DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY

Prepared for:

Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer

Lead Agency:

Town of Haverstraw Planning Board

Prepared by:

Project 21090

Date: January 24, 2025
Revised: February 28, 2025

Letchworth Road Residential Development

Letchworth Road
Town of Haverstraw
Rockland County, NY
Tax Map ID 19.11-1-1

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix A
State Environmental Quality Review Act (SEQRA)

Lead Agency:
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923
Contact: Mr. Salvatore Corallo Planning Board Chairman
Telephone: (845) 429-2200

Applicant/Owner:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer
Telephone: (973) 488-6402

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C-010	"Existing Conditions Map"
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I. EXECUTIVE SUMMARY

A. Brief Description of the Proposed Action

The Proposed Action is the development of 300 multi-family residential rental units within seven (7) 3.5 story buildings situated on a ±22.93-acre site, located on Letchworth Village Road in the Town of Haverstraw. Each of the proposed 3.5-story buildings will house a mix of one (1) and two (2) bedroom units. Amenities including a clubhouse and community pool are also included in the design. The Proposed Action is situated on ±22.93 acres within a ±154.6-acre parcel of land which was part of the former Letchworth Village Community. The Project Site is located within the R-120 District "Rural Residence District" and will require a Zoning Text Amendment to permit the multi-family residential use presented by the Proposed Action.

B. Summary of Anticipated Impacts and Proposed Mitigation Measures

The anticipated impacts of the Proposed Action and measures to mitigate these impacts are described below.

1. Land Use and Zoning

The Project Site is located in the Town's R-120 Zone, "Rural Residence District". Under Town Code Chapter 167, multi-family residences are not a permitted use in this zoning district. The Proposed Action requires a zoning change by the Town Board for The Project to be a permitted use.

Accordingly, the Proposed Action includes a zoning change to the LA-17 Zone "Luxury Apartment Multifamily Residential District" which allows multifamily residences at a density of no more than 17 units per acre.

The Project Site is located in the vicinity of the educational campuses of Willow Grove and Thiells Elementary Schools, Fieldstone Middle School & North Rockland High School. The immediate areas surrounding the project site are institutional, educational and recreational with single family residential and other vacant & underutilized parcels. As such, the proposed residential, multifamily Proposed Action is compatible with land uses in the vicinity of the Project Site.

The Proposed Action also conforms with the goals of the 2000 Town of Haverstraw Master Plan and the 2011 Rockland County Comprehensive Plan by providing a different housing type and increasing economic activity in the Palisades Parkway corridor. The Proposed Action will provide a needed rental apartment housing option within the Town of Haverstraw.

2. Visual Resources

The Proposed Action consists of seven (7) 3.5 story residential apartment buildings with surface & garage parking spaces. A 10,625± sf clubhouse, pool area, and multi-sport courts for tennis & pickleball are also included in the design. The architectural character of the building is a modern residential aesthetic that takes queues from the remaining Letchworth Village buildings.

Lighting & Landscaping will be in accordance with Town Code Section A173 entitled “Site Development Plans”, which will ensure that all requirements in the Proposed Action comply. All lighting will be included on the Site Plans will be dark-sky compliant, appropriately shielded to prevent light spillage onto adjoining properties. All lighting will utilize high-efficiency lamps (LED). The southern portion of the Project Site will be the only part of the project visible from a public roadway, specifically Letchworth Village Road.

As many trees as possible will be preserved, which will provide visual mitigation buffers throughout the Project Site. Additionally, the Project Site will be landscaped with a mix of deciduous and evergreen trees, shrubbery and perennials to provide further visual mitigation. See full size drawing L-100 “Overall Landscaping Plan”. The proposed main entrance via Letchworth Village Road wou be a landscaped roundabout boulevard and aesthetically & visually pleasing.

Several visual simulations were analyzed during leaf on and leaf off conditions. Photos of viewpoints looking into the Project Site were analyzed with renderings of the proposed building architecture superimposed on the photographs. In summary, the Proposed Action will result in minimal off-site visual impacts on the surrounding area. The building architecture will be of a high quality and will not have any adverse impacts to views in the surrounding areas.

3. Soils, Topography and Steep Slopes

SESI Consulting Engineers were retained by The Applicant to prepare a thorough subsurface study and investigation of the proposed ±22.93 acre project area. As detailed in the Geotechnical Investigation Report, dated March 6, 2024, the study included 41 test pits and 6 boring locations. The test pits were excavated down to depths ranging from ±11 to ±15 feet and the boring depths ranged from ±12 to ±20 feet.

Regarding the geology for the Project Site, the subsurface areas consisted of sands, gravels, & silts that were both clay and cobbles. In all testing locations on the site, natural soils were encountered, mostly consisting of silt-clay and silt with varying amounts of sand and cobbles. Groundwater was also found at depths from 1 to 13 feet deep from elevations of ±422.5 to ±441.6. For the

surface conditions, the topsoil thicknesses range from approximately 2 to 8 inches.

The grade of the Project Site slopes generally east and west, with a high point at the center of the site. The Project Site's topographic elevations range from 430 feet from the eastern end of the property to 460 feet at the end of the existing gravel road/driveway on the Project Site. The average elevation is approximately 440 feet.

The total amount of excavated material required to implement the Proposed Action is approximately ±71,000 cubic yards. The total amount of imported fill material required for the Proposed Action is approximately ±82,500 cubic yards. This results in a net import of approximately ±11,500 cubic yards, which is substantially balanced when considering the earthwork required to bring the site to the subgrade of the roads and buildings.

4. Flora, Fauna and Habitat

The Project Site is currently underutilized, vacant land that has experienced various levels of neglect over the past several years and decades. As a former institutional use, the Project Site has gradually returned to a mix of forested and lawn/meadow areas. Most recently, approximately one third of the Project Site was utilized as natural turf for recreational sport fields. The remaining two thirds of the Project Site contain a mix of forested and meadow areas.

Currently, numerous hardwood deciduous trees are present as the area matures due to its underutilization. While the site and surrounding lands are somewhat densely forested, there are no natural wooded corridors for wildlife movement due to the adjacent institutional and residential land uses. The current condition of the Project Site provides habitat only for wildlife species that are tolerant of people and disturbance and that are capable of using a

variety of habitats. These species include whitetail deer, squirrels, raccoons, fox and common birds. Evidence of all these species can be found on-Site.

According to the NYSDEC Environmental Resource Mapper, the Project Site does not contain any species of plant or animal that is listed by New York State as endangered or threatened, any areas identified as habitat for an endangered or threatened species, nor any species of plant or animal that is listed by New York State as rare, or as a species of special concern. There may be invasive vegetive species located on the Project Site which would be removed as part of the Proposed Action.

While the Proposed Action will cause the elimination of some habitat, the post development conditions will provide revegetated landscaped areas that will be permanently maintained. There are no significant adverse environmental impacts to the Flora and Fauna of the Project Site that result from implementing the Proposed Action.

5. <u>Stormwater Management</u>

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Proposed Action. The development has been designed in accordance with the following:

- Requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-25-001, effective January 25, 2025.
- Chapter 137, Part 3, "Stormwater Management" of the Town of Haverstraw Code.

As per the above requirements of the NYSDEC and the Town, and described in Section III.E, the proposed stormwater management facilities have been

designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered, and in some instances are enhanced in comparison to pre-development conditions. The on-site stormwater runoff from impervious coverages will be conveyed by a network of drain inlets, running to one (1) of five (5) stormwater management basins; two (2) infiltration basins and three (3) wet extended detention basins. The proposed stormwater improvements will result in reductions in peak rates of runoff from existing conditions for all storms and analyzed, resulting in no impacts to off-site properties.

6. Water Supply and Sanitary Sewerage

The Project Site is located within a water service area operated and maintained by Veolia New York Water. The property is located within the Haverstraw Joint Regional District which is overseen by the Joint Regional Sewerage Board in West Haverstraw.

Proposed water utilities include 8-inch domestic and an 8-inch fire service, Dutile Iron Pipe Class 56, for the proposed development. The Project Site will include eight proposed hydrants. The connections will be performed in accordance with the requirements of the Town of Haverstraw and Veolia Water of New York.

The proposed sanitary sewer serving the Subject Property will require an off-site extension to connect to an existing manhole located in the Right of Way of Letchworth Village Road. Projected wastewater generation is not expected to exceed 64,880 gallons per day based on the current unit mix proposed.

In order to mitigate the additional proposed sewage flow from the Project Site, the Applicant will consult with the Town of Haverstraw, the Joint Regional Sewerage Board, and Veolia to ensure impacts of proposed wastewater

discharge flow and additional water demands are mitigated, if any. It is not anticipated that the Proposed Action will have significant adverse impacts on the water or sewer infrastructure capacities or demands.

7. Other Utilities and Services (Gas, Electric, Telecommunications)

The Project Site is served by existing electric, natural gas, telephone and other telecommunications services in the vicinity. The electric and gas utilities are provided by Orange and Rockland Utilities. High-speed internet access for data, television, and telecommunications is provided by Optimum and Verizon in the vicinity of the Project Site and the service provider will be determined at a later date. Other than service connections to the Proposed Action, no modifications to the existing utilities are proposed to facilitate the Proposed Action and therefore do not require any mitigations.

8. Traffic, Transportation and Parking

An analysis of the surrounding roadway network under existing and future conditions with and without the proposed action was performed during the peak weekday morning, weekday school afternoon, weekday roadway evening, and Saturday midday hours. Based on intersection capacity analyses as well as accident analysis performed the applicant proposes the following improvements within the study area:

- Letchworth Village Road and Storrs Road (Intersection 4) is proposed to be modified to an all-way stop-controlled intersection.
- Letchworth Village Road & Ridge Road (Intersection 5) is proposed to be realigned to remove the existing skew between intersection approaches. Additionally, “All-Way” signs are proposed to be added below the “Stop” signs to provide increased awareness of the all-way stop operations to motorists utilizing the intersection.

- US Route 202, Thiells-Mount Ivy Road, NYS Route 45, and Old County Road (Intersections 9 and 10) is proposed to provide traffic signal timing modifications during the hours of 2:00 PM to 7:00 PM on weekdays.
- US Route 202, NYS Route 45, and Old County Road (Intersection 10) is proposed to prohibit right turns on red for the northbound NYS Route 45 approach to the intersection with the installation of signage.
- Warning signage for deer is proposed along Thiells-Mount Ivy Road between Anderson Road and Rosman Road.

The project proposes to provide a total of 667 on-site parking spaces which are categorized into 399 general surface parking spaces, 134 reserved garage parking spaces, and 134 reserved tandem parking spaces in front of the garages. To provide a conservative analysis, consideration of excluding the tandem parking located in front of each garage would provide a reduced parking supply of 533 parking spaces provided on-site, with a ratio of 1.78 spaces per dwelling unit. This is consistent with industry standards for the type of use where the average parking supply ratio provided is 1.7 spaces per dwelling unit. The anticipated parking occupancy percentage for the proposed development is 89.8 and 90.8 on a weekday and Saturday, respectively, as compared to the reduced parking supply which excludes tandem spaces in front of garages.

The onsite parking provided by the Proposed Action in addition to the proposed off-site improvements will provide a level of mitigation which will reduce adverse impacts to the study area.

9. Community Demographics, Facilities and Services

The Proposed Action will create 300-units of new, high-quality multi-family dwellings in the Town of Haverstraw that will provide a needed diversification of housing opportunities in the community. Additionally, the Letchworth Village

Property has been extensively studied numerous times in the past for this type of redevelopment and would be a positive change for the area.

The proposed Action will not result in a significant increase in students or burden the capacity of the North Rockland Central School District, particularly based on that the downward enrollment trend over the last 10 academic school years. In particular, the Willow Grove elementary school elementary school enrollment has declined by more than 17% and based on its vicinity to the Project Site, this is the public elementary school that will serve elementary aged public school aged children residing in the Proposed Action.

The proposed action is anticipated to generate approximately 739 residents which is only a 1.9% increase in the Town's population. It can be reasonably anticipated that some of the Proposed Action's future residents will relocate from within the existing Haverstraw community.

The Proposed Action will result in generally positive fiscal impacts for the Town of Haverstraw and the North Rockland Central School District since the Project Site is not currently generating any tax revenue for any community services entity. The Town Police, Fire and Ambulance Corps maintain a robust staff of both full-time and volunteer staff which would continue to serve the community as well as the Proposed Action. On-site property operations and maintenance staff will include 2-3 full time positions, which would help to mitigate some need for additional Town services.

10. Fiscal and Economic Conditions

The Proposed Action is expected to generate $11,745,000.00 in revenue for the Town during a fifteen-year PILOT program that has been entered into between the Town and Applicant. This is in addition to the $14,400,000.00 purchase price that will be provided directly to the Town of Haverstraw.

The Proposed Action is estimated to generate approximately 739 residents, which would create new municipal service costs totaling approximately ±$616,215. This service cost estimate is based on average costs, not marginal increases. The Proposed Action is also estimated to create an average increase of ±$886,677.00 in educational costs for the ±33 school aged children. The actual marginal costs of educating these students will be much lower.

Based on average costs, the total service and educational cost impacts created by the Proposed Action is approximately ±$1,502,892.00 per year, or $22,543,380 over the fifteen-year span of the proposed PILOT Agreement (actual marginal costs will be significantly lower). Thus, the total revenue to the Town and other taxing jurisdictions will be $26,145,000, a net benefit of more than $3,601,620.

The Applicant and Town have agreed that the purchase price and entering into the PILOT program sufficiently mitigates any adverse fiscal and economic impacts generated by the Proposed Action. Additionally, after the PILOT agreement has expired, the property will be assessed and taxed in accordance with the standard Town of Haverstraw metrics.

11. Noise and Air Quality

The Noise Analysis reveals that no significant noise impact will occur as a result of the Proposed Project. Despite this, the Applicant has incorporated several mitigating measures.

The Project Site's exterior perimeter already encompasses an amplified ambient noise due to traffic activity and existing tree screening and canopy. To provide additional noise abatement the Applicant will also shut-down equipment when it is not in use (no idling of unused equipment in excess of

State regulations). To the extent practical, noisy equipment shall be kept far from site boundaries and the Applicant shall schedule noisy operations concurrently to reduce long exposure to noticeable sound levels. In addition, the Proposed Action will conform to the construction time restrictions set forth in Town Code Section 167-40A(1), 7:00AM to 7:00PM on the weekdays and 8:00AM to 5:00PM on Saturdays. No construction operations are to take place on Sundays and Holidays.

Based on the foregoing information, no significant adverse impacts to noise or air quality are anticipated as a result of the Proposed Action.

12. Historic and Cultural Resources

A consultation with the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP, also known as SHPO), via its Cultural Resources Information System (CRIS) was formally made on December 4th, 2024.

Although the NYSOPRHP has deemed the Letchworth Village Property as State Register Eligible, at this time there has been no further action taken by the agency as the 22.93-acre portion of the overall property that will be subdivided as part of the Proposed Action does not currently contain any structures that would meet this criteria. Due to the prolonged abandonment of the facilities, the passage of time, vandalism and general deterioration of the facilities and grounds, the removal of the Whitman Building and razing of the Jacobson building foundation will not represent an adverse environmental impact regarding the preservation of historical or cultural resources requiring further mitigation.

At the time of this writing, the Applicant has received an initial response from SHPO regarding an inquiry specific to the Proposed Action on the Project Site. The SHPO response requested additional information including potential

Phase 1A/1B archaeological surveys, visual analyses and landscape screening drawings.

13. Construction information.

All construction activities will be conducted in compliance with existing regulations, including local day and hour construction limitations. Consistent with Section 114-4B “Noise” of the Town Code, construction will only take place between the hours of 8:00 am and 6:00 pm Monday through Friday as well as on Saturdays, Sundays, and holidays.

The contractor will set up site fencing with scrim for dust control and security, as well as use water trucks as needed to control dust due to mass excavation. The need for street cleaning will be monitored and provided as necessary. The construction site will have an anti-tracking pad at the vehicular exit as well as a concrete wash-out station.

The stabilized construction entrance will help minimize excess mud, dirt or rock tracked from the site. The paved access ways adjacent to the site entrance will be swept to remove any excess sediment or debris. Trucks hauling material to or from the construction site will be covered with a tarpaulin as necessary. Adequate provisions will be made to control and minimize dust on and emanating from the site during construction, using water sprays during dry periods.

The contractor will periodically advise the Town and will keep them informed of construction activities, including having face-to-face meetings with affected neighbors as necessary.

Potential impacts related to construction are temporary by their very nature and the aforementioned mitigation measures will reduce and minimize potential impacts to the greatest extent practicable.

C. Summary of Project Alternatives

1. No Action (No Build) Alternative

The "No-Action" alternative would involve no development of the ±22.93-acre Site. This would result in leaving the Site in its existing vacant, undeveloped condition. This alternative does not meet the goals and objectives of the Applicant or the Town of Haverstraw and does not correlate with its reasonable investment objectives for the Project Site.

Under this alternative, the Project Site would most likely continue to decline and deteriorate in appearance while not providing any of the potential positive opportunities, which the Proposed Action will present to the Town and Community.

2. Conventional Subdivision for a Single Family Residential Development

The "Conventional Subdivision" Alternative would involve development of the ±22.93-acre Project Site with seven single family residence lots and an associated right-of-way containing the proposed roadway to access the subdivision. The Conventional Subdivision Alternative would yield seven single family homes on lots that each exceed 120,000 square feet in area. This Alternative does not meet the goals and objectives of the Applicant from an economic and feasibility standpoint nor does it align with the objectives of the Town of Haverstraw.

Under this Alternative, the Project Site would be developed for residential use under the existing R-120 Zoning criteria. It would not provide the same level of

potential benefits, which the Proposed Action will provide to the Town and Community.

D. List of Involved and Interested Agencies and Required Approvals/Permits

The list of required permits and approvals from involved and interested agencies is provided below in Table I-1.

TABLE I-1
Reviews and Approvals

Involved Agency	Approval/Review
1. Town of Haverstraw Planning Board	• SEQRA Determination • Site Plan Approval
2. Town of Haverstraw Town Board	• Rezoning approval (R-120 to LA-17) • Amendment of LA-17 Zone Height
3. Town of Haverstraw Building Department	• Building Permit
4. Town of Haverstraw Department of Public Works	• Department of Public Works Water & Sewer Approval
5. Joint Regional Sewerage Board	• Joint Regional Sewerage Board Approval
6. Veolia Water New York	• Veolia Water New York Approval
7. New York State Department of Environmental Conservation (NYSDEC)	• 2025 SPDES Permit

II. PROJECT DESCRIPTION

A. Project Location and Site Description

The subject property is a portion of the Letchworth Village Property in the Town of Haverstraw (see Figure II-1 “Overall Aerial Map”). Tax Lot 19.16-1-14 NY is a large tract (154.6 acres) bordered by Willow Grove Road and a residential development to the North, Letchworth Village Road to the West and South, and New York State owned landed to the East. This Tax Lot includes many of the remaining buildings of the former Letchworth Village Development Center, including those along East Stewart Circle and West Stewart Circle.

The property to be developed (hereinafter referred to as the “Project Site”) consists of ±23.93 acres of vacant and underutilized land on the east side of the tax lot (see Figure II-2 “Aerial Map”, Figure II-3 “Site Location Map”). The Project Site formerly contained a single-family home however the home was previously removed. The site currently contains a driveway, remains of the former home’s foundation, a garage, a shed, walls, wooded areas and an open recreational field.

The Project Site sits at a high point, with the terrain rising from the west to a centrally located high point. The terrain then slopes downward to the east toward the State lands and Hammond Road (see Figure II-4 “Existing Topography Map”). There are no wetlands, watercourses, or water bodies located on the Project Site.

Small portions of the Project Site contain slopes in excess of 15% (see Figure II-5, “Steep Slopes Map”) and approximately 51% of the Project Site contains wooded areas.

B. Proposed Action

1. Regional and Area Location

The Project Site is within north central Rockland County, to the North of West Ramapo Road (Road 202) and to the East of the Palisades Interstate Parkway, which is the major north-south parkway bisecting the County and provides access to Interstate 287 and the Mario Cuomo Bridge.

The Project Site has direct frontage on the northeasterly side of Letchworth Village Road. Ridge Road is to the West, and Hammond Road and Thiells Mt Ivy Road are to the East (see Figures II-2 and II-3). Letchworth Village Road continues to the west and north of the site and provides access to the Palisades Interstate Parkway via Willow Grove Road. The intersection of Letchworth Village Road and Thiells Mt Ivy road lies just east of the Project Site and runs south, providing access to Route 202.

2. Description of New Buildings and their Architecture / Design

The project (hereinafter the "Proposed Action") consists of seven (7) multifamily apartment buildings constructed in accordance with the Type V-A (Protected Wood Frame) construction type standards over one level of garage parking. The buildings will each contain a trash collection room, mail / package room, and storage. Each unit will have its own washer and dryer.

Five (5) buildings (Type A) will have 41 dwelling units (5 one-bedroom units, 36 two-bedroom units) with 18 individual garages for rent at the basement level. Two (2) buildings designated Type B will have 48 dwelling units (14 one-bedroom units, 34 two-bedroom units) with 21 individual garages for rent at the basement level. The Type A buildings are proposed to have a building envelope of approximately a ±20,540 square feet and the Type B buildings are proposed to have a building envelope of approximately ±22,752 square feet.

The buildings will provide a total of 300 rental apartments consisting of 52 one-bedroom apartments and 248 two-bedroom apartments with an additional unit to be utilized as a model unit. On-grade, uncovered parking is provided adjacent to the buildings.

The Proposed Action also includes the construction of a clubhouse and recreation areas which will provide amenities for the residents. The clubhouse is approximately 10,625± S.F. and will contain a leasing office, clubroom, fitness center, yoga studio, lounge, demonstration kitchen, and restrooms. The area outside of the clubhouse will contain a patio and pool for residents. The recreation areas on-site will consist of a tennis court and pickleball courts for the residents.

The architectural character of the buildings is traditional residential with horizontal lap siding, stone veneer, fiber cement trim, cast stone lintels, decorative shutters, and asphalt shingles.

The design of these buildings will meet all adopted energy codes for the state of New York. High-efficiency gas fired MagicPak systems will provide heating and cooling and will be installed in each apartment. Apartment units range in size from 880 square feet for a one-bedroom to 1,380 square feet for a two-bedroom apartment. All paints, primers, and adhesives used will be low Volatile Organic Compounds (VOCs). Exterior gas fired fire pits and grills will be installed for residents use in the clubhouse area but no wood gas or ethanol fireplaces will be included in the Proposed Action.

Fire and life safety will be addressed through the installation of a sprinkler systems throughout the buildings. All systems will meet the requirement of the National Fire Protection Association 13 (NFPA 13) guidelines for installation and operation. All building and stair entries will be access controlled for resident safety and the leasing center will be staffed during business hours.

3. Residential Component

The Proposed Action consists of the development of three-hundred (300) multifamily residential rental units within seven (7) a 3.5-story buildings. The buildings are 3 stories from the front side, and 4 stories from the back side, which contains a level of individual garages which will be available for rent by residents in the building. Five (5) buildings (Type A) will have 41 dwelling units (5 one-bedroom units, 36 two-bedroom units) with 18 individual garages for rent at the basement level. Two (2) buildings designated Type B will have 48 dwelling units (14 one-bedroom units, 34 two-bedroom units) with 21 individual garages for rent at the basement level. One unit will be utilized as a model unit for marketing purposes. On-grade, uncovered parking is provided adjacent to the buildings.

4. Residential Amenities Component

The Proposed Action also includes the construction of a clubhouse and recreation areas which will provide amenities for the residents. The clubhouse is approximately 10,625± S.F. and will contain a leasing office, clubroom, fitness center, yoga studio, lounge, demonstration kitchen, and restrooms. The area outside of the clubhouse will contain a patio and pool for residents.

Recreation areas will be created on-site and will consist of pickleball courts dog run, and other amenities for the residents.

Each building will contain a mail / package room, and each unit will have a washer and dryer within the unit.

5. Green Design and Sustainability Components

The Proposed Action will be built with LED light fixtures, low flow water fixtures,

programmable thermostats, low VOC paints, and other modern sustainable features.

6. Site Roadways, Access and Circulation

The Project Site is bounded by Letchworth Village Road to the South and Ridge Road to the West. Access to the Proposed Action is proposed by a single boulevard style driveway which will connect to a small roundabout within Ridge Road as depicted on JMC Drawing C-100, “Site Layout Plan”.

The proposed driveway provides a single entering lane and single exiting lane separated by a landscaped median. An on-site roundabout with three approaches is proposed within Ridge Road to provide access to the Proposed Action, the existing church, as well as any future development that may occur at the Letchworth Village property. In addition, an emergency access drive is proposed which will connect directly to Letchworth Village Road and only be utilized by emergency services personnel during emergencies.

The proposed main driveway connects to a network of access driveways within the site that lead to the proposed buildings. The main boulevard continues east through the center of the site to a T intersection where the clubhouse is located. From there, residents can turn left or right to access the front side of all proposed buildings. In addition, there is a perimeter access drive which provides access to the rear of each building which contains the garages and additional parking spaces behind the buildings. A total of 662 parking spaces are provided, which includes 368 standard parking spaces, 30 ADA compliant accessible parking spaces, 132 garage parking spaces, and 132 garage apron parking spaces.

7. Tree Preservation, Landscaping, and Buffers

Existing trees on the Project Site will be preserved to the greatest extent

possible. The placement and orientation of the proposed buildings focuses the development in the center of the site and reduces the area of site disturbance and to preserve large areas of perimeter buffer. The grading limits of disturbance along the southern side of the development allows the preservation of a large wooded buffer adjacent to Letchworth Village Road.

In addition, a detailed landscaping plan has been prepared for the project which identifies proposed foundation plantings, parking lot plantings, and perimeter plantings. Please refer to the JMC Drawing L-100 “Site Landscaping Plan” which depicts the various proposed plantings throughout the Project Site.

8. Recreation and Open Space

The Proposed Action will provide approximately 6,500 linear feet of sidewalks within the site that connect the various buildings to each other and to the clubhouse. The clubhouse is approximately 10,625± S.F. and will contain a leasing office, clubroom, fitness center, yoga studio, lounge, demonstration kitchen, and restrooms. The area outside of the clubhouse will contain a 6,000± S.F. patio in addition to an 8,000± S.F. patio / pool area for residents. In addition, these sidewalks will connect to an approximately 11,500± S.F. recreation area that includes a dog run and two pickleball courts.

9. Utilities and Support Facilities

Existing utilities in the vicinity of the Project Site include water service provided by Veolia Water, sanitary sewer service provided by the Joint Regional Sewerage Board, and electric and gas service provided by Orange and Rockland Utilities. There are overhead wires that exist along the northern side of Letchworth Village Road. (Electric service within the development will be undergrounded.) In addition, there is a natural gas main that runs within Letchworth Village Road.

a. Sanitary Sewer

An existing 12" sanitary sewer main exists at the intersection of Letchworth Village Road and the driveway for the former Letchworth Village power plant. This main carries flows south parallel to the Minisceongo River through the Philip J. Rotella Municipal Golf Course. These flows are ultimately conveyed to the treatment plant located on Ecology Road in West Haverstraw. The sewer infrastructure is owned and maintained by the Joint Regional Sewerage Board.

Initial conversations with the Joint Regional Sewerage Board indicate that the existing sanitary sewer line is in good condition and has the capacity to accommodate the flows from the proposed development. As part of the coordination with the Joint Regional Sewerage Board, the applicant will be performing an analysis of the existing line to confirm that the proposed flows can be accommodated.

b. Water

An existing 12" water main is located within Letchworth Village Road. Veolia Water owns and maintains the water infrastructure within this service area. The locations of the existing water main are depicted on the JMC full size drawings located in Appendix D.

c. Electric, Natural Gas, Telephone, Cable

Electric, natural gas, telephone and cable services exist in the vicinity of the Project Site. Electric and natural gas utilities are provided by Orange and Rockland Utilities. The Proposed Action will utilize natural gas for heat, hot water and cooking. High-speed internet access is provided by Optimum and Verizon in this service area.

10. Site Excavation, Grading, and Fill Plans

The layout of the proposed buildings and the site was designed to minimize land disturbance and work with the existing terrain to the maximum extent possible. The proposed buildings and roadways are oriented with the natural terrain and the grading design mimics the existing grade so as to minimize overall earthwork and disturbance.

The intent of the site grading is to achieve a balanced design with no significant quantities of either export or import of material. The total amount of exported material required for the Project Site's current site plan is about ±71,000 cubic yards. The total amount of imported material required is about ±82,500 cubic yards. This results in a net import of approximately ±11,500 cubic yards of material, which is ideal because of the subgrade aggregates required (i.e. sand, gravel & concrete) to implement the Proposed Action. Accordingly, the earthwork is substantially balanced when one considers the excavation required to bring the site to the subgrade of the roads and buildings. A preliminary Cut and Fill Map is provided as Figure III.C-4 in Section III.C "Geology, Soils, Topography and Steep Slopes" of the DEIS.

11. Stormwater Management Summary

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Proposed Action. The development has been designed in accordance with the following:

- Requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-25-001, effective January 25, 2025.
- Chapter 137, Part 3, "Stormwater Management" of the Town of Haverstraw Code.

As per the above requirements of the NYSDEC and the Town, the proposed stormwater management facilities have been designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered, and in some instances are enhanced in comparison to pre-development conditions. The proposed stormwater improvements will result in reductions in peak rates of runoff from existing conditions for all storms and analyzed, resulting in no impacts to off-site properties.

The Applicant is proposing several stormwater practices to mitigate stormwater runoff from the proposed improvements. Stormwater runoff will be collected and conveyed through a series of drain inlets and underground pipes to multiple stormwater management areas, including infiltration basins and detention basins. In addition, there will be multiple structures known as hydrodynamic separators which will provide water quality pretreatment for stormwater runoff before entering each green practice. These practices will work in conjunction to reduce flows exiting the Project Site as required by the Town of Haverstraw and the NYSDEC, and will result in a minimum ±22.22 percent reduction of peak rates of runoff from existing conditions for all storms analyzed, resulting in no adverse impacts to off-site properties.

12. Construction Staging Summary

The construction of the project will be completed in a single phase, and will be sequenced in an efficient way to limit the potential impacts associated with construction. The Project Site will be fully closed in with temporary fences for safety and to prevent anything or anyone from entering the property. Silt fences will also run along the entire Project Site to mitigate off-site environmental impacts.

A construction entrance will be located via Letchworth Village Road, in the

same location as the future entrance for the Project Site. Dumpsters will be provided in accordance with changing site conditions. The construction trailer will be placed in the vicinity of the of the construction entrance. Traffic signage will be provided to provide adequate notice to drivers for the entrances to the Project Site and to keep safety a top priority (see Figure III.P-1).

A general construction sequence is provided below outlining the general order of operations for the project construction:

1. Demolition of existing buildings and site features as required.
2. Installation of sediment and erosion control measures as indicated on the site plans.
3. Clear undeveloped portion of property which is to be developed.
4. Strip and stockpile topsoil.
5. Begin driveway, building and parking lot construction, rough grading.
6. Install storm drain system complete (immediately install inlet protection on all inlets).
7. Install utilities (gas, electric and telephone) as required.
8. Install concrete and asphalt concrete pavement complete.
9. Finish grading, redistribute topsoil and establish vegetation and/or landscaping.
10. Clean pavements and storm drain system of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices.
11. Complete site and building construction.

C. Project History, Previous Developments

1. Original development of the Project Site

The Letchworth Village Institution was developed in the early 20th century, and was built as a place to care for “epileptic and feeble-minded individuals”. In

1907, New York State passed a law which directed a commission to select a site for the construction of a mental health facility. The State secured property in 1909 in Thiells and began to construct the facility in 1910. The first residents were admitted to the facility in July 1911.

As part of the initial construction of the facility, a home was constructed on the 22-acre Project Site as a residence for the Superintendent of the Asylum. The home was known as the Jacobson Home, which was named after one of the farmers from whom the State purchased the property. The property contained the single-family home, a garage, a shed, fields, wooded areas, and the driveway. The home remained vacant following the closure of the facility in 1996, when the Town of Haverstraw purchased the Letchworth Village. In 2010, the home was destroyed by apparent arson.

In recent years following the fire at the Jacobson Home, the southern side of the property was utilized by the Town of Haverstraw as recreation fields for various sports.

2. Previous Development Applications on the Site and in the Vicinity of the Site

In 1996, the Town of Haverstraw purchased the Letchworth Village property following its closure. In the following years, the Town retained Planning Consultants in order to evaluate the property and create a master plan and vision for the property. This resulted in the preparation of The Letchworth Village Planning and Conceptual Land Use Plan, dated June 2001, which outlined the Town's goals for the property.

A 2001 blight study prepared by Ferrandino & Associates Inc. concluded that the Letchworth Village buildings in their deteriorated condition had a degree of blighting influence on the area. The buildings were characterized as such

due to their poor physical condition, and the fact that they were an obsolete and unproductive use of land. The land surrounding the structures were also considered blighted due to the "deterioration of the roadways, the overgrowth of vegetation, and unkempt appearance".

In 2004, The Town of Haverstraw entered an agreement with a private developer, WCI Communities, Inc., for redevelopment of the Letchworth Village. The project, known as the Encore Haverstraw, would redevelop the overall 163-acre site. The project proposed to develop an urban renewal plan for the site, with the objective to redevelop the Letchworth Village in a way which would encourage a traditional neighborhood feel with single-family housing, condominiums, townhouses, and amenities while preserving open space / buffers and enhancing property values in the area.

The Encore Haverstraw proposed to construct an active adult community (55 and up) consisting of 500 residences (a mix of condominiums, townhouses, and single-family detached homes in addition to amenities spaces and open spaces. The project underwent an extensive review by the Town in 2005, which included the preparation of an Environmental Impact Statement. Ultimately, the project was never constructed.

D. Statement of Project Purpose and Need

1. Comprehensive Market Analysis Taking into Account Market Area Demographics, Renter Demand, Area Rent and Vacancy Rates, and Recent and Projected Supply

A primary objective for the Proposed Action is to help meet a growing need for high-quality rental housing in the Town of Haverstraw. Additional benefits from the Proposed Action will include the redevelopment of an underutilized property which was determined to be a blight, as well as job creation both during and after construction.

The fundamental need for the Proposed Actions stems from a basic housing supply and demand imbalance.

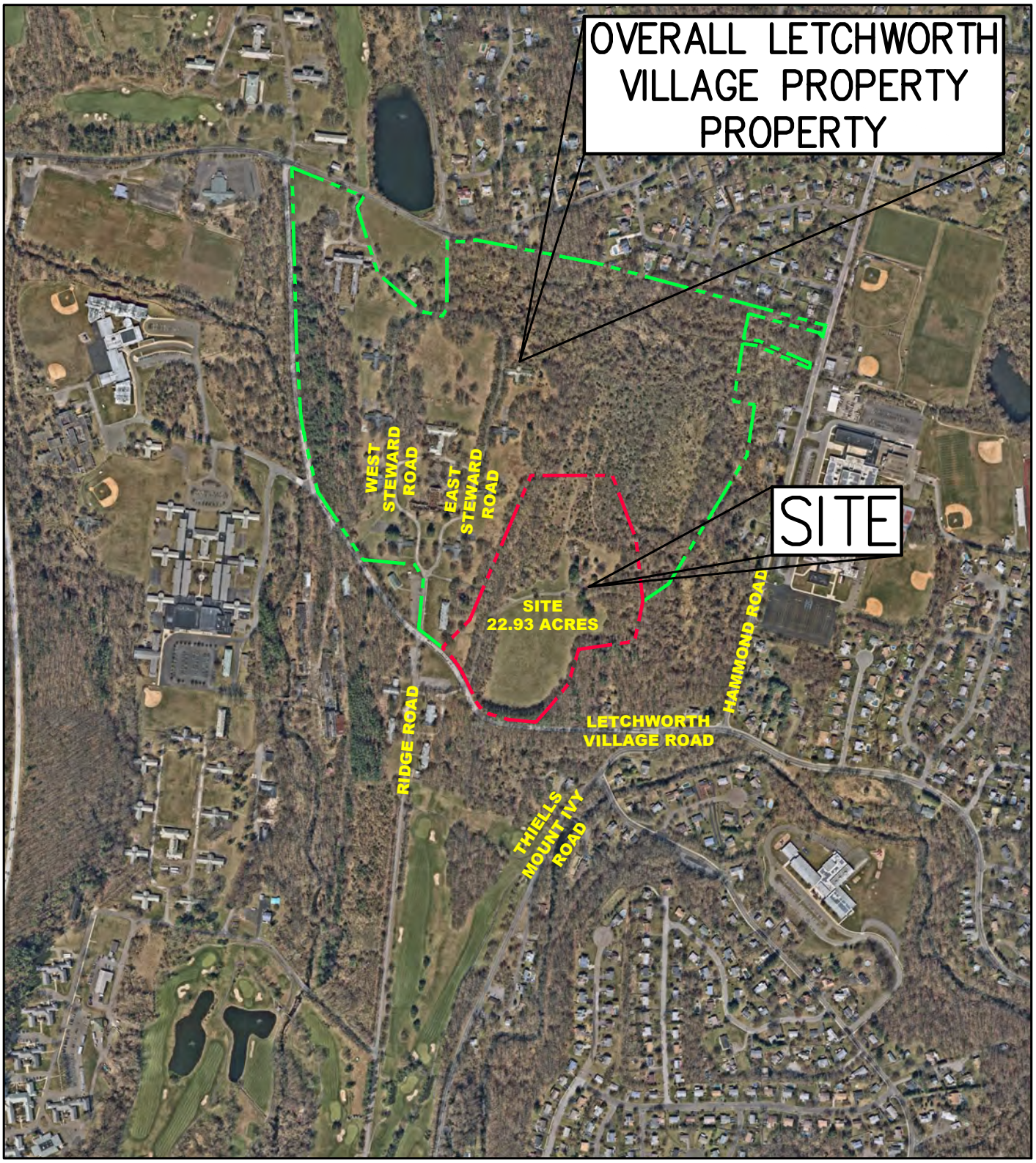
Table II-2

Reviews and Approvals

Involved Agency[1]	Approval/Review
1. Town of Haverstraw Planning Board	• SEQRA Determination • Site Plan Approval
2. Town of Haverstraw Town Board	• Rezoning approval (R-120 to LA-17) • Amendment of LA-17 Zone Height
3. Town of Haverstraw Building Department	• Building Permit
4. Town of Haverstraw Department of Public Works	• Department of Public Works Water & Sewer Approval
5. Joint Regional Sewerage Board	• Joint Regional Sewerage Board Approval
6. Veolia Water New York	• Veolia Water New York Approval
7. New York State Department of Environmental Conservation (NYSDEC)	• 2025 SPDES Permit

FIGURES

II-1 Overall Aerial Map
II-2 Aerial Map
II-3 Site Location Map
II-4 Existing Topography Map (2-Foot County GIS Topography)
II-5 Steep Slopes Map (2-Foot County GIS Topography)
II-6 Proposed Stormwater Management Practices
II-7 Sanitary Sewer Municipal Main Map



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

OVERALL AERIAL MAP

FIGURE No: II-1

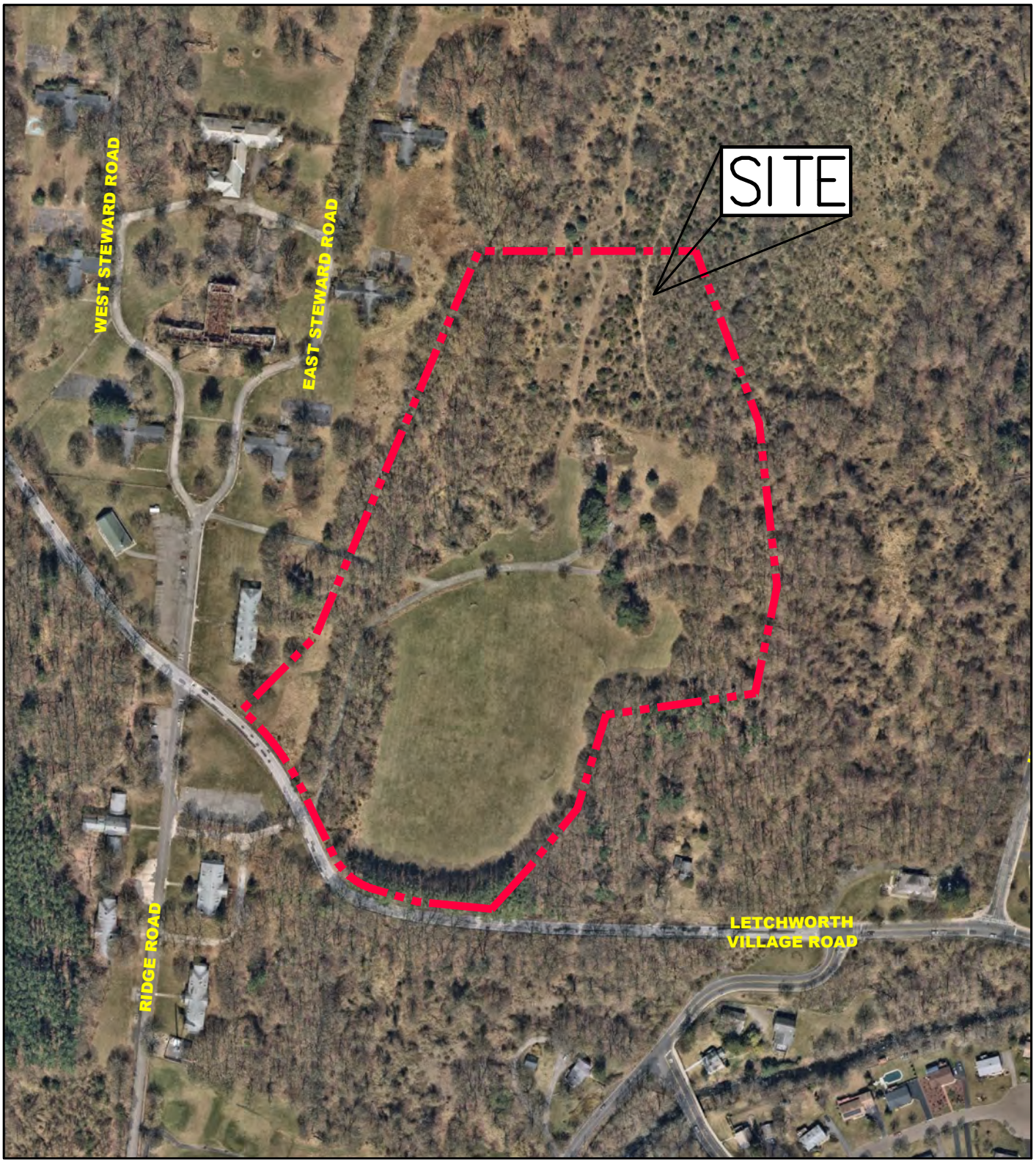
120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
(FAX) 273-2102

JMCPLLC.COM

DATE: 01/24/2025 | JMC PROJECT: 21090 | SCALE: 1" = 1,000' | SOURCE: NEARMAP

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

AERIAL MAP

FIGURE No: II-2

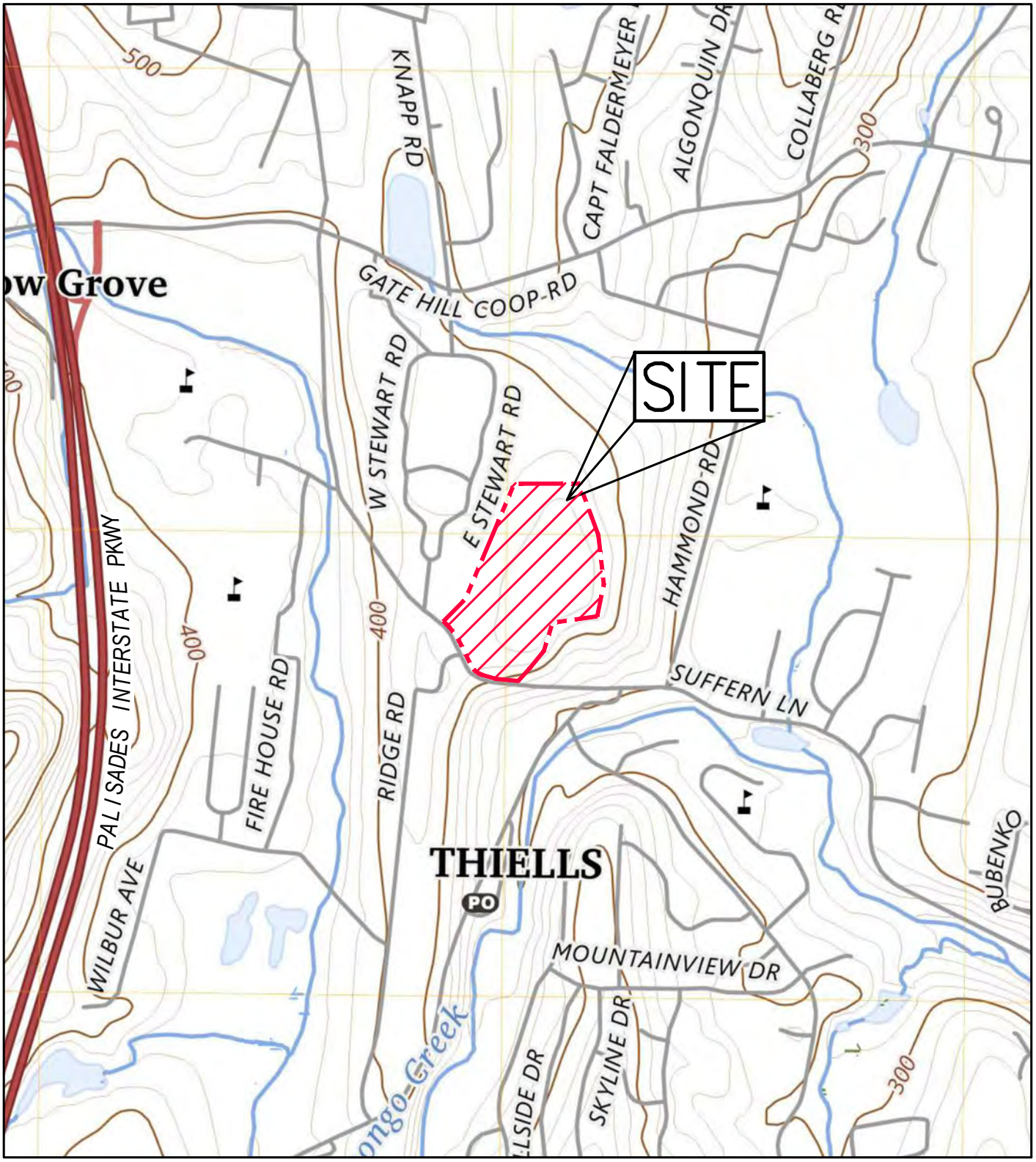
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

SITE LOCATION MAP

FIGURE No: II-3

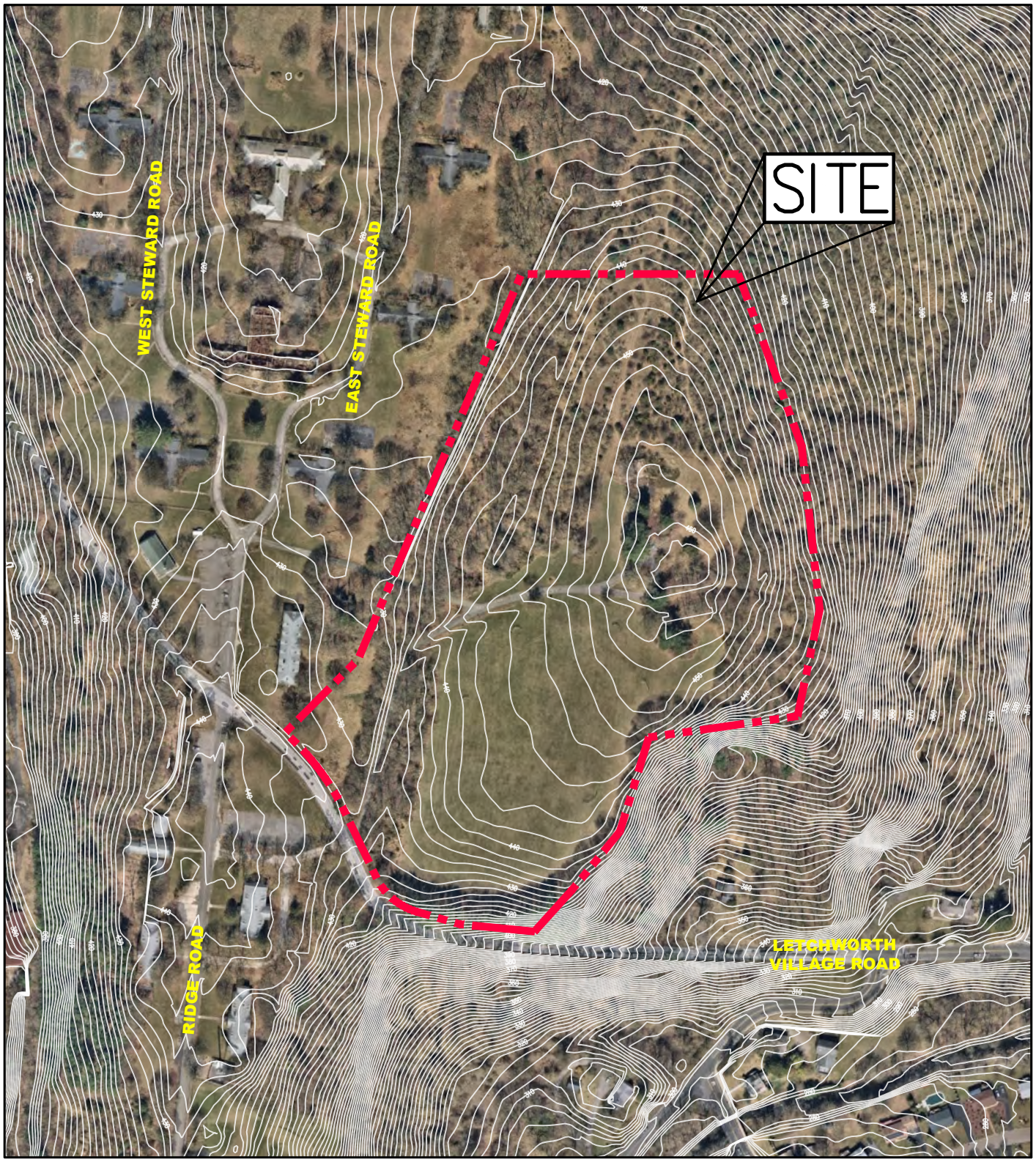
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING TOPOGRAPHY MAP (2-FOOT COUNTY GIS TOPOGRAPHY)

FIGURE No: II-4

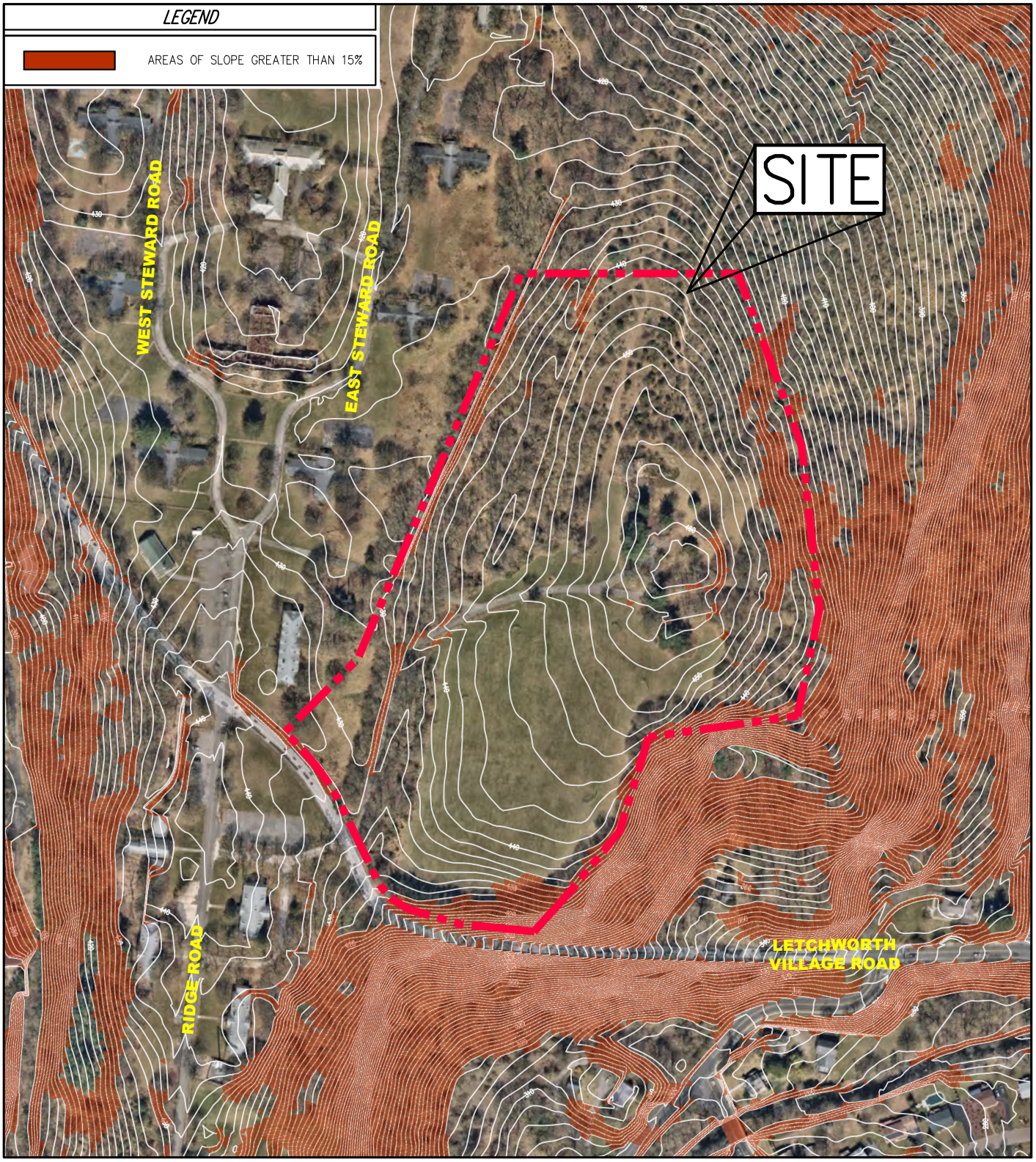
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

STEEP SLOPES MAP (2-FOOT COUNTY GIS TOPOGRAPHY)

FIGURE No: II-5

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MATCHLINE

EAST STEWART ROAD

STORMWATER MANAGEMENT BASIN 1B

STORMWATER MANAGEMENT BASIN 1C

BUILDING 7 (TYPE A)

BUILDING 6 (TYPE A)

BUILDING 5 (TYPE B)

POOL

CLUBHOUSE

BUILDING 2 (TYPE B)

BUILDING 4 (TYPE A)

BUILDING 1 (TYPE A)

BUILDING 3 (TYPE A)

STORMWATER MANAGEMENT BASIN 1F

PROPOSED LEVEL SPREADER

PROPOSED RIP-RAP APRON

STORMWATER MANAGEMENT BASIN 1D

PROPOSED LEVEL SPREADER

PROPOSED RIP-RAP APRON

N/F PEOPLE OF THE STATE OF NEW YORK

LETCHWORTH VILLAGE ROAD

TL 19.16-1-14.100
SEDER ROD
AREA = 108.6948 ACRES

TL 19.12-1-43
N/F
STATE OF NEW YORK

TL 19.12-1-1.3
N/F
THOMAS KOHAN

A.C.O.E. WETLAND AS FLAGGED BY LAVLER, MATUSKY & SKELLY ENGINEERS, LLP ON JULY 7, 2004

100' WETLAND BUFFER

PROPOSED RIP-RAP APRON

MATCHLINE

JMC

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

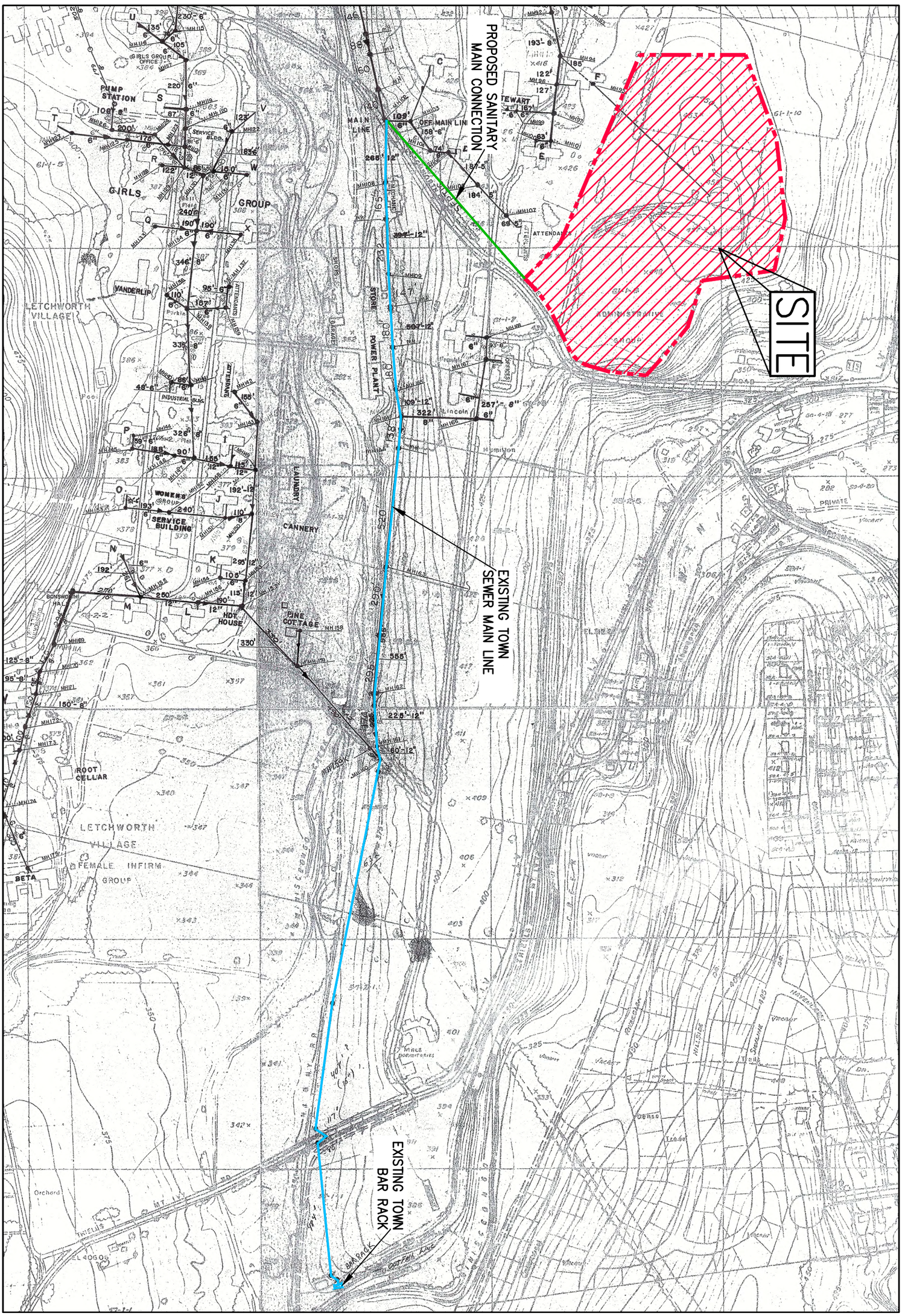
PROPOSED STORMWATER MANAGEMENT PRACTICES

FIGURE No: II-6

SCALE: 1"=150'

DATE: 01/24/2025

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SANITARY SEWER MUNICIPAL MAIN MAP

FIGURE No: II-7

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

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TOWN OF HAVERSTRAW, NEW YORK

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DATE: 01/24/2025 SCALE: 1"=400'

JMC PROJECT No: 21090

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III. EXISTING ENVIRONMENTAL CONDITIONS, ANTICIPATED IMPACTS AND MITIGATION

The following sections of the DEIS include a comprehensive analysis of existing site conditions, anticipated impacts in the build conditions (and no-build condition, where applicable), and specific mitigation measures designed to address all significant adverse impacts.

III.A Land Use and Zoning

1. Existing Conditions

a. Survey and analysis of existing land uses within ¼ mile of the Project Site including a color land use map

The existing land uses and zoning within a 1/4-mile radius of the project site are shown on Figure III.A-I. as sourced from the online Rockland County GIS website.

The project site is a part of an existing ±154.6-acre parcel. The parcel is bordered by Letchworth Village Road to the south and Willow Grove Road to the north. The project site is a ±22.93 acre portion of the larger parcel and is located in the north-central part of the Town.

The project site's surrounding areas are zoned for single family residential with a mix of conforming uses that are of either residential, community services, or recreational use. There are no commercial uses nor industrial uses within the vicinity of the project site. To the north, across Willow Grove Road are Single-Family Residential (Local Zoning Districts) and Recreation (Patriot Hills Golf Club) in the adjacent Town of Stony Point. There are Public Parklands and recreation fields on Willow Grove Road within the near vicinity of the project site. To the east, across Hammond Road, there is Single Family Residential R-120 "Rural Residential District" and R-15 "Medium Density Residence District" and R-25 "Low Density Residential District" and the public educational institution of North Rockland High School. The school also has recreation fields that are open to the public for usage. The Hammond Road Fire Station is also situated on Hammond Road to the east of the project site, just to the north of North Rockland High School. To the south of the project site, across Letchworth Village Road, there is Single Family Residential uses. There are recreational uses to the

south of the project site, specifically the Phillip J. Rotella Golf Course. The Theills Public Elementary School is located just to the south of the project site, on Rosman Road. To the west, across Letchworth Village Road, is the Willow Grove Elementary School and the Fieldstone Middle School. All referenced public schools are owned and operated by the North Rockland Central School District.

b. <u>Description and mapping of existing zoning within 1/4 mile of the Project Site, including detailed description of proposed zoning regulations that currently apply to the site</u>

The site is located in the Town's R-120, "Rural Residence", zoning district which permits single-family residences and public parks / playgrounds on lots greater than 120,000 square feet. Table 001 below outlines the various bulk criteria which apply to the R-120 zone. The R-120 zone has acted as a placeholder while the Town has considered other developments that do not comply with this zoning.

To the north, along Willow Grove Road, Birch Lane, & Cedar Lane a R-15 Zone is located which generally permits residential lots Greater Than 15,000 square feet. To the east, across Hammond Road R-25 zone which generally permits residential lots Greater Than 25,000 square feet.

To the south and west, across Letchworth Village Road is the continuation of the R-120 Zone for residential lots Greater Than 120,000 square feet which includes the remainder of the Letchworth Village property and the golf course.

TABLE III.A-1
Zoning Dimensional Requirements
R-120 Single Family Residence

Dimension/Description	***Requirement***
Lot area Minimum	120,000 sf
Lot coverage	
]\[	8%
Maximum lot coverage	18%
Lot width	200 ft
Lot Depth	50 ft
Required yards	
Front	50 ft
Single Side	40 ft
Both Sides	100 ft
Rear	80 ft
Habitable floor area (minimum)	
Height	35 ft
Stories	2.5

c. Review of Applicable Town of Haverstraw Documents and Rockland County planning documents, including the Rockland County Comprehensive Plan (March 2011), the Town of Haverstraw Master Plan of 2000, and the Town of Haverstraw Urban Renewal Plan

County of Rockland Comprehensive Plan 2011

The County's 2011 Comprehensive Plan identifies the Letchworth Village property as a parcel and area in the Town as a vacant area that supports the land to be reutilized and repurposed to return to the Town and County Tax rolls. It is referenced as a site in the County under recommendation #6 as a property in need of revitalization. This recommendation in the Comprehensive Plan highlights the Letchworth Village Property as a top area in the County that should be repurposed and all development should consider protecting and conserving natural resources. Although portions of the former Letchworth Village Institution has had partial development since

the Institution closed its doors in 1996, including what is known today as Patriot Hills Golf Course, it is cited as an area and property in the County of Rockland that should be used and considered for revitalization before other locations in the County are considered for new development.

Town of Haverstraw Master Plan 2000

The Town's 2000 Master Plan supports increasing housing types and economic activity for the Town. It specifically highlights the area in the Town recognized as the Palisades Parkway Corridor. This area is defined as the land areas to the east and the west of the north-south Palisades Interstate Parkway. The Master Plan calls for more community and economic activity. It also cites these areas to serve more recreation areas for the community, while preserving and maintaining the scenic environmental aesthetics in these area with close proximity to the Palisades Interstate Parkway. The Letchworth Village site is also specifically referenced as an area in which its previous uses were abandoned in the late 1980s by the State of New York and how the land around Letchworth Village Road is desired to be developed under the direction and guidance of the Town of Haverstraw. The various Town review boards and Town staff have communicated this to the project team.

Town of Haverstraw Urban Renewal Plan of 2001

In 2001, a field reconnaissance of all existing buildings was conducted on the Letchworth Village property. The purpose and objective of this study was to determine the extent of blight in the area and on the property as a prelude to potentially declare the property for urban renewal under New York General Municipal Law. This study was conducted by Ferrandino & Associates, Inc. and is on record and is referred to in a previously performed DEIS for the Letchworth Village Property, conducted in 2005.

The 18 buildings of the Letchworth Village Property, on the 154.6-acre

parcel, were determined as such to be in poor physical condition. It was concluded that the property is unutilized and is an obsolete and unproductive use of land. The land surrounding the structures were also considered blighted due to the "Deterioration of the roadways, the overgrowth of vegetation, and unkempt appearance". These determinations were formulated by using commonly applied criteria that has been found acceptable by the United States Department of Housing and Urban Development. The study concluded by determining that the Letchworth property was eligible for Urban Renewal. In 2005, the determination from the Blight Study from 2001 expanded the area designated for Urban Renewal to include the former power plant property.

Concurrently with the urban renewal process for the Letchworth Village Property, the Town of Haverstraw commissioned and authorized the preparation of a conceptual redevelopment plan to utilize the land for identified needs in the Town, including recreational space and facilities. The plan was called the "Letchworth Village Planning Study and Conceptual Land Use Plan" and it was presented to the Haverstraw Town Board in 2001 and highlighted the opportunities and constraints of the Letchworth Village Property. The plan highlighted the Town's ideas at the time for reuse and re-purposing some of the existing buildings as well as accommodating the Town's need for recreation space.

Following the preparation of this plan, the Town Board initiated a Request for Proposals process from residential developers. Ultimately, in May of 2004, the Haverstraw Town Board designated the Applicant of the proposal formally known as "Encore Haverstraw" as a qualified sponsor for the development of the Letchworth Village Property. In 2005, a DEIS was submitted to the Town of Haverstraw on behalf of the former "Encore Haverstraw" Development. This proposed development was to provide positive assets for the Town of Haverstraw at the time, however, this

proposed development never came to fruition.

2. Potential \ Impacts

a. Discussion of the relationship of the proposed development to overall land use patterns within the ¼ mile area, and compatibility with adjacent properties

As indicated, the land use patterns around the project site consist of residences, community services, and parkland uses. There are no existing commercial uses nor industrial uses within the studied vicinity of the project site.

Accordingly, a multifamily redevelopment project is compatible with land uses within the Project Site's Vicinity. The Town has communicated that this proposed project will bring much economic and development activity that is desired for the area. Being that the project is in the vicinity of the local public schools and public parklands, a multi-family use is considered the best use for the project site.

b. Discussion of the project's compliance or non-compliance with local land use policies and regulations and the requested Zoning Change from the R-120 to the LA-17 Zoning District, and the text Amendment to allow the building heights proposed.

The Proposed Action includes a requested rezoning of the Project Site from the R-120 district change to the LA-17, "Luxury Apartment Multifamily Residential", Zoning District to allow the development of a multifamily residential community to include seven 3.5 story buildings with a total of 300 dwelling units. A subdivision is also proposed to subdivide the ±22.93 acre development site from the overall ±154.6 acre parcel on Letchworth Village Road.

The LA-17 district permits multifamily housing uses at a density of 17 units per acre. The proposed zone change will accommodate the Proposed Action as a zoning compliant use by facilitating economic activity and providing alternative residential housing options, as discussed in the Town Master Plan 2000. The current R-120 zoning was in place at the time the Town Master Plan 2000 was adopted, and has acted as a placeholder while development proposals were considered. The 2005 Encore Haverstraw project, for example, did not conform to the R-120 zoning.

The Proposed Action will also require a zoning text amendment to permit the proposed building heights for this project. The maximum building height permitted in the LA-17 Zone is 40 feet. The residential buildings are proposed to be 51’ 9” from the finished floor of the garage to the peak of the sloped rooves. When considering the grade change from the front to the back of the building and the average grade calculation, the proposed building height will be approximately 44’, which is 4’ higher than what the LA-17 zone currently allows. The additional height requested is associated with the architectural roof gables, which are proposed in lieu of a flat roof to achieve the residential character aesthetic desired by the Town. The additional height also allows for garages under the residential units, reducing the amount of impervious surfaces that would otherwise be needed. The Proposed Action will conform to the balance of the LA-17 bulk requirements as outlined in Table III.A-2.

TABLE III.A-2
Zoning Dimensional Requirements
LA-17 Luxury Apartments

Dimension/Description	***Requirement***	**Provided**
Lot area	10 acres	±22.93 acres
Lot coverage (%)		
Maximum building coverage (%)	N/A	16
Maximum impervious coverage (%)	50	47.13
Lot width (feet)	150	±462
Lot frontage (feet)	130	±740
Required yards (feet)		
Front	35	98
Single Side	35	45
Both Sides	70	90
Rear	35	70.8
*Maximum Height (feet)**	40	44'*
Maximum Density	17 units / acre	±14 units / acre
Floor Area Ratio	0.6	±0.46

***Text Amendment requested to permit building heights of 44' in the LA-17 Zone.**

c. <u>Discussion of the project's relationship to Town and County planning proposals and policies</u>.

As discussed, the Town Master Plan 2000 emphasizes and documents the Town's desire and visions for a diversity of residential housing types and greater economic activity for the areas around the Palisades Interstate Parkway. Considering that the Project Site has easy automobile access to the Parkway, the proposed residential, multifamily project is compatible with the Town's planning proposals and policies from the Town Master Plan of 2000.

The Town has been planning for the development of the Letchworth Village Property since the Urban Renewal planning process began back in 2001. There was a study that determined that many of the existing buildings and the land around the buildings on the property were in significant decay and blight. The property is also a site that has attracted incidents of vandalism

over the years, due to it being unutilized and in a state of decay. In addition, the Town had established a plan in 2001 that highlighted the opportunities and constraints of the Letchworth Village Property followed by an RFP being issued by the Town Board for residential developers.

The Letchworth Village Property has been underutilized since 1996. Since that time, the Town of Haverstraw and the County of Rockland have shown intent to develop this property to benefit surrounding community, as highlighted and shown in several records over the last 25 years. The Proposed Action is consistent with the 2000 Town Master Plan, as the project site and the Letchworth Village Property are in the vicinity of the Palisades Interstate Parkway, which is identified in this document as an area that the Town envisions for more residential housing types and greater economic activity. As discussed, the Letchworth Village Property is associated with the Urban Renewal Planning Process and proposals for other residential developments have been solicited by Town Officials in the past. The Proposed Action is consistent with the Town and County's proposals for the project site and the entire Letchworth Village Property.

3. Proposed Mitigation

a. Identification of proposed mitigation for significant adverse environmental impacts identified in the DEIS

The Proposed Action's residential components will bring needed housing diversity to the Town, consistent with the Master Plan's recommendation of providing alternative forms of housing to stimulate economic activity for the areas around the Palisades Interstate Parkway.

The Project Site has easy automobile access to the major roadways in the Town and surrounding areas. The Applicant is working with the Town to ensure that the Proposed Action is compatible with the surrounding area

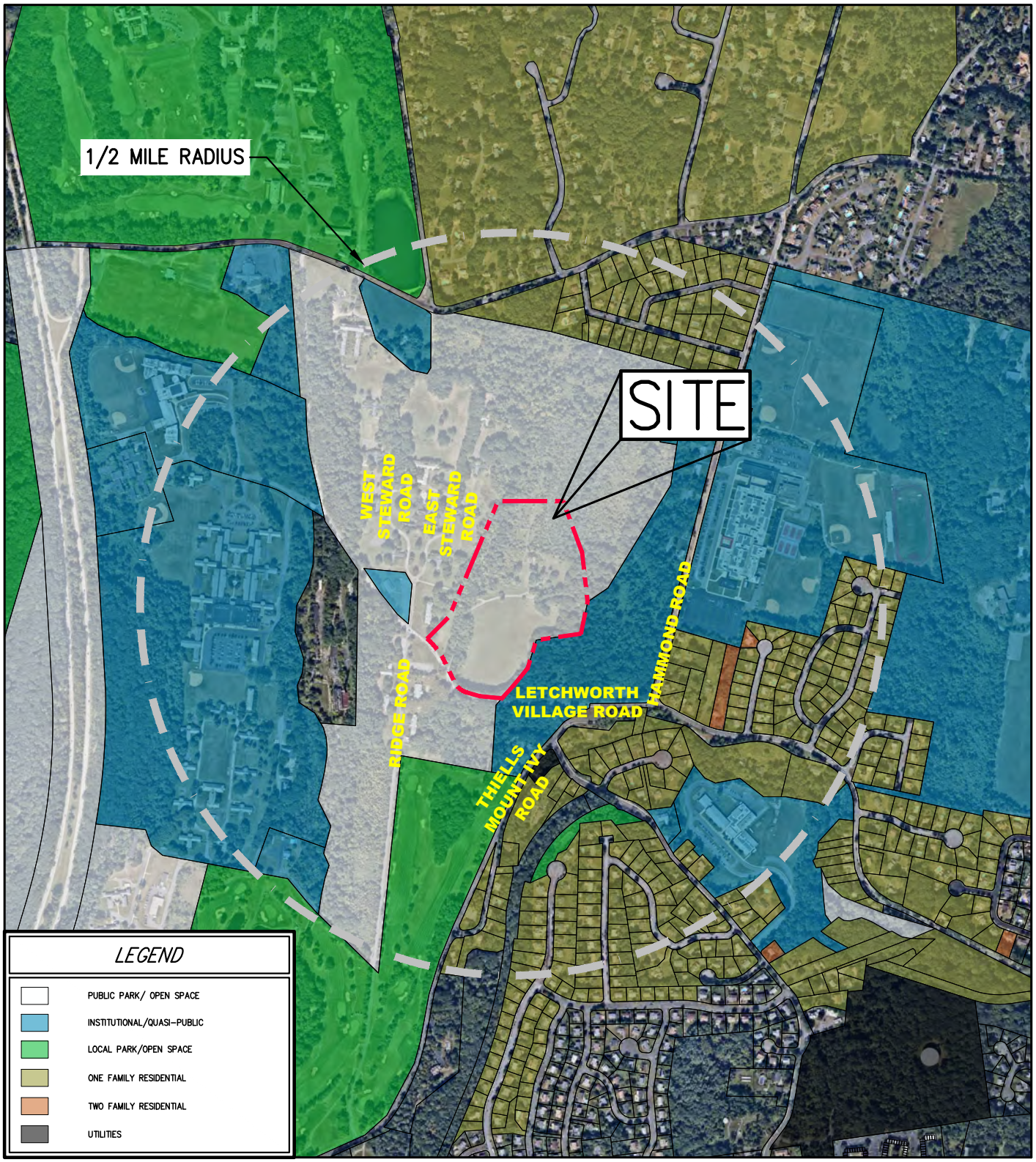
land uses. The development will be landscaped and be aesthetically pleasing for both the surrounding environment and the existing surrounding uses.

The Proposed Action is to be a multi-family residential use and it has been discussed with the various Town departments. The Town has communicated that this use is preferred for the unutilized Project Site. Being that the Project Site is in the vicinity of the local public schools and public parklands, a multi-family development is considered the best use for the property.

Additionally, the proposed action is proposed to be rezoned to the LA-17 Zoning District. This proposed zoning change from the existing R-120 Zone will provide a multi-family dwelling development to be in conformance with the project site. As such, no other mitigation measures are necessary.

FIGURES

III.A-1 Existing Land Use within ½ Mile Radius
III.A-2 Existing Zoning Districts within ½ Mile Radius
III.A-3 Zoning Map



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING LAND USE
WITHIN 1/2 MILE RADIUS

FIGURE No: III.A-1

120 BEDFORD RD
ARMONK
NY 10504

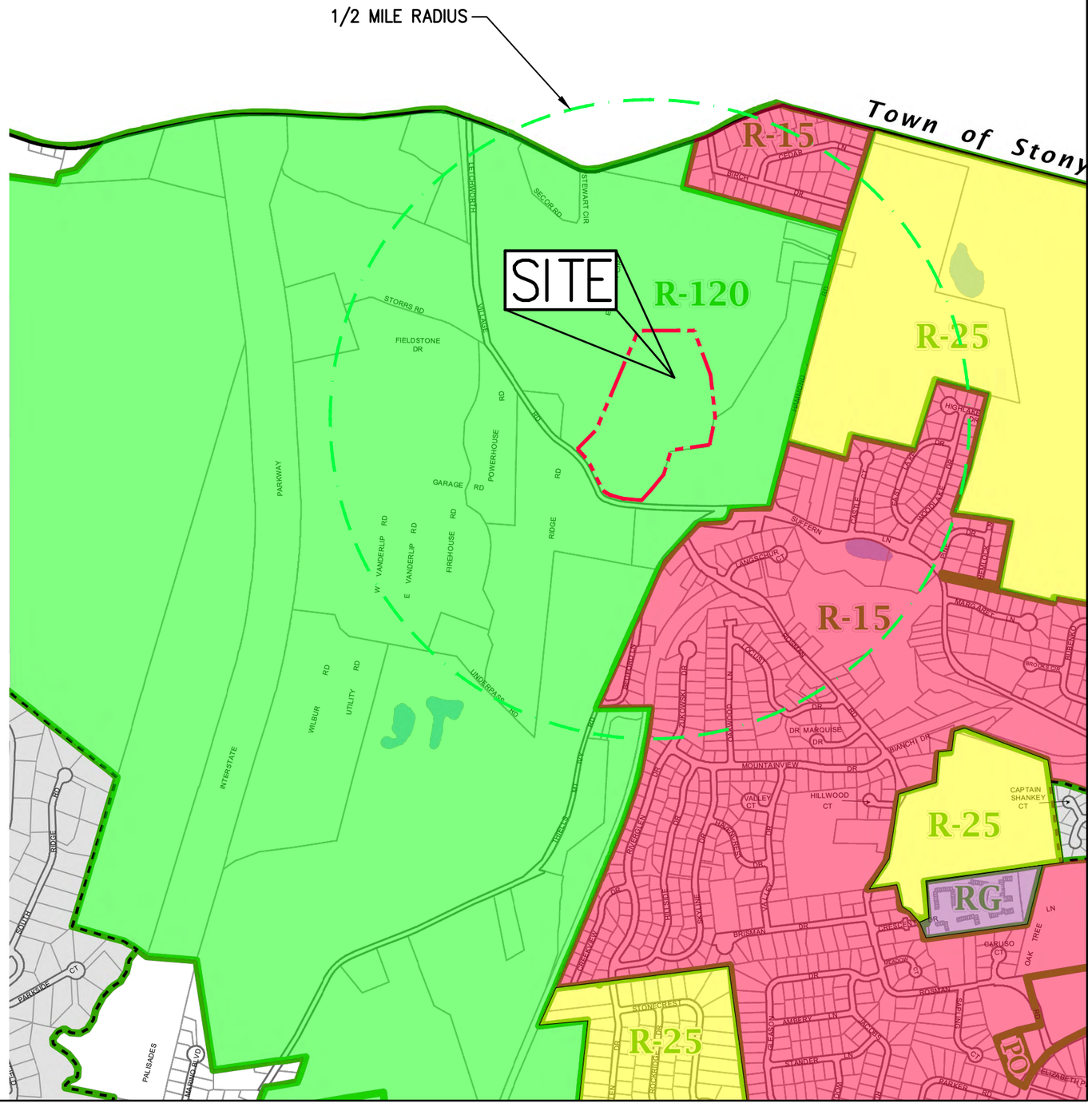
(914) 273-5225
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DATE: 01/24/2025 | JMC PROJECT: 21090 | SCALE: 1" = 1,000' | SOURCE: NEARMAP

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SOURCE: XXXXX



Zoning Legend

R-15	Medium-Density Residence District	(15,000 S.F./Lot)
R-25	Low-Density Residential District	(25,000 S.F./Lot)
R-40	Low-Density Residence District	(40,000 S.F./Lot)
R-120	Rural Residence District	(120,000 S.F./Lot)
RG	General Residence District	
RMH	Mobile Home Residence District	
WRD	Waterfront Recreation Development District	25 Acre
C	Commercial	(10,000 S.F./Lot)
CR	Commercial Recreation District	
PIO	Planned Industrial Office District	(40,000 S.F./Lot)
PO	Professional Office District	(20,000 S.F./Lot)

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ARMONK
NY 10504
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(FAX) 273-2102
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

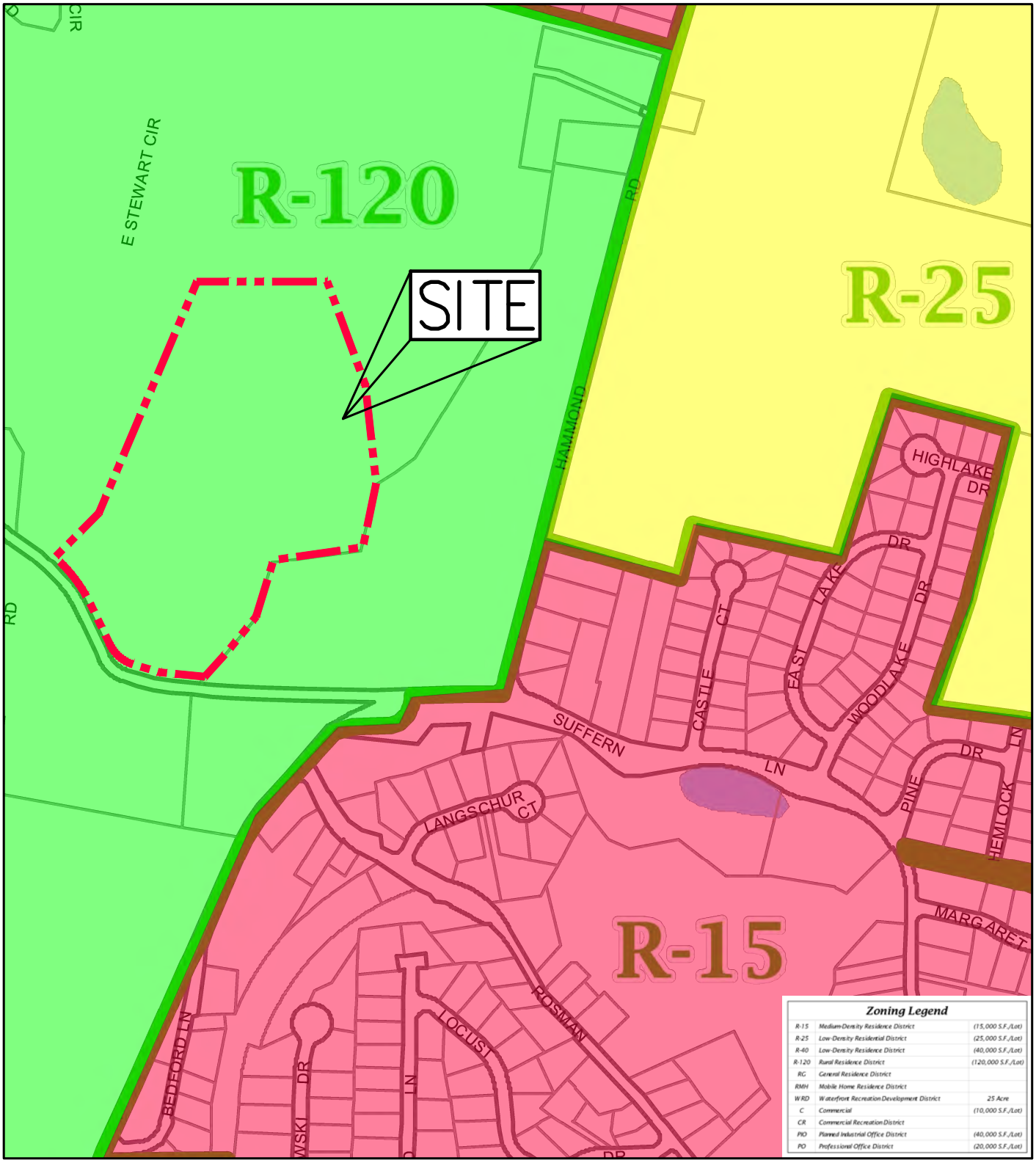
EXISTING ZONING DISTRICTS
WITHIN 1/2 MILE RADIUS

FIGURE No: III.A-2

DATE: 01/24/2025

SCALE: 1" = 1,000'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

ZONING MAP

FIGURE No: III.A-3

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III.B. Visual Resources and Community Character

1. Existing Conditions

a. Documentation of the visual character of the site and the immediately surrounding area through captioned photographs and narrative.

JMC visited the Project Site on October 7, 2024 and December 2, 2024 to document the visual character of the Project Site and surrounding area during both leaf-on and leaf-off conditions. Existing photographs from various viewpoints of the surrounding properties were taken with iPhone 11 and Pixel 9 Pro XL cameras. As demonstrated in the photos, the Project Site contains large, vegetated buffers at its perimeter. The areas immediately adjacent to the Project Site consist of the former Letchworth Village buildings, wooded areas / vegetated buffers, New York State owned land, and residential uses. See JMC Figure III.A-1 titled "Existing Land Uses within a 1/4-mile radius" and Photo View Figures III-B-1 through III-B-6A.

b. Description of on-site vegetative features, views offered into/from the subject property

The majority of the ±22.93 acre Project Site is comprised of native tree vegetation and grassland / field areas. The project contains the foundation remains of a single-family residence that was destroyed by arson in 2010. The existing photographs illustrate the dense vegetated buffers that surround the Project Site which offer little to no visibility into the property from surrounding viewpoints. The adjacent Letchworth Village structures that remain are in various states of decay after years of neglect. The Project Site is generally unmaintained, and the existing vegetation has been free to proliferate through the years.

2. Potential Impacts

a. Preparation of building elevations, sketches and other illustrations

The Proposed Action consists of seven 3.5-story residential apartment buildings, each with garage parking and additional surface parking for residents and guests. A clubhouse building is also proposed with associated on-site surface parking. There are two (2) building types proposed for the three hundred (300) residential dwellings proposed in this development. An exterior courtyard, pool area, and tennis & pickleball courts are also included in the design.

The architectural character of the buildings is traditional residential with horizontal lap siding, stone veneer, fiber cement trim, cast stone lintels, decorative shutters, and asphalt shingles.

The Proposed Action's building elevations have been prepared by Minno & Wasko Architects and are depicted on full size drawings A-04, A-07 and A-10.

b. Using captioned photographs, cross sections, photo-simulations and/or sketch renderings, provide an analysis of potential for impact on views of the development from the immediately surrounding area.

The photo locations of all the views discussed below are identified in Figure III.B-PLM.

i. Views into the site from the Cross Life Church (Figure III.B-1 and III.B-1-A)

Existing photographs III.B-1 and III.B-1A show the views into the Project Site from the West. The photographs are taken from the Cross Life Church parking lot which is immediately adjacent to the former entrance

roadway of the Letchworth Village. Photographs were taken in both leaf-on and leaf-on conditions in order to document the visibility into the Project Site. The photographs show the existing perimeter vegetation which is present on the western side of the site. The existing site features are not visible from this view. Two of the existing Letchworth Village buildings are visible.

Photo simulations of the site were prepared by the project architect, Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-1-P shows the simulations as taken from the Cross Life Church view.

As shown from this viewpoint, a portion of the proposed action will be visible. The proposed entrance driveway and roundabout will be visible, as well as two of the proposed buildings (3 and 6) and the proposed clubhouse. The existing vegetation to remain will aid in screening the development while additional proposed screening plantings will soften the proposed buildings.

ii. <u>Views into the site from Letchworth Village Road (West) (Figure III.B-2 and III.B-2A)</u>

Existing photographs III.B-2 and III.B-2A show the views into the Project Site from the western side of Letchworth Village Road adjacent to the intersection of Ridge Road. Photographs were taken in both leaf-on and leaf-off conditions in order to document the visibility into the Project Site. The photographs show the large existing vegetated buffers which exist on the site. The leaf-off photograph shows the existing fields on the southern side of the Project Site, which are visible once the trees lose their leaves in the fall and winter months.

Photo simulations of the site were prepared by the project architect, Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-2-P shows the simulations as taken from this view.

As shown, from this viewpoint, Building 1 will be directly visible from Letchworth Village Road. In addition, the viewshed extends through the center of the Project Site, with portions of buildings 2, 5, 6, and 7 being visible. Proposed screening plantings will soften the views of the proposed buildings.

iii. <u>Views into the site from Letchworth Village Road facing North (Figure III.B-3 and III.B-3A)</u>

Existing photographs III.B-3 and III.B-3A show the views into the Project Site from Letchworth Village Road from the southern side of the site facing North. Photographs were taken in both leaf-on and leaf-off conditions in order to document the visibility into the Project Site. The photographs show the existing grade change, stone wall, and vegetated buffer that exists on the southern side of the site. None of the existing site features are visible.

Photo simulations of the site were prepared by the project architect, Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-3-P shows the simulations as taken from this view.

As shown, from this viewpoint, portions of the southern sides of

Buildings 1 and 3 will be visible from Letchworth Village Road. Due to the grade change, existing stone wall, and existing topography and intervening vegetation, only the upper portions of these buildings will be visible.

iv. Views into the site from Letchworth Village Road facing Northwest (Figure III.B-4 and III.B-4A)

Existing photographs III.B-4 and III.B-4A show the views into the Project Site from Letchworth Village Road looking Northwest just west of the intersection of Thiells Mt Ivy Road. Photographs were taken in both leaf-on and leaf-off conditions in order to document the visibility into the Project Site. The photographs show the existing grade change, stone wall, and vegetated buffer that exists on the southeastern side of the site. None of the existing site features are visible.

Photo simulations of the site were prepared by the project architect, Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-4-P shows the simulations as taken from this view.

As shown, from this viewpoint, the proposed action is not visible at all due to the existing topography. The simulations approximate the highpoint of the ridgeline and superimpose the buildings to demonstrate that the buildings are completely hidden behind the hill.

v. Views into the site from Hammond Road facing West (Figure III.B-5 and III.B-5A)

Existing photographs III.B-5 and III.B-5A shows the views into the

Project Site from Hammond Road facing West. Photographs were taken in both leaf-on and leaf-off conditions in order to document the visibility into the Project Site. The photographs show the existing topography and vegetation between Hammond Road and the Project Site. None of the existing site features are visible due to the topography.

Photo simulations of the site were prepared by the project architect, Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-5-P shows the simulations as taken from this view.

As shown, from this viewpoint, the proposed action is not visible at all due to the existing topography. The simulations approximate the peak of the ridgeline and superimpose the buildings show them in relation to the highpoint of the hill. Only a small portion of the proposed buildings will project above the peak of the hill; however, it will not be visible due to the existing intervening vegetation which will remain.

vi. <u>Views into the site from Langschur Court facing Northwest (Figure III.B-6)A</u>

Existing photographs III.B-6A shows the views into the Project Site from Langschur Court facing Northwest. Photographs were taken in leaf-off conditions in order to document the visibility into the Project Site. The photographs show the existing homes on Langschur Court, as well as the topography and vegetation between Langschur Court and the Project Site. None of the existing site features are visible due to the topography.

Photo simulations of the site were prepared by the project architect,

Minno & Wasko, which superimpose the Proposed Action onto the photographs that were taken. Simulations were prepared for both leaf-on and leaf-off conditions. Figure III.B-6-P shows the simulations as taken from this view.

As shown, from this viewpoint, the proposed action is not visible at all due to the existing topography, vegetation, and distance. The simulations approximate the highpoint of the hillside and superimpose the buildings show them in relation to the highpoint of the hill. The buildings will not be visible from this viewpoint year-round due to the existing terrain and intervening vegetation.

3. Proposed Mitigation

The high-quality residential architecture aesthetic of the Proposed Action will take cues from the adjacent Letchworth Village structures that still exist. All buildings will be visually compatible with the natural and built environments and will be of a high-quality construction.

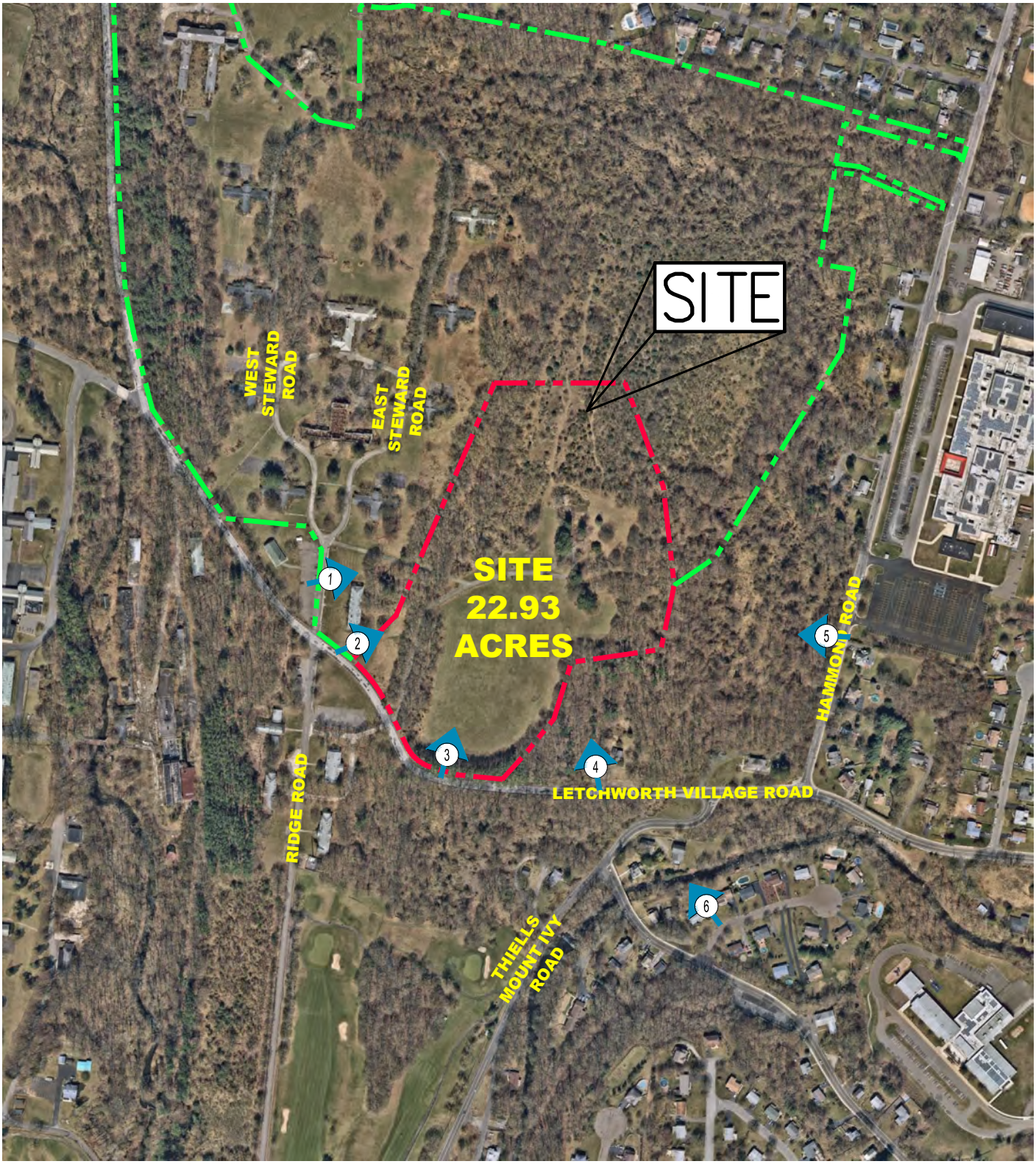
The Project Site will be landscaped with a mix of deciduous and evergreen trees, shrubbery and perennials to provide further visual mitigation from the surrounding properties in the vicinity of the property. Views into the Project Site are presented primarily from Letchworth Village Road in the vicinity of the main Project Site Driveway. In this regard, some visibility of the Project Site to the traveling public is desired for public safety, marketing and address identification.

Due to the undulating topography of the area and the existing intervening vegetative buffers around the perimeter of the property to remain, visual impacts of the Proposed Action will be mitigated to the maximum extent possible. In the Applicant’s opinion, the Proposed Action will result in minimal

off-site visual impacts on the surrounding area and an improvement from existing conditions. The Applicant believes that the buildings will be aesthetically pleasing, and the Project Site will be attractively landscaped and maintained with a high level of quality.

FIGURES

III.B-PLM	Photo Location Map
III.B-1	View From Cross Life Church
III.B-1A	View From Cross Life Church (Leaf-Off Condition)
III.B-1-P	Concept Site Photos View From Cross Life Church
III.B-2	View From Letchworth Village Road Entrance
III.B-2A	View From Letchworth Village Road Entrance (Leaf-Off Condition)
III.B-2-P	Concept Site Photos View From Letchworth Village Road Entrance
FP-1	Building Floor Plan (Building A)
FP-2	Building Floor Plan (Building A)
FP-3	Building Floor Plan (Building B)
FP-4	Building Floor Plan (Building B)
FP-5	Clubhouse Floor Plan
FP-6	Typical Unit Floor Plan & Sections
III.B-3	View From Letchworth Village Road Facing North
III.B-3A	View From Letchworth Village Road Facing North (Leaf-Off Condition)
III.B-3-P	Concept Site Photos View From Letchworth Village Road Facing North
III.B-4	View From Letchworth Village Road Facing North West
III.B-4A	View From Letchworth Village Road Facing North West (Leaf-Off Condition)
III.B-4-P	Concept Site Photos View From Letchworth Village Road Facing North West
III.B-5	View From Hammond Road Facing West
III.B-5A	View From Hammond Road Facing West (Leaf-Off Condition)
III.B-5-P	Concept Site Photos View From Hammond Road Facing West
III.B-6A	View From Langschur Court (Leaf Off-Conditions)
III.B-6-P	Concept Site Photos View From Langschur Court
ELV-1	Building Elevation (Building A)
ELV-2	Building Elevation (Building B)
ELV-3	Clubhouse Elevation



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

PHOTO LOCATION MAP

FIGURE No: III.B-PLM

120 BEDFORD RD
ARMONK
NY 10504

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DATE: 01/24/2025 | JMC PROJECT: 21090 | SCALE: 1" = 500' | SOURCE: NEARMAP

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM CROSS LIFE CHURCH (LEAF-ON CONDITION)

FIGURE No: III.B-1

1

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NY 10504

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SCALE: NTS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM CROSS LIFE CHURCH (LEAF-OFF CONDITION)

FIGURE No: III.B-1A

1

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SUMMER

WINTER





CAMERA LOCATION MAP

CAMERA LOCATION 1

CONCEPT SITE PHOTOS

DATE: 12/18/2024

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

VIEW FROM CROSS LIFE CHURCH

FIGURE No: III.B-1-P

SCALE: NTS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LETCHWORTH VILLAGE ROAD ENTRANCE (LEAF-ON CONDITION)

FIGURE No: III.B-2

2

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LETCHWORTH VILLAGE ROAD ENTRANCE (LEAF-OFF CONDITION)

FIGURE No: III.B-2A

2

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SUMMER



CAMERA LOCATION MAP

WINTER



CAMERA LOCATION 2

CONCEPT SITE PHOTOS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

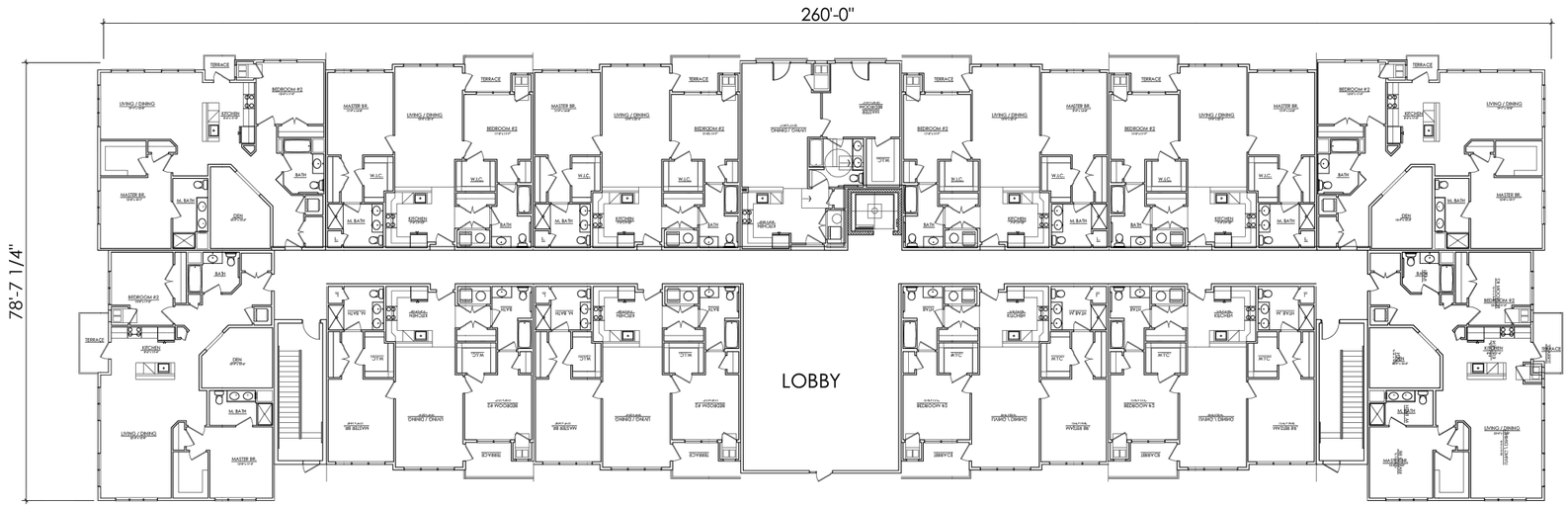
VIEW FROM LETCHWORTH VILLAGE ROAD ENTRANCE

FIGURE No: III.B-2-P

SCALE: NTS

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02 GROUND FLOOR
SCALE: 3/32" = 1'-0"



01 BASEMENT FLOOR
SCALE: 3/32" = 1'-0"

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TWO GATEWAY CENTER, SUITE 1700, NEWARK, NEW JERSEY 07102

LETCHWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCEL 19.11-1-1
PREPARED FOR:
BNE REAL ESTATE GROUP
HAVERSTRAW GROUP LLC

ISSUE: 03/14/2024

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A-2
BUILDING TYPE A
BUILDING PLAN

XX-XXXX-XX
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

BUILDING FLOORPLAN (BUILDING A)

FIGURE No: FP-1

SCALE: NTS
DATE: 01/24/2025

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03 FLOORS 2 & 3
SCALE: 3/32" = 1'-0"

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PC ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING INTERIOR DESIGN
19th CENTURY CENTERS, LIBRARIES, MUSEUMS, NEW JERSEY OFFICE

LETCHWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCEL 19.11-1-1
PREPARED FOR:
BNE REAL ESTATE GROUP
HAVERSTRAW GROUP LLC

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A-3
BUILDING TYPE A
BUILDING PLAN

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BUILDING FLOORPLAN (BUILDING A)

FIGURE No: FP-2

DATE: 01/24/2025 SCALE: NTS

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

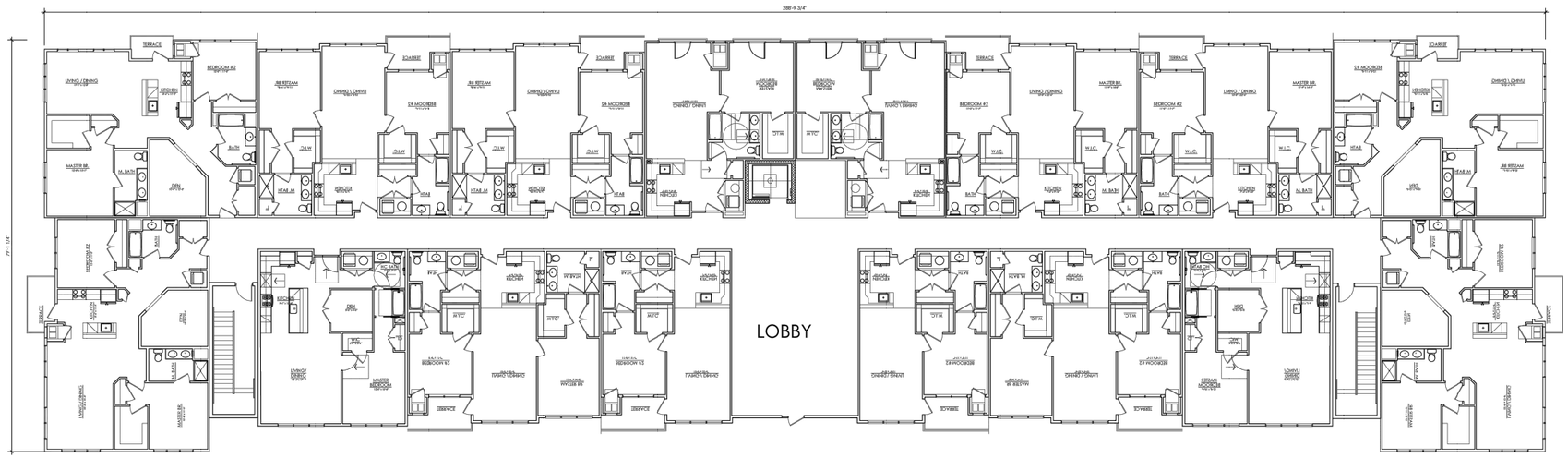
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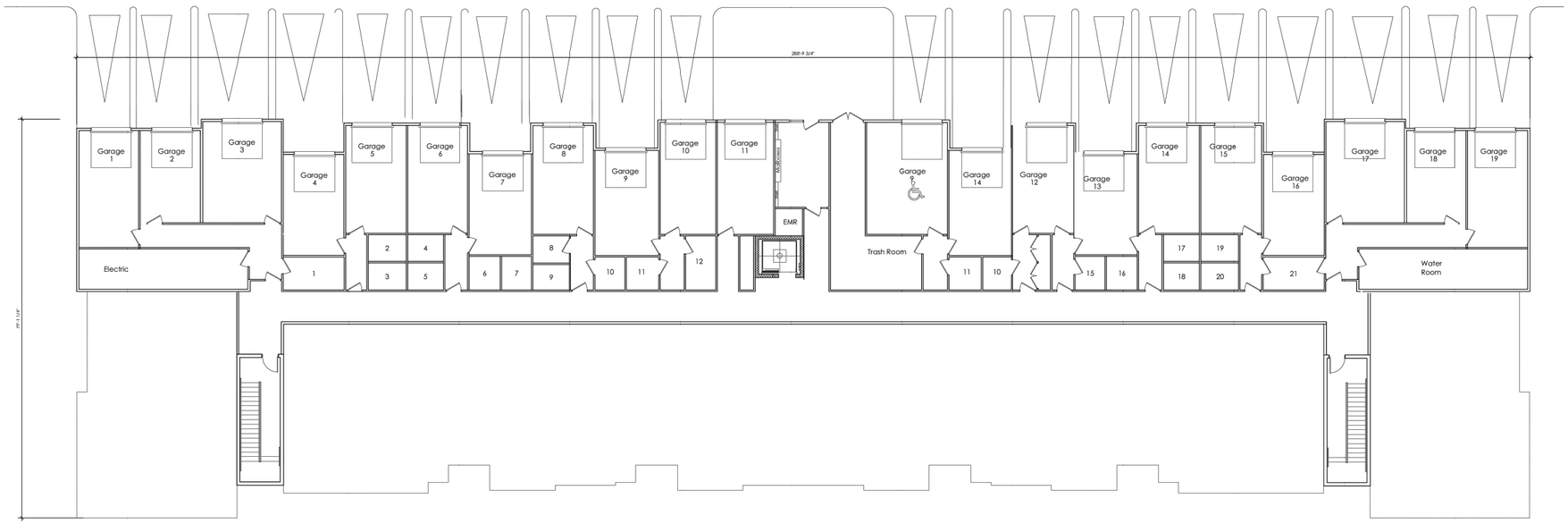
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02 GROUND FLOOR
SCALE: 3/32" = 1'-0"



01 BASEMENT FLOOR
SCALE: 3/32" = 1'-0"

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
80 CAMPUS LANE, SUITE 105, LAWRENCEVILLE, NEW JERSEY 08550 WWW.MWAP.COM
TWO GATEWAY CENTER, SUITE 1700, NEWARK, NEW JERSEY 07102

LETCHWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCEL 19.11-1-1

PREPARED FOR:
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HAVERSTRAW GROUP LLC

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A-05
BUILDING TYPE B
BUILDING PLAN

XX-XXXX-XX

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

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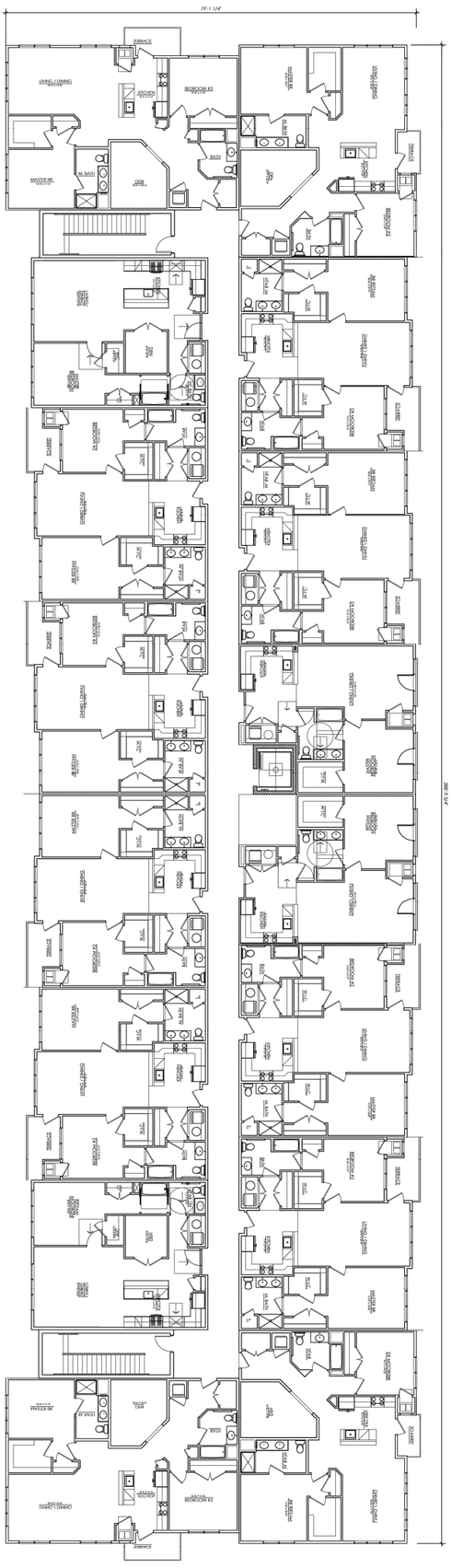
BUILDING FLOORPLAN (BUILDING B)

FIGURE No: FP-3

SCALE: NTS

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03 FLOORS 2 & 3
SCALE: 3/32" = 1'-0"

LETCHWORTH ROAD
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HAVERSTRAW, NY
TAX PARCEL 19.-11-1
PREPARED FOR:
RIVERTOWN GROUP
HAVERSTRAW GROUP, LLC

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
80 GRASSLAND ROAD, VALHALLA, NEW YORK 10595
TEL: (914) 631-4700 FAX: (914) 631-1064 WWW.MINNOWASKO.COM

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A-06
BUILDING TYPE B
BUILDING PLAN

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BUILDING FLOORPLAN (BUILDING B)

FIGURE No: FP-4

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

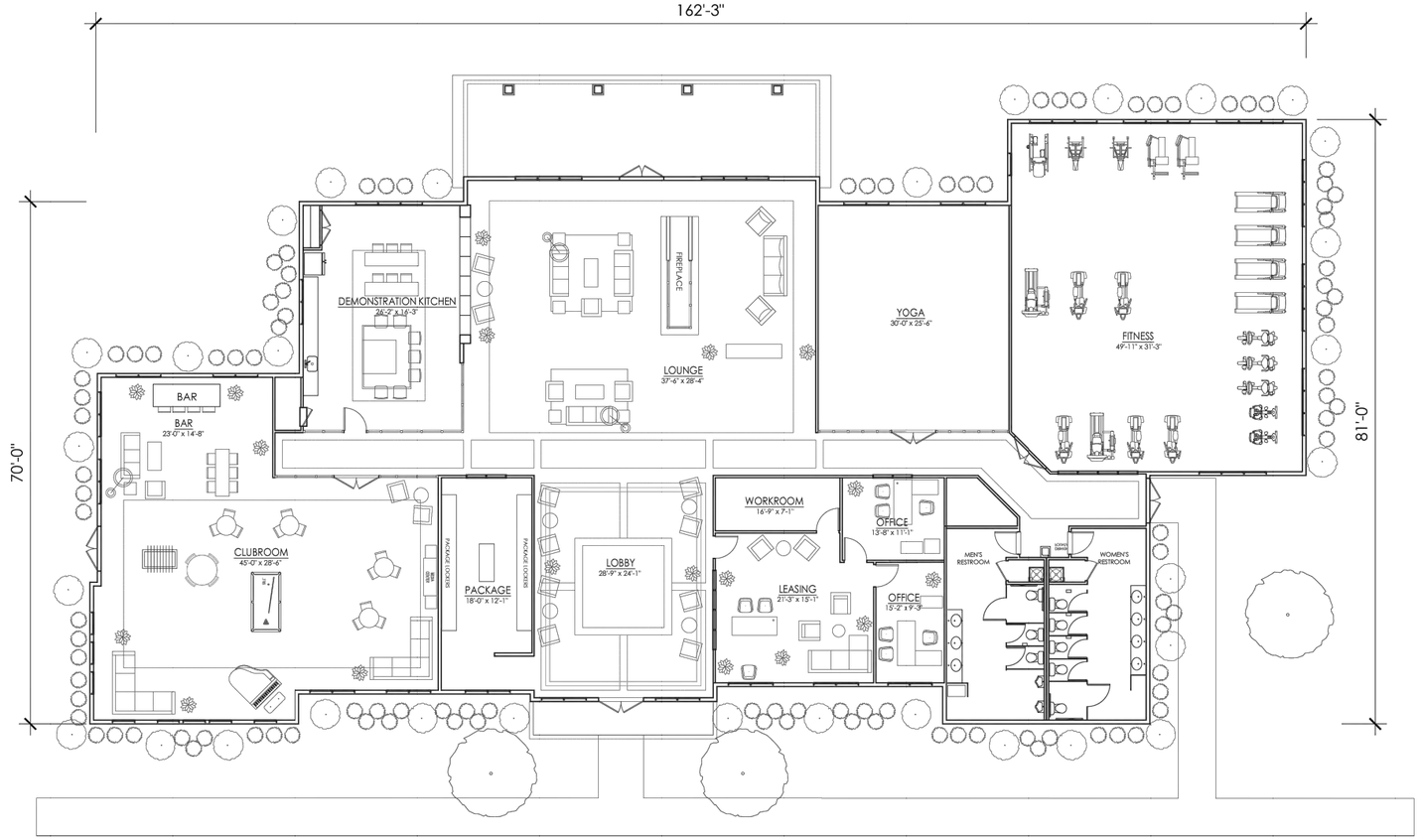
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CLUBHOUSE PLAN
SCALE: 1/8" = 1'-0"

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LETCHWORTH ROAD
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HAVERSTRAW, NY
TAX PARCEL 19.11-1-1

PREPARED FOR:
BNE REAL ESTATE GROUP
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A-09
CLUBHOUSE
BUILDING PLAN

XX-XXXX-XX

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

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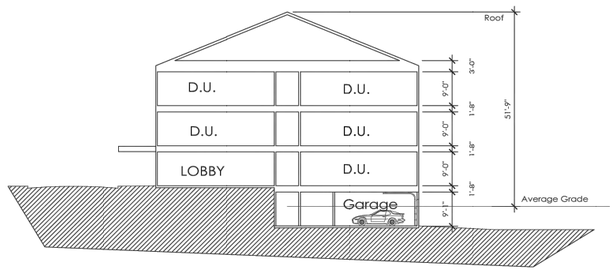
CLUBHOUSE FLOORPLAN

FIGURE No: FP-5

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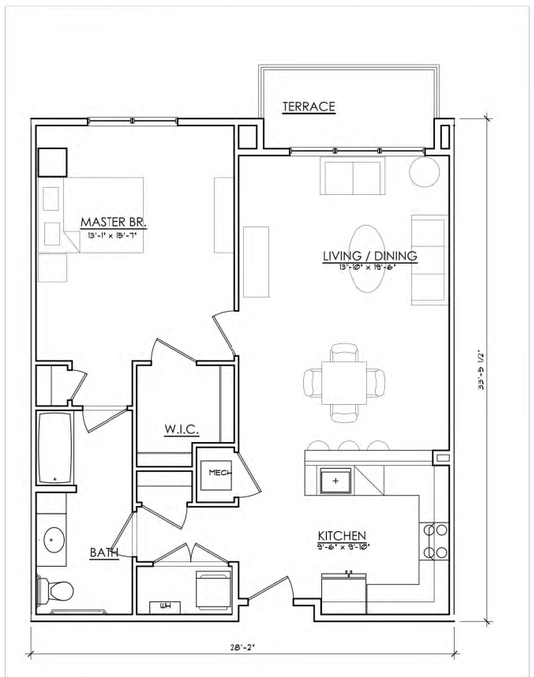
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03 SECTION

SCALE: 1/16" = 1'-0"

0 8' 16' 32'



01 ONE BEDROOM (SF)

SCALE: 1/4" = 1'-0"

0 2' 4' 8'



02 TWO BEDROOM (SF)

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

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ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105, LAMBERTVILLE, NEW JERSEY 08530 MINNOWASKO.COM
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LETCHWORTH ROAD
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HAVERSTRAW, NY
TAX PARCEL 19.11-1-1

PREPARED FOR:

BNE REAL ESTATE GROUP
HAVERSTRAW GROUP LLC

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A-08

TYP. UNIT PLANS & SECTION

XX-XXXX-XX

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

TYPICAL UNIT FLOORPLAN & SECTION

FIGURE No: FP-6

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LETCHWORTH VILLAGE ROAD FACING NORTH (LEAF ON)

FIGURE No: III.B-3

3

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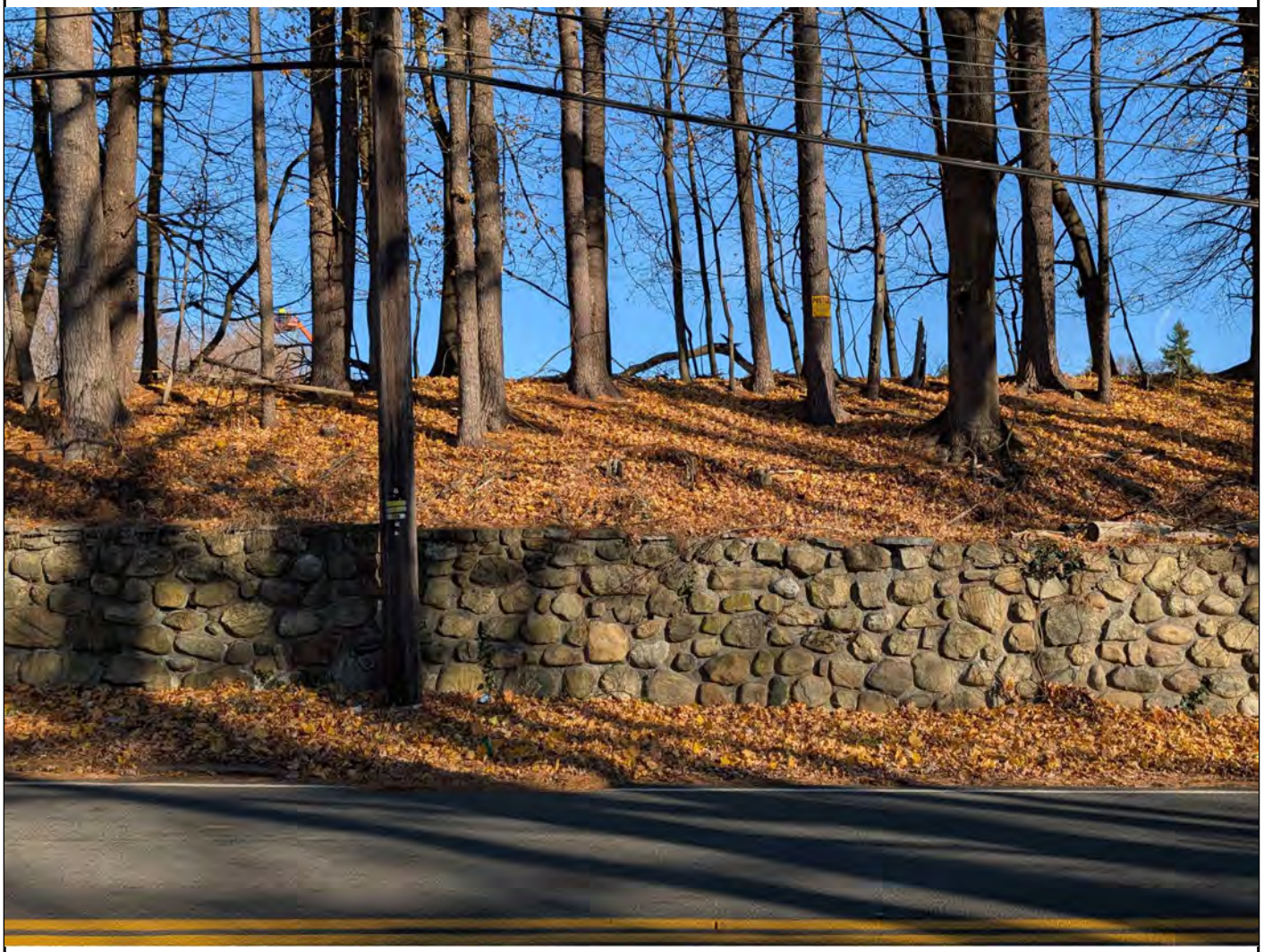
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LETCHWORTH VILLAGE ROAD FACING NORTH (LEAF-OFF CONDITION)

FIGURE No: III.B-3A

3

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A
SUMMER

NOTE: PHOTO LOCATIONS & ANGLE DIFFER SLIGHTLY



WINTER
B

CAMERA LOCATION 3



CAMERA LOCATION MAP

CONCEPT SITE PHOTOS
DATE: 12/18/2024

MINNO WASKO
ARCHITECTS AND PLANNERS
204 N. UNION STREET, LAM3ERTVILLE, NEW JERSEY 08530
GATEWAY TWO, SUITE 1700, NEWARK, NEW JERSEY 07102
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

VIEW FROM LETCHWORTH VILLAGE ROAD FACING NORTH

FIGURE No: III.B-3-P

SCALE: NTS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM 4 LETCHWORTH VILLAGE ROAD FACING NORTH WEST (LEAF-ON CONDITION)

FIGURE No: III.B-4

4

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM 4 LETCHWORTH VILLAGE ROAD FACING NORTH WEST (LEAF-OFF CONDITION)

FIGURE No: III.B-4A

4

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ARMONK
NY 10504

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(FAX) 273-2102

JMCPLLC.COM

DATE: 01/24/2025 JMC PROJECT: 21090

SCALE: NTS

SOURCE: PHOTO

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NOTE: PHOTO LOCATIONS & ANGLE DIFFER SLIGHTLY



CAMERA LOCATION 4



CAMERA LOCATION MAP

Buildings are visually obstructed by terrain & forest year round
Buildings are shown as a transparent overlay

CONCEPT SITE PHOTOS

DATE: 12/18/2024

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ARCHITECTS AND PLANNERS
204 N. UNION STREET, LAM3ERTVILLE, NEW JERSEY 08530 MINNOWASKO.COM
GATEWAY TWO, SUITE 1700, NEWARK, NEW JERSEY 07102

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

VIEW FROM 4 LETCHWORTH VILLAGE ROAD FACING NORTH WEST

FIGURE No: III.B-4-P

SCALE: NTS

DATE: 01/24/2025

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM HAMMOND RD FACING WEST (LEAF-ON CONDITION)

FIGURE No: III.B-5

5

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DATE: 01/24/2025 JMC PROJECT: 21090

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM HAMMOND RD FACING WEST (LEAF-OFF CONDITIONS)

FIGURE No: III.B-5A

5

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DATE: 01/24/2025 JMC PROJECT: 21090

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CAMERA LOCATION 5



CAMERA LOCATION MAP

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CONCEPT SITE PHOTOS

DATE: 12/18/2024

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

VIEW FROM HAMMOND ROAD FACING WEST

FIGURE No: III.B-5-P

DATE: 01/24/2025

SCALE: NTS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LANGSCHUR CT (LEAF OFF-CONDITIONS)

FIGURE No: III.B-6A

6

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DATE: 01/24/2025 JMC PROJECT: 21090

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CAMERA LOCATION MAP

SUMMER

WINTER

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CAMERA LOCATION 6

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

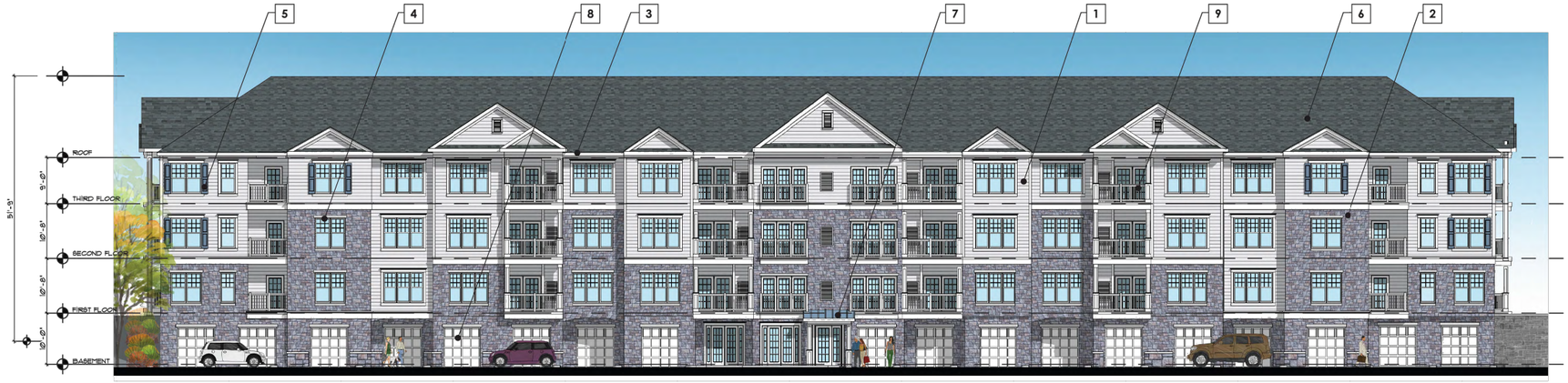
VIEW FROM LANGSCHUR CT

FIGURE No: III.B-6-P

SCALE: NTS

DATE: 01/24/2025

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04 REAR ELEVATION

SCALE: 3/32" = 1'-0"



02 LEFT ELEVATION

SCALE: 3/32" = 1'-0"



03 RIGHT ELEVATION

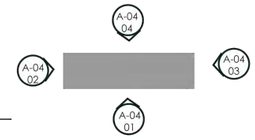
SCALE: 3/32" = 1'-0"



01 FRONT ELEVATION

SCALE: 3/32" = 1'-0"

KEY PLAN:



MATERIALS KEY:

01 HORIZONTAL LAP SIDING 01
02 STONE VENEER
03 FIBER CEMENT TRIM
04 CAST STONE
05 DECORATIVE SHUTTERS
06 ASPHALT SHINGLES
07 STANDING SEAM METAL ROOF
08 ARCHITECTURAL GARAGE DOOR
09 ARCHITECTURAL METAL RAILING
10 VINYL WINDOW

NOTES:

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PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105, LAMBERTVILLE, NEW JERSEY 08530 · MINNOWASKO.COM
TWO GATEWAY CENTER, SUITE 1700, NEWARK, NEW JERSEY 07102

LETCHWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCEL 19.11-1-1

PREPARED FOR:
BNE REAL ESTATE GROUP
HAVERSTRAW GROUP LLC

ISSUE: 03/14/2024	
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A-04
BUILDING TYPE A
BUILDING ELEVATIONS

XX-XXXX-XX

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LETCHWORTH ROAD
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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

BUILDING ELEVATION (BUILDING A)

FIGURE No: ELV-1

SCALE: NTS

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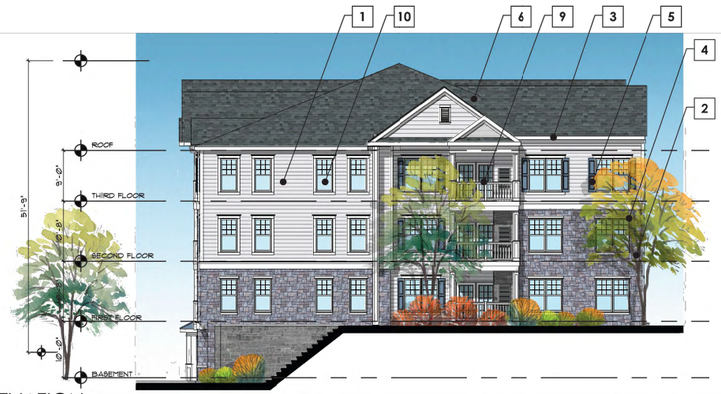
04 REAR ELEVATION

SCALE: 3/32" = 1'-0"



02 LEFT ELEVATION

SCALE: 3/32" = 1'-0"



03 RIGHT ELEVATION

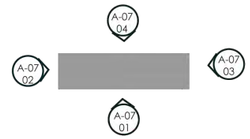
SCALE: 3/32" = 1'-0"



01 FRONT ELEVATION

SCALE: 3/32" = 1'-0"

KEY PLAN:



MATERIALS KEY:

01	HORIZONTAL LAP SIDING 01
02	STONE VENEER
03	FIBER CEMENT TRIM
04	CAST STONE
05	DECORATIVE SHUTTERS
06	ASPHALT SHINGLES
07	STANDING SEAM M.M. METAL ROOF
08	ARCHITECTURAL GARAGE DOOR
09	ARCHITECTURAL METAL RAILING
10	VINYL WINDOW

NOTES:

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MINNO WASKO
ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105, LAMBERTVILLE, NEW JERSEY 08530 MINNOWASKO.COM
TWO GATEWAY CENTER, SUITE 1700, NEWARK, NEW JERSEY 07102

LETCHWORTH ROAD
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HAVERSTRAW, NY
TAX PARCEL 19,11-1-1

PREPARED FOR:

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A-07

BUILDING TYPE B
BUILDING ELEVATIONS

XX-XXXX-XX

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD
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BUILDING ELEVATION (BUILDING B)

FIGURE No: ELV-2

SCALE: NTS

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01 FRONT ELEVATION
SCALE: 1/8" = 1'-0"



02 LEFT ELEVATION
SCALE: 1/8" = 1'-0"

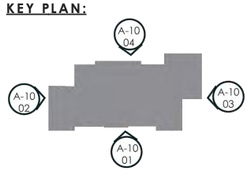


03 RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



04 REAR ELEVATION
SCALE: 1/8" = 1'-0"

KEY PLAN:



MATERIALS KEY:

01 HORIZONTAL LAP SIDING 01
02 STONE VENEER
03 FIBER CEMENT TRIM
04 CAST STONE
05 DECORATIVE SHUTTERS
06 ASPHALT SHINGLES
07 STANDING SEAM METAL ROOF
08 ARCHITECTURAL GARAGE DOOR
09 ARCHITECTURAL METAL RAILING
10 VINYL WINDOW

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MINNO WASKO
ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105, LAMBERTVILLE, NEW JERSEY 08530 MINNOWASKO.COM
TWO GATEWAY CENTER, SUITE 1700, NEWARK, NEW JERSEY 07102

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HAVERSTRAW, NY
TAX PARCEL 19.11-1-1

PREPARED FOR:
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A-10
CLUBHOUSE
BUILDING ELEVATIONS

XX-XXXX-XX

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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

CLUBHOUSE ELEVATION

FIGURE No: ELV-3

SCALE: NTS

DATE: 01/24/2025

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III.C. Soils, Topography, and Steep Slopes

1. Existing Conditions including a description and mapping of soils, topography, and steep slopes

SESI Consulting Engineers were retained by The Applicant to prepare a thorough subsurface study and investigation of the proposed ±22.93 acre project area. As detailed in the Geotechnical Investigation Report, dated March 6, 2024, the study included 41 test pits and 6 boring locations. The test pits were excavated down to depths ranging from ±11 to ±15 feet and the boring depths range from ±12 to ±20 feet.

Regarding the geology for the Project Site, the subsurface areas consisted of sands, gravels, & silts that were both clay and with cobbles. In all testing locations on the site, natural soils were encountered, mostly consisting of silt-clay and silt with varying amounts of sand and cobbles. Groundwater was also found at depths from 1 to 13 feet deep from elevations of ±422.5 to ±441.6. For the surface conditions, the topsoil thicknesses range from approximately 2 to 8 inches.

Table III.C-1 summarizes the observations for all test pits and boring locations.

Table III.C-1
Infiltration Test Result Summary Table

Basin Location	Bottom of Basin EL (ft)	Location Number	Depth of Groundwater (ft)	Groundwater Elevation (ft)	Infiltration Test EL (ft)	Infiltration Rate (in/hr)
Southwest Basin	424 (Original)	BP-1	2.0	427.5	Cancelled[2]	
		TP-1	5.0	423.2	425.5	13.25
		TP-2	7.0	422.5	425.5	15.50
Southwest Basin	432 (Original)	BP-2	N.E.	N.E.	432.0	>24
		TP-6	8.5[3]	430.2	432.0	10.50
		TP-7	8.0[3]	436.2	432.0	0.50
		TP-8	N.E.	N.E.	432.0	9.75
Northeast Basin	434	BP-3	N.E.	N.E.	432.0	9.50
		TP-21	N.E.	N.E.	432.0	9.50
		TP-22	N.E.	N.E.	432.0	8.75
		TP-27	N.E.	N.E.	Cancelled[2]	-
Additional Tests	N/A	BP-6	6.0	437.4	441.0	3.00
		TP-36	11.0	440.4	442.5	0.25

1. BP-1 Cancelled per email from JMC
2. TP-27 cancelled due to rapid infiltration at location and test depth, greater than 24 in/hr
3. Perched conditions observed at depths ranging from 8 to 8.5 ft below existing grade.
4. Northwest basin cancelled per email with JMC, high groundwater EL, approx. 2-ft below existing grade.

a. Description and Mapping of Soils

Figure III.C-2 depicts the soil mapping units on the Project Site based on the Natural Resources Conservation Service (NRCS) Web Soil Survey at https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. The soil mapping units on the Project Site include Charlton Fine Sandy Loam 3 to 8 percent slopes (CeB), 8 to 15 percent slopes (CeC), and 15 to 25 percent slopes (CeD). The Charlton Fine Sandy Loam Soils account for approximately ±90% of the site. The remaining ±10% of the site consists of Alden Silt Loam (Ad) which is located in the northern areas of the parcel.

Charlton Fine Sandy Loam soils are considered soils that drain well and the depth to bedrock is beyond six feet, according to the web soil survey. The Alden Silt Loam is considered a poorly drained soil, however none of the proposed work for the project is to take place in the areas on the site that consists of Alden Silt Loam soil. The depth to the top of the seasonal high water table is more than six feet across all soils on the entire parcel. The

Charlton soil groups are in hydrologic group B and the Alden soil is of group C/D according to the web soil survey.

As noted above, the Project Geotechnical Engineers, SESI Consulting Engineers, performed a preliminary subsurface soil and foundation investigation (Appendix C-1). It included six (6) borings in different locations and forty-one (41) test pit locations on the project site. Soil stratum one consists of a topsoil layer that is consistently ±6 inches throughout the ±22.93 acre site. Underneath this layer in stratum two lies existing Brown Sandy & Silt Loam, Brown Sand, Brown Gravel, and Brown Clay throughout the borings and test pits on the Project Site. Stratum three consisted of Brown Loam Clay throughout the test pits and borings on site.

b. Description and Mapping of Topography

A topographic survey of the Project Site has been prepared by Ward Carpenter Engineers, Inc., dated 09/20/2023 and is the basis of the underlying existing conditions depicted on the JMC Preliminary Site Plan Approval Drawings. As depicted on these drawings, the grade of the Project Site slopes generally east and west, with a high point at the center of the site. The Project Site's topographic elevations range from 430 feet from the eastern end of the property to 460 feet at the end of the existing gravel road/driveway on the Project Site. The average elevation is approximately 440 feet.

c. Topographic survey based on a two-foot contour interval is required. Description and Mapping of existing Steep Slopes to reflect the following slope categories: 0-15%, 15-25% and 25 % and greater

See Figure III-C-3 "Existing Slopes Map", depicting the above noted slope categories.

A series of retaining walls is proposed on the project site for the Proposed Action, as shown in the “Preliminary Site Grading Plan”, Sheet C-200. The retaining walls proposed will mitigate any additional excavation & earth removal that would have had to take place on the project site due to the existing slopes and topography. The retaining walls will be in accordance with Town Code Appendix Section A172-23 entitled “Retaining Walls”. The Town Code requires that all walls four feet in height or greater and all tiered walls that are six feet in height or greater shall be submitted and approved to the satisfaction of the Town Engineer and the Town Building Inspector.

The retaining walls are proposed to be situated along the eastern side of the property where the existing slopes are the steepest. Having the retaining walls situated in the area of the project site with the steepest slopes will provide the most mitigation on any additional cut & fill that may have been required to achieve the Proposed Action.

2. Potential Impacts

a. Preparation of grading plans and analyses:

i. Soil Erosion, as discussed in the “Preliminary Stormwater Pollution Prevention Plan”, a potential impact of the Proposed Action on any soils or slopes will be that of erosion and transport of sediment during construction. An Erosion and Sediment Control Management Program will be implemented for the Proposed Action, beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," dated November 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the Proposed Action.

As a condition of Site Plan approval, the Applicant will have a qualified professional conduct an assessment of the Project Site prior to the commencement of construction, and certify that the appropriate erosion and sediment controls as shown on the Erosion and Sediment Control Plan (full-sized drawing C-400) have been adequately installed to ensure overall preparedness of the Project Site for the commencement of construction. In addition, the Applicant shall have a qualified professional conduct a site inspection at least once every seven (7) calendar days. In the event that there has been a variance with the design of the sediment and erosion control measures so that the ability of the measures to adequately perform the intended function is lessened or compromised and/or the facilities are not adequately maintained, the qualified professional shall be required to report such variance to the Engineering Consultant within 48 hours, and shall be empowered to order immediate repairs to the sediment and erosion control measures.

Temporary control measures and facilities will include silt fences, construction ditches, stabilized construction access, temporary seeding, mulching and sediment traps with temporary riser and anti-vortex devices.

Throughout the construction of the Proposed Action, temporary control facilities will be implemented to control on-site erosion and sediment transfer. Interceptor swales will be used to direct stormwater runoff to temporary sediment traps for settlement. The sediment traps will be constructed as part of the Proposed Action will serve as temporary sediment basins to remove sediment and pollutants from the stormwater runoff produced during construction.

Descriptions of the temporary sediment & erosion controls that will be used during the development of the Site including silt fence, stabilized construction access, seeding, mulching, inlet protection, erosion control matting, sediment traps, temporary sediment basins, temporary riser and anti-vortex devices, and stone check dams are as follows:

(1) Silt Fence is constructed using a geotextile fabric. The fence will be either 18 inches or 30 inches high. The height of the fence can be increased in the event of placing these devices on uncompacted fills or extremely loose undisturbed soils. The fences will not be placed in areas that receive concentrated flows such as ditches, swales and channels. Nor will the filter fabric material be placed across the entrance to pipes, culverts, spillway structures, sediment traps, or basins.

(2) Stabilized Construction Entrance consists of AASHTO No. 1 rock. The rock entrance will be a minimum of 50 feet in length by 20 feet in width by 8 inches in depth.

(3) Seeding will be used to create a vegetative surface to stabilize disturbed earth until at least 80% of the disturbed area has a perennial vegetative cover. This amount is required to adequately function as a sediment and erosion control facility. Grass lining will also be used to line temporary channels and the surrounding disturbed areas.

(4) Mulching is used as an anchor for seeding and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed.

(5) Inlet Protection will be provided for all stormwater basins and inlets with the use of curb & gutter inlet protection and stone and block inlet protection structures, which will keep silt, sediment and construction debris out of the storm system. Existing structures within existing paved areas will be protected using "Silt Sacks" inside the structures.

(6) Erosion Control Matting will be utilized on slopes and within swales, where applicable, to provide stabilization in advance of vegetation being established. Such matting will be biodegradable to facilitate long term growth of vegetation in swales, on slopes and within stormwater management facilities.

(7) Sediment Traps will be used with the permanent SMP's until their contributing areas drainage are stabilized. Once stabilized, the temporary risers will be removed and final grading/planting of the basins will be completed for permanent use as Stormwater Management basins.

(8) Temporary Sediment Basins will be constructed to intercept sediment laden runoff and trap and retain the sediment. The sediment basins are sized to provide a sediment storage volume of 3,600 cubic feet per acre draining to the basin. The Sediment Basins will be used with the permanent SMP's until their contributing drainage areas are stabilized. Once stabilized, the temporary risers will be removed, permanent outlet control structures will be installed and final grading/planting of the sediment basins will be completed for permanent use as Stormwater Management basins.

(9) Temporary Riser and Anti-Vortex Devices are placed at the bottom of the temporary sediment basins where they intercept and collect debris and litter from the pond before they can enter the off-site storm drainage system.

(10) Stone Check Dams are small barriers of crushed stone, which will be laid across the grass swales which are approximately 12 inches high, located at a minimum of two foot of elevation change along the swales so that the crest elevation of the downstream dam is at the same elevation of the toe of the upstream dam.

(11) Permanent Control Measures and Facilities the contractor is responsible for maintaining the temporary sediment and erosion control measures throughout construction. This maintenance will include, but not be limited to, the following tasks:

a) For dust control purposes, moisten all exposed graded areas with water at least twice a day in those areas where soil is exposed and cannot be planted with a temporary cover due to construction operations or the season (December through March).

b) Inspection of erosion and sediment control measures shall be performed at the end of each construction day and immediately following each rainfall event. All required repairs shall be immediately executed by the contractor.

c) Sediment deposits shall be removed when they reach approximately ⅓ the height of the silt fence. All such sediment shall be properly disposed of in fill areas on the Project Site, as directed by the Owner's Field Representative. Fill shall be protected following disposal with mulch, temporary and/or permanent vegetation and be completely circumscribed on the downhill side by silt fence.

d) Rake all exposed areas parallel to the slope during earthwork operations.

e) Following final grading, the disturbed area shall be stabilized with a permanent surface treatment (i.e. turf grass, pavement or sidewalk). During rough grading, areas which are not to be disturbed for fourteen or more days shall be stabilized with the temporary seed mixture, as defined on the plans. Seed all piles of dirt in exposed soil areas that will not receive a permanent surface treatment.

Towards the completion of construction, permanent sediment and erosion control measures will be developed for long term erosion protection. These are described in detail in the "Preliminary Stormwater Pollution Prevention Plan" contained in Appendix F-1.

ii. Slope stabilization, as discussed, the Project Site currently slopes away from the existing gravel drive to the east and west. The steepest slopes on the Project Site exist on the eastern areas, towards Hammond Road. The Project Site is relatively flat with only some small areas of slopes above 15% around the perimeter of the property (see Figure III-C-3 "Existing Slopes Map"). As discussed in the "Preliminary Stormwater Pollution Prevention Plan" contained in Appendix F-1, erosion control matting will be utilized on slopes and within swales, where applicable, to provide stabilization in advance of vegetation being established. Such matting will be biodegradable to facilitate long-term growth of vegetation in swales, on slopes and within stormwater management facilities.

The final stabilization of graded areas consists of the placement of topsoil and installation of landscaping (unless the area is to be paved,

or a building is to be constructed in the location). On slopes with a grade of 3 horizontal to 1 vertical or greater, and in swales, a geotextile netting or mat will be installed for stabilization purposes as shown on the Plans.

iii. Extent of Rock Removal. The total amount of excavated material required to implement the Proposed Action is approximately ±71,000 cubic yards. The total amount of imported fill material required for the Proposed Action is approximately ±82,500 cubic yards.

This results in a net import of approximately ±11,500 cubic yards, which is substantially balanced when considering the earthwork required to bring the site to the subgrade of the roads and buildings. A preliminary Cut and Fill Map is provided as Figure III.C-4 in Section III.C "Geology, Soils, Topography and Steep Slopes" of the DEIS.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS

The Proposed Action was designed to a sensitivity to the on-site slopes and soils. The proposed buildings and roadways are oriented with the natural terrain and the grading design mimics the natural grade of the site so as to minimize the potential impacts to the soils and steep slopes.

A series of retaining walls is proposed on the project site for the Proposed Action, as shown in the "Preliminary Site Grading Plan", Sheet C-200. The retaining walls proposed will mitigate any additional excavation & earth removal that would have had to take place on the project site due to the existing slopes and topography. The retaining walls will be in accordance with Town Code Appendix Section A172-23 entitled "Retaining Walls". The Town Code requires that all walls four feet in height or greater and all tiered

walls that are six feet in height or greater shall be submitted and approved to the satisfaction of the Town Engineer and the Town Building Inspector.

The retaining walls are proposed to be situated along the eastern side of the property where the existing slopes are the steepest. Having the retaining walls situated in the area of the project site with the steepest slopes will provide the most mitigation on any additional cut & fill that may have been required to achieve the Proposed Action.

In addition, a detailed Erosion & Sediment Control Plan has been prepared for the project which will appropriately mitigate any potential impact related to the soils and steep slopes. Silt fencing, temporary sediment basins, and other control measures will be utilized to prevent the transport of sediment off-site. Temporary stabilization will be employed on all disturbed areas to reduce the potential for erosion. Retaining walls and other permanent stabilization measures will be utilized to mitigate potential long-term impacts.

FIGURES

III.C-1 Boring Location Map
III.C-2 Map Of Soil Types (USDA Soil Survey)
III.C-3 Existing Slopes Map
III.C-4 Cut and Fill Analysis

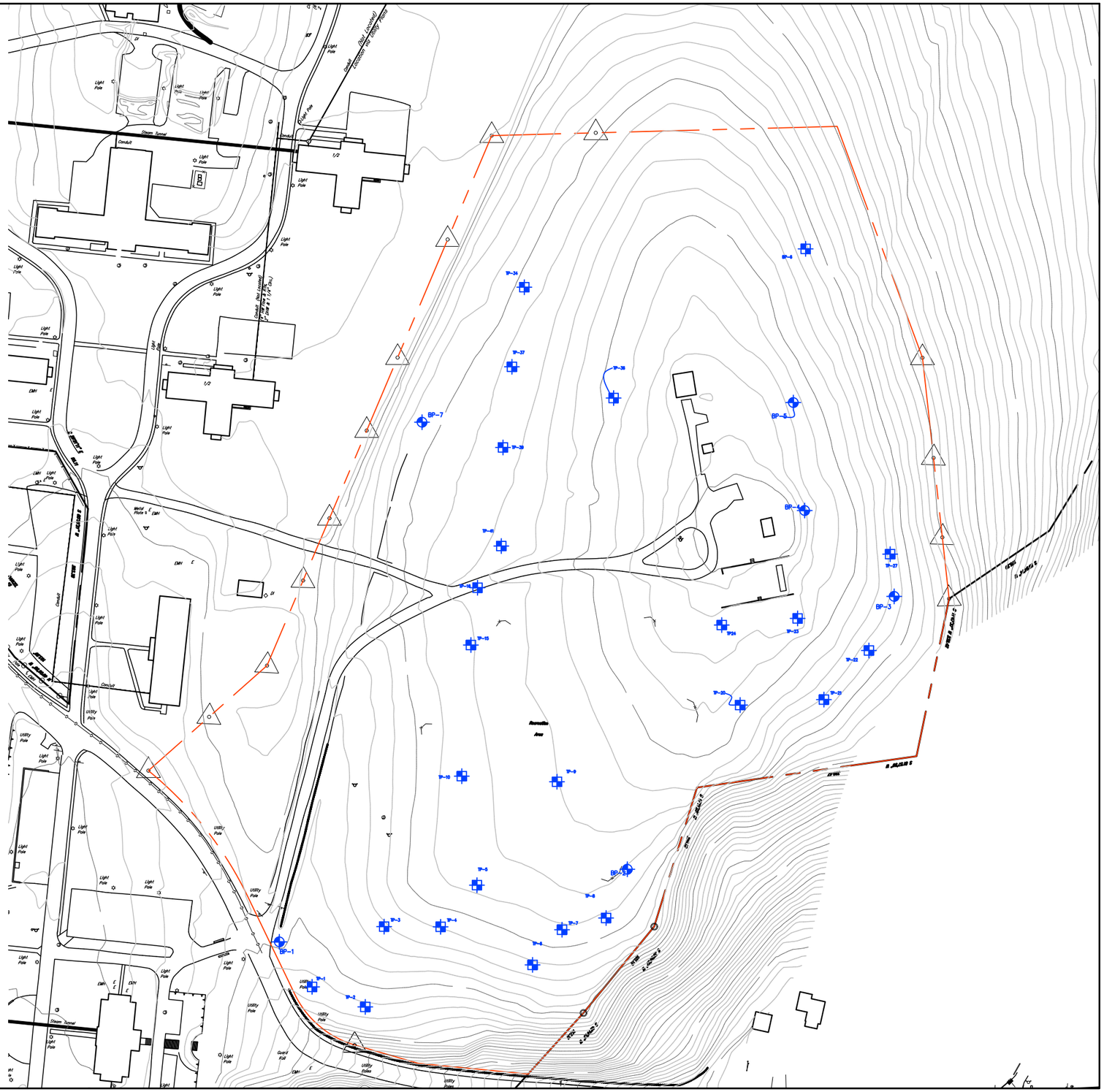
LEGEND

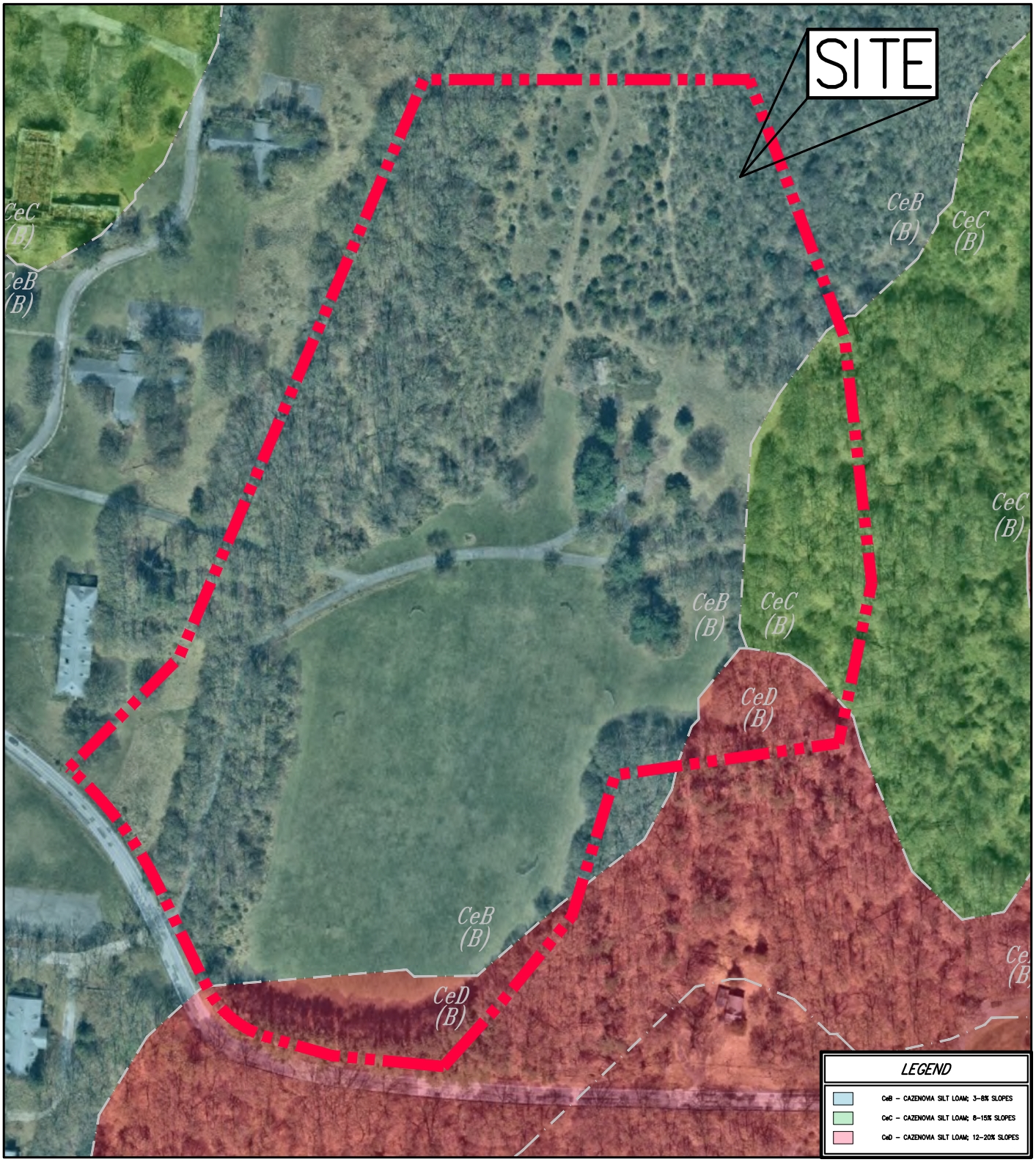
- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING WATERLINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- TEST PIT LOCATIONS – COMPLETED FEBRUARY 2, 2024
- BORING LOCATIONS – COMPLETED FEBRUARY 2, 2024

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR BNE REAL ESTATE," PREPARED BY WARD CARPENTER ENGINEERS, INC, DATED 09/20/2023.

2. GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "GEOTECHNICAL INVESTIGATION REPORT", DATED 03/06/2024, PREPARED BY SESI CONSULTING ENGINEERS.





LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

MAP OF SOIL TYPES
(USDA SOIL SURVEY)

FIGURE No: III.C-2

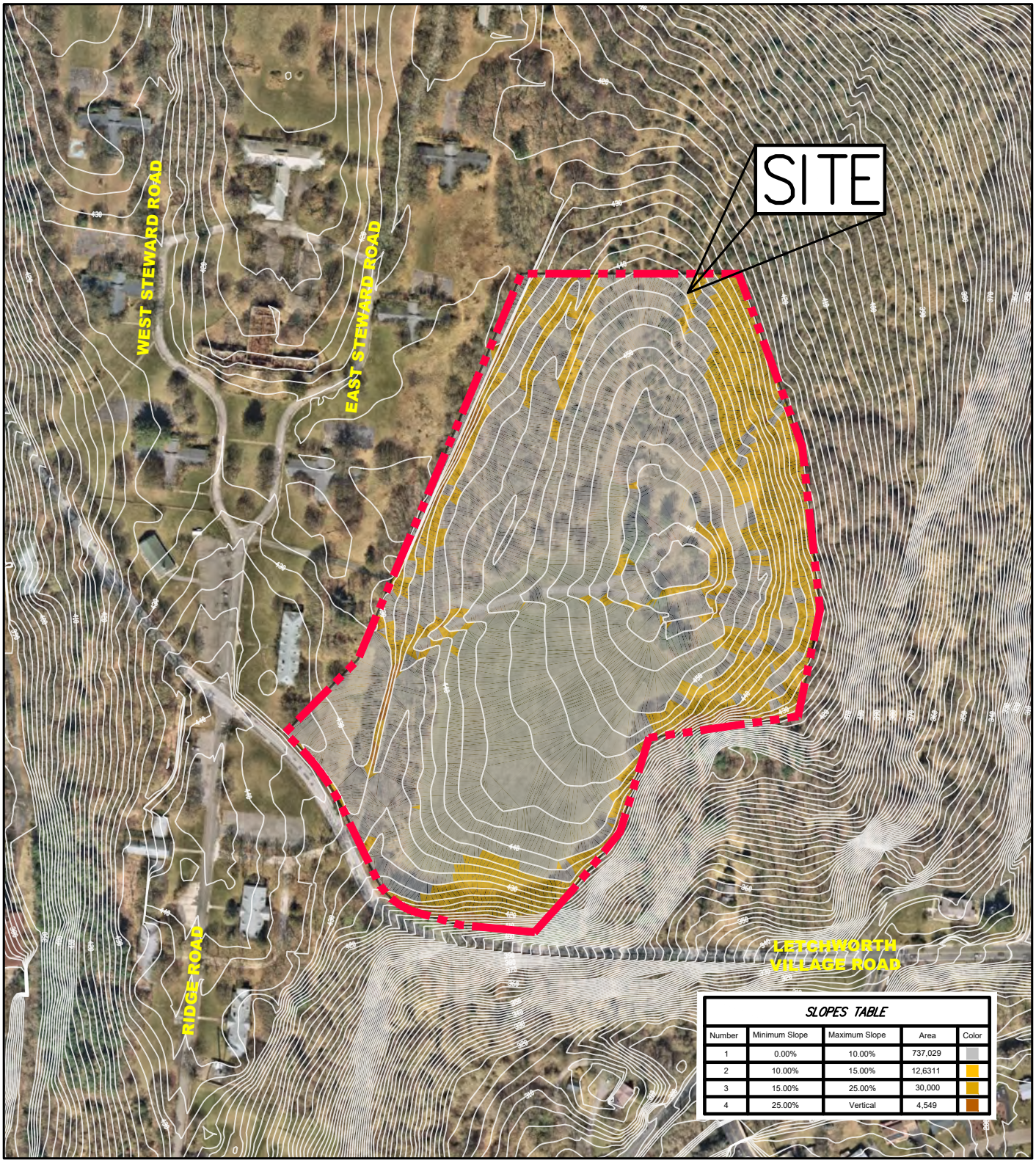
120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
(FAX) 273-2102

JMCPLLC.COM

DATE: 01/24/2025 | JMC PROJECT: 21090 | SCALE: 1" = 500' | SOURCE: NEARMAP

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SLOPES TABLE

Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	10.00%	737,029	
2	10.00%	15.00%	12,6311	
3	15.00%	25.00%	30,000	
4	25.00%	Vertical	4,549	

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING SLOPES MAP

FIGURE No: III.C-3

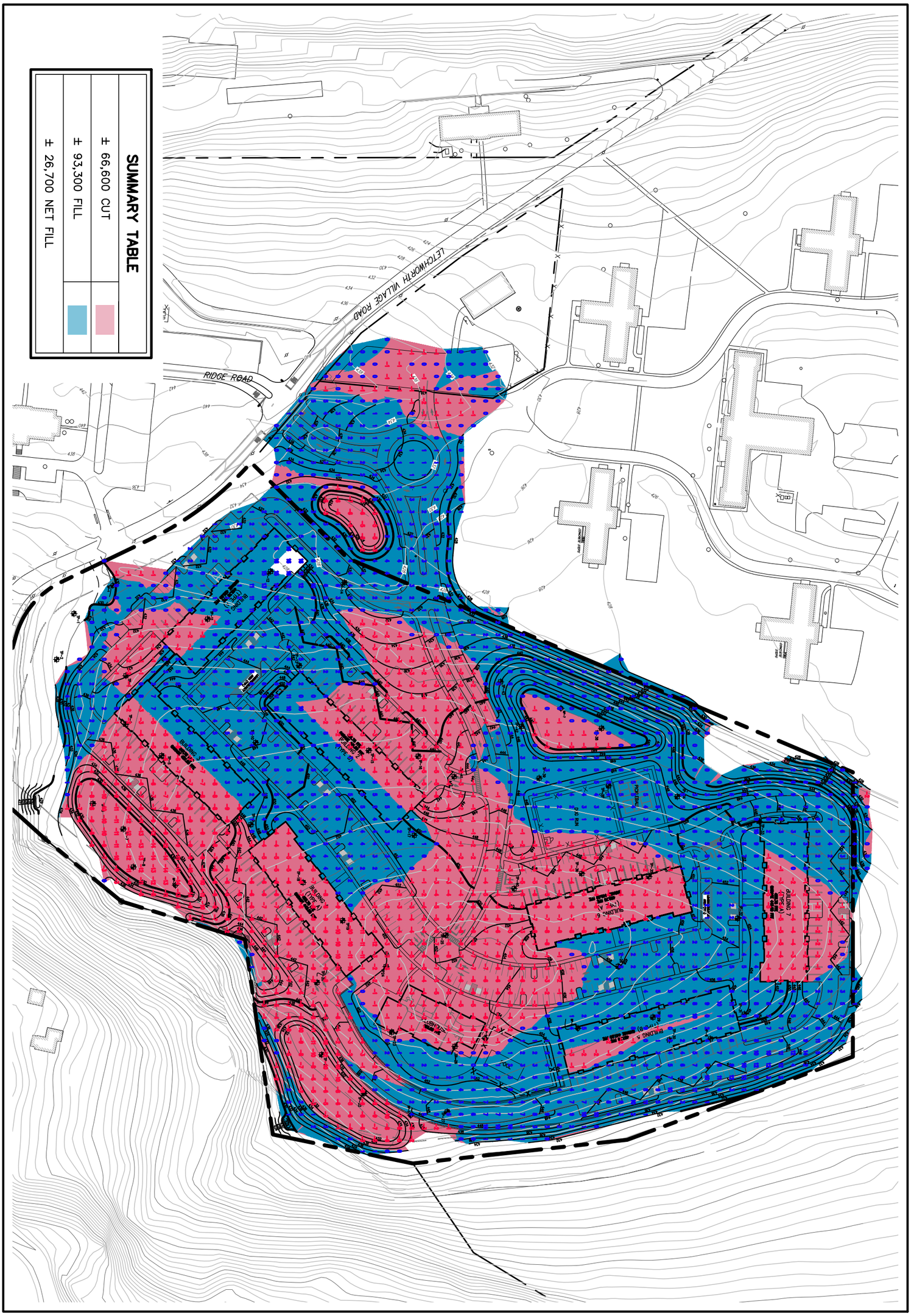
120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
(FAX) 273-2102

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DATE: 01/24/2025 | JMC PROJECT: 21090 | SCALE: 1" = 500' | SOURCE: NEARMAPS/GIS

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

CUT AND FILL ANALYSIS

DATE: 01/24/2025 — JMC PROJECT: 21090

FIGURE: III.C-4 — SCALE: 1" = 150'

120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
fax 273-2102

JMCPLLC.COM

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21090-CUT-FILL-FIG.dwg; CUT-FILL FIG.tab

III.D. Flora, Fauna and Habitat

1. Existing Conditions

a. Discussion of on-site species, vegetation / cover types and habitats.

The Project Site is currently underutilized, vacant land that has experienced various levels of neglect over the past several years and decades. As a former institutional use, the Project Site has gradually returned to a mix of forested and lawn/meadow areas. Most recently, approximately one third of the Project Site was utilized as natural turf for recreational sport fields. The remaining two thirds of the Project Site contains a mix of forested and meadow areas.

Currently, numerous hardwood deciduous trees are present as the area matures due to its underutilization. While the site and surrounding lands are somewhat densely forested, there are no natural wooded corridors for wildlife movement due to the adjacent institutional and residential land uses. The current condition of the Project Site provides habitat only for wildlife species that are tolerant of people and disturbance and that are capable of using a variety of habitats. These species include whitetail deer, squirrels, raccoons, fox and common birds. Evidence of all these species can be found on-Site.

Numerous mature trees of various species are located throughout the site. Mature trees can provide wildlife habitat for breeding, roosting, feeding, and shelter. Oak, maple and pine trees, which dominate the native tree population on-Site provide food which is used by many species including deer, wild turkey, squirrels, raccoons, chipmunks, mice and songbirds. Also, any dead and down wood and standing dead trees can enhance habitat value for species such as woodpeckers, cavity nesters, amphibians (some of which live beneath rotting logs), and fur-bearing animals which

use tree cavities. Dead and dying trees and those with loose bark may provide roosting habitat for bats, mainly along the edge of open areas, where sun exposure is possible, and insects are readily available. The Project Site may have numerous dead or dying trees because presumably they have not been maintained and allowed to deteriorate.

b. <u>Identification of any on-site or proximate rare, threatened, endangered or invasive species.</u>

The New York State Department of Environmental Conservation ("NYSDEC") Environmental Resource Mapper website was reviewed on December 17, 2024[1]. The Project Site is not within an area displayed in the Rare Plants and Rare Animals layer or the Significant Natural Communities layer, therefore the New York Natural Heritage Program ("NYNHP") has no records to report in the vicinity of the Project Site.

The NYSDEC Environmental Resource Mapper was also reviewed using the Full Environmental Assessment Form ("FEAF")[2] feature. The NYSDEC-generated FEAF report concluded that the Project Site does not contain any species of plant or animal that is listed by New York State as endangered or threatened, any areas identified as habitat for an endangered or threatened species, nor any species of plant or animal that is listed by New York State as rare, or as a species of special concern.

Based on the data gathered from State resources, the NYSDEC (NYNHP and FEAF data), no Rare, Threatened, or Endangered species would be present on the Project Site. There may be invasive vegetive species location the Project Site which would be removed as part of the Proposed Action.

[1] http://www.dec.ny.gov/gis/erm/
[2] http://www.dec.ny.gov/eafmapper/

2. Potential Impacts

a. Discussion on impacts on resident plant and animal populations.

The main impact to resident plant and animal populations on the Project Site as a result of the Proposed Action would be loss of habitat from the removal of mature trees and the increase in impervious surfaces from roads and buildings. As previously stated, approximately two thirds of the Project Site is currently forested. While there are no corridors for wildlife movement, most species of animals can freely move about the Project Site under existing conditions.

The Proposed Action would require disturbance of the majority of the 22.93 acre Project Site during construction. This would cause the direct loss of some habitat for the resident plant and animal populations that could be used for breeding, roosting, feeding, and shelter. The Proposed Action would reduce the habitat available for wildlife and would restrict movement through the Project Site, although as noted there are limited corridors for wildlife movement under existing conditions. Wildlife populations movement around the periphery of the Project Site would still be relatively unrestricted.

Under post development conditions, areas of the Proposed Action that do not contain structures would be maintained as mostly lawn and landscaped areas. This would provide some habitat that is similar to that which currently exists on the Project Site. Some areas on-Site would be seeded and then left to revegetate naturally. Current site conditions may host some wildlife that is accustomed to people and disturbance, which would be consistent with the post development conditions of the Proposed Action. However, the Proposed Action would result in some loss of habitat provided by the mature trees currently located on-Site.

b. Discussion of potential effects on rare, threatened, endangered or invasive species, if any.

According to the NYSDEC Environmental Resource Mapper, there are no Rare, Threatened, or Endangered species present on the Project Site. If invasive plant species are present on the Project Site, they will be removed as part of the Proposed Action.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

The Landscaping Plans for the Proposed Action (see full-sized Drawings L-150 and L-160) have been designed to take advantage of existing site features while creating a welcoming and attractive setting for residents and visitors.

Tree removal is recommended to occur between October and April (avoiding the summer months) to avoid disturbance to roosting species and breeding birds.

While the Proposed Action will cause the elimination of some habitat, the post development conditions will provide revegetated landscaped areas that will be permanently maintained. There are no significant adverse environmental impacts that result from implementing the Proposed Action.

III.E Stormwater Management

1. Existing Conditions

a. Description of existing regional and local drainage patterns and facilities

The Project Site consists of ±22.93 acres of the existing parcel. The site is made up of underutilized vacant land primarily consisting of wooded and grassed areas, with a long asphalt paved driveway surrounded by existing parkland areas, as well as multiple abandoned buildings. At the center of the project site is a mowed sports field. The Project Site is bordered by Hammond Avenue to the east and Letchworth Village Road to the south. To the north is adjacent underutilized land of the same tax parcel and an existing watercourse, as outlined in Section III.E. To the west is the underutilized Letchworth Village Park area. As discussed in Section III.E, a watercourse flows through the northern portion of the existing tax lot coming from the east, under Hammond Road. The existing wetland surrounding the watercourse is several hundred feet from the Project Site. In general, the existing topography rises to a high point at the center of the site, which then slopes downgradient in all directions. There is no known existing stormwater infrastructure on the Project Site.

b. Identification of discharge point for existing on-site drainage

An Existing Drainage Area Map was prepared to define the drainage boundary of contributing areas on and adjacent to the Project Site. This map depicts the ±27.09 acre watershed area covering the project site and identifies existing drainage patterns.

As depicted on drawing EDA-1, one (1) Design Boundary (DP-1) was identified for comparing peak rates of runoff in existing and proposed

conditions. Similarly, two (2) separate drainage areas were identified in existing conditions based on the existing drainage divides at the site.

The following is a description of each of the drainage areas analyzed in the existing conditions analysis:

Existing Drainage Area 1A (EDA-1A) is 12.30 acres in size and is located on the western portion of the site along Letchworth Village Road and adjacent to Stewart Hall. This area consists of pavement, buildings, sidewalks, driveways, roadways, lawn, meadows, woods, and brush. This drainage area drains towards East Stewarts Road.

Existing Drainage Area 2 (EDA-2) is 14.79 acres in size and is located on the eastern portion of the site adjacent to North Rockland Highschool. This area consists of building foundation and associated feature remains, roadways, lawn, meadows, woods, and brush. This drainage area drains towards Letchworth Village Road.

c. <u>Calculation of pre-development stormwater flow volumes and peak discharge rates for the 1-, 10-, and 100-year storm events as required by the New York State Department of Environmental Conservation (NYSDEC) and the Town of Haverstraw</u>

The peak rates of runoff to the design points from the drainage areas for each storm are shown in the table below:

Table III.E-1

Summary of Peak Rates of Runoff in Existing Conditions

(Cubic Feet per Second)

Storm Recurrence Interval	DP-1
1 year	2.43
10 year	24.11
100 year	85.88

2. Potential Impacts

a. Analysis of stormwater impacts from the proposed development including calculation of post-development runoff quantity for the 1-, 10-, 100-year storms

The reductions in peak rates of runoff from existing conditions to post development are shown on the table below:

Table III.E-2
Percent Reductions in Peak Rates of Runoff (Existing vs. Proposed Conditions)
(Cubic Feet per Second)

Design Point	Storm Recurrence Frequency (Years)	Existing Peak Runoff Rate (cfs)	Proposed Peak Runoff Rate (cfs)	Percent Reduction (%)
1	1 year	2.43	1.89	22.22
	10 year	24.11	18.04	25.18
	100 year	85.88	64.72	24.64

b. Description of the proposed stormwater management facilities

The proposed improvements consist of seven multifamily apartment buildings and one community clubhouse. The proposed development will also include asphalt driveways and roadways, surface parking areas, interior garage spaces, and associated landscaping. In general, the site topography is consistent with the existing conditions, graded to peak near the center of

the site and sloping away in all directions. The on-site stormwater runoff from impervious coverages will be conveyed by a network of drain inlets, running to one (1) of five (5) stormwater management basins; two (2) infiltration basins and three (3) wet extended detention basins. The proposed site improvements have the potential to affect post-construction stormwater runoff rates. To avoid impacts from the stormwater runoff, a Stormwater Pollution Prevention Plan (SWPPP) for the Proposed Action has been designed in accordance with the January 2015 NYSDEC Stormwater Design Manual. The following practices and project site features were incorporated in the SWPPP and Site Plan Design:

- Preserving hydrology – Maintaining drainage divides;
- Floodplain considerations - The site does not lie within the 100-year; flood zone according to the National Flood Insurance Program Flood Insurance Rate Map (FIRM) No. 36087C0084G, amended date 03/30/2015;
- Waterways (major, perennial, intermittent, springs) – The location, setback, cross section, etc. of the existing waterway has been maintained;
- Forest, vegetative cover – The maximum amount of forest and vegetative cover has been maintained and/or provided;
- Critical areas have been preserved;
- Topography (contour lines, existing flow paths, steep slopes, etc.) has been maintained or disturbed to the minimum extent practicable;
- Soil (hydrologic soil groups, highly erodible soils, etc.);
- Bedrock and significant geology features have been accounted for;

Stormwater runoff from the buildings and paved surfaces will be collected and conveyed using a range of practices to achieve NYSDEC's runoff reduction volume (RRv), and water quality volume (WQv) treatment requirements. The intent of these best management and green practices is

to minimize the volume of stormwater generated, and to detain said water runoff in the stormwater basins. These best management practices would increase the amount of water quality treatment provided on-site through infiltration of stormwater into the soil and reduce the volume of stormwater generated to no more than pre-construction runoff levels. Specific NYSDEC-designated Green Infrastructure Practices and Best Management practices to be employed by the SWPPP include infiltration and detention basins.

After volume reduction and water quality treatment in the proposed Green Infrastructure Practices, remaining flows would discharge to standard stormwater management practices (SMPs) to meet additional water quality, channel protection, overbank flood control, and extreme flood control criteria. These include:

- Infiltration Basin (I-1): An infiltration basin will be used to treat a portion of the water quality volume as well as the quantity requirement and also satisfies the remaining runoff reduction volume requirement for the new impervious surfaces on the Project Site.

The drainage divides under proposed conditions are depicted on drawing DA-2 “Proposed Drainage Area Map.” A description of the proposed drainage areas are as follows:

Proposed Drainage Area 1A (PDA-1A) is 3.85 acres in size and is located on the north-western portion of the site adjacent to Stewart Hall. This area consists of existing driveways, roadways, lawn, meadows, woods, and brush. Runoff from this drainage area sheet flows overland towards Design Boundary 1 (DP-1).

Proposed Drainage Area 1B (PDA-1B) is 4.47 acres in size and is located on the south-western portion of the site along Letchworth Village Road. This

area mainly consists of driveways, roadways, sidewalks, lawn, parking lots, and water features. Runoff from this drainage area is captured by on-site stormwater infrastructure such as inlets. The runoff is then conveyed through proposed HDPE piping to Detention Basin 1B. The captured stormwater will then be attenuated through an outlet control structure within the basin and then discharged overland towards Design Boundary 1 (DP-1).

Proposed Drainage Area 1C (PDA-1C) is 5.29 acres in size and is located within the north-center portion of the site. This area consists of one (1) Type A building, recreational areas, pavement, sidewalks, driveways, roadways, parking lots, lawn, and water features. Runoff from this drainage area is captured by on-site stormwater infrastructure such as inlets. The runoff is then conveyed through proposed HDPE piping to Detention Basin 1C. The captured stormwater will then be attenuated through an outlet control structure within the basin and then discharged overland towards Design Boundary 1 (DP-1).

Proposed Drainage Area 1D (PDA-1D) is 6.10 acres in size and is located within the south-center portion of the site. This area consists of four buildings, pavement, sidewalks, driveways, roadways, parking lots, lawn, and water features. Runoff from this drainage area is captured by on-site stormwater infrastructure such as inlets. The runoff is then conveyed through HDPE piping to Infiltration Basin 2A. The captured stormwater will be attenuated through ground infiltration and an outlet control structure. Any runoff that is not infiltrated and flows through the outlet control structure will be discharged overland towards Design Boundary 1 (DP-1).

Proposed Drainage Area 1E (PDA-1E) is 1.34 acres in size and is located on the southern portion of the site along Letchworth Village Road and adjacent to the Historic Letchworth Village. This area mainly consists of lawn, meadows, woods, and brush; there is also a small portion of a connecting

roadway. Runoff from this drainage area sheet flows overland to Design Boundary 1 (DP-1).

Proposed Drainage Area 1F (PDA-1F) is 5.06 acres in size and is within the northern and some of the eastern portion of the site adjacent to the North Rockland High School. This area consists of two buildings, the clubhouse and its associated improvements, pavement, sidewalks, driveways, roadways, parking lots, lawn, and water features. Runoff from this drainage area is captured by on-site stormwater infrastructure such as inlets. The runoff is then conveyed through HDPE piping to Infiltration Basin 2B. The captured stormwater will be attenuated through ground infiltration and an outlet control structure. Any runoff that is not infiltrated and flows through the outlet control structure will be discharged overland towards Design Boundary 1 (DP-1).

Proposed Drainage Area 1G (PDA-1G) is 0.98 acres in size and is located on the most eastern portion of the site adjacent to North Rockland High School. This area consists of lawn, meadows, woods, and brush. Runoff from this drainage area sheet flows overland to Design Boundary 1 (DP-1).

As a result of the stormwater management design of the Proposed Action, the peak rates of runoff of stormwater exiting the Project Site would be reduced from existing to proposed conditions for each modeled storm event.

3. Proposed Mitigation

As summarized above, and presented in more detail in the SWPPP, the Proposed Action utilizes practices to enhance stormwater quality and reduce peak rates of runoff associated with the proposed site improvements. Implementation of the SWPPP would provide water quantity and quality enhancements that exceed the regulatory requirements, therefore stormwater runoff from the Proposed Action is not anticipated to have a significant adverse

impact to the Project Site or downstream areas.

III.F Water Supply and Sanitary Sewerage

1. Existing Conditions

a. Description and mapping of existing Veolia water supply infrastructure and Town sewer lines on-site and within adjacent roadways

The area surrounding the Project Site has been previously developed. Accordingly, there are existing water and sewer mains in the vicinity. The Letchworth Village property was served by municipal sanitary sewer within the Haverstraw Joint Regional Sewer District System. An existing sanitary sewer main is located within Letchworth Village Road. Veolia New York Water maintains an existing water main within Letchworth Village Road parallel to the project site's eastern border.

For existing sanitary sewer & water utilities component locations, see the JMC full-size drawing C-010 titled "Existing Conditions Plan." The existing water mains are owned and maintained by Veolia New York Operations and the existing sewer is owned and operated by the Town of Haverstraw. A request for a Willingness to Serve letter has been sent to Veolia to confirm water supply availability and capacity for the Proposed Action.

b. Description of Veolia water system and Joint Regional Sewerage Board sewage treatment system capacities

A request for a Willingness to Serve letter has been sent to Veolia to confirm water supply availability and capacity for the Proposed Action.

2. Potential Impacts

a. Description of the proposed water and sewer utilities system

The proposed water utilities for the Proposed Action include an 8-inch main providing domestic and a fire service for each of the seven proposed residential buildings and one clubhouse building under the proposed roadway and surface parking areas. This connection shall be performed in accordance with the Town of Haverstraw and coordinated with Veolia New York Operations. Additionally, the proposed 8-inch water main will serve eight proposed fire hydrants located throughout the development.

The proposed sanitary sewer serving the Subject Property will require an off-site extension to connect to an existing manhole located in the Right of Way of Letchworth Village Road. This connection will utilize the existing manhole. A total of 17 sanitary sewer manholes are proposed within the Project Site to accommodate the 8-inch sanitary service to the proposed buildings. The existing topography illustrates no need for a lift station. Projected wastewater generation is not expected to exceed 64,880 gallons per day based on the current unit mix proposed.

b. Estimates of projected water usage and sewer generation

The Proposed Action's 300 units are estimated to generate a water demand of 89,960 gallons per day (gpd) during months requiring irrigation and 64,880 gpd during all other months, considering the likely uses depicted on Table III.G-2. Fire flow demand for the facility will be determined by the Project's mechanical engineer as detailed building plans continue to be developed. Fire and life safety concerns will be addressed through the installation of a dry sprinkler system on the garage floors and a wet sprinkler system on the residential floors. Both systems will meet all of the National Fire Protection Association (NFPA) thirteen (13) requirements for

installation and operation.

The domestic water usage was calculated based on the New York State Department of Environmental Conservation (NYSDEC*) Design Standards for Intermediate Sized Wastewater Treatment Systems*, last revised March 5, 2014. It is assumed that the clubhouse amenity space will use approximately 4,600 gallons per day, which should more than account for the use of the kitchen and other amenities located in this space. Additionally, since a large component of the amenity space is the outdoor pool, water usage will likely have some seasonal, weather dependent variability.

The Proposed Action is estimated to generate approximately 64,880 gallons per day (gpd) of sanitary wastewater. As discussed, there will be a ±10,250 square foot Clubhouse as well as a pool area. The pool will be operated on a seasonal basis and therefore this calculation is conservative. These calculations are based on the uses proposed in accordance with the New York State Department of Environmental Conservation (NYSDEC) *Design Standards for Intermediate Sized Wastewater Treatment Systems,* last revised March 5, 2014.

Table III.F-1

PROPOSED UNIT TYPES		
Unit Type	**Total Qty.**	**No. of Beds**
One Bed	52	52
Two Bed	248	496
Total Units	**300**	548

Table III.F-2

PROJECT ESTIMATED DAILY WATER & WASTEWATER DEMAND				
Use	**Units**	**Amount**	**Total GPD per Bedroom**	**Total GPD**
Apartments	Bedrooms	548	110	60,280
Amenities				
Swimming Pool/Bathhouse	10 gpd per Swimmer	60 Swimmers/Bathers		600
10,250 S.F. Clubhouse	20 gpd per occupant	200 Occupants		4,000
Irrigation 398,464 S.F.	--	Only applicable during months requiring irrigation		25,080
			Total	89,960
			Total (Irrigation Excluded)	64,880

Source: NYS Design Standards for Intermediate Sized Wastewater Treatment Systems, NYSDEC, March 5, 2014.

c. Analysis of the ability of existing infrastructure to accommodate projected domestic and fire flows.

The Proposed Action is to include an 8-inch main providing domestic and a fire service for each of the seven proposed residential buildings and one proposed clubhouse building under the proposed roadway and surface parking areas. This connection shall be performed in accordance with the Town of Haverstraw, and coordinated with Veolia New York Operations. The Applicant has engaged Veolia water to verify the supply and capacity of the existing infrastructure in the area.

d. Discussion of proposed infrastructure improvements and their potential impact on future development of the balance of the Letchworth Village property.

The Proposed Action will utilize the existing water and sewer infrastructure in the area as discussed herein. A sewer main extension within Letchworth Village Road is required to provide service to the Proposed Action. At this time there are no specific infrastructure improvements that have been identified for the water system subject to the review of Veolia.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS

In order to mitigate the additional proposed sewage flow from the Project Site, the Applicant will consult with the Town of Haverstraw and Veolia to ensure impacts of proposed wastewater discharge flow and additional water demands are minimal. It is not anticipated that the Proposed Action will have significant adverse impacts on the aforementioned water or sewer infrastructure.

III.G Other Utilities and Services (Gas, Electric, Telecommunications)

1. Existing Conditions

a. Description of existing utility services in the vicinity of and provided to the site

Electric, natural gas, telephone and cable services exist in the vicinity of the Project Site. Electric and natural gas utilities are provided in this area by Orange and Rockland Gas & Electric. Overhead utility wires exist along the Project Site's frontage along Letchworth Village Road and along Hammond Road.

2. Potential Impacts

a. Description of any proposed modifications to the existing utilities system.

Service connections to the Proposed Action will be required and coordinated with Orange and Rockland Gas & Electric. It is not anticipated that major modifications to the existing utilities will be required to facilitate the Proposed Action.

To provide electric service for the Proposed Action, a will serve letter request will be submitted to Orange & Rockland Electric and Gas. Given the preexisting development in the vicinity of the Project Site, it is anticipated that Orange & Rockland will have the electric & gas capacity to serve the Proposed Action.

High-speed internet access for data and telecommunications is provided by Optimum and Verizon in the vicinity of the Project Site and the service provider will be determined at a later date.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS

There are no significant adverse environmental impacts relating to utility installations that require mitigation. The Proposed Action will comply with Orange and Rockland Gas & Electric requirements for the installation of all utilities. All electric and telecommunications utilities will be installed underground to ensure reliability of the services and minimize future maintenance requirements.

III.H Traffic, Transportation, and Parking

1. Existing Roadway Inventory & Transportation Data Collection

a. Location of Property

The Project Site of ±22.93 acres is bounded by Letchworth Village Road to the south and Hammond Road to the east. The site is an undeveloped portion of an existing Town of Haverstraw owned ±154.6 acre parcel, with the Project Site located within the south-eastern corner of the existing parcel. The location of the site is illustrated on Figure III.H-1 which is included within Appendix C-2. Access to the property is proposed through the Town of Haverstraw property which connects to Letchworth Village Road opposite Ridge Road.

The Palisades Interstate Parkway (PIP) parkway provides regional connectivity for motorists commencing at the Bear Mountain Bridge and providing access into New Jersey. The proposed development is located approximately one mile southeast of the Palisades Interstate Parkway (PIP) Interchange 14 which is accessed via Letchworth Village Road to Willow Grove Road. The project site is also located approximately 2.25 miles from the PIP Interchange 13, which can be accessed via Ridge Road to Thiells-Mount Ivy Road to US Route 202.

Multiple North Rockland Central School District schools are located within the vicinity of the project site. North Rockland High School is located along Hammond Road an approximate driving distance of 0.5 miles; Thiells Elementary School is located along Rosman Road, a distance of approximately 0.85 miles by roadway; and Willow Grove Elementary School as well as Fieldstone Middle School are both located along Storrs Road at a driving distance of approximately 0.33 miles from the project site.

b. Existing Roadway Network

JMC performed field reconnaissance at the site and adjoining roadway network in order to gather existing conditions data. The field work included determination of lane widths, striping, horizontal and vertical alignments, signs, speed limits, pedestrian activities, traffic flows, on street parking, sidewalks, curbing, etc.

Rockland County Highway Department controls the jurisdiction of the following roadways within the study area:

- County Route No. 33 – Main Street / Central Highway
- County Route No. 47 – Thiells-Mount Ivy Road / Hammond Road
- County Route No. 94 – Suffern Lane / Letchworth Village Road
- County Route No. 98 – Willow Grove Road

Within the study area the county roadways listed above have a posted speed limit of 30 miles per hour and on-street parking is generally prohibited. A single lane in each direction is generally provided for the county roadways within the study area. Generally, the pavement condition on these roads is good.

Ridge Road, Rosman Road, and Old County Road are under the jurisdiction of the Town of Haverstraw. Within the study area, the town roadways have a posted speed limit of 30 miles per hour and provide one lane in each direction. On-street parking is generally prohibited within the study area along these town roadways. Generally, the pavement condition on these roads is good.

US Route 202 is an east/west highway which is under the jurisdiction of the New York State Department of Transportation (NYSDOT). US Route 202

extends west into New Jersey through Suffern and northeast into Westchester County across the Bear Mountain Bridge. Within the study area, US 202 generally provides one lane in each direction and widens at several intersections to provide additional lanes for turning vehicles. The roadway has a posted speed limit of 45 mph within the study area. On-street parking is generally prohibited within the study area. The pavement condition within the study area is in good condition.

Palisades Interstate Parkway (PIP) is a north/south expressway under the jurisdiction of NYSDOT and the Palisades Interstate Park Commission (PIPC). The PIP is designated as a state Scenic Byway in New York and New Jersey as well as being listed on the National Register of Historic Places and as a national landmark. The PIP commences at the George Washington Bridge in Fort Lee, NJ and terminates at the Bear Mountain Bridge. Two travel lanes are generally provided in each direction separated by a landscaped median and vehicular access is limited grade separated interchanges. The posted speed limit along the parkway is 55 mph. Interchanges 13 (US 202) and 14 (County Route 98) are located within the study area. The pavement condition on the parkway is in good condition.

In order to evaluate the changes in traffic associated with the proposed redevelopment, the following intersections have been analyzed:

1. Willow Grove Road (County Route No. 98) and Palisades Interstate Parkway Southbound On/Off Ramps (Exit 14)
2. Willow Grove Road (County Route No. 98) and Palisades Interstate Parkway Northbound On/Off Ramps (Exit 14)
3. Willow Grove Road (County Route No. 98) and Letchworth Village Road (County Route No. 94) / Patriot Hills Lane
4. Letchworth Village Road (County Route No. 94) and Storrs Road
5. Letchworth Village Road (County Route No. 94) and Ridge Road

6. Suffern Lane (County Route No. 94) / Letchworth Village Road (County Route No. 94) and Thiells-Mount Ivy Road (County Route No. 47) / Hammond Road (County Route No. 47)
7. Suffern Lane (County Route No. 94) / West Railroad Avenue (County Route No. 94) and Main Street (County Route No. 33) / Central Highway (County Route No. 33)
8. US Route 202 and Palisades Interstate Parkway Southbound On/Off Ramps (Exit 13) / Diner Driveway
9. US Route 202 and Thiells-Mount Ivy Road (County Route No. 47)
10. US Route 202 and NYS Route 45 / Old County Road
11. Thiells-Mount Ivy Road (County Route No. 47) and Palisades Interstate Parkway Northbound Off Ramp (Exit 13)
12. Thiells-Mount Ivy Road (County Route No. 47) and Ridge Road
13. Thiells-Mount Ivy Road (County Route No. 47) and Rosman Road

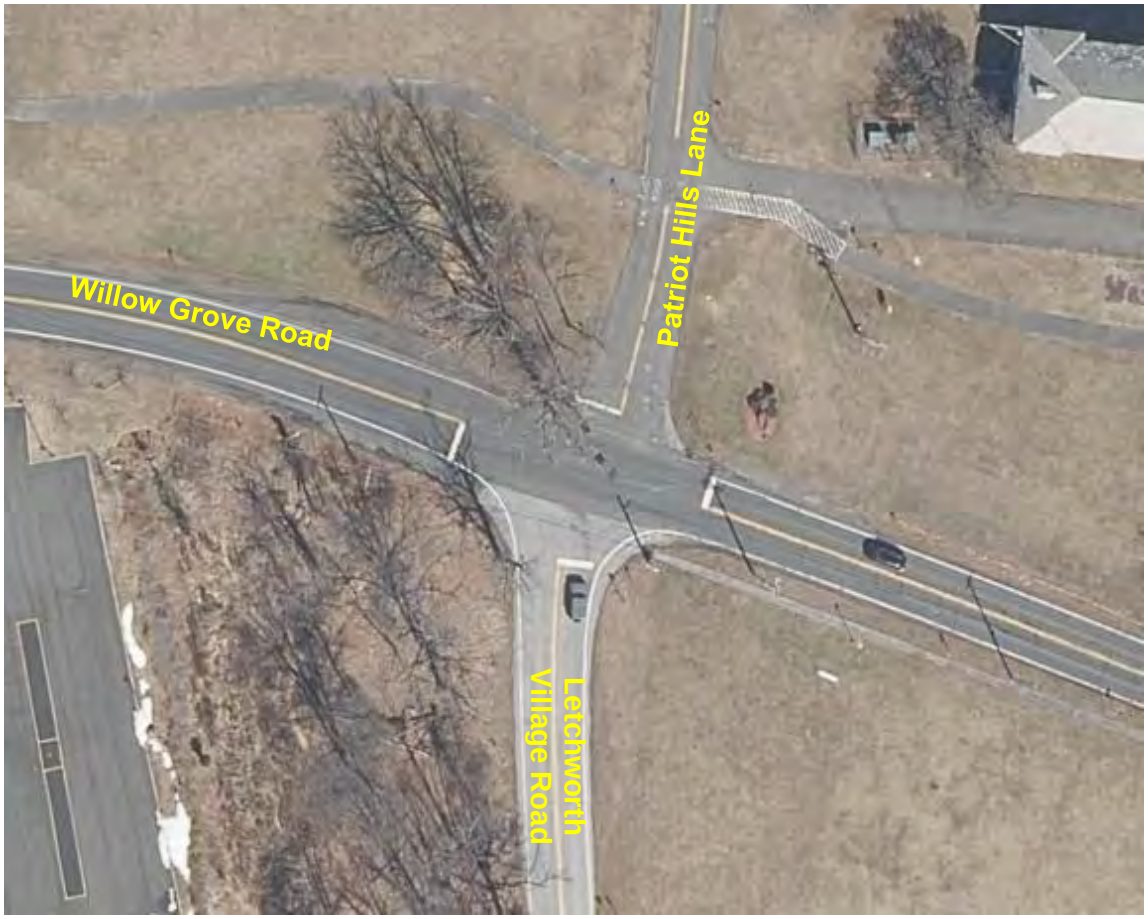
Palisades Interstate Parkway Southbound On and Off Ramps for the exit 14 interchange intersect Willow Grove Road (a.k.a. County Route No. 98) at an unsignalized T-type intersection. A single lane is provided along Willow Grove Road in both directions for thru and turning movements. The southbound approach of the off-ramp provides one lane for left and right turns under stop control. An aerial snapshot of Intersection 1 is shown below.



Palisades Interstate Parkway Northbound On and Off Ramps for the exit 14 interchange intersect Willow Grove Road (a.k.a. County Route No. 98) at an unsignalized T-type intersection. Willow Grove Road provides a single lane in both directions for thru and turning movements. The northbound approach of the off-ramp provides one lane for left and right turns under stop control. An aerial snapshot of Intersection 2 is shown below.



Letchworth Village Road (a.k.a. County Route No. 94) intersects Willow Grove Road (a.k.a. County Route No. 98) opposite Patriot Hills Lane as a four-legged signalized intersection. All approaches to the intersection provide a single lane for combined thru and turning movements. Pedestrian crossings are not provided at the intersection. The traffic signal is owned and maintained by the Town of Haverstraw. An aerial snapshot of Intersection 3 is shown below.



The intersection of Letchworth Village Road (a.k.a. County Route No. 94) and Storrs Road is an unsignalized three-legged intersection. A single lane is provided along all approaches for thru and turning movements. The southbound Letchworth Village Road approach is controlled by a stop sign while the other approaches to the intersection have no control. An aerial snapshot of Intersection 4 is shown below.



Letchworth Village Road (a.k.a. County Route No. 94) and Ridge Road intersect at an unsignalized four-legged intersection. All approaches to the intersection provide a single lane and are under stop control. An aerial snapshot of Intersection 5 is shown below.

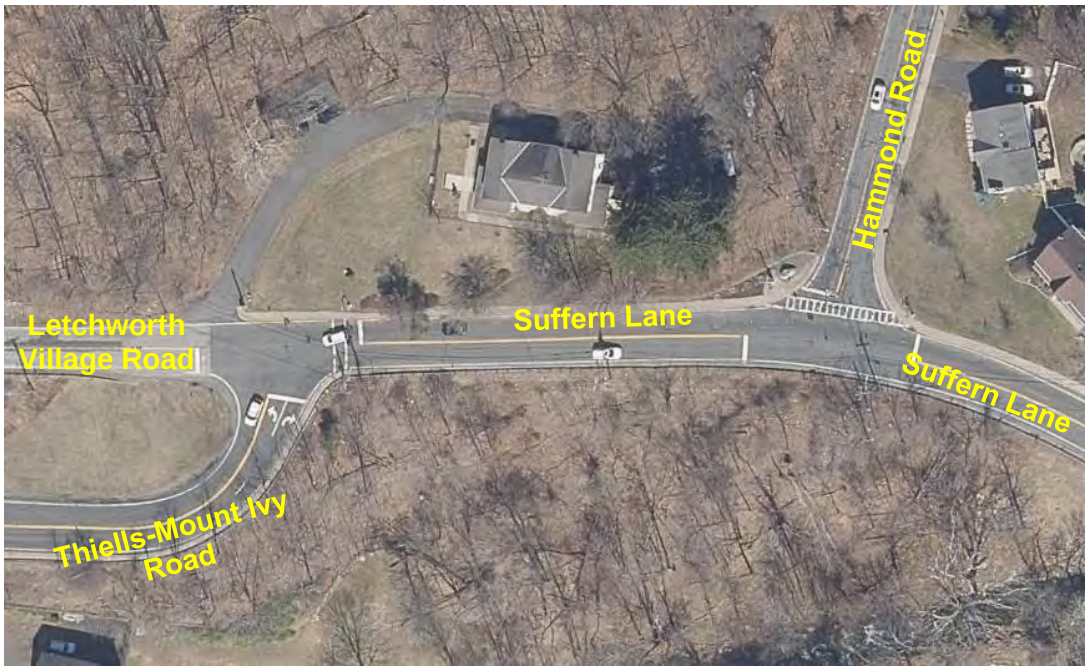


Access to the subject development is proposed through the northern leg of this intersection (opposite Ridge Road). The applicant proposes to realign the northern and southern approaches to the intersection with Letchworth Village Road to remove the skew which currently exists. Under proposed conditions all approaches would remain under stop control.

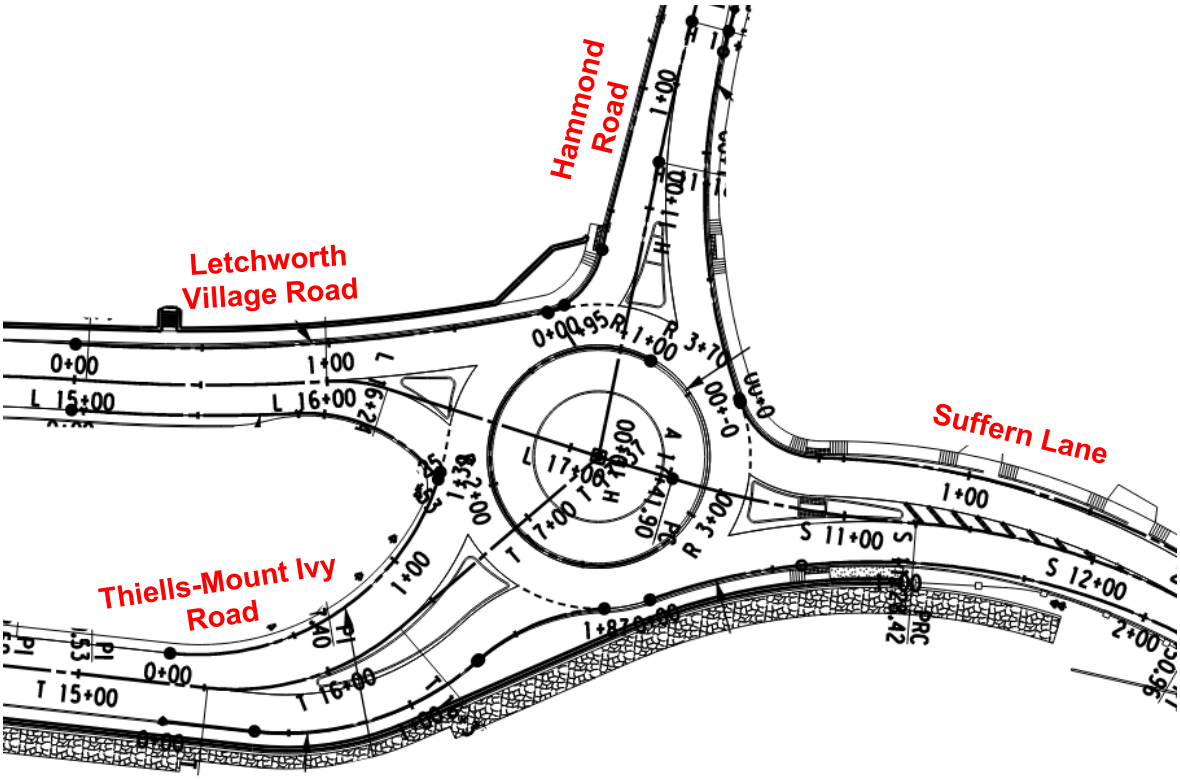
The stop sign assemblies for the approaches to the Letchworth Village Road and Ridge Road intersection include a red retroreflective signpost strip for increased visibility, however an “All-Way” supplemental plaque is not installed below the existing “Stop” signs at the intersection. The

applicant proposes to install “All-Way” signage, with an MUTCD sign designation of R1-3P, below the existing “Stop” signs to provide increased notification of the operations to motorists utilizing the intersection.

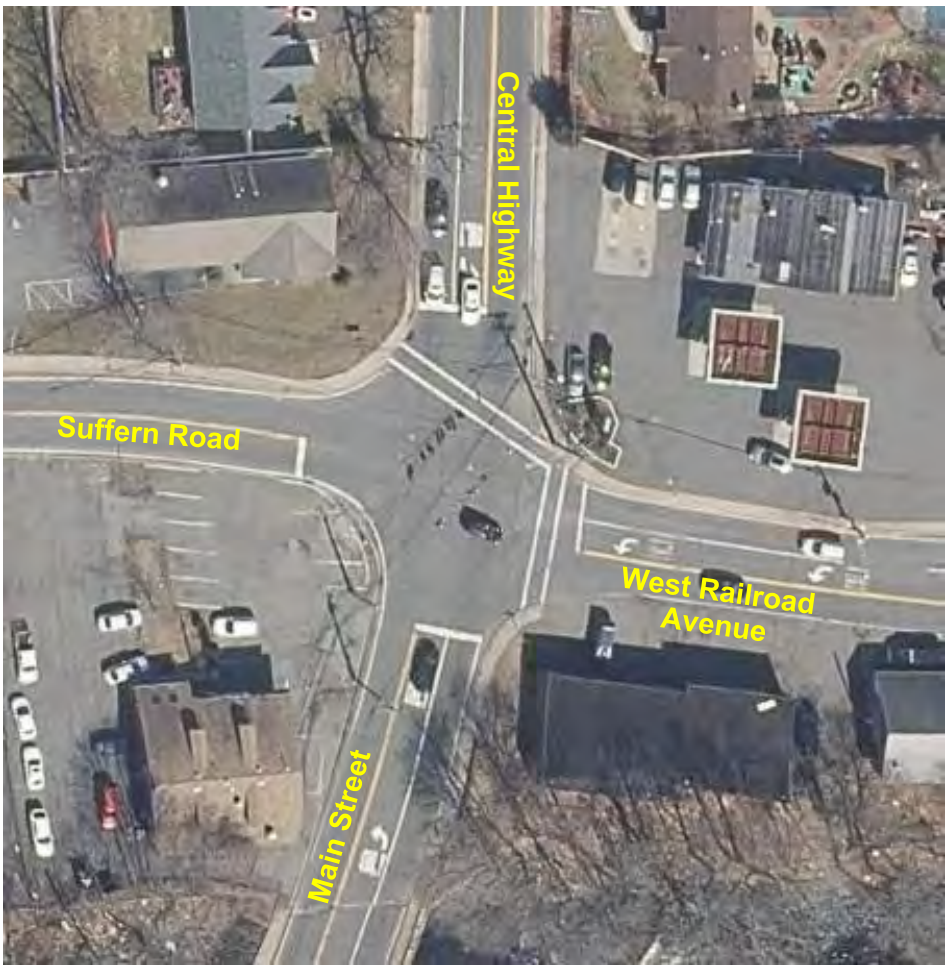
The intersection of County Route No. 94 and County Route No. 47 has historically been two offset signalized three-legged intersections. The eastbound Letchworth Village Road and westbound Suffern Lane approaches are also known as County Route No. 94. The northbound Thiells-Mount Ivy Road and southbound Hammond Road approaches are also known as County Route No. 47. Under the signalized geometric design, the eastbound, westbound, and southbound approaches provide a single approach lane to the intersection for thru and turning vehicles while the northbound approach provides separate left and right turning lanes. A signalized pedestrian crossing is provided across Hammond Road on the north side of the eastern leg of the intersection and a signalized pedestrian crossing is provided across Suffern Lane on the eastern side of the western leg of the intersection. An aerial snapshot of Intersection 6 is shown below.



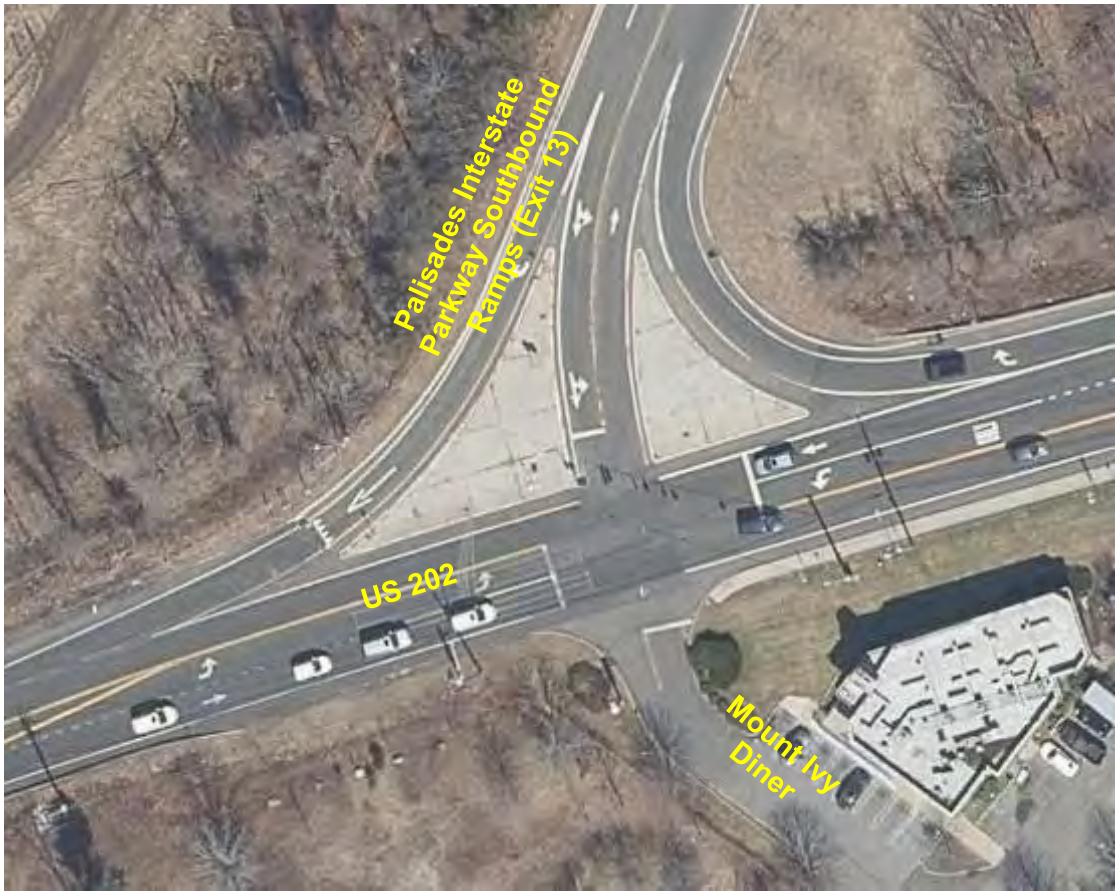
On or about July 1, 2024, Rockland County began a reconstruction project at the intersection of County Routes No. 47 and No. 94. The construction project is anticipated to be completed in 2025. The proposed redesign removes the existing traffic signals and constructs a roundabout at the eastern leg of the offset intersection. The Thiells-Mount Ivy Road southern leg of the intersection is proposed to be relocated to provide direct access to the roundabout. The proposed roundabout design provides a single lane approach for all directions. A snapshot of the proposed design is shown below.



The intersection of County Route No. 94 and County Route No. 33 is a signalized four-legged intersection. The eastbound approach of Suffern Lane and westbound approach of West Railroad Avenue are also known as County Route No. 94). The northbound approach of Main Street and southbound approach of Central Highway are also known as County Route No. 33. The eastbound Suffern Road approach provides a single lane for thru and turning movements. The northbound, southbound, and westbound approaches each provide a left turn lane and a thru/right turn lane. Signalized pedestrian crossings are provided on the east side of the intersection across West Railroad Avenue and north side of the intersection across Central Highway. The traffic signal is owned and maintained by the Town of Haverstraw. An aerial snapshot of Intersection 7 is shown below.



Palisades Interstate Parkway Southbound On and Off Ramps for the exit 13 interchange intersect US Route 202 at a signalized four-legged intersection. The eastbound US 202 approach provides a left turn lane and a thru/right turn lane. The westbound US 202 approach provides a left turn lane, thru lane, and channelized right turn lane under free control. The southbound PIP off-ramp approach provides a left/thru lane and a channelized right turn lane under yield control. The fourth leg of the intersection serves private a property for the Mount All American Ivy Diner via a single lane for all movements located opposite the PIP ramps. The traffic signal is under the jurisdiction of NYSDOT. An aerial snapshot of Intersection 8 is shown below.



US Route 202 and Thiells-Mount Ivy Road (a.k.a. County Route No. 47) is a signalized three-legged intersection. The eastbound US Route 202 approach provides a left turn lane and two thru lanes while the westbound US Route 202 approach provides a thru lane and channelized right turn lane under signal control. The southbound Thiells-Mount Ivy Road approach provides a left turn lane and a channelized right turn lane under free control. A signalized pedestrian crossing is provided across US Route 202 on the east side of the intersection. The traffic signal is under the jurisdiction of NYSDOT. The intersection of US Route 202 and Thiells-Mount Ivy Road is operated as part of the adjacent US Route 202 and NYS Route 45 intersection by a single controller. An aerial snapshot of Intersection 9 is shown below.



NYS Route 45 and Old County Road intersect US Route 202 at a signalized four-legged intersection. The eastbound US Route 202 approach provides a left turn lane, a thru lane and a channelized right turn lane under signal control. The westbound US 202 approach provides a left turn lane and a thru/right turn lane. The northbound NYS Route 45 approach provides a left turn lane, a left/thru lane, and a right turn only lane. The southbound Old County Road approach provides a single lane for thru and turning movements. A signalized pedestrian crossing is provided across Old County Road on the north side of the intersection. The intersection of US Route 202 and NYS Route 45 operates with the adjacent intersection of US Route 202 and Thiells-Mount Ivy Road intersection by a single controller. An aerial snapshot of Intersection 10 is shown below.



Palisades Interstate Parkway Northbound Off Ramp for the exit 13 interchange intersects Thiells-Mount Ivy Road (a.k.a. County Route No. 47) at an unsignalized T-type intersection. The northbound and southbound approaches provide a single lane in both directions for thru movements only. The eastbound off-ramp approach provides a left turn lane controlled by a stop sign as well as a channelized right turn lane under yield control. An aerial snapshot of Intersection 11 is shown below.



The intersection of Thiells-Mount Ivy Road (a.k.a. County Route No. 47) and Ridge Road is an unsignalized T-type intersection. The eastbound and westbound approaches of Thiells-Mount Ivy Road provide one lane for thru and turning movements. The southbound Ridge Road approach provides a single lane for left and right turns under stop control. An aerial snapshot of Intersection 12 is shown below.



Rosman Road intersects Thiells-Mount Ivy Road (a.k.a. County Route No. 47) at an unsignalized T-type intersection. The northbound and southbound approaches of Thiells-Mount Ivy Road provide a single lane for thru and turning movements. The Rosman Road westbound approach provides one lane for left and right turns. The Rosman Road approach to the intersection is controlled by a stop sign. An aerial snapshot of Intersection 13 is shown below.



c. Existing Transit Services

Rockland County provides Park and Ride lots to provide commuters the opportunity to park their cars in a convenient, safe location while commuting to work via carpool, vanpool, bus, or train. Within the study area a Park and Ride lot, known as Mount Ivy, is located at the southwest corner of the US Route 202 & NYS Route 45 intersection. Public bus services are provided at this facility by Transport of Rockland (TOR) as well as by Coach USA.

A local bus service is operated within the project area by Rockland County known as Transport of Rockland (TOR) which offers ten routes around the county. A system map is available to be viewed online (https://www.rocklandcountyny.gov/home/showpublisheddocument/1776/638217172466200000). TOR buses currently operate with a "flag-down" service policy which allows passengers to request a stop by waving at the bus driver rather than being picked up from fixed bus stop locations. Three bus routes operate within the study area:

- Route 91 – This route services Nyack to Spring Valley. Within the study area this route operates from the Mount Ivy Park & Ride Lot east along US Route 202 to US Route 9W with a spur along Couty Route No. 33 (Main Street / Central Highway) for Helen Hayes Hospital.
- Route 94 – This route services Spring Valley to Tomkins Cove. Within the study area this route operates from the Mount Ivy Park & Ride Lot north along County Route No. 47 (Thiells-Mount Ivy Road / Hammond Road), then east along County Route No. 94 (Filors Lane) to US Route 9W with a spur along Couty Route No. 33 (Central Highway) for Helen Hayes Hospital.
- Route 95 – This Route services Rockland Community College to Haverstraw Village. Within the study area this route operates from the Mount Ivy Park & Ride Lot east along US Route 202, then north along

Couty Route No. 33 (Main Street) and east along County Route No. 94 (West Railroad Avenue) to US Route 9W.

Regional transit service is provided to/from Porth Authority Bus Terminal and George Washington Bridge Bus Station in New York City by Coach USA also known as Rockland Coaches (Red & Tan Bus Lines). Within the study area, routes 45, 45A, 45X, 47 are serviced at the Mount Ivy Park & Ride Lot.

An additional transit service is provided within the County of Rockland for residents with physical, mental, developmental, or intellectual disabilities or senior citizens who are aged 60 or over as part of Rockland County's paratransit bus service. This service is known as TRIPS which stands for Transportation Resources, Intra-County, for Physically disabled and Senior citizens. TRIPS provides curbside-to-curbside service by appointment. TRIPS passengers may or may not go directly to their destinations and there may be several pick-ups and drop-offs along the way.

North Rockland Central School District provides transportation for school children to and from school via buses. Existing school bus stops are located within the vicinity of the study area at the following intersections:

- Willow Grove Road intersecting with:
    - Cross Creek Lane
- Suffern Lane intersecting with:
    - Hammond Road
    - Castle Court
    - Woodlake Drive
    - Pine Drive
    - Margaret Lane
    - Donaldson Lane
    - Madison Avenue (West)

  - Madison Avenue (East)
  - West Railroad Avenue
- Thiells-Mount Ivy Road intersecting with:
  - Bedford Lane
  - Anderson Road
  - Marino Boulevard
  - Kohut Street
  - Buckingham Court
  - Richard Court
  - Country Club Lane

In addition to the intersections listed above, bus stops are also provided at driveways for private residences along Suffern Lane and Thiells-Mount Ivy Road. The buses stop at the various listed locations for the multiple schools within the district during the morning from 6:30 AM to 8:50 AM and in the afternoon from 2:15 PM to 5:00 PM. The bus stop information was provided by the North Rockland Central School District.

d. Existing Pedestrian Facilities

Existing pedestrian facilities have been reviewed within the vicinity of the project site and are summarized below.

Sidewalks are provided to the west of the project site:

- Along the west side of Letchworth Village Road for an approximate distance of 200 feet north of Storrs Road.
- Along the north side of Storrs Road for an approximate distance of 50 feet west of Letchworth Village Road.
- Along the south side of Storrs Road for a distance of 125 feet west of Letchworth Village Road.

Sidewalks are provided to the east of the proposed development:

- Along the east side of Thiells-Mount Ivy Road from Rosman Road to Suffern Lane.
- Along the north side of Rosman Road from Thiells-Mount Ivy Road to a mid-block pedestrian crossing approximately 900 feet east of Thiells-Mount Ivy Road, then along the south side of Rosman Road to US Route 202.
- Along the north side of Suffern Lane from Letchworth Village Road to Central Highway.
- Along the east side of Hammond Road from Suffern Lane to Willow Grove Road.

Pedestrian crosswalks are currently provided across Suffern Lane on the eastern side of its intersection with Thiells-Mount Ivy Road as well as across Hammond Road on the north side of its intersection with Suffern Lane. As previously discussed, this intersection of County Route Nos. 47 and 94 is currently under construction to be converted into a four-legged roundabout. The proposed roundabout design maintains the pedestrian crossing across Suffern Lane and Hammond Road.

Figure III.H-2, included within Appendix C-2, has been prepared to show the locations of the existing sidewalks and crosswalks overlayed on an aerial.

The existing pedestrian infrastructure provided at intersections within the study area to the south of the subject property and located at a distance greater than 0.5 miles from the Project Site is summarized below:

- The intersection of Thiells-Mount Ivy Road and Ridge Road is located approximately 0.7 miles from the site and does not provide pedestrian facilities.
- The intersection of Thiells-Mount Ivy Road and the Palisades Parkway Northbound Off Ramp is located approximately 2.0 miles from the subject property. A sidewalk is provided at this location along the east side of Thiells-Mount Ivy Road. Pedestrian crossings are not provided at the Thiells-Mount Ivy Road intersection with Palisades Parkway Northbound Off Ramp.
- The intersection of US Route 202 and Thiells-Mount Ivy Road is located approximately 2.1 miles from the site. A sidewalk is provided along the south side of US Route 202 as well as in the northeast corner of the intersection. A signalized pedestrian crossing is provided across US Route 202 on the east side of the intersection.
- The intersection of US Route 202 with NYS Route 45 and Old County Road is located approximately 2.2 miles from the site. Sidewalks are provided in all corners of the intersection and a signalized pedestrian crossing is provided across Old County Road on the north side of the intersection.
- The intersection of US Route 202 with the Palisades Parkway Southbound On/Off Ramps and diner driveway is located approximately 2.25 miles from the site. A sidewalk commencing at the diner driveway in the southeast corner of the intersection is provided and extends east along US Route 202 to NYS Route 45. Pedestrian crossings are not provided at the intersection of US Route 202 and Palisades Parkway Southbound On/Off Ramps.

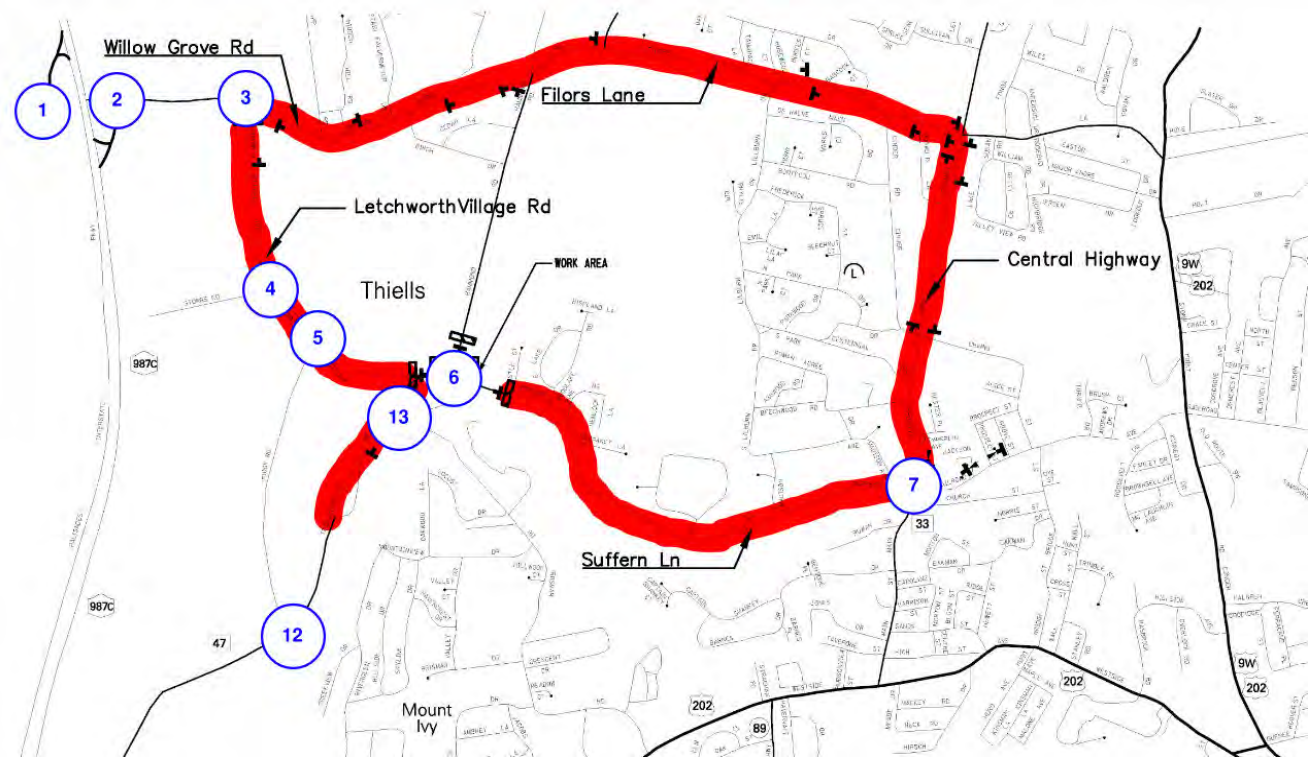
2. Existing Condition Analysis

a. Existing Volumes

Traffic counts were performed at the studied intersections in order to quantify and analyze existing peak hour volumes as well as establish base conditions for projecting future operations. The counts included pedestrian activities and truck traffic.

Traffic volume counts were conducted via automatic traffic recorders (ATRs) to determine if a weekend analysis should be conducted for a Saturday or Sunday. The ATR was installed on Thiells-Mount Ivy Road between Anderson Road and Ridge Road. The traffic volume data was collected by the ATR for one full week from Saturday October 19, 2024, to Friday October 25, 2024. The data from the ATR is contained in Appendix C-2 depict the hourly traffic volumes. The counts indicate that Saturday had a higher volume of traffic than Sunday during the midday hours of 11:00 AM to 2:00 PM. Therefore, Saturday was utilized for the weekend analysis of the study and was concurred with by the Town's traffic consultant.

Traffic counts were conducted from 7:00 – 9:00 AM and from 2:00 – 7:00 PM on Wednesday, November 13, 2024, as well as from 11:00 AM – 2:00 PM on Saturday, November 16, 2024, at all studied intersections except for intersection 6. The intersection traffic count data is included in Appendix C-2. As discussed above within Section III.H.1.ii, intersection 6 (County Route Nos. 94 and 47) is under construction by Rockland County to replace the two offset signalized intersections with a single roundabout intersection. A detour has been implemented to provide a work area for the infrastructure improvement. The affected roadways for the detour are highlighted in red in the snapshot below. Accordingly, intersection 6 was not counted at this time.



Concurrent with the turning movement counts at the studied intersections, additional traffic volume counts were conducted via ATRs (in addition to the count location along US 202). The ATRs collected traffic volume data for one full week from Wednesday November 13, 2024, to Tuesday November 19, 2024. The ATRs were installed on US Route 202 between the Palisades Interstate Parkway Southbound On/Off ramps and Thiells-Mount Ivy Road, on US Route 202 between Thiells-Mount Ivy Road and Main Street (County Rout No. 33), and on Thiells-Mount Ivy Road between US Route 202 and Palisades Interstate Parkway Northbound Off-Ramp, and on Willow Grove Road between the Palisades Parkway and Letchworth Village Road. Figure III.H-1 has been provided within Appendix C-2 to indicate the locations of the ATR counts and the data from the ATRs is also contained in Appendix C-2. Due to consideration of the detour associated with the infrastructure improvement by Rockland County at the intersections of County Route Nos. 94 and 47, ATRs were not performed on Letchworth

Village Road between Ridge Road and Thiells-Mount Ivy Road or on Ridge Road between Letchworth Village Road and Thiells-Mount Ivy Road.

The peak hour volumes from the intersection counts occurred between 7:45 – 8:45 AM during the weekday morning, 3:00 – 4:00 PM during the weekday afternoon school hour, 4:00 – 5:00 PM during the weekday afternoon roadway peak hour, and 12:15 – 1:15 PM during the Saturday midday hour.

As mentioned above, traffic counts at Intersection 6 were unable to be performed due to construction. Peak hour volumes from the traffic study which was performed for the proposed roundabout were utilized as the existing peak hour volumes at Intersection 6 during the peak weekday AM and weekday roadway PM hours. The peak weekday PM hour traffic volumes at Intersection 3 were compared to the traffic volumes during the peak weekday school PM hour and the peak Saturday midday hour. The results of the comparison were that the peak weekday school PM hour traffic volumes were 3.6% less than the traffic volumes during the peak weekday PM hour and the peak Saturday midday hour traffic volumes were 37.6% less than the traffic volumes during the peak weekday PM hour. Based on this comparison, the peak weekday PM hour traffic volumes at Intersection 6 were adjusted based on these percentages to reflect the peak weekday school PM hour and peak Saturday midday hour traffic volumes, respectively, at Intersection 6.

The intersection peak hour volumes were compared between nearby studied intersections and were conservatively balanced between the studied intersections where applicable. Additionally, the peak hour volumes were adjusted based on NYSDOT record count data as well as the ATR count data. The intersection peak hour volumes were also adjusted to account for the detour implemented during the traffic count collection due to the construction of the roundabout. All existing peak hour traffic volume

adjustments were coordinated, reviewed, and concurred with by the Town's traffic consultant. The adjusted peak hour volumes are reflected in our 2024 Existing Volumes contained in Appendix C-2.

b. Intersection Analysis Methodology

The intersections have been analyzed based on the methodologies of the Highway Capacity Manual 6th Edition. Information derived from the manual relative to the level of service criteria is provided below.

i. Level-of-Service Criteria for Signalized Intersections

Levels of Service (LOS) for signalized intersections are defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called control delay. Control delay includes the delays of initial deceleration, move-up time in the queue, stops, and reacceleration. In this chapter, control delay may also be referred to as signal delay. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a peak 15-minute analysis period. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the volume/capacity (v/c) ratio for the lane group in question.

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of services occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both.

LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycles failures are frequent occurrences.

LOS F describes operations with control delay in excess of 80 seconds per vehicle and/or the arrival flow rates exceed the capacity of the intersection. It will also occur at high v/c ratios below 1.0 with many individual cycle failures. If the volume-to-

capacity (v/c) is greater than 1.0, the LOS is considered an F, even if the delays are lower than 80 seconds.

The LOS criteria for signalized intersections are presented below.

Signalized Level of Service Criteria		
Control Delay (Seconds/Vehicle)	**LOS by Volume-to-Capacity Ratio**	
	v/c ≤ 1.0	**v/c > 1.0**
≤10	A	F
>10 and ≤20	B	F
>20 and ≤35	C	F
>35 and ≤55	D	F
>55 and ≤80	E	F
>80	F	F

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

ii. Level-of-Service for Unsignalized Intersections

The Levels of Service (LOS) for Two Way Stop Control (TWSC) and All Way Stop Control (AWSC) intersections and Roundabouts are determined by the computed or measured control delay and are defined for each minor movement. LOS is not defined for the intersection as a whole for TWSC intersections. LOS criteria are presented below.

Unsignalized Level of Service Criteria		
Control Delay (Seconds/Vehicle)	**LOS by Volume-to-Capacity Ratio**	
	v/c ≤ 1.0	**v/c > 1.0**
≤10	A	F
>10 and ≤15	B	F
>15 and ≤25	C	F
>25 and ≤35	D	F
>35 and ≤50	E	F
>50	F	F

For TWSC intersections, 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 the intersection as a whole at TWSC intersections. For approach-based and intersection wide assessments at AWSC intersections and roundabouts, LOS is defined solely by control delay.

Average control delay less than 10 seconds/vehicle are defined as LOS A. Follow-up times of less than 5 seconds/vehicle have been measured when there is no conflicting traffic, so control delays of less than 10 seconds/vehicle are appropriate for low flow conditions. If the volume-to-capacity (v/c) is greater than 1.0, the LOS is considered an F, even if the delays are lower than 50 seconds.

The LOS criteria for unsignalized intersections are somewhat different than the criteria used for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. A number of driver behavior considerations combine to make delays at signalized intersections less onerous than delays at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, whereas drivers on minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at an unsignalized intersections versus that at signalized intersections. For these reasons, it is considered that the control delay threshold for any given LOS would be less for an unsignalized intersection than it would be for a signalized intersection.

c. Existing Operations

The intersection capacity analyses based on the existing volumes and conditions are shown on Tables III.H-4 through III.H-7. The specific volume/capacity ratios, delay for average vehicle in seconds and the associated levels of service are summarized for each lane group on Tables III.H-4 through III.H-7.

During the peak weekday AM hour, the southbound approach of Letchworth Village Road to its intersection with Storrs Road operates at a level of service E. The northbound Thiells-Mount Ivy Road left turn lane approaching Letchworth Village Road operates at a level of service E. At the intersection of Hammond Road and Suffern Lane, the southbound approach, westbound approach, and overall intersection operate at a level

of service D. At the intersection of US Route 202 and Thiells-Mount Ivy Road, the eastbound left turn lane, eastbound thru lane, eastbound approach, and overall intersection operate at a level of service D while the southbound right turn lane and southbound approach operate at a level of service E. The southbound Thiells-Mount Ivy Road left turn lane operates at a level of service F at its intersection with US Route 202. At the intersection of US Route 202 with NYS Route 45 and Old County Road the overall intersection, westbound left turn lane, and northbound approach are projected to operate with a level of service D while the northbound left turn lanes and southbound approach are projected to operate with a level of service E. The westbound US Route 202 thru/right and westbound approach to its intersection with NYS Route 45 are projected to operate at a level of service F. The westbound Rosman Road approach to Thiells-Mount Ivy Road is projected to operate at a level of service F. All other movements at the studied intersections are projected to operate at a level of service C or better during the peak weekday AM hour.

During the peak weekday school afternoon hour, the northbound Thiells-Mount Ivy Road left turn lane at its intersection with Letchworth Village Road operates at a level of service D. The southbound Hammond Road approach to Suffern Lane operates at a level of service D. At the intersection of US Route 202 and Thiells-Mount Ivy Road the eastbound left turn lane, eastbound thru lane, eastbound approach, and overall intersection operate at a level of service D while the southbound left turn lane and southbound approach operate a t a level of service F. At the intersection of US Route 202 with NYS Route 45 and Old County Road the northbound and southbound approaches operate at a level of service D while the westbound and northbound left turn lanes operate at a level of service E. The westbound US 202 thru/right lane and westbound approach operate at a level of service F at its intersection with NYS Route 45. The westbound Rosman Road approach to Thiells-Mount Ivy Road is projected to operate

at a level of service F. All other movements at the studied intersections are projected to operate at a level of service C or better during the peak weekday AM hour.

During the peak weekday PM roadway hour, the northbound Thiells-Mount Ivy Road left turn lane operates at a level of service D at its intersection with Letchworth Village Road. The southbound Hammond Road approach to Suffern Lane operates at a level of service D. At the US Route 202 and Thiells-Mount Ivy Road intersection the eastbound thru lane, eastbound approach, southbound approach, and overall intersection operate at a level of service D while the eastbound left turn lane operates at a level of service E. The southbound Thiells-Mount Ivy Road left turn lane operates at a level of service F at its intersection with US Route 202. At the intersection of US Route 202 with NYS Route 45 and Old County Road the southbound approach operates at a level of service D while the westbound left turn lane, westbound thru/right lane, westbound approach, and the northbound left turn lanes operate at a level of service E. The westbound Rosman Road approach to Thiells-Mount Ivy Road is projected to operate at a level of service F. All other movements at the studied intersections are projected to operate at a level of service C or better during the peak weekday AM hour.

During the peak Saturday midday hour, the northbound Thiells-Mount Ivy Road left turn lane operates at a level of service D at its intersection with Letchworth Village Road. The southbound Hammond Road approach to Suffern Lane operates at a level of service D. At the intersection of US Route 202 and Thiells-Mount Ivy Road the eastbound thru lane, eastbound approach, and southbound approach operate at a level of service D while the eastbound left turn lane operates at a level of service E. The southbound Thiells-Mount Icy Road left turn lane operates at a level of service F at its intersection with US Route 202. At the intersection of US

Route 202 with NYS Route 45 and Old County Road, the westbound left turn lane and southbound approach operate at a level of service D while the westbound thru/right lane, westbound approach, and northbound left turn lanes operate at a level of service E. All other movements at the studied intersections are projected to operate at a level of service C or better during the peak Saturday midday hour.

d. Accident Analysis

JMC requested and reviewed accident reports from the Town of Haverstraw, Town of Stony Point, Town of Ramapo, and New York State Department of Transportation (NYSDOT) for all studied intersections. Additionally, accident reports for the following roadway segments were reviewed:

Roadway Segment	From	To
Willow Grove Road	PIP Southbound Ramps	Letchworth Village Road
Letchworth Village Road	Willow Grove Road	Thiells-Mount Ivy Road
Thiells-Mount Ivy Road	US 202	Ridge Road
Ridge Road	Letchworth Village Road	Thiells-Mount Ivy Road

The intersections and roadway segments were reviewed during a three-year period from 9/1/2021 to 8/31/2024 with the exception of the intersection of County Route No. 94 and County Route No. 33 where construction of a roundabout began on or about 7/1/2024 closing the intersection to vehicular traffic. The intersection of County Route No. 94 and County Route No. 33 was reviewed during the three-year period prior to commencement of construction from 7/1/2021 to 6/30/2024. The data from the accident reports has been provided in tabular format and are included within

Appendix C-2. The tables provide information on the number of accidents, type of accidents and conditions such as time of day, day of week, weather conditions, pavement conditions as well as contributing factors. Additionally, the tables provide comparisons between the accident rates at the location or roadway segment and the statewide mean accident rates.

There were 8 reported accidents at the intersection of Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps. There were five left turn accidents, two right angle accidents, and one right turn accident. Driver error accounted for all the contributing factors towards the reported accidents.

Along Willow Grove Road between Palisades Interstate Parkway Southbound and Northbound Ramps, there was 1 reported accident where a driver hit a deer.

There were 9 reported accidents at the intersection of Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps. There were five rear end accidents, two right angle accidents, and one sideswipe accident. Additionally, there was an accident involving a fixed object where the motorist hit a tree. Driver error accounted for all the contributing factors towards the reported accidents.

Along Willow Grove Road between Palisades Interstate Parkway Northbound On/Off Ramps and Letchworth Village Road, there was one reported accident where a driver struck a utility pole.

There were 7 reported accidents at the intersection of Willow Grove Road & Letchworth Village Road / Patriots Hills Lane. There were four rear end accidents, a sideswipe accident, and a left turn accident. Additionally, there was an accident with a fixed object where the driver hit a pole. Driver error

accounted for the majority of the contributing factors towards the reported accidents.

Along Letchworth Village Road between Willow Grove Road and Storrs Road, there were 2 reported accidents. There was a rear end accident and a collision with a deer.

There was one reported accident at the intersection of Letchworth Village Road & Storrs Road. The accident was a sideswipe type accident occurring between two vehicles traveling through the intersection along Letchworth Village Road in opposite directions. The vehicle traveling north had a trailer and the contributing factor for the accident was categorized as oversized vehicle.

Along Letchworth Village Road between Storrs Road and Ridge Road, there were no reported accidents.

There were no reported accidents at the intersection of Letchworth Village Road & Ridge Road.

Along Letchworth Village Road between Ridge Road and Thiells-Mount Ivy Road, there was 1 reported accident involving the driver of a motorcycle leaving the roadway around a curve and striking a large rock causing the operator to be ejected from the vehicle.

The intersection of County Routes Nos. 94 and 47 are currently under construction to remove the two signalized intersections offset by approximately 250 feet and provide a single roundabout with an approach for each of the four existing roadways (Letchworth Village Road, Hammond Road, Suffern Lane, and Thiells-Mount Ivy Road). The accident analysis for this location was performed based on a time period for the three years

prior to the commencement of construction where the condition of two separate signalized intersections existed:

- There were 4 reported accidents at the intersection of Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road. There were two right turn accidents, one left turn accident, and one rear end accident. Driver error accounted for the majority of the contributing factors towards the reported accidents.
- There were 3 reported rear end accidents at the intersection of Suffern Lane & Hammond Road. Driver error accounted for the majority of the contributing factors towards the reported accidents.

There were 8 reported accidents at the intersection of Suffern Lane, West Railroad Avenue, Main Street, and Central Highway. There were three rear end accidents, two sideswipe accidents, and two right angle accidents. Additionally, there was one undescribed accident at the intersection with a contributing factor of falling asleep. Driver error accounted for the majority of the contributing factors towards the reported accidents.

There were 13 reported accidents at the intersection of US Route 202 with Palisades Interstate Parkway Southbound On/Off Ramps and Diner Driveway. There were 9 rear end accidents which were reported at the intersection and are summarized by approaches of occurrence below:

- Rear End Accidents
    - Eastbound Approach – 2 Accidents
    - Westbound Approach – 5 Accidents
    - Southbound Approach – 2 Accidents

A sideswipe accident occurred at the intersection as the result of a motorist swerving to avoid an animal within the roadway. There was also an

accident involving a vehicle turning left from westbound US Route 202 striking a pedestrian that was crossing the diner driveway. Additionally, two accidents occurred where a left turning vehicle from eastbound US 202 did not yield to a westbound vehicle traveling through the intersection along US 202 which were categorized as left turn and head on accidents. Driver error accounted for the majority of the contributing factors towards the reported accidents.

There were 32 reported accidents at the intersection of US Route 202 & Thiells-Mount Ivy Road. There were 20 rear end accidents and 6 sideswipe accidents. A summary of the approaches these accidents were reported along is provided below:

- Rear End Accidents
    - Eastbound Approach – 11 Accidents
    - Westbound Approach – 3 Accidents
    - Southbound Approach – 6 Accidents
- Sideswipe Accidents
    - Westbound Approach – 4 Accidents
    - Southbound Approach – 2 Accidents

There were 5 accidents occurring with wet pavement. A summary of the approaches these accidents were reported along as well as the types of accidents is provided below:

- Wet Pavement
    - Westbound Approach – 2 Accidents
    - Southbound Approach – 3 Accidents
- Accident Type
    - Rear End – 3 Accidents
    - Sideswipe – 1 Accidents

- Fixed Object – 1 Accident

Additionally, there were 4 accidents involving fixed objects where motorists hit a pedestrian signal pole or signage within the channelizing islands. Lastly, there was an accident where a driver hit a deer within the intersection and one right angle accident. Driver error accounted for the majority of the contributing factors towards the reported accidents. It should be noted that the intersection was recently improved in 2020 to provide backplates around all traffic signal heads, provide channelization of southbound right turn lane with a receiving lane, provide enlargement of channelizing island for westbound right turn, and modification of the westbound approach to have a designated thru and right lanes.

There were 61 reported accidents at the intersection of US Route 202 with NYS Route 45 and Old County Road. There were 39 rear end accidents reported at the intersection. A summary of the approaches these accidents were reported along is provided below:

- Rear End Accidents
  - Westbound Approach – 7 Accidents
  - Southbound Approach – 4 Accidents
  - Northbound Approach – 28 Accidents
- 16 of the rear end accidents which occurred along the northbound approach (NYS Route 45) were described within the report to be related to a vehicle performing a right turn on red.

There were 9 sideswipe accidents which are summarized below based on the approach where the accident was reported along:

- Sideswipe Accidents
  - Eastbound Approach – 2 Accidents
  - Westbound Approach – 5 Accidents
  - Northbound Approach – 2 Accidents

There were 12 accidents occurring with wet or icy pavement. A summary of the approaches these accidents were reported along as well as the types of accidents is provided below:

- Wet Pavement
    - Eastbound Approach – 1 Accidents
    - Westbound Approach – 2 Accidents
    - Southbound Approach – 2 Accidents
    - Northbound Approach – 7 Accidents
- Accident Type
    - Rear End – 8 Accidents
    - Sideswipe – 3 Accidents
    - Left Turn – 1 Accident

Additionally, 3 left turn accidents, 1 right turn accident, and 2 right angle accidents occurred at the intersection. There were also two accidents involving fixed objects where motorists traveling from NYS Route 45 hit the building or landscaping located in the northwest corner of the intersection. Lastly, there were three head on accidents (vehicle traveling westbound thru struck vehicle stopped in eastbound left turn lane), vehicle turning left from EB 202 struck vehicle stopped on southbound approach, vehicle turning right from NB Route 45 struck vehicle stopped in WB left turn lane. and one accident involving a pedestrian crossing US Route 202 not within a designated crosswalk on the west side of the intersection. Driver error accounted for the majority of the contributing factors towards the reported accidents. It should be noted that the intersection was recently improved in 2020 to provide backplates around all traffic signal heads as well as modification to the eastbound right turn lane to install a ‘Stop Here on Red’ sign and remove the previous yield condition. The above accident analysis for the intersection of US Route 202 with NYS Route 45 and Old County

Road had 16 rear end accidents with descriptions including vehicles in the process of performing a right turn on red from the northbound NYS Route 45 approach. This accounts for approximately 41% of the rear end accidents and 27% of the total accidents which were reported at the intersection. Based on the frequency of accidents related to this maneuver, the traffic analysis performed for the Build with improvements scenario reviews a potential safety improvement to restrict right turns on red from the northbound approach. This potential safety improvement is discussed within Section III.H.5.

Along Thiells-Mount Ivy Road between US Route 202 and Palisades Interstate Parkway Northbound Off Ramp, there were 5 reported accidents. There were 4 sideswipe accidents and one left turn accident. Driver error accounted for the majority of the contributing factors towards the reported accidents.

There were 16 reported accidents at the intersection of Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp. There were 4 right angle accidents, 4 left turn accidents, 3 sideswipe accidents, and a right turn accident. Additionally, there were 2 rear end accidents and two fixed object accidents where a motorist struck a sign, and another motorist struck a tree. Driver error accounted for the majority of the contributing factors towards the reported accidents. The traffic signal warrant for crash experience was reviewed for the existing unsignalized intersection based on the "Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 11th Edition," dated December 2023. The warrant is described within the MUTCD Section 4C.08 as traffic signal warrant 7 with three criteria which all should be met for consideration of installing a traffic control signal.

Criteria A

This criterion is met when adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency. Additional coordination with NYSDOT and the Town of Haverstraw would be required to understand alternative designs and enforcement which have been previously considered.

Criteria B

The MUTCD provides Tables 4C-2 and 4C-3 with thresholds for meeting this criterion. The tables within the MUTCD identify 'angle crashes' as all crashes that occur at an angle and involve one or more vehicles on the major street and one or more vehicles on the minor street. The right angle and left turn accidents have been summarized below to indicate the date and if an injury was reported:

#	Date	Accident Type	Injury Reported
1	10/27/2021	Right Angle	No
2	4/30/2022	Left Turn	No
3	6/14/2022	Right Angle	No
4	9/14/2022	Left Turn	No
5	11/09/2022	Left Turn	No
6	9/6/2023	Right Angle	No
7	9/21/2023	Right Angle	No
8	3/31/2024	Left Turn	Yes

Based on Table 4C-2 and 4C-3 within the MUTCD, the Warrant is satisfied if 4 angle and pedestrian crashes or 3 fatal-and-injury angle and pedestrian crashes have been reported within a one-year period. The Warrant is also

satisfied if 5 angle and pedestrian crashes or 4 fatal-and-injury angle and pedestrian crashes have been reported within a three-year period. A summary of the thresholds provided in the MUTCD Tables 4C-2 and 4C-3 is provided below with a comparison to the analyzed intersection:

Description	MUTCD Threshold	Intersection 11
One-Year Period Total of angle and pedestrian crashes	4	4
One-Year Period Total of fatal-and-injury angle and pedestrian crashes	3	1
Three-Year Period Total of angle and pedestrian crashes	5	8
Three-Year Period Total of fatal-and-injury angle and pedestrian crashes	4	1

As indicated above, Criteria B is satisfied for the frequency of angle crashes within a one-year period and three-year period.

Criteria C

This criterion is based on the volumes entering the intersection for 8 hours of an average day. Turning movement counts were conducted at the intersection of Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp from 7:00 – 9:00 AM and from 2:00 – 7:00 PM for a total of 7 hours. No pedestrians were counted during the overall count period. Below is a summary of the vehicular turning movement counts for the intersection:

Time	Major Street (Thiells-Mt Ivy Rd)	Minor Street (PIP Off Ramp)
7:00 – 8:00 AM	611	116
8:00 – 9:00 AM	777	103
2:00 – 3:00 PM	454	125
3:00 – 4:00 PM	548	186
4:00 – 5:00 PM	628	231
5:00 – 6:00 PM	540	294
6:00 – 7:00 PM	414	239

This criterion is satisfied when the 80 percent columns presented in Table 4C-1 of Condition A or B are met or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. 80 percent of the minimum pedestrian volume as indicated on Figure 4C-5 is 85 pedestrians crossing the major road (Thiells-Mount Ivy Road). The number of pedestrians crossing the major road does not satisfy the pedestrian volume threshold. Below is a summary of the vehicle volume thresholds provided for this criterion within the MUTCD as well as a comparison to the counted volumes at the intersection:

Description	Major Street Threshold	Minor Street Threshold	Number of Hours That Condition is Satisfied
80% Condition A	7	5	5
80% Condition B	3	7	3

As indicated above, Criteria C is not satisfied for volumes observed at the intersection.

Based on a review of the crash experience criteria provided within the MUTCD for consideration of traffic signal installation, the intersection of Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp is not warranted since all criteria is not met. However, other mitigations have been considered by the applicant to reduce the accidents experienced at the intersection. Advanced warning signing of the intersection is proposed along Thiells-Mount Ivy Road to alert vehicles traveling along the roadway of the entering vehicles from the off ramp. It should be noted that this roadway is under the jurisdiction of the Rockland County Highway Department.

Along Thiells-Mount Ivy Road Between Palisades Interstate Parkway Northbound Off Ramp and Ridge Road, there were 24 reported accidents. There were 6 rear end accidents, 3 right angle accidents, one right turn accident, and one sideswipe accident. There were three fixed object accidents where a utility pole, a guide rail and a curb were stuck by separate motorists. Two accidents involved pedestrians. One accident occurred with a pedestrian being struck while walking on the shoulder of Thiells-Mount Ivy Road approximately 0.3 miles south of Ridge Road. This accident location is 1 mile away from the subject property. The other accident involving a pedestrian occurred at the intersection of Thiells-Mount Ivy Road with Charles Lane. This accident involved a fatality for the pedestrian who was struck by multiple vehicles at the intersection. A clear description of the events leading to the accident was not provided within the report, however, the contributing factor for the accident is noted as failure to yield right-of-way and the roadway surface is noted as wet pavement. This accident location is approximately 1.8 miles away from the subject property. The proposed development's traffic represents approximately 7% of the traffic on this road segment. There were 6 accidents occurring with wet or icy pavement. A summary of the types of accidents is provided below:

- Accident Type
    - Rear End – 1 Accidents
    - Fixed Object – 2 Accidents
    - Animal – 1 Accident
    - Right Angle – 1 Accident
    - Pedestrian – 1 Accident

There were 8 accidents involving vehicles striking a deer as well as a fixed object accident where a motorist avoided a deer and struck a curb. These 9 accidents occurred between Anderson Road and Rosman Road. This segment of Thiells-Mount Ivy Road contains undeveloped wooded areas. Advanced warning signing for deer (MUTCD Sign Designation W11-3) is proposed to be placed for northbound and southbound vehicles traveling the roadway through this segment. It should be noted that this roadway is under the jurisdiction of the Rockland County Highway Department.

There were 3 reported accidents at the intersection of Thiells-Mount Ivy Road & Ridge Road. There was a rear end accident and a right-angle accident. Additionally, there was an accident which involved a vehicle approaching the intersection along Ridge Road and being unable to stop due to defective brakes causing the vehicle to leave the roadway on the south side of the intersection.

There were 4 reported accidents at the intersection of Thiells-Mount Ivy Road & Rosman Road. There were two rear end accidents, one right angle accident, and an accident where a vehicle struck a rock wall along the west side of Thiells-Mount Ivy Road. Driver error accounted for all the contributing factors towards the reported accidents.

Along Ridge Road between Letchworth Village Road and Thiells-Mount Ivy Road, there was one reported accident. The accident was a sideswipe accident at the intersection of Ridge Road and Underpass Road. The contributing factor for the accident was passenger distraction.

e. <u>Sight Distance Analysis</u>

The intersection of Ridge Road and Letchworth Village Road is an unsignalized all-way stop intersection. The applicant proposes to realign the northern and southern approaches to the intersection with Letchworth Village Road to remove the skew which currently exists. Under proposed conditions, all approaches would remain under stop control. The applicant also proposes to install "All-Way" signage, with an MUTCD sign designation of R1-3P, below the existing "Stop" signs to provide increased notification of the operations to motorists utilizing the intersection.

Sight distance for the intersection was reviewed in accordance with American Association of state Highway and transportation Officials (AASHTO) publication, "A Policy on Geometric Design of Highways and Streets, 7th Edition". Section 9.5.3.5 from the publication states, *"At intersections with all-way stop control, the first stopped vehicle on one approach should be visible to the drivers of the first stopped vehicles on each of the other approaches. There are no other sight distance criteria applicable to intersections with all-way stop control …"* The existing and proposed geometry of the Ridge Road and Letchworth Village Road intersection provides visibility between all vehicles stopped on the approaches to the intersection. Therefore, sufficient sight distance is provided at the all-way stop-controlled intersection.

3. Trip Generation and Trip Assignment

a. Vehicular Trip Generation

As previously mentioned, the applicant proposes to construct 300 dwelling units of family housing within seven (7) buildings. The proposed buildings include a basement for garages and three stories (levels) of living space above. The projected traffic associated with the proposed redevelopment is based on information published by the Institute of Transportation Engineers (ITE) in its publication "Trip Generation Manual, 11th Edition". Table III.H-1 below depicts the traffic volumes associated with the proposed development.

TABLE III.H-1

DEVELOPMENT VOLUMES[(1)]

DESCRIPTION	PEAK WEEKDAY AM HOUR			PEAK WEEKDAY SCHOOL HOUR			PEAK WEEKDAY ROADWAY PM HOUR			PEAK SATURDAY MIDDAY HOUR		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
a. Proposed 300 Dwelling Units Multifamily Housing Primary Volumes (ITE Code 220)[(2)]	28	88	116	100	61	161	95	55	150	62	61	123

Notes:
(1) Trip generation is based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.
(2) Multifamily Housing (Low-Rise) (ITE Code 220) is defined by ITE as including apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). The subject property is not close to rail transit.

As shown in Table III.H-1 above, the proposed development is projected to generate 116, 161, 150, and 123 primary volumes during the peak weekday AM, weekday school hour, weekday PM hour, and Saturday midday hour, respectively.

The primary volumes were routed through the studied intersections based on Annual Average Daily Traffic (AADT) data available from the New York State Department of Transportation for the surrounding roadways as well as consideration of turning movement counts at the studied intersections performed as part of the above Section III.H.2.a. Additional consideration was given to the local as well as regional roadway designations within and nearby to the study area for the proposed vehicle trip routing associated with the development. Lastly, the arrival & departure patterns of the site traffic associated with the residential use of the site were considered. A summary of the site distribution provided to the surrounding area roadways with the percentages of entering and exiting traffic is provided below:

- Palisades Parkway north of the Site – 25%
- Willow Grove Road west of the Palisades Interstate Pkwy. – 1%
- US 202 west of the Palisades Interstate Parkway – 10%
- Palisades Interstate Parkway south of the Site – 35%
- NYS Route 45 – 5%
- Rosman Road – 4%
- Main Street – 4%
- West Railroad Avenue – 8%
- Willow Grove Road east of Hammond Road – 8%

b. <u>Multi-Modal Trip Generation</u>

In addition to the proposed vehicular trips associated with the proposed project, a review of non-vehicular trips associated was undertaken based on ITE's publication, "Trip Generation Manual, 11th Edition." Table III.H-2 below depicts the walking trips associated with the proposed development as projected by ITE. A walk trip is defined by ITE as an inbound or outbound person trip where the greatest distance between the trip origin and trip

destination is traveled on foot or on any type of assistive device (including wheelchair, scooter, skates, or skateboard).

TABLE III.H-2

MULTI-MODAL DEVELOPMENT VOLUMES[1]

DESCRIPTION	PEAK WEEKDAY AM HOUR			PEAK WEEKDAY ROADWAY PM HOUR		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
a. Proposed 300 Dwelling Units Multifamily Housing Walk Trips (ITE Code 220)[2][3]	4	5	9	3	6	9

Notes:
(1) Trip generation is based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.
(2) Multifamily Housing (Low-Rise) (ITE Code 220) is defined by ITE as including apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). The subject property is not close to rail transit.
(3) A 'Walk Trip' is defined by ITE as an inbound or outbound person trip where the greatest distance between the trip origin and trip destination is traveled on foot or on any type of assistive device (including wheelchair, scooter, skates, or skateboard).

As shown in Table III.H-2 above, the proposed development is projected to generate 9 walking trips during the peak weekday AM and roadway PM hours. The current trip generation manual does not provide projections for the peak school afternoon hour or Saturday midday peak hour. ITE does not provide information for transit trips for the proposed land use which include a combined total of walk, bicycle, or transit trips.

Existing pedestrian facilities in the study network are discussed in Section III.H.1.d above. Four North Rockland Central School District schools are located within a one-mile walking distance of the proposed development. The existing schools within this distance include Thiells Elementary School, Willow Grove Elementary, Fieldstone Middle School, and North Rockland

High School. The majority of projected walking trips are anticipated to be trips to and from the nearby schools. However, due to the lack of pedestrian facilities available within the surrounding area, school children would be unlikely to walk to or from school. To mitigate this and in anticipation of educational bussing needs, the applicant will coordinate with North Rockland Central School District to provide a centralized school bus stop on-site as a designated area for the drop-off and pick-up of school children to and from their designated school.

4. Future Condition Traffic Volumes and Analysis

a. No-Build Volumes

In order to project future traffic increases to the 2029 design year, the existing volumes were increased by a general growth rate of 0.5% per year compounded annually.

Based on discussions with the Town's Traffic Consultant, the Oak Tree Apartments development located along Rosman Road in the vicinity of Caruso Court and the Shoprite Plaza is to be considered in this study. The traffic volumes for this other development are shown in a figure contained in Appendix C-2.

The general growth volumes plus the other development volumes result in the 2029 no-build volumes which represent traffic operations in 2029 without the development of the site.

The intersection capacity analyses based on the no-build volumes and conditions are shown on Tables III.H-4 through III.H-7. The specific volume/capacity ratios, delay for average vehicle in seconds and the

associated levels of service are summarized for each lane group on Tables III.H-4 through III.H-7.

During the peak weekday AM hour, The eastbound US 202 thru/right and the northbound diner driveway at its intersection with the southbound Palisades Parkway ramps is projected to increase in delay from a level of service B under existing conditions to a level of service C under no-build conditions. The overall intersection of US Route 202 and Thiells-Mount Ivy is projected to increase in delay from a level of service D under existing conditions to a level of service E under no-build conditions while the westbound thru and westbound approaches at the intersection are projected to increase in delay from a level of service C under existing conditions to a level of service D under no-build conditions. The southbound County Road approach to its intersection with US Route 202 is projected to increase in delay from a level of service E under existing conditions to a level of service F under no-build conditions. All other turning movements at the studied intersections under no-build conditions are projected to operate at the same levels of service as experienced under existing conditions during the peak weekday AM hour.

During the peak school afternoon hour, the southbound Letchworth Village Road approach to its intersection with Storrs Road is project increase in delay from a level of service C under existing conditions to a level of service D under no-build conditions. The overall intersection of Suffern Lane, West Railroad Avenue, Main Street, and Central Highway is projected to increase in delay from a level of service B under existing conditions to a level of service C under no-build conditions. The northbound diner driveway and southbound Palisades Interstate Parkway Southbound Off-Ramp approaches to the intersection with US Route 202 is projected to increase in delay from a level of service B under existing conditions to a level of service C under no-build conditions. The overall intersection of US Route

202 and Thiells-Mount Ivy Road as well as the eastbound left turn lane are projected to increase in delay from a level of service D under existing conditions to a level of service E under no-build conditions. The eastbound US Route 202 approach to its intersection with NYS Route 45 is projected to increase in delay from a level of service A under existing conditions to a level of service B under no-build conditions while the westbound approach is projected to decrease in delay from a level of service F under existing conditions to a level of service E under no-build conditions. The southbound Ridge Road approach to the intersection with Thiells-Mount Ivy Road is projected to increase in delay from a level of service B under existing conditions to a level of service C under no-build conditions. All other turning movements at the studied intersections under no-build conditions are projected to operate at the same levels of service as experienced under existing conditions during the peak weekday school PM hour.

During the peak weekday roadway afternoon hour, the eastbound Suffern Lane approach and northbound Main Street thru/right lane at the intersection of Suffern Lane, West Railroad Avenue, Main Street, and Central Highway are projected to increase in delay from a level of service C under existing conditions to a level of service D under no-build conditions. The westbound US Route 202 approach to its intersection with Thiells-Mount Ivy Road is projected to increase in delay from a level of service A under existing conditions to a level of service B under no-build conditions. The westbound US Route 202 thru/right lane at its intersection with NYS Route 45 is projected to increase in delay from a level of service E under existing conditions to a level of service F under no-build conditions while the northbound NYS Route 45 approach is projected to increase in delay from a level of service C under existing conditions to a level of service D under no-build conditions. The southbound Thiells-Mount Ivy Road approach to its intersection with Rosman Road is projected to increase in delay from a level of service A under existing conditions to a level of service B under no-

build conditions. All other turning movements at the studied intersections under no-build conditions are projected to operate at the same levels of service as experienced under existing conditions during the peak weekday roadway PM hour.

During the peak Saturday midday hour, the northbound NYS Route 45 approach to the intersection with US Route 202 as well as the overall intersection are projected to increase in delay from a level of service C under existing conditions to a level of service D under no-build conditions while the westbound US Route 202 thru/right lane is projected to increase in delay from a level of service E under existing conditions to a level of service F under no-build conditions. All other turning movements at the studied intersections under no-build conditions are projected to operate at the same levels of service as experienced under existing conditions during the peak Saturday midday hour.

b. <u>Build Volumes</u>

The development related traffic, described above within Section III.H.3.i, was added to the no-build volumes results in 2029 Build Volumes which reflect projected volumes after the completion of the development.

The intersection capacity analyses based on the build volumes and conditions are shown on Tables III.H-4 through III.H-7. The specific volume/capacity ratios, delay for average vehicle in seconds and the associated levels of service are summarized for each lane group on Tables III.H-4 through III.H-7.

During the peak weekday AM hour, the southbound Letchworth Village Road approach to the intersection with Storrs Road is projected to increase in delay from a level of service E under no-build conditions to a level of

service F under build conditions. At the intersection of Letchworth Village Road and Ridge Road the eastbound approach is projected to increase in delay from a level of service B under no-build conditions to a level of service C under build conditions while the westbound approach is projected to increase in delay from a level of service A under no-build conditions to a level of service B under build conditions. The westbound US Route 202 thru lane and westbound approach to the intersection with Thiells-Mount Ivy Road are projected to increase in delay from a level of service D under no-build conditions to a level of service E under build conditions while the southbound Thiells-Mount Ivy Road approach is projected to increase in delay from a level of service E under no-build conditions to a level of service F under build conditions. All other turning movements at the studied intersections under build conditions are projected to operate at the same levels of service as projected under no-build conditions during the peak weekday AM hour.

During the peak weekday school afternoon hour, the overall intersection Of Letchworth Village Road and Ridge Road is projected to increase in delay from a level of service A under no-build conditions to a level of service B under build conditions while the eastbound, northbound, and southbound approaches are projected to increase in delay from a level of service A under no-build conditions to a level of service B under build conditions. The southbound Thiells-Mount Ivy Road right turn lane at its intersection with US Route 202 is projected to increase in delay by 2.7 seconds and from a level of service C under no-build conditions to a level of service D under build conditions. The eastbound Palisades Interstate Parkway northbo0und off-ramp intersection with Thiells-Mount Ivy Road is projected to increase in delay by 2.9 seconds and from a level of service C under no-build conditions to a level of service D under build conditions. All other turning movements at the studied intersections under build conditions are projected to operate

at the same levels of service as projected under no-build conditions during the peak weekday school PM hour.

During the peak weekday roadway afternoon hour, the southbound Palisades Interstate Parkway off-ramp intersection with Willow Grove Road is projected to increase in delay by 1.4 seconds and from a level of service B under no-build conditions to a level of service C under build conditions. The northbound Palisades Interstate Parkway off-ramp intersection with Willow Grove Road is projected to increase in delay by 3.8 seconds and from a level of service C under no-build conditions to a level of service D under build conditions. At the intersection of Letchworth Village Road & Ridge Road the eastbound approach and overall intersection are projected to increase in delay from a level of service A under no-build conditions to a level of service B under build conditions. The northbound Main Street left turn lane at its intersection with Suffern Lane is projected to increase in delay by 0.2 seconds and from a level of service B under no-build conditions to a level of service C under build conditions. The eastbound US 202 approach to the intersection of Thiells-Mount Ivy Road is projected to increase in delay by 0.9 seconds and from a level of service D under no-build conditions to a level of service E under build conditions. The southbound Ridge Road approach to the intersection with Thiells-Mount Ivy Road is projected to increase in delay by 0.9 seconds and from a level of service B under no-build conditions to a level of service C under build conditions. All other turning movements at the studied intersections under build conditions are projected to operate at the same levels of service as projected under no-build conditions during the peak weekday roadway PM hour.

During the peak Saturday midday hour, the southbound Letchworth Village Road approach to the intersection with Storrs Road is projected to increase in delay by 0.2 seconds and from a level of service A under no-build

conditions to a level of service B under build conditions. At the intersection of US Route 202 and Thiells-Mount Ivy Road, the westbound thru lane is projected to increase in delay by 2.8 seconds and from a level of service A under no-build conditions to a level of service B under build conditions while the southbound right turn lane is projected to increase in delay by 2.8 seconds and from a level of service B under no-build conditions to a level of service C under build conditions. The southbound Thiells-Mount Ivy Road approach to the intersection with US Route 202 is projected to increase in delay by 1.8 seconds and from a level of service D under no-build conditions to a level of service E under build conditions. The westbound US 202 approach to the intersection with NYS Route 45 is projected to increase in delay by 2.9 seconds and from a level of service E under no-build conditions to a level of service F under build conditions. All other turning movements at the studied intersections under build conditions are projected to operate at the same levels of service as projected under no-build conditions during the peak Saturday midday hour.

5. Transportation Mitigation

Following off-site improvements have been considered by the applicant for the proposed development:

Intersection 4

The intersection of Letchworth Village Road with the minor approach of Storrs Road currently provides a stop control to the southbound Letchworth Village Road approach. This is atypical to have a stop approach along one of the major approaches while providing no control to the minor approach. The arrangement of the stop control at the intersection has an adverse effect on the level of services during the peak weekday morning and school afternoon hours which are projected to operate with Level of Service F and D, respectively,

under build conditions. A summary of the projected operations is provided below:

2029 Build – Intersection 4*				
Description	**Weekday AM Hour**	**Weekday School PM Hour**	**Weekday Roadway PM Hour**	**Saturday Midday Hour**
Storrs Road (Eastbound)	8.8 (A)	8.6 (A)	8.2 (A)	7.5 (A)
Letchworth Village Road (Northwestbound)	-	-	-	-
Letchworth Village Road (Southbound)	50.3 (F)	34.9 (D)	14.8 (B)	10.0 (B)

*Legend: Average seconds delay per vehicle (Level of Service)

Our office reviewed two alternatives in providing modifications to the intersection which are summarized below.

Option A involves relocating the stop control to be for the Storrs Road approach to the intersection and removing the stop sign provided to the southbound Letchworth Village Road approach. The vegetation within the northwest corner of the intersection is recommended to be reviewed for this option and removed as necessary to provide an increased sight distance for vehicles turning from Storrs Road. The analysis of the intersection projects Letchworth Village Road to operate at a level of service A during the studied hours. Storrs Road is projected to operate at a level of service D during the weekday morning and afternoon school hours as well as operate at a level of service B during the weekday roadway afternoon hour and Saturday midday hour. A summary of the projected operations with Option A is provided below:

2029 Build – Intersection 4 with Two-Way Stop on Storrs Road Approach*				
Description	**Weekday AM Hour**	**Weekday School PM Hour**	**Weekday Roadway PM Hour**	**Saturday Midday Hour**
Storrs Road (Eastbound)	28.2 (D)	25.7 (D)	12.3 (B)	10.3 (B)
Letchworth Village Road (Northwestbound)	9.3 (A)	8.4 (A)	7.8 (A)	7.5 (A)
Letchworth Village Road (Southbound)	-	-	-	-

*Legend: Average seconds delay per vehicle (Level of Service)

Option B considers providing an All-Way stop at the intersection of Storrs Road and Letchworth Village Road. The overall intersection is projected to operate at a level of service C during the peak weekday AM hour, a level of service B during the weekday PM hours, and a level of service A during the Saturday Midday hour. The five all-way stop warrants provided within the MUTCD have been reviewed as it relates to the installation of an all-way stop at the subject intersection.

A. *Crash experience:* This warrant is met for a three-leg intersection if there are four or more reported crashes in a 12-month period or five or more crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control. During the three-year accident analysis performed as part of this report, a single accident was reported at the intersection of Letchworth Village Road and Storrs Road. This warrant is not satisfied.

B. *Sight Distance:* This warrant is satisfied where an engineering study indicates that sight distance on the minor-road approaches controlled by a 'Stop' sign is not adequate for a vehicle to turn onto or cross the major (uncontrolled) road. With the stop control located along the minor road approach of Storrs Road, the sight distance for vehicles looking left should

be reviewed. If the sight distance cannot be provided to the satisfaction of the jurisdictional agencies Warrant B could be met for an all-way stop installation.

C. *Transition to Signal Control or Transition to Yield control at a Circular Intersection:* This warrant does not apply to the intersection of Letchworth Village Road and Storrs Road.

D. *8-Hour Volume:* This warrant is satisfied where the combined motor vehicle, bicycle, and pedestrian volumes on the major street approaches are at least 300 units and the combined motor vehicle, bicycle, and pedestrian volumes from the minor street approach is at least 200 units. A summary of the counted weekday volumes is provided below:

Time	Major Street (Letchworth Village Rd)	Minor Street (Storrs Rd)
7:00 – 8:00 AM	553	136
8:00 – 9:00 AM	468	152
2:00 – 3:00 PM	313	137
3:00 – 4:00 PM	336	244
4:00 – 5:00 PM	363	95
5:00 – 6:00 PM	273	29
6:00 – 7:00 PM	221	9

The counted volumes meet the threshold for satisfying the warrant during only during the 3:00 to 4:00 hour. Therefore, this warrant is not satisfied.

E. *Other Factors:* This warrant is satisfied where there is a need to control the studied intersection based on other factors not addressed in the prior warrants. Some examples provided within the MUTCD are listed below.

- The need to control left turn conflicts.

- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where all-way stop control would improve traffic operational characteristics of the intersection.
- Where pedestrian and/or bicyclist movements support the installation of all-way stop control.

This warrant is not satisfied based on the current study prepared.

The warrant analysis prepared above indicates that an all-way stop may be justified by a sight distance analysis or other factors which could be provided by the jurisdictional agencies. A summary of the projected operations with Option B is provided below:

2029 Build – Intersection 4 with All-Way Stop*				
Description	**Weekday AM Hour**	**Weekday School PM Hour**	**Weekday Roadway PM Hour**	**Saturday Midday Hour**
Storrs Road (Eastbound)	14.1 (B)	13.5 (B)	9.5 (A)	7.6 (A)
Letchworth Village Road (Northwestbound)	29.9 (D)	16.6 (C)	11.8 (B)	8.1 (A)
Letchworth Village Road (Southbound)	13.9 (B)	11.1 (B)	9.6 (A)	8.2 (A)

*Legend: Average seconds delay per vehicle (Level of Service)

It should be noted that Letchworth Village Road is under the jurisdiction of the Rockland County Highway Department and Storrs Road is under the jurisdiction of the Town of Haverstraw. Based on our review of the potential improvements mentioned above for this intersection, it is recommended that the intersection be converted from an atypical two-way stop-controlled intersection to an all-way stop-controlled intersection. The recommendation to convert the intersection to an all-way stop-controlled intersection is due to sight distance considerations and the existing atypical stop control at the

intersection. The improvements to this intersection have been depicted on Figure CI-1, included within Appendix C-2. The recommended improvement would require input from the Town and County.

An additional sign is proposed to be modified associated with the intersection modification to an all-way stop-control. An "Intersection ahead" sign (MUTCD sign designation of W2-2R) is currently located approximately 300 feet south of Storrs Road along Letchworth Village Road facing northbound traveling vehicles. The sign is proposed to be replaced with a "Stop Ahead" sign, with MUTCD sign designation of W3-1.

Lastly, a "new" sign (Sign Designation W16-15P) is recommended to be mounted above the proposed new signs described above for only the first 6 months after the permanent installation of the all-way stop control at the intersection of Letchworth Village Road and Storrs Road.

The improvements to the intersection of Letchworth Village Road and Storrs Road would commence after permits are received from the Town of Haverstraw as well as Rockland County. The improvements described above would be privately funded and installed by the Applicant prior to the issuance of a certificate of occupancy for the proposed development.

Intersection 5

At the intersection of Letchworth Village Road (also known as County Route No. 94) and Ridge Road, the applicant proposes to realign the northern and southern approaches to the intersection to remove the skew which currently exists. The applicant also proposes to install "All-Way" signage, with an MUTCD sign designation of R1-3P, below the existing "Stop" signs to provide increased awareness of the operations to motorists utilizing the intersection. The improvements to this intersection have been depicted on Figure CI-2, included within Appendix C-2. It should be noted that Letchworth Village Road

is under the jurisdiction of the Rockland County Highway Department and Ridge Road is under the jurisdiction of the Town of Haverstraw.

The improvements to the intersection of Letchworth Village Road and Ridge Road would commence after permits are received from the Town of Haverstraw as well as Rockland County Highway Department. The improvements described above would be privately funded and installed by the Applicant prior to the issuance of a certificate of occupancy for the proposed development.

Intersection 9

At the intersection of US Route 202 and Thiells-Mount Ivy Road (also known as County Route No. 47), modifications to the traffic signal timing were reviewed to improve operations through the intersection during the weekday afternoon hours. Intersection 9 and intersection 10 operate as a single signalized intersection providing a complex traffic signal design and timing operation. The existing traffic signal provides two timing plans. One plan is provided for weekdays from 7:30 to 9:15 AM and another plan for all other operating time periods. The timing plan from the weekday morning timing plan was reviewed as the timing modification during the afternoon weekday peak hours studied. The timing modifications provide an overall intersection delay reduction to be less than the No Build condition. Furthermore, during the weekday school afternoon hour, the delay for the southbound Thiells-Mount Ivy Road left turn lane is reduced to be better than Existing conditions. The morning traffic signal timing plan is proposed to be implemented during the studied hours from 2:00 PM to 7:00 PM. It should be noted that NYSDOT has jurisdiction over the intersection of US Route 202 and Thiells-Mount Ivy Road and the recommendations would need to be reviewed by the NYSDOT for its implementation.

The improvements to the intersection of US Route 202 and Thiells-Mount Ivy Road include traffic signal timing which is to be implemented by NYSDOT. The

Applicant would coordinate the proposed traffic signal timing modifications with NYSDOT prior to the issuance of a certificate of occupancy for the proposed development.

Intersection 10

At the intersection of US Route 202 with NYS Route 45 and Old County Road, the accident analysis performed as part of Section III.H.2.iv indicates that 16 rear end accidents occurred while vehicles were attempting to perform a right turn on red from the northbound NYS Route 45 approach. The accidents were analyzed over the 3-year analysis time period. Based on the frequency of accidents related to this maneuver, a potential safety improvement to restrict right turns on red from the northbound approach was assessed. The analysis reveals that the installation of a 'No Turn on Red' for this lane would degrade the level of service from a level of service A to a level of service D during all studied hours. It should be noted that NYSDOT has jurisdiction over the intersection of US Route 202 and NYS Route 45. The safety improvement would need to be reviewed by the Town and State prior to implementation. The improvements to the intersection have been depicted in Figure CI-3, included within Appendix C-2.

The signage modifications to the intersection of US Route 202 and NYS Route 45 would commence after permits are received from NYSDOT. The improvements described above would be privately funded and installed by the Applicant prior to the issuance of a certificate of occupancy for the proposed development. The Applicant would coordinate the proposed traffic signal timing modifications, to be implemented by NYSDOT, prior to the issuance of a certificate of occupancy for the proposed development.

Intersection 11

Advanced warning signing is proposed along Thiells-Mount Ivy Road (also known as County Route No. 47) for its intersection with Palisades Interstate

Parkway Northbound Off Ramp. The signing is proposed both south and north of the intersection. The improvements have been depicted in Figure CI-4, included within Appendix C-2. It should be noted that the Rockland County Highway Department has jurisdiction along Thiells-Mount Ivy Road and NYSDOT has jurisdiction of the Palisades Parkway Off Ramp and the recommendations would need to be reviewed by the County prior to implementation.

The improvements to the intersection of Thiells-Mount Ivy Road and Palisades Interstate Parkway Northbound Off Ramp would commence after permits are received from Rockland County Highway Department. The improvements described above would be privately funded and installed by the Applicant prior to the issuance of a certificate of occupancy for the proposed development.

Thiells-Mount Ivy Road

Along Thiells-Mount Ivy Road between Anderson Road and Rosman Road, advanced warning signing for deer (MUTCD Sign Designation W11-3) is proposed to be placed in both directions. The improvements have been depicted in Figure CI-5, included within Appendix C-2. It should be noted that this roadway is under the jurisdiction of the Rockland County Highway Department and the recommendations would need to be reviewed by the County prior to implementation.

The improvements to the roadway segment of Thiells-Mount Ivy Road would commence after permits are received from Rockland County Highway Department. The improvements described above would be privately funded and installed by the Applicant prior to the issuance of a certificate of occupancy for the proposed development.

Intersection 13

The Rosman Road approach to the intersection with Thiells-Mount Ivy Road operates at a level of service F during all studied weekday peak hours under existing, no-build, and build conditions. A potential recommendation at this intersection would be to prohibit left turns out of the Rosman Road approach; however, we recommend that this intersection be reviewed at a future date when traffic volumes in the area return to typical conditions once the roundabout construction is completed. It should be noted that Thiells-Mount Ivy Road is under the jurisdiction of the Rockland County Highway Department and Rosman Road is under the jurisdiction of the Town of Haverstraw. Any improvements at this intersection would need to be reviewed and accepted by the County and Town prior to implementation. The Applicant does not currently propose improvements to the intersection of Thiells-Mount Ivy Road and Rosman Road.

It is the professional opinion of JMC that the proposed development of the property with the proposed off-site improvements described above will not have a significant impact on traffic operations in the study area.

6. On-Site Circulation and Parking

a. Circulation

The intersection of Letchworth Village Road and Ridge Road is proposed to be realigned to remove the existing skew. The existing access to the Town property from the northern leg of this intersection is proposed to be maintained and improved to provide a median between the entering and exiting travel lanes. A roundabout is proposed within the adjacent Town of Haverstraw property approximately 200 feet north of the intersection of Letchworth Village Road and Ridge Road. The roundabout would provide access to Letchworth Village Road, access to the existing church parking

lot, access to the proposed development, as well as permit future access to the north for potential development.

The site driveway extends east from the proposed roundabout onto the subject property with a 10-foot-wide median separating traffic flow to provide a boulevard aesthetic. On either side of the median, a 5-foot-wide right shoulder, 12-foot-wide travel lane, and 3-foot-wide left shoulder is provided for a total pavement width of 20 feet. A club house and pool are centrally located within the development parcel at the end of the main internal access driveway where an all-way stop intersection is proposed. Additionally, a pickleball and recreation area are proposed on-site on the north side of the main internal access. The proposed development has been arranged to provide four residential buildings south of the main internal access driveway and three residential buildings north of the main internal access driveway. Internal circulating roadways and drive aisles for parking areas are proposed at a width of 26 feet. Stop control is proposed for minor approaches to internal intersections.

Parking areas for the proposed buildings are proposed throughout the site to provide convenient access. Along one side of each residential building, garages are proposed with additional parking spaces provided in front of the garage as tandem parking. The garage parking space and associated tandem parking space will be assigned. Other parking spaces are not proposed to be assigned.

Two designated loading spaces are proposed on-site with a size of 40 feet by 15 feet. The loading areas are provided within the northern portion of the property between Buildings 6 and 7 as well as withing the southern portion of the site between Buildings 1 and 2. The loading areas have been oriented parallel to the drive aisles with flares for access. The loading areas have been provided primarily for use during residential move-in and move-

out operations. The proposed residential multifamily housing would be anticipated to be serviced with smaller delivery vehicles, typically for deliveries by UPS, USPS, FedEx, etc.

Sidewalks and crosswalks are proposed throughout the site to provide access between the buildings for pedestrians. Additionally, a sidewalk is provided through the town property to the intersection of Letchworth Village Road and Ridge Road.

A secondary 20-foot-wide vehicular access driveway is proposed for emergency use. The secondary access is proposed along Letchworth Village Road approximately 375 feet east of Ridge Road. This access roadway is proposed to be compromised of Item 4 gravel with a compacted sub-base material and restricted from typical vehicular traffic by mountable curbing and/or a bollard and chain assembly.

b. <u>Parking</u>

The development proposes to provide general surface parking for residents and visitors, accessible surface parking spaces, on-site garages, and reserved surface parking in front of each garage space as tandem parking. A summary of the proposed designated parking areas is provided below:

- General Surface parking
    - Standard – 369 Spaces
    - Accessible – 30 Spaces
    - Sub-Total – 399 Spaces
- Reserved parking
    - Garage – 134 Spaces
    - Tandem (In front of Garage) – 134 Spaces
    - Sub-Total – 268 Spaces
- Total
    - 667 Parking Spaces

As indicated above, the proposed project proposes a total of 667 parking spaces on-site at a ratio of 2.22 spaces per dwelling unit. To provide a conservative analysis, consideration of excluding the tandem parking located in front of each garage would provide a reduced parking supply of 533 parking spaces. With the reduced parking supply, an on-site parking ratio of 1.78 spaces per dwelling unit is provided.

The projected parking associated with the proposed redevelopment is based on information published by the Institute of Transportation Engineers (ITE) in its publication "Parking Generation Manual, 6th Edition". The proposed multifamily development is comprised of 52 one-bedroom units and 248 two-bedroom units for a total of 300 dwelling units. The project is categorized as low-rise by ITE since it proposes to have three floors (levels) of residences. Additionally, the site is categorized as not close to rail transit since the site is located greater than 0.5 miles from rail transit and within a 'general urban/suburban' setting/location.

As the proposed project is comprised of one-bedroom and two-bedroom units, the following land use codes provided within ITE's Parking Generation Manual were considered. Land Use Code 217, (Multifamily Housing 1 BR (Low-Rise), is defined by ITE as multifamily housing with one bedroom in a residential building with two or three floors (levels) of residence that consist entirely of 1-bedroom dwelling units. Land Use Code 220, Multifamily Housing 2+ BR (Low-Rise), is defined by ITE as multifamily housing with two-or-more bedroom in a residential building with two or three floors (levels) of residence that contain at least one dwelling unit with two or more bedrooms. Based upon the definitions summarized above, parking demand projections for the site have been assessed based on Land Use Code 220 for all of the proposed 300 dwelling units.

Table III.H-3 below indicates the anticipated parking demand based upon dwelling units as well as bedrooms. The table provides the parking ratio and the anticipated demand for parking spaces based upon the 85th percentile ratio.

TABLE III.H-3

ANTICIPATED PARKING DEMAND[(1)]

Day of Week	300 Dwelling Units (ITE Code 220)[(3)]		548 Bedrooms (ITE Code 220)[(3)]	
	Ratio (Space / DU)	Demand (Spaces)	Ratio (Space / BR)	Demand (Spaces)
Weekday	1.59	477	0.86	471
Saturday	1.44	432	0.88	482

Notes:
(1) Parking generation is based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 6th Edition.
(2) Multifamily Housing 2+ BR (Low-Rise) (ITE Code 220) is defined by ITE as multifamily housing with two-or-more bedroom in a residential building with two or three floors (levels) of residence that contain at least one dwelling unit with two or more bedrooms. The subject site is considered not close to rail transit since the walking distance between the residential site entrance and the closest rail transit station entrance is greater than half a mile.

As shown in Table III.H-3 above, the proposed development has an anticipated parking demand based on dwelling units of 477 and 432 spaces during a weekday (Monday to Friday) and a Saturday, respectively. The anticipated parking demand based on bedrooms for the proposed project is 471 and 482 spaces during a weekday (Monday to Friday) and a Saturday, respectively. Therefore, a conservatively anticipated parking demand for the site is 477 parking spaces on a weekday and 482 parking spaces on a Saturday which represents an occupancy percentage 89.8 and 90.8 on a weekday and Saturday, respectively, as compared to the reduced parking supply excluding tandem spaces in front of garages.

The average parking supply ratio provided by ITE for the associated land use sub-category is 1.7 spaces per dwelling unit. This parking ratio equates to a parking supply of 510 spaces for the site based on the ITE data. As described above, the project proposes to provide 533 parking spaces (with a ratio of 1.78 spaces per unit) based on conservatively excluding the tandem parking spaces located in front of garages from the parking supply. The proposed parking supply is similar to the average parking supply based on ITE and provides sufficient available parking based upon the anticipated demand presented in Table III.H-3.

III.I Community Demographics, Facilities, and Services

1. Existing Conditions

a. Discussion of Existing Multi-Family Housing Market Trends in Rockland County including the current population of the Town of Haverstraw and Population change from 1994 to present

The Town professional staff and the various Boards that serve the Town have communicated that they envision a multi-family dwelling community as a great asset for the Town and in this specific area of Haverstraw. The population in Haverstraw in 1990 was 32,691, as reported in the 2000 "Master Plan and Zoning Ordinance Review Project" document prepared by Michael F. Kauker Associates. According to the US Census American Community Survey (ACS 2020 – 2023 four-year population estimate), the current population in the Town of Haverstraw is currently 38,871. This represents an increase of 6,180 residents or approximately 19% over the past 35 years.

The 2000 Master Plan highlights the Palisades Interstate Parkway Corridor Management Plan, dated May 11, 1999. This study emphasized the lands and areas in the Town that border both the east and west sides of the north-south Palisades Interstate Parkway. The 2000 Master Plan concurs that the goals for this area in the Town should provide more economic development and recreational opportunities, while preserving the local environment along with its scenic beauty which would continue to provide tourism and further strengthen the local economy. Additionally, the 2011 Rockland County Comprehensive Plan cites the Letchworth Village Property as a top area in the County that is targeted for revitalization and repurposing. The 2011 Comprehensive plan states that the Letchworth property should be redeveloped or repurposed with use(s) that return it to the tax rolls. Furthermore, it states that "previously developed properties, such as Letchworth, should be revitalized and used before major new

developments are considered in order to protect and conserve natural resources[1]". Given the previously developed nature of the property and the Proposed Action's market rate apartment housing, the project is consistent with these stated objectives.

b. <u>Discussion of demographic factors in the Town of Haverstraw such as income, employment, age, etc.</u>

The 38,871 inhabitants of the Town of Haverstraw constitute 12,776 households with 65.6% owning their home and an average of 2.99 persons living in a single-family household.

According to the United States Census Bureau, the median age in the Town is 38.9 years, as opposed to the median age for Rockland County which is 34.7 years. As shown in Table III.I-1, the largest age cohort in the Town is 25-34 years (13.6%). This demonstrates the Town's need for more housing for younger families with school-aged children. Correspondingly, there is a significant population (39.2%) of the younger labor force age 25-54 years. The senior population aged 65 years and older constitute 15.8% of the population.

[1] Rockland Tomorrow, Rockland County Comprehensive Plan. Adopted 03/01/2011. Page 141.

Table III.I-1

Age Cohorts, Town Haverstraw, 2022

	Count	Percent
Total Population	**38,871**	**100.0%**
Under 5 years	3,233	8.3%
5 to 14 years	4,798	12.3%
15 to 24 years	4,330	11.1%
25 to 34 years	5,329	13.6%
35 to 44 years	4,670	12.0%
45 to 54 years	5,289	13.6%
55 to 64 years	5,116	13.2%
65 to 74 years	3,455	8.9%
75 to 84 years	1,963	5.1%
85 years and over	690	1.8%
Mean Age	38.9	

Source: US Census Bureau, American Community Survey 2020-2023 Five-year Estimates.

In terms of racial composition, the residential population is majority white (37.6%), with 26.78% of the Town population identifying as "Some Other Race", as shown in Table III.I-2.

Table III.I-2

Race and Ethnicity

Town of Haverstraw 2022

	Count	Percent
Total population	**38,871**	**100.0%**
White	14,611	37.6%
Black or African American	5,991	15.4%
American Indian and Alaska Native	364	0.9%
Asian	1,759	4.5%
Native Hawaiian and Other Pacific Islander	24	0.1%
Some other race	10,408	26.78%
Two or more races	5,930	15.3%
Hispanic or Latino (of any race)	18,556	47.7%
Not Hispanic or Latino	12,340	31.7%

Source: US Census Bureau, American Community Survey 2020-2023 Five-year Estimates.

The median household income of the Town is $87,716, which is moderately lower than that of Rockland County as a whole at $106,589 (Based on the Rockland County GIS).

c. <u>Describe Town facilities and other relevant service providers including the Town of Haverstraw Police Department, Haverstraw Volunteer Ambulance corps (HVAC), and the Thiells Fire Department</u>

i. <u>Town of Haverstraw Police Department</u>

On October 30, 2024, JMC sent correspondence to the Town of Haverstraw Police Department regarding the Proposed Action and the Department's current composition. The Town responded with the following information in correspondence received on November 21, 2024 (Appendix B).

The Police Department data indicates that there are currently 72 sworn members of the Town of Haverstraw Police Department. This includes:

- One Chief of Police
- One Captain
- Three Lieutenants
- Thirteen Sergeants
- Forty-three Officers
- Nine Detectives
- Two Part Time Officers

The letter states that the Department does not keep statistics. With Police headquarters located at 101 East Ramapo Road, the Police

facility is approximately 3 miles from the Project Site.

ii. Haverstraw Volunteer Ambulance Corps

On October 30, 2024, JMC sent correspondence to the Haverstraw Ambulance Corps regarding the Proposed Action and the Department's current composition. The Corps' responded with information dated November 21, 2024 (Appendix B). The Haverstraw Ambulance Corps is located at 160 North Route 9W, Haverstraw, NY 10927 and has 83 active members. The members utilize 4 ambulances and 1 fly car. The average call response times are between 6 and 9 minutes. There were a total of 4,067 calls in the 2023 calendar year based on the corps' website[2].

iii. Thiells Fire Department

On October 30, 2024, JMC sent correspondence to the David B. Roche Volunteer (Thiells) Fire Department regarding the Proposed Action and the Department's current capabilities. The Fire Chief responded in a letter dated November 21, 2024 (Appendix B).

The correspondence from the Fire Department states that the department is a 100% volunteer organization with 60 members of the Department, 5 of which also serve as Fire Board Commissioners. The Fire Department is located at 99 Route 202, Thiells, NY 10984 which is approximately 3 miles from the Project Site.

The Thiells Fire Department currently uses 7 fire apparatus that

[2] https://haverstrawems.org/response-statistic/2023-response-statistics/

includes 3 engines, a rescue, a ladder truck and a brush truck. The three engine trucks can pump 1,500 gallons per minute and the ladder truck can pump 2,000 gallons per minute. The Department responds to over 260 calls on an annual basis with an average response time between 5 and 6 minutes.

d. <u>Discussion of North Rockland Central School District Public School System including budget, enrollment trends, and physical capacity of each school.</u>

The North Rockland Central School District offers K-12 education for residents of the Town of Haverstraw and Town of Stony Point. The School District operates 6 elementary schools, 1 middle school, and 1 high school: Farley Elementary School, located at 140 Route 210, Stony Point; Haverstraw Elementary School, located at 16 Grant Street; Stony Point Elementary School, located at 7 Gurnee Drive; Thiells Elementary School, located at 78 Rosman Road; West Haverstraw Elementary School, located at 71 Blauvelt Avenue; Willow Grove Elementary School, located at 153 Storrs Road; Fieldstone Middle School, located at 100 Fieldstone Drive; and North Rockland High School, located at 106 Hammond Road. The budget for the North Rockland Central School District for the 2024-2025 academic year is approved for $284,311,248.00, as publicized on the school district website[3]. Furthermore, based on information from the NY State Education Data website, the District's education cost per student is estimated to be $26,869.00 per pupil[4].

Table III.I-3 summarizes the capacity of each school as detailed in the above-referenced preliminary bond statement.

[3] https://www.northrockland.org/about-nrcsd/budget-information
[4] https://data.nysed.gov

Table III.I-3

North Rockland CSD Student Capacity

(Prior to Completion of Facilities Bond Initiative), 2024

NRCSD Institution	Student Capacity
Farley Elementary	2,100
Haverstraw Elementary	900
Stony Point Elementary	1,100
Thiells Elementary	1,000
West Haverstraw Elementary	1,000
Willow Grove Elementary	2,000
Gerald Neary Elementary	500
Subtotal Elementary	**8,600**
Fieldstone Middle School	1,700
North Rockland High School	3,400
Total	**13,700**

Source: Preliminary Official Statement for North Rockland Central School District, Rockland County, New York.

Table III.I-4 below summarizes the enrollment history of the School District for each school. This information is available from the New York State Education Department for school years 2013-2014 to 2023-2024. Total School District enrollment has remained relatively stable, with little fluctuation between school years. Over 10 academic school years, the total enrollment has decreased by 3.6% between the 2013-2014 and 2023-2024 school years. Notably, two elementary schools (Thiells Elementary and Willow Grove Elementary) have had significant decreases in enrollment over the last 10 school years. Of all elementary schools, the Haverstraw Elementary school has exhibited a significant increase in enrollment of 19.0%. Overall, the elementary school enrollment is down 6.1% over the last 10 school years. The middle school is down 7.2% and the high school has increased 5.3% over the last 10 academic school years. Based on the overall district student capacity of 13,700 students and the 2023-2024 enrollment of 7,700 students, the district is operating at approximately 56% of it's overall capacity which suggests the ability to accommodate more pupils.

Table III.I-4

Enrollment by School, School in North Rockland CSD,

2013-2014 to 2023-2024

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	Percent Change
Farley Elementary	556	590	558	599	565	590	569	540	502	538	499	-10.3%
Haverstraw Elementary	537	571	588	577	611	627	629	591	533	569	639	+19.0%
Stony Point Elementary	708	686	733	656	653	628	607	628	808	725	718	+1.04%
Thiells Elementary	844	793	738	753	759	778	739	730	646	642	669	-20.7%
West Haverstraw Elementary	722	734	746	754	750	772	780	719	716	739	713	-1.3%
Willow Grove Elementary	685	666	655	646	660	638	586	563	548	557	568	-17.1%
Gerald Neary Elementary	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	N/A
Subtotal Elementary	*4,052*	*4,040*	*4,018*	*3,985*	*3,998*	*4,033*	*3,910*	*3,771*	*3,753*	*3,770*	*3,806*	-6.1%
Fieldstone Middle School	1,304	1,206	1,219	1,237	1,285	1,278	1,322	1,315	1,223	1,247	1,210	-7.2%
North Rockland High School	2,549	2,601	2,552	2,548	2,612	2,584	2,654	2,627	2.667	2,686	2,684	+5.3%
Total Enrollment	**7,905**	**7,847**	**7,789**	**7,770**	**7,895**	**7,895**	**7,886**	**7,713**	**7,643**	**7,703**	**7,700**	**-3.6%**

Source: New York State Department of Education, 2013-2014 to 2023-2024 school district data.

2. Potential Impacts

a. Discussion anticipated project population and resulting increase in Town Population

The Proposed Action's 300 dwelling units will consist of 52 one-bedroom units and 248 two-bedroom units for a total of 548 bedrooms contained in the seven buildings. The 2018 Rutgers for Urban Policy Research Report "Who Lives in New Jersey Housing" provides generation rates for the population increase projections for various housing types.

Based on the number of dwellings proposed and the multi-family rental

apartment housing type, there is a projected population of approximately 739 residents for the Proposed Action. Of the 739 residents, 33 are estimated to be children of school age.

These 739 residents would represent a minor increase in the Town's population of approximately 1.9%. It is anticipated that some of the Proposed Action's residents would be current residents of the Town who may relocate to the new dwelling opportunities presented by the development.

b. Discussion of potential relationship/connectivity impacts to community facilities and services

While the Proposed Action is estimated to result in 739 additional residents, this is only an approximately 1.9% increase in the total Town of Haverstraw population. Accordingly, this would have minimal impacts on the demand for public safety, emergency services and other community resources.

c. Discussion of emergency services access and circulation

Emergency Services access to the Project Site will be via the main site driveway on Letchworth Village Road. The Theills Fire Department utilizes KME Fire Apparatus' and as shown on Figure III.I-1, titled, "Fire Truck Turning Plan" and the vehicle turning analysis utilized the largest KME fire apparatus in circulation which is 55 feet in length and ±8.5 feet wide. The roadway width for the Proposed Action will comply with the New York State Fire Code Appendix D titled, "Fire Apparatus Access Roads" and are to be 26 feet wide. As shown on Figure III.I-1, the largest KME Fire Apparatus is conservatively able to maneuver with enough room to turn and circulate throughout the Proposed Action and with unobstructed access to all 7 proposed residential buildings in addition to the clubhouse building & pool

complex.

Additionally, a 20' wide emergency services only access driveway is schematically shown connecting directly to Letchworth Village Road between proposed buildings one and three. This dedicated emergency services only driveway would provide a secondary means of ingress/egress for emergency services apparatus.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

The Proposed Action will create 300-units of new, high-quality multi-family dwellings in the Town of Haverstraw that will provide a needed diversification of housing opportunities in the community. Additionally, the Letchworth Village Property has been extensively studied numerous times in the past for this type of redevelopment and would be a positive change for the area.

The proposed Action will not result in a significant increase in students or burden the capacity of the North Rockland Central School District, particularly based on that the downward enrollment trend over the last 10 academic school years. In particular, the Willow Grove elementary school elementary school enrollment has declined by more than 17% and based on its vicinity to the Project Site, this is the public elementary school that will serve elementary aged public school aged children residing in the Proposed Action.

The proposed action is anticipated to generate approximately 739 residents which is only a 1.9% increase in the Town's population. It can be reasonably anticipated that some of the Proposed Action's future residents

will relocate from within the existing Haverstraw community.

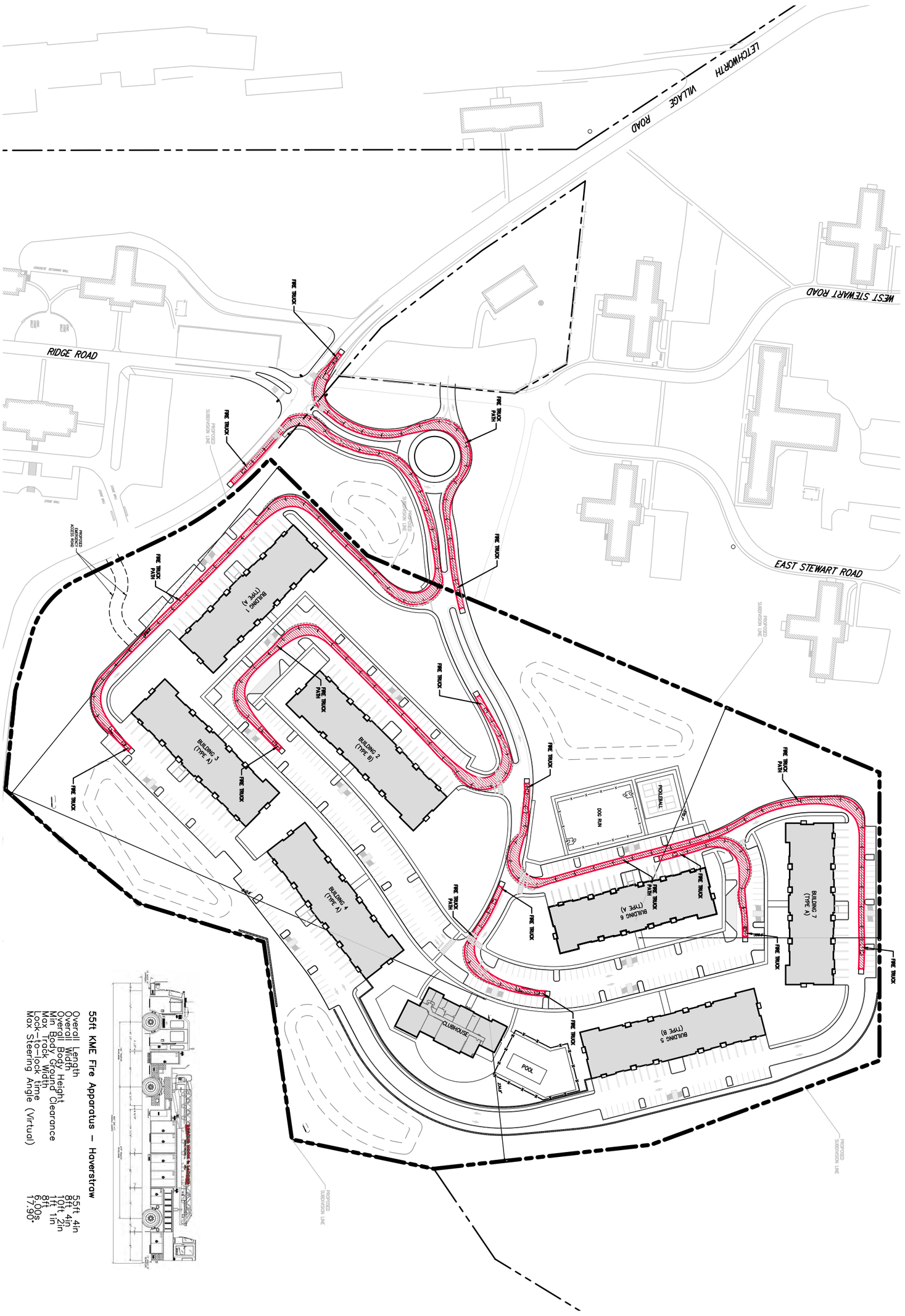
The Proposed Action will result in generally positive fiscal impacts for the Town of Haverstraw and the North Rockland Central School District since the Project Site is not currently generating any tax revenue for any community services entity. The Town Police, Fire and Ambulance Corps maintain a robust staff of both full-time and volunteer staff which would continue to serve the community as well as the Proposed Action. On-site property operations and maintenance staff will include 2-3 full time positions, which would help to mitigate some need for additional Town services.

FIGURES

III.I-1 Figure III.I-1 entitled “Fire Truck Turning Plan”

APPENDICIES

B Correspondence from the Building Inspector with Input from Police, Fire, & EMS Services, dated November 21, 2024.



55ft KME Fire Apparatus – Hoverstraw

Overall Length	55ft 4in
Overall Width	8ft
Overall Body Height	10ft 4in
Min Body Ground Clearance	1ft 1in
Max Track Width	8ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	17.90°

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

FIRE TRUCK TURNING PLAN

DATE: 01/24/2025 — JMC PROJECT: 21090

FIGURE: III.I-1 — SCALE: 1" = 150'

120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
fax 273-2102

JMCPLLC.COM

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21090–TRUCK–TURNING.dwg; FIG.tab

III.J Fiscal and Economic Conditions

1. Existing Conditions

a. Describe the current taxes provided to each taxing jurisdiction (Town, County, School District, etc.)

The existing 154.6-acre parcel, which includes the 22.93-acre Project Site, is currently owned and maintained by the Town of Haverstraw. Therefore, the Project Site does not currently generate any tax revenue for any taxing jurisdiction.

b. Summarize the current operating budgets of the Haverstraw Police Department, Haverstraw Volunteer Ambulance Corps. (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works

Email correspondence was received from the Town of Haverstraw Finance Department, dated November 21st, 2024. The correspondence addressed the operating budgets for the upcoming 2025 fiscal year for the various service departments for the Town of Haverstraw as outlined below:

- Police Department Budget for 2025 $24,886,000.00
- Thiells Fire Department Budget for 2025 $1,635,499.00
- Haverstraw Volunteer Ambulance Corps Budget for 2025 $1,625,000.00
- The Town of Haverstraw DPW Budget (Snow Removal) in 2025 $2,251,000.00
- The Town of Haverstraw DPW Budget (Road Maintenance) in 2025 $2,016,000.00

c. Summarize the educational cost per student in the North Rockland Central School District utilizing NYS Education Department data

The budget for the North Rockland Central School District for the 2024-2025 academic year is approved for $284,311,248.00, as publicized on the school

district website[1]. Furthermore, based on information from the NY State Education Data website, the District's education cost per student is estimated to be $26,869.00 per pupil[2].

2. Potential Impacts

a. Estimate Annual Tax Revenues to be generated to each taxing jurisdiction upon project completion using current tax rates

Under existing conditions, the project site generates no revenue as it is municipally owned by the Town of Haverstraw. The Applicant is under contract to purchase the ±22-acre parcel from the Town for an agreed upon $14,400,00.00. Additionally, the Applicant has arranged a 15-year Payment in Lieu of Taxes (PILOT) Program with the Town. A yearly summary of the revenues stipulated in the PILOT Program is provided in Table III.J-1. For the purposes of the PILOT Program the value per unit agreed upon with the Town is $3,840.00 per unit.

Table III.J-1
PILOT Program Schedule from PSA with Town of Haverstraw

Year	Pilot Schedule	Payment
1	Vacant Land - $75,000.00	$75,000.00
2	Vacant Land - $75,000.00	$75,000.00
3	Vacant Land - $75,000.00	$75,000.00
4	$3,840.00 per unit x 1/3	$384,000.00
5	$3,840.00 per unit x 1/3	$384,000.00
6	$3,840.00 per unit x 2/3	$768,000.00
7	$3,840.00 per unit x 2/3	$768,000.00
8-15	$3,840.00 per unit	$1,152,000.00
Total PILOT Revenue		$11,745,000.00

As shown in Table III.J-2, at the start of year eight (8) through year fifteen

[1] https://www.northrockland.org/about-nrcsd/budget-information
[2] https://data.nysed.gov

of the PILOT Program, the full tax revenue amount of the Proposed Action is projected to be $1,152,000.00 and the total 15 year PILOT program represents a $11,745,000.00 payment divided among the Town of Haverstraw, the North Rockland Central School District and the County of Rockland. This revenue is in addition to the purchase price of $14,400,000.00 which will be provided directly to the Town of Haverstraw.

Table III.J-2
PILOT Year 8-15 - Estimated Revenue of the Proposed Action

Proposed Unit Value[3]		# of Units Proposed		Projected PILOT Value
$3,840.00	x	300	=	$1,152,000.00

After year fifteen of the PILOT program and the Proposed Action is fully integrated into the community, the property will be assessed and taxed based on the future current assessment practices utilized by the Town of Haverstraw.

b. Discuss potential impacts to community services including the Haverstraw Pollice Department, Haverstraw Volunteer Ambulance Corp (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works

The Proposed Action is estimated to result in 739 additional residents**,** representing a minor increase of 1.9% of the total Town population, and thus would have a minimal impact on per capita staffing level for public safety and emergency services. Table III.J-3 provides the approximate service cost per resident for the community services provided by the Town of Haverstraw.

[3] Assessed Unit Value per year eight (8) of PILOT Program.

Table III.J-3
Estimated Average Service Costs of the Proposed Action

Provided Town Service	Adopted 2025 Budget Allocation	Calculated Cost per Town Resident - Population of 38,871 (US Census Bureau)	Total Projected Additional Cost based on a projection of 739 additional Town Residents
Police Department	$24,886,000.00	±$640.22	± $473,122.58
Thiells Fire Department	$1,635,499.00	± $42.07	± $31,089.73
Haverstraw Volunteer Ambulance Corps	$1,625,000.00	± $41.80	± $30,890.20
Haverstraw DPW Snow Removal	$2,251,000.00	± $57.90	± $42,788.10
Haverstraw DPW Road Maintenance	$2,016,000.00	± $51.86	± 38,324.54
Total	**±$32,413,499.00**	**± $833.85**	**± $616,215.15**

The Town services provided including Police, Fire, and EMS and DPW combine to equal a total approximate per capita cost of ±833.85 annually, based on the information available. Accordingly, the Proposed Action's 739 anticipated residents would represent an average per capita service impact cost of ±$616,215.15 annually. However, the average per capita cost overstates the actual per capita cost, as it does not account for the fact that new construction, equipment, personnel and other fixed expenses do not increase with each new resident. A more accurate comparator would be the marginal cost of providing services for each new resident, but that computation is too complex for this purpose.

c. Estimate potential impacts to the North Rockland Central School District

The budget for the North Rockland Central School District for the 2024-2025 academic year is approved for $284,311,248.00, as publicized on the school

district website. Based on data from the NY State Education Data website, the estimated average cost to educate is $26,869.00 per pupil. The Proposed Action is projected to generate ±33 additional students to the school district. Based on the average cost per pupil, the additional educational cost is estimated at approximately $886,677.00.

As with municipal services described above, it should be noted that the District's average cost to educate each student is not reflective of the marginal or actual cost per student that would be absorbed as a result of the ±33 additional school children potentially generated by the Proposed Action. The ±33 estimated school children generated by the Proposed Action would likely be of various ages and distributed across the primary and secondary educational grades, i.e. ±2 students per grade level. This would not require the hiring and training of additional staff and teachers and would not increase the utility costs for heating, cooling and electricity and certainly would not require the construction of new school facilities. Given the observed enrollment decline and excess capacity of the school district's facilities, the school children generated by the Proposed Action would have a minimal impact to the district's operating costs.

As noted in section III.J.2.a above, the PILOT program will generate $1,152,000.00 in revenue for the Town beginning in year eight. Combined with the initial $14,400,00.00 purchase price of the Proposed Action, the PILOT program will cover the marginal educational cost increases of the ±33 estimated school children generated by the Proposed Action after the municipal service costs are covered.

d. <u>Discuss employment generation resulting from construction and operation of the development</u>

The Proposed Action is estimated to generate employment, both temporary and Full-time, both for the construction of the facilities and for the

operations. Approximately ±400 jobs are estimated to be created during the Proposed Action's construction, with a maximum of approximately 150 – 180 staff on site at any one time or instance. The Proposed Action is also estimated to generate approximately 7 full-time positions for the operations of the residential & community development once it is operational.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

The Proposed Action is estimated to generate approximately 739 residents, which would create new municipal service costs totaling approximately ±$616,215. As discussed above, this figure is based on average costs, not marginal increases. The Proposed Action is also estimated to create an average increase of ±$886,677.00 in educational costs for the ±33 school aged children. The actual marginal costs will be much lower. Based on average costs, the total service and educational cost impacts created by the Proposed Action is approximately ±$1,502,892.00 per year, or $22,543,380 over the fifteen-year span of the proposed PILOT Agreement (actual marginal costs will be significantly lower). As indicated in Section III.J.2.a, the Proposed Action is expected to generate $11,745,000.00 in revenue for the Town during the fifteen-year PILOT program. This is in addition to the $14,400,000.00 purchase price that will be provided directly to the Town of Haverstraw. Thus, the total revenue to the Town and other taxing jurisdictions will be $26,145,000, a net benefit of more than $3,601,620. The Applicant and Town have agreed that the purchase price and entering into the PILOT program sufficiently mitigates any adverse fiscal and economic impacts generated by the Proposed Action. Additionally, after the PILOT agreement has expired, the property will be assessed and taxed in accordance with the standard Town of Haverstraw metrics.

III.K Noise and Air Quality

1. Existing Conditions

a. Summarize a qualitative description of the existing noise environment at the Project Site

The Project Site is located north of Letchworth Village Road and west of Hammond Road. The overall parcel is approximately ±154.6 acres and the Project Site is ±22.93 acres. There are no sensitive receptors in the immediate vicinity of the Project Site. The area surrounding the site is comprised of the former Letchworth Village to the west and north, residential neighborhoods to the south, and vacant state owned land to the east. While there are school facilities to the east and west, they are approximately 1,200 feet from the Project Site.

b. Summarize existing ambient air quality conditions in the region based on published New York State Department of Environmental Conservation ambient air monitoring data

In summary, the existing air quality is good in the vicinity of the Project Site. The median air quality index (AQI) in 2024 for Rockland County, New York was 39[1]. An AQI between 0 and 50 is satisfactory and indicates that air pollution poses little or no risk. Existing air quality standards for New York State are found in the State Ambient Air Quality Standards (SAAQS) which largely mimic the National Ambient Air Quality Standards (NAAQS). Table III.K-1 depicts the NAAQS.

NYSDEC monitors air quality throughout the State by region (there are 8 regions) by analyzing different pollutants. Rockland County is located within

[1] According to the United States Environmental Protection Agency (EPA) Outdoor Air Quality Data, Air Quality Index Report.

NYSDEC Region 3. There are currently 58 active air monitoring sites in New York State. Pollutant parameters observed vary between the different air monitoring sites but typically include carbon monoxide, lead, nitrogen oxides, ground-level ozone, particle pollution (particulate matter) and sulfur oxides. Historically, eight (8) monitoring sites are located within NYSDEC Region 3. The closest monitoring site to the Project Site is site number 36_087_0005 in Suffern, NY. It is considered the Rockland County Monitoring Station.

The Proposed Action may result in mobile sources of pollutants in the form of vehicular trips. Possible relevant pollutants for mobile sources are particulate matter (PM), ozone (O3) and carbon monoxide (CO). Carbon monoxide is the dominant pollutant and so, it is modeled as provided in NYSDOT's Environmental Manual (TEM). Parameters of each pollutant are described below:[2]

The Rockland County monitoring station is the closest station to the site that measures lead (Pb). In 2023, the three month rolling average of lead in 2023 equaled 0.0073 ug/m3. This three-month rolling average was well below the 0.15 ug/m3 maximum allowed.

Nitrogen dioxide (NO2) is not measured at station 5902-04. Monitoring sites are located in NYSDEC Regions 2, 8 and 9. The closest monitoring station is at the Botanical Gardens (Pfizer Lab) in the Bronx, New York.3 The annual value in 2018 was 14.44 ppb versus a standard of 53 ppb.

The Rockland County Monitoring station is the closest station to the site that measures ozone. Ozone is formed from the long-term transport of hydrocarbon emissions in the mid- western United States and as such, is

[2] At the time of this analysis, NYSDEC ambient air quality data for 2024 has not been released.

not a “local” enforcement issue on emissions. It is the only pollutant that occasionally exceeds the standard in most NYSDEC Regions state-wide. The average 3-year annual mean for this pollutant was 0.072 parts per million (ppm) for the years 2021 to 2023. The first highest maximum daily eight-hour average was 0.086 ppm in 2023.

Particulate matter (PM 2.5) is measured at Rockland County station. This station had an annual mean standard for the last three (3) years (2021-2023) of 5.6 ug/m3. This annual mean was well below the 12 ug/m3 standard. This station had an average of 98th percentile for the last 3 years 19.5 ug/m3. This average was well below the 35 ug/m3 standard.

TABLE III.K-1

National Ambient Air Quality Standards*

POLLUTANT		PRIMARY/ SECONDARY	AVERAGING TIME	LEVEL	FORM
CARBON MONOXIDE		primary	8-hour 1-hour	9 ppm 35 ppm	Not to be exceeded more than once per year
LEAD		primary and secondary	Rolling 3-month average	0.15 µg/m3	Not to be exceeded
NITROGEN DIOXIDE		primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	Annual	53 ppb	Annual Mean
OZONE		primary and secondary	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
PARTICLE POLLUTION	$PM_{2.5}$	primary	Annual	12 $\mu g/m^3$	annual mean, averaged over 3 years
		secondary	Annual	15 $\mu g/m^3$	annual mean, averaged over 3 years
	PM_{10}	primary and secondary	24-hour	35 $\mu g/m^3$	98th percentile, averaged over 3 years
		primary and secondary	24-hour	150 $\mu g/m^3$	Not to be exceeded more than once per year on average over 3 years
SULFUR DIOXIDE		primary	1-hour	75 ppm	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

*http://www.dec.ny.gov/chemical/8542.html

2. Potential Impacts

a. Provide a qualitative discussion of construction related impacts of noise

During construction, noise levels will be temporarily higher due to the transient nature of the construction process, but will conform to the Town Code requirements. There are no anticipated levels of noise that are to exceed nor take place at times beyond what is permitted in the Haverstraw Town Code Chapter 114, entitled, "Noise". Furthermore Section 167-40A(1) regulates hours for legal construction operations; 7:00AM to 7:00PM on the weekdays and 8:00AM to 5:00PM on Saturdays. No construction operations are to take place on Sundays and Holidays

The U.S. EPA reports noise levels for construction of housing projects range from a high of 88 dB(A) to a low of 75 dB(A) from grading through finishing operations (U.S. EPA, Construction Noise Control Technology Initiatives, Table 2.2 measured at 50 feet). This project will not exceed said parameters.

b. Provide a qualitative discussion of post-construction related impacts of noise

The Proposed Action would result in the development of a total of seven 3.5 story buildings with a total of 300 residential dwellings with on-site stormwater management, and outdoor recreation space. The primary source of post-construction noise will be vehicular traffic associated with the residential use.

Noise levels associated with vehicular traffic are a function of traffic speed, vehicle mix (automobiles, medium trucks, heavy trucks), and volume. Posted vehicle traffic speeds will not be affected by the Proposed Action.

Vehicle mixes are also anticipated to be essentially the same. Therefore, any changes in traffic related noise will be a function of the change in volume. For example, a doubling of traffic volume (assuming speeds and vehicle mixes do not change) equates to an increase in noise of 3 dBA utilizing this screening type approach. A 3dBA increase is considered "unnoticed" to "tolerable" according to the NYSDEC noise evaluation guidelines in "Assessing and Mitigating Noise Impacts." The Proposed Action will not materially increase the volume of traffic and therefore have a minimal impact on sound levels.

Intermittent operational sounds produced by the residential development could consist of backup beepers/alarms on delivery vehicles and garbage trucks. Backup beepers/alarms are used as a safety device for facility personnel. Sound levels of back-up beepers can range as high as 97 to 112 dB(A) (The Aggregate Handbook, 1991). In this case, backup beepers/alarms will be sporadic as it relates to garbage pick-up and unloading box trucks.

Given the above combination of "typical" sound/noise levels projected to occur on the Project Site as a result of the Proposed Action, no significant adverse noise impacts would be expected from the Proposed Action.

c. <u>Provide a qualitative analysis of air impacts resulting from site preparation, construction activities, and post-construction activities</u>

During construction, the short-term use of heavy equipment operations will result in a temporary, minor increase in pollutant emissions from various equipment used in the construction process, as well as fugitive dust during site clearing, excavation, demolition, and grading operations. All construction related air quality impacts will be of relatively short duration. The construction is proposed to take approximately 24 months. Best

construction management practices will also be employed to reduce soil erosion. This generally includes the daily use of water/spray trucks in dry periods, anti-tracking pads at construction entrances, street sweeping at the entrances as needed and adherence to a Storm Water Pollution Prevention Plan (SWPPP) which provides Erosion and Sediment Control.

In addition, trucks, compressors, cranes, excavators and other equipment will be maintained and in good working condition and turned off when not in use. This will reduce the idling of unused equipment in adherence of state regulations (6 NYCRR, Subpart 217-3). Reduced idling will reduce potential air pollution.

No further analysis is warranted with respect to potential air quality impacts due to construction because as set forth above, construction would not result in a significant or extended impact on air quality as a result of the Proposed Action.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS

The noise and air quality analysis reveals that no significant adverse impacts will occur as a result of the Proposed Action. Despite this, the Applicant has incorporated several mitigating measures.

The Project Site's exterior perimeter already encompasses an amplified ambient noise due to traffic activity and existing tree screening and canopy. To provide additional noise abatement the Applicant will also shut-down equipment when it is not in use (no idling of unused equipment in excess of State regulations). To the extent practical, noisy equipment shall be kept far from site boundaries and the Applicant shall schedule noisy

operations concurrently to reduce long exposure to noticeable sound levels. In addition, the Proposed Action will conform to the construction time restrictions set forth in the Town Code.

Based on the foregoing information, no significant adverse impacts to noise or air quality are anticipated as a result of the Proposed Action.

III.L Historic and Cultural Resources

I. Existing Conditions

a. Identification of potential significant resources based on the New York State Historic Preservation Office (SHPO) Cultural Resource Information System (CRIS)

A consultation with the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP, also known as SHPO), via its Cultural Resources Information System (CRIS) was formally made on December 4th, 2024. The applicant is currently awaiting a response from SHPO.

At the time of this writing, the Applicant has received an initial response from SHPO regarding an inquiry specific to the Proposed Action on the Project Site. The SHPO response requested additional information including potential Phase 1A/1B archaeological surveys, visual analyses and landscape screening drawings.

According to the CRIS website[1], although many of the structures on the overall Letchworth Village property were deemed eligible for historic preservation, the 22.93-acre portion of the overall property that will be subdivided as part of the Proposed Action does not currently contain any structures that would meet this criteria.

The Project Site contains the foundation remains of the Jacobson Building which was the "Old Director's Residence". In the 1980's the structure was converted to a museum and conference center. Ultimately, the structure was destroyed by arson in 2010[2]. The foundation, along with the abandoned garage, barn and shed structure for this former single-family residence remain. There is also an existing asphalt driveway that leads to the former

[1] https://cris.parks.ny.gov

[2] Lerner, Jane. "Fire Destroys Abandoned Letchworth House in Thiells". The Journal News, July 17, 2010.

home site.

Although not on the Subject Property, there is an abandoned dormitory structure, formerly known as the Whitman Building, which is located adjacent to the 22.93 acres Project Site. The area where this structure stands is proposed to be utilized as the main access driveway for the Proposed Action. This structure is a standalone abandoned building in poor condition surrounded by walking paths. The building was constructed in 1916-17 and utilized until the 1990's. This structure is proposed to be demolished in order to provide access to the Proposed Action from Letchworth Village Road.

2. Potential Impacts

a. Identification of potential impacts to archeological or historic resources, if any.

The 154.6-acre parcel was the subject of a review with the NYSOPRHP, back in September of 2005, (SHPO Review Number 04PR04241), in conjunction with a DEIS for a previously proposed development known as "Encore Haverstraw". Ultimately that project did not move forward. The 2005 NYSOPRHP review concluded that there are no intact precontact cultural resources on any portion or area of the 154.6-acre parcel. The SHPO review also concluded that there were four (4) areas found on the 154.6-acre parcel that were considered to have Historic and Archeological Sensitivity. However, none of these four identified areas on the 154.6-acre parcel include any portion of the 22.93-acre Project Site containing the Proposed Action. In 1986, the NYSOPRHP determined that the Letchworth Village met the criteria for the State Register of Historic Places and the site is currently listed as National Register Eligible. The entire site, including the facility buildings, were studied as a single entity by the OPRHP.

Since these initial studies, there has been no further action taken by the NYSOPRHP on the Letchworth Village property and the grounds and structures have been allowed to further deteriorate.

3. Proposed Mitigation

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

Although the NYSOPRHP has deemed the Letchworth Village Property as State Register Eligible, at this time there has been no further action taken by the agency. Due to the prolonged abandonment of the facilities, the passage of time, vandalism and general deterioration of the facilities and grounds, the removal of the Whitman Building and razing of the Jacobson building foundation will not represent an adverse environmental impact regarding the preservation of historical or cultural resources requiring further mitigation.

At the time of this writing, the Applicant has received an initial response from SHPO regarding an inquiry specific to the Proposed Action on the Project Site. The SHPO response requested additional information including potential Phase 1A/1B archaeological surveys, visual analyses and landscape screening drawings.

III.M Construction

1. Potential Impacts

a. Description of anticipated construction activities including site preparation, earthwork, removal of materials off-site, stockpiling, and rock removal, if necessary.

Prior to the start of construction or any disturbance to the Project Site, a pre- construction meeting will be held with the owner and contractor, the Town of Haverstraw, and project engineer to discuss construction details and erosion and sediment control plans. The Erosion and Sediment Control Plan, described in further detail in Chapter III.C, "Soils, Topography and Steep Slopes" and the Stormwater Pollution Prevention Plan (SWPPP) details how the Project Site will be protected from erosion and sedimentation transport during construction when soils are being disturbed.

Site preparation, in accordance with the Erosion and Sediment Control Plan, will include installing security fencing at the driveway of the Project Site and construction fencing at the limits of disturbance to prevent unauthorized entry to construction areas, to restrict access to areas that could be hazardous to the public, and to protect areas not proposed to be disturbed from construction operations. A stabilized construction entrance/exit will be established to prevent vehicle tracking of sediment outside of the Project Site. The construction entrance/exit will be constructed with two to four-inch stone aggregate. The stabilized construction entrance will be a minimum of 50 feet in length by 24 feet in width by 8 inches in depth. Construction vehicles will access the Site through the construction gates.

After Site preparation, the next steps are mass excavation and grading, the installation of underground utilities and the construction of the seven 3.5-

story residential buildings. Full size drawing C-400 "Site Erosion & Sediment Control Plan" depicts the location of the temporary stockpile areas near the proposed buildings, and material staging would be located in these same general areas. These stockpile and staging areas will evolve with the status of the project completion. Based on the Geotechnical report contained in the SWPPP Appendix D, it is not anticipated that substantial rock removal will be required during construction activities.

The major components of the construction involves installation of underground utilities and infrastructure, pouring the building footings and foundations, erecting the structure of the buildings, pool deck & recreation area, interior finishing work, and site landscaping. The building erection would be the most intensive stage of the construction process where material deliveries would take place regularly. Once construction is completed, all disturbed areas will be stabilized and restored, and the Project Site will be landscaped according to the approved landscaping plan.

b. <u>Analysis of construction impacts including:</u>

i. <u>Identification of types of construction equipment.</u>

Equipment that will be utilized during the construction of the Proposed Action will include the typical heavy earthwork equipment such as excavators, bulldozers, front-end loaders, dump trucks, drill rigs, graders, pavers, and compactors, as well as a track crane with boom, aerial lifts, pickup trucks, tri-axle dump trucks, low-boy tractor trailers, and box trucks.

ii. <u>Construction Worker and Vehicle Traffic.</u>

Truck traffic will be moderate during the progression of construction. Initially, the earthwork equipment will be mobilized and delivered to the Project Site at the outset of work and remain for approximately

six months. After the earthwork activities are completed there will be various trucks with deliveries and equipment throughout the duration of construction, generating approximately several trucks per day. Construction workers will generate traffic each day in the morning and at the end of the day, as well, which will result in approximately ten to fifteen vehicles per day for the duration of construction. The number of worker vehicles will vary throughout the different stages of construction completion as the various trades complete their work, i.e., plumbers, electricians, painters, etc.

Employees will generally arrive at the Site prior to peak AM commuter traffic and leave prior to peak PM commuter traffic. Deliveries will be scheduled throughout the day and therefore are not anticipated to have a significant impact on traffic conditions.

iii. Duration and Hours of Operation

The Proposed Action will be constructed with a duration of approximately 24 to 30 months. All construction activities will be conducted consistent with Town Code Section 114 “Noise”.

iv. Phasing

The Proposed Action will be construction in one Phase.

v. Staging

Full size drawing C-400 “Site Sediment & Erosion Control Plan” depicts the construction entrance that will be located at the intersection of Letchworth Village Road and Ridge Road. The areas of temporary soil stockpiling, dumpster location, and construction parking will be near the proposed buildings and within the proposed area of disturbance.

vi. Identification of potential impacts from these construction activities such as noise, air quality, stormwater and traffic, including impacts of truck traffic during various times of the day.

The short-term use of heavy equipment operations will result in a temporary, minor increase in pollutant emissions from various equipment used in the construction process. The construction operation may also result in fugitive dust during site clearing, excavation, and grading operations. Fugitive dust is essentially airborne soil particles caused by heavy equipment operations entraining the freshly exposed soil into the air. To a lesser extent, some fugitive dust emissions will arise from wind erosion of the exposed soils. All construction related air quality impacts will be of relatively short duration. Best construction management practices will be employed to reduce soil erosion and possible sources of fugitive dust. This generally includes the daily use of water/spray trucks in dry periods, anti-tracking pads at construction entrances, street sweeping at the entrances as needed and adherence to the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP provides an Erosion and Sediment Control Management Program to be implemented beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," dated November 2016.

With regard to construction noise, trucks, compressors, cranes, excavators, and other equipment will be maintained in good working condition and turned off when not in use. This will reduce the idling of unused equipment in adherence of state regulations (6 NYCRR, Subpart 217-3). Reduced idling will reduce potential air pollution. During construction, noise levels will be (1) temporary, and (2) will occur at two different levels.

First, the temporary component results from the transient nature of the construction process. The U.S. EPA reports noise levels at housing projects range from a high of 88 dB(A) to a low of 75 dB(A) from grading through finishing operations (U.S. EPA, Construction Noise Control Technology Initiatives, Table 2.2- measured at 50 feet).

The approximate location of the proposed construction will occur throughout the 22.93-acre Project Site. The noise generated during construction is due mainly from diesel engines that run the equipment. Exhaust is typically the predominant source of diesel engine noise, and mufflers will be maintained on all equipment. Once "rough grading" has been finalized and foundations have been poured peak upper sound levels will decline further as the construction uses tools which are (1) smaller, (2) less continuous in use, and (3) begin to move "indoors." In the second phase of construction, heavy equipment is generally replaced by internal work and hand equipment on the remaining external work.

2. Mitigation Measures

a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS

All construction activities will be conducted in compliance with existing regulations, including local day and hour construction limitations. Consistent with Section 114-4B "Noise" of the Town Code, construction will only take place between the hours of 8:00 am and 6:00 pm Monday through Friday as well as on Saturdays, Sundays, and holidays.

The contractor will set up site fencing with scrim for dust control and security, as well as use water trucks as needed to control dust due to mass

excavation. The need for street cleaning will be monitored and provided as necessary. The construction site will have an anti-tracking pad at the vehicular exit as well as a concrete wash-out station.

The stabilized construction entrance will help minimize excess mud, dirt or rock tracked from the site. The paved access ways adjacent to the site entrance will be swept to remove any excess sediment or debris. Trucks hauling material to or from the construction site will be covered with a tarpaulin as necessary. Adequate provisions will be made to control and minimize dust on and emanating from the site during construction, using water sprays during dry periods.

The contractor will periodically advise the Town and will keep them informed of construction activities, including having face-to-face meetings with affected neighbors as necessary.

Potential impacts related to construction are temporary by their very nature and the aforementioned mitigation measures will reduce and minimize potential impacts to the greatest extent practicable.

IV. SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE AVOIDED

A. Short-Term Construction Impacts

Short term impacts are generally related to construction activities occurring on-site that cannot be avoided. Unavoidable adverse impacts occurring in the short term include traffic generation from construction workers and deliveries, noise from construction equipment and traffic, air quality impacts from construction activities and equipment and potential erosion. The Applicant will employ best management practices during construction, which will mitigate all of these adverse impacts to the maximum extent practicable, as described elsewhere in this document.

Construction activities on-site would occur in accordance with Section 167-40A(1) of the Town Code, only taking place between the hours of 7:00AM to 7:00PM on the weekdays and 8:00AM to 5:00PM on Saturdays. No construction operations are to take place on Sundays and Holidays.

Traffic volumes on local roadways would increase as a result of construction, but construction workers generally arrive and depart before weekday peak hours via Letchworth Village Road and points beyond. Although air quality would be temporarily affected by exhaust and emissions from construction equipment and fugitive dust, mitigation measures would be utilized to reduce impacts. Erosion and sediment control measures would be employed on-site, in accordance with the SWPPP, to mitigate potential impacts from erosion as a result of construction activities.

B. Long-Term Impacts

Potential long-term impacts that would result from the Proposed Action would be mitigated to the maximum extent practicable. Therefore, although the long-

term impacts listed below are unavoidable, they are not significant. Long term impacts resulting from the operation of the Proposed Action would include:

- *Habitat and Soil Disturbance:* The proposed action will result in physical disturbance to the majority of the 22.93 acre Project Site which contains natural habitats. While this disturbance is unavoidable, the Applicant proposes to mitigate the potential adverse impacts associated with the loss of natural habitat by implementing a landscaping plan which will remove invasive species, plant new native trees, understory shrubs and herbaceous plants.

- *Traffic:* The Proposed Action is projected to generate 116, 161, 150, and 123 primary volumes during the peak weekday AM, weekday school hour, weekday PM hour, and Saturday midday hour, respectively. The majority of the studied intersections will operate at the same level of service as projected for the 2026 no-build conditions, except for some level of service degradations which result from minimal delays which would not be perceptible to drivers on the roadway.

  Even though there are minor delay increases that resulted in degradations in level of service during the studied peak hours, which would not be perceptible to the driver, the Applicant recommends mitigations in response to the capacity analysis preformed. The improvements proposed include modifying the intersection of Letchworth Village Road and Storrs Road to an all-way stop-controlled intersection as well as traffic signal timing modifications during the hours of 2:00 PM to 7:00 PM on weekdays at the intersection of US Route 202, Thiells-Mount Ivy Road, NYS Route 45, and Old County Road.

- *Community Services: The Proposed Action will generate approximately 739* new residents or 1.9% of the total Town of Haverstraw population,

some of whom may be relocating from within the Town. This population would have some impacts on community services but would have a minimal impact on per capita staffing levels for public safety and emergency services. The increase of 739 residents in the Proposed Action is estimated to create new annual service costs totaling $±616,215.00 to the Town. The Proposed Action is also estimated to create an average increase of ±$886,677.00 in educational costs for the ±33 school age children. The actual marginal costs will be much lower. Based on average costs, the total service and educational cost impacts created by the Proposed Action is approximately ±$1,502,892 per year or $22,543,380 over the fifteen-year span of the proposed PILOT Agreement. However, the Proposed Action is expected to generate $11,745,000.00 in revenue for the Town during the fifteen-year PILOT program. This is in addition to the $14,400,000.00 purchase price that will be provided directly to the Town of Haverstraw. Thus, the total revenue to the Town and other taxing jurisdictions will be $26,145,000, a net benefit of more than $3,601,620.

Additionally, since the Project Site is adjacent to an existing roadway infrastructure and utility services, no major capital improvements are required or proposed.

Regarding impacts to community recreation resources, the Applicant will provide the residents with a clubhouse and recreation areas which will provide amenities for the residents. The clubhouse is approximately 10,625± S.F. and will contain a leasing office, clubroom, fitness center, yoga studio, lounge, demonstration kitchen, and restrooms. The area outside of the clubhouse will contain a patio and pool for residents. The recreation areas on-site will consist of a tennis court and pickleball courts for the residents. These should reduce impacts to community recreational facilities. In addition, the Proposed Action will provide

sidewalk walking paths interior to the community that will provide opportunities for residents to spend time outdoors.

School Impacts: The Proposed Action is anticipated to generate 33 new public school children for the North Rockland School District. There is currently a surplus capacity within the School District. The addition of 33 public school children will not deplete the existing surplus capacity and is not likely to create demand for additional capital improvements beyond what is being currently administered by the district.

- *Utilities:* The Proposed Action would result in increased demand for utility services, including potable water, sanitary sewers, electricity and fossil fuels. While demand would be increased for such services, it is not anticipated that the Proposed Action would result in significant adverse impacts to utilities since capacity and infrastructure exist to accommodate the Proposed Action.

- *Visual Change as Viewed from Surrounding Roads:* The Proposed Action consists of seven 3.5 story residential apartment buildings. The architectural character of the building is a residential aesthetic with cues from the adjacent Letchworth Village structures that still exist. The project site will be landscaped with a mix of deciduous and evergreen trees, shrubbery and perennials to provide visual mitigation. The proposed buildings are located throughout the 22.93 acre parcel but are situated to enable a buffer area consisting of existing vegetation to remain and proposed landscaping. While there are some locations that will be clearly visible from Letchworth Village Road, for the most part views will not be significantly affected in the immediate vicinity of the Proposed Action. All lighting associated with the Proposed Action will be high efficiency and shielded to mitigate any trespass onto adjacent

properties. The Proposed Action will also employ signage that will be unobtrusive and conforming to the Town Code for residential uses.

In summary, in the Applicants opinion, the Proposed Action will result in minimal off-site visual impacts to the surrounding area. The Applicant believes that the buildings will be aesthetically pleasing, and the Project Site will be landscaped and well-maintained. In addition, the Applicant believes that the views to the Proposed Action are not considered a negative impact, but will be different than the existing condition, and are unavoidable with the construction and beneficial development of the area.

V. ALTERNATIVES

The Scoping Document for this DEIS directs the Applicant to analyze and compare the potential impacts for two (2) alternative development scenarios on the Project Site: (i) No Action (No Build) Alternative, and a (ii) Conventional Subdivision Single Family Development Alternative.

To serve as the basis for this analysis, and comparison of these alternatives, a zoning compliant site plan was prepared for the conventional subdivision alternative (Figure V-1). This plan includes a Table of Land Use, which demonstrates compatibility with the underlying zoning requirements.

The following narrative discusses the notable potential impacts in qualitative and quantitative terms for each of the alternatives.

A. No Action (No Build) Alternative

1. Project Description

The "No-Action" alternative would involve no development of the 22.93-acre Project Site. This would result in leaving the Project Site in its existing vacant, underutilized condition. This alternative does not meet the goals and objectives of the Applicant nor does it align with the objectives for the Project Site that is currently owned and maintained by the Town of Haverstraw.

Under this alternative, the Project Site would most likely continue to decline and deteriorate in appearance while not providing any of the potential positive opportunities which the Proposed Action will present to the Town and Community.

2. Land Use, Zoning and Public Policy

The No-Build alternative conforms to the existing R-120 residential zoning and is therefore a use permitted to continue. Without the Proposed Action, however, the Project Site would remain as underutilized land in a neglected condition with no improvements. Although open space would remain, it is presently undergoing continued neglect and colonization by invasive plant species. The no development scenario would fall short of accomplishing various goals, objectives and policies of the Town of Haverstraw Master Plan 2000, which calls for more community and economic activity for the lands to the east and to the west of the Palisades Interstate Parkway, in which the project site is situated in.

3. Community Character/Visual Impacts

With no Proposed Action, the Project Site would retain its existing character, including incidents of vandalism on the existing structures, overgrown areas of invasive species and other vegetated areas, and underutilized land and property which is counter to the Town's objectives for the Project Site and the entire Letchworth property.

4. Stormwater Management

Under the No Build Alternative, there would be no Stormwater Pollution Prevention Plan, no water quality treatment, detention, or best management practices. There would be no stormwater facilities having been designed such that the quantity and quality of stormwater runoff, during and after construction, are not adversely altered or enhanced when compared to pre-development conditions.

5. Water Supply & Sanitary Sewerage

Under the No Build Alternative, there would not be any increase or decrease in water demand and the public water supply would not be

impacted.

Similarly, there would not be any increase or decrease in sewage generated from the no-build condition and the public sanitary sewage system would not be impacted.

6. Other Utilities and Services

Under the No Build Alternative there would not be any infrastructure or development from the no-build condition and the existing utilities and service infrastructure would not be impacted.

7. Traffic, Transportation, Pedestrians and Transit

The present traffic, transportation, pedestrian, and transit conditions around the Project Site and the property would not be altered under the No-Build scenario. No access to the Project Site would be implemented.

8. Community Demographics, Facilities and Services

The No-Build Alternative would not generate any school children and there would be no change in the number of children attending schools in the District. However, the District would not gain additional revenue from the Proposed Action's anticipated school taxes.

The No-Build Alternative would not create additional recreational and open space opportunities for the community. The Project Site would not be improved with the introduction of various passive site features such as walking paths and landscape improvements. In addition, the undeveloped Project Site would continue to foster invasive species, which would be removed and replaced with native vegetation by the Proposed Action.

The No-Build scenario would not be expected to generate an increased need for police, fire, EMS services.

The No-Build scenario would not expect to increase nor decrease the amount of refuse and recycling from the property therefore, there would be no change to Town services.

9. Fiscal and Economic Conditions

Without the Proposed Action, the Project Site would continue to be owned by the Town, and therefore generate no additional tax revenue. The tax benefits to the community would not occur from the higher assessed value resulting from the proposed land and building improvements.

There would be no aggregate, direct, indirect and induced outputs from the construction phase of the Proposed Action to the local economy. There would be no annual generation of economic output to the local economy during the Proposed Action's operational phase.

In addition, there would be no expected labor income during the construction phase at the local level. There would be no expected annual labor income during the operations phase benefiting the local economy.

There would be no direct, indirect and induced jobs to be created during the construction phase at the local level.

The development and implementation of the Proposed Action would not occur, resulting in no positive impact on the economy for the Town of Haverstraw.

10. Noise and Air Quality Conditions

The No-Build scenario would not result in an increase nor decrease in the existing noise or air quality generated from the Project Site and the Letchworth Property. The property would continue to deteriorate and be in a state of neglect.

11. Historic and Cultural Resources

Under the No-Build scenario, there would be no change to the historic resources deemed eligible for registering by the NYSOPRHP. However, it is the Town's intent to develop the property, and the Project Site is not considered an area of archeological or cultural sensitivity.

The existing structures that are on the Project Site will continue to be in neglect and continue to attract vandalism. The generally deteriorating Project Site conditions and accumulation of debris would not be cleaned up under the No-Build Alternative.

12. Construction

Under the No-Build Alternative there would not be any infrastructure or development activity and there would be no impacts relating to construction activity on The Project Site.

B. Conventional Subdivision for a Single Family Residential Development

1. Project Description

The Conventional Subdivision Alternative would involve development of the 22.93-acre Project Site with seven single family residence lots and an associated right-of-way containing the proposed roadway to access the subdivision. The Conventional Subdivision Alternative would yield seven single family homes. This Alternative does not meet the goals and objectives of the Applicant from an economic and feasibility

standpoint nor does it align with the objectives of the Town of Haverstraw.

Under this Alternative, the Project Site would be developed for residential use under the existing R-120 Zoning criteria. It would not provide the same level of potential benefits which the Proposed Action will provide for the Town and Community.

2. Land Use, Zoning and Public Policy

The Conventional Subdivision Alternative would conform to the existing R-120 residential zoning regulations. However, this alternative would provide only seven lots for the 22.93-acre project site. Although some existing open space would remain, this alternative would fall short of accomplishing various goals, objectives, and policies of the Town of Haverstraw Master Plan 2000, which calls for more community and economic activity for the lands to the east and to the west of the Palisades Interstate Parkway, in which the Project Site is located.

3. Community Character/Visual Impacts

Under the Conventional Subdivision Alternative, invasive species and debris would be removed from the Project Site. The vandalized and deteriorated structures would be demolished and removed and the overgrown areas of invasive species would be treated and removed.

Under the Conventional Subdivision Alternative, the single-family dwellings would be fully visible from Letchworth Village Road and much less appealing than the single boulevard entrance driveway presented by the Proposed Action. While the Conventional Subdivision Alternative would present a residential aesthetic consistent with the surrounding community, there would be impacts to the rural character of the area

because there would be less of a buffer to adjacent properties.

4. Stormwater Management

Under the Conventional Subdivision Alternative, there would be a Stormwater Pollution Prevention Plan providing water quality treatment, detention, and best management practices. There would be stormwater facilities proposed to be designed such that the quantity and quality of stormwater runoff, during and after construction, are not adversely altered or enhanced when compared to pre-development conditions.

This alternative would involve similar stormwater infrastructure and practices as the Proposed Action but does not meet the goals and objectives of the Applicant.

5. Water Supply & Sanitary Sewerage

The Conventional Subdivision Alternative would involve a municipal water main and sanitary sewer main extension similar to the Proposed Action.

The amount of water usage and sewer generation would be substantially less under the Conventional Subdivision Alternative but would still require significant utility infrastructure work to provide the water and sewer extensions.

6. Other Utilities and Services

The Conventional Subdivision Alternative would require utilization of public utilities similar to the Proposed Action.

7. Traffic, Transportation, Pedestrians and Transit

The seven single family residences under the Conventional Subdivision Alternative would generate significantly less vehicle and pedestrian trips than the 300 multi-family residential units in the Proposed Action.

8. Community Demographics, Facilities and Services

Under the Conventional Subdivision Alternative, there would be a total of seven single family residences. The number of anticipated calls for the Police Fire and EMS would be significantly less under this Alternative. Additionally, per the Rutgers University Residential Demographic Multipliers Study, it is estimated that seven, 4-bedroom homes would generate approximately eight school age children that would be newly eligible for enrollment in the North Rockland School District. This would have a minimal impact on the local schools.

The Conventional Subdivision Alternative would have a significantly smaller population than the Proposed Action and therefore would require less resources with a smaller impact on community services provided by the Town.

9. Fiscal and Economic Conditions

The Conventional Subdivision Alternative would provide significantly less tax revenue than the Proposed Action. The property tax generation of the seven lot Conventional Subdivision Alternative would be estimated at approximately ±$17,715.00 per lot, for a total annual tax revenue of approximately ±$124,005.00 for the Conventional Subdivision Alternative. This revenue estimation assumes the market value of a four-bedroom single family home to be $700,000.00. As shown in Table V-1 & Table V-2, this analysis utilizes a market rate percentage of 52.29% and a tax mill rate of 48.27 per $1000 of assessed value, as provided by

the Town Assessor via email correspondence on December 17, 2024. This would result in less of a fiscal benefit to the Town of Haverstraw than the Proposed Action.

Table V-1
Estimated Assessed Tax Value

Estimated Market Value		Town Assessment Rate Proposed Ratio		Assessed Tax Value
$700,000.00	x	0.5229	=	$366,030.00

Table V-2
Projected Education Expenditures from the Proposed Action

Estimated Tax Assessed Value		Town Mill Rate per 1000 of Tax Value		Estimated Tax Revenue
$367,000.00	x	48.27	=	$17,715.00

The 2018 Rutgers for Urban Policy Research Report "Who Lives in New Jersey Housing" was used to estimate a population of 27 residents for the Conventional Subdivision Alternative. This population projection was used to estimate the cost analysis for the Town of Haverstraw Services which would represent a minimal potential increase to the current adopted budget for these Town Services.

The Project Site would no longer be municipally owned by the Town of Haverstraw in both the Proposed Action and the Conventional Subdivision Alternative and each would generate some revenue. The tax benefits that the project site would incur under the Proposed Action would not occur with the Conventional Subdivision Alternative, being that it would be assessed at a significantly lower value and subdivided into individual single family residential lots. Additionally, there would be no PILOT Program which would result in less revenue for the Town of Haverstraw.

Additionally, the expected labor income would be significantly less substantial than the Proposed Action. There also would be no expected annual labor income for the alternative for single family residences.

10. Noise and Air Quality Conditions

The Conventional Subdivision Alternative would result in a decrease in noise conditions as opposed to the Proposed Action. Although the noise levels would be marginally less than the Proposed Action, the alternative proposes two of the 7 single family residences to be corner lots right off of Letchworth Village Road, which would generate some noise closer to other existing residences on the south side of Letchworth Village Road. Screening and other noise mitigation practices would be implemented similarly to the Proposed Action.

It is understood that the noise levels produced by the alternative would be less significant than the Proposed Action; however, noise mitigation practices would be implemented for both the Proposed Action and the Conventional Subdivision Alternative.

11. Historic and Cultural Resources

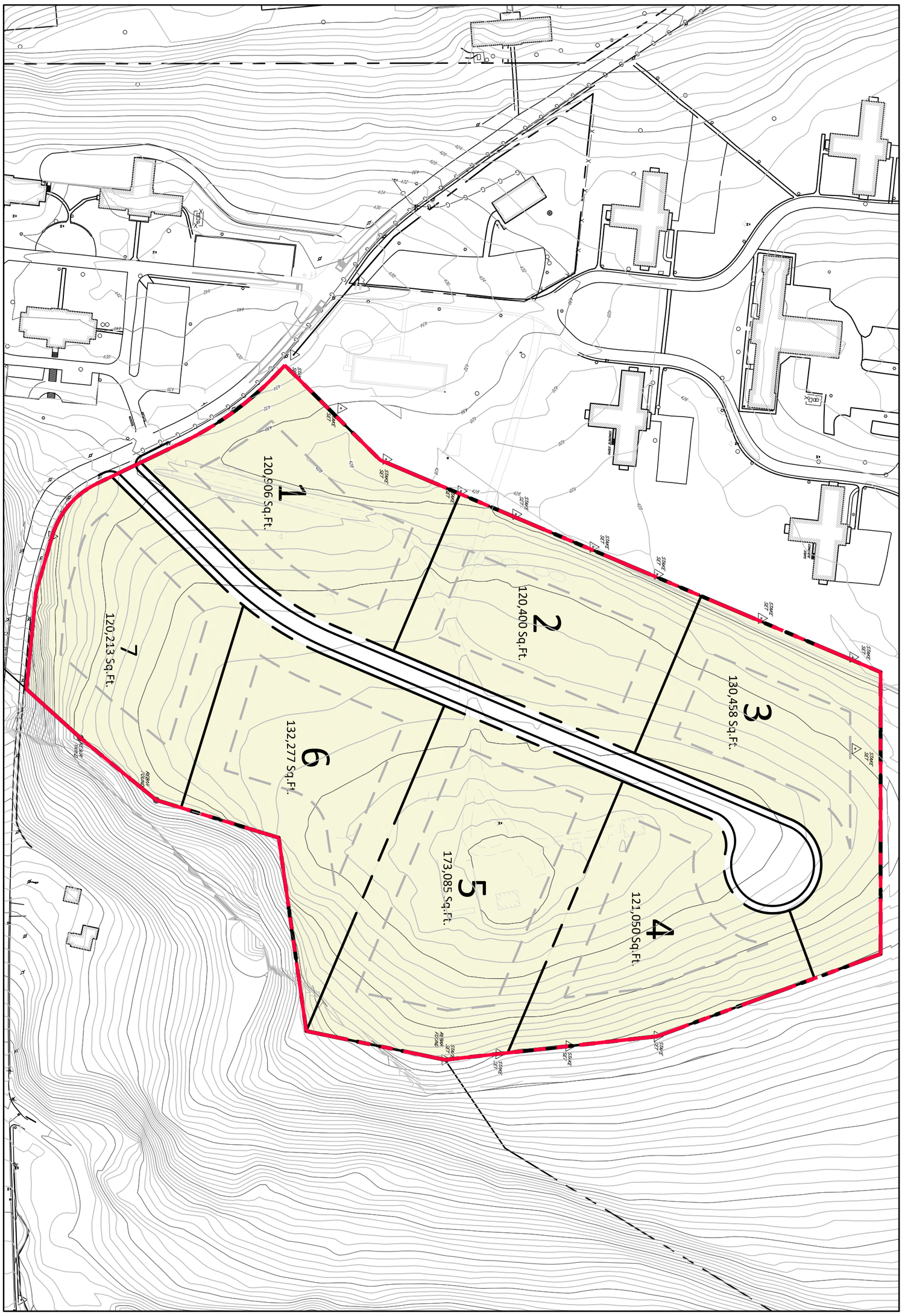
The historic resources registered by the NYSOPRHP would still be cited. Both the Proposed Action and the Conventional Subdivision Alternative would go through the same approval process with the NYSOPRHP.

12. Construction

The potential construction impacts required by the Conventional Subdivision Alternative would be marginally less than the Proposed Action. Disturbance of the Subject Property would still be required to implement the Conventional Subdivision Alternative. Construction impacts would still include temporary increases in noise and traffic.

FIGURES

V-1 Alternative Subdivision Plan



ALTERNATIVE SUBDIVISION PLAN

FIGURE No: V-1

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
(FAX) 273-2102

JMCPLLC.COM

DATE: 01/24/2025 SCALE: 1" = 150'

JMC PROJECT No: 21090

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21090-CONV-SUB.dwg; ALT-SUB PLAN.tab

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

With the implementation of the Proposed Action, certain natural resources will be committed, and therefore consumed, converted or made unavailable for future use. These resources include:

- During the construction period of the Proposed Action, consumption of gasoline, oil, natural gas and electricity will be utilized in the operations of the development. Also, the additional site generated automobile traffic will result in the consumption of fossil fuels.

- During the operational period of the Proposed Action, the residents and the employees will require the use of water, electricity, and natural gas and/or oil. These natural resources will provide heating & cooling on a seasonal basis as well as running water and sewage.

- Commitment of resources such as building materials (Brick & Stone) is also a necessary component of the Proposed Action. The construction period is proposed to be phased over a 24 to 30-month period, so resources will be used gradually over that time.

- Construction and operational activities will also require a commitment of labor. The commitment of construction laborers will be temporary, while a permanent commitment of labor will be required for property maintenance and operations of the facility. The commitment of labor, both temporary and permanent, is considered to be a beneficial impact resulting from the Proposed Action.

VII. GROWTH INDUCING ASPECTS

The preceding chapters of the DEIS describe the direct impacts anticipated to be generated by the Proposed Action. This section addresses the potential for the Action to directly or indirectly induce growth within the Town of Haverstraw.

The Proposed Action is expected to generate 739 residents upon completion, increasing the Town population by approximately 1.9%. These new residents from the Proposed Action would bolster the sales of local commercial businesses, as they serve to meet the needs of the new residents or current residents who might wish to downsize from their existing single-family home and may now reside within the Proposed Action. This spending potential would provide an additional source of support for local retailers and restaurants and help strengthen the Town's economic vitality. However, the demand of the residents for goods and services is not expected to stimulate additional development within the Town.

While demand for certain services—such as natural gas, electricity, water & wastewater services—will increase as a result of the Proposed Action, there is adequate capacity to serve the public utility needs for the Project Site.

VIII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES, INCLUDING LEED CERTIFICATION OBJECTIVES

The Proposed Action does not include design parameters which would qualify for LEED Certification as this would not meet the goals of the Applicant. However, the proposed buildings will meet all adopted energy codes for the State of New York.

For the development of the Project Site itself, in addition to satisfying mandates for erosion protections and the avoidance of the use of invasive species for landscaping, the Proposed Action will utilize native and adapted species to help support local fauna and limit reliance on irrigation.

Stormwater management will be a focus of the Proposed Action, with sufficient space to utilize green infrastructure for infiltration strategies, returning water to the hydrologic cycle rather than processing using gray infrastructure technologies.

The buildings will be designed and constructed with strategies that help mitigate threats from pests such as termites or rodents, including maintaining maintenance space around foundations; sealing all cracks, joints, and penetration points with pest proof sealants; discharging stormwater away from foundations, and developing an integrated Pest Management policy to follow during design and into building operations.

State Environmental Quality Review
Notice of Completion of Draft Environmental Impact Statement (DEIS)
And
Notice of Public Hearing on DEIS

Lead Agency: Planning Board
Town of Haverstraw
One Rosman Road
Garnerville, New York 10923

Date: March 20, 2025

Project Name: BNE/Letchworth

Applicant(s): Haverstraw Group LLC and BNE Acquisitions LLC

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

A Draft Environmental Impact Statement (DEIS) has been completed and accepted for the proposed action described below.

Written comments are requested and will be accepted by the Planning Board of the Town of Haverstraw until April 30, 2025 at 4:00 p.m. to:

Contact Person: Annette Hendrie, Chief Clerk
TOH Building Planning & Zoning
Address: Town of Haverstraw
One Rosman Road
Garnerville, New York 10923
Telephone Number: (845) 429-2200
E-mail: atorres@townofhaverstraw.org

A public hearing on the DEIS will be held on April 9, 2025 at 7:30 p.m. in the large meeting room of the Town of Haverstraw Town Hall, One Rosman Road, Garnerville, New York 10923.

SEQR Status**:** Type I

Description and Location**:** The proposed project relates to an approximately 23-acre portion of the former Letchworth Property (Tax Lot 19.16-1-14) located off of Letchworth Village Road in the Town of Haverstraw, Rockland County, for (i) the Town Board to consider rezoning the applicable portion of the Letchworth Property from the R-120 zoning district to the LA-17 zoning district and related zone text amendments; and (ii) the Planning Board to consider subdivision approval (from the remainder of the former Letchworth

Property) and site plan approval to construct approximately 300 residential units in seven buildings and related amenities, including a club house and pool, 658 parking spaces, internal roads and other facilities.

Potential Environmental Impacts:

The proposed action as described above may result in potential impacts including but not limited to the following:

- Land Use and Zoning
- Visual Resources and Community Character
- Soils, Topography and Steep Slopes
- Flora, Fauna and Habitat
- Stormwater Management
- Water Supply and Sanitary Sewerage
- Other Utilities and Services (Gas, Electric, Telecommunications)
- Traffic Transportation and Parking
- Community Demographics, Facilities and Services
- Fiscal and Economic Conditions
- Noise and Air Quality
- Historic and Cultural Resources
- Construction information

These potential impacts and mitigation measures proposed by the applicant are contained in the DEIS dated February 28, 2025.

A copy of the DEIS may be obtained as follows:
Paper copy of the DEIS for review is on file in the Town Building Department
An electronic version of the DEIS is available on the Town's website (www.townofhaverstraw.org) and at the following link: https://www.dropbox.com/scl/fo/x0l7nkrah4jroipwtso55/AKEm_FnOaJmg-93wQQNYOjQ?rlkey=imql3mcip6uqs2yqnnttfrnuj&st=xs4lpviw&dl=0.

A copy of this notice must be sent to**:**
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1750

Chief Executive Officer, Town of Haverstraw

Any person who has requested a copy of the DEIS

Involved and interested agencies as set forth in the attached distribution list

Environmental Notice Bulletin
625 Broadway
Albany, NY 12233-1750

Copies of the DEIS must be distributed according to 6 NYCRR 617.12(b).

Town of Haverstraw Planning Board
One Rosman Road
Garnerville, NY 10923
Sal Corallo, Chairman
Christie Tomm Addona, Attorney
Annette Hendrie, Principal Clerk-Typist

Mailing List

State Environmental Quality Review

Notice of Completion of Supplemental Draft Environmental Impact Statement (SDEIS) and Notice of Public Hearing on SDEIS

Re: Letchworth Road Residential Development
Section: 19.16 Block: 01 Lot: 14

NYS Office of General Services
Empire State Plaza - 36th Floor, Corning Tower
Albany, NY 12242

NYS D.O.T
275 Ridge Road
New City, NY 10956
Attention: Ralph Tarulli

NYS DEC
21 So. Putt Corners Road
New Paltz, NY 12561

NYS DEC Environmental Permits
625 Broadway, 4th Floor
Albany, NY 12233-1750

Palisades Interstate Park Commission
PO Box 427
Bear Mountain, NY 10911
Attention: Engineering

Rockland County Planning Dept.
50 Sanatorium Road, Bldg. T
Pomona, NY 10970
Attention: Michael Kezner

Rockland County Highway Dept.
26 Scotland Hill Road
Chestnut Ridge, NY 10977
Attention: Dyan Rajasingham

Rockland County Drainage Agency
26 Scotland Hill Road
Chestnut Ridge, NY 10977
Attention: Shajan Thottakra

Rockland County Environmental Resources (Parks)
50 Sanatorium Road, Bldg. A – 6th Floor
Pomona, NY 10970
Attention: Kevin McGuinness

Rockland County Dept. of Health
PO Box 350 –
50 Sanatorium Road, Bldg. D
Pomona, NY 10970
Attention: Liz Mello

Rockland County Dept. of Transportation
50 Sanatorium Road, Bldg. T
Pomona, NY 10970
Attention: Douglas J. Schuetz

Rockland County Office of Fire & Emergency Services
35 Firemens Memorial Drive
Pomona, NY 10970
Attention: Christopher Kear

Town of Haverstraw Police Dept. (Pick-Up)
Chief John Gould, Jr.
101 W. Ramapo Road
Garnerville, NY 10923

Thiells/Roseville Fire District (Pick –Up)
Chief Kenny Connolly
Chief Daniel Coughlin

Orange and Rockland
390 W. Rte. 59
Spring Valley, NY 10977

Veolia North America
162 Old Mill Road
W.Nyack, NY 10994

MUNICIPALITIES

1. **Town of Haverstraw Zoning Board of Appeals**
   One Rosman Road
   Garnerville, NY 10923

2. **Village of Haverstraw**
   40 New Main St.
   Haverstraw, NY 10927

3. **Village of West Haverstraw**
   130 Samsondale Ave.
   West Haverstraw, NY 10993

4. **Village of Pomona**
   100 Ladentown Road
   Pomona, NY 10970

5. **Town of Clarkstown**
   10 Maple Ave.
   New City, NY 10956

6. **Town of Stony Point**
   Stony Point Town Hall
   74 East Main St.
   Stony Point, NY 10980

7. **Town of Ramapo**
   237 RT. 59
   Suffern, NY 10901

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY

Appendix A

State Environmental Quality Review Act (SEQRA)

Prepared for:

Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer

Lead Agency:

Town of Haverstraw Planning Board

Prepared by:

Project 21090

Date: January 24, 2025
Revised: February 28, 2025

Letchworth Road Residential Development

Letchworth Road
Town of Haverstraw
Rockland County, NY
Tax Map ID 19.11-1-1

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix A
State Environmental Quality Review Act (SEQRA)

Lead Agency:
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923
Contact: Mr. Salvatore Corallo Planning Board Chairman
Telephone: (845) 429-2200

Applicant/Owner:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer
Telephone: (973) 488-6402

Date Submitted: January 24, 2025
Date Revised: February 28, 2025
Date Accepted:
Date of Public Hearing:
Comments Due:

DEIS SCOPE
Letchworth Village Residential Development
Town of Haverstraw, Rockland County, New York

This document identifies the impacts to be addressed in the Draft Environmental Impact Statement (DEIS) for the proposed Letchworth Village Residential Development and initial site plans, which provide for a 300-unit multi-family residential development located on Letchworth Village Road in the Town of Haverstraw, New York. This Scoping Document contains the items described in 6 CRR-NY Part 617.8 (E)(1) through (7).

Classification of Action: Type I

Lead Agency: **Planning Board**
Town of Haverstraw

Scoping Meeting: **TBD**

Scope Adoption: **TBD**

Description of the Proposed Action:

The proposed action is the development of 300 residential rental units within 7 3.5 story buildings situated on a ±22.93-acre parcel of land located on Letchworth Village Road. The site is within the R-120 "Rural Residence District", and the proposed actions requests a rezoning to the LA-17 "Luxury Apartment Multifamily District", where multifamily residential uses are principally permitted. Associated site improvements are proposed including access driveways, parking areas, a clubhouse, recreation areas (such as tennis or pickleball courts, pool, etc), site landscaping, retaining walls, stormwater management facilities, etc.

General Guidelines:

- The DEIS shall cover all items in this Final Scope and will conform to the format outlined in this document. Each impact issue (e.g., land use, traffic, etc.) shall be presented in a separate subsection which includes a discussion of existing conditions, impacts associated with the proposed action and any mitigation measures designed to minimize identified issues. If appropriate, impact issues listed separately in this document may be combined in the DEIS, as long as all issues described in this Final Scope are addressed.

- Narrative discussions shall be accompanied by appropriate tables, charts, graphs and figures whenever possible. If a particular subject can be most effectively described in graphic format, the narrative discussion shall summarize and highlight information presented graphically.

- Information shall be presented in a manner that can be readily understood by the public.

- Where reasonable and necessary, mitigation measures shall be incorporated into the proposed action if they are not already so included. For any mitigation measure listed in the Final Scope that is not incorporated into the proposed action, the specific reason why the Applicant considers it unnecessary shall be discussed in the DEIS. The Applicant may suggest additional mitigation measures where appropriate. When no mitigation is provided, the DEIS should explain the basis therefore.

- The document shall be written in the third person (i.e., the terms "we" and "our" shall not be used). The Applicant's conclusions and opinions, if given, shall be identified as those of the "Applicant". When describing the project and its potential impacts, the DEIS should use the word "would" rather than "will".

- The entire document shall be checked carefully to ensure consistency with respect to the information presented in the various sections.

The DEIS shall contain the following information and address the following issues as they relate to the proposed action:

COVER SHEET identifying:

1. The Proposed Action and its location;
2. The name, address and telephone number of the Lead Agency and contact person;
3. The name, address and telephone number of the preparer of the DEIS; the date of DEIS submission and acceptance; and
4. The name, address and telephone number of the Applicant;
5. Public hearing date and DEIS comment period.

Following the cover sheet, a list (name, address and telephone numbers) of all consultants involved in the project should be provided.

TABLE OF CONTENTS, indicating the chapters of the DEIS and page numbers as well as lists of exhibits, tables and appendices.

The text of the DEIS shall include the following:

I. EXECUTIVE SUMMARY

The summary shall describe the Proposed Action, its significant impacts and mitigation measures, and the alternatives analyzed in the body of the document. It will also include a list of all required reviews and approvals from all governmental agencies, including the Town, County and State agencies. The use of tabular summaries is recommended.

II. PROJECT DESCRIPTION

With text accompanied by photographs, maps and/or sketches, as necessary, this section of

the DEIS shall provide a full and clear description of the Proposed Action.

A. Project Location and Site Description

Identification and description of regional context and area location, tax map designation, site access, abutting land uses and zoning categories. This section shall include a description of all uses and facilities that are currently located on the project site and a site survey.

B. Proposed Action

Include a detailed discussion of the proposed multi-family residential development, the proposed zoning and the proposed site plans for the phases(s) of development including:

i. Description of new buildings and their architecture/design
ii. Residential component
iii. Residential amenities component
iv. Green design and sustainability components
v. Site roadways, access and circulation
vi. Tree preservation, landscaping and buffers
vii. Recreation and open space
viii. Utilities and support facilities
ix. Site excavation, grading and fill plans
x. Stormwater management summary
xi. Construction staging summary

C. Project History

Description of the site's development history, including:

i. Original approvals/development of Letchworth Village

D. Statement of Project Purpose and Need

Description of the Applicant's needs and objectives for the development, and the benefit to the public, including:

i. Comprehensive market analysis taking into account market area demographics, renter demand, area rent and vacancy rates, and recent and projected supply. The analysis will also include a review of the 2024 Rockland County Housing Needs Assessment.

E. Reviews and Approvals

A complete list of all required reviews and approvals, and all Involved and Interested Agencies that will receive the DEIS.

III. EXISTING ENVIRONMENTAL CONDITIONS, ANTICIPATED IMPACTS AND MITIGATION

This section of the DEIS shall include a comprehensive analysis of existing conditions, anticipated impacts in the build condition (and no-build condition, where applicable), and specific mitigation measures designed to address all significant adverse impacts.

A. Land Use and Zoning

1. Existing Conditions
   a. Survey and analysis of existing land uses within 1/4 mile of the project site including a color land use map
   b. Description and mapping of existing zoning within 1/4 mile of the project site, including detailed description of zoning regulations that currently apply to the site (e.g., permitted uses, lot, bulk and parking requirements, setbacks and buffers)
   c. Review of applicable Town of Haverstraw and Rockland County planning documents, including the Rockland County Comprehensive Plan (March 2011), The Town of Haverstraw Comprehensive Plan, and the Town of Haverstraw Urban Renewal Plan.
2. Potential Impacts
   a. Discussion of the relationship of the proposed development to overall land use patterns within the 1/4 mile study area, and compatibility with adjacent properties.
   b. Discussion of the project's compliance or non-compliance with local land use policies and regulations.
   c. Discuss the requested zone change from the R-120 to the LA-17 (Luxury Apartment Multifamily Residential) district, and the text amendment regarding the permitted building height in the LA-17 district.
   d. Discussion of the project's relationship to Town and County planning proposals and policies.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

B. Visual Resources

1. Existing Conditions
   a. Documentation of the visual character of the site and the immediately surrounding area through captioned photographs and narrative.
   b. Description of on-site vegetative features, views offered into/from the subject property
2. Potential Impacts
   a. Preparation of building elevations, sketches and other illustrations.
   b. Using captioned photographs, cross sections, photo-simulations and/or sketch renderings, provide an analysis of potential for impact on views to the development from the immediately surrounding area.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts

identified in the DEIS.

C. Soils, Topography and Steep Slopes

1. Existing Conditions including a description and mapping of:
   a. Soils
   b. Topography
   c. Steep Slopes (0-10%, 10%-15%, and 15% or greater)
2. Potential Impacts
   a. Preparation of grading plans and analyses of:
      i. Soil erosion
      ii. Slope stabilization and
      iii. Extent of rock removal, if required.
   b. Estimate of cuts and fills.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

D. Flora, Fauna, and Habitat

1. Existing Conditions
   a. Discussion of on-site species, vegetation / cover types and habitats.
   b. Identification of any on-site or proximate rare, threatened, endangered or invasive species.
2. Potential Impacts
   a. Discussion on impacts on resident plant and animal populations.
   b. Discussion of potential effects on rare, threatened, endangered, or invasive species, if any.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

E. Stormwater Management

1. Existing Conditions
   a. Description of existing regional and local drainage patterns and facilities, and all proximate waterbodies, watercourses and wetlands
   b. Identification of discharge points for existing on-site drainage.
   c. Calculation of pre-development stormwater flow volumes and peak discharge rates for the 1, 10, and 100-year storm events as required by the New York State Department of Environmental Conservation (NYSDEC) and the Town of Haverstraw
2. Potential Impacts
   a. Analysis of stormwater impacts from the proposed development, including calculation of post-development runoff quantity for the 1, 10, and 100-year storms.
   b. Description of the proposed stormwater management facilities.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

F. Water Supply and Sanitary Sewerage

1. Existing Conditions
   a. Description and mapping of existing Veolia water supply infrastructure and Town sewer lines on-site and within adjacent roadways.
   b. Description of Veolia water system and Joint Regional Sewerage Board sewage treatment system capacities.
2. Potential Impacts
   a. Description of the proposed water and sewer utilities system.
   b. Estimates of projected water usage and sewage generation.
   c. Analysis of the ability of existing infrastructure to accommodate projected domestic and fire flows.
   d. Discussion of proposed infrastructure improvements and their potential impact on future development of the balance of the Letchworth Village property.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

G. Other Utilities and Services (Gas, Electric and Telecommunications)

1. Existing Conditions
   a. Description of existing utility services in the vicinity of and provided to the site.
2. Potential Impacts
   a. Description of any proposed modifications to the existing utilities system.
   b. Projection of anticipated electricity and gas usage, and analysis of the ability of existing systems to accommodate projected demands.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

H. Traffic, Transportation and Parking

i. Existing Roadway Inventory & Transportation Data Collection

Discuss the subject site's location along Letchworth Village Road (a Rockland County road) and its relationship to other key roadways, places of interest, and institutions including nearby schools. Identify existing transit service including routes, bus stops, and facilities in the subject area. Perform a comprehensive roadway/intersection inventory including agency jurisdiction, roadway/pavement condition, lane geometry, traffic control, nearby school bus stops, posted speed limits, and presence of non-motorized transportation facilities such as sidewalks.

Perform a series of continuous and peak-period traffic counts on the surrounding roadways and at key intersections, respectively. Continuous counts shall include volume, speed, and classification for one typical week including Saturday and Sunday. Peak-period counts shall include vehicle turning movements inclusive of bicycles and pedestrians and be performed during typical weekday morning (7:00 a.m. to 9:00 a.m.) coinciding with school arrival, weekday afternoon (2:00 p.m. to 4:00 p.m.) coinciding with school dismissal, weekday evening (4:00 p.m. to 7:00

p.m.), and Saturday or Sunday midday (11:00 a.m. to 2:00 p.m.). In general, all traffic data collection shall avoid major holidays and inclement weather, and be performed when schools/colleges are in normal session.

Continuous Count Locations

1. Letchworth Village Road between Ridge Road and Thiells-Mt. Ivy Road
2. Ridge Road between Letchworth Village Road and Thiells-Mt. Ivy Road
3. Thiells-Mt. Ivy Road between Ridge Road and Anderson Road
4. Thiells-Mt. Ivy Road between Palisades Interstate Parkway NB off ramp and US Route 202
5. Willow Grove Road between Letchworth Village Road/Patriot Hills Lane and Palisades Interstate Parkway
6. US Route 202 between Palisades Interstate Parkway SB on/off ramps and Thiells-Mt. Ivy Road

Study Intersections (Turning Movement Counts)

1. Letchworth Village Road and Ridge Road
2. Letchworth Village Road and Storrs Road
3. Letchworth Village Road/Patriot Hills Lane and Willow Grove Road
4. Palisades Interstate Parkway NB on/off ramps and Willow Grove Road
5. Palisades Interstate Parkway SB on/off ramps and Willow Grove Road
6. Thiells-Mt. Ivy Road and Ridge Road
7. Thiells-Mt. Ivy Road and Rosman Road
8. Thiells-Mt. Ivy Road and Palisades Interstate Parkway NB off ramp
9. Thiells-Mt. Ivy Road and US Route 202
10. NYS Route 45/Old Country Road and US Route 202
11. Palisades Interstate Parkway SB on/off ramps and US Route 202
12. Suffern Lane and Thiells-Mt. Ivy Road/Hammond Road
13. Suffern Lane/W. Railroad Avenue and Main Street/Central Highway

The transportation data shall be calibrated as necessary based on industry standards, appropriately balanced, and presented on traffic volume figures. The data will represent the 2024 Existing Condition traffic volumes.

Obtain and evaluate the most recent three-year period of crash history for the study intersections and the following road segments:

1. Letchworth Village Road between Willow Grove Road and Thiells-Mt. Ivy Road
2. Ridge Road between Letchworth Village Road and Thiells-Mt. Ivy Road
3. Thiells-Mt. Ivy Road between Ridge Road and US Route 202
4. Willow Grove Road between Letchworth Village Road/Patriot Hills Lane and Palisades Interstate Parkway SB on/off ramps

The crash evaluation shall include summary tables detailing crash types, crash severity (e.g., injury, fatality), and crash rates with a comparison to statewide averages.

Perform intersection and stopping sight distance measurements in accordance with

AASHTO guidelines and the prevailing roadway speed for the southbound Ridge Road approach to Letchworth Village Road. Identify if AASHTO sight distance guidelines are not met and propose ways to improve the sight lines as needed.

ii. 2024 Existing Condition Analysis
Develop a Synchro/SimTraffic model for the study roadway network and perform a capacity analysis for each intersection and study period. Report levels of service, delays, and volume-capacity ratios. Present results tabularly.

iii. Trip Generation and Trip Assignment
Calculate the trip generation of the project based on the applicable land use(s) in the industry-standard Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Assign the site-generated traffic to study intersections based on the distribution of arriving and departing volumes, regional highway connections, points of interest, employment centers, shopping attractions, and schools.

Calculate non-vehicular trips for the project based on the Trip Generation Manual, 11th Edition, or other acceptable means. Identify where pedestrian traffic will be concentrated within the study roadway network and discuss how pedestrian trips can be accommodated safely. Pedestrian connections to nearby schools shall be included in this discussion.

iv. Future Condition Traffic Volumes and Analysis
Determine the project's "build" year and obtain concurrence from the Town of Haverstraw and involved agencies. A design year (i.e., "build" plus "x" years) may be considered for analysis. Apply an appropriate background growth rate to the Existing Condition traffic volumes. Identify ongoing and proposed roadway construction projects and other planned land development projects in the site vicinity that have the potential to influence and/or increase traffic volumes within the study network. Develop future No-Build Condition traffic volumes and present the same on traffic volume figures. Perform a capacity analysis using Synchro/SimTraffic software for each intersection and study period. Report levels of service, delays, and volume-capacity ratios. Present results tabularly.

Overlay site-generated traffic volume onto No-Build Condition traffic volumes to calculate Build Condition traffic volumes. Perform a capacity analysis using Synchro/SimTraffic software for each intersection and study period. Report levels of service, delays, and volume-capacity ratios. Present results tabularly.

Compare results of the No-Build Condition and Build Condition analyses and identity the project's quantitative impact on the roadway network and study intersections. Discuss how the project will affect traffic safety particularly at intersections/roadway segments that have crash rates higher than the statewide averages.

v. Transportation Mitigation

For significant adverse impacts in the Build Condition, identify the appropriate mitigation and conceptualize such improvements on an aerial basemap. Discuss the timeline for improvements, responsibility, and the probable funding sources. Multi-modal connections, including new pedestrian desire lines, shall be considered in the development of mitigation measures. For intersections and roadway segments that have crash rates higher than the statewide averages, propose opportunities for safety improvements.

vi. On-Site Circulation and Parking
Evaluate and discuss internal site circulation for pedestrian and vehicles, internal traffic control, and loading/unloading needs. Perform an analysis of the proposed off-street parking supply and the anticipated peak parking demand based on industry-standard data. Explore efforts to minimize creating surplus/underutilized off-street parking.

I. Community Demographics, Facilities and Services

1. Existing Conditions
   a. Discussion of existing multi-family housing market trends in Rockland County including the current population of the Town of Haverstraw and population change from 1994 to present.
   b. Discussion of demographic factors such as income, employment, age, etc.
   c. Describe Town facilities and other relevant service providers including:
      i. Town of Haverstraw Police Department
      ii. Haverstraw Volunteer Ambulance Corps (HVAC)
      iii. Thiells Fire Department
   d. Discussion of North Rockland Central School District public school system including budget, enrollment trends and physical capacity of each school.
2. Potential Impacts
   a. Discuss anticipated project population and resulting increase in Town population.
   b. Discussion of potential relationship/connectivity impacts to community facilities and services.
   c. Discussion of emergency services access and circulation
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

J. Fiscal and Economic Conditions

1. Existing Conditions
   a. Describe current taxes provided to each taxing jurisdiction (Town, County, School District, etc.)
   b. Summarize the current operating budgets of the Haverstraw Police Department, Haverstraw Volunteer Ambulance Corps. (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works.
   c. Summarize the educational cost per student in the North Rockland Central School District utilizing NYS Education Department data.
2. Potential Impacts

a. Estimate annual tax revenues to be generated to each taxing jurisdiction upon project completion using current tax rates.
b. Discuss potential impacts to community services including the Haverstraw Police Department, Haverstraw Volunteer Ambulance Corps. (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works.
c. Estimate potential impacts to the North Rockland Central School District.
d. Discuss employment generation resulting from construction and operation of the development.

3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

K. Noise and Air Quality

1. Existing Conditions
   a. Provide a qualitative description of the existing noise environment at the Project Site.
   b. Summarize existing ambient air quality conditions in the region based on published New York State Department of Environmental Conservation ambient air monitoring data.
2. Potential Impacts
   a. Provide a qualitative discussion of construction related impacts of noise and the Project's adherence to the Chapter 114, Noise, of the Haverstraw Town Code.
   b. Provide a qualitative discussion of post-construction related impacts of noise and the Project's adherence to the Chapter 114, Noise, of the Haverstraw Town Code.
   c. Provide a qualitative analysis of the potential air impacts resulting from site preparation, construction activities, and post-construction activities.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

L. Historic and Cultural Resources

1. Existing Conditions
   a. Identification of potential significant resources based on the New York State Historic Preservation Office (SHPO) Cultural Resource Information System (CRIS).
2. Potential Impacts
   a. Identification of potential impacts to archeological or historic resources, if any.
3. Proposed Mitigation
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

M. Construction

1. Potential Impacts
   a. Description of anticipated construction activities including site preparation, earthwork, removal of materials off-site, stockpiling, and rock removal, if

necessary.

b. Analysis of construction impacts including:
   i. Identification of types of construction equipment,
   ii. Construction worker and vehicle traffic,
   iii. Duration and hours of operation,
   iv. Phasing,
   v. Staging,
   vi. Identification of potential impacts from these construction activities such as noise, air quality, stormwater and traffic, including impacts of truck traffic during various times of day.

2. Mitigation Measures
   a. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

IV. SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE AVOIDED

A. Short-Term Construction Impacts

B. Long-Term Impacts

V. ALTERNATIVES

A. The "No Action" Alternative

B. Conventional Subdivision (existing R-120 Zoning)

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

VII. GROWTH INDUCING ASPECTS

VIII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY

IX. RESOURCES, including LEED Certification Objectives

X. SOURCES AND BIBLIOGRAPHY

XI. APPENDICIES

A. SEQRA Documentation, including EAF, Positive Declaration, and Scoping Outline

B. Relevant Correspondence

C. Technical Studies, including SWPPP and Traffic Study

D. Detailed Site Plans

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Letchworth Road Residential Development		
Project Location (describe, and attach a general location map): Letchworth Village Road, Haverstraw, NY		
Brief Description of Proposed Action (include purpose or need): The applicant proposes to develop a 22.67 acre Parcel of the Letchworth Village Property with approximately 300 units of multifamily spread over six buildings, each with underground garages. Taking advantage of the existing topography, each building is three stories high on the entrance side and four stories high on the garage side. The current proposal includes a community room, swimming pool and other outdoor recreation. The recreation amenities may change as the project progresses. 648 parking spaces are currently proposed, of which 136 would be within the garages. At two spaces per unit, this allows for 48 visitor parking spaces. The units will be available at market rates and are not age-restricted. No variances are anticipated. Requested is a rezoning of the Parcel from the current R-120 zone, allowing single-family homes, to LA-17 which permits multifamily housing. Subdivision and site plan approval are also sought.		
Name of Applicant/Sponsor: Haverstraw Group LLC	Telephone: (973) 992-2443 E-Mail:	
Address: 16 Microlab Road, Suite A		
City/PO: Livingston	State: NJ	Zip Code: 07039
Project Contact (if not same as sponsor; give name and title/role): JMC, PLLC, Agent, Diego Villareale, PE	Telephone: (914) 273-5225 E-Mail: dvillareale@jmcpllc.com	
Address: 120 Bedford Road		
City/PO: Armonk	State: NY	Zip Code: 10504
Property Owner (if not same as sponsor): Town of Haverstraw	Telephone: (845) 429-2200 E-Mail:	
Address: 1 Rosman Road		
City/PO: Garnerville	State: NY	Zip Code: 10923

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☑Yes ☐No	Zone Change	TBD
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Subdivision and Site Plan Approval	TBD
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	ARB Approval; Road Opening Permit; Building Permit	TBD
e. County agencies ☑Yes ☐No County Planning; Health Department	NYS Municipal Law Referral; Rockland County Health Department	TBD
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No NYSDEC	SPDES General Permit GP-0-20-001	TBD
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes ☑No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

Town of Haverstraw Letchworth Village Urban Redevelopment Plan

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
R-120

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☑ Yes ☐ No
If Yes,
i. What is the proposed new zoning for the site? LA-17

C.4. Existing community services.

a. In what school district is the project site located? North Rockland Central School District

b. What police or other public protection forces serve the project site?
Town of Haverstraw Police Department

c. Which fire protection and emergency medical services serve the project site?
Thiells Fire Department; Haverstraw Ambulance

d. What parks serve the project site?
Cheesecote Mountain Town Park; Harriman State Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Residential

b. a. Total acreage of the site of the proposed action? ±22.67 acres
b. Total acreage to be physically disturbed? ±20.61 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? ±22.67 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☑ Yes ☐ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Residential
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? One
iv. Minimum and maximum proposed lot sizes? Minimum ±22.67 acres Maximum ±22.67 acres

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 18-24 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				300
At completion of all phases				300

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☑ No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No

If Yes:

i. Total anticipated water usage/demand per day: ±82,500 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No

If Yes:

- Name of district or service area: Viola New York Water
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☑No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No

If Yes:

i. Total anticipated liquid waste generation per day: ±82,500 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): Sanitary wastewater

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: Haverstraw
- Name of district: Haverstraw Joint Regional District
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑ Yes ☐ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

465,048 Square feet or 10.68 acres (impervious surface)

987,984 Square feet or 22.67 acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

On-site stormwater management facilities.

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☑ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☑ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☑Yes ☐No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☑ Morning ☑ Evening ☐Weekend

☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing 0 Proposed 648 Net increase/decrease +648

iv. Does the proposed action include any shared use parking? ☐Yes ☑No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☑Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☑Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☑No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: Each apartment building = 1,800kW; Clubhouse = 300kW

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Local grid/utility

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8:00 am - 6:00 pm
- Saturday: 8:00 am - 6:00 pm
- Sunday: 8:00 am - 6:00 pm
- Holidays: 8:00 am - 6:00 pm

ii. During Operations:

- Monday - Friday: 24 / 7 Residential
- Saturday: 24 / 7 Residential
- Sunday: 24 / 7 Residential
- Holidays: 24 / 7 Residential

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Typical temporary construction noise during permitted hours.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Downlit LED lighting fixtures for security.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☐ No

If Yes:

i. Describe proposed treatment(s):

_____

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Institutional (Schools)

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.61	10.68	+10.07
• Forested	13.89	2.08	- 11.81
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	8.18	7.88	- 0.30
• Agricultural (includes active orchards, field, greenhouse etc.)	-	-	-
• Surface water features (lakes, ponds, streams, rivers, etc.)	-	-	-
• Wetlands (freshwater or tidal)	-	-	-
• Non-vegetated (bare rock, earth or fill)	-	-	-
• Other Describe: STORMWATER MANAGEMENT BASINS	-	2.04	+ 2.04

c. Is the project site presently used by members of the community for public recreation? ☑ Yes ☐ No

i. If Yes: explain: Informal open space.

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

North Rockland High School; Fieldstone Middle School

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☑ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? Greater than 6.5 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

CeB Charlton fine sandy loam	80 %
CeD Charlton fine sandy loam	10 %
CeC Charlton fine sandy loam	10 %

d. What is the average depth to the water table on the project site? Average: _____ feet
Greater than 6.5

e. Drainage status of project site soils:
☑ Well Drained: 100 % of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 82 % of site
☑ 10-15%: 14 % of site
☑ 15% or greater: 4 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☑ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Typical suburban species

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:
i. Species and listing (endangered or threatened):

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Eligible property: BLDG 24/WHITMAN/ATTENDANT'S HOME (1916-17), Eligible property: BLDG 22/ADMINISTRATION (1926-27), Eligible property: BLDG 20/FRANKLIN HALL/OFFICES (1926-27), Eligible property: BLDG 25/STEWART/ASSEMBLY HALL (1919)

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC, Agent Date January 11, 2024

Signature Robert B. Peake, AICP Title Planner

Robert B. Peake AICP

PRINT FORM

EAF Mapper Summary Report

Monday, December 11, 2023 3:21 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	No
E.2.h.iii [Surface Water Features]	No
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No

E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:BLDG 24/WHITMAN/ATTENDANT'S HOME (1916-17), Eligible property:BLDG 22/ADMINISTRATION (1926-27), Eligible property:BLDG 20/FRANKLIN HALL/OFFICES (1926-27), Eligible property:BLDG 25/STEWART/ASSEMBLY HALL (1919)
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

NOTICE OF PUBLIC SCOPING SESSION

TOWN OF HAVERSTRAW PLANNING BOARD

Applicants: Haverstraw Group LLC and BNE Acquisitions LLC

Notice: Pursuant to the State Environmental Quality Review Act (SEQRA), the Town of Haverstraw Planning Board will hold a Public Scoping Session on Wednesday, August 14, 2024 at 7:30 p.m. in the large meeting room of Town Hall, One Rosman Road, Garnerville, NY 10923, to solicit public comment on the Draft Scoping Document, prepared by the Applicants, for the proposed residential development of a portion of the former Letchworth Property. All interested persons are invited to attend and provide comments on the Draft Scoping Document, which will serve as the outline of the issues to be addressed in the Draft Environmental Impact Statement.

Proposed Project: The proposed project relates to an approximately 23-acre portion of the former Letchworth Property (Tax Lots 19.16-1-14) for (i) the Town Board to consider rezoning the applicable portion of the Letchworth Property from the R-120 zoning district to the LA-17 zoning district; and (ii) the Planning Board to consider subdivision approval (from the remainder of the former Letchworth Property) and site plan approval to construct approximately 300 residential units in seven buildings and related amenities, including parking, internal roads and recreational facilities.

Type of Action: This is a Type I action under SEQRA.

Documents: Included with this circulation are (1) the Positive Declaration adopted by the Planning Board, (2) the Draft Scoping Document that will be the subject of the Public Scoping Session, and (3) Plan Set prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC dated March 27, 2024 consisting of (i) cover sheet (C-000), (ii) existing conditions map (C-010) and (iii) preliminary site layout plan. All other application materials are available for review and inspection in the Town Building Department upon advanced request to the Chief Clerk at the contacts set forth below.

Written Comment: In addition to the Public Scoping Session, the Planning Board will accept written comment on the Draft Scoping Document until Wednesday, August 21, 2024 at 5:00 p.m. to:

Contact Person:	Annette Hendrie, Chief Clerk
	TOH Building Planning & Zoning
Address:	Town of Haverstraw
	One Rosman Road
	Garnerville, New York 10923
Telephone Number:	(845) 429-2200
E-mail:	atorres@townofhaverstraw.org

Positive Declaration

State Environmental Quality Review Act (SEQRA)

Determination of Significance

Town of Haverstraw Planning Board

Letchworth Road Residential Development

July 10, 2024

Lead Agency:
Town of Haverstraw Planning Board
One Rosman Road, Garnerville, NY 10923

Project Title:
Letchworth Road Residential Development

Project Location:
Letchworth Village Road
Town of Haverstraw, Rockland County, New York

Description of Action:
The proposed project involves a zoning amendment to inlcude the subject property in the LA-17 District and an application for a site development plan to construct a 300-unit multiple family residential development on a 22-acre parcel of land. The development will include 658 parking spaces. The site is currently undeveloped and features wooded areas and steep slopes.

SEQR Classification:
Type I

Determination:
The Town of Haverstraw Planning Board, as the lead agency, has determined that the proposed action described above may result in one or more significant adverse environmental impacts and will require the preparation of a Draft Environmental Impact Statement (DEIS). This

determination is based on the criteria found in 6 NYCRR Part 617.7(c), which includes consideration of the following potential impacts:

Potential Significant Environmental Impacts:

1. **Impact on Land:**
   The development will involve significant land disturbance on a 22-acre parcel with wooded areas and steep slopes. Potential impacts include soil erosion, changes in topography, and instability of slopes.
2. **Impact on Water:**
   The project may affect surface water and groundwater quality due to increased runoff, potential contamination from construction activities, and changes to the natural drainage patterns. The presence of steep slopes increases the risk of erosion and sedimentation into nearby water bodies.
3. **Impact on Air Quality:**
   Construction activities and increased vehicular traffic from 658 parking spaces may result in temporary and long-term air quality impacts, including dust, emissions, and particulate matter.
4. **Impact on Plants and Animals:**
   The removal of wooded areas and alteration of natural habitats may adversely affect local vegetation and wildlife, including potential impacts on any endangered or threatened species that may be present on the site.
5. **Impact on Aesthetic and Visual Resources:**
   The construction of a large residential development may alter the visual character of the area, impacting scenic views and the aesthetic value of the natural landscape.
6. **Impact on Transportation:**
   The increase in vehicular traffic from 300 residential units and 658 parking spaces may impact local traffic patterns, congestion, and public transportation infrastructure.
7. **Impact on Noise, Odor, and Light:**
   Construction activities and the presence of a large residential community may result in increased noise levels, odors, and light pollution, affecting the surrounding environment and community.
8. **Impact on Historical and Cultural Resources:**
   The development may result in potential damage or destruction of archaeological sites, historic buildings, or culturally significant landscapes.
9. **Impact on Infrastructure and Utilities:**
   Potential impacts may arise from insufficient capacity of existing infrastructure (water, sewer, electricity) to support the proposed development. The development may result in increased demand on public services, such as schools, hospitals, and emergency services, without adequate provisions for expansion or improvement.

10. **Impact on Human Health:**
    Potential impacts on public health may arise from construction activities, increased traffic, and changes in air and water quality.
11. **Consistency with Community Plans and Character:**
    The scale of the proposed development may not be consistent with existing community plans and could alter the character and quality of the local community.

Reasons Supporting This Determination:
Based on a thorough review of the Environmental Assessment Form (EAF) and additional information provided, the Town of Haverstraw Planning Board has identified the following reasons why the proposed action may have a significant adverse impact on the environment:

- The project involves substantial alteration of undeveloped land with steep slopes, increasing the risk of soil erosion, stormwater runoff and water quality degradation.
- The removal of wooded areas may lead to significant impacts on local flora and fauna, including potential endangered species.
- The construction of a large residential development may alter the visual character of the area, impacting scenic views and the aesthetic value of the natural landscape.
- Increased traffic from 658 parking spaces may contribute to local congestion and transportation infrastructure stress.

Scoping:
In accordance with 6 NYCRR Part 617.8, the Town of Haverstraw Planning Board will conduct a scoping process to identify the significant issues to be addressed in the DEIS. The public and involved agencies will be invited to participate in the scoping process, and a public scoping meeting will be held on Wednesday, August 14, 2024 at 7:30 p.m. The Planning Board will accept written comments submitted to the address below until 5:00 p.m. on Wednesday, August 21, 2024. Documents related to this application are available for review and inspection in the Town Building Department.

Contact Information:
For further information, please contact:

Contact Person:	Annette Hendrie, Chief Clerk TOH Building Planning & Zoning
Address:	Town of Haverstraw One Rosman Road Garnerville, New York 10923
Telephone Number:	(845) 429-2200
E-mail:	atorres@townofhaverstraw.org

DEIS SCOPE
Letchworth Village Residential Development
Town of Haverstraw, Rockland County, New York

This document identifies the impacts to be addressed in the Draft Environmental Impact Statement (DEIS) for the proposed Letchworth Village Residential Development and initial site plans, which provide for a 300-unit multi-family residential development located on Letchworth Village Road in the Town of Haverstraw, New York. This Scoping Document contains the items described in 6 CRR-NY Part 617.8 (E)(1) through (7).

Classification of Action: Type I

Lead Agency: **Planning Board**
Town of Haverstraw

Scoping Meeting: **TBD**

Scope Adoption: **TBD**

Description of the Proposed Action:

The proposed action is the development of 300 residential rental units within 7 3.5 story buildings situated on a ±22.93-acre parcel of land located on Letchworth Village Road. The site is within the R-120 "Rural Residence District", and the proposed actions requests a rezoning to the LA-17 "Luxury Apartment Multifamily District", where multifamily residential uses are principally permitted. Associated site improvements are proposed including access driveways, parking areas, a clubhouse, recreation areas (such as tennis or pickleball courts, pool, etc), site landscaping, retaining walls, stormwater management facilities, etc.

General Guidelines:

- The DEIS shall cover all items in this Final Scope and will conform to the format outlined in this document. Each impact issue (e.g., land use, traffic, etc.) shall be presented in a separate subsection which includes a discussion of existing conditions, impacts associated with the proposed action and any mitigation measures designed to minimize identified issues. If appropriate, impact issues listed separately in this document may be combined in the DEIS, as long as all issues described in this Final Scope are addressed.

- Narrative discussions shall be accompanied by appropriate tables, charts, graphs and figures whenever possible. If a particular subject can be most effectively described in graphic format, the narrative discussion shall summarize and highlight information presented graphically.

- Information shall be presented in a manner that can be readily understood by the public.
- Where reasonable and necessary, mitigation measures shall be incorporated into the proposed action if they are not already so included. For any mitigation measure listed in the Final Scope that is not incorporated into the proposed action, the specific reason why the Applicant

considers it unnecessary shall be discussed in the DEIS. The Applicant may suggest additional mitigation measures where appropriate. When no mitigation is provided, the DEIS should explain the basis therefore.

- The document shall be written in the third person (i.e., the terms "we" and "our" shall not be used). The Applicant's conclusions and opinions, if given, shall be identified as those of the "Applicant". When describing the project and its potential impacts, the DEIS should use the word "would" rather than "will".

- The entire document shall be checked carefully to ensure consistency with respect to the information presented in the various sections.

The DEIS shall contain the following information and address the following issues as they relate to the proposed action:

COVER SHEET identifying:

1. The Proposed Action and its location;
2. The name, address and telephone number of the Lead Agency and contact person;
3. The name, address and telephone number of the preparer of the DEIS; the date of DEIS submission and acceptance; and
4. The name, address and telephone number of the Applicant;
5. Public hearing date and DEIS comment period.

Following the cover sheet, a list (name, address and telephone numbers) of all consultants involved in the project should be provided.

TABLE OF CONTENTS, indicating the chapters of the DEIS and page numbers as well as lists of exhibits, tables and appendices.

The text of the DEIS shall include the following:

I. EXECUTIVE SUMMARY

The summary shall describe the Proposed Action, its significant impacts and mitigation measures, and the alternatives analyzed in the body of the document. It will also include a list of all required reviews and approvals from all governmental agencies, including the Town, County and State agencies. The use of tabular summaries is recommended.

II. PROJECT DESCRIPTION

With text accompanied by photographs, maps and/or sketches, as necessary, this section of the DEIS shall provide a full and clear description of the Proposed Action.

A. Project Location and Site Description

Identification and description of regional context and area location, tax map designation, site access, abutting land uses and zoning categories. This section shall include a description of all uses and

facilities that are currently located on the project site and a site survey.

B. Proposed Action

Include a detailed discussion of the proposed multi-family residential development, the proposed zoning and the proposed site plans for the phases(s) of development including:

i. Description of new buildings and their architecture/design
ii. Residential component
iii. Residential amenities component
iv. Green design and sustainability components
v. Site roadways, access and circulation
vi. Tree preservation, landscaping and buffers
vii. Recreation and open space
viii. Utilities and support facilities
ix. Site excavation, grading and fill plans
x. Stormwater management summary
xi. Construction staging summary

C. Project History

Description of the site's development history, including:

i. Original approvals/development of Letchworth Village

D. Statement of Project Purpose and Need

Description of the Applicant's needs and objectives for the development, and the benefit to the public, including:

i. Comprehensive market analysis taking into account market area demographics, renter demand, area rent and vacancy rates, and recent and projected supply. The analysis will also include a review of the 2024 Rockland County Housing Needs Assessment.

E. Reviews and Approvals

A complete list of all required reviews and approvals, and all Involved and Interested Agencies that will receive the DEIS.

III. EXISTING ENVIRONMENTAL CONDITIONS, ANTICIPATED IMPACTS AND MITIGATION

This section of the DEIS shall include a comprehensive analysis of existing conditions, anticipated impacts in the build condition (and no-build condition, where applicable), and specific mitigation measures designed to address all significant adverse impacts.

A. Land Use and Zoning

i. Existing Conditions

1. Survey and analysis of existing land uses within 1/4 mile of the project site including a color land use map
2. Description and mapping of existing zoning within 1/4 mile of the project site, including detailed description of zoning regulations that currently apply to the site (e.g., permitted uses, lot, bulk and parking requirements, setbacks and buffers)
3. Review of applicable Town of Haverstraw and Rockland County planning documents, including the Rockland County Comprehensive Plan (March 2011) and The Town of Haverstraw Comprehensive Plan.

ii. Potential Impacts

1. Discussion of the relationship of the proposed development to overall land use patterns within the 1/4 mile study area, and compatibility with adjacent properties.
2. Discussion of the project's compliance or non-compliance with local land use policies and regulations.
3. Discussion of the project's relationship to Town and County planning proposals and policies.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

B. Visual Resources

i. Existing Conditions

1. Documentation of the visual character of the site and the immediately surrounding area through captioned photographs and narrative.
2. Description of on-site vegetative features, views offered into/from the subject property

ii. Potential Impacts

1. Preparation of building elevations, sketches and other illustrations.
2. Using captioned photographs, cross sections, photo-simulations and/or sketch renderings, provide an analysis of potential for impact on views to the development from the immediately surrounding area.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

C. Soils, Topography and Steep Slopes

i. Existing Conditions including a description and mapping of:

1. Soils
2. Topography
3. Steep Slopes (0-10%, 10%-15%, and 15% or greater)

ii. Potential Impacts

1. Preparation of grading plans and analyses of:
    a. Soil erosion
    b. Slope stabilization and
    c. Extent of rock removal, if required.
2. Estimate of cuts and fills.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

D. Stormwater Management

i. Existing Conditions

1. Description of existing regional and local drainage patterns and facilities
2. Identification of discharge points for existing on-site drainage.
3. Calculation of pre-development stormwater flow volumes and peak discharge rates for the 1, 10, and 100-year storm events as required by the New York State Department of Environmental Conservation (NYSDEC) and the Town of Haverstraw

ii. Potential Impacts

1. Analysis of stormwater impacts from the proposed development, including calculation of post-development runoff quantity for the 1, 10, and 100-year storms.
2. Description of the proposed stormwater management facilities.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

E. Water Supply and Sanitary Sewerage

i. Existing Conditions

1. Description of existing Veolia water supply infrastructure and Town sewer lines on-site and within adjacent roadways.
2. Description of Veolia water system and Joint Regional Sewerage Board sewage treatment system capacities.

ii. Potential Impacts

1. Description of the proposed water and sewer utilities system.
2. Estimates of projected water usage and sewage generation.
3. Analysis of the ability of existing infrastructure to accommodate projected domestic and fire flows.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

F. Other Utilities and Services (Gas, Electric and Telecommunications)

i. Existing Conditions

1. Description of existing utility services in the vicinity of and provided to the site.

ii. Potential Impacts

1. Description of any proposed modifications to the existing utilities system.
2. Analysis of the ability of existing systems to accommodate projected demands.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

G. Traffic, Transportation and Parking

i. Existing Conditions

1. Discussion of the property location along Letchworth Village Road (a Rockland County Road), including access to local and regional roadways, and existing transit service.
2. Inventory of existing road conditions in the site vicinity, including:
   a. Pavement width/conditions,
   b. Number of lanes,
   c. Posted speed limits,
   d. Types of roadway and traffic controls.

3. Description of existing bus service.4. Determination of existing traffic volumes in the weekday AM and PM and weekend peak hours, and existing levels of service during these peak hours for six intersections (to be coordinated with the Town), during periods of when schools (including colleges) are in session.

4. Analysis of available traffic accident reports for the past three years for the above intersections and the road segments between these intersections.

ii. Potential Impacts

1. Analysis of the traffic impacts of the proposed development.
2. Estimate of project generated peak-hour traffic and anticipated distribution patterns.
3. Calculation of background traffic volume for the design year, including other development projects recently approved or under construction, but not yet occupied and generating traffic, as well as those in the review pipeline that have a reasonable expectation of receiving approval.
4. Level of service analysis with No-Build and Build (including project generated traffic) conditions including a level of service and delay summary table for all conditions.
5. Analysis of access and sight distance requirements at the proposed site access driveway.
6. Analysis of projected parking demand and proposed parking spaces.
7. Qualitative description of future pedestrian routes.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

H. Community Demographics, Facilities and Services

i. Existing Conditions

1. Discussion of existing multi-family housing market trends in Rockland County including the current population of the Town of Haverstraw and population change from 1994 to present.
2. Discussion of demographic factors such as income, employment, age, etc.
3. Describe Town facilities and other relevant service providers including:
    a. Town of Haverstraw Police Department
    b. Haverstraw Volunteer Ambulance Corps (HVAC)
    c. Thiells Fire Department
4. Discussion of North Rockland Central School District public school system including budget, enrollment trends and physical capacity of each school.

ii. Potential Impacts

1. Discuss anticipated project population and resulting increase in Town population.
2. Discussion of potential relationship/connectivity impacts to community facilities and services.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

I. Fiscal and Economic Conditions

i. Existing Conditions

1. Describe current taxes provided to each taxing jurisdiction (Town, County, School District, etc.)
2. Summarize the current operating budgets of the Haverstraw Police Department, Haverstraw Volunteer Ambulance Corps. (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works.
3. Summarize the educational cost per student in the North Rockland Central School District utilizing NYS Education Department data.

ii. Potential Impacts

1. Estimate annual tax revenues to be generated to each taxing jurisdiction upon project completion using current tax rates.
2. Discuss potential impacts to community services including the Haverstraw Police Department, Haverstraw Volunteer Ambulance Corps. (HVAC), Thiells Fire Department, and the Haverstraw Department of Public Works.
3. Estimate potential impacts to the North Rockland Central School District.
4. Discuss employment generation resulting from construction and operation of the development.

iii. Proposed Mitigation

1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

J. Historic and Cultural Resources

i. Existing Conditions
1. Identification of potential significant resources based on the New York State Historic Preservation Office (SHPO) Cultural Resource Information System (CRIS).

ii. Potential Impacts
1. Identification of potential impacts to archeological or historic resources, if any.

iii. Proposed Mitigation
1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

K. Construction

i. Potential Impacts
1. Description of anticipated construction activities including site preparation, earthwork, removal of materials off-site, stockpiling, and rock removal, if necessary.
2. Analysis of construction impacts including:
   a. Identification of types of construction equipment,
   b. Construction worker and vehicle traffic,
   c. Duration and hours of operation,
   d. Phasing,
   e. Staging,
   f. Identification of potential impacts from these construction activities such as noise, air quality, stormwater and traffic, including impacts of truck traffic during various times of day.

ii. Mitigation Measures
1. Identify all proposed mitigation for significant adverse environmental impacts identified in the DEIS.

IV. SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE AVOIDED

A. Short-Term Construction Impacts

B. Long-Term Impacts

V. ALTERNATIVES

A. The "No Action" Alternative

B. Conventional Subdivision (existing R-120 Zoning)

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

VII. GROWTH INDUCING ASPECTS

VIII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY

IX. RESOURCES, including LEED Certification Objectives

X. SOURCES AND BIBLIOGRAPHY

XI. APPENDICIES

A. **SEQRA Documentation, including EAF, Positive Declaration, and Scoping Outline**

B. **Relevant Correspondence**

C. **Technical Studies, including SWPPP and Traffic Study**

D. **Detailed Site Plans**

PRELIMINARY SITE PLANS

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

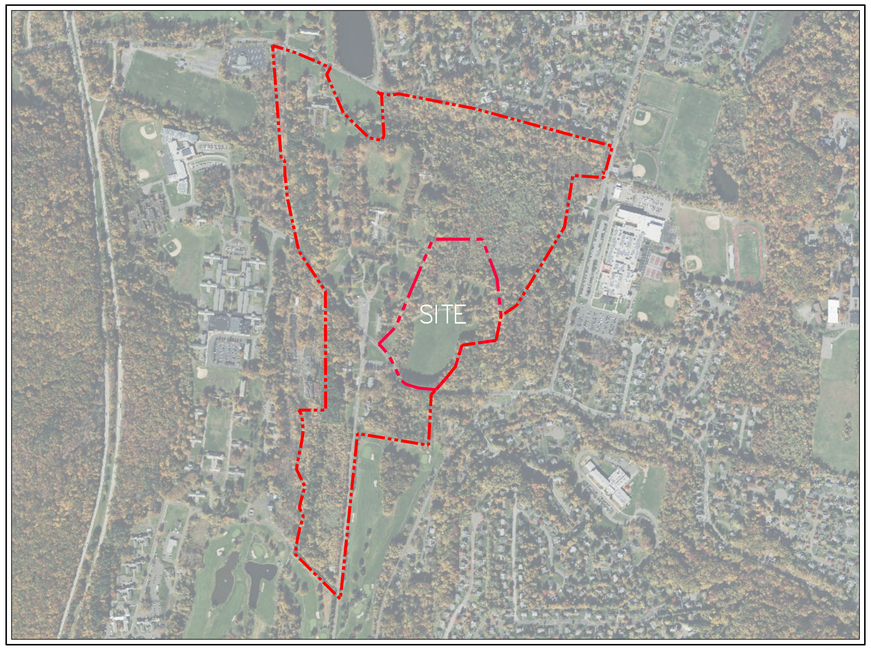
TAX MAP SECTION 19.11 | BLOCK 1 | LOT 1
ROCKLAND COUNTY
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

Site Planner, Civil & Traffic Engineer,
and Landscape Architect:
JMC PLANNING, ENGINEERING, LANDSCAPE ARCHITECTURE &
LAND SURVEYING, PLLC
120 BEDFORD ROAD
ARMONK, NY 10504
(914) 273-5225

Applicant:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

Architect:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

Surveyor:
WARD CARPENTER ENGINEERS INC.
76 MAMARONECK AVE #1
WHITE PLAINS, NY 10601
(914) 949-6000



AREA MAP
SCALE: 1" = 500'

JMC Drawing List:

C-000 COVER SHEET
C-010 EXISTING CONDITIONS MAP
C-100 PRELIMINARY SITE LAYOUT PLAN

ZONING COMPLIANCE CHART

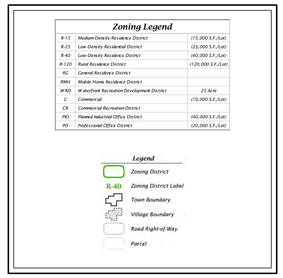
TAX PARCEL: 19.11-1-1
EXISTING ZONE DISTRICT: R-120 - RURAL RESIDENCE DISTRICT
PROPOSED ZONE DISTRICT: LA-17 - LUXURY APARTMENT
PROPOSED USE: RESIDENTIAL APARTMENTS

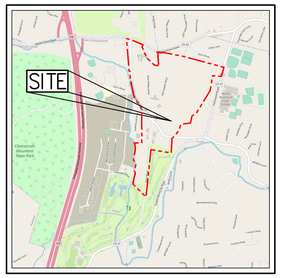
DESCRIPTION		REQUIREMENT (R-120)	REQUIREMENT (LA-17)	PROPOSED
MINIMUM LOT AREA	(S.F./ACRES)	120,000 S.F.	10 ACRES	22.93 ACRES
NET ACREAGE	(ACRES)	-	-	22.41 (1)
MINIMUM LOT WIDTH	(FEET)	200	150	±462
MAXIMUM DENSITY	(UNITS/ACRE)	NA	17	±14
MAXIMUM BUILDING HEIGHT	(STORIES/FEET)	2.5 / 35	40 FEET	±48
MAXIMUM BUILDING COVERAGE	(%)	8	NA	16
FLOOR AREA RATIO		NA	0.6	±0.46
MAXIMUM IMPERVIOUS COVERAGE	(%)	18	50	47.13
MINIMUM BUILDING SETBACKS				
FRONT YARD	(FEET)	50	35	98
SIDE YARD (ONE/TOTAL)	(FEET)	40/100	35/70	45/90
REAR YARD	(FEET)	80	35	70.8
PARKING SPACES				
STANDARD PARKING SPACES	(SPACES)	-	-	368
ACCESSIBLE PARKING SPACES	(SPACES)	-	2% OF TOTAL	30
GARAGE PARKING SPACES	(SPACES)	-	-	130
GARAGE APRON PARKING SPACES	(SPACES)	-	-	130
TOTAL PARKING SPACES	(SPACES)	VARIES	2 PER UNIT/600	658

(1) IN ACCORDANCE WITH SECTION 167-62B DEDUCTIONS FOR STEEP SLOPES WERE TAKEN BASED ON THE FOLLOWING CRITERIA:
SLOPES 20 TO 25% - 25% DEDUCTION 1115S SF X 0.25 = 2789 SF
SLOPES 25 TO 30% - 50% DEDUCTION 6465 SF X 0.50 = 3233 SF
SLOPES 30 TO 35% - 75% DEDUCTION 4428 SF X 0.75 = 3321 SF
SLOPES GREATER THAN 35% - 100% DEDUCTION 13499 SF X 1.00 = 13499 SF
TOTAL DEDUCTION = 22842 SF = 0.52 AC



ZONING MAP
SCALE: NTS
SOURCE: TOWN OF HAVERSTRAW ZONING
ROCKLAND COUNTY, NY
2015





VICINITY MAP
SCALE: NTS
SOURCE: OPENSTREETMAP.ORG

GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY THE CONTRACTOR'S OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.

2. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC, PLLC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC, PLLC.

3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL LOCAL PERMITS REQUIRED.

4. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.

5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.

6. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING PAVEMENT TO REMAIN.

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SUBSURFACE UTILITY LOCATIONS ARE BASED ON A COMPILATION OF FIELD EVIDENCE, AVAILABLE RECORD PLANS AND/OR UTILITY MARK-OUTS. THE LOCATION OR COMPLETENESS OF UNDERGROUND INFORMATION CANNOT BE GUARANTEED. VERIFY THE ACTUAL LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

811 Know what's below. Call before you dig.

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

No.	Revision	Date	By
	Previous Editions Obsolete		

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

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Approved:	DV
Scale:	NOT TO SCALE
Date:	03/27/2024
Project No:	21090
21090-COVER	COVER
COVER.scr	
Drawing No:	C-000

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LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING STORM DRAIN LINE AND SIZE
- EXISTING SANITARY LINE AND SIZE
- EXISTING GAS LINE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN

NOTES

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR RNE REAL ESTATE," PREPARED BY WARD DAVENTER CHANDLER, INC. DATED 10/10/2023.

NO.	REVISION	DATE	BY
	PREVIOUS EDITIONS OBSOLETE		

APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

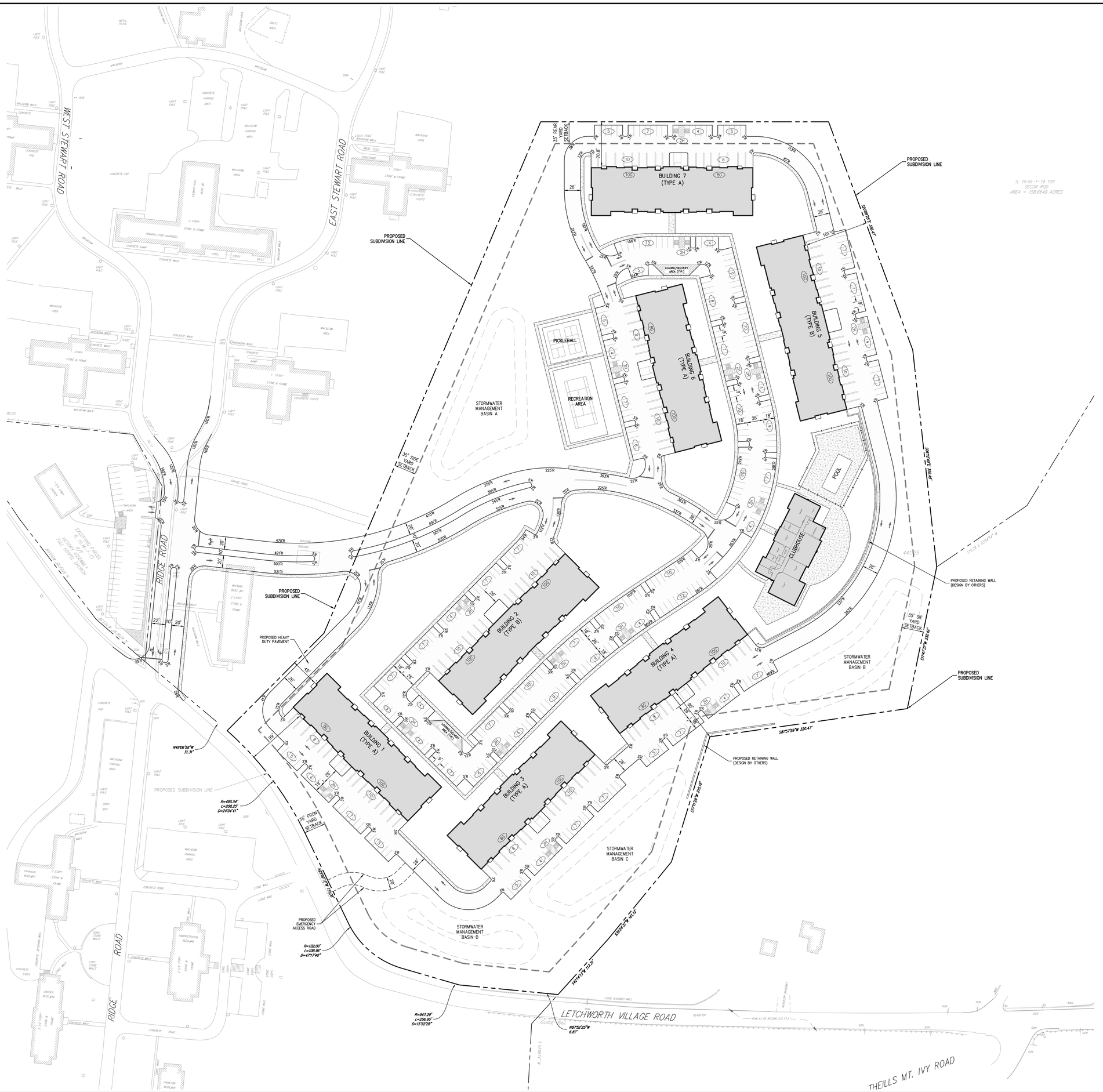
JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

EXISTING CONDITIONS MAP

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW. EXCEPTIONS ARE NOTED IN ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209, SUBSECTION 2.

DRAWN	BMS
APPROVED	DV
SCALE	1" = 50'
DATE	03/27/2024
PROJECT NO.	21090
ZONE/HOME	DEPT
DESIGN	
DRAWING NO.	C-010



LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING SETBACK LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED DROP CURB & RAMP
- PROPOSED SAWCUT LINE
- PROPOSED ACCESSIBLE PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED MONOLITHIC CONCRETE SIDEWALK & CURB
- PROPOSED DROP CURB AND RAMP
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED GUIDE RAIL
- PROPOSED FENCE
- PROPOSED DOUBLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- PROPOSED SINGLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- TRAFFIC SIGN LOCATION & DESIGNATION
- PEDESTRIAN CROSSING
- PROPOSED TREE LINE
- EXISTING FEATURE TO BE REMOVED

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR BNE REAL ESTATE," PREPARED BY WARD CARPENTER ENGINEERS, INC. DATED 09/20/2023.

No.	Revision	Date	By
	Previous Editions Obsolete		

APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

JMC

PRELIMINARY SITE LAYOUT PLAN

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

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Approved:	DV
Scale:	1" = 50'
Date:	03/27/2024
Project No:	21090
21090-LAYOUT	LAY
LAY.scr	
Drawing No:	C-100

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NOT FOR CONSTRUCTION

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY

Appendix B

Relevant Correspondence

Prepared for:

Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer

Lead Agency:

Town of Haverstraw Planning Board

Prepared by:

Project 21090

Date: January 24, 2025
Revised: February 28, 2025

Letchworth Road Residential Development

Letchworth Road
Town of Haverstraw
Rockland County, NY
Tax Map ID 19.11-1-1

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix B
Relevant Correspondence

Lead Agency:
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923
Contact: Mr. Salvatore Corallo Planning Board Chairman
Telephone: (845) 429-2200

Applicant/Owner:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer
Telephone: (973) 488-6402

Date Submitted: January 24, 2025
Revised: February 28, 2025
Date Accepted:
Date of Public Hearing:
Comments Due:

Information Required for Willingness to Serve

Date: _____

Project Name: _____

Project Address (Street Name/Town):_____

Brief Project Description: _____

Size and Length of Main:_____

Number of Hydrants: _____

Number of Domestic Services:_____

Number of Fire Services: _____

Number of Irrigation services:_____

Commercial (Type and Number Square Feet): _____

Residential (Number of Units and Number of Bedrooms per Unit): _____

Contact Name: _____

Contact Address: _____

Contact Number: _____

Contact Email: _____

Projected Demand Summary (if more than one building, attach a Project Demand Summary Table):

1. Domestic Average Daily Demand (gpd): _____ (gpm): _____
2. Domestic Maximum Daily Demand (gpd): _____ (gpm): _____
3. Domestic Peak Hourly Demand (gph): _____ (gpm): _____
4. Lawn Irrigation Demand (gpd): _____ (gpm): _____
5. Required Fire Hydrant Flows (gpm): _____
6. Required Fire Sprinkler System Flows (gpm): _____

Additional Comments:_____

_____

Additional Requirements:

- Attach a detailed project description including detailed project demand calculations and back-up information supporting all project demand calculations.
- Attach a copy of site plan calling out the block and lots and local vicinity with elevations in NGVD 1929, if elevations are not in NGVD 1929, please provide conversion factor.
- This form and backup calculations to be signed and sealed by a NYS P.E.

Rockland County
Ed Day, Rockland County Executive

DEPARTMENT OF PLANNING
Dr. Robert L. Yeager Health Center
50 Sanatorium Road, Building T
Pomona, New York 10970
Phone: (845) 364-3434 Fax: (845) 364-3435

Douglas J. Schuetz
Acting Commissioner

Richard M. Schiafo
Deputy Commissioner

August 9, 2024

Annette Hendrie, Chief Clerk
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923

RE: Letchworth Road Residential Development - Scoping Document

To Chairman Corallo and Planning Board Members:

As an on-going interested agency pursuant to the State Environmental Quality Review Act (SEQRA), our department has reviewed the Scoping Document for the above referenced proposal, dated July 10, 2024. The purpose of the Scoping Document is to identify the issues to be addressed in the Draft Environmental Impact Statement (DEIS) for the development of an approximately 23-acre parcel, known as Letchworth Road Residential Development. The proposed action includes a zone change of approximately 23 acres that is to be subdivided from a 154.6-acre parcel in the R-120 zoning district. A zone change is being requested from R-120 to the LA-17 zoning district for the 23-acre parcel. Seven buildings with a total of 300 multifamily units, 648 parking spaces with 136 spaces located within garages, a clubhouse, pool, and outdoor recreation facilities will be constructed on 22.41 net acres (22.93 gross acres). The remaining 131.67 acres will remain in its present condition. The subject site is located within 500 feet of the town boundary for Stony Point, Letchworth Village, Minisceongo Creek, Willow Grove Road (CR 98), Letchworth Village Road (CR 94), Hammond Road/Thiells Mt Ivy Road (CR 47), and therefore local planning and zoning applications are subject to review by our department, as required by New York State General Municipal Law. After a review of the Scoping document, we have the following comments:

1. The Draft Scope seems to be lacking an analysis of 'Surface and Subsurface Waters'. This department strongly urges the Planning Board to add this to Section III. Existing Environmental Conditions, Anticipated Impacts and Mitigation, particularly because of the site's proximity to the Minisceongo Creek and the on-site federally regulated

wetlands and probable state-regulated wetlands that are part of the Creeks drainage area. We recommend that all surface and subsurface water bodies including wetlands, streams and other natural water features be identified, delineated, presented graphically and discussed. The DEIS should address adverse impacts to water resources and proposed mitigation efforts. This analysis should include the potential for non-point sources of pollution including pesticides, deicing agents and other pollutants that may result from both construction and post-construction from trucks and vehicles that will be using the proposed development.

2. The 'Water Supply and Sanitary Sewage' section should include a map and discussion of the public water supply and sewer systems currently serving the Project Site, including source, capacity and the distribution infrastructure location of connection to each utility system and any offsite improvements required for the project. Additionally, there should be a discussion of the water supply system's ability to serve required fire suppression systems.

3. Water is a scarce resource in Rockland County; thus, proper planning and phasing of this project are critical to supplying the current and future residents of the Villages, Towns, and County with an adequate supply of water. The DEIS should discuss water conservation measures to be implemented as well as wastewater flow mitigation measures, including the potential to reduce inflow & infiltration as an offset for the increased wastewater flows.

4. The Traffic, Transportation, and Parking section seems to be limited in the scope of discussion. This should be expanded to include bicycle, pedestrian traffic, and other modes of transportation as well as all vehicle trips generated and anticipated paths of travel. Additionally, the DEIS should pay special attention to the development's impact along Hammond Road as it relates to North Rockland High School, which may affect the peak hours and level of service of the road during the school year.

5. Traffic Mitigation should discuss:
   - Conceptual plans for potential traffic access improvements.
   - Conceptual plans for roadway and intersection modifications, as required.
   - A construction traffic plan to include routes to be used by trucks and heavy vehicles during construction period relating to road construction or relocation.
   - A discussion of potential demand of public transit services as a result of the proposed project.

6. In addition to traffic and transportation analysis, the DEIS, Section III. Existing Environmental Conditions, Anticipated Impacts and Mitigation should include an analysis on 'Air'/Air Quality. This project will result in an increase in traffic. All of Rockland County is a non-attainment area for 8-Hour Ozone (2015). This summer the County was faced with a significant number of 'bad air quality' days resulting in Air Quality alerts. Ground-level ozone, caused by the chemical reaction of oxides of nitrogen and volatile organic compounds, is harmful to human health and the

environment. One of the sources of these pollutants are automobiles. Potential air quality impacts caused by an increase in traffic should be assessed to make sure the increase in automobile use does not result in exacerbating the ozone problem. The project should be consistent with regulatory efforts to reduce ozone levels.

An analysis should determine the potential impacts of site generated traffic, including all service vehicles, on air quality to determine whether any location should undergo a detailed microscale CO and/or micro particulate analysis. This analysis should follow New York State Department of Transportation procedures. Any potential impacts from construction equipment, generators during construction and after construction, trucks etc. should be included. Discussion of mitigation measures should include the potential of using electric transit, EV Charging infrastructure, and bicycles.

7. The existing site is largely undeveloped and characterized by undisturbed forest. This department strongly recommends that a section be added to III. Existing Environmental Conditions, Anticipated Impacts and Mitigation, on 'Flora and Fauna/Habitat.'

   Based on a review of the Hudson Valley Natural Resources Mapper (https://gisservices.dec.ny.gov/gis/hvnrm/) the entire site is part of a Significant Biodiversity Area (SBA). SBAs are landscape areas in the Hudson River Estuary that contain high concentrations of biodiversity or unique ecological features. These areas contribute to and serve as a framework for conservation partnerships and voluntary protection efforts. One of the most significant threats to biodiversity is habitat destruction, alteration, and fragmentation. Careful consideration should be given to development impacts within an SBA. Proactive planning that avoids or minimizes impact to the habitat of important areas and maintains habitat connections for wildlife movement will contribute to the long-term biodiversity of the region. The DEIS should discuss the possible impacts of this development on the biodiversity of the area, particularly the loss of forested area, the increase of impervious surfaces, and habitat fragmentation, which affects the movement of species to and from and within these sensitive habitats. A pdf titled "An Approach for Conserving Biodiversity in the Hudson River Estuary Corridor" that identifies voluntary, non-regulatory strategies for conserving wildlife and habitat in the region can be found at: https://hudson.dnr.cals.cornell.edu/library

8. The additional section on 'Flora and Fauna/Habitat' should include a biological assessment to evaluate ecological communities and habitats based on site evaluation and available published data. This should include an inventory of potential threatened and endangered species and species of special concern. The impacts to natural communities should be discussed, including the impacts of the segmentation of habitat and its impact on existing plant and animal life. Mitigation measures should include the preservation, relocation and native plantings as well as an assessment of

any tree-cutting during specific time periods. Unavoidable impacts to plant and animal life should be clearly stated.

9. It is likely that a significant number of trees will be removed to accommodate the proposed residential development. Mature trees and mature forested areas remove, absorb and store carbon in wood, leaves, and the soil. When trees and forests are cleared, that carbon is lost. New York's recently adopted Scoping Plan, required as part of The Climate Leadership and Community Protection Act, calls for protecting the ability of forests to serve as carbon sinks and calls for promoting the most effective methods of increasing New York's carbon sequestration, storage, and climate resilience. The protection of trees, minimization of loss of trees, impacts of the loss of forested area, and forest loss mitigation must be addressed. Additionally, the proposal must comply with Chapter 167 Sections 91 and 92 of the Town Code.

10. To comply with Chapter 167 Section 93 of the Town Code, a significant number of trees will likely need to be planted to replace those lost. We recommend the use of trees as well as other plantings that are native to New York to help preserve and promote biodiversity. Native plants are better adapted to the local climate and soils, making them easier to care for, and result in the need for less fertilizer, pesticides, and use of water. They also have deeper root systems that help prevent erosion and increased runoff into local waterbodies. A pdf titled "Native Plants for Gardening and Landscaping Fact Sheets" that lists native species and the environments in which they can grow can be found on the New York State Department of Environmental Conservation's website: https://www.dec.ny.gov/get-involved/living-green/sustainable-landscaping. Native plants should be incorporated in the design of the site from the outset and may be considered as part of the mitigation of potential negative environmental impacts of the development.

11. To help reduce the impact of this development we recommend that the DEIS include an analysis of a reduction of impervious surface. This analysis should consider the use of green infrastructure such as porous pavers or porous concrete for use in the parking areas to replace the use of conventional asphalt. If installed correctly and properly maintained porous pavers have been shown to be effective in helping manage off-site runoff of stormwater. In addition to permeable pavers, other green infrastructure techniques should be considered such as bioswales, native landscaped islands in the parking areas, rain gardens, and rainwater capture. For long term effectiveness of permeable pavers and other green infrastructure techniques it is recommended that the Town and the applicant review Chapter 5 'Green Infrastructure Practices' of the 2015 NYSDEC Stormwater Design Manual.

12. The Section on "Other Utilities and Services" should include:
    - The identification of electric and gas infrastructure in the immediate vicinity of the Project Site.

- Anticipated electricity and gas usage, including information on anticipated issues with supply or need to upgrade existing infrastructure.
- Identify options for the handling of solid waste generated by the Project.
- Solid waste disposal projections and methods for disposal shall be specifically identified. All waste reduction, recycling and/or composting plans shall be discussed in detail for both construction and postconstruction activities.

This section should include an assessment of energy usage and its impact not only on the local utility infrastructure, but also on greenhouse gas emissions. Mitigation measures should include a full evaluation of the potential use of renewable energy sources such as solar, as well as electric vehicle charging infrastructure.

13. As part of the analysis of energy impacts, we encourage an evaluation of greenhouse gas (GHG) emissions be completed. This analysis should include both building and transportation related GHG emissions as well as the loss of mature trees and the associated carbon storage, as referenced in Comment 9. Additionally, the analysis should include a thorough review of energy measures to reduce GHG emissions such as the use of passive building principles, clean heating and cooling alternatives like air or ground source heat pumps, the use of renewable energy such as solar panels, and the installation of EV charging stations.

14. The section on Community Demographics, Facilities and Services should discuss the ability of services such as police and fire to serve the Project Site including site circulation, access, and building height as they relate to emergency services. As previously mentioned, the DEIS should address the need for fire suppression including water storage. The service providers should be contacted regarding possible concerns with the project and any correspondence should be provided as part of the DEIS.

15. The Scoping Document states the DEIS will include a Land Use and Zoning section that will review the applicable Town of Haverstraw and Rockland County planning documents. The Scope references the 2011 County Comprehensive Plan. Please note that in the Fall of 2024 the County will be undertaking an update to this Plan. The County also recently completed a Rockland County Housing Needs Assessment (2024), which will provide a recent snapshot of the housing landscape in the area. Additionally, the County recently completed a Strategic Economic Development Plan and a Multi-jurisdictional Natural Hazard Mitigation Plan Update.

16. This department strongly recommends that a section be added to III. Existing Environmental Conditions, Anticipated Impacts and Mitigation, on 'Noise.' This assessment should look at existing noise levels and evaluate and identify both construction and post construction noise. This discussion should comply with the NYS Department of Environmental Conservation Program Policy entitled, "Assessing and Mitigating Noise Impacts.'

17. A list of involved and interested agencies should be included with the Scoping Document.

Thank you for giving us the opportunity to review the Scoping Document for the Letchworth Road Residential Development project. We respectfully request that the DEIS be forwarded to this department for review.

Very truly yours,

Douglas J. Schuetz
Acting Commissioner of Planning

CC: New York State Office of General Services
Orange & Rockland
Rockland County Department of Health
Rockland County Department of Public Transportation
Rockland County Drainage Agency
Rockland County Highway Department
Rockland County Office of Fire and Emergency Services
Thiells/Roseville Fire Department
Veolia North America

From:	Mike Gamboli
To:	Thomas J. Dagostino; Harley Valenecia-McNally
Cc:	Paul J. Dumont, PE; George T. Behn Jr.- TOH Building Inspector II; James Caris, AICP
Subject:	Re: Letchworth Village Road Project - Town Services, Update
Date:	Thursday, November 21, 2024 1:29:42 PM

Caution: External Sender

Thomas

See answers below in RED

Michael J. Gamboli
Town of Haverstraw
Director of Finance
One Rosman Road
Garnerville, New York 10923
Phone (845)429-2200
Fax (845)429-4701

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On 11/21/2024 10:58 AM, Thomas J. Dagostino wrote:

> Good morning Mike. This is Tom D'Agostino. I work with JMC Planning and Engineering. We are the site design consultants on a project we are designing in Town.
>
> The project is for a residential development to contain seven 3.5 story multi-family buildings. The site is on the existing lot SBL 19.16-1-14. This existing lot is approximately 154.6 acres and our site plan is to subdivide and develop on 22.93 of those acres. There are 300 dwellings proposed in total across the 7 proposed residential buildings.
>
> We are putting together the DEIS for this project and are required to have the following information in this document:
>
> - The current taxes on this lot that are owed to the Town, County, State, & School District Therer are currently no Taxes on this property as it is owned by the Town of Haverstraw
> - An estimation of the taxes that this development may have when fully developed and occupied (300 dwelling units over 7 buildings on 22.93 acres) Need to get from Town Assessor Harley McNally
> - The current Budgets for the Town Police Department, Theills Fire Department, Haverstraw Volunteer Ambulance Corp, Services, and the Town DPW.

Town Police Department 2025 Budget is approximately $24,886,000. The whole General fund 2025 Budget is $40,343,100

The Part Town fund 2025 Budget is $1,980,500.

Town Highway Snow Removal 2025 Budget is $2,251,000 and the Town Highway Road Maintenance 2025 Budget is $2,016,000

Thiells/Roseville Fire Department is $1,635,499 and Moleston Fire District is $441,130

Haverstraw Ambulance 2025 Budget is $555,600 and Paramedic Services is $1,058,265

There are also some Special Districts. The Town's 2025 Adopted Budget is on the Town Website.

-
- Do either you or George have a contact at the North Rockland Central School District that I could ask a few questions as well regarding enrollment and costs of education? Call their Finance Department

If you have any questions don't hesitate to contact me at the JMC Office at (914) 273-5225. Thank you again.

Sincerely,

THOMAS J. D'AGOSTINO
Planner

JMC
SITE DEVELOPMENT CONSULTANTS
120 Bedford Road • Armonk, NY 10504
V 914 273-5225, x263 • F 914 273-2102
www.jmcpllc.com

SITE PLANNING | CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | TRANSPORTATION ENGINEERING | LAND SURVEYING | 3D SCANNING & MODELING

JMC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC | JMC SITE DEVELOPMENT CONSULTANTS, LLC | JOHN MEYER CONSULTING, INC.

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From:	Harley Valenecia-McNally
To:	Thomas J. Dagostino
Cc:	James Caris, AICP; Diego Villareale, PE
Subject:	Re: Letchworth Village Assessment Discussion Follow-up
Date:	Tuesday, December 17, 2024 9:04:01 AM

Caution: External Sender

Tom,

Sorry i misunderstood the question, the 6.5% is my effective tax rate used for valuation. For a "mill" rate for a single family house in unincorporated Haverstraw and in North Rockland School district your looking at approximately 48.27 per thousand. So that house valued at 500k (261,450) would pay 12,620 in just advalorem charges, this does include consumption charges.

On 12/16/2024 4:31 PM, Thomas J. Dagostino wrote:

> Hey Harley. Good to speak with you earlier today.
>
> As we discussed, the Town Mill Rate for single family houses is $6.50 / $1000 of assessed value & the Percentage of Assessment for the Market Rate is 52.29%
>
> As I understand our discussion, for instance if you have a single family property assumed to be worth $500,000.00, the calculation would be as follows:
>
> 1. $500,000 * 0.5229 = $261,450
> 2. 261.45 x $6.50 = an annual tax bill of **$1,699.42**
>
> Can you confirm we are understanding this information and utilizing it accurately? Is the mill rate $6.50 per $1000, or $65 per $1000 of assessed value? Thank you again.
>
> Sincerely,
>
> THOMAS J. D'AGOSTINO
> Planner
>
> JMC

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--
Harley V McNally
Town Assessor
Town of Haverstraw
One Rosman Road
Garnerville, NY 10923

845-942-3717

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

ARCHAEOLOGY COMMENTS

Phase IA/IB Archaeological Survey Recommendation
Project: Letchworth Road Residential Development
PR#: 24PR10811
Date: 12/04/2024

The project is in an archaeologically sensitive area. Therefore, the State Historic Preservation Office/Office of Parks, Recreation and Historic Preservation (SHPO/OPRHP) recommends a Phase IA/IB archaeological survey for components of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. A Phase IA/IB survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's Area of Potential Effects (APE).

If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by SHPO/OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition. Documentation of ground disturbance typically consists of soil bore logs, photos, or previous project plans. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase IA/IB survey.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before archaeological fieldwork is conducted on State-owned land. If any portion of the project includes the lands of New York State, you should contact the SED before initiating survey activities. The SED contact is Christina Rieth and she can be reached at (518) 402-5975 or christina.rieth@nysed.gov. Section 233 permits are not required for projects on private land.

If you have any questions concerning archaeology, please contact Bradley Russell at Bradley.Russell@parks.ny.gov

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

December 20, 2024

Paul Dumont
JMC Planning, Engineering Landscape Architecture, & Land Surveying, PLLC
120 Bedford Road
Armonk, NY 10504

Re: SEQRA
Letchworth Road Residential Development NY
24PR10811

Dear Paul Dumont:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted documents under the State Environmental Quality Review Act (SEQRA) as requested. These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project.

We note that the project site is within the Letchworth Village Historic District, which is eligible for listing in the State and National Registers of Historic Places. Our office, in its capacity as subject-matter expert in historic resources under SEQRA, has reviewed the project description, existing conditions plan, and proposed site plan, submitted to our office on December 03, 2024. In order to continue our review, please provide the following additional information:

1. It is unclear from the submitted Site Plan how the proposed work will visually impact the Historic District. In order to determine whether or not the scale, massing, and location are compatible, submit viewshed studies and a complete set of construction drawings, including elevation drawings.
2. We recommend retaining the existing vegetation and incorporating a vegetative screening buffer into the landscaping plan to minimize the visual impact to the historic resources.

Please note that the Archaeology Unit has requested additional information about this project. Please continue to consult with Bradley Russell who can be reached at Bradley.Russell@parks.ny.gov

Be aware that if this project will involve state or federal permits, funding or licenses it may be subject to review under Section 14.09 of the NYS Parks, Recreation and Historic Preservation Law or Section 106 of the National Historic Preservation Act.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

If you have any questions, you can call or e-mail me at the contact information below.

Sincerely,

Mariana Staines
Historic Site Restoration Coordinator
518-268-2142 | mariana.montesstaines@parks.ny.gov

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY

Appendix C-2-Traffic Data

Prepared for:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer

Lead Agency:
Town of Haverstraw Planning Board

Prepared by:

Project 21090

Date: **January 24, 2025**
Revised: February 28, 2025

Letchworth Road Residential Development

Letchworth Road
Town of Haverstraw
Rockland County, NY
Tax Map ID 19.11-1-1

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix C-2-Traffic Study

Lead Agency:
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923
Contact: Mr. Salvatore Corallo Planning Board Chairman
Telephone: (845) 429-2200

Applicant/Owner:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer
Telephone: (973) 488-6402

Date Submitted: January 24, 2025
Revised: February 28, 2025
Date Accepted:
Date of Public Hearing:
Comments Due:

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G. CAPACITY ANALYSES

PART A

TABLES

TABLE III.H-4

INTERSECTION OPERATIONS-PEAK WEEKDAY AM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
1. Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU	0.09	8.8	A	0.10	8.8	A	0.10	8.8	A
	WESTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/RIGHT	0.36	18.2	C	0.38	19.0	C	0.40	19.6	C
2. Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	WESTBOUND (Willow Grove Rd)	LEFT/THRU	0.04	7.9	A	0.04	7.9	A	0.06	8.0	A
	NORTHBOUND (PIP NB Off-Ramp)	LEFT/RIGHT	0.39	13.7	B	0.41	14.1	B	0.43	14.6	B
3. Willow Grove Road & Letchworth Village Road / Patriot Hills Lane (Signalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.47	13.5	B	0.49	13.7	B	0.50	13.8	B
	WESTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.46	13.1	B	0.48	13.3	B	0.48	13.3	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.26	20.8	C	0.28	21.0	C	0.35	22.2	C
	SOUTHBOUND (Patriot Hills Ln)	LEFT/THRU/RIGHT	0.09	18.4	B	0.09	18.4	B	0.09	18.4	B
	INTERSECTION	COMPOSITE	-	14.3	B	-	14.5	B	-	14.9	B
4. Letchworth Village Road & Storrs Road (Unsignalized)	EASTBOUND (Storrs Rd)	LEFT/THRU	0.03	8.6	A	0.03	8.7	A	0.04	8.8	A
	WESTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Letchworth Vill. Rd)	LEFT/RIGHT	0.73	35.3	E	0.78	40.8	E	0.84	50.3	F
4a. Letchworth Village Road & Storrs Road (Unsignalized with Two-Way Stop on Storrs Road)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.66	28.2	D
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.30	9.3	A
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							-	-	-
4b. Letchworth Village Road & Storrs Road (All-Way Stop)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.47	14.1	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.83	29.9	D
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							0.48	13.9	B
	INTERSECTION	COMPOSITE							-	21.5	C
5. Letchworth Village Road & Ridge Road (Unsignalized)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.55	13.7	B	0.57	14.3	B	0.65	18.1	C
	WESTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.42	11.1	B	0.43	11.5	B	0.50	13.6	B
	NORTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.20	10.4	B	0.21	10.5	B	0.24	11.5	B
	SOUTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.01	8.7	A	0.01	8.8	A	0.19	10.6	B
	INTERSECTION	COMPOSITE	-	12.2	B	-	12.7	B	-	14.9	B

TABLE III.H-4

INTERSECTION OPERATIONS-PEAK WEEKDAY AM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
6-1. Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	0.29	9.7	A						
	WESTBOUND (Suffern Ln)	LEFT/THRU	0.72	14.9	B						
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.57	60.7	E		N/A			N/A	
		RIGHT	0.74	16.6	B						
		COMPOSITE	-	26.1	C						
	INTERSECTION	COMPOSITE	-	16.9	B						
6-2. Suffern Lane & Hammond Road (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU	0.78	28.1	C						
	WESTBOUND (Suffern Ln)	THRU/RIGHT	0.90	43.3	D		N/A			N/A	
	SOUTHBOUND (Hammond Rd)	LEFT/RIGHT	0.84	47.9	D						
	INTERSECTION	COMPOSITE	-	39.6	D						
6a. Letchworth Village Road, Hammond Road, Suffern Lane, & Thiells-Mount Ivy Road (Roundabout)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT				0.40	10.1	B	0.46	11.4	B
	WESTBOUND (Suffern Ln)	LEFT/THRU/RIGHT				0.84	25.3	D	0.85	26.2	D
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU/RIGHT		N/A		0.40	7.9	A	0.41	8.1	A
	SOUTHBOUND (Hammond Rd)	LEFT/THRU/RIGHT				0.46	11.4	B	0.46	11.5	B
	INTERSECTION	COMPOSITE				-	16.3	C	-	16.8	C
7. Suffern Lane / West Railroad Avenue & Main Street / Central Highway (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU/RIGHT	0.68	25.2	C	0.70	26.3	C	0.71	26.5	C
	WESTBOUND (W Railroad Ave)	LEFT	0.29	14.3	B	0.31	14.9	B	0.31	14.8	B
		THRU/RIGHT	0.37	13.9	B	0.37	14.4	B	0.37	14.4	B
		COMPOSITE	-	14.0	B	-	14.6	B	-	14.6	B
	NORTHBOUND (Main St)	LEFT	0.46	17.3	B	0.47	17.6	B	0.48	17.8	B
		THRU/RIGHT	0.78	27.2	C	0.80	28.0	C	0.80	28.4	C
		COMPOSITE	-	24.0	C	-	24.7	C	-	25.1	C
	SOUTHBOUND (Central Hwy)	LEFT	0.28	18.1	B	0.30	18.7	B	0.30	19.1	B
		THRU/RIGHT	0.72	27.2	C	0.70	27.4	C	0.71	27.9	C
		COMPOSITE	-	25.0	C	-	25.3	C	-	25.8	C
	INTERSECTION	COMPOSITE	-	22.3	C	-	23.0	C	-	23.2	C
8. US Route 202 & Palisades Interstate Parkway Southbound On/Off Ramps (Signalized)	EASTBOUND (US 202)	LEFT	0.58	26.7	C	0.59	28.4	C	0.60	28.8	C
		THRU/RIGHT	0.82	19.4	B	0.83	20.4	C	0.83	20.6	C
		COMPOSITE	-	20.6	C	-	21.7	C	-	21.9	C
	WESTBOUND (US 202)	LEFT	0.02	15.2	B	0.02	16.4	B	0.02	16.6	B
		THRU/RIGHT	0.83	16.1	B	0.84	16.7	B	0.84	16.8	B
		COMPOSITE	-	16.1	B	-	16.7	B	-	16.8	B
	NORTHBOUND (Diner Dwy)	LEFT/THRU/RIGHT	0.01	19.7	B	0.01	20.4	C	0.01	20.7	C
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/THRU	0.47	23.1	C	0.50	24.2	C	0.50	24.5	C
		RIGHT	-	-	-	-	-	-	-	-	-
		COMPOSITE	-	23.1	C	-	24.2	C	-	24.5	C
	INTERSECTION	COMPOSITE	-	18.7	B	-	19.6	B	-	19.7	B

TABLE III.H-4

INTERSECTION OPERATIONS-PEAK WEEKDAY AM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
9. US Route 202 & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (US 202)	LEFT	0.34	43.8	D	0.33	43.0	D	0.30	41.2	D
		THRU	0.39	42.8	D	0.42	45.8	D	0.43	48.6	D
		COMPOSITE	-	43.0	D	-	45.4	D	-	47.5	D
	WESTBOUND (US 202)	THRU	0.81	29.5	C	0.87	51.5	D	0.90	66.6	E
		RIGHT	0.10	4.6	A	0.10	5.2	A	0.11	6.2	A
		COMPOSITE	-	26.7	C	-	46.5	D	-	60.1	E
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.90	104.4	F	0.95	115.6	F	1.00	128.6	F
		RIGHT	0.89	56.3	E	0.91	60.7	E	0.93	63.6	E
		COMPOSITE	-	71.0	E	-	77.8	E	-	83.3	F
	INTERSECTION	COMPOSITE	-	47.7	D	-	58.0	E	-	66.0	E
10. US Route 202 & NYS Route 45 / Old County Road (Signalized)	EASTBOUND (US 202)	LEFT	0.03	5.2	A	0.03	5.9	A	0.04	6.7	A
		THRU	0.45	5.6	A	0.49	6.5	A	0.50	7.2	A
		RIGHT	0.33	1.5	A	0.35	1.6	A	0.36	1.7	A
		COMPOSITE	-	4.0	A	-	4.6	A	-	5.0	A
	WESTBOUND (US 202)	LEFT	0.04	46.6	D	0.15	48.6	D	0.16	51.2	D
		THRU/RIGHT	0.97	88.1	F	1.05	107.4	F	1.08	118.2	F
		COMPOSITE	-	87.6	F	-	105.2	F	-	115.7	F
	NORTHBOUND (NY 45)	LEFT	0.28	61.2	E	0.27	61.6	E	0.25	59.5	E
		LEFT/THRU	0.28	61.2	E	0.28	61.6	E	0.25	59.4	E
		RIGHT	0.20	3.5	A	0.19	3.5	A	0.18	3.4	A
		COMPOSITE	-	43.5	D	-	43.8	D	-	42.4	D
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT	0.77	75.9	E	0.78	84.9	F	0.79	89.6	F
	INTERSECTION	COMPOSITE	-	41.3	D	-	49.0	D	-	52.7	D
10a. US Route 202 & NYS Route 45 / Old County Road (Signalized with No Turn on Red on NY Route 45)	EASTBOUND (US 202)	LEFT							0.04	6.7	A
		THRU							0.50	7.2	A
		RIGHT							0.36	1.7	A
		COMPOSITE							-	5.0	A
	WESTBOUND (US 202)	LEFT							0.16	51.2	D
		THRU/RIGHT							1.08	118.2	F
		COMPOSITE		N/A			N/A		-	115.7	F
	NORTHBOUND (NY 45)	LEFT							0.25	59.5	E
		LEFT/THRU							0.25	59.4	E
		RIGHT							0.22	43.0	D
		COMPOSITE							-	54.4	D
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT							0.79	89.6	F
	INTERSECTION	COMPOSITE							-	54.5	D
11. Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp (Unsignalized)	EASTBOUND (PIP NB Off-Ramp)	LEFT	0.51	14.7	B	0.54	15.6	C	0.57	16.7	C
		RIGHT	-	-	-	-	-	-	-	-	-
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
12. Thiells-Mount Ivy Road & Ridge Road (Unsignalized)	EASTBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.15	9.5	A	0.16	9.6	A	0.17	9.7	A
	WESTBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Ridge Rd)	LEFT/RIGHT	0.34	18.3	C	0.36	18.9	C	0.42	20.6	C
13. Thiells-Mount Ivy Road & Rosman Road (Unsignalized)	WESTBOUND (Rosman Rd)	LEFT/RIGHT	0.89	59.1	F	1.01	86.1	F	1.05	99.8	F
	NORTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.12	8.7	A	0.11	8.3	A	0.12	8.3	A

Notes:

(1) V/C represents volume/capacity ratio

(2) Delay is average seconds delay per vehicle

(3) LOS represents level of service

TABLE III.H-5

INTERSECTION OPERATIONS-PEAK WEEKDAY SCHOOL PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
1. Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU	0.03	8.4	A	0.03	8.5	A	0.03	8.5	A
	WESTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/RIGHT	0.14	12.5	B	0.15	12.7	B	0.20	13.5	B
2. Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	WESTBOUND (Willow Grove Rd)	LEFT/THRU	0.07	7.8	A	0.07	7.8	A	0.09	8.0	A
	NORTHBOUND (PIP NB Off-Ramp)	LEFT/RIGHT	0.60	17.3	C	0.63	18.2	C	0.67	20.3	C
3. Willow Grove Road & Letchworth Village Road / Patriot Hills Lane (Signalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.51	13.9	B	0.53	14.2	B	0.56	14.8	B
	WESTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.39	12.2	B	0.40	12.3	B	0.40	12.3	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.57	26.3	C	0.59	26.9	C	0.63	28.2	C
	SOUTHBOUND (Patriot Hills Ln)	LEFT/THRU/RIGHT	0.09	18.4	B	0.09	18.4	B	0.09	18.4	B
	INTERSECTION	COMPOSITE	-	16.5	B	-	16.9	B	-	17.5	B
4. Letchworth Village Road & Storrs Road (Unsignalized)	EASTBOUND (Storrs Rd)	LEFT/THRU	0.14	8.4	A	0.14	8.5	A	0.15	8.6	A
	WESTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Letchworth Vill. Rd)	LEFT/RIGHT	0.41	24.0	C	0.46	26.2	D	0.62	34.9	D
4a. Letchworth Village Road & Storrs Road (Unsignalized with Two-Way Stop on Storrs Road)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.66	25.7	D
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.08	8.4	A
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							-	-	-
4b. Letchworth Village Road & Storrs Road (All-Way Stop)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.48	13.5	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.56	16.6	C
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							0.30	11.1	B
	INTERSECTION	COMPOSITE							-	14.2	B
5. Letchworth Village Road & Ridge Road (Unsignalized)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.30	9.0	A	0.31	9.2	A	0.41	11.0	B
	WESTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.20	8.7	A	0.21	8.8	A	0.30	10.0	A
	NORTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.17	9.2	A	0.17	9.3	A	0.24	10.4	B
	SOUTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.01	9.5	A	0.01	9.5	A	0.16	11.3	B
	INTERSECTION	COMPOSITE	-	9.0	A	-	9.1	A	-	10.6	B

TABLE III.H-5

INTERSECTION OPERATIONS-PEAK WEEKDAY SCHOOL PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
6-1. Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	0.15	10.0	A						
	WESTBOUND (Suffern Ln)	LEFT/THRU	0.44	6.8	A						
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.30	45.4	D		N/A			N/A	
		RIGHT	0.85	17.3	B						
		COMPOSITE	-	19.7	B						
	INTERSECTION	COMPOSITE	-	13.5	B						
6-2. Suffern Lane & Hammond Road (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU	0.68	11.2	B						
	WESTBOUND (Suffern Ln)	THRU/RIGHT	0.51	23.0	C		N/A			N/A	
	SOUTHBOUND (Hammond Rd)	LEFT/RIGHT	0.79	45.0	D						
	INTERSECTION	COMPOSITE	-	20.9	C						
6a. Letchworth Village Road, Hammond Road, Suffern Lane, & Thiells-Mount Ivy Road (Roundabout)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT				0.22	6.7	A	0.26	7.2	A
	WESTBOUND (Suffern Ln)	LEFT/THRU/RIGHT				0.41	7.8	A	0.44	8.4	A
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU/RIGHT		N/A		0.59	11.0	B	0.63	12.0	B
	SOUTHBOUND (Hammond Rd)	LEFT/THRU/RIGHT				0.28	7.0	A	0.30	7.5	A
	INTERSECTION	COMPOSITE				-	8.9	A	-	9.6	A
7. Suffern Lane / West Railroad Avenue & Main Street / Central Highway (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU/RIGHT	0.55	25.6	C	0.56	26.7	C	0.57	26.9	C
	WESTBOUND (W Railroad Ave)	LEFT	0.36	15.8	B	0.39	16.4	B	0.39	16.4	B
		THRU/RIGHT	0.23	13.3	B	0.23	13.8	B	0.24	13.8	B
		COMPOSITE	-	14.8	B	-	15.3	B	-	15.3	B
	NORTHBOUND (Main St)	LEFT	0.31	14.1	B	0.32	14.5	B	0.33	14.7	B
		THRU/RIGHT	0.76	23.6	C	0.78	24.5	C	0.78	24.7	C
		COMPOSITE	-	21.1	C	-	21.9	C	-	22.1	C
	SOUTHBOUND (Central Hwy)	LEFT	0.34	14.8	B	0.36	15.3	B	0.36	15.5	B
		THRU/RIGHT	0.61	20.7	C	0.61	21.1	C	0.61	21.5	C
		COMPOSITE	-	19.1	B	-	19.5	B	-	19.9	B
	INTERSECTION	COMPOSITE	-	19.7	B	-	20.3	C	-	20.5	C
8. US Route 202 & Palisades Interstate Parkway Southbound On/Off Ramps (Signalized)	EASTBOUND (US 202)	LEFT	0.48	20.2	C	0.49	21.6	C	0.49	21.7	C
		THRU/RIGHT	0.84	14.1	B	0.85	14.9	B	0.85	15.0	B
		COMPOSITE	-	15.1	B	-	16.0	B	-	16.1	B
	WESTBOUND (US 202)	LEFT	0.01	21.7	C	0.01	23.9	C	0.01	24.4	C
		THRU/RIGHT	0.80	16.6	B	0.81	17.8	B	0.81	18.0	B
		COMPOSITE	-	16.7	B	-	17.8	B	-	18.0	B
	NORTHBOUND (Diner Dwy)	LEFT/THRU/RIGHT	0.04	19.9	B	0.04	20.5	C	0.04	20.8	C
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/THRU	0.41	22.4	B	0.45	23.5	C	0.45	23.8	C
		RIGHT	-	-	-	-	-	-	-	-	-
		COMPOSITE	-	22.4	C	-	23.5	C	-	23.8	C
	INTERSECTION	COMPOSITE	-	16.3	B	-	17.4	B	-	17.5	B

TABLE III.H-5

INTERSECTION OPERATIONS-PEAK WEEKDAY SCHOOL PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
9. US Route 202 & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (US 202)	LEFT	0.55	54.9	D	0.56	57.0	E	0.60	59.0	E
		THRU	0.53	51.2	D	0.54	52.1	D	0.54	52.1	D
		COMPOSITE	-	51.9	D	-	53.0	D	-	53.4	D
	WESTBOUND (US 202)	THRU	0.55	11.5	B	0.57	12.0	B	0.57	12.1	B
		RIGHT	0.14	4.6	A	0.14	4.5	A	0.15	4.6	A
		COMPOSITE	-	10.1	B	-	10.4	B	-	10.5	B
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	1.19	176.9	F	1.34	228.6	F	1.35	233.2	F
		RIGHT	0.70	29.0	C	0.74	34.3	C	0.77	37.0	D
		COMPOSITE	-	84.6	F	-	109.7	F	-	111.5	F
	INTERSECTION	COMPOSITE	-	51.5	D	-	61.2	E	-	62.5	E
9a. US Route 202 & Thiells-Mount Ivy Road (Signalized with Timing Modifications)	EASTBOUND (US 202)	LEFT							0.73	69.0	E
		THRU							0.49	44.2	D
		COMPOSITE							-	48.9	D
	WESTBOUND (US 202)	THRU							0.57	12.4	B
		RIGHT		N/A			N/A		0.14	4.4	A
		COMPOSITE							-	10.7	B
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT							1.16	162.4	F
		RIGHT							0.79	37.6	D
		COMPOSITE							-	84.9	F
	INTERSECTION	COMPOSITE							-	51.1	D
10. US Route 202 & NYS Route 45 / Old County Road (Signalized)	EASTBOUND (US 202)	LEFT	0.05	6.1	A	0.05	6.4	A	0.05	6.4	A
		THRU	0.67	12.7	B	0.72	15.4	B	0.72	15.5	B
		RIGHT	0.34	2.1	A	0.34	2.2	A	0.35	2.3	A
		COMPOSITE	-	9.3	A	-	11.3	B	-	11.4	B
	WESTBOUND (US 202)	LEFT	0.33	61.0	E	0.42	63.4	E	0.42	63.5	E
		THRU/RIGHT	0.87	82.1	F	0.87	81.0	F	0.87	81.1	F
		COMPOSITE	-	80.5	F	-	79.3	E	-	79.5	E
	NORTHBOUND (NY 45)	LEFT	0.31	61.3	E	0.32	63.9	E	0.33	64.0	E
		LEFT/THRU	0.30	61.1	E	0.32	63.7	E	0.32	63.8	E
		RIGHT	0.35	5.5	A	0.36	5.5	A	0.36	5.5	A
		COMPOSITE	-	35.5	D	-	36.9	D	-	37.3	D
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT	0.46	39.8	D	0.45	38.8	D	0.45	38.9	D
	INTERSECTION	COMPOSITE	-	33.6	C	-	34.7	C	-	34.8	C
10a. US Route 202 & NYS Route 45 / Old County Road (Signalized with Timing Modifications and No Turn on Red on NY Route 45)	EASTBOUND (US 202)	LEFT							0.04	4.5	A
		THRU							0.64	9.2	A
		RIGHT							0.31	1.6	A
		COMPOSITE							-	6.9	A
	WESTBOUND (US 202)	LEFT							0.38	50.8	D
		THRU/RIGHT							0.70	58.6	E
		COMPOSITE		N/A			N/A		-	57.9	E
	NORTHBOUND (NY 45)	LEFT							0.37	65.4	E
		LEFT/THRU							0.37	65.1	E
		RIGHT							0.55	54.0	D
		COMPOSITE							-	60.1	E
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT							0.79	80.3	F
	INTERSECTION	COMPOSITE							-	33.6	C
11. Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp (Unsignalized)	EASTBOUND (PIP NB Off-Ramp)	LEFT	0.75	20.4	C	0.81	24.2	C	0.84	27.1	D
		RIGHT	-	-	-	-	-	-	-	-	-
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-

TABLE III.H-5

INTERSECTION OPERATIONS-PEAK WEEKDAY SCHOOL PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
12. Thiells-Mount Ivy Road & Ridge Road (Unsignalized)	EASTBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.08	8.6	A	0.08	8.7	A	0.11	8.9	A
	WESTBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Ridge Rd)	LEFT/RIGHT	0.24	14.8	B	0.25	15.1	C	0.30	16.1	C
13. Thiells-Mount Ivy Road & Rosman Road (Unsignalized)	WESTBOUND (Rosman Rd)	LEFT/RIGHT	1.11	130.1	F	1.23	177.0	F	1.32	215.2	F
	NORTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.14	10.3	B	0.16	10.4	B	0.17	10.6	B

Notes:

(1) V/C represents volume/capacity ratio

(2) Delay is average seconds delay per vehicle

(3) LOS represents level of service

TABLE III.H-6

INTERSECTION OPERATIONS-PEAK WEEKDAY ROADWAY PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
1. Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU	0.04	8.6	A	0.04	8.7	A	0.04	8.7	A
	WESTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/RIGHT	0.18	14.1	B	0.19	14.4	B	0.25	15.8	C
2. Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	WESTBOUND (Willow Grove Rd)	LEFT/THRU	0.08	8.0	A	0.09	8.1	A	0.10	8.2	A
	NORTHBOUND (PIP NB Off-Ramp)	LEFT/RIGHT	0.69	22.0	C	0.72	23.8	C	0.76	27.6	D
3. Willow Grove Road & Letchworth Village Road / Patriot Hills Lane (Signalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.61	15.8	B	0.63	16.3	B	0.67	17.1	B
	WESTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.50	13.6	B	0.52	13.9	B	0.55	14.2	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.50	24.8	C	0.52	25.2	C	0.56	26.2	C
	SOUTHBOUND (Patriot Hills Ln)	LEFT/THRU/RIGHT	0.11	18.6	B	0.11	18.6	B	0.11	18.6	B
	INTERSECTION	COMPOSITE	-	16.9	B	-	17.2	B	-	18.0	B
4. Letchworth Village Road & Storrs Road (Unsignalized)	EASTBOUND (Storrs Rd)	LEFT/THRU	0.03	8.1	A	0.03	8.1	A	0.03	8.2	A
	WESTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Letchworth Vill. Rd)	LEFT/RIGHT	0.27	13.0	B	0.29	13.4	B	0.37	14.8	B
4a. Letchworth Village Road & Storrs Road (Unsignalized with Two-Way Stop on Storrs Road)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.24	12.3	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.03	7.8	A
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							-	-	-
4b. Letchworth Village Road & Storrs Road (All-Way Stop)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.22	9.5	A
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.46	11.8	B
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							0.28	9.6	A
	INTERSECTION	COMPOSITE							-	10.6	B
5. Letchworth Village Road & Ridge Road (Unsignalized)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.28	8.9	A	0.30	9.1	A	0.38	10.5	B
	WESTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.22	8.9	A	0.23	9.0	A	0.30	10.0	A
	NORTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.17	9.1	A	0.17	9.2	A	0.23	10.0	A
	SOUTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.01	7.7	A	0.01	7.7	A	0.11	8.9	A
	INTERSECTION	COMPOSITE	-	8.9	A	-	9.1	A	-	10.1	B

TABLE III.H-6

INTERSECTION OPERATIONS-PEAK WEEKDAY ROADWAY PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
6-1. Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	0.14	9.4	A						
	WESTBOUND (Suffern Ln)	LEFT/THRU	0.41	6.0	A						
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.31	46.8	D		N/A			N/A	
		RIGHT	0.84	17.4	B						
		COMPOSITE	-	20.1	C						
	INTERSECTION	COMPOSITE	-	13.3	B						
6-2. Suffern Lane & Hammond Road (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU	0.67	10.8	B						
	WESTBOUND (Suffern Ln)	THRU/RIGHT	0.50	22.9	C		N/A			N/A	
	SOUTHBOUND (Hammond Rd)	LEFT/RIGHT	0.79	44.8	D						
	INTERSECTION	COMPOSITE	-	20.6	C						
6a. Letchworth Village Road, Hammond Road, Suffern Lane, & Thiells-Mount Ivy Road (Roundabout)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT				0.22	6.6	A	0.25	7.0	A
	WESTBOUND (Suffern Ln)	LEFT/THRU/RIGHT				0.40	7.7	A	0.43	8.2	A
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU/RIGHT		N/A		0.59	10.8	B	0.62	11.7	B
	SOUTHBOUND (Hammond Rd)	LEFT/THRU/RIGHT				0.28	6.9	A	0.30	7.4	A
	INTERSECTION	COMPOSITE				-	8.8	A	-	9.4	A
7. Suffern Lane / West Railroad Avenue & Main Street / Central Highway (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU/RIGHT	0.75	33.1	C	0.77	36.1	D	0.77	36.6	D
	WESTBOUND (W Railroad Ave)	LEFT	0.44	17.8	B	0.48	18.7	B	0.48	18.7	B
		THRU/RIGHT	0.24	15.5	B	0.25	16.2	B	0.26	16.3	B
		COMPOSITE	-	16.8	B	-	17.7	B	-	17.7	B
	NORTHBOUND (Main St)	LEFT	0.28	19.1	B	0.29	20.0	B	0.30	20.2	C
		THRU/RIGHT	0.84	34.3	C	0.86	37.9	D	0.86	38.5	D
		COMPOSITE	-	31.4	C	-	34.5	C	-	34.9	C
	SOUTHBOUND (Central Hwy)	LEFT	0.46	21.2	C	0.50	22.6	C	0.50	22.9	C
		THRU/RIGHT	0.54	25.6	C	0.54	26.7	C	0.54	27.1	C
		COMPOSITE	-	24.3	C	-	25.5	C	-	25.9	C
	INTERSECTION	COMPOSITE	-	26.7	C	-	28.8	C	-	29.1	C
8. US Route 202 & Palisades Interstate Parkway Southbound On/Off Ramps (Signalized)	EASTBOUND (US 202)	LEFT	0.42	19.4	B	0.43	20.7	C	0.42	20.8	C
		THRU/RIGHT	0.84	14.5	B	0.85	15.3	B	0.85	15.4	B
		COMPOSITE	-	15.3	B	-	16.1	B	-	16.2	B
	WESTBOUND (US 202)	LEFT	0.01	22.0	C	0.01	23.9	C	0.01	24.3	C
		THRU/RIGHT	0.79	17.2	B	0.81	18.4	B	0.81	18.6	B
		COMPOSITE	-	17.2	B	-	18.4	B	-	18.6	B
	NORTHBOUND (Diner Dwy)	LEFT/THRU/RIGHT	0.01	19.1	B	0.01	19.6	B	0.01	19.9	B
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/THRU	0.43	22.1	C	0.47	23.1	C	0.47	23.4	C
		RIGHT	-	-	-	-	-	-	-	-	-
		COMPOSITE	-	22.1	C	-	23.1	C	-	23.4	C
	INTERSECTION	COMPOSITE	-	16.6	B	-	17.7	B	-	17.8	B

TABLE III.H-6

INTERSECTION OPERATIONS-PEAK WEEKDAY ROADWAY PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
9. US Route 202 & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (US 202)	LEFT	0.64	60.6	E	0.67	65.1	E	0.70	67.8	E
		THRU	0.50	48.9	D	0.53	51.3	D	0.53	51.5	D
		COMPOSITE	-	51.5	D	-	54.3	D	-	55.2	E
	WESTBOUND (US 202)	THRU	0.56	11.3	B	0.59	12.1	B	0.59	12.2	B
		RIGHT	0.14	4.5	A	0.14	4.4	A	0.15	4.4	A
		COMPOSITE	-	9.9	A	-	10.5	B	-	10.6	B
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.79	96.2	F	0.82	100.5	F	0.82	100.5	F
		RIGHT	0.68	27.9	C	0.71	32.6	C	0.74	34.8	C
		COMPOSITE	-	46.9	D	-	52.6	D	-	53.8	D
	INTERSECTION	COMPOSITE	-	36.7	D	-	39.8	D	-	40.7	D
9a. US Route 202 & Thiells-Mount Ivy Road (Signalized with Timing Modifications)	EASTBOUND (US 202)	LEFT							0.82	78.1	E
		THRU							0.45	40.8	D
		COMPOSITE							-	49.2	D
	WESTBOUND (US 202)	THRU							0.57	11.6	B
		RIGHT		N/A			N/A		0.14	4.2	A
		COMPOSITE							-	10.0	B
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT							0.84	98.5	F
		RIGHT							0.78	37.4	D
		COMPOSITE							-	55.0	E
	INTERSECTION	COMPOSITE							-	38.8	D
10. US Route 202 & NYS Route 45 / Old County Road (Signalized)	EASTBOUND (US 202)	LEFT	0.03	4.1	A	0.03	4.8	A	0.03	5.0	A
		THRU	0.06	8.2	A	0.63	9.9	A	0.63	9.9	A
		RIGHT	0.32	1.5	A	0.33	1.6	A	0.33	1.6	A
		COMPOSITE	-	5.8	A	-	7.1	A	-	7.2	A
	WESTBOUND (US 202)	LEFT	0.30	60.7	E	0.41	65.2	E	0.41	65.3	E
		THRU/RIGHT	0.85	78.3	E	0.86	80.2	F	0.87	80.8	F
		COMPOSITE	-	77.3	E	-	79.0	E	-	79.6	E
	NORTHBOUND (NY 45)	LEFT	0.28	59.9	E	0.31	63.6	E	0.31	63.9	E
		LEFT/THRU	0.28	59.9	E	0.30	63.5	E	0.31	63.9	E
		RIGHT	0.34	5.7	A	0.36	5.7	A	0.36	5.7	A
		COMPOSITE	-	34.6	C	-	36.5	D	-	37.1	D
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT	0.43	47.4	D	0.42	46.6	D	0.42	46.5	D
	INTERSECTION	COMPOSITE	-	32.3	C	-	33.8	C	-	34.1	C
10a. US Route 202 & NYS Route 45 / Old County Road (Signalized with Timing Modifications and No Turn on Red on NY Route 45)	EASTBOUND (US 202)	LEFT							0.02	3.1	A
		THRU							0.57	6.9	A
		RIGHT							0.30	1.2	A
		COMPOSITE							-	5.0	A
	WESTBOUND (US 202)	LEFT							0.26	45.4	D
		THRU/RIGHT							0.67	54.7	D
		COMPOSITE		N/A			N/A		-	54.0	D
	NORTHBOUND (NY 45)	LEFT							0.34	62.2	E
		LEFT/THRU							0.34	62.1	E
		RIGHT							0.53	51.2	D
		COMPOSITE							-	57.1	E
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT							0.80	91.9	F
	INTERSECTION	COMPOSITE							-	32.1	C
11. Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp (Unsignalized)	EASTBOUND (PIP NB Off-Ramp)	LEFT	0.53	11.6	B	0.58	12.5	B	0.65	14.7	B
		RIGHT	-	-	-	-	-	-	-	-	-
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-

TABLE III.H-6

INTERSECTION OPERATIONS-PEAK WEEKDAY ROADWAY PM HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
12. Thiells-Mount Ivy Road & Ridge Road (Unsignalized)	EASTBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.07	8.6	A	0.07	8.6	A	0.10	8.8	A
	WESTBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Ridge Rd)	LEFT/RIGHT	0.24	14.3	B	0.25	14.6	B	0.29	15.5	C
13. Thiells-Mount Ivy Road & Rosman Road (Unsignalized)	WESTBOUND (Rosman Rd)	LEFT/RIGHT	1.21	165.7	F	1.36	228.1	F	1.44	264.4	F
	NORTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.16	10.0	A	0.18	10.2	B	0.18	10.3	B

Notes:

(1) V/C represents volume/capacity ratio

(2) Delay is average seconds delay per vehicle

(3) LOS represents level of service

TABLE III.H-7

INTERSECTION OPERATIONS-PEAK SATURDAY MIDDAY HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
1. Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU	0.04	8.2	A	0.04	8.3	A	0.04	8.3	A
	WESTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/RIGHT	0.08	11.6	B	0.09	11.9	B	0.12	12.2	B
2. Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps (Unsignalized)	EASTBOUND (Willow Grove Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	WESTBOUND (Willow Grove Rd)	LEFT/THRU	0.03	7.5	A	0.03	7.6	A	0.04	7.6	A
	NORTHBOUND (PIP NB Off-Ramp)	LEFT/RIGHT	0.39	12.5	B	0.40	12.8	B	0.42	13.4	B
3. Willow Grove Road & Letchworth Village Road / Patriot Hills Lane (Signalized)	EASTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.34	11.7	B	0.36	11.9	B	0.38	12.1	B
	WESTBOUND (Willow Grove Rd)	LEFT/THRU/RIGHT	0.44	12.8	B	0.45	12.9	B	0.46	13.0	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.25	20.3	C	0.26	20.5	C	0.31	21.1	C
	SOUTHBOUND (Patriot Hills Ln)	LEFT/THRU/RIGHT	0.06	18.1	B	0.06	18.1	B	0.06	18.1	B
	INTERSECTION	COMPOSITE	-	13.7	B	-	13.8	B	-	14.1	B
4. Letchworth Village Road & Storrs Road (Unsignalized)	EASTBOUND (Storrs Rd)	LEFT/THRU	0.00	7.5	A	0.00	7.5	A	0.00	7.5	A
	WESTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Letchworth Vill. Rd)	LEFT/RIGHT	0.16	9.7	A	0.17	9.8	A	0.20	10.0	B
4a. Letchworth Village Road & Storrs Road (Unsignalized with Two-Way Stop on Storrs Road)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.01	10.3	B
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.00	7.5	A
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							-	-	-
4b. Letchworth Village Road & Storrs Road (All-Way Stop)	EASTBOUND (Storrs Rd)	LEFT/RIGHT							0.00	7.6	A
	NORTHBOUND (Letchworth Vill. Rd)	LEFT/THRU		N/A			N/A		0.20	8.1	A
	SOUTHBOUND (Letchworth Vill. Rd)	THRU/RIGHT							0.20	8.2	A
	INTERSECTION	COMPOSITE							-	8.1	A
5. Letchworth Village Road & Ridge Road (Unsignalized)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.16	7.8	A	0.17	7.9	A	0.22	8.6	A
	WESTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT	0.14	8.5	A	0.14	8.6	A	0.19	9.1	A
	NORTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.07	8.1	A	0.07	8.1	A	0.10	8.5	A
	SOUTHBOUND (Ridge Rd)	LEFT/THRU/RIGHT	0.02	7.4	A	0.02	7.5	A	0.11	8.2	A
	INTERSECTION	COMPOSITE	-	8.1	A	-	8.1	A	-	8.7	A

TABLE III.H-7

INTERSECTION OPERATIONS-PEAK SATURDAY MIDDAY HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
6-1. Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (Letchworth Vill. Rd)	THRU/RIGHT	0.09	7.3	A						
	WESTBOUND (Suffern Ln)	LEFT/THRU	0.26	4.1	A						
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.26	49.2	D		N/A			N/A	
		RIGHT	0.80	18.6	B						
		COMPOSITE	-	21.4	C						
	INTERSECTION	COMPOSITE	-	12.9	B						
6-2. Suffern Lane & Hammond Road (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU	0.34	4.9	A						
	WESTBOUND (Suffern Ln)	THRU/RIGHT	0.33	19.3	B		N/A			N/A	
	SOUTHBOUND (Hammond Rd)	LEFT/RIGHT	0.69	35.9	D						
	INTERSECTION	COMPOSITE	-	14.9	B						
6a. Letchworth Village Road, Hammond Road, Suffern Lane, & Thiells-Mount Ivy Road (Roundabout)	EASTBOUND (Letchworth Vill. Rd)	LEFT/THRU/RIGHT				0.12	4.6	A	0.14	4.9	A
	WESTBOUND (Suffern Ln)	LEFT/THRU/RIGHT				0.23	5.1	A	0.24	5.3	A
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU/RIGHT		N/A		0.33	6.2	A	0.34	6.5	A
	SOUTHBOUND (Hammond Rd)	LEFT/THRU/RIGHT				0.15	4.7	A	0.16	4.9	A
	INTERSECTION	COMPOSITE				-	5.4	A	-	5.7	A
7. Suffern Lane / West Railroad Avenue & Main Street / Central Highway (Signalized)	EASTBOUND (Suffern Ln)	LEFT/THRU/RIGHT	0.55	29.3	C	0.57	30.9	C	0.58	31.0	C
	WESTBOUND (W Railroad Ave)	LEFT	0.45	18.4	B	0.48	19.2	B	0.49	19.2	B
		THRU/RIGHT	0.20	15.0	B	0.21	15.6	B	0.21	15.6	B
		COMPOSITE	-	17.2	B	-	18.0	B	-	18.0	B
	NORTHBOUND (Main St)	LEFT	0.11	12.8	B	0.11	13.2	B	0.12	13.3	B
		THRU/RIGHT	0.80	24.4	C	0.82	25.4	C	0.82	25.6	C
		COMPOSITE	-	23.1	C	-	24.1	C	-	24.3	C
	SOUTHBOUND (Central Hwy)	LEFT	0.21	14.7	B	0.23	15.4	B	0.23	15.5	B
		THRU/RIGHT	0.40	18.1	B	0.40	18.5	B	0.40	18.6	B
		COMPOSITE	-	17.4	B	-	17.8	B	-	17.9	B
	INTERSECTION	COMPOSITE	-	21.0	C	-	21.9	C	-	22.0	C
8. US Route 202 & Palisades Interstate Parkway Southbound On/Off Ramps (Signalized)	EASTBOUND (US 202)	LEFT	0.25	16.0	B	0.26	16.9	B	0.26	17.0	B
		THRU/RIGHT	0.76	13.9	B	0.78	14.6	B	0.78	14.6	B
		COMPOSITE	-	14.2	B	-	14.8	B	-	14.9	B
	WESTBOUND (US 202)	LEFT	0.03	16.3	B	0.03	17.5	B	0.03	17.6	B
		THRU/RIGHT	0.71	15.1	B	0.73	15.9	B	0.73	15.9	B
		COMPOSITE	-	15.2	B	-	15.9	B	-	16.0	B
	NORTHBOUND (Diner Dwy)	LEFT/THRU/RIGHT	0.06	15.3	B	0.06	15.4	B	0.06	15.5	B
	SOUTHBOUND (PIP SB Off-Ramp)	LEFT/THRU	0.40	17.3	B	0.43	17.9	B	0.43	18.0	B
		RIGHT	-	-	-	-	-	-	-	-	-
		COMPOSITE	-	17.3	B	-	17.9	B	-	18.0	B
	INTERSECTION	COMPOSITE	-	15.0	B	-	15.7	B	-	15.7	B

TABLE III.H-7

INTERSECTION OPERATIONS-PEAK SATURDAY MIDDAY HOUR

INTERSECTION	APPROACH	LANE GROUP	2024 EXISTING			2029 NO BUILD			2029 BUILD		
			V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)	V/C(1)	DELAY(2)	LOS(3)
9. US Route 202 & Thiells-Mount Ivy Road (Signalized)	EASTBOUND (US 202)	LEFT	0.48	59.4	E	0.45	57.4	E	0.45	57.2	E
		THRU	0.34	40.5	D	0.38	43.1	D	0.37	42.8	D
		COMPOSITE	-	42.9	D	-	44.9	D	-	44.7	D
	WESTBOUND (US 202)	THRU	0.52	7.5	A	0.56	7.2	A	0.56	10.0	B
		RIGHT	0.09	1.8	A	0.09	1.8	A	0.09	2.1	A
		COMPOSITE	-	6.6	A	-	8.5	A	-	8.8	A
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT	0.79	90.4	F	0.84	96.9	F	0.86	100.4	F
		RIGHT	0.46	14.3	B	0.47	18.0	B	0.50	20.8	C
		COMPOSITE	-	47.5	D	-	53.8	D	-	55.6	E
	INTERSECTION	COMPOSITE	-	29.7	C	-	32.9	C	-	33.8	C
10. US Route 202 & NYS Route 45 / Old County Road (Signalized)	EASTBOUND (US 202)	LEFT	0.02	3.6	A	0.02	4.6	A	0.02	4.8	A
		THRU	0.49	6.0	A	0.54	7.1	A	0.54	7.5	A
		RIGHT	0.19	1.2	A	0.20	0.8	A	0.20	1.4	A
		COMPOSITE	-	4.7	A	-	5.9	A	-	6.0	A
	WESTBOUND (US 202)	LEFT	0.16	44.1	D	0.31	49.0	D	0.32	50.0	D
		THRU/RIGHT	0.85	67.0	E	0.93	80.5	F	0.95	83.5	F
		COMPOSITE	-	65.9	E	-	78.2	E	-	81.1	F
	NORTHBOUND (NY 45)	LEFT	0.20	62.2	E	0.21	63.9	E	0.21	65.0	E
		LEFT/THRU	0.20	62.3	E	0.21	64.0	E	0.22	65.0	E
		RIGHT	0.30	7.2	A	0.30	7.0	A	0.30	7.0	A
		COMPOSITE	-	34.3	C	-	35.2	D	-	36.0	D
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT	0.24	47.2	D	0.22	46.8	D	0.22	46.7	D
	INTERSECTION	COMPOSITE	-	33.0	C	-	38.5	D	-	39.6	D
10a. US Route 202 & NYS Route 45 / Old County Road (Signalized with No Turn on Red on NY Route 45)	EASTBOUND (US 202)	LEFT							0.02	4.8	A
		THRU							0.54	7.5	A
		RIGHT							0.20	1.4	A
		COMPOSITE							-	6.0	A
	WESTBOUND (US 202)	LEFT							0.32	50.0	D
		THRU/RIGHT							0.95	83.5	F
		COMPOSITE		N/A			N/A		-	81.1	F
	NORTHBOUND (NY 45)	LEFT							0.21	65.0	E
		LEFT/THRU							0.22	65.0	E
		RIGHT							0.39	46.1	D
		COMPOSITE							-	55.5	E
	SOUTHBOUND (County Rd)	LEFT/THRU/RIGHT							0.22	46.7	D
	INTERSECTION	COMPOSITE							-	42.9	D
11. Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp (Unsignalized)	EASTBOUND (PIP NB Off-Ramp)	LEFT	0.32	9.2	A	0.35	9.6	A	0.36	9.6	A
		RIGHT	-	-	-	-	-	-	-	-	-
	NORTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
12. Thiells-Mount Ivy Road & Ridge Road (Unsignalized)	EASTBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.03	7.8	A	0.03	7.8	A	0.05	7.9	A
	WESTBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Ridge Rd)	LEFT/RIGHT	0.06	10.1	B	0.06	10.1	B	0.09	10.3	B
13. Thiells-Mount Ivy Road & Rosman Road (Unsignalized)	WESTBOUND (Rosman Rd)	LEFT/RIGHT	0.43	20.4	C	0.48	22.4	C	0.51	24.0	C
	NORTHBOUND (Thiells-Mt. Ivy Rd)	THRU/RIGHT	-	-	-	-	-	-	-	-	-
	SOUTHBOUND (Thiells-Mt. Ivy Rd)	LEFT/THRU	0.11	8.6	A	0.12	8.6	A	0.13	8.7	A

Notes:

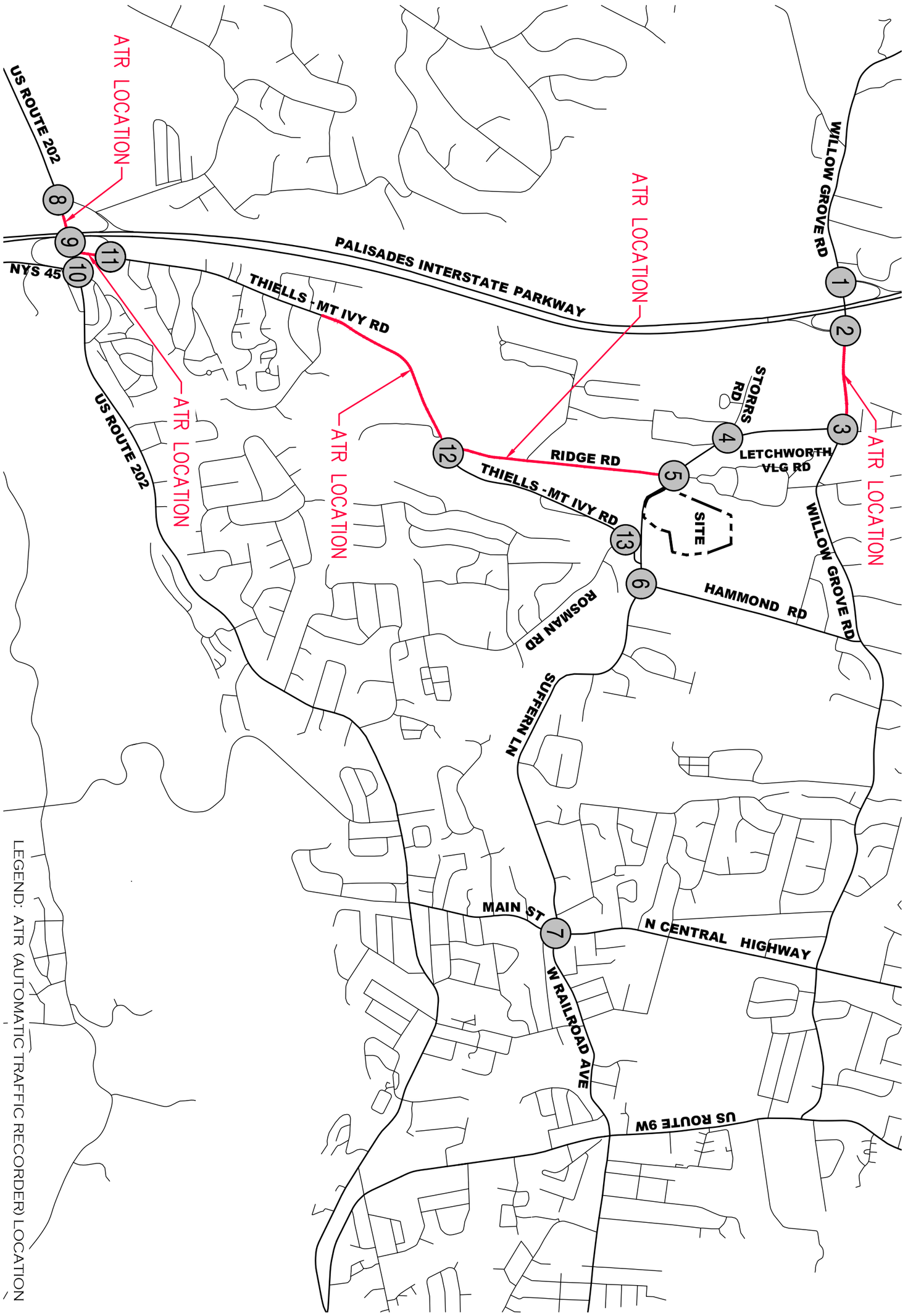
(1) V/C represents volume/capacity ratio

(2) Delay is average seconds delay per vehicle

(3) LOS represents level of service

PART B

FIGURES



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

STUDY AREA MAP

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-1 — SCALE: 1" = 1500'

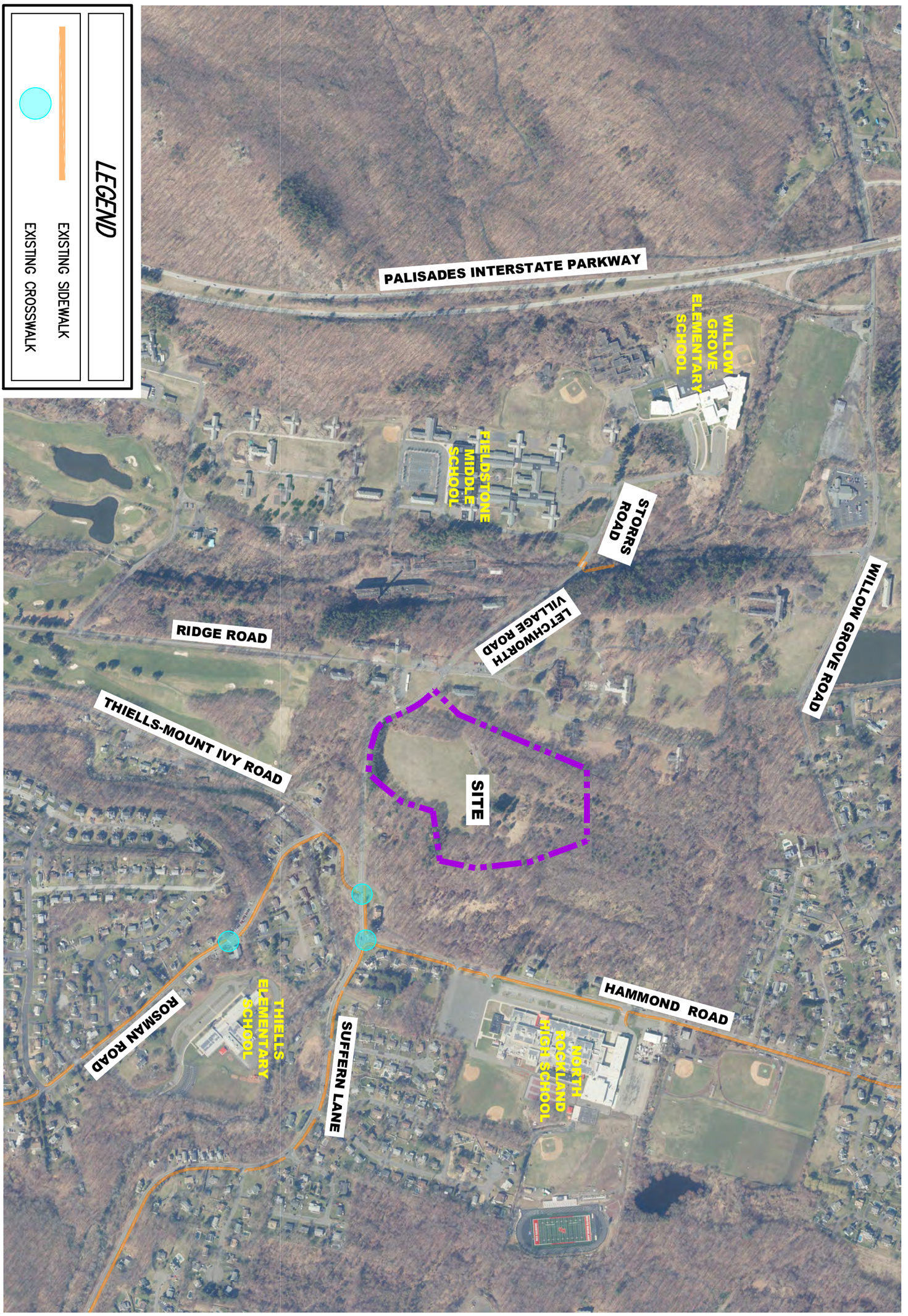
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21090-Traffic-Fig.dwg; STUDY AREA.tab; ATR.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

EXISTING PEDESTRIAN FACILITIES

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H - 2 — SCALE: 1" = 600'

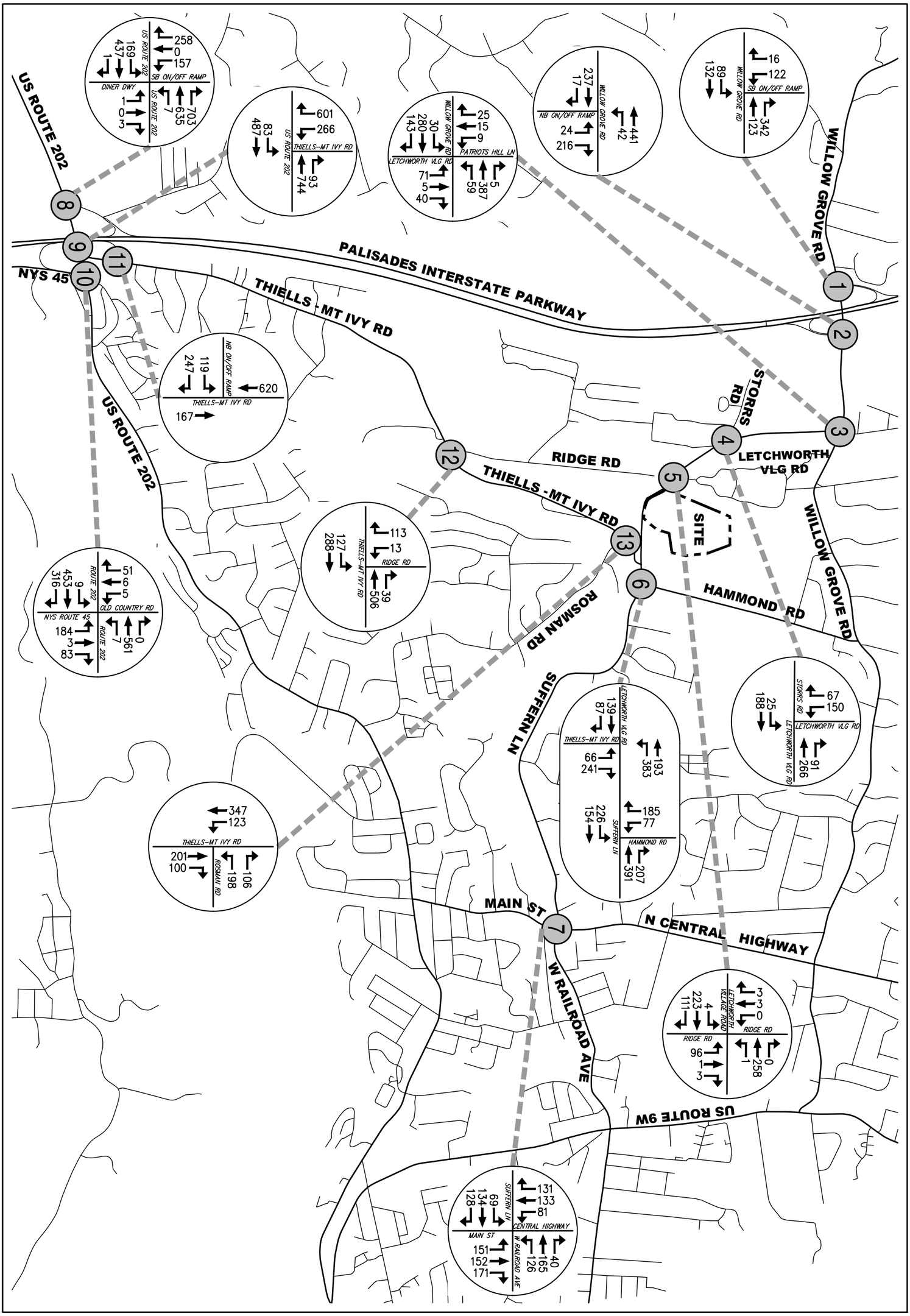
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21090-CROSSWALK-FIG.dwg; TRAFFIC-FIG-E-SIDEWALKS-AND-CROSSWALKS.tab; SIDEWALKS_CROSSWALKS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2024 EXISTING VOLUMES

PEAK WEEKDAY AM HOUR (7:45 - 8:45)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-3 — SCALE: 1" = 1500'

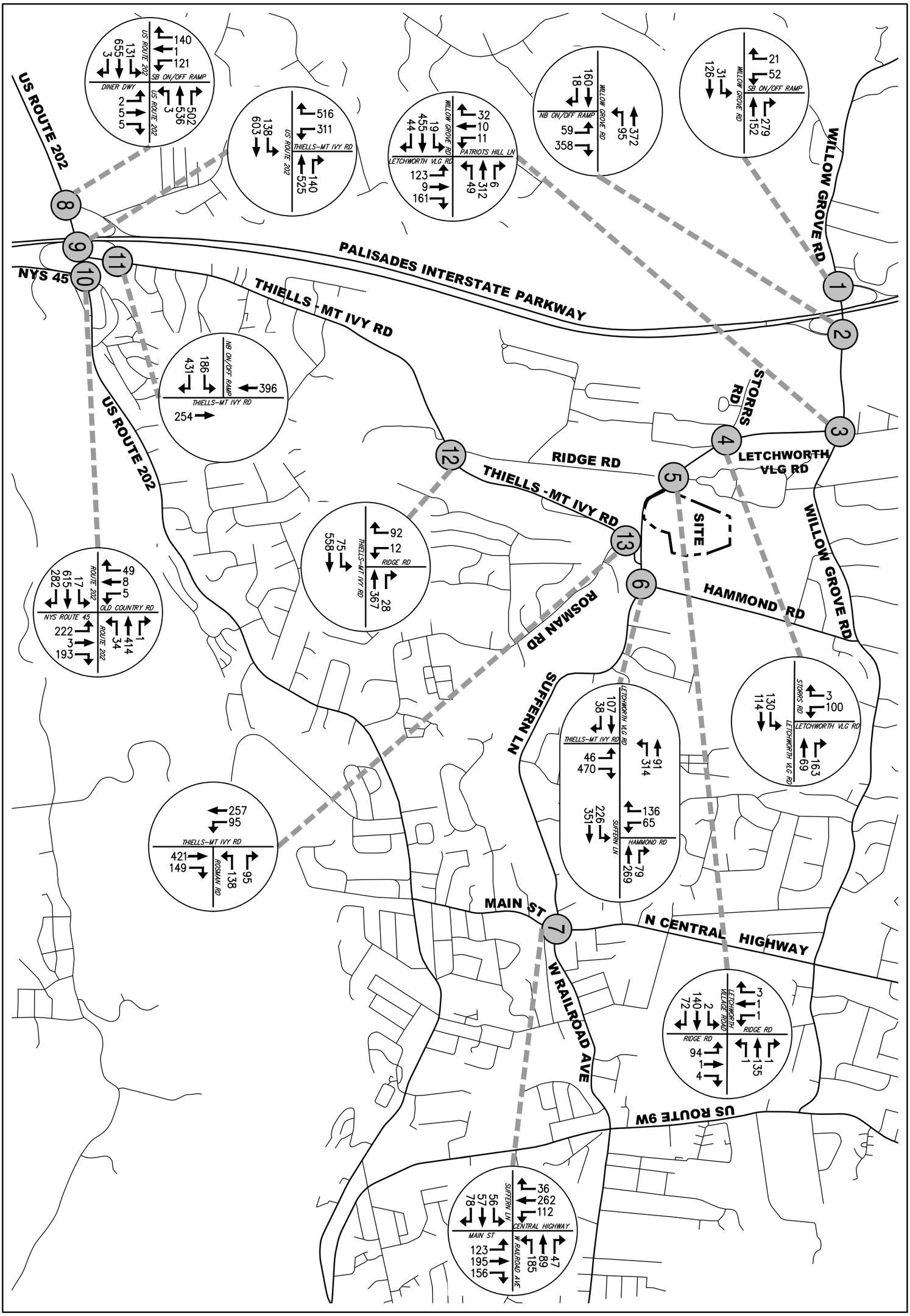
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2024 EXISTING VOLUMES

PEAK WEEKDAY SCHOOL HOUR (3:00 - 4:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-4 — SCALE: 1" = 1500'

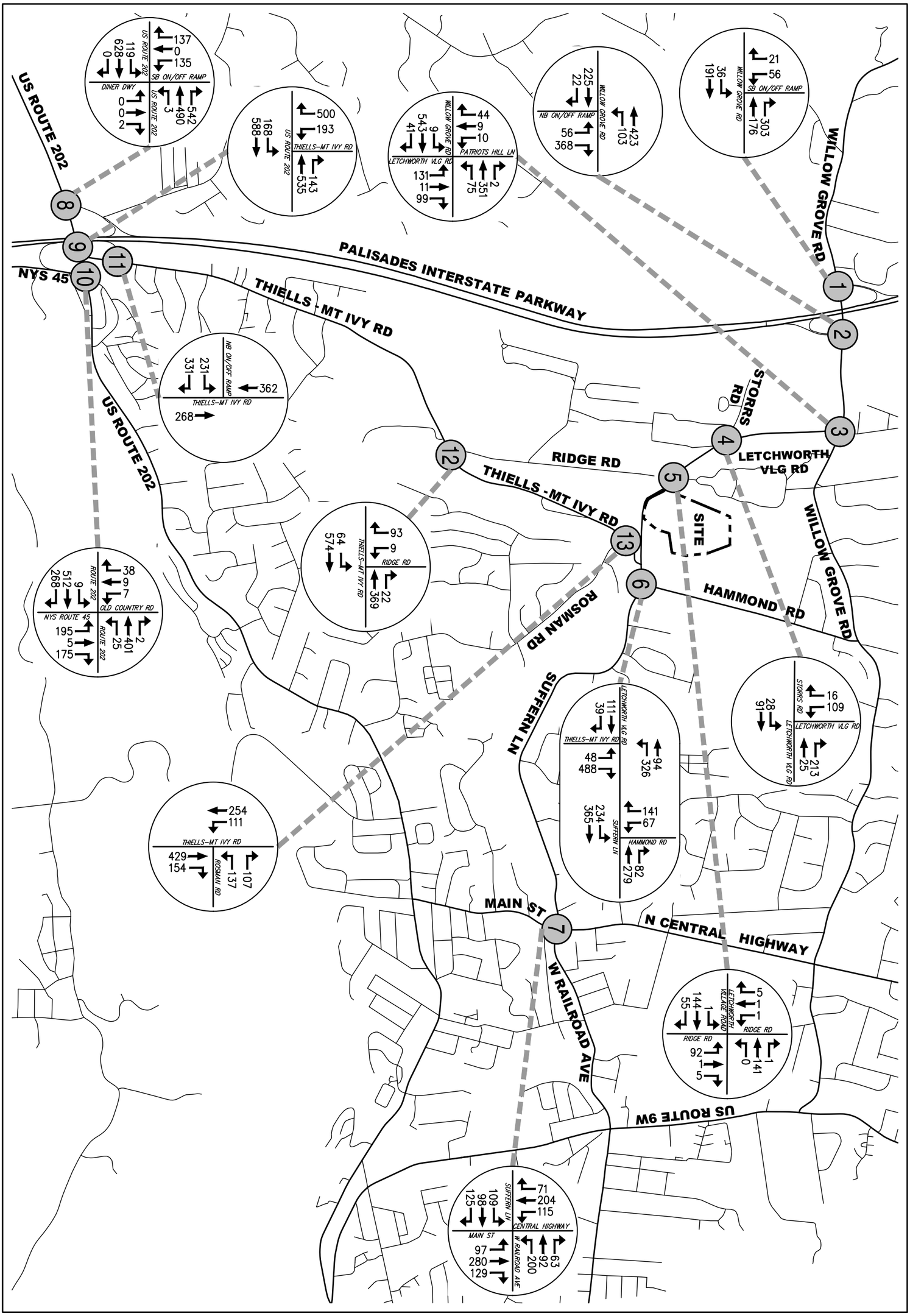
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2024 EXISTING VOLUMES

PEAK WEEKDAY ROADWAY PM HOUR (4:00 - 5:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-5 — SCALE: 1" = 1500'

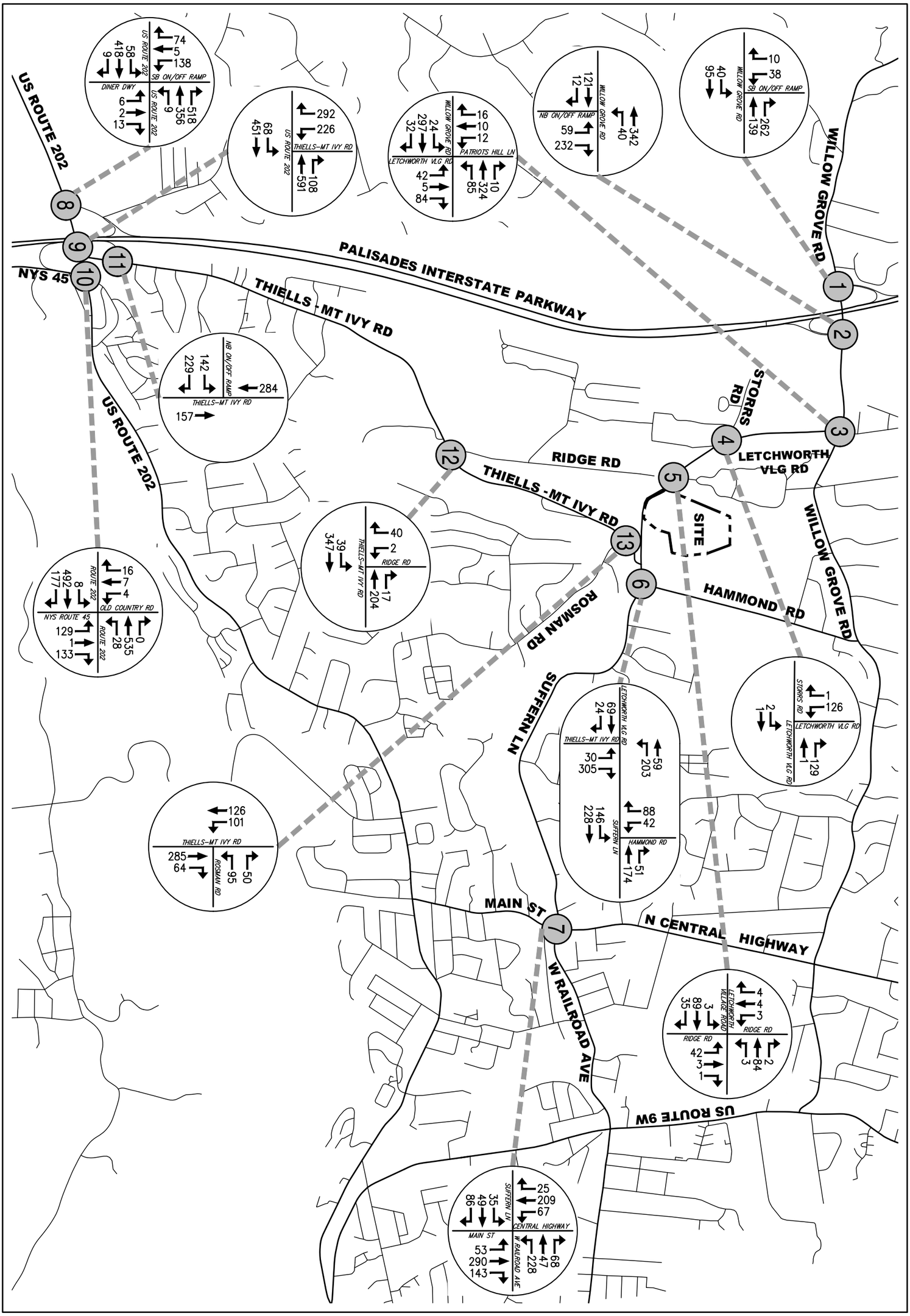
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2024 EXISTING VOLUMES

PEAK SATURDAY HOUR (12:15 - 1:15)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-6 — SCALE: 1" = 1500'

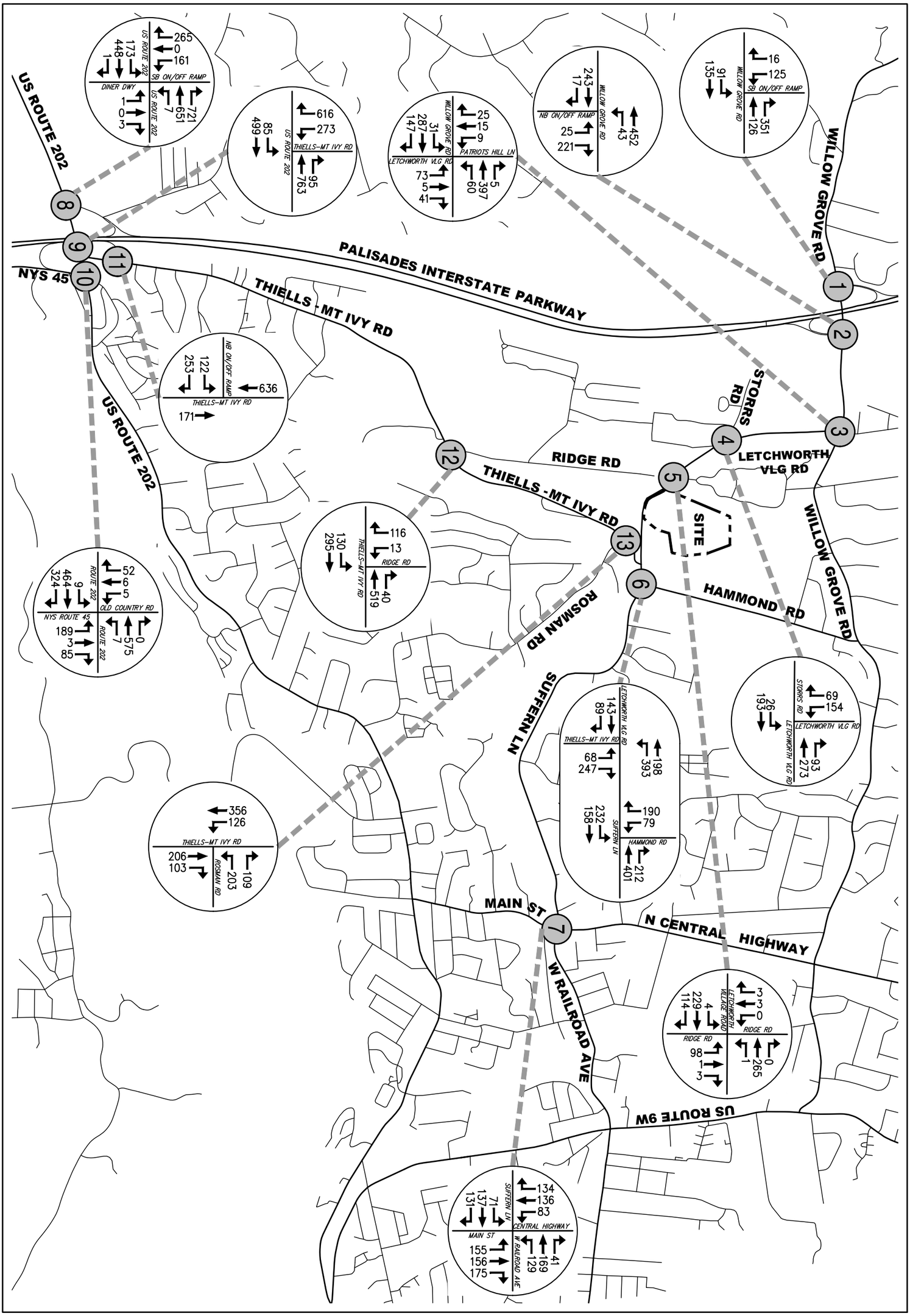
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 GENERAL GROWTH VOLUMES

PEAK WEEKDAY AM HOUR (7:45 - 8:45)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-7 — SCALE: 1" = 1500'

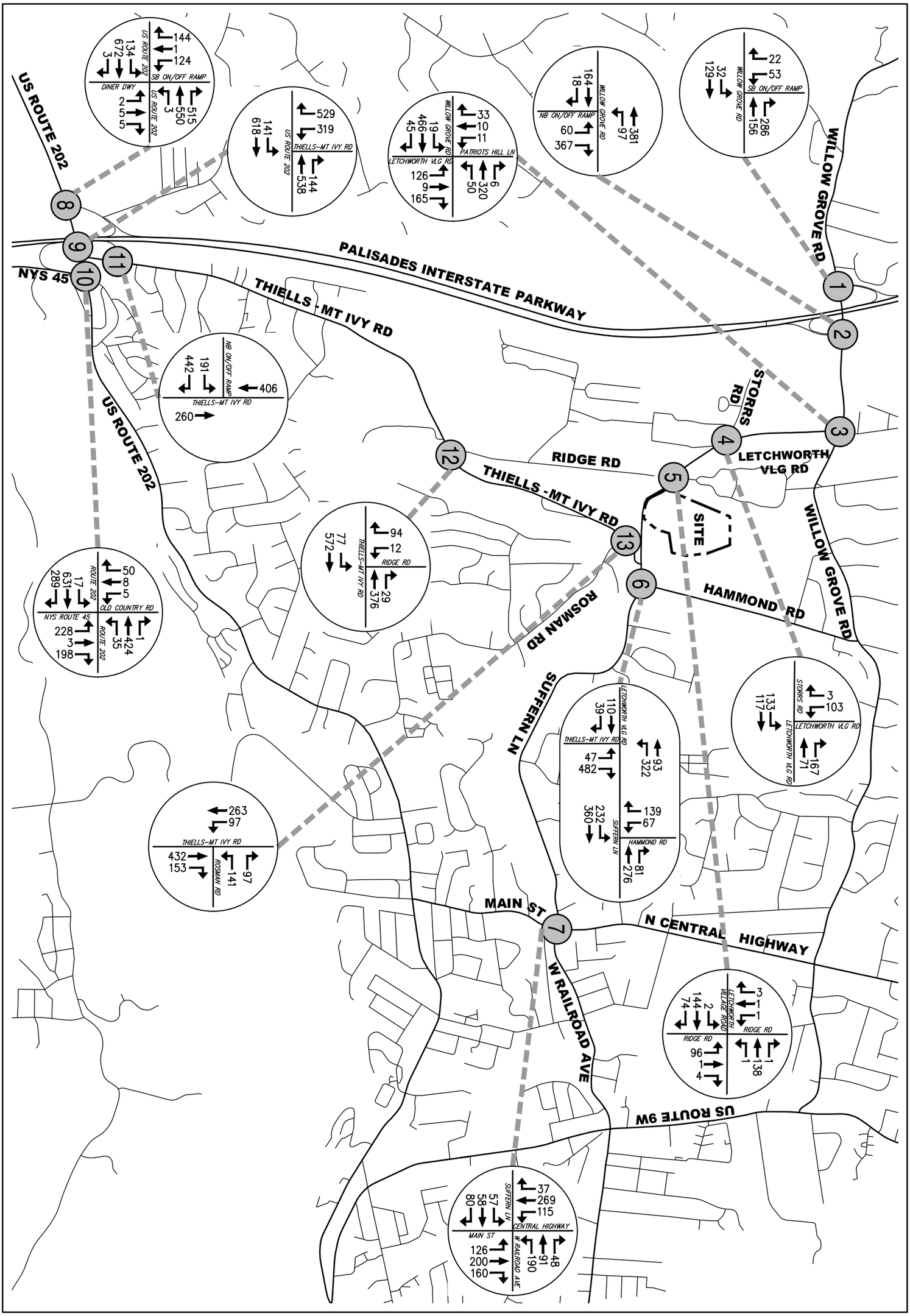
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 GENERAL GROWTH VOLUMES

PEAK WEEKDAY SCHOOL HOUR (3:00 - 4:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-8 — SCALE: 1" = 1500'

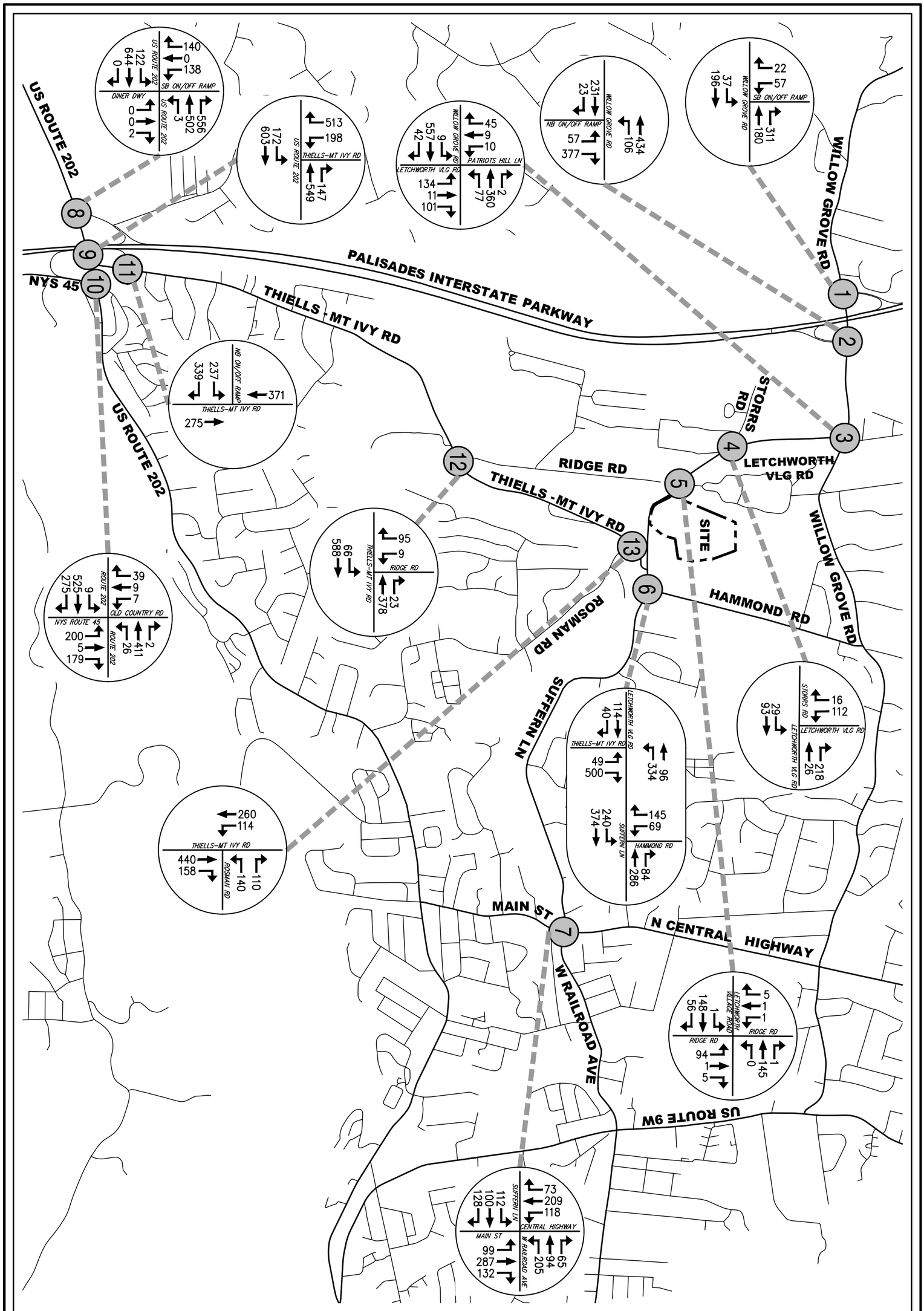
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 GENERAL GROWTH VOLUMES

PEAK WEEKDAY PM HOUR (4:00 - 5:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-9 — SCALE: 1" = 1500'

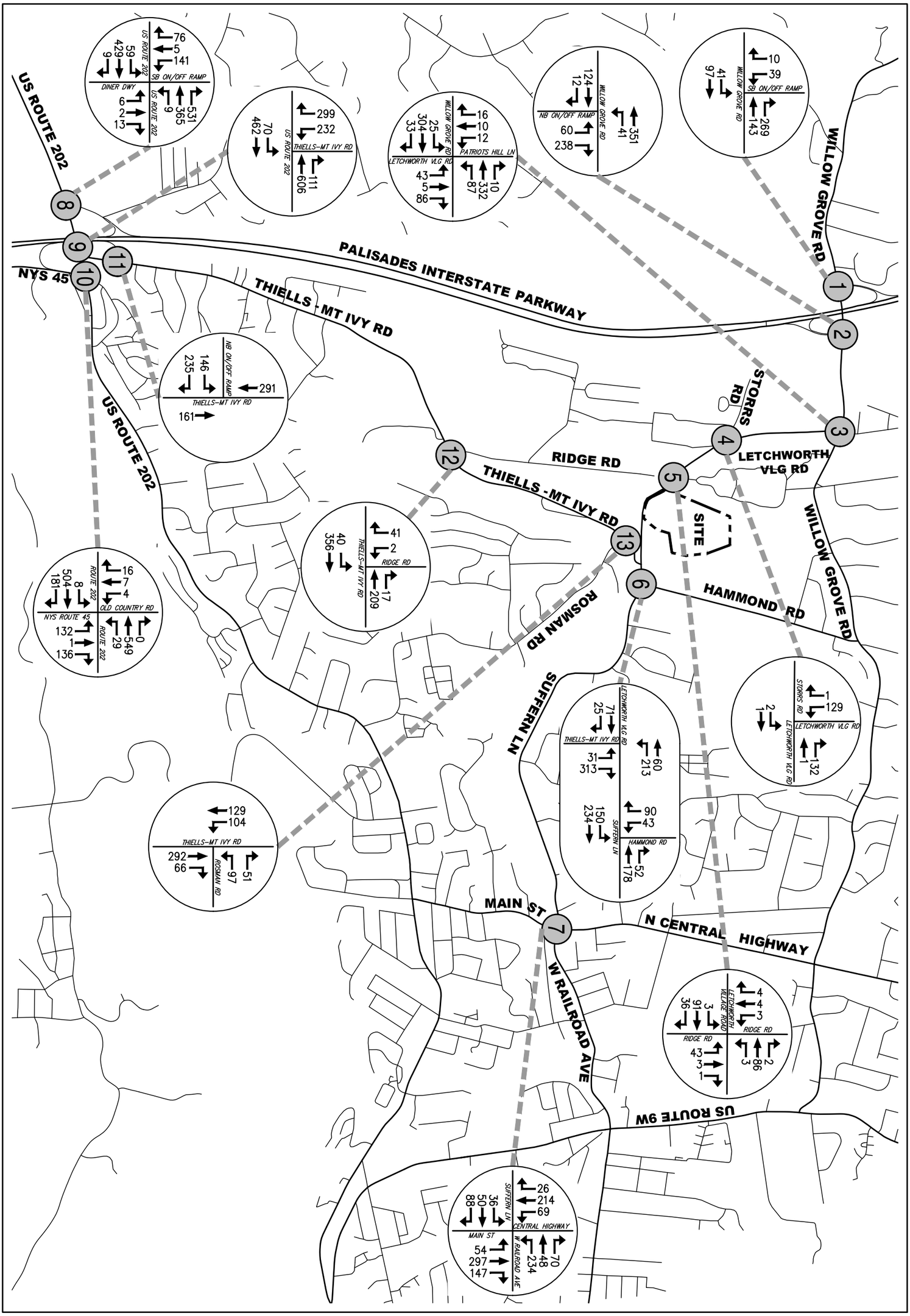
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21090-Traffic-Fig.dwg; EXISTING.tab; TRAFFIC_FIGS.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 GENERAL GROWTH VOLUMES

PEAK SATURDAY HOUR (12:15 - 1:15)

DATE: 01/2025 — JMC PROJECT: 21090

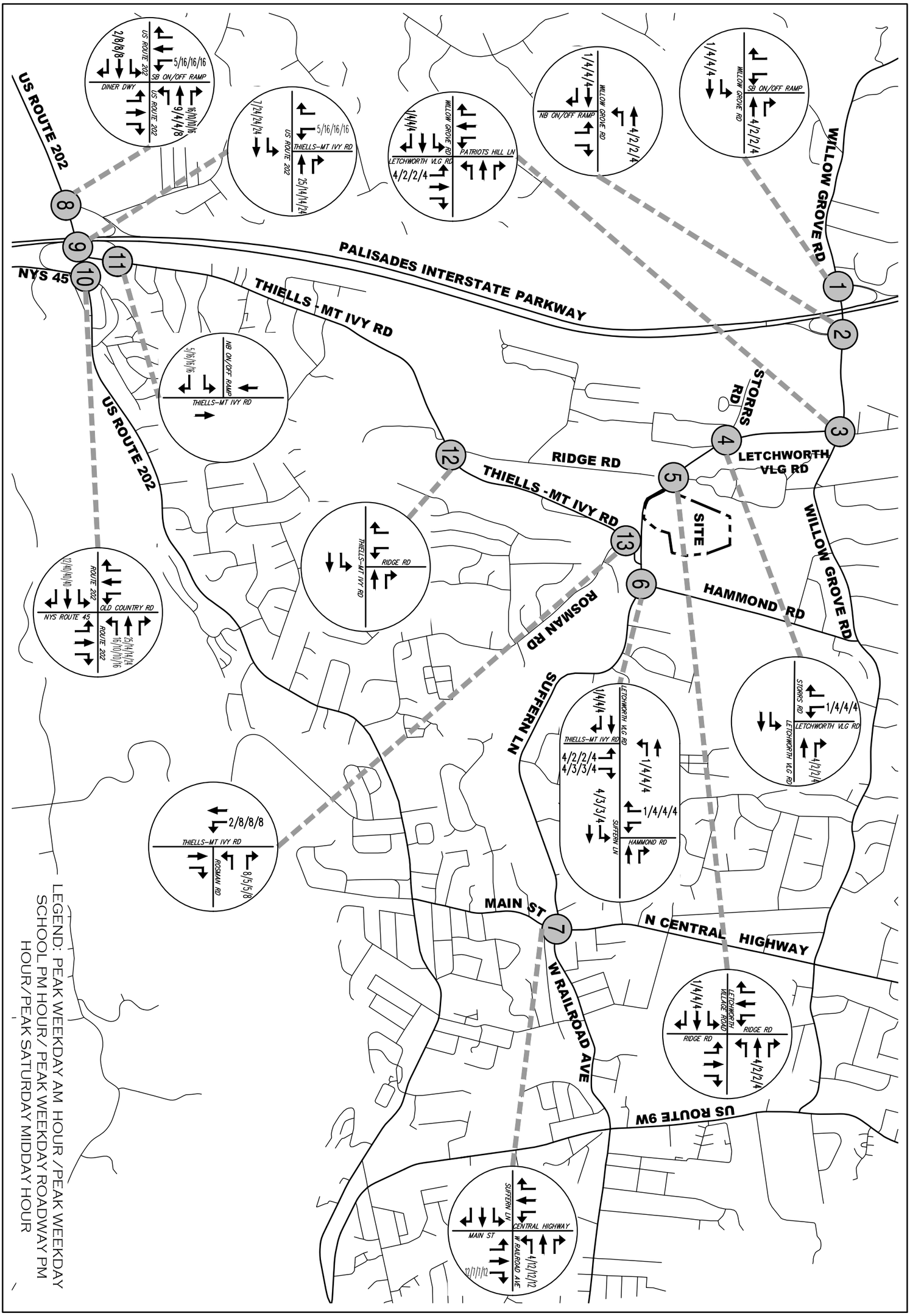
FIGURE: III.H-10 — SCALE: 1" = 1500'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

OTHER DEVELOPEMENTS

OAK TREE

DATE: 01/2025 — JMC PROJECT: 21090

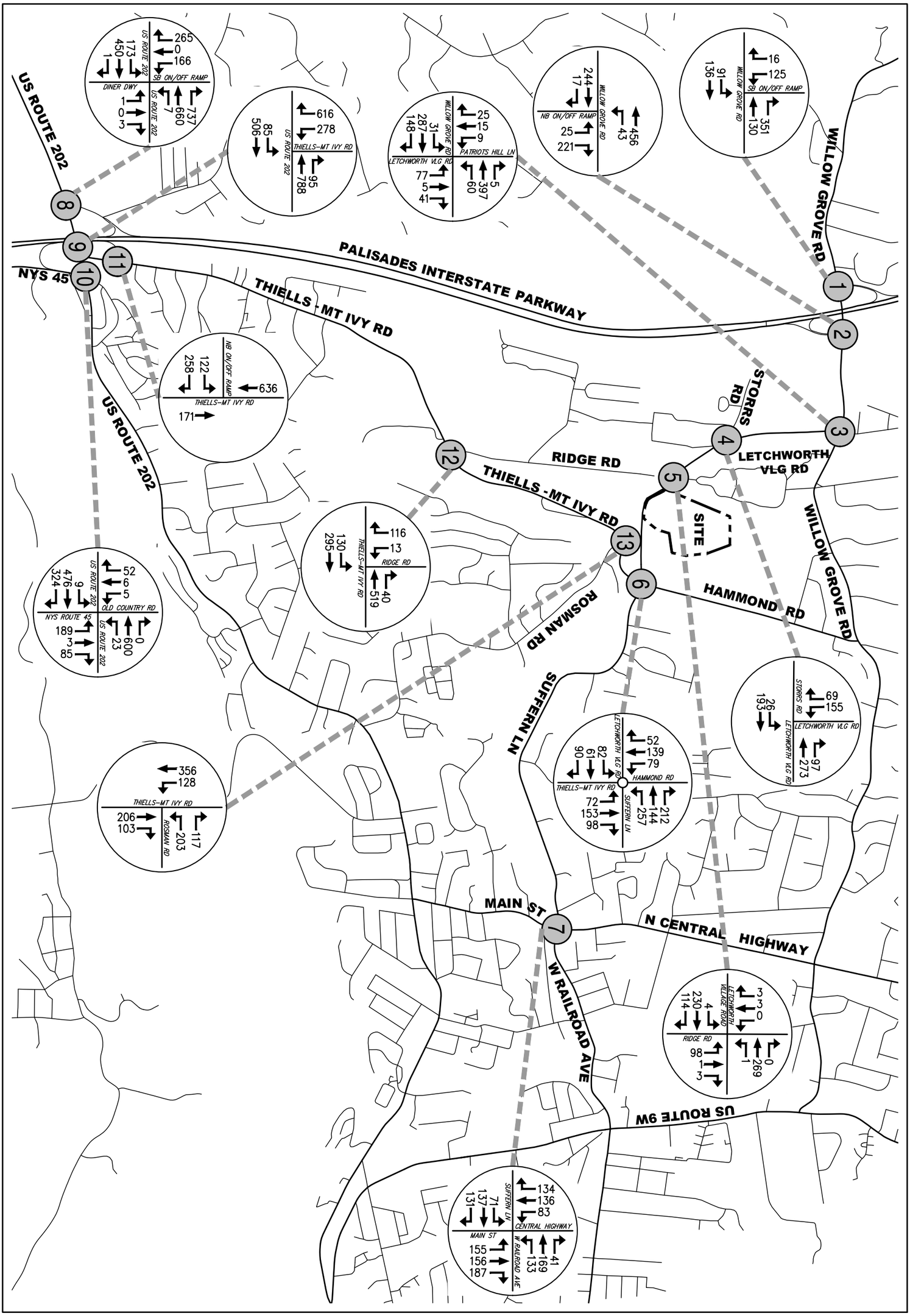
FIGURE: III.H-11 — SCALE: 1" = 1500'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 NO BUILD VOLUMES

PEAK WEEKDAY AM HOUR (7:45 - 8:45)

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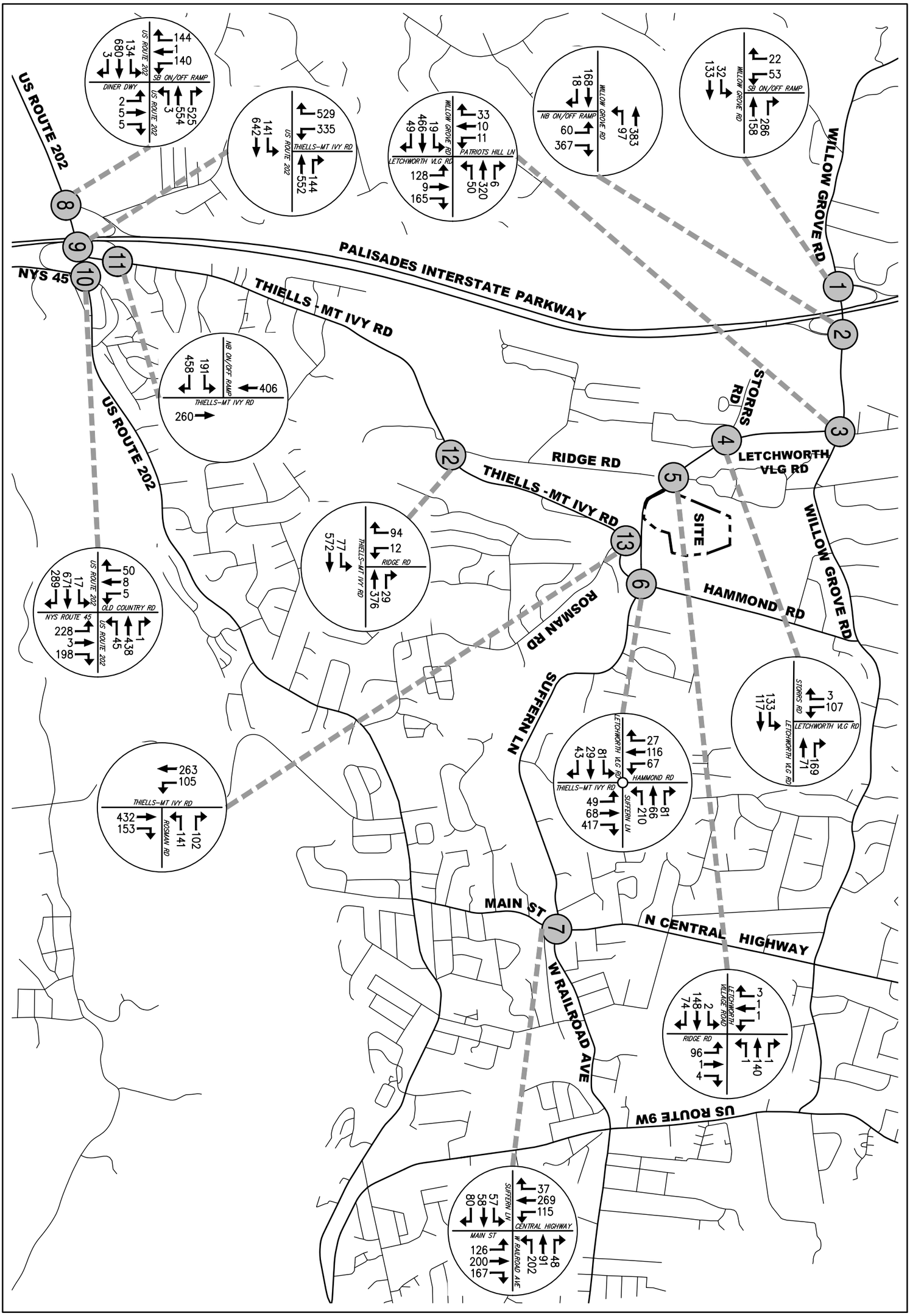
FIGURE: III.H-12 — SCALE: 1" = 1500'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

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2029 NO BUILD VOLUMES

PEAK WEEKDAY SCHOOL HOUR (3:00 - 4:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-13 — SCALE: 1" = 1500'

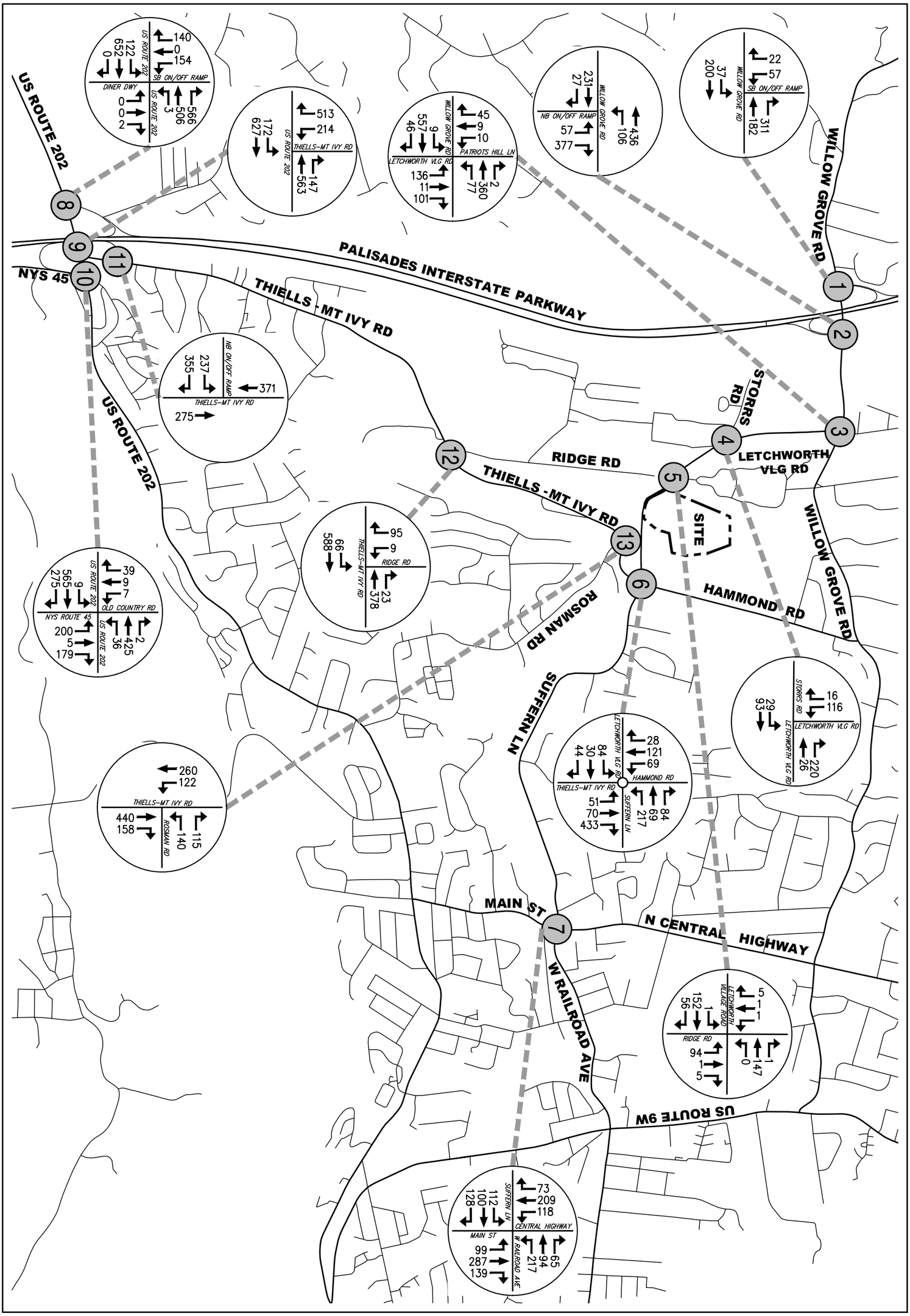
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LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 NO BUILD VOLUMES

PEAK WEEKDAY PM HOUR (4:00 - 5:00)

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FIGURE: III.H-14 — SCALE: 1" = 1500'

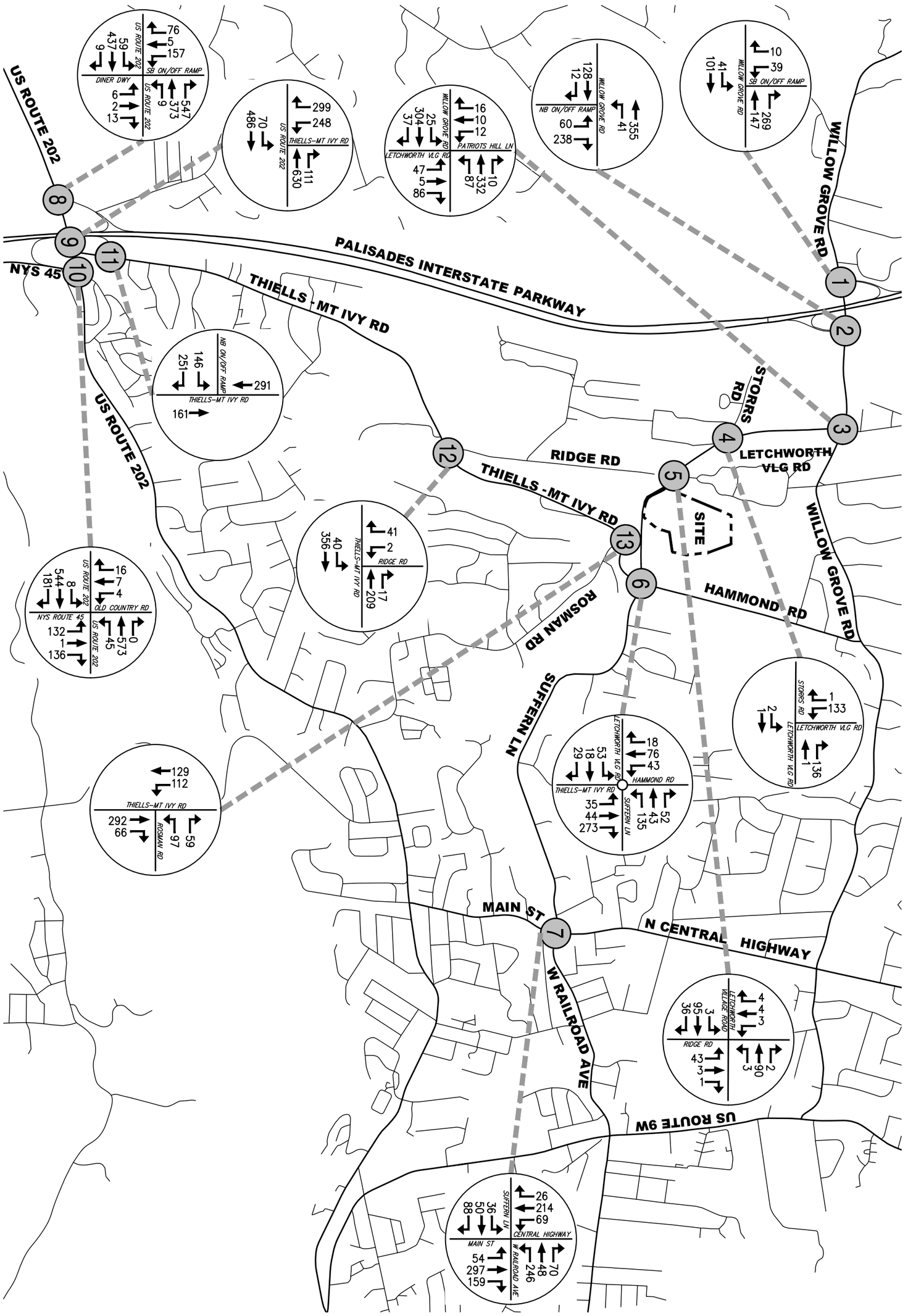
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LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 NO BUILD VOLUMES

PEAK SATURDAY HOUR (12:15 - 1:15)

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FIGURE: III.H-15 — SCALE: 1" = 1500'

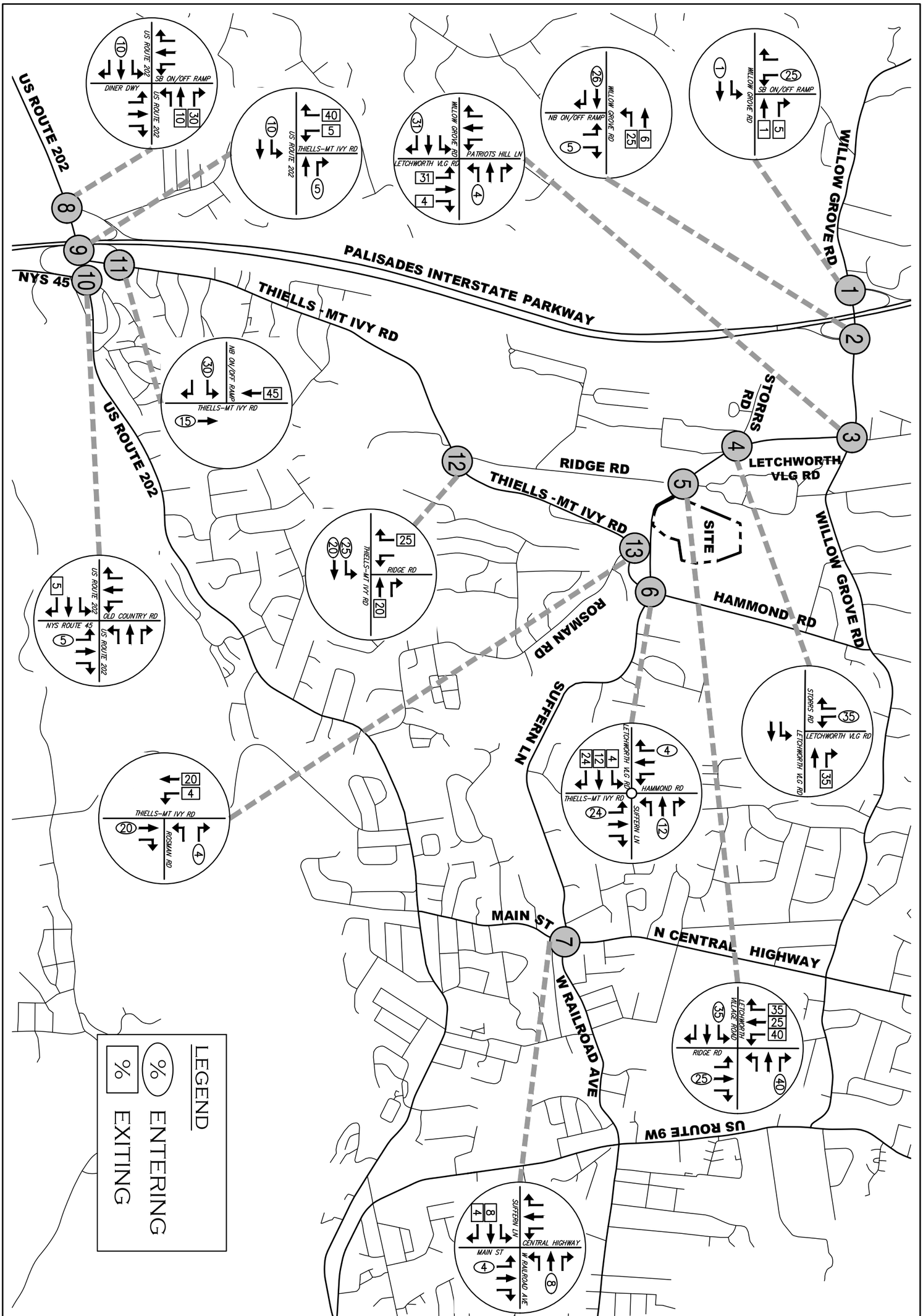
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

PRIMARY TRIP DISTRIBUTIONS

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FIGURE: III.H-16 — SCALE: 1" = 1500'

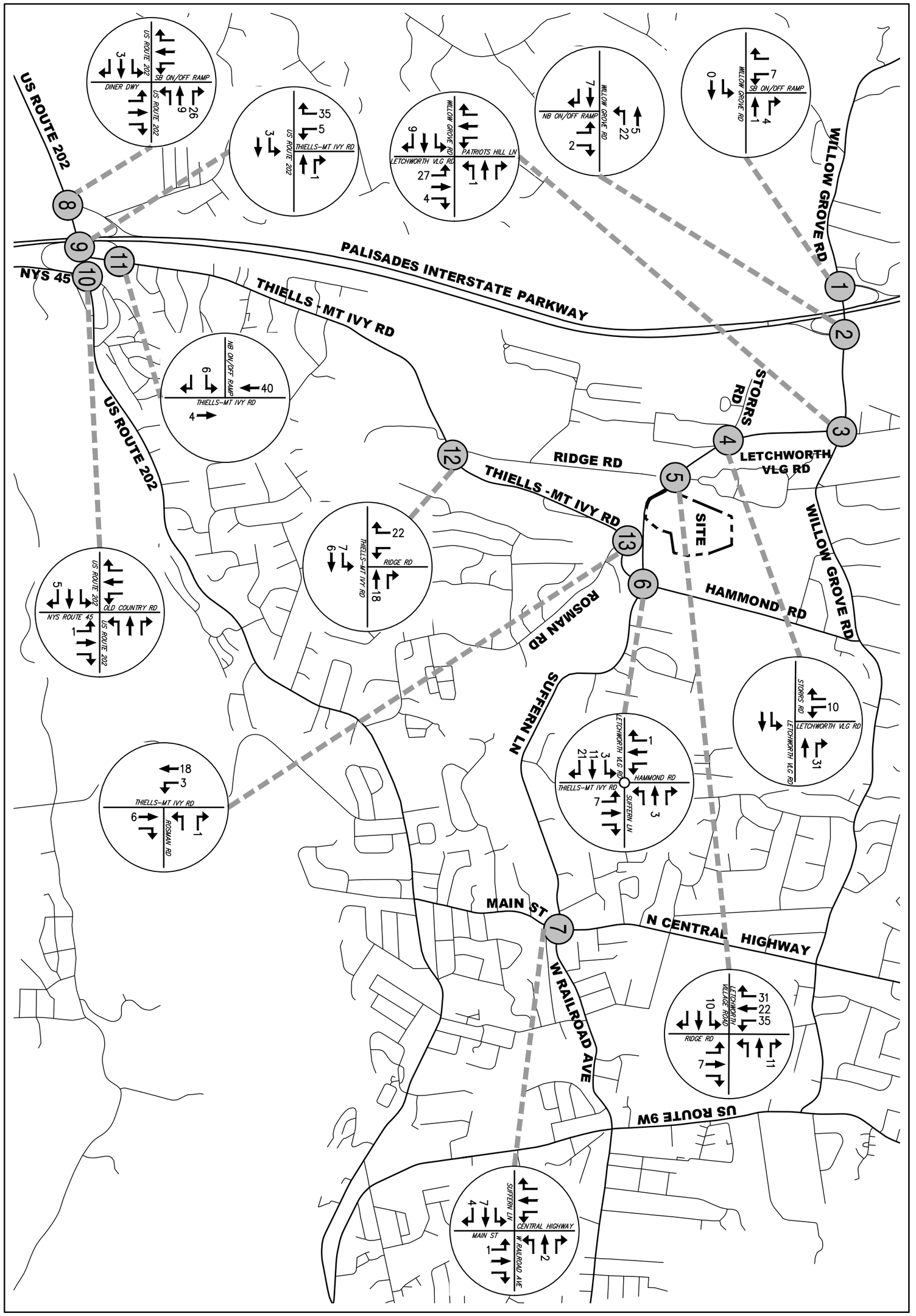
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

PRIMARY VOLUMES

PEAK WEEKDAY AM HOUR (7:45 - 8:45)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-17 — SCALE: 1" = 1500'

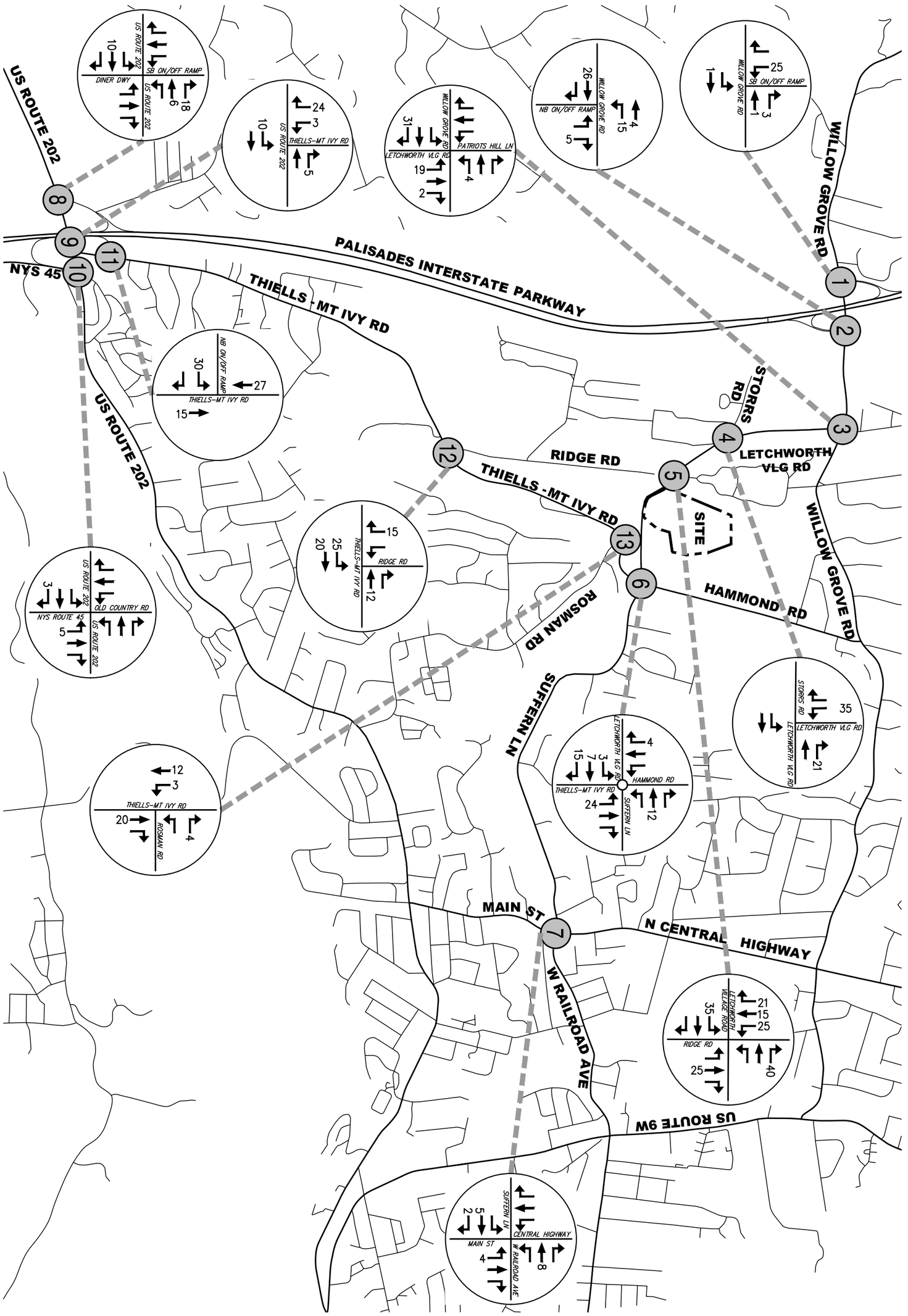
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

PRIMARY VOLUMES

PEAK WEEKDAY SCHOOL HOUR (3:00 - 4:00)

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FIGURE: III.H-18 — SCALE: 1" = 1500'

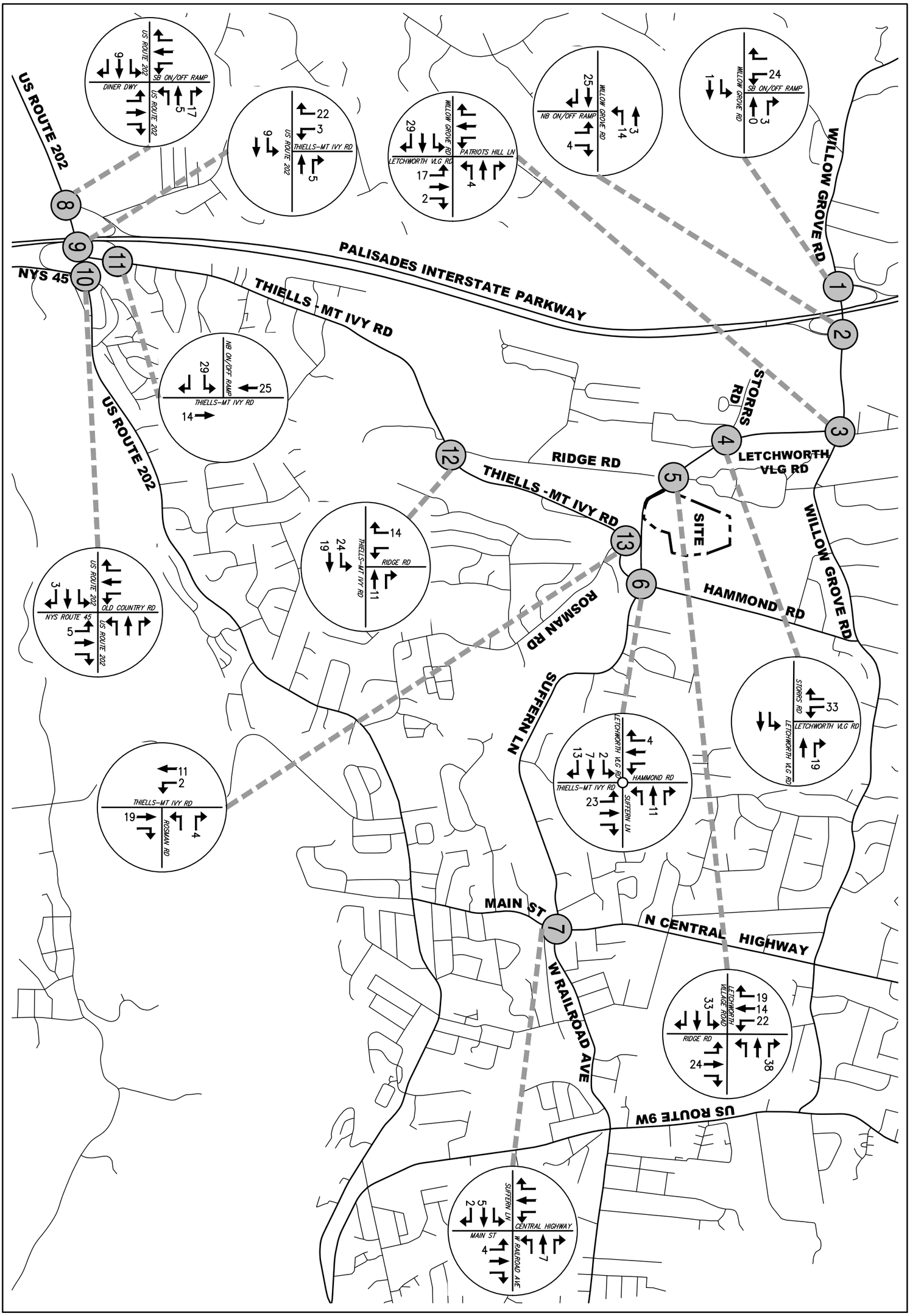
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LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

PRIMARY VOLUMES

PEAK WEEKDAY PM HOUR (4:00 - 5:00)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-19 — SCALE: 1" = 1500'

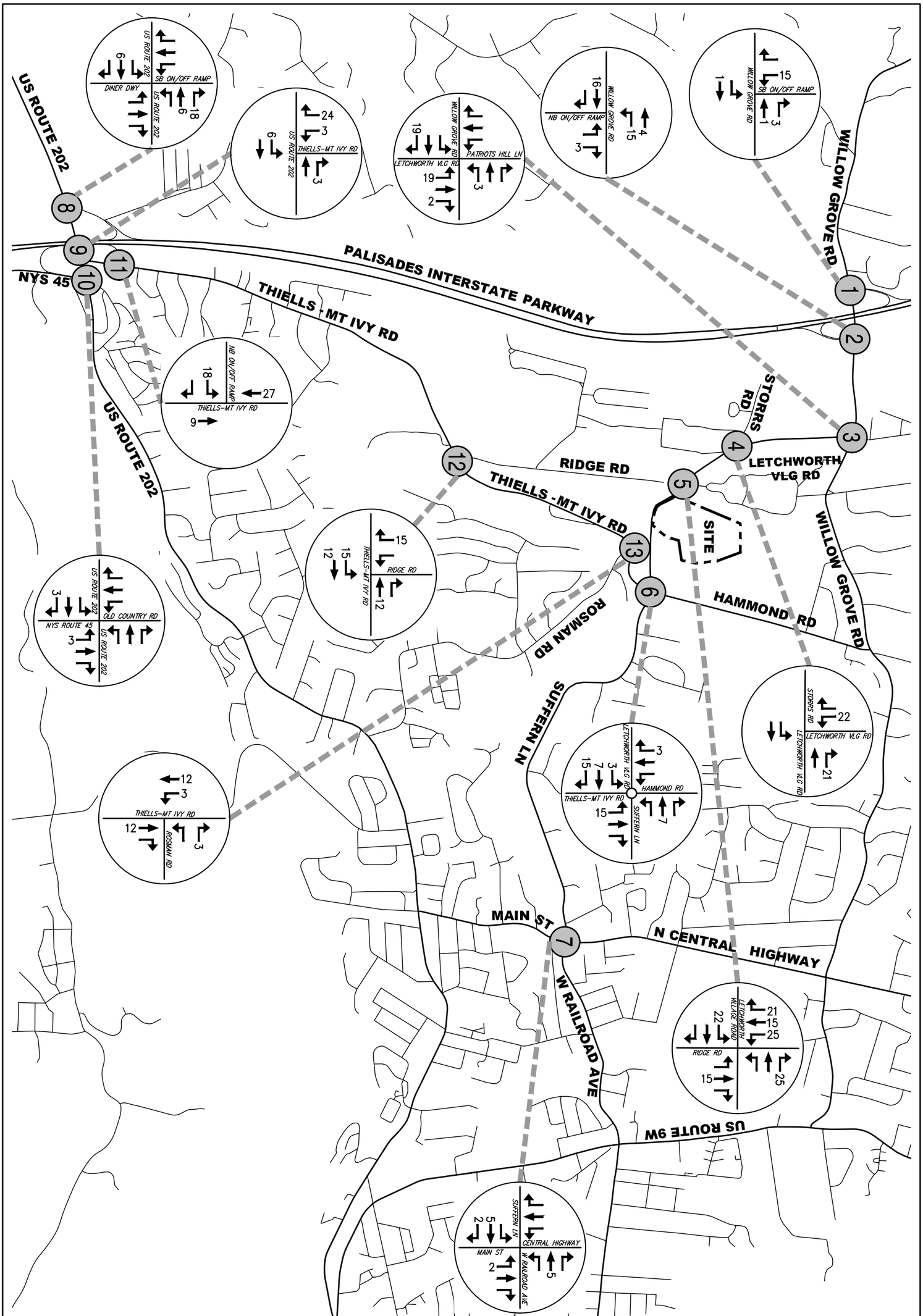
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

PRIMARY VOLUMES

PEAK SATURDAY HOUR (12:15 - 1:15)

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: III.H-20 — SCALE: 1" = 1500'

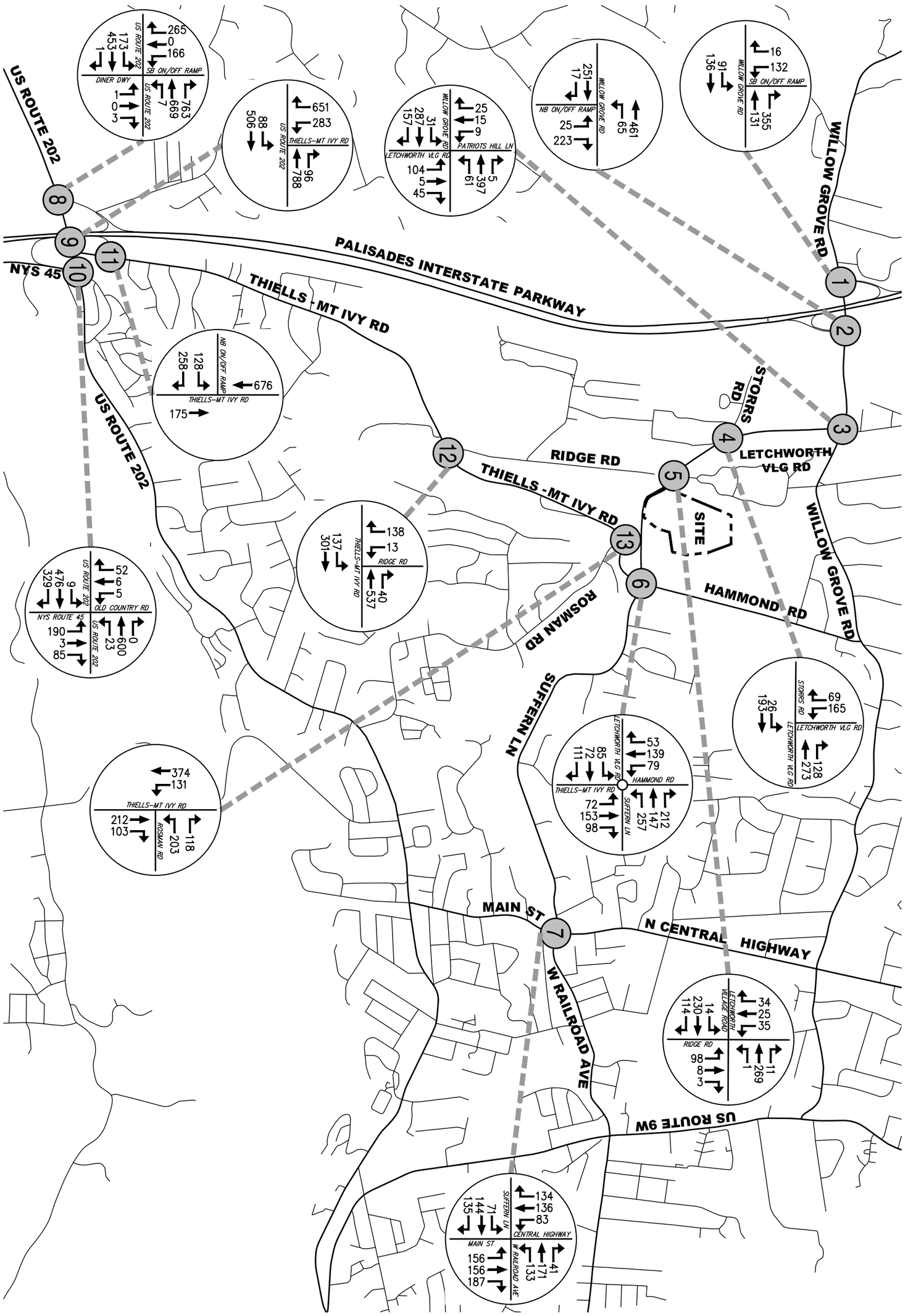
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 BUILD VOLUMES

PEAK WEEKDAY AM HOUR (7:45 - 8:45)

DATE: 01/2025 — JMC PROJECT: 21090

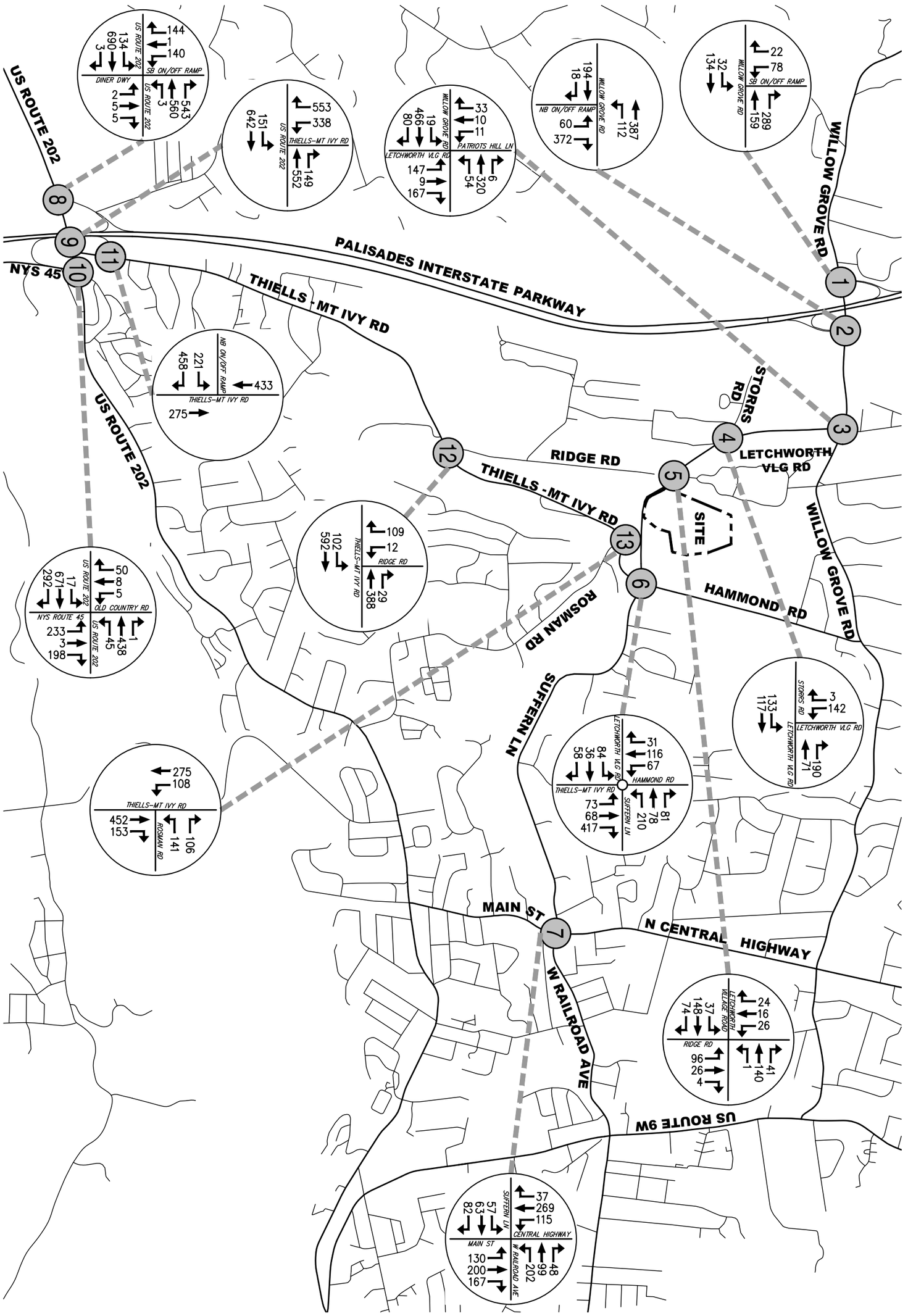
FIGURE: III.H-21 — SCALE: 1" = 1500'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 BUILD VOLUMES

PEAK WEEKDAY SCHOOL HOUR (3:00 - 4:00)

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FIGURE: III.H-22 — SCALE: 1" = 1500'

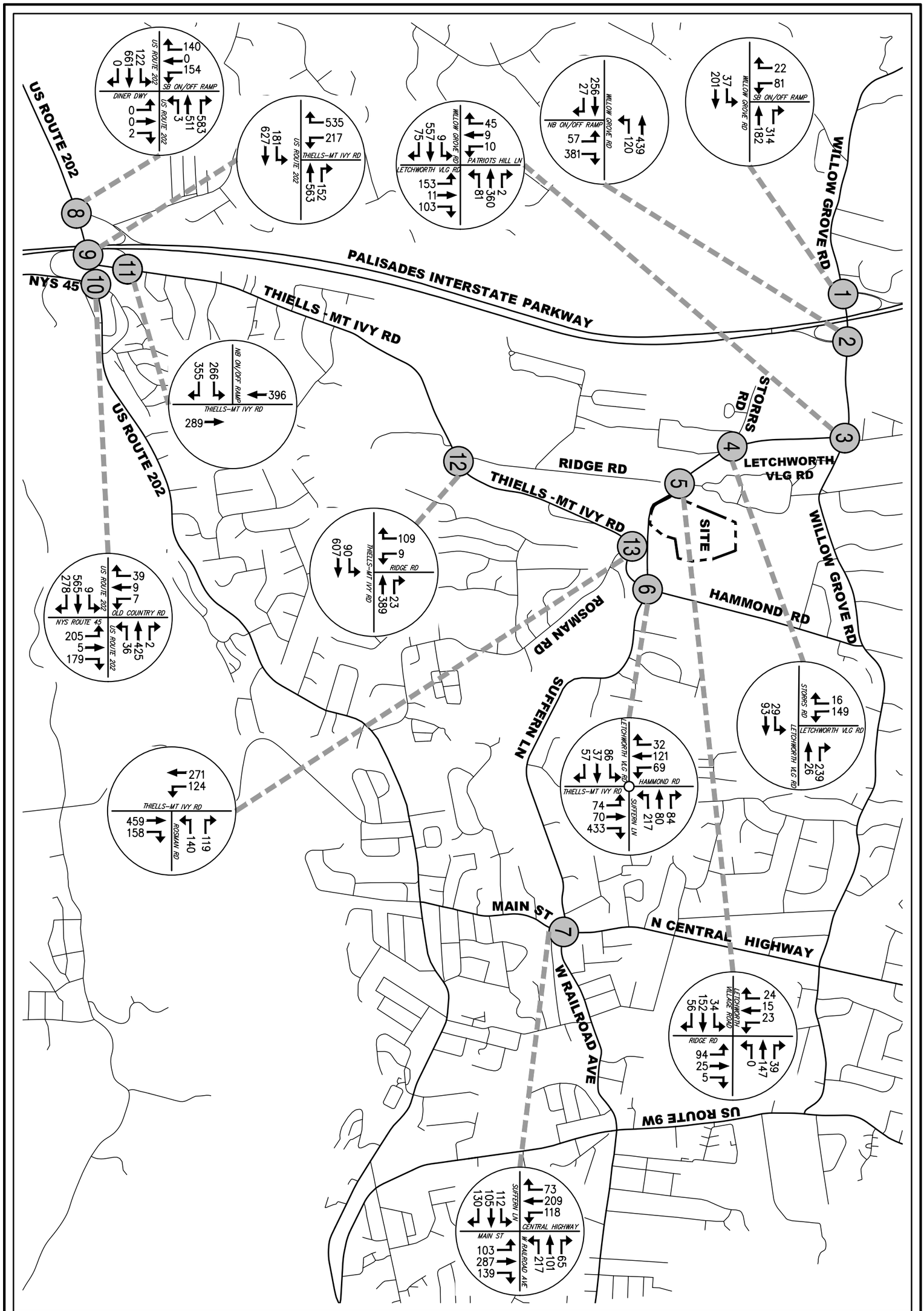
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 BUILD VOLUMES

PEAK WEEKDAY PM HOUR (4:00 - 5:00)

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FIGURE: III.H-23 — SCALE: 1" = 1500'

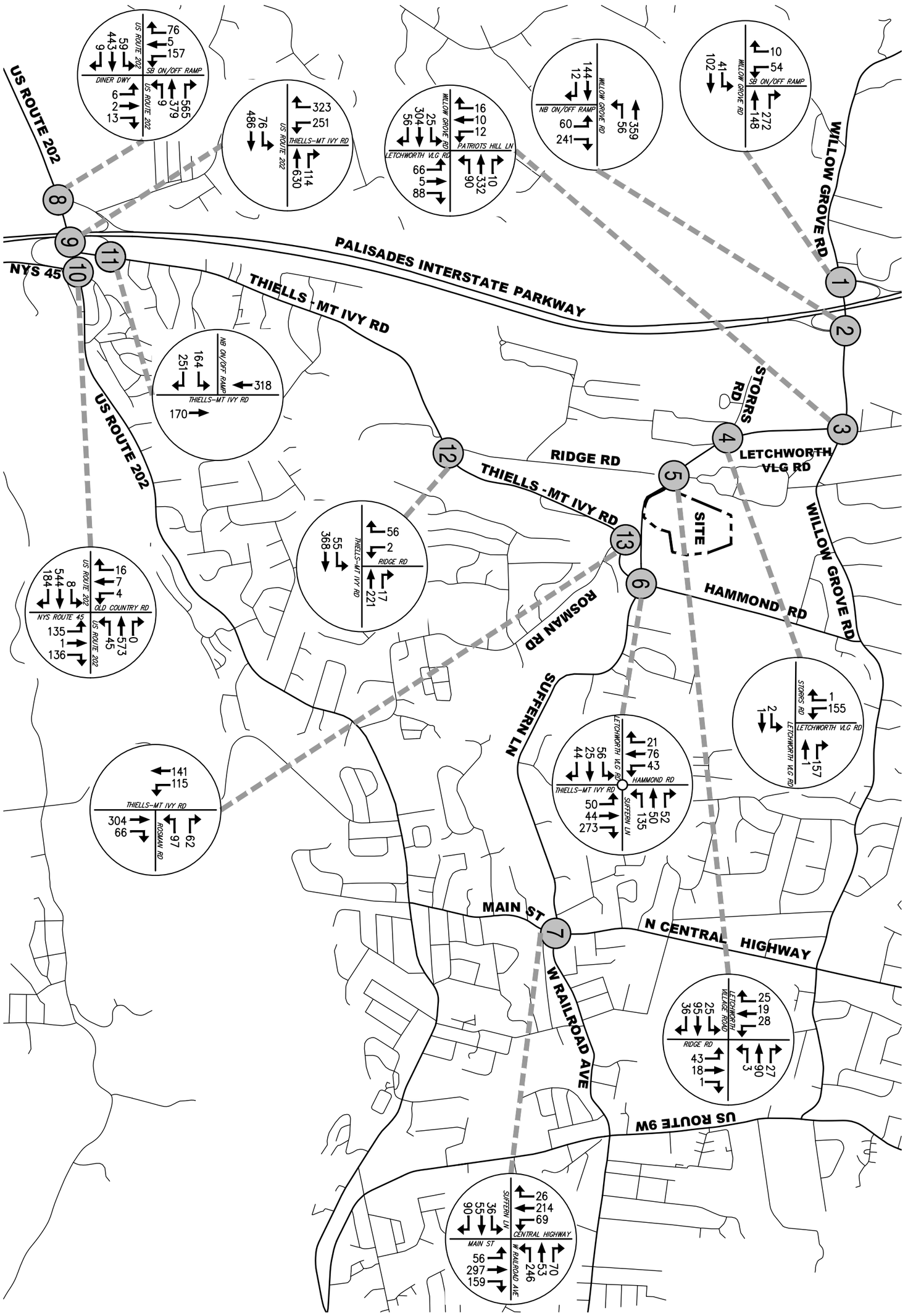
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

2029 BUILD VOLUMES

PEAK SATURDAY HOUR (12:15 - 1:15)

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FIGURE: III.H-24 — SCALE: 1" = 1500'

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PART C

ACCIDENT ANALYSIS

TABLE AR-1

INTERSECTION NAME: Willow Grove Road & Palisades Interstate Parkway Southbound On/Off Ramps (Exit 14)

TOTAL ACCIDENTS: 8

INTERSECTION NUMBER: 1

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	4	50
Monday		
Tuesday	1	13
Wednesday		
Thursday	1	13
Friday		
Saturday	2	25
Time of Day	**Number**	**%**
6 am-10 am	2	25
10 am-4 pm	1	13
4 pm-7 pm	3	38
7 pm-12 Mid	2	25
12 Mid-6 am		
Weather	**Number**	**%**
Clear	5	63
Cloudy	2	25
Fog	1	13
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	8	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	8	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn	5	63
Right Turn	1	13
Right Angle	2	25
Head On		
Bicyclist		
Pedestrian		
Animal		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	13
Property-Damage Only	7	88
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)	5	63
Fall (Sep-Nov)	3	38
Contributing Factors	**Number**	**%**
Driver Inexperience		
Failure to Yield ROW	3.50	44
Driver Inattention	2.50	31
Turning Improperly	2.00	25
Animal's Action		
Pavement Slippery		
Unknown		

Accident Rate Calculations

Total Volume:	7,830	vehicles per day (AADT Source: JMC base counts)
	2.86	Million Vehicles per Year
	2.7	Average number of accidents per year
	0.93	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized Intersection)

Specific Collisions Types

Left Turn

1.7 Average number of Left Turn accidents per year
0.58 Accident Rate in Accidents per Million Entering Vehicles
0.01 NYSDOT Mean Accident Rate

Right Turn

0.3 Average number of Right Turn accidents per year
0.12 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Right Angle

0.7 Average number of Right Angle accidents per year
0.23 Accident Rate in Accidents per Million Entering Vehicles
0.02 NYSDOT Mean Accident Rate

TABLE AR-2

ROADWAY NAME: Willow Grove Road

TOTAL ACCIDENTS: 1

BETWEEN: Palisades Interstate Parkway Southbound (Int. 1) and Northbound Ramps (Int. 2)

SEGMENT LENGTH: 0.15 Miles

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday	1	100
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm	1	100
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	1	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	1	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day		
Night		
Dawn/Dusk	1	100

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Animal	1	100
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only	1	100
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)		
Fall (Sep-Nov)	1	100
Contributing Factors	**Number**	**%**
Driver Inexperience		
Failure to Yield ROW		
Following Too Closely		
Animal's Action	1.00	100
Unsafe Speed		
Pavement Slippery		
Reaction to Uninvolved Vehicle		

Accident Rate Calculations

Total Volume:	7,260	vehicles per day (AADT Source: JMC base counts)
	2.65	Million Vehicles per Year
	0.3	Average number of accidents per year
	0.83	Accident Rate in accidents per Million Vehicle Miles (MVM)
	2.32	NYSDOT Mean collision rate (Urban Mainline 2-Lanes Undivided)

TABLE AR-3

INTERSECTION NAME: Willow Grove Road & Palisades Interstate Parkway Northbound On/Off Ramps (Exit 14)

TOTAL ACCIDENTS: 9

INTERSECTION NUMBER: 2

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	3	33
Monday		
Tuesday	3	33
Wednesday	1	11
Thursday		
Friday	1	11
Saturday	1	11
Time of Day	**Number**	**%**
6 am-10 am	2	22
10 am-4 pm	4	44
4 pm-7 pm	1	11
7 pm-12 Mid		
12 Mid-6 am	2	22
Weather	**Number**	**%**
Clear	6	67
Cloudy	3	33
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	8	89
Snow/Ice		
Wet	1	11
Light Conditions	**Number**	**%**
Day	8	89
Night	1	11
Dawn/Dusk		

Accident Type	Number	%
Rear End	5	56
Sideswipe	1	11
Left Turn		
Right Turn		
Right Angle	2	22
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	11
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	2	22
Property-Damage Only	7	78
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)	2	22
Summer (June-Aug)	4	44
Fall (Sep-Nov)	3	33
Contributing Factors	**Number**	**%**
Driver Inattention	1.00	11
Failure to Yield ROW	1.50	17
Following Too Closely	4.50	50
Alcohol Involvement		
Unsafe Speed	0.50	6
Unsafe Lane Change	0.50	6
Reaction to Uninvolved Vehicle	1.00	11

Accident Rate Calculations

Total Volume:	11,970	vehicles per day (AADT Source: JMC base counts)
	4.37	Million Vehicles per Year
	3.0	Average number of accidents per year
	0.69	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized Intersection)

Specific Collisions Types

Rear End

1.7 Average number of Rear End accidents per year
0.38 Accident Rate in Accidents per Million Entering Vehicles
0.06 NYSDOT Mean Accident Rate

Right Angle

0.7 Average number of Right Angle accidents per year
0.15 Accident Rate in Accidents per Million Entering Vehicles
0.02 NYSDOT Mean Accident Rate

Wet Pavement

0.3 Average number of Wet Pavement accidents per year
0.08 Accident Rate in Accidents per Million Entering Vehicles
0.03 NYSDOT Mean Accident Rate

Sideswipe

0.3 Average number of Sideswipe accidents per year
0.08 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

TABLE AR-4

ROADWAY NAME: Willow Grove Road

TOTAL ACCIDENTS: 1

BETWEEN: Palisades Interstate Parkway NB On/Off Ramps (Int. 2) and Letchworth Village Road (Int. 3)

SEGMENT LENGTH: 0.3 Miles

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	1	100
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm	1	100
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	1	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	1	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	1	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	100
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	100
Property-Damage Only		
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)	1	100
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inexperience		
Failure to Yield ROW		
Following Too Closely		
Traffic Control Disregard		
Unsafe Speed		
Pavement Slippery		
Reaction to Uninvolved Vehicle	1.00	100

Accident Rate Calculations

Total Volume:	11,190	vehicles per day (AADT Source: JMC base counts)
	4.08	Million Vehicles per Year
	0.3	Average number of accidents per year
	0.27	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline & Juncture 2-Lanes Undivided)

Specific Collisions Types

Fixed Object

0.3 Average number of Fixed Object accidents per year

0.27 Accident Rate in Accidents per Million Vehicle Miles

0.42 NYSDOT Mean Accident Rate

; RS 2-3.tab

TABLE AR-5

INTERSECTION NAME: Willow Grove Road & Letchworth Village Road / Patriots Hills Lane

TOTAL ACCIDENTS: 7

INTERSECTION NUMBER: 3

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday	1	14
Wednesday	3	43
Thursday	2	29
Friday	1	14
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	2	29
10 am-4 pm	1	14
4 pm-7 pm	2	29
7 pm-12 Mid	2	29
12 Mid-6 am		
Weather	**Number**	**%**
Clear	6	86
Cloudy		
Fog		
Rain	1	14
Sleet/Snow		
Pavement	**Number**	**%**
Dry	6	86
Snow/Ice		
Wet	1	14
Light Conditions	**Number**	**%**
Day	4	57
Night	3	43
Dawn/Dusk		

Accident Type	Number	%
Rear End	4	57
Sideswipe	1	14
Left Turn	1	14
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	14
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	14
Property-Damage Only	6	86
Time of Year	**Number**	**%**
Winter (Dec-Feb)	1	14
Spring (Mar-May)	2	29
Summer (June-Aug)	2	29
Fall (Sep-Nov)	1	14
Contributing Factors	**Number**	**%**
Driver Inattention	5.00	71
Failure to Yield ROW	0.50	7
Turning Improperly	0.50	7
Steering Failure	1.00	14
Unsafe Speed		
Pavement Slippery		
Unknown		

Accident Rate Calculations

Total Volume:	13,250	vehicles per day (AADT Source: JMC base counts)
	4.84	Million Vehicles per Year
	2.3	Average number of accidents per year
	0.48	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.15	NYSDOT Mean collision rate (Urban 4-leg Unsignalized Intersection)

Specific Collisions Types

Rear End

1.3 Average number of Rear End accidents per year
0.28 Accident Rate in Accidents per Million Entering Vehicles
0.04 NYSDOT Mean Accident Rate

Left Turn

0.3 Average number of Left Turn accidents per year
0.07 Accident Rate in Accidents per Million Entering Vehicles
0.01 NYSDOT Mean Accident Rate

Sideswipe

0.3 Average number of Sideswipe accidents per year
0.07 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Wet Pavement

0.3 Average number of Wet Pavement accidents per year
0.07 Accident Rate in Accidents per Million Entering Vehicles
0.03 NYSDOT Mean Accident Rate

TABLE AR-6

ROADWAY NAME: Letchworth Village Road
BETWEEN: Willow Grove Road (Int. 3) and Storrs Road (Int. 4)
SEGMENT LENGTH: 0.35 Miles

TOTAL ACCIDENTS: 2

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday	1	50
Thursday		
Friday	1	50
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	1	50
10 am-4 pm		
4 pm-7 pm		
7 pm-12 Mid	1	50
12 Mid-6 am		
Weather	**Number**	**%**
Clear	2	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	2	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	2	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End	1	50
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Animal	1	50
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	50
Property-Damage Only	1	50
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)	1	50
Summer (June-Aug)	1	50
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Following Too Closely	1.00	50
Traffic Control Disregard		
Unsafe Speed		
Failure to Keep Right		
Animal's Action	1.00	50

Accident Rate Calculations

Total Volume:	3,660	vehicles per day (AADT Source: JMC base counts)
	1.34	Million Vehicles per Year
	0.7	Average number of accidents per year
	1.43	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline 2-Lanes Undivided)

TABLE AR-7

INTERSECTION NAME: Letchworth Village Road & Storrs Road

TOTAL ACCIDENTS: 1

INTERSECTION NUMBER: 4

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday	1	100
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm	1	100
4 pm-7 pm		
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	1	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	1	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	1	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe	1	100
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only	1	100
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)	1	100
Summer (June-Aug)		
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Turning Improperly		
Steering Failure		
Unsafe Speed		
Pavement Slippery		
Oversized Vehicle	1.00	100

Accident Rate Calculations

Total Volume:	4,820	vehicles per day (AADT Source: JMC base counts)
	1.76	Million Vehicles per Year
	0.3	Average number of accidents per year
	0.19	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized intersection)

Specific Collisions Types

Sideswipe

0.3	Average number of Sideswipe accidents per year
0.19	Accident Rate in Accidents per Million Entering Vehicles
0.00	NYSDOT Mean Accident Rate

TABLE AR-8

ROADWAY NAME: Letchworth Village Road
BETWEEN: Storrs Road (Int. 4) and Ridge Road (Int. 5)
SEGMENT LENGTH: 0.2 Miles

TOTAL ACCIDENTS: 0

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm		
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear		
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry		
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day		
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Animal		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only		
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)		
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Following Too Closely		
Traffic Control Disregard		
Unsafe Speed		
Failure to Keep Right		
Animal's Action		

Accident Rate Calculations

Total Volume:	4,380	vehicles per day (AADT Source: JMC base counts)
	1.60	Million Vehicles per Year
	0.0	Average number of accidents per year
	0.00	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline & Juncture 2-Lanes Undivided)

TABLE AR-9

INTERSECTION NAME: Letchworth Village Road & Ridge Road

TOTAL ACCIDENTS: 0

INTERSECTION NUMBER: 5

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm		
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear		
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry		
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day		
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only		
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)		
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Turning Improperly		
Steering Failure		
Unsafe Speed		
Pavement Slippery		
Oversized Vehicle		

Accident Rate Calculations

Total Volume:	4,470	vehicles per day (AADT Source: JMC base counts)
	1.63	Million Vehicles per Year
	0.0	Average number of accidents per year
	0.00	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.15	NYSDOT Mean collision rate (Urban 4-leg Unsignalized Intersection)

Specific Collisions Types

Right Angle

0.0 Average number of Right Angle accidents per year

0.00 Accident Rate in Accidents per Million Entering Vehicles

0.03 NYSDOT Mean Accident Rate

TABLE AR-10

ROADWAY NAME: Letchworth Village Road
BETWEEN: Ridge Road (Int. 5) and Thiells-Mount Ivy Road (Int. 6)
SEGMENT LENGTH: 0.31 Miles

TOTAL ACCIDENTS: 1

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday	1	100
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm	1	100
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	1	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	1	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	1	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	100
Animal		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	100
Property-Damage Only		
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)		
Fall (Sep-Nov)	1	100
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Following Too Closely		
Traffic Control Disregard		
Unsafe Speed		
Failure to Keep Right	1.00	100
Animal's Action		

Accident Rate Calculations

Total Volume:	1,920	vehicles per day (AADT Source: JMC base counts)
	0.70	Million Vehicles per Year
	0.3	Average number of accidents per year
	1.53	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline & Juncture 2-Lanes Undivided)

Specific Collisions Types

Fixed Object

0.3 Average number of Fixed Object accidents per year
1.53 Accident Rate in Accidents per Million Vehicle Miles
0.42 NYSDOT Mean Accident Rate

TABLE AR-11

INTERSECTION NAME: Letchworth Village Road / Suffern Lane & Thiells-Mount Ivy Road

TOTAL ACCIDENTS: 4

INTERSECTION NUMBER: 6

TIME PERIOD: 07/01/2021 to 06/30/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday	1	25
Wednesday		
Thursday	2	50
Friday	1	25
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	1	25
10 am-4 pm	3	75
4 pm-7 pm		
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	4	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	4	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	4	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End	1	25
Sideswipe		
Left Turn	1	25
Right Turn	2	50
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	2	50
Property-Damage Only	2	50
Time of Year	**Number**	**%**
Winter (Dec-Feb)	1	25
Spring (Mar-May)	2	50
Summer (June-Aug)		
Fall (Sep-Nov)	1	25
Contributing Factors	**Number**	**%**
Driver Inexperience	1.00	25
Failure to Yield ROW	2.00	50
Following Too Closely		
Driver Inattention	0.50	13
Backing Unsafely		
Illnes		
Other Vehicular	0.50	13

Accident Rate Calculations

Total Volume:	11,060	vehicles per day (AADT Source: JMC base counts)
	4.04	Million Vehicles per Year
	1.3	Average number of accidents per year
	0.33	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.31	NYSDOT Mean collision rate (Urban 3-leg signalized Intersection)

Specific Collisions Types

Rear End

0.3 Average number of Rear End accidents per year
0.08 Accident Rate in Accidents per Million Entering Vehicles
0.12 NYSDOT Mean Accident Rate

Left Turn

0.3 Average number of Left Turn accidents per year
0.08 Accident Rate in Accidents per Million Entering Vehicles
0.03 NYSDOT Mean Accident Rate

Right Turn

0.7 Average number of Right Turn accidents per year
0.17 Accident Rate in Accidents per Million Entering Vehicles
0.01 NYSDOT Mean Accident Rate

TABLE AR-12

INTERSECTION NAME: Suffern Lane & Hammond Road

TOTAL ACCIDENTS: 3

INTERSECTION NUMBER: 6

TIME PERIOD: 07/01/2021 to 06/30/2024

Day of Week	Number	%
Sunday		
Monday	2	67
Tuesday		
Wednesday		
Thursday	1	33
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	2	67
10 am-4 pm		
4 pm-7 pm	1	33
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	3	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	3	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	3	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End	3	100
Sideswipe		
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	33
Property-Damage Only	2	67
Time of Year	**Number**	**%**
Winter (Dec-Feb)	1	33
Spring (Mar-May)	1	33
Summer (June-Aug)	1	33
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inexperience		
Failure to Yield ROW		
Following Too Closely	0.50	17
Driver Inattention	1.50	50
Backing Unsafely		
Illness	1.00	33
Other Vehicular		

Accident Rate Calculations

Total Volume:	11,680	vehicles per day (AADT Source: JMC base counts)
	4.26	Million Vehicles per Year
	1.0	Average number of accidents per year
	0.23	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.31	NYSDOT Mean collision rate (Urban 3-leg signalized Intersection)

Specific Collisions Types

Rear End

1.0 Average number of Rear End accidents per year

0.23 Accident Rate in Accidents per Million Entering Vehicles

0.12 NYSDOT Mean Accident Rate

TABLE AR-13

INTERSECTION NAME: Suffern Lane / West Railroad Avenue & Main Street / Central Highway

TOTAL ACCIDENTS: 8

INTERSECTION NUMBER: 7

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday	2	25
Tuesday		
Wednesday	1	13
Thursday	2	25
Friday	1	13
Saturday	2	25
Time of Day	**Number**	**%**
6 am-10 am	2	25
10 am-4 pm	1	13
4 pm-7 pm	1	13
7 pm-12 Mid	3	38
12 Mid-6 am	1	13
Weather	**Number**	**%**
Clear	6	75
Cloudy	1	13
Fog	1	13
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	8	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	3	38
Night	3	38
Dawn/Dusk	2	25

Accident Type	Number	%
Rear End	3	38
Sideswipe	2	25
Left Turn		
Right Turn		
Right Angle	2	25
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown	1	13
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	3	38
Property-Damage Only	5	63
Time of Year	**Number**	**%**
Winter (Dec-Feb)	3	38
Spring (Mar-May)	1	13
Summer (June-Aug)	2	25
Fall (Sep-Nov)	2	25
Contributing Factors	**Number**	**%**
Driver Inattention	3.00	38
Failure to Yield ROW	1.50	19
Passing/Lane Usage Improper	0.50	6
Turning Improperly	0.50	6
Unsafe Lane Change	1.00	13
Fell Asleep	0.50	6
Other Vehicular	1.00	13

Accident Rate Calculations

Total Volume:	15,830	vehicles per day (AADT Source: JMC base counts)
	5.78	Million Vehicles per Year
	2.7	Average number of accidents per year
	0.46	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.24	NYSDOT Mean collision rate (Urban 4-leg signalized Intersection)

Specific Collisions Types

Rear End

1.0 Average number of Rear End accidents per year
0.17 Accident Rate in Accidents per Million Entering Vehicles
0.11 NYSDOT Mean Accident Rate

Sideswipe

0.7 Average number of Sideswipe accidents per year
0.12 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Right Angle

0.7 Average number of Right Angle accidents per year
0.12 Accident Rate in Accidents per Million Entering Vehicles
0.03 NYSDOT Mean Accident Rate

TABLE AR-14

INTERSECTION NAME: US Route 202 & Palisades Interstate Parkway Southbound On/Off Ramps (Exit 13) / Diner Driveway

TOTAL ACCIDENTS: 13

INTERSECTION NUMBER: 8

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	2	15
Monday	3	23
Tuesday		
Wednesday	4	31
Thursday	2	15
Friday	1	8
Saturday	1	8
Time of Day	**Number**	**%**
6 am-10 am	4	31
10 am-4 pm	3	23
4 pm-7 pm	5	38
7 pm-12 Mid	1	8
12 Mid-6 am		
Weather	**Number**	**%**
Clear	10	77
Cloudy		
Fog		
Rain	3	23
Sleet/Snow		
Pavement	**Number**	**%**
Dry	5	38
Snow/Ice		
Wet	3	23
Light Conditions	**Number**	**%**
Day	5	38
Night	3	23
Dawn/Dusk		

Accident Type	Number	%
Rear End	9	69
Sideswipe	1	8
Left Turn	1	8
Right Turn		
Right Angle		
Head On	1	8
Bicyclist		
Pedestrian	1	8
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	5	38
Property-Damage Only	8	62
Time of Year	**Number**	**%**
Winter (Dec-Feb)	2	15
Spring (Mar-May)	4	31
Summer (June-Aug)	4	31
Fall (Sep-Nov)	3	23
Contributing Factors	**Number**	**%**
Driver Inattention	3.00	23
Failure to Yield ROW	2.00	15
Following Too Closely	6.00	46
Steering Failure		
Unsafe Speed	1.50	12
Pavement Slippery		
Animal's Action	0.50	4

Accident Rate Calculations

Total Volume:	20,560	vehicles per day (AADT Source: JMC base counts)
	7.50	Million Vehicles per Year
	4.3	Average number of accidents per year
	0.58	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.24	NYSDOT Mean collision rate (Urban 4-leg signalized Intersection)

Specific Collisions Types

Rear End

3.0 Average number of Rear End accidents per year
0.40 Accident Rate in Accidents per Million Entering Vehicles
0.11 NYSDOT Mean Accident Rate

Left Turn

0.3 Average number of Left Turn accidents per year
0.04 Accident Rate in Accidents per Million Entering Vehicles
0.01 NYSDOT Mean Accident Rate

Sideswipe

0.3 Average number of Sideswipe accidents per year
0.04 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Wet Pavement

1.0 Average number of Wet Pavement accidents per year
0.13 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

TABLE AR-15

INTERSECTION NAME: US Route 202 & Thiells-Mount Ivy Road

TOTAL ACCIDENTS: 32

INTERSECTION NUMBER: 9

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	5	16
Monday	3	9
Tuesday	5	16
Wednesday	4	13
Thursday	4	13
Friday	5	16
Saturday	6	19
Time of Day	**Number**	**%**
6 am-10 am	3	9
10 am-4 pm	11	34
4 pm-7 pm	8	25
7 pm-12 Mid	7	22
12 Mid-6 am	3	9
Weather	**Number**	**%**
Clear	27	84
Cloudy		
Rain	5	16
Pavement	**Number**	**%**
Dry	27	84
Snow/Ice		
Wet	5	16
Light Conditions	**Number**	**%**
Day	19	59
Night	12	38
Dawn/Dusk	1	3
Severity	**Number**	**%**
Non-Fatal Injury	4	13
Property-Damage Only	28	88

Accident Type	Number	%
Rear End	20	63
Sideswipe	6	19
Right Angle	1	3
Fixed Object	4	13
Animal	1	3
Time of Year	**Number**	**%**
Winter (Dec-Feb)	6	19
Spring (Mar-May)	7	22
Summer (June-Aug)	10	31
Fall (Sep-Nov)	9	28
Contributing Factors	**Number**	**%**
Driver Inexperience	1.00	3
Failure to Yield ROW	3.00	9
Following Too Closely	8.50	27
Traffic Control Disregard	0.50	2
Unsafe Speed	0.50	2
Pavement Slippery	1.50	5
Unsafe Lane Change	1.50	5
View Obstructed/Limited	0.50	2
Failure to Keep Right	0.50	2
Passing/Lane Usage Improper	1.00	3
Turning Improperly	0.50	2
Brake Defective	0.50	2
Animal's Action	1.00	3
Reaction to Uninvolved Vehicle	1.00	3
Fell Asleep	1.00	3
Backing Unsafely	1.00	3
Driver Inattention	8.50	27

Accident Rate Calculations

Total Volume:	21,270	vehicles per day (AADT Source: JMC base counts)
	7.76	Million Vehicles per Year
	10.7	Average number of accidents per year
	1.37	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.16	NYSDOT Mean collision rate (Urban 3-leg signalized Intersection)

Specific Collisions Types

Rear End

6.7 Average number of Rear End accidents per year
0.86 Accident Rate in Accidents per Million Entering Vehicles
0.07 NYSDOT Mean Accident Rate

Right Angle

0.3 Average number of Right Angle accidents per year
0.04 Accident Rate in Accidents per Million Entering Vehicles
0.03 NYSDOT Mean Accident Rate

Sideswipe

2.0 Average number of Sideswipe accidents per year
0.26 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Wet Pavement

1.7 Average number of Wet Pavement accidents per year
0.21 Accident Rate in Accidents per Million Entering Vehicles
0.02 NYSDOT Mean Accident Rate

TABLE AR-16

INTERSECTION NAME: US Route 202 & NYS Route 45 / Old County Road

TOTAL ACCIDENTS: 60

INTERSECTION NUMBER: 10

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	9	15
Monday	10	17
Tuesday	5	8
Wednesday	10	17
Thursday	11	18
Friday	11	18
Saturday	4	7
Time of Day	**Number**	**%**
6 am-10 am	11	18
10 am-4 pm	27	45
4 pm-7 pm	12	20
7 pm-12 Mid	8	13
12 Mid-6 am	2	3
Weather	**Number**	**%**
Clear	45	75
Cloudy	8	13
Rain	6	10
Sleet/Snow	1	2
Pavement	**Number**	**%**
Dry	48	80
Snow/Ice	1	2
Wet	11	18
Light Conditions	**Number**	**%**
Day	46	77
Night	9	15
Dawn/Dusk	5	8
Time of Year	**Number**	**%**
Winter (Dec-Feb)	18	30
Spring (Mar-May)	17	28
Summer (June-Aug)	10	17
Fall (Sep-Nov)	15	25

Accident Type	Number	%
Rear End	39	65
Sideswipe	9	15
Left Turn	3	5
Right Turn	1	2
Right Angle	2	3
Head On	3	5
Pedestrian	1	2
Fixed Object	2	3
Severity	**Number**	**%**
Non-Fatal Injury	7	12
Property-Damage Only	53	88
Contributing Factors	**Number**	**%**
Driver Inattention	28.58	48
Failure to Yield ROW	3.25	5
Following Too Closely	10.83	18
Traffic Control Disregard	1.50	3
Unsafe Speed	1.00	2
Unsafe Lane Change	3.00	5
Passing/Lane Usage Improper	3.50	6
Fell Asleep	0.50	1
Oversized Vehicle	0.50	1
Physical Disability	1.00	2
Reaction to Uninvolved Vehicle	0.33	1
Glare	1.00	2
Failure to Keep Right	0.50	1
View Obstructed	0.33	1
Turning Improperly	1.00	2
Alcohol Involement	0.33	1
Pedestrain Error	0.33	1
Pavement Slippery	1.50	3
Unknown	1.00	2

Accident Rate Calculations

Total Volume:	16,460	vehicles per day (AADT Source: JMC base counts)
	6.01	Million Vehicles per Year
	20.0	Average number of accidents per year
	3.33	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.24	NYSDOT Mean collision rate (Urban 4-leg signalized Intersection)

Specific Collisions Types

Rear End

13.0 Average number of Rear End accidents per year
2.16 Accident Rate in Accidents per Million Entering Vehicles
0.11 NYSDOT Mean Accident Rate

Sideswipe

3.0 Average number of Sideswipe accidents per year
0.50 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Wet Pavement

4.0 Average number of Wet Pavement accidents per year
0.67 Accident Rate in Accidents per Million Entering Vehicles
0.04 NYSDOT Mean Accident Rate

TABLE AR-17

ROADWAY NAME: Thiells-Mount Ivy Road

TOTAL ACCIDENTS: 5

BETWEEN: US Route 202 (Int. 10) and Palisades Interstate Parkway Northbound Off Ramp (Int. 11)

SEGMENT LENGTH: 0.1 Miles

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday	1	20
Tuesday	1	20
Wednesday	1	20
Thursday	2	40
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	2	40
10 am-4 pm	1	20
4 pm-7 pm	2	40
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	3	60
Cloudy	2	40
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	4	80
Snow/Ice		
Wet	1	20
Light Conditions	**Number**	**%**
Day	4	80
Night	1	20
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe	4	80
Left Turn	1	20
Right Turn		
Right Angle		
Pedestrian		
Fixed Object		
Animal		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only	5	100
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)	1	20
Summer (June-Aug)	2	40
Fall (Sep-Nov)	2	40
Contributing Factors	**Number**	**%**
Driver Inexperience		
Turning Improperly	1.00	20
Driver Inattention		
Failure to Yield ROW		
Following Too Closely		
Other Vehicular		
Animal's Action		
Pavement Slippery		
View Obstructed	0.50	10
Unsafe Lane Change	3.00	60
Backing Unsafely		
Passing/Lane Usage Improper	0.50	10
Unknown		

Accident Rate Calculations

Total Volume:	10,040	vehicles per day (AADT Source: JMC base counts)
	3.66	Million Vehicles per Year
	1.7	Average number of accidents per year
	4.13	Accident Rate in accidents per Million Vehicle Miles (MVM)
	5.42	NYSDOT Mean collision rate (Urban Mainline & Juncture 3-Lanes Undivided)

Specific Collisions Types

Wet Pavement

0.3 Average number of Wet Pavement accidents per year

0.83 Accident Rate in Accidents per Million Vehicle Miles

0.92 NYSDOT Mean Accident Rate

Fixed Object

0.0 Average number of Fixed Object accidents per year

0.00 Accident Rate in Accidents per Million Vehicle Miles

0.39 NYSDOT Mean Accident Rate

TABLE AR-18

INTERSECTION NAME: Thiells-Mount Ivy Road & Palisades Interstate Parkway Northbound Off Ramp (Exit 13)

TOTAL ACCIDENTS: 16

INTERSECTION NUMBER: 11

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	2	13
Monday		
Tuesday	3	19
Wednesday	6	38
Thursday	2	13
Friday	2	13
Saturday	1	6
Time of Day	**Number**	**%**
6 am-10 am	1	6
10 am-4 pm	6	38
4 pm-7 pm	6	38
7 pm-12 Mid	1	6
12 Mid-6 am	2	13
Weather	**Number**	**%**
Clear	14	88
Cloudy	1	6
Fog		
Rain	1	6
Sleet/Snow		
Pavement	**Number**	**%**
Dry	15	94
Snow/Ice		
Wet	1	6
Light Conditions	**Number**	**%**
Day	10	63
Night	5	31
Dawn/Dusk	1	6

Accident Type	Number	%
Rear End	2	13
Sideswipe	3	19
Left Turn	4	25
Right Turn	1	6
Right Angle	4	25
Head On		
Bicyclist		
Pedestrian		
Fixed Object	2	13
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	2	13
Property-Damage Only	14	88
Time of Year	**Number**	**%**
Winter (Dec-Feb)	2	13
Spring (Mar-May)	3	19
Summer (June-Aug)	2	13
Fall (Sep-Nov)	8	50
Contributing Factors	**Number**	**%**
Driver Inattention	3.00	19
Failure to Yield ROW	6.50	41
Turning Improperly	1.50	9
Failure to Keep Right	0.50	3
Unsafe Speed	2.00	13
Unsafe Lane Change	1.00	6
Fell Asleep	1.00	6
Passing/Lane Usage Improper	0.50	3

Accident Rate Calculations

Total Volume:	11,920	vehicles per day (AADT Source: JMC base counts)
	4.35	Million Vehicles per Year
	5.3	Average number of accidents per year
	1.23	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized Intersection)

Specific Collisions Types

Right Angle

1.3 Average number of Right Angle accidents per year
0.31 Accident Rate in Accidents per Million Entering Vehicles
0.02 NYSDOT Mean Accident Rate

Left Turn

1.3 Average number of Left Turn accidents per year
0.31 Accident Rate in Accidents per Million Entering Vehicles
0.01 NYSDOT Mean Accident Rate

Sideswipe

1.0 Average number of Sideswipe accidents per year
0.23 Accident Rate in Accidents per Million Entering Vehicles
0.00 NYSDOT Mean Accident Rate

Rear End

0.7 Average number of Rear End accidents per year
0.15 Accident Rate in Accidents per Million Entering Vehicles
0.06 NYSDOT Mean Accident Rate

TABLE AR-19

ROADWAY NAME: Thiells - Mount Ivy Road

TOTAL ACCIDENTS: 24

BETWEEN: Palisades Interstate Parkway Northbound Off Ramp (Int. 11) and Ridge Road (Int. 12)

SEGMENT LENGTH: 1.25 Miles

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	3	13
Monday	4	17
Tuesday	2	8
Wednesday	4	17
Thursday	4	17
Friday	3	13
Saturday	4	17
Time of Day	**Number**	**%**
6 am-10 am	6	25
10 am-4 pm	4	17
4 pm-7 pm	7	29
7 pm-12 Mid	6	25
12 Mid-6 am	1	4
Weather	**Number**	**%**
Clear	18	75
Cloudy	1	4
Fog		
Rain	4	17
Sleet/Snow	1	4
Pavement	**Number**	**%**
Dry	18	75
Snow/Ice	1	4
Wet	5	21
Light Conditions	**Number**	**%**
Day	11	46
Night	11	46
Dawn/Dusk	2	8

Accident Type	Number	%
Rear End	6	25
Sideswipe	1	4
Left Turn		
Right Turn	1	4
Right Angle	3	13
Pedestrian	2	8
Fixed Object	3	13
Animal	8	33
Severity	**Number**	**%**
Fatal Injury	1	4
Non-Fatal Injury	2	8
Property-Damage Only	21	88
Time of Year	**Number**	**%**
Winter (Dec-Feb)	9	38
Spring (Mar-May)	4	17
Summer (June-Aug)	5	21
Fall (Sep-Nov)	6	25
Contributing Factors	**Number**	**%**
Driver Inexperience	0.50	2
Driver Inattention	4.50	19
Failure to Yield ROW	4.00	17
Following Too Closely	2.50	10
Other Vehicular	1.00	4
Animal's Action	8.00	33
Pavement Slippery	1.00	4
View Obstructed	1.00	4
Backing Unsafely	0.50	2
Unknown	1.00	4

Accident Rate Calculations

Total Volume:	11,000	vehicles per day (AADT Source: JMC base counts)
	4.02	Million Vehicles per Year
	8.0	Average number of accidents per year
	1.57	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline & Juncture 2-Lanes Undivided)

Specific Collisions Types

Wet Pavement

2.0 Average number of Wet Pavement accidents per year

0.39 Accident Rate in Accidents per Million Vehicle Miles

0.61 NYSDOT Mean Accident Rate

Fixed Object

1.0 Average number of Fixed Object accidents per year

0.20 Accident Rate in Accidents per Million Vehicle Miles

0.42 NYSDOT Mean Accident Rate

TABLE AR-20

INTERSECTION NAME: Thiells-Mount Ivy Road & Ridge Road

TOTAL ACCIDENTS: 3

INTERSECTION NUMBER: 12

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday		
Wednesday	3	100
Thursday		
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	1	33
10 am-4 pm		
4 pm-7 pm	1	33
7 pm-12 Mid	1	33
12 Mid-6 am		
Weather	**Number**	**%**
Clear	3	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	3	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	1	33
Night	2	67
Dawn/Dusk		

Accident Type	Number	%
Rear End	1	33
Sideswipe		
Left Turn		
Right Turn		
Right Angle	1	33
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	33
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury	1	33
Property-Damage Only	2	67
Time of Year	**Number**	**%**
Winter (Dec-Feb)	3	100
Spring (Mar-May)		
Summer (June-Aug)		
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention	1.00	33
Failure to Yield ROW	1.00	33
Turning Improperly		
Steering Failure		
Unsafe Speed		
Pavement Slippery		
Breaks Deffective	1.00	33

Accident Rate Calculations

Total Volume:	11,310	vehicles per day (AADT Source: JMC base counts)
	4.13	Million Vehicles per Year
	1.0	Average number of accidents per year
	0.24	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized Intersection)

Specific Collisions Types

Rear End

0.3 Average number of Rear End accidents per year

0.08 Accident Rate in Accidents per Million Entering Vehicles

0.06 NYSDOT Mean Accident Rate

TABLE AR-21

INTERSECTION NAME: Thiells-Mount Ivy Road & Rosman Road

TOTAL ACCIDENTS: 4

INTERSECTION NUMBER: 13

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday		
Monday		
Tuesday	1	25
Wednesday	2	50
Thursday		
Friday	1	25
Saturday		
Time of Day	**Number**	**%**
6 am-10 am	1	25
10 am-4 pm	3	75
4 pm-7 pm		
7 pm-12 Mid		
12 Mid-6 am		
Weather	**Number**	**%**
Clear	4	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement		**%**
Dry	4	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day	4	100
Night		
Dawn/Dusk		

Accident Type	Number	%
Rear End	2	50
Sideswipe		
Left Turn		
Right Turn		
Right Angle	1	25
Head On		
Bicyclist		
Pedestrian		
Fixed Object	1	25
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only	4	100
Time of Year	**Number**	**%**
Winter (Dec-Feb)	2	50
Spring (Mar-May)	1	25
Summer (June-Aug)		
Fall (Sep-Nov)	1	25
Contributing Factors	**Number**	**%**
Driver Inattention	3.50	88
Failure to Yield ROW		
Turning Improperly		
Steering Failure		
Unsafe Speed		
Pavement Slippery		
Reaction to Uninvolved Vehicle	0.50	13

Accident Rate Calculations

Total Volume:	11,920	vehicles per day (AADT Source: JMC base counts)
	4.35	Million Vehicles per Year
	1.3	Average number of accidents per year
	0.31	Accident Rate in accidents per Million Entering Vehicles (MEV)
	0.17	NYSDOT Mean collision rate (Urban 3-leg Unsignalized Intersection)

Specific Collisions Types

Rear End

0.7 Average number of Rear End accidents per year
0.15 Accident Rate in Accidents per Million Entering Vehicles
0.06 NYSDOT Mean Accident Rate

Right Angle

0.3 Average number of Right Angle accidents per year
0.08 Accident Rate in Accidents per Million Entering Vehicles
0.02 NYSDOT Mean Accident Rate

TABLE AR-22

ROADWAY NAME: Ridge Road

BETWEEN: Letchworth Village Road (Int. 5) & Thiells-Mount Ivy Road (Int. 12)

SEGMENT LENGTH: 0.7 Miles

TOTAL ACCIDENTS: 1

TIME PERIOD: 09/01/2021 to 08/31/2024

Day of Week	Number	%
Sunday	1	100
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Time of Day	**Number**	**%**
6 am-10 am		
10 am-4 pm		
4 pm-7 pm		
7 pm-12 Mid	1	100
12 Mid-6 am		
Weather	**Number**	**%**
Clear	1	100
Cloudy		
Fog		
Rain		
Sleet/Snow		
Pavement	**Number**	**%**
Dry	1	100
Snow/Ice		
Wet		
Light Conditions	**Number**	**%**
Day		
Night	1	100
Dawn/Dusk		

Accident Type	Number	%
Rear End		
Sideswipe	1	100
Left Turn		
Right Turn		
Right Angle		
Head On		
Bicyclist		
Pedestrian		
Fixed Object		
Unknown		
Severity	**Number**	**%**
Fatal Injury		
Non-Fatal Injury		
Property-Damage Only	1	100
Time of Year	**Number**	**%**
Winter (Dec-Feb)		
Spring (Mar-May)		
Summer (June-Aug)	1	100
Fall (Sep-Nov)		
Contributing Factors	**Number**	**%**
Driver Inattention		
Failure to Yield ROW		
Following Too Closely		
Traffic Control Disregard		
Unsafe Speed		
Pavement Slippery		
Passenger Distraction	1.00	100

Accident Rate Calculations

Total Volume:	1,880	vehicles per day (AADT Source: JMC base counts)
	0.69	Million Vehicles per Year
	0.3	Average number of accidents per year
	0.69	Accident Rate in accidents per Million Vehicle Miles (MVM)
	3.57	NYSDOT Mean collision rate (Urban Mainline & Juncture 2-Lanes Undivided)

PART D

TRAFFIC COUNT DATA

TURNING MOVEMENT COUNT DATA

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway SB Ramp		INT #:	1

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	19	20		28	60		24	2					153						
	TRUCK		2		2	1			1											
7:15 - 7:30 AM	TOTAL	17	23		24	75		39	1					179						
	TRUCK		3		5	4														
7:30 - 7:45 AM	TOTAL	27	36		17	91		35	3					209						
	TRUCK		7			1		1												
7:45 - 8:00 AM	TOTAL	28	37		21	64		35	6					191						
	TRUCK		2		3	1		2												
8:00 - 8:15 AM	TOTAL	21	31		28	83		25	6					194						
	TRUCK	1	4		5	1		1												
8:15 - 8:30 AM	TOTAL	23	28		34	80		38	1					204						
	TRUCK		1		4	1														
8:30 - 8:45 AM	TOTAL	17	29		40	114		18	3					221						
	TRUCK	2	5		5	1														
8:45 - 9:00 AM	TOTAL	12	26		46	98		10	7					199						
	TRUCK	1	5		8															
2:00 - 2:15 PM	TOTAL	7	21		25	66		10	1					130						
	TRUCK		1		1	4														
2:15 - 2:30 PM	TOTAL	10	23		30	74		18	1					156						
	TRUCK		3		7	4		1												
2:30 - 2:45 PM	TOTAL	8	30		29	68		15	2					152						
	TRUCK		1		1	2		2												
2:45 - 3:00 PM	TOTAL	7	27		31	64		9	7					145						
	TRUCK				4	1		1												
3:00 - 3:15 PM	TOTAL	11	40		38	71		6	7					173						
	TRUCK	1	5		4															
3:15 - 3:30 PM	TOTAL	6	25		33	63		11	6					144						
	TRUCK		2		4	1														
3:30 - 3:45 PM	TOTAL	9	26		38	77		9	3					162						
	TRUCK		3		3	1														
3:45 - 4:00 PM	TOTAL	5	35		41	66		26	5					178						
	TRUCK		1		3	3		1												

4:00 - 4:15 PM	TOTAL	11	46		48	91		13	3					212						
	TRUCK	1	1		1	2														
4:15 - 4:30 PM	TOTAL	8	44		61	71		14	4					202						
	TRUCK				3															
4:30 - 4:45 PM	TOTAL	11	52		37	79		11	6					196						
	TRUCK		5			1														
4:45 - 5:00 PM	TOTAL	6	39		30	62		14	8					159						
	TRUCK		2		1	1														
5:00 - 5:15 PM	TOTAL	3	37		41	67		12	5					165						
	TRUCK		1																	
5:15 - 5:30 PM	TOTAL	9	38		47	74		9	2					179						
	TRUCK				1															
5:30 - 5:45 PM	TOTAL	6	44		25	73		12	3					163						
	TRUCK		1																	
5:45 - 6:00 PM	TOTAL	5	31		21	59		15	1					132						
	TRUCK																			
6:00 - 6:15 PM	TOTAL	4	26		31	54		9	6					130						
	TRUCK				1															
6:15 - 6:30 PM	TOTAL	5	29		15	57		13	3					122						
	TRUCK		1																	
6:30 - 6:45 PM	TOTAL	2	29		20	44		11	4					110						
	TRUCK																			
6:45 - 7:00 PM	TOTAL	2	27		26	27		8	3					93						
	TRUCK				1															

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3:
4: Willow Grove Road WB - Thru
5: Willow Grove Road WB - Right
6:
7: PIP Ramp SB - Left
8: PIP Ramp SB - Right
9:
10:
11:
12:
A:
B:
C:
D:

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway SB Ramp		INT #:	1

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	91	116		90	290		133	12					732						
	TRUCK	0%	12%		11%	2%		2%	8%											0.88
7:15 - 8:15 AM	TOTAL	93	127		90	313		134	16					773						
	TRUCK	1%	13%		14%	2%		3%	0%											0.92
7:30 - 8:30 AM	TOTAL	99	132		100	318		133	16					798						
	TRUCK	1%	11%		12%	1%		3%	0%											0.95
7:45 - 8:45 AM	TOTAL	89	125		123	341		116	16					810						
	TRUCK	3%	10%		14%	1%		3%	0%											0.92
8:00 - 9:00 AM	TOTAL	73	114		148	375		91	17					818						
	TRUCK	5%	13%		15%	1%		1%	0%											0.93
2:00 - 3:00 PM	TOTAL	32	101		115	272		52	11					583						
	TRUCK	0%	5%		11%	4%		8%	0%											0.93
2:15 - 3:15 PM	TOTAL	36	120		128	277		48	17					626						
	TRUCK	3%	8%		13%	3%		8%	0%											0.90
2:30 - 3:30 PM	TOTAL	32	122		131	266		41	22					614						
	TRUCK	3%	7%		10%	2%		7%	0%											0.89
2:45 - 3:45 PM	TOTAL	33	118		140	275		35	23					624						
	TRUCK	3%	8%		11%	1%		3%	0%											0.90
3:00 - 4:00 PM	TOTAL	31	126		150	277		52	21					657						
	TRUCK	3%	9%		9%	2%		2%	0%											0.92

4:00 - 5:00 PM	TOTAL	36	181		176	303		52	21					769							
	TRUCK	3%	4%		3%	1%		0%	0%												0.91
4:15 - 5:15 PM	TOTAL	28	172		169	279		51	23					722							
	TRUCK	0%	5%		2%	1%		0%	0%												0.89
4:30 - 5:30 PM	TOTAL	29	166		155	282		46	21					699							
	TRUCK	0%	5%		1%	1%		0%	0%												0.89
4:45 - 5:45 PM	TOTAL	24	158		143	276		47	18					666							
	TRUCK	0%	3%		1%	0%		0%	0%												0.93
5:00 - 6:00 PM	TOTAL	23	150		134	273		48	11					639							
	TRUCK	0%	1%		1%	0%		0%	0%												0.89
5:15 - 6:15 PM	TOTAL	24	139		124	260		45	12					604							
	TRUCK	0%	1%		2%	0%		0%	0%												0.84
5:30 - 6:30 PM	TOTAL	20	130		92	243		49	13					547							
	TRUCK	0%	2%		1%	0%		0%	0%												0.84
5:45 - 6:45 PM	TOTAL	16	115		87	214		48	14					494							
	TRUCK	0%	1%		1%	0%		0%	0%												0.94
6:00 - 7:00 PM	TOTAL	13	111		92	182		41	16					455							
	TRUCK	0%	1%		2%	0%		0%	0%												0.88

1: Willow Grove Road EB - Left	7: PIP Ramp SB - Left	A:
2: Willow Grove Road EB - Thru	8: PIP Ramp SB - Right	B:
3:	9:	C:
4: Willow Grove Road WB - Thru	10:	D:
5: Willow Grove Road WB - Right	11:	
6:	12:	

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway NB Ramp		INT #:	2

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	35	6		9	75		9	53					187						
	TRUCK	2				3														
7:15 - 7:30 AM	TOTAL	61	2		9	94		8	34					208						
	TRUCK	2				7														
7:30 - 7:45 AM	TOTAL	65	3		11	99		3	45					226						
	TRUCK	7				1														
7:45 - 8:00 AM	TOTAL	72	2		12	79		3	50					218						
	TRUCK	6				2			3											
8:00 - 8:15 AM	TOTAL	57	2		8	111		5	47					230						
	TRUCK	5				5														
8:15 - 8:30 AM	TOTAL	52	9		12	104		7	50					234						
	TRUCK	1			1	6														
8:30 - 8:45 AM	TOTAL	43	4		10	140		9	58					264						
	TRUCK	5				6			1											
8:45 - 9:00 AM	TOTAL	31	5		3	144		7	54					244						
	TRUCK	5				7			3											
2:00 - 2:15 PM	TOTAL	28	5		12	83		8	50					186						
	TRUCK	1				4														
2:15 - 2:30 PM	TOTAL	37	1		20	93		8	52					211						
	TRUCK	3				11														
2:30 - 2:45 PM	TOTAL	43	5		17	90		11	60					226						
	TRUCK	5				4			2											
2:45 - 3:00 PM	TOTAL	32	3		20	83		15	71					224						
	TRUCK	1			1	6			1											
3:00 - 3:15 PM	TOTAL	37	7		25	95		14	76					254						
	TRUCK	5	1		2	2		2	2											

4:00 - 4:15 PM	TOTAL	52	4		42	128		8	64					298							
	TRUCK	1				2															
4:15 - 4:30 PM	TOTAL	55	5		24	115		21	84					304							
	TRUCK	0				2			1												
4:30 - 4:45 PM	TOTAL	56	9		28	97		16	78					284							
	TRUCK	2	1		2	3															
4:45 - 5:00 PM	TOTAL	45	4		9	81		11	116					266							
	TRUCK	2				3															
5:00 - 5:15 PM	TOTAL	48	5		18	93		21	108					293							
	TRUCK	3																			
5:15 - 5:30 PM	TOTAL	40	7		19	102		15	109					292							
	TRUCK				1																
5:30 - 5:45 PM	TOTAL	43	8		10	86		8	98					253							
	TRUCK																				
5:45 - 6:00 PM	TOTAL	42	5		9	76		13	107					252							
	TRUCK																				
6:00 - 6:15 PM	TOTAL	34	4		10	64		16	80					208							
	TRUCK					1															
6:15 - 6:30 PM	TOTAL	40	2		8	64		6	104					224							
	TRUCK																				
6:30 - 6:45 PM	TOTAL	36	3		5	61		6	66					177							
	TRUCK																				
6:45 - 7:00 PM	TOTAL	36	2		12	40		14	96					200							
	TRUCK																				

1: Willow Grove Road EB - Thru
2: Willow Grove Road EB - Right
3:
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6:
7: PIP NB Ramp - Left
8: PIP NB Ramp - Right
9:
10:
11:
12:
A:
B:
C:
D:

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway NB Ramp		INT #:	2

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	233	13		41	347		23	182					839						
	TRUCK	7%	0%		0%	4%		0%	2%											0.93
7:15 - 8:15 AM	TOTAL	255	9		40	383		19	176					882						
	TRUCK	8%	0%		0%	4%		0%	2%											0.96
7:30 - 8:30 AM	TOTAL	246	16		43	393		18	192					908						
	TRUCK	8%	0%		2%	4%		0%	2%											0.97
7:45 - 8:45 AM	TOTAL	224	17		42	434		24	205					946						
	TRUCK	8%	0%		2%	4%		0%	2%											0.90
8:00 - 9:00 AM	TOTAL	183	20		33	499		28	209					972						
	TRUCK	9%	0%		3%	5%		0%	2%											0.92
2:00 - 3:00 PM	TOTAL	140	14		69	349		42	233					847						
	TRUCK	7%	0%		1%	7%		0%	1%											0.94
2:15 - 3:15 PM	TOTAL	149	16		82	361		48	259					915						
	TRUCK	9%	6%		4%	6%		4%	2%											0.90
2:30 - 3:30 PM	TOTAL	148	16		81	349		56	305					955						
	TRUCK	9%	6%		4%	4%		4%	2%											0.94
2:45 - 3:45 PM	TOTAL	136	15		91	360		58	339					999						
	TRUCK	7%	7%		4%	3%		3%	1%											0.93
3:00 - 4:00 PM	TOTAL	158	18		94	366		59	354					1,049						
	TRUCK	6%	6%		4%	3%		3%	1%											0.96

4:00 - 5:00 PM	TOTAL	208	22		103	421		56	342					1,152						
	TRUCK	2%	5%		2%	2%		0%	0%											0.95
4:15 - 5:15 PM	TOTAL	204	23		79	386		69	386					1,147						
	TRUCK	3%	4%		3%	2%		0%	0%											0.94
4:30 - 5:30 PM	TOTAL	189	25		74	373		63	411					1,135						
	TRUCK	4%	4%		4%	2%		0%	0%											0.97
4:45 - 5:45 PM	TOTAL	176	24		56	362		55	431					1,104						
	TRUCK	3%	0%		2%	1%		0%	0%											0.94
5:00 - 6:00 PM	TOTAL	173	25		56	357		57	422					1,090						
	TRUCK	2%	0%		2%	0%		0%	0%											0.93
5:15 - 6:15 PM	TOTAL	159	24		48	328		52	394					1,005						
	TRUCK	0%	0%		2%	0%		0%	0%											0.86
5:30 - 6:30 PM	TOTAL	159	19		37	290		43	389					937						
	TRUCK	0%	0%		0%	0%		0%	0%											0.93
5:45 - 6:45 PM	TOTAL	152	14		32	265		41	357					861						
	TRUCK	0%	0%		0%	0%		0%	0%											0.85
6:00 - 7:00 PM	TOTAL	146	11		35	229		42	346					809						
	TRUCK	0%	0%		0%	0%		0%	0%											0.90

1: Willow Grove Road EB - Thru
2: Willow Grove Road EB - Right
3:
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6:
7: PIP NB Ramp - Left
8: PIP NB Ramp - Right
9:
10:
11:
12:
A:
B:
C:
D:

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Letchworth Vilage Road/Patriots Hill Lane		INT #:	3

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	2	67	14	28	87		4	1	20		1		224						
	TRUCK		1	1	7	3				2										
7:15 - 7:30 AM	TOTAL	5	44	50	41	103	3	3		12		2	2	265						
	TRUCK			2	4	7				1										
7:30 - 7:45 AM	TOTAL	4	34	47	58	82		23		39	1	3	7	298	2				2	
	TRUCK		2	4	27	2		1		20										
7:45 - 8:00 AM	TOTAL	12	77	54	56	61	1	20	3	41	4	8	6	343	1				1	
	TRUCK		4	4	6			2		7		1								
8:00 - 8:15 AM	TOTAL	8	67	30	52	104		12		34	3	6	8	324						
	TRUCK		3	2	8	4		1		4		1								
8:15 - 8:30 AM	TOTAL	7	66	37	50	92		22		37	1	1	5	318						
	TRUCK			1	9	2		3		8			1							
8:30 - 8:45 AM	TOTAL	3	70	22	43	130	4	17	2	27	1		6	325						
	TRUCK	1	1	3	5	3		1	1	5			2							
8:45 - 9:00 AM	TOTAL	11	65	16	33	128	2	8	1	17	1	2	6	290						
	TRUCK	1	5	2	5	4				3			1							
2:00 - 2:15 PM	TOTAL	5	69	3	19	78	1	10	4	23	3		12	227						
	TRUCK		1		3	5		1		2			2							
2:15 - 2:30 PM	TOTAL	3	67	19	23	92	3	10	1	22	2	2	11	255						
	TRUCK			4	6	7		2		1										
2:30 - 2:45 PM	TOTAL	7	84	13	53	90		12	1	29	1	4	8	302						
	TRUCK	1	2	2	30	1				6		1								
2:45 - 3:00 PM	TOTAL	4	88	5	28	65		21	1	67		5	19	303	1				1	
	TRUCK		2		5			6		27		1	1							
3:00 - 3:15 PM	TOTAL	7	107	8	35	88	4	14	3	33	1	5	10	315						
	TRUCK	3	4	1	7	2				3										

4:00 - 4:15 PM	TOTAL	2	114	9	23	94		52	3	55	6	5	17	380						
	TRUCK			1	1	2		1		3										
4:15 - 4:30 PM	TOTAL	3	122	11	15	93	1	34	4	49	2	2	12	348						
	TRUCK				3			3		4			1							
4:30 - 4:45 PM	TOTAL	1	117	10	21	87	1	28	4	35			9	313						
	TRUCK		3		2	1		3		6										
4:45 - 5:00 PM	TOTAL	3	153	8	23	64		11		33	2	2	6	305						
	TRUCK		2		4					2										
5:00 - 5:15 PM	TOTAL	2	146	12	19	90	1	25	3	38	2		2	340						
	TRUCK		1	1	1			1												
5:15 - 5:30 PM	TOTAL	2	143	2	20	97	5	16	1	34	1		3	324						
	TRUCK							1												
5:30 - 5:45 PM	TOTAL		129	13	11	97	3	8	1	31	3	1	3	300						
	TRUCK				1															
5:45 - 6:00 PM	TOTAL		142	11	19	66	1	8		21	1		2	271						
	TRUCK				1	1		1												
6:00 - 6:15 PM	TOTAL	3	110	4	18	64	2	5		31	3	1	3	244						
	TRUCK					1				1										
6:15 - 6:30 PM	TOTAL	4	122	9	24	71	7	5	1	21	1	1	1	267						
	TRUCK			1																
6:30 - 6:45 PM	TOTAL	2	103	6	15	52	14	1	1	31	4			229						
	TRUCK				1	1														
6:45 - 7:00 PM	TOTAL	2	121	11	15	52	3	6	2	20	10	1	1	244						
	TRUCK				1	1				1										

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3: Willow Grove Road EB - Right
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6: Willow Grove Road WB - Right
7: Letchworth Village Rd NB - Left
8: Letchworth Village Rd NB - Thru
9: Letchworth Village Rd NB - Right
10: Patriots Hill Lane SB - Left
11: Patriots Hill Lane SB - Thru
12: Patriots Hill Lane SB - Right

A: X-ing Patriot Hill Lane North of INT
B: X-ing Willow Grove Road East of INT
C: X-ing Letchworth Vlg Rd South of INT
D: X-ing Willow Grove Road West of INT

DATE:	Weekday (11-13-2024)	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM	NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Letchworth Vilage Road/Patriots Hill Lane	INT #:	3

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	23	222	165	183	333	4	50	4	112	5	14	15	1,130	3				3	
	TRUCK	0%	3%	7%	24%	4%	0%	6%	0%	27%	0%	7%	0%							0.82
7:15 - 8:15 AM	TOTAL	29	222	181	207	350	4	58	3	126	8	19	23	1,230	3				3	
	TRUCK	0%	4%	7%	22%	4%	0%	7%	0%	25%	0%	11%	0%							0.90
7:30 - 8:30 AM	TOTAL	31	244	168	216	339	1	77	3	151	9	18	26	1,283	3				3	
	TRUCK	0%	4%	7%	23%	2%	0%	9%	0%	26%	0%	11%	4%							0.94
7:45 - 8:45 AM	TOTAL	30	280	143	201	387	5	71	5	139	9	15	25	1,310	1				1	
	TRUCK	3%	3%	7%	14%	2%	0%	10%	20%	17%	0%	13%	12%							0.95
8:00 - 9:00 AM	TOTAL	29	268	105	178	454	6	59	3	115	6	9	25	1,257						
	TRUCK	7%	3%	8%	15%	3%	0%	8%	33%	17%	0%	11%	16%							0.97
2:00 - 3:00 PM	TOTAL	19	308	40	123	325	4	53	7	141	6	11	50	1,087	1				1	
	TRUCK	5%	2%	15%	36%	4%	0%	17%	0%	26%	0%	18%	6%							0.90
2:15 - 3:15 PM	TOTAL	21	346	45	139	335	7	57	6	151	4	16	48	1,175	1				1	
	TRUCK	19%	2%	16%	35%	3%	0%	14%	0%	25%	0%	13%	2%							0.93
2:30 - 3:30 PM	TOTAL	25	391	32	142	317	4	74	8	181	6	14	43	1,237	1				1	
	TRUCK	16%	3%	13%	35%	2%	0%	12%	0%	26%	0%	14%	2%							0.98
2:45 - 3:45 PM	TOTAL	21	427	31	109	305	5	89	8	202	8	11	45	1,261	1				1	
	TRUCK	14%	2%	13%	26%	3%	0%	11%	0%	23%	0%	9%	2%							0.97
3:00 - 4:00 PM	TOTAL	19	455	44	103	306	6	120	9	183	11	10	32	1,298						
	TRUCK	16%	2%	18%	28%	4%	0%	6%	0%	13%	0%	0%	0%							0.95

4:00 - 5:00 PM	TOTAL	9	506	38	82	338	2	125	11	172	10	9	44	1,346						
	TRUCK	0%	1%	3%	12%	1%	0%	6%	0%	9%	0%	0%	2%							0.89
4:15 - 5:15 PM	TOTAL	9	538	41	78	334	3	98	11	155	6	4	29	1,306						
	TRUCK	0%	1%	2%	13%	0%	0%	7%	0%	8%	0%	0%	3%							0.94
4:30 - 5:30 PM	TOTAL	8	559	32	83	338	7	80	8	140	5	2	20	1,282						
	TRUCK	0%	1%	3%	8%	0%	0%	6%	0%	6%	0%	0%	0%							0.94
4:45 - 5:45 PM	TOTAL	7	571	35	73	348	9	60	5	136	8	3	14	1,269						
	TRUCK	0%	1%	3%	8%	0%	0%	3%	0%	1%	0%	0%	0%							0.93
5:00 - 6:00 PM	TOTAL	4	560	38	69	350	10	57	5	124	7	1	10	1,235						
	TRUCK	0%	0%	3%	4%	0%	0%	5%	0%	0%	0%	0%	0%							0.91
5:15 - 6:15 PM	TOTAL	5	524	30	68	324	11	37	2	117	8	2	11	1,139						
	TRUCK	0%	0%	0%	3%	1%	0%	5%	0%	1%	0%	0%	0%							0.88
5:30 - 6:30 PM	TOTAL	7	503	37	72	298	13	26	2	104	8	3	9	1,082						
	TRUCK	0%	0%	3%	3%	1%	0%	4%	0%	1%	0%	0%	0%							0.90
5:45 - 6:45 PM	TOTAL	9	477	30	76	253	24	19	2	104	9	2	6	1,011						
	TRUCK	0%	0%	3%	3%	1%	0%	5%	0%	1%	0%	0%	0%							0.93
6:00 - 7:00 PM	TOTAL	11	456	30	72	239	26	17	4	103	18	3	5	984						
	TRUCK	0%	0%	3%	3%	1%	0%	0%	0%	2%	0%	0%	0%							0.92

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
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11: Patriots Hill Lane SB - Thru
12: Patriots Hill Lane SB - Right

A: X-ing Patriot Hill Lane North of INT
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C: X-ing Letchworth Vlg Rd South of INT
D: X-ing Willow Grove Road West of INT

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Storrs Road		INT #:	4

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL		3		4	24		23	16					70						
	TRUCK		2			2		6	1											
7:15 - 7:30 AM	TOTAL	1	4		15	17		39	49					125						
	TRUCK				4	1		4	3											
7:30 - 7:45 AM	TOTAL	41	17		37	23		26	89					233						
	TRUCK	19	5		3	3		1	26											
7:45 - 8:00 AM	TOTAL	43	27		58	19		24	90					261						
	TRUCK	8	11		4	1		3	12											
8:00 - 8:15 AM	TOTAL	23	10		16	25		40	51					165						
	TRUCK		2		2	4		8	3											
8:15 - 8:30 AM	TOTAL	35	30		31	28		46	47					217						
	TRUCK	7	8		9	4		3	6											
8:30 - 8:45 AM	TOTAL	25	22		15	19		40	25					146						
	TRUCK	5	6		1	1		3	5											
8:45 - 9:00 AM	TOTAL	4	3		6	26		47	6					92						
	TRUCK					3		7												
2:00 - 2:15 PM	TOTAL	4	1		1	32		17	8					63						
	TRUCK					2			2											
2:15 - 2:30 PM	TOTAL	5	5		6	27		28	9					80						
	TRUCK	2			2	2		9	1											
2:30 - 2:45 PM	TOTAL	14	8		17	27		22	48					136						
	TRUCK	1			13	4		1	32											
2:45 - 3:00 PM	TOTAL	72	28		10	19		27	15					171						
	TRUCK	34	11		3			1	6											
3:00 - 3:15 PM	TOTAL	19	10		7	29		26	19					110						
	TRUCK	1	1		3	2		3	5											

4:00 - 4:15 PM	TOTAL	22	3		11	71		25	16					148						
	TRUCK				1	3			1											
4:15 - 4:30 PM	TOTAL	24	18		3	56		22	5					128						
	TRUCK	6	2		1	1			3											
4:30 - 4:45 PM	TOTAL	13	5			49		33	1					101						
	TRUCK	1				8		3												
4:45 - 5:00 PM	TOTAL	8	2		3	37		29	2					81						
	TRUCK	1				1		2	1											
5:00 - 5:15 PM	TOTAL	12	4		1	56		28	5					106						
	TRUCK		1			1		4												
5:15 - 5:30 PM	TOTAL	6				46		21	2					75						
	TRUCK					3														
5:30 - 5:45 PM	TOTAL	3	1			33		22						59						
	TRUCK							1												
5:45 - 6:00 PM	TOTAL	3			1	28		29						61				1	1	
	TRUCK					1		1												
6:00 - 6:15 PM	TOTAL	1				32		23	1					57						
	TRUCK																			
6:15 - 6:30 PM	TOTAL	1	2			25		30	2					60						
	TRUCK							1												
6:30 - 6:45 PM	TOTAL	2				34		18	2					56						
	TRUCK							1												
6:45 - 7:00 PM	TOTAL	3				25		22	7					57						
	TRUCK					1														

1: Storrs Road EB - Left
2: Storrs Road EB - Thru
3:
4: Letchworth Vlg Rd WB - Thru
5: Letchworth Vlg Rd WB - Right
6:
7: Letchworth Vlg Rd SB - Left
8: Letchworth Vlg Rd SB - Right
9:
10:
11:
12:
A: X-ing Letchworth Vlg Rd North of Int
B: X-ing Letchworth Vlg Rd East of Int
C:
D: X-ing Storrs Rd West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Storrs Road		INT #:	4

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	85	51		114	83		112	244					689						
	TRUCK	32%	35%		10%	8%		13%	17%											0.66
7:15 - 8:15 AM	TOTAL	108	58		126	84		129	279					784						
	TRUCK	25%	31%		10%	11%		12%	16%											0.75
7:30 - 8:30 AM	TOTAL	142	84		142	95		136	277					876						
	TRUCK	24%	31%		13%	13%		11%	17%											0.84
7:45 - 8:45 AM	TOTAL	126	89		120	91		150	213					789						
	TRUCK	16%	30%		13%	11%		11%	12%											0.76
8:00 - 9:00 AM	TOTAL	87	65		68	98		173	129					620						
	TRUCK	14%	25%		18%	12%		12%	11%											0.71
2:00 - 3:00 PM	TOTAL	95	42		34	105		94	80					450						
	TRUCK	39%	26%		53%	8%		12%	51%											0.66
2:15 - 3:15 PM	TOTAL	110	51		40	102		103	91					497						
	TRUCK	35%	24%		53%	8%		14%	48%											0.73
2:30 - 3:30 PM	TOTAL	161	76		42	109		96	95					579						
	TRUCK	29%	32%		55%	10%		7%	51%											0.85
2:45 - 3:45 PM	TOTAL	177	81		30	124		97	56					565				1	1	
	TRUCK	29%	32%		40%	6%		12%	34%											0.83
3:00 - 4:00 PM	TOTAL	171	73		24	163		100	48					579				1	1	
	TRUCK	11%	23%		50%	9%		18%	31%											0.78

4:00 - 5:00 PM	TOTAL	67	28		17	213		109	24					458							
	TRUCK	12%	7%		12%	6%		5%	21%												0.77
4:15 - 5:15 PM	TOTAL	57	29		7	198		112	13					416							
	TRUCK	14%	10%		14%	6%		8%	31%												0.81
4:30 - 5:30 PM	TOTAL	39	11		4	188		111	10					363							
	TRUCK	5%	9%		0%	7%		8%	10%												0.86
4:45 - 5:45 PM	TOTAL	29	7		4	172		100	9					321							
	TRUCK	3%	14%		0%	3%		7%	11%												0.76
5:00 - 6:00 PM	TOTAL	24	5		2	163		100	7					301				1	1		
	TRUCK	0%	20%		0%	3%		6%	0%												0.71
5:15 - 6:15 PM	TOTAL	13	1		1	139		95	3					252				1	1		
	TRUCK	0%	0%		0%	3%		2%	0%												0.84
5:30 - 6:30 PM	TOTAL	8	3		1	118		104	3					237				1	1		
	TRUCK	0%	0%		0%	1%		3%	0%												0.97
5:45 - 6:45 PM	TOTAL	7	2		1	119		100	5					234				1	1		
	TRUCK	0%	0%		0%	1%		3%	0%												0.96
6:00 - 7:00 PM	TOTAL	7	2			116		93	12					230							
	TRUCK	0%	0%			1%		2%	0%												0.96

1: Storrs Road EB - Left
2: Storrs Road EB - Thru
3:
4: Letchworth Vlg Rd WB - Thru
5: Letchworth Vlg Rd WB - Right
6:
7: Letchworth Vlg Rd SB - Left
8: Letchworth Vlg Rd SB - Right
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10:
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12:
A: X-ing Letchworth Vlg Rd North of Int
B: X-ing Letchworth Vlg Rd East of Int
C:
D: X-ing Storrs Rd West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Ridge Road		INT #:	5

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	1	8	17		8		19					1	54						
	TRUCK		4	4		1		1												
7:15 - 7:30 AM	TOTAL		18	23	1	17		9					1	69	1				1	
	TRUCK		3	1		3														
7:30 - 7:45 AM	TOTAL		21	19		33		31	1					105						
	TRUCK		6	2		3		3		1										
7:45 - 8:00 AM	TOTAL	1	29	23		37		40						130						
	TRUCK		12	2		3		1		1										
8:00 - 8:15 AM	TOTAL	2	25	25		18		20		2		2	1	95						
	TRUCK	1	7	3				3												
8:15 - 8:30 AM	TOTAL		38	39		35		24	1	1		1	1	140						
	TRUCK		5	5		11		3		1										
8:30 - 8:45 AM	TOTAL	1	36	24	1	22		12					1	97						
	TRUCK		9	2		2														
8:45 - 9:00 AM	TOTAL	2	25	25		23	1	9	2		1			88						
	TRUCK		5	2		4														
2:00 - 2:15 PM	TOTAL		7	10	1	14		14		1			1	48						
	TRUCK					1				1										
2:15 - 2:30 PM	TOTAL		18	19		21	1	14		1	1			75						
	TRUCK		4	3		2	1	1		1										
2:30 - 2:45 PM	TOTAL		17	14	1	26	1	17	2	1			1	80						
	TRUCK		1	2		13	1	3					1							
2:45 - 3:00 PM	TOTAL	1	36	18	2	19	1	10			3		1	91						
	TRUCK		11	1		4	1				2									
3:00 - 3:15 PM	TOTAL		21	15	1	19		17		2		1		76						
	TRUCK		3	1		4		1												

4:00 - 4:15 PM	TOTAL	1	19	12		50		28		1			1	112						
	TRUCK		1			2		2												
4:15 - 4:30 PM	TOTAL		26	15		38		24	1	1	1	1		107						
	TRUCK		1	1		1		1		1										
4:30 - 4:45 PM	TOTAL		18	15		22	1	26		2			3	87						
	TRUCK			2		4		2												
4:45 - 5:00 PM	TOTAL		19	13		23		14		1			1	71						
	TRUCK		2	1		3														
5:00 - 5:15 PM	TOTAL		15	16		32	1	21					3	88						
	TRUCK		2	2				1												
5:15 - 5:30 PM	TOTAL	1	6	13		18		26						64						
	TRUCK			1		2														
5:30 - 5:45 PM	TOTAL		14	10	2	14		21						61						
	TRUCK																			
5:45 - 6:00 PM	TOTAL		13	16		20		8					1	58	1				1	
	TRUCK			2		1														
6:00 - 6:15 PM	TOTAL		12	12		18		14						56		1			1	
	TRUCK																			
6:15 - 6:30 PM	TOTAL		12	22		11		13						58						
	TRUCK			1																
6:30 - 6:45 PM	TOTAL		9	9		18		16						52						
	TRUCK		1																	
6:45 - 7:00 PM	TOTAL		11	10		16		9						46						
	TRUCK																			

1: Letchworth Vlg Rd EB - Left
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6: Letchworth Vlg Rd WB - Right
7: Ridge Road NB - Left
8: Ridge Road NB - Thru
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10: Ridge Road SB - Left
11: Ridge Road SB - Thru
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A: X-ing Ridge Rd North of Int
B: X-ing Letchworth Vlg Rd East of Int
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D: X-ing Letchworth Vlg Rd West of Int

DATE:	Weekday (11-13-2024)	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM	NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Ridge Road	INT #:	5

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	2	76	82	1	95		99	1				2	358	1				1	
	TRUCK	0%	33%	11%	0%	11%		5%	0%				0%							0.69
7:15 - 8:15 AM	TOTAL	3	93	90	1	105		100	1	2		2	2	399	1				1	
	TRUCK	33%	30%	9%	0%	9%		7%	0%	100%		0%	0%							0.77
7:30 - 8:30 AM	TOTAL	3	113	106		123		115	2	3		3	2	470						
	TRUCK	33%	27%	11%		14%		9%	0%	100%		0%	0%							0.84
7:45 - 8:45 AM	TOTAL	4	128	111	1	112		96	1	3		3	3	462						
	TRUCK	25%	26%	11%	0%	14%		7%	0%	67%		0%	0%							0.83
8:00 - 9:00 AM	TOTAL	5	124	113	1	98	1	65	3	3	1	3	3	420						
	TRUCK	20%	21%	11%	0%	17%	0%	9%	0%	33%	0%	0%	0%							0.75
2:00 - 3:00 PM	TOTAL	1	78	61	4	80	3	55	2	3	4		3	294						
	TRUCK	0%	21%	10%	0%	25%	100%	7%	0%	67%	50%		33%							0.81
2:15 - 3:15 PM	TOTAL	1	92	66	4	85	3	58	2	4	4	1	2	322						
	TRUCK	0%	21%	11%	0%	27%	100%	9%	0%	25%	50%	0%	50%							0.88
2:30 - 3:30 PM	TOTAL	2	101	65	4	84	3	67	3	4	3	1	2	339						
	TRUCK	0%	23%	15%	0%	30%	67%	13%	0%	0%	67%	0%	50%							0.92
2:45 - 3:45 PM	TOTAL	2	104	71	3	77	2	74	1	3	3	1	3	344			1		1	
	TRUCK	0%	28%	14%	0%	19%	50%	8%	0%	0%	67%	0%	0%							0.93
3:00 - 4:00 PM	TOTAL	2	93	72	1	87	1	94	1	4	1	1	3	360	1		7		8	
	TRUCK	0%	28%	14%	0%	23%	0%	9%	0%	0%	100%	0%	0%							0.84

4:00 - 5:00 PM	TOTAL	1	82	55		133	1	92	1	5	1	1	5	377						
	TRUCK	0%	5%	7%		8%	0%	5%	0%	20%	0%	0%	0%							0.84
4:15 - 5:15 PM	TOTAL		78	59		115	2	85	1	4	1	1	7	353						
	TRUCK		6%	10%		7%	0%	5%	0%	25%	0%	0%	0%							0.82
4:30 - 5:30 PM	TOTAL	1	58	57		95	2	87		3			7	310						
	TRUCK	0%	7%	11%		9%	0%	3%		0%			0%							0.88
4:45 - 5:45 PM	TOTAL	1	54	52	2	87	1	82		1			4	284						
	TRUCK	0%	7%	8%	0%	6%	0%	1%		0%			0%							0.81
5:00 - 6:00 PM	TOTAL	1	48	55	2	84	1	76					4	271	1				1	
	TRUCK	0%	4%	9%	0%	4%	0%	1%					0%							0.77
5:15 - 6:15 PM	TOTAL	1	45	51	2	70		69					1	239	1	1			2	
	TRUCK	0%	0%	6%	0%	4%		0%					0%							0.93
5:30 - 6:30 PM	TOTAL		51	60	2	63		56					1	233	1	1			2	
	TRUCK		0%	5%	0%	2%		0%					0%							0.95
5:45 - 6:45 PM	TOTAL		46	59		67		51					1	224	1	1			2	
	TRUCK		2%	5%		1%		0%					0%							0.97
6:00 - 7:00 PM	TOTAL		44	53		63		52						212		1			1	
	TRUCK		2%	2%		0%		0%												0.91

1: Letchworth Vlg Rd EB - Left
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A: X-ing Ridge Rd North of Int
B: X-ing Letchworth Vlg Rd East of Int
C: X-ing Ridge Rd South of Int
D: X-ing Letchworth Vlg Rd West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Sufern Lane/West Railroad Avenue & Main Street/North Central Highway		INT #:	7

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	19	14	40	44	28	11	36	47	23	20	40	18	340	1	1	1		3	
	TRUCK	2		1	3	5	1	2	5		6	3								
7:15 - 7:30 AM	TOTAL	21	21	26	56	8	13	9	49	42	10	59	6	320				1	1	
	TRUCK	2	2	2	1		3		8		1	9								
7:30 - 7:45 AM	TOTAL	6	15	18	62	4	17	10	49	38	15	54	3	291						
	TRUCK				5		6	3	4	1		8	1							
7:45 - 8:00 AM	TOTAL	11	22	9	61	12	26	8	64	43	25	55	1	337						
	TRUCK		3		5	3	6		6		4	7								
8:00 - 8:15 AM	TOTAL	6	12	15	46	7	22	13	72	39	15	62	5	314						
	TRUCK	1		2	2	1	2	5	5	4	2	4	1							
8:15 - 8:30 AM	TOTAL	12	13	13	52	6	10	11	60	45	21	68	3	314	1		1		2	
	TRUCK	1	2	3	1	3	1	3	6	1	1	8	1							
8:30 - 8:45 AM	TOTAL	4	17	24	66	9	14	14	61	44	20	65	5	343			1		1	
	TRUCK			3	4	2		2	4	4	4	5	1							
8:45 - 9:00 AM	TOTAL	4	10	14	54	5	17	10	59	35	27	78	1	314						
	TRUCK	1	1	3	5	4		2	5	4	4	5								
2:00 - 2:15 PM	TOTAL	12	10	10	56	12	8	12	58	39	11	53	9	290	1	1			2	
	TRUCK		1	1	2	1			5	3	1	4								
2:15 - 2:30 PM	TOTAL	8	13	19	46	14	23	8	76	34	17	68	3	329			2		2	
	TRUCK	3	2	2	1		1	1	11	4	7	11								
2:30 - 2:45 PM	TOTAL	7	5	14	60	9	14	17	80	26	24	61	3	320				1	1	
	TRUCK	1		4	2		4		6			3								
2:45 - 3:00 PM	TOTAL	7	8	12	52	7	19	13	86	41	13	72	3	333		1			1	
	TRUCK	2		3	1	1		2	1		2	9								
3:00 - 3:15 PM	TOTAL	10	11	10	49	8	6	11	59	43	33	82	2	324			1	1	2	
	TRUCK	2	2	1	4			1	3	4	6	5								

4:00 - 4:15 PM	TOTAL	13	7	10	60	16	18	23	70	21	23	52	5	318		3	1	2	6	
	TRUCK				2	2	1	3	3	1		3								
4:15 - 4:30 PM	TOTAL	8	10	11	51	12	23	19	64	35	26	63	8	330						
	TRUCK	1	2		1	1		1	3		2	1	1							
4:30 - 4:45 PM	TOTAL	8	12	12	73	18	16	19	74	38	40	57	9	376	3				3	
	TRUCK		1	1		2			1	2	3	3								
4:45 - 5:00 PM	TOTAL	10	6	11	45	8	15	22	86	35	26	74	7	345	1				1	
	TRUCK	2					1	1	2	3	3	5								
5:00 - 5:15 PM	TOTAL	5	9	8	63	9	25	15	73	37	29	66	5	344		1		3	4	
	TRUCK				1		1		1	1		3								
5:15 - 5:30 PM	TOTAL	6	12	12	54	8	28	23	76	17	25	53	12	326						
	TRUCK			1				1				3								
5:30 - 5:45 PM	TOTAL	2	14	13	42	11	19	20	86	33	22	69	10	341		1			1	
	TRUCK		1						1			1								
5:45 - 6:00 PM	TOTAL	6	5	15	50	9	15	24	81	42	18	56	11	332						
	TRUCK				1					2		3								
6:00 - 6:15 PM	TOTAL	7	9	5	46	12	15	13	74	43	27	55	7	313						
	TRUCK								1			1								
6:15 - 6:30 PM	TOTAL	9	10	8	58	15	13	11	68	37	21	42	5	297	2	1		1	4	
	TRUCK								1	1		2								
6:30 - 6:45 PM	TOTAL	7	5	9	57	8	16	25	57	37	17	51	6	295						
	TRUCK				1				1											
6:45 - 7:00 PM	TOTAL	3	7	14	36	12	21	16	62	48	21	65	4	309		1			1	
	TRUCK								1	2		2								

1: Suffern Lane EB - Left
2: Suffern Lane EB - Thru
3: Suffern Lane EB - Right
4: West Railroad Ave WB - Left
5: West Railroad Ave WB - Thru
6: West Railroad Ave WB - Right
7: Main Street NB - Left
8: Main Street NB - Thru
9: Main Street NB - Right
10: North Central Hwy SB - Left
11: North Central Hwy SB - Thru
12: North Central Hwy SB - Right

A: X-ing North Central Hwy North of Int
B: X-ing West Railroad Ave East of Int
C: X-ing Main Street South of Int
D: X-ing Suffern Lane West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Sufern Lane/West Railroad Avenue & Main Street/North Central Highway		INT #:	7

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	57	72	93	223	52	67	63	209	146	70	208	28	1,288	1	1	1	1	4	
	TRUCK	7%	7%	3%	6%	15%	24%	8%	11%	1%	16%	13%	4%							0.95
7:15 - 8:15 AM	TOTAL	44	70	68	225	31	78	40	234	162	65	230	15	1,262				1	1	
	TRUCK	7%	7%	6%	6%	13%	22%	20%	10%	3%	11%	12%	13%							0.94
7:30 - 8:30 AM	TOTAL	35	62	55	221	29	75	42	245	165	76	239	12	1,256	1		1		2	
	TRUCK	6%	8%	9%	6%	24%	20%	26%	9%	4%	9%	11%	25%							0.93
7:45 - 8:45 AM	TOTAL	33	64	61	225	34	72	46	257	171	81	250	14	1,308	1		2		3	
	TRUCK	6%	8%	13%	5%	26%	13%	22%	8%	5%	14%	10%	21%							0.95
8:00 - 9:00 AM	TOTAL	26	52	66	218	27	63	48	252	163	83	273	14	1,285	1		2		3	
	TRUCK	12%	6%	17%	6%	37%	5%	25%	8%	8%	13%	8%	21%							0.94
2:00 - 3:00 PM	TOTAL	34	36	55	214	42	64	50	300	140	65	254	18	1,272	1	2	2	1	6	
	TRUCK	18%	8%	18%	3%	5%	8%	6%	8%	5%	15%	11%	0%							0.95
2:15 - 3:15 PM	TOTAL	32	37	55	207	38	62	49	301	144	87	283	11	1,306		1	3	2	6	
	TRUCK	25%	11%	18%	4%	3%	8%	8%	7%	6%	17%	10%	0%							0.98
2:30 - 3:30 PM	TOTAL	36	32	49	218	39	47	60	289	158	94	283	11	1,316	1	2	1	2	6	
	TRUCK	22%	6%	18%	4%	5%	9%	5%	4%	4%	10%	7%	0%							0.97
2:45 - 3:45 PM	TOTAL	37	36	49	209	42	54	58	277	169	94	283	15	1,323	1	3	2	2	8	
	TRUCK	24%	6%	14%	4%	7%	0%	9%	4%	6%	16%	8%	0%							0.98
3:00 - 4:00 PM	TOTAL	34	35	48	220	45	56	62	256	156	112	280	18	1,322	1	4	2	3	10	
	TRUCK	21%	6%	13%	5%	7%	0%	5%	5%	9%	13%	8%	6%							0.97

4:00 - 5:00 PM	TOTAL	39	35	44	229	54	72	83	294	129	115	246	29	1,369	4	3	1	2	10	
	TRUCK	8%	9%	2%	1%	9%	3%	6%	3%	5%	7%	5%	3%							0.91
4:15 - 5:15 PM	TOTAL	31	37	42	232	47	79	75	297	145	121	260	29	1,395	4	1		3	8	
	TRUCK	10%	8%	2%	1%	6%	3%	3%	2%	4%	7%	5%	3%							0.93
4:30 - 5:30 PM	TOTAL	29	39	43	235	43	84	79	309	127	120	250	33	1,391	4	1		3	8	
	TRUCK	7%	3%	5%	0%	5%	2%	3%	1%	5%	5%	6%	0%							0.92
4:45 - 5:45 PM	TOTAL	23	41	44	204	36	87	80	321	122	102	262	34	1,356	1	2		3	6	
	TRUCK	9%	2%	2%	0%	0%	2%	3%	1%	3%	3%	5%	0%							0.98
5:00 - 6:00 PM	TOTAL	19	40	48	209	37	87	82	316	129	94	244	38	1,343		2		3	5	
	TRUCK	0%	3%	2%	1%	0%	1%	1%	1%	2%	0%	4%	0%							0.98
5:15 - 6:15 PM	TOTAL	21	40	45	192	40	77	80	317	135	92	233	40	1,312		1			1	
	TRUCK	0%	3%	2%	1%	0%	0%	1%	1%	1%	0%	3%	0%							0.96
5:30 - 6:30 PM	TOTAL	24	38	41	196	47	62	68	309	155	88	222	33	1,283	2	2		1	5	
	TRUCK	0%	3%	0%	1%	0%	0%	0%	1%	2%	0%	3%	0%							0.94
5:45 - 6:45 PM	TOTAL	29	29	37	211	44	59	73	280	159	83	204	29	1,237	2	1		1	4	
	TRUCK	0%	0%	0%	1%	0%	0%	0%	1%	2%	0%	3%	0%							0.93
6:00 - 7:00 PM	TOTAL	26	31	36	197	47	65	65	261	165	86	213	22	1,214	2	2		1	5	
	TRUCK	0%	0%	0%	1%	0%	0%	0%	2%	2%	0%	2%	0%							0.97

1: Suffern Lane EB - Left
2: Suffern Lane EB - Thru
3: Suffern Lane EB - Right
4: West Railroad Ave WB - Left
5: West Railroad Ave WB - Thru
6: West Railroad Ave WB - Right
7: Main Street NB - Left
8: Main Street NB - Thru
9: Main Street NB - Right
10: North Central Hwy SB - Left
11: North Central Hwy SB - Thru
12: North Central Hwy SB - Right

A: X-ing North Central Hwy North of Int
B: X-ing West Railroad Ave East of Int
C: X-ing Main Street South of Int
D: X-ing Suffern Lane West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Palisades Interstate Parkway SB Ramp		INT #:	8

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	25	62	0	0	117	167	0	0	0	52	0	52	475			1		1	
	TRUCK	2	4	0	0	7	2	0	0	0	7	0	3							
7:15 - 7:30 AM	TOTAL	30	83	1	0	112	149	0	0	0	40	0	58	473	1		4		5	
	TRUCK	0	9	0	0	3	2	0	0	0	12	0	2			1			1	
7:30 - 7:45 AM	TOTAL	54	96	1	0	140	183	1	0	0	31	0	78	584			4	1	5	
	TRUCK	6	12	0	0	11	8	0	0	0	3	0	11							
7:45 - 8:00 AM	TOTAL	42	103	0	2	139	159	0	0	0	43	0	73	561				2	2	
	TRUCK	1	14	0	2	7	5	0	0	0	8	0	3				1		1	
8:00 - 8:15 AM	TOTAL	37	110	1	3	165	169	1	0	2	45	0	73	606			1		1	
	TRUCK	1	9	0	0	10	10	0	0	1	4	0	3							
8:15 - 8:30 AM	TOTAL	53	119	0	1	139	146	0	0	1	35	0	59	553						
	TRUCK	7	11	0	0	9	4	0	0	0	3	0	7							
8:30 - 8:45 AM	TOTAL	37	105	0	1	156	190	0	0	0	34	0	53	576		1	3		4	
	TRUCK	2	8	0	0	19	8	0	0	0	4	0	3							
8:45 - 9:00 AM	TOTAL	50	131	2	0	190	155	0	0	0	42	0	41	611			2		2	
	TRUCK	5	15	0	0	10	5	0	0	0	3	0	0							
2:00 - 2:15 PM	TOTAL	38	127	0	0	126	85	1	1	1	28	0	30	437			1		1	
	TRUCK	1	5	0	0	7	0	0	0	0	0	0	7							
2:15 - 2:30 PM	TOTAL	27	126	1	3	116	107	1	2	1	19	1	27	431			3		3	
	TRUCK	1	10	0	0	8	5	0	0	0	2	0	3							
2:30 - 2:45 PM	TOTAL	47	128	1	0	118	115	2	3	2	24	1	27	468			3		3	
	TRUCK	2	10	0	0	5	3	0	0	0	1	0	0							
2:45 - 3:00 PM	TOTAL	40	144	1	3	133	106	0	2	2	16	1	35	483			3		3	
	TRUCK	0	12	1	0	8	4	0	0	0	3	0	1							
3:00 - 3:15 PM	TOTAL	28	175	0	2	133	116	0	2	4	34	0	35	529						
	TRUCK	0	6	0	0	8	8	0	0	0	4	0	3							

4:00 - 4:15 PM	TOTAL	31	155	0	0	126	152	0	0	0	30	0	31	525						
	TRUCK	1	8	0	0	8	8	0	0	0	1	0	0							
4:15 - 4:30 PM	TOTAL	31	154	0	0	125	139	0	0	0	35	0	41	525			1	1	2	
	TRUCK	0	7	0	0	4	5	0	0	0	1	0	1							
4:30 - 4:45 PM	TOTAL	25	152	0	1	115	115	0	0	0	28	0	29	465			2	1	3	
	TRUCK	1	3	0	0	8	5	0	0	0	3	0	0							
4:45 - 5:00 PM	TOTAL	32	167	0	2	124	136	0	0	2	42	0	36	541	1		1		2	
	TRUCK	0	5	0	0	7	4	0	0	0	2	0	0							
5:00 - 5:15 PM	TOTAL	45	130	0	2	132	141	0	0	2	26	1	35	514						
	TRUCK	3	3	0	0	6	4	0	0	0	1	0	0							
5:15 - 5:30 PM	TOTAL	34	148	1	0	129	106	1	1	2	32	1	43	498		1	1		2	
	TRUCK	0	5	0	0	2	1	0	0	0	0	0	2							
5:30 - 5:45 PM	TOTAL	29	139	0	2	118	120	0	0	0	46	0	35	489						
	TRUCK	3	2	0	0	5	2	0	0	0	2	0	0							
5:45 - 6:00 PM	TOTAL	37	144	0	1	118	129	1	0	1	21	0	32	484			1		1	
	TRUCK	3	2	0	0	6	2	0	0	0	0	0	0							
6:00 - 6:15 PM	TOTAL	23	127	1	0	118	121	0	2	0	41	0	35	468			2		2	
	TRUCK	0	2	0	0	4	3	0	0	0	1	0	0							
6:15 - 6:30 PM	TOTAL	27	125	0	0	95	101	0	3	1	34	0	27	413						
	TRUCK	2	2	0	0	1	5		0	0	0	0	0							
6:30 - 6:45 PM	TOTAL	26	104	1	1	104	105	0	1	1	22	1	40	406		1	3		4	
	TRUCK	1	3	0	0	1	3	0	0	0	1	0	0							
6:45 - 7:00 PM	TOTAL	24	97	1	5	100	106	3	1	4	26	1	25	393						
	TRUCK	0	1	0	0	3	1	0	0	0	0	0	0							

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3: US Route 202 EB - Right
4: US Route 202 WB - Left
5: US Route 202 WB - Thru
6: US Route 202 WB - Right
7: Diner Driveway NB - Left
8: Diner Driveway NB - Thru
9: Diner Driveway NB - Right
10: PIP Ramp SB - Left
11: PIP Ramp SB - Thru
12: PIP Ramp SB - Right

A: X-ing SB Ramp North of Int
B: X-ing US Route 202 East of Int
C: X-ing Diner Dwy South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Palisades Interstate Parkway SB Ramp		INT #:	8

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	151	344	2	2	508	658	1			166		261	2,093	1		9	3	13	
	TRUCK	6%	11%	0%	100%	6%	3%	0%			18%		7%			1	1		2	0.90
7:15 - 8:15 AM	TOTAL	163	392	3	5	556	660	2		2	159		282	2,224	1		9	3	13	
	TRUCK	5%	11%	0%	40%	6%	4%	0%		50%	17%		7%			1	1		2	0.92
7:30 - 8:30 AM	TOTAL	186	428	2	6	583	657	2		3	154		283	2,304			5	3	8	
	TRUCK	8%	11%	0%	33%	6%	4%	0%		33%	12%		8%				1		1	0.95
7:45 - 8:45 AM	TOTAL	169	437	1	7	599	664	1		3	157		258	2,296		1	4	2	7	
	TRUCK	7%	10%	0%	29%	8%	4%	0%		33%	12%		6%				1		1	0.95
8:00 - 9:00 AM	TOTAL	177	465	3	5	650	660	1		3	156		226	2,346		1	6		7	
	TRUCK	8%	9%	0%	0%	7%	4%	0%		33%	9%		6%							0.96
2:00 - 3:00 PM	TOTAL	152	525	3	6	493	413	4	8	6	87	3	119	1,819			10		10	
	TRUCK	3%	7%	33%	0%	6%	3%	0%	0%	0%	7%	0%	9%							0.94
2:15 - 3:15 PM	TOTAL	142	573	3	8	500	444	3	9	9	93	3	124	1,911			9		9	
	TRUCK	2%	7%	33%	0%	6%	5%	0%	0%	0%	11%	0%	6%							0.90
2:30 - 3:30 PM	TOTAL	146	627	2	5	504	458	2	9	9	105	2	140	2,009			6		6	
	TRUCK	3%	6%	50%	0%	5%	4%	0%	0%	0%	11%	0%	3%							0.95
2:45 - 3:45 PM	TOTAL	128	637	3	6	522	445	1	6	7	105	2	143	2,005		1	3		4	
	TRUCK	3%	6%	33%	0%	5%	4%	100%	0%	0%	10%	0%	6%							0.95
3:00 - 4:00 PM	TOTAL	131	655	3	3	502	471	2	5	5	121	1	140	2,039		1	1		2	
	TRUCK	4%	4%	0%	0%	4%	3%	100%	0%	0%	7%	0%	6%							0.96

4:00 - 5:00 PM	TOTAL	119	628		3	490	542			2	135		137	2,056	1		4	2	7	
	TRUCK	2%	4%		0%	6%	4%			0%	5%		1%							0.95
4:15 - 5:15 PM	TOTAL	133	603		5	496	531			4	131	1	141	2,045	1		4	2	7	
	TRUCK	3%	3%		0%	5%	3%			0%	5%	0%	1%							0.95
4:30 - 5:30 PM	TOTAL	136	597	1	5	500	498	1	1	6	128	2	143	2,018	1	1	4	1	7	
	TRUCK	3%	3%	0%	0%	5%	3%	0%	0%	0%	5%	0%	1%							0.93
4:45 - 5:45 PM	TOTAL	140	584	1	6	503	503	1	1	6	146	2	149	2,042	1	1	2		4	
	TRUCK	4%	3%	0%	0%	4%	2%	0%	0%	0%	3%	0%	1%							0.94
5:00 - 6:00 PM	TOTAL	145	561	1	5	497	496	2	1	5	125	2	145	1,985		1	2		3	
	TRUCK	6%	2%	0%	0%	4%	2%	0%	0%	0%	2%	0%	1%							0.97
5:15 - 6:15 PM	TOTAL	123	558	2	3	483	476	2	3	3	140	1	145	1,939		1	4		5	
	TRUCK	5%	2%	0%	0%	4%	2%	0%	0%	0%	2%	0%	1%							0.97
5:30 - 6:30 PM	TOTAL	116	535	1	3	449	471	1	5	2	142		129	1,854			3		3	
	TRUCK	7%	1%	0%	0%	4%	3%	0%	0%	0%	2%		0%							0.95
5:45 - 6:45 PM	TOTAL	113	500	2	2	435	456	1	6	3	118	1	134	1,771		1	6		7	
	TRUCK	5%	2%	0%	0%	3%	3%	0%	0%	0%	2%	0%	0%							0.91
6:00 - 7:00 PM	TOTAL	100	453	3	6	417	433	3	7	6	123	2	127	1,680		1	5		6	
	TRUCK	3%	2%	0%	0%	2%	3%	0%	0%	0%	2%	0%	0%							0.90

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7: Diner Driveway NB - Left
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9: Diner Driveway NB - Right
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11: PIP Ramp SB - Thru
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A: X-ing SB Ramp North of Int
B: X-ing US Route 202 East of Int
C: X-ing Diner Dwy South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Thiells Mt Ivy Road		INT #:	9

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	10	87		190	13		37	102					439						
	TRUCK	1	11		5	3		1	3											
7:15 - 7:30 AM	TOTAL	16	83		163	13		36	103					414				1	1	
	TRUCK	2	10		8	1		3	2											
7:30 - 7:45 AM	TOTAL	24	116		184	29		51	131					535				1	1	
	TRUCK	3	17		10	5		3	6											
7:45 - 8:00 AM	TOTAL	20	117		187	27		52	120					523						
	TRUCK	3	16		10	2		1	4											
8:00 - 8:15 AM	TOTAL	21	126		183	26		48	147					551						
	TRUCK	3	12		14	8		3	5											
8:15 - 8:30 AM	TOTAL	26	115		159	24		79	121					524						
	TRUCK	1	10		10	2		7	3											
8:30 - 8:45 AM	TOTAL	16	129		169	16		54	176					560				1	1	
	TRUCK	0	11		21	6		7	5											
8:45 - 9:00 AM	TOTAL	17	150		173	23		45	163					571				2	2	
	TRUCK	1	17		16	3		3	4											
2:00 - 2:15 PM	TOTAL	21	122		125	23		49	88					428						
	TRUCK	2	2		6	0		1	0											
2:15 - 2:30 PM	TOTAL	11	131		138	40		63	81					464				2	2	
	TRUCK	1	7		10	5		0	2											
2:30 - 2:45 PM	TOTAL	21	134		136	25		57	100					473				3	3	
	TRUCK	1	10		5	1		3	3											
2:45 - 3:00 PM	TOTAL	24	118		125	21		59	112					459				1	1	
	TRUCK	4	9		7	1		3	3											
3:00 - 3:15 PM	TOTAL	33	169		142	34		59	106					543						
	TRUCK	7	4		7	5		10	8											
3:15 - 3:30 PM	TOTAL	36	159		134	38		62	94					523						
	TRUCK	2	8		6	3		6	2											
3:30 - 3:45 PM	TOTAL	30	122		124	25		66	115					482				2	2	
	TRUCK	1	4		6	3		6	2											
3:45 - 4:00 PM	TOTAL	32	156		146	44		42	97					517				2	2	
	TRUCK	0	3		5	3		3	0											

4:00 - 4:15 PM	TOTAL	28	154		116	34		43	140					515				1	1	
	TRUCK	1	9		9	3		0	1											
4:15 - 4:30 PM	TOTAL	45	135		144	29		42	122					517						
	TRUCK	2	7		6	2		0	0											
4:30 - 4:45 PM	TOTAL	32	150		120	26		50	108					486				3	3	
	TRUCK	0	6		12	3		4	0											
4:45 - 5:00 PM	TOTAL	42	149		140	36		53	115					535	2			1	3	
	TRUCK	5	3		10	0		6	4											
5:00 - 5:15 PM	TOTAL	31	131		147	46		61	128					544						
	TRUCK	0	2		7	1		2	2											
5:15 - 5:30 PM	TOTAL	38	148		140	37		54	93					510				1	1	
	TRUCK	0	5		2	2		2	1											
5:30 - 5:45 PM	TOTAL	33	136		126	35		48	112					490						
	TRUCK	0	3		7	0		0	1											
5:45 - 6:00 PM	TOTAL	32	129		133	39		50	114					497				1	1	
	TRUCK	1	1		4	0		0	2											
6:00 - 6:15 PM	TOTAL	37	128		131	25		58	109					488				1	1	
	TRUCK	1	2		5	0		0	1											
6:15 - 6:30 PM	TOTAL	29	126		108	26		59	91					439						
	TRUCK	1	1		6	0		0	1											
6:30 - 6:45 PM	TOTAL	21	114		118	23		46	93					415				1	1	
	TRUCK	1	4		5	0		1	1											
6:45 - 7:00 PM	TOTAL	10	111		129	34		57	76					417						
	TRUCK	0	1		1	1		2	2											

1: US Route 202 EB - Left
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A: X-ing Thiells Mt Ivy Road North of Int
B: X-ing US Route 202 West of Int
C:
D: X-ing US Route 202 East of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Thiells Mt Ivy Road		INT #:	9

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	70	403		724	82		176	456					1,911				2	2	
	TRUCK	13%	13%		5%	13%		5%	3%											0.89
7:15 - 8:15 AM	TOTAL	81	442		717	95		187	501					2,023				2	2	
	TRUCK	14%	12%		6%	17%		5%	3%											0.92
7:30 - 8:30 AM	TOTAL	91	474		713	106		230	519					2,133				1	1	
	TRUCK	11%	12%		6%	16%		6%	3%											0.97
7:45 - 8:45 AM	TOTAL	83	487		698	93		233	564					2,158				1	1	
	TRUCK	8%	10%		8%	19%		8%	3%											0.96
8:00 - 9:00 AM	TOTAL	80	520		684	89		226	607					2,206				3	3	
	TRUCK	6%	10%		9%	21%		9%	3%											0.97
2:00 - 3:00 PM	TOTAL	77	505		524	109		228	381					1,824				6	6	
	TRUCK	10%	6%		5%	6%		3%	2%											0.96
2:15 - 3:15 PM	TOTAL	89	552		541	120		238	399					1,939				6	6	
	TRUCK	15%	5%		5%	10%		7%	4%											0.89
2:30 - 3:30 PM	TOTAL	114	580		537	118		237	412					1,998				4	4	
	TRUCK	12%	5%		5%	8%		9%	4%											0.92
2:45 - 3:45 PM	TOTAL	123	568		525	118		246	427					2,007				3	3	
	TRUCK	11%	4%		5%	10%		10%	4%											0.92
3:00 - 4:00 PM	TOTAL	131	606		546	141		229	412					2,065				4	4	
	TRUCK	8%	3%		4%	10%		11%	3%											0.95

4:00 - 5:00 PM	TOTAL	147	588		520	125		188	485					2,053	2			5	7	
	TRUCK	5%	4%		7%	6%		5%	1%											0.96
4:15 - 5:15 PM	TOTAL	150	565		551	137		206	473					2,082	2			4	6	
	TRUCK	5%	3%		6%	4%		6%	1%											0.96
4:30 - 5:30 PM	TOTAL	143	578		547	145		218	444					2,075	2			5	7	
	TRUCK	3%	3%		6%	4%		6%	2%											0.95
4:45 - 5:45 PM	TOTAL	144	564		553	154		216	448					2,079	2			2	4	
	TRUCK	3%	2%		5%	2%		5%	2%											0.96
5:00 - 6:00 PM	TOTAL	134	544		546	157		213	447					2,041				2	2	
	TRUCK	1%	2%		4%	2%		2%	1%											0.94
5:15 - 6:15 PM	TOTAL	140	541		530	136		210	428					1,985				3	3	
	TRUCK	1%	2%		3%	1%		1%	1%											0.97
5:30 - 6:30 PM	TOTAL	131	519		498	125		215	426					1,914				2	2	
	TRUCK	2%	1%		4%	0%		0%	1%											0.96
5:45 - 6:45 PM	TOTAL	119	497		490	113		213	407					1,839				3	3	
	TRUCK	3%	2%		4%	0%		0%	1%											0.93
6:00 - 7:00 PM	TOTAL	97	479		486	108		220	369					1,759				2	2	
	TRUCK	3%	2%		3%	1%		1%	1%											0.90

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A: X-ing Thiells Mt Ivy Road North of Int
B: X-ing US Route 202 West of Int
C:
D: X-ing US Route 202 East of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & US Route 45		INT #:	10

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	2	74	56	4	155	0	32	0	24	0	2	16	365						
	TRUCK	0	7	7	3	4	0	1	0	0	0	1	1							
7:15 - 7:30 AM	TOTAL	3	87	41	2	138	0	33	0	26	0	1	12	343						
	TRUCK	1	10	9	0	2	0	6	0	2	0	1	2							
7:30 - 7:45 AM	TOTAL	0	100	53	3	127	0	45	0	21	0	2	16	367						
	TRUCK	0	10	4	1	5	0	1	0	2	0	0	5							
7:45 - 8:00 AM	TOTAL	3	115	66	1	153	0	43	0	20	1	0	21	423						
	TRUCK	0	10	12	0	6	0	8	0	3	0	0	2							
8:00 - 8:15 AM	TOTAL	3	113	78	4	137	0	48	0	20	2	2	11	418	2				2	
	TRUCK	1	5	6	1	7	0	9	0	2	0	0	1		2				2	
8:15 - 8:30 AM	TOTAL	2	94	90	0	122	0	45	1	21	1	2	10	388	1				1	
	TRUCK	1	12	7	0	9	0	3	1	2	0	0	1							
8:30 - 8:45 AM	TOTAL	1	112	68	2	114	0	37	2	22	1	2	9	370	1				1	
	TRUCK	0	10	5	1	20	0	3	0	2	0	0	1							
8:45 - 9:00 AM	TOTAL	1	115	97	2	137	0	54	0	21	0	1	19	447						
	TRUCK	0	12	11	0	9	0	5	0	2	0	0	4		1				1	
2:00 - 2:15 PM	TOTAL	2	124	68	6	121	1	37	0	32	1	3	2	397	1	1	1		3	
	TRUCK	0	3	1	2	5	0	2	0	3	0	0	0							
2:15 - 2:30 PM	TOTAL	2	139	55	8	106	0	40	0	44	1	3	4	402	2				2	
	TRUCK	0	8	3	0	9	0	3	0	2	1	1	1							
2:30 - 2:45 PM	TOTAL	6	112	65	5	115	0	43	0	50	1	1	10	408	3				3	
	TRUCK	0	8	7	2	5	0	4	0	1	0	0	0							
2:45 - 3:00 PM	TOTAL	2	127	63	4	105	0	36	0	44	2	3	9	395						
	TRUCK	0	3	10	0	8	0	1	0	2	0	2	0							
3:00 - 3:15 PM	TOTAL	4	151	71	8	94	0	68	0	42	0	2	15	455						
	TRUCK	1	10	5	0	2	0	8	0	0	0	1	3							
3:15 - 3:30 PM	TOTAL	6	164	69	8	102	0	47	1	52	3	4	7	463						
	TRUCK	1	10	4	0	5	0	4	0	0	0	0	0							
3:30 - 3:45 PM	TOTAL	2	138	56	7	106	0	50	1	56	0	2	16	434						
	TRUCK	0	10	2	0	4	0	2	0	0	0	0	5							
3:45 - 4:00 PM	TOTAL	5	121	67	11	112	1	57	1	43	2	0	11	431			2		2	
	TRUCK	1	2	4	0	7	0	2	0	0	0	0	1							

4:00 - 4:15 PM	TOTAL	3	130	63	12	78	0	44	0	51	4	1	10	396						
	TRUCK	0	5	1	2	1	0	4	0	1	1	0	2							
4:15 - 4:30 PM	TOTAL	2	119	59	4	115	1	47	1	42	0	4	13	407	2	1			3	
	TRUCK	0	8	1	1	3	0	2	0	0	0	0	1		1				1	
4:30 - 4:45 PM	TOTAL	2	118	76	6	87	1	53	3	40	1	1	7	395						
	TRUCK	0	6	3	0	7	0	9	0	3	1	0	0							
4:45 - 5:00 PM	TOTAL	2	145	70	3	121	0	51	1	42	2	3	8	448	1				1	
	TRUCK	1	6	2	1	2	0	5	0	1	0	0	0							
5:00 - 5:15 PM	TOTAL	3	114	66	6	98	0	67	3	60	0	3	6	426		1			1	
	TRUCK	1	3	3	2	4	0	4	0	1	0	0	1							
5:15 - 5:30 PM	TOTAL	2	121	86	10	124	1	55	1	51	2	2	6	461						
	TRUCK	0	6	3	1	0	0	6	0	0	0	0	0							
5:30 - 5:45 PM	TOTAL	6	115	61	3	110	1	50	4	46	2	3	6	407	1				1	
	TRUCK	0	3	1	0	5	0	2	0	2	0	0	0							
5:45 - 6:00 PM	TOTAL	1	124	59	3	111	0	45	2	54	2	1	4	406	1	1			2	
	TRUCK	0	1	0	0	3	0	3	0	0	0	0	0							
6:00 - 6:15 PM	TOTAL	2	132	60	6	110	0	31	2	43	0	2	5	393	4				4	
	TRUCK	0	2	0	0	3	0	1	0	1	0	0	0							
6:15 - 6:30 PM	TOTAL	4	127	56	9	92	1	35	2	43	2	2	7	380	2				2	
	TRUCK	0	0	2	1	1	0	3	0	0	0	0	1							
6:30 - 6:45 PM	TOTAL	5	110	41	11	108	0	33	0	58	1	0	5	372	1				1	
	TRUCK	0	2	3	1	3	0	1	0	2	0	0	0							
6:45 - 7:00 PM	TOTAL	2	121	50	10	107	0	31	3	46	2	0	6	378	1				1	
	TRUCK	0	0	1	1	0	0	1	0	1	0	0	0							

1: US Route 202 EB - Left
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3: US Route 202 EB - Right
4: US 202 Route WB - Left
5: US 202 Route WB - Thru
6: US 202 Route WB - Right
7: US Route 45 NB - Left
8: US Route 45 NB - Thru
9: US Route 45 NB - Right
10: Old County Road SB - Left
11: Old County Road SB - Thru
12: Old County Road SB - Right

A: X-ing Old County Road North of Int
B: X-ing US Route 202 East of Int
C: X-ing US Route 45 South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & US Route 45		INT #:	10

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	8	376	216	10	573		153		91	1	5	65	1,498						
	TRUCK	13%	10%	15%	40%	3%		10%		8%	0%	40%	15%							0.89
7:15 - 8:15 AM	TOTAL	9	415	238	10	555		169		87	3	5	60	1,551	2				2	
	TRUCK	22%	8%	13%	20%	4%		14%		10%	0%	20%	17%		2				2	0.92
7:30 - 8:30 AM	TOTAL	8	422	287	8	539		181	1	82	4	6	58	1,596	3				3	
	TRUCK	25%	9%	10%	25%	5%		12%	100%	11%	0%	0%	16%		2				2	0.94
7:45 - 8:45 AM	TOTAL	9	434	302	7	526		173	3	83	5	6	51	1,599	4				4	
	TRUCK	22%	9%	10%	29%	8%		13%	33%	11%	0%	0%	10%		2				2	0.95
8:00 - 9:00 AM	TOTAL	7	434	333	8	510		184	3	84	4	7	49	1,623	4				4	
	TRUCK	29%	9%	9%	25%	9%		11%	33%	10%	0%	0%	14%		3				3	0.91
2:00 - 3:00 PM	TOTAL	12	502	251	23	447	1	156		170	5	10	25	1,602	6	1	1		8	
	TRUCK	0%	4%	8%	17%	6%	0%	6%		5%	20%	30%	4%							0.98
2:15 - 3:15 PM	TOTAL	14	529	254	25	420		187		180	4	9	38	1,660	5				5	
	TRUCK	7%	5%	10%	8%	6%		9%		3%	25%	44%	11%							0.91
2:30 - 3:30 PM	TOTAL	18	554	268	25	416		194	1	188	6	10	41	1,721	3				3	
	TRUCK	11%	6%	10%	8%	5%		9%	0%	2%	0%	30%	7%							0.93
2:45 - 3:45 PM	TOTAL	14	580	259	27	407		201	2	194	5	11	47	1,747						
	TRUCK	14%	6%	8%	0%	5%		7%	0%	1%	0%	27%	17%							0.94
3:00 - 4:00 PM	TOTAL	17	574	263	34	414	1	222	3	193	5	8	49	1,783			2		2	
	TRUCK	18%	6%	6%	0%	4%	0%	7%	0%	0%	0%	13%	18%							0.96

4:00 - 5:00 PM	TOTAL	9	512	268	25	401	2	195	5	175	7	9	38	1,646	3	1			4	
	TRUCK	11%	5%	3%	16%	3%	0%	10%	0%	3%	29%	0%	8%		1				1	0.92
4:15 - 5:15 PM	TOTAL	9	496	271	19	421	2	218	8	184	3	11	34	1,676	3	2			5	
	TRUCK	22%	5%	3%	21%	4%	0%	9%	0%	3%	33%	0%	6%		1				1	0.94
4:30 - 5:30 PM	TOTAL	9	498	298	25	430	2	226	8	193	5	9	27	1,730	1	1			2	
	TRUCK	22%	4%	4%	16%	3%	0%	11%	0%	3%	20%	0%	4%							0.94
4:45 - 5:45 PM	TOTAL	13	495	283	22	453	2	223	9	199	6	11	26	1,742	2	1			3	
	TRUCK	15%	4%	3%	18%	2%	0%	8%	0%	2%	0%	0%	4%							0.94
5:00 - 6:00 PM	TOTAL	12	474	272	22	443	2	217	10	211	6	9	22	1,700	2	2			4	
	TRUCK	8%	3%	3%	14%	3%	0%	7%	0%	1%	0%	0%	5%							0.92
5:15 - 6:15 PM	TOTAL	11	492	266	22	455	2	181	9	194	6	8	21	1,667	6	1			7	
	TRUCK	0%	2%	2%	5%	2%	0%	7%	0%	2%	0%	0%	0%							0.90
5:30 - 6:30 PM	TOTAL	13	498	236	21	423	2	161	10	186	6	8	22	1,586	8	1			9	
	TRUCK	0%	1%	1%	5%	3%	0%	6%	0%	2%	0%	0%	5%							0.97
5:45 - 6:45 PM	TOTAL	12	493	216	29	421	1	144	6	198	5	5	21	1,551	8	1			9	
	TRUCK	0%	1%	2%	7%	2%	0%	6%	0%	2%	0%	0%	5%							0.96
6:00 - 7:00 PM	TOTAL	13	490	207	36	417	1	130	7	190	5	4	23	1,523	8				8	
	TRUCK	0%	1%	3%	8%	2%	0%	5%	0%	2%	0%	0%	4%							0.97

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10: Old County Road SB - Left
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A: X-ing Old County Road North of Int
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DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Palisades Interstate Parkway NB Ramp		INT #:	11

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	13	27					22				113		175						
	TRUCK	0	1					3				3								
7:15 - 7:30 AM	TOTAL	19	34					30				101		184						
	TRUCK	1	1					5				6								
7:30 - 7:45 AM	TOTAL	42	48					49				137		276						
	TRUCK	0	1					6				9								
7:45 - 8:00 AM	TOTAL	42	69					44				115		270						
	TRUCK	1	3					6				4								
8:00 - 8:15 AM	TOTAL	30	47					46				137		260						
	TRUCK	0	1					9				7								
8:15 - 8:30 AM	TOTAL	26	57					49				151		283						
	TRUCK	2	1					3				13								
8:30 - 8:45 AM	TOTAL	21	54					28				167		270						
	TRUCK	0	1					6				8								
8:45 - 9:00 AM	TOTAL	26	61					41				158		286						
	TRUCK	0	0					5				6								
2:00 - 2:15 PM	TOTAL	26	68					40				60		194						
	TRUCK	0	0					3				1								
2:15 - 2:30 PM	TOTAL	31	86					48				61		226						
	TRUCK	0	2					5				2								
2:30 - 2:45 PM	TOTAL	28	73					44				79		224						
	TRUCK	0	0					2				6								
2:45 - 3:00 PM	TOTAL	40	94					45				77		256						
	TRUCK	1	2					5				4								
3:00 - 3:15 PM	TOTAL	49	80					55				66		250						
	TRUCK	2	3					10				14								
3:15 - 3:30 PM	TOTAL	45	97					74				60		276						
	TRUCK	1	1					5				7								
3:30 - 3:45 PM	TOTAL	42	81					54				87		264						
	TRUCK	0	0					5				7								
3:45 - 4:00 PM	TOTAL	50	62					71				81		264						
	TRUCK	1	0					2				3								

4:00 - 4:15 PM	TOTAL	61	99					65				102		327						
	TRUCK	0	4					3				3								
4:15 - 4:30 PM	TOTAL	52	65					71				91		279						
	TRUCK	1	2					4				3								
4:30 - 4:45 PM	TOTAL	55	76					55				81		267						
	TRUCK	1	0					3				2								
4:45 - 5:00 PM	TOTAL	63	90					77				86		316						
	TRUCK	0	2					4				7								
5:00 - 5:15 PM	TOTAL	68	84					84				80		316						
	TRUCK	0	1					1				3								
5:15 - 5:30 PM	TOTAL	73	86					66				57		282						
	TRUCK	0	1					3				2								
5:30 - 5:45 PM	TOTAL	73	90					68				74		305						
	TRUCK	0	1					0				1								
5:45 - 6:00 PM	TOTAL	80	115					65				46		306						
	TRUCK	0	1					1				0								
6:00 - 6:15 PM	TOTAL	58	82					61				66		267						
	TRUCK	0	0					0				1								
6:15 - 6:30 PM	TOTAL	69	84					54				62		269						
	TRUCK	0	1					0				1								
6:30 - 6:45 PM	TOTAL	63	74					39				57		233						
	TRUCK	0	1					1				1								
6:45 - 7:00 PM	TOTAL	49	94					40				35		218						
	TRUCK	0	0					1				2								

1: PIP Ramp EB - Left
2: PIP Ramp EB - Right
3:
4:
5:
6:
7: Thiells Mt Ivy Road NB - Thru
8:
9:
10:
11: Thiells Mt Ivy Road SB - Thru
12:

A: X-ing Thiells Mt Ivy Rd North of Int
B:
C: X-ing Thiells Mt Ivy Rd South of Int
D: X-ing PIP Ramp West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Palisades Interstate Parkway NB Ramp		INT #:	11

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	116	178					145				466		905						
	TRUCK	2%	3%					14%				5%								0.82
7:15 - 8:15 AM	TOTAL	133	198					169				490		990						
	TRUCK	2%	3%					15%				5%								0.90
7:30 - 8:30 AM	TOTAL	140	221					188				540		1,089						
	TRUCK	2%	3%					13%				6%								0.96
7:45 - 8:45 AM	TOTAL	119	227					167				570		1,083						
	TRUCK	3%	3%					14%				6%								0.96
8:00 - 9:00 AM	TOTAL	103	219					164				613		1,099						
	TRUCK	2%	1%					14%				6%								0.96
2:00 - 3:00 PM	TOTAL	125	321					177				277		900						
	TRUCK	1%	1%					8%				5%								0.88
2:15 - 3:15 PM	TOTAL	148	333					192				283		956						
	TRUCK	2%	2%					11%				9%								0.93
2:30 - 3:30 PM	TOTAL	162	344					218				282		1,006						
	TRUCK	2%	2%					10%				11%								0.91
2:45 - 3:45 PM	TOTAL	176	352					228				290		1,046						
	TRUCK	2%	2%					11%				11%								0.95
3:00 - 4:00 PM	TOTAL	186	320					254				294		1,054						
	TRUCK	2%	1%					9%				11%								0.95

4:00 - 5:00 PM	TOTAL	231	330					268				360		1,189						
	TRUCK	1%	2%					5%				4%								0.91
4:15 - 5:15 PM	TOTAL	238	315					287				338		1,178						
	TRUCK	1%	2%					4%				4%								0.93
4:30 - 5:30 PM	TOTAL	259	336					282				304		1,181						
	TRUCK	0%	1%					4%				5%								0.93
4:45 - 5:45 PM	TOTAL	277	350					295				297		1,219						
	TRUCK	0%	1%					3%				4%								0.96
5:00 - 6:00 PM	TOTAL	294	375					283				257		1,209						
	TRUCK	0%	1%					2%				2%								0.96
5:15 - 6:15 PM	TOTAL	284	373					260				243		1,160						
	TRUCK	0%	1%					2%				2%								0.95
5:30 - 6:30 PM	TOTAL	280	371					248				248		1,147						
	TRUCK	0%	1%					0%				1%								0.94
5:45 - 6:45 PM	TOTAL	270	355					219				231		1,075						
	TRUCK	0%	1%					1%				1%								0.88
6:00 - 7:00 PM	TOTAL	239	334					194				220		987						
	TRUCK	0%	1%					1%				2%								0.92

1: PIP Ramp EB - Left
2: PIP Ramp EB - Right
3:
4:
5:
6:
7: Thiells Mt Ivy Road NB - Thru
8:
9:
10:
11: Thiells Mt Ivy Road SB - Thru
12:
A: X-ing Thiells Mt Ivy Rd North of Int
B:
C: X-ing Thiells Mt Ivy Rd South of Int
D: X-ing PIP Ramp West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Ridge Road		INT #:	12

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	20	12			25	1				1		11	70						
	TRUCK	1	0			0	0				1		2							
7:15 - 7:30 AM	TOTAL	16	23			24	6				1		14	84						
	TRUCK	1	2			0	0				0		1							
7:30 - 7:45 AM	TOTAL	49	15			42	3				3		12	124						
	TRUCK	3	2			4	0				0		2							
7:45 - 8:00 AM	TOTAL	55	19			48	11				3		13	149						
	TRUCK	3	1			2	0				0		3							
8:00 - 8:15 AM	TOTAL	29	29			36	6				4		26	130						
	TRUCK	4	5			3	0				2		4							
8:15 - 8:30 AM	TOTAL	26	26			43	4				4		53	156						
	TRUCK	3	2			1	0				1		7							
8:30 - 8:45 AM	TOTAL	17	22			62	3				2		21	127						
	TRUCK	0	1			2	1				0		4							
8:45 - 9:00 AM	TOTAL	13	21			65	3				2		11	115						
	TRUCK	0	4			4	1				1		1							
2:00 - 2:15 PM	TOTAL	15	22			16	1				2		7	63						
	TRUCK	1	0			0	1				0		0							
2:15 - 2:30 PM	TOTAL	12	23			20	8				3		17	83						
	TRUCK	2	1			2	2				0		2							
2:30 - 2:45 PM	TOTAL	14	20			21	6				3		23	87						
	TRUCK	2	0			2	0				1		2							
2:45 - 3:00 PM	TOTAL	17	36			20	0				4		22	99						
	TRUCK	1	0			0	0				1		4							
3:00 - 3:15 PM	TOTAL	17	36			21	4				2		23	103						
	TRUCK	3	1			2	1				0		4							
3:15 - 3:30 PM	TOTAL	18	47			19	3				0		16	103						
	TRUCK	3	1			0	1				0		5							
3:30 - 3:45 PM	TOTAL	18	43			22	3				6		27	119						
	TRUCK	0	0			0	0				0		2							
3:45 - 4:00 PM	TOTAL	22	34			38	3				4		26	127						
	TRUCK	2	2			2	0				0		1							

4:00 - 4:15 PM	TOTAL	17	39			47	5				3		29	140					
	TRUCK	1	2			1	1				0		0						
4:15 - 4:30 PM	TOTAL	19	40			35	0				0		26	120					
	TRUCK	1	1			0	0				0		1						
4:30 - 4:45 PM	TOTAL	18	41			28	2				4		19	112					
	TRUCK	3	1			0	0				1		0						
4:45 - 5:00 PM	TOTAL	10	50			28	0				2		19	109					
	TRUCK	0	2			1	0				0		2						
5:00 - 5:15 PM	TOTAL	18	36			26	0				1		24	105					
	TRUCK	1	1			0	0				0		1						
5:15 - 5:30 PM	TOTAL	25	37			23	1				0		16	102					
	TRUCK	1	1			0	0				0		0						
5:30 - 5:45 PM	TOTAL	15	57			24	3				0		11	110					
	TRUCK	0	1			1	0				0		0						
5:45 - 6:00 PM	TOTAL	9	58			19	1				2		13	102					
	TRUCK	0	1			0	0				0		2						
6:00 - 6:15 PM	TOTAL	14	41			15	0				1		11	82					
	TRUCK	0	0			0	0				0		0						
6:15 - 6:30 PM	TOTAL	16	40			19	0				0		19	94					
	TRUCK	0	0			0	0				0		1						
6:30 - 6:45 PM	TOTAL	12	38			17	0				2		12	81					
	TRUCK	0	0			1	0				0		0						
6:45 - 7:00 PM	TOTAL	11	29			13	1				0		10	64					
	TRUCK	0	0			0	0				0		0						

1: Thiells Mt Ivy Road EB - Left
2: Thiells Mt Ivy Road EB - Thru
3:
4:
5: Thiells Mt Ivy Road WB - Thru
6: Thiells Mt Ivy Road WB - Right
7:
8:
9:
10: Ridge Road SB - Left
11:
12: Ridge Road SB - Right

A: X-ing Ridge Road North of Int
B: X-ing Thiells Mt Ivy Rd East of Int
C:
D: X-ing Thiells Mt Ivy West of Int

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Ridge Road		INT #:	12

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	140	69			139	21				8		50	427						
	TRUCK	6%	7%			4%	0%				13%		16%							0.72
7:15 - 8:15 AM	TOTAL	149	86			150	26				11		65	487						
	TRUCK	7%	12%			6%	0%				18%		15%							0.82
7:30 - 8:30 AM	TOTAL	159	89			169	24				14		104	559						
	TRUCK	8%	11%			6%	0%				21%		15%							0.90
7:45 - 8:45 AM	TOTAL	127	96			189	24				13		113	562						
	TRUCK	8%	9%			4%	4%				23%		16%							0.90
8:00 - 9:00 AM	TOTAL	85	98			206	16				12		111	528						
	TRUCK	8%	12%			5%	13%				33%		14%							0.85
2:00 - 3:00 PM	TOTAL	58	101			77	15				12		69	332						
	TRUCK	10%	1%			5%	20%				17%		12%							0.84
2:15 - 3:15 PM	TOTAL	60	115			82	18				12		85	372						
	TRUCK	13%	2%			7%	17%				17%		14%							0.90
2:30 - 3:30 PM	TOTAL	66	139			81	13				9		84	392						
	TRUCK	14%	1%			5%	15%				22%		18%							0.95
2:45 - 3:45 PM	TOTAL	70	162			82	10				12		88	424						
	TRUCK	10%	1%			2%	20%				8%		17%							0.89
3:00 - 4:00 PM	TOTAL	75	160			100	13				12		92	452						
	TRUCK	11%	3%			4%	15%				0%		13%							0.89

4:00 - 5:00 PM	TOTAL	64	170			138	7				9		93	481						
	TRUCK	8%	4%			1%	14%				11%		3%							0.86
4:15 - 5:15 PM	TOTAL	65	167			117	2				7		88	446						
	TRUCK	8%	3%			1%	0%				14%		5%							0.93
4:30 - 5:30 PM	TOTAL	71	164			105	3				7		78	428						
	TRUCK	7%	3%			1%	0%				14%		4%							0.96
4:45 - 5:45 PM	TOTAL	68	180			101	4				3		70	426						
	TRUCK	3%	3%			2%	0%				0%		4%							0.97
5:00 - 6:00 PM	TOTAL	67	188			92	5				3		64	419						
	TRUCK	3%	2%			1%	0%				0%		5%							0.95
5:15 - 6:15 PM	TOTAL	63	193			81	5				3		51	396						
	TRUCK	2%	2%			1%	0%				0%		4%							0.90
5:30 - 6:30 PM	TOTAL	54	196			77	4				3		54	388						
	TRUCK	0%	1%			1%	0%				0%		6%							0.88
5:45 - 6:45 PM	TOTAL	51	177			70	1				5		55	359						
	TRUCK	0%	1%			1%	0%				0%		5%							0.88
6:00 - 7:00 PM	TOTAL	53	148			64	1				3		52	321						
	TRUCK	0%	0%			2%	0%				0%		2%							0.85

1: Thiells Mt Ivy Road EB - Left
2: Thiells Mt Ivy Road EB - Thru
3:
4:
5: Thiells Mt Ivy Road WB - Thru
6: Thiells Mt Ivy Road WB - Right
7:
8:
9:
10: Ridge Road SB - Left
11:
12: Ridge Road SB - Right

A: X-ing Ridge Road North of Int
B: X-ing Thiells Mt Ivy Rd East of Int
C:
D: X-ing Thiells Mt Ivy West of Int

DATE:	Weekday (11-13-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Rosman Road		INT #:	13

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 7:15 AM	TOTAL	25	8		0	11		9	0					53						
	TRUCK	0	0		0	1		4	0											
7:15 - 7:30 AM	TOTAL	30	23		5	22		14	0					94						
	TRUCK	1	4		1	3		2	0											
7:30 - 7:45 AM	TOTAL	44	27		2	16		26	2					117						
	TRUCK	4	2		0	2		7	0											
7:45 - 8:00 AM	TOTAL	52	34		2	18		25	3					134						
	TRUCK	2	3		0	3		11	0											
8:00 - 8:15 AM	TOTAL	40	23		0	32		21	4					120						
	TRUCK	2	2		0	7		7	1											
8:15 - 8:30 AM	TOTAL	45	27		4	28		33	4					141						
	TRUCK	2	8		1	2		5	0											
8:30 - 8:45 AM	TOTAL	61	22		0	22		36	1					142						
	TRUCK	2	2		0	1		8	0											
8:45 - 9:00 AM	TOTAL	68	23		2	18		23	2					136						
	TRUCK	5	3		0	3		6	0											
2:00 - 2:15 PM	TOTAL	20	16		2	19		8	0					65						
	TRUCK	1	1		0	0		0	0											
2:15 - 2:30 PM	TOTAL	27	21		5	19		24	0					96						
	TRUCK	3	3		0	1		4	0											
2:30 - 2:45 PM	TOTAL	21	21		3	21		12	2					80						
	TRUCK	1	12		0	1		0	1											
2:45 - 3:00 PM	TOTAL	22	17		5	34		36	1					115						
	TRUCK	0	5		0	3		11	0											
3:00 - 3:15 PM	TOTAL	21	17		2	28		24	2					94		1	1		2	
	TRUCK	2	4		0	2		4	1											
3:15 - 3:30 PM	TOTAL	20	12		8	42		20	4					106						
	TRUCK	1	2		2	0		7	0											
3:30 - 3:45 PM	TOTAL	21	20		5	47		23	1					117						
	TRUCK	0	2		0	3		8	0											
3:45 - 4:00 PM	TOTAL	44	23		9	32		28	0					136						
	TRUCK	2	9		0	2		7	0											

4:00 - 4:15 PM	TOTAL	48	44		5	30		22	3					152						
	TRUCK	2	2		0	2		3	0											
4:15 - 4:30 PM	TOTAL	32	30		0	37		23	2					124						
	TRUCK	0	1		0	0		1	0											
4:30 - 4:45 PM	TOTAL	31	15		5	40		16	1					108						
	TRUCK	0	5		0	2		0	0											
4:45 - 5:00 PM	TOTAL	26	18		5	47		18	3					117						
	TRUCK	1	2		0	1		2	0											
5:00 - 5:15 PM	TOTAL	28	25		6	35		16	0					110						
	TRUCK	0	0		0	0		2	0											
5:15 - 5:30 PM	TOTAL	23	17		3	32		7	0					82						
	TRUCK	1	1		1	0		0	0											
5:30 - 5:45 PM	TOTAL	23	10		5	45		15	2					100						
	TRUCK	0	0		0	1		0	0											
5:45 - 6:00 PM	TOTAL	16	17		4	58		8	2					105						
	TRUCK	0	1		0	2		0	0											
6:00 - 6:15 PM	TOTAL	13	10		8	38		14	1					84						
	TRUCK	0	0		0	0		0	0											
6:15 - 6:30 PM	TOTAL	18	10		4	37		12	1					82						
	TRUCK	0	0		0	0		0	0											
6:30 - 6:45 PM	TOTAL	16	15		2	36		8	0					77						
	TRUCK	0	0		0	0		1	0											
6:45 - 7:00 PM	TOTAL	12	15		1	25		9	2					64						
	TRUCK	0	1		0	0		0	0											

1: Rosman Road WB - Left
2: Rosman Road WB - Right
3:
4: Thiells Mt Ivy Road NB - Thru
5: Thiells Mt Ivy Road NB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Thru
9:
10:
11:
12:
A: X-ing Thiells Mt Ivy Rd North of Int
B: X-ing Rosman Rd East of Int
C: X-ing Thiells Mt Ivy Rd South of Int
D:

DATE:	Weekday (11-13-2024)	PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	7:00-9:00 AM 2:00-7:00 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Rosman Road		INT #:	13

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
7:00 - 8:00 AM	TOTAL	151	92		9	67		74	5					398						
	TRUCK	5%	10%		11%	13%		32%	0%											0.74
7:15 - 8:15 AM	TOTAL	166	107		9	88		86	9					465						
	TRUCK	5%	10%		11%	17%		31%	11%											0.87
7:30 - 8:30 AM	TOTAL	181	111		8	94		105	13					512						
	TRUCK	6%	14%		13%	15%		29%	8%											0.91
7:45 - 8:45 AM	TOTAL	198	106		6	100		115	12					537						
	TRUCK	4%	14%		17%	13%		27%	8%											0.95
8:00 - 9:00 AM	TOTAL	214	95		6	100		113	11					539						
	TRUCK	5%	16%		17%	13%		23%	9%											0.95
2:00 - 3:00 PM	TOTAL	90	75		15	93		80	3					356						
	TRUCK	6%	28%		0%	5%		19%	33%											0.77
2:15 - 3:15 PM	TOTAL	91	76		15	102		96	5					385		1	1		2	
	TRUCK	7%	32%		0%	7%		20%	40%											0.84
2:30 - 3:30 PM	TOTAL	84	67		18	125		92	9					395		1	1		2	
	TRUCK	5%	34%		11%	5%		24%	22%											0.86
2:45 - 3:45 PM	TOTAL	84	66		20	151		103	8					432		1	1		2	
	TRUCK	4%	20%		10%	5%		29%	13%											0.92
3:00 - 4:00 PM	TOTAL	106	72		24	149		95	7					453		1	1		2	
	TRUCK	5%	24%		8%	5%		27%	14%											0.83

4:00 - 5:00 PM	TOTAL	137	107		15	154		79	9					501						
	TRUCK	2%	9%		0%	3%		8%	0%											0.82
4:15 - 5:15 PM	TOTAL	117	88		16	159		73	6					459						
	TRUCK	1%	9%		0%	2%		7%	0%											0.93
4:30 - 5:30 PM	TOTAL	108	75		19	154		57	4					417						
	TRUCK	2%	11%		5%	2%		7%	0%											0.89
4:45 - 5:45 PM	TOTAL	100	70		19	159		56	5					409						
	TRUCK	2%	4%		5%	1%		7%	0%											0.87
5:00 - 6:00 PM	TOTAL	90	69		18	170		46	4					397						
	TRUCK	1%	3%		6%	2%		4%	0%											0.90
5:15 - 6:15 PM	TOTAL	75	54		20	173		44	5					371						
	TRUCK	1%	4%		5%	2%		0%	0%											0.88
5:30 - 6:30 PM	TOTAL	70	47		21	178		49	6					371						
	TRUCK	0%	2%		0%	2%		0%	0%											0.88
5:45 - 6:45 PM	TOTAL	63	52		18	169		42	4					348						
	TRUCK	0%	2%		0%	1%		2%	0%											0.83
6:00 - 7:00 PM	TOTAL	59	50		15	136		43	4					307						
	TRUCK	0%	2%		0%	0%		2%	0%											0.91

1: Rosman Road WB - Left
2: Rosman Road WB - Right
3:
4: Thiells Mt Ivy Road NB - Thru
5: Thiells Mt Ivy Road NB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Thru
9:
10:
11:
12:
A: X-ing Thiells Mt Ivy Rd North of Int
B: X-ing Rosman Rd East of Int
C: X-ing Thiells Mt Ivy Rd South of Int
D:

DATE:	Weekday (11-13-2024)
PERIOD:	7:00-9:00 AM 2:00-7:00 PM

PEAK HOUR CALCULATIONS - DO NOT EDIT THIS SHEET

JOB NO:	21090
NAME:	Traffic Databank

TIME	CLASS	TOTAL INT. 1	TOTAL INT. 2	TOTAL INT. 3	TOTAL INT. 4	TOTAL INT. 5	TOTAL INT. 6	TOTAL INT. 7	TOTAL INT. 8	SUB-TOTAL INT. 1-8
7:00 - 8:00 AM	TOTAL	732	839	1,130	689	358		1,288	2,093	7,129
	TRUCK									
7:15 - 8:15 AM	TOTAL	773	882	1,230	784	399		1,262	2,224	7,554
	TRUCK									
7:30 - 8:30 AM	TOTAL	798	908	1,283	876	470		1,256	2,304	7,895
	TRUCK									
7:45 - 8:45 AM	TOTAL	810	946	1,310	789	462		1,308	2,296	7,921
	TRUCK									
8:00 - 9:00 AM	TOTAL	818	972	1,257	620	420		1,285	2,346	7,718
	TRUCK									
2:00 - 3:00 PM	TOTAL	583	847	1,087	450	294		1,272	1,819	6,352
	TRUCK									
2:15 - 3:15 PM	TOTAL	626	915	1,175	497	322		1,306	1,911	6,752
	TRUCK									
2:30 - 3:30 PM	TOTAL	614	955	1,237	579	339		1,316	2,009	7,049
	TRUCK									
2:45 - 3:45 PM	TOTAL	624	999	1,261	565	344		1,323	2,005	7,121
	TRUCK									
3:00 - 4:00 PM	TOTAL	657	1,049	1,298	579	360		1,322	2,039	7,304
	TRUCK									

4:00 - 5:00 PM	TOTAL	769	1,152	1,346	458	377		1,369	2,056	7,527
	TRUCK									
4:15 - 5:15 PM	TOTAL	722	1,147	1,306	416	353		1,395	2,045	7,384
	TRUCK									
4:30 - 5:30 PM	TOTAL	699	1,135	1,282	363	310		1,391	2,018	7,198
	TRUCK									
4:45 - 5:45 PM	TOTAL	666	1,104	1,269	321	284		1,356	2,042	7,042
	TRUCK									
5:00 - 6:00 PM	TOTAL	639	1,090	1,235	301	271		1,343	1,985	6,864
	TRUCK									
5:15 - 6:15 PM	TOTAL	604	1,005	1,139	252	239		1,312	1,939	6,490
	TRUCK									
5:30 - 6:30 PM	TOTAL	547	937	1,082	237	233		1,283	1,854	6,173
	TRUCK									
5:45 - 6:45 PM	TOTAL	494	861	1,011	234	224		1,237	1,771	5,832
	TRUCK									
6:00 - 7:00 PM	TOTAL	455	809	984	230	212		1,214	1,680	5,584
	TRUCK									

DATE:	Weekday (11-13-2024)
PERIOD:	7:00-9:00 AM 2:00-7:00 PM

PEAK HOUR CALCULATIONS - DO NOT EDIT THIS SHEET

JOB NO:	21090
NAME:	Traffic Databank

TIME	CLASS	TOTAL INT. 9	TOTAL INT. 10	TOTAL INT. 11	TOTAL INT. 12	TOTAL INT. 13	SUB-TOTAL INT. 1-8	TOTAL
7:00 - 8:00 AM	TOTAL	1,911	1,498	905	427	398	7,129	12,268
	TRUCK							
7:15 - 8:15 AM	TOTAL	2,023	1,551	990	487	465	7,554	13,070
	TRUCK							
7:30 - 8:30 AM	TOTAL	2,133	1,596	1,089	559	512	7,895	13,784
	TRUCK							
7:45 - 8:45 AM	TOTAL	2,158	1,599	1,083	562	537	7,921	13,860
	TRUCK							
8:00 - 9:00 AM	TOTAL	2,206	1,623	1,099	528	539	7,718	13,713
	TRUCK							
2:00 - 3:00 PM	TOTAL	1,824	1,602	900	332	356	6,352	11,366
	TRUCK							
2:15 - 3:15 PM	TOTAL	1,939	1,660	956	372	385	6,752	12,064
	TRUCK							
2:30 - 3:30 PM	TOTAL	1,998	1,721	1,006	392	395	7,049	12,561
	TRUCK							
2:45 - 3:45 PM	TOTAL	2,007	1,747	1,046	424	432	7,121	12,777
	TRUCK							
3:00 - 4:00 PM	TOTAL	2,065	1,783	1,054	452	453	7,304	13,111
	TRUCK							

4:00 - 5:00 PM	TOTAL	2,053	1,646	1,189	481	501	7,527	13,397
	TRUCK							
4:15 - 5:15 PM	TOTAL	2,082	1,676	1,178	446	459	7,384	13,225
	TRUCK							
4:30 - 5:30 PM	TOTAL	2,075	1,730	1,181	428	417	7,198	13,029
	TRUCK							
4:45 - 5:45 PM	TOTAL	2,079	1,742	1,219	426	409	7,042	12,917
	TRUCK							
5:00 - 6:00 PM	TOTAL	2,041	1,700	1,209	419	397	6,864	12,630
	TRUCK							
5:15 - 6:15 PM	TOTAL	1,985	1,667	1,160	396	371	6,490	12,069
	TRUCK							
5:30 - 6:30 PM	TOTAL	1,914	1,586	1,147	388	371	6,173	11,579
	TRUCK							
5:45 - 6:45 PM	TOTAL	1,839	1,551	1,075	359	348	5,832	11,004
	TRUCK							
6:00 - 7:00 PM	TOTAL	1,759	1,523	987	321	307	5,584	10,481
	TRUCK							

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway SB Ramp		INT #:	1

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	11	15		30	70		16	1					143						
	TRUCK	0	0		1	0		0	0											
11:15 - 11:30 AM	TOTAL	13	25		32	49		10	1					130						
	TRUCK	0	1		0	1		0	0											
11:30 - 11:45 AM	TOTAL	8	26		42	65		11	0					152						
	TRUCK	0	2		0	0		0	0											
11:45 - 12:00 PM	TOTAL	9	25		42	42		10	3					131						
	TRUCK	0	0		0	0		0	0											
12:00 - 12:15 PM	TOTAL	14	20		25	69		10	3					141						
	TRUCK	0	1		1	0		0	0											
12:15 - 12:30 PM	TOTAL	6	25		40	52		11	3					137						
	TRUCK	0	0		2	0		0	0											
12:30 - 12:45 PM	TOTAL	10	24		31	62		10	2					139						
	TRUCK	0	1		0	0		0	0											
12:45 - 1:00 PM	TOTAL	10	23		25	61		5	4					128						
	TRUCK	0	1		0	0		0	0											
1:00 - 1:15 PM	TOTAL	14	21		30	62		12	1					140						
	TRUCK	0	0		2	0		0	0											
1:15 - 1:30 PM	TOTAL	12	16		32	56		10	2					128						
	TRUCK	0	1		0	0		0	0											
1:30 - 1:45 PM	TOTAL	11	24		28	50		8	2					123						
	TRUCK	0	0		0	0		0	0											
1:45 - 2:00 PM	TOTAL	17	18		26	58		15	5					139						
	TRUCK	0	1		1	0		0	0											

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3:
4: Willow Grove Road WB - Thru
5: Willow Grove Road WB - Right
6:
7: PIP Ramp SB - Left
8: PIP Ramp SB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway SB Ramp	INT #:	1

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	41	91		146	226		47	5					556						
	TRUCK	0%	3%		1%	0%		0%	0%											0.91
11:15 - 12:15 PM	TOTAL	44	96		141	225		41	7					554						
	TRUCK	0%	4%		1%	0%		0%	0%											0.91
11:30 - 12:30 PM	TOTAL	37	96		149	228		42	9					561						
	TRUCK	0%	3%		2%	0%		0%	0%											0.92
11:45 - 12:45 PM	TOTAL	39	94		138	225		41	11					548						
	TRUCK	0%	2%		2%	0%		0%	0%											0.97
12:00 - 1:00 PM	TOTAL	40	92		121	244		36	12					545						
	TRUCK	0%	3%		2%	0%		0%	0%											0.97
12:15 - 1:15 PM	TOTAL	40	93		126	237		38	10					544						
	TRUCK	0%	2%		3%	0%		0%	0%											0.97
12:30 - 1:30 PM	TOTAL	46	84		118	241		37	9					535						
	TRUCK	0%	4%		2%	0%		0%	0%											0.96
12:45 - 1:45 PM	TOTAL	47	84		115	229		35	9					519						
	TRUCK	0%	2%		2%	0%		0%	0%											0.93
1:00 - 2:00 PM	TOTAL	54	79		116	226		45	10					530						
	TRUCK	0%	3%		3%	0%		0%	0%											0.95

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3:
4: Willow Grove Road WB - Thru
5: Willow Grove Road WB - Right
6:
7: PIP Ramp SB - Left
8: PIP Ramp SB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway NB Ramp		INT #:	2

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	26	4		10	83		16	61					200						
	TRUCK	0	0		0	1		0	0											
11:15 - 11:30 AM	TOTAL	33	3		10	68		18	59					191						
	TRUCK	1	0		0	1		0	0											
11:30 - 11:45 AM	TOTAL	29	6		13	83		21	52					204						
	TRUCK	1	0		0	0		0	0											
11:45 - 12:00 PM	TOTAL	28	5		7	62		25	77					204						
	TRUCK	1	0		0	0		0	0											
12:00 - 12:15 PM	TOTAL	31	0		10	66		15	67					189						
	TRUCK	1	0		0	1		0	0											
12:15 - 12:30 PM	TOTAL	33	2		8	86		17	51					197						
	TRUCK	0	0		0	2		0	0											
12:30 - 12:45 PM	TOTAL	33	2		14	85		10	58					202						
	TRUCK	1	0		0	1		0	0											
12:45 - 1:00 PM	TOTAL	20	3		9	69		13	69					183						
	TRUCK	1	0		0	1		0	0											
1:00 - 1:15 PM	TOTAL	34	5		6	80		19	51					195						
	TRUCK	0	0		0	2		0	0											
1:15 - 1:30 PM	TOTAL	21	8		5	76		17	46					173						
	TRUCK	1	0		0	0		0	0											
1:30 - 1:45 PM	TOTAL	29	4		9	69		6	45					162						
	TRUCK	0	0		0	0		0	1											
1:45 - 2:00 PM	TOTAL	29	1		12	72		10	76					200						
	TRUCK	0	0		0	1		0	0											

1: Willow Grove Road EB -Thru
2: Willow Grove Road EB - Right
3:
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6:
7: PIP Ramp NB - Left
8: PIP Ramp NB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Palisades Interstate Parkway NB Ramp	INT #:	2

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	116	18		40	296		80	249					799						
	TRUCK	3%	0%		0%	1%		0%	0%											0.98
11:15 - 12:15 PM	TOTAL	121	14		40	279		79	255					788						
	TRUCK	3%	0%		0%	1%		0%	0%											0.97
11:30 - 12:30 PM	TOTAL	121	13		38	297		78	247					794						
	TRUCK	2%	0%		0%	1%		0%	0%											0.97
11:45 - 12:45 PM	TOTAL	125	9		39	299		67	253					792						
	TRUCK	2%	0%		0%	1%		0%	0%											0.97
12:00 - 1:00 PM	TOTAL	117	7		41	306		55	245					771						
	TRUCK	3%	0%		0%	2%		0%	0%											0.95
12:15 - 1:15 PM	TOTAL	120	12		37	320		59	229					777						
	TRUCK	2%	0%		0%	2%		0%	0%											0.96
12:30 - 1:30 PM	TOTAL	108	18		34	310		59	224					753						
	TRUCK	3%	0%		0%	1%		0%	0%											0.93
12:45 - 1:45 PM	TOTAL	104	20		29	294		55	211					713						
	TRUCK	2%	0%		0%	1%		0%	0%											0.91
1:00 - 2:00 PM	TOTAL	113	18		32	297		52	218					730						
	TRUCK	1%	0%		0%	1%		0%	0%											0.91

1: Willow Grove Road EB -Thru
2: Willow Grove Road EB - Right
3:
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6:
7: PIP Ramp NB - Left
8: PIP Ramp NB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Patriots Hill Lane/Letchworth Village Road		INT #:	3

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	7	61	13	11	73	3	11	4	19	5	2	2	211						
	TRUCK	0	0	0	0	1	0	0	0	0	0	0	0							
11:15 - 11:30 AM	TOTAL	7	75	5	16	71	5	9	1	5	3	0	8	205						
	TRUCK	0	1	0	0	1	0	0	0	0	0	0	0							
11:30 - 11:45 AM	TOTAL	6	68	8	15	70	1	9	0	17	3	2	3	202						
	TRUCK	0	2	1	2	0	0	0	0	1	0	0	0							
11:45 - 12:00 PM	TOTAL	8	90	10	11	69	4	5	2	10	2	3	1	215						
	TRUCK	0	0	0	1	0	0	0	0	0	0	0	0							
12:00 - 12:15 PM	TOTAL	11	75	6	7	75	5	7	1	13	2	3	2	207						
	TRUCK	0	1	0	0	0	0	1	0	2	0	0	0							
12:15 - 12:30 PM	TOTAL	10	67	6	13	75	1	7	3	19	3	4	5	213						
	TRUCK	0	0	0	0	2	0	0	0	1	0	0	0							
12:30 - 12:45 PM	TOTAL	3	81	6	11	71	5	10	1	12	4	1	7	212						
	TRUCK	0	0	1	0	0	0	0	0	0	0	0	0							
12:45 - 1:00 PM	TOTAL	7	79	4	10	74	2	13	0	21	4	1	3	218						
	TRUCK	0	1	0	1	2	0	1	0	1	0	0	0							
1:00 - 1:15 PM	TOTAL	4	70	5	15	73	2	4	1	17	1	4	1	197						
	TRUCK	0	0	0	3	1	0	0	0	1	0	0	0							
1:15 - 1:30 PM	TOTAL	2	66	6	9	75	0	5	4	14	1	5	6	193						
	TRUCK	0	0	1	0	0	0	0	0	1	0	0	0							
1:30 - 1:45 PM	TOTAL	10	52	4	18	63	3	7	1	13	0	0	5	176						
	TRUCK	0	1	0	2	0	0	0	0	0	0	0	0							
1:45 - 2:00 PM	TOTAL	10	82	9	16	64	6	4	1	15	0	0	6	213		1			1	
	TRUCK	0	1	0	1	0	0	0	0	0	0	0	0							

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3: Willow Grove Road EB - Right
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6: Willow Grove Road WB - Right
7: Letchworth Village Rd NB - Left
8: Letchworth Village Rd NB - Thru
9: Letchworth Village Rd NB - Right
10: Patriots Hill Lane SB - Left
11: Patriots Hill Lane SB - Thru
12: Patriots Hill Lane SB - Right

A: X-ing Patriot Hill Lane North of Int
B: X-ing Willow Grove Road East of Int
C: X-ing Letchworth Vlg Rd South of Int
D: X-ing Willow Grove Road West of Int

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Willow Grove Road & Patriots Hill Lane/Letchworth Village Road	INT #:	3

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	28	294	36	53	283	13	34	7	51	13	7	14	833						
	TRUCK	0%	1%	3%	6%	1%	0%	0%	0%	2%	0%	0%	0%							0.97
11:15 - 12:15 PM	TOTAL	32	308	29	49	285	15	30	4	45	10	8	14	829						
	TRUCK	0%	1%	3%	6%	0%	0%	3%	0%	7%	0%	0%	0%							0.96
11:30 - 12:30 PM	TOTAL	35	300	30	46	289	11	28	6	59	10	12	11	837						
	TRUCK	0%	1%	3%	7%	1%	0%	4%	0%	7%	0%	0%	0%							0.97
11:45 - 12:45 PM	TOTAL	32	313	28	42	290	15	29	7	54	11	11	15	847						
	TRUCK	0%	0%	4%	2%	1%	0%	3%	0%	6%	0%	0%	0%							0.98
12:00 - 1:00 PM	TOTAL	31	302	22	41	295	13	37	5	65	13	9	17	850						
	TRUCK	0%	1%	5%	2%	1%	0%	5%	0%	6%	0%	0%	0%							0.97
12:15 - 1:15 PM	TOTAL	24	297	21	49	293	10	34	5	69	12	10	16	840						
	TRUCK	0%	0%	5%	8%	2%	0%	3%	0%	4%	0%	0%	0%							0.96
12:30 - 1:30 PM	TOTAL	16	296	21	45	293	9	32	6	64	10	11	17	820						
	TRUCK	0%	0%	10%	9%	1%	0%	3%	0%	5%	0%	0%	0%							0.94
12:45 - 1:45 PM	TOTAL	23	267	19	52	285	7	29	6	65	6	10	15	784						
	TRUCK	0%	1%	5%	12%	1%	0%	3%	0%	5%	0%	0%	0%							0.90
1:00 - 2:00 PM	TOTAL	26	270	24	58	275	11	20	7	59	2	9	18	779		1			1	
	TRUCK	0%	1%	4%	10%	0%	0%	0%	0%	3%	0%	0%	0%							0.91

1: Willow Grove Road EB - Left
2: Willow Grove Road EB - Thru
3: Willow Grove Road EB - Right
4: Willow Grove Road WB - Left
5: Willow Grove Road WB - Thru
6: Willow Grove Road WB - Right
7: Letchworth Village Rd NB - Left
8: Letchworth Village Rd NB - Thru
9: Letchworth Village Rd NB - Right
10: Patriots Hill Lane SB - Left
11: Patriots Hill Lane SB - Thru
12: Patriots Hill Lane SB - Right

A: X-ing Patriot Hill Lane North of Int
B: X-ing Willow Grove Road East of Int
C: X-ing Letchworth Vlg Rd South of Int
D: X-ing Willow Grove Road West of Int

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Storrs Road		INT #:	4

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	4	0		0	27		23	4					58						
	TRUCK	0	0		0	1		0	1											
11:15 - 11:30 AM	TOTAL	1	0		0	17		19	1					38						
	TRUCK	0	0		0	0		0	0											
11:30 - 11:45 AM	TOTAL	1	0		0	24		20	3					48						
	TRUCK	0	0		0	0		3	0											
11:45 - 12:00 PM	TOTAL	2	1		0	16		26	1					46						
	TRUCK	0	0		0	0		0	1											
12:00 - 12:15 PM	TOTAL	1	0		0	25		15	1					42						
	TRUCK	1	0		0	2		0	0											
12:15 - 12:30 PM	TOTAL	1	0		1	29		20	1					52						
	TRUCK	0	0		0	1		0	0											
12:30 - 12:45 PM	TOTAL	1	0		0	24		17	0					42						
	TRUCK	0	0		0	1		1	0											
12:45 - 1:00 PM	TOTAL	0	0		0	30		14	0					44						
	TRUCK	0	0		0	2		1	0											
1:00 - 1:15 PM	TOTAL	0	1		0	23		25	0					49						
	TRUCK	0	0		0	1		3	0											
1:15 - 1:30 PM	TOTAL	1	0		0	21		19	0					41						
	TRUCK	1	0		0	0		1	0											
1:30 - 1:45 PM	TOTAL	1	1		0	20		21	3					46						
	TRUCK	0	0		0	0		1	1											
1:45 - 2:00 PM	TOTAL	0	0		0	21		24	2					47						
	TRUCK	0	0		0	0		0	1											

1: Storrs Road EB - Left
2: Storrs Road EB - Thru
3:
4: Letchworth Village Rd WB - Thru
5: Letchworth Village Rd WB - Right
6:
7: Letchworth Village Rd SB - Left
8: Letchworth Village Rd SB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Storrs Road	INT #:	4

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	8	1			84		88	9					190						
	TRUCK	0%	0%			1%		3%	22%											0.82
11:15 - 12:15 PM	TOTAL	5	1			82		80	6					174						
	TRUCK	20%	0%			2%		4%	17%											0.91
11:30 - 12:30 PM	TOTAL	5	1		1	94		81	6					188						
	TRUCK	20%	0%		0%	3%		4%	17%											0.90
11:45 - 12:45 PM	TOTAL	5	1		1	94		78	3					182						
	TRUCK	20%	0%		0%	4%		1%	33%											0.88
12:00 - 1:00 PM	TOTAL	3			1	108		66	2					180						
	TRUCK	33%			0%	6%		3%	0%											0.87
12:15 - 1:15 PM	TOTAL	2	1		1	106		76	1					187						
	TRUCK	0%	0%		0%	5%		7%	0%											0.90
12:30 - 1:30 PM	TOTAL	2	1			98		75						176						
	TRUCK	50%	0%			4%		8%												0.90
12:45 - 1:45 PM	TOTAL	2	2			94		79	3					180						
	TRUCK	50%	0%			3%		8%	33%											0.92
1:00 - 2:00 PM	TOTAL	2	2			85		89	5					183						
	TRUCK	50%	0%			1%		6%	40%											0.93

1: Storrs Road EB - Left
2: Storrs Road EB - Thru
3:
4: Letchworth Village Rd WB - Thru
5: Letchworth Village Rd WB - Right
6:
7: Letchworth Village Rd SB - Left
8: Letchworth Village Rd SB - Right
9:
10:
11:
12:

A:
B:
C:
D:

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Ridge Road		INT #:	5

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	2	13	7	0	15	0	14	0	0	0	0	0	51				5	5	
	TRUCK	0	1	0	0	1	0	0	0	0	0	0	0							
11:15 - 11:30 AM	TOTAL	0	9	9	0	10	1	5	0	0	0	1	0	35						
	TRUCK	0	0	0	0	0	0	0	0	0	0	0	0							
11:30 - 11:45 AM	TOTAL	1	10	9	0	15	1	9	2	0	0	0	2	49						
	TRUCK	0	3	0	0	0	0	0	0	0	0	0	0							
11:45 - 12:00 PM	TOTAL	1	15	10	0	10	0	5	0	0	0	2	0	43						
	TRUCK	0	1	0	0	0	0	0	0	0	0	0	0							
12:00 - 12:15 PM	TOTAL	1	10	8	1	13	1	10	0	0	0	0	0	44			1		1	
	TRUCK	0	0	0	0	2	0	1	0	0	0	0	0							
12:15 - 12:30 PM	TOTAL	1	11	5	1	21	1	10	3	0	3	0	0	56						
	TRUCK	0	0	0	0	1	0	0	0	0	0	0	0							
12:30 - 12:45 PM	TOTAL	1	9	7	1	12	1	14	0	0	0	1	0	46						
	TRUCK	0	1	0	1	0	0	1	0	0	0	0	0							
12:45 - 1:00 PM	TOTAL	0	7	7	1	18	0	9	0	1	0	3	1	47			1		1	
	TRUCK	0	0	0	0	2	0	1	0	0	0	0	0							
1:00 - 1:15 PM	TOTAL	1	6	16	0	11	0	9	0	0	0	0	3	46						
	TRUCK	0	1	2	0	1	0	0	0	0	0	0	0							
1:15 - 1:30 PM	TOTAL	1	7	10	0	11	2	7	1	0	1	0	1	41						
	TRUCK	0	1	0	0	0	0	0	0	0	0	0	0							
1:30 - 1:45 PM	TOTAL	0	8	12	0	14	0	6	0	0	1	0	0	41						
	TRUCK	0	0	0	0	0	0	0	0	0	0	0	0							
1:45 - 2:00 PM	TOTAL	0	16	10	0	10	0	10	0	0	0	0	0	46				4	4	
	TRUCK	0	1	0	0	0	0	0	0	0	0	0	0							

1: Letchworth Vlg Rd EB - Left
2: Letchworth Vlg Rd EB - Thru
3: Letchworth Vlg Rd EB - Right
4: Letchworth Vlg Rd WB - Left
5: Letchworth Vlg Rd WB - Thru
6: Letchworth Vlg Rd WB - Right
7: Ridge Road NB - Left
8: Ridge Road NB - Thru
9: Ridge Road NB - Right
10: Ridge Road NB - Left
11: Ridge Road NB - Thru
12: Ridge Road NB - Right

A: X-ing Ridge Road North of Int
B: X-ing Letchworth Vlg Rd East of Int
C: X-ing Ridge Road South of Int
D: X-ing Letchworth Vlg Rd West of Int

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Letchworth Village Road & Ridge Road	INT #:	5

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	4	47	35		50	2	33	2			3	2	178				5	5	
	TRUCK	0%	11%	0%		2%	0%	0%	0%			0%	0%							0.87
11:15 - 12:15 PM	TOTAL	3	44	36	1	48	3	29	2			3	2	171			1		1	
	TRUCK	0%	9%	0%	0%	4%	0%	3%	0%			0%	0%							0.87
11:30 - 12:30 PM	TOTAL	4	46	32	2	59	3	34	5		3	2	2	192			1		1	
	TRUCK	0%	9%	0%	0%	5%	0%	3%	0%		0%	0%	0%							0.86
11:45 - 12:45 PM	TOTAL	4	45	30	3	56	3	39	3		3	3		189			1		1	
	TRUCK	0%	4%	0%	33%	5%	0%	5%	0%		0%	0%								0.84
12:00 - 1:00 PM	TOTAL	3	37	27	4	64	3	43	3	1	3	4	1	193			2		2	
	TRUCK	0%	3%	0%	25%	8%	0%	7%	0%	0%	0%	0%	0%							0.86
12:15 - 1:15 PM	TOTAL	3	33	35	3	62	2	42	3	1	3	4	4	195			1		1	
	TRUCK	0%	6%	6%	33%	6%	0%	5%	0%	0%	0%	0%	0%							0.87
12:30 - 1:30 PM	TOTAL	3	29	40	2	52	3	39	1	1	1	4	5	180			1		1	
	TRUCK	0%	10%	5%	50%	6%	0%	5%	0%	0%	0%	0%	0%							0.96
12:45 - 1:45 PM	TOTAL	2	28	45	1	54	2	31	1	1	2	3	5	175			1		1	
	TRUCK	0%	7%	4%	0%	6%	0%	3%	0%	0%	0%	0%	0%							0.93
1:00 - 2:00 PM	TOTAL	2	37	48		46	2	32	1		2		4	174				4	4	
	TRUCK	0%	8%	4%		2%	0%	0%	0%		0%		0%							0.95

1: Letchworth Vlg Rd EB - Left
2: Letchworth Vlg Rd EB - Thru
3: Letchworth Vlg Rd EB - Right
4: Letchworth Vlg Rd WB - Left
5: Letchworth Vlg Rd WB - Thru
6: Letchworth Vlg Rd WB - Right
7: Ridge Road NB - Left
8: Ridge Road NB - Thru
9: Ridge Road NB - Right
10: Ridge Road NB - Left
11: Ridge Road NB - Thru
12: Ridge Road NB - Right

A: X-ing Ridge Road North of Int
B: X-ing Letchworth Vlg Rd East of Int
C: X-ing Ridge Road South of Int
D: X-ing Letchworth Vlg Rd West of Int

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Suffern Lane/West Railroad Avenue & Main Street/ North Central Highway		INT #:	7

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	2	7	10	52	10	13	12	52	26	23	51	2	260						
	TRUCK	0	0	0	1	0	0	1	2	2	0	2	0							
11:15 - 11:30 AM	TOTAL	9	8	14	59	10	12	11	57	34	18	45	6	283						
	TRUCK	2	0	0	0	0	0	2	1	0	1	1	1							
11:30 - 11:45 AM	TOTAL	6	7	11	64	9	12	5	66	42	11	61	4	298	8				8	
	TRUCK	0	0	0	2	0	0	0	2	0	0	1	0							
11:45 - 12:00 PM	TOTAL	5	7	15	55	4	20	7	62	33	18	60	7	293	4	5			9	
	TRUCK	1	1	0	0	0	0	0	1	0	0	0	2							
12:00 - 12:15 PM	TOTAL	7	5	18	59	11	18	12	56	40	9	56	0	291						
	TRUCK	0	0	0	2	0	0	1	1	0	0	0	0							
12:15 - 12:30 PM	TOTAL	10	15	13	46	13	17	12	80	34	9	51	3	303		1		2	3	
	TRUCK	0	0	1	0	0	0	0	2	0	0	2	0							
12:30 - 12:45 PM	TOTAL	4	6	20	74	9	20	8	72	33	19	52	7	324						
	TRUCK	0	0	0	0	0	0	0	2	1	0	4	0							
12:45 - 1:00 PM	TOTAL	4	4	11	50	10	15	12	75	34	25	50	4	294						
	TRUCK	0	0	1	2	0	0	0	4	0	0	0	0							
1:00 - 1:15 PM	TOTAL	6	9	16	66	5	18	10	74	42	14	61	6	327						
	TRUCK	0	0	0	0	0	0	0	2	0	0	3	0							
1:15 - 1:30 PM	TOTAL	4	4	13	69	9	17	12	43	31	13	69	2	286						
	TRUCK	0	0	0	2	0	0	0	2	1	1	2	0							
1:30 - 1:45 PM	TOTAL	6	12	10	63	19	12	10	50	39	9	59	3	292						
	TRUCK	0	0	0	0	1	0	1	2	0	0	1	1							
1:45 - 2:00 PM	TOTAL	7	8	10	62	12	14	10	53	37	8	42	5	268						
	TRUCK	2	0	2	0	1	0	0	0	0	0	2	0							

1: Suffern Lane EB - Left
2: Suffern Lane EB - Thru
3: Suffern Lane EB - Right
4: West Railroad Ave WB - Left
5: West Railroad Ave WB - Thru
6: West Railroad Ave WB - Right
7: Main Street NB - Left
8: Main Street NB - Thru
9: Main Street NB - Rght
10: North Central Hwy SB - Left
11: North Central Hwy SB - Thru
12: North Central Hwy SB - Right

A: X-ing N Central Hwy North of Int
B: X-ing W Railroad Ave East of Int
C: X-ing Main Street South of Int
D: X-ing Suffern Lane West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Suffern Lane/West Railroad Avenue & Main Street/ North Central Highway		INT #:	7

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	22	29	50	230	33	57	35	237	135	70	217	19	1,134	12	5			17	
	TRUCK	14%	3%	0%	1%	0%	0%	9%	3%	1%	1%	2%	16%							0.95
11:15 - 12:15 PM	TOTAL	27	27	58	237	34	62	35	241	149	56	222	17	1,165	12	5			17	
	TRUCK	11%	4%	0%	2%	0%	0%	9%	2%	0%	2%	1%	18%							0.98
11:30 - 12:30 PM	TOTAL	28	34	57	224	37	67	36	264	149	47	228	14	1,185	12	6		2	20	
	TRUCK	4%	3%	2%	2%	0%	0%	3%	2%	0%	0%	1%	14%							0.98
11:45 - 12:45 PM	TOTAL	26	33	66	234	37	75	39	270	140	55	219	17	1,211	4	6		2	12	
	TRUCK	4%	3%	2%	1%	0%	0%	3%	2%	1%	0%	3%	12%							0.93
12:00 - 1:00 PM	TOTAL	25	30	62	229	43	70	44	283	141	62	209	14	1,212		1		2	3	
	TRUCK	0%	0%	3%	2%	0%	0%	2%	3%	1%	0%	3%	0%							0.94
12:15 - 1:15 PM	TOTAL	24	34	60	236	37	70	42	301	143	67	214	20	1,248		1		2	3	
	TRUCK	0%	0%	3%	1%	0%	0%	0%	3%	1%	0%	4%	0%							0.95
12:30 - 1:30 PM	TOTAL	18	23	60	259	33	70	42	264	140	71	232	19	1,231						
	TRUCK	0%	0%	2%	2%	0%	0%	0%	4%	1%	1%	4%	0%							0.94
12:45 - 1:45 PM	TOTAL	20	29	50	248	43	62	44	242	146	61	239	15	1,199						
	TRUCK	0%	0%	2%	2%	2%	0%	2%	4%	1%	2%	3%	7%							0.92
1:00 - 2:00 PM	TOTAL	23	33	49	260	45	61	42	220	149	44	231	16	1,173						
	TRUCK	9%	0%	4%	1%	4%	0%	2%	3%	1%	2%	3%	6%							0.90

1: Suffern Lane EB - Left
2: Suffern Lane EB - Thru
3: Suffern Lane EB - Right
4: West Railroad Ave WB - Left
5: West Railroad Ave WB - Thru
6: West Railroad Ave WB - Right
7: Main Street NB - Left
8: Main Street NB - Thru
9: Main Street NB - Rght
10: North Central Hwy SB - Left
11: North Central Hwy SB - Thru
12: North Central Hwy SB - Right

A: X-ing N Central Hwy North of Int
B: X-ing W Railroad Ave East of Int
C: X-ing Main Street South of Int
D: X-ing Suffern Lane West of Int

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Palisades Interstate Parkway SB Ramp		INT #:	8

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	12	57	3	1	62	122	0	2	1	20	1	15	296		1			1	
	TRUCK	0	2	0	0	7	0	0	0	0	1	0	0							
11:15 - 11:30 AM	TOTAL	17	59	0	3	76	130	0	1	1	21	0	19	327			2		2	
	TRUCK	0	2	0	0	1	1	0	0	0	0	0	0							
11:30 - 11:45 AM	TOTAL	13	93	1	2	59	117	0	1	3	22	2	15	328						
	TRUCK	0	1	0	0	1	0	0	0	0	0	0	1							
11:45 - 12:00 PM	TOTAL	16	65	4	6	65	118	0	1	0	31	0	22	328			1	1	2	
	TRUCK	0	1	0	0	1	1	0	0	0	1	0	0							
12:00 - 12:15 PM	TOTAL	12	77	0	5	71	96	0	1	7	27	1	22	319						
	TRUCK	0	2	0	0	3	0	0	0	0	1	0	0				1		1	
12:15 - 12:30 PM	TOTAL	14	71	4	3	82	121	3	1	1	27	1	13	341			3		3	
	TRUCK	0	1	0	0	0	1	0	0	0	0	0	0							
12:30 - 12:45 PM	TOTAL	17	92	3	2	92	112	2	1	3	25	1	22	372						
	TRUCK	1	8	0	0	4	0	0	0	0	0	0	0							
12:45 - 1:00 PM	TOTAL	16	85	2	1	71	118	1	0	2	29	2	28	355						
	TRUCK	0	1	0	0	2	3	0	0	0	0	0	0							
1:00 - 1:15 PM	TOTAL	11	67	0	2	79	121	0	0	4	23	1	11	319			4	1	5	
	TRUCK	0	1	0	0	2	2	0	0	0	0	0	1							
1:15 - 1:30 PM	TOTAL	21	80	2	1	97	107	0	0	1	24	0	11	344						
	TRUCK	1	2	0	0	6	0	0	0	0	0	0	0							
1:30 - 1:45 PM	TOTAL	16	69	1	1	84	116	1	1	3	27	1	5	325						
	TRUCK	0	0	0	0	3	1	0	0	0	0	0	0							
1:45 - 2:00 PM	TOTAL	27	88	0	2	68	128	1	0	4	17	0	12	347						
	TRUCK	1	0	0	0	0	0	0	0	0	1	0	0							

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3: US Route 202 EB - Right
4: US Route 202 WB - Left
5: US Route 202 WB - Thru
6: US Route 202 WB - Right
7: Driveway NB - Left
8: Driveway NB - Thru
9: Driveway NB - Right
10: PIP Ramp SB - Left
11: PIP Ramp SB - Thru
12: PIP Ramp SB - Right

A: X-ing SB Ramp North of Int
B: X-ing US Route 202 East of Int
C: X-ing Driveway South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Palisades Interstate Parkway SB Ramp		INT #:	8

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	58	274	8	12	262	487		5	5	94	3	71	1,279		1	3	1	5	
	TRUCK	0%	2%	0%	0%	4%	0%		0%	0%	2%	0%	1%							0.97
11:15 - 12:15 PM	TOTAL	58	294	5	16	271	461		4	11	101	3	78	1,302			3	1	4	
	TRUCK	0%	2%	0%	0%	2%	0%		0%	0%	2%	0%	1%				1		1	0.99
11:30 - 12:30 PM	TOTAL	55	306	9	16	277	452	3	4	11	107	4	72	1,316			4	1	5	
	TRUCK	0%	2%	0%	0%	2%	0%	0%	0%	0%	2%	0%	1%				1		1	0.96
11:45 - 12:45 PM	TOTAL	59	305	11	16	310	447	5	4	11	110	3	79	1,360			4	1	5	
	TRUCK	2%	4%	0%	0%	3%	0%	0%	0%	0%	2%	0%	0%				1		1	0.91
12:00 - 1:00 PM	TOTAL	59	325	9	11	316	447	6	3	13	108	5	85	1,387			3		3	
	TRUCK	2%	4%	0%	0%	3%	1%	0%	0%	0%	1%	0%	0%				1		1	0.93
12:15 - 1:15 PM	TOTAL	58	315	9	8	324	472	6	2	10	104	5	74	1,387			7	1	8	
	TRUCK	2%	3%	0%	0%	2%	1%	0%	0%	0%	0%	0%	1%							0.93
12:30 - 1:30 PM	TOTAL	65	324	7	6	339	458	3	1	10	101	4	72	1,390			4	1	5	
	TRUCK	3%	4%	0%	0%	4%	1%	0%	0%	0%	0%	0%	1%							0.93
12:45 - 1:45 PM	TOTAL	64	301	5	5	331	462	2	1	10	103	4	55	1,343			4	1	5	
	TRUCK	2%	1%	0%	0%	4%	1%	0%	0%	0%	0%	0%	2%							0.95
1:00 - 2:00 PM	TOTAL	75	304	3	6	328	472	2	1	12	91	2	39	1,335			4	1	5	
	TRUCK	3%	1%	0%	0%	3%	1%	0%	0%	0%	1%	0%	3%							0.96

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3: US Route 202 EB - Right
4: US Route 202 WB - Left
5: US Route 202 WB - Thru
6: US Route 202 WB - Right
7: Driveway NB - Left
8: Driveway NB - Thru
9: Driveway NB - Right
10: PIP Ramp SB - Left
11: PIP Ramp SB - Thru
12: PIP Ramp SB - Right

A: X-ing SB Ramp North of Int
B: X-ing US Route 202 East of Int
C: X-ing Driveway South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Thiells Mt Ivy Road		INT #:	9

CALCULATIONS - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	11	68		101	23		59	82					344						
	TRUCK	0	3		6	1		3	1											
11:15 - 11:30 AM	TOTAL	15	66		124	16		45	77					343						
	TRUCK	0	2		2	0		0	0											
11:30 - 11:45 AM	TOTAL	12	102		110	10		44	63					341						
	TRUCK	0	1		1	0		0	0											
11:45 - 12:00 PM	TOTAL	19	81		115	36		52	70					373						
	TRUCK	0	2		2	0		1	0											
12:00 - 12:15 PM	TOTAL	23	88		121	28		47	57					364						
	TRUCK	0	3		1	1		0	1											
12:15 - 12:30 PM	TOTAL	15	77		145	24		55	66					382						
	TRUCK	0	1		0	0		0	1											
12:30 - 12:45 PM	TOTAL	17	91		135	19		52	70					384						
	TRUCK	1	5		4	0		0	0											
12:45 - 1:00 PM	TOTAL	17	100		125	28		59	64					393						
	TRUCK	0	1		4	1		1	1											
1:00 - 1:15 PM	TOTAL	14	78		128	28		60	80					388						
	TRUCK	0	1		1	1		1	3											
1:15 - 1:30 PM	TOTAL	15	86		131	24		76	76					408						
	TRUCK	0	0		5	0		1	0											
1:30 - 1:45 PM	TOTAL	13	78		134	32		64	67					388		4			4	
	TRUCK	0	0		2	0		1	0											
1:45 - 2:00 PM	TOTAL	8	97		128	28		75	72					408		2			2	
	TRUCK	0	1		1	1		2	0											

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3:
4: US Route 202 WB - Thru
5: US Route 202 WB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Right
9:
10:
11:
12:

A: X-ing Thiells Mt Ivy North of Int
B: X-ing US Route 202 East of Int
C:
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & Thiells Mt Ivy Road		INT #:	9

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	57	317		450	85		200	292					1,401						
	TRUCK	0%	3%		2%	1%		2%	0%											0.94
11:15 - 12:15 PM	TOTAL	69	337		470	90		188	267					1,421						
	TRUCK	0%	2%		1%	1%		1%	0%											0.95
11:30 - 12:30 PM	TOTAL	69	348		491	98		198	256					1,460						
	TRUCK	0%	2%		1%	1%		1%	1%											0.96
11:45 - 12:45 PM	TOTAL	74	337		516	107		206	263					1,503						
	TRUCK	1%	3%		1%	1%		0%	1%											0.98
12:00 - 1:00 PM	TOTAL	72	356		526	99		213	257					1,523						
	TRUCK	1%	3%		2%	2%		0%	1%											0.97
12:15 - 1:15 PM	TOTAL	63	346		533	99		226	280					1,547						
	TRUCK	2%	2%		2%	2%		1%	2%											0.98
12:30 - 1:30 PM	TOTAL	63	355		519	99		247	290					1,573						
	TRUCK	2%	2%		3%	2%		1%	1%											0.96
12:45 - 1:45 PM	TOTAL	59	342		518	112		259	287					1,577		4			4	
	TRUCK	0%	1%		2%	2%		2%	1%											0.97
1:00 - 2:00 PM	TOTAL	50	339		521	112		275	295					1,592		6			6	
	TRUCK	0%	1%		2%	2%		2%	1%											0.98

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3:
4: US Route 202 WB - Thru
5: US Route 202 WB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Right
9:
10:
11:
12:

A: X-ing Thiells Mt Ivy North of Int
B: X-ing US Route 202 East of Int
C:
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	US Route 202 & US Route 45		INT #:	10

CALCULATIONS - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	2	86	36	4	98	0	23	0	25	3	1	6	284	2	1			3	
	TRUCK	0	3	3	1	6	0	1	0	1	1	0	0							
11:15 - 11:30 AM	TOTAL	3	76	34	5	118	0	22	1	29	2	2	6	298	1		3		4	
	TRUCK	0	1	0	0	2	0	0	0	1	0	0	0							
11:30 - 11:45 AM	TOTAL	1	107	49	12	102	0	20	0	29	1	3	7	331	1		1	1	3	
	TRUCK	0	1	0	1	2	0	0	0	1	0	0	0							
11:45 - 12:00 PM	TOTAL	3	83	41	6	117	0	27	1	28	2	1	6	315	1				1	
	TRUCK	0	2	2	0	1	0	2	0	0	0	0	0							
12:00 - 12:15 PM	TOTAL	2	95	35	8	116	0	29	3	27	0	2	4	321	1				1	
	TRUCK	0	3	0	1	1	0	1	0	1	0	0	0							
12:15 - 12:30 PM	TOTAL	1	94	42	8	134	0	25	0	29	2	1	3	339						
	TRUCK	0	0	0	0	3	0	1	0	1	1	0	0							
12:30 - 12:45 PM	TOTAL	0	103	30	12	117	0	25	1	37	0	1	5	331	1				1	
	TRUCK	0	5	1	1	1	0	0	0	1	0	0	0							
12:45 - 1:00 PM	TOTAL	5	115	40	4	118	0	36	0	32	1	1	3	355						
	TRUCK	0	1	1	0	2	0	3	0	0	0	0	0							
1:00 - 1:15 PM	TOTAL	2	97	35	4	120	0	30	0	35	1	4	5	333						
	TRUCK	0	2	0	0	1	0	2	0	1	0	0	0							
1:15 - 1:30 PM	TOTAL	2	126	40	3	118	0	31	2	35	2	0	6	365	4	1			5	
	TRUCK	0	2	0	1	3	0	2	0	2	0	0	0							
1:30 - 1:45 PM	TOTAL	1	109	41	9	126	2	36	0	47	0	3	12	386	3				3	
	TRUCK	0	0	1	1	2	0	0	0	1	0	0	0							
1:45 - 2:00 PM	TOTAL	4	111	55	9	110	0	30	0	40	0	1	7	367	1				1	
	TRUCK	0	1	2	0	1	0	0	0	0	0	0	0							

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3: US Route 202 EB - Right
4: US Route 202 WB - Left
5: US Route 202 WB - Thru
6: US Route 202 WB - Right
7: US Route 45 NB - Left
8: US Route 45 NB - Thru
9: US Route 45 NB - Right
10: Old County Road SB - Left
11: Old County Road SB - Thru
12: Old County Road SB - Right

A: X-ing Old County Road North of Int
B: X-ing US Route 202 East of Int
C: X-ing US Route 45 South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	US Route 202 & US Route 45	INT #:	10

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	9	352	160	27	435		92	2	111	8	7	25	1,228	5	1	4	1	11	
	TRUCK	0%	2%	3%	7%	3%		3%	0%	3%	13%	0%	0%							0.93
11:15 - 12:15 PM	TOTAL	9	361	159	31	453		98	5	113	5	8	23	1,265	4		4	1	9	
	TRUCK	0%	2%	1%	6%	1%		3%	0%	3%	0%	0%	0%							0.96
11:30 - 12:30 PM	TOTAL	7	379	167	34	469		101	4	113	5	7	20	1,306	3		1	1	5	
	TRUCK	0%	2%	1%	6%	1%		4%	0%	3%	20%	0%	0%							0.96
11:45 - 12:45 PM	TOTAL	6	375	148	34	484		106	5	121	4	5	18	1,306	3				3	
	TRUCK	0%	3%	2%	6%	1%		4%	0%	2%	25%	0%	0%							0.96
12:00 - 1:00 PM	TOTAL	8	407	147	32	485		115	4	125	3	5	15	1,346	2				2	
	TRUCK	0%	2%	1%	6%	1%		4%	0%	2%	33%	0%	0%							0.95
12:15 - 1:15 PM	TOTAL	8	409	147	28	489		116	1	133	4	7	16	1,358	1				1	
	TRUCK	0%	2%	1%	4%	1%		5%	0%	2%	25%	0%	0%							0.96
12:30 - 1:30 PM	TOTAL	9	441	145	23	473		122	3	139	4	6	19	1,384	5	1			6	
	TRUCK	0%	2%	1%	9%	1%		6%	0%	3%	0%	0%	0%							0.95
12:45 - 1:45 PM	TOTAL	10	447	156	20	482	2	133	2	149	4	8	26	1,439	7	1			8	
	TRUCK	0%	1%	1%	10%	2%	0%	5%	0%	3%	0%	0%	0%							0.93
1:00 - 2:00 PM	TOTAL	9	443	171	25	474	2	127	2	157	3	8	30	1,451	8	1			9	
	TRUCK	0%	1%	2%	8%	1%	0%	3%	0%	3%	0%	0%	0%							0.94

1: US Route 202 EB - Left
2: US Route 202 EB - Thru
3: US Route 202 EB - Right
4: US Route 202 WB - Left
5: US Route 202 WB - Thru
6: US Route 202 WB - Right
7: US Route 45 NB - Left
8: US Route 45 NB - Thru
9: US Route 45 NB - Right
10: Old County Road SB - Left
11: Old County Road SB - Thru
12: Old County Road SB - Right

A: X-ing Old County Road North of Int
B: X-ing US Route 202 East of Int
C: X-ing US Route 45 South of Int
D: X-ing US Route 202 West of Int

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Palisades Interstate Parkway NB Ramp		INT #:	11

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	21		65					33			76		195						
	TRUCK	0		0					1			3								
11:15 - 11:30 AM	TOTAL	27		43					25			71		166						
	TRUCK	0		0					0			0								
11:30 - 11:45 AM	TOTAL	20		38					26			59		143						
	TRUCK	0		0					1			0								
11:45 - 12:00 PM	TOTAL	22		48					48			75		193						
	TRUCK	0		0					1			1								
12:00 - 12:15 PM	TOTAL	24		44					48			58		174						
	TRUCK	0		0					1			0								
12:15 - 12:30 PM	TOTAL	35		57					38			55		185						
	TRUCK	0		0					1			1								
12:30 - 12:45 PM	TOTAL	30		51					39			61		181						
	TRUCK	0		0					2			0								
12:45 - 1:00 PM	TOTAL	46		49					42			67		204						
	TRUCK	0		0					1			2								
1:00 - 1:15 PM	TOTAL	31		55					38			74		198						
	TRUCK	0		1					1			4								
1:15 - 1:30 PM	TOTAL	44		83					39			71		237						
	TRUCK	0		1					0			1								
1:30 - 1:45 PM	TOTAL	33		58					44			63		198						
	TRUCK	0		0					0			1								
1:45 - 2:00 PM	TOTAL	29		64					35			67		195						
	TRUCK	0		0					0			3								

1: PIP Ramp EB - Left
2:
3: PIP Ramp EB - Right
4:
5:
6:
7:
8: Theills Mt Ivy Road NB - Thru
9:
10:
11: Thiells Mt Ivy Road SB - Thru
12:

A: X-ing Thiells Mt Ivy North of Int
B:
C: X-ing Thiells Mt Ivy South of Int
D: X-ing PIP Ramp West of Int

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Palisades Interstate Parkway NB Ramp	INT #:	11

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	90		194					132			281		697						
	TRUCK	0%		0%					2%			1%								0.89
11:15 - 12:15 PM	TOTAL	93		173					147			263		676						
	TRUCK	0%		0%					2%			0%								0.88
11:30 - 12:30 PM	TOTAL	101		187					160			247		695						
	TRUCK	0%		0%					3%			1%								0.90
11:45 - 12:45 PM	TOTAL	111		200					173			249		733						
	TRUCK	0%		0%					3%			1%								0.95
12:00 - 1:00 PM	TOTAL	135		201					167			241		744						
	TRUCK	0%		0%					3%			1%								0.91
12:15 - 1:15 PM	TOTAL	142		212					157			257		768						
	TRUCK	0%		0%					3%			3%								0.94
12:30 - 1:30 PM	TOTAL	151		238					158			273		820						
	TRUCK	0%		1%					3%			3%								0.86
12:45 - 1:45 PM	TOTAL	154		245					163			275		837						
	TRUCK	0%		1%					1%			3%								0.88
1:00 - 2:00 PM	TOTAL	137		260					156			275		828						
	TRUCK	0%		1%					1%			3%								0.87

1: PIP Ramp EB - Left
2:
3: PIP Ramp EB - Right
4:
5:
6:
7:
8: Theills Mt Ivy Road NB - Thru
9:
10:
11: Thiells Mt Ivy Road SB - Thru
12:

A: X-ing Thiells Mt Ivy North of Int
B:
C: X-ing Thiells Mt Ivy South of Int
D: X-ing PIP Ramp West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Ridge Road		INT #:	12

CALCULATIONS - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	11	24			18	0				0		5	58						
	TRUCK	0	1			1	0				0		0							
11:15 - 11:30 AM	TOTAL	8	15			14	0				0		8	45						
	TRUCK	0	0			0	0				0		0							
11:30 - 11:45 AM	TOTAL	8	14			20	0				1		9	52						
	TRUCK	0	0			0	0				0		0							
11:45 - 12:00 PM	TOTAL	5	19			8	0				1		11	44		1			1	
	TRUCK	0	0			1	0				0		0							
12:00 - 12:15 PM	TOTAL	12	21			17	1				0		8	59		2			2	
	TRUCK	2	1			0	0				0		0							
12:15 - 12:30 PM	TOTAL	10	24			19	0				0		7	60						
	TRUCK	0	0			0	0				0		0							
12:30 - 12:45 PM	TOTAL	11	20			15	1				0		8	55						
	TRUCK	0	2			0	0				0		0							
12:45 - 1:00 PM	TOTAL	12	24			20	1				0		8	65						
	TRUCK	0	1			2	0				0		0							
1:00 - 1:15 PM	TOTAL	6	15			20	0				2		17	60						
	TRUCK	0	1			1	0				0		5							
1:15 - 1:30 PM	TOTAL	7	11			23	3				0		10	54						
	TRUCK	0	0			1	0				0		0							
1:30 - 1:45 PM	TOTAL	6	20			14	0				1		11	52						
	TRUCK	0	0			0	0				0		0							
1:45 - 2:00 PM	TOTAL	9	17			21	0				2		9	58						
	TRUCK	0	0			2	0				0		0							

1: Thiells Mt Ivy Road EB - Left
2: Thiells Mt Ivy Road EB - Thru
3:
4:
5: Thiells Mt Ivy Road WB - Thru
6: Thiells Mt Ivy Road WB - Right
7:
8:
9:
10: Ridge Road SB - Left
11:
12: Ridge Road SB - Right

A: X-ing Ridge Road North of Int
B: X-ing Thiells Mt Ivy East of Int
C:
D: X-ing Thiells Mt Ivy West of Int

DATE:	Weekend (11-16-2024)		JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Ridge Road		INT #:	12

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	32	72			60					2		33	199		1			1	
	TRUCK	0%	1%			3%					0%		0%							0.86
11:15 - 12:15 PM	TOTAL	33	69			59	1				2		36	200		3			3	
	TRUCK	6%	1%			2%	0%				0%		0%							0.85
11:30 - 12:30 PM	TOTAL	35	78			64	1				2		35	215		3			3	
	TRUCK	6%	1%			2%	0%				0%		0%							0.90
11:45 - 12:45 PM	TOTAL	38	84			59	2				1		34	218		3			3	
	TRUCK	5%	4%			2%	0%				0%		0%							0.91
12:00 - 1:00 PM	TOTAL	45	89			71	3						31	239		2			2	
	TRUCK	4%	4%			3%	0%						0%							0.92
12:15 - 1:15 PM	TOTAL	39	83			74	2				2		40	240						
	TRUCK	0%	5%			4%	0%				0%		13%							0.92
12:30 - 1:30 PM	TOTAL	36	70			78	5				2		43	234						
	TRUCK	0%	6%			5%	0%				0%		12%							0.90
12:45 - 1:45 PM	TOTAL	31	70			77	4				3		46	231						
	TRUCK	0%	3%			5%	0%				0%		11%							0.89
1:00 - 2:00 PM	TOTAL	28	63			78	3				5		47	224						
	TRUCK	0%	2%			5%	0%				0%		11%							0.93

1: Thiells Mt Ivy Road EB - Left
2: Thiells Mt Ivy Road EB - Thru
3:
4:
5: Thiells Mt Ivy Road WB - Thru
6: Thiells Mt Ivy Road WB - Right
7:
8:
9:
10: Ridge Road SB - Left
11:
12: Ridge Road SB - Right

A: X-ing Ridge Road North of Int
B: X-ing Thiells Mt Ivy East of Int
C:
D: X-ing Thiells Mt Ivy West of Int

DATE:	Weekend (11-16-2024)	CALCULATIONS - DO NOT EDIT THIS SHEET	JOB NO:	21090
PERIOD:	11 AM - 2 PM		NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Rosman Road		INT #:	13

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 11:15 AM	TOTAL	20	10		5	20		8	4					67						
	TRUCK	0	0		1	0		0	1											
11:15 - 11:30 AM	TOTAL	10	10		2	13		7	2					44						
	TRUCK	0	0		0	0		0	0											
11:30 - 11:45 AM	TOTAL	17	9		5	13		10	3					57						
	TRUCK	0	0		0	0		2	0											
11:45 - 12:00 PM	TOTAL	7	9		4	18		14	3					55						
	TRUCK	0	0		0	0		0	1											
12:00 - 12:15 PM	TOTAL	16	9		8	13		9	2					57						
	TRUCK	0	0		1	0		0	0											
12:15 - 12:30 PM	TOTAL	19	12		8	20		15	0					74						
	TRUCK	0	1		0	0		0	0											
12:30 - 12:45 PM	TOTAL	15	9		6	13		7	3					53						
	TRUCK	0	0		1	0		1	0											
12:45 - 1:00 PM	TOTAL	22	12		8	16		7	1					66			1		1	
	TRUCK	1	1		0	1		0	1											
1:00 - 1:15 PM	TOTAL	17	6		6	15		6	2					52						
	TRUCK	0	0		1	0		0	1											
1:15 - 1:30 PM	TOTAL	23	11		2	9		7	2					54						
	TRUCK	0	0		0	0		0	1											
1:30 - 1:45 PM	TOTAL	13	7		6	13		7	0					46						
	TRUCK	0	0		0	0		0	0											
1:45 - 2:00 PM	TOTAL	18	6		6	14		13	4					61						
	TRUCK	1	0		0	0		0	1											

1: Rosman Road WB - Left
2: Rosman Road WB - Right
3:
4: Thiells Mt Ivy Road NB - Thru
5: Thiells Mt Ivy Road NB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Thru
9:
10:
11:
12:

A: X-ing Thiells Mt Ivy North of Int
B: X-ing Rosman Road East of Int
C: X-ing Thiells Mt Ivy South of Int
D:

DATE:	Weekend (11-16-2024)	JOB NO:	21090
PERIOD:	11 AM - 2 PM	NAME:	Traffic Databank
LOCATION:	Thiells Mt Ivy Road & Rosman Road	INT #:	13

PEAK HOUR MOVEMENTS & % HEAVY VEHICLES - DO NOT EDIT THIS SHEET

TIME	CLASS	VEHICLE MOVEMENT												TOTAL VEHICLES	PED/BIKE MOVEMENT				TOTAL PEDS /BIKE	INT. PHF
		1	2	3	4	5	6	7	8	9	10	11	12		A	B	C	D		
11:00 - 12:00 PM	TOTAL	54	38		16	64		39	12					223						
	TRUCK	0%	0%		6%	0%		5%	17%											0.83
11:15 - 12:15 PM	TOTAL	50	37		19	57		40	10					213						
	TRUCK	0%	0%		5%	0%		5%	10%											0.93
11:30 - 12:30 PM	TOTAL	59	39		25	64		48	8					243						
	TRUCK	0%	3%		4%	0%		4%	13%											0.82
11:45 - 12:45 PM	TOTAL	57	39		26	64		45	8					239						
	TRUCK	0%	3%		8%	0%		2%	13%											0.81
12:00 - 1:00 PM	TOTAL	72	42		30	62		38	6					250			1		1	
	TRUCK	1%	5%		7%	2%		3%	17%											0.84
12:15 - 1:15 PM	TOTAL	73	39		28	64		35	6					245			1		1	
	TRUCK	1%	5%		7%	2%		3%	33%											0.83
12:30 - 1:30 PM	TOTAL	77	38		22	53		27	8					225			1		1	
	TRUCK	1%	3%		9%	2%		4%	38%											0.85
12:45 - 1:45 PM	TOTAL	75	36		22	53		27	5					218			1		1	
	TRUCK	1%	3%		5%	2%		0%	60%											0.83
1:00 - 2:00 PM	TOTAL	71	30		20	51		33	8					213						
	TRUCK	1%	0%		5%	0%		0%	38%											0.87

1: Rosman Road WB - Left
2: Rosman Road WB - Right
3:
4: Thiells Mt Ivy Road NB - Thru
5: Thiells Mt Ivy Road NB - Right
6:
7: Thiells Mt Ivy Road SB - Left
8: Thiells Mt Ivy Road SB - Thru
9:
10:
11:
12:

A: X-ing Thiells Mt Ivy North of Int
B: X-ing Rosman Road East of Int
C: X-ing Thiells Mt Ivy South of Int
D:

DATE:	Weekend (11-16-2024)
PERIOD:	11 AM - 2 PM

PEAK HOUR CALCULATIONS - DO NOT EDIT THIS SHEET

JOB NO:	2190
NAME:	Traffic Databank

TIME	CLASS	TOTAL INT. 1	TOTAL INT. 2	TOTAL INT. 3	TOTAL INT. 4	TOTAL INT. 5	TOTAL INT. 6	TOTAL INT. 7	TOTAL INT. 8	SUB-TOTAL INT. 1-8
11:00 - 12:00 PM	TOTAL	556	799	833	190	178		1,134	1,279	4,969
	TRUCK									
11:15 - 12:15 PM	TOTAL	554	788	829	174	171		1,165	1,302	4,983
	TRUCK									
11:30 - 12:30 PM	TOTAL	561	794	837	188	192		1,185	1,316	5,073
	TRUCK									
11:45 - 12:45 PM	TOTAL	548	792	847	182	189		1,211	1,360	5,129
	TRUCK									
12:00 - 1:00 PM	TOTAL	545	771	850	180	193		1,212	1,387	5,138
	TRUCK									
12:15 - 1:15 PM	TOTAL	544	777	840	187	195		1,248	1,387	5,178
	TRUCK									
12:30 - 1:30 PM	TOTAL	535	753	820	176	180		1,231	1,390	5,085
	TRUCK									
12:45 - 1:45 PM	TOTAL	519	713	784	180	175		1,199	1,343	4,913
	TRUCK									
1:00 - 2:00 PM	TOTAL	530	730	779	183	174		1,173	1,335	4,904
	TRUCK									

DATE:	Weekend (11-16-2024)
PERIOD:	11 AM - 2 PM

PEAK HOUR CALCULATIONS - DO NOT EDIT THIS SHEET

JOB NO:	21090
NAME:	Traffic Databank

TIME	CLASS	TOTAL INT. 9	TOTAL INT. 10	TOTAL INT. 11	TOTAL INT. 12	TOTAL INT. 13	SUB-TOTAL INT. 1-8	TOTAL
11:00 - 12:00 PM	TOTAL	1,401	1,228	697	199	223	4,969	8,717
	TRUCK						0	
11:15 - 12:15 PM	TOTAL	1,421	1,265	676	200	213	4,983	8,758
	TRUCK						0	
11:30 - 12:30 PM	TOTAL	1,460	1,306	695	215	243	5,073	8,992
	TRUCK						0	
11:45 - 12:45 PM	TOTAL	1,503	1,306	733	218	239	5,129	9,128
	TRUCK						0	
12:00 - 1:00 PM	TOTAL	1,523	1,346	744	239	250	5,138	9,240
	TRUCK						0	
12:15 - 1:15 PM	TOTAL	1,547	1,358	768	240	245	5,178	9,336
	TRUCK						0	
12:30 - 1:30 PM	TOTAL	1,573	1,384	820	234	225	5,085	9,321
	TRUCK						0	
12:45 - 1:45 PM	TOTAL	1,577	1,439	837	231	218	4,913	9,215
	TRUCK						0	
1:00 - 2:00 PM	TOTAL	1,592	1,451	828	224	213	4,904	9,212
	TRUCK						0	

AUTOMATIC TRAFFIC RECORDER (ATR) COUNT DATA

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

Start	14-Oct-24		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	16	12	21	12
01:00	*	*	*	*	*	*	*	*	*	*	*	*	14	8	19	7
02:00	*	*	*	*	*	*	*	*	*	*	*	*	2	5	5	4
03:00	*	*	*	*	*	*	*	*	*	*	*	*	8	1	6	4
04:00	*	*	*	*	*	*	*	*	*	*	*	*	3	5	2	1
05:00	*	*	*	*	*	*	*	*	*	*	*	*	11	6	6	6
06:00	*	*	*	*	*	*	*	*	*	*	*	*	22	15	13	14
07:00	*	*	*	*	*	*	*	*	*	*	*	*	59	44	28	36
08:00	*	*	*	*	*	*	*	*	*	*	*	*	87	71	53	52
09:00	*	*	*	*	*	*	*	*	*	*	*	*	156	85	95	80
10:00	*	*	*	*	*	*	*	*	*	*	*	*	**353**	85	117	86
11:00	*	*	*	*	*	*	*	*	*	*	*	*	101	**86**	**131**	**119**
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	128	113	123	121
01:00	*	*	*	*	*	*	*	*	*	*	*	*	130	**142**	134	113
02:00	*	*	*	*	*	*	*	*	*	*	*	*	137	81	144	105
03:00	*	*	*	*	*	*	*	*	*	*	*	*	117	111	**155**	104
04:00	*	*	*	*	*	*	*	*	*	*	*	*	**158**	96	125	132
05:00	*	*	*	*	*	*	*	*	*	*	*	*	126	114	143	163
06:00	*	*	*	*	*	*	*	*	*	*	*	*	94	138	90	**167**
07:00	*	*	*	*	*	*	*	*	*	*	*	*	81	54	82	102
08:00	*	*	*	*	*	*	*	*	*	*	*	*	54	47	63	42
09:00	*	*	*	*	*	*	*	*	*	*	*	*	47	39	44	21
10:00	*	*	*	*	*	*	*	*	*	*	*	*	55	35	31	19
11:00	*	*	*	*	*	*	*	*	*	*	*	*	36	22	13	7
Total	0	0	0	0	0	0	0	0	0	0	0	0	1995	1415	1643	1517
Day	0		0		0		0		0		0		3410		3160	
AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	10:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	-	-	-	-	-	-	353	86	131	119
PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	16:00	13:00	15:00	18:00
Vol.	-	-	-	-	-	-	-	-	-	-	-	-	158	142	155	167

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

Start	21-Oct-24		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	9	4	13	2	13	6	14	5	9	4	12	4	*	*	*	*
01:00	1	1	3	2	7	2	5	1	8	5	5	2	*	*	*	*
02:00	2	0	4	2	2	0	1	2	2	0	2	1	*	*	*	*
03:00	1	2	1	4	2	2	2	3	0	1	1	2	*	*	*	*
04:00	3	5	1	6	1	8	3	5	6	3	3	5	*	*	*	*
05:00	11	12	9	12	9	12	12	12	8	11	10	12	*	*	*	*
06:00	61	34	63	45	67	42	66	42	62	35	64	40	*	*	*	*
07:00	**172**	122	167	149	173	134	**171**	**142**	160	114	169	132	*	*	*	*
08:00	170	**165**	**178**	**173**	**190**	**159**	151	138	**165**	**173**	**171**	**162**	*	*	*	*
09:00	116	115	104	120	95	125	98	96	112	161	105	123	*	*	*	*
10:00	108	112	85	103	90	104	95	106	111	94	98	104	*	*	*	*
11:00	136	105	127	140	112	120	118	116	143	102	127	117	*	*	*	*
12:00 PM	123	126	145	124	131	124	137	123	111	127	129	125	*	*	*	*
01:00	142	129	164	125	146	121	130	115	141	113	145	121	*	*	*	*
02:00	157	143	204	130	167	147	170	137	167	130	173	137	*	*	*	*
03:00	191	162	186	160	192	181	159	174	**301**	188	206	173	*	*	*	*
04:00	**256**	**202**	209	**164**	194	**216**	**206**	**198**	203	**214**	214	**199**	*	*	*	*
05:00	253	169	**271**	160	**217**	201	194	128	189	137	**225**	159	*	*	*	*
06:00	187	155	195	148	203	132	150	117	149	127	177	136	*	*	*	*
07:00	94	90	116	82	105	80	103	85	94	85	102	84	*	*	*	*
08:00	60	47	77	50	85	56	63	39	66	54	70	49	*	*	*	*
09:00	49	35	42	34	42	28	50	27	58	36	48	32	*	*	*	*
10:00	32	18	30	15	24	12	16	16	54	26	31	17	*	*	*	*
11:00	20	15	26	17	16	13	20	9	38	22	24	15	*	*	*	*
Total	2354	1968	2420	1967	2283	2025	2134	1836	2357	1962	2311	1951	0	0	0	0
Day	4322		4387		4308		3970		4319		4262		0		0	
AM Peak	07:00	08:00	08:00	08:00	08:00	08:00	07:00	07:00	08:00	08:00	08:00	08:00	-	-	-	-
Vol.	172	165	178	173	190	159	171	142	165	173	171	162	-	-	-	-
PM Peak	16:00	16:00	17:00	16:00	17:00	16:00	16:00	16:00	15:00	16:00	17:00	16:00	-	-	-	-
Vol.	256	202	271	164	217	216	206	198	301	214	225	199	-	-	-	-

Comb. Total	4322	4387	4308	3970	4319	4262	3410	3160

ADT ADT 3,982 AADT 3,982

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/19/24	0	10	6	0	0	0	0	0	0	0	0	0	0	0	16
01:00	0	8	5	1	0	0	0	0	0	0	0	0	0	0	14
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	5	2	0	1	0	0	0	0	0	0	0	0	0	8
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	5	3	0	3	0	0	0	0	0	0	0	0	0	11
06:00	0	11	6	1	4	0	0	0	0	0	0	0	0	0	22
07:00	0	31	22	3	3	0	0	0	0	0	0	0	0	0	59
08:00	2	46	29	2	8	0	0	0	0	0	0	0	0	0	87
09:00	0	85	60	2	9	0	0	0	0	0	0	0	0	0	156
10:00	0	182	139	6	25	0	0	0	0	0	0	0	1	0	353
11:00	0	56	37	2	6	0	0	0	0	0	0	0	0	0	101
12 PM	0	64	52	2	9	0	0	1	0	0	0	0	0	0	128
13:00	0	73	46	1	10	0	0	0	0	0	0	0	0	0	130
14:00	0	71	56	1	9	0	0	0	0	0	0	0	0	0	137
15:00	0	65	44	1	7	0	0	0	0	0	0	0	0	0	117
16:00	0	85	67	2	4	0	0	0	0	0	0	0	0	0	158
17:00	0	65	51	0	10	0	0	0	0	0	0	0	0	0	126
18:00	0	43	42	1	8	0	0	0	0	0	0	0	0	0	94
19:00	0	48	28	0	5	0	0	0	0	0	0	0	0	0	81
20:00	0	28	23	1	2	0	0	0	0	0	0	0	0	0	54
21:00	0	24	20	0	3	0	0	0	0	0	0	0	0	0	47
22:00	0	29	24	1	1	0	0	0	0	0	0	0	0	0	55
23:00	0	21	15	0	0	0	0	0	0	0	0	0	0	0	36
Total	2	1059	778	27	127	0	0	1	0	0	0	0	1	0	1995
Percent	0.1%	53.1%	39.0%	1.4%	6.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	08:00	10:00	10:00	10:00	10:00								10:00		
Vol.	2	182	139	6	25								1		
PM Peak		16:00	16:00	12:00	13:00			12:00							
Vol.		85	67	2	10			1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/20/24	0	12	8	0	1	0	0	0	0	0	0	0	0	0	21
01:00	0	11	7	0	1	0	0	0	0	0	0	0	0	0	19
02:00	0	3	1	0	0	0	0	1	0	0	0	0	0	0	5
03:00	0	2	3	0	1	0	0	0	0	0	0	0	0	0	6
04:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
05:00	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
06:00	0	5	4	0	4	0	0	0	0	0	0	0	0	0	13
07:00	0	13	13	0	2	0	0	0	0	0	0	0	0	0	28
08:00	0	28	21	0	4	0	0	0	0	0	0	0	0	0	53
09:00	0	51	36	0	8	0	0	0	0	0	0	0	0	0	95
10:00	0	68	41	1	7	0	0	0	0	0	0	0	0	0	117
11:00	0	77	48	0	6	0	0	0	0	0	0	0	0	0	131
12 PM	0	64	51	0	8	0	0	0	0	0	0	0	0	0	123
13:00	0	71	54	0	9	0	0	0	0	0	0	0	0	0	134
14:00	0	78	56	0	10	0	0	0	0	0	0	0	0	0	144
15:00	0	86	63	0	6	0	0	0	0	0	0	0	0	0	155
16:00	0	74	43	0	8	0	0	0	0	0	0	0	0	0	125
17:00	0	78	58	0	7	0	0	0	0	0	0	0	0	0	143
18:00	0	50	34	0	6	0	0	0	0	0	0	0	0	0	90
19:00	0	44	34	0	4	0	0	0	0	0	0	0	0	0	82
20:00	0	32	26	1	4	0	0	0	0	0	0	0	0	0	63
21:00	0	28	16	0	0	0	0	0	0	0	0	0	0	0	44
22:00	0	18	9	0	4	0	0	0	0	0	0	0	0	0	31
23:00	0	7	4	1	1	0	0	0	0	0	0	0	0	0	13
Total	0	904	632	3	103	0	0	1	0	0	0	0	0	0	1643
Percent	0.0%	55.0%	38.5%	0.2%	6.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	11:00	10:00	09:00			02:00							
Vol.		77	48	1	8			1							
PM Peak		15:00	15:00	20:00	14:00										
Vol.		86	63	1	10										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/21/24	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
05:00	0	7	3	0	1	0	0	0	0	0	0	0	0	0	11
06:00	0	32	21	3	5	0	0	0	0	0	0	0	0	0	61
07:00	0	89	73	3	7	0	0	0	0	0	0	0	0	0	172
08:00	0	88	63	10	9	0	0	0	0	0	0	0	0	0	170
09:00	0	53	44	3	15	0	0	1	0	0	0	0	0	0	116
10:00	0	46	35	2	25	0	0	0	0	0	0	0	0	0	108
11:00	0	64	47	7	18	0	0	0	0	0	0	0	0	0	136
12 PM	0	59	42	4	18	0	0	0	0	0	0	0	0	0	123
13:00	1	71	51	5	13	0	1	0	0	0	0	0	0	0	142
14:00	0	76	53	9	18	0	0	1	0	0	0	0	0	0	157
15:00	0	103	66	8	14	0	0	0	0	0	0	0	0	0	191
16:00	0	136	103	2	15	0	0	0	0	0	0	0	0	0	256
17:00	0	133	103	3	14	0	0	0	0	0	0	0	0	0	253
18:00	0	99	73	1	14	0	0	0	0	0	0	0	0	0	187
19:00	0	46	41	3	4	0	0	0	0	0	0	0	0	0	94
20:00	0	28	26	2	4	0	0	0	0	0	0	0	0	0	60
21:00	2	29	16	0	2	0	0	0	0	0	0	0	0	0	49
22:00	0	15	15	0	2	0	0	0	0	0	0	0	0	0	32
23:00	0	12	5	0	3	0	0	0	0	0	0	0	0	0	20
Total	3	1195	885	66	202	0	1	2	0	0	0	0	0	0	2354
Percent	0.1%	50.8%	37.6%	2.8%	8.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	08:00	10:00			09:00							
Vol.		89	73	10	25			1							
PM Peak	21:00	16:00	16:00	14:00	12:00		13:00	14:00							
Vol.	2	136	103	9	18		1	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/22/24	0	7	6	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	5	1	2	1	0	0	0	0	0	0	0	0	0	9
06:00	0	34	22	3	4	0	0	0	0	0	0	0	0	0	63
07:00	0	90	62	6	8	0	0	1	0	0	0	0	0	0	167
08:00	0	92	64	8	14	0	0	0	0	0	0	0	0	0	178
09:00	0	49	41	5	9	0	0	0	0	0	0	0	0	0	104
10:00	0	40	39	1	5	0	0	0	0	0	0	0	0	0	85
11:00	0	65	51	4	6	0	0	1	0	0	0	0	0	0	127
12 PM	0	72	57	2	14	0	0	0	0	0	0	0	0	0	145
13:00	0	83	61	4	16	0	0	0	0	0	0	0	0	0	164
14:00	0	103	78	7	15	0	0	1	0	0	0	0	0	0	204
15:00	0	96	69	7	14	0	0	0	0	0	0	0	0	0	186
16:00	0	107	85	4	13	0	0	0	0	0	0	0	0	0	209
17:00	0	139	111	5	16	0	0	0	0	0	0	0	0	0	271
18:00	0	100	76	2	17	0	0	0	0	0	0	0	0	0	195
19:00	0	64	50	1	1	0	0	0	0	0	0	0	0	0	116
20:00	0	47	26	1	3	0	0	0	0	0	0	0	0	0	77
21:00	0	25	16	0	1	0	0	0	0	0	0	0	0	0	42
22:00	0	15	11	0	4	0	0	0	0	0	0	0	0	0	30
23:00	0	16	10	0	0	0	0	0	0	0	0	0	0	0	26
Total	0	1256	938	62	161	0	0	3	0	0	0	0	0	0	2420
Percent	0.0%	51.9%	38.8%	2.6%	6.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	08:00	08:00			07:00							
Vol.		92	64	8	14			1							
PM Peak		17:00	17:00	14:00	18:00			14:00							
Vol.		139	111	7	17			1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/23/24	0	9	4	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	5	2	0	2	0	0	0	0	0	0	0	0	0	9
06:00	0	31	27	4	5	0	0	0	0	0	0	0	0	0	67
07:00	0	90	66	10	7	0	0	0	0	0	0	0	0	0	173
08:00	0	95	72	8	15	0	0	0	0	0	0	0	0	0	190
09:00	0	43	33	4	15	0	0	0	0	0	0	0	0	0	95
10:00	0	43	35	1	11	0	0	0	0	0	0	0	0	0	90
11:00	0	56	43	5	8	0	0	0	0	0	0	0	0	0	112
12 PM	0	67	50	3	10	0	0	1	0	0	0	0	0	0	131
13:00	0	75	55	3	13	0	0	0	0	0	0	0	0	0	146
14:00	0	81	62	5	18	0	0	0	1	0	0	0	0	0	167
15:00	0	91	74	7	20	0	0	0	0	0	0	0	0	0	192
16:00	0	96	78	6	13	0	0	1	0	0	0	0	0	0	194
17:00	0	118	83	3	13	0	0	0	0	0	0	0	0	0	217
18:00	0	105	80	1	17	0	0	0	0	0	0	0	0	0	203
19:00	0	51	47	1	6	0	0	0	0	0	0	0	0	0	105
20:00	0	47	34	2	2	0	0	0	0	0	0	0	0	0	85
21:00	0	23	17	1	1	0	0	0	0	0	0	0	0	0	42
22:00	0	13	8	1	2	0	0	0	0	0	0	0	0	0	24
23:00	0	7	7	1	1	0	0	0	0	0	0	0	0	0	16
Total	0	1154	880	66	180	0	0	2	1	0	0	0	0	0	2283
Percent	0.0%	50.5%	38.5%	2.9%	7.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	07:00	08:00										
Vol.		95	72	10	15										
PM Peak		17:00	17:00	15:00	15:00			12:00	14:00						
Vol.		118	83	7	20			1	1						

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/24/24	0	6	7	0	1	0	0	0	0	0	0	0	0	0	14
01:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
05:00	0	6	4	1	1	0	0	0	0	0	0	0	0	0	12
06:00	0	36	22	3	4	1	0	0	0	0	0	0	0	0	66
07:00	0	84	69	6	12	0	0	0	0	0	0	0	0	0	171
08:00	0	76	59	6	10	0	0	0	0	0	0	0	0	0	151
09:00	0	49	35	2	11	1	0	0	0	0	0	0	0	0	98
10:00	0	40	35	4	16	0	0	0	0	0	0	0	0	0	95
11:00	0	58	45	3	12	0	0	0	0	0	0	0	0	0	118
12 PM	0	70	55	3	9	0	0	0	0	0	0	0	0	0	137
13:00	0	69	44	4	12	0	0	1	0	0	0	0	0	0	130
14:00	0	84	67	7	12	0	0	0	0	0	0	0	0	0	170
15:00	0	76	63	4	16	0	0	0	0	0	0	0	0	0	159
16:00	1	104	82	6	12	0	0	1	0	0	0	0	0	0	206
17:00	0	104	75	4	11	0	0	0	0	0	0	0	0	0	194
18:00	0	78	60	2	10	0	0	0	0	0	0	0	0	0	150
19:00	0	55	41	2	5	0	0	0	0	0	0	0	0	0	103
20:00	0	33	26	1	3	0	0	0	0	0	0	0	0	0	63
21:00	0	29	17	0	4	0	0	0	0	0	0	0	0	0	50
22:00	0	10	5	0	1	0	0	0	0	0	0	0	0	0	16
23:00	0	11	8	0	1	0	0	0	0	0	0	0	0	0	20
Total	1	1086	820	59	164	2	0	2	0	0	0	0	0	0	2134
Percent	0.0%	50.9%	38.4%	2.8%	7.7%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	07:00	10:00	06:00									
Vol.		84	69	6	16	1									
PM Peak	16:00	16:00	16:00	14:00	15:00			13:00							
Vol.	1	104	82	7	16			1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/25/24	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
01:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	2	1	0	3	0	0	0	0	0	0	0	0	0	6
05:00	0	3	2	0	3	0	0	0	0	0	0	0	0	0	8
06:00	0	33	22	4	3	0	0	0	0	0	0	0	0	0	62
07:00	0	74	68	6	12	0	0	0	0	0	0	0	0	0	160
08:00	0	83	64	10	8	0	0	0	0	0	0	0	0	0	165
09:00	0	49	41	4	17	0	0	0	1	0	0	0	0	0	112
10:00	0	54	39	5	13	0	0	0	0	0	0	0	0	0	111
11:00	0	68	52	3	19	0	0	0	1	0	0	0	0	0	143
12 PM	0	47	43	2	19	0	0	0	0	0	0	0	0	0	111
13:00	0	66	56	5	13	0	0	1	0	0	0	0	0	0	141
14:00	0	82	64	9	11	0	0	1	0	0	0	0	0	0	167
15:00	0	137	115	8	41	0	0	0	0	0	0	0	0	0	301
16:00	0	102	77	3	20	0	1	0	0	0	0	0	0	0	203
17:00	0	99	76	1	12	0	0	1	0	0	0	0	0	0	189
18:00	0	83	57	2	7	0	0	0	0	0	0	0	0	0	149
19:00	0	52	36	1	5	0	0	0	0	0	0	0	0	0	94
20:00	0	35	27	1	3	0	0	0	0	0	0	0	0	0	66
21:00	0	29	24	0	5	0	0	0	0	0	0	0	0	0	58
22:00	0	28	21	2	3	0	0	0	0	0	0	0	0	0	54
23:00	0	23	14	0	1	0	0	0	0	0	0	0	0	0	38
Total	0	1161	906	66	218	0	1	3	2	0	0	0	0	0	2357
Percent	0.0%	49.3%	38.4%	2.8%	9.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	07:00	08:00	11:00				09:00						
Vol.		83	68	10	19				1						
PM Peak		15:00	15:00	14:00	15:00		16:00	13:00							
Vol.		137	115	9	41		1	1							
Grand Total	6	7815	5839	349	1155	2	2	14	3	0	0	0	1	0	15186
Percent	0.0%	51.5%	38.4%	2.3%	7.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/19/24	1	8	3	0	0	0	0	0	0	0	0	0	0	0	12
01:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
02:00	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	2	2	0	2	0	0	0	0	0	0	0	0	0	6
06:00	0	5	7	1	2	0	0	0	0	0	0	0	0	0	15
07:00	0	22	18	0	4	0	0	0	0	0	0	0	0	0	44
08:00	0	41	23	1	5	1	0	0	0	0	0	0	0	0	71
09:00	1	51	28	0	5	0	0	0	0	0	0	0	0	0	85
10:00	0	39	37	1	8	0	0	0	0	0	0	0	0	0	85
11:00	0	46	35	1	4	0	0	0	0	0	0	0	0	0	86
12 PM	0	62	45	0	5	0	0	1	0	0	0	0	0	0	113
13:00	0	73	60	1	8	0	0	0	0	0	0	0	0	0	142
14:00	0	46	30	1	4	0	0	0	0	0	0	0	0	0	81
15:00	0	71	33	1	6	0	0	0	0	0	0	0	0	0	111
16:00	0	59	35	0	2	0	0	0	0	0	0	0	0	0	96
17:00	0	69	41	0	4	0	0	0	0	0	0	0	0	0	114
18:00	0	89	38	1	10	0	0	0	0	0	0	0	0	0	138
19:00	0	30	23	0	0	1	0	0	0	0	0	0	0	0	54
20:00	0	24	19	1	3	0	0	0	0	0	0	0	0	0	47
21:00	0	19	19	0	1	0	0	0	0	0	0	0	0	0	39
22:00	0	25	7	1	2	0	0	0	0	0	0	0	0	0	35
23:00	0	12	9	0	1	0	0	0	0	0	0	0	0	0	22
Total	2	803	521	10	76	2	0	1	0	0	0	0	0	0	1415
Percent	0.1%	56.7%	36.8%	0.7%	5.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	00:00	09:00	10:00	06:00	10:00	08:00									
Vol.	1	51	37	1	8	1									
PM Peak		18:00	13:00	13:00	18:00	19:00		12:00							
Vol.		89	60	1	10	1		1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/20/24	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
01:00	0	2	5	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	3	0	0	1	0	0	0	0	0	0	0	0	0	4
03:00	0	2	1	0	0	1	0	0	0	0	0	0	0	0	4
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	6	8	0	0	0	0	0	0	0	0	0	0	0	14
07:00	0	20	12	0	4	0	0	0	0	0	0	0	0	0	36
08:00	0	27	20	0	5	0	0	0	0	0	0	0	0	0	52
09:00	0	43	31	1	4	1	0	0	0	0	0	0	0	0	80
10:00	0	48	33	0	5	0	0	0	0	0	0	0	0	0	86
11:00	0	64	49	0	6	0	0	0	0	0	0	0	0	0	119
12 PM	1	68	50	0	2	0	0	0	0	0	0	0	0	0	121
13:00	0	56	48	0	9	0	0	0	0	0	0	0	0	0	113
14:00	0	62	42	0	1	0	0	0	0	0	0	0	0	0	105
15:00	0	59	38	0	7	0	0	0	0	0	0	0	0	0	104
16:00	1	72	53	0	6	0	0	0	0	0	0	0	0	0	132
17:00	1	90	65	0	7	0	0	0	0	0	0	0	0	0	163
18:00	0	95	63	1	8	0	0	0	0	0	0	0	0	0	167
19:00	0	47	42	1	11	1	0	0	0	0	0	0	0	0	102
20:00	0	19	21	0	2	0	0	0	0	0	0	0	0	0	42
21:00	0	15	4	0	2	0	0	0	0	0	0	0	0	0	21
22:00	0	8	11	0	0	0	0	0	0	0	0	0	0	0	19
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
Total	3	824	603	3	81	3	0	0	0	0	0	0	0	0	1517
Percent	0.2%	54.3%	39.7%	0.2%	5.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	11:00	09:00	11:00	03:00									
Vol.		64	49	1	6	1									
PM Peak	12:00	18:00	17:00	18:00	19:00	19:00									
Vol.	1	95	65	1	11	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/21/24	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	20	11	1	2	0	0	0	0	0	0	0	0	0	34
07:00	0	73	37	5	7	0	0	0	0	0	0	0	0	0	122
08:00	0	88	56	6	15	0	0	0	0	0	0	0	0	0	165
09:00	0	52	57	1	4	1	0	0	0	0	0	0	0	0	115
10:00	0	45	54	1	11	1	0	0	0	0	0	0	0	0	112
11:00	0	58	40	1	6	0	0	0	0	0	0	0	0	0	105
12 PM	0	57	52	3	14	0	0	0	0	0	0	0	0	0	126
13:00	1	62	52	5	7	1	0	0	0	0	0	0	1	0	129
14:00	0	56	70	7	10	0	0	0	0	0	0	0	0	0	143
15:00	0	95	51	9	7	0	0	0	0	0	0	0	0	0	162
16:00	2	116	68	1	14	1	0	0	0	0	0	0	0	0	202
17:00	0	86	76	3	3	0	1	0	0	0	0	0	0	0	169
18:00	0	88	63	1	2	1	0	0	0	0	0	0	0	0	155
19:00	0	51	32	0	6	1	0	0	0	0	0	0	0	0	90
20:00	0	29	16	2	0	0	0	0	0	0	0	0	0	0	47
21:00	0	22	13	0	0	0	0	0	0	0	0	0	0	0	35
22:00	0	8	9	0	1	0	0	0	0	0	0	0	0	0	18
23:00	0	5	10	0	0	0	0	0	0	0	0	0	0	0	15
Total	3	1030	772	46	109	6	1	0	0	0	0	0	1	0	1968
Percent	0.2%	52.3%	39.2%	2.3%	5.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak		08:00	09:00	08:00	08:00	09:00									
Vol.		88	57	6	15	1									
PM Peak	16:00	16:00	17:00	15:00	12:00	13:00	17:00						13:00		
Vol.	2	116	76	9	14	1	1						1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/22/24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	23	18	2	2	0	0	0	0	0	0	0	0	0	45
07:00	0	83	51	6	7	1	0	0	0	0	0	0	1	0	149
08:00	0	80	73	6	12	2	0	0	0	0	0	0	0	0	173
09:00	0	66	43	0	10	1	0	0	0	0	0	0	0	0	120
10:00	0	55	42	0	5	1	0	0	0	0	0	0	0	0	103
11:00	1	75	50	2	10	1	1	0	0	0	0	0	0	0	140
12 PM	0	68	45	1	8	1	0	1	0	0	0	0	0	0	124
13:00	0	65	46	1	13	0	0	0	0	0	0	0	0	0	125
14:00	1	68	50	2	6	3	0	0	0	0	0	0	0	0	130
15:00	0	81	67	5	6	1	0	0	0	0	0	0	0	0	160
16:00	0	97	56	2	9	0	0	0	0	0	0	0	0	0	164
17:00	0	101	54	1	3	1	0	0	0	0	0	0	0	0	160
18:00	0	82	60	1	5	0	0	0	0	0	0	0	0	0	148
19:00	1	62	17	1	1	0	0	0	0	0	0	0	0	0	82
20:00	0	27	19	0	4	0	0	0	0	0	0	0	0	0	50
21:00	0	23	10	0	1	0	0	0	0	0	0	0	0	0	34
22:00	0	10	5	0	0	0	0	0	0	0	0	0	0	0	15
23:00	0	11	6	0	0	0	0	0	0	0	0	0	0	0	17
Total	3	1098	718	30	103	12	1	1	0	0	0	0	1	0	1967
Percent	0.2%	55.8%	36.5%	1.5%	5.2%	0.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	11:00	07:00	08:00	07:00	08:00	08:00	11:00						07:00		
Vol.	1	83	73	6	12	2	1						1		
PM Peak	14:00	17:00	15:00	15:00	13:00	14:00		12:00							
Vol.	1	101	67	5	13	3		1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/23/24	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	6	2	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
06:00	0	27	12	3	0	0	0	0	0	0	0	0	0	0	42
07:00	0	67	55	5	7	0	0	0	0	0	0	0	0	0	134
08:00	0	91	53	5	10	0	0	0	0	0	0	0	0	0	159
09:00	0	64	47	0	10	3	1	0	0	0	0	0	0	0	125
10:00	0	47	52	0	5	0	0	0	0	0	0	0	0	0	104
11:00	0	55	54	1	10	0	0	0	0	0	0	0	0	0	120
12 PM	0	56	58	2	7	1	0	0	0	0	0	0	0	0	124
13:00	0	55	57	0	8	1	0	0	0	0	0	0	0	0	121
14:00	0	64	63	4	15	0	0	1	0	0	0	0	0	0	147
15:00	0	89	79	5	8	0	0	0	0	0	0	0	0	0	181
16:00	0	121	76	4	15	0	0	0	0	0	0	0	0	0	216
17:00	0	121	71	2	6	1	0	0	0	0	0	0	0	0	201
18:00	0	78	46	1	7	0	0	0	0	0	0	0	0	0	132
19:00	0	51	23	3	3	0	0	0	0	0	0	0	0	0	80
20:00	0	33	20	1	2	0	0	0	0	0	0	0	0	0	56
21:00	0	19	8	1	0	0	0	0	0	0	0	0	0	0	28
22:00	0	4	6	0	2	0	0	0	0	0	0	0	0	0	12
23:00	0	9	4	0	0	0	0	0	0	0	0	0	0	0	13
Total	0	1069	795	37	116	6	1	1	0	0	0	0	0	0	2025
Percent	0.0%	52.8%	39.3%	1.8%	5.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	07:00	07:00	08:00	09:00	09:00								
Vol.		91	55	5	10	3	1								
PM Peak		16:00	15:00	15:00	14:00	12:00		14:00							
Vol.		121	79	5	15	1		1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/24/24	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	8	4	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	23	13	2	4	0	0	0	0	0	0	0	0	0	42
07:00	1	80	47	5	9	0	0	0	0	0	0	0	0	0	142
08:00	0	70	50	5	12	1	0	0	0	0	0	0	0	0	138
09:00	0	59	28	1	7	0	0	0	1	0	0	0	0	0	96
10:00	0	58	44	1	3	0	0	0	0	0	0	0	0	0	106
11:00	0	59	43	2	11	1	0	0	0	0	0	0	0	0	116
12 PM	0	64	46	2	11	0	0	0	0	0	0	0	0	0	123
13:00	0	60	45	2	8	0	0	0	0	0	0	0	0	0	115
14:00	0	62	61	5	8	1	0	0	0	0	0	0	0	0	137
15:00	0	88	65	7	13	1	0	0	0	0	0	0	0	0	174
16:00	0	108	76	3	10	1	0	0	0	0	0	0	0	0	198
17:00	0	79	47	2	0	0	0	0	0	0	0	0	0	0	128
18:00	0	64	40	2	11	0	0	0	0	0	0	0	0	0	117
19:00	0	47	34	2	2	0	0	0	0	0	0	0	0	0	85
20:00	0	20	18	1	0	0	0	0	0	0	0	0	0	0	39
21:00	0	12	14	0	1	0	0	0	0	0	0	0	0	0	27
22:00	0	7	9	0	0	0	0	0	0	0	0	0	0	0	16
23:00	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
Total	1	981	696	42	110	5	0	0	1	0	0	0	0	0	1836
Percent	0.1%	53.4%	37.9%	2.3%	6.0%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	08:00	07:00	08:00	08:00			09:00						
Vol.	1	80	50	5	12	1			1						
PM Peak		16:00	16:00	15:00	15:00	14:00									
Vol.		108	76	7	13	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
10/25/24	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	6	3	0	2	0	0	0	0	0	0	0	0	0	11
06:00	0	19	13	1	2	0	0	0	0	0	0	0	0	0	35
07:00	0	65	40	5	3	0	0	0	1	0	0	0	0	0	114
08:00	0	84	66	7	16	0	0	0	0	0	0	0	0	0	173
09:00	0	69	72	2	17	0	0	0	1	0	0	0	0	0	161
10:00	0	52	33	1	8	0	0	0	0	0	0	0	0	0	94
11:00	0	53	35	0	12	1	0	0	1	0	0	0	0	0	102
12 PM	0	75	38	2	12	0	0	0	0	0	0	0	0	0	127
13:00	0	59	43	1	9	1	0	0	0	0	0	0	0	0	113
14:00	0	71	47	2	10	0	0	0	0	0	0	0	0	0	130
15:00	0	110	64	7	6	0	0	1	0	0	0	0	0	0	188
16:00	0	127	79	0	8	0	0	0	0	0	0	0	0	0	214
17:00	0	83	47	2	5	0	0	0	0	0	0	0	0	0	137
18:00	0	75	43	1	8	0	0	0	0	0	0	0	0	0	127
19:00	0	53	30	1	1	0	0	0	0	0	0	0	0	0	85
20:00	0	31	19	1	3	0	0	0	0	0	0	0	0	0	54
21:00	0	21	15	0	0	0	0	0	0	0	0	0	0	0	36
22:00	0	18	6	1	1	0	0	0	0	0	0	0	0	0	26
23:00	0	11	10	0	1	0	0	0	0	0	0	0	0	0	22
Total	0	1090	708	34	124	2	0	1	3	0	0	0	0	0	1962
Percent	0.0%	55.6%	36.1%	1.7%	6.3%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	09:00	08:00	09:00	11:00			07:00						
Vol.		84	72	7	17	1			1						
PM Peak		16:00	16:00	15:00	12:00	13:00		15:00							
Vol.		127	79	7	12	1		1							
Grand Total	12	6895	4813	202	719	36	3	4	4	0	0	0	2	0	12690
Percent	0.1%	54.3%	37.9%	1.6%	5.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/19/24	0	0	0	0	0	1	5	4	5	1	0	0	0	0	16	53	55
01:00	0	0	0	0	0	0	4	7	3	0	0	0	0	0	14	51	53
02:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	48	49
03:00	0	0	0	0	0	0	1	1	3	3	0	0	0	0	8	58	59
04:00	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	57	59
05:00	0	0	0	**1**	0	0	1	5	3	0	1	0	0	0	11	53	62
06:00	0	0	0	0	0	0	6	10	5	1	0	0	0	0	22	52	54
07:00	0	0	0	0	0	5	23	17	12	1	1	0	0	0	59	52	54
08:00	**1**	**1**	0	0	0	1	25	33	21	5	0	0	0	0	87	53	55
09:00	0	0	0	0	0	1	36	65	46	**7**	1	0	0	0	156	53	55
10:00	0	0	**1**	0	0	**10**	**88**	**195**	**57**	2	0	0	0	0	**353**	50	53
11:00	0	0	0	0	**1**	3	26	48	18	3	**2**	0	0	0	101	52	54
12 PM	0	0	0	0	0	7	24	64	26	6	1	0	0	0	128	52	55
13:00	0	0	0	0	0	4	30	64	29	3	0	0	0	0	130	52	54
14:00	0	0	0	0	2	5	28	58	**38**	4	**2**	0	0	0	137	53	54
15:00	0	0	0	0	0	4	24	47	32	9	1	0	0	0	117	53	57
16:00	0	0	0	0	0	8	**49**	**68**	32	1	0	0	0	0	**158**	51	53
17:00	0	0	0	0	0	4	32	47	33	**10**	0	0	0	0	126	53	56
18:00	0	0	0	0	2	5	25	40	19	3	0	0	0	0	94	52	54
19:00	0	0	0	0	1	**11**	15	41	8	3	2	0	0	0	81	50	56
20:00	0	0	0	0	0	7	13	23	9	0	2	0	0	0	54	51	54
21:00	0	0	0	0	1	3	15	15	10	2	1	0	0	0	47	52	56
22:00	0	0	0	0	**4**	3	14	26	6	1	1	0	0	0	55	49	54
23:00	0	0	0	0	2	2	7	17	8	0	0	0	0	0	36	51	53
Total	1	1	1	1	13	84	492	898	423	66	15	0	0	0	1995		
Percent	0.1%	0.1%	0.1%	0.1%	0.7%	4.2%	24.7%	45.0%	21.2%	3.3%	0.8%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	10:00	05:00	11:00	10:00	10:00	10:00	10:00	09:00	11:00				10:00		
Vol.	1	1	1	1	1	10	88	195	57	7	2				353		
PM Peak					22:00	19:00	16:00	16:00	14:00	17:00	14:00				16:00		
Vol.					4	11	49	68	38	10	2				158		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/20/24	0	0	0	0	0	0	2	7	9	2	**1**	0	0	0	21	54	59
01:00	0	0	0	0	0	1	4	3	9	1	1	0	0	0	19	54	60
02:00	0	0	0	0	**1**	0	1	2	1	0	0	0	0	0	5	51	53
03:00	0	0	0	0	0	0	2	2	1	1	0	0	0	0	6	55	58
04:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	53	54
05:00	0	0	0	0	1	0	4	0	1	0	0	0	0	0	6	50	53
06:00	0	0	0	0	0	1	2	5	3	1	1	0	0	0	13	55	61
07:00	0	0	0	0	0	1	12	9	4	1	0	**1**	0	0	28	52	58
08:00	0	0	0	0	0	1	17	21	10	3	1	0	0	0	53	53	57
09:00	0	0	0	0	0	4	20	37	28	5	1	0	0	0	95	53	56
10:00	0	0	0	0	0	5	**21**	59	26	5	1	0	0	0	117	52	55
11:00	0	0	0	0	0	**8**	19	**65**	**31**	**7**	1	0	0	0	**131**	53	56
12 PM	0	0	0	0	**2**	2	**33**	51	30	5	0	0	0	0	123	52	54
13:00	0	0	0	0	0	**9**	23	67	30	3	**2**	0	0	0	134	52	54
14:00	0	0	0	0	0	6	26	**77**	28	7	0	0	0	0	144	52	54
15:00	0	0	0	0	0	6	28	75	35	9	2	0	0	0	**155**	53	56
16:00	0	0	0	0	1	4	31	53	24	**11**	1	0	0	0	125	53	57
17:00	0	0	0	**1**	1	5	29	52	**43**	10	2	0	0	0	143	53	57
18:00	0	0	0	1	0	4	25	38	17	3	1	**1**	0	0	90	52	55
19:00	0	0	0	0	0	7	28	30	14	3	0	0	0	0	82	51	54
20:00	0	0	0	0	0	7	20	25	8	3	0	0	0	0	63	50	54
21:00	0	0	0	0	1	8	13	13	9	0	0	0	0	0	44	51	53
22:00	0	0	0	0	0	0	7	11	11	2	0	0	0	0	31	53	56
23:00	0	0	0	0	0	1	3	4	2	3	0	0	0	0	13	56	58
Total	0	0	0	2	7	80	370	707	375	85	15	2	0	0	1643		
Percent	0.0%	0.0%	0.0%	0.1%	0.4%	4.9%	22.5%	43.0%	22.8%	5.2%	0.9%	0.1%	0.0%	0.0%			
AM Peak					02:00	11:00	10:00	11:00	11:00	11:00	00:00	07:00			11:00		
Vol.					1	8	21	65	31	7	1	1			131		
PM Peak				17:00	12:00	13:00	12:00	14:00	17:00	16:00	13:00	18:00			15:00		
Vol.				1	2	9	33	77	43	11	2	1			155		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/21/24	0	0	0	0	0	0	3	3	2	1	0	0	0	0	9	54	57
01:00	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	1	64	64
02:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	54	54
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
04:00	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3	57	59
05:00	0	0	0	0	0	0	5	4	2	0	0	0	0	0	11	50	53
06:00	0	0	0	0	1	5	20	26	8	1	0	0	0	0	61	49	53
07:00	0	0	0	0	**6**	13	**48**	**78**	23	4	0	0	0	0	**172**	50	54
08:00	0	0	0	0	2	**19**	28	71	**41**	**8**	1	0	0	0	170	52	55
09:00	0	0	**1**	0	1	2	22	55	27	7	0	**1**	0	0	116	53	56
10:00	0	0	0	0	3	5	34	48	17	1	0	0	0	0	108	50	53
11:00	0	0	0	0	4	6	39	62	23	2	0	0	0	0	136	50	53
12 PM	0	0	0	0	1	6	41	59	13	3	0	0	0	0	123	49	53
13:00	0	**2**	0	0	1	12	33	64	25	4	1	0	0	0	142	51	54
14:00	0	0	0	0	2	15	36	74	26	3	1	0	0	0	157	51	54
15:00	0	0	0	0	1	**17**	42	87	35	9	0	0	0	0	191	52	54
16:00	0	0	0	0	2	16	67	**120**	36	**14**	0	**1**	0	0	**256**	51	55
17:00	0	0	**1**	0	1	12	**79**	109	**41**	9	0	1	0	0	253	51	54
18:00	0	0	0	0	**4**	10	48	77	39	8	1	0	0	0	187	52	54
19:00	0	0	0	0	1	9	28	36	15	3	**2**	0	0	0	94	51	55
20:00	0	0	0	0	0	6	22	22	10	0	0	0	0	0	60	50	53
21:00	**2**	0	0	0	0	6	14	18	6	3	0	0	0	0	49	51	55
22:00	0	0	0	**2**	3	4	6	8	5	4	0	0	0	0	32	54	57
23:00	0	0	0	0	0	2	3	7	8	0	0	0	0	0	20	53	54
Total	2	2	2	2	33	166	619	1029	404	85	7	3	0	0	2354		
Percent	0.1%	0.1%	0.1%	0.1%	1.4%	7.1%	26.3%	43.7%	17.2%	3.6%	0.3%	0.1%	0.0%	0.0%			
AM Peak			09:00		07:00	08:00	07:00	07:00	08:00	08:00	01:00	09:00			07:00		
Vol.			1		6	19	48	78	41	8	1	1			172		
PM Peak	21:00	13:00	17:00	22:00	18:00	15:00	17:00	16:00	17:00	16:00	19:00	16:00			16:00		
Vol.	2	2	1	2	4	17	79	120	41	14	2	1			256		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/22/24	0	0	0	0	0	0	2	6	3	1	0	0	**1**	0	13	55	71
01:00	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3	52	54
02:00	0	0	0	0	0	1	1	2	0	0	0	0	0	0	4	48	49
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	44	44
04:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
05:00	0	0	0	0	0	3	1	3	2	0	0	0	0	0	9	51	53
06:00	0	0	0	0	1	4	19	24	9	4	**2**	0	0	0	63	53	58
07:00	0	0	0	0	**5**	7	43	**79**	28	5	0	0	0	0	167	51	54
08:00	0	0	0	0	0	**13**	**45**	73	**38**	**9**	0	0	0	0	**178**	52	55
09:00	0	0	0	0	1	3	34	49	11	4	2	0	0	0	104	50	56
10:00	0	0	0	0	1	2	24	30	24	2	1	**1**	0	0	85	53	54
11:00	0	0	0	0	0	10	30	51	29	6	1	0	0	0	127	52	55
12 PM	0	0	0	0	0	6	33	78	25	2	1	0	0	0	145	51	54
13:00	0	0	0	0	0	10	53	65	31	5	0	0	0	0	164	51	54
14:00	0	0	0	0	1	**20**	50	94	34	5	0	0	0	0	204	51	54
15:00	0	0	0	0	0	16	33	87	39	**8**	**3**	0	0	0	186	52	56
16:00	0	0	0	0	**3**	6	37	90	64	7	2	0	0	0	209	53	54
17:00	0	0	0	0	1	9	59	**121**	**72**	7	2	0	0	0	**271**	52	54
18:00	0	0	0	0	0	12	**61**	97	21	3	1	0	0	0	195	49	53
19:00	0	0	0	0	1	11	33	56	8	5	1	**1**	0	0	116	49	56
20:00	0	0	0	0	0	18	15	27	12	4	0	0	0	**1**	77	51	55
21:00	0	0	0	0	1	6	11	13	9	2	0	0	0	0	42	52	54
22:00	0	0	0	0	1	1	10	11	4	3	0	0	0	0	30	53	57
23:00	0	0	0	0	0	0	8	9	5	3	0	1	0	0	26	55	59
Total	0	0	0	0	16	159	604	1066	469	85	16	3	1	1	2420		
Percent	0.0%	0.0%	0.0%	0.0%	0.7%	6.6%	25.0%	44.0%	19.4%	3.5%	0.7%	0.1%	0.0%	0.0%			
AM Peak					07:00	08:00	08:00	07:00	08:00	08:00	06:00	10:00	00:00		08:00		
Vol.					5	13	45	79	38	9	2	1	1		178		
PM Peak					16:00	14:00	18:00	17:00	17:00	15:00	15:00	19:00		20:00	17:00		
Vol.					3	20	61	121	72	8	3	1		1	271		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/23/24	0	0	0	0	0	0	2	7	2	2	0	0	0	0	13	55	58
01:00	0	0	0	0	0	0	1	1	4	0	1	0	0	0	7	54	63
02:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	49	49
03:00	0	0	0	0	0	0	1	0	0	0	0	0	**1**	0	2	73	74
04:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	59	59
05:00	0	0	0	0	0	0	2	3	2	2	0	0	0	0	9	56	58
06:00	0	0	0	0	0	5	23	23	8	6	**2**	0	0	0	67	53	58
07:00	0	0	0	0	2	**12**	**46**	78	31	4	0	0	0	0	173	51	54
08:00	0	0	0	0	**4**	7	43	**85**	**44**	**7**	0	0	0	0	**190**	52	54
09:00	0	0	0	0	0	5	17	51	19	2	1	0	0	0	95	52	54
10:00	0	0	0	0	0	2	27	45	13	2	1	0	0	0	90	50	54
11:00	0	0	0	0	3	9	32	45	19	4	0	0	0	0	112	51	54
12 PM	0	0	0	**1**	0	4	42	46	31	5	**1**	**1**	0	0	131	52	55
13:00	0	0	0	0	0	8	44	54	32	8	0	0	0	0	146	52	55
14:00	0	0	0	1	**5**	17	44	70	28	2	0	0	0	0	167	50	53
15:00	0	0	0	0	0	15	42	95	33	6	1	0	0	0	192	51	54
16:00	0	0	0	0	3	12	48	82	38	**11**	0	0	0	0	194	52	55
17:00	0	0	0	0	1	7	46	**113**	**43**	7	0	0	0	0	**217**	52	54
18:00	0	0	0	0	2	**18**	**59**	83	33	7	1	0	0	0	203	51	54
19:00	0	0	0	0	2	9	30	39	19	5	1	0	0	0	105	52	55
20:00	0	0	0	0	4	8	31	28	12	1	1	0	0	0	85	50	54
21:00	0	0	0	0	0	2	14	13	10	3	0	0	0	0	42	53	56
22:00	0	0	0	0	0	0	6	10	5	3	0	0	0	0	24	54	58
23:00	0	0	0	0	0	0	4	10	1	1	0	0	0	0	16	49	55
Total	0	0	0	2	26	140	604	983	427	89	10	1	1	0	2283		
Percent	0.0%	0.0%	0.0%	0.1%	1.1%	6.1%	26.5%	43.1%	18.7%	3.9%	0.4%	0.0%	0.0%	0.0%			
AM Peak					08:00	07:00	07:00	08:00	08:00	08:00	06:00		03:00		08:00		
Vol.					4	12	46	85	44	7	2		1		190		
PM Peak				12:00	14:00	18:00	18:00	17:00	17:00	16:00	12:00	12:00			17:00		
Vol.				1	5	18	59	113	43	11	1	1			217		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/24/24	0	0	0	0	0	0	2	5	5	2	0	0	0	0	14	54	58
01:00	0	0	0	0	0	1	0	3	0	1	0	0	0	0	5	56	58
02:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
03:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	53	54
04:00	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3	48	49
05:00	0	0	0	0	0	1	5	4	1	1	0	0	0	0	12	50	56
06:00	0	0	0	0	4	6	25	20	8	3	0	0	0	0	66	50	54
07:00	0	0	0	**1**	1	**18**	**54**	**69**	28	0	0	0	0	0	**171**	50	53
08:00	0	0	0	0	**5**	13	26	68	**34**	4	1	0	0	0	151	52	54
09:00	0	0	0	0	4	4	22	37	26	4	1	0	0	0	98	53	55
10:00	0	0	**1**	0	0	7	33	34	13	4	**2**	**1**	0	0	95	52	57
11:00	0	0	0	0	0	6	33	56	16	**7**	0	0	0	0	118	51	55
12 PM	0	0	0	0	3	7	46	51	24	6	0	0	0	0	137	51	54
13:00	0	0	0	0	2	14	37	35	33	9	0	0	0	0	130	53	56
14:00	0	0	**1**	0	0	8	**55**	74	29	2	0	**1**	0	0	170	51	54
15:00	0	0	0	**1**	1	**16**	34	58	41	8	0	0	0	0	159	53	55
16:00	0	0	0	0	**6**	15	51	80	46	8	0	0	0	0	**206**	52	54
17:00	0	0	0	0	0	5	36	**84**	**56**	**13**	0	0	0	0	194	53	56
18:00	0	0	0	0	3	10	52	62	18	5	0	0	0	0	150	50	54
19:00	0	0	0	0	0	8	34	40	14	7	0	0	0	0	103	51	56
20:00	0	0	0	0	1	13	19	22	4	2	**2**	0	0	0	63	49	57
21:00	0	0	0	0	2	5	10	26	4	2	1	0	0	0	50	49	56
22:00	0	0	0	0	1	1	4	6	3	1	0	0	0	0	16	52	55
23:00	0	0	0	0	1	0	3	9	3	3	1	0	0	0	20	56	60
Total	0	0	2	2	34	159	581	847	407	92	8	2	0	0	2134		
Percent	0.0%	0.0%	0.1%	0.1%	1.6%	7.5%	27.2%	39.7%	19.1%	4.3%	0.4%	0.1%	0.0%	0.0%			
AM Peak			10:00	07:00	08:00	07:00	07:00	07:00	08:00	11:00	10:00	10:00			07:00		
Vol.			1	1	5	18	54	69	34	7	2	1			171		
PM Peak			14:00	15:00	16:00	15:00	14:00	17:00	17:00	17:00	20:00	14:00			16:00		
Vol.			1	1	6	16	55	84	56	13	2	1			206		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/25/24	0	0	0	0	0	0	4	2	3	0	0	0	0	0	9	52	54
01:00	0	0	0	0	0	0	2	3	1	2	0	0	0	0	8	57	59
02:00	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	53	54
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	1	1	0	3	1	0	0	0	0	6	55	58
05:00	0	0	0	0	0	0	1	3	2	2	0	0	0	0	8	57	58
06:00	0	0	0	0	0	5	18	24	10	3	**2**	0	0	0	62	52	58
07:00	0	**1**	0	1	1	**17**	**46**	68	20	5	0	**1**	0	0	160	50	54
08:00	0	0	0	0	3	9	24	**87**	**33**	**9**	0	0	0	0	**165**	52	55
09:00	0	0	0	1	3	5	25	50	21	6	0	1	0	0	112	52	56
10:00	0	0	0	0	0	11	29	55	13	3	0	0	0	0	111	49	54
11:00	0	0	0	**2**	**6**	7	45	54	25	4	0	0	0	0	143	51	54
12 PM	0	0	0	0	1	7	28	50	24	1	0	0	0	0	111	51	54
13:00	0	0	0	0	0	3	37	65	29	**7**	0	0	0	0	141	52	54
14:00	0	0	0	0	0	14	58	67	24	3	1	0	0	0	167	50	54
15:00	0	0	0	0	**3**	**27**	**101**	**115**	48	6	1	0	0	0	**301**	51	54
16:00	0	0	0	0	2	11	38	102	43	7	0	0	0	0	203	52	54
17:00	0	0	0	0	3	10	43	75	**52**	4	1	**1**	0	0	189	52	54
18:00	0	0	0	**1**	1	11	46	58	27	5	0	0	0	0	149	51	54
19:00	0	0	0	0	1	6	23	49	14	1	0	0	0	0	94	50	53
20:00	0	0	**2**	0	1	10	16	17	15	3	**2**	0	0	0	66	53	57
21:00	0	0	0	0	3	6	18	23	7	1	0	0	0	0	58	49	53
22:00	0	0	0	1	0	3	21	19	7	0	1	0	**2**	0	54	51	61
23:00	0	0	0	0	0	6	10	13	7	2	0	0	0	0	38	52	55
Total	0	1	2	6	28	170	634	999	429	75	8	3	2	0	2357		
Percent	0.0%	0.0%	0.1%	0.3%	1.2%	7.2%	26.9%	42.4%	18.2%	3.2%	0.3%	0.1%	0.1%	0.0%			
AM Peak		07:00		11:00	11:00	07:00	07:00	08:00	08:00	08:00	06:00	07:00			08:00		
Vol.		1		2	6	17	46	87	33	9	2	1			165		
PM Peak			20:00	18:00	15:00	15:00	15:00	15:00	17:00	13:00	20:00	17:00	22:00		15:00		
Vol.			2	1	3	27	101	115	52	7	2	1	2		301		
Grand Total	3	4	7	15	157	958	3904	6529	2934	577	79	14	4	1	15186		
Percent	0.0%	0.0%	0.0%	0.1%	1.0%	6.3%	25.7%	43.0%	19.3%	3.8%	0.5%	0.1%	0.0%	0.0%			

15th Percentile :	41 MPH
50th Percentile :	46 MPH
85th Percentile :	52 MPH
95th Percentile :	54 MPH

Statistics

10 MPH Pace Speed :	41-50 MPH
Number in Pace :	10433
Percent in Pace :	68.7%
Number of Vehicles > 55 MPH :	675
Percent of Vehicles > 55 MPH :	4.4%
Mean Speed(Average) :	47 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/19/24	**1**	0	0	**1**	3	2	2	1	2	0	0	0	0	0	12	50	53
01:00	0	0	0	0	0	3	3	1	0	0	0	**1**	0	0	8	49	68
02:00	0	0	0	0	0	0	2	2	1	0	0	0	0	0	5	51	53
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	44	44
04:00	0	0	0	0	0	2	2	0	1	0	0	0	0	0	5	51	53
05:00	0	0	0	0	0	0	4	2	0	0	0	0	0	0	6	47	49
06:00	0	0	0	0	1	4	4	2	**4**	0	0	0	0	0	15	52	54
07:00	0	0	0	0	3	13	14	10	4	0	0	0	0	0	44	48	52
08:00	0	0	0	1	3	23	26	16	1	**1**	0	0	0	0	71	47	49
09:00	0	0	**1**	0	6	18	**39**	18	2	1	0	0	0	0	85	47	49
10:00	0	0	0	1	**7**	24	31	**20**	1	1	0	0	0	0	85	47	49
11:00	0	0	0	1	0	**33**	32	18	2	0	0	0	0	0	**86**	46	49
12 PM	0	0	0	1	4	34	49	19	2	**3**	**1**	0	0	0	113	47	50
13:00	0	0	0	0	8	**42**	55	**33**	2	2	0	0	0	0	**142**	47	49
14:00	0	0	0	0	4	13	41	19	4	0	0	0	0	0	81	47	49
15:00	0	0	0	**3**	4	15	57	24	**6**	2	0	0	0	0	111	48	52
16:00	0	0	0	0	9	25	33	25	2	1	1	0	0	0	96	47	49
17:00	0	0	0	2	5	28	53	22	2	2	0	0	0	0	114	47	49
18:00	0	0	0	2	**10**	40	**62**	16	6	1	1	0	0	0	138	46	50
19:00	0	0	0	1	7	20	15	10	1	0	0	0	0	0	54	46	49
20:00	0	0	0	2	2	18	16	7	1	1	0	0	0	0	47	46	49
21:00	0	0	0	1	4	9	15	9	0	1	0	0	0	0	39	47	49
22:00	0	0	0	0	3	12	12	6	0	1	1	0	0	0	35	47	56
23:00	0	0	0	1	2	11	3	2	1	1	0	**1**	0	0	22	49	59
Total	1	0	1	17	85	389	571	282	45	18	4	2	0	0	1415		
Percent	0.1%	0.0%	0.1%	1.2%	6.0%	27.5%	40.4%	19.9%	3.2%	1.3%	0.3%	0.1%	0.0%	0.0%			
AM Peak	00:00		09:00	00:00	10:00	11:00	09:00	10:00	06:00	08:00		01:00			11:00		
Vol.	1		1	1	7	33	39	20	4	1		1			86		
PM Peak				15:00	18:00	13:00	18:00	13:00	15:00	12:00	12:00	23:00			13:00		
Vol.				3	10	42	62	33	6	3	1	1			142		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/20/24	0	0	0	0	2	1	6	3	0	0	0	0	0	0	12	47	49
01:00	0	0	0	0	2	0	2	2	1	0	0	0	0	0	7	49	53
02:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	4	48	49
03:00	0	0	0	**1**	0	0	2	1	0	0	0	0	0	0	4	47	49
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	0	0	0	4	2	0	0	0	0	0	0	6	47	49
06:00	0	0	0	0	1	4	3	3	3	0	0	0	0	0	14	51	53
07:00	0	0	0	0	3	9	15	7	1	**1**	0	0	0	0	36	47	51
08:00	0	0	0	0	**4**	16	20	8	3	1	0	0	0	0	52	47	52
09:00	0	0	0	1	3	21	36	18	0	1	0	0	0	0	80	46	49
10:00	0	0	**1**	0	2	23	34	21	4	1	0	0	0	0	86	48	50
11:00	0	0	0	0	4	**30**	**48**	**31**	**6**	0	0	0	0	0	**119**	48	50
12 PM	0	0	0	0	4	36	52	25	4	0	0	0	0	0	121	47	49
13:00	0	0	0	0	6	27	46	29	4	1	0	0	0	0	113	47	49
14:00	0	0	0	0	2	24	43	30	**5**	1	0	0	0	0	105	48	50
15:00	0	0	0	2	3	22	41	30	4	1	**1**	0	0	0	104	48	50
16:00	0	**1**	0	0	7	34	53	**32**	2	**2**	1	0	0	0	132	47	49
17:00	0	0	**3**	**4**	11	42	69	30	3	0	1	0	0	0	163	46	49
18:00	0	0	0	2	**14**	**53**	**72**	25	0	1	0	0	0	0	**167**	45	48
19:00	0	0	0	0	12	30	39	16	4	0	1	0	0	0	102	46	49
20:00	0	0	0	0	3	16	15	5	3	0	0	0	0	0	42	46	51
21:00	0	0	0	0	0	12	6	3	0	0	0	0	0	0	21	44	48
22:00	0	0	0	0	0	6	7	6	0	0	0	0	0	0	19	47	49
23:00	0	1	0	0	1	2	2	1	0	0	0	0	0	0	7	44	48
Total	0	2	4	10	85	410	615	330	47	10	4	0	0	0	1517		
Percent	0.0%	0.1%	0.3%	0.7%	5.6%	27.0%	40.5%	21.8%	3.1%	0.7%	0.3%	0.0%	0.0%	0.0%			
AM Peak			10:00	03:00	08:00	11:00	11:00	11:00	11:00	07:00					11:00		
Vol.			1	1	4	30	48	31	6	1					119		
PM Peak		16:00	17:00	17:00	18:00	18:00	18:00	16:00	14:00	16:00	15:00				18:00		
Vol.		1	3	4	14	53	72	32	5	2	1				167		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/21/24	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4	47	48
01:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	44	44
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	43	44
04:00	0	0	0	0	0	0	3	2	0	0	0	0	0	0	5	48	49
05:00	0	0	0	0	0	3	4	5	0	0	0	0	0	0	12	48	49
06:00	0	0	0	0	3	11	15	4	1	0	0	0	0	0	34	44	49
07:00	0	0	0	1	8	31	49	26	5	**2**	0	0	0	0	122	47	50
08:00	0	0	0	1	**11**	**51**	**55**	**38**	**9**	0	0	0	0	0	**165**	47	50
09:00	0	0	0	0	6	30	50	24	3	1	**1**	0	0	0	115	47	49
10:00	0	0	0	**2**	10	36	36	22	6	0	0	0	0	0	112	47	50
11:00	0	0	0	1	4	35	40	21	4	0	0	0	0	0	105	47	49
12 PM	0	0	**1**	0	8	36	59	19	2	1	0	0	0	0	126	45	49
13:00	0	0	0	**6**	**19**	39	49	12	3	1	0	0	0	0	129	44	48
14:00	0	0	0	1	13	37	62	24	5	1	0	0	0	0	143	46	49
15:00	0	0	0	2	17	34	**69**	30	8	**2**	0	0	0	0	162	47	51
16:00	0	0	0	3	15	**57**	64	**51**	**12**	0	0	0	0	0	**202**	48	50
17:00	0	0	1	2	13	56	60	31	6	0	0	0	0	0	169	46	49
18:00	0	0	0	1	19	52	58	22	3	0	0	0	0	0	155	45	48
19:00	0	0	0	0	8	39	28	12	3	0	0	0	0	0	90	45	49
20:00	0	0	0	0	8	14	14	6	3	1	**1**	0	0	0	47	48	54
21:00	0	0	0	0	3	14	14	2	2	0	0	0	0	0	35	44	50
22:00	**1**	0	0	0	1	2	5	5	4	0	0	0	0	0	18	51	53
23:00	0	0	0	0	3	5	4	2	1	0	0	0	0	0	15	46	51
Total	1	0	2	20	169	585	741	359	80	9	2	0	0	0	1968		
Percent	0.1%	0.0%	0.1%	1.0%	8.6%	29.7%	37.7%	18.2%	4.1%	0.5%	0.1%	0.0%	0.0%	0.0%			
AM Peak				10:00	08:00	08:00	08:00	08:00	08:00	07:00	09:00				08:00		
Vol.				2	11	51	55	38	9	2	1				165		
PM Peak	22:00		12:00	13:00	13:00	16:00	15:00	16:00	16:00	15:00	20:00				16:00		
Vol.	1		1	6	19	57	69	51	12	2	1				202		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/22/24	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	39	39
01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
02:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	39	39
03:00	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	39	39
04:00	0	0	0	0	0	1	2	3	0	0	0	0	0	0	6	48	49
05:00	0	0	0	0	0	1	7	3	1	0	0	0	0	0	12	48	51
06:00	0	0	0	0	3	15	18	6	3	0	0	0	0	0	45	46	51
07:00	0	0	0	**2**	10	36	**65**	23	**11**	2	0	0	0	0	149	47	52
08:00	0	0	0	1	**22**	**51**	57	**32**	6	**3**	**1**	0	0	0	**173**	47	51
09:00	0	0	0	0	4	41	37	31	4	3	0	0	0	0	120	48	51
10:00	0	0	0	1	7	36	37	16	5	1	0	0	0	0	103	47	50
11:00	0	0	0	2	15	40	55	23	4	1	0	0	0	0	140	46	49
12 PM	0	0	0	1	11	38	46	20	**8**	0	0	0	0	0	124	47	51
13:00	0	0	0	0	13	48	44	18	2	0	0	0	0	0	125	45	48
14:00	0	0	0	1	12	33	**64**	20	0	0	0	0	0	0	130	45	48
15:00	0	0	0	0	12	51	60	**32**	4	**1**	0	0	0	0	160	47	49
16:00	0	0	0	0	11	53	60	32	6	0	**2**	0	0	0	**164**	47	49
17:00	0	0	0	1	**20**	52	55	26	5	1	0	0	0	0	160	46	49
18:00	0	0	0	**3**	20	**58**	38	24	4	0	1	0	0	0	148	46	49
19:00	0	0	0	2	15	31	29	4	1	0	0	0	0	0	82	43	46
20:00	0	0	0	0	8	16	16	7	3	0	0	0	0	0	50	46	50
21:00	0	0	0	0	5	14	9	6	0	0	0	0	0	0	34	45	48
22:00	0	0	0	0	1	6	5	2	1	0	0	0	0	0	15	46	51
23:00	0	0	0	0	0	7	6	2	2	0	0	0	0	0	17	48	52
Total	0	0	0	14	190	637	710	330	70	12	4	0	0	0	1967		
Percent	0.0%	0.0%	0.0%	0.7%	9.7%	32.4%	36.1%	16.8%	3.6%	0.6%	0.2%	0.0%	0.0%	0.0%			
AM Peak				07:00	08:00	08:00	07:00	08:00	07:00	08:00	08:00				08:00		
Vol.				2	22	51	65	32	11	3	1				173		
PM Peak				18:00	17:00	18:00	14:00	15:00	12:00	15:00	16:00				16:00		
Vol.				3	20	58	64	32	8	1	2				164		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/23/24	0	0	0	0	0	2	3	0	0	**1**	0	0	0	0	6	55	58
01:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	48	49
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	58	59
04:00	0	0	0	0	0	2	3	2	1	0	0	0	0	0	8	49	52
05:00	0	0	0	0	1	4	2	3	2	0	0	0	0	0	12	50	53
06:00	0	0	0	1	2	18	11	9	1	0	0	0	0	0	42	47	49
07:00	0	0	0	0	**16**	29	**63**	22	3	1	0	0	0	0	134	46	49
08:00	0	0	0	**2**	16	**48**	54	**32**	**6**	1	0	0	0	0	**159**	47	49
09:00	0	0	0	0	12	34	53	22	4	0	0	0	0	0	125	46	49
10:00	0	0	0	0	8	33	44	12	6	1	0	0	0	0	104	46	51
11:00	0	0	**1**	1	12	40	43	20	3	0	0	0	0	0	120	46	49
12 PM	0	0	0	0	12	32	53	20	6	1	0	0	0	0	124	47	50
13:00	0	0	0	0	6	45	48	18	4	0	0	0	0	0	121	46	49
14:00	0	0	0	2	10	39	65	25	5	0	**1**	0	0	0	147	46	49
15:00	0	0	0	0	11	47	73	**44**	4	**2**	0	0	0	0	181	47	49
16:00	0	0	0	0	14	55	**102**	39	5	1	0	0	0	0	**216**	46	49
17:00	0	0	0	**5**	**15**	**62**	80	31	**8**	0	0	0	0	0	201	46	49
18:00	0	0	0	0	13	52	51	14	2	0	0	0	0	0	132	44	48
19:00	0	0	0	0	7	31	27	11	4	0	0	0	0	0	80	46	50
20:00	0	0	0	0	12	20	14	5	4	1	0	0	0	0	56	46	52
21:00	0	0	0	1	3	9	11	1	3	0	0	0	0	0	28	44	52
22:00	0	0	0	0	0	3	6	3	0	0	0	0	0	0	12	47	49
23:00	0	0	0	0	0	8	2	3	0	0	0	0	0	0	13	46	48
Total	0	0	1	12	170	613	810	337	71	10	1	0	0	0	2025		
Percent	0.0%	0.0%	0.0%	0.6%	8.4%	30.3%	40.0%	16.6%	3.5%	0.5%	0.0%	0.0%	0.0%	0.0%			
AM Peak			11:00	08:00	07:00	08:00	07:00	08:00	08:00	00:00					08:00		
Vol.			1	2	16	48	63	32	6	1					159		
PM Peak				17:00	17:00	17:00	16:00	15:00	17:00	15:00	14:00				16:00		
Vol.				5	15	62	102	44	8	2	1				216		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/24/24	0	0	0	0	1	2	2	0	0	0	0	0	0	0	5	43	44
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
02:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	44	44
03:00	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3	42	44
04:00	0	0	0	0	0	0	4	1	0	0	0	0	0	0	5	46	48
05:00	0	0	0	0	1	2	5	4	0	0	0	0	0	0	12	47	49
06:00	0	0	0	1	6	15	14	5	1	0	0	0	0	0	42	44	48
07:00	0	0	0	**2**	11	35	**57**	**25**	**9**	**3**	0	0	0	0	**142**	48	52
08:00	0	0	0	2	**21**	**41**	52	20	2	0	0	0	0	0	138	45	48
09:00	0	0	0	0	15	25	31	21	4	0	0	0	0	0	96	47	49
10:00	0	0	0	1	12	27	44	16	6	0	0	0	0	0	106	46	50
11:00	0	0	0	0	21	36	39	16	4	0	0	0	0	0	116	45	49
12 PM	0	0	0	1	11	34	52	21	3	**1**	0	0	0	0	123	46	49
13:00	0	0	0	**6**	12	39	39	13	5	1	0	0	0	0	115	45	50
14:00	0	0	0	1	13	41	50	28	3	1	0	0	0	0	137	47	49
15:00	0	0	0	3	18	37	67	**40**	**8**	1	0	0	0	0	174	47	50
16:00	0	0	0	3	**28**	**58**	**71**	35	3	0	0	0	0	0	**198**	46	49
17:00	0	0	0	0	4	38	58	24	3	1	0	0	0	0	128	46	49
18:00	0	0	**1**	3	6	38	47	18	2	0	0	0	**1**	**1**	117	45	49
19:00	0	0	0	0	15	31	26	9	3	0	**1**	0	0	0	85	45	49
20:00	0	0	0	0	4	18	13	3	1	0	0	0	0	0	39	44	48
21:00	0	0	0	0	0	13	9	4	1	0	0	0	0	0	27	46	49
22:00	0	0	0	0	1	4	6	4	1	0	0	0	0	0	16	48	51
23:00	0	0	0	0	1	3	4	1	0	0	0	0	0	0	9	44	47
Total	0	0	1	23	201	539	693	309	59	8	1	0	1	1	1836		
Percent	0.0%	0.0%	0.1%	1.3%	10.9%	29.4%	37.7%	16.8%	3.2%	0.4%	0.1%	0.0%	0.1%	0.1%			
AM Peak				07:00	08:00	08:00	07:00	07:00	07:00	07:00					07:00		
Vol.				2	21	41	57	25	9	3					142		
PM Peak			18:00	13:00	16:00	16:00	16:00	15:00	15:00	12:00	19:00		18:00	18:00	16:00		
Vol.			1	6	28	58	71	40	8	1	1		1	1	198		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 19-Oct-24
Date End: 25-Oct-24
THIELLS MT IVY RD
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
10/25/24	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4	43	44
01:00	0	0	0	0	1	3	1	0	0	0	0	0	0	0	5	41	43
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
04:00	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	38	39
05:00	0	0	0	0	0	0	10	1	0	0	0	0	0	0	11	44	47
06:00	0	0	0	1	1	13	15	4	1	0	0	0	0	0	35	44	49
07:00	0	0	**1**	2	**14**	29	43	19	5	1	0	0	0	0	114	47	50
08:00	0	**1**	0	**3**	13	**45**	74	**28**	**8**	1	0	0	0	0	**173**	46	50
09:00	0	0	0	1	10	39	**76**	27	7	1	0	0	0	0	161	47	49
10:00	0	0	0	0	9	22	37	19	4	**3**	0	0	0	0	94	48	52
11:00	0	0	0	2	7	40	33	18	2	0	0	0	0	0	102	46	49
12 PM	0	0	0	**7**	13	38	43	19	6	1	0	0	0	0	127	46	50
13:00	0	0	0	1	20	34	41	13	4	0	0	0	0	0	113	45	49
14:00	0	0	0	0	5	**56**	42	18	7	**2**	0	0	0	0	130	47	51
15:00	0	0	0	7	**27**	52	65	32	5	0	0	0	0	0	188	46	49
16:00	0	0	0	0	18	49	**91**	**45**	**9**	2	0	0	0	0	**214**	47	50
17:00	0	0	0	1	4	40	51	34	6	1	0	0	0	0	137	48	50
18:00	0	0	0	1	8	55	40	20	1	2	0	0	0	0	127	45	49
19:00	0	0	0	4	10	42	23	4	2	0	0	0	0	0	85	43	47
20:00	0	0	0	0	9	19	21	4	1	0	0	0	0	0	54	44	47
21:00	0	0	0	1	6	16	11	2	0	0	0	0	0	0	36	43	45
22:00	0	0	0	0	5	4	12	3	1	1	0	0	0	0	26	46	53
23:00	0	0	0	0	5	7	5	5	0	0	0	0	0	0	22	46	48
Total	0	1	1	32	185	607	736	316	69	15	0	0	0	0	1962		
Percent	0.0%	0.1%	0.1%	1.6%	9.4%	30.9%	37.5%	16.1%	3.5%	0.8%	0.0%	0.0%	0.0%	0.0%			
AM Peak		08:00	07:00	08:00	07:00	08:00	09:00	08:00	08:00	10:00					08:00		
Vol.		1	1	3	14	45	76	28	8	3					173		
PM Peak				12:00	15:00	14:00	16:00	16:00	16:00	14:00					16:00		
Vol.				7	27	56	91	45	9	2					214		
Grand Total	2	3	10	128	1085	3780	4876	2263	441	82	16	2	1	1	12690		
Percent	0.0%	0.0%	0.1%	1.0%	8.6%	29.8%	38.4%	17.8%	3.5%	0.6%	0.1%	0.0%	0.0%	0.0%			

15th Percentile :	35 MPH
50th Percentile :	41 MPH
85th Percentile :	46 MPH
95th Percentile :	49 MPH

Statistics

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	8656
Percent in Pace :	68.2%
Number of Vehicles > 55 MPH :	102
Percent of Vehicles > 55 MPH :	0.8%
Mean Speed(Average) :	42 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	3	2	3	3	5	4	3
01:00	*	*	1	2	1	1	5	4	3
02:00	*	*	1	0	2	1	1	3	1
03:00	*	*	2	1	2	2	2	0	1
04:00	*	*	0	0	1	0	1	3	1
05:00	*	*	5	5	3	4	5	2	4
06:00	*	*	32	32	31	32	9	5	22
07:00	*	*	**100**	**99**	**95**	**98**	12	14	**64**
08:00	*	*	68	81	93	81	28	23	59
09:00	*	*	48	36	54	46	28	24	38
10:00	*	*	56	37	44	46	**36**	33	41
11:00	*	*	48	51	59	53	33	**39**	46
12:00 PM	*	*	52	55	56	54	45	**46**	51
01:00	*	*	63	61	68	64	33	43	54
02:00	*	*	62	67	66	65	43	38	55
03:00	*	*	**102**	67	**87**	85	**48**	44	70
04:00	*	*	96	**109**	86	**97**	47	29	**73**
05:00	*	*	76	72	70	73	30	35	57
06:00	*	*	55	49	50	51	33	20	41
07:00	*	*	45	37	32	38	22	21	31
08:00	*	*	31	16	21	23	20	30	24
09:00	*	*	9	19	12	13	29	10	16
10:00	*	*	12	12	16	13	12	11	13
11:00	*	*	7	3	9	6	7	7	7
Day Total	0	0	974	913	961	949	534	488	775
% Avg. WkDay	0.0%	0.0%	102.6%	96.2%	101.3%				
% Avg. Week	0.0%	0.0%	125.7%	117.8%	124.0%	122.5%	68.9%	63.0%	
AM Peak	-	-	07:00	07:00	07:00	- 07:00	- 10:00	11:00	- 07:00	- -
Vol.	-	-	100	99	95	- 98	- 36	39	- 64	- -
PM Peak	-	-	15:00	16:00	15:00	- 16:00	- 15:00	12:00	- 16:00	- -
Vol.	-	-	102	109	87	- 97	- 48	46	- 73	- -

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	4	2	*	*	*	3	*	*	3
01:00	0	2	*	*	*	1	*	*	1
02:00	3	0	*	*	*	2	*	*	2
03:00	2	2	*	*	*	2	*	*	2
04:00	0	0	*	*	*	0	*	*	0
05:00	3	5	*	*	*	4	*	*	4
06:00	34	28	*	*	*	31	*	*	31
07:00	**101**	**98**	*	*	*	**100**	*	*	**100**
08:00	75	77	*	*	*	76	*	*	76
09:00	46	40	*	*	*	43	*	*	43
10:00	48	40	*	*	*	44	*	*	44
11:00	65	72	*	*	*	68	*	*	68
12:00 PM	60	65	*	*	*	62	*	*	62
01:00	57	66	*	*	*	62	*	*	62
02:00	68	91	*	*	*	80	*	*	80
03:00	85	90	*	*	*	88	*	*	88
04:00	**110**	**101**	*	*	*	**106**	*	*	**106**
05:00	74	70	*	*	*	72	*	*	72
06:00	44	30	*	*	*	37	*	*	37
07:00	29	16	*	*	*	22	*	*	22
08:00	24	14	*	*	*	19	*	*	19
09:00	12	19	*	*	*	16	*	*	16
10:00	7	9	*	*	*	8	*	*	8
11:00	7	5	*	*	*	6	*	*	6
Day Total	958	942	0	0	0	952	0	0	952
% Avg. WkDay	100.6%	98.9%	0.0%	0.0%	0.0%				
% Avg. Week	100.6%	98.9%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	07:00	07:00	-	-	-	07:00	-	-	07:00
Vol.	101	98	-	-	-	100	-	-	100
PM Peak	16:00	16:00	-	-	-	16:00	-	-	16:00
Vol.	110	101	-	-	-	106	-	-	106

Grand Total	958	942	974	913	961	1901	534	488	1727

ADT ADT 824 AADT 824

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	18	9	3	2	0	0	0	0	0	0	0	0	0	32
07:00	1	71	20	4	4	0	0	0	0	0	0	0	0	0	100
08:00	0	37	16	6	8	1	0	0	0	0	0	0	0	0	68
09:00	0	27	11	2	6	0	0	0	2	0	0	0	0	0	48
10:00	0	31	15	1	9	0	0	0	0	0	0	0	0	0	56
11:00	0	32	10	1	5	0	0	0	0	0	0	0	0	0	48
12 PM	0	37	8	2	4	0	1	0	0	0	0	0	0	0	52
13:00	0	39	12	5	7	0	0	0	0	0	0	0	0	0	63
14:00	0	40	8	6	7	1	0	0	0	0	0	0	0	0	62
15:00	0	56	34	4	8	0	0	0	0	0	0	0	0	0	102
16:00	0	66	25	3	2	0	0	0	0	0	0	0	0	0	96
17:00	0	50	19	0	7	0	0	0	0	0	0	0	0	0	76
18:00	0	40	8	0	7	0	0	0	0	0	0	0	0	0	55
19:00	0	34	9	1	1	0	0	0	0	0	0	0	0	0	45
20:00	0	22	5	1	3	0	0	0	0	0	0	0	0	0	31
21:00	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	9	3	0	0	0	0	0	0	0	0	0	0	0	12
23:00	0	3	2	0	1	0	1	0	0	0	0	0	0	0	7
Total	1	628	219	39	81	2	2	0	2	0	0	0	0	0	974
Percent	0.1%	64.5%	22.5%	4.0%	8.3%	0.2%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	08:00	10:00	08:00			09:00						
Vol.	1	71	20	6	9	1			2						
PM Peak		16:00	15:00	14:00	15:00	14:00	12:00								
Vol.		66	34	6	8	1	1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	19	7	4	2	0	0	0	0	0	0	0	0	0	32
07:00	0	71	20	3	5	0	0	0	0	0	0	0	0	0	99
08:00	0	53	13	5	10	0	0	0	0	0	0	0	0	0	81
09:00	0	21	11	2	2	0	0	0	0	0	0	0	0	0	36
10:00	0	19	11	2	4	1	0	0	0	0	0	0	0	0	37
11:00	0	30	14	2	5	0	0	0	0	0	0	0	0	0	51
12 PM	0	30	16	3	4	0	1	0	1	0	0	0	0	0	55
13:00	0	39	14	4	4	0	0	0	0	0	0	0	0	0	61
14:00	0	41	17	5	4	0	0	0	0	0	0	0	0	0	67
15:00	0	40	19	3	5	0	0	0	0	0	0	0	0	0	67
16:00	0	74	26	3	6	0	0	0	0	0	0	0	0	0	109
17:00	0	52	16	1	3	0	0	0	0	0	0	0	0	0	72
18:00	0	33	11	0	5	0	0	0	0	0	0	0	0	0	49
19:00	0	30	4	1	2	0	0	0	0	0	0	0	0	0	37
20:00	0	10	5	1	0	0	0	0	0	0	0	0	0	0	16
21:00	0	11	5	0	3	0	0	0	0	0	0	0	0	0	19
22:00	0	7	4	0	1	0	0	0	0	0	0	0	0	0	12
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	589	217	39	65	1	1	0	1	0	0	0	0	0	913
Percent	0.0%	64.5%	23.8%	4.3%	7.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	08:00	08:00	10:00									
Vol.		71	20	5	10	1									
PM Peak		16:00	16:00	14:00	16:00		12:00		12:00						
Vol.		74	26	5	6		1		1						

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	20	6	2	3	0	0	0	0	0	0	0	0	0	31
07:00	0	71	15	3	5	1	0	0	0	0	0	0	0	0	95
08:00	0	56	22	3	11	1	0	0	0	0	0	0	0	0	93
09:00	0	26	15	1	10	1	1	0	0	0	0	0	0	0	54
10:00	0	20	18	3	2	1	0	0	0	0	0	0	0	0	44
11:00	0	39	13	1	6	0	0	0	0	0	0	0	0	0	59
12 PM	1	26	18	4	7	0	0	0	0	0	0	0	0	0	56
13:00	0	40	17	3	8	0	0	0	0	0	0	0	0	0	68
14:00	0	47	11	4	4	0	0	0	0	0	0	0	0	0	66
15:00	0	50	27	3	7	0	0	0	0	0	0	0	0	0	87
16:00	0	55	26	1	4	0	0	0	0	0	0	0	0	0	86
17:00	0	43	23	0	4	0	0	0	0	0	0	0	0	0	70
18:00	0	35	11	0	4	0	0	0	0	0	0	0	0	0	50
19:00	0	20	8	1	3	0	0	0	0	0	0	0	0	0	32
20:00	0	11	6	1	3	0	0	0	0	0	0	0	0	0	21
21:00	0	9	2	0	1	0	0	0	0	0	0	0	0	0	12
22:00	0	13	2	0	1	0	0	0	0	0	0	0	0	0	16
23:00	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
Total	1	595	245	30	84	4	1	0	0	1	0	0	0	0	961
Percent	0.1%	61.9%	25.5%	3.1%	8.7%	0.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	08:00	07:00	08:00	07:00	09:00			01:00					
Vol.		71	22	3	11	1	1			1					
PM Peak	12:00	16:00	15:00	12:00	13:00										
Vol.	1	55	27	4	8										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	2	2	0	1	0	0	0	0	0	0	0	0	0	5
06:00	1	8	0	0	0	0	0	0	0	0	0	0	0	0	9
07:00	0	9	2	1	0	0	0	0	0	0	0	0	0	0	12
08:00	0	15	11	1	1	0	0	0	0	0	0	0	0	0	28
09:00	0	16	11	0	1	0	0	0	0	0	0	0	0	0	28
10:00	0	25	10	0	1	0	0	0	0	0	0	0	0	0	36
11:00	0	23	7	0	3	0	0	0	0	0	0	0	0	0	33
12 PM	0	29	12	0	4	0	0	0	0	0	0	0	0	0	45
13:00	0	20	10	0	3	0	0	0	0	0	0	0	0	0	33
14:00	0	31	9	0	3	0	0	0	0	0	0	0	0	0	43
15:00	0	33	11	0	4	0	0	0	0	0	0	0	0	0	48
16:00	0	31	11	1	4	0	0	0	0	0	0	0	0	0	47
17:00	0	26	3	0	1	0	0	0	0	0	0	0	0	0	30
18:00	0	26	5	1	1	0	0	0	0	0	0	0	0	0	33
19:00	0	18	2	0	2	0	0	0	0	0	0	0	0	0	22
20:00	1	15	3	1	0	0	0	0	0	0	0	0	0	0	20
21:00	0	20	9	0	0	0	0	0	0	0	0	0	0	0	29
22:00	0	9	1	1	1	0	0	0	0	0	0	0	0	0	12
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
Total	2	372	123	7	30	0	0	0	0	0	0	0	0	0	534
Percent	0.4%	69.7%	23.0%	1.3%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	10:00	08:00	03:00	11:00										
Vol.	1	25	11	1	3										
PM Peak	20:00	15:00	12:00	16:00	12:00										
Vol.	1	33	12	1	4										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
02:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
07:00	0	7	5	0	2	0	0	0	0	0	0	0	0	0	14
08:00	0	13	8	0	2	0	0	0	0	0	0	0	0	0	23
09:00	0	18	6	0	0	0	0	0	0	0	0	0	0	0	24
10:00	0	25	6	0	2	0	0	0	0	0	0	0	0	0	33
11:00	0	28	7	0	4	0	0	0	0	0	0	0	0	0	39
12 PM	0	34	7	0	5	0	0	0	0	0	0	0	0	0	46
13:00	0	32	10	1	0	0	0	0	0	0	0	0	0	0	43
14:00	0	23	11	0	3	1	0	0	0	0	0	0	0	0	38
15:00	0	31	10	0	3	0	0	0	0	0	0	0	0	0	44
16:00	0	19	8	0	2	0	0	0	0	0	0	0	0	0	29
17:00	0	24	8	0	3	0	0	0	0	0	0	0	0	0	35
18:00	0	11	7	0	2	0	0	0	0	0	0	0	0	0	20
19:00	0	11	6	0	4	0	0	0	0	0	0	0	0	0	21
20:00	0	23	6	0	1	0	0	0	0	0	0	0	0	0	30
21:00	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
22:00	0	9	1	0	1	0	0	0	0	0	0	0	0	0	11
23:00	0	4	2	0	1	0	0	0	0	0	0	0	0	0	7
Total	0	332	118	1	36	1	0	0	0	0	0	0	0	0	488
Percent	0.0%	68.0%	24.2%	0.2%	7.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	08:00		11:00										
Vol.		28	8		4										
PM Peak		12:00	14:00	13:00	12:00	14:00									
Vol.		34	11	1	5	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	24	6	2	1	1	0	0	0	0	0	0	0	0	34
07:00	0	77	17	3	4	0	0	0	0	0	0	0	0	0	101
08:00	1	38	22	5	9	0	0	0	0	0	0	0	0	0	75
09:00	0	24	17	1	3	0	0	0	1	0	0	0	0	0	46
10:00	0	26	14	2	4	1	1	0	0	0	0	0	0	0	48
11:00	0	35	12	1	14	2	1	0	0	0	0	0	0	0	65
12 PM	0	33	19	2	5	1	0	0	0	0	0	0	0	0	60
13:00	0	37	10	3	7	0	0	0	0	0	0	0	0	0	57
14:00	0	42	14	6	6	0	0	0	0	0	0	0	0	0	68
15:00	0	55	21	4	5	0	0	0	0	0	0	0	0	0	85
16:00	2	77	21	2	8	0	0	0	0	0	0	0	0	0	110
17:00	0	48	17	2	7	0	0	0	0	0	0	0	0	0	74
18:00	0	33	10	0	1	0	0	0	0	0	0	0	0	0	44
19:00	0	22	5	1	1	0	0	0	0	0	0	0	0	0	29
20:00	0	16	4	0	3	1	0	0	0	0	0	0	0	0	24
21:00	0	7	5	0	0	0	0	0	0	0	0	0	0	0	12
22:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
23:00	0	4	2	0	1	0	0	0	0	0	0	0	0	0	7
Total	3	612	221	34	79	6	2	0	1	0	0	0	0	0	958
Percent	0.3%	63.9%	23.1%	3.5%	8.2%	0.6%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00	08:00	11:00	11:00	10:00		09:00						
Vol.	1	77	22	5	14	2	1		1						
PM Peak	16:00	16:00	15:00	14:00	16:00	12:00									
Vol.	2	77	21	6	8	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	2	0	0	1	0	0	0	0	0	0	0	0	5
06:00	0	19	4	3	2	0	0	0	0	0	0	0	0	0	28
07:00	0	67	24	4	3	0	0	0	0	0	0	0	0	0	98
08:00	0	49	18	3	7	0	0	0	0	0	0	0	0	0	77
09:00	0	20	12	3	5	0	0	0	0	0	0	0	0	0	40
10:00	0	24	9	1	6	0	0	0	0	0	0	0	0	0	40
11:00	0	46	20	2	3	0	1	0	0	0	0	0	0	0	72
12 PM	0	38	10	3	12	1	1	0	0	0	0	0	0	0	65
13:00	0	34	19	5	7	0	1	0	0	0	0	0	0	0	66
14:00	0	69	13	6	3	0	0	0	0	0	0	0	0	0	91
15:00	0	57	22	3	8	0	0	0	0	0	0	0	0	0	90
16:00	0	77	18	2	4	0	0	0	0	0	0	0	0	0	101
17:00	1	52	17	0	0	0	0	0	0	0	0	0	0	0	70
18:00	0	24	6	0	0	0	0	0	0	0	0	0	0	0	30
19:00	0	11	3	1	1	0	0	0	0	0	0	0	0	0	16
20:00	0	8	3	1	2	0	0	0	0	0	0	0	0	0	14
21:00	0	12	6	0	1	0	0	0	0	0	0	0	0	0	19
22:00	0	7	1	0	1	0	0	0	0	0	0	0	0	0	9
23:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
Total	1	624	210	37	65	2	3	0	0	0	0	0	0	0	942
Percent	0.1%	66.2%	22.3%	3.9%	6.9%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	07:00	08:00	05:00	11:00								
Vol.		67	24	4	7	1	1								
PM Peak	17:00	16:00	15:00	14:00	12:00	12:00	12:00								
Vol.	1	77	22	6	12	1	1								
Grand Total	8	3752	1353	187	440	16	9	0	4	1	0	0	0	0	5770
Percent	0.1%	65.0%	23.4%	3.2%	7.6%	0.3%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	37	39
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	1	3	1	0	0	0	0	0	0	0	5	41	43
06:00	0	0	2	2	15	8	3	**2**	0	0	0	0	0	0	32	40	45
07:00	**1**	0	2	9	**38**	**35**	**13**	2	0	0	0	0	0	0	**100**	40	43
08:00	0	0	**6**	13	26	16	6	1	0	0	0	0	0	0	68	38	42
09:00	0	1	0	10	16	14	7	0	0	0	0	0	0	0	48	39	43
10:00	0	1	1	**20**	17	12	5	0	0	0	0	0	0	0	56	38	42
11:00	0	**2**	3	14	19	6	3	0	**1**	0	0	0	0	0	48	37	42
12 PM	0	0	2	9	24	11	6	0	0	0	0	0	0	0	52	39	42
13:00	0	0	2	14	21	**25**	1	0	0	0	0	0	0	0	63	38	39
14:00	0	0	**6**	12	22	17	3	**2**	0	0	0	0	0	0	62	38	43
15:00	0	0	4	23	**47**	24	3	1	0	0	0	0	0	0	**102**	37	39
16:00	0	0	5	**27**	34	22	**7**	1	0	0	0	0	0	0	96	38	42
17:00	0	0	2	18	33	21	2	0	0	0	0	0	0	0	76	37	39
18:00	0	0	0	8	24	18	4	1	0	0	0	0	0	0	55	39	42
19:00	0	0	0	9	18	14	3	1	0	0	0	0	0	0	45	39	42
20:00	0	0	2	3	15	7	4	0	0	0	0	0	0	0	31	39	43
21:00	0	0	2	0	4	1	2	0	0	0	0	0	0	0	9	41	43
22:00	0	0	0	2	7	1	2	0	0	0	0	0	0	0	12	40	43
23:00	**1**	0	0	2	1	1	2	0	0	0	0	0	0	0	7	42	44
Total	2	4	39	196	387	257	77	11	1	0	0	0	0	0	974		
Percent	0.2%	0.4%	4.0%	20.1%	39.7%	26.4%	7.9%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	11:00	08:00	10:00	07:00	07:00	07:00	06:00	11:00						07:00		
Vol.	1	2	6	20	38	35	13	2	1						100		
PM Peak	23:00		14:00	16:00	15:00	13:00	16:00	14:00							15:00		
Vol.	1		6	27	47	25	7	2							102		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	2	2	0	0	0	0	0	0	0	0	5	38	39
06:00	0	0	1	3	10	13	4	1	0	0	0	0	0	0	32	40	44
07:00	0	0	0	12	**35**	**40**	**10**	**2**	0	0	0	0	0	0	**99**	39	43
08:00	0	**1**	**5**	**16**	24	25	9	1	0	0	0	0	0	0	81	39	43
09:00	0	0	4	5	9	12	4	2	0	0	0	0	0	0	36	40	45
10:00	0	0	1	8	15	8	4	1	0	0	0	0	0	0	37	39	43
11:00	0	0	2	7	20	16	6	0	0	0	0	0	0	0	51	39	42
12 PM	0	0	2	6	20	18	7	**2**	0	0	0	0	0	0	55	40	44
13:00	0	0	**6**	13	20	19	2	1	0	0	0	0	0	0	61	38	39
14:00	0	0	4	13	26	16	6	2	0	0	0	0	0	0	67	39	43
15:00	0	0	4	21	23	16	3	0	0	0	0	0	0	0	67	37	39
16:00	0	0	6	**26**	**45**	**24**	7	1	0	0	0	0	0	0	**109**	38	41
17:00	0	0	2	18	22	18	**10**	2	0	0	0	0	0	0	72	40	44
18:00	0	0	0	9	18	14	7	0	**1**	0	0	0	0	0	49	40	43
19:00	0	0	1	4	12	14	4	2	0	0	0	0	0	0	37	40	45
20:00	0	0	2	0	8	5	0	1	0	0	0	0	0	0	16	38	46
21:00	0	0	0	4	9	6	0	0	0	0	0	0	0	0	19	37	39
22:00	0	0	1	1	5	1	4	0	0	0	0	0	0	0	12	42	44
23:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	37	39
Total	0	1	41	168	327	270	87	18	1	0	0	0	0	0	913		
Percent	0.0%	0.1%	4.5%	18.4%	35.8%	29.6%	9.5%	2.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		08:00	08:00	08:00	07:00	07:00	07:00	07:00							07:00		
Vol.		1	5	16	35	40	10	2							99		
PM Peak			13:00	16:00	16:00	16:00	17:00	12:00	18:00						16:00		
Vol.			6	26	45	24	10	2	1						109		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3	38	39
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
02:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	39	39
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
05:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3	38	39
06:00	0	0	1	5	12	7	5	1	0	0	0	0	0	0	31	41	44
07:00	0	0	1	9	40	**37**	5	**2**	**1**	0	0	0	0	0	**95**	39	43
08:00	0	**1**	3	**18**	**41**	26	4	0	0	0	0	0	0	0	93	38	39
09:00	0	0	**6**	10	20	12	**6**	0	0	0	0	0	0	0	54	39	42
10:00	**1**	0	5	11	13	11	3	0	0	0	0	0	0	0	44	38	41
11:00	0	0	2	13	29	11	4	0	0	0	0	0	0	0	59	37	41
12 PM	0	**2**	**4**	8	17	14	**11**	0	0	0	0	0	0	0	56	41	43
13:00	0	0	0	16	30	17	5	0	0	0	0	0	0	0	68	38	41
14:00	0	0	3	10	31	11	8	**3**	0	0	0	0	0	0	66	40	44
15:00	0	0	4	**21**	33	**24**	4	0	0	**1**	0	0	0	0	**87**	38	40
16:00	0	0	2	18	**35**	19	8	2	**1**	1	0	0	0	0	86	39	44
17:00	0	0	0	16	23	24	6	1	0	0	0	0	0	0	70	39	42
18:00	0	0	2	9	21	14	4	0	0	0	0	0	0	0	50	38	41
19:00	0	0	1	5	13	11	2	0	0	0	0	0	0	0	32	38	40
20:00	0	0	0	5	7	5	3	1	0	0	0	0	0	0	21	41	44
21:00	0	0	0	4	3	5	0	0	0	0	0	0	0	0	12	38	39
22:00	0	0	0	1	7	7	1	0	0	0	0	0	0	0	16	38	40
23:00	0	0	0	1	3	5	0	0	0	0	0	0	0	0	9	38	39
Total	1	3	34	182	382	266	79	10	2	2	0	0	0	0	961		
Percent	0.1%	0.3%	3.5%	18.9%	39.8%	27.7%	8.2%	1.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	08:00	09:00	08:00	08:00	07:00	09:00	07:00	07:00						07:00		
Vol.	1	1	6	18	41	37	6	2	1						95		
PM Peak		12:00	12:00	15:00	16:00	15:00	12:00	14:00	16:00	15:00					15:00		
Vol.		2	4	21	35	24	11	3	1	1					87		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	0	1	1	2	1	0	0	0	0	0	0	0	5	41	43
01:00	0	0	0	0	1	1	2	0	**1**	0	0	0	0	0	5	51	53
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
05:00	0	0	0	2	1	1	1	0	0	0	0	0	0	0	5	41	43
06:00	**1**	0	0	1	2	2	**3**	0	0	0	0	0	0	0	9	42	44
07:00	0	0	0	1	5	6	0	0	0	0	0	0	0	0	12	38	39
08:00	0	0	1	**5**	9	10	3	0	0	0	0	0	0	0	28	39	42
09:00	0	0	**3**	5	9	9	2	0	0	0	0	0	0	0	28	38	41
10:00	0	**1**	1	5	**15**	12	2	0	0	0	0	0	0	0	**36**	38	40
11:00	0	0	2	4	12	**13**	1	**1**	0	0	0	0	0	0	33	38	41
12 PM	0	0	1	**13**	**19**	5	5	**2**	0	0	0	0	0	0	45	40	44
13:00	0	0	1	4	13	12	2	1	0	0	0	0	0	0	33	39	43
14:00	0	0	**2**	8	15	12	4	2	0	0	0	0	0	0	43	39	44
15:00	0	0	1	6	14	**19**	**8**	0	0	0	0	0	0	0	**48**	40	43
16:00	0	0	1	8	16	14	6	1	**1**	0	0	0	0	0	47	40	44
17:00	0	0	1	9	7	10	3	0	0	0	0	0	0	0	30	39	42
18:00	0	0	0	6	10	12	4	1	0	0	0	0	0	0	33	40	44
19:00	0	0	0	4	5	4	6	2	1	0	0	0	0	0	22	44	49
20:00	**1**	0	0	1	11	6	1	0	0	0	0	0	0	0	20	38	40
21:00	1	0	0	3	8	14	2	1	0	0	0	0	0	0	29	39	43
22:00	0	0	0	1	4	6	1	0	0	0	0	0	0	0	12	39	41
23:00	0	0	0	0	3	3	1	0	0	0	0	0	0	0	7	39	43
Total	3	1	14	88	181	175	58	11	3	0	0	0	0	0	534		
Percent	0.6%	0.2%	2.6%	16.5%	33.9%	32.8%	10.9%	2.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	10:00	09:00	08:00	10:00	11:00	06:00	11:00	01:00						10:00		
Vol.	1	1	3	5	15	13	3	1	1						36		
PM Peak	20:00		14:00	12:00	12:00	15:00	15:00	12:00	16:00						15:00		
Vol.	1		2	13	19	19	8	2	1						48		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	0	1	0	3	0	0	0	0	0	0	0	0	4	39	39
01:00	0	0	0	1	1	2	0	0	0	0	0	0	0	0	4	38	39
02:00	0	0	0	0	0	0	2	**1**	0	0	0	0	0	0	3	47	49
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	44	44
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	29	29
06:00	0	0	0	0	3	2	0	0	0	0	0	0	0	0	5	38	39
07:00	0	0	1	**4**	4	4	1	0	0	0	0	0	0	0	14	38	41
08:00	0	0	1	4	10	7	1	0	0	0	0	0	0	0	23	38	39
09:00	0	0	**3**	3	6	7	**5**	0	0	0	0	0	0	0	24	41	43
10:00	0	0	0	3	**17**	10	3	0	0	0	0	0	0	0	33	39	42
11:00	0	0	1	3	17	**16**	2	0	0	0	0	0	0	0	**39**	38	40
12 PM	0	0	1	7	16	**16**	5	1	0	0	0	0	0	0	**46**	39	43
13:00	0	0	1	6	14	13	5	**4**	0	0	0	0	0	0	43	42	47
14:00	0	**3**	**2**	7	13	9	4	0	0	0	0	0	0	0	38	39	42
15:00	0	0	2	**9**	**18**	12	2	1	0	0	0	0	0	0	44	38	42
16:00	0	0	0	4	14	6	5	0	0	0	0	0	0	0	29	40	43
17:00	0	0	0	5	12	12	**6**	0	0	0	0	0	0	0	35	40	43
18:00	0	0	0	2	6	9	3	0	0	0	0	0	0	0	20	40	43
19:00	0	0	0	2	7	11	0	1	0	0	0	0	0	0	21	39	39
20:00	0	0	1	3	10	10	5	1	0	0	0	0	0	0	30	41	44
21:00	0	0	0	2	1	4	3	0	0	0	0	0	0	0	10	42	44
22:00	0	0	0	0	4	5	0	0	0	0	**2**	0	0	0	11	60	63
23:00	0	0	0	1	3	2	1	0	0	0	0	0	0	0	7	39	43
Total	0	3	13	69	176	160	56	9	0	0	2	0	0	0	488		
Percent	0.0%	0.6%	2.7%	14.1%	36.1%	32.8%	11.5%	1.8%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%			
AM Peak			09:00	07:00	10:00	11:00	09:00	02:00							11:00		
Vol.			3	4	17	16	5	1							39		
PM Peak		14:00	14:00	15:00	15:00	12:00	17:00	13:00			22:00				12:00		
Vol.		3	2	9	18	16	6	4			2				46		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	0	0	0	1	3	0	0	0	0	0	0	0	0	4	39	39
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	33	34
03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3	42	44
06:00	0	0	0	5	12	12	4	0	**1**	0	0	0	0	0	34	39	44
07:00	0	0	0	**16**	**36**	**27**	**21**	0	1	0	0	0	0	0	**101**	41	44
08:00	**1**	0	2	15	25	20	8	**4**	0	0	0	0	0	0	75	40	45
09:00	0	0	1	9	19	11	6	0	0	0	0	0	0	0	46	39	43
10:00	0	0	0	12	18	11	6	1	0	0	0	0	0	0	48	39	43
11:00	0	0	**8**	16	22	13	6	0	0	0	0	0	0	0	65	38	42
12 PM	0	0	1	10	24	13	**12**	0	0	0	0	0	0	0	60	41	43
13:00	0	0	4	16	12	15	7	**3**	0	0	0	0	0	0	57	41	45
14:00	0	0	3	16	30	14	4	0	**1**	0	0	0	0	0	68	38	41
15:00	0	0	2	12	35	**25**	11	0	0	0	0	0	0	0	85	39	43
16:00	0	0	1	**27**	**52**	24	6	0	0	0	0	0	0	0	**110**	37	40
17:00	0	0	3	14	30	21	4	2	0	0	0	0	0	0	74	38	42
18:00	0	0	2	5	25	11	1	0	0	0	0	0	0	0	44	37	39
19:00	0	0	2	2	14	7	3	0	0	0	**1**	0	0	0	29	39	44
20:00	0	0	**6**	1	7	7	1	2	0	0	0	0	0	0	24	39	46
21:00	0	0	0	0	5	3	3	1	0	0	0	0	0	0	12	43	46
22:00	0	0	0	1	2	3	0	1	0	0	0	0	0	0	7	39	48
23:00	0	0	2	1	2	1	0	1	0	0	0	0	0	0	7	39	48
Total	1	0	38	179	374	243	104	15	3	0	1	0	0	0	958		
Percent	0.1%	0.0%	4.0%	18.7%	39.0%	25.4%	10.9%	1.6%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%			
AM Peak	08:00		11:00	07:00	07:00	07:00	07:00	08:00	06:00						07:00		
Vol.	1		8	16	36	27	21	4	1						101		
PM Peak			20:00	16:00	16:00	15:00	12:00	13:00	14:00		19:00				16:00		
Vol.			6	27	52	25	12	3	1		1				110		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
01:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	48	49
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5	36	38
06:00	0	0	0	4	9	10	4	0	**1**	0	0	0	0	0	28	41	44
07:00	0	0	1	16	**32**	30	**17**	**2**	0	0	0	0	0	0	**98**	41	44
08:00	0	0	3	8	27	**31**	8	0	0	0	0	0	0	0	77	39	42
09:00	0	1	4	6	21	6	2	0	0	0	0	0	0	0	40	36	40
10:00	0	**2**	4	11	13	8	2	0	0	0	0	0	0	0	40	37	40
11:00	0	1	**5**	**20**	27	13	6	0	0	0	0	0	0	0	72	38	41
12 PM	0	0	3	12	23	20	6	1	0	0	0	0	0	0	65	39	43
13:00	0	0	1	16	27	19	2	1	0	0	0	0	0	0	66	38	39
14:00	0	0	3	22	**39**	24	2	0	0	**1**	0	0	0	0	91	37	39
15:00	0	0	5	18	36	19	**12**	0	0	0	0	0	0	0	90	39	43
16:00	0	0	**6**	**27**	32	**33**	3	0	0	0	0	0	0	0	**101**	38	39
17:00	0	**1**	5	14	31	15	3	1	0	0	0	0	0	0	70	37	40
18:00	0	0	0	8	7	12	3	0	0	0	0	0	0	0	30	39	42
19:00	0	0	0	3	5	4	4	0	0	0	0	0	0	0	16	42	43
20:00	0	0	1	7	4	1	1	0	0	0	0	0	0	0	14	34	41
21:00	0	0	0	3	7	6	1	**2**	0	0	0	0	0	0	19	40	47
22:00	0	0	0	0	4	4	1	0	0	0	0	0	0	0	9	39	42
23:00	0	0	1	1	2	0	1	0	0	0	0	0	0	0	5	41	43
Total	0	5	42	198	352	257	78	8	1	1	0	0	0	0	942		
Percent	0.0%	0.5%	4.5%	21.0%	37.4%	27.3%	8.3%	0.8%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	11:00	11:00	07:00	08:00	07:00	07:00	06:00						07:00		
Vol.		2	5	20	32	31	17	2	1						98		
PM Peak		17:00	16:00	16:00	14:00	16:00	15:00	21:00		14:00					16:00		
Vol.		1	6	27	39	33	12	2		1					101		
Grand Total	7	17	221	1080	2179	1628	539	82	11	3	3	0	0	0	5770		
Percent	0.1%	0.3%	3.8%	18.7%	37.8%	28.2%	9.3%	1.4%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%			

15th Percentile :	27 MPH
50th Percentile :	33 MPH
85th Percentile :	39 MPH
95th Percentile :	43 MPH

Statistics

10 MPH Pace Speed :	31-40 MPH
Number in Pace :	3807
Percent in Pace :	66.0%
Number of Vehicles > 55 MPH :	6
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	34 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	2	2	1	2	6	7	4
01:00	*	*	0	0	1	0	6	11	4
02:00	*	*	0	1	1	1	4	2	2
03:00	*	*	1	1	1	1	1	1	1
04:00	*	*	2	2	1	2	1	1	1
05:00	*	*	6	2	5	4	3	1	3
06:00	*	*	33	21	32	29	12	3	20
07:00	*	*	80	82	87	83	14	14	55
08:00	*	*	**117**	**91**	**97**	**102**	24	23	**70**
09:00	*	*	67	38	50	52	29	20	41
10:00	*	*	35	33	47	38	35	29	36
11:00	*	*	42	52	73	56	**37**	**36**	48
12:00 PM	*	*	59	42	54	52	33	40	46
01:00	*	*	45	49	66	53	49	33	48
02:00	*	*	63	67	**71**	67	30	**48**	56
03:00	*	*	**77**	**90**	63	**77**	**53**	45	**66**
04:00	*	*	56	70	63	63	36	33	52
05:00	*	*	58	43	37	46	39	30	41
06:00	*	*	54	33	51	46	41	20	40
07:00	*	*	29	26	26	27	16	21	24
08:00	*	*	17	19	12	16	10	15	15
09:00	*	*	15	14	23	17	19	9	16
10:00	*	*	8	12	16	12	15	4	11
11:00	*	*	2	5	8	5	6	8	6
Day Total	0	0	868	795	886	851	519	454	706
% Avg. WkDay	0.0%	0.0%	102.0%	93.4%	104.1%				
% Avg. Week	0.0%	0.0%	122.9%	112.6%	125.5%	120.5%	73.5%	64.3%	
AM Peak	-	-	08:00	08:00	08:00	- 08:00	- 11:00	11:00	- 08:00 - -
Vol.	-	-	117	91	97	- 102	- 37	36	- 70 - -
PM Peak	-	-	15:00	15:00	14:00	- 15:00	- 15:00	14:00	- 15:00 - -
Vol.	-	-	77	90	71	- 77	- 53	48	- 66 - -

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	2	2	*	*	*	2	*	*	2
01:00	0	1	*	*	*	0	*	*	0
02:00	1	0	*	*	*	0	*	*	0
03:00	1	1	*	*	*	1	*	*	1
04:00	1	1	*	*	*	1	*	*	1
05:00	3	3	*	*	*	3	*	*	3
06:00	25	27	*	*	*	26	*	*	26
07:00	67	93	*	*	*	80	*	*	80
08:00	**98**	**97**	*	*	*	**98**	*	*	**98**
09:00	61	67	*	*	*	64	*	*	64
10:00	49	50	*	*	*	50	*	*	50
11:00	48	68	*	*	*	58	*	*	58
12:00 PM	50	71	*	*	*	60	*	*	60
01:00	56	54	*	*	*	55	*	*	55
02:00	66	**120**	*	*	*	93	*	*	93
03:00	**88**	115	*	*	*	**102**	*	*	**102**
04:00	72	100	*	*	*	86	*	*	86
05:00	64	92	*	*	*	78	*	*	78
06:00	39	72	*	*	*	56	*	*	56
07:00	22	57	*	*	*	40	*	*	40
08:00	24	30	*	*	*	27	*	*	27
09:00	17	17	*	*	*	17	*	*	17
10:00	8	15	*	*	*	12	*	*	12
11:00	3	6	*	*	*	4	*	*	4
Day Total	865	1159	0	0	0	1013	0	0	1013
% Avg. WkDay	85.4%	114.4%	0.0%	0.0%	0.0%				
% Avg. Week	85.4%	114.4%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	98	97	-	-	-	98	-	-	98
PM Peak	15:00	14:00	-	-	-	15:00	-	-	15:00
Vol.	88	120	-	-	-	102	-	-	102

Grand Total	865	1159	868	795	886	1864	519	454	1719

ADT ADT 792 AADT 792

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	15	9	2	7	0	0	0	0	0	0	0	0	0	33
07:00	0	46	28	4	2	0	0	0	0	0	0	0	0	0	80
08:00	0	63	38	10	6	0	0	0	0	0	0	0	0	0	117
09:00	0	39	20	3	5	0	0	0	0	0	0	0	0	0	67
10:00	0	22	9	2	2	0	0	0	0	0	0	0	0	0	35
11:00	0	23	11	1	7	0	0	0	0	0	0	0	0	0	42
12 PM	0	32	18	2	7	0	0	0	0	0	0	0	0	0	59
13:00	0	29	10	2	4	0	0	0	0	0	0	0	0	0	45
14:00	0	28	23	5	7	0	0	0	0	0	0	0	0	0	63
15:00	0	42	22	9	4	0	0	0	0	0	0	0	0	0	77
16:00	0	35	16	2	3	0	0	0	0	0	0	0	0	0	56
17:00	0	31	20	4	3	0	0	0	0	0	0	0	0	0	58
18:00	0	31	17	1	5	0	0	0	0	0	0	0	0	0	54
19:00	0	19	7	2	1	0	0	0	0	0	0	0	0	0	29
20:00	0	10	7	0	0	0	0	0	0	0	0	0	0	0	17
21:00	0	12	2	1	0	0	0	0	0	0	0	0	0	0	15
22:00	0	3	4	0	1	0	0	0	0	0	0	0	0	0	8
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
Total	0	486	267	50	65	0	0	0	0	0	0	0	0	0	868
Percent	0.0%	56.0%	30.8%	5.8%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	08:00	06:00										
Vol.		63	38	10	7										
PM Peak		15:00	14:00	15:00	12:00										
Vol.		42	23	9	7										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	13	5	0	3	0	0	0	0	0	0	0	0	0	21
07:00	0	43	32	5	2	0	0	0	0	0	0	0	0	0	82
08:00	0	58	20	6	7	0	0	0	0	0	0	0	0	0	91
09:00	0	19	16	1	2	0	0	0	0	0	0	0	0	0	38
10:00	0	13	10	1	8	1	0	0	0	0	0	0	0	0	33
11:00	0	22	19	2	8	1	0	0	0	0	0	0	0	0	52
12 PM	1	19	16	1	5	0	0	0	0	0	0	0	0	0	42
13:00	0	29	11	3	6	0	0	0	0	0	0	0	0	0	49
14:00	0	39	19	3	6	0	0	0	0	0	0	0	0	0	67
15:00	0	47	30	8	5	0	0	0	0	0	0	0	0	0	90
16:00	0	42	21	1	6	0	0	0	0	0	0	0	0	0	70
17:00	0	26	11	4	2	0	0	0	0	0	0	0	0	0	43
18:00	0	19	11	2	1	0	0	0	0	0	0	0	0	0	33
19:00	0	15	8	1	2	0	0	0	0	0	0	0	0	0	26
20:00	0	12	6	1	0	0	0	0	0	0	0	0	0	0	19
21:00	0	9	4	1	0	0	0	0	0	0	0	0	0	0	14
22:00	0	6	6	0	0	0	0	0	0	0	0	0	0	0	12
23:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
Total	1	437	251	40	64	2	0	0	0	0	0	0	0	0	795
Percent	0.1%	55.0%	31.6%	5.0%	8.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	07:00	08:00	10:00	10:00									
Vol.		58	32	6	8	1									
PM Peak	12:00	15:00	15:00	15:00	13:00										
Vol.	1	47	30	8	6										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	17	8	2	5	0	0	0	0	0	0	0	0	0	32
07:00	0	48	30	5	4	0	0	0	0	0	0	0	0	0	87
08:00	0	52	30	7	8	0	0	0	0	0	0	0	0	0	97
09:00	0	21	20	1	7	0	0	1	0	0	0	0	0	0	50
10:00	0	25	11	1	10	0	0	0	0	0	0	0	0	0	47
11:00	0	37	24	1	9	2	0	0	0	0	0	0	0	0	73
12 PM	0	34	11	1	8	0	0	0	0	0	0	0	0	0	54
13:00	0	41	17	0	6	2	0	0	0	0	0	0	0	0	66
14:00	0	46	18	1	6	0	0	0	0	0	0	0	0	0	71
15:00	0	28	25	5	5	0	0	0	0	0	0	0	0	0	63
16:00	0	37	17	3	5	0	0	1	0	0	0	0	0	0	63
17:00	0	27	10	0	0	0	0	0	0	0	0	0	0	0	37
18:00	0	35	14	1	1	0	0	0	0	0	0	0	0	0	51
19:00	0	17	5	1	3	0	0	0	0	0	0	0	0	0	26
20:00	0	5	4	1	2	0	0	0	0	0	0	0	0	0	12
21:00	0	17	5	0	1	0	0	0	0	0	0	0	0	0	23
22:00	0	5	9	0	2	0	0	0	0	0	0	0	0	0	16
23:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
Total	0	503	265	30	82	4	0	2	0	0	0	0	0	0	886
Percent	0.0%	56.8%	29.9%	3.4%	9.3%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	07:00	08:00	10:00	11:00		09:00							
Vol.		52	30	7	10	2		1							
PM Peak		14:00	15:00	15:00	12:00	13:00		16:00							
Vol.		46	25	5	8	2		1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	3	1	0	2	0	0	0	0	0	0	0	0	0	6
01:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	3	4	0	5	0	0	0	0	0	0	0	0	0	12
07:00	0	10	3	0	1	0	0	0	0	0	0	0	0	0	14
08:00	0	17	7	0	0	0	0	0	0	0	0	0	0	0	24
09:00	0	20	6	0	2	0	0	1	0	0	0	0	0	0	29
10:00	0	20	10	0	5	0	0	0	0	0	0	0	0	0	35
11:00	0	27	7	0	3	0	0	0	0	0	0	0	0	0	37
12 PM	0	29	3	0	1	0	0	0	0	0	0	0	0	0	33
13:00	0	29	11	0	9	0	0	0	0	0	0	0	0	0	49
14:00	1	19	8	0	2	0	0	0	0	0	0	0	0	0	30
15:00	0	35	13	0	5	0	0	0	0	0	0	0	0	0	53
16:00	0	19	14	2	1	0	0	0	0	0	0	0	0	0	36
17:00	0	28	11	0	0	0	0	0	0	0	0	0	0	0	39
18:00	0	26	10	1	4	0	0	0	0	0	0	0	0	0	41
19:00	0	12	4	0	0	0	0	0	0	0	0	0	0	0	16
20:00	0	9	0	1	0	0	0	0	0	0	0	0	0	0	10
21:00	0	10	9	0	0	0	0	0	0	0	0	0	0	0	19
22:00	0	5	7	1	2	0	0	0	0	0	0	0	0	0	15
23:00	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
Total	1	333	135	6	43	0	0	1	0	0	0	0	0	0	519
Percent	0.2%	64.2%	26.0%	1.2%	8.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	10:00	03:00	06:00			09:00							
Vol.		27	10	1	5			1							
PM Peak	14:00	15:00	16:00	16:00	13:00										
Vol.	1	35	14	2	9										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
01:00	0	6	5	0	0	0	0	0	0	0	0	0	0	0	11
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:00	0	8	5	0	1	0	0	0	0	0	0	0	0	0	14
08:00	0	18	3	0	2	0	0	0	0	0	0	0	0	0	23
09:00	0	11	8	0	1	0	0	0	0	0	0	0	0	0	20
10:00	0	18	9	0	2	0	0	0	0	0	0	0	0	0	29
11:00	0	29	6	0	1	0	0	0	0	0	0	0	0	0	36
12 PM	2	29	7	0	2	0	0	0	0	0	0	0	0	0	40
13:00	0	23	9	0	1	0	0	0	0	0	0	0	0	0	33
14:00	0	36	9	0	3	0	0	0	0	0	0	0	0	0	48
15:00	0	24	20	0	1	0	0	0	0	0	0	0	0	0	45
16:00	0	20	10	1	2	0	0	0	0	0	0	0	0	0	33
17:00	0	16	11	0	3	0	0	0	0	0	0	0	0	0	30
18:00	0	11	5	0	4	0	0	0	0	0	0	0	0	0	20
19:00	0	16	4	0	1	0	0	0	0	0	0	0	0	0	21
20:00	0	8	7	0	0	0	0	0	0	0	0	0	0	0	15
21:00	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	4	4	0	0	0	0	0	0	0	0	0	0	0	8
Total	2	299	127	1	25	0	0	0	0	0	0	0	0	0	454
Percent	0.4%	65.9%	28.0%	0.2%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	10:00		08:00										
Vol.		29	9		2										
PM Peak	12:00	14:00	15:00	16:00	18:00										
Vol.	2	36	20	1	4										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
06:00	0	12	5	1	6	1	0	0	0	0	0	0	0	0	25
07:00	0	42	19	4	1	1	0	0	0	0	0	0	0	0	67
08:00	0	60	22	8	8	0	0	0	0	0	0	0	0	0	98
09:00	0	36	23	0	2	0	0	0	0	0	0	0	0	0	61
10:00	0	34	7	1	7	0	0	0	0	0	0	0	0	0	49
11:00	0	24	14	5	4	0	1	0	0	0	0	0	0	0	48
12 PM	0	30	10	3	7	0	0	0	0	0	0	0	0	0	50
13:00	0	36	14	0	6	0	0	0	0	0	0	0	0	0	56
14:00	1	38	18	3	5	1	0	0	0	0	0	0	0	0	66
15:00	0	52	21	6	9	0	0	0	0	0	0	0	0	0	88
16:00	0	51	13	2	6	0	0	0	0	0	0	0	0	0	72
17:00	0	43	14	3	4	0	0	0	0	0	0	0	0	0	64
18:00	0	25	10	1	3	0	0	0	0	0	0	0	0	0	39
19:00	0	15	5	1	1	0	0	0	0	0	0	0	0	0	22
20:00	0	18	5	1	0	0	0	0	0	0	0	0	0	0	24
21:00	0	12	3	1	1	0	0	0	0	0	0	0	0	0	17
22:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	1	543	206	40	71	3	1	0	0	0	0	0	0	0	865
Percent	0.1%	62.8%	23.8%	4.6%	8.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	09:00	08:00	08:00	06:00	11:00								
Vol.		60	23	8	8	1	1								
PM Peak	14:00	15:00	15:00	15:00	15:00	14:00									
Vol.	1	52	21	6	9	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-NB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
06:00	0	17	5	1	4	0	0	0	0	0	0	0	0	0	27
07:00	0	52	27	7	6	0	0	0	0	1	0	0	0	0	93
08:00	0	65	18	5	9	0	0	0	0	0	0	0	0	0	97
09:00	0	39	16	1	9	0	0	0	2	0	0	0	0	0	67
10:00	2	25	12	3	7	0	0	1	0	0	0	0	0	0	50
11:00	0	41	15	2	8	2	0	0	0	0	0	0	0	0	68
12 PM	0	53	12	2	3	1	0	0	0	0	0	0	0	0	71
13:00	0	39	4	1	8	0	0	0	2	0	0	0	0	0	54
14:00	0	62	31	11	16	0	0	0	0	0	0	0	0	0	120
15:00	0	69	29	9	8	0	0	0	0	0	0	0	0	0	115
16:00	1	66	21	4	8	0	0	0	0	0	0	0	0	0	100
17:00	0	65	20	2	5	0	0	0	0	0	0	0	0	0	92
18:00	0	47	18	1	6	0	0	0	0	0	0	0	0	0	72
19:00	0	41	12	1	2	1	0	0	0	0	0	0	0	0	57
20:00	0	15	12	2	1	0	0	0	0	0	0	0	0	0	30
21:00	0	13	2	0	2	0	0	0	0	0	0	0	0	0	17
22:00	0	12	1	1	1	0	0	0	0	0	0	0	0	0	15
23:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	3	730	258	53	105	4	0	1	4	1	0	0	0	0	1159
Percent	0.3%	63.0%	22.3%	4.6%	9.1%	0.3%	0.0%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	07:00	07:00	08:00	11:00		10:00	09:00	07:00					
Vol.	2	65	27	7	9	2		1	2	1					
PM Peak	16:00	15:00	14:00	14:00	14:00	12:00			13:00						
Vol.	1	69	31	11	16	1			2						
Grand Total	8	3331	1509	220	455	13	1	4	4	1	0	0	0	0	5546
Percent	0.1%	60.1%	27.2%	4.0%	8.2%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	38	39
05:00	0	0	0	2	1	3	0	0	0	0	0	0	0	0	6	38	39
06:00	0	**2**	1	4	14	10	2	0	0	0	0	0	0	0	33	38	40
07:00	0	0	**3**	13	29	24	**9**	2	0	0	0	0	0	0	80	39	43
08:00	0	0	1	**32**	**35**	**39**	9	1	0	0	0	0	0	0	**117**	39	42
09:00	0	0	3	17	18	24	2	**3**	0	0	0	0	0	0	67	38	44
10:00	0	1	1	11	14	5	2	1	0	0	0	0	0	0	35	37	43
11:00	0	0	3	7	19	9	4	0	0	0	0	0	0	0	42	38	42
12 PM	0	0	3	13	17	**19**	7	0	0	0	0	0	0	0	59	39	42
13:00	0	0	1	4	18	13	**8**	1	0	0	0	0	0	0	45	41	44
14:00	0	0	**4**	12	22	18	5	**2**	0	0	0	0	0	0	63	39	43
15:00	0	0	3	**18**	**35**	15	6	0	0	0	0	0	0	0	**77**	38	41
16:00	**1**	0	4	7	23	14	5	1	**1**	0	0	0	0	0	56	39	44
17:00	0	0	2	10	25	14	5	1	1	0	0	0	0	0	58	39	44
18:00	0	0	2	11	25	12	4	0	0	0	0	0	0	0	54	38	41
19:00	0	0	1	7	9	9	3	0	0	0	0	0	0	0	29	39	42
20:00	0	0	0	3	10	3	1	0	0	0	0	0	0	0	17	37	40
21:00	0	0	3	1	5	3	3	0	0	0	0	0	0	0	15	41	43
22:00	0	0	0	1	3	3	1	0	0	0	0	0	0	0	8	39	42
23:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
Total	1	3	35	174	327	238	76	12	2	0	0	0	0	0	868		
Percent	0.1%	0.3%	4.0%	20.0%	37.7%	27.4%	8.8%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		06:00	07:00	08:00	08:00	08:00	07:00	09:00							08:00		
Vol.		2	3	32	35	39	9	3							117		
PM Peak	16:00		14:00	15:00	15:00	12:00	13:00	14:00	16:00						15:00		
Vol.	1		4	18	35	19	8	2	1						77		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	39	39
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
06:00	0	0	0	5	11	4	1	0	0	0	0	0	0	0	21	37	39
07:00	0	0	2	8	28	**32**	**11**	0	**1**	0	0	0	0	0	82	39	43
08:00	0	**1**	3	**16**	**35**	25	8	**3**	0	0	0	0	0	0	**91**	39	44
09:00	0	1	1	8	18	7	2	1	0	0	0	0	0	0	38	38	42
10:00	0	0	4	4	7	15	3	0	0	0	0	0	0	0	33	39	42
11:00	0	0	**5**	9	20	7	9	2	0	0	0	0	0	0	52	41	44
12 PM	**1**	0	1	7	16	14	2	1	0	0	0	0	0	0	42	38	42
13:00	0	0	3	10	18	17	1	0	0	0	0	0	0	0	49	38	39
14:00	0	0	**5**	17	24	16	5	0	0	0	0	0	0	0	67	38	41
15:00	0	**1**	2	**22**	25	**27**	**9**	**4**	0	0	0	0	0	0	**90**	39	44
16:00	0	0	0	14	**26**	22	8	0	0	0	0	0	0	0	70	39	42
17:00	0	0	1	14	13	13	2	0	0	0	0	0	0	0	43	38	39
18:00	0	0	0	6	18	6	3	0	0	0	0	0	0	0	33	38	42
19:00	0	0	0	2	16	6	2	0	0	0	0	0	0	0	26	38	41
20:00	0	0	0	3	10	2	4	0	0	0	0	0	0	0	19	41	43
21:00	0	0	1	3	5	4	0	1	0	0	0	0	0	0	14	38	46
22:00	0	0	0	0	3	6	3	0	0	0	0	0	0	0	12	42	44
23:00	0	0	0	2	3	0	0	0	0	0	0	0	0	0	5	33	34
Total	1	3	28	152	300	225	73	12	1	0	0	0	0	0	795		
Percent	0.1%	0.4%	3.5%	19.1%	37.7%	28.3%	9.2%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		08:00	11:00	08:00	08:00	07:00	07:00	08:00	07:00						08:00		
Vol.		1	5	16	35	32	11	3	1						91		
PM Peak	12:00	15:00	14:00	15:00	16:00	15:00	15:00	15:00							15:00		
Vol.	1	1	5	22	26	27	9	4							90		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
05:00	0	0	0	2	0	3	0	0	0	0	0	0	0	0	5	38	39
06:00	0	0	2	13	7	8	2	0	0	0	0	0	0	0	32	38	40
07:00	0	1	3	16	32	23	**12**	0	0	0	0	0	0	0	87	39	43
08:00	0	0	1	**23**	**34**	**30**	9	0	0	0	0	0	0	0	**97**	39	42
09:00	0	0	**4**	10	14	15	5	**2**	0	0	0	0	0	0	50	39	44
10:00	0	0	3	12	18	8	5	1	0	0	0	0	0	0	47	39	43
11:00	**1**	**3**	4	11	30	14	8	2	0	0	0	0	0	0	73	39	43
12 PM	0	0	**4**	11	21	11	**6**	1	0	0	0	0	0	0	54	39	43
13:00	0	0	2	**23**	21	15	3	2	0	0	0	0	0	0	66	38	42
14:00	0	0	1	11	**26**	**21**	6	**5**	**1**	0	0	0	0	0	**71**	41	47
15:00	0	0	4	16	23	18	2	0	0	0	0	0	0	0	63	37	39
16:00	0	0	1	22	23	11	6	0	0	0	0	0	0	0	63	38	42
17:00	0	0	0	4	17	14	2	0	0	0	0	0	0	0	37	38	40
18:00	0	0	4	9	24	10	3	1	0	0	0	0	0	0	51	38	42
19:00	0	0	0	6	7	11	2	0	0	0	0	0	0	0	26	39	41
20:00	0	**1**	0	1	5	4	1	0	0	0	0	0	0	0	12	38	41
21:00	0	0	2	9	6	4	1	1	0	0	0	0	0	0	23	38	44
22:00	0	0	0	4	7	3	1	0	1	0	0	0	0	0	16	39	50
23:00	0	0	1	2	3	2	0	0	0	0	0	0	0	0	8	37	38
Total	1	5	36	206	321	226	74	15	2	0	0	0	0	0	886		
Percent	0.1%	0.6%	4.1%	23.3%	36.2%	25.5%	8.4%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	09:00	08:00	08:00	08:00	07:00	09:00							08:00		
Vol.	1	3	4	23	34	30	12	2							97		
PM Peak		20:00	12:00	13:00	14:00	14:00	12:00	14:00	14:00						14:00		
Vol.		1	4	23	26	21	6	5	1						71		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	1	1	1	0	3	0	0	0	0	0	0	0	6	43	44
01:00	0	0	0	0	2	2	2	0	0	0	0	0	0	0	6	42	44
02:00	0	0	1	0	0	2	0	0	**1**	0	0	0	0	0	4	52	54
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
05:00	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3	42	44
06:00	0	0	0	2	3	4	1	**2**	0	0	0	0	0	0	12	45	48
07:00	0	0	1	1	3	7	2	0	0	0	0	0	0	0	14	39	43
08:00	0	0	0	4	7	7	**6**	0	0	0	0	0	0	0	24	42	44
09:00	0	0	1	7	10	**9**	2	0	0	0	0	0	0	0	29	38	41
10:00	0	0	1	**8**	15	9	0	1	1	0	0	0	0	0	35	38	46
11:00	0	0	**3**	2	**17**	9	6	0	0	0	0	0	0	0	**37**	40	43
12 PM	0	0	0	10	14	6	3	0	0	0	0	0	0	0	33	38	42
13:00	0	0	2	**13**	17	12	**4**	**1**	0	0	0	0	0	0	49	39	43
14:00	0	0	2	7	10	7	3	1	0	0	0	0	0	0	30	39	44
15:00	0	0	3	6	**19**	**19**	3	1	0	**1**	**1**	0	0	0	**53**	39	46
16:00	0	0	3	6	16	8	3	0	0	0	0	0	0	0	36	38	41
17:00	0	0	**4**	7	15	10	2	1	0	0	0	0	0	0	39	38	42
18:00	0	0	2	12	13	10	3	1	0	0	0	0	0	0	41	38	43
19:00	0	0	0	1	5	7	2	0	**1**	0	0	0	0	0	16	41	51
20:00	0	0	0	4	4	2	0	0	0	0	0	0	0	0	10	36	38
21:00	0	0	0	1	9	5	4	0	0	0	0	0	0	0	19	41	43
22:00	0	0	0	4	4	6	1	0	0	0	0	0	0	0	15	38	41
23:00	0	0	0	0	3	2	0	1	0	0	0	0	0	0	6	45	48
Total	0	0	25	96	189	144	51	9	3	1	1	0	0	0	519		
Percent	0.0%	0.0%	4.8%	18.5%	36.4%	27.7%	9.8%	1.7%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%			
AM Peak			11:00	10:00	11:00	09:00	08:00	06:00	02:00						11:00		
Vol.			3	8	17	9	6	2	1						37		
PM Peak			17:00	13:00	15:00	15:00	13:00	13:00	19:00	15:00	15:00				15:00		
Vol.			4	13	19	19	4	1	1	1	1				53		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	0	1	4	1	0	**1**	0	0	0	0	0	0	7	39	48
01:00	0	0	0	1	2	6	1	1	0	0	0	0	0	0	11	41	47
02:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	48	49
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
06:00	0	0	0	1	0	0	1	1	0	0	0	0	0	0	3	47	49
07:00	0	0	0	2	6	5	0	1	0	0	0	0	0	0	14	38	46
08:00	0	**1**	1	**7**	4	6	**4**	0	0	0	0	0	0	0	23	40	43
09:00	0	0	**2**	5	9	4	0	0	0	0	0	0	0	0	20	36	38
10:00	0	0	1	5	16	5	2	0	0	0	0	0	0	0	29	37	41
11:00	0	0	1	5	**17**	**9**	3	1	0	0	0	0	0	0	**36**	39	43
12 PM	**2**	0	**5**	8	17	4	3	1	0	0	0	0	0	0	40	37	43
13:00	0	0	4	1	16	10	2	0	0	0	0	0	0	0	33	38	40
14:00	0	**1**	5	**9**	18	6	**6**	**3**	0	0	0	0	0	0	**48**	41	45
15:00	0	1	1	8	**19**	**14**	1	1	0	0	0	0	0	0	45	38	39
16:00	0	0	1	4	12	11	5	0	0	0	0	0	0	0	33	40	43
17:00	0	0	2	3	14	5	5	0	0	0	**1**	0	0	0	30	41	44
18:00	0	0	0	5	7	6	1	1	0	0	0	0	0	0	20	39	45
19:00	0	0	3	2	8	6	2	0	0	0	0	0	0	0	21	39	42
20:00	0	0	3	3	0	8	1	0	0	0	0	0	0	0	15	39	41
21:00	0	0	0	1	3	4	1	0	0	0	0	0	0	0	9	39	42
22:00	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4	42	44
23:00	0	0	1	2	1	2	2	0	0	0	0	0	0	0	8	42	43
Total	2	3	31	75	175	113	42	12	0	0	1	0	0	0	454		
Percent	0.4%	0.7%	6.8%	16.5%	38.5%	24.9%	9.3%	2.6%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%			
AM Peak		08:00	09:00	08:00	11:00	11:00	08:00	00:00							11:00		
Vol.		1	2	7	17	9	4	1							36		
PM Peak	12:00	14:00	12:00	14:00	15:00	15:00	14:00	14:00			17:00				14:00		
Vol.	2	1	5	9	19	14	6	3			1				48		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
05:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	37	39
06:00	0	0	2	4	10	6	3	0	0	0	0	0	0	0	25	39	42
07:00	0	0	1	11	32	21	1	**1**	0	0	0	0	0	0	67	38	39
08:00	0	0	4	**21**	**38**	**26**	**9**	0	0	0	0	0	0	0	**98**	38	42
09:00	0	0	**5**	18	24	11	2	1	0	0	0	0	0	0	61	37	39
10:00	0	0	2	6	19	15	7	0	0	0	0	0	0	0	49	39	43
11:00	0	**1**	4	11	14	15	2	0	0	**1**	0	0	0	0	48	38	41
12 PM	0	0	1	13	18	13	1	**3**	**1**	0	0	0	0	0	50	39	47
13:00	0	0	3	14	18	15	**5**	0	1	0	0	0	0	0	56	39	43
14:00	**1**	**2**	2	10	**30**	18	3	0	0	0	0	0	0	0	66	38	39
15:00	0	0	**9**	**27**	29	18	4	1	0	0	0	0	0	0	**88**	37	40
16:00	0	0	2	14	30	**20**	3	2	0	**1**	0	0	0	0	72	38	43
17:00	0	1	3	17	27	13	2	1	0	0	0	0	0	0	64	37	39
18:00	0	1	2	4	14	14	3	1	0	0	0	0	0	0	39	39	43
19:00	0	0	0	3	11	4	3	0	1	0	0	0	0	0	22	41	44
20:00	0	0	1	7	7	8	1	0	0	0	0	0	0	0	24	38	39
21:00	0	0	3	3	6	5	0	0	0	0	0	0	0	0	17	37	39
22:00	0	0	0	4	1	2	1	0	0	0	0	0	0	0	8	39	42
23:00	0	0	0	0	1	1	0	1	0	0	0	0	0	0	3	47	49
Total	1	5	45	188	334	226	50	11	3	2	0	0	0	0	865		
Percent	0.1%	0.6%	5.2%	21.7%	38.6%	26.1%	5.8%	1.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak		11:00	09:00	08:00	08:00	08:00	08:00	07:00		11:00					08:00		
Vol.		1	5	21	38	26	9	1		1					98		
PM Peak	14:00	14:00	15:00	15:00	14:00	16:00	13:00	12:00	12:00	16:00					15:00		
Vol.	1	2	9	27	30	20	5	3	1	1					88		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
2-SB RIDGE RD N OF UNDERPASS RD
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	43	44
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	38	39
06:00	0	**1**	2	4	9	8	2	0	**1**	0	0	0	0	0	27	39	44
07:00	0	0	2	19	**40**	19	**10**	**3**	0	0	0	0	0	0	93	39	44
08:00	0	0	2	13	39	**30**	10	3	0	0	0	0	0	0	**97**	39	44
09:00	0	0	**4**	**20**	22	16	5	0	0	0	0	0	0	0	67	38	41
10:00	**3**	1	0	11	19	13	2	1	0	0	0	0	0	0	50	38	41
11:00	0	0	3	20	24	18	3	0	0	0	0	0	0	0	68	37	39
12 PM	0	**1**	4	19	28	17	2	0	0	0	0	0	0	0	71	37	39
13:00	0	0	2	11	17	18	6	0	0	0	0	0	0	0	54	39	42
14:00	0	0	6	33	**55**	16	8	1	0	**1**	0	0	0	0	**120**	37	42
15:00	0	0	6	**41**	41	23	2	2	0	0	0	0	0	0	115	37	39
16:00	0	0	**7**	29	33	22	6	**3**	0	0	0	0	0	0	100	38	43
17:00	0	0	2	22	38	**27**	2	1	0	0	0	0	0	0	92	37	39
18:00	0	0	3	6	41	10	**11**	1	0	0	0	0	0	0	72	40	43
19:00	0	0	1	7	22	23	3	1	0	0	0	0	0	0	57	39	41
20:00	0	0	0	6	14	9	0	0	**1**	0	0	0	0	0	30	38	39
21:00	0	0	0	7	7	1	2	0	0	0	0	0	0	0	17	37	42
22:00	0	0	0	2	5	5	2	1	0	0	0	0	0	0	15	41	46
23:00	0	0	0	3	2	0	0	1	0	0	0	0	0	0	6	45	48
Total	3	3	44	274	460	277	77	18	2	1	0	0	0	0	1159		
Percent	0.3%	0.3%	3.8%	23.6%	39.7%	23.9%	6.6%	1.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	06:00	09:00	09:00	07:00	08:00	07:00	07:00	06:00						08:00		
Vol.	3	1	4	20	40	30	10	3	1						97		
PM Peak		12:00	16:00	15:00	14:00	17:00	18:00	16:00	20:00	14:00					14:00		
Vol.		1	7	41	55	27	11	3	1	1					120		
Grand Total	9	22	244	1165	2106	1449	443	89	13	4	2	0	0	0	5546		
Percent	0.2%	0.4%	4.4%	21.0%	38.0%	26.1%	8.0%	1.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	27 MPH
50th Percentile :	33 MPH
85th Percentile :	39 MPH
95th Percentile :	43 MPH

Statistics

10 MPH Pace Speed :	31-40 MPH
Number in Pace :	3555
Percent in Pace :	64.1%
Number of Vehicles > 55 MPH :	6
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	34 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

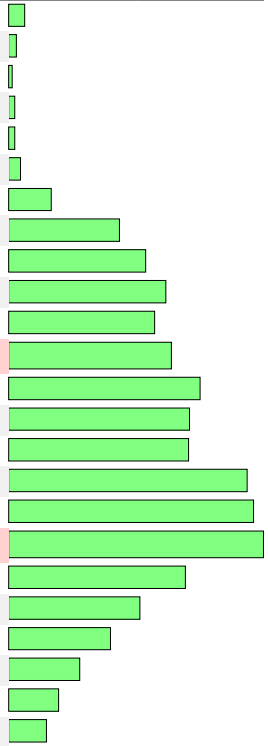
Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	21	27	27	25	27	39	28
01:00	*	*	7	10	20	12	31	29	19
02:00	*	*	3	3	8	5	10	12	7
03:00	*	*	10	5	13	9	17	15	12
04:00	*	*	14	7	11	11	17	5	11
05:00	*	*	12	19	17	16	13	12	15
06:00	*	*	62	69	55	62	26	18	46
07:00	*	*	163	148	152	154	75	60	120
08:00	*	*	174	175	183	177	114	104	150
09:00	*	*	173	**187**	206	189	122	144	166
10:00	*	*	176	164	192	177	**166**	144	168
11:00	*	*	**178**	176	**242**	**199**	165	**159**	**184**
12:00 PM	*	*	218	220	269	236	181	182	214
01:00	*	*	216	227	253	232	185	207	218
02:00	*	*	204	240	284	243	206	**214**	230
03:00	*	*	287	256	258	267	**211**	181	239
04:00	*	*	288	336	**327**	**317**	149	173	**255**
05:00	*	*	**306**	**360**	269	312	157	177	254
06:00	*	*	211	204	218	211	156	148	187
07:00	*	*	162	173	138	158	125	105	141
08:00	*	*	113	105	137	118	93	98	109
09:00	*	*	114	109	77	100	96	78	95
10:00	*	*	65	75	77	72	79	56	70
11:00	*	*	40	53	43	45	79	37	50
Day Total	0	0	3217	3348	3476	3347	2500	2397	2988
% Avg. WkDay	0.0%	0.0%	96.1%	100.0%	103.9%				
% Avg. Week	0.0%	0.0%	107.7%	112.0%	116.3%	112.0%	83.7%	80.2%	
AM Peak	-	-	11:00	09:00	11:00	- 11:00	- 10:00	11:00	- 11:00	- -
Vol.	-	-	178	187	242	- 199	- 166	159	- 184	- -
PM Peak	-	-	17:00	17:00	16:00	- 16:00	- 15:00	14:00	- 16:00	- -
Vol.	-	-	306	360	327	- 317	- 211	214	- 255	- -

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	17	23	*	*	*	20	*	*	20
01:00	9	10	*	*	*	10	*	*	10
02:00	6	4	*	*	*	5	*	*	5
03:00	8	7	*	*	*	8	*	*	8
04:00	9	8	*	*	*	8	*	*	8
05:00	19	11	*	*	*	15	*	*	15
06:00	53	53	*	*	*	53	*	*	53
07:00	130	144	*	*	*	137	*	*	137
08:00	166	172	*	*	*	169	*	*	169
09:00	180	207	*	*	*	194	*	*	194
10:00	185	176	*	*	*	180	*	*	180
11:00	**192**	**210**	*	*	*	**201**	*	*	**201**
12:00 PM	237	234	*	*	*	236	*	*	236
01:00	208	238	*	*	*	223	*	*	223
02:00	220	223	*	*	*	222	*	*	222
03:00	291	297	*	*	*	294	*	*	294
04:00	299	304	*	*	*	302	*	*	302
05:00	**305**	**323**	*	*	*	**314**	*	*	**314**
06:00	218	219	*	*	*	218	*	*	218
07:00	161	162	*	*	*	162	*	*	162
08:00	127	125	*	*	*	126	*	*	126
09:00	102	73	*	*	*	88	*	*	88
10:00	58	66	*	*	*	62	*	*	62
11:00	45	49	*	*	*	47	*	*	47
Day Total	3245	3338	0	0	0	3294	0	0	3294
% Avg. WkDay	98.5%	101.3%	0.0%	0.0%	0.0%				
% Avg. Week	98.5%	101.3%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	11:00	11:00	-	-	-	11:00	-	-	11:00
Vol.	192	210	-	-	-	201	-	-	201
PM Peak	17:00	17:00	-	-	-	17:00	-	-	17:00
Vol.	305	323	-	-	-	314	-	-	314



Grand Total	3245	3338	3217	3348	3476	6641	2500	2397	6282

ADT ADT 3,074 AADT 3,074

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	11	8	0	1	0	1	0	0	0	0	0	0	0	21
01:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	8	4	0	2	0	0	0	0	0	0	0	0	0	14
05:00	0	10	1	0	0	0	1	0	0	0	0	0	0	0	12
06:00	0	38	11	6	4	2	1	0	0	0	0	0	0	0	62
07:00	0	108	30	9	8	3	4	1	0	0	0	0	0	0	163
08:00	0	104	40	14	14	2	0	0	0	0	0	0	0	0	174
09:00	3	103	43	5	12	5	2	0	0	0	0	0	0	0	173
10:00	1	112	41	2	15	4	1	0	0	0	0	0	0	0	176
11:00	0	115	38	5	15	3	2	0	0	0	0	0	0	0	178
12 PM	2	146	49	7	8	2	4	0	0	0	0	0	0	0	218
13:00	0	137	55	4	19	0	1	0	0	0	0	0	0	0	216
14:00	0	132	47	7	12	3	3	0	0	0	0	0	0	0	204
15:00	0	186	67	12	14	2	6	0	0	0	0	0	0	0	287
16:00	1	199	62	7	15	2	1	1	0	0	0	0	0	0	288
17:00	1	253	34	2	11	1	4	0	0	0	0	0	0	0	306
18:00	0	154	49	1	4	1	2	0	0	0	0	0	0	0	211
19:00	0	131	21	4	2	2	2	0	0	0	0	0	0	0	162
20:00	0	81	21	2	3	4	2	0	0	0	0	0	0	0	113
21:00	0	80	30	0	2	0	2	0	0	0	0	0	0	0	114
22:00	0	49	12	0	1	1	2	0	0	0	0	0	0	0	65
23:00	1	29	8	0	0	0	2	0	0	0	0	0	0	0	40
Total	9	2199	678	87	162	37	43	2	0	0	0	0	0	0	3217
Percent	0.3%	68.4%	21.1%	2.7%	5.0%	1.2%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	09:00	08:00	10:00	09:00	07:00	07:00							
Vol.	3	115	43	14	15	5	4	1							
PM Peak	12:00	17:00	15:00	15:00	13:00	20:00	15:00	16:00							
Vol.	2	253	67	12	19	4	6	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	19	7	0	0	0	1	0	0	0	0	0	0	0	27
01:00	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
03:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	3	2	0	1	1	0	0	0	0	0	0	0	0	7
05:00	0	15	2	1	0	1	0	0	0	0	0	0	0	0	19
06:00	0	41	8	7	8	1	4	0	0	0	0	0	0	0	69
07:00	1	91	23	12	20	1	0	0	0	0	0	0	0	0	148
08:00	0	105	43	13	7	1	4	0	2	0	0	0	0	0	175
09:00	0	112	50	4	12	6	3	0	0	0	0	0	0	0	187
10:00	1	110	32	2	12	6	1	0	0	0	0	0	0	0	164
11:00	0	115	34	5	14	5	2	0	1	0	0	0	0	0	176
12 PM	0	145	57	4	9	2	2	0	1	0	0	0	0	0	220
13:00	0	152	49	2	13	5	6	0	0	0	0	0	0	0	227
14:00	0	163	43	8	13	5	7	0	1	0	0	0	0	0	240
15:00	0	183	50	8	10	2	3	0	0	0	0	0	0	0	256
16:00	1	252	62	7	12	0	2	0	0	0	0	0	0	0	336
17:00	0	273	70	3	10	3	1	0	0	0	0	0	0	0	360
18:00	1	153	42	0	3	2	3	0	0	0	0	0	0	0	204
19:00	0	135	29	1	2	1	5	0	0	0	0	0	0	0	173
20:00	0	84	16	2	1	0	2	0	0	0	0	0	0	0	105
21:00	0	81	20	0	4	1	3	0	0	0	0	0	0	0	109
22:00	0	56	17	0	0	0	2	0	0	0	0	0	0	0	75
23:00	0	34	17	0	2	0	0	0	0	0	0	0	0	0	53
Total	4	2334	678	79	153	44	51	0	5	0	0	0	0	0	3348
Percent	0.1%	69.7%	20.3%	2.4%	4.6%	1.3%	1.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	11:00	09:00	08:00	07:00	09:00	06:00		08:00						
Vol.	1	115	50	13	20	6	4		2						
PM Peak	16:00	17:00	17:00	14:00	13:00	13:00	14:00		12:00						
Vol.	1	273	70	8	13	5	7		1						

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	19	7	0	1	0	0	0	0	0	0	0	0	0	27
01:00	0	13	6	0	0	0	0	0	0	1	0	0	0	0	20
02:00	0	2	6	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	9	4	0	0	0	0	0	0	0	0	0	0	0	13
04:00	0	4	5	0	1	0	1	0	0	0	0	0	0	0	11
05:00	0	10	3	1	1	0	2	0	0	0	0	0	0	0	17
06:00	0	39	6	4	3	2	1	0	0	0	0	0	0	0	55
07:00	0	91	32	9	14	5	0	0	1	0	0	0	0	0	152
08:00	1	117	38	9	11	2	5	0	0	0	0	0	0	0	183
09:00	2	138	34	7	17	6	2	0	0	0	0	0	0	0	206
10:00	0	112	60	4	12	2	2	0	0	0	0	0	0	0	192
11:00	1	156	60	4	12	5	3	0	1	0	0	0	0	0	242
12 PM	1	168	70	10	14	5	0	1	0	0	0	0	0	0	269
13:00	0	178	54	4	7	6	3	1	0	0	0	0	0	0	253
14:00	0	197	58	9	18	1	1	0	0	0	0	0	0	0	284
15:00	0	179	54	6	11	5	3	0	0	0	0	0	0	0	258
16:00	1	254	56	3	8	3	2	0	0	0	0	0	0	0	327
17:00	0	212	44	1	6	2	4	0	0	0	0	0	0	0	269
18:00	2	165	38	1	5	3	3	0	0	1	0	0	0	0	218
19:00	0	110	22	0	3	2	1	0	0	0	0	0	0	0	138
20:00	0	105	25	1	2	2	2	0	0	0	0	0	0	0	137
21:00	0	57	16	0	2	2	0	0	0	0	0	0	0	0	77
22:00	0	63	11	0	2	0	1	0	0	0	0	0	0	0	77
23:00	0	30	12	0	1	0	0	0	0	0	0	0	0	0	43
Total	8	2428	721	73	151	53	36	2	2	2	0	0	0	0	3476
Percent	0.2%	69.9%	20.7%	2.1%	4.3%	1.5%	1.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	10:00	07:00	09:00	09:00	08:00		07:00	01:00					
Vol.	2	156	60	9	17	6	5		1	1					
PM Peak	18:00	16:00	12:00	12:00	14:00	13:00	17:00	12:00		18:00					
Vol.	2	254	70	10	18	6	4	1		1					

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	19	8	0	0	0	0	0	0	0	0	0	0	0	27
01:00	0	27	4	0	0	0	0	0	0	0	0	0	0	0	31
02:00	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
03:00	0	12	3	1	1	0	0	0	0	0	0	0	0	0	17
04:00	0	8	7	1	0	1	0	0	0	0	0	0	0	0	17
05:00	0	6	5	2	0	0	0	0	0	0	0	0	0	0	13
06:00	0	18	6	0	1	1	0	0	0	0	0	0	0	0	26
07:00	0	48	16	2	4	4	1	0	0	0	0	0	0	0	75
08:00	0	84	23	1	6	0	0	0	0	0	0	0	0	0	114
09:00	1	96	17	0	6	1	1	0	0	0	0	0	0	0	122
10:00	1	113	40	3	6	1	2	0	0	0	0	0	0	0	166
11:00	1	122	34	1	5	1	1	0	0	0	0	0	0	0	165
12 PM	0	128	41	2	9	0	1	0	0	0	0	0	0	0	181
13:00	0	143	36	1	4	0	1	0	0	0	0	0	0	0	185
14:00	0	150	45	1	7	2	1	0	0	0	0	0	0	0	206
15:00	3	168	30	1	6	2	1	0	0	0	0	0	0	0	211
16:00	1	120	23	1	3	0	1	0	0	0	0	0	0	0	149
17:00	0	117	26	4	5	3	2	0	0	0	0	0	0	0	157
18:00	0	129	23	1	1	2	0	0	0	0	0	0	0	0	156
19:00	0	105	17	1	2	0	0	0	0	0	0	0	0	0	125
20:00	0	71	19	1	1	1	0	0	0	0	0	0	0	0	93
21:00	0	66	26	0	2	1	1	0	0	0	0	0	0	0	96
22:00	1	52	21	1	2	1	1	0	0	0	0	0	0	0	79
23:00	0	61	12	0	4	1	1	0	0	0	0	0	0	0	79
Total	8	1870	485	25	75	22	15	0	0	0	0	0	0	0	2500
Percent	0.3%	74.8%	19.4%	1.0%	3.0%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	10:00	10:00	08:00	07:00	10:00								
Vol.	1	122	40	3	6	4	2								
PM Peak	15:00	15:00	14:00	17:00	12:00	17:00	17:00								
Vol.	3	168	45	4	9	3	2								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	33	6	0	0	0	0	0	0	0	0	0	0	0	39
01:00	0	21	5	1	2	0	0	0	0	0	0	0	0	0	29
02:00	0	7	5	0	0	0	0	0	0	0	0	0	0	0	12
03:00	0	11	4	0	0	0	0	0	0	0	0	0	0	0	15
04:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	9	3	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	13	4	0	1	0	0	0	0	0	0	0	0	0	18
07:00	0	43	16	1	0	0	0	0	0	0	0	0	0	0	60
08:00	0	76	27	0	1	0	0	0	0	0	0	0	0	0	104
09:00	0	107	27	2	5	1	2	0	0	0	0	0	0	0	144
10:00	3	108	27	0	5	1	0	0	0	0	0	0	0	0	144
11:00	0	115	34	0	9	1	0	0	0	0	0	0	0	0	159
12 PM	2	122	47	0	7	2	2	0	0	0	0	0	0	0	182
13:00	5	152	42	2	2	2	1	0	0	0	0	0	1	0	207
14:00	1	167	42	0	4	0	0	0	0	0	0	0	0	0	214
15:00	3	127	44	0	4	1	2	0	0	0	0	0	0	0	181
16:00	0	132	30	2	6	2	1	0	0	0	0	0	0	0	173
17:00	0	135	35	1	3	3	0	0	0	0	0	0	0	0	177
18:00	1	124	18	0	4	0	1	0	0	0	0	0	0	0	148
19:00	0	80	23	0	1	0	1	0	0	0	0	0	0	0	105
20:00	0	82	13	0	1	1	1	0	0	0	0	0	0	0	98
21:00	0	59	15	0	2	1	1	0	0	0	0	0	0	0	78
22:00	0	38	15	0	3	0	0	0	0	0	0	0	0	0	56
23:00	0	26	9	0	2	0	0	0	0	0	0	0	0	0	37
Total	15	1791	492	9	62	15	12	0	0	0	0	0	1	0	2397
Percent	0.6%	74.7%	20.5%	0.4%	2.6%	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	09:00	11:00	09:00	09:00								
Vol.	3	115	34	2	9	1	2								
PM Peak	13:00	14:00	12:00	13:00	12:00	17:00	12:00						13:00		
Vol.	5	167	47	2	7	3	2						1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	13	3	0	0	0	1	0	0	0	0	0	0	0	17
01:00	0	6	2	0	0	0	1	0	0	0	0	0	0	0	9
02:00	0	2	3	0	0	1	0	0	0	0	0	0	0	0	6
03:00	0	6	1	0	1	0	0	0	0	0	0	0	0	0	8
04:00	0	3	4	1	1	0	0	0	0	0	0	0	0	0	9
05:00	0	13	5	0	0	0	0	0	1	0	0	0	0	0	19
06:00	0	30	9	5	5	3	1	0	0	0	0	0	0	0	53
07:00	0	86	24	9	10	1	0	0	0	0	0	0	0	0	130
08:00	0	101	37	13	11	1	3	0	0	0	0	0	0	0	166
09:00	4	103	44	8	18	3	0	0	0	0	0	0	0	0	180
10:00	1	112	44	5	18	4	1	0	0	0	0	0	0	0	185
11:00	0	120	43	3	18	3	4	0	1	0	0	0	0	0	192
12 PM	2	147	58	3	20	6	1	0	0	0	0	0	0	0	237
13:00	1	141	45	5	13	2	1	0	0	0	0	0	0	0	208
14:00	0	155	39	7	15	3	1	0	0	0	0	0	0	0	220
15:00	1	201	53	8	22	4	2	0	0	0	0	0	0	0	291
16:00	1	218	57	7	13	3	0	0	0	0	0	0	0	0	299
17:00	0	235	58	4	4	3	1	0	0	0	0	0	0	0	305
18:00	1	160	44	0	5	4	4	0	0	0	0	0	0	0	218
19:00	0	123	30	3	4	1	0	0	0	0	0	0	0	0	161
20:00	0	97	24	2	2	2	0	0	0	0	0	0	0	0	127
21:00	0	73	25	1	1	1	1	0	0	0	0	0	0	0	102
22:00	0	50	8	0	0	0	0	0	0	0	0	0	0	0	58
23:00	0	31	13	0	1	0	0	0	0	0	0	0	0	0	45
Total	11	2226	673	84	182	45	22	0	2	0	0	0	0	0	3245
Percent	0.3%	68.6%	20.7%	2.6%	5.6%	1.4%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	09:00	08:00	09:00	10:00	11:00		05:00						
Vol.	4	120	44	13	18	4	4		1						
PM Peak	12:00	17:00	12:00	15:00	15:00	12:00	18:00								
Vol.	2	235	58	8	22	6	4								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	13	8	0	1	0	1	0	0	0	0	0	0	0	23
01:00	0	5	3	0	1	0	1	0	0	0	0	0	0	0	10
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	5	1	0	2	0	0	0	0	0	0	0	0	0	8
05:00	0	6	4	0	0	1	0	0	0	0	0	0	0	0	11
06:00	1	31	6	6	5	3	1	0	0	0	0	0	0	0	53
07:00	0	93	25	7	16	3	0	0	0	0	0	0	0	0	144
08:00	0	103	45	7	15	2	0	0	0	0	0	0	0	0	172
09:00	2	124	53	5	18	2	1	0	0	2	0	0	0	0	207
10:00	1	107	45	5	11	4	3	0	0	0	0	0	0	0	176
11:00	1	125	61	2	17	4	0	0	0	0	0	0	0	0	210
12 PM	0	158	51	5	14	3	2	0	1	0	0	0	0	0	234
13:00	0	152	63	6	9	5	2	0	0	1	0	0	0	0	238
14:00	0	157	42	7	15	2	0	0	0	0	0	0	0	0	223
15:00	0	215	62	6	14	0	0	0	0	0	0	0	0	0	297
16:00	0	225	55	7	14	2	1	0	0	0	0	0	0	0	304
17:00	0	247	66	2	7	1	0	0	0	0	0	0	0	0	323
18:00	0	165	42	4	5	1	1	0	0	0	0	0	1	0	219
19:00	0	114	35	2	6	3	2	0	0	0	0	0	0	0	162
20:00	0	89	30	2	4	0	0	0	0	0	0	0	0	0	125
21:00	0	53	18	0	1	1	0	0	0	0	0	0	0	0	73
22:00	0	52	13	0	0	1	0	0	0	0	0	0	0	0	66
23:00	0	38	10	0	0	1	0	0	0	0	0	0	0	0	49
Total	5	2284	742	73	175	39	15	0	1	3	0	0	1	0	3338
Percent	0.1%	68.4%	22.2%	2.2%	5.2%	1.2%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	07:00	09:00	10:00	10:00			09:00					
Vol.	2	125	61	7	18	4	3			2					
PM Peak		17:00	17:00	14:00	14:00	13:00	12:00		12:00	13:00			18:00		
Vol.		247	66	7	15	5	2		1	1			1		
Grand Total	60	15132	4469	430	960	255	194	4	10	5	0	0	2	0	21521
Percent	0.3%	70.3%	20.8%	2.0%	4.5%	1.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	1	1	1	15	3	0	0	0	0	0	0	0	0	0	21	29	33
01:00	0	1	2	3	1	0	0	0	0	0	0	0	0	0	7	29	33
02:00	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	28	29
03:00	0	1	2	2	5	0	0	0	0	0	0	0	0	0	10	33	34
04:00	0	0	4	7	3	0	0	0	0	0	0	0	0	0	14	31	33
05:00	0	1	3	5	3	0	0	0	0	0	0	0	0	0	12	32	34
06:00	0	3	17	34	8	0	0	0	0	0	0	0	0	0	62	29	33
07:00	2	6	29	98	26	2	0	0	0	0	0	0	0	0	163	30	33
08:00	0	5	37	82	**46**	**4**	0	0	0	0	0	0	0	0	174	32	34
09:00	**4**	5	**44**	88	32	0	0	0	0	0	0	0	0	0	173	30	33
10:00	0	**14**	29	93	38	2	0	0	0	0	0	0	0	0	176	31	34
11:00	0	7	22	**107**	41	1	0	0	0	0	0	0	0	0	**178**	31	34
12 PM	4	16	42	120	34	2	0	0	0	0	0	0	0	0	218	30	33
13:00	0	6	53	123	33	1	0	0	0	0	0	0	0	0	216	30	33
14:00	0	7	40	119	34	**3**	**1**	0	0	0	0	0	0	0	204	31	34
15:00	**5**	**19**	80	142	**40**	1	0	0	0	0	0	0	0	0	287	29	33
16:00	1	6	67	**176**	37	1	0	0	0	0	0	0	0	0	288	29	33
17:00	2	13	**86**	171	33	1	0	0	0	0	0	0	0	0	**306**	29	32
18:00	3	8	38	142	19	1	0	0	0	0	0	0	0	0	211	29	32
19:00	0	6	48	85	22	1	0	0	0	0	0	0	0	0	162	29	33
20:00	2	3	27	55	24	2	0	0	0	0	0	0	0	0	113	31	34
21:00	1	2	13	69	28	1	0	0	0	0	0	0	0	0	114	32	34
22:00	1	4	7	30	20	3	0	0	0	0	0	0	0	0	65	33	34
23:00	1	2	7	17	10	3	0	0	0	0	0	0	0	0	40	33	36
Total	27	136	699	1785	540	29	1	0	0	0	0	0	0	0	3217		
Percent	0.8%	4.2%	21.7%	55.5%	16.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	09:00	11:00	08:00	08:00									11:00		
Vol.	4	14	44	107	46	4									178		
PM Peak	15:00	15:00	17:00	16:00	15:00	14:00	14:00								17:00		
Vol.	5	19	86	176	40	3	1								306		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	1	0	4	18	4	0	0	0	0	0	0	0	0	0	27	29	33
01:00	0	0	2	2	6	0	0	0	0	0	0	0	0	0	10	33	34
02:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	29	29
03:00	0	0	0	3	2	0	0	0	0	0	0	0	0	0	5	33	34
04:00	0	0	1	5	1	0	0	0	0	0	0	0	0	0	7	29	33
05:00	0	0	5	10	4	0	0	0	0	0	0	0	0	0	19	31	33
06:00	1	6	10	30	20	1	**1**	0	0	0	0	0	0	0	69	32	34
07:00	0	2	26	86	32	2	0	0	0	0	0	0	0	0	148	31	34
08:00	1	4	34	103	31	2	0	0	0	0	0	0	0	0	175	31	33
09:00	**6**	5	32	104	37	**3**	0	0	0	0	0	0	0	0	**187**	31	34
10:00	2	7	27	**107**	18	3	0	0	0	0	0	0	0	0	164	29	33
11:00	2	**13**	**40**	83	**38**	0	0	0	0	0	0	0	0	0	176	31	33
12 PM	4	3	32	131	**47**	**3**	0	0	0	0	0	0	0	0	220	31	34
13:00	4	17	50	124	30	2	0	0	0	0	0	0	0	0	227	29	33
14:00	7	**26**	65	114	27	1	0	0	0	0	0	0	0	0	240	29	32
15:00	1	6	74	142	31	2	0	0	0	0	0	0	0	0	256	29	33
16:00	4	24	**132**	137	37	2	0	0	0	0	0	0	0	0	336	29	32
17:00	**10**	11	90	**215**	32	2	0	0	0	0	0	0	0	0	**360**	29	32
18:00	1	7	49	121	24	2	0	0	0	0	0	0	0	0	204	29	33
19:00	0	16	34	104	19	0	0	0	0	0	0	0	0	0	173	29	32
20:00	0	3	21	61	20	0	0	0	0	0	0	0	0	0	105	31	33
21:00	1	4	15	71	18	0	0	0	0	0	0	0	0	0	109	30	33
22:00	0	3	20	41	11	0	0	0	0	0	0	0	0	0	75	29	33
23:00	0	1	13	27	9	3	0	0	0	0	0	0	0	0	53	32	35
Total	45	158	776	1842	498	28	1	0	0	0	0	0	0	0	3348		
Percent	1.3%	4.7%	23.2%	55.0%	14.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	11:00	10:00	11:00	09:00	06:00								09:00		
Vol.	6	13	40	107	38	3	1								187		
PM Peak	17:00	14:00	16:00	17:00	12:00	12:00									17:00		
Vol.	10	26	132	215	47	3									360		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	1	4	13	9	0	0	0	0	0	0	0	0	0	27	32	34
01:00	2	0	3	10	5	0	0	0	0	0	0	0	0	0	20	32	34
02:00	0	0	2	4	2	0	0	0	0	0	0	0	0	0	8	32	34
03:00	0	0	3	6	3	1	0	0	0	0	0	0	0	0	13	33	36
04:00	0	1	1	5	4	0	0	0	0	0	0	0	0	0	11	32	34
05:00	0	2	4	6	5	0	0	0	0	0	0	0	0	0	17	32	34
06:00	0	1	11	33	9	1	0	0	0	0	0	0	0	0	55	30	34
07:00	1	3	34	73	37	4	0	0	0	0	0	0	0	0	152	32	34
08:00	5	3	**51**	76	43	**5**	0	0	0	0	0	0	0	0	183	32	34
09:00	2	**16**	40	116	27	4	**1**	0	0	0	0	0	0	0	206	30	34
10:00	4	5	36	97	**45**	5	0	0	0	0	0	0	0	0	192	32	34
11:00	**8**	14	51	**129**	34	5	1	0	0	0	0	0	0	0	**242**	30	34
12 PM	2	19	61	151	**34**	2	0	0	0	0	0	0	0	0	269	29	33
13:00	3	**23**	69	128	26	**4**	0	0	0	0	0	0	0	0	253	29	33
14:00	1	16	63	170	31	3	0	0	0	0	0	0	0	0	284	29	33
15:00	2	12	71	142	29	2	0	0	0	0	0	0	0	0	258	29	33
16:00	**10**	14	**84**	**183**	34	2	0	0	0	0	0	0	0	0	**327**	29	32
17:00	4	16	49	167	32	1	0	0	0	0	0	0	0	0	269	29	33
18:00	4	21	51	120	20	1	**1**	0	0	0	0	0	0	0	218	29	32
19:00	2	5	30	82	18	1	0	0	0	0	0	0	0	0	138	29	33
20:00	1	8	23	89	11	4	1	0	0	0	0	0	0	0	137	29	34
21:00	1	1	15	52	8	0	0	0	0	0	0	0	0	0	77	29	32
22:00	0	6	11	47	11	2	0	0	0	0	0	0	0	0	77	30	34
23:00	0	0	9	21	11	2	0	0	0	0	0	0	0	0	43	32	34
Total	52	187	776	1920	488	49	4	0	0	0	0	0	0	0	3476		
Percent	1.5%	5.4%	22.3%	55.2%	14.0%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	08:00	11:00	10:00	08:00	09:00								11:00		
Vol.	8	16	51	129	45	5	1								242		
PM Peak	16:00	13:00	16:00	16:00	12:00	13:00	18:00								16:00		
Vol.	10	23	84	183	34	4	1								327		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	2	17	8	0	0	0	0	0	0	0	0	0	27	32	34
01:00	0	0	8	14	7	2	0	0	0	0	0	0	0	0	31	33	36
02:00	0	0	2	5	3	0	0	0	0	0	0	0	0	0	10	32	34
03:00	0	0	4	5	7	1	0	0	0	0	0	0	0	0	17	33	35
04:00	0	0	4	8	3	1	**1**	0	0	0	0	0	0	0	17	34	40
05:00	0	0	1	8	3	1	0	0	0	0	0	0	0	0	13	33	36
06:00	0	1	3	13	9	0	0	0	0	0	0	0	0	0	26	32	34
07:00	0	2	17	33	21	2	0	0	0	0	0	0	0	0	75	32	34
08:00	0	6	12	61	30	**5**	0	0	0	0	0	0	0	0	114	32	34
09:00	**1**	5	19	69	27	1	0	0	0	0	0	0	0	0	122	31	34
10:00	0	2	**30**	**104**	29	1	0	0	0	0	0	0	0	0	**166**	30	33
11:00	1	**17**	23	91	**31**	2	0	0	0	0	0	0	0	0	165	31	33
12 PM	0	1	20	119	**41**	0	0	0	0	0	0	0	0	0	181	31	33
13:00	**6**	5	27	110	32	**4**	**1**	0	0	0	0	0	0	0	185	31	34
14:00	5	5	37	**132**	26	1	0	0	0	0	0	0	0	0	206	29	33
15:00	5	7	40	123	35	0	0	**1**	0	0	0	0	0	0	**211**	30	33
16:00	1	**9**	34	71	31	2	1	0	0	0	0	0	0	0	149	31	34
17:00	3	8	**47**	79	19	1	0	0	0	0	0	0	0	0	157	29	33
18:00	4	5	24	99	24	0	0	0	0	0	0	0	0	0	156	30	33
19:00	2	1	19	78	22	2	1	0	0	0	0	0	0	0	125	31	34
20:00	0	2	15	53	21	2	0	0	0	0	0	0	0	0	93	32	34
21:00	1	6	16	65	7	1	0	0	0	0	0	0	0	0	96	29	32
22:00	0	2	19	40	17	1	0	0	0	0	0	0	0	0	79	31	34
23:00	1	7	16	40	15	0	0	0	0	0	0	0	0	0	79	31	33
Total	30	91	439	1437	468	30	4	1	0	0	0	0	0	0	2500		
Percent	1.2%	3.6%	17.6%	57.5%	18.7%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	10:00	10:00	11:00	08:00	04:00								10:00		
Vol.	1	17	30	104	31	5	1								166		
PM Peak	13:00	16:00	17:00	14:00	12:00	13:00	13:00	15:00							15:00		
Vol.	6	9	47	132	41	4	1	1							211		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	8	25	5	1	0	0	0	0	0	0	0	0	39	30	34
01:00	0	0	1	17	7	3	1	0	0	0	0	0	0	0	29	34	39
02:00	0	0	0	7	5	0	0	0	0	0	0	0	0	0	12	33	34
03:00	0	0	3	9	3	0	0	0	0	0	0	0	0	0	15	31	33
04:00	0	2	0	2	1	0	0	0	0	0	0	0	0	0	5	31	33
05:00	0	0	2	3	5	1	1	0	0	0	0	0	0	0	12	35	41
06:00	0	0	5	8	5	0	0	0	0	0	0	0	0	0	18	32	34
07:00	0	0	8	32	18	2	0	0	0	0	0	0	0	0	60	33	34
08:00	0	1	15	61	23	**4**	0	0	0	0	0	0	0	0	104	32	34
09:00	**1**	**9**	20	82	26	4	**2**	0	0	0	0	0	0	0	144	31	34
10:00	0	9	21	82	29	3	0	0	0	0	0	0	0	0	144	31	34
11:00	0	4	**24**	**90**	**38**	3	0	0	0	0	0	0	0	0	**159**	32	34
12 PM	1	**11**	30	93	**43**	4	0	0	0	0	0	0	0	0	182	32	34
13:00	2	5	27	126	43	4	0	0	0	0	0	0	0	0	207	31	34
14:00	0	1	37	**131**	43	2	0	0	0	0	0	0	0	0	**214**	31	33
15:00	3	10	36	82	43	**6**	**1**	0	0	0	0	0	0	0	181	32	34
16:00	2	5	41	93	28	4	0	0	0	0	0	0	0	0	173	31	34
17:00	4	8	**43**	103	19	0	0	0	0	0	0	0	0	0	177	29	32
18:00	2	7	38	77	22	1	1	0	0	0	0	0	0	0	148	30	33
19:00	1	3	12	65	23	1	0	0	0	0	0	0	0	0	105	31	34
20:00	**5**	5	15	57	16	0	0	0	0	0	0	0	0	0	98	30	33
21:00	0	2	15	45	15	1	0	0	0	0	0	0	0	0	78	31	34
22:00	0	2	7	28	18	1	0	0	0	0	0	0	0	0	56	32	34
23:00	0	0	8	19	9	1	0	0	0	0	0	0	0	0	37	32	34
Total	21	84	416	1337	487	46	6	0	0	0	0	0	0	0	2397		
Percent	0.9%	3.5%	17.4%	55.8%	20.3%	1.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	09:00	11:00	11:00	11:00	08:00	09:00								11:00		
Vol.	1	9	24	90	38	4	2								159		
PM Peak	20:00	12:00	17:00	14:00	12:00	15:00	15:00								14:00		
Vol.	5	11	43	131	43	6	1								214		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	1	5	8	2	1	0	0	0	0	0	0	0	0	17	31	35
01:00	0	1	1	3	3	1	0	0	0	0	0	0	0	0	9	34	37
02:00	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6	32	34
03:00	0	0	2	4	2	0	0	0	0	0	0	0	0	0	8	32	34
04:00	0	0	1	5	1	2	0	0	0	0	0	0	0	0	9	36	38
05:00	0	0	1	13	4	0	**1**	0	0	0	0	0	0	0	19	32	40
06:00	2	4	9	28	10	0	0	0	0	0	0	0	0	0	53	31	33
07:00	0	6	25	61	35	**3**	0	0	0	0	0	0	0	0	130	32	34
08:00	4	8	35	83	35	1	0	0	0	0	0	0	0	0	166	31	33
09:00	**10**	8	32	96	33	1	0	0	0	0	0	0	0	0	180	31	33
10:00	1	8	41	92	**42**	1	0	0	0	0	0	0	0	0	185	31	34
11:00	3	**9**	**47**	**104**	27	2	0	0	0	0	0	0	0	0	**192**	30	33
12 PM	3	12	**86**	111	24	1	0	0	0	0	0	0	0	0	237	29	32
13:00	6	6	40	128	26	2	0	0	0	0	0	0	0	0	208	29	33
14:00	5	**22**	57	98	**36**	2	0	0	0	0	0	0	0	0	220	30	33
15:00	**7**	15	80	166	22	1	0	0	0	0	0	0	0	0	291	29	31
16:00	6	11	59	**198**	25	0	0	0	0	0	0	0	0	0	299	29	32
17:00	6	12	81	181	22	2	**1**	0	0	0	0	0	0	0	**305**	29	32
18:00	6	16	40	128	24	**4**	0	0	0	0	0	0	0	0	218	29	33
19:00	0	1	49	81	29	1	0	0	0	0	0	0	0	0	161	31	33
20:00	0	3	31	75	18	0	0	0	0	0	0	0	0	0	127	29	33
21:00	4	2	23	57	14	2	0	0	0	0	0	0	0	0	102	30	33
22:00	0	0	6	37	14	1	0	0	0	0	0	0	0	0	58	32	34
23:00	0	1	11	21	8	4	0	0	0	0	0	0	0	0	45	33	37
Total	63	146	763	1781	458	32	2	0	0	0	0	0	0	0	3245		
Percent	1.9%	4.5%	23.5%	54.9%	14.1%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	11:00	11:00	10:00	07:00	05:00								11:00		
Vol.	10	9	47	104	42	3	1								192		
PM Peak	15:00	14:00	12:00	16:00	14:00	18:00	17:00								17:00		
Vol.	7	22	86	198	36	4	1								305		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-NB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	1	0	1	14	7	0	0	0	0	0	0	0	0	0	23	32	34
01:00	0	1	1	7	1	0	0	0	0	0	0	0	0	0	10	29	32
02:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	33	34
03:00	0	0	1	5	0	1	0	0	0	0	0	0	0	0	7	29	38
04:00	0	0	1	6	1	0	0	0	0	0	0	0	0	0	8	29	33
05:00	0	0	1	7	3	0	0	0	0	0	0	0	0	0	11	32	34
06:00	1	1	11	28	10	2	0	0	0	0	0	0	0	0	53	32	34
07:00	0	1	23	85	32	**3**	0	0	0	0	0	0	0	0	144	32	34
08:00	0	4	26	92	**48**	2	0	0	0	0	0	0	0	0	172	32	34
09:00	1	7	**67**	95	36	1	0	0	0	0	0	0	0	0	207	30	33
10:00	**4**	8	31	106	26	1	0	0	0	0	0	0	0	0	176	30	33
11:00	2	**10**	34	**133**	30	1	0	0	0	0	0	0	0	0	**210**	29	33
12 PM	3	12	45	138	31	**5**	0	0	0	0	0	0	0	0	234	30	33
13:00	4	13	69	122	28	2	0	0	0	0	0	0	0	0	238	29	33
14:00	3	5	45	130	36	2	**2**	0	0	0	0	0	0	0	223	30	34
15:00	**6**	13	82	155	**39**	2	0	0	0	0	0	0	0	0	297	29	33
16:00	4	13	**87**	172	27	1	0	0	0	0	0	0	0	0	304	29	32
17:00	4	11	86	**185**	37	0	0	0	0	0	0	0	0	0	**323**	29	32
18:00	3	**14**	62	116	21	1	2	0	0	0	0	0	0	0	219	29	33
19:00	0	10	43	82	27	0	0	0	0	0	0	0	0	0	162	30	33
20:00	0	2	31	70	19	2	1	0	0	0	0	0	0	0	125	30	34
21:00	2	1	9	41	19	1	0	0	0	0	0	0	0	0	73	32	34
22:00	0	3	9	42	10	2	0	0	0	0	0	0	0	0	66	31	34
23:00	0	1	7	30	11	0	0	0	0	0	0	0	0	0	49	31	33
Total	38	130	773	1862	501	29	5	0	0	0	0	0	0	0	3338		
Percent	1.1%	3.9%	23.2%	55.8%	15.0%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	09:00	11:00	08:00	07:00									11:00		
Vol.	4	10	67	133	48	3									210		
PM Peak	15:00	18:00	16:00	17:00	15:00	12:00	14:00								17:00		
Vol.	6	14	87	185	39	5	2								323		
Grand Total	276	932	4642	11964	3440	243	23	1	0	0	0	0	0	0	21521		
Percent	1.3%	4.3%	21.6%	55.6%	16.0%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	22 MPH
50th Percentile :	27 MPH
85th Percentile :	30 MPH
95th Percentile :	33 MPH

Statistics

10 MPH Pace Speed :	21-30 MPH
Number in Pace :	16606
Percent in Pace :	77.2%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	27 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	94	98	107	100	117	179	119
01:00	*	*	34	36	38	36	114	105	65
02:00	*	*	27	27	33	29	50	69	41
03:00	*	*	31	33	36	33	44	50	39
04:00	*	*	64	66	61	64	52	40	57
05:00	*	*	162	166	141	156	77	57	121
06:00	*	*	421	405	371	399	122	111	286
07:00	*	*	635	611	621	622	255	192	463
08:00	*	*	**851**	**768**	**773**	**797**	317	336	**609**
09:00	*	*	600	595	626	607	391	407	524
10:00	*	*	446	459	559	488	443	483	478
11:00	*	*	488	482	615	528	**474**	**539**	520
12:00 PM	*	*	565	559	686	603	454	570	567
01:00	*	*	539	501	**710**	583	**567**	528	569
02:00	*	*	607	611	675	631	508	599	600
03:00	*	*	631	610	706	649	499	**616**	612
04:00	*	*	**700**	**730**	605	**678**	479	607	**624**
05:00	*	*	651	579	548	593	500	485	553
06:00	*	*	583	575	476	545	517	458	522
07:00	*	*	489	515	435	480	429	360	446
08:00	*	*	398	456	321	392	344	326	369
09:00	*	*	323	319	327	323	357	248	315
10:00	*	*	254	249	273	259	285	192	251
11:00	*	*	161	201	177	180	252	143	187
Day Total	0	0	9754	9651	9920	9775	7647	7700	8937
% Avg. WkDay	0.0%	0.0%	99.8%	98.7%	101.5%				
% Avg. Week	0.0%	0.0%	109.1%	108.0%	111.0%	109.4%	85.6%	86.2%	
AM Peak	-	-	08:00	08:00	08:00	08:00	11:00	11:00	08:00
Vol.	-	-	851	768	773	797	474	539	609
PM Peak	-	-	16:00	16:00	13:00	16:00	13:00	15:00	16:00
Vol.	-	-	700	730	710	678	567	616	624

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	98	82	*	*	*	90	*	*	90
01:00	39	40	*	*	*	40	*	*	40
02:00	27	23	*	*	*	25	*	*	25
03:00	30	18	*	*	*	24	*	*	24
04:00	51	61	*	*	*	56	*	*	56
05:00	147	150	*	*	*	148	*	*	148
06:00	392	438	*	*	*	415	*	*	415
07:00	602	634	*	*	*	618	*	*	618
08:00	**776**	**782**	*	*	*	**779**	*	*	**779**
09:00	671	614	*	*	*	642	*	*	642
10:00	460	483	*	*	*	472	*	*	472
11:00	459	512	*	*	*	486	*	*	486
12:00 PM	546	532	*	*	*	539	*	*	539
01:00	534	526	*	*	*	530	*	*	530
02:00	605	656	*	*	*	630	*	*	630
03:00	653	666	*	*	*	660	*	*	660
04:00	**708**	**721**	*	*	*	**714**	*	*	**714**
05:00	615	616	*	*	*	616	*	*	616
06:00	527	585	*	*	*	556	*	*	556
07:00	466	480	*	*	*	473	*	*	473
08:00	367	369	*	*	*	368	*	*	368
09:00	261	284	*	*	*	272	*	*	272
10:00	216	213	*	*	*	214	*	*	214
11:00	165	158	*	*	*	162	*	*	162
Day Total	9415	9643	0	0	0	9529	0	0	9529
% Avg. WkDay	98.8%	101.2%	0.0%	0.0%	0.0%				
% Avg. Week	98.8%	101.2%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	776	782	-	-	-	779	-	-	779
PM Peak	16:00	16:00	-	-	-	16:00	-	-	16:00
Vol.	708	721	-	-	-	714	-	-	714

Grand Total	9415	9643	9754	9651	9920	19304	7647	7700	18466

ADT ADT 9,104 AADT 9,104

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	86	7	0	1	0	0	0	0	0	0	0	0	0	94
01:00	0	33	0	0	1	0	0	0	0	0	0	0	0	0	34
02:00	0	24	2	0	1	0	0	0	0	0	0	0	0	0	27
03:00	0	30	1	0	0	0	0	0	0	0	0	0	0	0	31
04:00	0	54	8	0	2	0	0	0	0	0	0	0	0	0	64
05:00	0	144	14	0	4	0	0	0	0	0	0	0	0	0	162
06:00	0	369	36	5	10	1	0	0	0	0	0	0	0	0	421
07:00	1	550	55	8	18	3	0	0	0	0	0	0	0	0	635
08:00	6	735	81	9	15	2	2	1	0	0	0	0	0	0	851
09:00	0	531	52	9	6	1	1	0	0	0	0	0	0	0	600
10:00	0	393	40	2	9	1	1	0	0	0	0	0	0	0	446
11:00	1	421	49	2	14	0	1	0	0	0	0	0	0	0	488
12 PM	1	491	50	6	13	2	1	1	0	0	0	0	0	0	565
13:00	2	456	70	2	8	0	1	0	0	0	0	0	0	0	539
14:00	6	522	57	6	16	0	0	0	0	0	0	0	0	0	607
15:00	3	546	54	11	15	0	2	0	0	0	0	0	0	0	631
16:00	10	599	67	9	12	0	3	0	0	0	0	0	0	0	700
17:00	4	582	50	6	6	1	2	0	0	0	0	0	0	0	651
18:00	5	524	45	2	6	0	1	0	0	0	0	0	0	0	583
19:00	4	453	24	2	4	1	1	0	0	0	0	0	0	0	489
20:00	1	360	33	1	2	1	0	0	0	0	0	0	0	0	398
21:00	0	306	14	2	1	0	0	0	0	0	0	0	0	0	323
22:00	0	237	15	0	2	0	0	0	0	0	0	0	0	0	254
23:00	0	150	10	0	1	0	0	0	0	0	0	0	0	0	161
Total	44	8596	834	82	167	13	16	2	0	0	0	0	0	0	9754
Percent	0.5%	88.1%	8.6%	0.8%	1.7%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	07:00	07:00	08:00	08:00							
Vol.	6	735	81	9	18	3	2	1							
PM Peak	16:00	16:00	13:00	15:00	14:00	12:00	16:00	12:00							
Vol.	10	599	70	11	16	2	3	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	1	95	2	0	0	0	0	0	0	0	0	0	0	0	98
01:00	0	30	6	0	0	0	0	0	0	0	0	0	0	0	36
02:00	0	26	0	0	0	1	0	0	0	0	0	0	0	0	27
03:00	0	32	0	0	1	0	0	0	0	0	0	0	0	0	33
04:00	0	58	8	0	0	0	0	0	0	0	0	0	0	0	66
05:00	0	155	9	0	1	1	0	0	0	0	0	0	0	0	166
06:00	0	356	32	5	12	0	0	0	0	0	0	0	0	0	405
07:00	2	531	48	8	21	1	0	0	0	0	0	0	0	0	611
08:00	5	671	73	10	7	1	1	0	0	0	0	0	0	0	768
09:00	1	522	56	5	8	1	1	0	1	0	0	0	0	0	595
10:00	5	392	49	2	8	1	2	0	0	0	0	0	0	0	459
11:00	3	411	47	5	14	1	1	0	0	0	0	0	0	0	482
12 PM	6	479	58	2	11	3	0	0	0	0	0	0	0	0	559
13:00	1	425	56	4	15	0	0	0	0	0	0	0	0	0	501
14:00	7	531	56	4	10	0	2	0	1	0	0	0	0	0	611
15:00	9	531	42	7	15	0	3	1	1	0	0	0	1	0	610
16:00	10	631	63	8	9	3	4	0	0	0	0	0	2	0	730
17:00	6	515	39	4	7	1	3	0	0	0	0	1	3	0	579
18:00	3	523	37	3	7	0	2	0	0	0	0	0	0	0	575
19:00	3	468	35	2	6	0	1	0	0	0	0	0	0	0	515
20:00	3	424	25	2	1	0	1	0	0	0	0	0	0	0	456
21:00	0	296	19	1	3	0	0	0	0	0	0	0	0	0	319
22:00	0	231	16	0	2	0	0	0	0	0	0	0	0	0	249
23:00	1	183	16	0	0	0	1	0	0	0	0	0	0	0	201
Total	66	8516	792	72	158	14	22	1	3	0	0	1	6	0	9651
Percent	0.7%	88.2%	8.2%	0.7%	1.6%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	07:00	02:00	10:00		09:00						
Vol.	5	671	73	10	21	1	2		1						
PM Peak	16:00	16:00	16:00	16:00	13:00	12:00	16:00	15:00	14:00			17:00	17:00		
Vol.	10	631	63	8	15	3	4	1	1			1	3		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	101	4	0	2	0	0	0	0	0	0	0	0	0	107
01:00	0	34	4	0	0	0	0	0	0	0	0	0	0	0	38
02:00	0	30	3	0	0	0	0	0	0	0	0	0	0	0	33
03:00	0	32	4	0	0	0	0	0	0	0	0	0	0	0	36
04:00	0	50	10	0	1	0	0	0	0	0	0	0	0	0	61
05:00	0	125	13	0	3	0	0	0	0	0	0	0	0	0	141
06:00	3	319	36	3	9	1	0	0	0	0	0	0	0	0	371
07:00	3	535	59	6	15	1	2	0	0	0	0	0	0	0	621
08:00	3	678	65	12	13	1	0	0	1	0	0	0	0	0	773
09:00	2	562	41	2	14	5	0	0	0	0	0	0	0	0	626
10:00	1	489	54	2	12	0	1	0	0	0	0	0	0	0	559
11:00	2	538	56	4	14	1	0	0	0	0	0	0	0	0	615
12 PM	6	602	55	9	8	2	3	0	1	0	0	0	0	0	686
13:00	4	628	60	5	9	1	3	0	0	0	0	0	0	0	710
14:00	7	588	54	5	18	2	1	0	0	0	0	0	0	0	675
15:00	16	619	48	7	14	1	1	0	0	0	0	0	0	0	706
16:00	9	530	50	3	8	3	2	0	0	0	0	0	0	0	605
17:00	7	495	35	2	8	1	0	0	0	0	0	0	0	0	548
18:00	0	441	26	2	5	0	1	1	0	0	0	0	0	0	476
19:00	4	407	19	0	5	0	0	0	0	0	0	0	0	0	435
20:00	2	295	21	3	0	0	0	0	0	0	0	0	0	0	321
21:00	0	310	13	0	3	0	1	0	0	0	0	0	0	0	327
22:00	0	258	15	0	0	0	0	0	0	0	0	0	0	0	273
23:00	1	166	10	0	0	0	0	0	0	0	0	0	0	0	177
Total	70	8832	755	65	161	19	15	1	2	0	0	0	0	0	9920
Percent	0.7%	89.0%	7.6%	0.7%	1.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	08:00	08:00	08:00	07:00	09:00	07:00		08:00						
Vol.	3	678	65	12	15	5	2		1						
PM Peak	15:00	13:00	13:00	12:00	14:00	16:00	12:00	18:00	12:00						
Vol.	16	628	60	9	18	3	3	1	1						

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	111	5	0	1	0	0	0	0	0	0	0	0	0	117
01:00	0	100	14	0	0	0	0	0	0	0	0	0	0	0	114
02:00	0	48	2	0	0	0	0	0	0	0	0	0	0	0	50
03:00	0	41	2	1	0	0	0	0	0	0	0	0	0	0	44
04:00	0	47	2	1	1	1	0	0	0	0	0	0	0	0	52
05:00	0	67	9	0	1	0	0	0	0	0	0	0	0	0	77
06:00	0	106	14	1	0	1	0	0	0	0	0	0	0	0	122
07:00	0	226	24	1	2	2	0	0	0	0	0	0	0	0	255
08:00	0	283	26	1	5	2	0	0	0	0	0	0	0	0	317
09:00	1	349	36	1	3	0	0	1	0	0	0	0	0	0	391
10:00	4	403	32	0	2	1	0	0	0	0	0	0	1	0	443
11:00	1	433	34	3	3	0	0	0	0	0	0	0	0	0	474
12 PM	1	407	40	3	3	0	0	0	0	0	0	0	0	0	454
13:00	7	516	30	3	9	1	1	0	0	0	0	0	0	0	567
14:00	7	457	34	1	8	0	1	0	0	0	0	0	0	0	508
15:00	7	443	43	2	4	0	0	0	0	0	0	0	0	0	499
16:00	9	423	41	1	4	0	1	0	0	0	0	0	0	0	479
17:00	1	462	31	2	2	0	2	0	0	0	0	0	0	0	500
18:00	6	480	27	1	2	0	1	0	0	0	0	0	0	0	517
19:00	0	390	36	1	1	1	0	0	0	0	0	0	0	0	429
20:00	0	332	9	2	1	0	0	0	0	0	0	0	0	0	344
21:00	2	334	19	1	1	0	0	0	0	0	0	0	0	0	357
22:00	1	270	12	1	1	0	0	0	0	0	0	0	0	0	285
23:00	1	230	18	1	1	1	0	0	0	0	0	0	0	0	252
Total	48	6958	540	28	55	10	6	1	0	0	0	0	1	0	7647
Percent	0.6%	91.0%	7.1%	0.4%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	09:00	11:00	08:00	07:00		09:00					10:00		
Vol.	4	433	36	3	5	2		1					1		
PM Peak	16:00	13:00	15:00	12:00	13:00	13:00	17:00								
Vol.	9	516	43	3	9	1	2								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	169	10	0	0	0	0	0	0	0	0	0	0	0	179
01:00	0	93	10	1	1	0	0	0	0	0	0	0	0	0	105
02:00	0	64	5	0	0	0	0	0	0	0	0	0	0	0	69
03:00	0	48	1	0	1	0	0	0	0	0	0	0	0	0	50
04:00	0	36	4	0	0	0	0	0	0	0	0	0	0	0	40
05:00	0	51	5	0	1	0	0	0	0	0	0	0	0	0	57
06:00	0	100	8	0	3	0	0	0	0	0	0	0	0	0	111
07:00	0	175	12	2	3	0	0	0	0	0	0	0	0	0	192
08:00	0	312	23	0	1	0	0	0	0	0	0	0	0	0	336
09:00	0	370	33	1	2	1	0	0	0	0	0	0	0	0	407
10:00	1	440	39	0	3	0	0	0	0	0	0	0	0	0	483
11:00	1	494	40	0	4	0	0	0	0	0	0	0	0	0	539
12 PM	6	515	44	0	4	0	1	0	0	0	0	0	0	0	570
13:00	5	479	31	2	8	0	3	0	0	0	0	0	0	0	528
14:00	7	548	35	0	8	0	1	0	0	0	0	0	0	0	599
15:00	3	565	42	0	4	0	2	0	0	0	0	0	0	0	616
16:00	9	553	40	3	2	0	0	0	0	0	0	0	0	0	607
17:00	3	445	35	0	1	0	1	0	0	0	0	0	0	0	485
18:00	0	428	25	0	5	0	0	0	0	0	0	0	0	0	458
19:00	0	334	25	1	0	0	0	0	0	0	0	0	0	0	360
20:00	0	310	14	0	2	0	0	0	0	0	0	0	0	0	326
21:00	0	231	13	1	2	0	1	0	0	0	0	0	0	0	248
22:00	1	183	7	0	1	0	0	0	0	0	0	0	0	0	192
23:00	0	139	3	0	1	0	0	0	0	0	0	0	0	0	143
Total	36	7082	504	11	57	1	9	0	0	0	0	0	0	0	7700
Percent	0.5%	92.0%	6.5%	0.1%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	07:00	11:00	09:00									
Vol.	1	494	40	2	4	1									
PM Peak	16:00	15:00	12:00	16:00	13:00		13:00								
Vol.	9	565	44	3	8		3								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	93	4	0	1	0	0	0	0	0	0	0	0	0	98
01:00	0	37	2	0	0	0	0	0	0	0	0	0	0	0	39
02:00	0	21	5	0	0	1	0	0	0	0	0	0	0	0	27
03:00	0	27	3	0	0	0	0	0	0	0	0	0	0	0	30
04:00	0	42	8	0	1	0	0	0	0	0	0	0	0	0	51
05:00	1	136	8	0	2	0	0	0	0	0	0	0	0	0	147
06:00	0	341	32	4	15	0	0	0	0	0	0	0	0	0	392
07:00	5	521	53	7	13	1	1	0	1	0	0	0	0	0	602
08:00	6	689	61	9	9	2	0	0	0	0	0	0	0	0	776
09:00	0	591	68	6	5	1	0	0	0	0	0	0	0	0	671
10:00	4	402	40	3	9	1	0	0	1	0	0	0	0	0	460
11:00	4	390	43	3	9	2	7	1	0	0	0	0	0	0	459
12 PM	5	479	47	2	7	5	0	0	0	0	0	0	1	0	546
13:00	5	455	61	1	10	0	2	0	0	0	0	0	0	0	534
14:00	5	520	55	6	18	1	0	0	0	0	0	0	0	0	605
15:00	1	563	62	11	15	0	0	1	0	0	0	0	0	0	653
16:00	3	619	65	9	11	0	1	0	0	0	0	0	0	0	708
17:00	5	544	51	6	7	0	1	1	0	0	0	0	0	0	615
18:00	0	478	42	4	3	0	0	0	0	0	0	0	0	0	527
19:00	1	420	43	1	1	0	0	0	0	0	0	0	0	0	466
20:00	1	332	25	3	4	1	1	0	0	0	0	0	0	0	367
21:00	0	240	15	1	5	0	0	0	0	0	0	0	0	0	261
22:00	0	204	10	1	1	0	0	0	0	0	0	0	0	0	216
23:00	0	151	14	0	0	0	0	0	0	0	0	0	0	0	165
Total	46	8295	817	77	146	15	13	3	2	0	0	0	1	0	9415
Percent	0.5%	88.1%	8.7%	0.8%	1.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	09:00	08:00	06:00	08:00	11:00	11:00	07:00						
Vol.	6	689	68	9	15	2	7	1	1						
PM Peak	12:00	16:00	16:00	15:00	14:00	12:00	13:00	15:00					12:00		
Vol.	5	619	65	11	18	5	2	1					1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	77	3	0	2	0	0	0	0	0	0	0	0	0	82
01:00	0	33	6	0	1	0	0	0	0	0	0	0	0	0	40
02:00	0	20	2	0	1	0	0	0	0	0	0	0	0	0	23
03:00	0	17	1	0	0	0	0	0	0	0	0	0	0	0	18
04:00	0	52	9	0	0	0	0	0	0	0	0	0	0	0	61
05:00	0	136	10	0	3	1	0	0	0	0	0	0	0	0	150
06:00	0	380	42	2	13	1	0	0	0	0	0	0	0	0	438
07:00	0	538	69	9	16	1	0	0	1	0	0	0	0	0	634
08:00	3	678	70	8	17	3	2	0	1	0	0	0	0	0	782
09:00	0	529	66	3	10	3	0	0	3	0	0	0	0	0	614
10:00	1	415	49	5	11	1	1	0	0	0	0	0	0	0	483
11:00	0	443	54	1	10	2	1	0	1	0	0	0	0	0	512
12 PM	3	461	54	4	8	2	0	0	0	0	0	0	0	0	532
13:00	1	448	56	3	13	2	1	0	2	0	0	0	0	0	526
14:00	1	568	67	5	11	0	4	0	0	0	0	0	0	0	656
15:00	2	602	42	5	13	0	1	0	1	0	0	0	0	0	666
16:00	4	636	60	10	8	1	1	1	0	0	0	0	0	0	721
17:00	4	552	41	7	9	1	2	0	0	0	0	0	0	0	616
18:00	1	532	42	3	5	0	2	0	0	0	0	0	0	0	585
19:00	1	432	41	1	2	1	2	0	0	0	0	0	0	0	480
20:00	0	336	27	2	1	0	2	1	0	0	0	0	0	0	369
21:00	1	267	11	1	4	0	0	0	0	0	0	0	0	0	284
22:00	0	197	15	0	1	0	0	0	0	0	0	0	0	0	213
23:00	0	146	10	1	1	0	0	0	0	0	0	0	0	0	158
Total	22	8495	847	70	160	19	19	2	9	0	0	0	0	0	9643
Percent	0.2%	88.1%	8.8%	0.7%	1.7%	0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	07:00	08:00	08:00	08:00		09:00						
Vol.	3	678	70	9	17	3	2		3						
PM Peak	16:00	16:00	14:00	16:00	13:00	12:00	14:00	16:00	13:00						
Vol.	4	636	67	10	13	2	4	1	2						
Grand Total	332	56774	5089	405	904	91	100	10	16	0	0	1	8	0	63730
Percent	0.5%	89.1%	8.0%	0.6%	1.4%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	11	54	25	3	1	0	0	0	0	0	0	0	94	32	34
01:00	0	0	4	15	13	2	0	0	0	0	0	0	0	0	34	33	35
02:00	0	2	1	14	8	1	1	0	0	0	0	0	0	0	27	33	38
03:00	0	2	1	8	12	7	1	0	0	0	0	0	0	0	31	37	39
04:00	1	1	3	9	27	21	2	0	0	0	0	0	0	0	64	38	39
05:00	0	3	8	42	73	31	4	**1**	0	0	0	0	0	0	162	36	39
06:00	4	4	29	111	202	69	2	0	0	0	0	0	0	0	421	35	38
07:00	6	26	72	202	236	**86**	**7**	0	0	0	0	0	0	0	635	34	38
08:00	**28**	**58**	**135**	**306**	**273**	47	4	0	0	0	0	0	0	0	**851**	33	35
09:00	1	16	71	211	233	65	3	0	0	0	0	0	0	0	600	34	37
10:00	2	10	43	166	180	43	2	0	0	0	0	0	0	0	446	34	37
11:00	2	10	63	201	176	30	6	0	0	0	0	0	0	0	488	33	36
12 PM	9	44	98	209	169	34	2	0	0	0	0	0	0	0	565	33	36
13:00	9	29	75	215	171	**37**	**3**	0	0	0	0	0	0	0	539	33	36
14:00	12	29	116	255	158	34	3	0	0	0	0	0	0	0	607	33	35
15:00	20	45	142	263	139	20	2	0	0	0	0	0	0	0	631	32	34
16:00	**24**	37	131	**276**	**204**	28	0	0	0	0	0	0	0	0	**700**	33	34
17:00	13	**62**	**173**	260	126	17	0	0	0	0	0	0	0	0	651	31	34
18:00	10	37	151	242	127	14	1	**1**	0	0	0	0	0	0	583	32	34
19:00	8	29	107	233	93	17	2	0	0	0	0	0	0	0	489	32	34
20:00	2	21	57	192	108	14	3	1	0	0	0	0	0	0	398	33	34
21:00	0	12	69	146	81	15	0	0	0	0	0	0	0	0	323	32	34
22:00	0	2	35	128	74	14	1	0	0	0	0	0	0	0	254	33	35
23:00	0	1	13	90	47	9	1	0	0	0	0	0	0	0	161	33	36
Total	151	480	1608	3848	2955	658	51	3	0	0	0	0	0	0	9754		
Percent	1.5%	4.9%	16.5%	39.5%	30.3%	6.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	08:00	07:00	07:00	05:00							08:00		
Vol.	28	58	135	306	273	86	7	1							851		
PM Peak	16:00	17:00	17:00	16:00	16:00	13:00	13:00	18:00							16:00		
Vol.	24	62	173	276	204	37	3	1							700		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	1	2	22	49	20	3	1	0	0	0	0	0	0	0	98	32	34
01:00	0	1	3	18	13	1	0	0	0	0	0	0	0	0	36	33	34
02:00	0	0	3	12	9	2	1	0	0	0	0	0	0	0	27	34	39
03:00	0	1	4	9	10	7	2	0	0	0	0	0	0	0	33	37	40
04:00	0	0	1	9	29	23	3	1	0	0	0	0	0	0	66	38	41
05:00	0	1	7	33	77	38	**10**	0	0	0	0	0	0	0	166	38	40
06:00	1	5	21	115	191	67	5	0	0	0	0	0	0	0	405	35	38
07:00	9	21	75	191	245	62	7	1	0	0	0	0	0	0	611	34	38
08:00	**12**	**29**	**87**	**283**	**295**	55	6	1	0	0	0	0	0	0	**768**	34	37
09:00	4	15	47	208	240	**71**	10	0	0	0	0	0	0	0	595	34	38
10:00	9	17	56	177	164	33	3	0	0	0	0	0	0	0	459	33	36
11:00	3	11	59	200	172	31	4	**2**	0	0	0	0	0	0	482	33	37
12 PM	15	49	75	224	162	**33**	1	0	0	0	0	0	0	0	559	33	35
13:00	4	13	71	214	**167**	30	1	**1**	0	0	0	0	0	0	501	33	36
14:00	13	57	127	240	142	29	**3**	0	0	0	0	0	0	0	611	32	35
15:00	27	78	146	242	101	15	1	0	0	0	0	0	0	0	610	31	34
16:00	**40**	**86**	**176**	268	142	17	1	0	0	0	0	0	0	0	**730**	31	34
17:00	22	70	145	228	98	15	0	1	0	0	0	0	0	0	579	31	34
18:00	9	38	120	**271**	119	16	2	0	0	0	0	0	0	0	575	32	34
19:00	6	37	136	227	92	15	2	0	0	0	0	0	0	0	515	31	34
20:00	7	10	90	212	120	16	0	1	0	0	0	0	0	0	456	32	34
21:00	1	3	54	158	90	13	0	0	0	0	0	0	0	0	319	33	34
22:00	0	1	47	127	60	11	3	0	0	0	0	0	0	0	249	33	35
23:00	1	4	34	96	51	13	2	0	0	0	0	0	0	0	201	33	36
Total	184	549	1606	3811	2809	616	68	8	0	0	0	0	0	0	9651		
Percent	1.9%	5.7%	16.6%	39.5%	29.1%	6.4%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	08:00	09:00	05:00	11:00							08:00		
Vol.	12	29	87	283	295	71	10	2							768		
PM Peak	16:00	16:00	16:00	18:00	13:00	12:00	14:00	13:00							16:00		
Vol.	40	86	176	271	167	33	3	1							730		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	1	14	61	29	2	0	0	0	0	0	0	0	0	107	32	34
01:00	0	0	4	21	11	2	0	0	0	0	0	0	0	0	38	33	35
02:00	0	1	3	15	12	2	0	0	0	0	0	0	0	0	33	33	35
03:00	0	0	2	10	16	7	0	1	0	0	0	0	0	0	36	36	39
04:00	0	0	4	15	26	14	2	0	0	0	0	0	0	0	61	37	39
05:00	0	1	4	29	66	35	4	**2**	0	0	0	0	0	0	141	37	39
06:00	3	13	24	113	164	49	5	0	0	0	0	0	0	0	371	34	38
07:00	7	26	55	222	220	**85**	4	2	0	0	0	0	0	0	621	34	38
08:00	**11**	**40**	107	**294**	**262**	52	**6**	1	0	0	0	0	0	0	**773**	33	36
09:00	3	16	77	255	220	53	2	0	0	0	0	0	0	0	626	34	37
10:00	3	23	81	249	169	32	2	0	0	0	0	0	0	0	559	33	35
11:00	10	30	**110**	242	183	37	3	0	0	0	0	0	0	0	615	33	36
12 PM	25	60	144	264	171	21	1	0	0	0	0	0	0	0	686	32	34
13:00	30	38	146	**279**	**182**	**33**	2	0	0	0	0	0	0	0	**710**	33	34
14:00	24	**77**	124	246	172	29	**3**	0	0	0	0	0	0	0	675	32	34
15:00	**47**	57	**180**	258	148	14	2	0	0	0	0	0	0	0	706	31	34
16:00	27	45	125	242	141	25	0	0	0	0	0	0	0	0	605	32	34
17:00	11	27	115	245	135	14	1	0	0	0	0	0	0	0	548	32	34
18:00	3	24	113	210	113	13	0	0	0	0	0	0	0	0	476	32	34
19:00	8	36	102	176	93	19	1	0	0	0	0	0	0	0	435	32	34
20:00	2	8	56	163	73	18	1	0	0	0	0	0	0	0	321	33	35
21:00	0	9	82	148	72	15	1	0	0	0	0	0	0	0	327	32	34
22:00	0	2	44	137	73	16	1	0	0	0	0	0	0	0	273	33	36
23:00	0	4	19	89	54	11	0	0	0	0	0	0	0	0	177	33	35
Total	214	538	1735	3983	2805	598	41	6	0	0	0	0	0	0	9920		
Percent	2.2%	5.4%	17.5%	40.2%	28.3%	6.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	11:00	08:00	08:00	07:00	08:00	05:00							08:00		
Vol.	11	40	110	294	262	85	6	2							773		
PM Peak	15:00	14:00	15:00	13:00	13:00	13:00	14:00								13:00		
Vol.	47	77	180	279	182	33	3								710		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	3	14	61	36	3	0	0	0	0	0	0	0	0	117	32	34
01:00	0	1	9	59	37	8	0	0	0	0	0	0	0	0	114	33	36
02:00	0	0	3	31	13	3	0	0	0	0	0	0	0	0	50	33	35
03:00	0	0	4	19	13	5	3	0	0	0	0	0	0	0	44	36	41
04:00	0	2	7	15	15	11	2	0	0	0	0	0	0	0	52	37	39
05:00	0	3	8	17	33	14	2	0	0	0	0	0	0	0	77	36	39
06:00	0	1	7	47	47	19	1	0	0	0	0	0	0	0	122	35	38
07:00	0	1	12	83	109	44	6	0	0	0	0	0	0	0	255	36	39
08:00	0	2	18	98	135	58	6	0	0	0	0	0	0	0	317	36	39
09:00	2	8	54	130	143	48	6	0	0	0	0	0	0	0	391	34	38
10:00	**3**	8	58	156	151	**61**	6	0	0	0	0	0	0	0	443	35	38
11:00	3	**11**	**60**	**176**	**165**	52	**7**	0	0	0	0	0	0	0	**474**	34	38
12 PM	1	8	60	174	156	**50**	**5**	0	0	0	0	0	0	0	454	34	38
13:00	13	**68**	110	179	**169**	26	2	0	0	0	0	0	0	0	**567**	33	34
14:00	11	33	98	198	143	24	1	0	0	0	0	0	0	0	508	33	34
15:00	16	44	78	173	149	35	4	0	0	0	0	0	0	0	499	33	37
16:00	19	52	114	151	114	25	4	0	0	0	0	0	0	0	479	33	36
17:00	17	42	**123**	194	109	15	0	0	0	0	0	0	0	0	500	32	34
18:00	**21**	29	107	**201**	140	17	2	0	0	0	0	0	0	0	517	32	34
19:00	3	19	72	187	117	31	0	0	0	0	0	0	0	0	429	33	36
20:00	2	11	68	152	98	12	1	0	0	0	0	0	0	0	344	33	34
21:00	2	4	70	166	96	19	0	0	0	0	0	0	0	0	357	33	35
22:00	3	8	53	130	71	17	3	0	0	0	0	0	0	0	285	33	36
23:00	2	3	52	108	79	7	0	0	**1**	0	0	0	0	0	252	33	34
Total	118	361	1259	2905	2338	604	61	0	1	0	0	0	0	0	7647		
Percent	1.5%	4.7%	16.5%	38.0%	30.6%	7.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	11:00	11:00	10:00	11:00								11:00		
Vol.	3	11	60	176	165	61	7								474		
PM Peak	18:00	13:00	17:00	18:00	13:00	12:00	12:00		23:00						13:00		
Vol.	21	68	123	201	169	50	5		1						567		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	24	96	54	5	0	0	0	0	0	0	0	0	179	32	34
01:00	0	0	18	45	31	8	3	0	0	0	0	0	0	0	105	34	38
02:00	0	0	3	32	29	4	1	0	0	0	0	0	0	0	69	34	36
03:00	0	1	4	21	19	5	0	0	0	0	0	0	0	0	50	34	37
04:00	0	0	4	20	12	3	1	0	0	0	0	0	0	0	40	34	38
05:00	0	2	5	16	21	13	0	0	0	0	0	0	0	0	57	36	38
06:00	0	0	7	34	41	25	4	0	0	0	0	0	0	0	111	37	39
07:00	0	1	15	56	78	38	3	**1**	0	0	0	0	0	0	192	36	39
08:00	0	3	21	97	148	60	**7**	0	0	0	0	0	0	0	336	36	39
09:00	1	10	26	129	164	**73**	4	0	0	0	0	0	0	0	407	36	38
10:00	3	**19**	56	170	177	51	6	1	0	0	0	0	0	0	483	34	38
11:00	**4**	15	**84**	**200**	**181**	50	4	1	0	0	0	0	0	0	**539**	34	37
12 PM	9	27	88	222	177	**44**	3	0	0	0	0	0	0	0	570	33	37
13:00	7	29	96	181	176	36	3	0	0	0	0	0	0	0	528	33	36
14:00	10	30	112	227	**179**	35	6	0	0	0	0	0	0	0	599	33	36
15:00	**15**	**57**	126	211	161	40	6	0	0	0	0	0	0	0	**616**	33	36
16:00	7	30	100	**262**	161	39	**7**	**1**	0	0	0	0	0	0	607	33	37
17:00	5	37	104	207	116	15	1	0	0	0	0	0	0	0	485	32	34
18:00	6	38	**131**	178	91	14	0	0	0	0	0	0	0	0	458	31	34
19:00	0	10	71	161	97	18	2	1	0	0	0	0	0	0	360	33	35
20:00	0	8	49	148	102	16	3	0	0	0	0	0	0	0	326	33	35
21:00	0	2	33	119	81	11	2	0	0	0	0	0	0	0	248	33	35
22:00	0	4	27	92	58	9	2	0	0	0	0	0	0	0	192	33	35
23:00	0	1	18	64	45	14	1	0	0	0	0	0	0	0	143	34	37
Total	67	324	1222	2988	2399	626	69	5	0	0	0	0	0	0	7700		
Percent	0.9%	4.2%	15.9%	38.8%	31.2%	8.1%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	11:00	11:00	11:00	09:00	08:00	07:00							11:00		
Vol.	4	19	84	200	181	73	7	1							539		
PM Peak	15:00	15:00	18:00	16:00	14:00	12:00	16:00	16:00							15:00		
Vol.	15	57	131	262	179	44	7	1							616		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	1	15	42	34	5	1	0	0	0	0	0	0	0	98	33	36
01:00	0	1	3	25	9	0	1	0	0	0	0	0	0	0	39	32	34
02:00	0	0	0	16	9	2	0	0	0	0	0	0	0	0	27	33	36
03:00	0	0	2	8	14	5	1	0	0	0	0	0	0	0	30	36	39
04:00	0	0	3	7	22	16	3	0	0	0	0	0	0	0	51	38	40
05:00	0	2	11	30	71	26	**7**	0	0	0	0	0	0	0	147	37	39
06:00	0	2	23	110	193	61	3	0	0	0	0	0	0	0	392	35	38
07:00	9	25	61	208	230	66	3	0	0	0	0	0	0	0	602	34	37
08:00	19	46	**129**	**265**	235	**79**	3	0	0	0	0	0	0	0	**776**	34	37
09:00	12	42	68	247	**237**	62	3	0	0	0	0	0	0	0	671	34	37
10:00	5	11	56	187	151	49	1	0	0	0	0	0	0	0	460	34	37
11:00	**24**	**63**	89	148	113	20	2	0	0	0	0	0	0	0	459	32	34
12 PM	**93**	**85**	100	153	98	16	1	0	0	0	0	0	0	0	546	31	34
13:00	15	28	92	204	161	31	**3**	0	0	0	0	0	0	0	534	33	36
14:00	7	38	113	250	162	**34**	0	**1**	0	0	0	0	0	0	605	33	35
15:00	17	44	131	278	**163**	20	0	0	0	0	0	0	0	0	653	32	34
16:00	28	49	146	**311**	156	18	0	0	0	0	0	0	0	0	**708**	32	34
17:00	10	38	**165**	257	123	22	0	0	0	0	0	0	0	0	615	32	34
18:00	3	25	98	252	134	13	2	0	0	0	0	0	0	0	527	32	34
19:00	2	25	74	224	120	19	2	0	0	0	0	0	0	0	466	32	34
20:00	5	11	70	173	90	17	1	0	0	0	0	0	0	0	367	32	34
21:00	0	1	31	122	89	15	3	0	0	0	0	0	0	0	261	33	36
22:00	0	1	25	100	70	17	2	1	0	0	0	0	0	0	216	34	37
23:00	0	1	32	83	35	13	1	0	0	0	0	0	0	0	165	33	37
Total	249	539	1537	3700	2719	626	43	2	0	0	0	0	0	0	9415		
Percent	2.6%	5.7%	16.3%	39.3%	28.9%	6.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	08:00	08:00	09:00	08:00	05:00								08:00		
Vol.	24	63	129	265	237	79	7								776		
PM Peak	12:00	12:00	17:00	16:00	15:00	14:00	13:00	14:00							16:00		
Vol.	93	85	165	311	163	34	3	1							708		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
4-SB THIELLS MT IVY RD N OF RT 202
HAVERSTRAW,NY

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	1	14	39	26	2	0	0	0	0	0	0	0	0	82	33	34
01:00	0	0	5	23	11	1	0	0	0	0	0	0	0	0	40	32	34
02:00	0	1	1	13	8	0	0	0	0	0	0	0	0	0	23	32	34
03:00	0	0	2	4	9	3	0	0	0	0	0	0	0	0	18	35	38
04:00	0	0	3	17	23	14	4	0	0	0	0	0	0	0	61	38	41
05:00	0	4	10	17	81	31	7	0	0	0	0	0	0	0	150	37	39
06:00	2	5	36	117	198	**75**	5	0	0	0	0	0	0	0	438	35	38
07:00	6	25	89	208	253	50	3	0	0	0	0	0	0	0	634	34	37
08:00	**11**	**53**	**108**	**240**	**302**	57	**11**	0	0	0	0	0	0	0	**782**	34	37
09:00	2	29	85	224	229	41	2	**2**	0	0	0	0	0	0	614	33	36
10:00	1	13	63	180	173	44	8	1	0	0	0	0	0	0	483	34	38
11:00	4	35	74	214	146	36	3	0	0	0	0	0	0	0	512	33	36
12 PM	7	23	85	204	**168**	**42**	**3**	0	0	0	0	0	0	0	532	33	37
13:00	16	29	97	213	140	29	2	0	0	0	0	0	0	0	526	33	35
14:00	21	**106**	154	211	140	23	1	0	0	0	0	0	0	0	656	32	34
15:00	23	65	142	264	146	25	0	**1**	0	0	0	0	0	0	666	32	34
16:00	**29**	59	**178**	**306**	130	19	0	0	0	0	0	0	0	0	**721**	31	34
17:00	11	52	126	283	127	17	0	0	0	0	0	0	0	0	616	32	34
18:00	13	51	145	232	123	21	0	0	0	0	0	0	0	0	585	32	34
19:00	3	43	103	190	121	17	3	0	0	0	0	0	0	0	480	32	34
20:00	4	7	72	172	95	17	2	0	0	0	0	0	0	0	369	33	35
21:00	0	5	46	133	86	12	2	0	0	0	0	0	0	0	284	33	34
22:00	0	2	27	108	63	10	2	1	0	0	0	0	0	0	213	33	36
23:00	0	3	19	73	55	8	0	0	0	0	0	0	0	0	158	33	35
Total	153	611	1684	3685	2853	594	58	5	0	0	0	0	0	0	9643		
Percent	1.6%	6.3%	17.5%	38.2%	29.6%	6.2%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	08:00	06:00	08:00	09:00							08:00		
Vol.	11	53	108	240	302	75	11	2							782		
PM Peak	16:00	14:00	16:00	16:00	12:00	12:00	12:00	15:00							16:00		
Vol.	29	106	178	306	168	42	3	1							721		
Grand Total	1136	3402	10651	24920	18878	4322	391	29	1	0	0	0	0	0	63730		
Percent	1.8%	5.3%	16.7%	39.1%	29.6%	6.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	22 MPH
50th Percentile :	28 MPH
85th Percentile :	33 MPH
95th Percentile :	36 MPH

Statistics

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	43798
Percent in Pace :	68.7%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	29 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	36	47	53	45	87	60	57
01:00	*	*	23	25	25	24	75	68	43
02:00	*	*	9	7	9	8	31	27	17
03:00	*	*	7	10	11	9	18	16	12
04:00	*	*	15	12	14	14	18	10	14
05:00	*	*	49	38	33	40	22	27	34
06:00	*	*	222	228	233	228	49	30	152
07:00	*	*	**401**	**391**	383	**392**	112	82	274
08:00	*	*	388	367	**398**	384	186	119	292
09:00	*	*	295	284	304	294	218	210	262
10:00	*	*	228	246	243	239	273	266	251
11:00	*	*	267	332	311	303	**355**	**282**	**309**
12:00 PM	*	*	277	320	292	296	356	346	318
01:00	*	*	284	325	315	308	323	352	320
02:00	*	*	366	344	337	349	362	353	352
03:00	*	*	501	467	521	496	**414**	358	452
04:00	*	*	552	599	**614**	**588**	361	**383**	**502**
05:00	*	*	**590**	**601**	507	566	396	295	478
06:00	*	*	491	494	406	464	299	259	390
07:00	*	*	324	341	331	332	260	188	289
08:00	*	*	263	215	214	231	220	139	210
09:00	*	*	161	170	212	181	231	115	178
10:00	*	*	118	126	147	130	164	90	129
11:00	*	*	78	95	118	97	114	74	96
Day Total	0	0	5945	6084	6031	6018	4944	4149	5431
% Avg. WkDay	0.0%	0.0%	98.8%	101.1%	100.2%				
% Avg. Week	0.0%	0.0%	109.5%	112.0%	111.0%	110.8%	91.0%	76.4%	
AM Peak	-	-	07:00	07:00	08:00	- 07:00	- 11:00	11:00	- 11:00 - -
Vol.	-	-	401	391	398	- 392	- 355	282	- 309 - -
PM Peak	-	-	17:00	17:00	16:00	- 16:00	- 15:00	16:00	- 16:00 - -
Vol.	-	-	590	601	614	- 588	- 414	383	- 502 - -

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	38	41	*	*	*	40	*	*	40
01:00	13	19	*	*	*	16	*	*	16
02:00	8	13	*	*	*	10	*	*	10
03:00	6	6	*	*	*	6	*	*	6
04:00	11	11	*	*	*	11	*	*	11
05:00	41	42	*	*	*	42	*	*	42
06:00	219	228	*	*	*	224	*	*	224
07:00	360	357	*	*	*	358	*	*	358
08:00	**388**	**366**	*	*	*	**377**	*	*	**377**
09:00	274	278	*	*	*	276	*	*	276
10:00	253	235	*	*	*	244	*	*	244
11:00	291	273	*	*	*	282	*	*	282
12:00 PM	271	357	*	*	*	314	*	*	314
01:00	273	313	*	*	*	293	*	*	293
02:00	322	366	*	*	*	344	*	*	344
03:00	476	481	*	*	*	478	*	*	478
04:00	**605**	**596**	*	*	*	**600**	*	*	**600**
05:00	541	541	*	*	*	541	*	*	541
06:00	450	450	*	*	*	450	*	*	450
07:00	293	352	*	*	*	322	*	*	322
08:00	197	218	*	*	*	208	*	*	208
09:00	150	167	*	*	*	158	*	*	158
10:00	103	99	*	*	*	101	*	*	101
11:00	80	84	*	*	*	82	*	*	82
Day Total	5663	5893	0	0	0	5777	0	0	5777
% Avg. WkDay	98.0%	102.0%	0.0%	0.0%	0.0%				
% Avg. Week	98.0%	102.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	388	366	-	-	-	377	-	-	377
PM Peak	16:00	16:00	-	-	-	16:00	-	-	16:00
Vol.	605	596	-	-	-	600	-	-	600

Grand Total	5663	5893	5945	6084	6031	11795	4944	4149	11208

ADT ADT 5,530 AADT 5,530

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	20	13	0	3	0	0	0	0	0	0	0	0	0	36
01:00	0	12	10	0	1	0	0	0	0	0	0	0	0	0	23
02:00	0	6	3	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	8	5	0	2	0	0	0	0	0	0	0	0	0	15
05:00	0	36	5	0	8	0	0	0	0	0	0	0	0	0	49
06:00	0	126	69	5	22	0	0	0	0	0	0	0	0	0	222
07:00	19	229	125	2	17	2	7	0	0	0	0	0	0	0	401
08:00	0	230	129	4	25	0	0	0	0	0	0	0	0	0	388
09:00	0	142	110	4	37	1	0	0	1	0	0	0	0	0	295
10:00	1	120	75	6	24	0	0	2	0	0	0	0	0	0	228
11:00	0	152	85	2	28	0	0	0	0	0	0	0	0	0	267
12 PM	1	143	109	6	18	0	0	0	0	0	0	0	0	0	277
13:00	0	146	108	7	23	0	0	0	0	0	0	0	0	0	284
14:00	3	200	133	5	23	0	1	0	0	0	0	0	1	0	366
15:00	12	286	169	2	30	1	1	0	0	0	0	0	0	0	501
16:00	3	329	181	2	36	0	0	0	0	0	0	0	1	0	552
17:00	0	365	190	2	33	0	0	0	0	0	0	0	0	0	590
18:00	0	272	178	1	39	0	0	0	0	0	0	0	1	0	491
19:00	0	191	116	2	15	0	0	0	0	0	0	0	0	0	324
20:00	0	162	87	0	14	0	0	0	0	0	0	0	0	0	263
21:00	0	95	58	0	8	0	0	0	0	0	0	0	0	0	161
22:00	0	75	39	0	4	0	0	0	0	0	0	0	0	0	118
23:00	0	50	24	0	4	0	0	0	0	0	0	0	0	0	78
Total	39	3400	2023	50	414	4	9	2	1	0	0	0	3	0	5945
Percent	0.7%	57.2%	34.0%	0.8%	7.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	08:00	08:00	10:00	09:00	07:00	07:00	10:00	09:00						
Vol.	19	230	129	6	37	2	7	2	1						
PM Peak	15:00	17:00	17:00	13:00	18:00	15:00	14:00						14:00		
Vol.	12	365	190	7	39	1	1						1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	26	19	0	2	0	0	0	0	0	0	0	0	0	47
01:00	0	15	10	0	0	0	0	0	0	0	0	0	0	0	25
02:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
03:00	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
05:00	0	23	6	0	8	1	0	0	0	0	0	0	0	0	38
06:00	0	141	66	4	16	1	0	0	0	0	0	0	0	0	228
07:00	15	226	123	4	11	3	6	0	0	0	0	0	3	0	391
08:00	0	228	113	2	24	0	0	0	0	0	0	0	0	0	367
09:00	0	144	115	3	22	0	0	0	0	0	0	0	0	0	284
10:00	0	118	106	5	17	0	0	0	0	0	0	0	0	0	246
11:00	0	169	135	1	27	0	0	0	0	0	0	0	0	0	332
12 PM	0	197	99	3	21	0	0	0	0	0	0	0	0	0	320
13:00	0	179	115	4	26	0	0	0	1	0	0	0	0	0	325
14:00	2	199	116	5	22	0	0	0	0	0	0	0	0	0	344
15:00	25	248	147	3	31	1	11	0	0	0	0	0	1	0	467
16:00	2	374	184	3	33	0	0	1	1	1	0	0	0	0	599
17:00	3	348	222	2	26	0	0	0	0	0	0	0	0	0	601
18:00	0	298	170	0	26	0	0	0	0	0	0	0	0	0	494
19:00	0	212	111	3	15	0	0	0	0	0	0	0	0	0	341
20:00	0	118	86	0	11	0	0	0	0	0	0	0	0	0	215
21:00	0	105	56	1	8	0	0	0	0	0	0	0	0	0	170
22:00	0	74	44	0	8	0	0	0	0	0	0	0	0	0	126
23:00	0	52	37	0	6	0	0	0	0	0	0	0	0	0	95
Total	47	3511	2091	43	361	6	17	1	2	1	0	0	4	0	6084
Percent	0.8%	57.7%	34.4%	0.7%	5.9%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	08:00	11:00	10:00	11:00	07:00	07:00						07:00		
Vol.	15	228	135	5	27	3	6						3		
PM Peak	15:00	16:00	17:00	14:00	16:00	15:00	15:00	16:00	13:00	16:00			15:00		
Vol.	25	374	222	5	33	1	11	1	1	1			1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	27	20	0	6	0	0	0	0	0	0	0	0	0	53
01:00	0	18	6	0	1	0	0	0	0	0	0	0	0	0	25
02:00	0	6	3	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	6	4	0	1	0	0	0	0	0	0	0	0	0	11
04:00	0	6	8	0	0	0	0	0	0	0	0	0	0	0	14
05:00	0	22	6	0	5	0	0	0	0	0	0	0	0	0	33
06:00	0	126	79	4	24	0	0	0	0	0	0	0	0	0	233
07:00	0	209	150	3	21	0	0	0	0	0	0	0	0	0	383
08:00	0	226	150	2	19	1	0	0	0	0	0	0	0	0	398
09:00	0	147	121	6	30	0	0	0	0	0	0	0	0	0	304
10:00	1	122	95	4	21	0	0	0	0	0	0	0	0	0	243
11:00	0	153	127	3	28	0	0	0	0	0	0	0	0	0	311
12 PM	0	173	90	5	24	0	0	0	0	0	0	0	0	0	292
13:00	0	178	102	7	28	0	0	0	0	0	0	0	0	0	315
14:00	6	199	108	3	20	0	1	0	0	0	0	0	0	0	337
15:00	6	292	180	1	38	1	2	0	0	0	0	0	1	0	521
16:00	0	382	193	5	33	0	1	0	0	0	0	0	0	0	614
17:00	1	314	161	1	30	0	0	0	0	0	0	0	0	0	507
18:00	0	233	156	0	17	0	0	0	0	0	0	0	0	0	406
19:00	0	202	117	0	12	0	0	0	0	0	0	0	0	0	331
20:00	0	136	64	0	14	0	0	0	0	0	0	0	0	0	214
21:00	0	128	76	0	8	0	0	0	0	0	0	0	0	0	212
22:00	0	99	40	0	8	0	0	0	0	0	0	0	0	0	147
23:00	0	70	44	0	4	0	0	0	0	0	0	0	0	0	118
Total	14	3474	2100	44	392	2	4	0	0	0	0	0	1	0	6031
Percent	0.2%	57.6%	34.8%	0.7%	6.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	07:00	09:00	09:00	08:00									
Vol.	1	226	150	6	30	1									
PM Peak	14:00	16:00	16:00	13:00	15:00	15:00	15:00						15:00		
Vol.	6	382	193	7	38	1	2						1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	53	29	0	5	0	0	0	0	0	0	0	0	0	87
01:00	0	45	26	0	4	0	0	0	0	0	0	0	0	0	75
02:00	0	14	16	0	1	0	0	0	0	0	0	0	0	0	31
03:00	0	13	4	0	1	0	0	0	0	0	0	0	0	0	18
04:00	0	15	3	0	0	0	0	0	0	0	0	0	0	0	18
05:00	0	15	6	0	1	0	0	0	0	0	0	0	0	0	22
06:00	0	28	15	1	5	0	0	0	0	0	0	0	0	0	49
07:00	0	59	43	0	9	1	0	0	0	0	0	0	0	0	112
08:00	0	97	75	3	11	0	0	0	0	0	0	0	0	0	186
09:00	0	110	88	1	19	0	0	0	0	0	0	0	0	0	218
10:00	1	149	106	1	16	0	0	0	0	0	0	0	0	0	273
11:00	0	220	116	3	16	0	0	0	0	0	0	0	0	0	355
12 PM	2	227	110	3	14	0	0	0	0	0	0	0	0	0	356
13:00	0	190	111	0	22	0	0	0	0	0	0	0	0	0	323
14:00	3	221	121	0	17	0	0	0	0	0	0	0	0	0	362
15:00	1	225	165	3	20	0	0	0	0	0	0	0	0	0	414
16:00	0	219	130	1	11	0	0	0	0	0	0	0	0	0	361
17:00	0	231	144	0	21	0	0	0	0	0	0	0	0	0	396
18:00	0	190	94	1	13	1	0	0	0	0	0	0	0	0	299
19:00	0	131	115	0	14	0	0	0	0	0	0	0	0	0	260
20:00	0	127	81	0	12	0	0	0	0	0	0	0	0	0	220
21:00	0	126	81	6	18	0	0	0	0	0	0	0	0	0	231
22:00	0	91	62	0	11	0	0	0	0	0	0	0	0	0	164
23:00	0	69	43	0	2	0	0	0	0	0	0	0	0	0	114
Total	7	2865	1784	23	263	2	0	0	0	0	0	0	0	0	4944
Percent	0.1%	57.9%	36.1%	0.5%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	08:00	09:00	07:00									
Vol.	1	220	116	3	19	1									
PM Peak	14:00	17:00	15:00	21:00	13:00	18:00									
Vol.	3	231	165	6	22	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	34	23	0	3	0	0	0	0	0	0	0	0	0	60
01:00	0	43	24	0	1	0	0	0	0	0	0	0	0	0	68
02:00	0	15	11	0	1	0	0	0	0	0	0	0	0	0	27
03:00	0	12	3	0	1	0	0	0	0	0	0	0	0	0	16
04:00	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
05:00	0	16	7	0	4	0	0	0	0	0	0	0	0	0	27
06:00	0	20	9	0	1	0	0	0	0	0	0	0	0	0	30
07:00	0	56	24	0	2	0	0	0	0	0	0	0	0	0	82
08:00	0	76	34	0	9	0	0	0	0	0	0	0	0	0	119
09:00	0	118	78	0	13	1	0	0	0	0	0	0	0	0	210
10:00	0	141	108	2	15	0	0	0	0	0	0	0	0	0	266
11:00	5	167	88	1	18	1	1	1	0	0	0	0	0	0	282
12 PM	1	187	145	0	13	0	0	0	0	0	0	0	0	0	346
13:00	1	217	123	1	10	0	0	0	0	0	0	0	0	0	352
14:00	1	212	120	0	20	0	0	0	0	0	0	0	0	0	353
15:00	1	201	137	2	17	0	0	0	0	0	0	0	0	0	358
16:00	1	238	125	0	19	0	0	0	0	0	0	0	0	0	383
17:00	1	183	101	0	10	0	0	0	0	0	0	0	0	0	295
18:00	0	155	84	0	20	0	0	0	0	0	0	0	0	0	259
19:00	0	113	66	1	8	0	0	0	0	0	0	0	0	0	188
20:00	0	74	58	0	7	0	0	0	0	0	0	0	0	0	139
21:00	0	63	43	0	9	0	0	0	0	0	0	0	0	0	115
22:00	0	48	37	0	5	0	0	0	0	0	0	0	0	0	90
23:00	0	48	21	0	5	0	0	0	0	0	0	0	0	0	74
Total	11	2444	1472	7	211	2	1	1	0	0	0	0	0	0	4149
Percent	0.3%	58.9%	35.5%	0.2%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00	10:00	11:00	09:00	11:00	11:00							
Vol.	5	167	108	2	18	1	1	1							
PM Peak	12:00	16:00	12:00	15:00	14:00										
Vol.	1	238	145	2	20										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	27	11	0	0	0	0	0	0	0	0	0	0	0	38
01:00	0	7	6	0	0	0	0	0	0	0	0	0	0	0	13
02:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
04:00	0	8	2	0	1	0	0	0	0	0	0	0	0	0	11
05:00	0	35	2	0	3	1	0	0	0	0	0	0	0	0	41
06:00	0	119	78	4	18	0	0	0	0	0	0	0	0	0	219
07:00	19	197	122	2	14	0	3	0	1	0	0	0	2	0	360
08:00	6	239	116	4	23	0	0	0	0	0	0	0	0	0	388
09:00	0	136	107	2	27	1	0	1	0	0	0	0	0	0	274
10:00	0	121	100	5	25	2	0	0	0	0	0	0	0	0	253
11:00	0	147	115	4	23	0	0	2	0	0	0	0	0	0	291
12 PM	0	138	103	3	27	0	0	0	0	0	0	0	0	0	271
13:00	0	156	89	3	25	0	0	0	0	0	0	0	0	0	273
14:00	3	178	117	3	19	1	1	0	0	0	0	0	0	0	322
15:00	22	240	161	2	42	0	7	0	0	1	0	0	1	0	476
16:00	2	358	213	1	31	0	0	0	0	0	0	0	0	0	605
17:00	4	323	171	3	40	0	0	0	0	0	0	0	0	0	541
18:00	2	250	173	1	24	0	0	0	0	0	0	0	0	0	450
19:00	0	173	106	0	14	0	0	0	0	0	0	0	0	0	293
20:00	0	109	77	1	10	0	0	0	0	0	0	0	0	0	197
21:00	1	83	62	0	4	0	0	0	0	0	0	0	0	0	150
22:00	1	61	33	1	7	0	0	0	0	0	0	0	0	0	103
23:00	0	42	30	0	8	0	0	0	0	0	0	0	0	0	80
Total	60	3158	1997	39	385	5	11	3	1	1	0	0	3	0	5663
Percent	1.1%	55.8%	35.3%	0.7%	6.8%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	08:00	07:00	10:00	09:00	10:00	07:00	11:00	07:00				07:00		
Vol.	19	239	122	5	27	2	3	2	1				2		
PM Peak	15:00	16:00	16:00	12:00	15:00	14:00	15:00			15:00			15:00		
Vol.	22	358	213	3	42	1	7			1			1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	21	17	0	3	0	0	0	0	0	0	0	0	0	41
01:00	0	13	6	0	0	0	0	0	0	0	0	0	0	0	19
02:00	0	7	6	0	0	0	0	0	0	0	0	0	0	0	13
03:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
04:00	0	5	6	0	0	0	0	0	0	0	0	0	0	0	11
05:00	0	28	10	0	4	0	0	0	0	0	0	0	0	0	42
06:00	0	123	75	6	24	0	0	0	0	0	0	0	0	0	228
07:00	15	205	119	2	11	0	4	0	0	0	0	0	1	0	357
08:00	9	216	115	1	20	0	3	1	0	0	0	0	1	0	366
09:00	0	123	126	3	24	1	0	1	0	0	0	0	0	0	278
10:00	0	137	72	3	23	0	0	0	0	0	0	0	0	0	235
11:00	0	149	100	4	20	0	0	0	0	0	0	0	0	0	273
12 PM	0	208	117	5	25	1	0	1	0	0	0	0	0	0	357
13:00	0	182	99	6	25	0	0	1	0	0	0	0	0	0	313
14:00	2	198	128	4	32	2	0	0	0	0	0	0	0	0	366
15:00	4	279	161	2	35	0	0	0	0	0	0	0	0	0	481
16:00	6	355	195	5	31	1	3	0	0	0	0	0	0	0	596
17:00	3	304	191	3	38	1	0	0	1	0	0	0	0	0	541
18:00	2	252	172	0	24	0	0	0	0	0	0	0	0	0	450
19:00	0	207	123	1	21	0	0	0	0	0	0	0	0	0	352
20:00	0	140	67	0	11	0	0	0	0	0	0	0	0	0	218
21:00	0	104	58	0	5	0	0	0	0	0	0	0	0	0	167
22:00	0	59	37	0	3	0	0	0	0	0	0	0	0	0	99
23:00	0	58	23	0	3	0	0	0	0	0	0	0	0	0	84
Total	41	3377	2025	45	382	6	10	4	1	0	0	0	2	0	5893
Percent	0.7%	57.3%	34.4%	0.8%	6.5%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	09:00	06:00	06:00	09:00	07:00	08:00					07:00		
Vol.	15	216	126	6	24	1	4	1					1		
PM Peak	16:00	16:00	16:00	13:00	17:00	14:00	16:00	12:00	17:00						
Vol.	6	355	195	6	38	2	3	1	1						
Grand Total	219	22229	13492	251	2408	27	52	11	5	2	0	0	13	0	38709
Percent	0.6%	57.4%	34.9%	0.6%	6.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	0	1	9	9	9	8	0	0	0	0	0	0	36	46	48
01:00	0	0	0	2	2	9	8	2	0	0	0	0	0	0	23	44	47
02:00	0	0	0	0	2	5	2	0	0	0	0	0	0	0	9	41	43
03:00	0	0	1	0	0	4	1	0	1	0	0	0	0	0	7	44	53
04:00	0	0	0	0	1	2	6	6	0	0	0	0	0	0	15	48	49
05:00	0	0	0	0	7	17	14	10	1	0	0	0	0	0	49	46	49
06:00	0	0	0	5	29	93	84	9	2	0	0	0	0	0	222	43	44
07:00	**36**	**58**	**24**	**16**	45	116	84	22	0	0	0	0	0	0	**401**	42	45
08:00	0	0	1	11	**56**	**180**	**118**	21	0	**1**	0	0	0	0	388	43	45
09:00	0	0	1	10	49	111	98	**24**	2	0	0	0	0	0	295	44	47
10:00	0	0	1	1	28	107	71	16	**4**	0	0	0	0	0	228	44	47
11:00	0	0	0	2	49	103	88	22	2	1	0	0	0	0	267	44	47
12 PM	0	0	1	6	35	110	**103**	**20**	2	0	0	0	0	0	277	44	47
13:00	0	0	0	2	39	129	90	20	**4**	0	0	0	0	0	284	43	47
14:00	3	2	10	32	74	153	79	11	2	0	0	0	0	0	366	42	44
15:00	**25**	**39**	**43**	47	102	186	56	3	0	0	0	0	0	0	501	39	43
16:00	4	8	40	51	146	200	92	9	1	**1**	0	0	0	0	552	41	44
17:00	0	3	22	**78**	**238**	**202**	43	2	1	0	0	**1**	0	0	**590**	38	42
18:00	0	3	20	45	161	202	50	10	0	0	0	0	0	0	491	39	43
19:00	0	0	2	4	52	180	73	12	1	0	0	0	0	0	324	42	44
20:00	0	0	1	5	40	135	68	12	2	0	0	0	0	0	263	43	45
21:00	0	0	0	1	27	88	38	5	1	1	0	0	0	0	161	42	44
22:00	0	0	0	1	25	45	36	9	0	1	0	1	0	0	118	44	47
23:00	2	0	0	3	18	27	23	5	0	0	0	0	0	0	78	43	46
Total	70	113	167	323	1234	2413	1334	258	26	5	0	2	0	0	5945		
Percent	1.2%	1.9%	2.8%	5.4%	20.8%	40.6%	22.4%	4.3%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	08:00	08:00	08:00	09:00	10:00	08:00					07:00		
Vol.	36	58	24	16	56	180	118	24	4	1					401		
PM Peak	15:00	15:00	15:00	17:00	17:00	17:00	12:00	12:00	13:00	16:00		17:00			17:00		
Vol.	25	39	43	78	238	202	103	20	4	1		1			590		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	0	0	0	0	4	20	14	7	2	0	0	0	0	0	47	46	49
01:00	0	0	0	0	6	11	7	1	0	0	0	0	0	0	25	43	44
02:00	0	0	0	0	4	2	0	1	0	0	0	0	0	0	7	39	48
03:00	0	0	0	0	1	1	6	2	0	0	0	0	0	0	10	46	48
04:00	0	0	0	0	2	6	3	1	0	0	0	0	0	0	12	43	46
05:00	0	0	0	0	6	12	13	6	1	0	0	0	0	0	38	46	49
06:00	0	0	0	3	34	81	90	16	4	0	0	0	0	0	228	44	47
07:00	**46**	**59**	**41**	**30**	37	77	80	18	2	**1**	0	0	0	0	**391**	42	45
08:00	0	0	0	6	**51**	**186**	102	21	1	0	0	0	0	0	367	43	45
09:00	0	0	1	4	28	133	92	25	1	0	0	0	0	0	284	44	47
10:00	2	0	0	6	16	106	92	19	**5**	0	0	0	0	0	246	44	48
11:00	0	0	0	0	32	154	**108**	**37**	1	0	0	0	0	0	332	44	47
12 PM	0	0	0	10	33	143	**106**	**25**	**3**	0	0	0	0	0	320	44	47
13:00	0	0	2	7	50	149	90	24	3	0	0	0	0	0	325	43	47
14:00	3	7	15	22	86	140	62	6	3	0	0	0	0	0	344	41	44
15:00	**74**	**92**	**70**	68	76	73	13	1	0	0	0	0	0	0	467	36	39
16:00	1	6	32	47	175	**246**	79	13	0	0	0	0	0	0	599	40	43
17:00	4	24	52	**74**	**223**	190	29	5	0	0	0	0	0	0	**601**	38	40
18:00	0	0	15	51	154	200	71	3	0	0	0	0	0	0	494	39	43
19:00	0	0	4	31	78	124	93	11	0	0	0	0	0	0	341	42	44
20:00	0	0	0	5	48	103	48	10	1	0	0	0	0	0	215	42	45
21:00	0	0	1	8	25	70	57	9	0	0	0	0	0	0	170	43	45
22:00	0	0	1	1	30	56	34	4	0	0	0	0	0	0	126	42	44
23:00	0	0	0	1	15	33	33	11	2	0	0	0	0	0	95	44	48
Total	130	188	234	374	1214	2316	1322	276	29	1	0	0	0	0	6084		
Percent	2.1%	3.1%	3.8%	6.1%	20.0%	38.1%	21.7%	4.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	08:00	08:00	11:00	11:00	10:00	07:00					07:00		
Vol.	46	59	41	30	51	186	108	37	5	1					391		
PM Peak	15:00	15:00	15:00	17:00	17:00	16:00	12:00	12:00	12:00						17:00		
Vol.	74	92	70	74	223	246	106	25	3						601		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	0	0	0	11	19	17	3	3	0	0	0	0	0	53	44	50
01:00	0	0	0	0	4	5	9	7	0	0	0	0	0	0	25	47	49
02:00	0	0	0	0	1	4	4	0	0	0	0	0	0	0	9	43	44
03:00	0	0	0	1	2	4	2	2	0	0	0	0	0	0	11	45	48
04:00	0	0	0	0	0	5	7	2	0	0	0	0	0	0	14	44	48
05:00	0	0	0	0	2	9	17	5	0	0	0	0	0	0	33	45	48
06:00	0	1	1	2	38	98	78	13	2	0	0	0	0	0	233	43	46
07:00	0	**3**	4	**11**	**58**	168	115	22	1	**1**	0	0	0	0	383	43	46
08:00	0	0	0	9	53	**176**	**138**	21	1	0	0	0	0	0	**398**	43	45
09:00	0	0	0	10	52	110	102	**27**	2	1	0	0	0	0	304	44	47
10:00	0	0	1	7	44	93	73	21	4	0	0	0	0	0	243	44	48
11:00	0	0	**5**	6	35	131	108	21	**5**	0	0	0	0	0	311	44	47
12 PM	0	0	0	0	22	123	113	28	**3**	**3**	0	0	0	0	292	44	48
13:00	0	0	0	2	27	133	**121**	**29**	3	0	0	0	0	0	315	44	47
14:00	**26**	13	9	11	36	135	94	13	0	0	0	0	0	0	337	43	44
15:00	21	**44**	**44**	43	134	155	74	5	1	0	0	0	0	0	521	40	43
16:00	1	10	25	**72**	**196**	**212**	88	10	0	0	0	0	0	0	**614**	40	43
17:00	2	3	13	61	185	187	48	7	0	0	0	0	**1**	0	507	39	43
18:00	0	0	5	17	87	210	77	10	0	0	0	0	0	0	406	41	44
19:00	0	0	4	13	71	142	86	13	2	0	0	0	0	0	331	42	44
20:00	0	0	0	3	34	90	71	15	0	1	0	0	0	0	214	43	46
21:00	0	0	0	9	41	101	56	5	0	0	0	0	0	0	212	42	44
22:00	0	0	0	3	26	62	44	11	1	0	0	0	0	0	147	43	47
23:00	0	0	0	0	17	50	42	8	1	0	0	0	0	0	118	43	46
Total	50	74	111	280	1176	2422	1584	298	29	6	0	0	1	0	6031		
Percent	0.8%	1.2%	1.8%	4.6%	19.5%	40.2%	26.3%	4.9%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak		07:00	11:00	07:00	07:00	08:00	08:00	09:00	11:00	07:00					08:00		
Vol.		3	5	11	58	176	138	27	5	1					398		
PM Peak	14:00	15:00	15:00	16:00	16:00	16:00	13:00	13:00	12:00	12:00			17:00		16:00		
Vol.	26	44	44	72	196	212	121	29	3	3			1		614		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	**1**	4	13	40	22	7	0	0	0	0	0	0	87	43	46
01:00	0	0	0	3	9	26	27	9	1	0	0	0	0	0	75	44	48
02:00	0	0	0	0	4	13	12	2	0	0	0	0	0	0	31	43	46
03:00	0	0	0	0	4	7	4	3	0	0	0	0	0	0	18	45	48
04:00	0	0	0	0	3	7	6	2	0	0	0	0	0	0	18	44	47
05:00	0	0	0	1	2	8	10	1	0	0	0	0	0	0	22	43	44
06:00	0	0	1	1	5	19	16	5	2	0	0	0	0	0	49	44	49
07:00	0	0	0	0	10	29	48	21	**4**	0	0	0	0	0	112	46	49
08:00	0	0	0	1	13	70	76	23	3	0	0	0	0	0	186	44	48
09:00	0	0	0	3	10	99	87	17	2	0	0	0	0	0	218	44	47
10:00	0	0	0	**8**	31	105	102	25	2	0	0	0	0	0	273	44	47
11:00	0	0	0	7	**43**	**134**	**140**	**29**	2	0	0	0	0	0	**355**	44	47
12 PM	0	0	4	6	33	146	**137**	23	**7**	0	0	0	0	0	356	44	47
13:00	0	0	0	4	37	132	119	**30**	1	0	0	0	0	0	323	44	47
14:00	0	0	0	4	37	169	129	20	3	0	0	0	0	0	362	43	46
15:00	0	0	0	10	72	**200**	108	21	3	0	0	0	0	0	**414**	43	45
16:00	0	0	2	10	62	176	89	20	2	0	0	0	0	0	361	43	45
17:00	0	0	**6**	**28**	**108**	177	68	9	0	0	0	0	0	0	396	41	44
18:00	0	0	0	5	58	151	76	8	1	0	0	0	0	0	299	42	44
19:00	0	0	2	6	68	122	57	5	0	0	0	0	0	0	260	42	44
20:00	0	0	2	10	48	106	51	3	0	0	0	0	0	0	220	42	44
21:00	0	0	1	3	33	119	67	6	2	0	0	0	0	0	231	43	44
22:00	0	0	0	3	38	73	45	4	1	0	0	0	0	0	164	42	44
23:00	0	0	0	0	13	63	36	2	0	0	0	0	0	0	114	42	44
Total	0	0	19	117	754	2191	1532	295	36	0	0	0	0	0	4944		
Percent	0.0%	0.0%	0.4%	2.4%	15.3%	44.3%	31.0%	6.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak			00:00	10:00	11:00	11:00	11:00	11:00	07:00						11:00		
Vol.			1	8	43	134	140	29	4						355		
PM Peak			17:00	17:00	17:00	15:00	12:00	13:00	12:00						15:00		
Vol.			6	28	108	200	137	30	7						414		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	0	2	12	27	16	2	1	0	0	0	0	0	60	43	45
01:00	0	0	0	1	17	20	22	6	**2**	0	0	0	0	0	68	44	48
02:00	0	0	0	0	3	10	10	4	0	0	0	0	0	0	27	44	48
03:00	0	0	0	0	5	7	2	1	1	0	0	0	0	0	16	43	50
04:00	0	0	0	0	1	5	4	0	0	0	0	0	0	0	10	43	44
05:00	0	0	0	0	5	8	9	5	0	0	0	0	0	0	27	45	48
06:00	0	0	0	1	2	8	12	5	2	0	0	0	0	0	30	47	51
07:00	0	0	0	0	2	29	33	16	2	0	0	0	0	0	82	46	49
08:00	0	0	0	1	6	39	56	16	1	0	0	0	0	0	119	44	48
09:00	0	0	0	**3**	27	77	77	**25**	1	0	0	0	0	0	210	44	48
10:00	0	0	0	2	**38**	**134**	74	16	1	0	0	0	0	**1**	266	43	46
11:00	0	0	0	3	24	118	**119**	18	0	0	0	0	0	0	**282**	43	46
12 PM	0	0	5	**11**	48	168	91	22	1	0	0	0	0	0	346	43	46
13:00	0	0	3	6	32	143	**139**	**29**	0	0	0	0	0	0	352	44	46
14:00	0	0	0	5	36	172	113	24	**3**	0	0	0	0	0	353	43	46
15:00	0	0	1	4	37	166	122	26	1	1	0	0	0	0	358	43	46
16:00	0	**3**	**7**	7	51	**180**	111	23	1	0	0	0	0	0	**383**	43	46
17:00	0	0	0	8	**52**	126	98	11	0	0	0	0	0	0	295	43	44
18:00	0	0	3	4	24	126	88	12	0	**2**	0	0	0	0	259	43	45
19:00	0	0	0	3	26	79	68	12	0	0	0	0	0	0	188	43	46
20:00	0	0	0	3	18	57	45	14	2	0	0	0	0	0	139	44	48
21:00	0	0	0	1	14	51	43	6	0	0	0	0	0	0	115	43	45
22:00	0	0	0	0	10	34	40	6	0	0	0	0	0	0	90	44	46
23:00	0	0	0	1	9	33	20	8	2	1	0	0	0	0	74	44	49
Total	0	3	19	66	499	1817	1412	307	21	4	0	0	0	1	4149		
Percent	0.0%	0.1%	0.5%	1.6%	12.0%	43.8%	34.0%	7.4%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak				09:00	10:00	10:00	11:00	09:00	01:00					10:00	11:00		
Vol.				3	38	134	119	25	2					1	282		
PM Peak		16:00	16:00	12:00	17:00	16:00	13:00	13:00	14:00	18:00					16:00		
Vol.		3	7	11	52	180	139	29	3	2					383		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	0	0	2	9	11	12	4	0	0	0	0	0	0	38	44	47
01:00	0	0	0	1	3	4	2	2	1	0	0	0	0	0	13	47	51
02:00	0	0	0	0	0	5	2	1	0	0	0	0	0	0	8	44	47
03:00	0	0	0	0	1	2	2	1	0	0	0	0	0	0	6	45	48
04:00	0	0	0	0	1	4	4	1	1	0	0	0	0	0	11	46	52
05:00	0	0	0	1	7	18	13	2	0	0	0	0	0	0	41	43	44
06:00	0	0	0	0	26	99	75	17	2	0	0	0	0	0	219	44	47
07:00	**47**	**38**	**24**	**25**	40	94	79	13	0	0	0	0	0	0	360	42	44
08:00	9	5	8	16	**41**	**161**	**124**	22	1	**1**	0	0	0	0	**388**	43	46
09:00	0	0	0	1	34	123	96	17	**3**	0	0	0	0	0	274	43	46
10:00	0	0	0	6	20	104	98	24	1	0	0	0	0	0	253	44	47
11:00	0	0	0	1	32	113	116	**26**	3	0	0	0	0	0	291	44	47
12 PM	0	0	0	4	28	100	96	**38**	**5**	0	0	0	0	0	271	45	48
13:00	0	0	0	2	30	110	**104**	25	2	0	0	0	0	0	273	44	47
14:00	6	3	0	12	41	151	79	30	0	0	0	0	0	0	322	43	47
15:00	**46**	**36**	**36**	31	102	142	77	6	0	0	0	0	0	0	476	40	43
16:00	0	4	20	**61**	167	**248**	93	9	2	**1**	0	0	0	0	**605**	40	44
17:00	5	7	15	50	**177**	227	56	4	0	0	0	0	0	0	541	39	42
18:00	3	2	14	24	126	183	85	11	2	0	0	0	0	0	450	41	44
19:00	0	0	0	3	62	143	78	7	0	0	0	0	0	0	293	42	44
20:00	0	0	1	1	45	97	49	3	1	0	0	0	0	0	197	42	44
21:00	0	0	0	1	19	69	54	5	1	1	0	0	0	0	150	43	44
22:00	0	0	1	4	17	42	32	7	0	0	0	0	0	0	103	43	46
23:00	0	0	0	1	15	29	29	5	1	0	0	0	0	0	80	43	46
Total	116	95	119	247	1043	2279	1455	280	26	3	0	0	0	0	5663		
Percent	2.0%	1.7%	2.1%	4.4%	18.4%	40.2%	25.7%	4.9%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	08:00	08:00	08:00	11:00	09:00	08:00					08:00		
Vol.	47	38	24	25	41	161	124	26	3	1					388		
PM Peak	15:00	15:00	15:00	16:00	17:00	16:00	13:00	12:00	12:00	16:00					16:00		
Vol.	46	36	36	61	177	248	104	38	5	1					605		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-EB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	0	0	0	5	25	8	0	**3**	0	0	0	0	0	41	43	51
01:00	0	0	0	0	4	9	4	1	1	0	0	0	0	0	19	43	50
02:00	0	0	0	0	0	5	6	2	0	0	0	0	0	0	13	45	48
03:00	0	0	0	0	0	5	1	0	0	0	0	0	0	0	6	40	43
04:00	0	0	0	1	1	3	5	1	0	0	0	0	0	0	11	44	47
05:00	0	0	0	0	3	16	13	10	0	0	0	0	0	0	42	46	48
06:00	0	0	0	2	33	104	73	16	0	0	0	0	0	0	228	43	46
07:00	**40**	**40**	**58**	**17**	31	77	70	23	1	0	0	0	0	0	357	42	46
08:00	30	32	11	3	39	**132**	87	**30**	2	0	0	0	0	0	**366**	43	47
09:00	0	0	0	2	**40**	110	**109**	16	1	0	0	0	0	0	278	43	45
10:00	0	0	0	7	40	84	82	21	1	0	0	0	0	0	235	44	47
11:00	0	0	0	1	32	113	106	20	1	0	0	0	0	0	273	44	46
12 PM	0	0	3	17	38	158	**119**	20	**2**	0	0	0	0	0	357	43	46
13:00	0	0	0	0	39	139	112	**21**	2	0	0	0	0	0	313	43	46
14:00	3	2	10	31	70	156	80	13	1	0	0	0	0	0	366	42	44
15:00	5	1	5	34	138	204	86	8	0	0	0	0	0	0	481	41	44
16:00	**18**	21	**29**	45	134	**267**	78	4	0	0	0	0	0	0	**596**	39	43
17:00	3	**31**	27	**49**	**182**	190	56	3	0	0	0	0	0	0	541	39	42
18:00	2	3	10	29	98	227	66	13	2	0	0	0	0	0	450	41	44
19:00	0	0	0	26	86	146	83	10	1	0	0	0	0	0	352	42	44
20:00	0	0	0	8	44	113	43	10	0	0	0	0	0	0	218	42	44
21:00	0	0	0	2	33	89	36	7	0	0	0	0	0	0	167	42	44
22:00	0	0	0	1	25	43	25	5	0	0	0	0	0	0	99	43	45
23:00	0	0	0	2	9	47	20	4	1	**1**	0	0	0	0	84	43	47
Total	101	130	153	277	1124	2462	1368	258	19	1	0	0	0	0	5893		
Percent	1.7%	2.2%	2.6%	4.7%	19.1%	41.8%	23.2%	4.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	09:00	08:00	09:00	08:00	00:00						08:00		
Vol.	40	40	58	17	40	132	109	30	3						366		
PM Peak	16:00	17:00	16:00	17:00	17:00	16:00	12:00	13:00	12:00	23:00					16:00		
Vol.	18	31	29	49	182	267	119	21	2	1					596		
Grand Total	467	603	822	1684	7044	15900	10007	1972	186	20	0	2	1	1	38709		
Percent	1.2%	1.6%	2.1%	4.4%	18.2%	41.1%	25.9%	5.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	31 MPH
50th Percentile :	37 MPH
85th Percentile :	43 MPH
95th Percentile :	45 MPH

Statistics

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	25907
Percent in Pace :	66.9%
Number of Vehicles > 55 MPH :	24
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	38 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

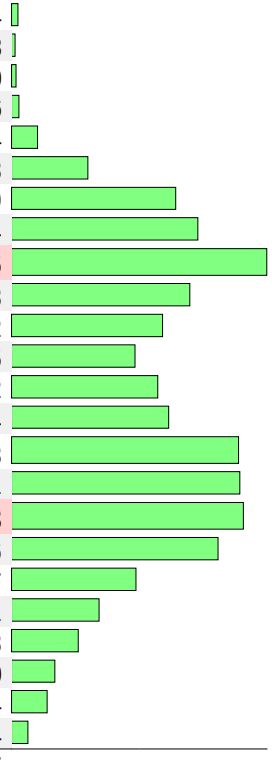
Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	17	16	15	16	54	50	30
01:00	*	*	7	9	9	8	43	31	20
02:00	*	*	6	10	17	11	18	21	14
03:00	*	*	20	16	12	16	14	10	14
04:00	*	*	67	59	57	61	25	13	44
05:00	*	*	156	165	166	162	49	27	113
06:00	*	*	347	346	300	331	87	71	230
07:00	*	*	398	402	362	387	147	107	283
08:00	*	*	**532**	**509**	**503**	**515**	249	148	**388**
09:00	*	*	399	351	378	376	286	235	330
10:00	*	*	267	304	302	291	**342**	277	298
11:00	*	*	261	267	317	282	326	**317**	298
12:00 PM	*	*	256	257	329	281	346	**375**	313
01:00	*	*	328	335	338	334	318	369	338
02:00	*	*	414	427	441	427	334	339	391
03:00	*	*	450	482	462	465	347	298	408
04:00	*	*	**515**	**484**	**533**	**511**	**358**	295	**437**
05:00	*	*	400	424	424	416	279	263	358
06:00	*	*	255	263	283	267	277	197	255
07:00	*	*	179	191	194	188	182	147	179
08:00	*	*	137	150	130	139	173	128	144
09:00	*	*	82	99	129	103	118	68	99
10:00	*	*	75	87	121	94	149	61	99
11:00	*	*	38	45	52	45	95	32	52
Day Total	0	0	5606	5698	5874	5726	4616	3879	5135
% Avg. WkDay	0.0%	0.0%	97.9%	99.5%	102.6%				
% Avg. Week	0.0%	0.0%	109.2%	111.0%	114.4%	111.5%	89.9%	75.5%	
AM Peak	-	-	08:00	08:00	08:00	- 08:00	- 10:00	11:00	- 08:00	-	-
Vol.	-	-	532	509	503	- 515	- 342	317	- 388	-	-
PM Peak	-	-	16:00	16:00	16:00	- 16:00	- 16:00	12:00	- 16:00	-	-
Vol.	-	-	515	484	533	- 511	- 358	375	- 437	-	-

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	12	15	*	*	*	14	*	*	14
01:00	6	9	*	*	*	8	*	*	8
02:00	12	9	*	*	*	10	*	*	10
03:00	16	15	*	*	*	16	*	*	16
04:00	40	67	*	*	*	54	*	*	54
05:00	168	148	*	*	*	158	*	*	158
06:00	315	363	*	*	*	339	*	*	339
07:00	368	400	*	*	*	384	*	*	384
08:00	**499**	**553**	*	*	*	**526**	*	*	**526**
09:00	362	373	*	*	*	368	*	*	368
10:00	313	312	*	*	*	312	*	*	312
11:00	270	240	*	*	*	255	*	*	255
12:00 PM	291	313	*	*	*	302	*	*	302
01:00	314	335	*	*	*	324	*	*	324
02:00	427	**508**	*	*	*	468	*	*	468
03:00	453	489	*	*	*	471	*	*	471
04:00	**494**	462	*	*	*	**478**	*	*	**478**
05:00	434	417	*	*	*	426	*	*	426
06:00	257	257	*	*	*	257	*	*	257
07:00	183	179	*	*	*	181	*	*	181
08:00	114	161	*	*	*	138	*	*	138
09:00	97	84	*	*	*	90	*	*	90
10:00	66	83	*	*	*	74	*	*	74
11:00	34	33	*	*	*	34	*	*	34
Day Total	5545	5825	0	0	0	5687	0	0	5687
% Avg. WkDay	97.5%	102.4%	0.0%	0.0%	0.0%				
% Avg. Week	97.5%	102.4%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	499	553	-	-	-	526	-	-	526
PM Peak	16:00	14:00	-	-	-	16:00	-	-	16:00
Vol.	494	508	-	-	-	478	-	-	478



Grand Total	5545	5825	5606	5698	5874	11413	4616	3879	10822

ADT ADT 5,292 AADT 5,292

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	5	10	0	2	0	0	0	0	0	0	0	0	0	17
01:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	1	5	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	9	9	0	2	0	0	0	0	0	0	0	0	0	20
04:00	0	40	22	0	5	0	0	0	0	0	0	0	0	0	67
05:00	0	82	62	0	12	0	0	0	0	0	0	0	0	0	156
06:00	1	162	142	3	39	0	0	0	0	0	0	0	0	0	347
07:00	0	210	152	6	30	0	0	0	0	0	0	0	0	0	398
08:00	0	278	212	2	39	1	0	0	0	0	0	0	0	0	532
09:00	0	180	175	7	37	0	0	0	0	0	0	0	0	0	399
10:00	0	118	111	1	37	0	0	0	0	0	0	0	0	0	267
11:00	0	151	86	2	21	0	0	1	0	0	0	0	0	0	261
12 PM	0	120	116	2	18	0	0	0	0	0	0	0	0	0	256
13:00	0	164	128	4	31	0	1	0	0	0	0	0	0	0	328
14:00	0	196	169	9	39	0	1	0	0	0	0	0	0	0	414
15:00	0	223	190	7	30	0	0	0	0	0	0	0	0	0	450
16:00	0	257	218	3	36	0	0	1	0	0	0	0	0	0	515
17:00	0	231	148	0	21	0	0	0	0	0	0	0	0	0	400
18:00	0	129	109	1	16	0	0	0	0	0	0	0	0	0	255
19:00	0	87	81	0	11	0	0	0	0	0	0	0	0	0	179
20:00	0	81	45	0	11	0	0	0	0	0	0	0	0	0	137
21:00	0	46	30	0	6	0	0	0	0	0	0	0	0	0	82
22:00	0	36	39	0	0	0	0	0	0	0	0	0	0	0	75
23:00	0	24	12	0	2	0	0	0	0	0	0	0	0	0	38
Total	1	2835	2273	47	445	1	2	2	0	0	0	0	0	0	5606
Percent	0.0%	50.6%	40.5%	0.8%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	08:00	08:00	09:00	06:00	08:00		11:00							
Vol.	1	278	212	7	39	1		1							
PM Peak		16:00	16:00	14:00	14:00		13:00	16:00							
Vol.		257	218	9	39		1	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	10	4	1	1	0	0	0	0	0	0	0	0	0	16
01:00	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	5	5	0	0	0	0	0	0	0	0	0	0	0	10
03:00	0	7	8	0	1	0	0	0	0	0	0	0	0	0	16
04:00	0	28	27	0	4	0	0	0	0	0	0	0	0	0	59
05:00	0	89	64	1	10	1	0	0	0	0	0	0	0	0	165
06:00	0	194	114	3	34	0	0	0	0	1	0	0	0	0	346
07:00	0	229	144	4	25	0	0	0	0	0	0	0	0	0	402
08:00	0	268	194	5	42	0	0	0	0	0	0	0	0	0	509
09:00	0	163	158	9	21	0	0	0	0	0	0	0	0	0	351
10:00	1	136	132	3	32	0	0	0	0	0	0	0	0	0	304
11:00	0	122	123	5	16	0	0	0	0	0	0	0	1	0	267
12 PM	0	113	117	4	23	0	0	0	0	0	0	0	0	0	257
13:00	1	173	132	1	28	0	0	0	0	0	0	0	0	0	335
14:00	0	191	194	6	36	0	0	0	0	0	0	0	0	0	427
15:00	2	259	184	7	29	1	0	0	0	0	0	0	0	0	482
16:00	0	255	201	8	20	0	0	0	0	0	0	0	0	0	484
17:00	1	217	185	1	20	0	0	0	0	0	0	0	0	0	424
18:00	1	134	105	1	22	0	0	0	0	0	0	0	0	0	263
19:00	0	101	81	0	9	0	0	0	0	0	0	0	0	0	191
20:00	0	81	61	1	7	0	0	0	0	0	0	0	0	0	150
21:00	0	68	29	0	2	0	0	0	0	0	0	0	0	0	99
22:00	0	41	41	0	5	0	0	0	0	0	0	0	0	0	87
23:00	0	27	16	0	2	0	0	0	0	0	0	0	0	0	45
Total	6	2915	2324	60	389	2	0	0	0	1	0	0	1	0	5698
Percent	0.1%	51.2%	40.8%	1.1%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	08:00	09:00	08:00	05:00				06:00			11:00		
Vol.	1	268	194	9	42	1				1			1		
PM Peak	15:00	15:00	16:00	16:00	14:00	15:00									
Vol.	2	259	201	8	36	1									

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	9	5	0	1	0	0	0	0	0	0	0	0	0	15
01:00	0	1	8	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	11	6	0	0	0	0	0	0	0	0	0	0	0	17
03:00	0	5	5	0	2	0	0	0	0	0	0	0	0	0	12
04:00	0	23	27	0	7	0	0	0	0	0	0	0	0	0	57
05:00	1	84	66	1	14	0	0	0	0	0	0	0	0	0	166
06:00	0	147	120	2	31	0	0	0	0	0	0	0	0	0	300
07:00	0	173	150	4	35	0	0	0	0	0	0	0	0	0	362
08:00	0	265	188	4	46	0	0	0	0	0	0	0	0	0	503
09:00	0	160	178	7	33	0	0	0	0	0	0	0	0	0	378
10:00	0	152	123	2	25	0	0	0	0	0	0	0	0	0	302
11:00	0	149	140	7	21	0	0	0	0	0	0	0	0	0	317
12 PM	0	141	153	7	27	0	0	1	0	0	0	0	0	0	329
13:00	0	168	141	3	25	0	0	1	0	0	0	0	0	0	338
14:00	0	227	169	7	38	0	0	0	0	0	0	0	0	0	441
15:00	0	249	175	2	36	0	0	0	0	0	0	0	0	0	462
16:00	1	277	224	1	30	0	0	0	0	0	0	0	0	0	533
17:00	0	234	165	2	23	0	0	0	0	0	0	0	0	0	424
18:00	0	155	113	1	14	0	0	0	0	0	0	0	0	0	283
19:00	1	112	72	0	9	0	0	0	0	0	0	0	0	0	194
20:00	0	65	56	0	9	0	0	0	0	0	0	0	0	0	130
21:00	0	72	54	0	3	0	0	0	0	0	0	0	0	0	129
22:00	0	61	55	0	5	0	0	0	0	0	0	0	0	0	121
23:00	0	34	17	0	1	0	0	0	0	0	0	0	0	0	52
Total	3	2974	2410	50	435	0	0	2	0	0	0	0	0	0	5874
Percent	0.1%	50.6%	41.0%	0.9%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	08:00	08:00	09:00	08:00										
Vol.	1	265	188	7	46										
PM Peak	16:00	16:00	16:00	12:00	14:00			12:00							
Vol.	1	277	224	7	38			1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
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5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	24	26	0	4	0	0	0	0	0	0	0	0	0	54
01:00	0	23	18	0	2	0	0	0	0	0	0	0	0	0	43
02:00	0	9	7	0	2	0	0	0	0	0	0	0	0	0	18
03:00	0	9	5	0	0	0	0	0	0	0	0	0	0	0	14
04:00	0	13	9	0	3	0	0	0	0	0	0	0	0	0	25
05:00	0	23	16	0	10	0	0	0	0	0	0	0	0	0	49
06:00	0	48	35	0	4	0	0	0	0	0	0	0	0	0	87
07:00	0	72	61	0	13	1	0	0	0	0	0	0	0	0	147
08:00	1	122	108	2	16	0	0	0	0	0	0	0	0	0	249
09:00	0	149	111	1	25	0	0	0	0	0	0	0	0	0	286
10:00	1	168	145	2	26	0	0	0	0	0	0	0	0	0	342
11:00	2	183	113	1	26	0	1	0	0	0	0	0	0	0	326
12 PM	1	175	146	2	22	0	0	0	0	0	0	0	0	0	346
13:00	1	167	130	0	20	0	0	0	0	0	0	0	0	0	318
14:00	0	193	127	1	13	0	0	0	0	0	0	0	0	0	334
15:00	0	190	134	4	19	0	0	0	0	0	0	0	0	0	347
16:00	0	178	161	3	16	0	0	0	0	0	0	0	0	0	358
17:00	0	153	110	0	16	0	0	0	0	0	0	0	0	0	279
18:00	0	152	116	0	9	0	0	0	0	0	0	0	0	0	277
19:00	0	90	82	1	9	0	0	0	0	0	0	0	0	0	182
20:00	0	85	81	0	7	0	0	0	0	0	0	0	0	0	173
21:00	0	67	44	0	7	0	0	0	0	0	0	0	0	0	118
22:00	0	79	66	0	4	0	0	0	0	0	0	0	0	0	149
23:00	1	46	44	0	4	0	0	0	0	0	0	0	0	0	95
Total	7	2418	1895	17	277	1	1	0	0	0	0	0	0	0	4616
Percent	0.2%	52.4%	41.1%	0.4%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00	08:00	10:00	07:00	11:00								
Vol.	2	183	145	2	26	1	1								
PM Peak	12:00	14:00	16:00	15:00	12:00										
Vol.	1	193	161	4	22										

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	20	27	0	3	0	0	0	0	0	0	0	0	0	50
01:00	0	20	11	0	0	0	0	0	0	0	0	0	0	0	31
02:00	0	15	5	0	1	0	0	0	0	0	0	0	0	0	21
03:00	0	7	2	0	1	0	0	0	0	0	0	0	0	0	10
04:00	0	6	4	0	3	0	0	0	0	0	0	0	0	0	13
05:00	0	13	9	0	5	0	0	0	0	0	0	0	0	0	27
06:00	0	42	22	0	7	0	0	0	0	0	0	0	0	0	71
07:00	0	53	47	0	7	0	0	0	0	0	0	0	0	0	107
08:00	0	73	62	2	11	0	0	0	0	0	0	0	0	0	148
09:00	0	124	102	0	9	0	0	0	0	0	0	0	0	0	235
10:00	0	144	111	3	19	0	0	0	0	0	0	0	0	0	277
11:00	2	154	137	0	24	0	0	0	0	0	0	0	0	0	317
12 PM	2	211	137	1	24	0	0	0	0	0	0	0	0	0	375
13:00	2	196	148	4	19	0	0	0	0	0	0	0	0	0	369
14:00	2	176	151	0	10	0	0	0	0	0	0	0	0	0	339
15:00	0	160	116	0	21	0	0	1	0	0	0	0	0	0	298
16:00	1	152	126	2	14	0	0	0	0	0	0	0	0	0	295
17:00	0	139	108	3	13	0	0	0	0	0	0	0	0	0	263
18:00	0	92	92	0	13	0	0	0	0	0	0	0	0	0	197
19:00	0	82	56	1	8	0	0	0	0	0	0	0	0	0	147
20:00	0	68	55	1	4	0	0	0	0	0	0	0	0	0	128
21:00	0	43	25	0	0	0	0	0	0	0	0	0	0	0	68
22:00	0	27	32	0	2	0	0	0	0	0	0	0	0	0	61
23:00	0	16	14	0	2	0	0	0	0	0	0	0	0	0	32
Total	9	2033	1599	17	220	0	0	1	0	0	0	0	0	0	3879
Percent	0.2%	52.4%	41.2%	0.4%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	10:00	11:00										
Vol.	2	154	137	3	24										
PM Peak	12:00	12:00	14:00	13:00	12:00			15:00							
Vol.	2	211	151	4	24			1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
01:00	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
02:00	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
03:00	0	12	4	0	0	0	0	0	0	0	0	0	0	0	16
04:00	0	16	21	0	3	0	0	0	0	0	0	0	0	0	40
05:00	1	80	69	0	17	1	0	0	0	0	0	0	0	0	168
06:00	0	163	121	0	31	0	0	0	0	0	0	0	0	0	315
07:00	2	186	141	6	33	0	0	0	0	0	0	0	0	0	368
08:00	0	266	186	1	42	2	1	1	0	0	0	0	0	0	499
09:00	0	161	168	4	27	0	0	2	0	0	0	0	0	0	362
10:00	0	143	134	6	28	0	1	1	0	0	0	0	0	0	313
11:00	0	140	107	4	17	0	1	0	1	0	0	0	0	0	270
12 PM	0	144	121	2	23	0	1	0	0	0	0	0	0	0	291
13:00	0	168	115	5	26	0	0	0	0	0	0	0	0	0	314
14:00	0	212	175	5	35	0	0	0	0	0	0	0	0	0	427
15:00	2	240	173	8	30	0	0	0	0	0	0	0	0	0	453
16:00	1	286	181	3	23	0	0	0	0	0	0	0	0	0	494
17:00	2	223	175	2	32	0	0	0	0	0	0	0	0	0	434
18:00	0	144	93	1	19	0	0	0	0	0	0	0	0	0	257
19:00	0	94	77	0	12	0	0	0	0	0	0	0	0	0	183
20:00	0	71	37	0	6	0	0	0	0	0	0	0	0	0	114
21:00	0	42	48	1	6	0	0	0	0	0	0	0	0	0	97
22:00	0	39	22	0	5	0	0	0	0	0	0	0	0	0	66
23:00	0	21	13	0	0	0	0	0	0	0	0	0	0	0	34
Total	8	2866	2193	48	418	3	4	4	1	0	0	0	0	0	5545
Percent	0.1%	51.7%	39.5%	0.9%	7.5%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	08:00	07:00	08:00	08:00	08:00	09:00	11:00						
Vol.	2	266	186	6	42	2	1	2	1						
PM Peak	15:00	16:00	16:00	15:00	14:00		12:00								
Vol.	2	286	181	8	35		1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	8	7	0	0	0	0	0	0	0	0	0	0	0	15
01:00	0	4	4	0	1	0	0	0	0	0	0	0	0	0	9
02:00	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	10	5	0	0	0	0	0	0	0	0	0	0	0	15
04:00	0	33	25	0	9	0	0	0	0	0	0	0	0	0	67
05:00	0	82	54	1	11	0	0	0	0	0	0	0	0	0	148
06:00	0	190	133	2	38	0	0	0	0	0	0	0	0	0	363
07:00	0	203	161	7	29	0	0	0	0	0	0	0	0	0	400
08:00	0	316	203	1	32	0	0	1	0	0	0	0	0	0	553
09:00	0	179	154	7	33	0	0	0	0	0	0	0	0	0	373
10:00	0	151	139	1	21	0	0	0	0	0	0	0	0	0	312
11:00	0	123	89	4	23	0	0	1	0	0	0	0	0	0	240
12 PM	0	170	114	4	22	0	1	1	1	0	0	0	0	0	313
13:00	0	168	138	2	26	0	1	0	0	0	0	0	0	0	335
14:00	0	268	193	8	38	0	0	1	0	0	0	0	0	0	508
15:00	0	256	191	7	34	1	0	0	0	0	0	0	0	0	489
16:00	1	240	191	4	26	0	0	0	0	0	0	0	0	0	462
17:00	0	231	155	2	29	0	0	0	0	0	0	0	0	0	417
18:00	0	136	110	0	11	0	0	0	0	0	0	0	0	0	257
19:00	0	101	66	0	12	0	0	0	0	0	0	0	0	0	179
20:00	0	84	70	1	6	0	0	0	0	0	0	0	0	0	161
21:00	0	48	33	0	3	0	0	0	0	0	0	0	0	0	84
22:00	0	44	34	0	5	0	0	0	0	0	0	0	0	0	83
23:00	0	15	17	0	1	0	0	0	0	0	0	0	0	0	33
Total	1	3065	2290	51	410	1	2	4	1	0	0	0	0	0	5825
Percent	0.0%	52.6%	39.3%	0.9%	7.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	07:00	06:00			08:00							
Vol.		316	203	7	38			1							
PM Peak	16:00	14:00	14:00	14:00	14:00	15:00	12:00	12:00	12:00						
Vol.	1	268	193	8	38	1	1	1	1						
Grand Total	35	19106	14984	290	2594	8	9	13	2	1	0	0	1	0	37043
Percent	0.1%	51.6%	40.5%	0.8%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	0	0	2	4	6	3	2	0	0	0	0	0	17	49	52
01:00	0	0	0	0	0	5	2	0	0	0	0	0	0	0	7	42	44
02:00	0	0	0	0	0	0	3	3	0	0	0	0	0	0	6	48	49
03:00	0	0	0	0	2	3	8	6	1	0	0	0	0	0	20	48	50
04:00	0	0	0	0	6	27	26	5	2	0	**1**	0	0	0	67	44	49
05:00	0	0	0	0	6	56	72	19	3	0	0	0	0	0	156	44	48
06:00	**1**	0	**1**	**4**	29	173	120	17	2	0	0	0	0	0	347	43	45
07:00	0	**2**	0	0	34	176	162	22	2	0	0	0	0	0	398	43	45
08:00	0	0	0	0	43	**241**	**204**	**41**	3	0	0	0	0	0	**532**	44	47
09:00	0	0	0	3	**45**	165	154	24	**7**	**1**	0	0	0	0	399	44	47
10:00	0	0	0	0	13	101	132	20	1	0	0	0	0	0	267	44	46
11:00	0	0	0	0	17	113	107	20	4	0	0	0	0	0	261	44	47
12 PM	0	0	0	1	18	103	106	24	**4**	0	0	0	0	0	256	44	48
13:00	0	0	0	1	38	153	106	**26**	4	0	0	0	0	0	328	44	47
14:00	0	**1**	**1**	6	46	241	109	9	1	0	0	0	0	0	414	42	44
15:00	**1**	0	0	6	75	201	147	19	1	0	0	0	0	0	450	43	44
16:00	0	0	0	4	**83**	**255**	**153**	19	1	0	0	0	0	0	**515**	43	44
17:00	0	0	0	**8**	82	202	95	11	1	1	0	0	0	0	400	42	44
18:00	0	0	0	5	47	122	69	10	2	0	0	0	0	0	255	43	44
19:00	0	0	0	0	20	88	60	10	1	0	0	0	0	0	179	43	46
20:00	0	0	0	0	10	63	46	16	2	0	0	0	0	0	137	44	48
21:00	0	0	0	0	5	27	40	9	1	0	0	0	0	0	82	44	48
22:00	0	0	0	1	8	27	30	4	3	**2**	0	0	0	0	75	44	52
23:00	1	0	0	0	7	4	18	6	1	1	0	0	0	0	38	46	50
Total	3	3	2	39	636	2550	1975	343	49	5	1	0	0	0	5606		
Percent	0.1%	0.1%	0.0%	0.7%	11.3%	45.5%	35.2%	6.1%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	07:00	06:00	06:00	09:00	08:00	08:00	08:00	09:00	09:00	04:00				08:00		
Vol.	1	2	1	4	45	241	204	41	7	1	1				532		
PM Peak	15:00	14:00	14:00	17:00	16:00	16:00	16:00	13:00	12:00	22:00					16:00		
Vol.	1	1	1	8	83	255	153	26	4	2					515		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	0	0	0	0	0	5	10	1	0	0	0	0	0	0	16	44	45
01:00	0	0	0	0	1	5	1	2	0	0	0	0	0	0	9	46	48
02:00	0	0	0	0	1	4	4	0	1	0	0	0	0	0	10	44	52
03:00	0	0	0	0	0	3	6	7	0	0	0	0	0	0	16	48	49
04:00	0	0	0	0	7	14	31	7	0	0	0	0	0	0	59	44	47
05:00	0	0	0	0	7	45	92	21	0	0	0	0	0	0	165	44	48
06:00	0	0	0	2	42	177	102	20	3	0	0	0	0	0	346	43	46
07:00	3	0	0	4	36	176	149	31	3	0	0	0	0	0	402	44	47
08:00	0	0	0	**5**	**60**	**210**	**195**	32	**6**	0	0	**1**	0	0	**509**	44	47
09:00	0	0	0	2	22	149	140	**33**	5	0	0	0	0	0	351	44	48
10:00	**5**	**3**	**1**	2	22	127	121	21	2	0	0	0	0	0	304	44	46
11:00	0	0	0	2	26	129	89	20	1	0	0	0	0	0	267	43	46
12 PM	0	0	0	2	14	113	105	**21**	**2**	0	0	0	0	0	257	44	47
13:00	0	**2**	1	1	57	159	99	14	2	0	0	0	0	0	335	43	44
14:00	1	0	0	10	75	210	119	10	2	0	0	0	0	0	427	42	44
15:00	**7**	2	2	**11**	88	**243**	121	8	0	0	0	0	0	0	482	42	44
16:00	0	0	0	7	95	239	**127**	14	2	0	0	0	0	0	**484**	42	44
17:00	1	1	**8**	6	**98**	205	92	12	1	0	0	0	0	0	424	42	44
18:00	1	0	0	4	43	129	76	10	0	0	0	0	0	0	263	43	44
19:00	0	0	0	2	27	97	51	13	1	0	0	0	0	0	191	43	46
20:00	0	0	0	0	23	70	49	7	1	0	0	0	0	0	150	43	45
21:00	0	0	0	0	8	38	41	11	1	0	0	0	0	0	99	44	48
22:00	0	0	1	2	14	26	34	9	1	0	0	0	0	0	87	44	48
23:00	0	0	0	3	1	14	23	2	2	0	0	0	0	0	45	44	49
Total	18	8	13	65	767	2587	1877	326	36	0	0	1	0	0	5698		
Percent	0.3%	0.1%	0.2%	1.1%	13.5%	45.4%	32.9%	5.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	08:00	08:00	08:00	08:00	09:00	08:00			08:00			08:00		
Vol.	5	3	1	5	60	210	195	33	6			1			509		
PM Peak	15:00	13:00	17:00	15:00	17:00	15:00	16:00	12:00	12:00						16:00		
Vol.	7	2	8	11	98	243	127	21	2						484		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	0	0	1	2	6	4	1	1	0	0	0	0	0	15	44	51
01:00	0	0	0	0	1	1	4	1	1	**1**	0	0	0	0	9	53	57
02:00	0	0	0	0	0	7	6	3	1	0	0	0	0	0	17	47	50
03:00	0	0	0	0	1	5	4	1	1	0	0	0	0	0	12	45	51
04:00	0	0	0	0	2	17	30	8	0	0	0	0	0	0	57	44	48
05:00	0	0	0	1	15	73	53	20	**4**	0	0	0	0	0	166	44	48
06:00	0	0	0	0	**38**	134	113	11	4	0	0	0	0	0	300	43	45
07:00	0	0	**1**	**8**	23	161	142	27	0	0	0	0	0	0	362	44	46
08:00	0	0	1	7	36	**239**	**187**	28	4	1	0	0	0	0	**503**	43	46
09:00	0	0	0	6	36	164	134	**38**	0	0	0	0	0	0	378	44	47
10:00	0	0	0	1	24	128	118	29	2	0	0	0	0	0	302	44	47
11:00	0	0	0	0	21	161	111	23	1	0	0	0	0	0	317	43	46
12 PM	0	0	0	0	32	146	120	**29**	2	0	0	0	0	0	329	44	47
13:00	0	0	0	0	17	164	129	26	2	0	0	0	0	0	338	44	47
14:00	0	0	0	2	67	204	**148**	17	2	**1**	0	0	0	0	441	43	44
15:00	0	1	**1**	4	76	**240**	126	13	1	0	0	0	0	0	462	42	44
16:00	**1**	**2**	0	**16**	**120**	233	142	14	**5**	0	0	0	0	0	**533**	42	44
17:00	0	0	0	6	71	219	112	14	1	1	0	0	0	0	424	42	44
18:00	0	0	0	1	31	139	92	17	3	0	0	0	0	0	283	43	46
19:00	0	0	0	1	14	78	83	17	1	0	0	0	0	0	194	44	47
20:00	0	0	1	1	9	46	60	12	1	0	0	0	0	0	130	44	47
21:00	0	0	0	5	19	50	46	8	1	0	0	0	0	0	129	43	46
22:00	0	0	0	2	14	44	49	8	3	1	0	0	0	0	121	44	48
23:00	0	0	0	4	11	19	14	2	2	0	0	0	0	0	52	43	48
Total	1	3	4	66	680	2678	2027	367	43	5	0	0	0	0	5874		
Percent	0.0%	0.1%	0.1%	1.1%	11.6%	45.6%	34.5%	6.2%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak			07:00	07:00	06:00	08:00	08:00	09:00	05:00	01:00					08:00		
Vol.			1	8	38	239	187	38	4	1					503		
PM Peak	16:00	16:00	15:00	16:00	16:00	15:00	14:00	12:00	16:00	14:00					16:00		
Vol.	1	2	1	16	120	240	148	29	5	1					533		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	0	1	4	23	20	4	1	0	**1**	0	0	0	54	44	49
01:00	0	0	0	2	6	12	16	7	0	0	0	0	0	0	43	45	48
02:00	0	0	0	0	1	4	11	2	0	0	0	0	0	0	18	44	47
03:00	0	0	0	1	1	6	5	0	1	0	0	0	0	0	14	43	51
04:00	0	0	0	0	0	8	13	3	1	0	0	0	0	0	25	45	49
05:00	0	0	0	0	2	13	22	11	1	0	0	0	0	0	49	47	49
06:00	0	0	0	0	10	24	40	12	1	0	0	0	0	0	87	44	48
07:00	0	0	0	0	8	47	63	23	**6**	0	0	0	0	0	147	46	49
08:00	0	0	**1**	0	8	101	106	31	2	0	0	0	0	0	249	44	48
09:00	0	0	0	0	8	135	123	19	1	0	0	0	0	0	286	44	46
10:00	0	0	1	1	21	**156**	**129**	**32**	2	0	0	0	0	0	**342**	44	47
11:00	0	0	0	**4**	**33**	140	129	16	4	0	0	0	0	0	326	43	46
12 PM	0	**1**	0	**8**	33	153	129	19	3	0	0	0	0	0	346	43	46
13:00	0	0	0	0	32	129	**136**	18	3	0	0	0	0	0	318	44	46
14:00	0	0	0	3	44	134	129	22	1	1	0	0	0	0	334	43	46
15:00	0	0	0	4	46	157	108	**27**	**4**	1	0	0	0	0	347	44	47
16:00	0	0	0	1	47	**169**	129	10	2	0	0	0	0	0	**358**	43	44
17:00	0	0	0	4	**59**	142	64	9	1	0	0	0	0	0	279	42	44
18:00	0	0	**1**	4	32	140	88	10	2	0	0	0	0	0	277	43	44
19:00	0	0	1	2	14	92	61	9	3	0	0	0	0	0	182	43	46
20:00	0	0	0	3	31	83	45	10	1	0	0	0	0	0	173	43	46
21:00	0	0	0	0	21	50	36	9	2	0	0	0	0	0	118	44	47
22:00	0	0	0	6	18	60	47	16	0	**2**	0	0	0	0	149	44	48
23:00	**1**	0	0	1	12	35	35	10	0	1	0	0	0	0	95	44	48
Total	1	1	4	45	491	2013	1684	329	42	5	1	0	0	0	4616		
Percent	0.0%	0.0%	0.1%	1.0%	10.6%	43.6%	36.5%	7.1%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak			08:00	11:00	11:00	10:00	10:00	10:00	07:00		00:00				10:00		
Vol.			1	4	33	156	129	32	6		1				342		
PM Peak	23:00	12:00	18:00	12:00	17:00	16:00	13:00	15:00	15:00	22:00					16:00		
Vol.	1	1	1	8	59	169	136	27	4	2					358		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	0	0	1	8	21	13	3	**4**	0	0	0	0	0	50	44	51
01:00	0	0	0	0	6	10	10	5	0	0	0	0	0	0	31	45	48
02:00	0	0	0	0	4	4	11	1	1	0	0	0	0	0	21	44	49
03:00	0	0	0	0	0	4	3	2	1	0	0	0	0	0	10	48	52
04:00	0	0	0	0	1	4	6	1	1	0	0	0	0	0	13	45	51
05:00	0	0	0	0	1	11	10	3	2	0	0	0	0	0	27	46	51
06:00	0	0	0	0	3	28	27	12	0	0	**1**	0	0	0	71	45	48
07:00	0	0	0	0	2	32	58	13	2	0	0	0	0	0	107	44	48
08:00	0	0	0	0	10	55	72	9	2	0	0	0	0	0	148	44	46
09:00	0	0	0	1	12	82	104	**34**	2	0	0	0	0	0	235	45	48
10:00	0	0	0	1	19	**125**	**110**	19	3	0	0	0	0	0	277	44	47
11:00	0	**1**	0	**11**	**64**	122	93	24	1	**1**	0	0	0	0	**317**	43	47
12 PM	0	0	0	**10**	**49**	**216**	85	15	0	0	0	0	0	0	**375**	42	44
13:00	0	0	0	3	25	179	**147**	14	1	0	0	0	0	0	369	43	44
14:00	0	0	0	5	31	166	123	12	2	0	0	0	0	0	339	43	44
15:00	0	0	0	1	34	145	97	**20**	1	0	0	0	0	0	298	43	46
16:00	0	0	0	3	44	153	81	13	1	0	0	0	0	0	295	43	44
17:00	0	0	0	2	36	124	93	7	1	0	0	0	0	0	263	43	44
18:00	0	0	0	7	15	101	61	11	2	0	0	0	0	0	197	43	46
19:00	0	0	0	3	18	63	53	10	0	0	0	0	0	0	147	43	46
20:00	0	0	0	1	7	52	50	14	**4**	0	0	0	0	0	128	44	49
21:00	0	0	0	0	4	20	29	15	0	0	0	0	0	0	68	46	48
22:00	0	0	0	0	9	28	19	5	0	0	0	0	0	0	61	43	46
23:00	0	0	0	1	0	11	12	8	0	0	0	0	0	0	32	47	49
Total	0	1	0	50	402	1756	1367	270	31	1	1	0	0	0	3879		
Percent	0.0%	0.0%	0.0%	1.3%	10.4%	45.3%	35.2%	7.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		11:00		11:00	11:00	10:00	10:00	09:00	00:00	11:00	06:00				11:00		
Vol.		1		11	64	125	110	34	4	1	1				317		
PM Peak				12:00	12:00	12:00	13:00	15:00	20:00						12:00		
Vol.				10	49	216	147	20	4						375		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	0	0	1	0	3	4	1	2	0	**1**	0	0	0	12	52	61
01:00	0	0	0	0	2	2	1	1	0	0	0	0	0	0	6	45	48
02:00	0	0	0	0	3	5	3	1	0	0	0	0	0	0	12	43	46
03:00	0	0	0	1	3	2	6	1	3	0	0	0	0	0	16	51	53
04:00	0	0	0	0	0	17	14	7	2	0	0	0	0	0	40	47	50
05:00	0	0	0	1	14	67	67	17	2	0	0	0	0	0	168	44	48
06:00	0	0	0	0	29	152	111	22	1	0	0	0	0	0	315	43	46
07:00	**5**	**2**	0	2	31	179	133	14	2	0	0	0	0	0	368	43	44
08:00	0	0	0	2	**51**	**231**	**177**	**36**	1	**1**	0	0	0	0	**499**	43	46
09:00	0	0	0	0	19	187	123	28	**4**	1	0	0	0	0	362	44	47
10:00	0	0	0	**3**	18	138	130	21	2	0	0	0	0	**1**	313	44	46
11:00	0	0	0	1	22	122	109	14	2	0	0	0	0	0	270	43	45
12 PM	0	0	0	2	43	136	90	**16**	**4**	0	0	0	0	0	291	43	46
13:00	0	0	0	3	31	158	101	16	4	**1**	0	0	0	0	314	43	46
14:00	0	0	0	5	51	209	**151**	11	0	0	0	0	0	0	427	43	44
15:00	**5**	**2**	**3**	1	72	239	116	15	0	0	0	0	0	0	453	42	44
16:00	1	0	1	**10**	80	**252**	134	13	3	0	0	0	0	0	**494**	42	44
17:00	1	0	0	6	**91**	227	99	9	1	0	0	0	0	0	434	42	44
18:00	0	0	0	1	46	123	70	15	2	0	0	0	0	0	257	43	46
19:00	0	0	0	2	18	83	66	13	1	0	0	0	0	0	183	43	46
20:00	0	0	0	0	8	54	41	6	4	0	**1**	0	0	0	114	44	49
21:00	0	0	0	0	12	34	45	3	2	1	0	0	0	0	97	44	46
22:00	0	0	0	0	4	23	31	7	1	0	0	0	0	0	66	44	48
23:00	0	0	0	0	3	15	13	2	1	0	0	0	0	0	34	44	48
Total	12	4	4	41	651	2658	1835	289	44	4	2	0	0	1	5545		
Percent	0.2%	0.1%	0.1%	0.7%	11.7%	47.9%	33.1%	5.2%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00		10:00	08:00	08:00	08:00	08:00	09:00	08:00	00:00			10:00	08:00		
Vol.	5	2		3	51	231	177	36	4	1	1			1	499		
PM Peak	15:00	15:00	15:00	16:00	17:00	16:00	14:00	12:00	12:00	13:00	20:00				16:00		
Vol.	5	2	3	10	91	252	151	16	4	1	1				494		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
5-WB WILLOW GROVE RD W OF PATRIOT HILLS
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	0	0	0	0	2	12	0	1	0	0	0	0	0	15	44	51
01:00	0	0	0	0	2	3	3	1	0	0	0	0	0	0	9	44	47
02:00	0	0	0	0	0	4	4	1	0	0	0	0	0	0	9	44	47
03:00	0	0	0	0	1	3	7	3	1	0	0	0	0	0	15	47	51
04:00	0	0	0	0	7	23	29	6	2	0	0	0	0	0	67	44	48
05:00	0	0	0	1	6	53	72	13	3	0	0	0	0	0	148	44	48
06:00	0	0	0	**2**	40	181	118	19	3	0	0	0	0	0	363	43	46
07:00	**3**	**1**	0	1	31	207	129	26	2	0	0	0	0	0	400	43	46
08:00	2	0	0	2	**54**	**230**	**234**	**27**	3	**1**	0	0	0	0	**553**	43	45
09:00	0	0	0	2	28	188	137	17	1	0	0	0	0	0	373	43	44
10:00	0	0	0	1	27	138	127	14	**5**	0	0	0	0	0	312	43	46
11:00	0	0	0	0	20	102	96	19	3	0	0	0	0	0	240	44	47
12 PM	0	0	0	2	22	170	99	18	1	**1**	0	0	0	0	313	43	46
13:00	0	0	0	4	42	160	111	15	2	1	0	0	0	0	335	43	45
14:00	0	0	**2**	8	93	**262**	**128**	14	1	0	0	0	0	0	**508**	42	44
15:00	0	0	0	4	**145**	207	113	20	0	0	0	0	0	0	489	42	44
16:00	**1**	0	0	2	83	235	117	**22**	1	1	0	0	0	0	462	43	45
17:00	0	**1**	0	**13**	75	237	84	6	1	0	0	0	0	0	417	41	44
18:00	0	0	0	4	39	138	58	14	**4**	0	0	0	0	0	257	43	46
19:00	0	0	0	0	35	78	57	8	1	0	0	0	0	0	179	43	45
20:00	0	0	0	8	12	74	51	16	0	0	0	0	0	0	161	44	47
21:00	0	0	0	0	8	38	31	5	2	0	0	0	0	0	84	44	47
22:00	0	0	0	1	6	41	31	3	1	0	0	0	0	0	83	43	44
23:00	0	0	0	1	6	13	10	3	0	0	0	0	0	0	33	44	47
Total	6	2	2	56	782	2787	1858	290	38	4	0	0	0	0	5825		
Percent	0.1%	0.0%	0.0%	1.0%	13.4%	47.8%	31.9%	5.0%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00		06:00	08:00	08:00	08:00	08:00	10:00	08:00					08:00		
Vol.	3	1		2	54	230	234	27	5	1					553		
PM Peak	16:00	17:00	14:00	17:00	15:00	14:00	14:00	16:00	18:00	12:00					14:00		
Vol.	1	1	2	13	145	262	128	22	4	1					508		
Grand Total	41	22	29	362	4409	17029	12623	2214	283	24	5	1	0	1	37043		
Percent	0.1%	0.1%	0.1%	1.0%	11.9%	46.0%	34.1%	6.0%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	35 MPH
50th Percentile :	39 MPH
85th Percentile :	43 MPH
95th Percentile :	46 MPH

Statistics

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	29652
Percent in Pace :	80.0%
Number of Vehicles > 55 MPH :	31
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	40 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24		Average Day		Sat 16-Nov-24	Sun 17-Nov-24		Week Average		
12:00 AM	*	*	77	94	111		94		87	110		96		
01:00	*	*	19	32	49		33		55	82		47		
02:00	*	*	18	32	25		25		18	38		26		
03:00	*	*	29	23	26		26		19	29		25		
04:00	*	*	29	25	31		28		25	14		25		
05:00	*	*	82	82	81		82		34	26		61		
06:00	*	*	230	331	244		268		97	65		193		
07:00	*	*	521	606	463		530		192	162		389		
08:00	*	*	**643**	**619**	575		**612**		285	243		473		
09:00	*	*	575	545	614		578		306	414		491		
10:00	*	*	461	493	543		499		372	441		462		
11:00	*	*	527	488	**640**		552		**395**	**510**		**512**		
12:00 PM	*	*	532	526	810		623		435	584		577		
01:00	*	*	570	637	763		657		411	**678**		612		
02:00	*	*	620	698	**840**		719		**453**	600		642		
03:00	*	*	**809**	776	783		**789**		426	590		**677**		
04:00	*	*	771	**810**	699		760		442	589		662		
05:00	*	*	684	807	511		667		414	557		595		
06:00	*	*	596	613	459		556		395	456		504		
07:00	*	*	486	504	348		446		394	374		421		
08:00	*	*	360	397	236		331		344	281		324		
09:00	*	*	293	332	202		276		289	232		270		
10:00	*	*	207	265	171		214		255	192		218		
11:00	*	*	142	192	153		162		180	136		161		
Day Total	0	0	9281	9927	9377		9527		6323	7403		8463		
% Avg. WkDay	0.0%	0.0%	97.4%	104.2%	98.4%									
% Avg. Week	0.0%	0.0%	109.7%	117.3%	110.8%		112.6%		74.7%	87.5%				
AM Peak	-	-	08:00	08:00	11:00	-	08:00	-	11:00	11:00	-	11:00	-	-
Vol.	-	-	643	619	640	-	612	-	395	510	-	512	-	-
PM Peak	-	-	15:00	16:00	14:00	-	15:00	-	14:00	13:00	-	15:00	-	-
Vol.	-	-	809	810	840	-	789	-	453	678	-	677	-	-

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	52	69	*	*	*	60	*	*	60
01:00	39	33	*	*	*	36	*	*	36
02:00	17	19	*	*	*	18	*	*	18
03:00	19	15	*	*	*	17	*	*	17
04:00	30	21	*	*	*	26	*	*	26
05:00	78	87	*	*	*	82	*	*	82
06:00	237	267	*	*	*	252	*	*	252
07:00	476	481	*	*	*	478	*	*	478
08:00	**592**	**637**	*	*	*	**614**	*	*	**614**
09:00	589	579	*	*	*	584	*	*	584
10:00	504	481	*	*	*	492	*	*	492
11:00	498	509	*	*	*	504	*	*	504
12:00 PM	542	557	*	*	*	550	*	*	550
01:00	578	598	*	*	*	588	*	*	588
02:00	675	686	*	*	*	680	*	*	680
03:00	717	797	*	*	*	757	*	*	757
04:00	**754**	**800**	*	*	*	**777**	*	*	**777**
05:00	700	777	*	*	*	738	*	*	738
06:00	598	641	*	*	*	620	*	*	620
07:00	448	454	*	*	*	451	*	*	451
08:00	348	339	*	*	*	344	*	*	344
09:00	275	279	*	*	*	277	*	*	277
10:00	200	259	*	*	*	230	*	*	230
11:00	138	154	*	*	*	146	*	*	146
Day Total	9104	9539	0	0	0	9321	0	0	9321
% Avg. WkDay	97.7%	102.3%	0.0%	0.0%	0.0%				
% Avg. Week	97.7%	102.3%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	592	637	-	-	-	614	-	-	614
PM Peak	16:00	16:00	-	-	-	16:00	-	-	16:00
Vol.	754	800	-	-	-	777	-	-	777

Grand Total	9104	9539	9281	9927	9377	18848	6323	7403	17784

ADT	ADT 14,545	AADT 14,545	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	58	16	0	3	0	0	0	0	0	0	0	0	0	77
01:00	0	16	3	0	0	0	0	0	0	0	0	0	0	0	19
02:00	0	14	3	1	0	0	0	0	0	0	0	0	0	0	18
03:00	0	22	6	0	0	1	0	0	0	0	0	0	0	0	29
04:00	0	23	6	0	0	0	0	0	0	0	0	0	0	0	29
05:00	1	63	15	0	2	1	0	0	0	0	0	0	0	0	82
06:00	2	175	46	1	6	0	0	0	0	0	0	0	0	0	230
07:00	2	394	105	3	16	0	0	1	0	0	0	0	0	0	521
08:00	4	485	129	7	17	1	0	0	0	0	0	0	0	0	643
09:00	4	434	116	5	15	1	0	0	0	0	0	0	0	0	575
10:00	2	350	93	3	13	0	0	0	0	0	0	0	0	0	461
11:00	5	400	107	3	11	0	1	0	0	0	0	0	0	0	527
12 PM	2	407	110	3	10	0	0	0	0	0	0	0	0	0	532
13:00	4	428	117	4	16	1	0	0	0	0	0	0	0	0	570
14:00	4	471	121	8	15	0	1	0	0	0	0	0	0	0	620
15:00	7	619	165	8	10	0	0	0	0	0	0	0	0	0	809
16:00	5	583	157	5	21	0	0	0	0	0	0	0	0	0	771
17:00	9	519	138	4	13	1	0	0	0	0	0	0	0	0	684
18:00	3	451	121	4	15	2	0	0	0	0	0	0	0	0	596
19:00	2	369	98	4	12	0	1	0	0	0	0	0	0	0	486
20:00	2	274	68	6	10	0	0	0	0	0	0	0	0	0	360
21:00	1	231	54	2	5	0	0	0	0	0	0	0	0	0	293
22:00	2	159	38	2	6	0	0	0	0	0	0	0	0	0	207
23:00	0	111	29	0	2	0	0	0	0	0	0	0	0	0	142
Total	61	7056	1861	73	218	8	3	1	0	0	0	0	0	0	9281
Percent	0.7%	76.0%	20.1%	0.8%	2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	08:00	08:00	03:00	11:00	07:00							
Vol.	5	485	129	7	17	1	1	1							
PM Peak	17:00	15:00	15:00	14:00	16:00	18:00	14:00								
Vol.	9	619	165	8	21	2	1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	72	20	0	2	0	0	0	0	0	0	0	0	0	94
01:00	0	25	7	0	0	0	0	0	0	0	0	0	0	0	32
02:00	0	25	7	0	0	0	0	0	0	0	0	0	0	0	32
03:00	0	18	5	0	0	0	0	0	0	0	0	0	0	0	23
04:00	0	20	5	0	0	0	0	0	0	0	0	0	0	0	25
05:00	0	65	16	0	1	0	0	0	0	0	0	0	0	0	82
06:00	4	247	66	4	10	0	0	0	0	0	0	0	0	0	331
07:00	3	458	122	6	16	0	1	0	0	0	0	0	0	0	606
08:00	3	470	129	7	9	1	0	0	0	0	0	0	0	0	619
09:00	4	419	101	5	16	0	0	0	0	0	0	0	0	0	545
10:00	2	375	98	2	16	0	0	0	0	0	0	0	0	0	493
11:00	3	369	98	5	13	0	0	0	0	0	0	0	0	0	488
12 PM	2	396	112	2	14	0	0	0	0	0	0	0	0	0	526
13:00	4	480	128	6	19	0	0	0	0	0	0	0	0	0	637
14:00	5	529	136	4	22	1	1	0	0	0	0	0	0	0	698
15:00	3	588	157	8	18	1	1	0	0	0	0	0	0	0	776
16:00	6	611	162	4	26	1	0	0	0	0	0	0	0	0	810
17:00	6	609	161	9	22	0	0	0	0	0	0	0	0	0	807
18:00	4	462	125	5	15	1	1	0	0	0	0	0	0	0	613
19:00	3	385	101	5	10	0	0	0	0	0	0	0	0	0	504
20:00	1	303	81	6	6	0	0	0	0	0	0	0	0	0	397
21:00	4	256	63	1	8	0	0	0	0	0	0	0	0	0	332
22:00	2	207	48	3	5	0	0	0	0	0	0	0	0	0	265
23:00	2	145	38	1	6	0	0	0	0	0	0	0	0	0	192
Total	61	7534	1986	83	254	5	4	0	0	0	0	0	0	0	9927
Percent	0.6%	75.9%	20.0%	0.8%	2.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	08:00	08:00	08:00	07:00	08:00	07:00								
Vol.	4	470	129	7	16	1	1								
PM Peak	16:00	16:00	16:00	17:00	16:00	14:00	14:00								
Vol.	6	611	162	9	26	1	1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	0	88	21	0	2	0	0	0	0	0	0	0	0	0	111
01:00	0	40	9	0	0	0	0	0	0	0	0	0	0	0	49
02:00	0	20	5	0	0	0	0	0	0	0	0	0	0	0	25
03:00	0	21	5	0	0	0	0	0	0	0	0	0	0	0	26
04:00	0	25	6	0	0	0	0	0	0	0	0	0	0	0	31
05:00	0	61	18	0	2	0	0	0	0	0	0	0	0	0	81
06:00	2	186	50	2	4	0	0	0	0	0	0	0	0	0	244
07:00	4	353	94	2	10	0	0	0	0	0	0	0	0	0	463
08:00	2	436	117	6	14	0	0	0	0	0	0	0	0	0	575
09:00	5	464	125	6	14	0	0	0	0	0	0	0	0	0	614
10:00	4	407	108	3	21	0	0	0	0	0	0	0	0	0	543
11:00	7	478	131	9	15	0	0	0	0	0	0	0	0	0	640
12 PM	4	612	166	8	20	0	0	0	0	0	0	0	0	0	810
13:00	9	575	154	4	21	0	0	0	0	0	0	0	0	0	763
14:00	9	631	169	5	26	0	0	0	0	0	0	0	0	0	840
15:00	5	595	158	6	19	0	0	0	0	0	0	0	0	0	783
16:00	8	526	141	4	19	1	0	0	0	0	0	0	0	0	699
17:00	2	380	103	4	22	0	0	0	0	0	0	0	0	0	511
18:00	7	344	92	3	12	0	1	0	0	0	0	0	0	0	459
19:00	2	262	70	4	8	1	1	0	0	0	0	0	0	0	348
20:00	2	175	47	2	9	1	0	0	0	0	0	0	0	0	236
21:00	1	151	39	3	7	0	0	1	0	0	0	0	0	0	202
22:00	1	131	35	1	3	0	0	0	0	0	0	0	0	0	171
23:00	1	119	30	1	2	0	0	0	0	0	0	0	0	0	153
Total	75	7080	1893	73	250	3	2	1	0	0	0	0	0	0	9377
Percent	0.8%	75.5%	20.2%	0.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	11:00	10:00										
Vol.	7	478	131	9	21										
PM Peak	13:00	14:00	14:00	12:00	14:00	16:00	18:00	21:00							
Vol.	9	631	169	8	26	1	1	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	67	17	0	3	0	0	0	0	0	0	0	0	0	87
01:00	0	43	11	0	1	0	0	0	0	0	0	0	0	0	55
02:00	0	15	3	0	0	0	0	0	0	0	0	0	0	0	18
03:00	0	15	4	0	0	0	0	0	0	0	0	0	0	0	19
04:00	0	22	3	0	0	0	0	0	0	0	0	0	0	0	25
05:00	0	27	7	0	0	0	0	0	0	0	0	0	0	0	34
06:00	1	74	19	0	2	1	0	0	0	0	0	0	0	0	97
07:00	1	145	38	1	7	0	0	0	0	0	0	0	0	0	192
08:00	4	212	57	2	9	0	1	0	0	0	0	0	0	0	285
09:00	2	230	59	3	11	1	0	0	0	0	0	0	0	0	306
10:00	3	277	75	4	13	0	0	0	0	0	0	0	0	0	372
11:00	4	287	83	7	12	1	1	0	0	0	0	0	0	0	395
12 PM	1	338	89	2	5	0	0	0	0	0	0	0	0	0	435
13:00	4	307	81	7	9	3	0	0	0	0	0	0	0	0	411
14:00	4	337	89	10	12	1	0	0	0	0	0	0	0	0	453
15:00	5	321	87	2	11	0	0	0	0	0	0	0	0	0	426
16:00	2	338	84	4	12	1	1	0	0	0	0	0	0	0	442
17:00	4	310	83	4	11	1	1	0	0	0	0	0	0	0	414
18:00	2	294	77	7	15	0	0	0	0	0	0	0	0	0	395
19:00	5	290	77	2	17	2	1	0	0	0	0	0	0	0	394
20:00	2	256	70	5	11	0	0	0	0	0	0	0	0	0	344
21:00	2	219	57	4	5	2	0	0	0	0	0	0	0	0	289
22:00	4	193	51	3	4	0	0	0	0	0	0	0	0	0	255
23:00	1	139	35	1	4	0	0	0	0	0	0	0	0	0	180
Total	51	4756	1256	68	174	13	5	0	0	0	0	0	0	0	6323
Percent	0.8%	75.2%	19.9%	1.1%	2.8%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	11:00	11:00	10:00	06:00	08:00								
Vol.	4	287	83	7	13	1	1								
PM Peak	15:00	12:00	12:00	14:00	19:00	13:00	16:00								
Vol.	5	338	89	10	17	3	1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	85	22	0	3	0	0	0	0	0	0	0	0	0	110
01:00	0	62	17	0	3	0	0	0	0	0	0	0	0	0	82
02:00	0	30	8	0	0	0	0	0	0	0	0	0	0	0	38
03:00	0	23	6	0	0	0	0	0	0	0	0	0	0	0	29
04:00	0	12	2	0	0	0	0	0	0	0	0	0	0	0	14
05:00	0	21	5	0	0	0	0	0	0	0	0	0	0	0	26
06:00	0	50	13	0	2	0	0	0	0	0	0	0	0	0	65
07:00	0	124	34	0	4	0	0	0	0	0	0	0	0	0	162
08:00	3	181	48	3	7	1	0	0	0	0	0	0	0	0	243
09:00	3	310	83	3	15	0	0	0	0	0	0	0	0	0	414
10:00	2	329	88	2	18	1	1	0	0	0	0	0	0	0	441
11:00	1	386	102	5	16	0	0	0	0	0	0	0	0	0	510
12 PM	3	443	118	5	14	0	1	0	0	0	0	0	0	0	584
13:00	8	509	135	5	20	0	1	0	0	0	0	0	0	0	678
14:00	10	446	119	6	18	1	0	0	0	0	0	0	0	0	600
15:00	5	446	119	6	14	0	0	0	0	0	0	0	0	0	590
16:00	3	448	119	2	16	1	0	0	0	0	0	0	0	0	589
17:00	4	422	112	4	15	0	0	0	0	0	0	0	0	0	557
18:00	4	343	91	4	12	1	1	0	0	0	0	0	0	0	456
19:00	2	284	77	1	9	0	1	0	0	0	0	0	0	0	374
20:00	4	209	55	4	7	1	1	0	0	0	0	0	0	0	281
21:00	5	175	47	2	3	0	0	0	0	0	0	0	0	0	232
22:00	1	144	38	2	6	1	0	0	0	0	0	0	0	0	192
23:00	0	105	28	0	3	0	0	0	0	0	0	0	0	0	136
Total	58	5587	1486	54	205	7	6	0	0	0	0	0	0	0	7403
Percent	0.8%	75.5%	20.1%	0.7%	2.8%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	11:00	11:00	10:00	08:00	10:00								
Vol.	3	386	102	5	18	1	1								
PM Peak	14:00	13:00	13:00	14:00	13:00	14:00	12:00								
Vol.	10	509	135	6	20	1	1								

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	40	11	0	1	0	0	0	0	0	0	0	0	0	52
01:00	0	31	8	0	0	0	0	0	0	0	0	0	0	0	39
02:00	0	14	3	0	0	0	0	0	0	0	0	0	0	0	17
03:00	0	15	4	0	0	0	0	0	0	0	0	0	0	0	19
04:00	0	23	6	0	0	1	0	0	0	0	0	0	0	0	30
05:00	0	60	16	0	2	0	0	0	0	0	0	0	0	0	78
06:00	1	179	48	0	7	0	1	1	0	0	0	0	0	0	237
07:00	5	358	95	5	12	1	0	0	0	0	0	0	0	0	476
08:00	6	445	120	8	13	0	0	0	0	0	0	0	0	0	592
09:00	6	440	117	10	14	1	1	0	0	0	0	0	0	0	589
10:00	4	378	101	5	15	0	1	0	0	0	0	0	0	0	504
11:00	2	379	101	2	13	1	0	0	0	0	0	0	0	0	498
12 PM	3	411	109	5	12	1	1	0	0	0	0	0	0	0	542
13:00	2	435	116	10	13	2	0	0	0	0	0	0	0	0	578
14:00	8	502	134	7	23	0	1	0	0	0	0	0	0	0	675
15:00	3	543	146	10	13	1	1	0	0	0	0	0	0	0	717
16:00	10	565	151	7	21	0	0	0	0	0	0	0	0	0	754
17:00	6	524	140	5	21	3	1	0	0	0	0	0	0	0	700
18:00	4	454	120	6	14	0	0	0	0	0	0	0	0	0	598
19:00	2	340	91	6	7	1	1	0	0	0	0	0	0	0	448
20:00	4	264	70	2	6	1	0	1	0	0	0	0	0	0	348
21:00	1	208	55	3	7	0	1	0	0	0	0	0	0	0	275
22:00	1	151	41	2	5	0	0	0	0	0	0	0	0	0	200
23:00	0	107	29	0	2	0	0	0	0	0	0	0	0	0	138
Total	68	6866	1832	93	221	13	9	2	0	0	0	0	0	0	9104
Percent	0.7%	75.4%	20.1%	1.0%	2.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	09:00	10:00	04:00	06:00	06:00							
Vol.	6	445	120	10	15	1	1	1							
PM Peak	16:00	16:00	16:00	13:00	14:00	17:00	12:00	20:00							
Vol.	10	565	151	10	23	3	1	1							

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 EB W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	55	13	0	1	0	0	0	0	0	0	0	0	0	69
01:00	0	26	7	0	0	0	0	0	0	0	0	0	0	0	33
02:00	0	16	3	0	0	0	0	0	0	0	0	0	0	0	19
03:00	0	11	3	1	0	0	0	0	0	0	0	0	0	0	15
04:00	0	18	3	0	0	0	0	0	0	0	0	0	0	0	21
05:00	0	67	19	0	1	0	0	0	0	0	0	0	0	0	87
06:00	1	201	54	1	10	0	0	0	0	0	0	0	0	0	267
07:00	6	360	97	4	14	0	0	0	0	0	0	0	0	0	481
08:00	8	474	126	11	18	0	0	0	0	0	0	0	0	0	637
09:00	4	431	115	9	19	1	0	0	0	0	0	0	0	0	579
10:00	2	360	96	6	15	0	2	0	0	0	0	0	0	0	481
11:00	3	383	102	3	16	1	0	1	0	0	0	0	0	0	509
12 PM	5	419	111	2	20	0	0	0	0	0	0	0	0	0	557
13:00	5	446	119	8	19	0	1	0	0	0	0	0	0	0	598
14:00	6	516	139	7	17	1	0	0	0	0	0	0	0	0	686
15:00	5	603	161	5	22	1	0	0	0	0	0	0	0	0	797
16:00	5	602	162	7	24	0	0	0	0	0	0	0	0	0	800
17:00	3	581	155	10	27	0	1	0	0	0	0	0	0	0	777
18:00	8	480	128	7	16	1	1	0	0	0	0	0	0	0	641
19:00	2	341	92	4	15	0	0	0	0	0	0	0	0	0	454
20:00	2	259	69	2	6	1	0	0	0	0	0	0	0	0	339
21:00	4	200	54	4	17	0	0	0	0	0	0	0	0	0	279
22:00	2	195	52	1	8	0	1	0	0	0	0	0	0	0	259
23:00	1	116	31	1	4	1	0	0	0	0	0	0	0	0	154
Total	72	7160	1911	93	289	7	6	1	0	0	0	0	0	0	9539
Percent	0.8%	75.1%	20.0%	1.0%	3.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	09:00	09:00	10:00	11:00							
Vol.	8	474	126	11	19	1	2	1							
PM Peak	18:00	15:00	16:00	17:00	17:00	14:00	13:00								
Vol.	8	603	162	10	27	1	1								
Grand Total	446	46039	12225	537	1611	56	35	5	0	0	0	0	0	0	60954
Percent	0.7%	75.5%	20.1%	0.9%	2.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	3	4	10	17	27	12	4	0	0	0	0	0	0	0	77	36	40
01:00	0	0	1	10	6	2	0	0	0	0	0	0	0	0	19	34	37
02:00	0	0	2	5	7	2	0	2	0	0	0	0	0	0	18	38	47
03:00	0	1	2	7	11	4	3	1	0	0	0	0	0	0	29	39	44
04:00	0	1	1	5	18	3	0	0	**1**	0	0	0	0	0	29	34	39
05:00	3	4	8	24	23	15	4	1	0	0	0	0	0	0	82	37	41
06:00	9	15	23	54	82	37	10	0	0	0	0	0	0	0	230	36	39
07:00	27	57	47	102	187	79	22	0	0	0	0	0	0	0	521	36	39
08:00	**41**	**66**	**71**	109	**230**	**97**	28	1	0	0	0	0	0	0	**643**	36	39
09:00	23	35	57	**132**	211	87	27	**3**	0	0	0	0	0	0	575	36	40
10:00	19	28	47	107	165	70	24	1	0	0	0	0	0	0	461	36	40
11:00	12	30	53	122	201	79	**29**	1	0	0	0	0	0	0	527	36	40
12 PM	17	33	56	125	195	81	24	0	0	**1**	0	0	0	0	532	36	39
13:00	17	34	56	131	220	85	26	0	1	0	0	0	0	0	570	36	39
14:00	16	38	63	145	232	94	32	0	0	0	0	0	0	0	620	36	40
15:00	29	**49**	**83**	**190**	**293**	**124**	**41**	0	0	0	0	0	0	0	**809**	36	40
16:00	**31**	33	77	180	291	118	40	1	0	0	0	0	0	0	771	36	40
17:00	23	37	69	159	257	104	34	0	1	0	0	0	0	0	684	36	40
18:00	23	37	60	139	212	91	33	1	0	0	0	0	0	0	596	36	40
19:00	20	30	49	114	173	77	22	1	0	0	0	0	0	0	486	36	39
20:00	16	22	37	84	131	52	16	1	1	0	0	0	0	0	360	36	40
21:00	13	18	31	71	103	42	13	**2**	0	0	0	0	0	0	293	36	40
22:00	8	12	22	50	72	32	9	0	**2**	0	0	0	0	0	207	36	40
23:00	6	9	16	34	48	22	7	0	0	0	0	0	0	0	142	36	39
Total	356	593	941	2116	3395	1409	448	16	6	1	0	0	0	0	9281		
Percent	3.8%	6.4%	10.1%	22.8%	36.6%	15.2%	4.8%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	09:00	08:00	08:00	11:00	09:00	04:00						08:00		
Vol.	41	66	71	132	230	97	29	3	1						643		
PM Peak	16:00	15:00	15:00	15:00	15:00	15:00	15:00	21:00	22:00	12:00					15:00		
Vol.	31	49	83	190	293	124	41	2	2	1					809		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	0	0	9	21	45	15	4	0	0	0	0	0	0	0	94	36	39
01:00	0	0	3	7	15	5	1	**1**	0	0	0	0	0	0	32	37	42
02:00	0	0	0	8	17	5	1	0	**1**	0	0	0	0	0	32	37	42
03:00	0	0	1	5	11	5	0	1	0	0	0	0	0	0	23	37	39
04:00	0	0	2	6	11	4	1	0	1	0	0	0	0	0	25	37	43
05:00	0	0	9	20	34	14	4	1	0	0	0	0	0	0	82	37	41
06:00	6	18	33	76	131	50	17	0	0	0	0	0	0	0	331	36	40
07:00	34	57	61	121	**219**	83	**31**	0	0	0	0	0	0	0	606	36	40
08:00	**51**	**64**	**63**	**134**	191	**85**	31	0	0	0	0	0	0	0	**619**	36	40
09:00	16	38	50	128	202	83	28	0	0	0	0	0	0	0	545	36	40
10:00	16	38	44	110	185	75	25	0	0	0	0	0	0	0	493	36	40
11:00	14	30	49	114	183	74	24	0	0	0	0	0	0	0	488	36	39
12 PM	21	10	52	122	216	79	26	0	0	0	0	0	0	0	526	36	39
13:00	27	38	63	148	232	96	33	0	0	0	0	0	0	0	637	36	40
14:00	28	42	71	163	250	106	38	0	0	0	0	0	0	0	698	36	40
15:00	34	46	79	180	281	118	38	0	0	0	0	0	0	0	776	36	39
16:00	**56**	**55**	81	**187**	268	**122**	**41**	0	0	0	0	0	0	0	**810**	36	40
17:00	39	50	**82**	187	**297**	115	36	1	0	0	0	0	0	0	807	36	39
18:00	21	33	60	142	228	92	35	2	0	0	0	0	0	0	613	37	40
19:00	10	23	50	119	193	77	28	3	1	0	0	0	0	0	504	37	41
20:00	9	22	41	93	149	60	21	2	0	0	0	0	0	0	397	36	40
21:00	2	18	34	78	135	50	11	2	**2**	0	0	0	0	0	332	36	39
22:00	0	11	28	64	102	41	13	**4**	2	0	0	0	0	0	265	37	42
23:00	2	9	20	44	77	29	9	1	1	0	0	0	0	0	192	36	40
Total	386	602	985	2277	3672	1483	496	18	8	0	0	0	0	0	9927		
Percent	3.9%	6.1%	9.9%	22.9%	37.0%	14.9%	5.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	07:00	08:00	07:00	01:00	02:00						08:00		
Vol.	51	64	63	134	219	85	31	1	1						619		
PM Peak	16:00	16:00	17:00	16:00	17:00	16:00	16:00	22:00	21:00						16:00		
Vol.	56	55	82	187	297	122	41	4	2						810		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	7	13	27	45	14	4	1	0	0	0	0	0	0	111	35	39
01:00	1	1	6	16	15	7	2	0	**1**	0	0	0	0	0	49	36	41
02:00	0	1	2	6	14	2	0	0	0	0	0	0	0	0	25	34	36
03:00	0	1	1	6	13	4	1	0	0	0	0	0	0	0	26	36	39
04:00	0	1	3	6	18	3	0	0	0	0	0	0	0	0	31	34	37
05:00	0	0	8	19	38	12	4	0	0	0	0	0	0	0	81	36	39
06:00	7	15	25	57	89	37	13	1	0	0	0	0	0	0	244	36	40
07:00	**40**	**51**	48	109	117	71	25	**2**	0	0	0	0	0	0	463	37	40
08:00	30	41	57	134	198	84	30	0	1	0	0	0	0	0	575	36	40
09:00	30	41	62	144	214	93	30	0	0	0	0	0	0	0	614	36	39
10:00	17	33	54	124	207	81	27	0	0	0	0	0	0	0	543	36	39
11:00	22	18	**63**	**146**	**253**	**95**	**43**	0	0	0	0	0	0	0	**640**	37	41
12 PM	15	23	82	188	**334**	123	45	0	0	0	0	0	0	0	810	36	40
13:00	14	17	77	176	313	117	**49**	0	0	0	0	0	0	0	763	37	41
14:00	26	**49**	**84**	**193**	322	**125**	41	0	0	0	0	0	0	0	**840**	36	39
15:00	**31**	46	79	182	286	119	39	1	0	0	0	0	0	0	783	36	40
16:00	28	42	70	160	262	105	32	0	0	0	0	0	0	0	699	36	39
17:00	14	33	50	117	204	76	17	0	0	0	0	0	0	0	511	36	39
18:00	23	31	41	105	165	69	24	1	0	0	0	0	0	0	459	36	40
19:00	10	14	35	80	139	53	17	0	0	0	0	0	0	0	348	36	39
20:00	8	11	23	54	92	35	12	1	0	0	0	0	0	0	236	36	40
21:00	2	1	20	49	88	30	9	0	**3**	0	0	0	0	0	202	36	41
22:00	0	0	9	40	73	29	13	**5**	1	**1**	0	0	0	0	171	39	44
23:00	0	0	3	37	58	29	22	2	2	0	0	0	0	0	153	40	44
Total	318	477	915	2175	3557	1413	499	14	8	1	0	0	0	0	9377		
Percent	3.4%	5.1%	9.8%	23.2%	37.9%	15.1%	5.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	11:00	11:00	11:00	11:00	11:00	07:00	01:00						11:00		
Vol.	40	51	63	146	253	95	43	2	1						640		
PM Peak	15:00	14:00	14:00	14:00	12:00	14:00	13:00	22:00	21:00	22:00					14:00		
Vol.	31	49	84	193	334	125	49	5	3	1					840		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	6	21	25	14	20	**1**	0	0	0	0	0	0	87	41	44
01:00	2	2	3	13	23	9	3	0	0	0	0	0	0	0	55	37	40
02:00	0	0	2	4	10	2	0	0	0	0	0	0	0	0	18	34	37
03:00	0	1	1	4	10	3	0	0	0	0	0	0	0	0	19	35	38
04:00	0	1	2	4	12	2	3	1	0	0	0	0	0	0	25	40	44
05:00	0	0	2	6	19	6	1	0	0	0	0	0	0	0	34	36	39
06:00	1	1	9	23	42	16	5	0	0	0	0	0	0	0	97	37	40
07:00	2	8	19	43	79	30	10	1	0	0	0	0	0	0	192	37	40
08:00	**7**	16	28	65	114	42	13	0	0	0	0	0	0	0	285	36	39
09:00	4	15	35	75	109	48	20	0	0	0	0	0	0	0	306	37	41
10:00	1	13	33	80	**169**	51	**25**	0	0	0	0	0	0	0	372	36	41
11:00	6	**18**	**38**	**88**	168	**54**	22	1	0	0	0	0	0	0	**395**	36	40
12 PM	8	**26**	48	103	164	69	17	0	0	0	0	0	0	0	435	36	39
13:00	4	19	41	100	167	61	19	0	0	0	0	0	0	0	411	36	39
14:00	3	20	45	**104**	**181**	68	28	**3**	1	0	0	0	0	0	**453**	37	41
15:00	2	12	**49**	99	168	64	29	1	**2**	0	0	0	0	0	426	37	41
16:00	2	16	45	104	167	**76**	**31**	1	0	0	0	0	0	0	442	37	41
17:00	7	7	42	95	171	60	28	3	1	0	0	0	0	0	414	37	42
18:00	11	18	40	89	148	59	26	3	1	0	0	0	0	0	395	37	41
19:00	**13**	12	39	89	162	58	19	1	1	0	0	0	0	0	394	36	40
20:00	8	12	34	80	135	56	18	1	0	0	0	0	0	0	344	37	40
21:00	4	16	26	67	110	42	20	3	1	0	0	0	0	0	289	37	42
22:00	6	8	26	55	108	39	13	0	0	0	0	0	0	0	255	36	40
23:00	0	5	19	41	74	30	11	0	0	0	0	0	0	0	180	37	40
Total	91	246	632	1452	2535	959	381	20	7	0	0	0	0	0	6323		
Percent	1.4%	3.9%	10.0%	23.0%	40.1%	15.2%	6.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	11:00	11:00	11:00	10:00	11:00	10:00	00:00							11:00		
Vol.	7	18	38	88	169	54	25	1							395		
PM Peak	19:00	12:00	15:00	14:00	14:00	16:00	16:00	14:00	15:00						14:00		
Vol.	13	26	49	104	181	76	31	3	2						453		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	1	12	25	53	16	3	0	0	0	0	0	0	0	110	35	39
01:00	0	1	8	20	38	13	2	0	0	0	0	0	0	0	82	36	39
02:00	0	0	2	8	21	7	0	0	0	0	0	0	0	0	38	35	38
03:00	0	0	1	7	18	3	0	0	0	0	0	0	0	0	29	34	37
04:00	0	0	2	2	8	2	0	0	0	0	0	0	0	0	14	34	38
05:00	0	0	2	7	14	3	0	0	0	0	0	0	0	0	26	34	37
06:00	0	4	7	15	26	10	3	0	0	0	0	0	0	0	65	36	39
07:00	3	6	17	39	61	23	11	1	1	0	0	0	0	0	162	37	42
08:00	4	14	25	56	101	28	15	0	0	0	0	0	0	0	243	36	40
09:00	4	23	37	95	170	62	21	1	1	0	0	0	0	0	414	36	40
10:00	1	26	42	101	185	59	23	**4**	0	0	0	0	0	0	441	36	41
11:00	**11**	**31**	**54**	**119**	**188**	**75**	**28**	1	**3**	0	0	0	0	0	**510**	37	41
12 PM	5	24	58	135	237	86	35	3	1	0	0	0	0	0	584	37	41
13:00	**13**	**39**	**77**	**156**	**251**	**102**	**37**	3	0	0	0	0	0	0	**678**	36	40
14:00	12	35	56	135	242	86	32	1	1	0	0	0	0	0	600	36	40
15:00	6	36	66	137	218	92	33	0	2	0	0	0	0	0	590	37	40
16:00	5	28	54	137	240	90	30	4	1	0	0	0	0	0	589	37	40
17:00	7	21	38	131	246	84	24	3	**3**	0	0	0	0	0	557	36	40
18:00	10	21	46	106	180	69	19	**5**	0	0	0	0	0	0	456	36	40
19:00	4	14	39	87	154	56	18	1	1	0	0	0	0	0	374	36	40
20:00	6	10	28	64	118	42	11	2	0	0	0	0	0	0	281	36	39
21:00	5	11	20	54	100	31	10	1	0	0	0	0	0	0	232	36	39
22:00	5	11	19	41	75	27	11	3	0	0	0	0	0	0	192	37	42
23:00	0	7	15	33	53	21	7	0	0	0	0	0	0	0	136	36	40
Total	101	363	725	1710	2997	1087	373	33	14	0	0	0	0	0	7403		
Percent	1.4%	4.9%	9.8%	23.1%	40.5%	14.7%	5.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	11:00	11:00	11:00	11:00	10:00	11:00						11:00		
Vol.	11	31	54	119	188	75	28	4	3						510		
PM Peak	13:00	13:00	13:00	13:00	13:00	13:00	13:00	18:00	17:00						13:00		
Vol.	13	39	77	156	251	102	37	5	3						678		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	2	4	12	23	9	2	0	0	0	0	0	0	0	52	36	39
01:00	0	3	4	9	16	6	1	0	0	0	0	0	0	0	39	35	39
02:00	0	0	1	4	9	3	0	0	0	0	0	0	0	0	17	35	38
03:00	0	0	1	5	10	3	0	0	0	0	0	0	0	0	19	35	38
04:00	0	1	2	7	16	4	0	0	0	0	0	0	0	0	30	34	38
05:00	0	4	7	19	31	13	4	0	0	0	0	0	0	0	78	37	40
06:00	0	14	24	55	90	36	18	0	0	0	0	0	0	0	237	37	41
07:00	24	31	48	110	167	72	24	0	0	0	0	0	0	0	476	36	40
08:00	**37**	44	**60**	**137**	**195**	**89**	29	**1**	0	0	0	0	0	0	**592**	36	40
09:00	33	**46**	60	135	192	88	**33**	1	**1**	0	0	0	0	0	589	36	40
10:00	24	30	51	116	178	75	28	1	1	0	0	0	0	0	504	36	40
11:00	20	30	50	117	181	76	24	0	0	0	0	0	0	0	498	36	39
12 PM	21	33	55	127	189	83	33	1	0	0	0	0	0	0	542	37	41
13:00	**24**	36	57	134	205	87	33	2	0	0	0	0	0	0	578	37	40
14:00	20	40	68	153	261	100	32	1	0	0	0	0	0	0	675	36	39
15:00	14	43	**77**	167	269	108	**38**	1	0	0	0	0	0	0	717	36	40
16:00	14	**45**	75	**173**	**297**	**114**	35	0	**1**	0	0	0	0	0	**754**	36	39
17:00	20	41	74	160	262	104	38	1	0	0	0	0	0	0	700	36	40
18:00	17	35	63	140	217	92	33	1	0	0	0	0	0	0	598	36	40
19:00	18	25	45	104	163	69	22	1	1	0	0	0	0	0	448	36	40
20:00	10	19	35	80	133	52	15	**4**	0	0	0	0	0	0	348	36	40
21:00	10	14	27	64	104	42	11	2	1	0	0	0	0	0	275	36	40
22:00	2	9	20	46	83	30	8	1	1	0	0	0	0	0	200	36	40
23:00	1	5	9	29	69	19	5	1	0	0	0	0	0	0	138	36	39
Total	309	550	917	2103	3360	1374	466	19	6	0	0	0	0	0	9104		
Percent	3.4%	6.0%	10.1%	23.1%	36.9%	15.1%	5.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	08:00	08:00	08:00	08:00	09:00	08:00	09:00						08:00		
Vol.	37	46	60	137	195	89	33	1	1						592		
PM Peak	13:00	16:00	15:00	16:00	16:00	16:00	15:00	20:00	16:00						16:00		
Vol.	24	45	77	173	297	114	38	4	1						754		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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6-EB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	2	6	20	28	10	2	1	0	0	0	0	0	0	69	36	39
01:00	0	1	1	6	18	6	1	0	0	0	0	0	0	0	33	36	39
02:00	0	0	0	1	14	3	0	1	0	0	0	0	0	0	19	36	45
03:00	0	0	1	4	7	3	0	0	0	0	0	0	0	0	15	36	38
04:00	0	0	2	4	12	3	0	0	0	0	0	0	0	0	21	34	38
05:00	1	5	8	21	35	14	3	0	0	0	0	0	0	0	87	36	39
06:00	10	15	27	62	101	40	11	1	0	0	0	0	0	0	267	36	39
07:00	31	29	47	113	161	72	27	1	0	0	0	0	0	0	481	36	40
08:00	**40**	**51**	**67**	**145**	**204**	**95**	**33**	**2**	0	0	0	0	0	0	**637**	36	40
09:00	33	40	64	132	197	86	26	1	0	0	0	0	0	0	579	36	39
10:00	16	27	45	111	184	72	23	0	**3**	0	0	0	0	0	481	36	40
11:00	7	35	56	117	186	77	29	1	1	0	0	0	0	0	509	37	40
12 PM	9	29	59	128	215	84	32	1	0	0	0	0	0	0	557	36	40
13:00	9	35	60	136	235	90	31	1	1	0	0	0	0	0	598	36	40
14:00	10	41	68	158	271	103	34	1	0	0	0	0	0	0	686	36	40
15:00	23	41	**80**	183	311	**121**	37	1	0	0	0	0	0	0	797	36	39
16:00	16	45	80	**185**	**312**	120	**40**	1	1	0	0	0	0	0	**800**	36	40
17:00	28	**50**	76	179	288	117	39	0	0	0	0	0	0	0	777	36	40
18:00	**36**	38	60	145	233	94	33	1	1	0	0	0	0	0	641	36	40
19:00	19	28	42	103	169	68	23	1	1	0	0	0	0	0	454	36	40
20:00	5	15	36	78	131	51	16	**4**	**3**	0	0	0	0	0	339	37	41
21:00	7	8	29	62	119	40	13	1	0	0	0	0	0	0	279	36	40
22:00	7	15	29	60	97	38	12	0	1	0	0	0	0	0	259	36	40
23:00	3	5	16	35	64	23	8	0	0	0	0	0	0	0	154	36	40
Total	310	555	959	2188	3592	1430	473	20	12	0	0	0	0	0	9539		
Percent	3.2%	5.8%	10.1%	22.9%	37.7%	15.0%	5.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	10:00						08:00		
Vol.	40	51	67	145	204	95	33	2	3						637		
PM Peak	18:00	17:00	15:00	16:00	16:00	15:00	16:00	20:00	20:00						16:00		
Vol.	36	50	80	185	312	121	40	4	3						800		
Grand Total	1871	3386	6074	14021	23108	9155	3136	140	61	2	0	0	0	0	60954		
Percent	3.1%	5.6%	10.0%	23.0%	37.9%	15.0%	5.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	23 MPH
50th Percentile :	31 MPH
85th Percentile :	36 MPH
95th Percentile :	40 MPH

Statistics

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	37129
Percent in Pace :	60.9%
Number of Vehicles > 55 MPH :	2
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	31 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
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6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

Start Time	Mon 11-Nov-24	Tue 12-Nov-24	Wed 13-Nov-24	Thu 14-Nov-24	Fri 15-Nov-24	Average Day	Sat 16-Nov-24	Sun 17-Nov-24	Week Average
12:00 AM	*	*	73	88	113	91	123	167	113
01:00	*	*	39	46	43	43	111	118	71
02:00	*	*	39	40	48	42	54	68	50
03:00	*	*	72	82	86	80	61	61	72
04:00	*	*	154	154	153	154	98	76	127
05:00	*	*	493	493	422	469	170	95	335
06:00	*	*	963	906	880	916	306	251	661
07:00	*	*	1165	1030	1160	1118	458	395	842
08:00	*	*	**1325**	**1286**	**1255**	**1289**	586	584	**1007**
09:00	*	*	1088	1105	1107	1100	706	791	959
10:00	*	*	803	861	932	865	703	808	821
11:00	*	*	840	813	1015	889	**745**	**936**	870
12:00 PM	*	*	852	912	1027	930	779	936	901
01:00	*	*	851	873	**1112**	945	**812**	925	915
02:00	*	*	906	921	1014	947	721	945	901
03:00	*	*	975	997	1016	996	746	**964**	**940**
04:00	*	*	**1044**	**1056**	935	**1012**	655	894	917
05:00	*	*	1003	944	834	927	733	773	857
06:00	*	*	873	822	757	817	758	632	768
07:00	*	*	672	732	562	655	675	564	641
08:00	*	*	528	595	408	510	530	461	504
09:00	*	*	395	464	327	395	489	329	401
10:00	*	*	315	369	289	324	394	286	331
11:00	*	*	186	231	204	207	290	176	217
Day Total	0	0	15654	15820	15699	15721	11703	12235	14221
% Avg. WkDay	0.0%	0.0%	99.6%	100.6%	99.9%				
% Avg. Week	0.0%	0.0%	110.1%	111.2%	110.4%	110.5%	82.3%	86.0%	
AM Peak	-	-	08:00	08:00	08:00	- 08:00	- 11:00	11:00	- 08:00	-	-
Vol.	-	-	1325	1286	1255	- 1289	- 745	936	- 1007	-	-
PM Peak	-	-	16:00	16:00	13:00	- 16:00	- 13:00	15:00	- 15:00	-	-
Vol.	-	-	1044	1056	1112	- 1012	- 812	964	- 940	-	-

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

Start Time	Mon 18-Nov-24	Tue 19-Nov-24	Wed 20-Nov-24	Thu 21-Nov-24	Fri 22-Nov-24	Average Day	Sat 23-Nov-24	Sun 24-Nov-24	Week Average
12:00 AM	77	72	*	*	*	74	*	*	74
01:00	49	57	*	*	*	53	*	*	53
02:00	47	43	*	*	*	45	*	*	45
03:00	74	83	*	*	*	78	*	*	78
04:00	147	163	*	*	*	155	*	*	155
05:00	473	488	*	*	*	480	*	*	480
06:00	884	913	*	*	*	898	*	*	898
07:00	1175	1163	*	*	*	1169	*	*	1169
08:00	**1278**	**1301**	*	*	*	**1290**	*	*	**1290**
09:00	1122	1082	*	*	*	1102	*	*	1102
10:00	787	859	*	*	*	823	*	*	823
11:00	737	856	*	*	*	796	*	*	796
12:00 PM	892	876	*	*	*	884	*	*	884
01:00	854	835	*	*	*	844	*	*	844
02:00	895	963	*	*	*	929	*	*	929
03:00	961	997	*	*	*	979	*	*	979
04:00	**1003**	**1008**	*	*	*	**1006**	*	*	**1006**
05:00	955	939	*	*	*	947	*	*	947
06:00	812	829	*	*	*	820	*	*	820
07:00	608	665	*	*	*	636	*	*	636
08:00	493	501	*	*	*	497	*	*	497
09:00	352	397	*	*	*	374	*	*	374
10:00	278	304	*	*	*	291	*	*	291
11:00	176	183	*	*	*	180	*	*	180
Day Total	15129	15577	0	0	0	15350	0	0	15350
% Avg. WkDay	98.6%	101.5%	0.0%	0.0%	0.0%				
% Avg. Week	98.6%	101.5%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	1278	1301	-	-	-	1290	-	-	1290
PM Peak	16:00	16:00	-	-	-	16:00	-	-	16:00
Vol.	1003	1008	-	-	-	1006	-	-	1006

Grand Total	15129	15577	15654	15820	15699	31071	11703	12235	29571

ADT ADT 14,545 AADT 14,545

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/13/24	0	59	11	0	3	0	0	0	0	0	0	0	0	0	73
01:00	0	33	3	1	2	0	0	0	0	0	0	0	0	0	39
02:00	0	31	7	0	1	0	0	0	0	0	0	0	0	0	39
03:00	0	57	11	0	4	0	0	0	0	0	0	0	0	0	72
04:00	0	121	28	1	4	0	0	0	0	0	0	0	0	0	154
05:00	1	401	71	1	17	2	0	0	0	0	0	0	0	0	493
06:00	1	766	141	9	32	7	4	2	0	0	0	0	1	0	963
07:00	9	948	138	13	36	8	12	1	0	0	0	0	0	0	1165
08:00	20	1016	205	28	34	8	9	1	2	0	0	0	2	0	1325
09:00	16	830	186	12	26	10	6	1	0	0	0	0	1	0	1088
10:00	3	602	150	13	21	6	6	1	0	0	0	0	1	0	803
11:00	12	621	161	11	24	6	5	0	0	0	0	0	0	0	840
12 PM	12	633	155	17	26	5	2	0	2	0	0	0	0	0	852
13:00	6	631	168	9	25	8	3	1	0	0	0	0	0	0	851
14:00	11	668	176	11	26	7	3	3	1	0	0	0	0	0	906
15:00	9	728	186	10	30	5	5	1	0	0	0	0	1	0	975
16:00	10	803	173	6	38	9	5	0	0	0	0	0	0	0	1044
17:00	15	775	173	6	19	12	1	2	0	0	0	0	0	0	1003
18:00	8	683	141	6	25	5	3	1	1	0	0	0	0	0	873
19:00	2	532	120	3	12	1	2	0	0	0	0	0	0	0	672
20:00	1	395	108	3	14	5	2	0	0	0	0	0	0	0	528
21:00	0	319	64	1	10	0	1	0	0	0	0	0	0	0	395
22:00	0	244	65	0	6	0	0	0	0	0	0	0	0	0	315
23:00	0	150	28	0	6	0	1	1	0	0	0	0	0	0	186
Total	136	12046	2669	161	441	104	70	15	6	0	0	0	6	0	15654
Percent	0.9%	77.0%	17.0%	1.0%	2.8%	0.7%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	07:00	09:00	07:00	06:00	08:00				08:00		
Vol.	20	1016	205	28	36	10	12	2	2				2		
PM Peak	17:00	16:00	15:00	12:00	16:00	17:00	15:00	14:00	12:00				15:00		
Vol.	15	803	186	17	38	12	5	3	2				1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/14/24	0	68	15	0	4	0	1	0	0	0	0	0	0	0	88
01:00	0	31	11	1	3	0	0	0	0	0	0	0	0	0	46
02:00	0	30	7	0	2	1	0	0	0	0	0	0	0	0	40
03:00	0	69	10	2	1	0	0	0	0	0	0	0	0	0	82
04:00	1	121	23	0	7	2	0	0	0	0	0	0	0	0	154
05:00	0	410	68	5	10	0	0	0	0	0	0	0	0	0	493
06:00	3	713	138	14	29	2	7	0	0	0	0	0	0	0	906
07:00	60	794	98	8	28	8	23	1	0	0	0	0	10	0	1030
08:00	13	1026	184	17	29	5	10	0	0	0	1	0	1	0	1286
09:00	6	844	208	8	21	7	8	0	2	1	0	0	0	0	1105
10:00	8	653	156	4	25	7	3	1	2	1	0	0	1	0	861
11:00	6	607	155	9	23	7	4	0	2	0	0	0	0	0	813
12 PM	13	683	163	10	26	8	7	1	1	0	0	0	0	0	912
13:00	10	667	150	10	29	3	3	0	1	0	0	0	0	0	873
14:00	10	673	183	7	38	4	4	1	0	1	0	0	0	0	921
15:00	13	766	161	8	29	8	9	0	2	0	0	0	1	0	997
16:00	11	811	184	12	26	2	7	2	0	0	1	0	0	0	1056
17:00	3	729	169	10	24	1	6	1	0	0	0	0	1	0	944
18:00	4	651	142	4	13	4	2	1	0	1	0	0	0	0	822
19:00	9	557	144	2	13	2	3	1	0	0	0	0	1	0	732
20:00	2	436	137	2	15	0	2	0	0	0	0	0	1	0	595
21:00	1	363	89	4	6	0	0	1	0	0	0	0	0	0	464
22:00	2	292	64	0	11	0	0	0	0	0	0	0	0	0	369
23:00	0	187	43	0	1	0	0	0	0	0	0	0	0	0	231
Total	175	12181	2702	137	413	71	99	10	10	4	2	0	16	0	15820
Percent	1.1%	77.0%	17.1%	0.9%	2.6%	0.4%	0.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	08:00	09:00	08:00	06:00	07:00	07:00	07:00	09:00	09:00	08:00		07:00		
Vol.	60	1026	208	17	29	8	23	1	2	1	1		10		
PM Peak	12:00	16:00	16:00	16:00	14:00	12:00	15:00	16:00	15:00	14:00	16:00		15:00		
Vol.	13	811	184	12	38	8	9	2	2	1	1		1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/15/24	1	82	26	1	3	0	0	0	0	0	0	0	0	0	113
01:00	0	35	5	2	1	0	0	0	0	0	0	0	0	0	43
02:00	0	38	8	1	1	0	0	0	0	0	0	0	0	0	48
03:00	0	65	16	1	3	0	0	1	0	0	0	0	0	0	86
04:00	0	120	28	1	4	0	0	0	0	0	0	0	0	0	153
05:00	0	343	62	4	10	0	2	1	0	0	0	0	0	0	422
06:00	1	707	119	16	29	3	1	0	3	0	0	0	1	0	880
07:00	10	935	153	9	32	14	7	0	0	0	0	0	0	0	1160
08:00	19	983	185	22	33	7	3	0	1	0	0	0	2	0	1255
09:00	14	855	192	8	21	7	6	2	0	0	0	0	2	0	1107
10:00	7	701	178	5	32	6	3	0	0	0	0	0	0	0	932
11:00	21	761	185	11	20	10	7	0	0	0	0	0	0	0	1015
12 PM	16	792	172	13	21	7	5	1	0	0	0	0	0	0	1027
13:00	19	845	200	6	26	6	7	2	0	1	0	0	0	0	1112
14:00	20	767	168	6	31	10	4	7	1	0	0	0	0	0	1014
15:00	5	802	155	8	32	5	4	3	1	0	0	0	1	0	1016
16:00	5	719	176	6	21	3	3	1	1	0	0	0	0	0	935
17:00	2	664	136	6	22	1	1	2	0	0	0	0	0	0	834
18:00	3	609	124	2	16	0	2	1	0	0	0	0	0	0	757
19:00	2	457	87	2	13	1	0	0	0	0	0	0	0	0	562
20:00	0	332	63	4	8	0	1	0	0	0	0	0	0	0	408
21:00	0	272	46	0	9	0	0	0	0	0	0	0	0	0	327
22:00	0	240	46	2	1	0	0	0	0	0	0	0	0	0	289
23:00	0	173	29	0	2	0	0	0	0	0	0	0	0	0	204
Total	145	12297	2559	136	391	80	56	21	7	1	0	0	6	0	15699
Percent	0.9%	78.3%	16.3%	0.9%	2.5%	0.5%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	09:00	08:00	08:00	07:00	07:00	09:00	06:00				08:00		
Vol.	21	983	192	22	33	14	7	2	3				2		
PM Peak	14:00	13:00	13:00	12:00	15:00	14:00	13:00	14:00	14:00	13:00			15:00		
Vol.	20	845	200	13	32	10	7	7	1	1			1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/16/24	0	98	23	0	2	0	0	0	0	0	0	0	0	0	123
01:00	0	97	12	2	0	0	0	0	0	0	0	0	0	0	111
02:00	0	47	5	0	2	0	0	0	0	0	0	0	0	0	54
03:00	0	50	10	1	0	0	0	0	0	0	0	0	0	0	61
04:00	0	82	8	2	6	0	0	0	0	0	0	0	0	0	98
05:00	2	141	21	1	5	0	0	0	0	0	0	0	0	0	170
06:00	1	240	56	3	6	0	0	0	0	0	0	0	0	0	306
07:00	0	344	91	6	14	2	1	0	0	0	0	0	0	0	458
08:00	1	464	86	6	23	3	3	0	0	0	0	0	0	0	586
09:00	1	580	107	0	15	2	0	1	0	0	0	0	0	0	706
10:00	5	553	124	2	14	2	2	1	0	0	0	0	0	0	703
11:00	9	571	140	2	17	3	2	0	0	0	0	0	1	0	745
12 PM	5	625	125	2	17	2	2	1	0	0	0	0	0	0	779
13:00	2	652	134	2	14	7	1	0	0	0	0	0	0	0	812
14:00	4	590	104	1	20	1	0	1	0	0	0	0	0	0	721
15:00	3	600	123	0	16	3	0	1	0	0	0	0	0	0	746
16:00	2	519	114	2	11	2	3	0	2	0	0	0	0	0	655
17:00	3	594	108	3	18	3	1	3	0	0	0	0	0	0	733
18:00	2	616	124	1	9	2	3	1	0	0	0	0	0	0	758
19:00	3	537	131	0	4	0	0	0	0	0	0	0	0	0	675
20:00	1	419	101	2	6	0	0	1	0	0	0	0	0	0	530
21:00	1	383	97	1	4	0	3	0	0	0	0	0	0	0	489
22:00	2	327	60	1	3	0	1	0	0	0	0	0	0	0	394
23:00	1	218	65	1	5	0	0	0	0	0	0	0	0	0	290
Total	48	9347	1969	41	231	32	22	10	2	0	0	0	1	0	11703
Percent	0.4%	79.9%	16.8%	0.4%	2.0%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	11:00	07:00	08:00	08:00	08:00	09:00					11:00		
Vol.	9	580	140	6	23	3	3	1					1		
PM Peak	12:00	13:00	13:00	17:00	14:00	13:00	16:00	17:00	16:00						
Vol.	5	652	134	3	20	7	3	3	2						

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/17/24	0	138	28	1	0	0	0	0	0	0	0	0	0	0	167
01:00	0	91	25	1	1	0	0	0	0	0	0	0	0	0	118
02:00	0	52	14	0	2	0	0	0	0	0	0	0	0	0	68
03:00	0	45	14	0	2	0	0	0	0	0	0	0	0	0	61
04:00	0	66	7	1	2	0	0	0	0	0	0	0	0	0	76
05:00	0	77	16	0	2	0	0	0	0	0	0	0	0	0	95
06:00	0	214	28	1	8	0	0	0	0	0	0	0	0	0	251
07:00	1	317	62	3	9	0	2	0	1	0	0	0	0	0	395
08:00	3	452	116	1	12	0	0	0	0	0	0	0	0	0	584
09:00	9	610	147	4	17	3	1	0	0	0	0	0	0	0	791
10:00	7	634	143	1	16	2	5	0	0	0	0	0	0	0	808
11:00	7	746	159	1	19	1	3	0	0	0	0	0	0	0	936
12 PM	11	714	187	1	15	4	3	0	1	0	0	0	0	0	936
13:00	11	705	177	4	20	2	4	0	1	0	0	0	1	0	925
14:00	10	767	134	7	20	2	3	1	1	0	0	0	0	0	945
15:00	11	765	156	0	20	6	6	0	0	0	0	0	0	0	964
16:00	11	686	180	3	5	3	4	2	0	0	0	0	0	0	894
17:00	3	615	136	3	15	1	0	0	0	0	0	0	0	0	773
18:00	4	507	111	1	8	1	0	0	0	0	0	0	0	0	632
19:00	1	464	85	1	12	0	0	1	0	0	0	0	0	0	564
20:00	1	379	74	0	5	0	2	0	0	0	0	0	0	0	461
21:00	0	251	67	1	10	0	0	0	0	0	0	0	0	0	329
22:00	0	231	52	0	3	0	0	0	0	0	0	0	0	0	286
23:00	0	142	31	0	3	0	0	0	0	0	0	0	0	0	176
Total	90	9668	2149	35	226	25	33	4	4	0	0	0	1	0	12235
Percent	0.7%	79.0%	17.6%	0.3%	1.8%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	09:00	11:00	09:00	10:00		07:00						
Vol.	9	746	159	4	19	3	5		1						
PM Peak	12:00	14:00	12:00	14:00	13:00	15:00	15:00	16:00	12:00				13:00		
Vol.	11	767	187	7	20	6	6	2	1				1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/18/24	0	59	15	0	3	0	0	0	0	0	0	0	0	0	77
01:00	0	37	11	0	1	0	0	0	0	0	0	0	0	0	49
02:00	0	35	8	1	3	0	0	0	0	0	0	0	0	0	47
03:00	0	60	10	1	3	0	0	0	0	0	0	0	0	0	74
04:00	0	112	31	1	3	0	0	0	0	0	0	0	0	0	147
05:00	0	393	60	8	11	1	0	0	0	0	0	0	0	0	473
06:00	0	711	124	13	30	3	2	1	0	0	0	0	0	0	884
07:00	10	959	144	7	34	9	8	1	1	1	0	0	1	0	1175
08:00	15	1022	165	21	31	12	8	1	0	0	0	0	3	0	1278
09:00	20	877	177	6	21	10	7	3	1	0	0	0	0	0	1122
10:00	8	625	112	7	26	5	1	0	3	0	0	0	0	0	787
11:00	11	572	107	10	18	9	5	0	5	0	0	0	0	0	737
12 PM	5	701	141	10	24	6	0	1	3	0	0	0	1	0	892
13:00	5	650	154	8	27	5	3	1	1	0	0	0	0	0	854
14:00	11	674	166	7	28	4	3	1	1	0	0	0	0	0	895
15:00	15	728	167	9	25	5	10	1	1	0	0	0	0	0	961
16:00	12	770	166	10	30	6	7	2	0	0	0	0	0	0	1003
17:00	11	745	154	5	29	3	7	0	1	0	0	0	0	0	955
18:00	4	641	131	4	25	2	4	0	1	0	0	0	0	0	812
19:00	0	501	91	2	12	0	1	1	0	0	0	0	0	0	608
20:00	0	383	90	2	12	2	4	0	0	0	0	0	0	0	493
21:00	2	280	61	3	6	0	0	0	0	0	0	0	0	0	352
22:00	1	216	57	0	3	0	1	0	0	0	0	0	0	0	278
23:00	0	130	43	1	2	0	0	0	0	0	0	0	0	0	176
Total	130	11881	2385	136	407	82	71	13	18	1	0	0	5	0	15129
Percent	0.9%	78.5%	15.8%	0.9%	2.7%	0.5%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	09:00	08:00	07:00	08:00	07:00	09:00	11:00	07:00			08:00		
Vol.	20	1022	177	21	34	12	8	3	5	1			3		
PM Peak	15:00	16:00	15:00	12:00	16:00	12:00	15:00	16:00	12:00				12:00		
Vol.	15	770	167	10	30	6	10	2	3				1		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-ROUTE 202 WB W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
11/19/24	0	63	5	2	2	0	0	0	0	0	0	0	0	0	72
01:00	0	43	11	1	2	0	0	0	0	0	0	0	0	0	57
02:00	0	27	11	1	3	1	0	0	0	0	0	0	0	0	43
03:00	0	58	19	2	4	0	0	0	0	0	0	0	0	0	83
04:00	0	123	34	0	6	0	0	0	0	0	0	0	0	0	163
05:00	1	392	78	4	13	0	0	0	0	0	0	0	0	0	488
06:00	0	717	147	8	33	4	2	0	0	1	0	0	1	0	913
07:00	16	936	139	14	35	10	10	2	0	0	0	0	1	0	1163
08:00	14	1052	163	19	36	8	7	2	0	0	0	0	0	0	1301
09:00	11	846	167	14	30	8	3	3	0	0	0	0	0	0	1082
10:00	11	657	137	12	24	10	6	1	0	0	0	0	1	0	859
11:00	7	627	174	9	29	7	2	0	0	0	0	0	1	0	856
12 PM	9	652	162	10	31	5	6	1	0	0	0	0	0	0	876
13:00	9	634	147	6	27	8	2	1	1	0	0	0	0	0	835
14:00	20	704	167	10	45	5	8	1	2	1	0	0	0	0	963
15:00	12	781	146	12	29	6	6	2	0	0	1	0	2	0	997
16:00	11	781	172	14	17	4	5	2	1	0	0	0	1	0	1008
17:00	7	734	155	6	29	4	3	0	1	0	0	0	0	0	939
18:00	8	659	134	6	19	2	1	0	0	0	0	0	0	0	829
19:00	3	540	104	2	11	2	1	1	1	0	0	0	0	0	665
20:00	2	409	78	2	10	0	0	0	0	0	0	0	0	0	501
21:00	3	308	68	2	15	1	0	0	0	0	0	0	0	0	397
22:00	1	244	49	2	6	1	1	0	0	0	0	0	0	0	304
23:00	1	141	35	1	5	0	0	0	0	0	0	0	0	0	183
Total	146	12128	2502	159	461	86	63	16	6	2	1	0	7	0	15577
Percent	0.9%	77.9%	16.1%	1.0%	3.0%	0.6%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	11:00	08:00	08:00	07:00	07:00	09:00		06:00			06:00		
Vol.	16	1052	174	19	36	10	10	3		1			1		
PM Peak	14:00	15:00	16:00	16:00	14:00	13:00	14:00	15:00	14:00	14:00	15:00		15:00		
Vol.	20	781	172	14	45	8	8	2	2	1	1		2		
Grand Total	870	79548	16935	805	2570	480	414	89	53	8	3	0	42	0	101817
Percent	0.9%	78.1%	16.6%	0.8%	2.5%	0.5%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/13/24	0	0	2	6	30	24	9	2	0	0	0	0	0	0	73	40	44
01:00	0	0	0	1	16	8	7	6	1	0	0	0	0	0	39	45	49
02:00	0	0	0	2	10	14	7	6	0	0	0	0	0	0	39	45	48
03:00	0	0	0	3	10	38	11	6	4	0	0	0	0	0	72	44	50
04:00	0	0	2	2	42	64	26	8	**9**	1	0	0	0	0	154	44	51
05:00	0	2	5	50	197	167	51	**17**	2	**2**	0	0	0	0	493	39	44
06:00	1	14	61	177	413	**228**	**59**	9	1	0	0	0	0	0	963	38	41
07:00	29	55	128	306	**434**	185	24	2	2	0	0	0	0	0	1165	36	39
08:00	**63**	**93**	**207**	**328**	428	187	15	3	1	0	0	0	0	0	**1325**	35	38
09:00	53	66	159	288	352	143	24	3	0	0	0	0	0	0	1088	35	39
10:00	13	29	73	164	326	169	28	1	0	0	0	0	0	0	803	37	39
11:00	27	54	86	176	299	173	20	5	0	0	0	0	0	0	840	37	39
12 PM	29	47	97	192	287	173	26	1	0	0	0	0	0	0	852	37	39
13:00	22	35	92	169	303	**189**	**37**	4	0	0	0	0	0	0	851	37	39
14:00	37	43	138	215	303	148	21	1	0	0	0	0	0	0	906	36	39
15:00	26	66	128	224	**360**	159	11	1	0	0	0	0	0	0	975	35	38
16:00	19	77	**188**	**317**	337	97	9	0	0	0	0	0	0	0	**1044**	34	37
17:00	**46**	**114**	146	270	330	90	6	1	0	0	0	0	0	0	1003	34	37
18:00	23	31	129	254	325	101	7	2	1	0	0	0	0	0	873	34	38
19:00	10	12	48	150	265	154	27	4	**2**	0	0	0	0	0	672	37	39
20:00	4	4	37	104	240	109	27	3	0	0	0	0	0	0	528	37	40
21:00	4	1	14	62	146	138	26	4	0	0	0	0	0	0	395	38	41
22:00	0	0	5	33	137	100	36	2	2	0	0	0	0	0	315	39	43
23:00	0	0	3	18	57	62	35	**7**	2	**2**	0	0	0	0	186	42	46
Total	406	743	1748	3511	5647	2920	549	98	27	5	0	0	0	0	15654		
Percent	2.6%	4.7%	11.2%	22.4%	36.1%	18.7%	3.5%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	07:00	06:00	06:00	05:00	04:00	05:00					08:00		
Vol.	63	93	207	328	434	228	59	17	9	2					1325		
PM Peak	17:00	17:00	16:00	16:00	15:00	13:00	13:00	23:00	19:00	23:00					16:00		
Vol.	46	114	188	317	360	189	37	7	2	2					1044		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/14/24	1	0	2	8	26	26	16	7	1	1	0	0	0	0	88	43	48
01:00	0	0	0	4	16	13	10	3	0	0	0	0	0	0	46	43	46
02:00	0	0	1	2	14	13	8	1	1	0	0	0	0	0	40	42	45
03:00	0	0	1	4	20	30	15	6	**5**	1	0	0	0	0	82	44	51
04:00	0	0	0	9	47	61	22	9	5	1	0	0	0	0	154	43	49
05:00	0	0	4	38	185	174	**73**	**14**	3	**2**	0	0	0	0	493	41	44
06:00	36	38	49	124	363	**239**	42	12	3	0	0	0	0	0	906	38	41
07:00	**230**	**127**	184	189	208	82	9	1	0	0	0	0	0	0	1030	33	37
08:00	62	88	**191**	**333**	**408**	181	20	2	1	0	0	0	0	0	**1286**	35	38
09:00	52	78	142	218	364	219	30	1	1	0	0	0	0	0	1105	36	39
10:00	35	49	81	213	291	165	25	0	2	0	0	0	0	0	861	36	39
11:00	13	49	86	158	316	159	31	1	0	0	0	0	0	0	813	37	39
12 PM	21	82	114	188	317	164	23	2	1	0	0	0	0	0	912	36	39
13:00	29	80	91	179	290	**177**	22	4	1	0	0	0	0	0	873	37	39
14:00	12	58	129	209	315	177	18	3	0	0	0	0	0	0	921	36	39
15:00	**64**	**94**	**150**	262	301	106	17	1	**2**	0	0	0	0	0	997	34	38
16:00	58	69	150	280	**372**	116	10	1	0	0	0	0	0	0	**1056**	34	38
17:00	21	61	138	**304**	319	88	12	1	0	0	0	0	0	0	944	34	38
18:00	16	51	108	264	284	84	14	1	0	0	0	0	0	0	822	34	38
19:00	15	28	70	152	293	133	34	7	0	0	0	0	0	0	732	37	40
20:00	12	12	31	118	249	144	25	3	0	**1**	0	0	0	0	595	37	39
21:00	1	5	16	81	195	130	28	7	1	0	0	0	0	0	464	38	42
22:00	4	4	10	43	144	111	**47**	5	1	0	0	0	0	0	369	39	43
23:00	0	0	2	24	72	84	36	**12**	0	0	**1**	0	0	0	231	41	45
Total	682	973	1750	3404	5409	2876	587	104	28	6	1	0	0	0	15820		
Percent	4.3%	6.2%	11.1%	21.5%	34.2%	18.2%	3.7%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	08:00	08:00	08:00	06:00	05:00	05:00	03:00	05:00					08:00		
Vol.	230	127	191	333	408	239	73	14	5	2					1286		
PM Peak	15:00	15:00	15:00	17:00	16:00	13:00	22:00	23:00	15:00	20:00	23:00				16:00		
Vol.	64	94	150	304	372	177	47	12	2	1	1				1056		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/15/24	0	0	2	11	30	48	15	5	1	0	**1**	0	0	0	113	41	46
01:00	0	0	1	4	11	16	8	3	0	0	0	0	0	0	43	42	46
02:00	0	0	0	4	14	18	7	4	1	0	0	0	0	0	48	43	48
03:00	0	0	2	6	14	33	19	**10**	**2**	0	0	0	0	0	86	44	48
04:00	0	0	0	7	41	66	29	8	1	**1**	0	0	0	0	153	42	46
05:00	0	0	3	33	149	166	**62**	7	1	0	1	0	0	0	422	40	44
06:00	2	19	36	160	369	**248**	38	8	0	0	0	0	0	0	880	38	40
07:00	40	68	139	263	389	223	36	2	0	0	0	0	0	0	1160	36	39
08:00	55	82	**185**	**309**	**424**	179	20	1	0	0	0	0	0	0	**1255**	35	38
09:00	**74**	88	168	249	336	166	24	2	0	0	0	0	0	0	1107	35	39
10:00	37	50	96	218	325	180	23	3	0	0	0	0	0	0	932	36	39
11:00	35	**90**	179	253	254	169	29	6	0	0	0	0	0	0	1015	36	39
12 PM	49	**102**	**175**	231	305	147	17	1	0	0	0	0	0	0	1027	35	38
13:00	**50**	101	159	270	349	**162**	20	1	0	0	0	0	0	0	**1112**	35	38
14:00	47	69	144	258	300	157	**37**	1	**1**	0	0	0	0	0	1014	36	39
15:00	26	43	133	253	**389**	148	22	2	0	0	0	0	0	0	1016	35	39
16:00	7	60	101	**272**	338	134	21	1	1	0	0	0	0	0	935	35	39
17:00	5	20	96	247	349	101	13	3	0	0	0	0	0	0	834	34	38
18:00	2	21	66	211	351	89	16	1	0	0	0	0	0	0	757	34	38
19:00	0	4	32	124	247	134	19	2	0	0	0	0	0	0	562	37	39
20:00	0	3	12	53	188	130	20	2	0	0	0	0	0	0	408	38	40
21:00	0	0	13	45	146	100	21	2	0	0	0	0	0	0	327	38	41
22:00	0	0	9	42	124	87	22	**5**	0	0	0	0	0	0	289	39	42
23:00	0	0	2	18	85	74	21	3	1	0	0	0	0	0	204	39	43
Total	429	820	1753	3541	5527	2975	559	83	9	1	2	0	0	0	15699		
Percent	2.7%	5.2%	11.2%	22.6%	35.2%	19.0%	3.6%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	08:00	08:00	08:00	06:00	05:00	03:00	03:00	04:00	00:00				08:00		
Vol.	74	90	185	309	424	248	62	10	2	1	1				1255		
PM Peak	13:00	12:00	12:00	16:00	15:00	13:00	14:00	22:00	14:00						13:00		
Vol.	50	102	175	272	389	162	37	5	1						1112		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/16/24	0	0	4	11	42	47	16	3	0	0	0	0	0	0	123	40	44
01:00	0	0	0	1	34	55	17	3	1	0	0	0	0	0	111	41	44
02:00	0	0	0	3	21	20	8	2	0	0	0	0	0	0	54	41	44
03:00	0	0	1	4	13	21	13	8	1	0	0	0	0	0	61	44	48
04:00	0	0	0	7	21	43	13	12	1	**1**	0	0	0	0	98	44	48
05:00	0	2	2	9	65	58	18	**13**	**3**	0	0	0	0	0	170	42	47
06:00	0	3	2	27	90	135	43	5	1	0	0	0	0	0	306	40	43
07:00	0	5	10	52	161	159	**61**	7	2	1	0	0	0	0	458	40	43
08:00	0	7	18	68	252	187	48	4	2	0	0	0	0	0	586	39	42
09:00	1	15	65	**119**	246	**211**	44	5	0	0	0	0	0	0	706	38	41
10:00	**3**	**16**	29	108	307	211	25	4	0	0	0	0	0	0	703	38	39
11:00	0	14	**68**	104	**323**	185	46	3	2	0	0	0	0	0	**745**	38	41
12 PM	7	18	54	136	313	**212**	**37**	1	1	0	0	0	0	0	779	38	40
13:00	**9**	11	57	157	**332**	212	31	3	0	0	0	0	0	0	**812**	37	39
14:00	3	21	28	147	292	202	25	3	0	0	0	0	0	0	721	38	39
15:00	4	18	41	129	325	199	29	1	0	0	0	0	0	0	746	37	39
16:00	0	14	41	156	295	128	14	5	**2**	0	0	0	0	0	655	36	39
17:00	2	7	44	225	322	122	10	1	0	0	0	0	0	0	733	35	38
18:00	2	16	**68**	**229**	296	127	18	1	1	0	0	0	0	0	758	36	39
19:00	3	**25**	54	175	273	124	18	3	0	0	0	0	0	0	675	36	39
20:00	0	2	18	122	261	104	20	3	0	0	0	0	0	0	530	37	39
21:00	2	4	31	116	215	105	14	1	1	0	0	0	0	0	489	37	39
22:00	0	5	8	67	166	115	25	**7**	1	0	0	0	0	0	394	38	42
23:00	0	2	4	38	115	94	31	4	1	**1**	0	0	0	0	290	39	43
Total	36	205	647	2210	4780	3076	624	102	20	3	0	0	0	0	11703		
Percent	0.3%	1.8%	5.5%	18.9%	40.8%	26.3%	5.3%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	11:00	09:00	11:00	09:00	07:00	05:00	05:00	04:00					11:00		
Vol.	3	16	68	119	323	211	61	13	3	1					745		
PM Peak	13:00	19:00	18:00	18:00	13:00	12:00	12:00	22:00	16:00	23:00					13:00		
Vol.	9	25	68	229	332	212	37	7	2	1					812		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Date Start: 13-Nov-24
Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/17/24	0	1	0	21	68	45	27	3	2	0	0	0	0	0	167	41	44
01:00	0	1	0	14	39	32	28	4	0	0	0	0	0	0	118	42	44
02:00	0	1	0	3	29	24	9	2	0	0	0	0	0	0	68	40	44
03:00	0	0	1	3	21	21	14	1	0	0	0	0	0	0	61	42	44
04:00	0	0	0	4	25	29	14	3	1	0	0	0	0	0	76	42	45
05:00	0	0	0	5	31	34	17	5	**3**	0	0	0	0	0	95	43	48
06:00	0	0	1	7	74	99	53	**15**	1	**1**	0	0	0	0	251	43	46
07:00	0	2	5	40	114	160	**59**	11	3	1	0	0	0	0	395	41	44
08:00	1	16	29	90	202	184	51	10	1	0	0	0	0	0	584	39	43
09:00	10	31	55	138	297	211	45	4	0	0	0	0	0	0	791	38	41
10:00	**13**	14	62	168	302	**215**	33	0	1	0	0	0	0	0	808	37	39
11:00	12	**43**	**86**	**198**	**372**	190	30	4	1	0	0	0	0	0	**936**	37	39
12 PM	15	55	103	189	331	**204**	31	**8**	0	0	0	0	0	0	936	37	39
13:00	15	64	82	210	**374**	150	29	1	0	0	0	0	0	0	925	36	39
14:00	**38**	34	**141**	222	322	173	13	2	0	0	0	0	0	0	945	36	39
15:00	37	**70**	104	241	361	132	19	0	0	0	0	0	0	0	**964**	35	38
16:00	14	32	102	**242**	334	151	17	2	0	0	0	0	0	0	894	36	39
17:00	16	8	76	218	311	124	14	6	0	0	0	0	0	0	773	36	39
18:00	8	12	58	147	266	114	22	5	0	0	0	0	0	0	632	37	39
19:00	0	9	30	145	257	94	23	4	**2**	0	0	0	0	0	564	37	40
20:00	1	8	24	101	180	128	17	2	0	0	0	0	0	0	461	38	39
21:00	0	1	4	33	139	111	**34**	5	2	0	0	0	0	0	329	39	43
22:00	0	1	1	31	113	106	30	2	1	**1**	0	0	0	0	286	39	43
23:00	0	0	0	16	59	63	31	7	0	0	0	0	0	0	176	41	44
Total	180	403	964	2486	4621	2794	660	106	18	3	0	0	0	0	12235		
Percent	1.5%	3.3%	7.9%	20.3%	37.8%	22.8%	5.4%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	11:00	11:00	10:00	07:00	06:00	05:00	06:00					11:00		
Vol.	13	43	86	198	372	215	59	15	3	1					936		
PM Peak	14:00	15:00	14:00	16:00	13:00	12:00	21:00	12:00	19:00	22:00					15:00		
Vol.	38	70	141	242	374	204	34	8	2	1					964		

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
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Date End: 19-Nov-24
6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/18/24	0	0	0	6	16	32	20	1	2	0	0	0	0	0	77	42	44
01:00	0	0	0	5	13	17	10	2	2	0	0	0	0	0	49	43	48
02:00	0	0	0	4	19	14	6	3	0	1	0	0	0	0	47	42	47
03:00	0	0	0	1	21	24	18	5	3	**2**	0	0	0	0	74	44	52
04:00	0	0	1	5	41	63	22	10	**4**	1	0	0	0	0	147	43	48
05:00	0	6	3	44	169	182	**53**	**12**	3	1	0	0	0	0	473	39	44
06:00	0	10	39	167	398	**213**	48	8	0	1	0	0	0	0	884	38	41
07:00	47	74	118	280	**421**	200	34	1	0	0	0	0	0	0	1175	36	39
08:00	50	**134**	258	**333**	356	135	10	2	0	0	0	0	0	0	**1278**	34	38
09:00	**71**	78	194	233	362	159	24	1	0	0	0	0	0	0	1122	35	39
10:00	10	40	83	192	256	178	24	4	0	0	0	0	0	0	787	37	39
11:00	22	57	**334**	293	29	2	0	0	0	0	0	0	0	0	737	28	29
12 PM	**40**	51	**193**	276	236	75	21	0	0	0	0	0	0	0	892	34	38
13:00	16	36	97	192	336	155	22	0	0	0	0	0	0	0	854	36	39
14:00	33	47	116	183	**345**	147	22	1	1	0	0	0	0	0	895	36	39
15:00	30	**91**	144	210	329	141	14	2	0	0	0	0	0	0	961	35	38
16:00	21	72	146	**310**	332	107	14	1	0	0	0	0	0	0	**1003**	34	38
17:00	39	70	178	285	268	101	14	0	0	0	0	0	0	0	955	34	38
18:00	24	23	84	241	307	117	14	1	0	**1**	0	0	0	0	812	35	38
19:00	5	9	25	133	248	**160**	26	1	0	1	0	0	0	0	608	38	39
20:00	2	6	31	98	213	107	**28**	**7**	1	0	0	0	0	0	493	38	42
21:00	2	5	11	52	140	110	27	4	1	0	0	0	0	0	352	39	42
22:00	0	3	5	27	100	109	25	7	1	1	0	0	0	0	278	39	44
23:00	0	0	0	16	68	67	15	7	**2**	0	**1**	0	0	0	176	39	45
Total	412	812	2060	3586	5023	2615	511	80	20	9	1	0	0	0	15129		
Percent	2.7%	5.4%	13.6%	23.7%	33.2%	17.3%	3.4%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	11:00	08:00	07:00	06:00	05:00	05:00	04:00	03:00					08:00		
Vol.	71	134	334	333	421	213	53	12	4	2					1278		
PM Peak	12:00	15:00	12:00	16:00	14:00	19:00	20:00	20:00	23:00	18:00	23:00				16:00		
Vol.	40	91	193	310	345	160	28	7	2	1	1				1003		

TRAFFIC DATABANK LLC

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Site Code:
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6-WB ROUTE 202 W OF PALISSADES PKWY
HAVERSTRAW,NY

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
11/19/24	0	0	1	7	23	23	11	7	0	0	0	0	0	0	72	43	47
01:00	0	0	0	4	21	21	7	3	1	0	0	0	0	0	57	41	46
02:00	0	0	0	2	15	10	11	4	1	0	0	0	0	0	43	44	48
03:00	0	0	0	3	23	33	14	8	1	1	0	0	0	0	83	44	48
04:00	0	0	0	9	37	68	30	12	**7**	0	0	0	0	0	163	44	49
05:00	0	4	12	40	181	187	**42**	**17**	1	**4**	0	0	0	0	488	39	44
06:00	0	17	53	181	379	**237**	41	4	0	1	0	0	0	0	913	38	40
07:00	42	77	166	298	**413**	153	12	1	1	0	0	0	0	0	1163	34	38
08:00	**65**	**88**	**262**	**339**	396	127	23	1	0	0	0	0	0	0	**1301**	34	38
09:00	45	56	177	245	350	176	29	3	1	0	0	0	0	0	1082	36	39
10:00	39	51	86	170	302	178	30	2	0	1	0	0	0	0	859	37	39
11:00	19	47	75	156	347	179	31	2	0	0	0	0	0	0	856	37	39
12 PM	39	39	96	193	321	**167**	19	2	0	0	0	0	0	0	876	36	39
13:00	25	42	125	192	275	154	20	2	0	0	0	0	0	0	835	36	39
14:00	49	51	123	184	**383**	149	22	2	0	0	0	0	0	0	963	35	39
15:00	49	**89**	147	256	317	117	20	1	**1**	0	0	0	0	0	997	34	38
16:00	**50**	48	150	**300**	337	112	10	1	0	0	0	0	0	0	**1008**	34	38
17:00	48	62	**155**	255	296	114	9	0	0	0	0	0	0	0	939	34	38
18:00	18	48	94	230	311	120	8	0	0	0	0	0	0	0	829	35	38
19:00	4	14	59	170	259	134	21	4	0	0	0	0	0	0	665	37	39
20:00	0	11	27	109	205	115	**31**	3	0	0	0	0	0	0	501	38	41
21:00	0	5	20	62	165	108	29	**7**	0	**1**	0	0	0	0	397	38	42
22:00	0	2	4	46	144	83	19	5	1	0	0	0	0	0	304	38	42
23:00	1	3	4	17	74	55	25	4	0	0	0	0	0	0	183	40	43
Total	493	754	1836	3468	5574	2820	514	95	15	8	0	0	0	0	15577		
Percent	3.2%	4.8%	11.8%	22.3%	35.8%	18.1%	3.3%	0.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	07:00	06:00	05:00	05:00	04:00	05:00					08:00		
Vol.	65	88	262	339	413	237	42	17	7	4					1301		
PM Peak	16:00	15:00	17:00	16:00	14:00	12:00	20:00	21:00	15:00	21:00					16:00		
Vol.	50	89	155	300	383	167	31	7	1	1					1008		
Grand Total	2638	4710	10758	22206	36581	20076	4004	668	137	35	4	0	0	0	101817		
Percent	2.6%	4.6%	10.6%	21.8%	35.9%	19.7%	3.9%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	23 MPH
50th Percentile :	31 MPH
85th Percentile :	37 MPH
95th Percentile :	39 MPH

Statistics

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	58787
Percent in Pace :	57.7%
Number of Vehicles > 55 MPH :	39
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	31 MPH

PART E

TRAFFIC SIGNAL TIMING

File

STATE OF NEW YORK – DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING SAFETY DIVISION
TRAFFIC CONTROL SPECIFICATION

Study:
Contract: D261052
PIN: 8093.57
File: 39.14-202

R-185 SIGNAL NO. | ROCKLAND COUNTY

INTERSECTION ROUTE 202 AT SB PIP RAMPS EXIT 13 AND AT DINER DWY

☐ CITY ☐ VILLAGE ☑ TOWN OF HAVERSTRAW

Department Order filed previously as Section: 2039.14 Subdivision: (f)

Prior specification hereby superseded ☐ None ☑ Dated: April 9, 1996

Purpose: RECUT LOOPS AND UPGRADE TO A 2070 CONTROLLER UNDER CONTRACT.

These specifications will be effective upon the ☐ Installation ☑ Modification / Reinstallation of the necessary traffic control device(s) required by and conforming to the Federal Manual on Uniform Traffic Control Devices.

This signal shall

A. Operate in accordance with the table of operations and / or change intervals as shown on the attached pages as a:

- ☐ Pretimed Signal
- ☐ Semi-traffic actuated
- ☑ Full-traffic actuated
- ☐ Pedestrian actuated
- ☐ Other

B.
- ☑ Display vehicular indications
- ☐ Display pedestrian indications
- ☑ Be equipped with vehicle detectors
- ☐ Be equipped with pedestrian buttons

as shown in the attached plans / drawings.

C. Be equipped with ☐ Pre-emption ☐ Interconnection and/or coordination which are described as follows:

Description:

cc:
- ☑ Region 8 Traffic Engineer
- ☑ Signal Shop
- ☐ Contract Maintainer
- ☐ Main Office

Michael Cotton 12/15 R.T.E.

Date | Signature | Title

Installation Date | 12-16-2010 Reinstallation/Modification

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SPECIFICATIONS (CONTINUED)

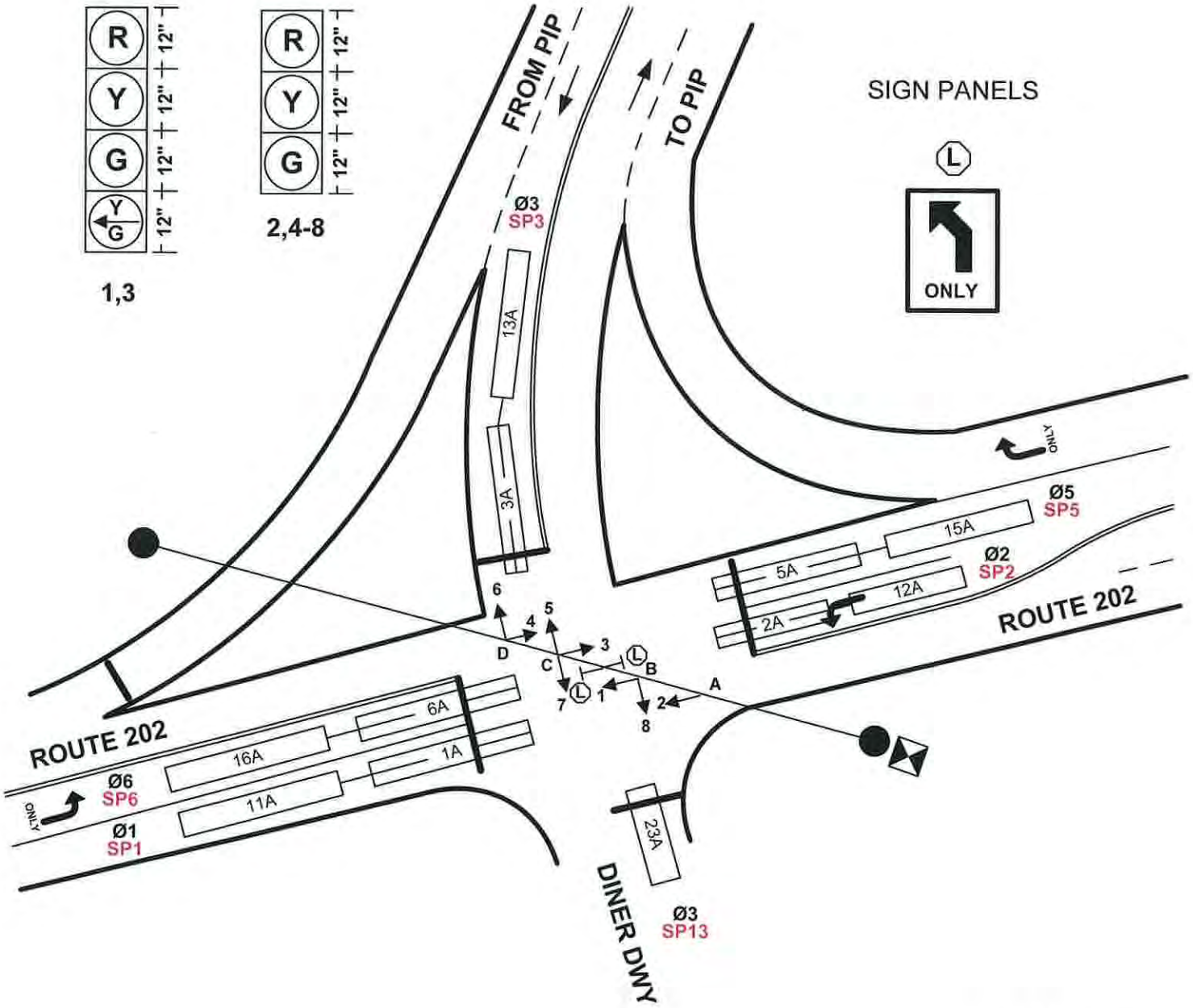
PROJECT:
CONTRACT: D261052
PIN: 8093.57
FILE: 39.14-202

R-185
SIGNAL NO(S)

ROCKLAND
COUNTY

FACES

SIGN PANELS



12/15/2010

Phase Times [1.1.1]

	1	2	3	4	5	6	7	8
Min Green	5	10	5		3	10		
Gap, Ext	1	2	1		1	2		
Max 1	25	50	30		10	50		
Max 2								
Yel Clearance	4	4	4	3.5	4	4	3.5	3.5
Red Clearance	2	2	2	1.5	2	2	1.5	1.5
Walk								
Ped Clearance								
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim								
Max Step								
Options [1.1.2]	1	2	3	4	5	6	7	8
Enable	ON	ON	ON		ON	ON		
Min Recall		ON				ON		
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls								
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		ON		ON		ON		ON
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON
Gaurantee Passage								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								
Options+ [1.1.3]	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Call Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1
2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1
4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1
5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1
6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1
7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1
8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1
9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1
10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1
11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1
12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coor	0	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
2	Coor	0	0	0	0	0	0	0	0	14	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
3	Coor	0	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
4	Coor	0	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
5	Coor	0	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
6	Coor	0	0	0	0	0	0	0	0	18	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON

Page#	
1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)
3	Detection; Sample Time and Unit Parameters related to detection
4	Preemption and Alternate Phase Time and Phase Options
5	Annual Schedule
6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)
7	Communications; Secutiry; I/O Setup
8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param

5185

Ring/Startup [1.1.4]

Phs	Ring	Start	Enable
1	1	Red	ON
2	1	Green	ON
3	1	Red	ON
4	1	Red	OFF
5	2	Red	ON
6	2	Green	ON
7	2	Red	OFF
8	2	Red	OFF

Coord Modes [2.1]

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX 1
Force-Off	Float
Closed Loop	ON
Stop-in-Walk	OFF
Auto Reset	ON
Expand Splt	
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	PH_OVLP
Flash Yel	45
Flash Red	20

Unit Params [1.2.1]

Phase Mode	STD8
IO Mode	User
Loc Flsh Start	ON
Start Flash(s)	0
Start AllRed(s)	0
Yellow < 3"	OFF
Display Time	20
Red Revert	3
MCE Timeout	0
Feature Profile	
Free Ring Seq	1
Auxswitch	STOPTM
SDLC Retry	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
SDLC Retry	0

Overlap 1-16 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

Overlap Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF

	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
1	Modifier Ø								Grn		9	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
A	Conflict Olap								Red	1.5	I	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
2	Modifier Ø								Grn		10	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
B	Conflict Olap								Red	1.5	J	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
3	Modifier Ø								Grn		11	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
C	Conflict Olap								Red	1.5	K	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
4	Modifier Ø								Grn		12	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
D	Conflict Olap								Red	1.5	L	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
5	Modifier Ø								Grn		13	Modifier Ø									Grn	
	Conf o0l								Yel	3.5		Conflict Ø									Yel	3.5
E	Conflict Olap								Red	1.5	M	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
6	Modifier Ø								Grn		14	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
F	Conflict Olap								Red	1.5	N	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
7	Modifier Ø								Grn		15	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
G	Conflict Olap								Red	1.5	O	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
8	Modifier Ø								Grn		16	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
H	Conflict Olap								Red	1.5	P	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	**1**	**2**	**3**		**5**	**6**					**3**													
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovrd																								

Coord Transition, CoorPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22							EndGRN				
2	12	22							EndGRN				
3	12	22							EndGRN				
4	12	22							EndGRN				
5	12	22							EndGRN				
6	12	22							EndGRN				
7	12	22							EndGRN				
8	12	22							EndGRN				
9	12	22							EndGRN				
10	12	22							EndGRN				
11	12	22							EndGRN				
12	12	22							EndGRN				
13	12	22							EndGRN				
14	12	22							EndGRN				
15	12	22							EndGRN				
16	12	22							EndGRN				
17	12	22							EndGRN				
18	12	22							EndGRN				
19	12	22							EndGRN				
20	12	22							EndGRN				
21	12	22							EndGRN				
22	12	22							EndGRN				
23	12	22							EndGRN				
24	12	22							EndGRN				
25									BegGRN				
26									BegGRN				
27									BegGRN				
28									BegGRN				
29									BegGRN				
30									BegGRN				
31									BegGRN				
32									BegGRN				
33									BegGRN				
34									BegGRN				
35									BegGRN				
36									BegGRN				
37									BegGRN				
38									BegGRN				
39									BegGRN				
40									BegGRN				
41									BegGRN				
42									BegGRN				
43									BegGRN				
44									BegGRN				
45									BegGRN				
46									BegGRN				
47									BegGRN				
48									BegGRN				

Channel Params[1.8.3]

C1 IO Mode	User	Single BIU Map	DEFAULT	Invert Rail Input	OFF

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
1	1						45	50	15
2	2						45	50	40
3	3		2				45	50	15
4							45	50	2
5	5	2	1				45	50	5
6	6						45	50	40
7	2						45	50	2
8	5						45	50	2
9	1						45	50	2
10	6						45	50	2
11	1						45	50	5
12	2						45	50	15
13	3		2				45	50	5
14							45	50	2
15	5	2	1				45	50	5
16	6						45	50	15
17	3						45	50	2
18	3						45	50	2
19							45	50	
20							45	50	
21							45	50	
22							45	50	
23	3		8				45	50	8
24							45	50	
25							45	50	
26							45	50	
27							45	50	
28							45	50	
29							45	50	
30							45	50	
31							45	50	
32							45	50	

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
33							45	50	
34							45	50	
35							45	50	
36							45	50	
37							45	50	
38							45	50	
39							45	50	
40							45	50	
41							45	50	
42							45	50	
43							45	50	
44							45	50	
45							45	50	
46							45	50	
47							45	50	
48							45	50	
49							45	50	
50							45	50	
51							45	50	
52							45	50	
53							45	50	
54							45	50	
55							45	50	
56							45	50	
57							45	50	
58							45	50	
59							45	50	
60							45	50	
61							45	50	
62							45	50	
63							45	50	
64							45	50	

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol
1	ON	ON		ON				
2	ON	ON		ON				
3	ON	ON		ON				
4	ON	ON		ON				
5	ON	ON		ON				
6	ON	ON		ON				
7	ON	ON		ON				
8	ON	ON		ON				
9	ON	ON		ON				
10	ON	ON		ON				
11	ON	ON		ON				
12	ON	ON		ON				
13	ON	ON		ON				
14	ON	ON		ON				
15	ON	ON		ON				
16	ON	ON		ON				
17	ON	ON		ON				
18	ON	ON		ON				
19	ON	ON		ON				
20	ON	ON		ON				
21	ON	ON		ON				
22	ON	ON		ON				
23	ON	ON		ON				
24	ON	ON		ON				
25	ON	ON		ON				
26	ON	ON		ON				
27	ON	ON		ON				
28	ON	ON		ON				
29	ON	ON		ON				
30	ON	ON		ON				
31	ON	ON		ON				
32	ON	ON		ON				

Vehicle Options 1-64 [5.2]

Det #	vol	occ	Yell Lock	Red Lock	Ext	Add Init	Que	Call
33					ON	ON		ON
34					ON	ON		ON
35					ON	ON		ON
36					ON	ON		ON
37					ON	ON		ON
38					ON	ON		ON
39					ON	ON		ON
40					ON	ON		ON
41					ON	ON		ON
42					ON	ON		ON
43					ON	ON		ON
44					ON	ON		ON
45					ON	ON		ON
46					ON	ON		ON
47					ON	ON		ON
48					ON	ON		ON
49					ON	ON		ON
50					ON	ON		ON
51					ON	ON		ON
52					ON	ON		ON
53					ON	ON		ON
54					ON	ON		ON
55					ON	ON		ON
56					ON	ON		ON
57					ON	ON		ON
58					ON	ON		ON
59					ON	ON		ON
60					ON	ON		ON
61					ON	ON		ON
62					ON	ON		ON
63					ON	ON		ON
64					ON	ON		ON

Parameters+ 1-64 [5.3]

Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1						NORM	
2						NORM	
3						NORM	
4						NORM	
5						NORM	
6						NORM	
7						NORM	
8						NORM	
9						NORM	
10						NORM	
11						NORM	
12						NORM	
13						NORM	
14						NORM	
15						NORM	
16						NORM	
17						NORM	
18						NORM	
19						NORM	
20						NORM	
21						NORM	
22						NORM	
23						NORM	
24						NORM	
25						NORM	
26						NORM	
27						NORM	
28						NORM	
29						NORM	
30						NORM	
31						NORM	
32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM	
34						NORM	
35						NORM	
36						NORM	
37						NORM	
38						NORM	
39						NORM	
40						NORM	
41						NORM	
42						NORM	
43						NORM	
44						NORM	
45						NORM	
46						NORM	
47						NORM	
48						NORM	
49						NORM	
50						NORM	
51						NORM	
52						NORM	
53						NORM	
54						NORM	
55						NORM	
56						NORM	
57						NORM	
58						NORM	
59						NORM	
60						NORM	
61						NORM	
62						NORM	
63						NORM	
64						NORM	

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1			15	
2			15	
3			15	
4			15	
5			15	
6			15	
7			15	
8			15	

Unit Paramters [1.2.1]

TS2 Det Faults	ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	ON	RAIL	Dwell		
2	ON	RAIL	Dwell		
3	ON	EMERG	Dwell		
4	ON	EMERG	Dwell		
5	ON	EMERG	Dwell		
6	ON	EMERG	Dwell		

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					ON
2					ON
3					ON
4					ON
5					ON
6					ON

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr+	Yel
1		2			
2		2			
3		2			
4		2			
5		2			
6		2			

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max
7	OFF		
8	OFF		
9	OFF		
10	OFF		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	

Channel Parameters [1.8.3]

D Conn Mappings	OFF
Pre Invert Rail Input	None

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Track Phases					Track Overlaps										
1																
2																
3																
4																
5																
6																

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #													
1	Phases												
	Overlaps												
	Peds												
2	Phases												
	Overlaps												
	Peds												
3	Phases												
	Overlaps												
	Peds												
4	Phases												
	Overlaps												
	Peds												
5	Phases												
	Overlaps												
	Peds												
6	Phases												
	Overlaps												
	Peds												

Exit Phases [3.2]

Pre #	Exit Phase			
1				
2				
3				
4				
5				
6				

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh		Override Higher		Flsh Dwell	Link
1	ON	ON		ON		OFF	
2	ON	ON		ON		OFF	
3	ON	ON		ON		OFF	
4	ON	ON		ON		OFF	
5	ON	ON		ON		OFF	
6	ON	ON		ON		OFF	

Alt# 1 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	ON	ON	ON	ON	ON	ON	ON	ON
Soft Recall								
Dual Enrty								
Enabl SimGap	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

Annual Schedule [4.3]

	Month of Year												Day of Week							Date																							Day Plan	Link To
1	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
2	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
3	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
4	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
5	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
6	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
7	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
8	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
9	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
10	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
11	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
12	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
13	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
14	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
15	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
16	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
17	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
18	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
19	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
20	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
21	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
22	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
23	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	
24	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	

Day Plans [4.4]

Day Plan 1

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 2

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 3

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 4

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 5

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 6

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 7

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 8

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 9

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 10

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 11

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 12

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 13

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 14

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 15

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
48												
98												
99												
100	255											

Coord Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	Call Inh	CIC	CNA1	Overlap Off 1	2	3	4	5	6	7	8	Dia	Max2
1															DFT	
2															DFT	
3															DFT	
4															DFT	
5															DFT	
6															DFT	
7															DFT	
8															DFT	
9															DFT	
10															DFT	
11															DFT	
12															DFT	
13															DFT	
14															DFT	
15															DFT	
16															DFT	
17															DFT	
18															DFT	
19															DFT	
20															DFT	
21															DFT	
22															DFT	
23															DFT	
24															DFT	
25															DFT	
26															DFT	
27															DFT	
28															DFT	
29															DFT	
30															DFT	
31															DFT	
32															DFT	
33															DFT	
34															DFT	
35															DFT	
36															DFT	
37															DFT	
38															DFT	
39															DFT	
40															DFT	
41															DFT	
42															DFT	
43															DFT	
44															DFT	
45															DFT	
46															DFT	
47															DFT	
48															DFT	

#	Event / Alarm	Ev	Alr
1	Power Up Alarm.	ON	ON
2	Stop Timing	ON	ON
3	TS1 Cabinet Door		
4	Coordination Failure	ON	ON
5	External Alarm # 1	ON	ON
6	External Alarm # 2	ON	ON
7	External Alarm # 3		
8	External Alarm # 4		
9	Closed Loop Disabled	ON	ON
10	External Alarm # 5		
11	External Alarm # 6		
12	Manual Control Enable	ON	ON
13	Coord Free Input		
14	Local Flash Input	ON	ON
15	MMU Flash		
16	CMU Flash		
17	Cycle Fault	ON	ON
18	Cycle Failure	ON	ON
19	Coordination Fault	ON	ON
20	Controller Fault	ON	ON
21	Detector SDLC Failure		
22	MMU SDLC Failure		
23	Critical SDLC Failure		
24	Reserved		
25	EEPROM CRC Fault	ON	ON
26	Detector Diagnostic Failure		
27	BIU Detector Failure	ON	ON
28	Queue detector alarm	ON	ON
29	Ped Detector Fault	ON	ON
30	Coord Diagnostic Fault		
41	TempAlert Probe Ch. A		
42	TempAlert Probe Ch. B		
47	Coord Active		
48	Preempt Active	ON	ON
49	Preempt 1 Input	ON	ON
50	Preempt 2 Input	ON	ON
51	Preempt 3 Input	ON	ON
52	Preempt 4 Input	ON	ON
53	Preempt 5 Input	ON	ON
54	Preempt 6 Input	ON	ON
55	Preempt 7 Input	ON	ON
56	Preempt 8 Input	ON	ON
57	Preempt 9 Input	ON	ON
58	Preempt 10 Input	ON	ON
61	In Transition	ON	ON
81	FIO Status Alarm		

Call Phases[1.1.5]

Ø	Phases Called By Ø			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø								
Yel (olaps)								

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	
TOD Dim Enable	OFF	Cycle Fault Action	Alarm
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	900		
Disable Init Ped	OFF		
Cycle Fault Action	Alarm		
Enable Run Timer	ON		

C1-USER IO Map [1.8.9.1 In]

I1-1	1	Veh Call 1
I1-2	2	Veh Call 2
I1-3	3	Veh Call 3
I1-4	189	Unused
I1-5	5	Veh Call 5
I1-6	6	Veh Call 6
I1-7	7	Veh Call 7
I1-8	8	Veh Call 8
I2-1	9	Veh Call 9
I2-2	10	Veh Call 10
I2-3	11	Veh Call 11
I2-4	12	Veh Call 12
I2-5	13	Veh Call 13
I2-6	189	Unused
I2-7	15	Veh Call 15
I2-8	16	Veh Call 16
I3-1	17	Veh Call 17
I3-2	18	Veh Call 18
I3-3	189	Unused
I3-4	189	Unused
I3-5	189	Unused
I3-6	189	Unused
I3-7	23	Veh Call 23
I3-8	189	Unused
I4-1	189	
I4-2		
I4-3		
I4-4		
I4-5	179	Door Open
I4-6	189	Unused
I4-7	229	33xCMUStop
I4-8	228	33xFlashSns
I5-1	189	Unused
I5-2	189	Unused
I5-3	189	Unused
I5-4	189	Unused
I5-5	189	Unused
I5-6	189	Unused
I5-7	189	Unused
I5-8	189	Unused
I6-1	189	Unused
I6-2	189	Unused
I6-3	189	Unused
I6-4	189	Unused
I6-5	189	Unused
I6-6	189	Unused
I6-7	189	Unused
I6-8	189	Unused

C1-USER IO Map [1.8.9.2 Out]

O1-1	1	Ch1 Red
O1-2	49	Ch1 Green
O1-3	2	Ch2 Red
O1-4	26	Ch2 Yellow
O1-5	50	Ch2 Green
O1-6	3	Ch3 Red
O1-7	27	Ch3 Yellow
O1-8	51	Ch3 Green
O2-1	4	Ch4 Red
O2-2	52	Ch4 Green
O2-3	5	Ch5 Red
O2-4	29	Ch5 Yellow
O2-5	53	Ch5 Green
O2-6	6	Ch6 Red
O2-7	30	Ch6 Yellow
O2-8	54	Ch6 Green
O3-1	7	Ch7 Red
O3-2	55	Ch7 Green
O3-3	8	Ch8 Red
O3-4	32	Ch8 Yellow
O3-5	56	Ch8 Green
O3-6	9	Ch9 Red
O3-7	33	Ch9 Yellow
O3-8	57	Ch9 Green
O4-1	10	Ch10 Red
O4-2	58	Ch10 Green
O4-3	11	Ch11 Red
O4-4	35	Ch11 Yellow
O4-5	59	Ch11 Green
O4-6	12	Ch12 Red
O4-7	36	Ch12 Yellow
O4-8	60	Ch12 Green
O5-1	28	Ch4 Yellow
O5-2	34	Ch10 Yellow
O5-3	25	Ch1 Yellow
O5-4	31	Ch7 Yellow
O5-5	39	Ch15 Yellow
O5-6	63	Ch15 Green
O5-7	115	Not Used
O5-8	114	Watchdog
O6-1	115	Not Used
O6-2	115	Not Used
O6-3	13	Ch13 Red
O6-4	37	Ch13 Yellow
O6-5	61	Ch13 Green
O6-6	14	Ch14 Red
O6-7	38	Ch14 Yellow
O6-8	62	Ch14 Green

C1-USER IO Map [1.8.9.2 Out]

O7-1	40	Ch16 Yellow
O7-2	16	Ch16 Red
O7-3	64	Ch16 Green
O7-4	115	Not Used
O7-5	115	Not Used
O7-6	115	Not Used
O7-7	115	Not Used
O7-8	15	Ch15 Red

C11S-USER IO Map [1.8.9.1 In]

I4-1		
I4-2		
I4-3		
I4-4		
I7-1	189	Unused
I7-2	189	Unused
I7-3	189	Unused
I7-4	189	Unused
I7-5	189	Unused
I7-6	189	Unused
I7-7	189	Unused
I7-8	189	Unused
I8-1	189	Unused
I8-2	189	Unused
I8-3	189	Unused
I8-4	189	Unused
I8-5	189	Unused
I8-6	189	Unused
I8-7	189	Unused
I8-8	189	Unused

C11S-USER IO Map [1.8.9.2 Out]

O8-1	115	Not Used
O8-2	115	Not Used
O8-3	115	Not Used
O8-4	115	Not Used
O8-5	115	Not Used
O8-6	115	Not Used
O8-7	115	Not Used
O8-8	115	Not Used

IO Logic [1.8.7]

Op1	Result		O1Fcn	Inv1	Src1	IO1	Fun1	O2Fcn	Inv2	Src2	IO2	Fun2	O3Fcn	Inv3	Src3	IO3	Fun3	Dly	Sec
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0

Security Access Levels [8.2]

1	SWLOAD
2	SECURE
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None
14	None
15	None
16	None
17	None
18	None
19	None
20	None
21	None
22	None
23	None
24	None
25	None
26	None
27	None
28	None
29	None
30	None
31	None
32	None
33	None
34	None
35	None
36	None
37	None
38	None
39	None
40	None
41	None
42	None
43	None
44	None
45	None
46	None
47	None
48	None
49	None
50	None
51	None
52	None
53	None
54	None
55	None
56	None
57	None
58	None
59	None
60	None
61	None
62	None
63	None
64	None

Com Parameters [6.1]

Station ID	5185
Group ID	0
Master ID	0
Backup Time	900

SysUp Modem [6.1]

Enable Modem	None
Idle Time	0
Dial Time	0
Tel:	
Alt:	

2070 Port Parms [6.2]

Port	Baud Rate	FCM
SP1	9600	6
SP2	9600	6
SP3	19200	6
SP4	38400	6
SP5	1200	0
SP6	1200	0
SP7	1200	0
SP8	1200	0

2070 IP 1 Addressing [6.5]

	Addressing			
Addr	192	168	0	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	0	1
Port	###			

2070 IP 2 Addressing [6.5]

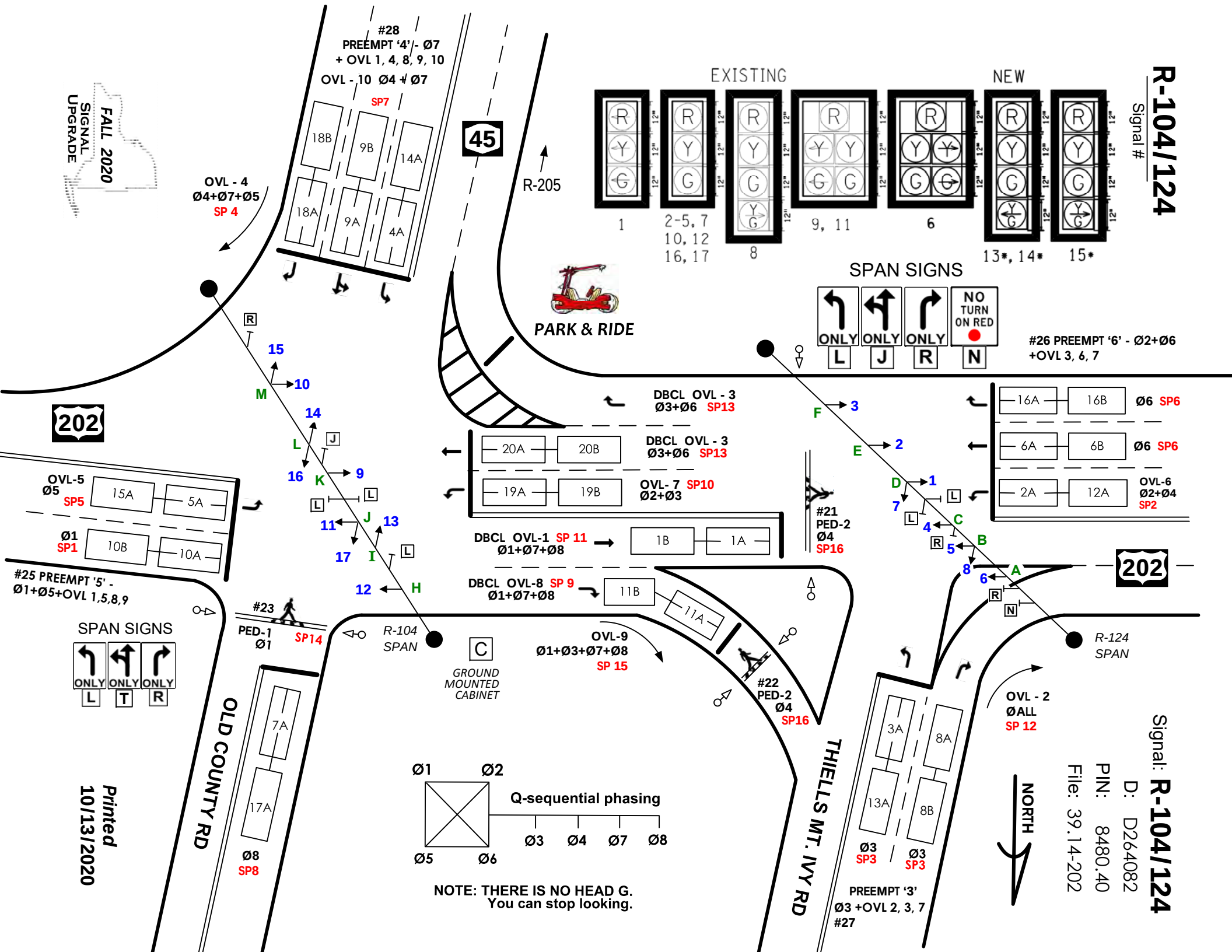
	Addressing			
Addr	192	168	0	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	0	1
Port	5001			

2070 Port Binding Ports [6.6]

	Port	Echo	Mode
ASYNC1	SP1	None	0
ASYNC2	SP2	None	0
ASYNC3	SP3	None	0
ASYNC4	SP4	None	0
SYNC1	SP5S	SYNC3	OFF
SYNC2	OFF	SYNC4	OFF

2070 Port Binding Functions [6.6]

Functio	Channel	Functio	Channel
TS2/CVI	None	SYSUp	ASYNC2
CMU/MM	None	SYSDow	ASYNC1
Opticom	None	Shell	None
Loop De	None		
GPS	None		


R-104/124
Signal #
EXISTING
NEW
1
2-5, 7
10, 12
16, 17
8
9, 11
6
13*, 14*
15*
SPAN SIGNS
ONLY L
ONLY J
ONLY R
NO TURN ON RED N
#26 PREEMPT '6' - Ø2+Ø6
+OVL 3, 6, 7
#28
PREEMPT '4' - Ø7
+ OVL 1, 4, 8, 9, 10
OVL - 10 Ø4 + Ø7
SP7
FALL 2020
SIGNAL UPGRADE
OVL - 4
Ø4+Ø7+Ø5
SP 4
45
R-205
PARK & RIDE
202
DBCL OVL - 3
Ø3+Ø6 SP13
DBCL OVL - 3
Ø3+Ø6 SP13
OVL- 7 SP10
Ø2+Ø3
DBCL OVL-1 SP 11
Ø1+Ø7+Ø8
DBCL OVL-8 SP 9
Ø1+Ø7+Ø8
#21
PED-2
Ø4
SP16
Ø6 SP6
Ø6 SP6
OVL-6
Ø2+Ø4
SP2
OVL-5
Ø5
SP5
Ø1
SP1
#25 PREEMPT '5' -
Ø1+Ø5+OVL 1,5,8,9
SPAN SIGNS
ONLY L
ONLY T
ONLY R
#23
PED-1
Ø1
SP14
R-104
SPAN
GROUND MOUNTED CABINET
OVL-9
Ø1+Ø3+Ø7+Ø8
SP 15
#22
PED-2
Ø4
SP16
R-124
SPAN
OVL - 2
ØALL
SP 12
OLD COUNTY RD
THIELLS MT. IVY RD
Ø8
SP8
Ø1
Ø2
Ø5
Ø6
Q-sequential phasing
Ø3
Ø4
Ø7
Ø8
NOTE: THERE IS NO HEAD G.
You can stop looking.
Ø3
SP3
Ø3
SP3
PREEMPT '3'
Ø3 +OVL 2, 3, 7
#27
NORTH
Printed
10/13/2020
Signal: R-104/124
D: D264082
PIN: 8480.40
File: 39.14-202

Phase Times [1.1.1]

	1	2	3	4	5	6	7	8
Min Green	5	5	5		3	5	5	5
Gap, Ext	3	1	1		1	2	1	1
Max 1	60	20	30		15	60	25	15
Max 2								
Yel Clearance	4	4	4	3	4	4	4	4
Red Clearance	2	2	2	1	2	2	2	2
Walk	7			7				
Ped Clearance	16			34				
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim			60					
Max Step			15					

Options [1.1.2]	1	2	3	4	5	6	7	8
Enable	ON	ON	ON	ON	ON	ON	ON	ON
Min Recall	ON					ON		
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls								
Auto Flash Entry								
Auto Flash Exit								
Dual Entry	ON					ON		
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON
Gaurantee Passage								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Call Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1
2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1
4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1
5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1
6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1
7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1
8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1
9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1
10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1
11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1
12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coor	0	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
2	Coor	70	20	40	0	15	60	25	10	14	Coor	0	0	0	0	0	0	0	0
		Max	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
3	Coor	0	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
4	Coor	0	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
5	Coor	0	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
6	Coor	0	0	0	0	0	0	0	0	18	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON

Page#	
1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)
3	Detection; Sample Time and Unit Parameters related to detection
4	Preemption and Alternate Phase Time and Phase Options
5	Annual Schedule
6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)
7	Communications; Secutiry; I/O Setup
8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param

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Ring/Startup [1.1.4]

Phs	Ring	Start	Enable
1	1	Green	ON
2	1	Red	ON
3	1	Red	ON
4	1	Red	ON
5	2	Red	ON
6	2	Green	ON
7	1	Red	ON
8	1	Red	ON

Coord Modes [2.1]

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX 1
Force-Off	Float
Closed Loop	ON
Stop-in-Walk	OFF
Auto Reset	ON
Expand Splt	
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	PH_OVLP
Flash Yel	45
Flash Red	20

Unit Params [1.2.1]

Phase Mode	QSeq
IO Mode	User
Loc Flsh Start	ON
Start Flash(s)	0
Start AllRed(s)	0
Yellow < 3"	OFF
Display Time	20
Red Revert	0
MCE Timeout	0
Feature Profile	
Free Ring Seq	1
Auxswitch	STOPTM
SDLC Retry	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
SDLC Retry	0

Overlap 1-16 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

Overlap Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF

1	Included Ø	1	7	8						Type	NORMAL	9	Included Ø	1	3	7	8					Type	NORMAL
	Modifier Ø									Grn	7		Modifier Ø									Grn	7
	Conflict Ø	2	3							Yel	4		Conflict Ø	2								Yel	4
A	Conflict Olap	6								Red	2	I	Conflict Olap	6								Red	2
	Conflict Ped									LG			Conflict Ped									LG	
2	Included Ø	1	2	3	4	5	6	7	8	Type	NORMAL	10	Included Ø	4	7							Type	NORMAL
	Modifier Ø									Grn			Modifier Ø									Grn	
	Conflict Ø									Yel	4		Conflict Ø									Yel	4
B	Conflict Olap									Red	2	J	Conflict Olap									Red	2
	Conflict Ped									LG			Conflict Ped									LG	
3	Included Ø	3	6							Type	NORMAL	11	Included Ø									Type	NORMAL
	Modifier Ø									Grn	7		Modifier Ø									Grn	
	Conflict Ø	5	7							Yel	4		Conflict Ø									Yel	3.5
C	Conflict Olap	4	5	10						Red	2	K	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	
4	Included Ø	4	5	7						Type	NORMAL	12	Included Ø									Type	NORMAL
	Modifier Ø									Grn			Modifier Ø									Grn	
	Conflict Ø									Yel	4		Conflict Ø									Yel	3.5
D	Conflict Olap									Red	2	L	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	
5	Included Ø	5								Type	NORMAL	13	Included Ø									Type	NORMAL
	Modifier Ø									Grn			Modifier Ø									Grn	
	Conf o0l									Yel	4		Conflict Ø									Yel	3.5
E	Conflict Olap									Red	2	M	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	
6	Included Ø	2	4							Type	NORMAL	14	Included Ø									Type	NORMAL
	Modifier Ø									Grn			Modifier Ø									Grn	
	Conflict Ø									Yel	4		Conflict Ø									Yel	3.5
F	Conflict Olap									Red	2	N	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	
7	Included Ø	2	3							Type	NORMAL	15	Included Ø									Type	NORMAL
	Modifier Ø									Grn	7		Modifier Ø									Grn	
	Conflict Ø	1	7							Yel	4		Conflict Ø									Yel	3.5
G	Conflict Olap	10								Red	2	O	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	
8	Included Ø	1	7	8						Type	NORMAL	16	Included Ø									Type	NORMAL
	Modifier Ø									Grn	7		Modifier Ø									Grn	
	Conflict Ø	2								Yel	4		Conflict Ø									Yel	3.5
H	Conflict Olap	6								Red	2	P	Conflict Olap									Red	1.5
	Conflict Ped									LG			Conflict Ped									LG	

Channel Settings [1.8.1]

……Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	**1**	**6**	**3**	**4**	**5**	**6**	**10**	**8**	**8**	**7**	**1**	**2**	**3**	**1**	**9**	**4**								
Channel Type	VEH	OLP	VEH	OLP	OLP	VEH	OLP	VEH	OLP	OLP	OLP	OLP	OLP	PED	OLP	PED	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel+ Settings [1.8.4]

……Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovrd																								

Coord Transition, CoorPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22							EndGRN				
2	12	22							EndGRN				
3	12	22							EndGRN				
4	12	22							EndGRN				
5	12	22							EndGRN				
6	12	22							EndGRN				
7	12	22							EndGRN				
8	12	22							EndGRN				
9	12	22							EndGRN				
10	12	22							EndGRN				
11	12	22							EndGRN				
12	12	22							EndGRN				
13	12	22							EndGRN				
14	12	22							EndGRN				
15	12	22							EndGRN				
16	12	22							EndGRN				
17	12	22							EndGRN				
18	12	22							EndGRN				
19	12	22							EndGRN				
20	12	22							EndGRN				
21	12	22							EndGRN				
22	12	22							EndGRN				
23	12	22							EndGRN				
24	12	22							EndGRN				
25									BegGRN				
26									BegGRN				
27									BegGRN				
28									BegGRN				
29									BegGRN				
30									BegGRN				
31									BegGRN				
32									BegGRN				
33									BegGRN				
34									BegGRN				
35									BegGRN				
36									BegGRN				
37									BegGRN				
38									BegGRN				
39									BegGRN				
40									BegGRN				
41									BegGRN				
42									BegGRN				
43									BegGRN				
44									BegGRN				
45									BegGRN				
46									BegGRN				
47									BegGRN				
48									BegGRN				

Channel Params[1.8.3]

C1 IO Mode	User	Single BIU Map	DEFAULT	Invert Rail Input	OFF

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
1							45	50	2
2	2		2				45	50	20
3	3						45	50	15
4	7		2				45	50	20
5	5	1	2				45	50	8
6	6						45	50	35
7	8		5				45	50	7
8							45	50	2
9	7		2				45	50	20
10	1						45	50	45
11							45	50	2
12	2						45	50	5
13	3						45	50	5
14	7		2				45	50	5
15	5	1	1				45	50	5
16	6						45	50	35
17	8		5				45	50	5
18	7		2				45	50	15
19							45	50	
20							45	50	
21							45	50	
22							45	50	
23							45	50	
24							45	50	
25							45	50	
26							45	50	
27							45	50	
28							45	50	
29							45	50	
30							45	50	
31							45	50	
32							45	50	

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
33							45	50	
34							45	50	
35							45	50	
36							45	50	
37							45	50	
38							45	50	
39							45	50	
40							45	50	
41							45	50	
42							45	50	
43							45	50	
44							45	50	
45							45	50	
46							45	50	
47							45	50	
48							45	50	
49							45	50	
50							45	50	
51							45	50	
52							45	50	
53							45	50	
54							45	50	
55							45	50	
56							45	50	
57							45	50	
58							45	50	
59							45	50	
60							45	50	
61							45	50	
62							45	50	
63							45	50	
64							45	50	

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol
1	ON	ON		ON			ON	ON
2	ON	ON		ON			ON	ON
3	ON	ON		ON			ON	ON
4	ON	ON		ON			ON	ON
5	ON	ON		ON			ON	ON
6	ON	ON		ON			ON	ON
7	ON	ON		ON			ON	ON
8	ON	ON		ON			ON	ON
9	ON	ON		ON			ON	ON
10	ON	ON		ON			ON	ON
11	ON	ON		ON			ON	ON
12	ON	ON		ON			ON	ON
13	ON	ON		ON			ON	ON
14	ON	ON		ON			ON	ON
15	ON	ON		ON			ON	ON
16	ON	ON		ON			ON	ON
17	ON	ON		ON			ON	ON
18	ON	ON		ON			ON	ON
19	ON	ON		ON			ON	ON
20	ON	ON		ON			ON	ON
21	ON	ON		ON			ON	ON
22	ON	ON		ON			ON	ON
23	ON	ON		ON			ON	ON
24	ON	ON		ON			ON	ON
25	ON	ON		ON			ON	ON
26	ON	ON		ON			ON	ON
27	ON	ON		ON			ON	ON
28	ON	ON		ON			ON	ON
29	ON	ON		ON			ON	ON
30	ON	ON		ON			ON	ON
31	ON	ON		ON			ON	ON
32	ON	ON		ON			ON	ON

Vehicle Options 1-64 [5.2]

Det #	vol	occ	Yell Lock	Red Lock	Ext	Add Init	Que	Call
33	ON	ON			ON	ON		ON
34	ON	ON			ON	ON		ON
35	ON	ON			ON	ON		ON
36	ON	ON			ON	ON		ON
37	ON	ON			ON	ON		ON
38	ON	ON			ON	ON		ON
39	ON	ON			ON	ON		ON
40	ON	ON			ON	ON		ON
41	ON	ON			ON	ON		ON
42	ON	ON			ON	ON		ON
43	ON	ON			ON	ON		ON
44	ON	ON			ON	ON		ON
45	ON	ON			ON	ON		ON
46	ON	ON			ON	ON		ON
47	ON	ON			ON	ON		ON
48	ON	ON			ON	ON		ON
49	ON	ON			ON	ON		ON
50	ON	ON			ON	ON		ON
51	ON	ON			ON	ON		ON
52	ON	ON			ON	ON		ON
53	ON	ON			ON	ON		ON
54	ON	ON			ON	ON		ON
55	ON	ON			ON	ON		ON
56	ON	ON			ON	ON		ON
57	ON	ON			ON	ON		ON
58	ON	ON			ON	ON		ON
59	ON	ON			ON	ON		ON
60	ON	ON			ON	ON		ON
61	ON	ON			ON	ON		ON
62	ON	ON			ON	ON		ON
63	ON	ON			ON	ON		ON
64	ON	ON			ON	ON		ON

Parameters+ 1-64 [5.3]

Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1						NORM	
2						NORM	
3						NORM	
4						NORM	
5						NORM	
6						NORM	
7						NORM	
8						NORM	
9						NORM	
10						NORM	
11						NORM	
12						NORM	
13						NORM	
14						NORM	
15						NORM	
16						NORM	
17						NORM	
18						NORM	
19						NORM	
20						NORM	
21						NORM	
22						NORM	
23						NORM	
24						NORM	
25						NORM	
26						NORM	
27						NORM	
28						NORM	
29						NORM	
30						NORM	
31						NORM	
32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM	
34						NORM	
35						NORM	
36						NORM	
37						NORM	
38						NORM	
39						NORM	
40						NORM	
41						NORM	
42						NORM	
43						NORM	
44						NORM	
45						NORM	
46						NORM	
47						NORM	
48						NORM	
49						NORM	
50						NORM	
51						NORM	
52						NORM	
53						NORM	
54						NORM	
55						NORM	
56						NORM	
57						NORM	
58						NORM	
59						NORM	
60						NORM	
61						NORM	
62						NORM	
63						NORM	
64						NORM	

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1	1		15	
2	4		15	
3			15	
4			15	
5			15	
6			15	
7			15	
8			15	

Unit Paramters [1.2.1]

TS2 Det Faults	ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

5104 RTE 202 @ RTE 45 & OLD RTE 45

Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	ON	RAIL	Dwell		
2	ON	RAIL	Dwell		
3	ON	EMERG	Dwell		2
4	ON	EMERG	Dwell		2
5	ON	EMERG	Dwell		2
6	ON	EMERG	Dwell		2

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					ON
2					ON
3		5		34	ON
4		5		34	ON
5		5		34	ON
6		5		34	ON

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr+	Yel
1		2			
2		2			
3		2			
4		2			
5		2			
6		2			

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max
7	OFF		
8	OFF		
9	OFF		
10	OFF		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	

Channel Parameters [1.8.3]

D Conn Mappings	OFF
Pre Invert Rail Input	None

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Track Phases	Track Overlaps
1		
2		
3		
4		
5		
6		

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #													
1	Phases												
	Overlaps												
	Peds												
2	Phases												
	Overlaps												
	Peds												
3	Phases	3											
	Overlaps	2	3	7									
	Peds												
4	Phases	7											
	Overlaps	1	4	8	9	10							
	Peds												
5	Phases	1	5										
	Overlaps	1	5	8	9								
	Peds												
6	Phases	2	6										
	Overlaps	3	6	7									
	Peds												

Exit Phases [3.2]

Pre #	Exit Phase
1	
2	
3	
4	
5	
6	

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh		Override Higher		Flsh Dwell	Link
1	ON	ON		ON		OFF	
2	ON	ON		ON		OFF	
3	ON	ON		ON		OFF	
4	ON	ON		ON		OFF	
5	ON	ON		ON		OFF	
6	ON	ON		ON		OFF	

Alt# 1 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	ON	ON	ON	ON	ON	ON	ON	ON
Soft Recall								
Dual Enrty								
Enabl SimGap	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

Annual Schedule [4.3]	Month of Year												Day of Week							Date																							Day	Link
	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Plan	To
1	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON		ON	ON	ON	ON	ON		ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	1	
2	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
3	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
4	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
5	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
6	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
7	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
8	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
9	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
10	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
11	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
12	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
13	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
14	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
15	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
16	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
17	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
18	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
19	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
20	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
21	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
22	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
23	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	
24	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
																																																	1	

Day Plans [4.4]

Day Plan 1

	Hour	Min	Act		Hour	Min	Act
1	0	0	99	9	0	0	0
2	7	30	2	10	0	0	0
3	9	15	99	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 2

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 3

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 4

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 5

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 6

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 7

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 8

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 9

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 10

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 11

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 12

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 13

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 14

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 15

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
48												
98												
99												
100	255											

Coord Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	Call Inh	CIC	CNA1	Overlap Off 1	2	3	4	5	6	7	8	Dia	Max2
1															DFT	
2															DFT	
3															DFT	
4															DFT	
5															DFT	
6															DFT	
7															DFT	
8															DFT	
9															DFT	
10															DFT	
11															DFT	
12															DFT	
13															DFT	
14															DFT	
15															DFT	
16															DFT	
17															DFT	
18															DFT	
19															DFT	
20															DFT	
21															DFT	
22															DFT	
23															DFT	
24															DFT	
25															DFT	
26															DFT	
27															DFT	
28															DFT	
29															DFT	
30															DFT	
31															DFT	
32															DFT	
33															DFT	
34															DFT	
35															DFT	
36															DFT	
37															DFT	
38															DFT	
39															DFT	
40															DFT	
41															DFT	
42															DFT	
43															DFT	
44															DFT	
45															DFT	
46															DFT	
47															DFT	
48															DFT	

#	Event / Alarm	Ev	Alr
1	Power Up Alarm.	ON	ON
2	Stop Timing	ON	ON
3	TS1 Cabinet Door		
4	Coordination Failure	ON	ON
5	External Alarm # 1	ON	ON
6	External Alarm # 2	ON	ON
7	External Alarm # 3		
8	External Alarm # 4		
9	Closed Loop Disabled	ON	ON
10	External Alarm # 5		
11	External Alarm # 6		
12	Manual Control Enable	ON	ON
13	Coord Free Input		
14	Local Flash Input	ON	ON
15	MMU Flash		
16	CMU Flash		
17	Cycle Fault	ON	ON
18	Cycle Failure	ON	ON
19	Coordination Fault	ON	ON
20	Controller Fault	ON	ON
21	Detector SDLC Failure		
22	MMU SDLC Failure		
23	Critical SDLC Failure		
24	Reserved		
25	EEPROM CRC Fault	ON	ON
26	Detector Diagnostic Failure		
27	BIU Detector Failure	ON	ON
28	Queue detector alarm	ON	ON
29	Ped Detector Fault	ON	ON
30	Coord Diagnostic Fault		
41	TempAlert Probe Ch. A		
42	TempAlert Probe Ch. B		
47	Coord Active		
48	Preempt Active	ON	ON
49	Preempt 1 Input	ON	ON
50	Preempt 2 Input	ON	ON
51	Preempt 3 Input	ON	ON
52	Preempt 4 Input	ON	ON
53	Preempt 5 Input	ON	ON
54	Preempt 6 Input	ON	ON
55	Preempt 7 Input	ON	ON
56	Preempt 8 Input	ON	ON
57	Preempt 9 Input	ON	ON
58	Preempt 10 Input	ON	ON
61	In Transition	ON	ON
81	FIO Status Alarm		

Call Phases[1.1.5]

Ø	Phases Called By Ø			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø								
Yel (olaps)								

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	
TOD Dim Enable	OFF	Cycle Fault Action	Alarm
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	900		
Disable Init Ped	OFF		
Cycle Fault Action	Alarm		
Enable Run Timer	ON		

C1-USER IO Map [1.8.9.1 In]

I1-1	189	Unused
I1-2	2	Veh Call 2
I1-3	3	Veh Call 3
I1-4	4	Veh Call 4
I1-5	5	Veh Call 5
I1-6	6	Veh Call 6
I1-7	7	Veh Call 7
I1-8	189	Unused
I2-1	9	Veh Call 9
I2-2	10	Veh Call 10
I2-3	189	Unused
I2-4	12	Veh Call 12
I2-5	13	Veh Call 13
I2-6	14	Veh Call 14
I2-7	15	Veh Call 15
I2-8	16	Veh Call 16
I3-1	17	Veh Call 17
I3-2	18	Veh Call 18
I3-3	189	Unused
I3-4	189	Unused
I3-5	130	Ped Call 2
I3-6	130	Ped Call 2
I3-7	129	Ped Call 1
I3-8	189	Unused
I4-1	189	
I4-2		
I4-3		
I4-4		
I4-5	179	Door Open
I4-6	189	Unused
I4-7	229	33xCMUStop
I4-8	228	33xFlashSns
I5-1	202	Pre 5 In
I5-2	203	Pre 6 In
I5-3	200	Pre 3 In
I5-4	201	Pre 4 In
I5-5	189	Unused
I5-6	189	Unused
I5-7	189	Unused
I5-8	189	Unused
I6-1	189	Unused
I6-2	189	Unused
I6-3	189	Unused
I6-4	189	Unused
I6-5	189	Unused
I6-6	189	Unused
I6-7	189	Unused
I6-8	189	Unused

C1-USER IO Map [1.8.9.2 Out]

O1-1	1	Ch1 Red
O1-2	49	Ch1 Green
O1-3	2	Ch2 Red
O1-4	26	Ch2 Yellow
O1-5	50	Ch2 Green
O1-6	3	Ch3 Red
O1-7	27	Ch3 Yellow
O1-8	51	Ch3 Green
O2-1	4	Ch4 Red
O2-2	52	Ch4 Green
O2-3	5	Ch5 Red
O2-4	29	Ch5 Yellow
O2-5	53	Ch5 Green
O2-6	6	Ch6 Red
O2-7	30	Ch6 Yellow
O2-8	54	Ch6 Green
O3-1	7	Ch7 Red
O3-2	55	Ch7 Green
O3-3	8	Ch8 Red
O3-4	32	Ch8 Yellow
O3-5	56	Ch8 Green
O3-6	9	Ch9 Red
O3-7	33	Ch9 Yellow
O3-8	57	Ch9 Green
O4-1	10	Ch10 Red
O4-2	58	Ch10 Green
O4-3	11	Ch11 Red
O4-4	35	Ch11 Yellow
O4-5	59	Ch11 Green
O4-6	12	Ch12 Red
O4-7	36	Ch12 Yellow
O4-8	60	Ch12 Green
O5-1	28	Ch4 Yellow
O5-2	34	Ch10 Yellow
O5-3	25	Ch1 Yellow
O5-4	31	Ch7 Yellow
O5-5	39	Ch15 Yellow
O5-6	63	Ch15 Green
O5-7	115	Not Used
O5-8	114	Watchdog
O6-1	115	Not Used
O6-2	115	Not Used
O6-3	13	Ch13 Red
O6-4	37	Ch13 Yellow
O6-5	61	Ch13 Green
O6-6	14	Ch14 Red
O6-7	38	Ch14 Yellow
O6-8	62	Ch14 Green

C1-USER IO Map [1.8.9.2 Out]

O7-1	40	Ch16 Yellow
O7-2	16	Ch16 Red
O7-3	64	Ch16 Green
O7-4	115	Not Used
O7-5	115	Not Used
O7-6	115	Not Used
O7-7	115	Not Used
O7-8	15	Ch15 Red

C11S-USER IO Map [1.8.9.1 In]

I4-1		
I4-2		
I4-3		
I4-4		
I7-1	189	Unused
I7-2	189	Unused
I7-3	189	Unused
I7-4	189	Unused
I7-5	189	Unused
I7-6	189	Unused
I7-7	189	Unused
I7-8	189	Unused
I8-1	189	Unused
I8-2	189	Unused
I8-3	189	Unused
I8-4	189	Unused
I8-5	189	Unused
I8-6	189	Unused
I8-7	189	Unused
I8-8	189	Unused

C11S-USER IO Map [1.8.9.2 Out]

O8-1	115	Not Used
O8-2	115	Not Used
O8-3	115	Not Used
O8-4	115	Not Used
O8-5	115	Not Used
O8-6	115	Not Used
O8-7	115	Not Used
O8-8	115	Not Used

IO Logic [1.8.7]

Op1	Result		O1Fcn	Inv1	Src1	IO1	Fun1	O2Fcn	Inv2	Src2	IO2	Fun2	O3Fcn	Inv3	Src3	IO3	Fun3	Dly	Sec
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0

Security Access Levels [8.2]

1	SWLOAD
2	SECURE
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None
14	None
15	None
16	None
17	None
18	None
19	None
20	None
21	None
22	None
23	None
24	None
25	None
26	None
27	None
28	None
29	None
30	None
31	None
32	None
33	None
34	None
35	None
36	None
37	None
38	None
39	None
40	None
41	None
42	None
43	None
44	None
45	None
46	None
47	None
48	None
49	None
50	None
51	None
52	None
53	None
54	None
55	None
56	None
57	None
58	None
59	None
60	None
61	None
62	None
63	None
64	None

Com Parameters [6.1]

Station ID	5104
Group ID	0
Master ID	0
Backup Time	900

SysUp Modem [6.1]

Enable Modem	None
Idle Time	0
Dial Time	0
Tel:	
Alt:	

2070 Port Parms [6.2]

Port	Baud Rate	FCM
SP1	9600	6
SP2	9600	6
SP3	19200	6
SP4	38400	6
SP5	1200	0
SP6	1200	0
SP7	1200	0
SP8	1200	0

2070 IP 1 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	###			

2070 IP 2 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	5001			

2070 Port Binding Ports [6.6]

	Port	Echo	Mode
ASYNC1	SP1	None	0
ASYNC2	SP2	None	0
ASYNC3	SP3	None	0
ASYNC4	SP4	None	0
SYNC1	SP5S	SYNC3	OFF
SYNC2	OFF	SYNC4	OFF

2070 Port Binding Functions [6.6]

Function	Channel	Function	Channel
TS2/CVN	None	SYSUp	ASYNC2
CMU/MM	None	SYSDow	ASYNC1
Opticom	None	Shell	None
Loop De	None		
GPS	None		

COUNTY #_____ DATE _____

(NOTE: USE DECIMAL-EDIT KEY "E" FOR EDITING ALL LOCATIONS ON THIS PAGE)

PHASE TIMING DATA/TIMER INTERVALS

INTERVAL	PHASE/ INT. #	S/B LT F1	NB central F2	~~EB~~ Rail Road F3	WB Rail Road F4	N/B LT F5	SB central F6	EB Rail Road F7	EB Rail Road F8
MEMORY/RECALL	00	~~000~~	~~003~~	~~001~~	004	000	~~003~~	~~000~~	004
WALK	01	~~004~~	~~004~~			~~004~~	~~004~~	~~004~~	
PEDESTRIAN CLEARANCE	02								
INITIAL	03	005	010	~~005~~	010	005	010	~~005~~ ~~010~~	010
VARIABLE INITIAL	04	.	.	.	.	.	.	.	.
VARIABLE INIT. LIMIT	05								
TIME BEFOR REDUCTION	06								
TIME TO REDUCE	07								
MAXIMUM GAP	08	02.0	~~04.0~~	~~04.0~~	04.0	02.0	~~04.0~~	~~02.0~~ ~~04.0~~	04.0
MINIMUM GAP	09	.	.	.	.	.	.	.	.
GAP CLOCK	10	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
MAXIMUM GREEN 1	11	012	040	~~035~~	035	012	040	~~035~~	035
MAXIMUM GREEN 2	12								
MAXIMUM GREEN 3	13								
RECALL GREEN	14	010	030	~~030~~	030	010	030	~~030~~	030
YELLOW CLEARANCE	15	3.0	4.0	~~4.0~~	04.0	3.0	4.0	4.0	04.0
RED CLEARANCE	16	1.0	2.0	~~2.0~~	02.0	1.0	2.0	1.0	02.0
THIRD CLEARANCE	17	.	.	.	.	.	.	.	.
FOURTH CLEARANCE	18	.	.	.	.	.	.	.	.
INTERVALS	19-28	RESERVED FOR				FUTURE USE			
REDUCE BY	29	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
EVERY	30	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
CARS WAITING	31	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY

MEMORY/ RECALL CODES: (MAY BE COMBINED)		
	MEMORY OFF	= 000
	MEMORY ON	= 001
	MINIMUM RECALL	= 002
	RECALL GREEN	= 004
	PED RECALL	= 008
	RECALL TO MAX	= 016

NOTES:

Suffern Lane (County Route No. 94) / West Railroad Avenue (County Route No. 94) and Main Street (County Route No. 33) / Central Highway (County Route No. 33)

Willow Grove Road (County Route No. 98)
& Letchworth Village Road (County Route No. 94)
/ Patriot Hills Lane



PART F

CONCPETUAL IMPROVEMENTS

JMC
120 BEDFORD RD
ARMONK
NY 10504
(914) 273-5225
fax 273-2102
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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

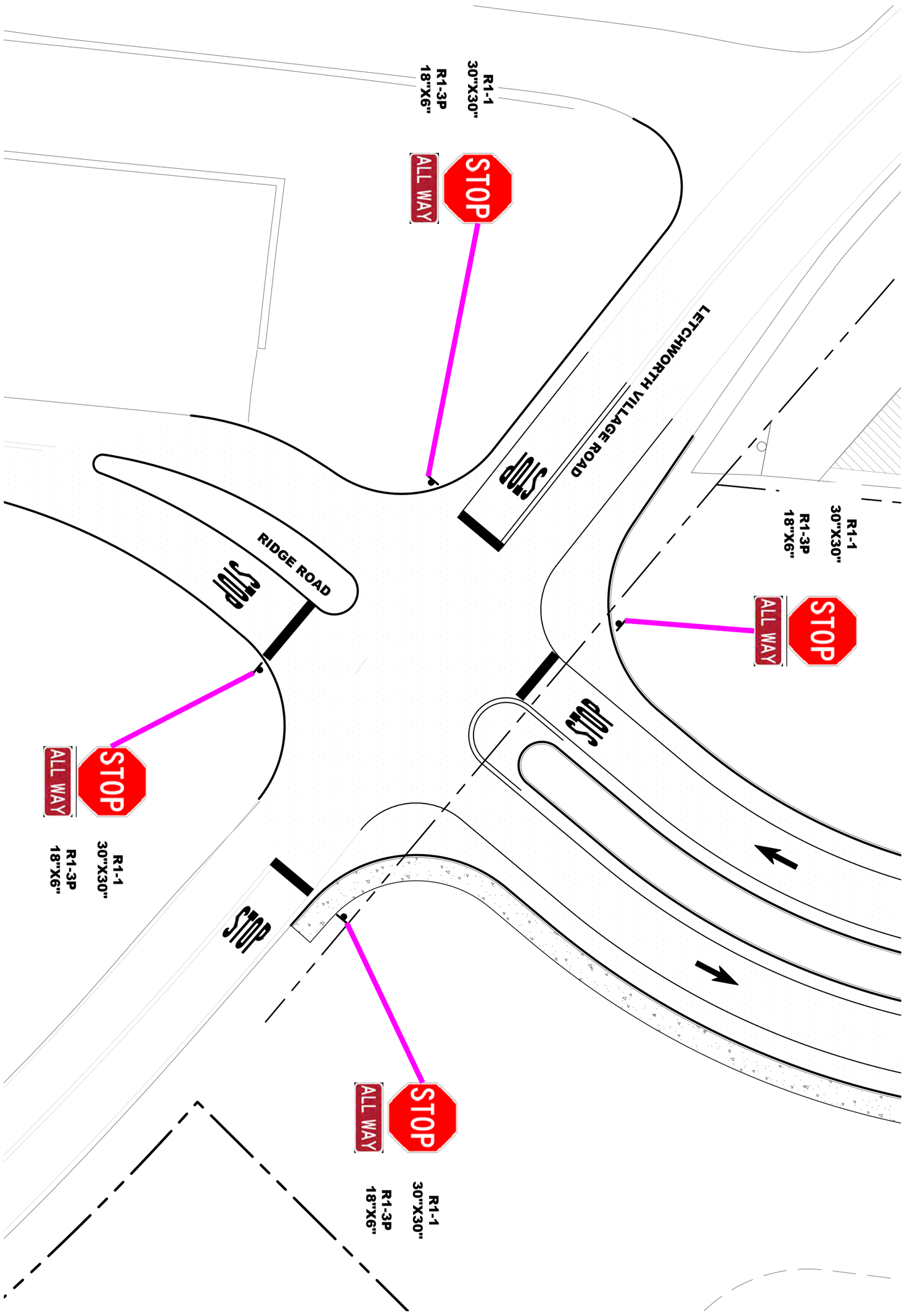
CONCEPTUAL IMPROVEMENTS
INTERSECTION OF LETCHWORTH VILLAGE ROAD & STORRS ROAD
DATE: 01/2025
JMC PROJECT: 21090

SCALE: 1" = 40'

FIGURE: CI-1

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21090-AERIAL - TRAFFIC-FIGURES.dwg; CI-1.Tab: TRAFFIC-FIGS-PROPOSED.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

CONCEPTUAL IMPROVEMENTS

INTERSECTION OF LETCHWORTH VILLAGE ROAD & RIDGE ROAD

DATE: 01/2025 — JMC PROJECT: 21090

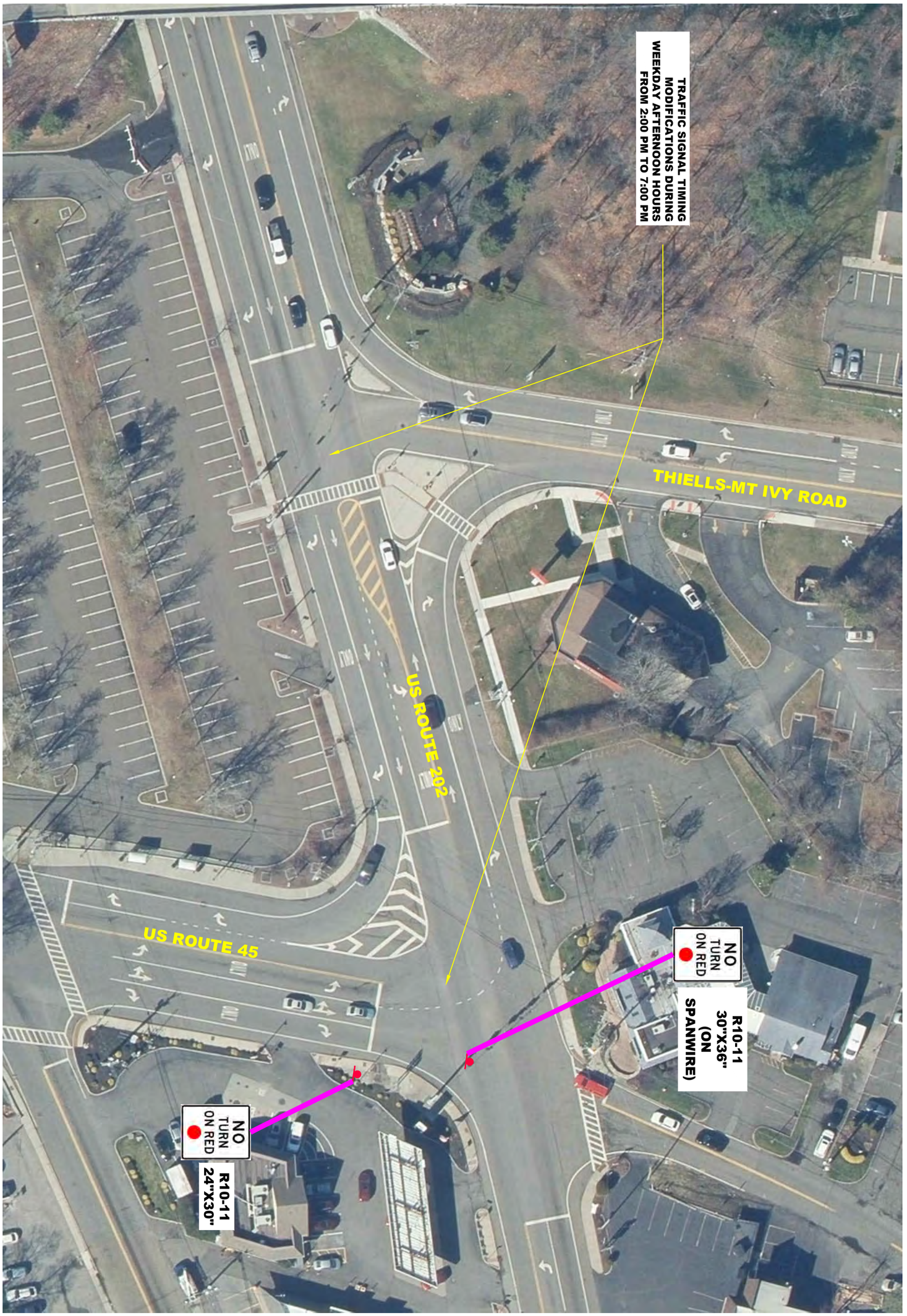
FIGURE: CI-2 — SCALE: 1" = 20'

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

CONCEPTUAL IMPROVEMENTS

INTERSECTION OF US ROUTE 202, THIELLS MT IVY ROAD, NYS ROUTE 45, & OLD COUNTY ROAD

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: CI-3 — SCALE: 1" = 50'

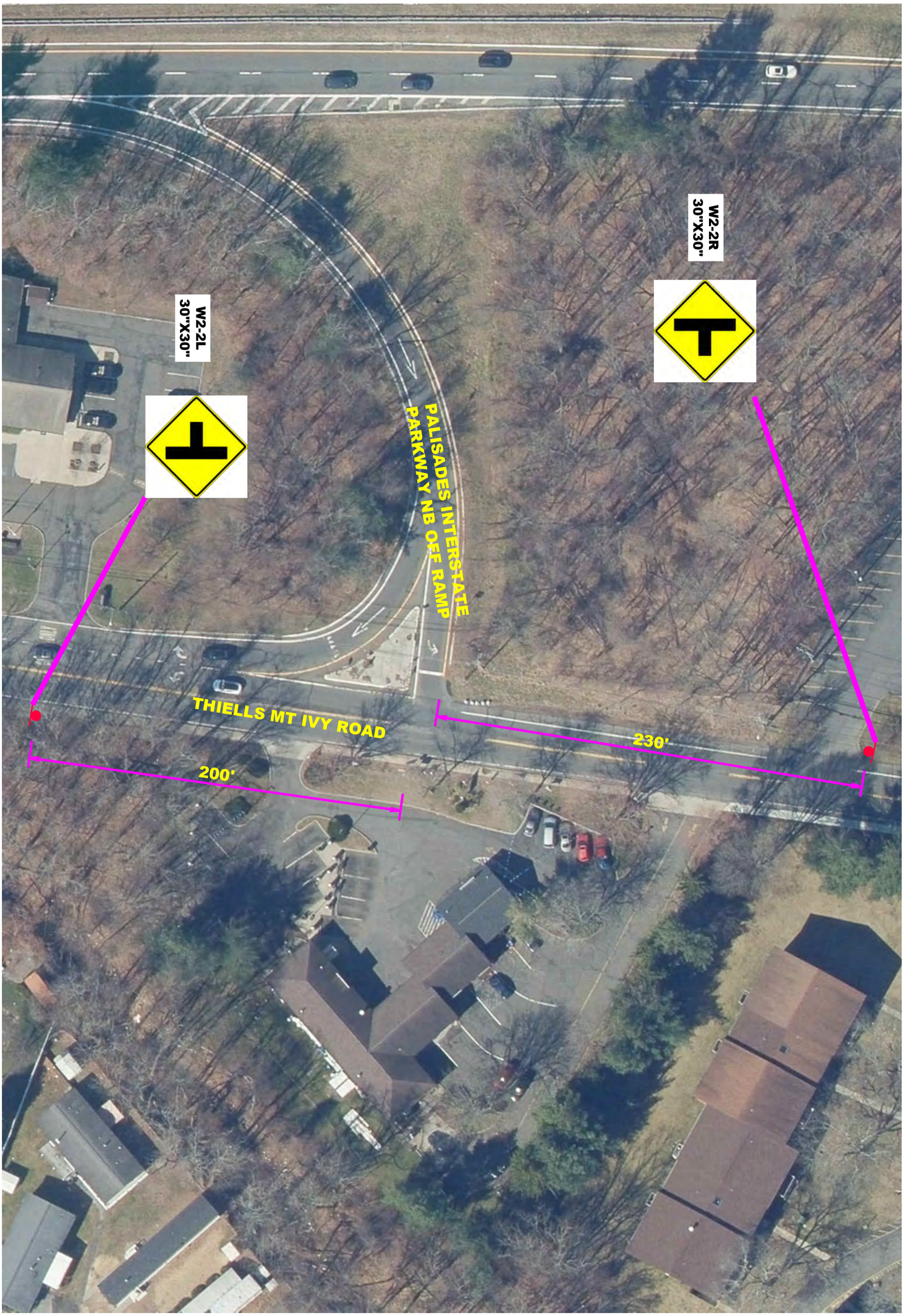
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21090–AERIAL–TRAFFIC–FIGURES.dwg; CI–3.tab; TRAFFIC–FIGS–PROPOSED.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

CONCEPTUAL IMPROVEMENTS

INTERSECTION OF THIELLS MT IVY ROAD AND PALISADES INTERSTATE PARKWAY NORTHBOUND OFF RAMP

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: CI-4 — SCALE: 1" = 50'

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21090–AERIAL–TRAFFIC–FIGURES.dwg; CI–4.tab; TRAFFIC–FIGS–PROPOSED.scr



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD — HAVERSTRAW, NY

CONCEPTUAL IMPROVEMENTS

THIELLS MT IVY ROAD BETWEEN ADERSON ROAD AND ROSMAN ROAD

DATE: 01/2025 — JMC PROJECT: 21090

FIGURE: CI-5 — SCALE: 1" = 600'

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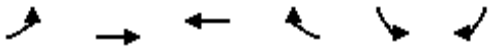
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PART G

CAPCAITY ANALYSES



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	89	132	123	342	122	16
Future Volume (vph)	89	132	123	342	122	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.901		0.985	
Flt Protected		0.980			0.958	
Satd. Flow (prot)	0	1696	1561	0	1697	0
Flt Permitted		0.980			0.958	
Satd. Flow (perm)	0	1696	1561	0	1697	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	10%	14%	1%	3%	0%
Adj. Flow (vph)	97	143	134	372	133	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	240	506	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	89	132	123	342	122	16
Future Vol, veh/h	89	132	123	342	122	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	10	14	1	3	0
Mvmt Flow	97	143	134	372	133	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	506	0	-	0	657	320
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	337	-
Critical Hdwy	4.13	-	-	-	6.23	6.1
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.3
Pot Cap-1 Maneuver	1054	-	-	-	444	732
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1054	-	-	-	400	732
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	735	-

Approach	EB	WB	SB
HCM Control Delay, s	3.5	0	18.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1054	-	-	-	422
HCM Lane V/C Ratio	0.092	-	-	-	0.355
HCM Control Delay (s)	8.8	0	-	-	18.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	237	17	42	441	24	216
Future Volume (vph)	237	17	42	441	24	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.879	
Flt Protected				0.996	0.995	
Satd. Flow (prot)	1711	0	0	1814	1586	0
Flt Permitted				0.996	0.995	
Satd. Flow (perm)	1711	0	0	1814	1586	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	0%	2%	4%	0%	2%
Adj. Flow (vph)	263	19	47	490	27	240
Shared Lane Traffic (%)						
Lane Group Flow (vph)	282	0	0	537	267	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	237	17	42	441	24	216
Future Vol, veh/h	237	17	42	441	24	216
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	0	2	4	0	2
Mvmt Flow	263	19	47	490	27	240

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	282	0	857	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	584	-
Critical Hdwy	-	-	4.12	-	6.2	6.12
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1280	-	346	772
Stage 1	-	-	-	-	789	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1280	-	329	772
Mov Cap-2 Maneuver	-	-	-	-	329	-
Stage 1	-	-	-	-	789	-
Stage 2	-	-	-	-	551	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	680	-	-	1280	-
HCM Lane V/C Ratio	0.392	-	-	0.036	-
HCM Control Delay (s)	13.7	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.1	-

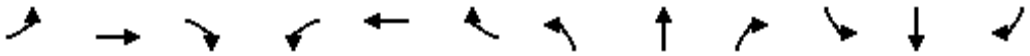
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	280	143	59	387	5	71	5	40	9	15	25
Future Volume (vph)	30	280	143	59	387	5	71	5	40	9	15	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.957			0.999			0.954			0.931	
Flt Protected		0.997			0.994			0.970			0.991	
Satd. Flow (prot)	0	1773	0	0	1796	0	0	1476	0	0	1576	0
Flt Permitted		0.951			0.889			0.799			0.954	
Satd. Flow (perm)	0	1692	0	0	1606	0	0	1216	0	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			1			36			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	7%	14%	2%	0%	10%	20%	17%	0%	13%	12%
Adj. Flow (vph)	32	295	151	62	407	5	75	5	42	9	16	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	478	0	0	474	0	0	122	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.53			0.57			0.29			0.10	
Control Delay		13.6			15.9			16.1			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.6			15.9			16.1			11.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		127			144			30			8	
Queue Length 95th (ft)		210			233			70			31	
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		900			834			419			510	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.53			0.57			0.29			0.10	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

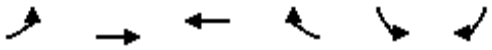




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	280	143	59	387	5	71	5	40	9	15	25
Future Volume (veh/h)	30	280	143	59	387	5	71	5	40	9	15	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2012	2012	1952	1847	2027	2057	1658	1509	1554	2097	1902	1917
Adj Flow Rate, veh/h	32	295	151	62	407	5	75	5	42	9	16	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	7	14	2	0	10	20	17	0	13	12
Cap, veh/h	84	622	303	137	874	10	298	30	133	117	205	277
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	65	1198	583	162	1683	20	686	92	408	191	630	854
Grp Volume(v), veh/h	478	0	0	474	0	0	122	0	0	51	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	0	1865	0	0	1187	0	0	1676	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	0.0	11.3	0.0	0.0	5.7	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.07		0.32	0.13		0.01	0.61		0.34	0.18		0.51
Lane Grp Cap(c), veh/h	1009	0	0	1022	0	0	461	0	0	599	0	0
V/C Ratio(X)	0.47	0.00	0.00	0.46	0.00	0.00	0.26	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1009	0	0	1022	0	0	461	0	0	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.9	0.0	0.0	11.6	0.0	0.0	19.4	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	1.5	0.0	0.0	1.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	0.0	5.0	0.0	0.0	1.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	13.1	0.0	0.0	20.8	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		478			474			122			51	
Approach Delay, s/veh		13.5			13.1			20.8			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	188	266	91	150	67
Future Volume (vph)	25	188	266	91	150	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.966		0.958	
Flt Protected		0.994			0.967	
Satd. Flow (prot)	0	1498	1713	0	1618	0
Flt Permitted		0.994			0.967	
Satd. Flow (perm)	0	1498	1713	0	1618	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	16%	30%	13%	11%	11%	12%
Adj. Flow (vph)	33	247	350	120	197	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	280	470	0	285	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

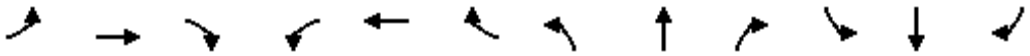
Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	188	266	91	150	67
Future Vol, veh/h	25	188	266	91	150	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	16	30	13	11	11	12
Mvmt Flow	33	247	350	120	197	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	470	0	-	0	723	410
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	313	-
Critical Hdwy	4.26	-	-	-	6.91	6.52
Critical Hdwy Stg 1	-	-	-	-	5.91	-
Critical Hdwy Stg 2	-	-	-	-	5.91	-
Follow-up Hdwy	2.344	-	-	-	3.599	3.408
Pot Cap-1 Maneuver	1022	-	-	-	351	607
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1022	-	-	-	338	607
Mov Cap-2 Maneuver	-	-	-	-	338	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	35.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1022	-	-	-	392
HCM Lane V/C Ratio	0.032	-	-	-	0.728
HCM Control Delay (s)	8.6	0	-	-	35.2
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	5.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	223	111	1	258	0	96	1	3	0	3	3
Future Volume (vph)	4	223	111	1	258	0	96	1	3	0	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956						0.996			0.932	
Flt Protected		0.999						0.954				
Satd. Flow (prot)	0	1476	0	0	1588	0	0	1547	0	0	1686	0
Flt Permitted		0.999						0.954				
Satd. Flow (perm)	0	1476	0	0	1588	0	0	1547	0	0	1686	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	25%	26%	11%	0%	14%	0%	7%	0%	67%	0%	0%	0%
Adj. Flow (vph)	5	269	134	1	311	0	116	1	4	0	4	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	408	0	0	312	0	0	121	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

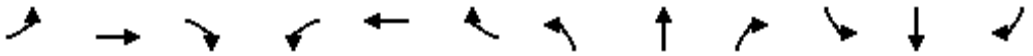
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	223	111	1	258	0	96	1	3	0	3	3
Future Vol, veh/h	4	223	111	1	258	0	96	1	3	0	3	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	25	26	11	0	14	0	7	0	67	0	0	0
Mvmt Flow	5	269	134	1	311	0	116	1	4	0	4	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.7	11.1	10.4	8.7
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	96%	1%	0%	0%
Vol Thru, %	1%	66%	100%	50%
Vol Right, %	3%	33%	0%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	338	259	6
LT Vol	96	4	1	0
Through Vol	1	223	258	3
RT Vol	3	111	0	3
Lane Flow Rate	120	407	312	7
Geometry Grp	1	1	1	1
Degree of Util (X)	0.196	0.549	0.412	0.011
Departure Headway (Hd)	5.847	4.856	4.749	5.61
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	607	737	752	642
Service Time	3.941	2.917	2.813	3.61
HCM Lane V/C Ratio	0.198	0.552	0.415	0.011
HCM Control Delay	10.4	13.7	11.1	8.7
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	0.7	3.4	2	0



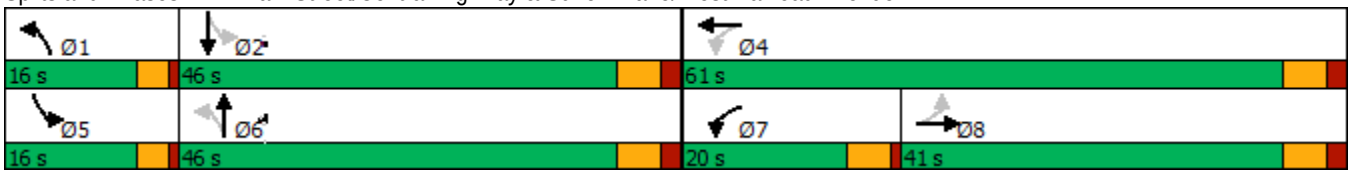
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	134	128	126	165	40	151	152	171	81	133	131
Future Volume (vph)	69	134	128	126	165	40	151	152	171	81	133	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	1.00							
Frt		0.948			0.971			0.921			0.926	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1662	0	1637	1417	0	1480	1644	0	1546	1488	0
Flt Permitted		0.876		0.385			0.375			0.370		
Satd. Flow (perm)	0	1470	0	663	1417	0	584	1644	0	602	1488	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			13			49			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	8%	13%	5%	26%	13%	22%	8%	5%	14%	10%	21%
Adj. Flow (vph)	73	141	135	133	174	42	159	160	180	85	140	138
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	349	0	133	216	0	159	340	0	85	278	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

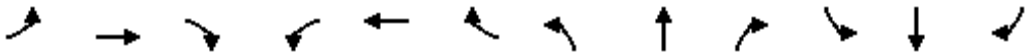
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.80		0.31	0.32		0.48	0.73		0.29	0.72	
Control Delay		44.6		17.3	17.4		24.0	37.4		21.0	39.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		44.6		17.3	17.4		24.0	37.4		21.0	39.4	
Queue Length 50th (ft)		176		43	71		60	156		30	130	
Queue Length 95th (ft)		#376		99	158		120	297		69	244	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		605		483	898		363	780		368	705	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.58		0.28	0.24		0.44	0.44		0.23	0.39	

Intersection Summary

Area Type: Other
Cycle Length: 123
Actuated Cycle Length: 92.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

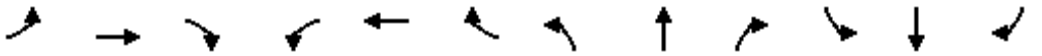




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	134	128	126	165	40	151	152	171	81	133	131
Future Volume (veh/h)	69	134	128	126	165	40	151	152	171	81	133	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2046	2016	1941	1773	1462	1654	1574	1781	1826	1769	1829	1663
Adj Flow Rate, veh/h	73	141	135	133	174	42	159	160	180	85	140	138
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	8	13	5	26	13	22	8	5	14	10	21
Cap, veh/h	134	204	172	461	477	115	346	204	230	305	195	193
Arrive On Green	0.26	0.26	0.26	0.09	0.42	0.42	0.11	0.27	0.27	0.07	0.23	0.23
Sat Flow, veh/h	268	792	669	1688	1137	274	1499	765	861	1684	845	833
Grp Volume(v), veh/h	349	0	0	133	0	216	159	0	340	85	0	278
Grp Sat Flow(s),veh/h/ln	1729	0	0	1688	0	1411	1499	0	1626	1684	0	1679
Q Serve(g_s), s	8.3	0.0	0.0	3.6	0.0	7.0	5.2	0.0	13.0	2.5	0.0	10.2
Cycle Q Clear(g_c), s	12.4	0.0	0.0	3.6	0.0	7.0	5.2	0.0	13.0	2.5	0.0	10.2
Prop In Lane	0.21		0.39	1.00		0.19	1.00		0.53	1.00		0.50
Lane Grp Cap(c), veh/h	510	0	0	461	0	592	346	0	434	305	0	388
V/C Ratio(X)	0.68	0.00	0.00	0.29	0.00	0.37	0.46	0.00	0.78	0.28	0.00	0.72
Avail Cap(c_a), veh/h	957	0	0	693	0	1161	450	0	973	482	0	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	14.2	0.0	13.3	17.0	0.0	22.7	17.9	0.0	23.7
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.1	0.0	0.5	0.4	0.0	4.4	0.2	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	0.0	1.3	0.0	2.1	1.7	0.0	5.2	0.9	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	0.0	14.3	0.0	13.9	17.3	0.0	27.2	18.1	0.0	27.2
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		349			349			499			363	
Approach Delay, s/veh		25.2			14.0			24.0			25.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	21.5		34.0	9.0	23.8	10.8	23.2				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	7.2	12.2		9.0	4.5	15.0	5.6	14.4				
Green Ext Time (p_c), s	0.2	2.3		1.9	0.1	2.9	0.2	2.8				

Intersection Summary			
HCM 6th Ctrl Delay		22.3	
HCM 6th LOS		C	

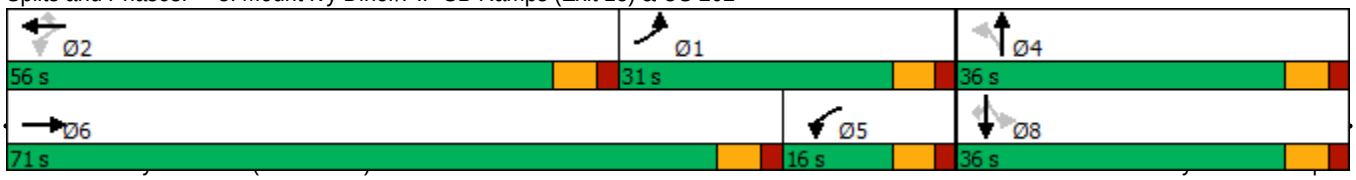


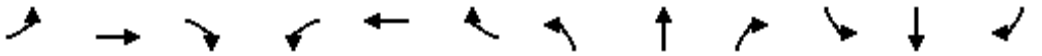
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	169	437	1	7	635	703	1	0	3	157	0	258
Future Volume (vph)	169	437	1	7	635	703	1	0	3	157	0	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.98			1.00	0.98
Frt						0.850		0.899				0.850
Flt Protected	0.950			0.950				0.988			0.950	
Satd. Flow (prot)	1653	1693	0	1420	1786	1576	0	1350	0	0	1566	1480
Flt Permitted	0.950			0.410				0.944			0.755	
Satd. Flow (perm)	1653	1693	0	612	1786	1576	0	1289	0	0	1242	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						601		133				272
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			4	4			2		1	1		2
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	10%	0%	29%	8%	4%	0%	0%	33%	12%	0%	6%
Adj. Flow (vph)	89	460	1	7	668	740	1	0	3	165	0	272
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	461	0	7	668	740	0	4	0	0	165	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Size(ft)	40	40		40	40			40			40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.43	0.46		0.02	0.77	0.69		0.01			0.63	0.52
Control Delay	48.2	14.4		10.4	28.4	7.9		0.0			46.8	8.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	48.2	14.4		10.4	28.4	7.9		0.0			46.8	8.3
Queue Length 50th (ft)	51	106		2	302	43		0			93	0
Queue Length 95th (ft)	111	366		7	#635	208		0			175	66
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	532	1268		442	1101	1202		580			480	725
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.17	0.36		0.02	0.61	0.62		0.01			0.34	0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 86.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





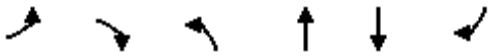
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	437	1	7	635	703	1	0	3	157	0	258
Future Volume (veh/h)	169	437	1	7	635	703	1	0	3	157	0	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1702	1658	1806	1583	1898	1958	2018	2018	1523	1759	1939	1849
Adj Flow Rate, veh/h	89	460	1	7	668	0	1	0	3	165	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	10	0	29	8	4	0	0	33	12	0	6
Cap, veh/h	154	560	1	463	805		116	33	197	348	0	
Arrive On Green	0.10	0.34	0.34	0.18	0.42	0.00	0.15	0.00	0.15	0.15	0.00	0.00
Sat Flow, veh/h	1621	1653	4	1507	1898	1659	219	228	1341	1461	0	1567
Grp Volume(v), veh/h	89	0	461	7	668	0	4	0	0	165	0	0
Grp Sat Flow(s),veh/h/ln	1621	0	1657	1507	1898	1659	1788	0	0	1461	0	1567
Q Serve(g_s), s	2.8	0.0	13.7	0.0	16.9	0.0	0.0	0.0	0.0	5.7	0.0	0.0
Cycle Q Clear(g_c), s	2.8	0.0	13.7	0.0	16.9	0.0	0.1	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.25		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	154	0	561	463	805		346	0	0	348	0	
V/C Ratio(X)	0.58	0.00	0.82	0.02	0.83		0.01	0.00	0.00	0.47	0.00	
Avail Cap(c_a), veh/h	752	0	1999	471	1762		1023	0	0	945	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.3	0.0	16.3	15.2	13.8	0.0	19.7	0.0	0.0	22.1	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.0	3.1	0.0	2.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	4.5	0.1	5.7	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	19.4	15.2	16.1	0.0	19.7	0.0	0.0	23.1	0.0	0.0
LnGrp LOS	C	A	B	B	B		B	A	A	C	A	
Approach Vol, veh/h		550			675			4			165	
Approach Delay, s/veh		20.6			16.1			19.7			23.1	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	28.8		13.9	15.7	24.2		13.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	4.8	18.9		2.1	2.0	15.7		7.8				
Green Ext Time (p_c), s	0.3	4.0		0.0	0.0	2.5		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		18.7	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	119	247	0	167	620	0
Future Volume (vph)	119	247	0	167	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.909					
Flt Protected	0.984					
Satd. Flow (prot)	1795	0	0	1696	1919	0
Flt Permitted	0.984					
Satd. Flow (perm)	1795	0	0	1696	1919	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	0%	14%	0%	6%
Adj. Flow (vph)	124	257	0	174	646	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	381	0	0	174	646	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

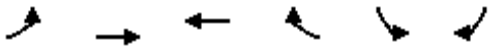
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	119	247	0	167	620	0
Future Vol, veh/h	119	247	0	167	620	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	0	14	0	6
Mvmt Flow	124	257	0	174	646	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	820	646	-	0	-	0
Stage 1	646	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	5.63	5.83	-	-	-	-
Critical Hdwy Stg 1	4.63	-	-	-	-	-
Critical Hdwy Stg 2	4.63	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	412	505	0	-	-	0
Stage 1	600	-	0	-	-	0
Stage 2	888	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	412	505	-	-	-	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	748	-
HCM Lane V/C Ratio	-	0.51	-
HCM Control Delay (s)	-	14.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.9	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	127	288	506	39	13	113
Future Volume (vph)	127	288	506	39	13	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.878	
Flt Protected		0.985			0.995	
Satd. Flow (prot)	0	1598	1792	0	1334	0
Flt Permitted		0.985			0.995	
Satd. Flow (perm)	0	1598	1792	0	1334	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	9%	4%	4%	23%	16%
Adj. Flow (vph)	141	320	562	43	14	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	461	605	0	140	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	127	288	506	39	13	113
Future Vol, veh/h	127	288	506	39	13	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	9	4	4	23	16
Mvmt Flow	141	320	562	43	14	126

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	605	0	-	0	1186	584
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	602	-
Critical Hdwy	4.18	-	-	-	6.43	6.26
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.272	-	-	-	3.707	3.444
Pot Cap-1 Maneuver	944	-	-	-	202	494
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	944	-	-	-	165	494
Mov Cap-2 Maneuver	-	-	-	-	165	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	526	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	18.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	944	-	-	-	410
HCM Lane V/C Ratio	0.149	-	-	-	0.341
HCM Control Delay (s)	9.5	0	-	-	18.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	1.5



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	198	106	201	100	123	347
Future Volume (vph)	198	106	201	100	123	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.953		0.955			
Flt Protected	0.969					0.987
Satd. Flow (prot)	1695	0	1561	0	0	1733
Flt Permitted	0.969					0.987
Satd. Flow (perm)	1695	0	1561	0	0	1733
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			499
Travel Time (s)	12.3		18.6			11.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	14%	17%	13%	27%	8%
Adj. Flow (vph)	208	112	212	105	129	365
Shared Lane Traffic (%)						
Lane Group Flow (vph)	320	0	317	0	0	494
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	17.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	198	106	201	100	123	347
Future Vol, veh/h	198	106	201	100	123	347
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	14	17	13	27	8
Mvmt Flow	208	112	212	105	129	365

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	888	265	0	0	317	0
Stage 1	265	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Critical Hdwy	6.24	6.24	-	-	4.37	-
Critical Hdwy Stg 1	5.24	-	-	-	-	-
Critical Hdwy Stg 2	5.24	-	-	-	-	-
Follow-up Hdwy	3.536	3.426	-	-	2.443	-
Pot Cap-1 Maneuver	327	751	-	-	1115	-
Stage 1	786	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	280	751	-	-	1115	-
Mov Cap-2 Maneuver	280	-	-	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	59.1	0	2.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	358	1115	-
HCM Lane V/C Ratio	-	-	0.894	0.116	-
HCM Control Delay (s)	-	-	59.1	8.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	8.8	0.4	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	139	87	383	193	66	241
Future Volume (vph)	139	87	383	193	66	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	14	14	10	10
Grade (%)	1%			4%	5%	
Storage Length (ft)		0	0		0	65
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.948					0.850
Flt Protected				0.968	0.950	
Satd. Flow (prot)	1564	0	0	1775	1428	1361
Flt Permitted				0.616	0.950	
Satd. Flow (perm)	1564	0	0	1129	1428	1361
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	38					301
Link Speed (mph)	30			30	30	
Link Distance (ft)	857			317	499	
Travel Time (s)	19.5			7.2	11.3	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	23%	11%	7%	11%	15%	8%
Adj. Flow (vph)	174	109	479	241	83	301
Shared Lane Traffic (%)						
Lane Group Flow (vph)	283	0	0	720	83	301
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	0.94	0.94	1.13	1.13
Turning Speed (mph)		9	15		15	9
Number of Detectors	0		1	0	2	2
Detector Template			Left			
Leading Detector (ft)	0		20	0	83	83
Trailing Detector (ft)	0		0	0	-5	-5
Detector 1 Position(ft)	0		0	0	-5	-5
Detector 1 Size(ft)	6		20	6	40	40
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0

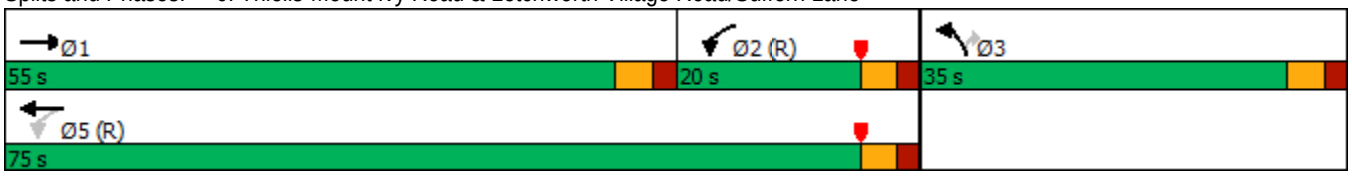


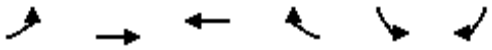
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	1		2	5	3	
Permitted Phases			5			3
Detector Phase	1		2	5	3	3
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	10.0	10.0	10.0
Total Split (s)	55.0		20.0	75.0	35.0	35.0
Total Split (%)	50.0%		18.2%	68.2%	31.8%	31.8%
Maximum Green (s)	50.0		15.0	70.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	Max		C-Max	C-Max	None	None
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					11.0	11.0
Pedestrian Calls (#/hr)					2	2
Act Effct Green (s)	68.7			88.7	11.3	11.3
Actuated g/C Ratio	0.62			0.81	0.10	0.10
v/c Ratio	0.29			0.72	0.57	0.74
Control Delay	9.7			9.8	60.7	16.4
Queue Delay	0.1			5.0	0.0	0.2
Total Delay	9.7			14.9	60.7	16.6
LOS	A			B	E	B
Approach Delay	9.7			14.9	26.1	
Approach LOS	A			B	C	
Queue Length 50th (ft)	71			151	57	0
Queue Length 95th (ft)	117			221	89	44
Internal Link Dist (ft)	777			237	419	
Turn Bay Length (ft)						65
Base Capacity (vph)	991			998	389	590
Starvation Cap Reductn	0			212	0	0
Spillback Cap Reductn	93			0	0	34
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.32			0.92	0.21	0.54

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:WBL and 5:WBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 16.9	Intersection LOS: B

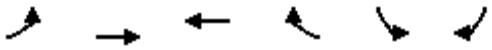
Intersection Capacity Utilization 60.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 6: Thiells-Mount Ivy Road & Letchworth Village Road/Suffern Lane





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	83	487	744	93	266	601						
Future Volume (vph)	83	487	744	93	266	601						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					1.00							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3282	1786	1377	1680	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3282	1786	1377	1677	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						124						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					1							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	8%	10%	8%	19%	8%	3%						
Adj. Flow (vph)	86	507	775	97	277	626						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	507	775	97	277	626						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							3		1			
Act Effct Green (s)	28.5	74.1	99.5	133.6	34.2	74.8						
Actuated g/C Ratio	0.15	0.40	0.53	0.72	0.18	0.40						
v/c Ratio	0.34	0.39	0.81	0.10	0.90	0.89						
Control Delay	43.8	42.8	18.8	4.6	104.4	56.3						
Queue Delay	0.0	0.0	10.8	0.0	0.0	0.0						
Total Delay	43.8	42.8	29.5	4.6	104.4	56.3						
LOS	D	D	C	A	F	E						
Approach Delay		43.0	26.7		71.0							
Approach LOS		D	C		E							
Queue Length 50th (ft)	66	220	272	15	324	599						
Queue Length 95th (ft)	106	349	m444	m35	#615	782						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	255	1304	953	987	308	899						
Starvation Cap Reductn	0	0	161	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	0.34	0.39	0.98	0.10	0.90	0.70						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 186.3			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 47.7		Intersection LOS: D	

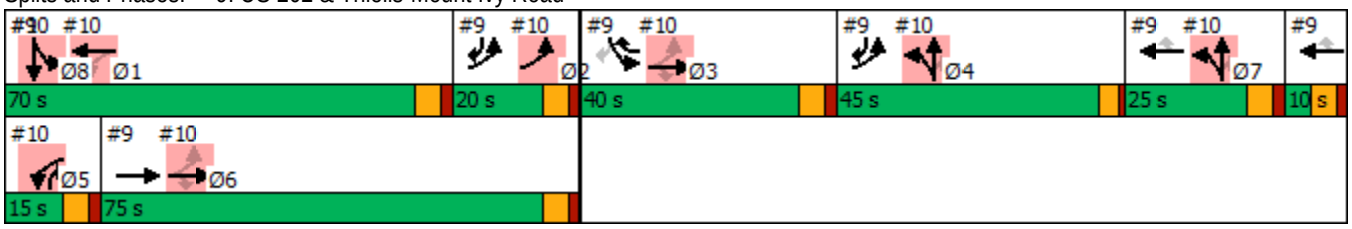
Intersection Capacity Utilization 86.4% ICU Level of Service E

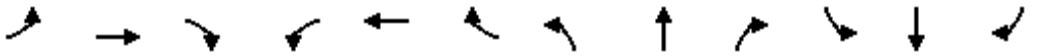
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	453	316	7	561	0	184	3	83	5	6	51
Future Volume (vph)	9	453	316	7	561	0	184	3	83	5	6	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.888	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1457	1717	1459	1466	1769	0	1583	1581	1505	0	1490	0
Flt Permitted	0.239			0.279			0.950	0.954			0.996	
Satd. Flow (perm)	367	1717	1459	430	1769	0	1583	1581	1505	0	1490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274						109		54	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	22%	9%	9%	25%	9%	0%	11%	33%	10%	0%	0%	14%
Adj. Flow (vph)	9	477	333	7	591	0	194	3	87	5	6	54
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	9	477	333	7	591	0	99	98	87	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					3							
Act Effct Green (s)	108.2	114.3	114.3	64.3	64.3		41.6	41.6	43.9		4.0	
Actuated g/C Ratio	0.58	0.61	0.61	0.35	0.35		0.22	0.22	0.24		0.02	
v/c Ratio	0.03	0.45	0.33	0.04	0.97		0.28	0.28	0.20		0.77	
Control Delay	5.2	5.2	0.9	46.6	88.1		60.6	60.6	3.5		73.8	
Queue Delay	0.0	0.4	0.6	0.0	0.0		0.6	0.6	0.0		2.0	
Total Delay	5.2	5.6	1.5	46.6	88.1		61.2	61.2	3.5		75.9	
LOS	A	A	A	D	F		E	E	A		E	
Approach Delay		4.0			87.6			43.5			75.9	
Approach LOS		A			F			D			E	
Queue Length 50th (ft)	0	24	0	5	681		106	105	0		13	
Queue Length 95th (ft)	m2	m60	m0	23	#1177		167	166	23		#116	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	295	1053	1000	198	610		353	352	473		84	
Starvation Cap Reductn	0	217	356	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		88	88	0		2	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.03	0.57	0.52	0.04	0.97		0.37	0.37	0.18		0.79	

Intersection Summary	
Area Type:	Other
Cycle Length: 210	
Actuated Cycle Length: 186.3	
Natural Cycle: 145	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.97	

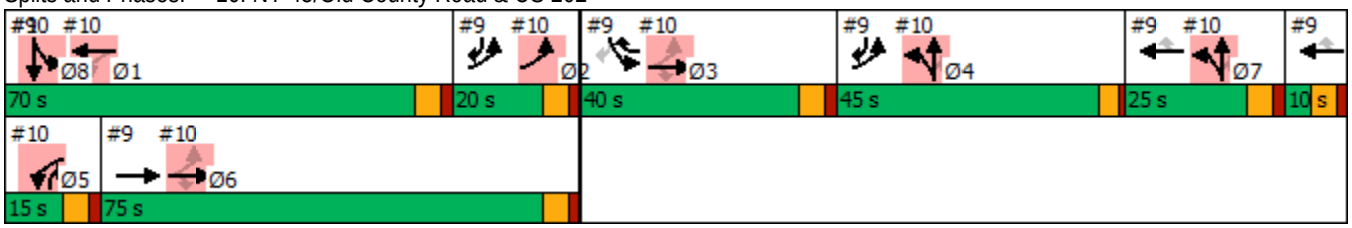
Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		1		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

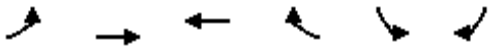
Intersection Summary

Intersection Signal Delay: 41.3	Intersection LOS: D
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

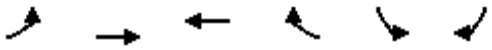
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	226	154	391	207	77	185
Future Volume (vph)	226	154	391	207	77	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	13	13	12	12
Grade (%)		-4%	8%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.953		0.905	
Flt Protected		0.971			0.985	
Satd. Flow (prot)	0	1767	1642	0	1555	0
Flt Permitted		0.159			0.985	
Satd. Flow (perm)	0	289	1642	0	1555	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			32		108	
Link Speed (mph)		30	30		30	
Link Distance (ft)		317	965		1736	
Travel Time (s)		7.2	21.9		39.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	12%	16%	7%	14%	16%	9%
Adj. Flow (vph)	260	177	449	238	89	213
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	437	687	0	302	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.89	0.89	1.01	1.01	0.97	0.97
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		2	
Detector Template	Left					
Leading Detector (ft)	20	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	10.0	10.0	23.0		10.0	
Total Split (s)	20.0	75.0	55.0		35.0	
Total Split (%)	18.2%	68.2%	50.0%		31.8%	
Maximum Green (s)	15.0	70.0	50.0		30.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	Max	C-Max	C-Max		None	
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)		80.8	50.0		19.2	
Actuated g/C Ratio		0.73	0.45		0.17	
v/c Ratio		0.78	0.90		0.84	
Control Delay		25.8	43.2		47.1	
Queue Delay		2.2	0.1		0.8	
Total Delay		28.1	43.3		47.9	
LOS		C	D		D	
Approach Delay		28.1	43.3		47.9	
Approach LOS		C	D		D	
Queue Length 50th (ft)		170	420		136	
Queue Length 95th (ft)		#411	#623		204	
Internal Link Dist (ft)		237	885		1656	
Turn Bay Length (ft)						
Base Capacity (vph)		558	763		502	
Starvation Cap Reductn		45	0		0	
Spillback Cap Reductn		0	1		51	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.85	0.90		0.67	

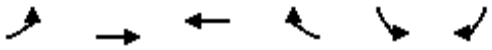
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 39.6		Intersection LOS: D	
Intersection Capacity Utilization 82.0%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 60: Suffern Lane & Hammond Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	31	126	152	279	52	21
Future Volume (vph)	31	126	152	279	52	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.961	
Flt Protected		0.990			0.966	
Satd. Flow (prot)	0	1703	1581	0	1689	0
Flt Permitted		0.990			0.966	
Satd. Flow (perm)	0	1703	1581	0	1689	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	34	137	165	303	57	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	171	468	0	80	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	126	152	279	52	21
Future Vol, veh/h	31	126	152	279	52	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	34	137	165	303	57	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	468	0	-	0	522	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	205	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1088	-	-	-	530	735
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1088	-	-	-	512	735
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1088	-	-	-	561
HCM Lane V/C Ratio	0.031	-	-	-	0.141
HCM Control Delay (s)	8.4	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	160	18	95	372	59	358
Future Volume (vph)	160	18	95	372	59	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986				0.884	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	1726	0	0	1814	1600	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	1726	0	0	1814	1600	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	4%	3%	3%	1%
Adj. Flow (vph)	167	19	99	388	61	373
Shared Lane Traffic (%)						
Lane Group Flow (vph)	186	0	0	487	434	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

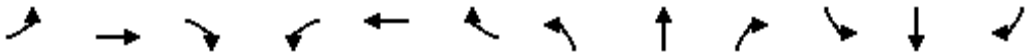
Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	18	95	372	59	358
Future Vol, veh/h	160	18	95	372	59	358
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	4	3	3	1
Mvmt Flow	167	19	99	388	61	373

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	186	0	763	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	586	-
Critical Hdwy	-	-	4.14	-	6.23	6.11
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.309
Pot Cap-1 Maneuver	-	-	1377	-	387	873
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	351	873
Mov Cap-2 Maneuver	-	-	-	-	351	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	520	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1377	-
HCM Lane V/C Ratio	0.602	-	-	0.072	-
HCM Control Delay (s)	17.3	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	4.1	-	-	0.2	-



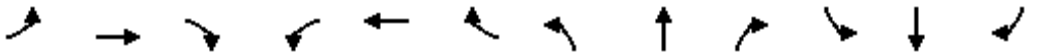
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	455	44	49	312	6	123	9	161	11	10	32
Future Volume (vph)	19	455	44	49	312	6	123	9	161	11	10	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.998			0.926			0.919	
Flt Protected		0.998			0.993			0.979			0.990	
Satd. Flow (prot)	0	1842	0	0	1732	0	0	1488	0	0	1713	0
Flt Permitted		0.980			0.881			0.838			0.913	
Satd. Flow (perm)	0	1808	0	0	1537	0	0	1273	0	0	1580	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			2			85			34	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	16%	2%	18%	28%	4%	0%	6%	0%	13%	0%	0%	0%
Adj. Flow (vph)	20	479	46	52	328	6	129	9	169	12	11	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	545	0	0	386	0	0	307	0	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.58			0.48			0.65			0.11	
Control Delay		15.6			14.4			23.5			10.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.6			14.4			23.5			10.5	
Queue Length 50th (ft)		165			110			89			7	
Queue Length 95th (ft)		258			182			178			32	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		943			799			470			535	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.58			0.48			0.65			0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

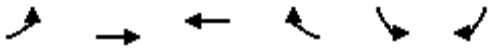




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	19	455	44	49	312	6	123	9	161	11	10	32
Future Volume (veh/h)	19	455	44	49	312	6	123	9	161	11	10	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	2027	1787	1637	1997	2057	1717	1806	1613	2097	2097	2097
Adj Flow Rate, veh/h	20	479	46	52	328	6	129	9	169	12	11	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	16	2	18	28	4	0	6	0	13	0	0	0
Cap, veh/h	65	922	86	138	846	15	241	39	261	144	150	351
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	32	1774	166	164	1628	28	537	119	804	268	463	1082
Grp Volume(v), veh/h	545	0	0	386	0	0	307	0	0	57	0	0
Grp Sat Flow(s),veh/h/ln	1972	0	0	1820	0	0	1460	0	0	1813	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.9	0.0	0.0	8.9	0.0	0.0	13.6	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.04		0.08	0.13		0.02	0.42		0.55	0.21		0.60
Lane Grp Cap(c), veh/h	1073	0	0	998	0	0	540	0	0	645	0	0
V/C Ratio(X)	0.51	0.00	0.00	0.39	0.00	0.00	0.57	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1073	0	0	998	0	0	540	0	0	645	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.2	0.0	0.0	11.0	0.0	0.0	22.0	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	1.1	0.0	0.0	4.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	0.0	3.8	0.0	0.0	5.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	0.0	12.2	0.0	0.0	26.3	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		545			386			307			57	
Approach Delay, s/veh		13.9			12.2			26.3			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	130	114	69	163	100	3
Future Volume (vph)	130	114	69	163	100	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.905		0.996	
Flt Protected		0.974			0.954	
Satd. Flow (prot)	0	1615	1490	0	1560	0
Flt Permitted		0.974			0.954	
Satd. Flow (perm)	0	1615	1490	0	1560	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	11%	23%	50%	9%	18%	31%
Adj. Flow (vph)	167	146	88	209	128	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	313	297	0	132	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

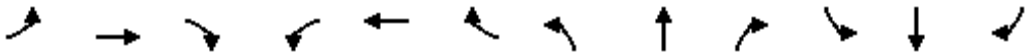
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	130	114	69	163	100	3
Future Vol, veh/h	130	114	69	163	100	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	11	23	50	9	18	31
Mvmt Flow	167	146	88	209	128	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	297	0	-	0	673	194
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	480	-
Critical Hdwy	4.21	-	-	-	6.98	6.71
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.299	-	-	-	3.662	3.579
Pot Cap-1 Maneuver	1215	-	-	-	368	770
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1215	-	-	-	313	769
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	560	-

Approach	EB	WB	SB
HCM Control Delay, s	4.5	0	24
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1215	-	-	-	319
HCM Lane V/C Ratio	0.137	-	-	-	0.414
HCM Control Delay (s)	8.4	0	-	-	24
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	140	72	1	135	1	94	1	4	1	1	3
Future Volume (vph)	2	140	72	1	135	1	94	1	4	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.954			0.999			0.994			0.910	
Flt Protected								0.955			0.992	
Satd. Flow (prot)	0	1451	0	0	1473	0	0	1551	0	0	1400	0
Flt Permitted								0.955			0.992	
Satd. Flow (perm)	0	1451	0	0	1473	0	0	1551	0	0	1400	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	28%	14%	0%	23%	0%	9%	0%	0%	100%	0%	0%
Adj. Flow (vph)	2	167	86	1	161	1	112	1	5	1	1	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	0	0	163	0	0	118	0	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

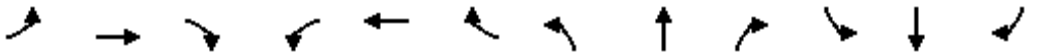
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	140	72	1	135	1	94	1	4	1	1	3
Future Vol, veh/h	2	140	72	1	135	1	94	1	4	1	1	3
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	28	14	0	23	0	9	0	0	100	0	0
Mvmt Flow	2	167	86	1	161	1	112	1	5	1	1	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.7	9.2	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	95%	1%	1%	20%
Vol Thru, %	1%	65%	99%	20%
Vol Right, %	4%	34%	1%	60%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	214	137	5
LT Vol	94	2	1	1
Through Vol	1	140	135	1
RT Vol	4	72	1	3
Lane Flow Rate	118	255	163	6
Geometry Grp	1	1	1	1
Degree of Util (X)	0.168	0.298	0.203	0.011
Departure Headway (Hd)	5.136	4.21	4.491	6.375
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	698	853	799	561
Service Time	3.174	2.234	2.519	4.421
HCM Lane V/C Ratio	0.169	0.299	0.204	0.011
HCM Control Delay	9.2	9	8.7	9.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	1.3	0.8	0

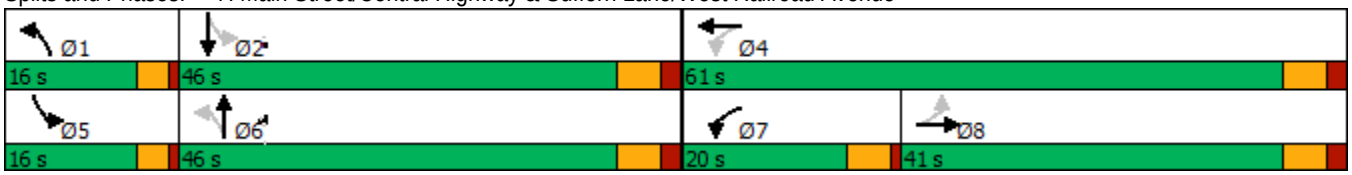


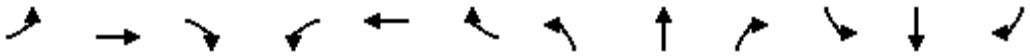
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	57	78	185	89	47	123	195	156	112	262	36
Future Volume (vph)	56	57	78	185	89	47	123	195	156	112	262	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	1.00	
Frt		0.945			0.949			0.933			0.982	
Flt Protected		0.985		0.950			0.950			0.950		
Satd. Flow (prot)	0	1593	0	1637	1629	0	1719	1641	0	1560	1685	0
Flt Permitted		0.853		0.487			0.433			0.327		
Satd. Flow (perm)	0	1379	0	838	1629	0	782	1641	0	535	1685	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			28			35			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1	3		4	4		3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	21%	6%	13%	5%	7%	0%	5%	5%	9%	13%	8%	6%
Adj. Flow (vph)	58	59	80	191	92	48	127	201	161	115	270	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	197	0	191	140	0	127	362	0	115	307	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.65		0.40	0.20		0.31	0.75		0.35	0.63	
Control Delay		39.8		20.2	15.2		16.9	36.7		17.9	33.7	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		39.8		20.2	15.2		16.9	36.7		17.9	33.7	
Queue Length 50th (ft)		83		61	35		39	160		35	140	
Queue Length 95th (ft)		188		145	95		86	308		80	270	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		614		509	1120		486	832		391	839	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.32		0.38	0.13		0.26	0.44		0.29	0.37	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 85.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

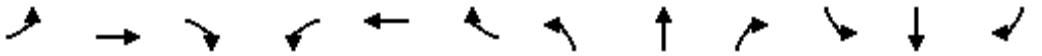




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	57	78	185	89	47	123	195	156	112	262	36
Future Volume (veh/h)	56	57	78	185	89	47	123	195	156	112	262	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1821	2046	1941	1773	1743	1847	1826	1826	1767	1784	1859	1889
Adj Flow Rate, veh/h	58	59	80	191	92	48	127	201	161	115	270	37
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	21	6	13	5	7	0	5	5	9	13	8	6
Cap, veh/h	139	106	115	529	401	209	405	263	211	341	444	61
Arrive On Green	0.16	0.16	0.16	0.13	0.37	0.37	0.09	0.28	0.28	0.08	0.28	0.28
Sat Flow, veh/h	380	644	700	1688	1078	562	1739	935	749	1699	1598	219
Grp Volume(v), veh/h	197	0	0	191	0	140	127	0	362	115	0	307
Grp Sat Flow(s),veh/h/ln	1723	0	0	1688	0	1640	1739	0	1685	1699	0	1817
Q Serve(g_s), s	4.1	0.0	0.0	5.2	0.0	3.5	3.0	0.0	11.9	2.8	0.0	8.9
Cycle Q Clear(g_c), s	6.4	0.0	0.0	5.2	0.0	3.5	3.0	0.0	11.9	2.8	0.0	8.9
Prop In Lane	0.29		0.41	1.00		0.34	1.00		0.44	1.00		0.12
Lane Grp Cap(c), veh/h	360	0	0	529	0	610	405	0	473	341	0	504
V/C Ratio(X)	0.55	0.00	0.00	0.36	0.00	0.23	0.31	0.00	0.76	0.34	0.00	0.61
Avail Cap(c_a), veh/h	1051	0	0	736	0	1490	600	0	1113	537	0	1200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	15.7	0.0	13.0	14.0	0.0	19.9	14.6	0.0	19.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.2	0.0	0.3	0.2	0.0	3.7	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	1.8	0.0	1.2	1.1	0.0	4.7	1.0	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	0.0	0.0	15.8	0.0	13.3	14.1	0.0	23.6	14.8	0.0	20.7
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		197			331			489			422	
Approach Delay, s/veh		25.6			14.8			21.1			19.1	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	22.8		28.5	9.0	23.0	12.6	16.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	5.0	10.9		5.5	4.8	13.9	7.2	8.4				
Green Ext Time (p_c), s	0.2	2.5		1.2	0.2	3.1	0.3	1.6				

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

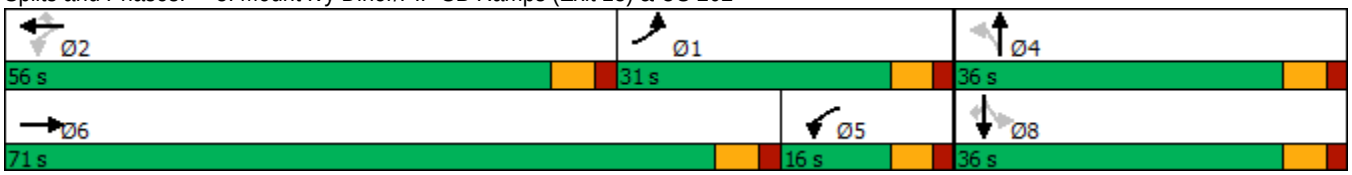


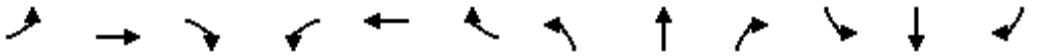
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	655	3	3	536	502	2	5	5	121	1	140
Future Volume (vph)	131	655	3	3	536	502	2	5	5	121	1	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			1.00	
Frt		0.999				0.850		0.944				0.850
Flt Protected	0.950			0.950				0.992			0.953	
Satd. Flow (prot)	1701	1789	0	1832	1854	1591	0	1534	0	0	1645	1480
Flt Permitted	0.950			0.207				0.954			0.720	
Satd. Flow (perm)	1701	1789	0	399	1854	1591	0	1475	0	0	1240	1480
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						508		5				146
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	4%	0%	0%	4%	3%	100%	0%	0%	7%	0%	6%
Adj. Flow (vph)	136	682	3	3	558	523	2	5	5	126	1	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	685	0	3	558	523	0	12	0	0	127	146
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.49	0.63		0.01	0.75	0.56		0.04			0.55	0.37
Control Delay	40.7	15.3		8.7	27.8	4.5		25.6			42.2	9.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	40.7	15.3		8.7	27.8	4.5		25.6			42.2	9.1
Queue Length 50th (ft)	58	156		1	213	4		3			54	0
Queue Length 95th (ft)	151	542		4	429	65		20			143	52
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	590	1496		427	1286	1259		617			516	701
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.23	0.46		0.01	0.43	0.42		0.02			0.25	0.21

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 77.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





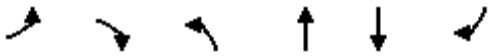
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	655	3	3	536	502	2	5	5	121	1	140
Future Volume (veh/h)	131	655	3	3	536	502	2	5	5	121	1	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1746	1746	1806	2018	1958	1973	517	2018	2018	1834	1939	1849
Adj Flow Rate, veh/h	136	682	3	3	558	0	2	5	5	126	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	0	0	4	3	100	0	0	7	0	6
Cap, veh/h	282	813	4	269	701		99	110	89	310	1	
Arrive On Green	0.17	0.47	0.47	0.06	0.36	0.00	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1663	1737	8	1922	1958	1672	134	956	779	1461	12	1567
Grp Volume(v), veh/h	136	0	685	3	558	0	12	0	0	127	0	0
Grp Sat Flow(s),veh/h/ln	1663	0	1745	1922	1958	1672	1869	0	0	1473	0	1567
Q Serve(g_s), s	3.7	0.0	17.3	0.0	12.9	0.0	0.0	0.0	0.0	3.9	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	17.3	0.0	12.9	0.0	0.3	0.0	0.0	4.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.17		0.42	0.99		1.00
Lane Grp Cap(c), veh/h	282	0	817	269	701		298	0	0	311	0	
V/C Ratio(X)	0.48	0.00	0.84	0.01	0.80		0.04	0.00	0.00	0.41	0.00	
Avail Cap(c_a), veh/h	826	0	2255	537	1946		1157	0	0	1011	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.9	0.0	11.7	21.7	14.5	0.0	19.8	0.0	0.0	21.5	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	2.4	0.0	2.1	0.0	0.1	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	4.9	0.0	4.6	0.0	0.1	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.2	0.0	14.1	21.7	16.6	0.0	19.9	0.0	0.0	22.4	0.0	0.0
LnGrp LOS	C	A	B	C	B		B	A	A	C	A	
Approach Vol, veh/h		821			561			12			127	
Approach Delay, s/veh		15.1			16.7			19.9			22.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	24.0		11.8	9.0	29.5		11.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.7	14.9		2.3	2.0	19.3		6.2				
Green Ext Time (p_c), s	0.5	3.1		0.0	0.0	4.2		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		16.3
HCM 6th LOS		B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	186	431	0	252	396	0
Future Volume (vph)	186	431	0	252	396	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.906					
Flt Protected	0.985					
Satd. Flow (prot)	1821	0	0	1774	1729	0
Flt Permitted	0.985					
Satd. Flow (perm)	1821	0	0	1774	1729	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	1%	0%	9%	11%	0%
Adj. Flow (vph)	196	454	0	265	417	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	650	0	0	265	417	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

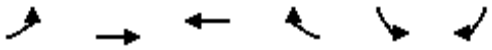
Intersection	
Int Delay, s/veh	10

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	186	431	0	252	396	0
Future Vol, veh/h	186	431	0	252	396	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	1	0	9	11	0
Mvmt Flow	196	454	0	265	417	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	682	417	-	0	-	0
Stage 1	417	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	5.62	5.81	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.309	-	-	-	-
Pot Cap-1 Maneuver	483	668	0	-	-	0
Stage 1	730	-	0	-	-	0
Stage 2	827	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	483	668	-	-	-	-
Mov Cap-2 Maneuver	483	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	827	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	867	-
HCM Lane V/C Ratio	-	0.749	-
HCM Control Delay (s)	-	20.4	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	7.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	558	367	28	12	92
Future Volume (vph)	75	558	367	28	12	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.880	
Flt Protected		0.994			0.994	
Satd. Flow (prot)	0	1686	1781	0	1398	0
Flt Permitted		0.994			0.994	
Satd. Flow (perm)	0	1686	1781	0	1398	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	11%	3%	4%	15%	0%	13%
Adj. Flow (vph)	84	627	412	31	13	103
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	711	443	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	75	558	367	28	12	92
Future Vol, veh/h	75	558	367	28	12	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	11	3	4	15	0	13
Mvmt Flow	84	627	412	31	13	103

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	443	0	-	0	1223	428
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	795	-
Critical Hdwy	4.21	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.299	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1071	-	-	-	214	611
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	468	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1071	-	-	-	188	611
Mov Cap-2 Maneuver	-	-	-	-	188	-
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	468	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1071	-	-	-	485
HCM Lane V/C Ratio	0.079	-	-	-	0.241
HCM Control Delay (s)	8.6	0	-	-	14.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.9



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	138	95	421	149	95	257
Future Volume (vph)	138	95	421	149	95	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.945		0.965			
Flt Protected	0.971					0.987
Satd. Flow (prot)	1606	0	1702	0	0	1666
Flt Permitted	0.971					0.987
Satd. Flow (perm)	1606	0	1702	0	0	1666
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			499
Travel Time (s)	12.3		18.6			11.3
Confl. Peds. (#/hr)	1			1	1	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	5%	24%	8%	5%	27%	14%
Adj. Flow (vph)	166	114	507	180	114	310
Shared Lane Traffic (%)						
Lane Group Flow (vph)	280	0	687	0	0	424
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	27.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	138	95	421	149	95	257
Future Vol, veh/h	138	95	421	149	95	257
Conflicting Peds, #/hr	1	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	24	8	5	27	14
Mvmt Flow	166	114	507	180	114	310

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1137	598	0	0	688	0
Stage 1	598	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Critical Hdwy	6.25	6.34	-	-	4.37	-
Critical Hdwy Stg 1	5.25	-	-	-	-	-
Critical Hdwy Stg 2	5.25	-	-	-	-	-
Follow-up Hdwy	3.545	3.516	-	-	2.443	-
Pot Cap-1 Maneuver	234	472	-	-	800	-
Stage 1	562	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	472	-	-	799	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	493	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	130.1	0	2.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	254	799	-
HCM Lane V/C Ratio	-	-	1.105	0.143	-
HCM Control Delay (s)	-	-	130.1	10.3	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	12.1	0.5	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	107	38	314	91	46	470
Future Volume (vph)	107	38	314	91	46	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	14	14	10	10
Grade (%)	1%			4%	5%	
Storage Length (ft)		0	0		0	65
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965					0.850
Flt Protected				0.963	0.950	
Satd. Flow (prot)	1848	0	0	1875	1610	1441
Flt Permitted				0.663	0.950	
Satd. Flow (perm)	1848	0	0	1291	1610	1441
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21					566
Link Speed (mph)	30			30	30	
Link Distance (ft)	857			317	499	
Travel Time (s)	19.5			7.2	11.3	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	129	46	378	110	55	566
Shared Lane Traffic (%)						
Lane Group Flow (vph)	175	0	0	488	55	566
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	0.94	0.94	1.13	1.13
Turning Speed (mph)		9	15		15	9
Number of Detectors	0		1	0	2	2
Detector Template			Left			
Leading Detector (ft)	0		20	0	83	83
Trailing Detector (ft)	0		0	0	-5	-5
Detector 1 Position(ft)	0		0	0	-5	-5
Detector 1 Size(ft)	6		20	6	40	40
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0
Turn Type	NA		pm+pt	NA	Prot	Perm

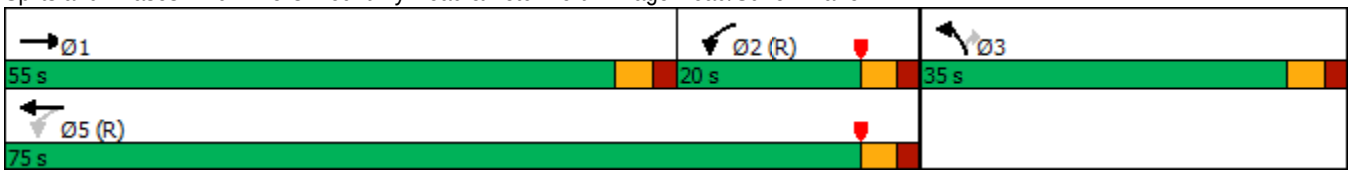


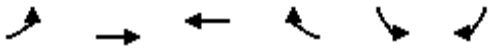
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Protected Phases	1		2	5	3	
Permitted Phases			5			3
Detector Phase	1		2	5	3	3
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	10.0	10.0	10.0
Total Split (s)	55.0		20.0	75.0	35.0	35.0
Total Split (%)	50.0%		18.2%	68.2%	31.8%	31.8%
Maximum Green (s)	50.0		15.0	70.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	Max		C-Max	C-Max	None	None
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					11.0	11.0
Pedestrian Calls (#/hr)					2	2
Act Effct Green (s)	67.5			87.5	12.5	12.5
Actuated g/C Ratio	0.61			0.80	0.11	0.11
v/c Ratio	0.15			0.44	0.30	0.85
Control Delay	10.0			6.3	45.4	16.5
Queue Delay	0.0			0.4	0.0	0.7
Total Delay	10.0			6.8	45.4	17.3
LOS	A			A	D	B
Approach Delay	10.0			6.8	19.7	
Approach LOS	A			A	B	
Queue Length 50th (ft)	39			82	38	0
Queue Length 95th (ft)	92			146	59	51
Internal Link Dist (ft)	777			237	419	
Turn Bay Length (ft)						65
Base Capacity (vph)	1142			1106	439	804
Starvation Cap Reductn	0			246	0	0
Spillback Cap Reductn	26			0	0	63
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.16			0.57	0.13	0.76

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBL and 5:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 13.5		Intersection LOS: B	
Intersection Capacity Utilization 46.8%		ICU Level of Service A	

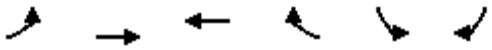
Analysis Period (min) 15

Splits and Phases: 6: Thiells-Mount Ivy Road & Letchworth Village Road/Suffern Lane





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	138	603	525	140	311	516						
Future Volume (vph)	138	603	525	140	311	516						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3505	1854	1490	1634	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3505	1854	1490	1623	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						256						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					3							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95						
Heavy Vehicles (%)	8%	3%	4%	10%	11%	3%						
Adj. Flow (vph)	145	635	553	147	327	543						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	635	553	147	327	543						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							0		2			
Act Effct Green (s)	28.7	62.2	98.0	128.5	30.5	71.4						
Actuated g/C Ratio	0.16	0.34	0.54	0.71	0.17	0.39						
v/c Ratio	0.55	0.53	0.55	0.14	1.19	0.70						
Control Delay	54.9	51.2	10.6	4.3	176.9	29.0						
Queue Delay	0.0	0.0	0.9	0.3	0.0	0.0						
Total Delay	54.9	51.2	11.5	4.6	176.9	29.0						
LOS	D	D	B	A	F	C						
Approach Delay		51.9	10.1		84.6							
Approach LOS		D	B		F							
Queue Length 50th (ft)	128	306	229	5	~459	310						
Queue Length 95th (ft)	188	493	387	93	#897	485						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	269	1306	1113	1054	274	992						
Starvation Cap Reductn	0	0	301	502	0	0						
Spillback Cap Reductn	0	17	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.54	0.49	0.68	0.27	1.19	0.55						

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 181.6	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 51.5	Intersection LOS: D

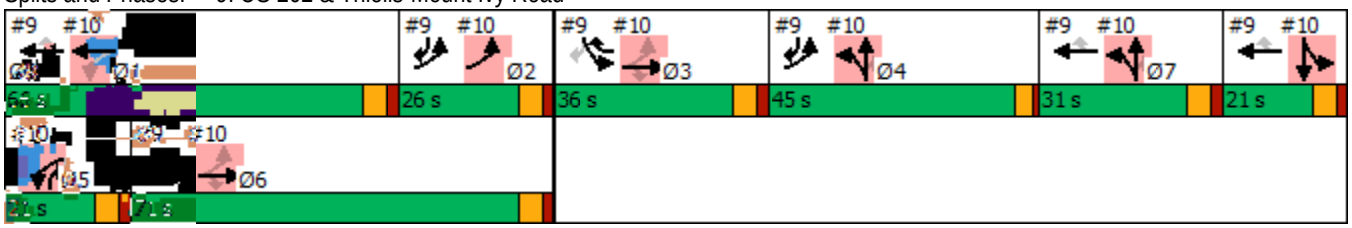
Intersection Capacity Utilization 69.6% ICU Level of Service C

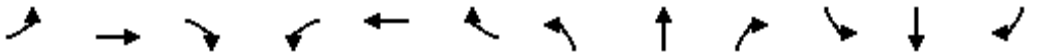
Analysis Period (min) 15

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

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

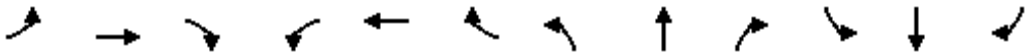
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	615	282	34	414	1	222	3	193	5	8	49
Future Volume (vph)	17	615	282	34	414	1	222	3	193	5	8	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99									
Frt			0.850						0.850		0.892	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1507	1766	1501	1832	1854	0	1643	1652	1655	0	1441	0
Flt Permitted	0.347			0.094			0.950	0.954			0.996	
Satd. Flow (perm)	550	1766	1481	181	1854	0	1643	1652	1655	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			146						201		51	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	18%	6%	6%	0%	4%	0%	7%	0%	0%	0%	13%	18%
Adj. Flow (vph)	18	641	294	35	431	1	231	3	201	5	8	51
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	18	641	294	35	432	0	118	116	201	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	92.7	98.8	98.8	48.8	48.8		42.5	42.5	46.8		11.5	
Actuated g/C Ratio	0.51	0.54	0.54	0.27	0.27		0.23	0.23	0.26		0.06	
v/c Ratio	0.05	0.67	0.34	0.33	0.87		0.31	0.30	0.35		0.46	
Control Delay	6.1	11.3	1.2	61.0	82.1		61.0	60.8	5.5		39.8	
Queue Delay	0.0	1.4	0.9	0.0	0.0		0.3	0.3	0.0		0.0	
Total Delay	6.1	12.7	2.1	61.0	82.1		61.3	61.1	5.5		39.8	
LOS	A	B	A	E	F		E	E	A		D	
Approach Delay		9.3			80.5			35.5			39.8	
Approach LOS		A			F			D			D	
Queue Length 50th (ft)	1	110	0	30	477		126	124	0		14	
Queue Length 95th (ft)	m3	m71	m0	77	#813		204	201	52		80	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	390	951	865	187	623		384	387	647		167	
Starvation Cap Reductn	0	145	325	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		57	57	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.05	0.80	0.54	0.19	0.69		0.36	0.35	0.31		0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 181.6			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay: 33.6		Intersection LOS: C	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		2		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

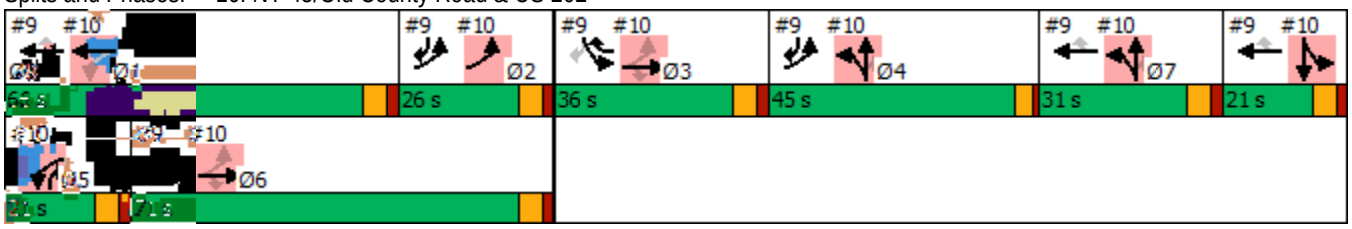
Intersection Capacity Utilization 63.5% ICU Level of Service B

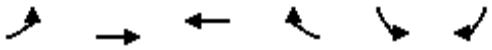
Analysis Period (min) 15

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

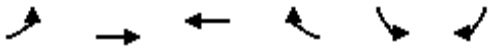
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	226	351	269	79	65	136
Future Volume (vph)	226	351	269	79	65	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	13	13	12	12
Grade (%)		-4%	8%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.969		0.909	
Flt Protected		0.981			0.984	
Satd. Flow (prot)	0	1988	1791	0	1699	0
Flt Permitted		0.465			0.984	
Satd. Flow (perm)	0	942	1791	0	1699	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			18		95	
Link Speed (mph)		30	30		30	
Link Distance (ft)		317	965		1736	
Travel Time (s)		7.2	21.9		39.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	272	423	324	95	78	164
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	695	419	0	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.89	0.89	1.01	1.01	0.97	0.97
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		2	
Detector Template	Left					
Leading Detector (ft)	20	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	

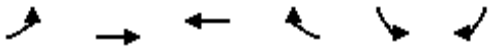


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	10.0	10.0	23.0		10.0	
Total Split (s)	20.0	75.0	55.0		35.0	
Total Split (%)	18.2%	68.2%	50.0%		31.8%	
Maximum Green (s)	15.0	70.0	50.0		30.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	Max	C-Max	C-Max		None	
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)		85.4	50.0		14.6	
Actuated g/C Ratio		0.78	0.45		0.13	
v/c Ratio		0.68	0.51		0.79	
Control Delay		9.9	23.0		45.0	
Queue Delay		1.3	0.0		0.0	
Total Delay		11.2	23.0		45.0	
LOS		B	C		D	
Approach Delay		11.2	23.0		45.0	
Approach LOS		B	C		D	
Queue Length 50th (ft)		107	196		102	
Queue Length 95th (ft)		336	256		154	
Internal Link Dist (ft)		237	885		1656	
Turn Bay Length (ft)						
Base Capacity (vph)		1020	823		532	
Starvation Cap Reductn		150	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.80	0.51		0.45	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 74.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 60: Suffern Lane & Hammond Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	191	176	303	56	21
Future Volume (vph)	36	191	176	303	56	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.915		0.963	
Flt Protected		0.992			0.965	
Satd. Flow (prot)	0	1703	1583	0	1691	0
Flt Permitted		0.992			0.965	
Satd. Flow (perm)	0	1703	1583	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	40	210	193	333	62	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	250	526	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	191	176	303	56	21
Future Vol, veh/h	36	191	176	303	56	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	40	210	193	333	62	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	526	0	-	0	650	360
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1036	-	-	-	450	696
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	772	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1036	-	-	-	430	696
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	772	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1036	-	-	-	480
HCM Lane V/C Ratio	0.038	-	-	-	0.176
HCM Control Delay (s)	8.6	0	-	-	14.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	225	22	103	423	56	368
Future Volume (vph)	225	22	103	423	56	368
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988				0.883	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	1792	0	0	1835	1618	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	1792	0	0	1835	1618	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	2%	2%	0%	0%
Adj. Flow (vph)	237	23	108	445	59	387
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	0	0	553	446	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

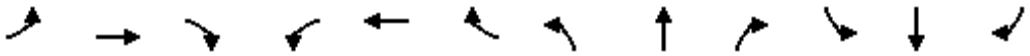
Intersection	
Int Delay, s/veh	8.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	225	22	103	423	56	368
Future Vol, veh/h	225	22	103	423	56	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	5	2	2	0	0
Mvmt Flow	237	23	108	445	59	387

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	910	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	661	-
Critical Hdwy	-	-	4.12	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1304	-	323	800
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	537	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	287	800
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	478	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	22
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1304	-
HCM Lane V/C Ratio	0.69	-	-	0.083	-
HCM Control Delay (s)	22	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	5.5	-	-	0.3	-



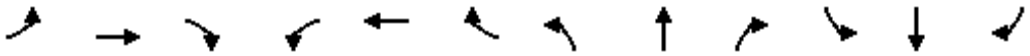
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	543	41	75	351	2	131	11	99	10	9	44
Future Volume (vph)	9	543	41	75	351	2	131	11	99	10	9	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.999			0.944			0.905	
Flt Protected		0.999			0.991			0.973			0.992	
Satd. Flow (prot)	0	1897	0	0	1802	0	0	1546	0	0	1667	0
Flt Permitted		0.992			0.801			0.792			0.939	
Satd. Flow (perm)	0	1884	0	0	1457	0	0	1258	0	0	1578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						48			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	12%	1%	0%	6%	0%	9%	0%	0%	2%
Adj. Flow (vph)	10	610	46	84	394	2	147	12	111	11	10	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	666	0	0	480	0	0	270	0	0	70	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.68			0.63			0.61			0.13	
Control Delay		18.0			18.0			24.9			9.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.0			18.0			24.9			9.1	
Queue Length 50th (ft)		220			154			88			7	
Queue Length 95th (ft)		331			250			165			33	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		982			756			440			545	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.68			0.63			0.61			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 50	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

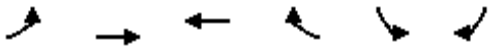




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	9	543	41	75	351	2	131	11	99	10	9	44
Future Volume (veh/h)	9	543	41	75	351	2	131	11	99	10	9	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2042	2012	1877	2042	2057	1717	1806	1672	2097	2097	2067
Adj Flow Rate, veh/h	10	610	46	84	394	2	147	12	111	11	10	49
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	1	3	12	1	0	6	0	9	0	0	2
Cap, veh/h	53	966	72	169	779	4	304	40	190	111	120	414
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	10	1860	139	220	1500	7	715	125	586	176	371	1276
Grp Volume(v), veh/h	666	0	0	480	0	0	270	0	0	70	0	0
Grp Sat Flow(s),veh/h/ln	2009	0	0	1728	0	0	1427	0	0	1822	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.2	0.0	0.0	12.2	0.0	0.0	11.9	0.0	0.0	2.0	0.0	0.0
Prop In Lane	0.02		0.07	0.17		0.00	0.54		0.41	0.16		0.70
Lane Grp Cap(c), veh/h	1091	0	0	952	0	0	535	0	0	646	0	0
V/C Ratio(X)	0.61	0.00	0.00	0.50	0.00	0.00	0.50	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1091	0	0	952	0	0	535	0	0	646	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	11.7	0.0	0.0	21.4	0.0	0.0	18.2	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	1.9	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	0.0	5.2	0.0	0.0	4.3	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	13.6	0.0	0.0	24.8	0.0	0.0	18.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		666			480			270			70	
Approach Delay, s/veh		15.8			13.6			24.8			18.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.9									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	28	91	25	213	109	16
Future Volume (vph)	28	91	25	213	109	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.879		0.983	
Flt Protected		0.988			0.958	
Satd. Flow (prot)	0	1766	1645	0	1710	0
Flt Permitted		0.988			0.958	
Satd. Flow (perm)	0	1766	1645	0	1710	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	12%	7%	12%	6%	5%	21%
Adj. Flow (vph)	36	118	32	277	142	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	154	309	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

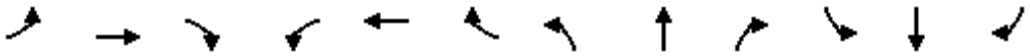
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	91	25	213	109	16
Future Vol, veh/h	28	91	25	213	109	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	12	7	12	6	5	21
Mvmt Flow	36	118	32	277	142	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	309	0	-	0	361	171
Stage 1	-	-	-	-	171	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	4.22	-	-	-	6.85	6.61
Critical Hdwy Stg 1	-	-	-	-	5.85	-
Critical Hdwy Stg 2	-	-	-	-	5.85	-
Follow-up Hdwy	2.308	-	-	-	3.545	3.489
Pot Cap-1 Maneuver	1197	-	-	-	607	818
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1197	-	-	-	588	818
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1197	-	-	-	610
HCM Lane V/C Ratio	0.03	-	-	-	0.266
HCM Control Delay (s)	8.1	0	-	-	13
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	144	55	0	141	1	92	1	5	1	1	5
Future Volume (vph)	1	144	55	0	141	1	92	1	5	1	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.963			0.999			0.993			0.899	
Flt Protected								0.955			0.994	
Satd. Flow (prot)	0	1708	0	0	1674	0	0	1591	0	0	1617	0
Flt Permitted								0.955			0.994	
Satd. Flow (perm)	0	1708	0	0	1674	0	0	1591	0	0	1617	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	5%	7%	0%	8%	0%	5%	0%	20%	0%	0%	0%
Adj. Flow (vph)	1	171	65	0	168	1	110	1	6	1	1	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	237	0	0	169	0	0	117	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

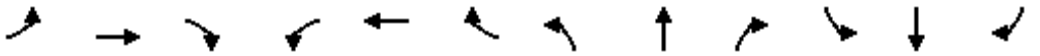
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	144	55	0	141	1	92	1	5	1	1	5
Future Vol, veh/h	1	144	55	0	141	1	92	1	5	1	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	5	7	0	8	0	5	0	20	0	0	0
Mvmt Flow	1	171	65	0	168	1	110	1	6	1	1	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	8.9	9.1	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	94%	1%	0%	14%
Vol Thru, %	1%	72%	99%	14%
Vol Right, %	5%	28%	1%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	200	142	7
LT Vol	92	1	0	1
Through Vol	1	144	141	1
RT Vol	5	55	1	5
Lane Flow Rate	117	238	169	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.164	0.281	0.216	0.011
Departure Headway (Hd)	5.053	4.25	4.604	4.566
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	709	845	779	781
Service Time	3.089	2.274	2.63	2.61
HCM Lane V/C Ratio	0.165	0.282	0.217	0.01
HCM Control Delay	9.1	8.9	8.9	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	1.2	0.8	0

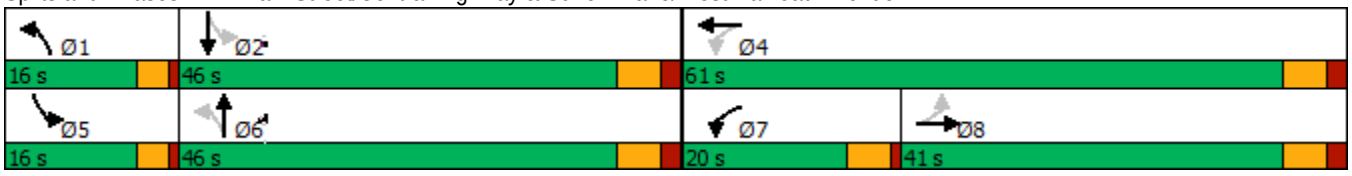


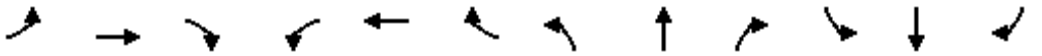
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	98	125	200	92	63	97	280	129	115	204	71
Future Volume (vph)	109	98	125	200	92	63	97	280	129	115	204	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Frt		0.949			0.939			0.953			0.961	
Flt Protected		0.984		0.950			0.950			0.950		
Satd. Flow (prot)	0	1709	0	1702	1578	0	1703	1734	0	1647	1696	0
Flt Permitted		0.825		0.423			0.438			0.194		
Satd. Flow (perm)	0	1430	0	757	1578	0	784	1734	0	336	1696	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			36			20			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	4		1	1		4	2		3	3		2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	9%	2%	1%	9%	3%	6%	3%	5%	7%	5%	3%
Adj. Flow (vph)	120	108	137	220	101	69	107	308	142	126	224	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	365	0	220	170	0	107	450	0	126	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.87		0.46	0.23		0.28	0.85		0.48	0.57	
Control Delay		58.2		22.4	16.0		20.5	51.4		25.2	35.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		58.2		22.4	16.0		20.5	51.4		25.2	35.2	
Queue Length 50th (ft)		241		97	57		47	305		56	178	
Queue Length 95th (ft)		#432		165	112		82	443		95	279	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		495		489	847		439	676		296	663	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.74		0.45	0.20		0.24	0.67		0.43	0.46	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 108	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

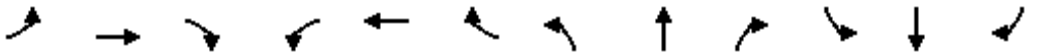




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	98	125	200	92	63	97	280	129	115	204	71
Future Volume (veh/h)	109	98	125	200	92	63	97	280	129	115	204	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2016	2001	2106	1832	1714	1803	1811	1856	1826	1874	1904	1934
Adj Flow Rate, veh/h	120	108	137	220	101	69	107	308	142	126	224	78
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	9	2	1	9	3	6	3	5	7	5	3
Cap, veh/h	181	144	162	500	414	283	378	365	168	273	417	145
Arrive On Green	0.27	0.27	0.27	0.11	0.44	0.44	0.07	0.30	0.30	0.07	0.31	0.31
Sat Flow, veh/h	472	543	610	1745	947	647	1725	1200	553	1784	1347	469
Grp Volume(v), veh/h	365	0	0	220	0	170	107	0	450	126	0	302
Grp Sat Flow(s),veh/h/ln	1626	0	0	1745	0	1594	1725	0	1753	1784	0	1816
Q Serve(g_s), s	15.8	0.0	0.0	7.4	0.0	5.8	3.6	0.0	20.6	4.1	0.0	11.8
Cycle Q Clear(g_c), s	18.1	0.0	0.0	7.4	0.0	5.8	3.6	0.0	20.6	4.1	0.0	11.8
Prop In Lane	0.33		0.38	1.00		0.41	1.00		0.32	1.00		0.26
Lane Grp Cap(c), veh/h	487	0	0	500	0	696	378	0	533	273	0	563
V/C Ratio(X)	0.75	0.00	0.00	0.44	0.00	0.24	0.28	0.00	0.84	0.46	0.00	0.54
Avail Cap(c_a), veh/h	716	0	0	607	0	1023	505	0	818	393	0	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.6	0.0	0.0	17.5	0.0	15.2	18.9	0.0	27.9	20.8	0.0	24.5
Incr Delay (d2), s/veh	3.4	0.0	0.0	0.2	0.0	0.3	0.2	0.0	6.4	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0	2.9	0.0	2.1	1.4	0.0	9.2	1.6	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	0.0	17.8	0.0	15.5	19.1	0.0	34.3	21.2	0.0	25.6
LnGrp LOS	C	A	A	B	A	B	B	A	C	C	A	C
Approach Vol, veh/h		365			390			557			428	
Approach Delay, s/veh		33.1			16.8			31.4			24.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	32.6		43.4	10.2	32.0	14.7	28.7				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	5.6	13.8		7.8	6.1	22.6	9.4	20.1				
Green Ext Time (p_c), s	0.1	2.4		1.4	0.2	3.4	0.3	2.6				

Intersection Summary												
HCM 6th Ctrl Delay			26.7									
HCM 6th LOS			C									

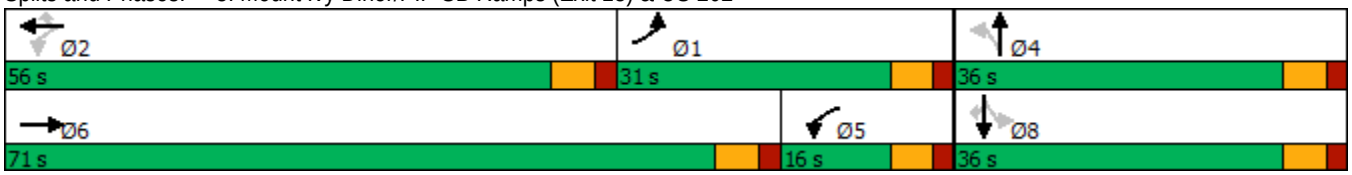


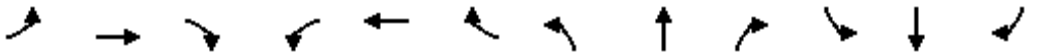
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	628	0	3	490	542	0	0	2	135	0	137
Future Volume (vph)	119	628	0	3	490	542	0	0	2	135	0	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00			1.00		0.99						0.98
Frt						0.850		0.865				0.850
Flt Protected	0.950			0.950							0.950	
Satd. Flow (prot)	1734	1790	0	1832	1819	1576	0	1668	0	0	1670	1553
Flt Permitted	0.950			0.218							0.757	
Satd. Flow (perm)	1733	1790	0	420	1819	1556	0	1668	0	0	1331	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						571		336				144
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)	1		4	4		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	4%	0%	0%	0%	5%	0%	1%
Adj. Flow (vph)	125	661	0	3	516	571	0	0	2	142	0	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	125	661	0	3	516	571	0	2	0	0	142	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.46	0.62		0.01	0.72	0.60		0.00			0.55	0.35
Control Delay	39.7	14.9		8.3	26.6	4.5		0.0			39.9	8.7
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	39.7	14.9		8.3	26.6	4.5		0.0			39.9	8.7
Queue Length 50th (ft)	51	147		1	188	0		0			57	0
Queue Length 95th (ft)	140	503		4	385	60		0			153	51
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	620	1523		436	1293	1271		908			571	733
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.20	0.43		0.01	0.40	0.45		0.00			0.25	0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 75.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





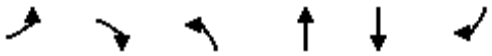
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	628	0	3	490	542	0	0	2	135	0	137
Future Volume (veh/h)	119	628	0	3	490	542	0	0	2	135	0	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1746	1806	2018	1928	1958	2018	2018	2018	1864	1939	1924
Adj Flow Rate, veh/h	125	661	0	3	516	0	0	0	2	142	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	0	6	4	0	0	0	5	0	1
Cap, veh/h	296	791	0	263	652		0	0	217	328	0	
Arrive On Green	0.17	0.45	0.00	0.06	0.34	0.00	0.00	0.00	0.13	0.13	0.00	0.00
Sat Flow, veh/h	1692	1746	0	1922	1928	1659	0	0	1697	1444	0	1631
Grp Volume(v), veh/h	125	661	0	3	516	0	0	0	2	142	0	0
Grp Sat Flow(s),veh/h/ln	1692	1746	0	1922	1928	1659	0	0	1697	1444	0	1631
Q Serve(g_s), s	3.3	16.7	0.0	0.0	12.1	0.0	0.0	0.0	0.1	4.7	0.0	0.0
Cycle Q Clear(g_c), s	3.3	16.7	0.0	0.0	12.1	0.0	0.0	0.0	0.1	4.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	791	0	263	652		0	0	217	328	0	
V/C Ratio(X)	0.42	0.84	0.00	0.01	0.79		0.00	0.00	0.01	0.43	0.00	
Avail Cap(c_a), veh/h	844	2265	0	531	1923		0	0	1015	1013	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.4	12.1	0.0	22.0	15.0	0.0	0.0	0.0	19.1	21.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	2.4	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.8	0.0	0.0	4.4	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	14.5	0.0	22.0	17.2	0.0	0.0	0.0	19.1	22.1	0.0	0.0
LnGrp LOS	B	B	A	C	B		A	A	B	C	A	
Approach Vol, veh/h		786			519			2			142	
Approach Delay, s/veh		15.3			17.2			19.1			22.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	23.0		12.4	9.0	28.7		12.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.3	14.1		2.1	2.0	18.7		6.8				
Green Ext Time (p_c), s	0.5	2.8		0.0	0.0	4.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		16.6
HCM 6th LOS		B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	331	0	268	362	0
Future Volume (vph)	231	331	0	268	362	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.920					
Flt Protected	0.980					
Satd. Flow (prot)	1835	0	0	1842	1845	0
Flt Permitted	0.980					
Satd. Flow (perm)	1835	0	0	1842	1845	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	2%	0%	5%	4%	0%
Adj. Flow (vph)	254	364	0	295	398	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	618	0	0	295	398	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

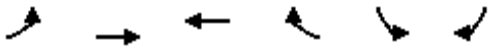
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	231	331	0	268	362	0
Future Vol, veh/h	231	331	0	268	362	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	1	2	0	5	4	0
Mvmt Flow	254	364	0	295	398	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	693	398	-	0	-	0
Stage 1	398	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	5.61	5.82	-	-	-	-
Critical Hdwy Stg 1	4.61	-	-	-	-	-
Critical Hdwy Stg 2	4.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.318	-	-	-	-
Pot Cap-1 Maneuver	479	681	0	-	-	0
Stage 1	744	-	0	-	-	0
Stage 2	809	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	479	681	-	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1156	-
HCM Lane V/C Ratio	-	0.534	-
HCM Control Delay (s)	-	11.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	3.3	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	574	369	22	9	93
Future Volume (vph)	64	574	369	22	9	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992		0.876	
Flt Protected		0.995			0.996	
Satd. Flow (prot)	0	1680	1836	0	1500	0
Flt Permitted		0.995			0.996	
Satd. Flow (perm)	0	1680	1836	0	1500	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	8%	4%	1%	14%	11%	3%
Adj. Flow (vph)	74	667	429	26	10	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	741	455	0	118	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

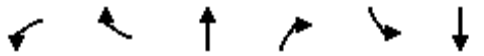
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	64	574	369	22	9	93
Future Vol, veh/h	64	574	369	22	9	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	4	1	14	11	3
Mvmt Flow	74	667	429	26	10	108

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	455	0	-	0	1257	442
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	815	-
Critical Hdwy	4.18	-	-	-	6.31	6.13
Critical Hdwy Stg 1	-	-	-	-	5.31	-
Critical Hdwy Stg 2	-	-	-	-	5.31	-
Follow-up Hdwy	2.272	-	-	-	3.599	3.327
Pot Cap-1 Maneuver	1075	-	-	-	194	621
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	440	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1075	-	-	-	173	621
Mov Cap-2 Maneuver	-	-	-	-	173	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	440	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1075	-	-	-	505
HCM Lane V/C Ratio	0.069	-	-	-	0.235
HCM Control Delay (s)	8.6	0	-	-	14.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	137	107	429	154	111	254
Future Volume (vph)	137	107	429	154	111	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.941		0.964			
Flt Protected	0.973					0.985
Satd. Flow (prot)	1720	0	1808	0	0	1907
Flt Permitted	0.973					0.985
Satd. Flow (perm)	1720	0	1808	0	0	1907
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			499
Travel Time (s)	12.3		18.6			11.3
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	9%	0%	3%	8%	0%
Adj. Flow (vph)	167	130	523	188	135	310
Shared Lane Traffic (%)						
Lane Group Flow (vph)	297	0	711	0	0	445
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	34.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	137	107	429	154	111	254
Future Vol, veh/h	137	107	429	154	111	254
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	9	0	3	8	0
Mvmt Flow	167	130	523	188	135	310

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1197	617	0	0	711	0
Stage 1	617	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.22	6.19	-	-	4.18	-
Critical Hdwy Stg 1	5.22	-	-	-	-	-
Critical Hdwy Stg 2	5.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.381	-	-	2.272	-
Pot Cap-1 Maneuver	219	486	-	-	861	-
Stage 1	557	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	178	486	-	-	861	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	165.7	0	3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	247	861	-
HCM Lane V/C Ratio	-	-	1.205	0.157	-
HCM Control Delay (s)	-	-	165.7	10	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	14.2	0.6	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	111	39	326	94	48	488
Future Volume (vph)	111	39	326	94	48	488
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	14	14	10	10
Grade (%)	1%			4%	5%	
Storage Length (ft)		0	0		0	65
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965					0.850
Flt Protected				0.963	0.950	
Satd. Flow (prot)	1857	0	0	1837	1579	1455
Flt Permitted				0.670	0.950	
Satd. Flow (perm)	1857	0	0	1278	1579	1455
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21					530
Link Speed (mph)	30			30	30	
Link Distance (ft)	857			317	499	
Travel Time (s)	19.5			7.2	11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	3%	3%	8%	4%	1%
Adj. Flow (vph)	121	42	354	102	52	530
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	0	0	456	52	530
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	0.94	0.94	1.13	1.13
Turning Speed (mph)		9	15		15	9
Number of Detectors	0		1	0	2	2
Detector Template			Left			
Leading Detector (ft)	0		20	0	83	83
Trailing Detector (ft)	0		0	0	-5	-5
Detector 1 Position(ft)	0		0	0	-5	-5
Detector 1 Size(ft)	6		20	6	40	40
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0

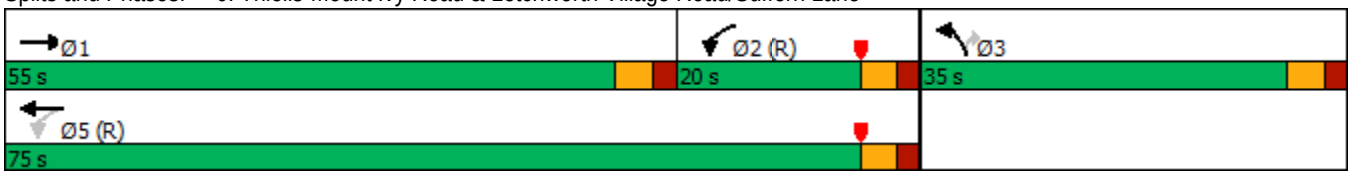


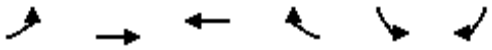
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	1		2	5	3	
Permitted Phases			5			3
Detector Phase	1		2	5	3	3
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	10.0	10.0	10.0
Total Split (s)	55.0		20.0	75.0	35.0	35.0
Total Split (%)	50.0%		18.2%	68.2%	31.8%	31.8%
Maximum Green (s)	50.0		15.0	70.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	Max		C-Max	C-Max	None	None
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					11.0	11.0
Pedestrian Calls (#/hr)					2	2
Act Effct Green (s)	68.3			88.3	11.7	11.7
Actuated g/C Ratio	0.62			0.80	0.11	0.11
v/c Ratio	0.14			0.41	0.31	0.84
Control Delay	9.4			5.6	46.8	16.8
Queue Delay	0.0			0.4	0.0	0.7
Total Delay	9.4			6.0	46.8	17.4
LOS	A			A	D	B
Approach Delay	9.4			6.0	20.1	
Approach LOS	A			A	C	
Queue Length 50th (ft)	34			51	36	0
Queue Length 95th (ft)	92			149	63	103
Internal Link Dist (ft)	777			237	419	
Turn Bay Length (ft)						65
Base Capacity (vph)	1160			1101	430	782
Starvation Cap Reductn	0			261	0	0
Spillback Cap Reductn	33			0	0	66
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.14			0.54	0.12	0.74

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:WBL and 5:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 13.3	Intersection LOS: B

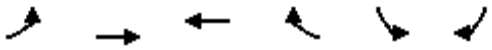
Intersection Capacity Utilization 47.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Thiells-Mount Ivy Road & Letchworth Village Road/Suffern Lane





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	168	588	535	143	193	500						
Future Volume (vph)	168	588	535	143	193	500						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor	1.00			0.97	0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1719	3471	1802	1546	1728	1607						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1711	3471	1802	1501	1708	1607						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						251						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)	2			2	5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	5%	4%	7%	6%	5%	1%						
Adj. Flow (vph)	175	613	557	149	201	521						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	175	613	557	149	201	521						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							2		3			
Act Effct Green (s)	28.1	61.8	97.5	123.6	26.1	66.5						
Actuated g/C Ratio	0.16	0.35	0.55	0.70	0.15	0.38						
v/c Ratio	0.64	0.50	0.56	0.14	0.79	0.68						
Control Delay	60.6	48.9	10.5	4.2	96.2	27.9						
Queue Delay	0.0	0.0	0.8	0.2	0.0	0.0						
Total Delay	60.6	48.9	11.3	4.5	96.2	27.9						
LOS	E	D	B	A	F	C						
Approach Delay		51.5	9.9		46.9							
Approach LOS		D	A		D							
Queue Length 50th (ft)	165	293	219	5	227	285						
Queue Length 95th (ft)	224	473	376	88	#460	447						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	286	1350	1122	1100	302	1001						
Starvation Cap Reductn	0	0	283	515	0	0						
Spillback Cap Reductn	0	11	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.61	0.46	0.66	0.25	0.67	0.52						

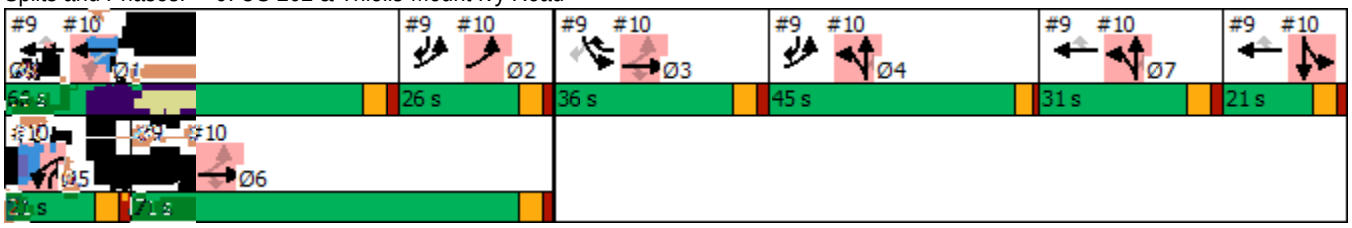
Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 176.4	
Natural Cycle: 135	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 36.7	Intersection LOS: D

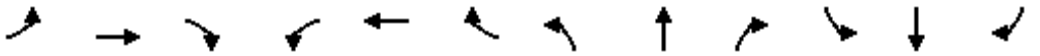
Intersection Capacity Utilization 69.1% ICU Level of Service C

Analysis Period (min) 15

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

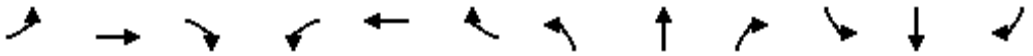
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	512	268	25	401	2	195	5	175	7	9	38
Future Volume (vph)	9	512	268	25	401	2	195	5	175	7	9	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00				0.98		1.00	
Frt			0.850		0.999				0.850		0.906	
Flt Protected	0.950			0.950			0.950	0.954			0.993	
Satd. Flow (prot)	1602	1782	1544	1579	1870	0	1598	1611	1607	0	1546	0
Flt Permitted	0.339			0.094			0.950	0.954			0.993	
Satd. Flow (perm)	572	1782	1544	156	1870	0	1598	1611	1571	0	1545	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			167						190		39	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	3					3			1	1		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	5%	3%	16%	3%	0%	10%	0%	3%	29%	0%	8%
Adj. Flow (vph)	10	557	291	27	436	2	212	5	190	8	10	41
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	10	557	291	27	438	0	108	109	190	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					2							
Act Effct Green (s)	87.9	94.1	94.1	48.5	48.5		42.1	42.1	46.1		11.5	
Actuated g/C Ratio	0.50	0.53	0.53	0.27	0.27		0.24	0.24	0.26		0.07	
v/c Ratio	0.03	0.59	0.32	0.30	0.85		0.28	0.28	0.34		0.43	
Control Delay	4.1	7.7	0.9	60.7	78.3		59.7	59.7	5.7		47.4	
Queue Delay	0.0	0.5	0.5	0.0	0.0		0.3	0.2	0.0		0.0	
Total Delay	4.1	8.2	1.5	60.7	78.3		59.9	59.9	5.7		47.4	
LOS	A	A	A	E	E		E	E	A		D	
Approach Delay		5.8			77.3			34.6			47.4	
Approach LOS		A			E			C			D	
Queue Length 50th (ft)	1	89	0	23	485		115	116	0		22	
Queue Length 95th (ft)	m2	726	0	63	#825		188	190	51		89	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	409	987	930	167	655		387	390	628		170	
Starvation Cap Reductn	0	137	314	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		56	56	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.66	0.47	0.16	0.67		0.33	0.33	0.30		0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 176.4	
Natural Cycle: 135	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	

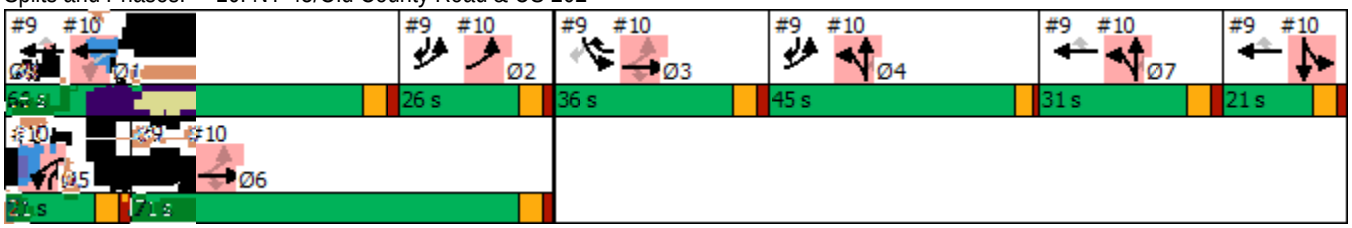
Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		3		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

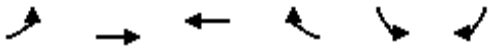
Intersection Summary

Intersection Signal Delay: 32.3	Intersection LOS: C
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

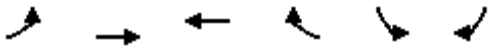
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	234	365	279	82	67	141
Future Volume (vph)	234	365	279	82	67	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	13	13	12	12
Grade (%)		-4%	8%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.969		0.908	
Flt Protected		0.981			0.984	
Satd. Flow (prot)	0	2000	1791	0	1704	0
Flt Permitted		0.469			0.984	
Satd. Flow (perm)	0	956	1791	0	1704	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			18		95	
Link Speed (mph)		30	30		30	
Link Distance (ft)		317	965		1736	
Travel Time (s)		7.2	21.9		39.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	2%	1%	2%	2%	3%	1%
Adj. Flow (vph)	269	420	321	94	77	162
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	689	415	0	239	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.89	0.89	1.01	1.01	0.97	0.97
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		2	
Detector Template	Left					
Leading Detector (ft)	20	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					

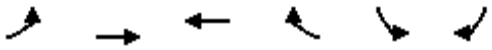


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	10.0	10.0	23.0		10.0	
Total Split (s)	20.0	75.0	55.0		35.0	
Total Split (%)	18.2%	68.2%	50.0%		31.8%	
Maximum Green (s)	15.0	70.0	50.0		30.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	Max	C-Max	C-Max		None	
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)		85.6	50.0		14.4	
Actuated g/C Ratio		0.78	0.45		0.13	
v/c Ratio		0.67	0.50		0.79	
Control Delay		9.5	22.9		44.8	
Queue Delay		1.2	0.0		0.0	
Total Delay		10.8	22.9		44.8	
LOS		B	C		D	
Approach Delay		10.8	22.9		44.8	
Approach LOS		B	C		D	
Queue Length 50th (ft)		148	193		100	
Queue Length 95th (ft)		371	270		164	
Internal Link Dist (ft)		237	885		1656	
Turn Bay Length (ft)						
Base Capacity (vph)		1035	823		533	
Starvation Cap Reductn		163	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.79	0.50		0.45	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 60: Suffern Lane & Hammond Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	95	139	262	38	10
Future Volume (vph)	40	95	139	262	38	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.912		0.972	
Flt Protected		0.985			0.962	
Satd. Flow (prot)	0	1802	1633	0	1726	0
Flt Permitted		0.985			0.962	
Satd. Flow (perm)	0	1802	1633	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	41	98	143	270	39	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	139	413	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	95	139	262	38	10
Future Vol, veh/h	40	95	139	262	38	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	41	98	143	270	39	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	413	0	-	0	458	278
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	180	-
Critical Hdwy	4.1	-	-	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1157	-	-	-	579	772
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1157	-	-	-	558	772
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	864	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1157	-	-	-	592
HCM Lane V/C Ratio	0.036	-	-	-	0.084
HCM Control Delay (s)	8.2	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	121	12	40	342	59	232
Future Volume (vph)	121	12	40	342	59	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.892	
Flt Protected				0.995	0.990	
Satd. Flow (prot)	1798	0	0	1848	1630	0
Flt Permitted				0.995	0.990	
Satd. Flow (perm)	1798	0	0	1848	1630	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	2%	0%	0%
Adj. Flow (vph)	126	13	42	356	61	242
Shared Lane Traffic (%)						
Lane Group Flow (vph)	139	0	0	398	303	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

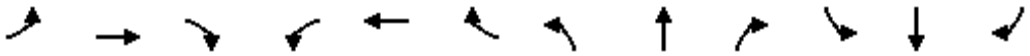
Intersection	
Int Delay, s/veh	4.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	121	12	40	342	59	232
Future Vol, veh/h	121	12	40	342	59	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	126	13	42	356	61	242

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	139	0	573	133
Stage 1	-	-	-	-	133	-
Stage 2	-	-	-	-	440	-
Critical Hdwy	-	-	4.1	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1457	-	500	925
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	670	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	482	925
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	646	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	780	-	-	1457	-
HCM Lane V/C Ratio	0.389	-	-	0.029	-
HCM Control Delay (s)	12.5	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.1	-



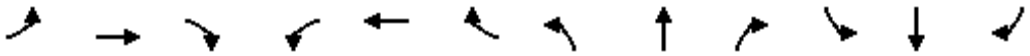
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	297	32	85	324	10	42	5	84	12	10	16
Future Volume (vph)	24	297	32	85	324	10	42	5	84	12	10	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.997			0.913			0.943	
Flt Protected		0.997			0.990			0.984			0.984	
Satd. Flow (prot)	0	1900	0	0	1792	0	0	1562	0	0	1747	0
Flt Permitted		0.957			0.850			0.901			0.910	
Satd. Flow (perm)	0	1824	0	0	1539	0	0	1430	0	0	1616	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			2			88			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	5%	8%	2%	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	25	309	33	89	338	10	44	5	88	13	10	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	367	0	0	437	0	0	137	0	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.39			0.55			0.26			0.07	
Control Delay		12.3			15.6			9.6			12.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.3			15.6			9.6			12.7	
Queue Length 50th (ft)		96			131			16			7	
Queue Length 95th (ft)		155			214			55			28	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		952			800			523			536	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.55			0.26			0.07	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

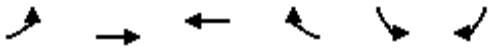




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	24	297	32	85	324	10	42	5	84	12	10	16
Future Volume (veh/h)	24	297	32	85	324	10	42	5	84	12	10	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2057	1982	1937	2027	2057	1761	1806	1746	2097	2097	2097
Adj Flow Rate, veh/h	25	309	33	89	338	10	44	5	88	12	10	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	5	8	2	0	3	0	4	0	0	0
Cap, veh/h	83	900	92	205	762	21	189	46	312	204	182	251
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	64	1732	177	286	1467	41	393	142	960	439	561	773
Grp Volume(v), veh/h	367	0	0	437	0	0	137	0	0	39	0	0
Grp Sat Flow(s),veh/h/ln	1973	0	0	1794	0	0	1495	0	0	1773	0	0
Q Serve(g_s), s	0.0	0.0	0.0	2.5	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	0.0	10.7	0.0	0.0	4.9	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.07		0.09	0.20		0.02	0.32		0.64	0.31		0.44
Lane Grp Cap(c), veh/h	1075	0	0	988	0	0	547	0	0	637	0	0
V/C Ratio(X)	0.34	0.00	0.00	0.44	0.00	0.00	0.25	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1075	0	0	988	0	0	547	0	0	637	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.9	0.0	0.0	11.4	0.0	0.0	19.2	0.0	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.4	0.0	0.0	1.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	4.5	0.0	0.0	1.9	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	0.0	0.0	12.8	0.0	0.0	20.3	0.0	0.0	18.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		367			437			137			39	
Approach Delay, s/veh		11.7			12.8			20.3			18.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	129	126	1
Future Volume (vph)	2	1	1	129	126	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.866		0.999	
Flt Protected		0.968			0.953	
Satd. Flow (prot)	0	1872	1646	0	1730	0
Flt Permitted		0.968			0.953	
Satd. Flow (perm)	0	1872	1646	0	1730	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	5%	7%	0%
Adj. Flow (vph)	2	1	1	143	140	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3	144	0	141	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

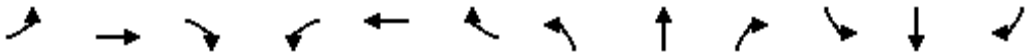
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	129	126	1
Future Vol, veh/h	2	1	1	129	126	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	5	7	0
Mvmt Flow	2	1	1	143	140	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	144	0	-	0	78	73
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.1	-	-	-	6.87	6.4
Critical Hdwy Stg 1	-	-	-	-	5.87	-
Critical Hdwy Stg 2	-	-	-	-	5.87	-
Follow-up Hdwy	2.2	-	-	-	3.563	3.3
Pot Cap-1 Maneuver	1451	-	-	-	905	991
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1451	-	-	-	904	991
Mov Cap-2 Maneuver	-	-	-	-	904	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	5	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1451	-	-	-	905
HCM Lane V/C Ratio	0.002	-	-	-	0.156
HCM Control Delay (s)	7.5	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	89	35	3	84	2	42	3	1	3	4	4
Future Volume (vph)	3	89	35	3	84	2	42	3	1	3	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.963			0.997			0.997			0.948	
Flt Protected		0.999			0.999			0.956			0.989	
Satd. Flow (prot)	0	1701	0	0	1689	0	0	1616	0	0	1696	0
Flt Permitted		0.999			0.999			0.956			0.989	
Satd. Flow (perm)	0	1701	0	0	1689	0	0	1616	0	0	1696	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	6%	6%	33%	6%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	102	40	3	97	2	48	3	1	3	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	0	0	102	0	0	52	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	89	35	3	84	2	42	3	1	3	4	4
Future Vol, veh/h	3	89	35	3	84	2	42	3	1	3	4	4
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	6	6	33	6	0	5	0	0	0	0	0
Mvmt Flow	3	102	40	3	97	2	48	3	1	3	5	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	8.5	8.1	7.4
HCM LOS	A	A	A	A

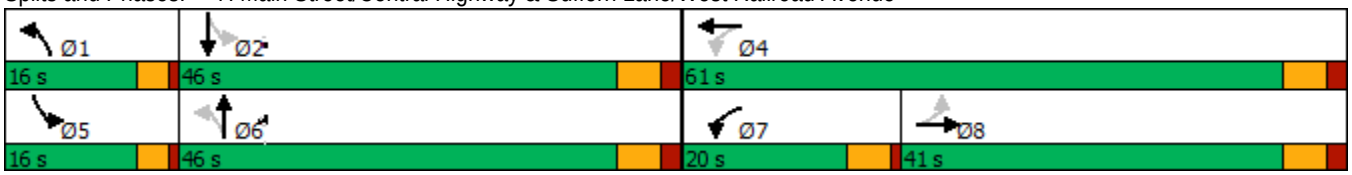
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	91%	2%	3%	27%
Vol Thru, %	7%	70%	94%	36%
Vol Right, %	2%	28%	2%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	127	89	11
LT Vol	42	3	3	3
Through Vol	3	89	84	4
RT Vol	1	35	2	4
Lane Flow Rate	53	146	102	13
Geometry Grp	1	1	1	1
Degree of Util (X)	0.069	0.159	0.133	0.015
Departure Headway (Hd)	4.728	3.93	4.68	4.359
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	762	898	758	826
Service Time	2.728	2.019	2.758	2.361
HCM Lane V/C Ratio	0.07	0.163	0.135	0.016
HCM Control Delay	8.1	7.8	8.5	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.5	0

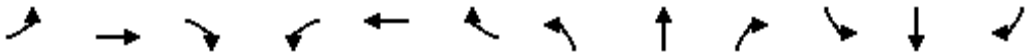
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	49	86	228	47	68	53	290	143	67	209	25
Future Volume (vph)	35	49	86	228	47	68	53	290	143	67	209	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00	0.99		1.00	1.00	
Frt		0.932			0.911			0.950			0.984	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1779	0	1702	1648	0	1805	1751	0	1762	1758	0
Flt Permitted		0.900		0.437			0.571			0.248		
Satd. Flow (perm)	0	1617	0	783	1648	0	1083	1751	0	460	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			72			21			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	3%	1%	0%	0%	0%	3%	1%	0%	4%	0%
Adj. Flow (vph)	37	52	91	240	49	72	56	305	151	71	220	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	180	0	240	121	0	56	456	0	71	246	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.59		0.51	0.18		0.11	0.79		0.22	0.41	
Control Delay		35.4		23.6	10.0		13.0	36.0		14.1	23.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		35.4		23.6	10.0		13.0	36.0		14.1	23.8	
Queue Length 50th (ft)		69		87	16		15	209		20	97	
Queue Length 95th (ft)		156		180	59		38	368		46	181	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		720		486	1138		625	872		415	875	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.25		0.49	0.11		0.09	0.52		0.17	0.28	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 84.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

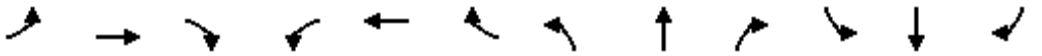




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	49	86	228	47	68	53	290	143	67	209	25
Future Volume (veh/h)	35	49	86	228	47	68	53	290	143	67	209	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2136	2136	2091	1832	1847	1847	1900	1856	1885	1979	1919	1979
Adj Flow Rate, veh/h	37	52	91	240	49	72	56	305	151	71	220	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	1	0	0	0	3	1	0	4	0
Cap, veh/h	102	93	132	534	244	358	500	381	188	335	547	65
Arrive On Green	0.14	0.14	0.14	0.14	0.36	0.36	0.07	0.33	0.33	0.07	0.33	0.33
Sat Flow, veh/h	260	652	933	1745	676	993	1810	1170	579	1884	1683	199
Grp Volume(v), veh/h	180	0	0	240	0	121	56	0	456	71	0	246
Grp Sat Flow(s),veh/h/ln	1845	0	0	1745	0	1668	1810	0	1749	1884	0	1882
Q Serve(g_s), s	3.3	0.0	0.0	7.3	0.0	3.3	1.3	0.0	15.9	1.6	0.0	6.8
Cycle Q Clear(g_c), s	6.1	0.0	0.0	7.3	0.0	3.3	1.3	0.0	15.9	1.6	0.0	6.8
Prop In Lane	0.21		0.51	1.00		0.60	1.00		0.33	1.00		0.11
Lane Grp Cap(c), veh/h	327	0	0	534	0	602	500	0	569	335	0	612
V/C Ratio(X)	0.55	0.00	0.00	0.45	0.00	0.20	0.11	0.00	0.80	0.21	0.00	0.40
Avail Cap(c_a), veh/h	1012	0	0	673	0	1371	689	0	1045	532	0	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	18.1	0.0	14.7	12.8	0.0	20.6	14.6	0.0	17.5
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.2	0.0	0.2	0.0	0.0	3.8	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	2.8	0.0	1.2	0.5	0.0	6.5	0.6	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	0.0	0.0	18.4	0.0	15.0	12.8	0.0	24.4	14.7	0.0	18.1
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h		180			361			512			317	
Approach Delay, s/veh		29.3			17.2			23.1			17.4	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	27.8		30.2	9.0	27.8	14.7	15.5				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	3.3	8.8		5.3	3.6	17.9	9.3	8.1				
Green Ext Time (p_c), s	0.1	2.0		1.0	0.1	3.8	0.4	1.4				

Intersection Summary			
HCM 6th Ctrl Delay		21.0	
HCM 6th LOS		C	

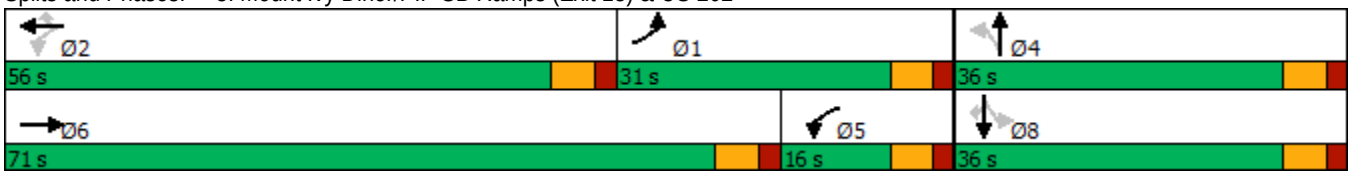


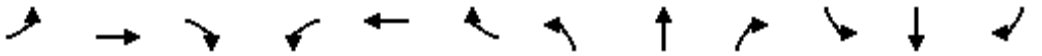
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	418	9	9	356	518	6	2	13	138	5	74
Future Volume (vph)	58	418	9	9	356	518	6	2	13	138	5	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				1.00				0.98
Frt		0.997				0.850		0.914				0.850
Flt Protected	0.950			0.950				0.987			0.954	
Satd. Flow (prot)	1734	1802	0	1832	1891	1623	0	1740	0	0	1761	1553
Flt Permitted	0.950			0.388				0.909			0.717	
Satd. Flow (perm)	1734	1802	0	746	1891	1623	0	1602	0	0	1323	1519
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				557		14				133
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			7	7			1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	3%	0%	0%	2%	1%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	62	449	10	10	383	557	6	2	14	148	5	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	459	0	10	383	557	0	22	0	0	153	80
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.25	0.50		0.02	0.51	0.57		0.06			0.49	0.17
Control Delay	29.8	13.0		8.6	18.6	4.3		14.8			28.3	2.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	29.8	13.0		8.6	18.6	4.3		14.8			28.3	2.2
Queue Length 50th (ft)	20	81		2	109	0		2			47	0
Queue Length 95th (ft)	65	261		8	233	61		21			124	10
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	824	1711		647	1589	1452		920			754	923
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.08	0.27		0.02	0.24	0.38		0.02			0.20	0.09

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 57.4	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





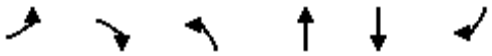
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	418	9	9	356	518	6	2	13	138	5	74
Future Volume (veh/h)	58	418	9	9	356	518	6	2	13	138	5	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1761	1806	2018	1988	2003	2018	2018	2018	1939	1939	1924
Adj Flow Rate, veh/h	62	449	10	10	383	0	6	2	14	148	5	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	0	0	2	1	0	0	0	0	0	1
Cap, veh/h	245	588	13	356	539		147	58	162	377	7	
Arrive On Green	0.15	0.34	0.34	0.07	0.27	0.00	0.14	0.14	0.14	0.14	0.14	0.00
Sat Flow, veh/h	1692	1716	38	1922	1988	1697	241	413	1145	1437	49	1631
Grp Volume(v), veh/h	62	0	459	10	383	0	22	0	0	153	0	0
Grp Sat Flow(s),veh/h/ln	1692	0	1754	1922	1988	1697	1799	0	0	1485	0	1631
Q Serve(g_s), s	1.3	0.0	9.5	0.0	7.1	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	9.5	0.0	7.1	0.0	0.4	0.0	0.0	4.0	0.0	0.0
Prop In Lane	1.00		0.02	1.00		1.00	0.27		0.64	0.97		1.00
Lane Grp Cap(c), veh/h	245	0	602	356	539		367	0	0	384	0	
V/C Ratio(X)	0.25	0.00	0.76	0.03	0.71		0.06	0.00	0.00	0.40	0.00	
Avail Cap(c_a), veh/h	1039	0	2802	688	2443		1363	0	0	1252	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.4	0.0	11.9	16.2	13.4	0.0	15.2	0.0	0.0	16.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.0	0.0	1.7	0.0	0.1	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.8	0.1	2.5	0.0	0.2	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	0.0	13.9	16.3	15.1	0.0	15.3	0.0	0.0	17.3	0.0	0.0
LnGrp LOS	B	A	B	B	B		B	A	A	B	A	
Approach Vol, veh/h		521			393			22			153	
Approach Delay, s/veh		14.2			15.2			15.3			17.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	17.0		11.8	9.0	20.0		11.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	3.3	9.1		2.4	2.0	11.5		6.0				
Green Ext Time (p_c), s	0.2	2.0		0.1	0.0	2.5		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		15.0	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	142	229	0	157	284	0
Future Volume (vph)	142	229	0	157	284	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.917					
Flt Protected	0.981					
Satd. Flow (prot)	1860	0	0	1878	1863	0
Flt Permitted	0.981					
Satd. Flow (perm)	1860	0	0	1878	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	3%	0%
Adj. Flow (vph)	151	244	0	167	302	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	395	0	0	167	302	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

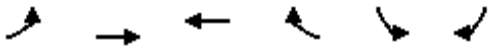
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	142	229	0	157	284	0
Future Vol, veh/h	142	229	0	157	284	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	151	244	0	167	302	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	469	302	-	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Critical Hdwy	5.6	5.8	-	-	-	-
Critical Hdwy Stg 1	4.6	-	-	-	-	-
Critical Hdwy Stg 2	4.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	618	768	0	-	-	0
Stage 1	807	-	0	-	-	0
Stage 2	900	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	618	768	-	-	-	-
Mov Cap-2 Maneuver	618	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	900	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1244	-
HCM Lane V/C Ratio	-	0.317	-
HCM Control Delay (s)	-	9.2	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.4	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	39	347	204	17	2	40
Future Volume (vph)	39	347	204	17	2	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.871	
Flt Protected		0.995			0.998	
Satd. Flow (prot)	0	1679	1797	0	1378	0
Flt Permitted		0.995			0.998	
Satd. Flow (perm)	0	1679	1797	0	1378	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	4%	0%	0%	13%
Adj. Flow (vph)	42	377	222	18	2	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	419	240	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

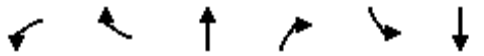
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	347	204	17	2	40
Future Vol, veh/h	39	347	204	17	2	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	5	4	0	0	13
Mvmt Flow	42	377	222	18	2	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	240	0	-	0	692	231
Stage 1	-	-	-	-	231	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	4.1	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1339	-	-	-	429	787
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	656	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1339	-	-	-	412	787
Mov Cap-2 Maneuver	-	-	-	-	412	-
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	656	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1339	-	-	-	754
HCM Lane V/C Ratio	0.032	-	-	-	0.061
HCM Control Delay (s)	7.8	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	95	50	285	64	101	126
Future Volume (vph)	95	50	285	64	101	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.953		0.975			
Flt Protected	0.968					0.978
Satd. Flow (prot)	1778	0	1738	0	0	1621
Flt Permitted	0.968					0.978
Satd. Flow (perm)	1778	0	1738	0	0	1621
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			499
Travel Time (s)	12.3		18.6			11.3
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	1%	5%	7%	2%	3%	33%
Adj. Flow (vph)	114	60	343	77	122	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	174	0	420	0	0	274
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	50	285	64	101	126
Future Vol, veh/h	95	50	285	64	101	126
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	5	7	2	3	33
Mvmt Flow	114	60	343	77	122	152

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	779	382	0	0	420	0
Stage 1	382	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.21	6.15	-	-	4.13	-
Critical Hdwy Stg 1	5.21	-	-	-	-	-
Critical Hdwy Stg 2	5.21	-	-	-	-	-
Follow-up Hdwy	3.509	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	382	666	-	-	1134	-
Stage 1	707	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	337	666	-	-	1134	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	614	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.4	0	3.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	406	1134	-
HCM Lane V/C Ratio	-	-	0.43	0.107	-
HCM Control Delay (s)	-	-	20.4	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.1	0.4	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	69	24	203	59	30	305
Future Volume (vph)	69	24	203	59	30	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	14	14	10	10
Grade (%)	1%			4%	5%	
Storage Length (ft)		0	0		0	65
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965					0.850
Flt Protected				0.963	0.950	
Satd. Flow (prot)	1848	0	0	1875	1610	1441
Flt Permitted				0.701	0.950	
Satd. Flow (perm)	1848	0	0	1365	1610	1441
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21					367
Link Speed (mph)	30			30	30	
Link Distance (ft)	857			317	499	
Travel Time (s)	19.5			7.2	11.3	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	83	29	245	71	36	367
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	316	36	367
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	0.94	0.94	1.13	1.13
Turning Speed (mph)		9	15		15	9
Number of Detectors	0		1	0	2	2
Detector Template			Left			
Leading Detector (ft)	0		20	0	83	83
Trailing Detector (ft)	0		0	0	-5	-5
Detector 1 Position(ft)	0		0	0	-5	-5
Detector 1 Size(ft)	6		20	6	40	40
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0
Turn Type	NA		pm+pt	NA	Prot	Perm

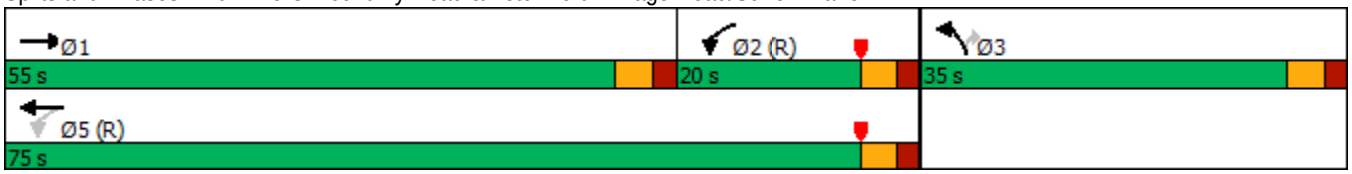


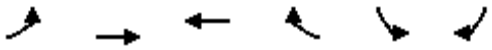
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Protected Phases	1		2	5	3	
Permitted Phases			5			3
Detector Phase	1		2	5	3	3
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	10.0	10.0	10.0
Total Split (s)	55.0		20.0	75.0	35.0	35.0
Total Split (%)	50.0%		18.2%	68.2%	31.8%	31.8%
Maximum Green (s)	50.0		15.0	70.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	Max		C-Max	C-Max	None	None
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					11.0	11.0
Pedestrian Calls (#/hr)					2	2
Act Effct Green (s)	70.6			90.6	9.4	9.4
Actuated g/C Ratio	0.64			0.82	0.09	0.09
v/c Ratio	0.09			0.26	0.26	0.80
Control Delay	7.3			3.6	49.2	18.6
Queue Delay	0.0			0.5	0.0	0.1
Total Delay	7.3			4.1	49.2	18.6
LOS	A			A	D	B
Approach Delay	7.3			4.1	21.4	
Approach LOS	A			A	C	
Queue Length 50th (ft)	21			18	25	0
Queue Length 95th (ft)	50			90	47	55
Internal Link Dist (ft)	777			237	419	
Turn Bay Length (ft)						65
Base Capacity (vph)	1193			1194	439	659
Starvation Cap Reductn	0			490	0	0
Spillback Cap Reductn	15			0	0	11
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.10			0.45	0.08	0.57

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBL and 5:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 33.5%		ICU Level of Service A	

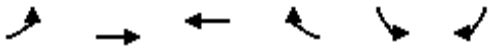
Analysis Period (min) 15

Splits and Phases: 6: Thiells-Mount Ivy Road & Letchworth Village Road/Suffern Lane





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	68	451	591	108	226	292						
Future Volume (vph)	68	451	591	108	226	292						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1770	3539	1891	1607	1796	1591						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1770	3539	1891	1607	1796	1591						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						224						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98						
Heavy Vehicles (%)	2%	2%	2%	2%	1%	2%						
Adj. Flow (vph)	69	460	603	110	231	298						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	460	603	110	231	298						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						

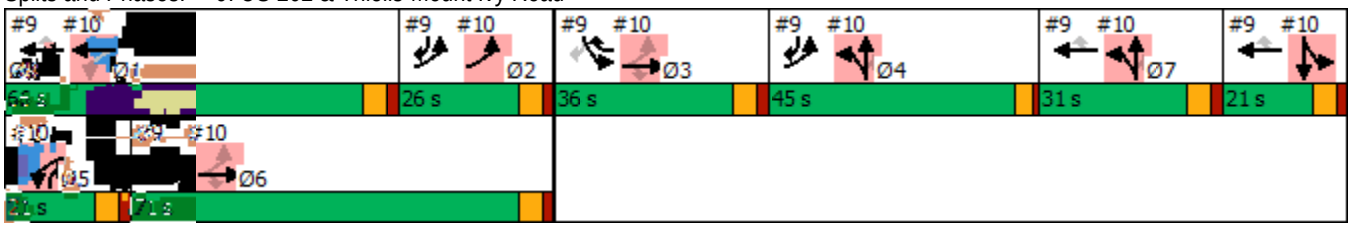


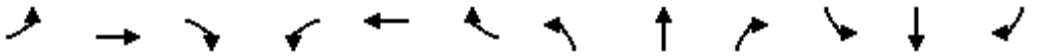
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							1		0			
Act Effct Green (s)	14.2	65.9	107.7	136.2	28.5	54.7						
Actuated g/C Ratio	0.08	0.38	0.62	0.78	0.16	0.31						
v/c Ratio	0.48	0.34	0.52	0.09	0.79	0.46						
Control Delay	59.4	40.5	5.8	1.6	90.4	14.3						
Queue Delay	0.0	0.0	1.6	0.2	0.0	0.0						
Total Delay	59.4	40.5	7.5	1.8	90.4	14.3						
LOS	E	D	A	A	F	B						
Approach Delay		42.9	6.6		47.5							
Approach LOS		D	A		D							
Queue Length 50th (ft)	58	205	143	4	260	63						
Queue Length 95th (ft)	102	265	226	m13	#420	156						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	234	1361	1150	1269	310	935						
Starvation Cap Reductn	0	0	360	702	0	0						
Spillback Cap Reductn	0	0	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.29	0.34	0.76	0.19	0.75	0.32						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 174.5			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 29.7		Intersection LOS: C	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

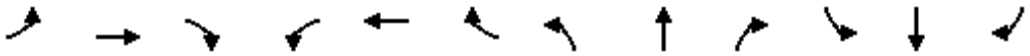
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	492	177	28	535	0	129	1	133	4	7	16
Future Volume (vph)	8	492	177	28	535	0	129	1	133	4	7	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.918	
Flt Protected	0.950			0.950			0.950	0.953			0.993	
Satd. Flow (prot)	1778	1835	1575	1762	1909	0	1674	1680	1623	0	1656	0
Flt Permitted	0.272			0.219			0.950	0.953			0.993	
Satd. Flow (perm)	509	1835	1575	406	1909	0	1674	1680	1623	0	1656	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115						139		17	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	4%	1%	0%	5%	0%	2%	25%	0%	0%
Adj. Flow (vph)	8	513	184	29	557	0	134	1	139	4	7	17
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	8	513	184	29	557	0	67	68	139	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					1							
Act Effct Green (s)	94.4	100.4	100.4	60.3	60.3		35.6	35.6	39.1		10.9	
Actuated g/C Ratio	0.54	0.58	0.58	0.35	0.35		0.20	0.20	0.22		0.06	
v/c Ratio	0.02	0.49	0.19	0.16	0.85		0.20	0.20	0.30		0.24	
Control Delay	3.6	5.7	0.6	44.1	67.0		62.2	62.3	7.2		47.2	
Queue Delay	0.0	0.3	0.6	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	3.6	6.0	1.2	44.1	67.0		62.2	62.3	7.2		47.2	
LOS	A	A	A	D	E		E	E	A		D	
Approach Delay		4.7			65.9			34.3			47.2	
Approach LOS		A			E			C			D	
Queue Length 50th (ft)	0	91	0	23	609		69	70	0		12	
Queue Length 95th (ft)	m1	101	m0	54	#900		130	131	52		50	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	435	1059	957	257	659		346	348	552		158	
Starvation Cap Reductn	0	143	481	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0		0	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.56	0.39	0.11	0.85		0.19	0.20	0.25		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 174.5			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 33.0		Intersection LOS: C	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

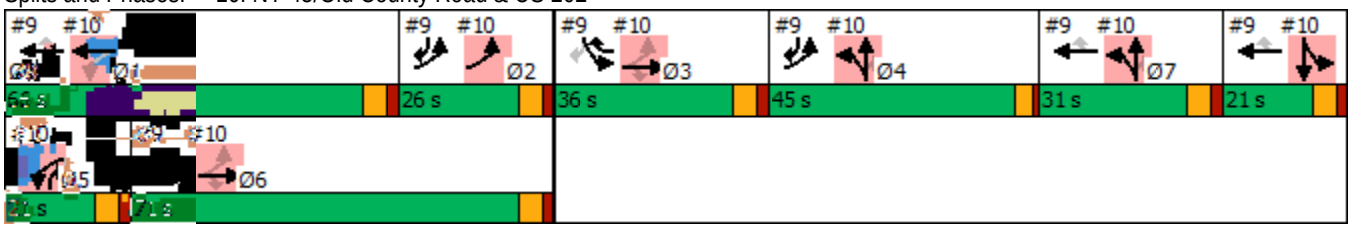
Intersection Capacity Utilization 53.3% ICU Level of Service A

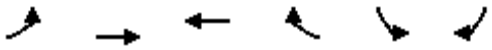
Analysis Period (min) 15

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

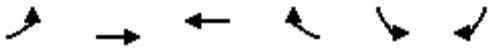
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	146	228	174	51	42	88
Future Volume (vph)	146	228	174	51	42	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	13	13	12	12
Grade (%)		-4%	8%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.970		0.909	
Flt Protected		0.981			0.984	
Satd. Flow (prot)	0	1988	1792	0	1699	0
Flt Permitted		0.657			0.984	
Satd. Flow (perm)	0	1332	1792	0	1699	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			17		94	
Link Speed (mph)		30	30		30	
Link Distance (ft)		317	965		1736	
Travel Time (s)		7.2	21.9		39.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	176	275	210	61	51	106
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	451	271	0	157	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.89	0.89	1.01	1.01	0.97	0.97
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		2	
Detector Template	Left					
Leading Detector (ft)	20	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	

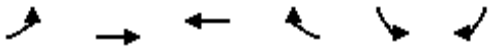


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	10.0	10.0	23.0		10.0	
Total Split (s)	20.0	75.0	55.0		35.0	
Total Split (%)	18.2%	68.2%	50.0%		31.8%	
Maximum Green (s)	15.0	70.0	50.0		30.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	Max	C-Max	C-Max		None	
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)		90.7	50.0		9.3	
Actuated g/C Ratio		0.82	0.45		0.08	
v/c Ratio		0.34	0.33		0.69	
Control Delay		3.8	19.3		35.9	
Queue Delay		1.2	0.0		0.0	
Total Delay		4.9	19.3		35.9	
LOS		A	B		D	
Approach Delay		4.9	19.3		35.9	
Approach LOS		A	B		D	
Queue Length 50th (ft)		43	111		43	
Queue Length 95th (ft)		163	157		91	
Internal Link Dist (ft)		237	885		1656	
Turn Bay Length (ft)						
Base Capacity (vph)		1311	823		531	
Starvation Cap Reductn		612	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.65	0.33		0.30	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 60: Suffern Lane & Hammond Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	136	130	351	125	16
Future Volume (vph)	91	136	130	351	125	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.901		0.985	
Flt Protected		0.980			0.957	
Satd. Flow (prot)	0	1696	1560	0	1695	0
Flt Permitted		0.980			0.957	
Satd. Flow (perm)	0	1696	1560	0	1695	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	10%	14%	1%	3%	0%
Adj. Flow (vph)	99	148	141	382	136	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	247	523	0	153	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	91	136	130	351	125	16
Future Vol, veh/h	91	136	130	351	125	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	10	14	1	3	0
Mvmt Flow	99	148	141	382	136	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	523	0	-	0	678	332
Stage 1	-	-	-	-	332	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.13	-	-	-	6.23	6.1
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.3
Pot Cap-1 Maneuver	1038	-	-	-	432	721
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1038	-	-	-	387	721
Mov Cap-2 Maneuver	-	-	-	-	387	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	SB
HCM Control Delay, s	3.5	0	19
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1038	-	-	-	408
HCM Lane V/C Ratio	0.095	-	-	-	0.376
HCM Control Delay (s)	8.8	0	-	-	19
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.7



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	244	17	43	456	25	221
Future Volume (vph)	244	17	43	456	25	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.879	
Flt Protected				0.996	0.995	
Satd. Flow (prot)	1710	0	0	1814	1586	0
Flt Permitted				0.996	0.995	
Satd. Flow (perm)	1710	0	0	1814	1586	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	0%	2%	4%	0%	2%
Adj. Flow (vph)	271	19	48	507	28	246
Shared Lane Traffic (%)						
Lane Group Flow (vph)	290	0	0	555	274	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	244	17	43	456	25	221
Future Vol, veh/h	244	17	43	456	25	221
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	0	2	4	0	2
Mvmt Flow	271	19	48	507	28	246

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	290	0	884	281
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	603	-
Critical Hdwy	-	-	4.12	-	6.2	6.12
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1272	-	334	764
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	569	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1272	-	316	764
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	668	-	-	1272	-
HCM Lane V/C Ratio	0.409	-	-	0.038	-
HCM Control Delay (s)	14.1	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.1	-

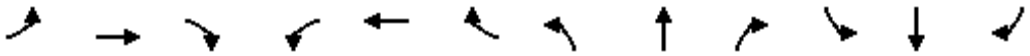
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	287	148	60	397	5	77	5	41	9	15	25
Future Volume (vph)	31	287	148	60	397	5	77	5	41	9	15	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.957			0.999			0.955			0.931	
Flt Protected		0.997			0.994			0.970			0.991	
Satd. Flow (prot)	0	1773	0	0	1796	0	0	1479	0	0	1576	0
Flt Permitted		0.949			0.887			0.791			0.954	
Satd. Flow (perm)	0	1688	0	0	1603	0	0	1206	0	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			1			35			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	7%	14%	2%	0%	10%	20%	17%	0%	13%	12%
Adj. Flow (vph)	33	302	156	63	418	5	81	5	43	9	16	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	491	0	0	486	0	0	129	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.55			0.58			0.31			0.10	
Control Delay		14.0			16.3			16.7			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.0			16.3			16.7			11.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		133			150			33			8	
Queue Length 95th (ft)		218			242			76			31	
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		898			833			415			510	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.55			0.58			0.31			0.10	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

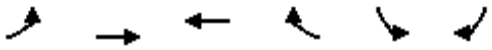




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	287	148	60	397	5	77	5	41	9	15	25
Future Volume (veh/h)	31	287	148	60	397	5	77	5	41	9	15	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2012	2012	1952	1847	2027	2057	1658	1509	1554	2097	1902	1917
Adj Flow Rate, veh/h	33	302	156	63	418	5	81	5	43	9	16	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	7	14	2	0	10	20	17	0	13	12
Cap, veh/h	84	619	304	137	875	10	304	29	128	117	205	277
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	66	1192	586	162	1684	19	701	88	395	191	630	854
Grp Volume(v), veh/h	491	0	0	486	0	0	129	0	0	51	0	0
Grp Sat Flow(s),veh/h/ln	1844	0	0	1866	0	0	1184	0	0	1676	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.9	0.0	0.0	11.7	0.0	0.0	6.1	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.07		0.32	0.13		0.01	0.63		0.33	0.18		0.51
Lane Grp Cap(c), veh/h	1008	0	0	1022	0	0	461	0	0	599	0	0
V/C Ratio(X)	0.49	0.00	0.00	0.48	0.00	0.00	0.28	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1008	0	0	1022	0	0	461	0	0	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	11.7	0.0	0.0	19.5	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	1.6	0.0	0.0	1.5	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	0.0	5.2	0.0	0.0	1.9	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	0.0	13.3	0.0	0.0	21.0	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		491			486			129			51	
Approach Delay, s/veh		13.7			13.3			21.0			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	193	273	97	155	69
Future Volume (vph)	26	193	273	97	155	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.965		0.958	
Flt Protected		0.994			0.967	
Satd. Flow (prot)	0	1498	1712	0	1618	0
Flt Permitted		0.994			0.967	
Satd. Flow (perm)	0	1498	1712	0	1618	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	16%	30%	13%	11%	11%	12%
Adj. Flow (vph)	34	254	359	128	204	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	288	487	0	295	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

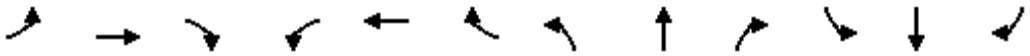
Intersection	
Int Delay, s/veh	11.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	193	273	97	155	69
Future Vol, veh/h	26	193	273	97	155	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	16	30	13	11	11	12
Mvmt Flow	34	254	359	128	204	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	487	0	-	0	745	423
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	322	-
Critical Hdwy	4.26	-	-	-	6.91	6.52
Critical Hdwy Stg 1	-	-	-	-	5.91	-
Critical Hdwy Stg 2	-	-	-	-	5.91	-
Follow-up Hdwy	2.344	-	-	-	3.599	3.408
Pot Cap-1 Maneuver	1007	-	-	-	339	596
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1007	-	-	-	326	596
Mov Cap-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	690	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	40.8
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1007	-	-	-	379
HCM Lane V/C Ratio	0.034	-	-	-	0.778
HCM Control Delay (s)	8.7	0	-	-	40.8
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	6.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	230	114	1	269	0	98	1	3	0	3	3
Future Volume (vph)	4	230	114	1	269	0	98	1	3	0	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956						0.996			0.932	
Flt Protected		0.999						0.954				
Satd. Flow (prot)	0	1476	0	0	1588	0	0	1547	0	0	1686	0
Flt Permitted		0.999						0.954				
Satd. Flow (perm)	0	1476	0	0	1588	0	0	1547	0	0	1686	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	25%	26%	11%	0%	14%	0%	7%	0%	67%	0%	0%	0%
Adj. Flow (vph)	5	277	137	1	324	0	118	1	4	0	4	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	419	0	0	325	0	0	123	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

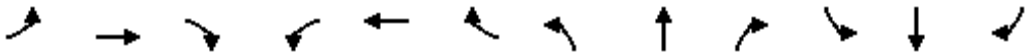
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	230	114	1	269	0	98	1	3	0	3	3
Future Vol, veh/h	4	230	114	1	269	0	98	1	3	0	3	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	25	26	11	0	14	0	7	0	67	0	0	0
Mvmt Flow	5	277	137	1	324	0	118	1	4	0	4	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.3	11.5	10.5	8.8
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	96%	1%	0%	0%
Vol Thru, %	1%	66%	100%	50%
Vol Right, %	3%	33%	0%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	102	348	270	6
LT Vol	98	4	1	0
Through Vol	1	230	269	3
RT Vol	3	114	0	3
Lane Flow Rate	123	419	325	7
Geometry Grp	1	1	1	1
Degree of Util (X)	0.205	0.569	0.431	0.011
Departure Headway (Hd)	6.006	4.884	4.775	5.689
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	601	734	748	632
Service Time	4.006	2.955	2.851	3.693
HCM Lane V/C Ratio	0.205	0.571	0.434	0.011
HCM Control Delay	10.5	14.3	11.5	8.8
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	0.8	3.6	2.2	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	61	90	257	144	212	72	153	98	79	139	52
Future Volume (vph)	82	61	90	257	144	212	72	153	98	79	139	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.948			0.953			0.959			0.974	
Flt Protected		0.983			0.979			0.989			0.986	
Satd. Flow (prot)	0	1889	0	0	1724	0	0	1723	0	0	1825	0
Flt Permitted		0.983			0.979			0.989			0.986	
Satd. Flow (perm)	0	1889	0	0	1724	0	0	1723	0	0	1825	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			785			1736	
Travel Time (s)		26.7			21.9			17.8			39.5	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	103	76	113	321	180	265	90	191	123	99	174	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	292	0	0	766	0	0	404	0	0	338	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

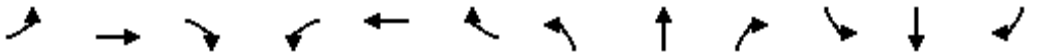
Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	16.3
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	290	766	403	338
Demand Flow Rate, veh/h	296	781	411	344
Vehicles Circulating, veh/h	605	391	283	603
Vehicles Exiting, veh/h	342	303	618	569
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.1	25.3	7.9	11.4
Approach LOS	B	D	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	296	781	411	344
Cap Entry Lane, veh/h	744	926	1034	746
Entry HV Adj Factor	0.981	0.981	0.981	0.981
Flow Entry, veh/h	290	766	403	338
Cap Entry, veh/h	731	909	1014	732
V/C Ratio	0.398	0.843	0.398	0.461
Control Delay, s/veh	10.1	25.3	7.9	11.4
LOS	B	D	A	B
95th %tile Queue, veh	2	10	2	2

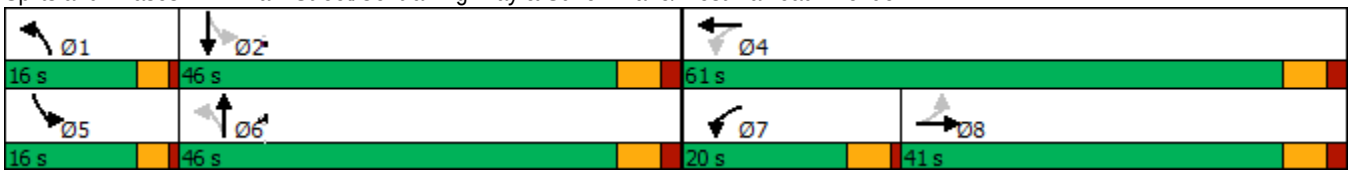


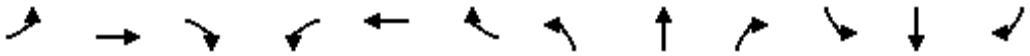
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	137	131	133	169	41	155	156	187	83	136	134
Future Volume (vph)	71	137	131	133	169	41	155	156	187	83	136	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	1.00							
Frt		0.948			0.971			0.918			0.926	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1662	0	1637	1417	0	1480	1640	0	1546	1488	0
Flt Permitted		0.873		0.380			0.370			0.336		
Satd. Flow (perm)	0	1465	0	654	1417	0	576	1640	0	547	1488	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			13			52			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	8%	13%	5%	26%	13%	22%	8%	5%	14%	10%	21%
Adj. Flow (vph)	75	144	138	140	178	43	163	164	197	87	143	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	357	0	140	221	0	163	361	0	87	284	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.82		0.32	0.33		0.49	0.75		0.31	0.72	
Control Delay		47.2		18.2	18.2		24.5	39.1		21.5	39.5	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		47.2		18.2	18.2		24.5	39.1		21.5	39.5	
Queue Length 50th (ft)		186		46	75		64	174		32	138	
Queue Length 95th (ft)		#407		108	169		123	318		70	250	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		587		475	873		359	759		351	687	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.61		0.29	0.25		0.45	0.48		0.25	0.41	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 95	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

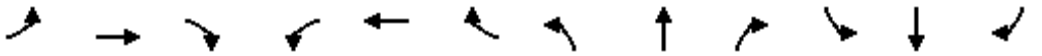




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	137	131	133	169	41	155	156	187	83	136	134
Future Volume (veh/h)	71	137	131	133	169	41	155	156	187	83	136	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2046	2016	1941	1773	1462	1654	1574	1781	1826	1769	1829	1663
Adj Flow Rate, veh/h	75	144	138	140	178	43	163	164	197	87	143	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	8	13	5	26	13	22	8	5	14	10	21
Cap, veh/h	133	204	174	454	478	115	347	205	247	293	204	201
Arrive On Green	0.26	0.26	0.26	0.09	0.42	0.42	0.11	0.28	0.28	0.07	0.24	0.24
Sat Flow, veh/h	273	785	667	1688	1137	275	1499	737	885	1684	845	833
Grp Volume(v), veh/h	357	0	0	140	0	221	163	0	361	87	0	284
Grp Sat Flow(s),veh/h/ln	1725	0	0	1688	0	1411	1499	0	1622	1684	0	1679
Q Serve(g_s), s	9.2	0.0	0.0	3.9	0.0	7.5	5.5	0.0	14.4	2.6	0.0	10.8
Cycle Q Clear(g_c), s	13.3	0.0	0.0	3.9	0.0	7.5	5.5	0.0	14.4	2.6	0.0	10.8
Prop In Lane	0.21		0.39	1.00		0.19	1.00		0.55	1.00		0.50
Lane Grp Cap(c), veh/h	511	0	0	454	0	593	347	0	452	293	0	404
V/C Ratio(X)	0.70	0.00	0.00	0.31	0.00	0.37	0.47	0.00	0.80	0.30	0.00	0.70
Avail Cap(c_a), veh/h	916	0	0	667	0	1112	440	0	930	462	0	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	0.0	14.7	0.0	13.9	17.2	0.0	23.4	18.5	0.0	24.2
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.1	0.0	0.6	0.4	0.0	4.6	0.2	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	1.4	0.0	2.3	1.8	0.0	5.7	1.0	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	0.0	14.9	0.0	14.4	17.6	0.0	28.0	18.7	0.0	27.4
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		357			361			524			371	
Approach Delay, s/veh		26.3			14.6			24.7			25.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	22.8		35.3	9.0	25.4	11.2	24.2				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	7.5	12.8		9.5	4.6	16.4	5.9	15.3				
Green Ext Time (p_c), s	0.2	2.4		1.9	0.1	3.0	0.2	2.9				

Intersection Summary												
HCM 6th Ctrl Delay			23.0									
HCM 6th LOS			C									

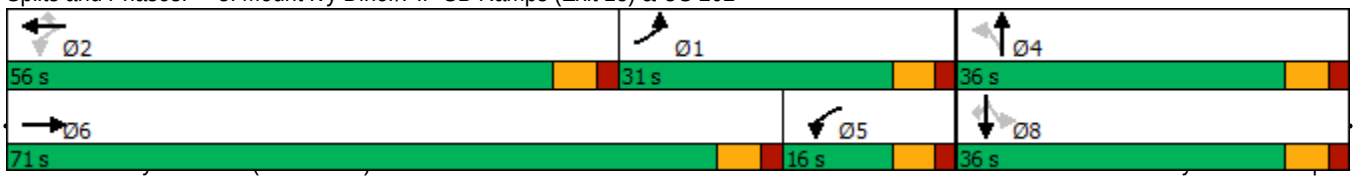


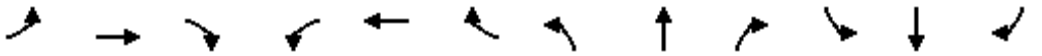
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	450	1	7	660	737	1	0	3	166	0	265
Future Volume (vph)	173	450	1	7	660	737	1	0	3	166	0	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.98			1.00	0.98
Frt						0.850		0.899				0.850
Flt Protected	0.950			0.950				0.988			0.950	
Satd. Flow (prot)	1653	1693	0	1420	1786	1576	0	1350	0	0	1566	1480
Flt Permitted	0.950			0.401				0.945			0.755	
Satd. Flow (perm)	1653	1693	0	598	1786	1576	0	1291	0	0	1242	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						606		133				279
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			4	4			2		1	1		2
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	10%	0%	29%	8%	4%	0%	0%	33%	12%	0%	6%
Adj. Flow (vph)	91	474	1	7	695	776	1	0	3	175	0	279
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	475	0	7	695	776	0	4	0	0	175	279
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Size(ft)	40	40		40	40			40			40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.45	0.46		0.02	0.78	0.71		0.01			0.66	0.53
Control Delay	50.3	14.5		10.9	29.4	9.0		0.0			48.9	8.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	50.3	14.5		10.9	29.4	9.0		0.0			48.9	8.2
Queue Length 50th (ft)	54	115		2	330	55		0			103	0
Queue Length 95th (ft)	114	381		7	#693	259		0			184	67
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	499	1239		423	1072	1188		552			449	701
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.18	0.38		0.02	0.65	0.65		0.01			0.39	0.40

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 90.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





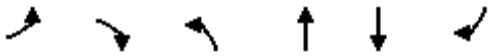
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	450	1	7	660	737	1	0	3	166	0	265
Future Volume (veh/h)	173	450	1	7	660	737	1	0	3	166	0	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1702	1658	1806	1583	1898	1958	2018	2018	1523	1759	1939	1849
Adj Flow Rate, veh/h	91	474	1	7	695	0	1	0	3	175	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	10	0	29	8	4	0	0	33	12	0	6
Cap, veh/h	153	569	1	452	826		115	33	208	352	0	
Arrive On Green	0.09	0.34	0.34	0.19	0.44	0.00	0.15	0.00	0.15	0.15	0.00	0.00
Sat Flow, veh/h	1621	1653	3	1507	1898	1659	232	217	1347	1461	0	1567
Grp Volume(v), veh/h	91	0	475	7	695	0	4	0	0	175	0	0
Grp Sat Flow(s),veh/h/ln	1621	0	1657	1507	1898	1659	1796	0	0	1461	0	1567
Q Serve(g_s), s	3.1	0.0	15.0	0.0	18.6	0.0	0.0	0.0	0.0	6.4	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	15.0	0.0	18.6	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.25		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	153	0	571	452	826		356	0	0	352	0	
V/C Ratio(X)	0.59	0.00	0.83	0.02	0.84		0.01	0.00	0.00	0.50	0.00	
Avail Cap(c_a), veh/h	712	0	1892	452	1667		972	0	0	895	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.7	0.0	17.1	16.3	14.3	0.0	20.4	0.0	0.0	23.1	0.0	0.0
Incr Delay (d2), s/veh	3.7	0.0	3.2	0.0	2.4	0.0	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.0	0.1	6.4	0.0	0.0	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	20.4	16.4	16.7	0.0	20.4	0.0	0.0	24.2	0.0	0.0
LnGrp LOS	C	A	C	B	B		C	A	A	C	A	
Approach Vol, veh/h		566			702			4			175	
Approach Delay, s/veh		21.7			16.7			20.4			24.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	30.8		14.8	16.5	25.6		14.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.1	20.6		2.1	2.0	17.0		8.5				
Green Ext Time (p_c), s	0.3	4.2		0.0	0.0	2.6		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		19.6
HCM 6th LOS		B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	122	258	0	171	636	0
Future Volume (vph)	122	258	0	171	636	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.908					
Flt Protected	0.984					
Satd. Flow (prot)	1793	0	0	1696	1919	0
Flt Permitted	0.984					
Satd. Flow (perm)	1793	0	0	1696	1919	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	0%	14%	0%	6%
Adj. Flow (vph)	127	269	0	178	663	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	396	0	0	178	663	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

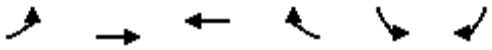
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	122	258	0	171	636	0
Future Vol, veh/h	122	258	0	171	636	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	0	14	0	6
Mvmt Flow	127	269	0	178	663	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	841	663	-	0	-	0
Stage 1	663	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Critical Hdwy	5.63	5.83	-	-	-	-
Critical Hdwy Stg 1	4.63	-	-	-	-	-
Critical Hdwy Stg 2	4.63	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	402	495	0	-	-	0
Stage 1	592	-	0	-	-	0
Stage 2	885	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	402	495	-	-	-	-
Mov Cap-2 Maneuver	402	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	885	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	729	-
HCM Lane V/C Ratio	-	0.543	-
HCM Control Delay (s)	-	15.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	3.3	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	130	295	519	40	13	116
Future Volume (vph)	130	295	519	40	13	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.878	
Flt Protected		0.985			0.995	
Satd. Flow (prot)	0	1598	1792	0	1334	0
Flt Permitted		0.985			0.995	
Satd. Flow (perm)	0	1598	1792	0	1334	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	9%	4%	4%	23%	16%
Adj. Flow (vph)	144	328	577	44	14	129
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	472	621	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	130	295	519	40	13	116
Future Vol, veh/h	130	295	519	40	13	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	9	4	4	23	16
Mvmt Flow	144	328	577	44	14	129

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	621	0	-	0	1215	599
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	616	-
Critical Hdwy	4.18	-	-	-	6.43	6.26
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.272	-	-	-	3.707	3.444
Pot Cap-1 Maneuver	931	-	-	-	194	485
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	931	-	-	-	157	485
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	518	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	931	-	-	-	401
HCM Lane V/C Ratio	0.155	-	-	-	0.357
HCM Control Delay (s)	9.6	0	-	-	18.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	1.6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	117	206	103	128	356
Future Volume (vph)	203	117	206	103	128	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.951		0.955			
Flt Protected	0.969					0.987
Satd. Flow (prot)	1725	0	1770	0	0	1857
Flt Permitted	0.969					0.987
Satd. Flow (perm)	1725	0	1770	0	0	1857
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			785
Travel Time (s)	12.3		18.6			17.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	127	224	112	139	387
Shared Lane Traffic (%)						
Lane Group Flow (vph)	348	0	336	0	0	526
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

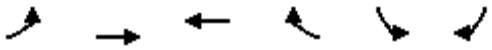
Intersection	
Int Delay, s/veh	25.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	117	206	103	128	356
Future Vol, veh/h	203	117	206	103	128	356
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	221	127	224	112	139	387

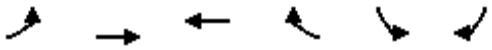
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	945	280	0	0	336	0
Stage 1	280	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Critical Hdwy	6.22	6.12	-	-	4.12	-
Critical Hdwy Stg 1	5.22	-	-	-	-	-
Critical Hdwy Stg 2	5.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	306	765	-	-	1223	-
Stage 1	779	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	765	-	-	1223	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	454	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	86.1	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	345	1223	-
HCM Lane V/C Ratio	-	-	1.008	0.114	-
HCM Control Delay (s)	-	-	86.1	8.3	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	11.6	0.4	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	85	506	788	95	278	616						
Future Volume (vph)	85	506	788	95	278	616						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					1.00							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3282	1786	1377	1680	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3282	1786	1377	1677	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						108						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					1							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	8%	10%	8%	19%	8%	3%						
Adj. Flow (vph)	89	527	821	99	290	642						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	527	821	99	290	642						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							3		1			
Act Effct Green (s)	30.8	72.7	99.5	133.7	34.2	77.0						
Actuated g/C Ratio	0.16	0.39	0.53	0.71	0.18	0.41						
v/c Ratio	0.33	0.42	0.87	0.10	0.95	0.91						
Control Delay	43.0	45.8	24.1	5.2	115.6	60.7						
Queue Delay	0.0	0.0	27.4	0.0	0.0	0.0						
Total Delay	43.0	45.8	51.5	5.2	115.6	60.7						
LOS	D	D	D	A	F	E						
Approach Delay		45.4	46.5		77.8							
Approach LOS		D	D		E							
Queue Length 50th (ft)	69	246	341	25	355	649						
Queue Length 95th (ft)	110	372	m445	m33	#655	846						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	272	1264	942	976	304	882						
Starvation Cap Reductn	0	0	157	0	0	0						
Spillback Cap Reductn	0	6	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.33	0.42	1.05	0.10	0.95	0.73						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 188.6			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 58.0		Intersection LOS: E	

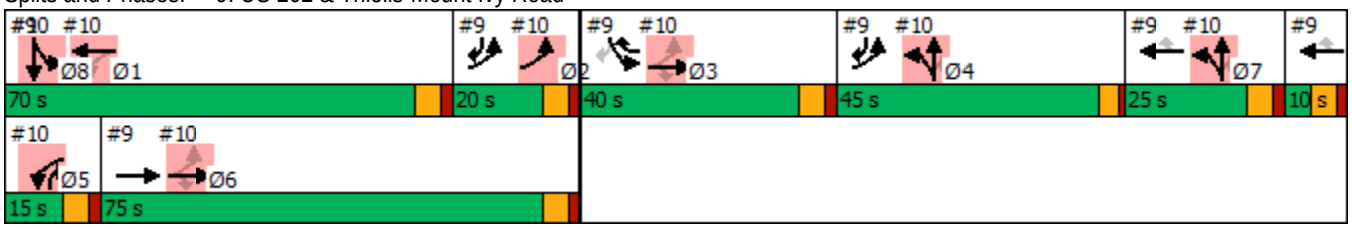
Intersection Capacity Utilization 89.6% ICU Level of Service E

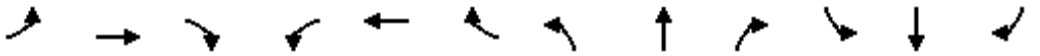
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

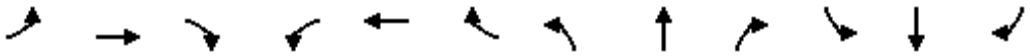
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	476	324	23	600	0	189	3	85	5	6	52
Future Volume (vph)	9	476	324	23	600	0	189	3	85	5	6	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.887	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1457	1717	1459	1466	1769	0	1583	1581	1505	0	1488	0
Flt Permitted	0.199			0.241			0.950	0.954			0.996	
Satd. Flow (perm)	305	1717	1459	372	1769	0	1583	1581	1505	0	1488	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			267						109		55	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	22%	9%	9%	25%	9%	0%	11%	33%	10%	0%	0%	14%
Adj. Flow (vph)	9	501	341	24	632	0	199	3	89	5	6	55
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	9	501	341	24	632	0	101	101	89	0	66	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					3							
Act Effct Green (s)	106.8	112.9	112.9	64.3	64.3		43.9	43.9	47.6		4.0	
Actuated g/C Ratio	0.57	0.60	0.60	0.34	0.34		0.23	0.23	0.25		0.02	
v/c Ratio	0.03	0.49	0.35	0.15	1.05		0.27	0.28	0.19		0.78	
Control Delay	5.9	6.1	1.0	48.6	107.4		59.8	59.8	3.5		74.5	
Queue Delay	0.0	0.4	0.6	0.0	0.0		1.8	1.8	0.0		10.4	
Total Delay	5.9	6.5	1.6	48.6	107.4		61.6	61.6	3.5		84.9	
LOS	A	A	A	D	F		E	E	A		F	
Approach Delay		4.6			105.2			43.8			84.9	
Approach LOS		A			F			D			F	
Queue Length 50th (ft)	0	34	0	20	~825		108	108	0		14	
Queue Length 95th (ft)	m2	m62	m0	51	#1298		169	169	24		#116	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	258	1027	980	179	603		368	367	485		85	
Starvation Cap Reductn	0	180	332	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		158	157	0		8	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.03	0.59	0.53	0.13	1.05		0.48	0.48	0.18		0.86	

Intersection Summary	
Area Type:	Other
Cycle Length: 210	
Actuated Cycle Length: 188.6	
Natural Cycle: 145	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.05	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		1		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

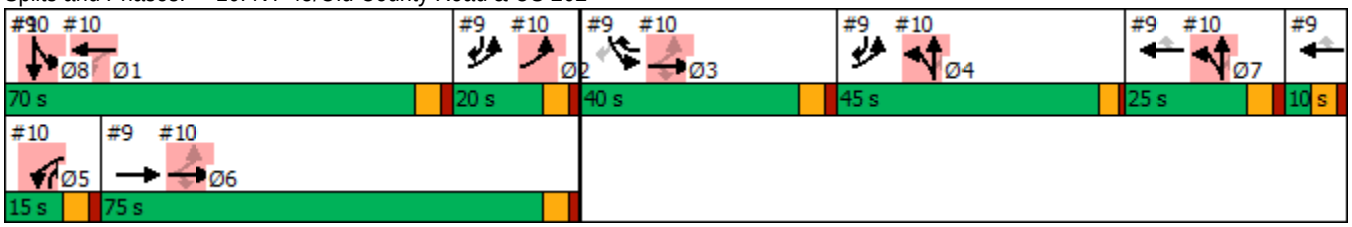
Intersection Signal Delay: 49.0	Intersection LOS: D
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

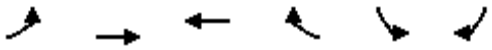
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	133	158	286	53	22
Future Volume (vph)	32	133	158	286	53	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.960	
Flt Protected		0.990			0.966	
Satd. Flow (prot)	0	1703	1581	0	1688	0
Flt Permitted		0.990			0.966	
Satd. Flow (perm)	0	1703	1581	0	1688	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	35	145	172	311	58	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	180	483	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	133	158	286	53	22
Future Vol, veh/h	32	133	158	286	53	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	35	145	172	311	58	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	483	0	-	0	543	328
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	215	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1074	-	-	-	516	725
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	831	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1074	-	-	-	498	725
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	831	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1074	-	-	-	548
HCM Lane V/C Ratio	0.032	-	-	-	0.149
HCM Control Delay (s)	8.5	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	168	18	97	383	60	367
Future Volume (vph)	168	18	97	383	60	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.884	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	1727	0	0	1814	1600	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	1727	0	0	1814	1600	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	4%	3%	3%	1%
Adj. Flow (vph)	175	19	101	399	63	382
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	0	0	500	445	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

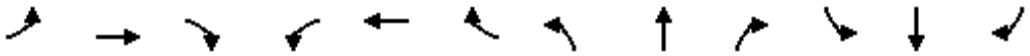
Intersection	
Int Delay, s/veh	7.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	168	18	97	383	60	367
Future Vol, veh/h	168	18	97	383	60	367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	4	3	3	1
Mvmt Flow	175	19	101	399	63	382

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	194	0	786	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	-	-	4.14	-	6.23	6.11
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.309
Pot Cap-1 Maneuver	-	-	1367	-	376	864
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	564	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1367	-	340	864
Mov Cap-2 Maneuver	-	-	-	-	340	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	510	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	18.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	710	-	-	1367	-
HCM Lane V/C Ratio	0.626	-	-	0.074	-
HCM Control Delay (s)	18.2	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	4.4	-	-	0.2	-



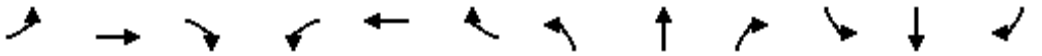
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	466	49	50	320	6	128	9	165	11	10	33
Future Volume (vph)	19	466	49	50	320	6	128	9	165	11	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.998			0.926			0.919	
Flt Protected		0.998			0.993			0.979			0.990	
Satd. Flow (prot)	0	1838	0	0	1733	0	0	1488	0	0	1713	0
Flt Permitted		0.980			0.877			0.836			0.913	
Satd. Flow (perm)	0	1805	0	0	1530	0	0	1271	0	0	1580	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1			84			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	16%	2%	18%	28%	4%	0%	6%	0%	13%	0%	0%	0%
Adj. Flow (vph)	20	491	52	53	337	6	135	9	174	12	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	563	0	0	396	0	0	318	0	0	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.60			0.50			0.68			0.11	
Control Delay		16.0			14.7			24.9			10.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.0			14.7			24.9			10.4	
Queue Length 50th (ft)		172			115			95			7	
Queue Length 95th (ft)		270			189			188			32	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		942			795			469			536	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.60			0.50			0.68			0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

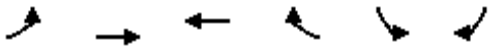




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	19	466	49	50	320	6	128	9	165	11	10	33
Future Volume (veh/h)	19	466	49	50	320	6	128	9	165	11	10	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	2027	1787	1637	1997	2057	1717	1806	1613	2097	2097	2097
Adj Flow Rate, veh/h	20	491	52	53	337	6	135	9	174	12	11	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	16	2	18	28	4	0	6	0	13	0	0	0
Cap, veh/h	64	913	95	137	847	14	243	38	259	141	148	355
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	31	1757	182	162	1631	28	544	116	798	261	457	1093
Grp Volume(v), veh/h	563	0	0	396	0	0	318	0	0	58	0	0
Grp Sat Flow(s),veh/h/ln	1970	0	0	1821	0	0	1458	0	0	1812	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0	9.2	0.0	0.0	14.3	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.04		0.09	0.13		0.02	0.42		0.55	0.21		0.60
Lane Grp Cap(c), veh/h	1072	0	0	999	0	0	540	0	0	645	0	0
V/C Ratio(X)	0.53	0.00	0.00	0.40	0.00	0.00	0.59	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1072	0	0	999	0	0	540	0	0	645	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	11.1	0.0	0.0	22.3	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.2	0.0	0.0	4.7	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	4.0	0.0	0.0	5.4	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	0.0	12.3	0.0	0.0	26.9	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		563			396			318			58	
Approach Delay, s/veh		14.2			12.3			26.9			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.9									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	133	117	71	169	107	3
Future Volume (vph)	133	117	71	169	107	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.905		0.996	
Flt Protected		0.974			0.954	
Satd. Flow (prot)	0	1615	1491	0	1560	0
Flt Permitted		0.974			0.954	
Satd. Flow (perm)	0	1615	1491	0	1560	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	11%	23%	50%	9%	18%	31%
Adj. Flow (vph)	171	150	91	217	137	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	321	308	0	141	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

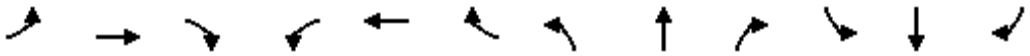
Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	133	117	71	169	107	3
Future Vol, veh/h	133	117	71	169	107	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	11	23	50	9	18	31
Mvmt Flow	171	150	91	217	137	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	308	0	-	0	692	201
Stage 1	-	-	-	-	200	-
Stage 2	-	-	-	-	492	-
Critical Hdwy	4.21	-	-	-	6.98	6.71
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.299	-	-	-	3.662	3.579
Pot Cap-1 Maneuver	1203	-	-	-	358	763
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	552	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1203	-	-	-	303	762
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	552	-

Approach	EB	WB	SB
HCM Control Delay, s	4.5	0	26.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1203	-	-	-	308
HCM Lane V/C Ratio	0.142	-	-	-	0.458
HCM Control Delay (s)	8.5	0	-	-	26.2
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.5	-	-	-	2.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	148	74	1	140	1	96	1	4	1	1	3
Future Volume (vph)	2	148	74	1	140	1	96	1	4	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.955			0.999			0.994			0.910	
Flt Protected								0.955			0.992	
Satd. Flow (prot)	0	1451	0	0	1473	0	0	1551	0	0	1400	0
Flt Permitted								0.955			0.992	
Satd. Flow (perm)	0	1451	0	0	1473	0	0	1551	0	0	1400	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	28%	14%	0%	23%	0%	9%	0%	0%	100%	0%	0%
Adj. Flow (vph)	2	176	88	1	167	1	114	1	5	1	1	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	169	0	0	120	0	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

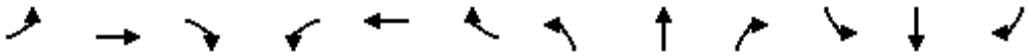
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	148	74	1	140	1	96	1	4	1	1	3
Future Vol, veh/h	2	148	74	1	140	1	96	1	4	1	1	3
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	28	14	0	23	0	9	0	0	100	0	0
Mvmt Flow	2	176	88	1	167	1	114	1	5	1	1	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.2	8.8	9.3	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	95%	1%	1%	20%
Vol Thru, %	1%	66%	99%	20%
Vol Right, %	4%	33%	1%	60%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	224	142	5
LT Vol	96	2	1	1
Through Vol	1	148	140	1
RT Vol	4	74	1	3
Lane Flow Rate	120	267	169	6
Geometry Grp	1	1	1	1
Degree of Util (X)	0.173	0.313	0.212	0.011
Departure Headway (Hd)	5.177	4.231	4.514	6.423
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	691	851	795	556
Service Time	3.218	2.256	2.543	4.473
HCM Lane V/C Ratio	0.174	0.314	0.213	0.011
HCM Control Delay	9.3	9.2	8.8	9.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	1.3	0.8	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	29	43	210	66	81	49	68	417	67	116	27
Future Volume (vph)	81	29	43	210	66	81	49	68	417	67	116	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.969			0.895			0.982	
Flt Protected		0.974			0.971			0.995			0.984	
Satd. Flow (prot)	0	1899	0	0	1739	0	0	1617	0	0	1836	0
Flt Permitted		0.974			0.971			0.995			0.984	
Satd. Flow (perm)	0	1899	0	0	1739	0	0	1617	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			776			1736	
Travel Time (s)		26.7			21.9			17.6			39.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	98	35	52	253	80	98	59	82	502	81	140	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	185	0	0	431	0	0	643	0	0	254	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

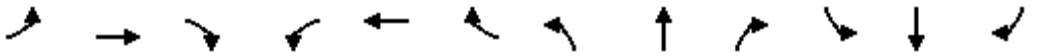
Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	185	431	643	254
Demand Flow Rate, veh/h	189	440	656	260
Vehicles Circulating, veh/h	484	244	219	400
Vehicles Exiting, veh/h	176	631	454	284
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.7	7.8	11.0	7.0
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	189	440	656	260
Cap Entry Lane, veh/h	842	1076	1104	918
Entry HV Adj Factor	0.980	0.980	0.981	0.978
Flow Entry, veh/h	185	431	643	254
Cap Entry, veh/h	826	1055	1082	897
V/C Ratio	0.224	0.409	0.594	0.283
Control Delay, s/veh	6.7	7.8	11.0	7.0
LOS	A	A	B	A
95th %tile Queue, veh	1	2	4	1

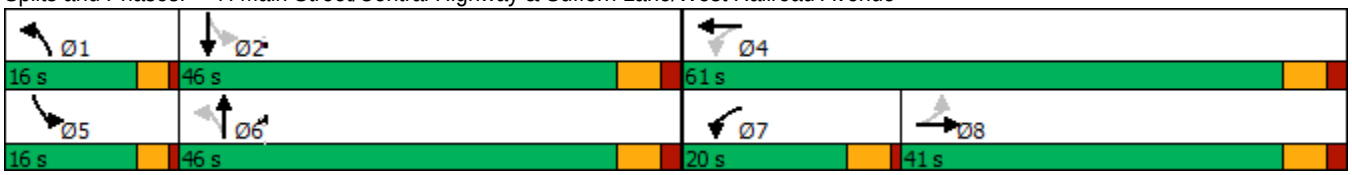


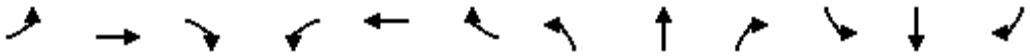
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	58	80	202	91	48	126	200	167	115	269	37
Future Volume (vph)	57	58	80	202	91	48	126	200	167	115	269	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	1.00	
Frt		0.945			0.949			0.932			0.982	
Flt Protected		0.986		0.950			0.950			0.950		
Satd. Flow (prot)	0	1595	0	1637	1629	0	1719	1638	0	1560	1685	0
Flt Permitted		0.852		0.481			0.422			0.308		
Satd. Flow (perm)	0	1377	0	828	1629	0	762	1638	0	504	1685	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			28			36			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1	3		4	4		3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	21%	6%	13%	5%	7%	0%	5%	5%	9%	13%	8%	6%
Adj. Flow (vph)	59	60	82	208	94	49	130	206	172	119	277	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	201	0	208	143	0	130	378	0	119	315	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.66		0.43	0.21		0.32	0.77		0.37	0.64	
Control Delay		41.1		21.3	15.6		17.1	38.0		18.3	33.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		41.1		21.3	15.6		17.1	38.0		18.3	33.9	
Queue Length 50th (ft)		88		70	38		41	173		37	147	
Queue Length 95th (ft)		194		160	98		88	327		83	279	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		597		502	1090		478	809		379	816	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.34		0.41	0.13		0.27	0.47		0.31	0.39	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 87.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

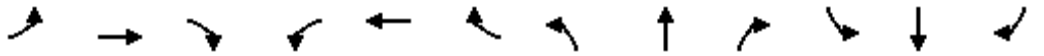




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	58	80	202	91	48	126	200	167	115	269	37
Future Volume (veh/h)	57	58	80	202	91	48	126	200	167	115	269	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1821	2046	1941	1773	1743	1847	1826	1826	1767	1784	1859	1889
Adj Flow Rate, veh/h	59	60	82	208	94	49	130	206	172	119	277	38
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	21	6	13	5	7	0	5	5	9	13	8	6
Cap, veh/h	137	105	116	530	405	211	403	265	221	332	456	63
Arrive On Green	0.17	0.17	0.17	0.13	0.38	0.38	0.09	0.29	0.29	0.08	0.29	0.29
Sat Flow, veh/h	380	638	702	1688	1078	562	1739	917	765	1699	1598	219
Grp Volume(v), veh/h	201	0	0	208	0	143	130	0	378	119	0	315
Grp Sat Flow(s),veh/h/ln	1721	0	0	1688	0	1640	1739	0	1682	1699	0	1817
Q Serve(g_s), s	4.5	0.0	0.0	6.0	0.0	3.8	3.2	0.0	13.0	3.0	0.0	9.5
Cycle Q Clear(g_c), s	6.9	0.0	0.0	6.0	0.0	3.8	3.2	0.0	13.0	3.0	0.0	9.5
Prop In Lane	0.29		0.41	1.00		0.34	1.00		0.46	1.00		0.12
Lane Grp Cap(c), veh/h	358	0	0	530	0	617	403	0	486	332	0	519
V/C Ratio(X)	0.56	0.00	0.00	0.39	0.00	0.23	0.32	0.00	0.78	0.36	0.00	0.61
Avail Cap(c_a), veh/h	1007	0	0	708	0	1428	585	0	1065	516	0	1150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	0.0	16.2	0.0	13.5	14.3	0.0	20.6	15.1	0.0	19.5
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.2	0.0	0.3	0.2	0.0	3.8	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	2.1	0.0	1.3	1.2	0.0	5.2	1.1	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	0.0	16.4	0.0	13.8	14.5	0.0	24.5	15.3	0.0	21.1
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		201			351			508			434	
Approach Delay, s/veh		26.7			15.3			21.9			19.5	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	24.0		29.8	9.2	24.3	13.3	16.4				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	5.2	11.5		5.8	5.0	15.0	8.0	8.9				
Green Ext Time (p_c), s	0.2	2.6		1.2	0.2	3.2	0.4	1.6				

Intersection Summary			
HCM 6th Ctrl Delay		20.3	
HCM 6th LOS		C	

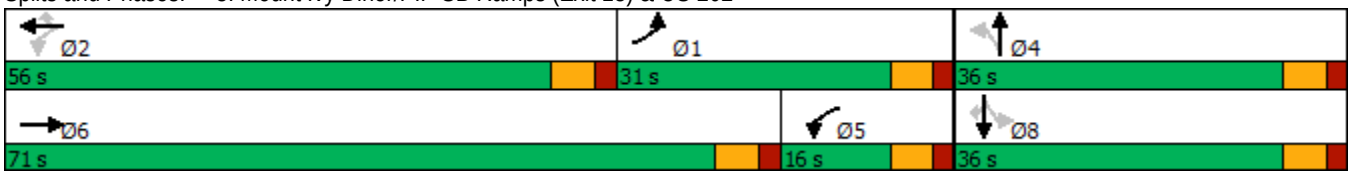


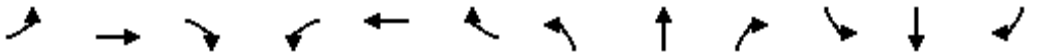
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	680	3	3	554	525	2	5	5	140	1	144
Future Volume (vph)	134	680	3	3	554	525	2	5	5	140	1	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			1.00	
Frt		0.999				0.850		0.944				0.850
Flt Protected	0.950			0.950				0.992			0.953	
Satd. Flow (prot)	1701	1789	0	1832	1854	1591	0	1534	0	0	1645	1480
Flt Permitted	0.950			0.191				0.955			0.719	
Satd. Flow (perm)	1701	1789	0	368	1854	1591	0	1477	0	0	1238	1480
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						514		5				150
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	4%	0%	0%	4%	3%	100%	0%	0%	7%	0%	6%
Adj. Flow (vph)	140	708	3	3	577	547	2	5	5	146	1	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	711	0	3	577	547	0	12	0	0	147	150
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.52	0.64		0.01	0.76	0.57		0.04			0.60	0.36
Control Delay	43.4	15.2		10.0	29.6	5.1		25.8			44.6	8.7
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	43.4	15.2		10.0	29.6	5.1		25.8			44.6	8.7
Queue Length 50th (ft)	65	181		1	238	10		3			68	0
Queue Length 95th (ft)	158	547		4	477	86		20			164	53
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	554	1435		388	1207	1215		580			484	670
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.25	0.50		0.01	0.48	0.45		0.02			0.30	0.22

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 82.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





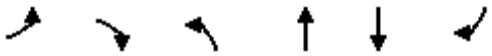
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	680	3	3	554	525	2	5	5	140	1	144
Future Volume (veh/h)	134	680	3	3	554	525	2	5	5	140	1	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1746	1746	1806	2018	1958	1973	517	2018	2018	1834	1939	1849
Adj Flow Rate, veh/h	140	708	3	3	577	0	2	5	5	146	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	0	0	4	3	100	0	0	7	0	6
Cap, veh/h	284	832	4	244	712		93	128	102	326	1	
Arrive On Green	0.17	0.48	0.48	0.06	0.36	0.00	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	1663	1738	7	1922	1958	1672	114	972	776	1460	10	1567
Grp Volume(v), veh/h	140	0	711	3	577	0	12	0	0	147	0	0
Grp Sat Flow(s),veh/h/ln	1663	0	1745	1922	1958	1672	1862	0	0	1470	0	1567
Q Serve(g_s), s	4.1	0.0	19.3	0.0	14.3	0.0	0.0	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	19.3	0.0	14.3	0.0	0.3	0.0	0.0	5.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.17		0.42	0.99		1.00
Lane Grp Cap(c), veh/h	284	0	835	244	712		323	0	0	327	0	
V/C Ratio(X)	0.49	0.00	0.85	0.01	0.81		0.04	0.00	0.00	0.45	0.00	
Avail Cap(c_a), veh/h	771	0	2104	494	1816		1081	0	0	944	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.2	0.0	12.4	23.9	15.5	0.0	20.4	0.0	0.0	22.5	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	2.6	0.0	2.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.7	0.0	5.3	0.0	0.1	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	0.0	14.9	23.9	17.8	0.0	20.5	0.0	0.0	23.5	0.0	0.0
LnGrp LOS	C	A	B	C	B		C	A	A	C	A	
Approach Vol, veh/h		851			580			12			147	
Approach Delay, s/veh		16.0			17.8			20.5			23.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.2	25.6		13.1	9.0	31.8		13.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	6.1	16.3		2.3	2.0	21.3		7.2				
Green Ext Time (p_c), s	0.5	3.3		0.0	0.0	4.5		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		17.4	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	191	458	0	260	406	0
Future Volume (vph)	191	458	0	260	406	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905					
Flt Protected	0.985					
Satd. Flow (prot)	1819	0	0	1774	1729	0
Flt Permitted	0.985					
Satd. Flow (perm)	1819	0	0	1774	1729	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	1%	0%	9%	11%	0%
Adj. Flow (vph)	201	482	0	274	427	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	683	0	0	274	427	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

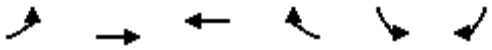
Intersection	
Int Delay, s/veh	11.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	191	458	0	260	406	0
Future Vol, veh/h	191	458	0	260	406	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	1	0	9	11	0
Mvmt Flow	201	482	0	274	427	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	701	427	-	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Critical Hdwy	5.62	5.81	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.309	-	-	-	-
Pot Cap-1 Maneuver	473	660	0	-	-	0
Stage 1	724	-	0	-	-	0
Stage 2	821	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	473	660	-	-	-	-
Mov Cap-2 Maneuver	473	-	-	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	849	-
HCM Lane V/C Ratio	-	0.805	-
HCM Control Delay (s)	-	24.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	8.7	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	572	376	29	12	94
Future Volume (vph)	77	572	376	29	12	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.880	
Flt Protected		0.994			0.995	
Satd. Flow (prot)	0	1686	1778	0	1399	0
Flt Permitted		0.994			0.995	
Satd. Flow (perm)	0	1686	1778	0	1399	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	11%	3%	4%	15%	0%	13%
Adj. Flow (vph)	87	643	422	33	13	106
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	730	455	0	119	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

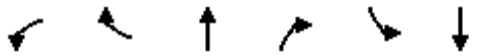
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	572	376	29	12	94
Future Vol, veh/h	77	572	376	29	12	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	11	3	4	15	0	13
Mvmt Flow	87	643	422	33	13	106

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	455	0	-	0	1256	439
Stage 1	-	-	-	-	439	-
Stage 2	-	-	-	-	817	-
Critical Hdwy	4.21	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.299	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1060	-	-	-	205	603
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	458	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1060	-	-	-	179	603
Mov Cap-2 Maneuver	-	-	-	-	179	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	458	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1060	-	-	-	475
HCM Lane V/C Ratio	0.082	-	-	-	0.251
HCM Control Delay (s)	8.7	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	102	432	153	105	263
Future Volume (vph)	141	102	432	153	105	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.943		0.965			
Flt Protected	0.972					0.986
Satd. Flow (prot)	1601	0	1702	0	0	1661
Flt Permitted	0.972					0.986
Satd. Flow (perm)	1601	0	1702	0	0	1661
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			776
Travel Time (s)	12.3		18.6			17.6
Confl. Peds. (#/hr)	1			1	1	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	5%	24%	8%	5%	27%	14%
Adj. Flow (vph)	170	123	520	184	127	317
Shared Lane Traffic (%)						
Lane Group Flow (vph)	293	0	704	0	0	444
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

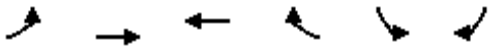
Intersection	
Int Delay, s/veh	36.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	141	102	432	153	105	263
Future Vol, veh/h	141	102	432	153	105	263
Conflicting Peds, #/hr	1	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	24	8	5	27	14
Mvmt Flow	170	123	520	184	127	317

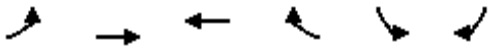
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1185	613	0	0	705	0
Stage 1	613	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Critical Hdwy	6.25	6.34	-	-	4.37	-
Critical Hdwy Stg 1	5.25	-	-	-	-	-
Critical Hdwy Stg 2	5.25	-	-	-	-	-
Follow-up Hdwy	3.545	3.516	-	-	2.443	-
Pot Cap-1 Maneuver	220	462	-	-	788	-
Stage 1	553	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	176	462	-	-	787	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	177	0	3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	238	787	-
HCM Lane V/C Ratio	-	-	1.23	0.161	-
HCM Control Delay (s)	-	-	177	10.4	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	14.4	0.6	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	141	642	552	144	335	529						
Future Volume (vph)	141	642	552	144	335	529						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3505	1854	1490	1634	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3505	1854	1490	1623	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						238						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					3							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95						
Heavy Vehicles (%)	8%	3%	4%	10%	11%	3%						
Adj. Flow (vph)	148	676	581	152	353	557						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	676	581	152	353	557						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							0		2			
Act Effct Green (s)	29.5	66.4	103.2	133.5	30.4	72.0						
Actuated g/C Ratio	0.16	0.35	0.55	0.71	0.16	0.38						
v/c Ratio	0.56	0.54	0.57	0.14	1.34	0.74						
Control Delay	57.0	52.1	10.6	4.2	228.6	34.3						
Queue Delay	0.0	0.0	1.3	0.3	0.0	0.0						
Total Delay	57.0	52.1	12.0	4.5	228.6	34.3						
LOS	E	D	B	A	F	C						
Approach Delay		53.0	10.4		109.7							
Approach LOS		D	B		F							
Queue Length 50th (ft)	137	337	249	5	~555	375						
Queue Length 95th (ft)	192	534	401	m91	#983	540						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	262	1283	1087	1062	264	968						
Starvation Cap Reductn	0	0	300	517	0	0						
Spillback Cap Reductn	0	24	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.56	0.54	0.74	0.28	1.34	0.58						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 187.3			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 61.2		Intersection LOS: E	

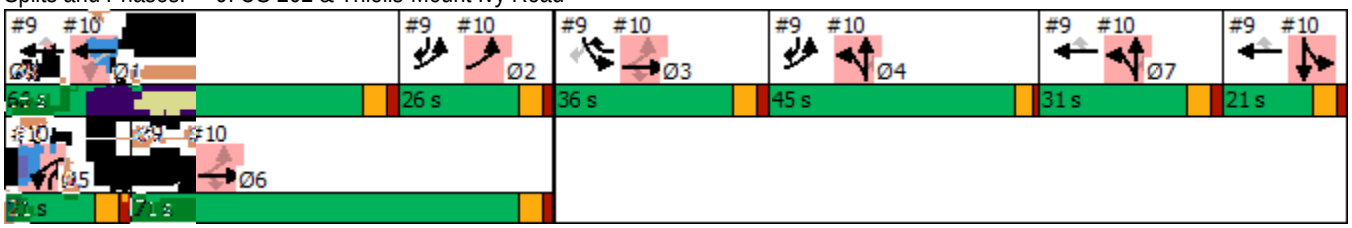
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

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

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

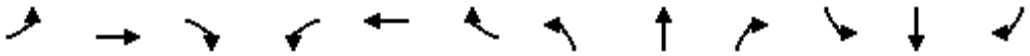
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	671	289	45	438	1	228	3	198	5	8	50
Future Volume (vph)	17	671	289	45	438	1	228	3	198	5	8	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99									
Frt			0.850						0.850		0.892	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1507	1766	1501	1832	1854	0	1643	1652	1655	0	1441	0
Flt Permitted	0.329			0.087			0.950	0.954			0.996	
Satd. Flow (perm)	522	1766	1481	168	1854	0	1643	1652	1655	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138						206		52	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	18%	6%	6%	0%	4%	0%	7%	0%	0%	0%	13%	18%
Adj. Flow (vph)	18	699	301	47	456	1	238	3	206	5	8	52
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	18	699	301	47	457	0	121	120	206	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	96.7	102.8	102.8	53.4	53.4		42.6	42.6	47.9		12.3	
Actuated g/C Ratio	0.52	0.55	0.55	0.29	0.29		0.23	0.23	0.26		0.07	
v/c Ratio	0.05	0.72	0.34	0.42	0.87		0.32	0.32	0.36		0.45	
Control Delay	6.4	13.4	1.3	63.4	81.0		63.5	63.4	5.5		38.8	
Queue Delay	0.0	2.0	1.0	0.0	0.0		0.4	0.3	0.0		0.0	
Total Delay	6.4	15.4	2.2	63.4	81.0		63.9	63.7	5.5		38.8	
LOS	A	B	A	E	F		E	E	A		D	
Approach Delay		11.3			79.3			36.9			38.8	
Approach LOS		B			E			D			D	
Queue Length 50th (ft)	1	135	0	41	519		136	134	0		15	
Queue Length 95th (ft)	m3	m718	m0	96	#893		209	207	51		80	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	376	961	868	182	601		373	375	637		164	
Starvation Cap Reductn	0	137	335	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		57	57	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.05	0.85	0.56	0.26	0.76		0.38	0.38	0.32		0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 187.3			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 34.7		Intersection LOS: C	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		2		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

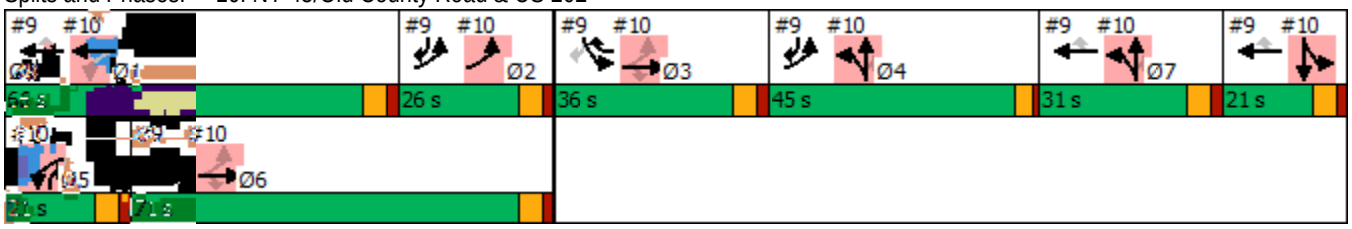
Intersection Capacity Utilization 66.7% ICU Level of Service C

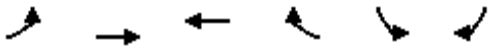
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	37	200	182	311	57	22
Future Volume (vph)	37	200	182	311	57	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.915		0.963	
Flt Protected		0.992			0.965	
Satd. Flow (prot)	0	1703	1583	0	1691	0
Flt Permitted		0.992			0.965	
Satd. Flow (perm)	0	1703	1583	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	41	220	200	342	63	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	261	542	0	87	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	200	182	311	57	22
Future Vol, veh/h	37	200	182	311	57	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	41	220	200	342	63	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	542	0	-	0	673	371
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1022	-	-	-	437	686
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1022	-	-	-	417	686
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1022	-	-	-	468
HCM Lane V/C Ratio	0.04	-	-	-	0.185
HCM Control Delay (s)	8.7	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	231	27	106	436	57	377
Future Volume (vph)	231	27	106	436	57	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986				0.883	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	1788	0	0	1835	1618	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	1788	0	0	1835	1618	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	2%	2%	0%	0%
Adj. Flow (vph)	243	28	112	459	60	397
Shared Lane Traffic (%)						
Lane Group Flow (vph)	271	0	0	571	457	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

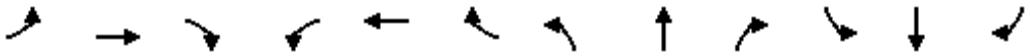
Intersection	
Int Delay, s/veh	9.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	231	27	106	436	57	377
Future Vol, veh/h	231	27	106	436	57	377
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	5	2	2	0	0
Mvmt Flow	243	28	112	459	60	397

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	271	0	940	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	683	-
Critical Hdwy	-	-	4.12	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1292	-	311	792
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1292	-	275	792
Mov Cap-2 Maneuver	-	-	-	-	275	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	464	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	23.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	635	-	-	1292	-
HCM Lane V/C Ratio	0.719	-	-	0.086	-
HCM Control Delay (s)	23.8	-	-	8.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	6	-	-	0.3	-



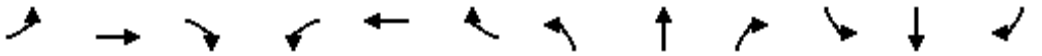
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	557	46	77	360	2	136	11	101	10	9	45
Future Volume (vph)	9	557	46	77	360	2	136	11	101	10	9	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.999			0.945			0.904	
Flt Protected		0.999			0.991			0.973			0.992	
Satd. Flow (prot)	0	1895	0	0	1802	0	0	1547	0	0	1665	0
Flt Permitted		0.992			0.788			0.789			0.939	
Satd. Flow (perm)	0	1882	0	0	1433	0	0	1255	0	0	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8						47			51	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	12%	1%	0%	6%	0%	9%	0%	0%	2%
Adj. Flow (vph)	10	626	52	87	404	2	153	12	113	11	10	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	688	0	0	493	0	0	278	0	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.70			0.66			0.63			0.13	
Control Delay		18.6			19.0			25.8			9.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.6			19.0			25.8			9.0	
Queue Length 50th (ft)		230			162			92			7	
Queue Length 95th (ft)		349			264			173			33	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		981			744			439			546	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.66			0.63			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

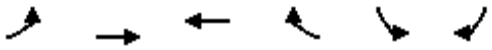




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	557	46	77	360	2	136	11	101	10	9	45
Future Volume (veh/h)	9	557	46	77	360	2	136	11	101	10	9	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2042	2012	1877	2042	2057	1717	1806	1672	2097	2097	2067
Adj Flow Rate, veh/h	10	626	52	87	404	2	153	12	113	11	10	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	1	3	12	1	0	6	0	9	0	0	2
Cap, veh/h	52	959	79	168	768	4	307	40	188	109	118	420
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	9	1845	152	218	1478	7	724	122	579	169	364	1293
Grp Volume(v), veh/h	688	0	0	493	0	0	278	0	0	72	0	0
Grp Sat Flow(s),veh/h/ln	2006	0	0	1703	0	0	1425	0	0	1826	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	19.2	0.0	0.0	13.0	0.0	0.0	12.3	0.0	0.0	2.1	0.0	0.0
Prop In Lane	0.01		0.08	0.18		0.00	0.55		0.41	0.15		0.71
Lane Grp Cap(c), veh/h	1090	0	0	940	0	0	535	0	0	647	0	0
V/C Ratio(X)	0.63	0.00	0.00	0.52	0.00	0.00	0.52	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1090	0	0	940	0	0	535	0	0	647	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.5	0.0	0.0	11.8	0.0	0.0	21.6	0.0	0.0	18.3	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	2.1	0.0	0.0	3.6	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	0.0	5.3	0.0	0.0	4.5	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	0.0	13.9	0.0	0.0	25.2	0.0	0.0	18.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		688			493			278			72	
Approach Delay, s/veh		16.3			13.9			25.2			18.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			17.2									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	29	93	26	220	116	16
Future Volume (vph)	29	93	26	220	116	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.879		0.984	
Flt Protected		0.988			0.958	
Satd. Flow (prot)	0	1766	1644	0	1713	0
Flt Permitted		0.988			0.958	
Satd. Flow (perm)	0	1766	1644	0	1713	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	12%	7%	12%	6%	5%	21%
Adj. Flow (vph)	38	121	34	286	151	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	159	320	0	172	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

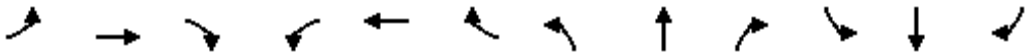
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	93	26	220	116	16
Future Vol, veh/h	29	93	26	220	116	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	12	7	12	6	5	21
Mvmt Flow	38	121	34	286	151	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	320	0	-	0	374	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.22	-	-	-	6.85	6.61
Critical Hdwy Stg 1	-	-	-	-	5.85	-
Critical Hdwy Stg 2	-	-	-	-	5.85	-
Follow-up Hdwy	2.308	-	-	-	3.545	3.489
Pot Cap-1 Maneuver	1186	-	-	-	596	811
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	811	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1186	-	-	-	576	811
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1186	-	-	-	597
HCM Lane V/C Ratio	0.032	-	-	-	0.287
HCM Control Delay (s)	8.1	0	-	-	13.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	152	56	0	147	1	94	1	5	1	1	5
Future Volume (vph)	1	152	56	0	147	1	94	1	5	1	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.999			0.993			0.899	
Flt Protected								0.955			0.994	
Satd. Flow (prot)	0	1710	0	0	1674	0	0	1591	0	0	1617	0
Flt Permitted								0.955			0.994	
Satd. Flow (perm)	0	1710	0	0	1674	0	0	1591	0	0	1617	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	5%	7%	0%	8%	0%	5%	0%	20%	0%	0%	0%
Adj. Flow (vph)	1	181	67	0	175	1	112	1	6	1	1	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	249	0	0	176	0	0	119	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

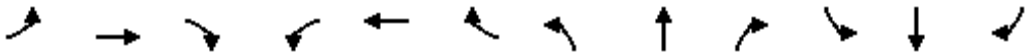
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	152	56	0	147	1	94	1	5	1	1	5
Future Vol, veh/h	1	152	56	0	147	1	94	1	5	1	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	5	7	0	8	0	5	0	20	0	0	0
Mvmt Flow	1	181	67	0	175	1	112	1	6	1	1	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	9	9.2	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	94%	0%	0%	14%
Vol Thru, %	1%	73%	99%	14%
Vol Right, %	5%	27%	1%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	209	148	7
LT Vol	94	1	0	1
Through Vol	1	152	147	1
RT Vol	5	56	1	5
Lane Flow Rate	119	249	176	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.169	0.295	0.226	0.011
Departure Headway (Hd)	5.096	4.272	4.624	4.614
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	704	841	777	773
Service Time	3.133	2.297	2.654	2.661
HCM Lane V/C Ratio	0.169	0.296	0.227	0.01
HCM Control Delay	9.2	9.1	9	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	1.2	0.9	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	30	44	217	69	84	51	70	433	69	121	28
Future Volume (vph)	84	30	44	217	69	84	51	70	433	69	121	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.969			0.894			0.983	
Flt Protected		0.974			0.972			0.995			0.984	
Satd. Flow (prot)	0	1899	0	0	1740	0	0	1616	0	0	1838	0
Flt Permitted		0.974			0.972			0.995			0.984	
Satd. Flow (perm)	0	1899	0	0	1740	0	0	1616	0	0	1838	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			793			1736	
Travel Time (s)		26.7			21.9			18.0			39.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	97	34	51	249	79	97	59	80	498	79	139	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	0	0	425	0	0	637	0	0	250	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

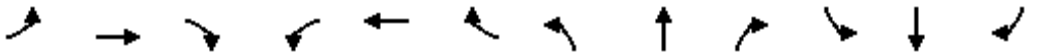
Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	182	425	637	250
Demand Flow Rate, veh/h	186	434	650	256
Vehicles Circulating, veh/h	477	241	215	395
Vehicles Exiting, veh/h	174	624	448	280
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.6	7.7	10.8	6.9
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	186	434	650	256
Cap Entry Lane, veh/h	848	1079	1108	922
Entry HV Adj Factor	0.980	0.980	0.981	0.977
Flow Entry, veh/h	182	425	637	250
Cap Entry, veh/h	831	1058	1087	901
V/C Ratio	0.219	0.402	0.587	0.278
Control Delay, s/veh	6.6	7.7	10.8	6.9
LOS	A	A	B	A
95th %tile Queue, veh	1	2	4	1



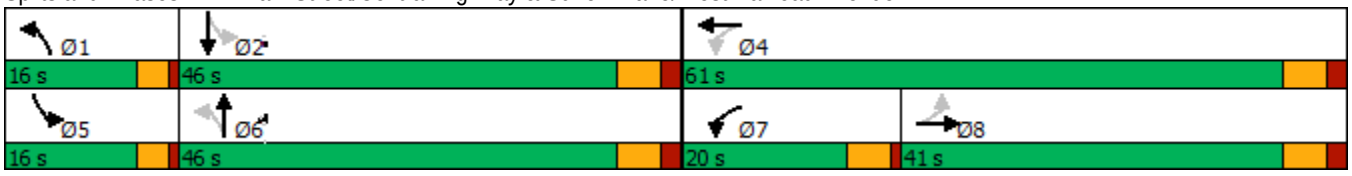
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	100	128	217	94	65	99	287	139	118	209	73
Future Volume (vph)	112	100	128	217	94	65	99	287	139	118	209	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Frt		0.949			0.939			0.951			0.961	
Flt Protected		0.984		0.950			0.950			0.950		
Satd. Flow (prot)	0	1709	0	1702	1578	0	1703	1729	0	1647	1696	0
Flt Permitted		0.823		0.419			0.430			0.177		
Satd. Flow (perm)	0	1427	0	750	1578	0	770	1729	0	306	1696	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			36			21			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	4		1	1		4	2		3	3		2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	9%	2%	1%	9%	3%	6%	3%	5%	7%	5%	3%
Adj. Flow (vph)	123	110	141	238	103	71	109	315	153	130	230	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	0	238	174	0	109	468	0	130	310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

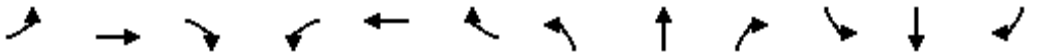
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.89		0.50	0.24		0.29	0.87		0.51	0.57	
Control Delay		61.5		23.8	16.5		20.6	53.4		26.2	35.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		61.5		23.8	16.5		20.6	53.4		26.2	35.4	
Queue Length 50th (ft)		261		113	63		48	325		58	185	
Queue Length 95th (ft)		#448		179	115		83	#496		98	287	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		479		482	822		434	654		283	644	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.78		0.49	0.21		0.25	0.72		0.46	0.48	

Intersection Summary

Area Type: Other
Cycle Length: 123
Actuated Cycle Length: 110.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

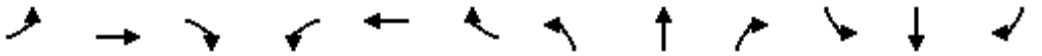




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	100	128	217	94	65	99	287	139	118	209	73
Future Volume (veh/h)	112	100	128	217	94	65	99	287	139	118	209	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2016	2001	2106	1832	1714	1803	1811	1856	1826	1874	1904	1934
Adj Flow Rate, veh/h	123	110	141	238	103	71	109	315	153	130	230	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	9	2	1	9	3	6	3	5	7	5	3
Cap, veh/h	180	143	164	499	416	287	375	366	178	262	428	149
Arrive On Green	0.27	0.27	0.27	0.12	0.44	0.44	0.07	0.31	0.31	0.07	0.32	0.32
Sat Flow, veh/h	477	532	611	1745	943	650	1725	1177	572	1784	1348	469
Grp Volume(v), veh/h	374	0	0	238	0	174	109	0	468	130	0	310
Grp Sat Flow(s),veh/h/ln	1621	0	0	1745	0	1593	1725	0	1749	1784	0	1817
Q Serve(g_s), s	17.7	0.0	0.0	8.5	0.0	6.2	3.8	0.0	22.9	4.4	0.0	12.8
Cycle Q Clear(g_c), s	19.9	0.0	0.0	8.5	0.0	6.2	3.8	0.0	22.9	4.4	0.0	12.8
Prop In Lane	0.33		0.38	1.00		0.41	1.00		0.33	1.00		0.26
Lane Grp Cap(c), veh/h	487	0	0	499	0	703	375	0	543	262	0	576
V/C Ratio(X)	0.77	0.00	0.00	0.48	0.00	0.25	0.29	0.00	0.86	0.50	0.00	0.54
Avail Cap(c_a), veh/h	672	0	0	579	0	962	489	0	768	369	0	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.5	0.0	0.0	18.4	0.0	15.9	19.8	0.0	29.6	22.1	0.0	25.6
Incr Delay (d2), s/veh	4.5	0.0	0.0	0.3	0.0	0.3	0.2	0.0	8.3	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	0.0	3.3	0.0	2.2	1.5	0.0	10.6	1.8	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	0.0	18.7	0.0	16.2	20.0	0.0	37.9	22.6	0.0	26.7
LnGrp LOS	D	A	A	B	A	B	B	A	D	C	A	C
Approach Vol, veh/h		374			412			577			440	
Approach Delay, s/veh		36.1			17.7			34.5			25.5	
Approach LOS		D			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	34.9		46.2	10.6	34.3	15.8	30.4				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	5.8	14.8		8.2	6.4	24.9	10.5	21.9				
Green Ext Time (p_c), s	0.1	2.5		1.5	0.2	3.4	0.3	2.5				

Intersection Summary			
HCM 6th Ctrl Delay		28.8	
HCM 6th LOS		C	

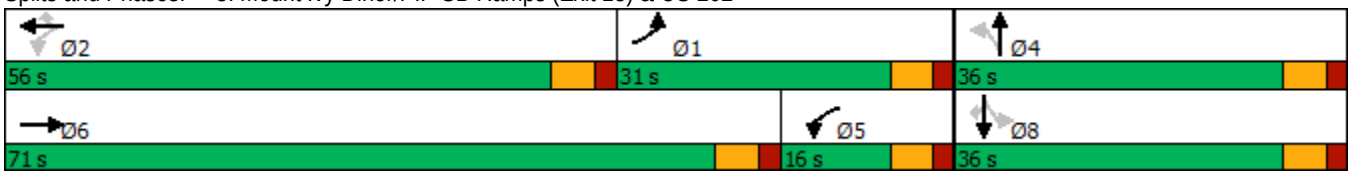


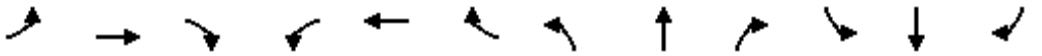
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	652	0	3	506	566	0	0	2	154	0	140
Future Volume (vph)	122	652	0	3	506	566	0	0	2	154	0	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00			1.00		0.99						0.98
Frt						0.850		0.865				0.850
Flt Protected	0.950			0.950							0.950	
Satd. Flow (prot)	1734	1790	0	1832	1819	1576	0	1668	0	0	1670	1553
Flt Permitted	0.950			0.201							0.757	
Satd. Flow (perm)	1733	1790	0	387	1819	1556	0	1668	0	0	1331	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						596		325				147
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)	1		4	4		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	4%	0%	0%	0%	5%	0%	1%
Adj. Flow (vph)	128	686	0	3	533	596	0	0	2	162	0	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	686	0	3	533	596	0	2	0	0	162	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.48	0.63		0.01	0.73	0.61		0.00			0.60	0.35
Control Delay	42.2	15.6		9.3	27.9	4.6		0.0			41.9	8.4
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	42.2	15.6		9.3	27.9	4.6		0.0			41.9	8.4
Queue Length 50th (ft)	57	169		1	208	0		0			71	0
Queue Length 95th (ft)	147	536		4	424	63		0			174	51
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	584	1477		404	1226	1243		868			538	700
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.22	0.46		0.01	0.43	0.48		0.00			0.30	0.21

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 79.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





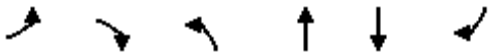
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	652	0	3	506	566	0	0	2	154	0	140
Future Volume (veh/h)	122	652	0	3	506	566	0	0	2	154	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1746	1806	2018	1928	1958	2018	2018	2018	1864	1939	1924
Adj Flow Rate, veh/h	128	686	0	3	533	0	0	0	2	162	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	0	6	4	0	0	0	5	0	1
Cap, veh/h	298	809	0	242	662		0	0	246	344	0	
Arrive On Green	0.18	0.46	0.00	0.06	0.34	0.00	0.00	0.00	0.15	0.15	0.00	0.00
Sat Flow, veh/h	1692	1746	0	1922	1928	1659	0	0	1698	1447	0	1631
Grp Volume(v), veh/h	128	686	0	3	533	0	0	0	2	162	0	0
Grp Sat Flow(s),veh/h/ln	1692	1746	0	1922	1928	1659	0	0	1698	1447	0	1631
Q Serve(g_s), s	3.6	18.6	0.0	0.0	13.5	0.0	0.0	0.0	0.1	5.7	0.0	0.0
Cycle Q Clear(g_c), s	3.6	18.6	0.0	0.0	13.5	0.0	0.0	0.0	0.1	5.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	809	0	242	662		0	0	246	344	0	
V/C Ratio(X)	0.43	0.85	0.00	0.01	0.81		0.00	0.00	0.01	0.47	0.00	
Avail Cap(c_a), veh/h	788	2116	0	492	1797		0	0	950	948	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.7	12.7	0.0	23.9	16.0	0.0	0.0	0.0	19.6	22.1	0.0	0.0
Incr Delay (d2), s/veh	1.0	2.6	0.0	0.0	2.4	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.6	0.0	0.0	5.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	15.3	0.0	23.9	18.4	0.0	0.0	0.0	19.6	23.1	0.0	0.0
LnGrp LOS	C	B	A	C	B		A	A	B	C	A	
Approach Vol, veh/h		814			536			2			162	
Approach Delay, s/veh		16.1			18.4			19.6			23.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	24.4		13.8	9.0	30.9		13.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.6	15.5		2.1	2.0	20.6		7.8				
Green Ext Time (p_c), s	0.5	2.9		0.0	0.0	4.2		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	17.7	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	237	355	0	275	371	0
Future Volume (vph)	237	355	0	275	371	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.919					
Flt Protected	0.980					
Satd. Flow (prot)	1832	0	0	1842	1845	0
Flt Permitted	0.980					
Satd. Flow (perm)	1832	0	0	1842	1845	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	2%	0%	5%	4%	0%
Adj. Flow (vph)	260	390	0	302	408	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	650	0	0	302	408	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

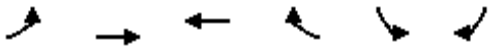
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	237	355	0	275	371	0
Future Vol, veh/h	237	355	0	275	371	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	1	2	0	5	4	0
Mvmt Flow	260	390	0	302	408	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	710	408	-	0	-	0
Stage 1	408	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Critical Hdwy	5.61	5.82	-	-	-	-
Critical Hdwy Stg 1	4.61	-	-	-	-	-
Critical Hdwy Stg 2	4.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.318	-	-	-	-
Pot Cap-1 Maneuver	470	673	0	-	-	0
Stage 1	737	-	0	-	-	0
Stage 2	804	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	470	673	-	-	-	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1122	-
HCM Lane V/C Ratio	-	0.58	-
HCM Control Delay (s)	-	12.5	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	3.9	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	66	588	378	23	9	95
Future Volume (vph)	66	588	378	23	9	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992		0.876	
Flt Protected		0.995			0.996	
Satd. Flow (prot)	0	1680	1835	0	1500	0
Flt Permitted		0.995			0.996	
Satd. Flow (perm)	0	1680	1835	0	1500	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	8%	4%	1%	14%	11%	3%
Adj. Flow (vph)	77	684	440	27	10	110
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	761	467	0	120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

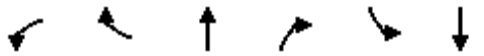
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	66	588	378	23	9	95
Future Vol, veh/h	66	588	378	23	9	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	4	1	14	11	3
Mvmt Flow	77	684	440	27	10	110

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	467	0	-	0	1292	454
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	838	-
Critical Hdwy	4.18	-	-	-	6.31	6.13
Critical Hdwy Stg 1	-	-	-	-	5.31	-
Critical Hdwy Stg 2	-	-	-	-	5.31	-
Follow-up Hdwy	2.272	-	-	-	3.599	3.327
Pot Cap-1 Maneuver	1064	-	-	-	185	612
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	429	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1064	-	-	-	163	612
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	429	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1064	-	-	-	494
HCM Lane V/C Ratio	0.072	-	-	-	0.245
HCM Control Delay (s)	8.6	0	-	-	14.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	140	115	440	158	122	260
Future Volume (vph)	140	115	440	158	122	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.939		0.964			
Flt Protected	0.973					0.984
Satd. Flow (prot)	1714	0	1808	0	0	1903
Flt Permitted	0.973					0.984
Satd. Flow (perm)	1714	0	1808	0	0	1903
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			793
Travel Time (s)	12.3		18.6			18.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	9%	0%	3%	8%	0%
Adj. Flow (vph)	171	140	537	193	149	317
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	0	730	0	0	466
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	48.1

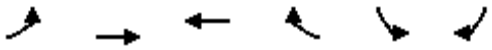
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	115	440	158	122	260
Future Vol, veh/h	140	115	440	158	122	260
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	9	0	3	8	0
Mvmt Flow	171	140	537	193	149	317

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1249	634	0	0	730	0
Stage 1	634	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Critical Hdwy	6.22	6.19	-	-	4.18	-
Critical Hdwy Stg 1	5.22	-	-	-	-	-
Critical Hdwy Stg 2	5.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.381	-	-	2.272	-
Pot Cap-1 Maneuver	205	475	-	-	847	-
Stage 1	547	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 161	475	-	-	847	-
Mov Cap-2 Maneuver	~ 161	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	439	-	-	-	-	-

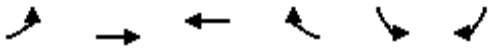
Approach	WB	NB	SB
HCM Control Delay, s	228.1	0	3.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	229	847	-
HCM Lane V/C Ratio	-	-	1.358	0.176	-
HCM Control Delay (s)	-	-	228.1	10.2	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	17.1	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	172	627	563	147	214	513						
Future Volume (vph)	172	627	563	147	214	513						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor	1.00			0.97	0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1719	3471	1802	1546	1728	1607						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1712	3471	1802	1501	1708	1607						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						232						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)	2			2	5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	5%	4%	7%	6%	5%	1%						
Adj. Flow (vph)	179	653	586	153	223	534						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	653	586	153	223	534						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							2		3			
Act Effct Green (s)	29.4	66.9	104.0	133.3	29.4	70.9						
Actuated g/C Ratio	0.16	0.36	0.56	0.71	0.16	0.38						
v/c Ratio	0.67	0.53	0.59	0.14	0.82	0.71						
Control Delay	65.1	51.3	10.7	4.1	100.5	32.6						
Queue Delay	0.0	0.0	1.3	0.3	0.0	0.0						
Total Delay	65.1	51.3	12.1	4.4	100.5	32.6						
LOS	E	D	B	A	F	C						
Approach Delay		54.3	10.5		52.6							
Approach LOS		D	B		D							
Queue Length 50th (ft)	179	323	236	6	266	345						
Queue Length 95th (ft)	229	515	389	m85	#534	497						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	270	1276	1060	1085	281	966						
Starvation Cap Reductn	0	0	273	533	0	0						
Spillback Cap Reductn	0	13	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.66	0.52	0.74	0.28	0.79	0.55						

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 187	
Natural Cycle: 135	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 39.8	Intersection LOS: D

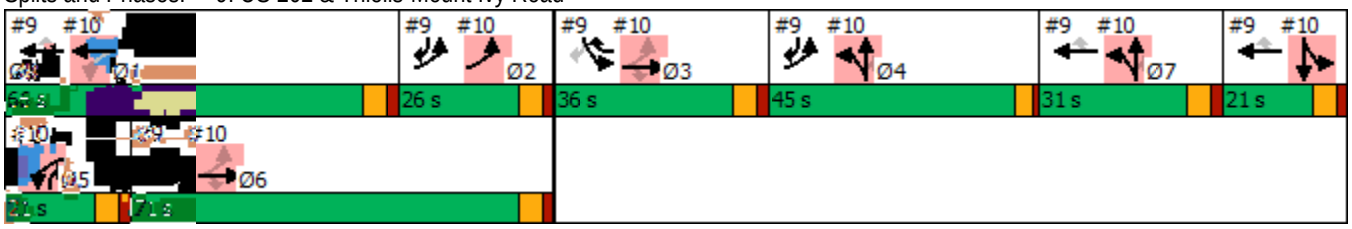
Intersection Capacity Utilization 71.4% ICU Level of Service C

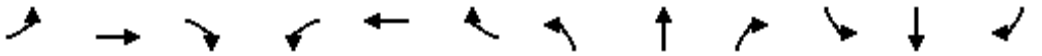
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

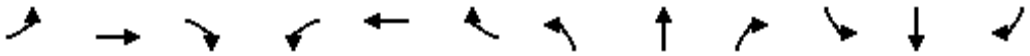
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	565	275	36	425	2	200	5	179	7	9	39
Future Volume (vph)	9	565	275	36	425	2	200	5	179	7	9	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00				0.98		1.00	
Frt			0.850		0.999				0.850		0.905	
Flt Protected	0.950			0.950			0.950	0.954			0.993	
Satd. Flow (prot)	1602	1782	1544	1579	1870	0	1598	1611	1607	0	1544	0
Flt Permitted	0.320			0.086			0.950	0.954			0.993	
Satd. Flow (perm)	540	1782	1544	143	1870	0	1598	1611	1571	0	1544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			156						195		40	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	3					3			1	1		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	5%	3%	16%	3%	0%	10%	0%	3%	29%	0%	8%
Adj. Flow (vph)	10	614	299	39	462	2	217	5	195	8	10	42
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	10	614	299	39	464	0	111	111	195	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					2							
Act Effct Green (s)	96.3	102.4	102.4	53.8	53.8		42.6	42.6	47.6		12.7	
Actuated g/C Ratio	0.51	0.55	0.55	0.29	0.29		0.23	0.23	0.25		0.07	
v/c Ratio	0.03	0.63	0.33	0.41	0.86		0.31	0.30	0.36		0.42	
Control Delay	4.8	9.1	1.0	65.2	80.2		63.3	63.2	5.7		46.6	
Queue Delay	0.0	0.8	0.6	0.0	0.0		0.3	0.3	0.0		0.0	
Total Delay	4.8	9.9	1.6	65.2	80.2		63.6	63.5	5.7		46.6	
LOS	A	A	A	E	F		E	E	A		D	
Approach Delay		7.1			79.0			36.5			46.6	
Approach LOS		A			E			D			D	
Queue Length 50th (ft)	1	116	0	34	528		125	125	0		23	
Queue Length 95th (ft)	m2	820	0	83	#908		193	193	50		89	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	393	975	915	157	608		363	366	608		162	
Starvation Cap Reductn	0	132	322	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		56	57	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.03	0.73	0.50	0.25	0.76		0.36	0.36	0.32		0.37	

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 187	
Natural Cycle: 135	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	

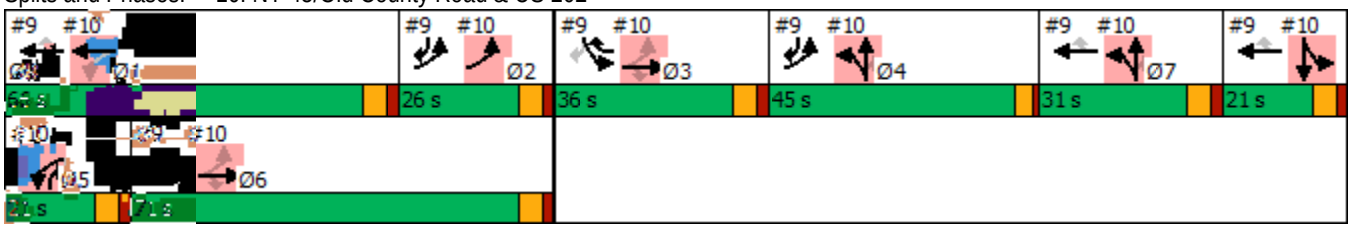
Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		3		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

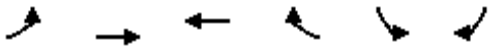
Intersection Summary

Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	101	147	269	39	10
Future Volume (vph)	41	101	147	269	39	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.973	
Flt Protected		0.986			0.962	
Satd. Flow (prot)	0	1803	1634	0	1728	0
Flt Permitted		0.986			0.962	
Satd. Flow (perm)	0	1803	1634	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	42	104	152	277	40	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	146	429	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	101	147	269	39	10
Future Vol, veh/h	41	101	147	269	39	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	42	104	152	277	40	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	429	0	-	0	479	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	188	-
Critical Hdwy	4.1	-	-	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1141	-	-	-	564	759
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1141	-	-	-	542	759
Mov Cap-2 Maneuver	-	-	-	-	542	-
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	858	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1141	-	-	-	576
HCM Lane V/C Ratio	0.037	-	-	-	0.088
HCM Control Delay (s)	8.3	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	128	12	41	355	60	238
Future Volume (vph)	128	12	41	355	60	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988				0.892	
Flt Protected				0.995	0.990	
Satd. Flow (prot)	1800	0	0	1848	1630	0
Flt Permitted				0.995	0.990	
Satd. Flow (perm)	1800	0	0	1848	1630	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	2%	0%	0%
Adj. Flow (vph)	133	13	43	370	63	248
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	0	0	413	311	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

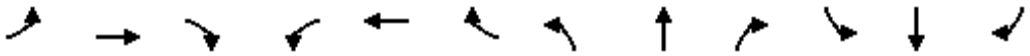
Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	12	41	355	60	238
Future Vol, veh/h	128	12	41	355	60	238
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	133	13	43	370	63	248

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	146	0	596	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	456	-
Critical Hdwy	-	-	4.1	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1448	-	486	917
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1448	-	468	917
Mov Cap-2 Maneuver	-	-	-	-	468	-
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	769	-	-	1448	-
HCM Lane V/C Ratio	0.404	-	-	0.029	-
HCM Control Delay (s)	12.8	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.1	-



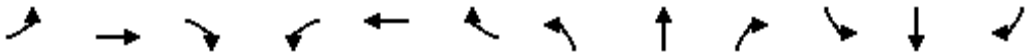
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	304	37	87	332	10	47	5	86	12	10	16
Future Volume (vph)	25	304	37	87	332	10	47	5	86	12	10	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.997			0.916			0.943	
Flt Protected		0.997			0.990			0.983			0.984	
Satd. Flow (prot)	0	1895	0	0	1792	0	0	1566	0	0	1747	0
Flt Permitted		0.955			0.850			0.893			0.908	
Satd. Flow (perm)	0	1816	0	0	1539	0	0	1422	0	0	1612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			2			90			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	5%	8%	2%	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	26	317	39	91	346	10	49	5	90	13	10	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	382	0	0	447	0	0	144	0	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.40			0.56			0.28			0.07	
Control Delay		12.5			15.8			9.9			12.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.5			15.8			9.9			12.7	
Queue Length 50th (ft)		101			135			18			7	
Queue Length 95th (ft)		163			221			58			28	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		948			800			522			534	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.40			0.56			0.28			0.07	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

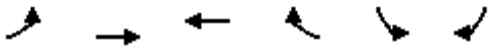




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	25	304	37	87	332	10	47	5	86	12	10	16
Future Volume (veh/h)	25	304	37	87	332	10	47	5	86	12	10	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2057	1982	1937	2027	2057	1761	1806	1746	2097	2097	2097
Adj Flow Rate, veh/h	26	317	39	91	346	10	49	5	90	12	10	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	5	8	2	0	3	0	4	0	0	0
Cap, veh/h	84	884	104	204	762	21	200	44	302	204	183	251
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	65	1702	201	285	1467	40	422	137	931	440	562	775
Grp Volume(v), veh/h	382	0	0	447	0	0	144	0	0	39	0	0
Grp Sat Flow(s),veh/h/ln	1968	0	0	1792	0	0	1490	0	0	1777	0	0
Q Serve(g_s), s	0.0	0.0	0.0	2.3	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.6	0.0	0.0	11.0	0.0	0.0	5.2	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.07		0.10	0.20		0.02	0.34		0.62	0.31		0.44
Lane Grp Cap(c), veh/h	1072	0	0	987	0	0	546	0	0	638	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.45	0.00	0.00	0.26	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1072	0	0	987	0	0	546	0	0	638	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.4	0.0	0.0	19.3	0.0	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.5	0.0	0.0	1.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	4.6	0.0	0.0	2.0	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	0.0	0.0	12.9	0.0	0.0	20.5	0.0	0.0	18.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		382			447			144			39	
Approach Delay, s/veh		11.9			12.9			20.5			18.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	136	133	1
Future Volume (vph)	2	1	1	136	133	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.866		0.999	
Flt Protected		0.968			0.953	
Satd. Flow (prot)	0	1872	1646	0	1730	0
Flt Permitted		0.968			0.953	
Satd. Flow (perm)	0	1872	1646	0	1730	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	5%	7%	0%
Adj. Flow (vph)	2	1	1	151	148	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3	152	0	149	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

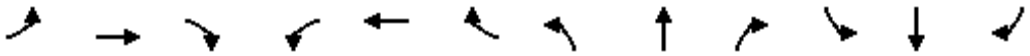
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	136	133	1
Future Vol, veh/h	2	1	1	136	133	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	5	7	0
Mvmt Flow	2	1	1	151	148	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	152	0	-	0	82	77
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.1	-	-	-	6.87	6.4
Critical Hdwy Stg 1	-	-	-	-	5.87	-
Critical Hdwy Stg 2	-	-	-	-	5.87	-
Follow-up Hdwy	2.2	-	-	-	3.563	3.3
Pot Cap-1 Maneuver	1441	-	-	-	900	985
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1441	-	-	-	899	985
Mov Cap-2 Maneuver	-	-	-	-	899	-
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	5	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	900
HCM Lane V/C Ratio	0.002	-	-	-	0.165
HCM Control Delay (s)	7.5	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	95	36	3	90	2	43	3	1	3	4	4
Future Volume (vph)	3	95	36	3	90	2	43	3	1	3	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.997			0.997			0.948	
Flt Protected		0.999			0.999			0.956			0.989	
Satd. Flow (prot)	0	1702	0	0	1690	0	0	1616	0	0	1696	0
Flt Permitted		0.999			0.999			0.956			0.989	
Satd. Flow (perm)	0	1702	0	0	1690	0	0	1616	0	0	1696	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	6%	6%	33%	6%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	109	41	3	103	2	49	3	1	3	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	153	0	0	108	0	0	53	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

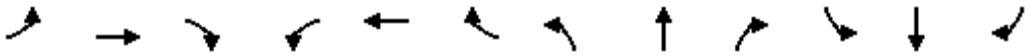
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	95	36	3	90	2	43	3	1	3	4	4
Future Vol, veh/h	3	95	36	3	90	2	43	3	1	3	4	4
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	6	6	33	6	0	5	0	0	0	0	0
Mvmt Flow	3	109	41	3	103	2	49	3	1	3	5	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.6	8.1	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	91%	2%	3%	27%
Vol Thru, %	6%	71%	95%	36%
Vol Right, %	2%	27%	2%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	134	95	11
LT Vol	43	3	3	3
Through Vol	3	95	90	4
RT Vol	1	36	2	4
Lane Flow Rate	54	154	109	13
Geometry Grp	1	1	1	1
Degree of Util (X)	0.071	0.169	0.142	0.015
Departure Headway (Hd)	4.764	3.942	4.689	4.397
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	756	895	757	819
Service Time	2.764	2.034	2.771	2.399
HCM Lane V/C Ratio	0.071	0.172	0.144	0.016
HCM Control Delay	8.1	7.9	8.6	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.5	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	18	29	135	43	52	35	44	273	43	76	18
Future Volume (vph)	53	18	29	135	43	52	35	44	273	43	76	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.968			0.895			0.981	
Flt Protected		0.974			0.973			0.995			0.984	
Satd. Flow (prot)	0	1901	0	0	1740	0	0	1617	0	0	1834	0
Flt Permitted		0.974			0.973			0.995			0.984	
Satd. Flow (perm)	0	1901	0	0	1740	0	0	1617	0	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			794			1736	
Travel Time (s)		26.7			21.9			18.0			39.5	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.83	0.83	0.92	0.92	0.92	0.83	0.92	0.83
Adj. Flow (vph)	64	22	32	147	52	63	38	48	297	52	83	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	262	0	0	383	0	0	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	118	262	383	157
Demand Flow Rate, veh/h	120	267	391	160
Vehicles Circulating, veh/h	288	153	140	242
Vehicles Exiting, veh/h	114	378	268	178
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.6	5.1	6.2	4.7
Approach LOS	A	A	A	A

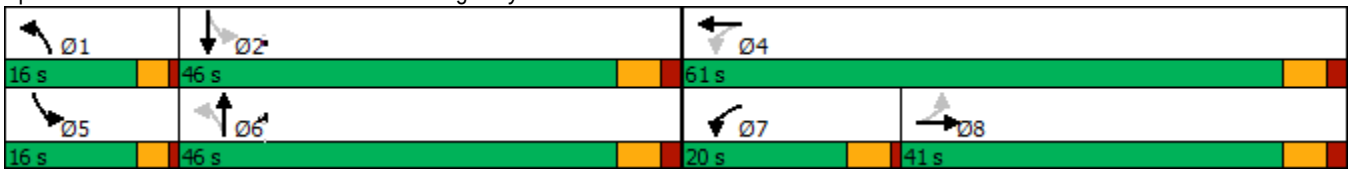
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	120	267	391	160
Cap Entry Lane, veh/h	1029	1180	1196	1078
Entry HV Adj Factor	0.980	0.981	0.980	0.983
Flow Entry, veh/h	118	262	383	157
Cap Entry, veh/h	1008	1158	1172	1060
V/C Ratio	0.117	0.226	0.327	0.148
Control Delay, s/veh	4.6	5.1	6.2	4.7
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	1

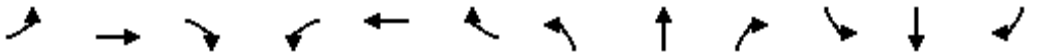
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	50	88	246	48	70	54	297	159	69	214	26
Future Volume (vph)	36	50	88	246	48	70	54	297	159	69	214	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00	0.99		1.00	1.00	
Frt		0.932			0.911			0.948			0.984	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1779	0	1702	1648	0	1805	1747	0	1762	1758	0
Flt Permitted		0.898		0.426			0.565			0.233		
Satd. Flow (perm)	0	1613	0	763	1648	0	1072	1747	0	432	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			74			23			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	3%	1%	0%	0%	0%	3%	1%	0%	4%	0%
Adj. Flow (vph)	38	53	93	259	51	74	57	313	167	73	225	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	184	0	259	125	0	57	480	0	73	252	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.61		0.57	0.18		0.11	0.79		0.23	0.41	
Control Delay		36.8		25.7	10.2		13.0	36.4		14.2	23.6	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		36.8		25.7	10.2		13.0	36.4		14.2	23.6	
Queue Length 50th (ft)		74		101	18		16	228		21	102	
Queue Length 95th (ft)		160		195	61		39	396		48	187	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		692		471	1097		627	838		401	841	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.27		0.55	0.11		0.09	0.57		0.18	0.30	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 87.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

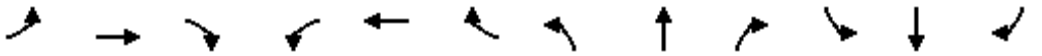




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	50	88	246	48	70	54	297	159	69	214	26
Future Volume (veh/h)	36	50	88	246	48	70	54	297	159	69	214	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2136	2136	2091	1832	1847	1847	1900	1856	1885	1979	1919	1979
Adj Flow Rate, veh/h	38	53	93	259	51	74	57	313	167	73	225	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	1	0	0	0	3	1	0	4	0
Cap, veh/h	99	92	132	535	248	361	499	383	204	318	566	68
Arrive On Green	0.14	0.14	0.14	0.15	0.36	0.36	0.07	0.34	0.34	0.07	0.34	0.34
Sat Flow, veh/h	263	648	931	1745	681	988	1810	1137	607	1884	1680	202
Grp Volume(v), veh/h	184	0	0	259	0	125	57	0	480	73	0	252
Grp Sat Flow(s),veh/h/ln	1843	0	0	1745	0	1669	1810	0	1744	1884	0	1882
Q Serve(g_s), s	3.7	0.0	0.0	8.3	0.0	3.6	1.4	0.0	17.7	1.7	0.0	7.2
Cycle Q Clear(g_c), s	6.6	0.0	0.0	8.3	0.0	3.6	1.4	0.0	17.7	1.7	0.0	7.2
Prop In Lane	0.21		0.51	1.00		0.59	1.00		0.35	1.00		0.11
Lane Grp Cap(c), veh/h	324	0	0	535	0	609	499	0	587	318	0	634
V/C Ratio(X)	0.57	0.00	0.00	0.48	0.00	0.21	0.11	0.00	0.82	0.23	0.00	0.40
Avail Cap(c_a), veh/h	961	0	0	642	0	1304	679	0	991	506	0	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	0.0	19.0	0.0	15.3	13.1	0.0	21.4	15.3	0.0	17.9
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.3	0.0	0.2	0.0	0.0	4.0	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.0	3.2	0.0	1.3	0.5	0.0	7.3	0.7	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	0.0	19.2	0.0	15.6	13.2	0.0	25.4	15.4	0.0	18.5
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h		184			384			537			325	
Approach Delay, s/veh		30.9			18.0			24.1			17.8	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	29.7		31.7	9.0	29.7	15.7	16.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	3.4	9.2		5.6	3.7	19.7	10.3	8.6				
Green Ext Time (p_c), s	0.1	2.0		1.0	0.1	4.0	0.4	1.4				

Intersection Summary												
HCM 6th Ctrl Delay			21.9									
HCM 6th LOS			C									

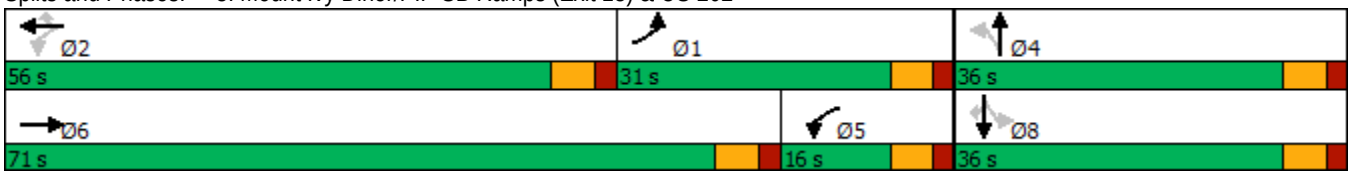


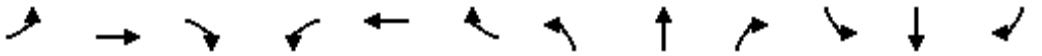
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	437	9	9	373	547	6	2	13	157	5	76
Future Volume (vph)	59	437	9	9	373	547	6	2	13	157	5	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				1.00				0.98
Frt		0.997				0.850		0.914				0.850
Flt Protected	0.950			0.950				0.987			0.954	
Satd. Flow (prot)	1734	1802	0	1832	1891	1623	0	1740	0	0	1761	1553
Flt Permitted	0.950			0.358				0.911			0.716	
Satd. Flow (perm)	1734	1802	0	688	1891	1623	0	1605	0	0	1322	1519
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				588		14				133
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			7	7			1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	3%	0%	0%	2%	1%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	63	470	10	10	401	588	6	2	14	169	5	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	480	0	10	401	588	0	22	0	0	174	82
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.25	0.54		0.02	0.54	0.59		0.05			0.52	0.17
Control Delay	32.1	14.1		9.2	19.8	4.5		15.2			29.6	2.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	32.1	14.1		9.2	19.8	4.5		15.2			29.6	2.2
Queue Length 50th (ft)	22	92		2	122	0		2			58	0
Queue Length 95th (ft)	71	292		8	259	63		21			147	11
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	810	1671		614	1536	1428		907			742	911
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.08	0.29		0.02	0.26	0.41		0.02			0.23	0.09

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 60	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





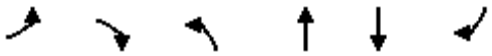
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	437	9	9	373	547	6	2	13	157	5	76
Future Volume (veh/h)	59	437	9	9	373	547	6	2	13	157	5	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1761	1806	2018	1988	2003	2018	2018	2018	1939	1939	1924
Adj Flow Rate, veh/h	63	470	10	10	401	0	6	2	14	169	5	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	0	0	2	1	0	0	0	0	0	1
Cap, veh/h	244	604	13	334	551		144	67	183	395	7	
Arrive On Green	0.14	0.35	0.35	0.07	0.28	0.00	0.16	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	1692	1718	37	1922	1988	1697	236	418	1145	1438	43	1631
Grp Volume(v), veh/h	63	0	480	10	401	0	22	0	0	174	0	0
Grp Sat Flow(s),veh/h/ln	1692	0	1754	1922	1988	1697	1799	0	0	1480	0	1631
Q Serve(g_s), s	1.4	0.0	10.5	0.0	7.8	0.0	0.0	0.0	0.0	4.3	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	10.5	0.0	7.8	0.0	0.4	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		1.00	0.27		0.64	0.97		1.00
Lane Grp Cap(c), veh/h	244	0	617	334	551		394	0	0	401	0	
V/C Ratio(X)	0.26	0.00	0.78	0.03	0.73		0.06	0.00	0.00	0.43	0.00	
Avail Cap(c_a), veh/h	985	0	2655	648	2315		1295	0	0	1186	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	12.4	17.5	14.0	0.0	15.4	0.0	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	2.2	0.0	1.9	0.0	0.1	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	3.1	0.1	2.8	0.0	0.2	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	0.0	14.6	17.5	15.9	0.0	15.4	0.0	0.0	17.9	0.0	0.0
LnGrp LOS	B	A	B	B	B		B	A	A	B	A	
Approach Vol, veh/h		543			411			22			174	
Approach Delay, s/veh		14.8			15.9			15.4			17.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	17.9		12.8	9.0	21.1		12.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	3.4	9.8		2.4	2.0	12.5		6.8				
Green Ext Time (p_c), s	0.2	2.1		0.1	0.0	2.6		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		15.7	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	146	251	0	161	291	0
Future Volume (vph)	146	251	0	161	291	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.915					
Flt Protected	0.982					
Satd. Flow (prot)	1857	0	0	1878	1863	0
Flt Permitted	0.982					
Satd. Flow (perm)	1857	0	0	1878	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	3%	0%
Adj. Flow (vph)	155	267	0	171	310	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	422	0	0	171	310	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

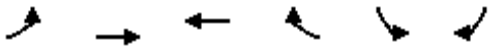
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	146	251	0	161	291	0
Future Vol, veh/h	146	251	0	161	291	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	155	267	0	171	310	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	481	310	-	0	-	0
Stage 1	310	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	5.6	5.8	-	-	-	-
Critical Hdwy Stg 1	4.6	-	-	-	-	-
Critical Hdwy Stg 2	4.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	609	761	0	-	-	0
Stage 1	802	-	0	-	-	0
Stage 2	897	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	609	761	-	-	-	-
Mov Cap-2 Maneuver	609	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1204	-
HCM Lane V/C Ratio	-	0.351	-
HCM Control Delay (s)	-	9.6	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.6	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	356	209	17	2	41
Future Volume (vph)	40	356	209	17	2	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.871	
Flt Protected		0.995			0.998	
Satd. Flow (prot)	0	1679	1797	0	1378	0
Flt Permitted		0.995			0.998	
Satd. Flow (perm)	0	1679	1797	0	1378	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	4%	0%	0%	13%
Adj. Flow (vph)	43	387	227	18	2	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	430	245	0	47	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	356	209	17	2	41
Future Vol, veh/h	40	356	209	17	2	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	5	4	0	0	13
Mvmt Flow	43	387	227	18	2	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	245	0	-	0	709	236
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	473	-
Critical Hdwy	4.1	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1333	-	-	-	420	782
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1333	-	-	-	403	782
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1333	-	-	-	749
HCM Lane V/C Ratio	0.033	-	-	-	0.062
HCM Control Delay (s)	7.8	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	97	59	292	66	112	129
Future Volume (vph)	97	59	292	66	112	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.949		0.975			
Flt Protected	0.970					0.977
Satd. Flow (prot)	1772	0	1738	0	0	1628
Flt Permitted	0.970					0.977
Satd. Flow (perm)	1772	0	1738	0	0	1628
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			794
Travel Time (s)	12.3		18.6			18.0
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	1%	5%	7%	2%	3%	33%
Adj. Flow (vph)	117	71	352	80	135	155
Shared Lane Traffic (%)						
Lane Group Flow (vph)	188	0	432	0	0	290
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

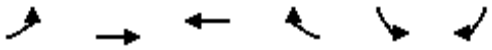
Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	97	59	292	66	112	129
Future Vol, veh/h	97	59	292	66	112	129
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	5	7	2	3	33
Mvmt Flow	117	71	352	80	135	155

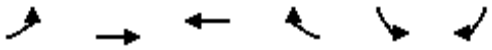
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	818	392	0	0	432	0
Stage 1	392	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Critical Hdwy	6.21	6.15	-	-	4.13	-
Critical Hdwy Stg 1	5.21	-	-	-	-	-
Critical Hdwy Stg 2	5.21	-	-	-	-	-
Follow-up Hdwy	3.509	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	363	657	-	-	1122	-
Stage 1	700	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	315	657	-	-	1122	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	392	1122	-
HCM Lane V/C Ratio	-	-	0.479	0.12	-
HCM Control Delay (s)	-	-	22.4	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.5	0.4	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	70	486	630	111	248	299						
Future Volume (vph)	70	486	630	111	248	299						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1770	3539	1891	1607	1796	1591						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1770	3539	1891	1607	1796	1591						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						201						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98						
Heavy Vehicles (%)	2%	2%	2%	2%	1%	2%						
Adj. Flow (vph)	71	496	643	113	253	305						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	496	643	113	253	305						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						

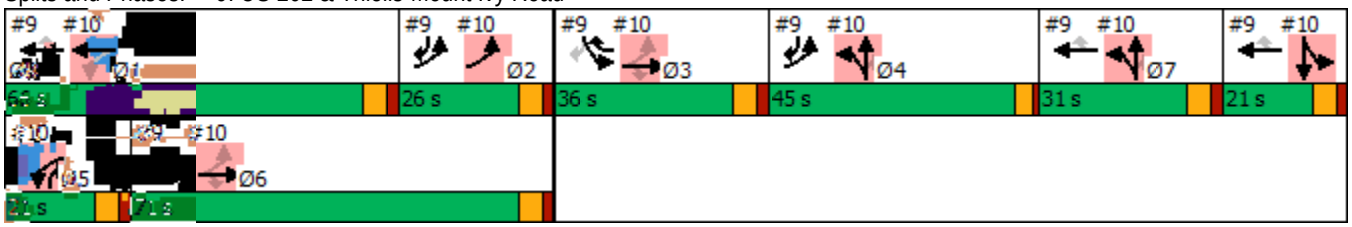


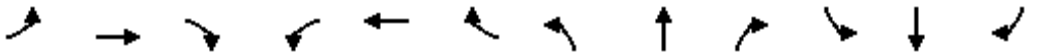
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							1		0			
Act Effct Green (s)	16.0	66.2	109.6	139.6	30.1	58.1						
Actuated g/C Ratio	0.09	0.37	0.61	0.78	0.17	0.32						
v/c Ratio	0.45	0.38	0.56	0.09	0.84	0.47						
Control Delay	57.4	43.1	7.2	1.8	96.9	18.0						
Queue Delay	0.0	0.0	2.4	0.2	0.0	0.0						
Total Delay	57.4	43.1	9.6	2.0	96.9	18.0						
LOS	E	D	A	A	F	B						
Approach Delay		44.9	8.5		53.8							
Approach LOS		D	A		D							
Queue Length 50th (ft)	61	231	163	6	300	95						
Queue Length 95th (ft)	104	292	m220	m13	#482	190						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	227	1325	1147	1248	300	924						
Starvation Cap Reductn	0	0	360	704	0	0						
Spillback Cap Reductn	0	0	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.31	0.37	0.82	0.21	0.84	0.33						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 179.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 32.9		Intersection LOS: C	
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

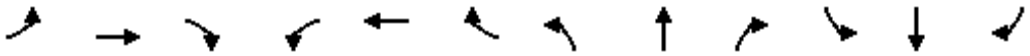
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	544	181	45	573	0	132	1	136	4	7	16
Future Volume (vph)	8	544	181	45	573	0	132	1	136	4	7	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.918	
Flt Protected	0.950			0.950			0.950	0.953			0.993	
Satd. Flow (prot)	1778	1835	1575	1762	1909	0	1674	1680	1623	0	1656	0
Flt Permitted	0.226			0.150			0.950	0.953			0.993	
Satd. Flow (perm)	423	1835	1575	278	1909	0	1674	1680	1623	0	1656	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106						142		17	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	4%	1%	0%	5%	0%	2%	25%	0%	0%
Adj. Flow (vph)	8	567	189	47	597	0	138	1	142	4	7	17
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	8	567	189	47	597	0	69	70	142	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					1							
Act Effct Green (s)	96.3	102.3	102.3	60.2	60.2		36.1	36.1	41.0		12.3	
Actuated g/C Ratio	0.54	0.57	0.57	0.34	0.34		0.20	0.20	0.23		0.07	
v/c Ratio	0.02	0.54	0.20	0.31	0.93		0.21	0.21	0.30		0.22	
Control Delay	4.6	7.1	0.8	49.0	80.5		63.9	64.0	7.0		46.8	
Queue Delay	0.0	0.4	0.7	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.6	7.5	1.4	49.0	80.5		64.0	64.0	7.0		46.8	
LOS	A	A	A	D	F		E	E	A		D	
Approach Delay		5.9			78.2			35.2			46.8	
Approach LOS		A			E			D			D	
Queue Length 50th (ft)	0	114	0	39	703		73	74	0		12	
Queue Length 95th (ft)	m1	124	m0	77	#1008		133	134	51		50	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	387	1030	930	217	639		336	337	546		154	
Starvation Cap Reductn	0	129	469	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		13	13	0		0	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.63	0.41	0.22	0.93		0.21	0.22	0.26		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 179.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 38.5		Intersection LOS: D	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

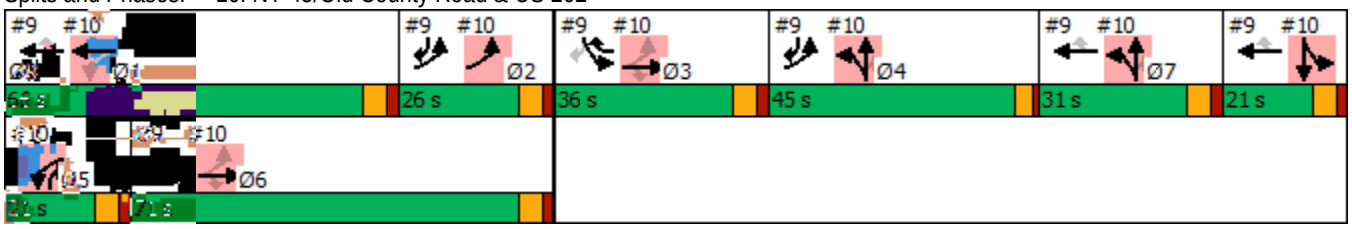
Intersection Capacity Utilization 56.2% ICU Level of Service B

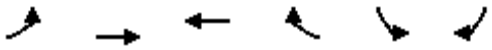
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	136	131	355	132	16
Future Volume (vph)	91	136	131	355	132	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.901		0.986	
Flt Protected		0.980			0.957	
Satd. Flow (prot)	0	1696	1560	0	1696	0
Flt Permitted		0.980			0.957	
Satd. Flow (perm)	0	1696	1560	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	10%	14%	1%	3%	0%
Adj. Flow (vph)	99	148	142	386	143	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	247	528	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	91	136	131	355	132	16
Future Vol, veh/h	91	136	131	355	132	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	10	14	1	3	0
Mvmt Flow	99	148	142	386	143	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	528	0	-	0	681	335
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.13	-	-	-	6.23	6.1
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.3
Pot Cap-1 Maneuver	1034	-	-	-	430	718
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1034	-	-	-	385	718
Mov Cap-2 Maneuver	-	-	-	-	385	-
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	SB
HCM Control Delay, s	3.5	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1034	-	-	-	405
HCM Lane V/C Ratio	0.096	-	-	-	0.397
HCM Control Delay (s)	8.8	0	-	-	19.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.9



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	251	17	65	461	25	223
Future Volume (vph)	251	17	65	461	25	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.879	
Flt Protected				0.994	0.995	
Satd. Flow (prot)	1710	0	0	1811	1586	0
Flt Permitted				0.994	0.995	
Satd. Flow (perm)	1710	0	0	1811	1586	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	0%	2%	4%	0%	2%
Adj. Flow (vph)	279	19	72	512	28	248
Shared Lane Traffic (%)						
Lane Group Flow (vph)	298	0	0	584	276	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	251	17	65	461	25	223
Future Vol, veh/h	251	17	65	461	25	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	0	2	4	0	2
Mvmt Flow	279	19	72	512	28	248

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	298	0	945	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	656	-
Critical Hdwy	-	-	4.12	-	6.2	6.12
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1263	-	309	756
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1263	-	284	756
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	648	-	-	1263	-
HCM Lane V/C Ratio	0.425	-	-	0.057	-
HCM Control Delay (s)	14.6	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0.2	-

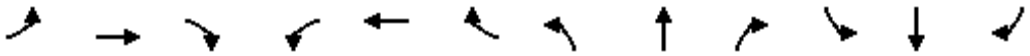
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	287	157	61	397	5	104	5	45	9	15	25
Future Volume (vph)	31	287	157	61	397	5	104	5	45	9	15	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.955			0.999			0.961			0.931	
Flt Protected		0.997			0.993			0.967			0.991	
Satd. Flow (prot)	0	1769	0	0	1794	0	0	1489	0	0	1576	0
Flt Permitted		0.950			0.883			0.766			0.950	
Satd. Flow (perm)	0	1685	0	0	1595	0	0	1179	0	0	1511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			1			29			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	7%	14%	2%	0%	10%	20%	17%	0%	13%	12%
Adj. Flow (vph)	33	302	165	64	418	5	109	5	47	9	16	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	500	0	0	487	0	0	161	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.56			0.59			0.40			0.10	
Control Delay		14.1			16.4			20.0			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.1			16.4			20.0			11.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		136			151			48			8	
Queue Length 95th (ft)		223			244			100			31	
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		898			829			402			508	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.56			0.59			0.40			0.10	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

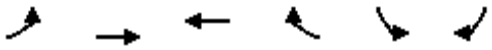




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	287	157	61	397	5	104	5	45	9	15	25
Future Volume (veh/h)	31	287	157	61	397	5	104	5	45	9	15	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2012	2012	1952	1847	2027	2057	1658	1509	1554	2097	1902	1917
Adj Flow Rate, veh/h	33	302	165	64	418	5	109	5	47	9	16	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	7	14	2	0	10	20	17	0	13	12
Cap, veh/h	84	607	316	139	872	10	325	24	111	117	205	277
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	65	1169	608	165	1679	19	759	74	343	191	630	854
Grp Volume(v), veh/h	500	0	0	487	0	0	161	0	0	51	0	0
Grp Sat Flow(s),veh/h/ln	1841	0	0	1863	0	0	1176	0	0	1675	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.2	0.0	0.0	11.7	0.0	0.0	7.9	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.07		0.33	0.13		0.01	0.68		0.29	0.18		0.51
Lane Grp Cap(c), veh/h	1006	0	0	1021	0	0	460	0	0	599	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.48	0.00	0.00	0.35	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1006	0	0	1021	0	0	460	0	0	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.1	0.0	0.0	11.7	0.0	0.0	20.1	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.6	0.0	0.0	2.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	5.2	0.0	0.0	2.4	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	0.0	0.0	13.3	0.0	0.0	22.2	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		500			487			161			51	
Approach Delay, s/veh		13.8			13.3			22.2			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			14.9									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	193	273	128	165	69
Future Volume (vph)	26	193	273	128	165	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.957		0.960	
Flt Protected		0.994			0.966	
Satd. Flow (prot)	0	1498	1699	0	1620	0
Flt Permitted		0.994			0.966	
Satd. Flow (perm)	0	1498	1699	0	1620	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	16%	30%	13%	11%	11%	12%
Adj. Flow (vph)	34	254	359	168	217	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	288	527	0	308	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

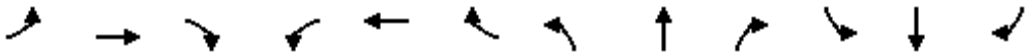
Intersection	
Int Delay, s/veh	14

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	193	273	128	165	69
Future Vol, veh/h	26	193	273	128	165	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	16	30	13	11	11	12
Mvmt Flow	34	254	359	168	217	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	527	0	-	0	765	443
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	322	-
Critical Hdwy	4.26	-	-	-	6.91	6.52
Critical Hdwy Stg 1	-	-	-	-	5.91	-
Critical Hdwy Stg 2	-	-	-	-	5.91	-
Follow-up Hdwy	2.344	-	-	-	3.599	3.408
Pot Cap-1 Maneuver	973	-	-	-	330	580
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	973	-	-	-	316	580
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	690	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	50.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	973	-	-	-	365
HCM Lane V/C Ratio	0.035	-	-	-	0.844
HCM Control Delay (s)	8.8	0	-	-	50.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	7.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	230	114	1	269	11	98	8	3	35	25	34
Future Volume (vph)	14	230	114	1	269	11	98	8	3	35	25	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.995			0.996			0.951	
Flt Protected		0.998						0.957			0.982	
Satd. Flow (prot)	0	1475	0	0	1587	0	0	1561	0	0	1690	0
Flt Permitted		0.998						0.957			0.982	
Satd. Flow (perm)	0	1475	0	0	1587	0	0	1561	0	0	1690	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	25%	26%	11%	0%	14%	0%	7%	0%	67%	0%	0%	0%
Adj. Flow (vph)	17	277	137	1	324	13	118	10	4	42	30	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	431	0	0	338	0	0	132	0	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

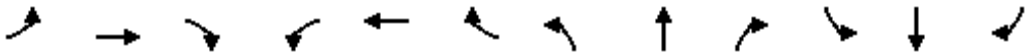
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	230	114	1	269	11	98	8	3	35	25	34
Future Vol, veh/h	14	230	114	1	269	11	98	8	3	35	25	34
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	25	26	11	0	14	0	7	0	67	0	0	0
Mvmt Flow	17	277	137	1	324	13	118	10	4	42	30	41
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.1	13.6	11.5	10.6
HCM LOS	C	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	90%	4%	0%	37%
Vol Thru, %	7%	64%	96%	27%
Vol Right, %	3%	32%	4%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	358	281	94
LT Vol	98	14	1	35
Through Vol	8	230	269	25
RT Vol	3	114	11	34
Lane Flow Rate	131	431	339	113
Geometry Grp	1	1	1	1
Degree of Util (X)	0.236	0.651	0.501	0.192
Departure Headway (Hd)	6.468	5.437	5.324	6.104
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	553	664	674	584
Service Time	4.538	3.485	3.376	4.176
HCM Lane V/C Ratio	0.237	0.649	0.503	0.193
HCM Control Delay	11.5	18.1	13.6	10.6
HCM Lane LOS	B	C	B	B
HCM 95th-tile Q	0.9	4.8	2.8	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	72	111	257	147	212	72	153	98	79	139	53
Future Volume (vph)	85	72	111	257	147	212	72	153	98	79	139	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944			0.954			0.959			0.974	
Flt Protected		0.984			0.980			0.989			0.986	
Satd. Flow (prot)	0	1883	0	0	1728	0	0	1723	0	0	1825	0
Flt Permitted		0.984			0.980			0.989			0.986	
Satd. Flow (perm)	0	1883	0	0	1728	0	0	1723	0	0	1825	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			785			1736	
Travel Time (s)		26.7			21.9			17.8			39.5	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	106	90	139	321	184	265	90	191	123	99	174	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	335	0	0	770	0	0	404	0	0	339	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

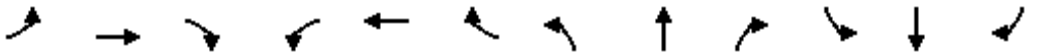
Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	335	770	403	339
Demand Flow Rate, veh/h	342	785	411	345
Vehicles Circulating, veh/h	605	395	301	607
Vehicles Exiting, veh/h	347	317	646	573
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.4	26.2	8.1	11.5
Approach LOS	B	D	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	342	785	411	345
Cap Entry Lane, veh/h	744	922	1015	743
Entry HV Adj Factor	0.980	0.981	0.981	0.981
Flow Entry, veh/h	335	770	403	339
Cap Entry, veh/h	730	905	996	729
V/C Ratio	0.459	0.851	0.405	0.464
Control Delay, s/veh	11.4	26.2	8.1	11.5
LOS	B	D	A	B
95th %tile Queue, veh	2	11	2	2



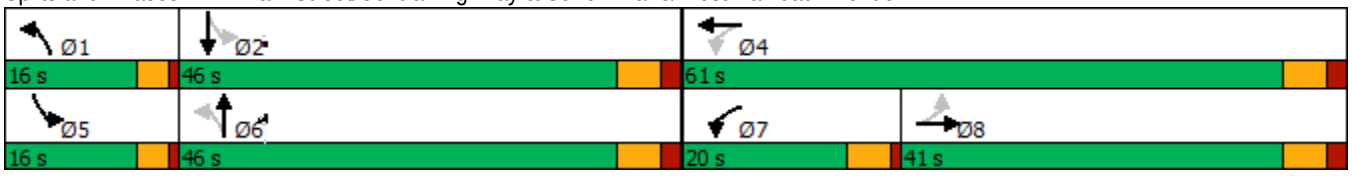
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	144	135	133	171	41	156	156	187	83	136	134
Future Volume (vph)	71	144	135	133	171	41	156	156	187	83	136	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	1.00							
Frt		0.948			0.971			0.918			0.926	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1662	0	1637	1417	0	1480	1640	0	1546	1488	0
Flt Permitted		0.876		0.372			0.365			0.334		
Satd. Flow (perm)	0	1470	0	640	1417	0	568	1640	0	543	1488	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			13			52			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	8%	13%	5%	26%	13%	22%	8%	5%	14%	10%	21%
Adj. Flow (vph)	75	152	142	140	180	43	164	164	197	87	143	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	369	0	140	223	0	164	361	0	87	284	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

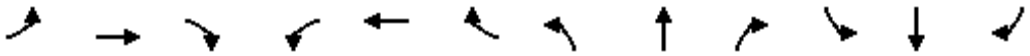
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.82		0.33	0.33		0.50	0.76		0.31	0.72	
Control Delay		47.8		18.2	18.2		25.0	39.5		21.7	39.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		47.8		18.2	18.2		25.0	39.5		21.7	39.9	
Queue Length 50th (ft)		195		46	76		66	177		33	141	
Queue Length 95th (ft)		#428		108	170		123	318		70	250	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		582		472	863		353	751		347	679	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.63		0.30	0.26		0.46	0.48		0.25	0.42	

Intersection Summary

Area Type: Other
Cycle Length: 123
Actuated Cycle Length: 95.7
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

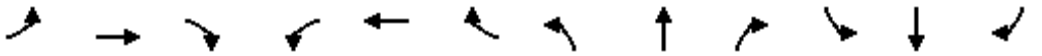




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	144	135	133	171	41	156	156	187	83	136	134
Future Volume (veh/h)	71	144	135	133	171	41	156	156	187	83	136	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2046	2016	1941	1773	1462	1654	1574	1781	1826	1769	1829	1663
Adj Flow Rate, veh/h	75	152	142	140	180	43	164	164	197	87	143	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	8	13	5	26	13	22	8	5	14	10	21
Cap, veh/h	132	213	177	449	484	116	344	205	246	290	202	199
Arrive On Green	0.27	0.27	0.27	0.09	0.42	0.42	0.11	0.28	0.28	0.07	0.24	0.24
Sat Flow, veh/h	264	799	665	1688	1140	272	1499	737	885	1684	845	833
Grp Volume(v), veh/h	369	0	0	140	0	223	164	0	361	87	0	284
Grp Sat Flow(s),veh/h/ln	1729	0	0	1688	0	1412	1499	0	1622	1684	0	1679
Q Serve(g_s), s	9.6	0.0	0.0	3.9	0.0	7.6	5.6	0.0	14.6	2.7	0.0	10.9
Cycle Q Clear(g_c), s	13.9	0.0	0.0	3.9	0.0	7.6	5.6	0.0	14.6	2.7	0.0	10.9
Prop In Lane	0.20		0.38	1.00		0.19	1.00		0.55	1.00		0.50
Lane Grp Cap(c), veh/h	522	0	0	449	0	600	344	0	451	290	0	401
V/C Ratio(X)	0.71	0.00	0.00	0.31	0.00	0.37	0.48	0.00	0.80	0.30	0.00	0.71
Avail Cap(c_a), veh/h	908	0	0	660	0	1099	434	0	918	457	0	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	0.0	14.7	0.0	13.9	17.5	0.0	23.7	18.8	0.0	24.6
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.1	0.0	0.5	0.4	0.0	4.7	0.2	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	1.4	0.0	2.3	1.8	0.0	5.8	1.0	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	0.0	14.8	0.0	14.4	17.8	0.0	28.4	19.1	0.0	27.9
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		369			363			525			371	
Approach Delay, s/veh		26.5			14.6			25.1			25.8	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	22.9		36.0	9.0	25.6	11.2	24.8				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	7.6	12.9		9.6	4.7	16.6	5.9	15.9				
Green Ext Time (p_c), s	0.2	2.4		1.9	0.1	3.0	0.2	2.9				

Intersection Summary												
HCM 6th Ctrl Delay			23.2									
HCM 6th LOS			C									

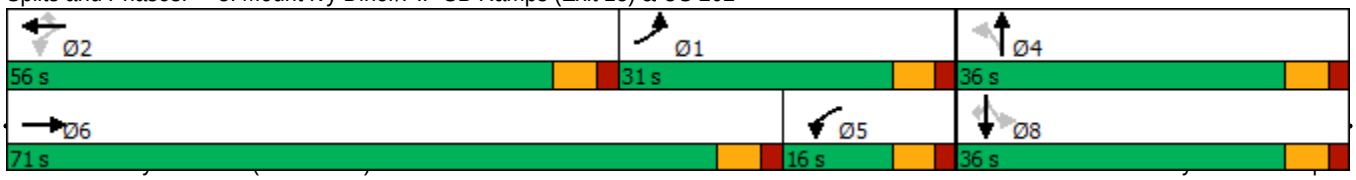


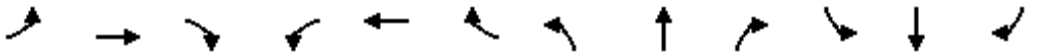
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	453	1	7	669	763	1	0	3	166	0	265
Future Volume (vph)	173	453	1	7	669	763	1	0	3	166	0	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.98			1.00	0.98
Frt						0.850		0.899				0.850
Flt Protected	0.950			0.950				0.988			0.950	
Satd. Flow (prot)	1653	1693	0	1420	1786	1576	0	1350	0	0	1566	1480
Flt Permitted	0.950			0.401				0.944			0.755	
Satd. Flow (perm)	1653	1693	0	598	1786	1576	0	1289	0	0	1242	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						619		133				279
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			4	4			2		1	1		2
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	10%	0%	29%	8%	4%	0%	0%	33%	12%	0%	6%
Adj. Flow (vph)	91	477	1	7	704	803	1	0	3	175	0	279
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	478	0	7	704	803	0	4	0	0	175	279
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Size(ft)	40	40		40	40			40			40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.46	0.46		0.02	0.78	0.73		0.01			0.67	0.53
Control Delay	50.7	14.4		10.9	29.4	9.6		0.0			49.5	8.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	50.7	14.4		10.9	29.4	9.6		0.0			49.5	8.2
Queue Length 50th (ft)	54	116		2	338	61		0			103	0
Queue Length 95th (ft)	114	384		7	#707	284		0			184	67
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	487	1233		422	1053	1183		541			439	691
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.19	0.39		0.02	0.67	0.68		0.01			0.40	0.40

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 91.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





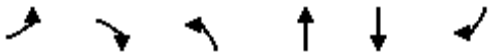
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	453	1	7	669	763	1	0	3	166	0	265
Future Volume (veh/h)	173	453	1	7	669	763	1	0	3	166	0	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1702	1658	1806	1583	1898	1958	2018	2018	1523	1759	1939	1849
Adj Flow Rate, veh/h	91	477	1	7	704	0	1	0	3	175	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	10	0	29	8	4	0	0	33	12	0	6
Cap, veh/h	152	571	1	451	834		114	33	208	350	0	
Arrive On Green	0.09	0.35	0.35	0.19	0.44	0.00	0.15	0.00	0.15	0.15	0.00	0.00
Sat Flow, veh/h	1621	1653	3	1507	1898	1659	233	216	1347	1461	0	1567
Grp Volume(v), veh/h	91	0	478	7	704	0	4	0	0	175	0	0
Grp Sat Flow(s),veh/h/ln	1621	0	1657	1507	1898	1659	1797	0	0	1461	0	1567
Q Serve(g_s), s	3.1	0.0	15.3	0.0	19.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	15.3	0.0	19.0	0.0	0.1	0.0	0.0	6.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.25		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	573	451	834		355	0	0	350	0	
V/C Ratio(X)	0.60	0.00	0.83	0.02	0.84		0.01	0.00	0.00	0.50	0.00	
Avail Cap(c_a), veh/h	704	0	1871	451	1649		961	0	0	885	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.0	0.0	17.3	16.6	14.4	0.0	20.6	0.0	0.0	23.4	0.0	0.0
Incr Delay (d2), s/veh	3.7	0.0	3.3	0.0	2.4	0.0	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.1	0.1	6.6	0.0	0.0	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	20.6	16.6	16.8	0.0	20.7	0.0	0.0	24.5	0.0	0.0
LnGrp LOS	C	A	C	B	B		C	A	A	C	A	
Approach Vol, veh/h		569			711			4			175	
Approach Delay, s/veh		21.9			16.8			20.7			24.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	31.3		14.9	16.8	25.9		14.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.1	21.0		2.1	2.0	17.3		8.6				
Green Ext Time (p_c), s	0.3	4.3		0.0	0.0	2.6		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		19.7	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	128	258	0	175	676	0
Future Volume (vph)	128	258	0	175	676	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910					
Flt Protected	0.984					
Satd. Flow (prot)	1797	0	0	1696	1919	0
Flt Permitted	0.984					
Satd. Flow (perm)	1797	0	0	1696	1919	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	0%	14%	0%	6%
Adj. Flow (vph)	133	269	0	182	704	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	0	0	182	704	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

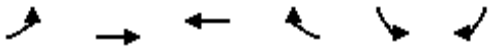
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	128	258	0	175	676	0
Future Vol, veh/h	128	258	0	175	676	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	0	14	0	6
Mvmt Flow	133	269	0	182	704	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	886	704	-	0	-	0
Stage 1	704	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	5.63	5.83	-	-	-	-
Critical Hdwy Stg 1	4.63	-	-	-	-	-
Critical Hdwy Stg 2	4.63	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	382	471	0	-	-	0
Stage 1	571	-	0	-	-	0
Stage 2	882	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	382	471	-	-	-	-
Mov Cap-2 Maneuver	382	-	-	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	705	-
HCM Lane V/C Ratio	-	0.57	-
HCM Control Delay (s)	-	16.7	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	3.6	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	137	301	537	40	13	138
Future Volume (vph)	137	301	537	40	13	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.876	
Flt Protected		0.985			0.996	
Satd. Flow (prot)	0	1598	1794	0	1334	0
Flt Permitted		0.985			0.996	
Satd. Flow (perm)	0	1598	1794	0	1334	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	9%	4%	4%	23%	16%
Adj. Flow (vph)	152	334	597	44	14	153
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	486	641	0	167	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	137	301	537	40	13	138
Future Vol, veh/h	137	301	537	40	13	138
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	8	9	4	4	23	16
Mvmt Flow	152	334	597	44	14	153

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	641	0	-	0	1257	619
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	638	-
Critical Hdwy	4.18	-	-	-	6.43	6.26
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.272	-	-	-	3.707	3.444
Pot Cap-1 Maneuver	915	-	-	-	183	472
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	506	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	915	-	-	-	146	472
Mov Cap-2 Maneuver	-	-	-	-	146	-
Stage 1	-	-	-	-	411	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	915	-	-	-	396
HCM Lane V/C Ratio	0.166	-	-	-	0.424
HCM Control Delay (s)	9.7	0	-	-	20.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.6	-	-	-	2.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	118	212	103	131	374
Future Volume (vph)	203	118	212	103	131	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950		0.956			
Flt Protected	0.969					0.987
Satd. Flow (prot)	1723	0	1772	0	0	1857
Flt Permitted	0.969					0.987
Satd. Flow (perm)	1723	0	1772	0	0	1857
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			785
Travel Time (s)	12.3		18.6			17.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	128	230	112	142	407
Shared Lane Traffic (%)						
Lane Group Flow (vph)	349	0	342	0	0	549
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

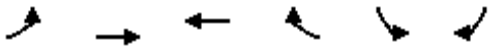
Intersection	
Int Delay, s/veh	29.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	118	212	103	131	374
Future Vol, veh/h	203	118	212	103	131	374
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	221	128	230	112	142	407

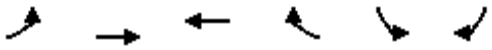
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	977	286	0	0	342	0
Stage 1	286	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Critical Hdwy	6.22	6.12	-	-	4.12	-
Critical Hdwy Stg 1	5.22	-	-	-	-	-
Critical Hdwy Stg 2	5.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	294	759	-	-	1217	-
Stage 1	775	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	250	759	-	-	1217	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	99.8	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	332	1217	-
HCM Lane V/C Ratio	-	-	1.051	0.117	-
HCM Control Delay (s)	-	-	99.8	8.3	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	12.5	0.4	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	88	506	788	96	283	651						
Future Volume (vph)	88	506	788	96	283	651						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					1.00							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3282	1786	1377	1680	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3282	1786	1377	1677	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						108						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					1							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	8%	10%	8%	19%	8%	3%						
Adj. Flow (vph)	92	527	821	100	295	678						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	527	821	100	295	678						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							3		1			
Act Effct Green (s)	36.1	72.5	99.5	133.6	34.2	82.3						
Actuated g/C Ratio	0.19	0.37	0.51	0.69	0.18	0.42						
v/c Ratio	0.30	0.43	0.90	0.11	1.00	0.93						
Control Delay	41.2	48.6	27.3	6.2	128.6	63.6						
Queue Delay	0.0	0.0	39.3	0.0	0.0	0.0						
Total Delay	41.2	48.6	66.6	6.2	128.6	63.6						
LOS	D	D	E	A	F	E						
Approach Delay		47.5	60.1		83.3							
Approach LOS		D	E		F							
Queue Length 50th (ft)	71	265	362	27	~384	722						
Queue Length 95th (ft)	112	372	m426	m33	#673	936						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	310	1228	916	949	296	861						
Starvation Cap Reductn	0	0	156	0	0	0						
Spillback Cap Reductn	0	6	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.30	0.43	1.08	0.11	1.00	0.79						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 193.8			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 66.0		Intersection LOS: E	

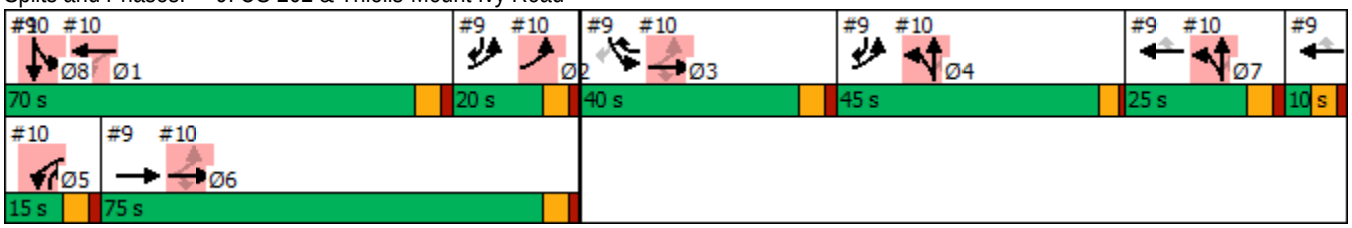
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

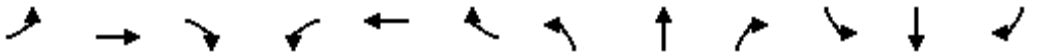
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

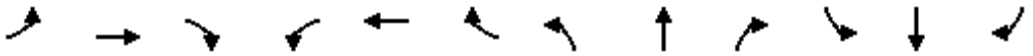
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	476	329	23	600	0	190	3	85	5	6	52
Future Volume (vph)	9	476	329	23	600	0	190	3	85	5	6	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.887	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1457	1717	1459	1466	1769	0	1583	1581	1505	0	1488	0
Flt Permitted	0.186			0.224			0.950	0.954			0.996	
Satd. Flow (perm)	285	1717	1459	346	1769	0	1583	1581	1505	0	1488	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			271						109		55	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	22%	9%	9%	25%	9%	0%	11%	33%	10%	0%	0%	14%
Adj. Flow (vph)	9	501	346	24	632	0	200	3	89	5	6	55
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	9	501	346	24	632	0	102	101	89	0	66	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					3							
Act Effct Green (s)	106.7	112.7	112.7	64.3	64.3		49.1	49.1	53.0		4.0	
Actuated g/C Ratio	0.55	0.58	0.58	0.33	0.33		0.25	0.25	0.27		0.02	
v/c Ratio	0.04	0.50	0.36	0.16	1.08		0.25	0.25	0.18		0.79	
Control Delay	6.7	6.8	1.1	51.2	118.2		57.9	57.9	3.4		76.4	
Queue Delay	0.0	0.4	0.7	0.0	0.0		1.5	1.5	0.0		13.2	
Total Delay	6.7	7.2	1.7	51.2	118.2		59.5	59.4	3.4		89.6	
LOS	A	A	A	D	F		E	E	A		F	
Approach Delay		5.0			115.7			42.4			89.6	
Approach LOS		A			F			D			F	
Queue Length 50th (ft)	1	48	0	21	~898		110	108	0		14	
Queue Length 95th (ft)	m2	m61	m0	51	#1298		172	169	24		#116	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	241	998	962	167	586		401	400	513		84	
Starvation Cap Reductn	0	163	318	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		177	177	0		9	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.04	0.60	0.54	0.14	1.08		0.46	0.45	0.17		0.88	

Intersection Summary	
Area Type:	Other
Cycle Length: 210	
Actuated Cycle Length: 193.8	
Natural Cycle: 145	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.08	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		1		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

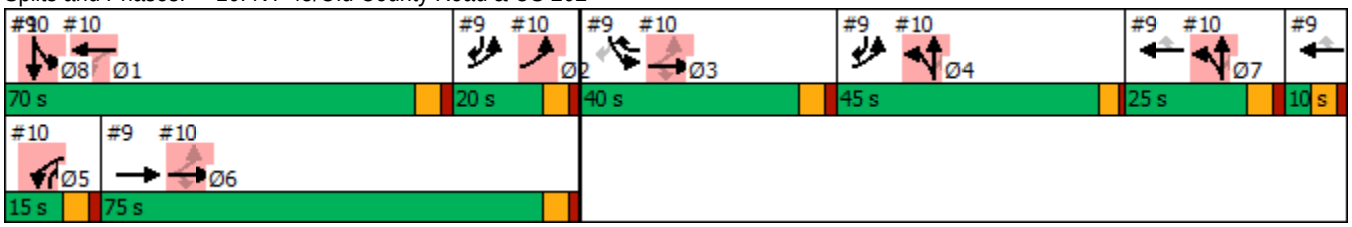
Intersection Signal Delay: 52.7	Intersection LOS: D
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

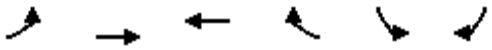
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	134	159	289	78	22
Future Volume (vph)	32	134	159	289	78	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.970	
Flt Protected		0.990			0.962	
Satd. Flow (prot)	0	1703	1581	0	1696	0
Flt Permitted		0.990			0.962	
Satd. Flow (perm)	0	1703	1581	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	35	146	173	314	85	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	181	487	0	109	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	134	159	289	78	22
Future Vol, veh/h	32	134	159	289	78	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	35	146	173	314	85	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	487	0	-	0	546	330
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	216	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1071	-	-	-	514	723
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	830	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1071	-	-	-	495	723
Mov Cap-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	830	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1071	-	-	-	532
HCM Lane V/C Ratio	0.032	-	-	-	0.204
HCM Control Delay (s)	8.5	0	-	-	13.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	194	18	112	387	60	372
Future Volume (vph)	194	18	112	387	60	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988				0.884	
Flt Protected				0.989	0.993	
Satd. Flow (prot)	1729	0	0	1811	1600	0
Flt Permitted				0.989	0.993	
Satd. Flow (perm)	1729	0	0	1811	1600	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	4%	3%	3%	1%
Adj. Flow (vph)	202	19	117	403	63	388
Shared Lane Traffic (%)						
Lane Group Flow (vph)	221	0	0	520	451	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

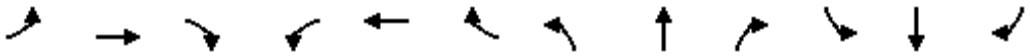
Intersection	
Int Delay, s/veh	8.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	194	18	112	387	60	372
Future Vol, veh/h	194	18	112	387	60	372
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	4	3	3	1
Mvmt Flow	202	19	117	403	63	388

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	221	0	849	212
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	637	-
Critical Hdwy	-	-	4.14	-	6.23	6.11
Critical Hdwy Stg 1	-	-	-	-	5.23	-
Critical Hdwy Stg 2	-	-	-	-	5.23	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.309
Pot Cap-1 Maneuver	-	-	1336	-	346	836
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	544	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1336	-	307	836
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	483	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	20.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	675	-	-	1336	-
HCM Lane V/C Ratio	0.667	-	-	0.087	-
HCM Control Delay (s)	20.3	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	5.1	-	-	0.3	-



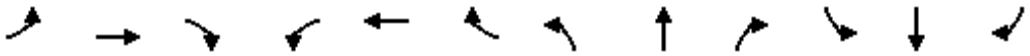
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	466	80	54	320	6	147	9	164	11	10	33
Future Volume (vph)	19	466	80	54	320	6	147	9	164	11	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.998			0.931			0.919	
Flt Protected		0.998			0.993			0.978			0.990	
Satd. Flow (prot)	0	1812	0	0	1729	0	0	1498	0	0	1713	0
Flt Permitted		0.981			0.867			0.824			0.910	
Satd. Flow (perm)	0	1781	0	0	1510	0	0	1262	0	0	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			1			73			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	16%	2%	18%	28%	4%	0%	6%	0%	13%	0%	0%	0%
Adj. Flow (vph)	20	491	84	57	337	6	155	9	173	12	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	595	0	0	400	0	0	337	0	0	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.64			0.51			0.73			0.11	
Control Delay		16.8			15.0			29.3			10.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.8			15.0			29.3			10.4	
Queue Length 50th (ft)		186			117			111			7	
Queue Length 95th (ft)		293			193			#238			32	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		932			784			459			534	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.64			0.51			0.73			0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 50	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

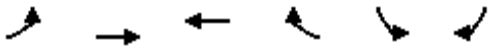




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	19	466	80	54	320	6	147	9	164	11	10	33
Future Volume (veh/h)	19	466	80	54	320	6	147	9	164	11	10	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	2027	1787	1637	1997	2057	1717	1806	1613	2097	2097	2097
Adj Flow Rate, veh/h	20	491	84	57	337	6	155	9	173	12	11	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	16	2	18	28	4	0	6	0	13	0	0	0
Cap, veh/h	63	857	143	145	833	14	264	32	241	141	148	354
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	29	1650	276	176	1604	27	603	100	742	261	457	1092
Grp Volume(v), veh/h	595	0	0	400	0	0	337	0	0	58	0	0
Grp Sat Flow(s),veh/h/ln	1954	0	0	1807	0	0	1446	0	0	1809	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.9	0.0	0.0	9.3	0.0	0.0	15.7	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.03		0.14	0.14		0.01	0.46		0.51	0.21		0.60
Lane Grp Cap(c), veh/h	1064	0	0	992	0	0	538	0	0	644	0	0
V/C Ratio(X)	0.56	0.00	0.00	0.40	0.00	0.00	0.63	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1064	0	0	992	0	0	538	0	0	644	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	11.1	0.0	0.0	22.7	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.2	0.0	0.0	5.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	4.0	0.0	0.0	5.9	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	0.0	12.3	0.0	0.0	28.2	0.0	0.0	18.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		595			400			337			58	
Approach Delay, s/veh		14.8			12.3			28.2			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	133	117	71	190	142	3
Future Volume (vph)	133	117	71	190	142	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.902		0.997	
Flt Protected		0.974			0.953	
Satd. Flow (prot)	0	1615	1498	0	1561	0
Flt Permitted		0.974			0.953	
Satd. Flow (perm)	0	1615	1498	0	1561	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	11%	23%	50%	9%	18%	31%
Adj. Flow (vph)	171	150	91	244	182	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	321	335	0	186	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

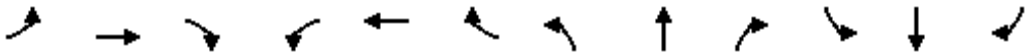
Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	133	117	71	190	142	3
Future Vol, veh/h	133	117	71	190	142	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	11	23	50	9	18	31
Mvmt Flow	171	150	91	244	182	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	335	0	-	0	705	214
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	492	-
Critical Hdwy	4.21	-	-	-	6.98	6.71
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.299	-	-	-	3.662	3.579
Pot Cap-1 Maneuver	1176	-	-	-	351	749
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	552	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1176	-	-	-	295	748
Mov Cap-2 Maneuver	-	-	-	-	295	-
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	552	-

Approach	EB	WB	SB
HCM Control Delay, s	4.6	0	34.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1176	-	-	-	299
HCM Lane V/C Ratio	0.145	-	-	-	0.622
HCM Control Delay (s)	8.6	0	-	-	34.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.5	-	-	-	3.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	148	74	1	140	41	96	26	4	26	16	24
Future Volume (vph)	37	148	74	1	140	41	96	26	4	26	16	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.961			0.970			0.995			0.950	
Flt Protected		0.993						0.963			0.981	
Satd. Flow (prot)	0	1488	0	0	1491	0	0	1590	0	0	1211	0
Flt Permitted		0.993						0.963			0.981	
Satd. Flow (perm)	0	1488	0	0	1491	0	0	1590	0	0	1211	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	28%	14%	0%	23%	0%	9%	0%	0%	100%	0%	0%
Adj. Flow (vph)	44	176	88	1	167	49	114	31	5	31	19	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	0	0	217	0	0	150	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

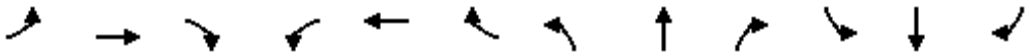
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	148	74	1	140	41	96	26	4	26	16	24
Future Vol, veh/h	37	148	74	1	140	41	96	26	4	26	16	24
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	28	14	0	23	0	9	0	0	100	0	0
Mvmt Flow	44	176	88	1	167	49	114	31	5	31	19	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	10	10.4	11.3
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	76%	14%	1%	39%
Vol Thru, %	21%	57%	77%	24%
Vol Right, %	3%	29%	23%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	126	259	182	66
LT Vol	96	37	1	26
Through Vol	26	148	140	16
RT Vol	4	74	41	24
Lane Flow Rate	150	308	217	79
Geometry Grp	1	1	1	1
Degree of Util (X)	0.236	0.403	0.296	0.154
Departure Headway (Hd)	5.656	4.702	4.922	7.049
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	638	755	734	511
Service Time	3.671	2.802	2.922	5.067
HCM Lane V/C Ratio	0.235	0.408	0.296	0.155
HCM Control Delay	10.4	11	10	11.3
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	0.9	2	1.2	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	36	58	210	78	81	73	68	417	67	116	31
Future Volume (vph)	84	36	58	210	78	81	73	68	417	67	116	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956			0.970			0.899			0.981	
Flt Protected		0.977			0.972			0.993			0.985	
Satd. Flow (prot)	0	1893	0	0	1742	0	0	1621	0	0	1836	0
Flt Permitted		0.977			0.972			0.993			0.985	
Satd. Flow (perm)	0	1893	0	0	1742	0	0	1621	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			776			1736	
Travel Time (s)		26.7			21.9			17.6			39.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	101	43	70	253	94	98	88	82	502	81	140	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	214	0	0	445	0	0	672	0	0	258	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

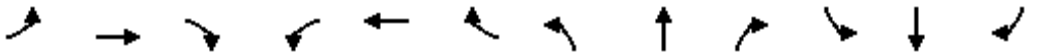
Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	214	445	672	258
Demand Flow Rate, veh/h	218	454	686	264
Vehicles Circulating, veh/h	484	277	230	444
Vehicles Exiting, veh/h	224	639	472	287
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	8.4	12.0	7.5
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	218	454	686	264
Cap Entry Lane, veh/h	842	1040	1091	877
Entry HV Adj Factor	0.982	0.980	0.980	0.978
Flow Entry, veh/h	214	445	672	258
Cap Entry, veh/h	827	1020	1070	858
V/C Ratio	0.259	0.436	0.629	0.301
Control Delay, s/veh	7.2	8.4	12.0	7.5
LOS	A	A	B	A
95th %tile Queue, veh	1	2	5	1

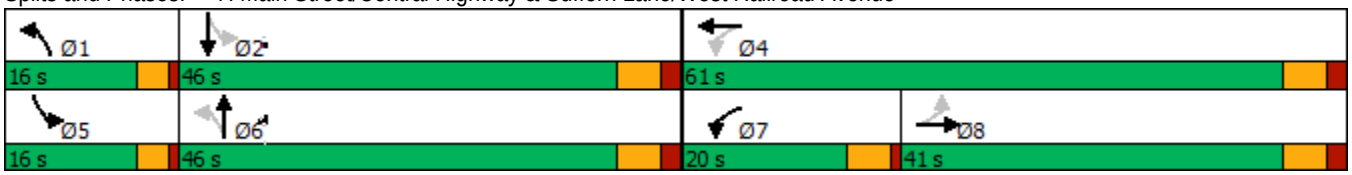


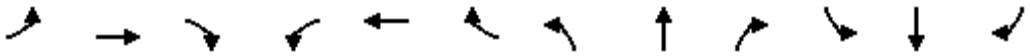
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	63	82	202	99	48	130	200	167	115	269	37
Future Volume (vph)	57	63	82	202	99	48	130	200	167	115	269	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	1.00	
Frt		0.945			0.951			0.932			0.982	
Flt Protected		0.986		0.950			0.950			0.950		
Satd. Flow (prot)	0	1597	0	1637	1632	0	1719	1638	0	1560	1685	0
Flt Permitted		0.855		0.472			0.417			0.307		
Satd. Flow (perm)	0	1384	0	812	1632	0	753	1638	0	503	1685	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			25			36			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	1		2	2		1	3		4	4		3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	21%	6%	13%	5%	7%	0%	5%	5%	9%	13%	8%	6%
Adj. Flow (vph)	59	65	85	208	102	49	134	206	172	119	277	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	209	0	208	151	0	134	378	0	119	315	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.67		0.44	0.22		0.33	0.77		0.37	0.64	
Control Delay		41.4		21.3	16.1		17.5	38.4		18.7	34.5	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		41.4		21.3	16.1		17.5	38.4		18.7	34.5	
Queue Length 50th (ft)		93		71	42		42	175		38	149	
Queue Length 95th (ft)		202		159	106		92	331		84	282	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		596		499	1083		472	803		377	810	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.35		0.42	0.14		0.28	0.47		0.32	0.39	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 88.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

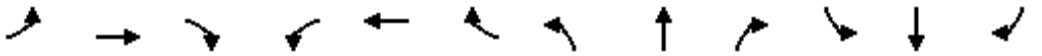




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	63	82	202	99	48	130	200	167	115	269	37
Future Volume (veh/h)	57	63	82	202	99	48	130	200	167	115	269	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1821	2046	1941	1773	1743	1847	1826	1826	1767	1784	1859	1889
Adj Flow Rate, veh/h	59	65	85	208	102	49	134	206	172	119	277	38
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	21	6	13	5	7	0	5	5	9	13	8	6
Cap, veh/h	134	112	119	527	421	202	402	264	221	330	453	62
Arrive On Green	0.17	0.17	0.17	0.13	0.38	0.38	0.09	0.29	0.29	0.08	0.28	0.28
Sat Flow, veh/h	364	659	702	1688	1112	534	1739	917	765	1699	1598	219
Grp Volume(v), veh/h	209	0	0	208	0	151	134	0	378	119	0	315
Grp Sat Flow(s),veh/h/ln	1725	0	0	1688	0	1645	1739	0	1682	1699	0	1817
Q Serve(g_s), s	4.7	0.0	0.0	6.0	0.0	4.0	3.4	0.0	13.2	3.1	0.0	9.6
Cycle Q Clear(g_c), s	7.2	0.0	0.0	6.0	0.0	4.0	3.4	0.0	13.2	3.1	0.0	9.6
Prop In Lane	0.28		0.41	1.00		0.32	1.00		0.46	1.00		0.12
Lane Grp Cap(c), veh/h	365	0	0	527	0	624	402	0	485	330	0	515
V/C Ratio(X)	0.57	0.00	0.00	0.39	0.00	0.24	0.33	0.00	0.78	0.36	0.00	0.61
Avail Cap(c_a), veh/h	1000	0	0	703	0	1419	578	0	1055	511	0	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	0.0	16.2	0.0	13.5	14.5	0.0	20.8	15.3	0.0	19.8
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.2	0.0	0.3	0.2	0.0	3.9	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.0	2.1	0.0	1.4	1.2	0.0	5.3	1.1	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	0.0	16.4	0.0	13.8	14.7	0.0	24.7	15.5	0.0	21.5
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	C
Approach Vol, veh/h		209			359			512			434	
Approach Delay, s/veh		26.9			15.3			22.1			19.9	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	24.1		30.2	9.2	24.4	13.3	16.8				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	5.4	11.6		6.0	5.1	15.2	8.0	9.2				
Green Ext Time (p_c), s	0.2	2.6		1.3	0.2	3.2	0.4	1.7				

Intersection Summary			
HCM 6th Ctrl Delay		20.5	
HCM 6th LOS		C	

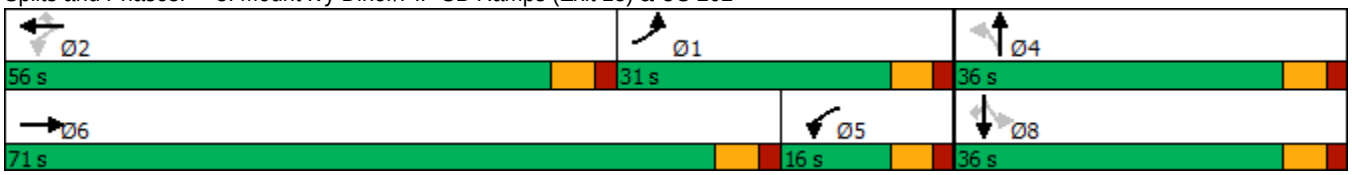


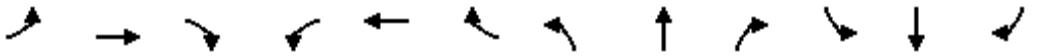
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	690	3	3	560	543	2	5	5	140	1	144
Future Volume (vph)	134	690	3	3	560	543	2	5	5	140	1	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			1.00	
Frt		0.999				0.850		0.944				0.850
Flt Protected	0.950			0.950				0.992			0.953	
Satd. Flow (prot)	1701	1789	0	1832	1854	1591	0	1534	0	0	1645	1480
Flt Permitted	0.950			0.186				0.955			0.719	
Satd. Flow (perm)	1701	1789	0	359	1854	1591	0	1477	0	0	1238	1480
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						527		5				150
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	4%	0%	0%	4%	3%	100%	0%	0%	7%	0%	6%
Adj. Flow (vph)	140	719	3	3	583	566	2	5	5	146	1	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	722	0	3	583	566	0	12	0	0	147	150
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.52	0.65		0.01	0.77	0.59		0.04			0.60	0.36
Control Delay	43.6	15.1		10.0	29.8	5.3		25.8			44.7	8.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	43.6	15.1		10.0	29.8	5.3		25.8			44.7	8.8
Queue Length 50th (ft)	66	187		1	243	11		3			68	0
Queue Length 95th (ft)	158	544		4	485	93		20			164	53
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	552	1431		384	1202	1217		578			482	667
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.25	0.50		0.01	0.49	0.47		0.02			0.30	0.22

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 82.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





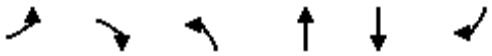
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	690	3	3	560	543	2	5	5	140	1	144
Future Volume (veh/h)	134	690	3	3	560	543	2	5	5	140	1	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1746	1746	1806	2018	1958	1973	517	2018	2018	1834	1939	1849
Adj Flow Rate, veh/h	140	719	3	3	583	0	2	5	5	146	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	0	0	4	3	100	0	0	7	0	6
Cap, veh/h	288	842	4	239	716		92	128	102	323	1	
Arrive On Green	0.17	0.48	0.48	0.05	0.37	0.00	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	1663	1738	7	1922	1958	1672	113	973	776	1460	10	1567
Grp Volume(v), veh/h	140	0	722	3	583	0	12	0	0	147	0	0
Grp Sat Flow(s),veh/h/ln	1663	0	1745	1922	1958	1672	1862	0	0	1470	0	1567
Q Serve(g_s), s	4.2	0.0	19.9	0.0	14.7	0.0	0.0	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear(g_c), s	4.2	0.0	19.9	0.0	14.7	0.0	0.3	0.0	0.0	5.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.17		0.42	0.99		1.00
Lane Grp Cap(c), veh/h	288	0	845	239	716		322	0	0	325	0	
V/C Ratio(X)	0.49	0.00	0.85	0.01	0.81		0.04	0.00	0.00	0.45	0.00	
Avail Cap(c_a), veh/h	760	0	2075	485	1790		1066	0	0	931	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.4	0.0	12.4	24.4	15.7	0.0	20.7	0.0	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	2.6	0.0	2.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.9	0.0	5.5	0.0	0.1	0.0	0.0	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	15.0	24.4	18.0	0.0	20.8	0.0	0.0	23.8	0.0	0.0
LnGrp LOS	C	A	B	C	B		C	A	A	C	A	
Approach Vol, veh/h		862			586			12			147	
Approach Delay, s/veh		16.1			18.0			20.8			23.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	26.0		13.2	9.0	32.5		13.2				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	6.2	16.7		2.3	2.0	21.9		7.3				
Green Ext Time (p_c), s	0.5	3.3		0.0	0.0	4.6		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		17.5	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	221	458	0	275	433	0
Future Volume (vph)	221	458	0	275	433	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.909					
Flt Protected	0.984					
Satd. Flow (prot)	1825	0	0	1774	1729	0
Flt Permitted	0.984					
Satd. Flow (perm)	1825	0	0	1774	1729	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	1%	0%	9%	11%	0%
Adj. Flow (vph)	233	482	0	289	456	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	715	0	0	289	456	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

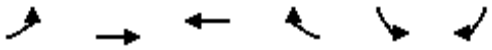
Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	221	458	0	275	433	0
Future Vol, veh/h	221	458	0	275	433	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	1	0	9	11	0
Mvmt Flow	233	482	0	289	456	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	745	456	-	0	-	0
Stage 1	456	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	5.62	5.81	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.309	-	-	-	-
Pot Cap-1 Maneuver	450	638	0	-	-	0
Stage 1	706	-	0	-	-	0
Stage 2	811	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	450	638	-	-	-	-
Mov Cap-2 Maneuver	450	-	-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	811	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	850	-
HCM Lane V/C Ratio	-	0.841	-
HCM Control Delay (s)	-	27.1	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	10	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	102	592	388	29	12	109
Future Volume (vph)	102	592	388	29	12	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.878	
Flt Protected		0.993			0.995	
Satd. Flow (prot)	0	1681	1781	0	1393	0
Flt Permitted		0.993			0.995	
Satd. Flow (perm)	0	1681	1781	0	1393	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	11%	3%	4%	15%	0%	13%
Adj. Flow (vph)	115	665	436	33	13	122
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	780	469	0	135	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

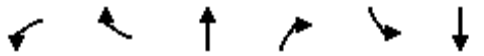
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	102	592	388	29	12	109
Future Vol, veh/h	102	592	388	29	12	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	11	3	4	15	0	13
Mvmt Flow	115	665	436	33	13	122

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	469	0	-	0	1348	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	895	-
Critical Hdwy	4.21	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.299	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1047	-	-	-	181	592
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	423	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1047	-	-	-	150	592
Mov Cap-2 Maneuver	-	-	-	-	150	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	423	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1047	-	-	-	458
HCM Lane V/C Ratio	0.109	-	-	-	0.297
HCM Control Delay (s)	8.9	0	-	-	16.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	106	452	153	108	275
Future Volume (vph)	141	106	452	153	108	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.942		0.966			
Flt Protected	0.972					0.986
Satd. Flow (prot)	1597	0	1703	0	0	1662
Flt Permitted	0.972					0.986
Satd. Flow (perm)	1597	0	1703	0	0	1662
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			776
Travel Time (s)	12.3		18.6			17.6
Confl. Peds. (#/hr)	1			1	1	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	5%	24%	8%	5%	27%	14%
Adj. Flow (vph)	170	128	545	184	130	331
Shared Lane Traffic (%)						
Lane Group Flow (vph)	298	0	729	0	0	461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	44

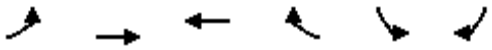
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	141	106	452	153	108	275
Future Vol, veh/h	141	106	452	153	108	275
Conflicting Peds, #/hr	1	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	24	8	5	27	14
Mvmt Flow	170	128	545	184	130	331

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1230	638	0	0	730	0
Stage 1	638	-	-	-	-	-
Stage 2	592	-	-	-	-	-
Critical Hdwy	6.25	6.34	-	-	4.37	-
Critical Hdwy Stg 1	5.25	-	-	-	-	-
Critical Hdwy Stg 2	5.25	-	-	-	-	-
Follow-up Hdwy	3.545	3.516	-	-	2.443	-
Pot Cap-1 Maneuver	207	447	-	-	770	-
Stage 1	539	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 164	447	-	-	769	-
Mov Cap-2 Maneuver	~ 164	-	-	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	447	-	-	-	-	-

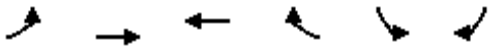
Approach	WB	NB	SB
HCM Control Delay, s	215.2	0	3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	225	769	-
HCM Lane V/C Ratio	-	-	1.323	0.169	-
HCM Control Delay (s)	-	-	215.2	10.6	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	16	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	151	642	552	149	338	553						
Future Volume (vph)	151	642	552	149	338	553						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3505	1854	1490	1634	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3505	1854	1490	1623	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						238						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					3							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95						
Heavy Vehicles (%)	8%	3%	4%	10%	11%	3%						
Adj. Flow (vph)	159	676	581	157	356	582						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	676	581	157	356	582						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							0		2			
Act Effct Green (s)	29.6	66.4	103.2	133.5	30.4	72.1						
Actuated g/C Ratio	0.16	0.35	0.55	0.71	0.16	0.38						
v/c Ratio	0.60	0.54	0.57	0.15	1.35	0.77						
Control Delay	59.0	52.1	10.7	4.3	233.2	37.0						
Queue Delay	0.0	0.0	1.4	0.3	0.0	0.0						
Total Delay	59.0	52.1	12.1	4.6	233.2	37.0						
LOS	E	D	B	A	F	D						
Approach Delay		53.4	10.5		111.5							
Approach LOS		D	B		F							
Queue Length 50th (ft)	149	338	253	5	~565	416						
Queue Length 95th (ft)	206	534	408	m95	#992	593						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	263	1282	1087	1061	264	967						
Starvation Cap Reductn	0	0	304	514	0	0						
Spillback Cap Reductn	0	24	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.60	0.54	0.74	0.29	1.35	0.60						

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 187.4	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.35	
Intersection Signal Delay: 62.5	Intersection LOS: E

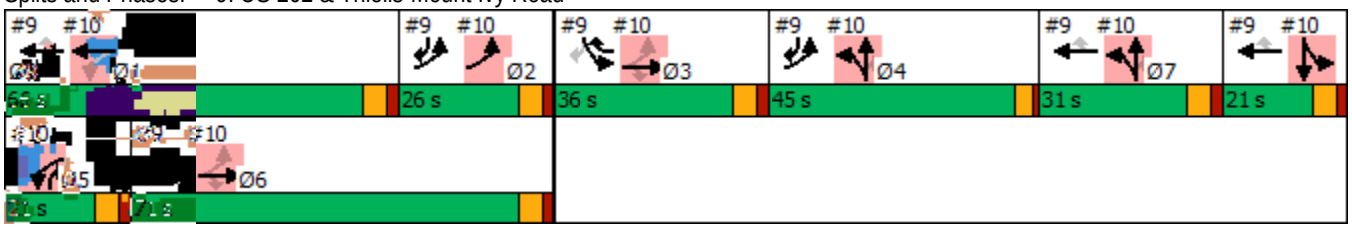
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

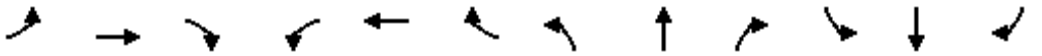
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

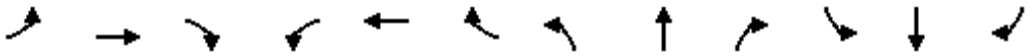
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	671	292	45	438	1	233	3	198	5	8	50
Future Volume (vph)	17	671	292	45	438	1	233	3	198	5	8	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99									
Frt			0.850						0.850		0.892	
Flt Protected	0.950			0.950			0.950	0.953			0.996	
Satd. Flow (prot)	1507	1766	1501	1832	1854	0	1643	1650	1655	0	1441	0
Flt Permitted	0.328			0.087			0.950	0.953			0.996	
Satd. Flow (perm)	520	1766	1481	168	1854	0	1643	1650	1655	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139						206		52	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	18%	6%	6%	0%	4%	0%	7%	0%	0%	0%	13%	18%
Adj. Flow (vph)	18	699	304	47	456	1	243	3	206	5	8	52
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	18	699	304	47	457	0	124	122	206	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	96.7	102.8	102.8	53.4	53.4		42.7	42.7	48.0		12.3	
Actuated g/C Ratio	0.52	0.55	0.55	0.28	0.28		0.23	0.23	0.26		0.07	
v/c Ratio	0.05	0.72	0.35	0.42	0.87		0.33	0.32	0.36		0.45	
Control Delay	6.4	13.4	1.3	63.5	81.1		63.6	63.5	5.5		38.8	
Queue Delay	0.0	2.1	1.0	0.0	0.0		0.4	0.4	0.0		0.0	
Total Delay	6.4	15.5	2.3	63.5	81.1		64.0	63.8	5.5		38.9	
LOS	A	B	A	E	F		E	E	A		D	
Approach Delay		11.4			79.5			37.3			38.9	
Approach LOS		B			E			D			D	
Queue Length 50th (ft)	1	133	0	41	520		140	137	0		15	
Queue Length 95th (ft)	m3	m75	m0	96	#893		213	211	51		80	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	375	960	868	182	600		374	376	638		164	
Starvation Cap Reductn	0	138	332	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		57	57	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.05	0.85	0.57	0.26	0.76		0.39	0.38	0.32		0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 187.4			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 34.8		Intersection LOS: C	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		2		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

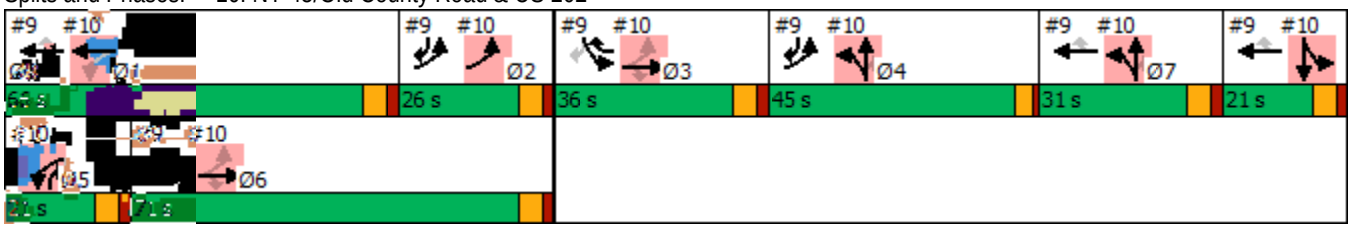
Intersection Capacity Utilization 66.7% ICU Level of Service C

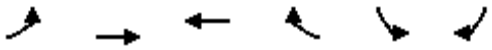
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	37	201	182	314	81	22
Future Volume (vph)	37	201	182	314	81	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.915		0.971	
Flt Protected		0.992			0.962	
Satd. Flow (prot)	0	1703	1583	0	1697	0
Flt Permitted		0.992			0.962	
Satd. Flow (perm)	0	1703	1583	0	1697	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	9%	2%	2%	0%
Adj. Flow (vph)	41	221	200	345	89	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	262	545	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	201	182	314	81	22
Future Vol, veh/h	37	201	182	314	81	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	9	9	2	2	0
Mvmt Flow	41	221	200	345	89	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	545	0	-	0	676	373
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	303	-
Critical Hdwy	4.13	-	-	-	6.22	6.1
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1019	-	-	-	435	685
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1019	-	-	-	415	685
Mov Cap-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	762	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1019	-	-	-	453
HCM Lane V/C Ratio	0.04	-	-	-	0.25
HCM Control Delay (s)	8.7	0	-	-	15.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	256	27	120	439	57	381
Future Volume (vph)	256	27	120	439	57	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.883	
Flt Protected				0.989	0.994	
Satd. Flow (prot)	1790	0	0	1833	1620	0
Flt Permitted				0.989	0.994	
Satd. Flow (perm)	1790	0	0	1833	1620	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	2%	2%	0%	0%
Adj. Flow (vph)	269	28	126	462	60	401
Shared Lane Traffic (%)						
Lane Group Flow (vph)	297	0	0	588	461	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

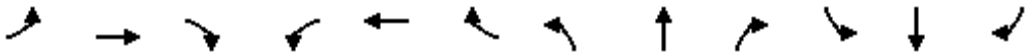
Intersection	
Int Delay, s/veh	10.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	256	27	120	439	57	381
Future Vol, veh/h	256	27	120	439	57	381
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	5	2	2	0	0
Mvmt Flow	269	28	126	462	60	401

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	297	0	997	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	714	-
Critical Hdwy	-	-	4.12	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1264	-	288	767
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1264	-	249	767
Mov Cap-2 Maneuver	-	-	-	-	249	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	441	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	27.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	604	-	-	1264	-
HCM Lane V/C Ratio	0.763	-	-	0.1	-
HCM Control Delay (s)	27.6	-	-	8.2	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	7	-	-	0.3	-



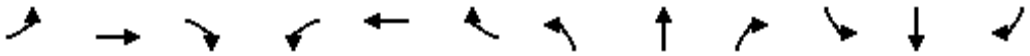
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	557	75	81	360	2	153	11	103	10	9	45
Future Volume (vph)	9	557	75	81	360	2	153	11	103	10	9	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.999			0.948			0.904	
Flt Protected		0.999			0.991			0.972			0.992	
Satd. Flow (prot)	0	1882	0	0	1800	0	0	1551	0	0	1665	0
Flt Permitted		0.992			0.764			0.782			0.937	
Satd. Flow (perm)	0	1869	0	0	1388	0	0	1248	0	0	1572	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						44			51	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	12%	1%	0%	6%	0%	9%	0%	0%	2%
Adj. Flow (vph)	10	626	84	91	404	2	172	12	116	11	10	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	720	0	0	497	0	0	300	0	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.74			0.69			0.69			0.13	
Control Delay		19.8			20.1			29.1			9.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		19.8			20.1			29.1			9.0	
Queue Length 50th (ft)		247			167			105			7	
Queue Length 95th (ft)		376			276			#199			33	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		977			721			434			544	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.74			0.69			0.69			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

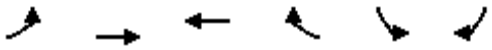




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	557	75	81	360	2	153	11	103	10	9	45
Future Volume (veh/h)	9	557	75	81	360	2	153	11	103	10	9	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2042	2012	1877	2042	2057	1717	1806	1672	2097	2097	2067
Adj Flow Rate, veh/h	10	626	84	91	404	2	172	12	116	11	10	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	1	3	12	1	0	6	0	9	0	0	2
Cap, veh/h	52	910	121	169	737	3	319	37	178	110	119	424
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	9	1751	232	219	1419	7	757	114	549	171	366	1305
Grp Volume(v), veh/h	720	0	0	497	0	0	300	0	0	72	0	0
Grp Sat Flow(s),veh/h/ln	1992	0	0	1645	0	0	1420	0	0	1842	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.8	0.0	0.0	13.9	0.0	0.0	13.7	0.0	0.0	2.1	0.0	0.0
Prop In Lane	0.01		0.12	0.18		0.00	0.57		0.39	0.15		0.71
Lane Grp Cap(c), veh/h	1082	0	0	910	0	0	535	0	0	652	0	0
V/C Ratio(X)	0.67	0.00	0.00	0.55	0.00	0.00	0.56	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1082	0	0	910	0	0	535	0	0	652	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	11.9	0.0	0.0	22.0	0.0	0.0	18.3	0.0	0.0
Incr Delay (d2), s/veh	3.2	0.0	0.0	2.4	0.0	0.0	4.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0	5.4	0.0	0.0	5.0	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	0.0	14.2	0.0	0.0	26.2	0.0	0.0	18.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		720			497			300			72	
Approach Delay, s/veh		17.1			14.2			26.2			18.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			18.0									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	29	93	26	239	149	16
Future Volume (vph)	29	93	26	239	149	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.878		0.987	
Flt Protected		0.988			0.957	
Satd. Flow (prot)	0	1766	1643	0	1723	0
Flt Permitted		0.988			0.957	
Satd. Flow (perm)	0	1766	1643	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	12%	7%	12%	6%	5%	21%
Adj. Flow (vph)	38	121	34	310	194	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	159	344	0	215	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

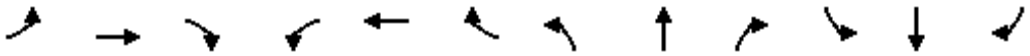
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	93	26	239	149	16
Future Vol, veh/h	29	93	26	239	149	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	12	7	12	6	5	21
Mvmt Flow	38	121	34	310	194	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	344	0	-	0	386	189
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.22	-	-	-	6.85	6.61
Critical Hdwy Stg 1	-	-	-	-	5.85	-
Critical Hdwy Stg 2	-	-	-	-	5.85	-
Follow-up Hdwy	2.308	-	-	-	3.545	3.489
Pot Cap-1 Maneuver	1161	-	-	-	586	798
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	811	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1161	-	-	-	565	798
Mov Cap-2 Maneuver	-	-	-	-	565	-
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1161	-	-	-	581
HCM Lane V/C Ratio	0.032	-	-	-	0.369
HCM Control Delay (s)	8.2	0	-	-	14.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	152	56	0	147	39	94	25	5	23	15	24
Future Volume (vph)	34	152	56	0	147	39	94	25	5	23	15	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.969			0.972			0.995			0.947	
Flt Protected		0.993						0.964			0.982	
Satd. Flow (prot)	0	1719	0	0	1654	0	0	1626	0	0	1682	0
Flt Permitted		0.993						0.964			0.982	
Satd. Flow (perm)	0	1719	0	0	1654	0	0	1626	0	0	1682	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)	1		7	7		1						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	5%	7%	0%	8%	0%	5%	0%	20%	0%	0%	0%
Adj. Flow (vph)	40	181	67	0	175	46	112	30	6	27	18	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	288	0	0	221	0	0	148	0	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

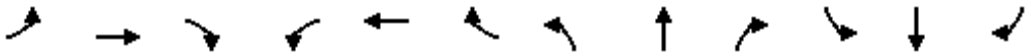
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	152	56	0	147	39	94	25	5	23	15	24
Future Vol, veh/h	34	152	56	0	147	39	94	25	5	23	15	24
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	0	5	7	0	8	0	5	0	20	0	0	0
Mvmt Flow	40	181	67	0	175	46	112	30	6	27	18	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.5	10	10	8.9
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	76%	14%	0%	37%
Vol Thru, %	20%	63%	79%	24%
Vol Right, %	4%	23%	21%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	242	186	62
LT Vol	94	34	0	23
Through Vol	25	152	147	15
RT Vol	5	56	39	24
Lane Flow Rate	148	288	221	74
Geometry Grp	1	1	1	1
Degree of Util (X)	0.221	0.372	0.297	0.106
Departure Headway (Hd)	5.393	4.645	4.835	5.15
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	658	769	737	687
Service Time	3.481	2.709	2.906	3.247
HCM Lane V/C Ratio	0.225	0.375	0.3	0.108
HCM Control Delay	10	10.5	10	8.9
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.8	1.7	1.2	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	37	57	217	80	84	74	70	433	69	121	32
Future Volume (vph)	86	37	57	217	80	84	74	70	433	69	121	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.970			0.899			0.980	
Flt Protected		0.977			0.972			0.994			0.985	
Satd. Flow (prot)	0	1895	0	0	1742	0	0	1623	0	0	1834	0
Flt Permitted		0.977			0.972			0.994			0.985	
Satd. Flow (perm)	0	1895	0	0	1742	0	0	1623	0	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			793			1736	
Travel Time (s)		26.7			21.9			18.0			39.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	99	43	66	249	92	97	85	80	498	79	139	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	208	0	0	438	0	0	663	0	0	255	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	208	438	663	255
Demand Flow Rate, veh/h	212	447	677	261
Vehicles Circulating, veh/h	477	270	226	435
Vehicles Exiting, veh/h	219	633	463	282
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.0	8.2	11.7	7.4
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	212	447	677	261
Cap Entry Lane, veh/h	848	1048	1096	885
Entry HV Adj Factor	0.982	0.980	0.980	0.978
Flow Entry, veh/h	208	438	663	255
Cap Entry, veh/h	833	1027	1074	866
V/C Ratio	0.250	0.427	0.618	0.295
Control Delay, s/veh	7.0	8.2	11.7	7.4
LOS	A	A	B	A
95th %tile Queue, veh	1	2	4	1

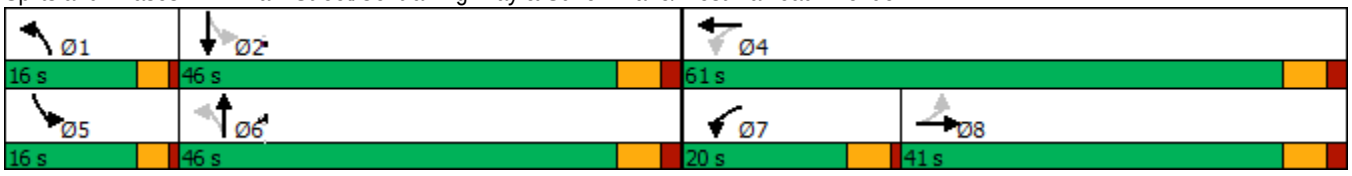
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	105	130	217	101	65	103	287	139	118	209	73
Future Volume (vph)	112	105	130	217	101	65	103	287	139	118	209	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Frt		0.949			0.941			0.951			0.961	
Flt Protected		0.984		0.950			0.950			0.950		
Satd. Flow (prot)	0	1709	0	1702	1581	0	1703	1729	0	1647	1696	0
Flt Permitted		0.823		0.414			0.427			0.176		
Satd. Flow (perm)	0	1427	0	741	1581	0	764	1729	0	305	1696	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			34			21			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)	4		1	1		4	2		3	3		2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	9%	2%	1%	9%	3%	6%	3%	5%	7%	5%	3%
Adj. Flow (vph)	123	115	143	238	111	71	113	315	153	130	230	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	381	0	238	182	0	113	468	0	130	310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

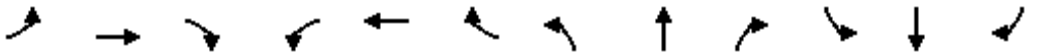
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.90		0.51	0.24		0.30	0.87		0.52	0.57	
Control Delay		62.7		23.8	17.0		20.8	53.7		26.5	35.7	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		62.7		23.8	17.0		20.8	53.7		26.5	35.7	
Queue Length 50th (ft)		267		113	68		50	325		58	185	
Queue Length 95th (ft)		#463		179	122		86	#496		98	287	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		476		479	816		430	649		281	639	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.80		0.50	0.22		0.26	0.72		0.46	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 123
Actuated Cycle Length: 111.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

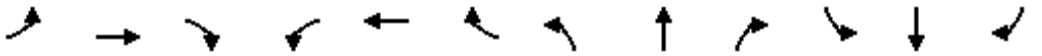




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	105	130	217	101	65	103	287	139	118	209	73
Future Volume (veh/h)	112	105	130	217	101	65	103	287	139	118	209	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	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	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2016	2001	2106	1832	1714	1803	1811	1856	1826	1874	1904	1934
Adj Flow Rate, veh/h	123	115	143	238	111	71	113	315	153	130	230	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	9	2	1	9	3	6	3	5	7	5	3
Cap, veh/h	179	148	165	496	433	277	374	365	177	260	425	148
Arrive On Green	0.27	0.27	0.27	0.12	0.44	0.44	0.07	0.31	0.31	0.07	0.32	0.32
Sat Flow, veh/h	469	544	608	1745	975	623	1725	1177	572	1784	1348	469
Grp Volume(v), veh/h	381	0	0	238	0	182	113	0	468	130	0	310
Grp Sat Flow(s),veh/h/ln	1621	0	0	1745	0	1598	1725	0	1749	1784	0	1817
Q Serve(g_s), s	18.2	0.0	0.0	8.5	0.0	6.6	4.0	0.0	23.2	4.5	0.0	13.0
Cycle Q Clear(g_c), s	20.5	0.0	0.0	8.5	0.0	6.6	4.0	0.0	23.2	4.5	0.0	13.0
Prop In Lane	0.32		0.38	1.00		0.39	1.00		0.33	1.00		0.26
Lane Grp Cap(c), veh/h	492	0	0	496	0	710	374	0	542	260	0	572
V/C Ratio(X)	0.77	0.00	0.00	0.48	0.00	0.26	0.30	0.00	0.86	0.50	0.00	0.54
Avail Cap(c_a), veh/h	666	0	0	574	0	956	483	0	761	365	0	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	18.4	0.0	16.0	20.1	0.0	29.9	22.3	0.0	26.0
Incr Delay (d2), s/veh	4.9	0.0	0.0	0.3	0.0	0.3	0.2	0.0	8.6	0.6	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	0.0	3.4	0.0	2.4	1.6	0.0	10.7	1.8	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	0.0	18.7	0.0	16.3	20.2	0.0	38.5	22.9	0.0	27.1
LnGrp LOS	D	A	A	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h		381			420			581			440	
Approach Delay, s/veh		36.6			17.7			34.9			25.9	
Approach LOS		D			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	35.0		46.8	10.6	34.5	15.9	31.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	6.0	15.0		8.6	6.5	25.2	10.5	22.5				
Green Ext Time (p_c), s	0.1	2.5		1.6	0.2	3.3	0.3	2.5				

Intersection Summary												
HCM 6th Ctrl Delay			29.1									
HCM 6th LOS			C									

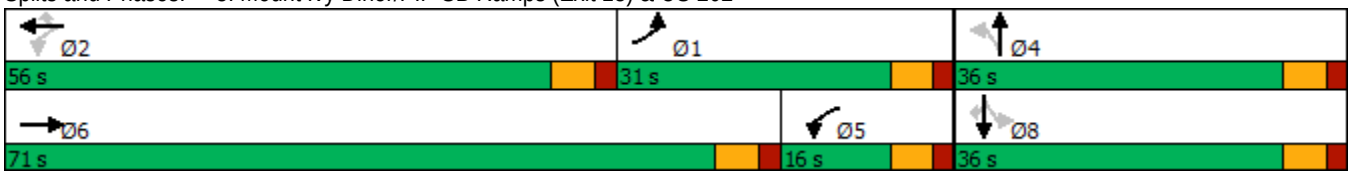


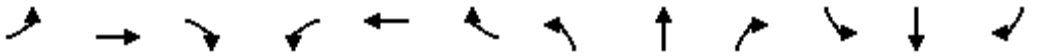
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	661	0	3	511	583	0	0	2	154	0	140
Future Volume (vph)	122	661	0	3	511	583	0	0	2	154	0	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00			1.00		0.99						0.98
Frt						0.850		0.865				0.850
Flt Protected	0.950			0.950							0.950	
Satd. Flow (prot)	1734	1790	0	1832	1819	1576	0	1668	0	0	1670	1553
Flt Permitted	0.950			0.195							0.757	
Satd. Flow (perm)	1733	1790	0	376	1819	1556	0	1668	0	0	1331	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						614		321				147
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)	1		4	4		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	4%	0%	0%	0%	5%	0%	1%
Adj. Flow (vph)	128	696	0	3	538	614	0	0	2	162	0	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	696	0	3	538	614	0	2	0	0	162	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.48	0.64		0.01	0.74	0.62		0.00			0.60	0.34
Control Delay	42.3	15.5		9.3	28.2	4.7		0.0			41.9	8.4
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	42.3	15.5		9.3	28.2	4.7		0.0			41.9	8.4
Queue Length 50th (ft)	57	174		1	212	0		0			71	0
Queue Length 95th (ft)	147	536		4	431	64		0			174	51
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	581	1472		396	1221	1246		863			536	698
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.22	0.47		0.01	0.44	0.49		0.00			0.30	0.21

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 80.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





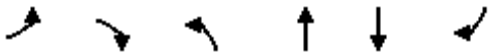
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	661	0	3	511	583	0	0	2	154	0	140
Future Volume (veh/h)	122	661	0	3	511	583	0	0	2	154	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1746	1806	2018	1928	1958	2018	2018	2018	1864	1939	1924
Adj Flow Rate, veh/h	128	696	0	3	538	0	0	0	2	162	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	0	6	4	0	0	0	5	0	1
Cap, veh/h	302	818	0	239	665		0	0	246	342	0	
Arrive On Green	0.18	0.47	0.00	0.06	0.35	0.00	0.00	0.00	0.14	0.14	0.00	0.00
Sat Flow, veh/h	1692	1746	0	1922	1928	1659	0	0	1698	1447	0	1631
Grp Volume(v), veh/h	128	696	0	3	538	0	0	0	2	162	0	0
Grp Sat Flow(s),veh/h/ln	1692	1746	0	1922	1928	1659	0	0	1698	1447	0	1631
Q Serve(g_s), s	3.7	19.1	0.0	0.0	13.8	0.0	0.0	0.0	0.1	5.8	0.0	0.0
Cycle Q Clear(g_c), s	3.7	19.1	0.0	0.0	13.8	0.0	0.0	0.0	0.1	5.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	818	0	239	665		0	0	246	342	0	
V/C Ratio(X)	0.42	0.85	0.00	0.01	0.81		0.00	0.00	0.01	0.47	0.00	
Avail Cap(c_a), veh/h	778	2089	0	486	1774		0	0	938	935	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	12.8	0.0	24.3	16.2	0.0	0.0	0.0	19.9	22.4	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.6	0.0	0.0	2.4	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.7	0.0	0.0	5.2	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	15.4	0.0	24.3	18.6	0.0	0.0	0.0	19.9	23.4	0.0	0.0
LnGrp LOS	C	B	A	C	B		A	A	B	C	A	
Approach Vol, veh/h		824			541			2			162	
Approach Delay, s/veh		16.2			18.6			19.9			23.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	24.8		13.9	9.0	31.5		13.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	5.7	15.8		2.1	2.0	21.1		7.9				
Green Ext Time (p_c), s	0.5	3.0		0.0	0.0	4.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		17.8	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	266	355	0	289	396	0
Future Volume (vph)	266	355	0	289	396	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923					
Flt Protected	0.979					
Satd. Flow (prot)	1839	0	0	1842	1845	0
Flt Permitted	0.979					
Satd. Flow (perm)	1839	0	0	1842	1845	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	2%	0%	5%	4%	0%
Adj. Flow (vph)	292	390	0	318	435	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	682	0	0	318	435	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

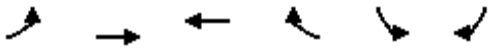
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	266	355	0	289	396	0
Future Vol, veh/h	266	355	0	289	396	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	1	2	0	5	4	0
Mvmt Flow	292	390	0	318	435	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	753	435	-	0	-	0
Stage 1	435	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	5.61	5.82	-	-	-	-
Critical Hdwy Stg 1	4.61	-	-	-	-	-
Critical Hdwy Stg 2	4.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.318	-	-	-	-
Pot Cap-1 Maneuver	448	652	0	-	-	0
Stage 1	721	-	0	-	-	0
Stage 2	794	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	448	652	-	-	-	-
Mov Cap-2 Maneuver	448	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	794	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1046	-
HCM Lane V/C Ratio	-	0.652	-
HCM Control Delay (s)	-	14.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	5.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	607	389	23	9	109
Future Volume (vph)	90	607	389	23	9	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992		0.875	
Flt Protected		0.994			0.996	
Satd. Flow (prot)	0	1677	1836	0	1499	0
Flt Permitted		0.994			0.996	
Satd. Flow (perm)	0	1677	1836	0	1499	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	8%	4%	1%	14%	11%	3%
Adj. Flow (vph)	105	706	452	27	10	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	811	479	0	137	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

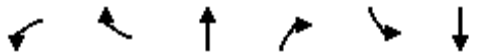
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	90	607	389	23	9	109
Future Vol, veh/h	90	607	389	23	9	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	4	1	14	11	3
Mvmt Flow	105	706	452	27	10	127

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	479	0	-	0	1382	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	916	-
Critical Hdwy	4.18	-	-	-	6.31	6.13
Critical Hdwy Stg 1	-	-	-	-	5.31	-
Critical Hdwy Stg 2	-	-	-	-	5.31	-
Follow-up Hdwy	2.272	-	-	-	3.599	3.327
Pot Cap-1 Maneuver	1053	-	-	-	164	602
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	395	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1053	-	-	-	137	602
Mov Cap-2 Maneuver	-	-	-	-	137	-
Stage 1	-	-	-	-	526	-
Stage 2	-	-	-	-	395	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1053	-	-	-	478
HCM Lane V/C Ratio	0.099	-	-	-	0.287
HCM Control Delay (s)	8.8	0	-	-	15.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	140	119	459	158	124	271
Future Volume (vph)	140	119	459	158	124	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938		0.965			
Flt Protected	0.974					0.985
Satd. Flow (prot)	1713	0	1810	0	0	1905
Flt Permitted	0.974					0.985
Satd. Flow (perm)	1713	0	1810	0	0	1905
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			793
Travel Time (s)	12.3		18.6			18.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	9%	0%	3%	8%	0%
Adj. Flow (vph)	171	145	560	193	151	330
Shared Lane Traffic (%)						
Lane Group Flow (vph)	316	0	753	0	0	481
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	54.9

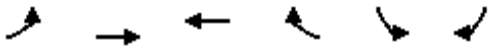
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	119	459	158	124	271
Future Vol, veh/h	140	119	459	158	124	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	9	0	3	8	0
Mvmt Flow	171	145	560	193	151	330

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1289	657	0	0	753	0
Stage 1	657	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Critical Hdwy	6.22	6.19	-	-	4.18	-
Critical Hdwy Stg 1	5.22	-	-	-	-	-
Critical Hdwy Stg 2	5.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.381	-	-	2.272	-
Pot Cap-1 Maneuver	194	461	-	-	830	-
Stage 1	535	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 151	461	-	-	830	-
Mov Cap-2 Maneuver	~ 151	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	427	-	-	-	-	-

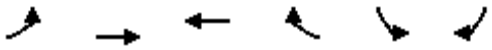
Approach	WB	NB	SB
HCM Control Delay, s	264.4	0	3.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	219	830	-
HCM Lane V/C Ratio	-	-	1.442	0.182	-
HCM Control Delay (s)	-	-	264.4	10.3	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	18.5	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	181	627	563	152	217	535						
Future Volume (vph)	181	627	563	152	217	535						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor	1.00			0.97	0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1719	3471	1802	1546	1728	1607						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1712	3471	1802	1501	1708	1607						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						232						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)	2			2	5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	5%	4%	7%	6%	5%	1%						
Adj. Flow (vph)	189	653	586	158	226	557						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	653	586	158	226	557						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							2		3			
Act Effct Green (s)	29.5	67.0	104.1	133.9	29.8	71.4						
Actuated g/C Ratio	0.16	0.36	0.55	0.71	0.16	0.38						
v/c Ratio	0.70	0.53	0.59	0.15	0.82	0.74						
Control Delay	67.8	51.5	10.8	4.1	100.5	34.8						
Queue Delay	0.0	0.0	1.4	0.3	0.0	0.0						
Total Delay	67.8	51.5	12.2	4.4	100.5	34.8						
LOS	E	D	B	A	F	C						
Approach Delay		55.2	10.6		53.8							
Approach LOS		E	B		D							
Queue Length 50th (ft)	190	324	239	6	271	381						
Queue Length 95th (ft)	241	515	394	m89	#546	542						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	269	1271	1056	1082	279	977						
Starvation Cap Reductn	0	0	276	529	0	0						
Spillback Cap Reductn	0	12	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.70	0.52	0.75	0.29	0.81	0.57						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 187.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 40.7		Intersection LOS: D	

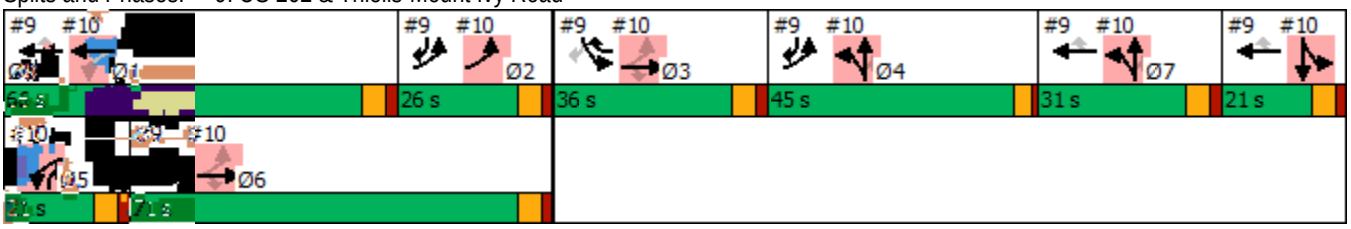
Intersection Capacity Utilization 72.8% ICU Level of Service C

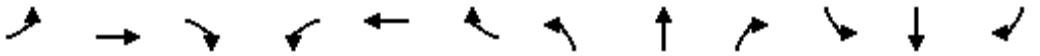
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

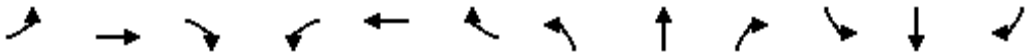
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	565	278	36	425	2	205	5	179	7	9	39
Future Volume (vph)	9	565	278	36	425	2	205	5	179	7	9	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00				0.98		1.00	
Frt			0.850		0.999				0.850		0.905	
Flt Protected	0.950			0.950			0.950	0.954			0.993	
Satd. Flow (prot)	1602	1782	1544	1579	1870	0	1598	1611	1607	0	1544	0
Flt Permitted	0.319			0.086			0.950	0.954			0.993	
Satd. Flow (perm)	538	1782	1544	143	1870	0	1598	1611	1571	0	1544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157						195		40	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	3					3			1	1		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	5%	3%	16%	3%	0%	10%	0%	3%	29%	0%	8%
Adj. Flow (vph)	10	614	302	39	462	2	223	5	195	8	10	42
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	10	614	302	39	464	0	114	114	195	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					2							
Act Effct Green (s)	96.8	102.8	102.8	53.8	53.8		42.6	42.6	47.7		12.9	
Actuated g/C Ratio	0.52	0.55	0.55	0.29	0.29		0.23	0.23	0.25		0.07	
v/c Ratio	0.03	0.63	0.33	0.41	0.87		0.31	0.31	0.36		0.42	
Control Delay	5.0	9.1	1.0	65.3	80.8		63.6	63.5	5.7		46.4	
Queue Delay	0.0	0.8	0.6	0.0	0.0		0.4	0.4	0.0		0.0	
Total Delay	5.0	9.9	1.6	65.3	80.8		63.9	63.9	5.7		46.5	
LOS	A	A	A	E	F		E	E	A		D	
Approach Delay		7.2			79.6			37.1			46.5	
Approach LOS		A			E			D			D	
Queue Length 50th (ft)	1	114	0	34	529		128	128	0		23	
Queue Length 95th (ft)	m2	817	m0	83	#908		198	198	50		89	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	392	971	913	157	605		363	365	606		161	
Starvation Cap Reductn	0	132	320	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		56	57	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.03	0.73	0.51	0.25	0.77		0.37	0.37	0.32		0.38	

Intersection Summary	
Area Type:	Other
Cycle Length: 225	
Actuated Cycle Length: 187.7	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	

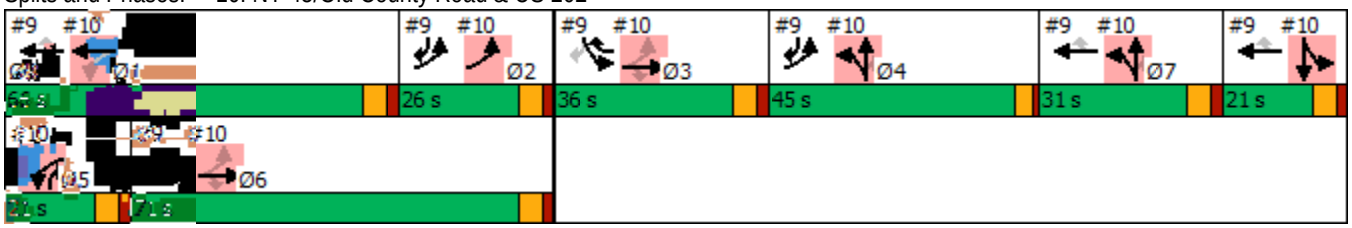
Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		3		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

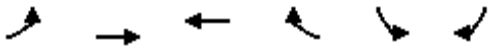
Intersection Summary

Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	102	148	272	54	10
Future Volume (vph)	41	102	148	272	54	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		-2%	3%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.980	
Flt Protected		0.986			0.959	
Satd. Flow (prot)	0	1803	1634	0	1735	0
Flt Permitted		0.986			0.959	
Satd. Flow (perm)	0	1803	1634	0	1735	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1017	791		646	
Travel Time (s)		23.1	18.0		14.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	42	105	153	280	56	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	147	433	0	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.07	1.07	1.04	1.04
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	102	148	272	54	10
Future Vol, veh/h	41	102	148	272	54	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	3	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	42	105	153	280	56	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	433	0	-	0	482	293
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	4.1	-	-	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1137	-	-	-	562	757
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	857	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1137	-	-	-	540	757
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	857	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1137	-	-	-	565
HCM Lane V/C Ratio	0.037	-	-	-	0.117
HCM Control Delay (s)	8.3	0	-	-	12.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	144	12	56	359	60	241
Future Volume (vph)	144	12	56	359	60	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11
Grade (%)	-2%			1%	-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.989				0.892	
Flt Protected				0.993	0.990	
Satd. Flow (prot)	1801	0	0	1845	1630	0
Flt Permitted				0.993	0.990	
Satd. Flow (perm)	1801	0	0	1845	1630	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	791			759	531	
Travel Time (s)	18.0			17.3	12.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	2%	0%	0%
Adj. Flow (vph)	150	13	58	374	63	251
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	0	0	432	314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.01	1.01	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

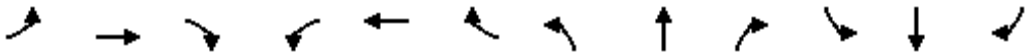
Intersection	
Int Delay, s/veh	5.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	12	56	359	60	241
Future Vol, veh/h	144	12	56	359	60	241
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-1	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	150	13	58	374	63	251

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	163	0	647	157
Stage 1	-	-	-	-	157	-
Stage 2	-	-	-	-	490	-
Critical Hdwy	-	-	4.1	-	6.2	6.1
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1428	-	455	898
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	637	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	432	898
Mov Cap-2 Maneuver	-	-	-	-	432	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	739	-	-	1428	-
HCM Lane V/C Ratio	0.424	-	-	0.041	-
HCM Control Delay (s)	13.4	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0.1	-



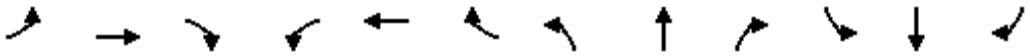
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	304	56	90	332	10	66	5	88	12	10	16
Future Volume (vph)	25	304	56	90	332	10	66	5	88	12	10	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Grade (%)		-4%			-4%			4%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980			0.997			0.925			0.943	
Flt Protected		0.997			0.990			0.980			0.984	
Satd. Flow (prot)	0	1880	0	0	1792	0	0	1577	0	0	1747	0
Flt Permitted		0.957			0.844			0.861			0.904	
Satd. Flow (perm)	0	1805	0	0	1527	0	0	1386	0	0	1605	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			2			86			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		828			502			1286			927	
Travel Time (s)		18.8			11.4			29.2			21.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	5%	8%	2%	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	26	317	58	94	346	10	69	5	92	13	10	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	401	0	0	450	0	0	166	0	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	1.02	1.02	1.02	1.07	1.07	1.07	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	46.0	46.0		46.0	46.0		31.0	31.0		31.0	31.0	
Total Split (%)	59.7%	59.7%		59.7%	59.7%		40.3%	40.3%		40.3%	40.3%	
Maximum Green (s)	40.0	40.0		40.0	40.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
v/c Ratio		0.42			0.57			0.33			0.08	
Control Delay		12.6			16.0			12.0			12.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.6			16.0			12.0			12.7	
Queue Length 50th (ft)		106			137			27			7	
Queue Length 95th (ft)		170			224			73			28	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		748			422			1206			847	
Turn Bay Length (ft)												
Base Capacity (vph)		945			794			508			532	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.42			0.57			0.33			0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Pretimed	

Splits and Phases: 3: Letchworth Village Road/Patriot Hills Drive & Willow Grove Road

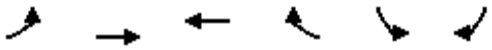




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	25	304	56	90	332	10	66	5	88	12	10	16
Future Volume (veh/h)	25	304	56	90	332	10	66	5	88	12	10	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2057	2057	1982	1937	2027	2057	1761	1806	1746	2097	2097	2097
Adj Flow Rate, veh/h	26	317	58	94	346	10	69	5	92	12	10	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	5	8	2	0	3	0	4	0	0	0
Cap, veh/h	82	837	147	209	754	21	240	39	265	205	184	253
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	62	1611	283	294	1451	40	535	121	815	444	566	781
Grp Volume(v), veh/h	401	0	0	450	0	0	166	0	0	39	0	0
Grp Sat Flow(s),veh/h/ln	1956	0	0	1784	0	0	1471	0	0	1791	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.2	0.0	0.0	11.0	0.0	0.0	6.3	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.06		0.14	0.21		0.02	0.42		0.55	0.31		0.44
Lane Grp Cap(c), veh/h	1066	0	0	983	0	0	544	0	0	643	0	0
V/C Ratio(X)	0.38	0.00	0.00	0.46	0.00	0.00	0.31	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1066	0	0	983	0	0	544	0	0	643	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.1	0.0	0.0	11.5	0.0	0.0	19.6	0.0	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.5	0.0	0.0	1.4	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	4.7	0.0	0.0	2.4	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	0.0	13.0	0.0	0.0	21.1	0.0	0.0	18.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	B	A	A
Approach Vol, veh/h		401			450			166			39	
Approach Delay, s/veh		12.1			13.0			21.1			18.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		31.0		46.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		25.0		40.0		25.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	157	155	1
Future Volume (vph)	2	1	1	157	155	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)		3%	-10%		2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.866		0.999	
Flt Protected		0.968			0.953	
Satd. Flow (prot)	0	1872	1646	0	1730	0
Flt Permitted		0.968			0.953	
Satd. Flow (perm)	0	1872	1646	0	1730	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		996	368		563	
Travel Time (s)		22.6	8.4		12.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	5%	7%	0%
Adj. Flow (vph)	2	1	1	174	172	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3	175	0	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		13	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

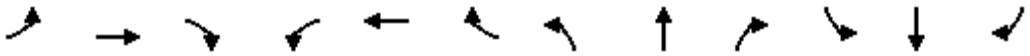
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	157	155	1
Future Vol, veh/h	2	1	1	157	155	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	3	-10	-	2	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	5	7	0
Mvmt Flow	2	1	1	174	172	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	175	0	-	0	93	88
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.1	-	-	-	6.87	6.4
Critical Hdwy Stg 1	-	-	-	-	5.87	-
Critical Hdwy Stg 2	-	-	-	-	5.87	-
Follow-up Hdwy	2.2	-	-	-	3.563	3.3
Pot Cap-1 Maneuver	1414	-	-	-	886	971
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1414	-	-	-	885	971
Mov Cap-2 Maneuver	-	-	-	-	885	-
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	5	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1414	-	-	-	886
HCM Lane V/C Ratio	0.002	-	-	-	0.196
HCM Control Delay (s)	7.5	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	95	36	3	90	27	43	18	1	28	19	25
Future Volume (vph)	25	95	36	3	90	27	43	18	1	28	19	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	10	10	10	11	11	11
Grade (%)		3%			3%			0%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.969			0.969			0.998			0.953	
Flt Protected		0.992			0.999			0.967			0.981	
Satd. Flow (prot)	0	1713	0	0	1664	0	0	1654	0	0	1691	0
Flt Permitted		0.992			0.999			0.967			0.981	
Satd. Flow (perm)	0	1713	0	0	1664	0	0	1654	0	0	1691	0
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		697			787			2470			607	
Travel Time (s)		15.8			17.9			84.2			20.7	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	6%	6%	33%	6%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	29	109	41	3	103	31	49	21	1	32	22	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	179	0	0	137	0	0	71	0	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.09	1.09	1.09	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

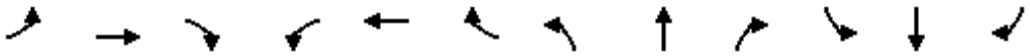
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	95	36	3	90	27	43	18	1	28	19	25
Future Vol, veh/h	25	95	36	3	90	27	43	18	1	28	19	25
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	6	6	33	6	0	5	0	0	0	0	0
Mvmt Flow	29	109	41	3	103	31	49	21	1	32	22	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	9.1	8.5	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	69%	16%	3%	39%
Vol Thru, %	29%	61%	75%	26%
Vol Right, %	2%	23%	23%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	156	120	72
LT Vol	43	25	3	28
Through Vol	18	95	90	19
RT Vol	1	36	27	25
Lane Flow Rate	71	179	138	83
Geometry Grp	1	1	1	1
Degree of Util (X)	0.098	0.216	0.188	0.106
Departure Headway (Hd)	4.958	4.335	4.9	4.604
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	723	828	732	778
Service Time	2.991	2.361	2.927	2.635
HCM Lane V/C Ratio	0.098	0.216	0.189	0.107
HCM Control Delay	8.5	8.6	9.1	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.8	0.7	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	25	44	135	50	52	50	44	273	43	76	21
Future Volume (vph)	56	25	44	135	50	52	50	44	273	43	76	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	12	13	13	12	12	12	12	12	12
Grade (%)		-4%			8%			5%			-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.968			0.900			0.979	
Flt Protected		0.977			0.973			0.993			0.984	
Satd. Flow (prot)	0	1891	0	0	1740	0	0	1623	0	0	1830	0
Flt Permitted		0.977			0.973			0.993			0.984	
Satd. Flow (perm)	0	1891	0	0	1740	0	0	1623	0	0	1830	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1174			965			794			1736	
Travel Time (s)		26.7			21.9			18.0			39.5	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.83	0.83	0.92	0.92	0.92	0.83	0.92	0.83
Adj. Flow (vph)	67	30	48	147	60	63	54	48	297	52	83	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	0	0	270	0	0	399	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.89	0.89	0.97	1.05	1.01	1.01	1.03	1.03	1.03	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	145	270	399	160
Demand Flow Rate, veh/h	148	275	407	164
Vehicles Circulating, veh/h	288	172	152	266
Vehicles Exiting, veh/h	141	387	284	181
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.9	5.3	6.5	4.9
Approach LOS	A	A	A	A

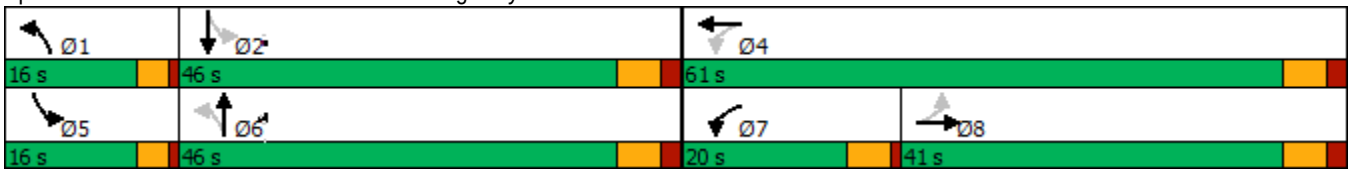
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	148	275	407	164
Cap Entry Lane, veh/h	1029	1158	1182	1052
Entry HV Adj Factor	0.982	0.981	0.980	0.978
Flow Entry, veh/h	145	270	399	160
Cap Entry, veh/h	1011	1136	1159	1028
V/C Ratio	0.144	0.238	0.344	0.156
Control Delay, s/veh	4.9	5.3	6.5	4.9
LOS	A	A	A	A
95th %tile Queue, veh	1	1	2	1

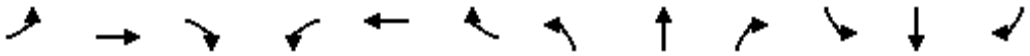
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	55	90	246	53	70	56	297	159	69	214	26
Future Volume (vph)	36	55	90	246	53	70	56	297	159	69	214	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	12	12	11	11	11
Grade (%)		-6%			3%			0%			-2%	
Storage Length (ft)	0		0	175		0	175		0	200		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			140			45			65		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00	0.99		1.00	1.00	
Frt		0.933			0.915			0.948			0.984	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1781	0	1702	1655	0	1805	1747	0	1762	1758	0
Flt Permitted		0.902		0.420			0.561			0.231		
Satd. Flow (perm)	0	1623	0	752	1655	0	1064	1747	0	428	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40			70			23			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			387			303			364	
Travel Time (s)		13.2			8.8			6.9			8.3	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	3%	1%	0%	0%	0%	3%	1%	0%	4%	0%
Adj. Flow (vph)	38	58	95	259	56	74	59	313	167	73	225	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	191	0	259	130	0	59	480	0	73	252	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			11			12			12	
Link Offset(ft)		-12			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.07	1.07	1.07	1.00	1.00	1.00	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		2	2	
Detector Template	Left											
Leading Detector (ft)	20	83		83	83		83	83		83	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		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	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43		43	43	
Detector 2 Size(ft)		40		40	40		40	40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	11.0		10.0	11.0	
Total Split (s)	41.0	41.0		20.0	61.0		16.0	46.0		16.0	46.0	
Total Split (%)	33.3%	33.3%		16.3%	49.6%		13.0%	37.4%		13.0%	37.4%	
Maximum Green (s)	35.0	35.0		15.0	55.0		12.0	40.0		12.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		5.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0		2.0	4.0		2.0	4.0		2.0	4.0	
Recall Mode	Min	Min		Min	Min		Min	Min		Min	Min	
v/c Ratio		0.62		0.57	0.19		0.12	0.80		0.24	0.41	
Control Delay		37.6		25.7	11.0		13.2	36.9		14.5	24.0	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		37.6		25.7	11.0		13.2	36.9		14.5	24.0	
Queue Length 50th (ft)		80		101	21		17	230		21	103	
Queue Length 95th (ft)		167		195	66		41	400		49	189	
Internal Link Dist (ft)		500			307			223			284	
Turn Bay Length (ft)				175			175			200		
Base Capacity (vph)		690		470	1093		621	832		397	834	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.28		0.55	0.12		0.10	0.58		0.18	0.30	

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 88.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: Main Street/Central Highway & Suffern Lane/West Railroad Avenue

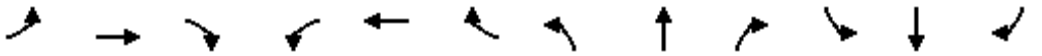




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	55	90	246	53	70	56	297	159	69	214	26
Future Volume (veh/h)	36	55	90	246	53	70	56	297	159	69	214	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2136	2136	2091	1832	1847	1847	1900	1856	1885	1979	1919	1979
Adj Flow Rate, veh/h	38	58	95	259	56	74	59	313	167	73	225	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	1	0	0	0	3	1	0	4	0
Cap, veh/h	98	99	134	532	265	350	496	382	204	316	565	68
Arrive On Green	0.15	0.15	0.15	0.15	0.37	0.37	0.07	0.34	0.34	0.07	0.34	0.34
Sat Flow, veh/h	253	676	919	1745	722	954	1810	1137	607	1884	1680	202
Grp Volume(v), veh/h	191	0	0	259	0	130	59	0	480	73	0	252
Grp Sat Flow(s),veh/h/ln	1848	0	0	1745	0	1675	1810	0	1744	1884	0	1882
Q Serve(g_s), s	3.8	0.0	0.0	8.3	0.0	3.8	1.4	0.0	17.9	1.7	0.0	7.3
Cycle Q Clear(g_c), s	6.9	0.0	0.0	8.3	0.0	3.8	1.4	0.0	17.9	1.7	0.0	7.3
Prop In Lane	0.20		0.50	1.00		0.57	1.00		0.35	1.00		0.11
Lane Grp Cap(c), veh/h	331	0	0	532	0	616	496	0	586	316	0	633
V/C Ratio(X)	0.58	0.00	0.00	0.49	0.00	0.21	0.12	0.00	0.82	0.23	0.00	0.40
Avail Cap(c_a), veh/h	957	0	0	638	0	1300	675	0	984	502	0	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	0.0	19.0	0.0	15.4	13.3	0.0	21.5	15.4	0.0	18.0
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.3	0.0	0.2	0.0	0.0	4.1	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	3.2	0.0	1.4	0.5	0.0	7.4	0.7	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	0.0	19.2	0.0	15.6	13.3	0.0	25.6	15.5	0.0	18.6
LnGrp LOS	C	A	A	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h		191			389			539			325	
Approach Delay, s/veh		31.0			18.0			24.3			17.9	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	29.8		32.0	9.0	29.8	15.7	16.3				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	12.0	40.0		55.0	12.0	40.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s	3.4	9.3		5.8	3.7	19.9	10.3	8.9				
Green Ext Time (p_c), s	0.1	2.0		1.1	0.1	4.0	0.4	1.5				

Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

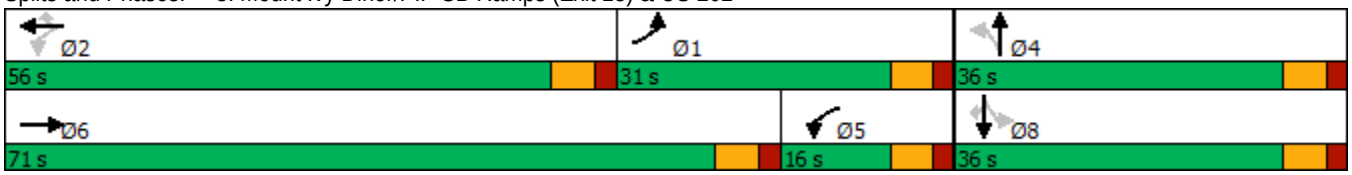


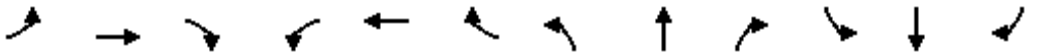
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	443	9	9	379	565	6	2	13	157	5	76
Future Volume (vph)	59	443	9	9	379	565	6	2	13	157	5	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		4%			-3%			-3%			-1%	
Storage Length (ft)	145		0	175		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	95			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				1.00				0.98
Frt		0.997				0.850		0.914				0.850
Flt Protected	0.950			0.950				0.987			0.954	
Satd. Flow (prot)	1734	1802	0	1832	1891	1623	0	1740	0	0	1761	1553
Flt Permitted	0.950			0.354				0.912			0.716	
Satd. Flow (perm)	1734	1802	0	681	1891	1623	0	1607	0	0	1322	1519
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				608		14				133
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		345			864			202			414	
Travel Time (s)		5.2			13.1			5.5			9.4	
Confl. Peds. (#/hr)			7	7			1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	3%	0%	0%	2%	1%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	63	476	10	10	408	608	6	2	14	169	5	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	486	0	10	408	608	0	22	0	0	174	82
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.03	1.03	1.03	0.98	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	1	2		1	2	0
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83	0	20	83		20	83	0
Trailing Detector (ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Position(ft)	-5	-5		-5	-5	0	0	-5		0	-5	0
Detector 1 Size(ft)	40	40		40	40	20	20	40		20	40	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0		1.0	2.0	0.0	0.0	1.0		0.0	1.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		1.0	0.0	0.0	0.0	8.0		0.0	2.0	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	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	2.0			1.0			1.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases				2		2	4			8		8
Detector Phase	1	6		5	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	16.0		9.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	31.0	71.0		16.0	56.0	56.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	25.2%	57.7%		13.0%	45.5%	45.5%	29.3%	29.3%		29.3%	29.3%	29.3%
Maximum Green (s)	25.0	65.0		10.0	50.0	50.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0		6.0			6.0	6.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
v/c Ratio	0.25	0.54		0.02	0.54	0.60		0.05			0.53	0.17
Control Delay	32.6	14.1		9.3	19.8	4.5		15.3			30.0	2.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	32.6	14.1		9.3	19.8	4.5		15.3			30.0	2.2
Queue Length 50th (ft)	22	94		2	125	0		2			59	0
Queue Length 95th (ft)	71	297		8	265	64		22			148	11
Internal Link Dist (ft)		265			784			122			334	
Turn Bay Length (ft)	145			175								
Base Capacity (vph)	804	1661		611	1526	1427		900			735	904
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.08	0.29		0.02	0.27	0.43		0.02			0.24	0.09

Intersection Summary	
Area Type:	Other
Cycle Length: 123	
Actuated Cycle Length: 60.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: Mount Ivy Diner/PIP SB Ramps (Exit 13) & US 202





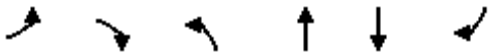
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	443	9	9	379	565	6	2	13	157	5	76
Future Volume (veh/h)	59	443	9	9	379	565	6	2	13	157	5	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1776	1761	1806	2018	1988	2003	2018	2018	2018	1939	1939	1924
Adj Flow Rate, veh/h	63	476	10	10	408	0	6	2	14	169	5	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	0	0	2	1	0	0	0	0	0	1
Cap, veh/h	243	610	13	332	558		144	67	182	393	7	
Arrive On Green	0.14	0.36	0.36	0.07	0.28	0.00	0.16	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	1692	1718	36	1922	1988	1697	237	418	1145	1438	43	1631
Grp Volume(v), veh/h	63	0	486	10	408	0	22	0	0	174	0	0
Grp Sat Flow(s),veh/h/ln	1692	0	1754	1922	1988	1697	1799	0	0	1480	0	1631
Q Serve(g_s), s	1.4	0.0	10.7	0.0	8.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	10.7	0.0	8.0	0.0	0.4	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		1.00	0.27		0.64	0.97		1.00
Lane Grp Cap(c), veh/h	243	0	623	332	558		393	0	0	400	0	
V/C Ratio(X)	0.26	0.00	0.78	0.03	0.73		0.06	0.00	0.00	0.43	0.00	
Avail Cap(c_a), veh/h	978	0	2638	644	2300		1287	0	0	1178	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.5	0.0	12.4	17.6	14.1	0.0	15.5	0.0	0.0	17.2	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	2.2	0.0	1.9	0.0	0.1	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	3.2	0.1	2.9	0.0	0.2	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	14.6	17.6	15.9	0.0	15.5	0.0	0.0	18.0	0.0	0.0
LnGrp LOS	B	A	B	B	B		B	A	A	B	A	
Approach Vol, veh/h		549			418			22			174	
Approach Delay, s/veh		14.9			16.0			15.5			18.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	18.1		12.9	9.0	21.3		12.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	50.0		30.0	10.0	65.0		30.0				
Max Q Clear Time (g_c+I1), s	3.4	10.0		2.4	2.0	12.7		6.8				
Green Ext Time (p_c), s	0.2	2.1		0.1	0.0	2.7		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		15.7	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	164	251	0	170	318	0
Future Volume (vph)	164	251	0	170	318	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	13	13	13	12	12
Grade (%)	-4%			3%	-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.918					
Flt Protected	0.981					
Satd. Flow (prot)	1862	0	0	1878	1863	0
Flt Permitted	0.981					
Satd. Flow (perm)	1862	0	0	1878	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	579			615	2020	
Travel Time (s)	13.2			14.0	45.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	3%	0%
Adj. Flow (vph)	174	267	0	181	338	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	441	0	0	181	338	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	14			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.89	0.93	0.98	0.98	0.99	0.99
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

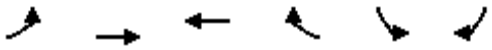
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	251	0	170	318	0
Future Vol, veh/h	164	251	0	170	318	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	3	-2	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	174	267	0	181	338	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	519	338	-	0	-	0
Stage 1	338	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	5.6	5.8	-	-	-	-
Critical Hdwy Stg 1	4.6	-	-	-	-	-
Critical Hdwy Stg 2	4.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	584	736	0	-	-	0
Stage 1	784	-	0	-	-	0
Stage 2	890	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	584	736	-	-	-	-
Mov Cap-2 Maneuver	584	-	-	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	1217	-
HCM Lane V/C Ratio	-	0.363	-
HCM Control Delay (s)	-	9.6	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.7	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	368	221	17	2	56
Future Volume (vph)	55	368	221	17	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Grade (%)		8%	-5%		-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.869	
Flt Protected		0.994			0.998	
Satd. Flow (prot)	0	1680	1799	0	1373	0
Flt Permitted		0.994			0.998	
Satd. Flow (perm)	0	1680	1799	0	1373	0
Link Speed (mph)		30	30		20	
Link Distance (ft)		1483	1520		1197	
Travel Time (s)		33.7	34.5		40.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	4%	0%	0%	13%
Adj. Flow (vph)	60	400	240	18	2	61
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	460	258	0	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.10	1.10	1.01	1.01	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	368	221	17	2	56
Future Vol, veh/h	55	368	221	17	2	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	8	-5	-	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	5	4	0	0	13
Mvmt Flow	60	400	240	18	2	61

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	258	0	-	0	769	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	520	-
Critical Hdwy	4.1	-	-	-	6.2	6.23
Critical Hdwy Stg 1	-	-	-	-	5.2	-
Critical Hdwy Stg 2	-	-	-	-	5.2	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.417
Pot Cap-1 Maneuver	1318	-	-	-	388	769
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	618	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1318	-	-	-	365	769
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	618	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1318	-	-	-	741
HCM Lane V/C Ratio	0.045	-	-	-	0.085
HCM Control Delay (s)	7.9	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	97	62	304	66	115	141
Future Volume (vph)	97	62	304	66	115	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	-1%		1%			-2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.947		0.976			
Flt Protected	0.970					0.978
Satd. Flow (prot)	1767	0	1739	0	0	1623
Flt Permitted	0.970					0.978
Satd. Flow (perm)	1767	0	1739	0	0	1623
Link Speed (mph)	30		30			30
Link Distance (ft)	540		819			794
Travel Time (s)	12.3		18.6			18.0
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	1%	5%	7%	2%	3%	33%
Adj. Flow (vph)	117	75	366	80	139	170
Shared Lane Traffic (%)						
Lane Group Flow (vph)	192	0	446	0	0	309
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	13		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.95	0.95	1.01	1.01	0.95	0.95
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

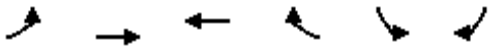
Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	97	62	304	66	115	141
Future Vol, veh/h	97	62	304	66	115	141
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-1	-	1	-	-	-2
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	5	7	2	3	33
Mvmt Flow	117	75	366	80	139	170

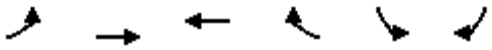
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	855	406	0	0	446	0
Stage 1	406	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.21	6.15	-	-	4.13	-
Critical Hdwy Stg 1	5.21	-	-	-	-	-
Critical Hdwy Stg 2	5.21	-	-	-	-	-
Follow-up Hdwy	3.509	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	346	646	-	-	1109	-
Stage 1	690	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	298	646	-	-	1109	-
Mov Cap-2 Maneuver	298	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	3.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	377	1109	-
HCM Lane V/C Ratio	-	-	0.508	0.125	-
HCM Control Delay (s)	-	-	24	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.8	0.4	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	76	486	630	114	251	323						
Future Volume (vph)	76	486	630	114	251	323						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1770	3539	1891	1607	1796	1591						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1770	3539	1891	1607	1796	1591						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						201						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98						
Heavy Vehicles (%)	2%	2%	2%	2%	1%	2%						
Adj. Flow (vph)	78	496	643	116	256	330						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	496	643	116	256	330						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						

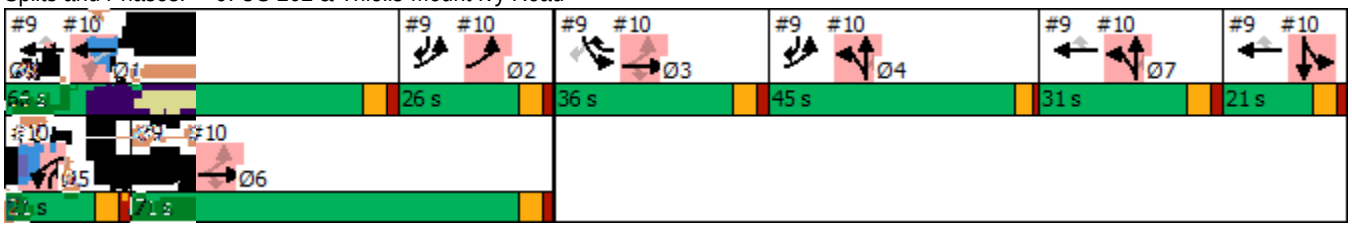


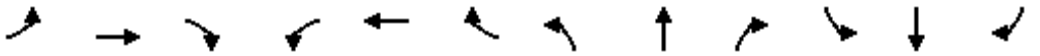
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							1		0			
Act Effct Green (s)	17.8	68.0	109.8	139.9	30.1	59.9						
Actuated g/C Ratio	0.10	0.37	0.60	0.77	0.17	0.33						
v/c Ratio	0.45	0.37	0.56	0.09	0.86	0.50						
Control Delay	57.2	42.8	7.4	1.9	100.4	20.8						
Queue Delay	0.0	0.0	2.6	0.2	0.0	0.0						
Total Delay	57.2	42.8	10.0	2.1	100.4	20.8						
LOS	E	D	B	A	F	C						
Approach Delay		44.7	8.8		55.6							
Approach LOS		D	A		E							
Queue Length 50th (ft)	67	232	179	7	309	123						
Queue Length 95th (ft)	115	292	m221	m13	#492	225						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	224	1334	1134	1236	297	932						
Starvation Cap Reductn	0	0	357	693	0	0						
Spillback Cap Reductn	0	0	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.35	0.37	0.83	0.21	0.86	0.35						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 181.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 33.8		Intersection LOS: C	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

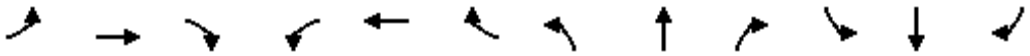
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	544	184	45	573	0	135	1	136	4	7	16
Future Volume (vph)	8	544	184	45	573	0	135	1	136	4	7	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.918	
Flt Protected	0.950			0.950			0.950	0.953			0.993	
Satd. Flow (prot)	1778	1835	1575	1762	1909	0	1674	1680	1623	0	1656	0
Flt Permitted	0.221			0.148			0.950	0.953			0.993	
Satd. Flow (perm)	414	1835	1575	274	1909	0	1674	1680	1623	0	1656	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108						142		17	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	4%	1%	0%	5%	0%	2%	25%	0%	0%
Adj. Flow (vph)	8	567	192	47	597	0	141	1	142	4	7	17
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	8	567	192	47	597	0	70	72	142	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					1							
Act Effct Green (s)	98.0	104.0	104.0	60.1	60.1		36.1	36.1	41.1		12.5	
Actuated g/C Ratio	0.54	0.57	0.57	0.33	0.33		0.20	0.20	0.23		0.07	
v/c Ratio	0.02	0.54	0.20	0.32	0.95		0.21	0.22	0.30		0.22	
Control Delay	4.8	7.2	0.8	50.0	83.5		64.9	65.0	7.0		46.7	
Queue Delay	0.0	0.3	0.7	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.8	7.5	1.4	50.0	83.5		65.0	65.0	7.0		46.7	
LOS	A	A	A	D	F		E	E	A		D	
Approach Delay		6.0			81.1			36.0			46.7	
Approach LOS		A			F			D			D	
Queue Length 50th (ft)	0	112	0	40	719		76	78	0		13	
Queue Length 95th (ft)	m1	m119	m0	77	#1008		134	138	51		50	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	381	1043	941	213	631		332	333	542		152	
Starvation Cap Reductn	0	128	474	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		13	13	0		0	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.62	0.41	0.22	0.95		0.22	0.23	0.26		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 181.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 39.6		Intersection LOS: D	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

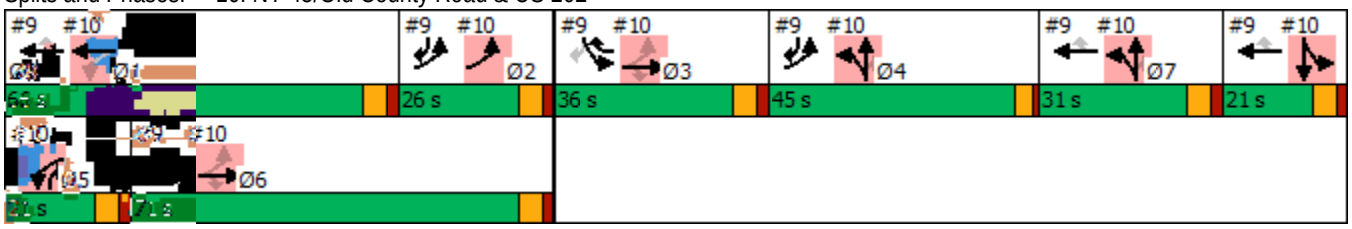
Intersection Capacity Utilization 56.2% ICU Level of Service B

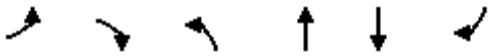
Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	26	193	273	128	165	69
Future Volume (vph)	26	193	273	128	165	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.881				0.960	
Flt Protected	0.994			0.967		
Satd. Flow (prot)	1319	0	0	1717	1677	0
Flt Permitted	0.994			0.967		
Satd. Flow (perm)	1319	0	0	1717	1677	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1000			364	561	
Travel Time (s)	22.7			8.3	12.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	16%	30%	13%	11%	11%	12%
Adj. Flow (vph)	34	254	359	168	217	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	288	0	0	527	308	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

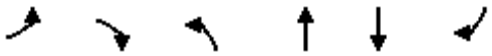
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	193	273	128	165	69
Future Vol, veh/h	26	193	273	128	165	69
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	16	30	13	11	11	12
Mvmt Flow	34	254	359	168	217	91
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.1	29.9	13.9
HCM LOS	B	D	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	68%	12%	0%
Vol Thru, %	32%	0%	71%
Vol Right, %	0%	88%	29%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	401	219	234
LT Vol	273	26	0
Through Vol	128	0	165
RT Vol	0	193	69
Lane Flow Rate	528	288	308
Geometry Grp	1	1	1
Degree of Util (X)	0.826	0.471	0.482
Departure Headway (Hd)	5.639	5.882	5.633
Convergence, Y/N	Yes	Yes	Yes
Cap	638	611	637
Service Time	3.689	3.945	3.693
HCM Lane V/C Ratio	0.828	0.471	0.484
HCM Control Delay	29.9	14.1	13.9
HCM Lane LOS	D	B	B
HCM 95th-tile Q	8.7	2.5	2.6



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	133	117	71	190	142	3
Future Volume (vph)	133	117	71	190	142	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.937				0.997	
Flt Protected	0.974			0.987		
Satd. Flow (prot)	1514	0	0	1639	1638	0
Flt Permitted	0.974			0.987		
Satd. Flow (perm)	1514	0	0	1639	1638	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	999			364	561	
Travel Time (s)	22.7			8.3	12.8	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	11%	23%	50%	9%	18%	31%
Adj. Flow (vph)	171	150	91	244	182	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	335	186	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

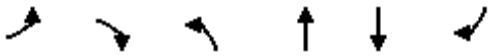
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	133	117	71	190	142	3
Future Vol, veh/h	133	117	71	190	142	3
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	11	23	50	9	18	31
Mvmt Flow	171	150	91	244	182	4
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.5	16.6	11.1
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	27%	53%	0%
Vol Thru, %	73%	0%	98%
Vol Right, %	0%	47%	2%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	261	250	145
LT Vol	71	133	0
Through Vol	190	0	142
RT Vol	0	117	3
Lane Flow Rate	335	321	186
Geometry Grp	1	1	1
Degree of Util (X)	0.562	0.484	0.295
Departure Headway (Hd)	6.05	5.44	5.704
Convergence, Y/N	Yes	Yes	Yes
Cap	599	663	630
Service Time	4.077	3.473	3.737
HCM Lane V/C Ratio	0.559	0.484	0.295
HCM Control Delay	16.6	13.5	11.1
HCM Lane LOS	C	B	B
HCM 95th-tile Q	3.5	2.6	1.2



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	93	26	239	149	16
Future Volume (vph)	29	93	26	239	149	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.897				0.987	
Flt Protected	0.988			0.995		
Satd. Flow (prot)	1584	0	0	1862	1800	0
Flt Permitted	0.988			0.995		
Satd. Flow (perm)	1584	0	0	1862	1800	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	999			365	561	
Travel Time (s)	22.7			8.3	12.8	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	12%	7%	12%	6%	5%	21%
Adj. Flow (vph)	38	121	34	310	194	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	159	0	0	344	215	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

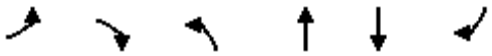
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	93	26	239	149	16
Future Vol, veh/h	29	93	26	239	149	16
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	12	7	12	6	5	21
Mvmt Flow	38	121	34	310	194	21
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.5	11.8	9.6
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	10%	24%	0%
Vol Thru, %	90%	0%	90%
Vol Right, %	0%	76%	10%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	265	122	165
LT Vol	26	29	0
Through Vol	239	0	149
RT Vol	0	93	16
Lane Flow Rate	344	158	214
Geometry Grp	1	1	1
Degree of Util (X)	0.456	0.219	0.281
Departure Headway (Hd)	4.771	4.987	4.729
Convergence, Y/N	Yes	Yes	Yes
Cap	754	716	756
Service Time	2.817	3.044	2.781
HCM Lane V/C Ratio	0.456	0.221	0.283
HCM Control Delay	11.8	9.5	9.6
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.4	0.8	1.2



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	157	155	1
Future Volume (vph)	2	1	1	157	155	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.955				0.999	
Flt Protected	0.968					
Satd. Flow (prot)	1788	0	0	1901	1815	0
Flt Permitted	0.968					
Satd. Flow (perm)	1788	0	0	1901	1815	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	999			364	560	
Travel Time (s)	22.7			8.3	12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	5%	7%	0%
Adj. Flow (vph)	2	1	1	174	172	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	0	175	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

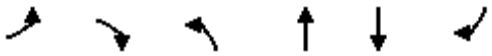
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	157	155	1
Future Vol, veh/h	2	1	1	157	155	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	5	7	0
Mvmt Flow	2	1	1	174	172	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8.1	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	1%	67%	0%
Vol Thru, %	99%	0%	99%
Vol Right, %	0%	33%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	158	3	156
LT Vol	1	2	0
Through Vol	157	0	155
RT Vol	0	1	1
Lane Flow Rate	176	3	173
Geometry Grp	1	1	1
Degree of Util (X)	0.197	0.004	0.2
Departure Headway (Hd)	4.036	4.581	4.151
Convergence, Y/N	Yes	Yes	Yes
Cap	887	786	861
Service Time	2.076	2.581	2.188
HCM Lane V/C Ratio	0.198	0.004	0.201
HCM Control Delay	8.1	7.6	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0	0.7



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	26	193	273	128	165	69
Future Volume (vph)	26	193	273	128	165	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.881				0.960	
Flt Protected	0.994			0.967		
Satd. Flow (prot)	1319	0	0	1717	1677	0
Flt Permitted	0.994			0.967		
Satd. Flow (perm)	1319	0	0	1717	1677	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1000			364	561	
Travel Time (s)	22.7			8.3	12.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	16%	30%	13%	11%	11%	12%
Adj. Flow (vph)	34	254	359	168	217	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	288	0	0	527	308	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

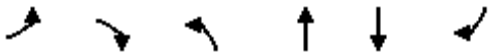
Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	193	273	128	165	69
Future Vol, veh/h	26	193	273	128	165	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-10	2	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	16	30	13	11	11	12
Mvmt Flow	34	254	359	168	217	91

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1149	263	308	0	-	0
Stage 1	263	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Critical Hdwy	7.16	6.8	4.23	-	-	-
Critical Hdwy Stg 1	6.16	-	-	-	-	-
Critical Hdwy Stg 2	6.16	-	-	-	-	-
Follow-up Hdwy	3.644	3.57	2.317	-	-	-
Pot Cap-1 Maneuver	170	697	1193	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	114	697	1193	-	-	-
Mov Cap-2 Maneuver	114	-	-	-	-	-
Stage 1	479	-	-	-	-	-
Stage 2	329	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.2	6.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1193	-	434	-	-
HCM Lane V/C Ratio	0.301	-	0.664	-	-
HCM Control Delay (s)	9.3	0	28.2	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	1.3	-	4.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	133	117	71	190	142	3
Future Volume (vph)	133	117	71	190	142	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.937				0.997	
Flt Protected	0.974			0.987		
Satd. Flow (prot)	1514	0	0	1639	1638	0
Flt Permitted	0.974			0.987		
Satd. Flow (perm)	1514	0	0	1639	1638	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1005			366	561	
Travel Time (s)	22.8			8.3	12.8	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	11%	23%	50%	9%	18%	31%
Adj. Flow (vph)	171	150	91	244	182	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	335	186	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

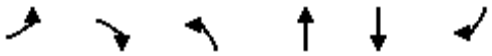
Intersection	
Int Delay, s/veh	10.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	133	117	71	190	142	3
Future Vol, veh/h	133	117	71	190	142	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-10	2	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	11	23	50	9	18	31
Mvmt Flow	171	150	91	244	182	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	611	185	187	0	-	0
Stage 1	185	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Critical Hdwy	7.11	6.73	4.6	-	-	-
Critical Hdwy Stg 1	6.11	-	-	-	-	-
Critical Hdwy Stg 2	6.11	-	-	-	-	-
Follow-up Hdwy	3.599	3.507	2.65	-	-	-
Pot Cap-1 Maneuver	400	794	1145	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	362	793	1144	-	-	-
Mov Cap-2 Maneuver	362	-	-	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.7	2.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1144	-	485	-	-
HCM Lane V/C Ratio	0.08	-	0.661	-	-
HCM Control Delay (s)	8.4	0	25.7	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.3	-	4.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	93	26	239	149	16
Future Volume (vph)	29	93	26	239	149	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.897				0.987	
Flt Protected	0.988			0.995		
Satd. Flow (prot)	1584	0	0	1862	1800	0
Flt Permitted	0.988			0.995		
Satd. Flow (perm)	1584	0	0	1862	1800	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1003			363	560	
Travel Time (s)	22.8			8.3	12.7	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	12%	7%	12%	6%	5%	21%
Adj. Flow (vph)	38	121	34	310	194	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	159	0	0	344	215	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

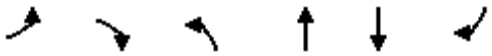
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	93	26	239	149	16
Future Vol, veh/h	29	93	26	239	149	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-10	2	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	12	7	12	6	5	21
Mvmt Flow	38	121	34	310	194	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	583	205	215	0	-	0
Stage 1	205	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	7.12	6.57	4.22	-	-	-
Critical Hdwy Stg 1	6.12	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	-	-	-
Follow-up Hdwy	3.608	3.363	2.308	-	-	-
Pot Cap-1 Maneuver	416	809	1298	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	403	809	1298	-	-	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1298	-	653	-	-
HCM Lane V/C Ratio	0.026	-	0.243	-	-
HCM Control Delay (s)	7.8	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	157	155	1
Future Volume (vph)	2	1	1	157	155	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	12	12	13	13
Grade (%)	3%			-10%	2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.955				0.999	
Flt Protected	0.968					
Satd. Flow (prot)	1788	0	0	1901	1815	0
Flt Permitted	0.968					
Satd. Flow (perm)	1788	0	0	1901	1815	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	999			364	560	
Travel Time (s)	22.7			8.3	12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	5%	7%	0%
Adj. Flow (vph)	2	1	1	174	172	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	0	175	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	0.94	0.94	0.97	0.97
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

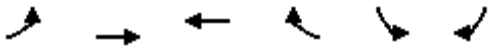
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	157	155	1
Future Vol, veh/h	2	1	1	157	155	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-10	2	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	5	7	0
Mvmt Flow	2	1	1	174	172	1

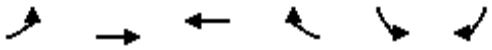
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	349	173	173	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	176	-	-	-	-	-
Critical Hdwy	7	6.5	4.1	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	615	863	1416	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	614	863	1416	-	-	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	835	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	679	-	-
HCM Lane V/C Ratio	0.001	-	0.005	-	-
HCM Control Delay (s)	7.5	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	88	506	788	96	283	651						
Future Volume (vph)	88	506	788	96	283	651						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					1.00							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3282	1786	1377	1680	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3282	1786	1377	1677	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						108						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					1							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	8%	10%	8%	19%	8%	3%						
Adj. Flow (vph)	92	527	821	100	295	678						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	527	821	100	295	678						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							3		1			
Act Effct Green (s)	36.1	72.4	99.5	133.6	34.2	82.3						
Actuated g/C Ratio	0.19	0.37	0.51	0.69	0.18	0.42						
v/c Ratio	0.30	0.43	0.90	0.11	1.00	0.93						
Control Delay	41.2	48.6	27.3	6.2	128.6	63.6						
Queue Delay	0.0	0.0	39.3	0.0	0.0	0.0						
Total Delay	41.2	48.6	66.6	6.2	128.6	63.6						
LOS	D	D	E	A	F	E						
Approach Delay		47.5	60.1		83.3							
Approach LOS		D	E		F							
Queue Length 50th (ft)	71	265	362	27	~384	722						
Queue Length 95th (ft)	112	372	m426	m33	#673	936						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	310	1226	916	949	296	861						
Starvation Cap Reductn	0	0	156	0	0	0						
Spillback Cap Reductn	0	6	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.30	0.43	1.08	0.11	1.00	0.79						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 193.8			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 66.0		Intersection LOS: E	

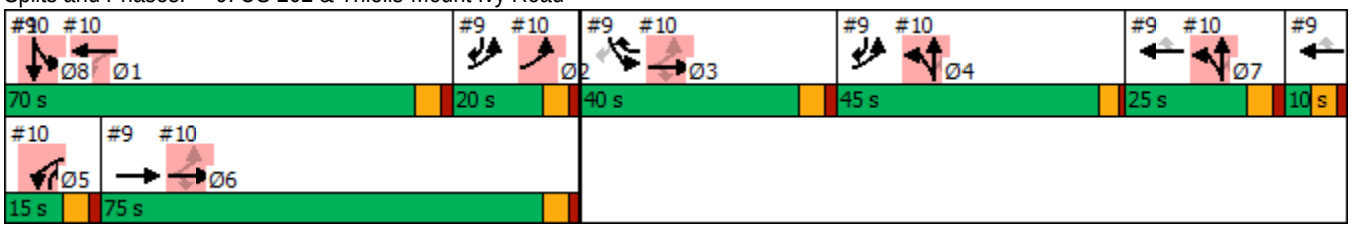
Intersection Capacity Utilization 91.8%	ICU Level of Service F
Analysis Period (min) 15	

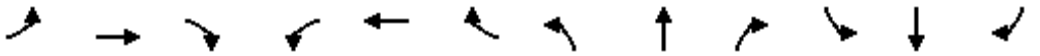
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

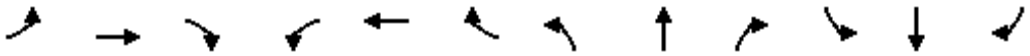
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	476	329	23	600	0	190	3	85	5	6	52
Future Volume (vph)	9	476	329	23	600	0	190	3	85	5	6	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.887	
Flt Protected	0.950			0.950			0.950	0.954			0.996	
Satd. Flow (prot)	1457	1717	1459	1466	1769	0	1583	1581	1505	0	1488	0
Flt Permitted	0.186			0.223			0.950	0.954			0.996	
Satd. Flow (perm)	285	1717	1459	344	1769	0	1583	1581	1505	0	1488	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			271								55	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	22%	9%	9%	25%	9%	0%	11%	33%	10%	0%	0%	14%
Adj. Flow (vph)	9	501	346	24	632	0	200	3	89	5	6	55
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	9	501	346	24	632	0	102	101	89	0	66	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					3							
Act Effct Green (s)	106.6	112.6	112.6	64.3	64.3		49.1	49.1	53.0		4.0	
Actuated g/C Ratio	0.55	0.58	0.58	0.33	0.33		0.25	0.25	0.27		0.02	
v/c Ratio	0.04	0.50	0.36	0.16	1.08		0.25	0.25	0.22		0.79	
Control Delay	6.7	6.8	1.1	51.2	118.2		57.9	57.9	43.0		76.4	
Queue Delay	0.0	0.4	0.7	0.0	0.0		1.5	1.5	0.0		13.2	
Total Delay	6.7	7.2	1.7	51.2	118.2		59.5	59.4	43.0		89.6	
LOS	A	A	A	D	F		E	E	D		F	
Approach Delay		5.0			115.7			54.4			89.6	
Approach LOS		A			F			D			F	
Queue Length 50th (ft)	1	48	0	21	~898		110	108	78		14	
Queue Length 95th (ft)	m2	m61	m0	51	#1298		172	169	122		#116	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	241	997	961	166	586		401	400	436		84	
Starvation Cap Reductn	0	163	318	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		177	177	0		9	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.04	0.60	0.54	0.14	1.08		0.46	0.45	0.20		0.88	

Intersection Summary	
Area Type:	Other
Cycle Length: 210	
Actuated Cycle Length: 193.8	
Natural Cycle: 145	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.08	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		1		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

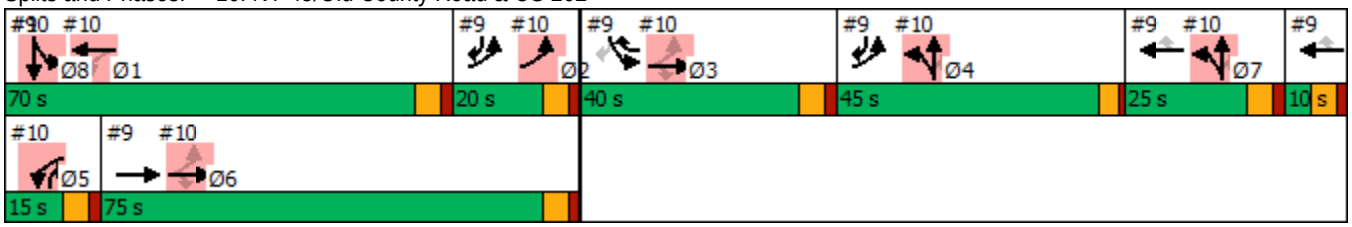
Intersection Signal Delay: 54.5	Intersection LOS: D
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

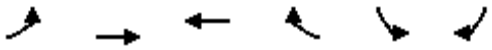
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

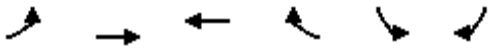
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	151	642	552	149	338	553						
Future Volume (vph)	151	642	552	149	338	553						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor					0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1671	3505	1854	1490	1634	1576						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1671	3505	1854	1490	1625	1576						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						218						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)					3							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95						
Heavy Vehicles (%)	8%	3%	4%	10%	11%	3%						
Adj. Flow (vph)	159	676	581	157	356	582						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	676	581	157	356	582						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							0		2			
Act Effct Green (s)	23.7	71.8	99.6	133.7	34.2	70.0						
Actuated g/C Ratio	0.13	0.40	0.55	0.74	0.19	0.39						
v/c Ratio	0.73	0.49	0.57	0.14	1.16	0.79						
Control Delay	69.0	44.3	10.8	4.1	162.4	37.6						
Queue Delay	0.0	0.0	1.5	0.2	0.0	0.0						
Total Delay	69.0	44.3	12.4	4.4	162.4	37.6						
LOS	E	D	B	A	F	D						
Approach Delay		49.0	10.7		84.9							
Approach LOS		D	B		F							
Queue Length 50th (ft)	142	297	245	5	~467	407						
Queue Length 95th (ft)	186	485	394	m95	#872	560						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	218	1386	1016	1097	307	962						
Starvation Cap Reductn	0	0	255	506	0	0						
Spillback Cap Reductn	0	13	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.73	0.49	0.76	0.27	1.16	0.60						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 181.6			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 51.2		Intersection LOS: D	

Intersection Capacity Utilization 73.3% ICU Level of Service D

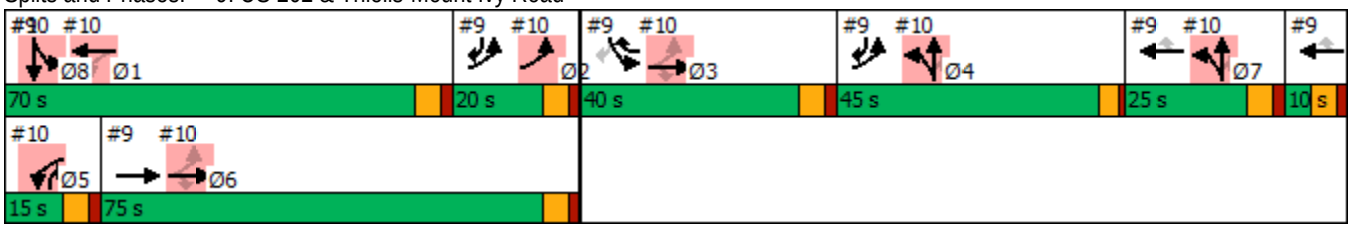
Analysis Period (min) 15

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

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

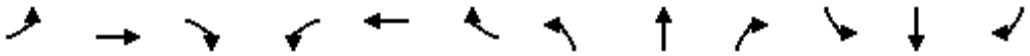
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	671	292	45	438	1	233	3	198	5	8	50
Future Volume (vph)	17	671	292	45	438	1	233	3	198	5	8	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99									
Frt			0.850						0.850		0.892	
Flt Protected	0.950			0.950			0.950	0.953			0.996	
Satd. Flow (prot)	1507	1766	1501	1832	1854	0	1643	1650	1655	0	1441	0
Flt Permitted	0.384			0.095			0.950	0.953			0.996	
Satd. Flow (perm)	609	1766	1481	183	1854	0	1643	1650	1655	0	1441	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			171								52	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	18%	6%	6%	0%	4%	0%	7%	0%	0%	0%	13%	18%
Adj. Flow (vph)	18	699	304	47	456	1	243	3	206	5	8	52
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	18	699	304	47	457	0	124	122	206	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	106.0	112.1	112.1	64.4	64.4		36.8	36.8	41.4		4.0	
Actuated g/C Ratio	0.58	0.62	0.62	0.35	0.35		0.20	0.20	0.23		0.02	
v/c Ratio	0.04	0.64	0.31	0.38	0.70		0.37	0.37	0.55		0.79	
Control Delay	4.5	8.3	0.9	50.7	58.6		64.7	64.4	54.0		79.2	
Queue Delay	0.0	0.9	0.7	0.0	0.0		0.7	0.7	0.0		1.1	
Total Delay	4.5	9.2	1.6	50.7	58.6		65.4	65.1	54.0		80.3	
LOS	A	A	A	D	E		E	E	D		F	
Approach Delay		6.9			57.9			60.1			80.3	
Approach LOS		A			E			E			F	
Queue Length 50th (ft)	1	115	0	35	441		135	132	192		15	
Queue Length 95th (ft)	m2	m87	m0	87	746		204	200	262		#123	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	425	1089	979	147	657		332	334	399		82	
Starvation Cap Reductn	0	162	390	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		61	61	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.04	0.75	0.52	0.32	0.70		0.46	0.45	0.52		0.80	

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 181.6			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 33.6		Intersection LOS: C	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		2		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

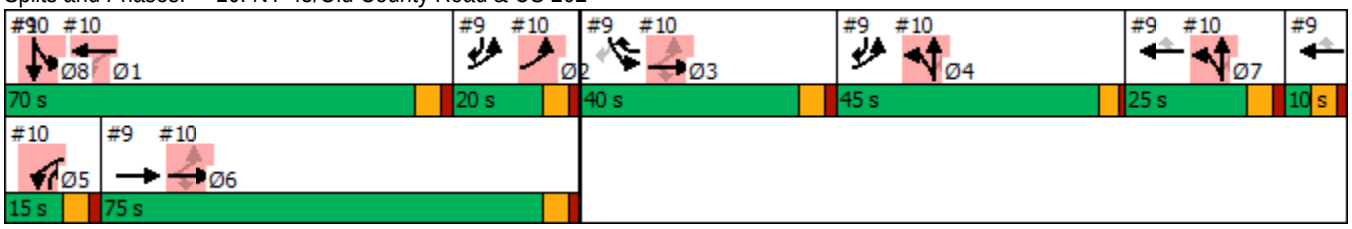
Intersection Capacity Utilization 66.4% ICU Level of Service C

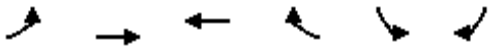
Analysis Period (min) 15

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

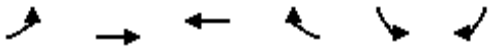
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	181	627	563	152	217	535						
Future Volume (vph)	181	627	563	152	217	535						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Ped Bike Factor	1.00			0.97	0.99							
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1719	3471	1802	1546	1728	1607						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1712	3471	1802	1502	1712	1607						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						212						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Confl. Peds. (#/hr)	2			2	5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Heavy Vehicles (%)	5%	4%	7%	6%	5%	1%						
Adj. Flow (vph)	189	653	586	158	226	557						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	653	586	158	226	557						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	10.0
Total Split (s)		75.0		40.0	40.0		70.0	20.0	45.0	15.0	25.0	10.0
Total Split (%)		35.7%		19.0%	19.0%		33%	10%	21%	7%	12%	5%
Maximum Green (s)		69.0		34.0	34.0		64.0	14.0	41.0	9.0	19.0	4.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		None		None	None		Max	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							2		3			
Act Effct Green (s)	23.4	72.2	100.0	127.1	27.2	62.7						
Actuated g/C Ratio	0.13	0.41	0.57	0.73	0.16	0.36						
v/c Ratio	0.82	0.46	0.57	0.14	0.84	0.78						
Control Delay	78.1	41.0	10.5	4.0	98.5	37.4						
Queue Delay	0.0	0.0	1.1	0.2	0.0	0.0						
Total Delay	78.1	41.0	11.6	4.2	98.5	37.4						
LOS	E	D	B	A	F	D						
Approach Delay		49.3	10.0		55.0							
Approach LOS		D	B		E							
Queue Length 50th (ft)	~188	266	223	5	243	372						
Queue Length 95th (ft)	218	467	382	m89	#444	515						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	230	1434	1030	1161	339	952						
Starvation Cap Reductn	0	0	226	497	0	0						
Spillback Cap Reductn	0	11	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.82	0.46	0.73	0.24	0.67	0.59						

Intersection Summary			
Area Type:	Other		
Cycle Length: 210			
Actuated Cycle Length: 174.8			
Natural Cycle: 135			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 38.9		Intersection LOS: D	

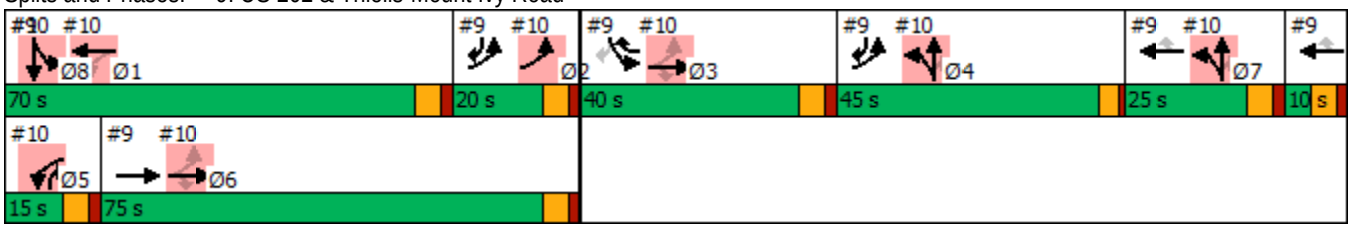
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

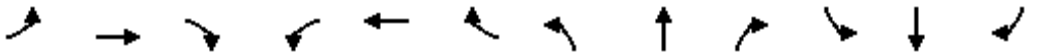
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

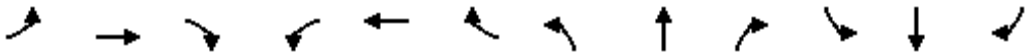
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	565	278	36	425	2	205	5	179	7	9	39
Future Volume (vph)	9	565	278	36	425	2	205	5	179	7	9	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00				0.98		1.00	
Frt			0.850		0.999				0.850		0.905	
Flt Protected	0.950			0.950			0.950	0.954			0.993	
Satd. Flow (prot)	1602	1782	1544	1579	1870	0	1598	1611	1607	0	1544	0
Flt Permitted	0.382			0.166			0.950	0.954			0.993	
Satd. Flow (perm)	644	1782	1544	276	1870	0	1598	1611	1571	0	1544	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			193								41	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	3					3			1	1		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	5%	3%	16%	3%	0%	10%	0%	3%	29%	0%	8%
Adj. Flow (vph)	10	614	302	39	462	2	223	5	195	8	10	42
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	10	614	302	39	464	0	114	114	195	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	4.0	4.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	10.0	10.0	
Total Split (s)	20.0			15.0	70.0				15.0	10.0	10.0	
Total Split (%)	9.5%			7.1%	33.3%				7.1%	4.8%	4.8%	
Maximum Green (s)	14.0			9.0	64.0				9.0	4.0	4.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Max				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					2							
Act Effct Green (s)	99.4	105.5	105.5	64.6	64.6		36.6	36.6	41.1		4.0	
Actuated g/C Ratio	0.57	0.60	0.60	0.37	0.37		0.21	0.21	0.24		0.02	
v/c Ratio	0.02	0.57	0.30	0.26	0.67		0.34	0.34	0.53		0.80	
Control Delay	3.1	6.6	0.7	45.3	54.7		61.7	61.6	51.2		90.5	
Queue Delay	0.0	0.3	0.4	0.0	0.0		0.6	0.5	0.0		1.4	
Total Delay	3.1	6.9	1.2	45.3	54.7		62.2	62.1	51.2		91.9	
LOS	A	A	A	D	D		E	E	D		F	
Approach Delay		5.0			54.0			57.1			91.9	
Approach LOS		A			D			E			F	
Queue Length 50th (ft)	1	91	0	27	422		118	117	172		21	
Queue Length 95th (ft)	m2	152	0	75	758		189	189	249		#135	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	443	1148	1063	169	691		334	336	393		75	
Starvation Cap Reductn	0	144	379	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		60	60	0		1	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.61	0.44	0.23	0.67		0.42	0.41	0.50		0.81	

Intersection Summary	
Area Type:	Other
Cycle Length: 210	
Actuated Cycle Length: 174.8	
Natural Cycle: 135	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.84	

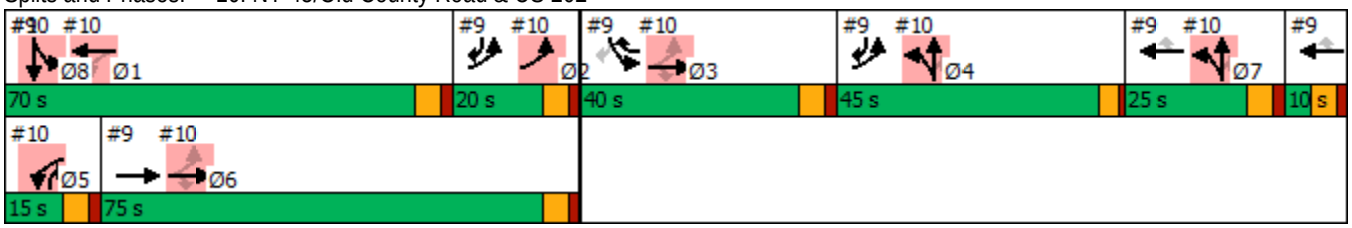
Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	40.0	45.0	75.0	25.0
Total Split (%)	19%	21%	36%	12%
Maximum Green (s)	34.0	41.0	69.0	19.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		3		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

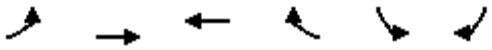
Intersection Summary

Intersection Signal Delay: 32.1	Intersection LOS: C
Intersection Capacity Utilization 59.3%	ICU Level of Service B
Analysis Period (min) 15	

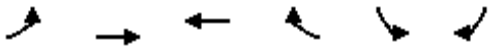
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Lane Configurations												
Traffic Volume (vph)	76	486	630	114	251	323						
Future Volume (vph)	76	486	630	114	251	323						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Grade (%)		0%	-3%		-1%							
Storage Length (ft)	515			0	0	0						
Storage Lanes	1			1	1	1						
Taper Length (ft)	85				25							
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00						
Frt				0.850		0.850						
Flt Protected	0.950				0.950							
Satd. Flow (prot)	1770	3539	1891	1607	1796	1591						
Flt Permitted	0.950				0.950							
Satd. Flow (perm)	1770	3539	1891	1607	1796	1591						
Right Turn on Red				No		Yes						
Satd. Flow (RTOR)						201						
Link Speed (mph)		45	45		30							
Link Distance (ft)		864	366		615							
Travel Time (s)		13.1	5.5		14.0							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98						
Heavy Vehicles (%)	2%	2%	2%	2%	1%	2%						
Adj. Flow (vph)	78	496	643	116	256	330						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	496	643	116	256	330						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Left	Right	Left	Right						
Median Width(ft)		12	12		12							
Link Offset(ft)		0	0		0							
Crosswalk Width(ft)		16	16		16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.98	0.98	0.99	0.99						
Turning Speed (mph)	15			9	15	9						
Number of Detectors	2	2	2	2	2	0						
Detector Template												
Leading Detector (ft)	83	83	83	83	83	0						
Trailing Detector (ft)	-5	-5	-5	-5	-5	0						
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5						
Detector 1 Size(ft)	40	40	40	40	40	40						
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex						
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	3.0	1.0	1.0	0.0						
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0						
Detector 1 Delay (s)	2.0	0.0	0.0	0.0	0.0	0.0						
Detector 2 Position(ft)	43	43	43	43	43							
Detector 2 Size(ft)	40	40	40	40	40							
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)	1.0	2.0	3.0	1.0	1.0							
Turn Type	Prot	NA	NA	pm+ov	Prot	pt+ov						

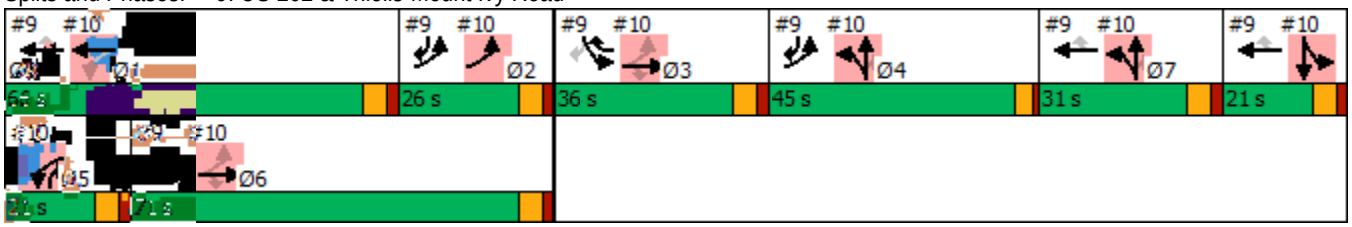


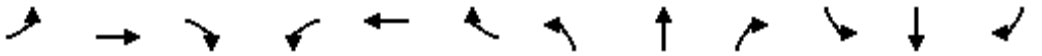
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø1	Ø2	Ø4	Ø5	Ø7	Ø8
Protected Phases	2 4	6	1 7 8	3	3	2 4	1	2	4	5	7	8
Permitted Phases				1 7 8		3						
Detector Phase	2	6	1 7 8	3	3	2 4						
Switch Phase												
Minimum Initial (s)		5.0		5.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		11.0		24.0	24.0		11.0	11.0	45.0	9.0	11.0	11.0
Total Split (s)		71.0		36.0	36.0		66.0	26.0	45.0	21.0	31.0	21.0
Total Split (%)		31.6%		16.0%	16.0%		29%	12%	20%	9%	14%	9%
Maximum Green (s)		65.0		30.0	30.0		60.0	20.0	41.0	15.0	25.0	15.0
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)		2.0		2.0	2.0		2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0							
Total Lost Time (s)		6.0		6.0	6.0							
Lead/Lag		Lag		Lead	Lead		Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		2.0		1.0	1.0		3.0	1.0	1.0	1.0	1.0	1.0
Recall Mode		Min		None	None		Min	None	None	None	None	None
Walk Time (s)							7.0		7.0			
Flash Dont Walk (s)							16.0		34.0			
Pedestrian Calls (#/hr)							1		0			
Act Effct Green (s)	17.8	67.8	109.8	139.9	30.1	59.9						
Actuated g/C Ratio	0.10	0.37	0.60	0.77	0.17	0.33						
v/c Ratio	0.45	0.38	0.56	0.09	0.86	0.50						
Control Delay	57.2	42.9	7.4	1.9	100.4	20.8						
Queue Delay	0.0	0.0	2.6	0.2	0.0	0.0						
Total Delay	57.2	42.9	10.0	2.1	100.4	20.8						
LOS	E	D	B	A	F	C						
Approach Delay		44.8	8.8		55.6							
Approach LOS		D	A		E							
Queue Length 50th (ft)	67	232	179	7	309	123						
Queue Length 95th (ft)	115	292	m221	m13	#492	225						
Internal Link Dist (ft)		784	286		535							
Turn Bay Length (ft)	515											
Base Capacity (vph)	224	1334	1134	1236	297	932						
Starvation Cap Reductn	0	0	357	693	0	0						
Spillback Cap Reductn	0	0	0	0	0	0						
Storage Cap Reductn	0	0	0	0	0	0						
Reduced v/c Ratio	0.35	0.37	0.83	0.21	0.86	0.35						

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 181.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 33.9		Intersection LOS: C	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

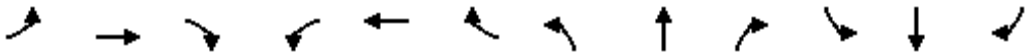
Splits and Phases: 9: US 202 & Thiells-Mount Ivy Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	544	184	45	573	0	135	1	136	4	7	16
Future Volume (vph)	8	544	184	45	573	0	135	1	136	4	7	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			-5%			2%	
Storage Length (ft)	100		0	90		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	45			55			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850						0.850		0.918	
Flt Protected	0.950			0.950			0.950	0.953			0.993	
Satd. Flow (prot)	1778	1835	1575	1762	1909	0	1674	1680	1623	0	1656	0
Flt Permitted	0.221			0.147			0.950	0.953			0.993	
Satd. Flow (perm)	414	1835	1575	273	1909	0	1674	1680	1623	0	1656	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			108								17	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		366			1762			536			551	
Travel Time (s)		5.5			26.7			12.2			12.5	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	4%	1%	0%	5%	0%	2%	25%	0%	0%
Adj. Flow (vph)	8	567	192	47	597	0	141	1	142	4	7	17
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	8	567	192	47	597	0	70	72	142	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			-40			-12	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	1.02	1.02	0.98	0.98	0.98	0.97	0.97	0.97	1.01	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	0	2	2		2	2	2	1	2	
Detector Template										Left		
Leading Detector (ft)	83	83	0	83	83		83	83	83	20	83	
Trailing Detector (ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Position(ft)	-5	-5	0	-5	-5		-5	-5	-5	0	-5	
Detector 1 Size(ft)	40	40	20	40	40		40	40	40	20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	1.0	2.0	0.0	1.0	3.0		1.0	1.0	1.0	0.0	1.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	2.0	0.0		2.0	2.0	0.0	0.0	5.0	
Detector 2 Position(ft)	43	43		43	43		43	43	43		43	
Detector 2 Size(ft)	40	40		40	40		40	40	40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												

Lane Group	Ø3	Ø4	Ø6	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)	1.0	2.0		1.0	3.0		1.0	1.0	1.0		1.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	2	3 6		5	1		4 7	4 7	5	8	8	
Permitted Phases	3 6		3 6	1					4 7			
Detector Phase	2	3 6	3 6	5	1		7	7	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0			3.0	5.0				3.0	5.0	5.0	
Minimum Split (s)	11.0			9.0	11.0				9.0	11.0	11.0	
Total Split (s)	26.0			21.0	66.0				21.0	21.0	21.0	
Total Split (%)	11.6%			9.3%	29.3%				9.3%	9.3%	9.3%	
Maximum Green (s)	20.0			15.0	60.0				15.0	15.0	15.0	
Yellow Time (s)	4.0			4.0	4.0				4.0	4.0	4.0	
All-Red Time (s)	2.0			2.0	2.0				2.0	2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0				0.0		0.0	
Total Lost Time (s)	6.0			6.0	6.0				6.0		6.0	
Lead/Lag	Lag			Lead	Lead				Lead	Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes				Yes	Yes	Yes	
Vehicle Extension (s)	1.0			1.0	3.0				1.0	1.0	1.0	
Recall Mode	None			None	Min				None	None	None	
Walk Time (s)					7.0							
Flash Dont Walk (s)					16.0							
Pedestrian Calls (#/hr)					1							
Act Effct Green (s)	97.9	103.9	103.9	60.1	60.1		36.1	36.1	41.2		12.5	
Actuated g/C Ratio	0.54	0.57	0.57	0.33	0.33		0.20	0.20	0.23		0.07	
v/c Ratio	0.02	0.54	0.20	0.32	0.95		0.21	0.22	0.39		0.22	
Control Delay	4.8	7.2	0.8	49.9	83.5		64.9	65.0	46.1		46.7	
Queue Delay	0.0	0.3	0.7	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.8	7.5	1.4	49.9	83.5		65.0	65.0	46.1		46.7	
LOS	A	A	A	D	F		E	E	D		D	
Approach Delay		6.0			81.1			55.5			46.7	
Approach LOS		A			F			E			D	
Queue Length 50th (ft)	0	112	0	40	719		76	78	120		13	
Queue Length 95th (ft)	m1	m119	m0	77	#1008		134	138	183		50	
Internal Link Dist (ft)		286			1682			456			471	
Turn Bay Length (ft)	100			90								
Base Capacity (vph)	380	1043	941	213	631		332	333	438		152	
Starvation Cap Reductn	0	128	474	0	0		0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0		13	13	0		0	
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	
Reduced v/c Ratio	0.02	0.62	0.41	0.22	0.95		0.22	0.23	0.32		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 225			
Actuated Cycle Length: 181.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 42.9		Intersection LOS: D	

Lane Group	Ø3	Ø4	Ø6	Ø7
Detector 2 Extend (s)				
Turn Type				
Protected Phases	3	4	6	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	45.0	11.0	11.0
Total Split (s)	36.0	45.0	71.0	31.0
Total Split (%)	16%	20%	32%	14%
Maximum Green (s)	30.0	41.0	65.0	25.0
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	1.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	1.0	2.0	1.0
Recall Mode	None	None	Min	None
Walk Time (s)		7.0		
Flash Dont Walk (s)		34.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

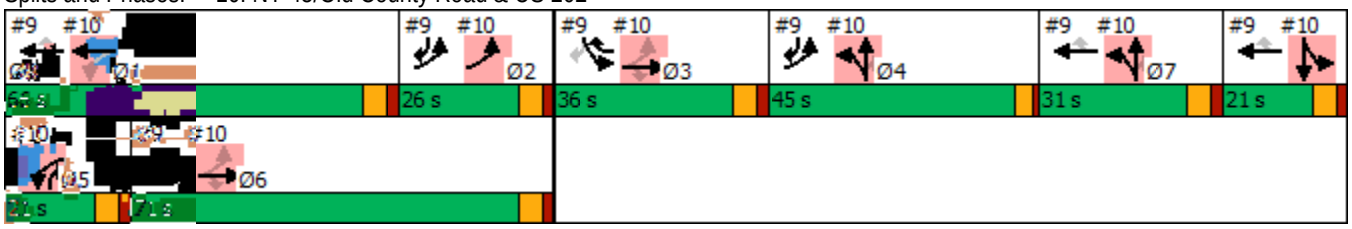
Intersection Capacity Utilization 56.2% ICU Level of Service B

Analysis Period (min) 15

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: NY 45/Old County Road & US 202



DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY

Appendix D

Detailed Site Plans

Prepared for:

Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer

Lead Agency:

Town of Haverstraw Planning Board

Prepared by:

Project 21090

Date: January 24, 2025
Revised: February 28, 2025

Letchworth Road Residential Development

Letchworth Road
Town of Haverstraw
Rockland County, NY
Tax Map ID 19.11-1-1

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix D
Detailed Site Plans

Lead Agency:
Town of Haverstraw Planning Board
1 Rosman Road
Garnerville, NY 10923
Contact: Mr. Salvatore Corallo Planning Board Chairman
Telephone: (845) 429-2200

Applicant/Owner:
Haverstraw Group LLC
16 Microlab Road, Suite A
Livingston, NJ 07039
Contact: Mr. Marc Pantirer
Telephone: (973) 488-6402

Date Submitted: January 24, 2025
Revised: February 28, 2025
Date Accepted:
Date of Public Hearing:
Comments Due:

PRELIMINARY SITE PLAN DRAWINGS

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

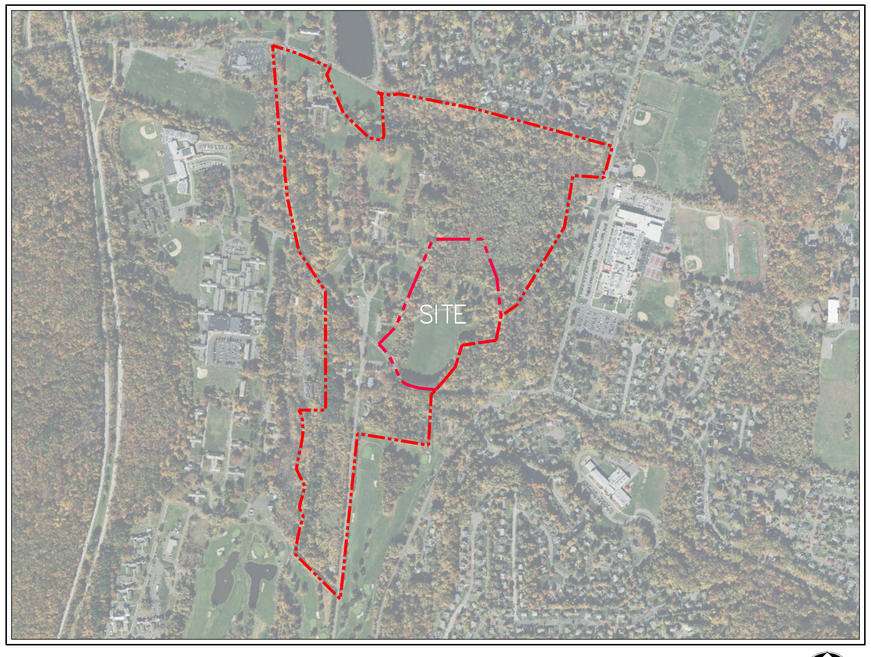
TAX MAP SECTION 19.11 | BLOCK 1 | LOT 1
ROCKLAND COUNTY
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

Site Planner, Civil & Traffic Engineer,
and Landscape Architect:
JMC PLANNING, ENGINEERING, LANDSCAPE ARCHITECTURE &
LAND SURVEYING, PLLC
120 BEDFORD ROAD
ARMONK, NY 10504
(914) 273-5225

Applicant:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

Architect:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

Surveyor:
WARD CARPENTER ENGINEERS INC.
76 MAMARONECK AVE #1
WHITE PLAINS, NY 10601
(914) 949-6000



AREA MAP
SCALE: 1" = 500'

JMC Drawing List:

C-000 COVER SHEET
C-010 EXISTING CONDITIONS MAP
C-100 SITE LAYOUT PLAN
C-200 SITE GRADING PLAN
C-220 CROSS SECTIONS
C-300 SITE UTILITY PLAN
C-400 SITE EROSION & SEDIMENT CONTROL PLAN
C-900 CONSTRUCTION DETAILS
C-901 CONSTRUCTION DETAILS
C-902 CONSTRUCTION DETAILS
C-903 CONSTRUCTION DETAILS
L-100 OVERALL LANDSCAPE PLAN
L-110 TYPICAL UNIT LANDSCAPE PLAN

ZONING COMPLIANCE CHART

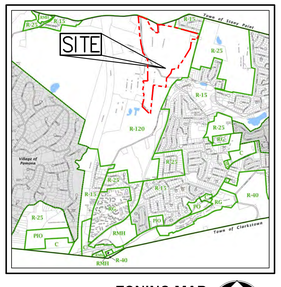
TAX PARCEL: 19.11-1-1
EXISTING ZONE DISTRICT: R-120 - RURAL RESIDENCE DISTRICT
PROPOSED ZONE DISTRICT: LA-17 - LUXURY APARTMENT
PROPOSED USE: RESIDENTIAL APARTMENTS - 300 UNITS

DESCRIPTION		REQUIREMENT (R-120)	EXISTING	REQUIREMENT (LA-17)	PROPOSED
MINIMUM LOT AREA	(S.F./ACRES)	120,000 S.F.	22.93 ACRES	10 ACRES	22.93 ACRES
NET ACREAGE	(ACRES)	-		-	22.41 (1)
MINIMUM LOT WIDTH	(FEET)	200	679	150	±462
MAXIMUM DENSITY	(UNITS/ACRE)	N/A	N/A	17	±14
MAXIMUM BUILDING HEIGHT	(STORIES/FEET)	2.5 / 35	<2.5 / <35	40 FEET	±48
MAXIMUM BUILDING COVERAGE	(%)	8	0.2	NA	16
FLOOR AREA RATIO		NA	N/A	0.6	±0.46
MAXIMUM IMPERVIOUS COVERAGE	(%)	18	3	50	47.13
MINIMUM BUILDING SETBACKS					
FRONT YARD	(FEET)	50	840.6	35	98
SIDE YARD (ONE/TOTAL)	(FEET)	40/100	234.8/605.5	35/70	45/90
REAR YARD	(FEET)	80	386.5	35	70.8
PARKING SPACES					
STANDARD PARKING SPACES	(SPACES)	-	N/A	-	369
ACCESSIBLE PARKING SPACES	(SPACES)	-	N/A	2% OF TOTAL	30
GARAGE PARKING SPACES	(SPACES)	-	N/A	-	134
GARAGE APRON PARKING SPACES	(SPACES)	-	N/A	-	134
TOTAL PARKING SPACES	(SPACES)	VARIES		2 PER UNIT	667

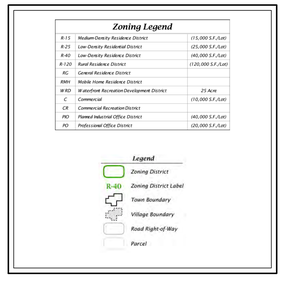
(1) IN ACCORDANCE WITH SECTION 167-62B DEDUCTIONS FOR STEEP SLOPES WERE TAKEN BASED ON THE FOLLOWING CRITERIA:

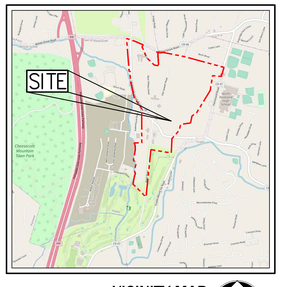
SLOPES 20 TO 25% - 25% DEDUCTION	11155 SF X 0.25 =	2789 SF
SLOPES 25 TO 30% - 50% DEDUCTION	6465 SF X 0.50 =	3233 SF
SLOPES 30 TO 35% - 75% DEDUCTION	4428 SF X 0.75 =	3321 SF
SLOPES GREATER THAN 35% - 100% DEDUCTION	13499 SF X 1.00 =	13499 SF

TOTAL DEDUCTION = 22842 SF = 0.52 AC



ZONING MAP
SCALE: NTS
SOURCE: TOWN OF HAVERSTRAW ZONING
ROCKLAND COUNTY, NY
2015





VICINITY MAP
SCALE: NTS
SOURCE: OPENSTREETMAP.ORG

GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY THE CONTRACTOR'S OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.

2. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC, PLLC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC, PLLC.

3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL LOCAL PERMITS REQUIRED.

4. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.

5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.

6. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING PAVEMENT TO REMAIN.

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NOT FOR CONSTRUCTION

SUBSURFACE UTILITY LOCATIONS ARE BASED ON A COMPILATION OF FIELD EVIDENCE, AVAILABLE RECORD PLANS AND/OR UTILITY MARK-OUTS. THE LOCATION OR COMPLETENESS OF UNDERGROUND INFORMATION CANNOT BE GUARANTEED. VERIFY THE ACTUAL LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

811 Know what's below. Call before you dig.

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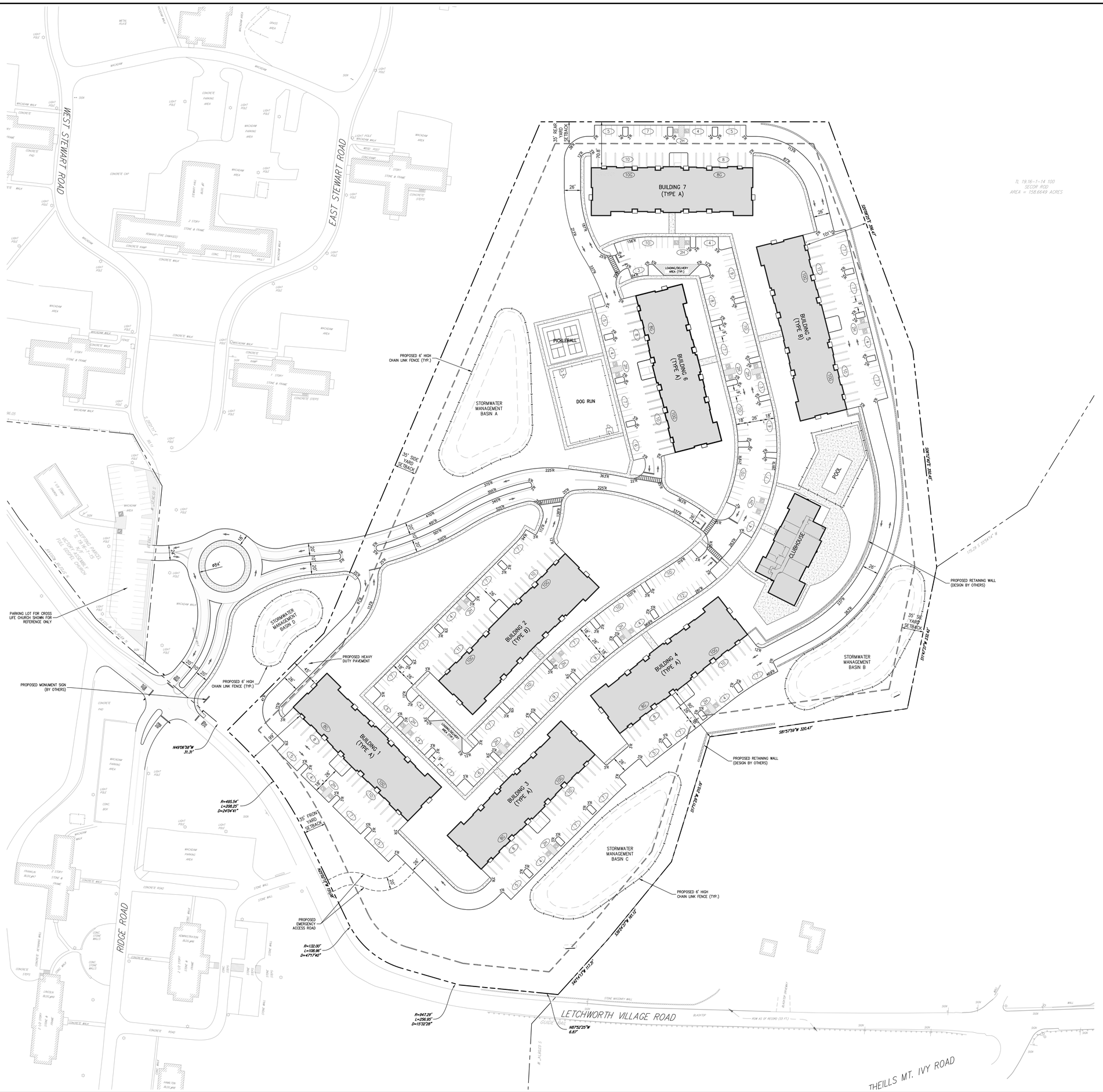
No.	Revision	Date	By
1.	ISSUED FOR DEIS COMPLETENESS	01/24/2025	PK
2.	DEIS COMPLETENESS SUBMISSION	02/28/2025	NB

Previous Editions Obsolete

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JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

Drawn:	BMG	Approved:	DV
Scale:	NOT TO SCALE		
Date:	03/27/2024		
Project No:	21090		
2080-COVER	COVER	COVER.tif	
Drawing No:	C-000		


LEGEND
EXISTING PROPERTY LINE
ADJACENT PROPERTY LINE
EXISTING BUILDING LINE
EXISTING PAVEMENT EDGE
EXISTING CURB LINE
EXISTING CONTOUR
EXISTING INDEX CONTOUR
EXISTING STONE WALL
EXISTING RETAINING WALL
EXISTING GUIDE RAIL
EXISTING FENCE
EXISTING STORM DRAIN LINE AND SIZE
EXISTING SANITARY LINE AND SIZE
EXISTING GAS LINE
EXISTING DRAIN INLET
EXISTING MANHOLE
EXISTING FIRE HYDRANT
EXISTING GAS VALVE
EXISTING WATER VALVE
EXISTING UTILITY POLE
EXISTING LIGHT POLE
EXISTING SIGN
NOTES
1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR RNE REAL ESTATE," PREPARED BY WARD DAVENTER CHANDLER, INC. DATED 10/31/2023.
TL 19.16+/-14.100
SCCDR #09
AREA = 1588949 ACRES
PROPOSED SUBDIVISION LINE
STAKE SET
REBAR FOUND
N 81°26'50" W 265.39'
S 11°44'44" E 11.56'
EXCEPTING PARCEL
TL 19.16-1-15
WITORY ASSEMBLY
FULL GOSPEL CHURCH
N 81°26'50" W 62.25'
N 81°26'50" W 62.25'
S 81°26'50" E



LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING SETBACK LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED DROP CURB & RAMP
- PROPOSED SAWCUT LINE
- PROPOSED ACCESSIBLE PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED MONOLITHIC CONCRETE SIDEWALK & CURB
- PROPOSED DROP CURB AND RAMP
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED GUIDE RAIL
- PROPOSED FENCE
- PROPOSED DOUBLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- PROPOSED SINGLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- TRAFFIC SIGN LOCATION & DESIGNATION
- PEDESTRIAN CROSSING
- PROPOSED TREE LINE
- EXISTING FEATURE TO BE REMOVED

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR BNE REAL ESTATE," PREPARED BY WARD CARPENTER ENGINEERS, INC. DATED 09/20/2023.

No.	Revision	Date	By
1.	ISSUED FOR DRS COMPLETENESS	01/24/2025	PK
2.	DRS COMPLETENESS SUBMISSION	02/28/2025	NB

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APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
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SITE LAYOUT PLAN

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

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PROGRESS PLOTTING

Drawing: 21090-LAYOUT
Date: 2025-02-27
Time: 4:57 PM
By:

Drawn:	BMS	Approved:	DV
Scale:	1" = 50'		
Date:	03/27/2024		
Project No:	21090		
21090-LAYOUT	LAY	LAY.scr	

Drawing No:
C–100

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SITE GRADING PLAN

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

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Drawn:	PK
Approved:	DV
Scale:	1" = 50'
Date:	01/24/2025
Project No:	21090
Drawing No:	C-200

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John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

No.	Revision	Date	By
2.	DEIS COMPLETENESS SUBMISSION	02/28/2025	NB
1.	ISSUED FOR DEIS COMPLETENESS	01/24/2025	PK

Private Utilities Disclaimer

LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED DROP CURB AND RAMP
- PROPOSED FINISHED GRADE
- PROPOSED SPOT GRADE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED TYPE D DRAIN INLET
- PROPOSED TYPE DI DRAIN INLET
- PROPOSED TRENCH DRAIN
- PROPOSED HEADWALL
- PROPOSED WATER QUALITY STRUCTURE
- PROPOSED UNDERGROUND DETENTION/RETENTION SYSTEM
- PROPOSED OUTLET CONTROL STRUCTURE
- PROPOSED CLEANOUT
- PROPOSED HYDRANT
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED DOUBLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- PROPOSED SINGLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- BORING LOCATION AND DESIGNATION
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED DITCH OR SWALE
- PROPOSED RIP-RAP
- EXISTING FEATURE TO BE REMOVED

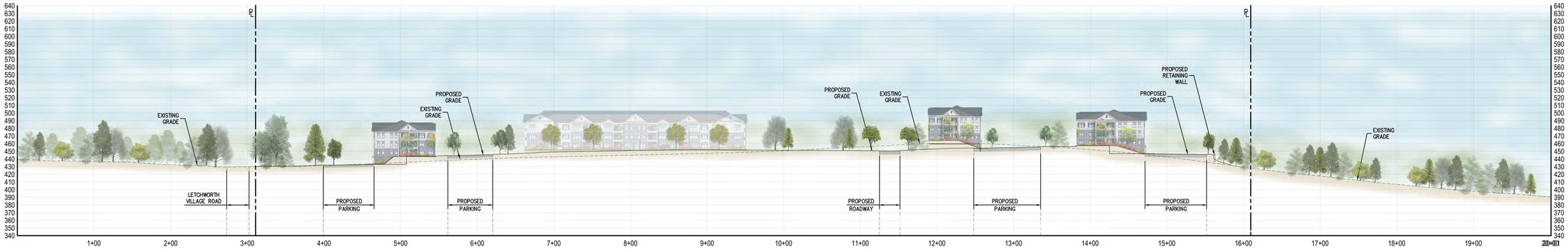
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RETAINING WALL SPOT GRADE LEGEND

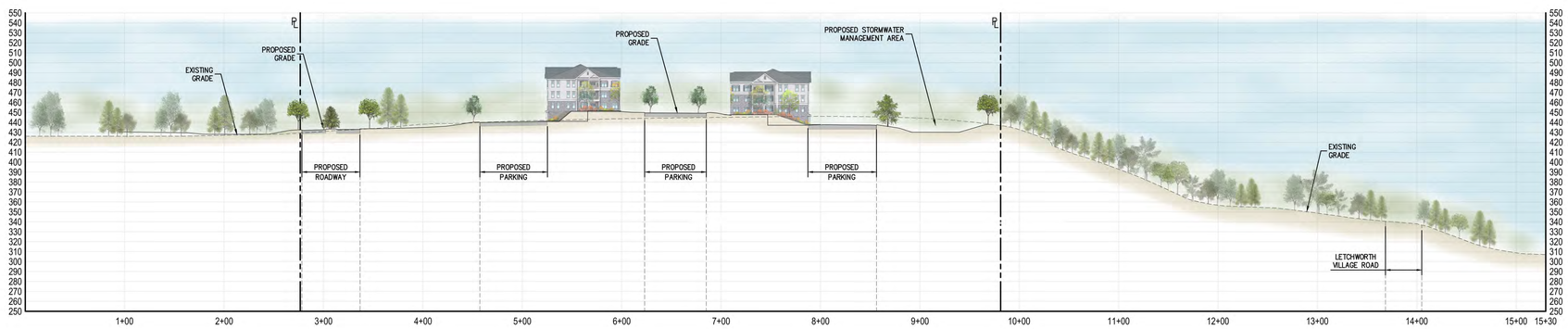
TW (PROPOSED GRADE)
BW (PROPOSED GRADE)
FF/EW

THELLS MT. IVY ROAD
LETCHWORTH VILLAGE ROAD
RIDGE ROAD
WEST STEWART ROAD
EAST STEWART ROAD
PARKING LOT FOR CROSS LIFE CHURCH SHOWN FOR REFERENCE ONLY
BUILDING 1 (TYPE A) 443.75 FFE GARAGE 433.85 FFE
BUILDING 2 (TYPE B) 452.75 FFE GARAGE 442.85 FFE
BUILDING 3 (TYPE A) 455.75 FFE GARAGE 445.85 FFE
BUILDING 4 (TYPE A) 458.75 FFE GARAGE 448.85 FFE
BUILDING 5 (TYPE B) 457.75 FFE GARAGE 447.00 FFE
BUILDING 6 (TYPE A) 450.75 FFE GARAGE 440.00 FFE
BUILDING 7 (TYPE A) 453.75 FFE GARAGE 443.00 FFE
CLUBHOUSE 459.50 FFE
POOL
PICKLEBALL
DOG RUN



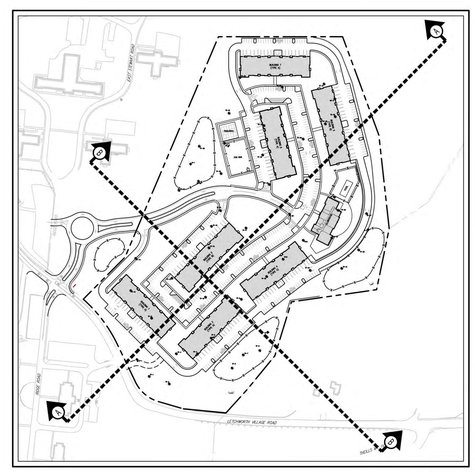
CROSS SECTION A-A

SCALE: HORZ. 1" = 50'
VERT. 1" = 50'



CROSS SECTION B-B

SCALE: HORZ. 1" = 50'
VERT. 1" = 50'



SECTION VIEW MAP
SCALE: 200'

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No.	Revision	Date	By
1.	ISSUED FOR DDS COMPLETENESS	01/24/2025	PK
2.	DDS COMPLETENESS SUBMISSION	02/28/2025	NB

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APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

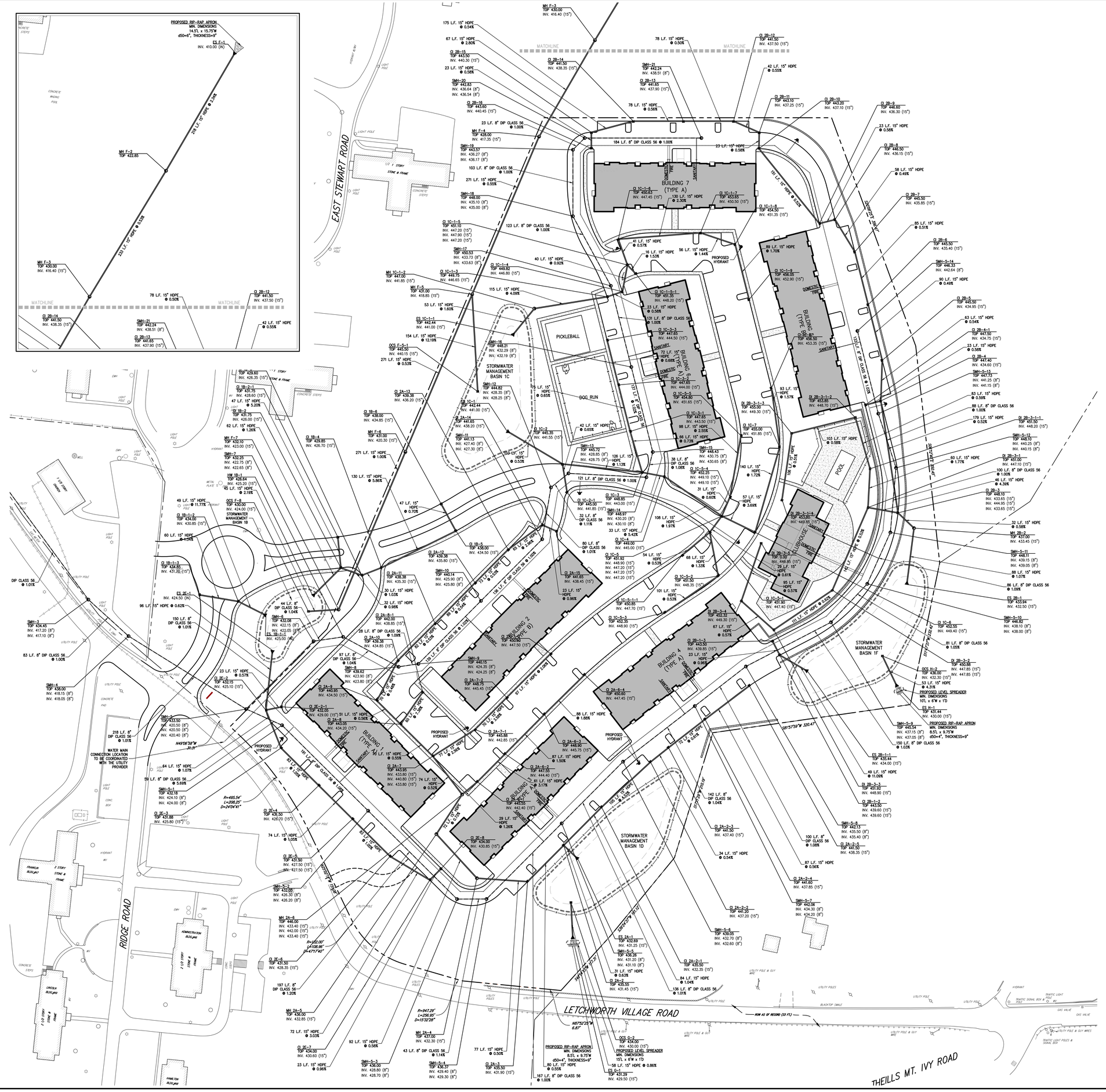
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CROSS SECTIONS

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
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Drawn:	CS	Approved:	DV
Scale:	AS SHOWN		
Date:	03/27/2024		
Project No:	21090		
21090-DRAWING	SECTIONS		-
Drawing No:	C-220		


PROPOSED RIP-RAP APRON
MIN. DIMENSIONS
14.5'L x 15.75'W
d50=6", THICKNESS=9"
ES F-1
INV. 410.00 (IN)
MH F-2
TOP 422.85
MH F-3
TOP 430.00
INV. 416.40 (15")
234 L.F. 15" HDPE @ 2.24%
233 L.F. 15" HDPE @ 0.54%
MATCHLINE
Cl 2B-14
TOP 441.50
INV. 438.35 (15")
SMH-21
TOP 442.24
INV. 438.51 (8")
Cl 2B-13
TOP 441.65
INV. 437.90 (15")
78 LF. 15" HDPE
0.50%
42 LF. 15" HDPE
0.55%
EAST STEWART ROAD
HYDRANT
LIGHT POLE
US 1 STORY
STONE & FRAME
CONCRETE STEPS
CONCRETE PAVING
POOL
Cl 2B-15
TOP 443.50
INV. 440.30 (15")
23 LF. 15" HDPE
0.58%
SMH-20
TOP 442.83
INV. 436.64 (8")
INV. 436.54 (8")
Cl 2B-16
TOP 443.60
INV. 440.45 (15")
23 LF. 8" DIP CLASS 56
1.00%
MH F-4
TOP 428.00
INV. 417.35 (15")
SMH-19
TOP 443.57
INV. 436.27 (8")
INV. 436.17 (8")
103 LF. 8" DIP CLASS 56
1.00%
271 LF. 15" HDPE
0.50%
SMH-18
TOP 448.00
INV. 435.10 (8")
INV. 435.00 (8")
MATCHLINE
Cl 2B-14
TOP 441.50
INV. 438.35 (15")
SMH-21
TOP 442.24
INV. 438.51 (8")
Cl 2B-13
TOP 441.65
INV. 437.90 (15")
78 LF. 15" HDPE
0.50%
Cl 2B-12
TOP 441.50
INV. 437.50 (15")
42 LF. 15" HDPE
0.55%
78 LF. 15" HDPE
0.56%
Cl 2B-11
TOP 443.10
INV. 437.25 (15")
Cl 2B-10
TOP 443.20
INV. 437.10 (15")
Cl 2B-9
TOP 446.80
INV. 436.30 (15")
23 LF. 15" HDPE
0.58%
Cl 2B-8
TOP 446.50
INV. 436.15 (15")
58 LF. 15" HDPE
0.49%
Cl 2B-7
TOP 445.50
INV. 435.85 (15")
85 LF. 15" HDPE
0.51%
Cl 2B-6
TOP 445.50
INV. 435.40 (15")
SMH-5-14
TOP 446.33
INV. 442.64 (8")
90 LF. 15" HDPE
0.49%
Cl 2B-5
TOP 445.50
INV. 434.95 (15")
63 LF. 15" HDPE
0.54%
Cl 2B-4-1
TOP 447.50
INV. 434.75 (15")
23 LF. 15" HDPE
0.58%
Cl 2B-4
TOP 447.40
INV. 434.60 (15")
SMH-5-13
TOP 447.73
INV. 441.25 (8")
INV. 441.15 (8")
83 LF. 15" HDPE
0.59%
179 LF. 15" HDPE
0.52%
Cl 2B-3-1-1
TOP 447.50
INV. 448.20 (15")
SMH-5-12
TOP 448.10
INV. 440.25 (8")
INV. 440.15 (8")
60 LF. 15" HDPE
1.77%
Cl 2B-3-2
TOP 451.00
INV. 447.10 (15")
100 LF. 8" DIP CLASS 56
1.00%
46 LF. 15" HDPE
4.39%
Cl 2B-3
TOP 448.10
INV. 433.65 (15")
INV. 444.95 (15")
INV. 433.65 (15")
32 LF. 15" HDPE
0.56%
MH 2B-2
TOP 437.00
INV. 433.45 (15")
SMH-5-11
TOP 448.11
INV. 439.15 (8")
INV. 439.05 (8")
100 LF. 8" DIP CLASS 56
1.00%
88 LF. 15" HDPE
1.07%
86 LF. 8" DIP CLASS 56
1.09%
ES 2B-1
TOP 433.94
INV. 432.50 (15")
SMH-5-10
TOP 446.82
INV. 438.10 (8")
INV. 438.00 (8")
81 LF. 8" DIP CLASS 56
1.05%
Cl 2B-3-2
TOP 450.88
INV. 447.85 (15")
OCS H-2
TOP 438.00
INV. 432.30 (15")
53 LF. 15" HDPE
4.31%
PROPOSED LEVEL SPREADER
MIN. DIMENSIONS
10'L x 6'W x 1'D
ES H-1
TOP 431.44
INV. 430.00 (15")
PROPOSED RIP-RAP APRON
MIN. DIMENSIONS
8.5'L x 9.75'W
d50=4", THICKNESS=9"
SMH-5-9
TOP 445.54
INV. 437.15 (8")
INV. 437.05 (8")
150 LF. 8" DIP CLASS 56
1.03%
ES 2B-1-1
TOP 439.44
INV. 434.00 (15")
49 LF. 15" HDPE
11.09%
Cl 2B-2-1
TOP 451.92
INV. 448.90 (15")
Cl 2B-2
TOP 443.50
INV. 439.60 (15")
INV. 439.60 (15")
SMH-5-8
TOP 442.13
INV. 435.50 (8")
INV. 435.40 (8")
Cl 2A-2-3
TOP 441.50
INV. 438.35 (15")
87 LF. 15" HDPE
0.56%
Cl 2A-2-4
TOP 441.60
INV. 437.85 (15")
SMH-5-7
TOP 442.06
INV. 434.30 (8")
INV. 434.20 (8")
Cl 2A-3-2
TOP 441.20
INV. 437.20 (15")
SMH-5-6
TOP 438.05
INV. 432.70 (8")
INV. 432.60 (8")
Cl 2A-2-2
TOP 435.50
INV. 432.35 (15")
84 LF. 15" HDPE
1.04%
136 LF. 8" DIP CLASS 56
1.01%
Cl 2A-3-3
TOP 441.50
INV. 437.40 (15")
34 LF. 15" HDPE
0.54%
100 LF. 8" DIP CLASS 56
1.08%
Cl 2A-2-5
TOP 441.50
INV. 438.35 (15")
Cl 2A-3-1
TOP 441.50
INV. 437.30 (15")
142 LF. 8" DIP CLASS 56
1.04%
Cl 2A-4-3
TOP 448.00
INV. 445.75 (15")
87 LF. 15" HDPE
1.50%
Cl 2A-4-2
TOP 447.55
INV. 444.40 (15")
61 LF. 15" HDPE
2.17%
Cl 2A-4-1
TOP 444.50
INV. 442.40 (15")
29 LF. 15" HDPE
1.26%
Cl 2C-6
TOP 434.00
INV. 430.85 (15")
72 LF. 15" HDPE
0.56%
88 LF. 15" HDPE
1.88%
Cl 2A-6-4
TOP 450.60
INV. 447.45 (15")
Cl 2A-7-1
TOP 445.88
INV. 442.85 (15")
Cl 2A-7
TOP 443.95
INV. 433.80 (15")
INV. 440.80 (15")
INV. 433.80 (15")
74 LF. 15" HDPE
0.52%
Cl 2A-9
TOP 440.95
INV. 434.50 (15")
Cl 2A-8
TOP 443.05
INV. 434.20 (15")
Cl 2C-1
TOP 432.05
INV. 429.00 (15")
51 LF. 15" HDPE
0.56%
Cl 2A-10
TOP 438.38
INV. 434.85 (15")
Cl 2A-11
TOP 438.38
INV. 435.30 (15")
20 LF. 15" HDPE
1.03%
32 LF. 15" HDPE
0.98%
Cl 2A-8-1
TOP 442.00
INV. 438.85 (15")
28 LF. 8" DIP CLASS 56
1.00%
Cl 2A-12
TOP 438.38
INV. 435.80 (15")
SMH-10
TOP 440.14
INV. 425.90 (8")
INV. 425.80 (8")
Cl 2B-5
TOP 438.00
INV. 434.50 (15")
61 LF. 15" HDPE
2.26%
70 LF. 8" DIP CLASS 56
0.53%
138 LF. 8" DIP CLASS 56
1.00%
Cl 2A-15
TOP 441.65
INV. 438.45 (15")
23 LF. 15" HDPE
0.96%
Cl 2A-14
TOP 448.97
INV. 430.20 (8")
INV. 430.10 (8")
33 LF. 15" HDPE
5.42%
Cl 1C-4
TOP 449.00
INV. 445.00 (15")
Cl 1C-5
TOP 451.92
INV. 448.80 (15")
INV. 447.20 (15")
INV. 447.20 (15")
INV. 447.20 (15")
54 LF. 15" HDPE
0.53%
68 LF. 15" HDPE
1.33%
Cl 1C-5-2
TOP 451.50
INV. 448.35 (15")
101 LF. 15" HDPE
0.53%
Cl 1C-5-1-1
TOP 450.65
INV. 447.70 (15")
Cl 1C-5-3
TOP 452.35
INV. 448.90 (15")
Cl 2B-3-4
TOP 452.32
INV. 449.30 (15")
67 LF. 15" HDPE
0.57%
Cl 2B-1-3
TOP 443.50
INV. 439.85 (15")
23 LF. 15" HDPE
0.96%
Cl 2B-1-2
TOP 443.50
INV. 439.80 (15")
Cl 2B-1-1
TOP 439.44
INV. 434.00 (15")
Cl 1C-6
TOP 452.55
INV. 449.40 (15")
Cl 2B-3-3
TOP 455.00
INV. 449.30 (15")
Cl 2B-7
TOP 455.00
INV. 451.85 (15")
Cl 2B-3-1-3
TOP 455.00
INV. 449.30 (15")
Cl 2B-3-1-2
TOP 453.85
INV. 448.70 (15")
93 LF. 15" HDPE
1.57%
Cl 1C-3-1
TOP 447.65
INV. 443.50 (15")
98 LF. 15" HDPE
2.55%
Cl 1C-3-2
TOP 447.85
INV. 444.00 (15")
Cl 1C-3-3
TOP 447.85
INV. 444.50 (15")
72 LF. 15" HDPE
0.68%
Cl 1C-3-4
TOP 454.80
INV. 451.65 (15")
Cl 1C-3
TOP 448.85
INV. 443.00 (15")
38 LF. 8" DIP CLASS 56
1.00%
Cl 1C-3-5-1
TOP 451.35
INV. 448.20 (15")
23 LF. 15" HDPE
0.58%
131 LF. 8" DIP CLASS 56
1.00%
Cl 1C-1-9
TOP 456.05
INV. 452.90 (15")
Cl 1C-1-8
TOP 454.50
INV. 451.35 (15")
Cl 1C-1-7
TOP 453.85
INV. 450.50 (15")
130 LF. 15" HDPE
2.30%
Cl 1C-1-6
TOP 451.10
INV. 447.20 (15")
INV. 447.20 (15")
INV. 447.20 (15")
123 LF. 8" DIP CLASS 56
1.00%
Cl 1C-1-5
TOP 449.80
INV. 446.80 (15")
40 LF. 15" HDPE
0.92%
Cl 1C-1-4
TOP 449.83
INV. 446.80 (15")
Cl 1C-1-3
TOP 449.75
INV. 446.65 (15")
115 LF. 15" HDPE
4.09%
Cl 1C-1-2
TOP 447.00
INV. 441.85 (15")
MH 1C-1-2
TOP 441.85 (15")
MH F-5
TOP 431.00
INV. 418.85 (15")
53 LF. 15" HDPE
1.60%
ES 1C-1-1
TOP 442.44
INV. 441.00 (15")
154 LF. 15" HDPE
12.19%
OCS F-5-1
TOP 440.50
INV. 440.15 (15")
271 LF. 15" HDPE
0.53%
SMH-16
TOP 440.21
INV. 432.29 (8")
INV. 432.19 (8")
SMH-12
TOP 444.82
INV. 428.35 (8")
INV. 428.25 (8")
SB 1C-1
TOP 442.44
INV. 441.00 (15")
SB 2A-14
TOP 441.65
INV. 438.20 (15")
SMH-11
TOP 441.13
INV. 427.40 (8")
INV. 427.30 (8")
Cl 2A-13
TOP 438.38
INV. 436.20 (15")
Cl 1B-6
TOP 438.00
INV. 434.85 (15")
MH F-6
TOP 431.00
INV. 420.30 (15")
271 LF. 15" HDPE
1.00%
130 LF. 15" HDPE
5.86%
47 LF. 15" HDPE
0.70%
175 LF. 15" HDPE
0.54%
67 LF. 15" HDPE
2.80%
23 LF. 15" HDPE
0.58%
78 LF. 15" HDPE
0.50%
78 LF. 15" HDPE
0.56%
MATCHLINE
MATCHLINE
PICKLEBALL
DOG RUN
STORMWATER MANAGEMENT BASIN 1C
BUILDING 7 (TYPE A)
BUILDING 6 (TYPE A)
BUILDING 5 (TYPE A)
BUILDING 4 (TYPE A)
BUILDING 3 (TYPE B)
BUILDING 2 (TYPE B)
BUILDING 1 (TYPE A)
DOMESTIC FIRE
SANITARY
PROPOSED HYDRANT
STORMWATER MANAGEMENT BASIN 1D
STORMWATER MANAGEMENT BASIN 1F
POOL
CLUBHOUSE
SHOWER
SHOWER
SHOWER



LEGEND

- PROPOSED INLET PROTECTION
- PROPOSED CONSTRUCTION FENCE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED STOCKPILE AREA
- PROPOSED TEMPORARY SWALE
- PROPOSED TEMPORARY SEDIMENT BASIN
- TEMPORARY RISER & ANTI-VORTEX DEVICE
- EXISTING FEATURE TO BE REMOVED

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "SURVEY OF PROPERTY PREPARED FOR BNE REAL ESTATE," PREPARED BY WARD CARPENTER ENGINEERS, INC, DATED 09/20/2023.
2. THIS PLAN IS FOR TEMPORARY EROSION AND SEDIMENT CONTROL INFORMATION ONLY.
3. PRIOR TO BEGINNING ANY CLEARING, GRUBBING OR EXCAVATION, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL THE PLANS AND SPECIFICATIONS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE PLAN.
4. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ON-SITE EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY AS REQUIRED TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIERS. ALL SEDIMENT COLLECTED SHALL BE RESPREAD ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNERS REPRESENTATIVE.
5. THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS, AFTER EACH RAINSTORM, AND AS MAY BE REQUIRED OR DIRECTED BY ALL APPLICABLE APPROVALS AND PERMITS. THE CONTRACTOR SHALL IMMEDIATELY PROVIDE A WRITTEN REPORT ON FINDINGS OF SEDIMENT IN DOWNSTREAM AREAS TO ALL AUTHORITIES HAVING JURISDICTION AND MAKE REPAIRS AS REQUIRED OR DIRECTED.
6. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED/WARRANTED BY FIELD CONDITIONS AND AS DIRECTED BY THE OWNERS REPRESENTATIVE, JMC, AND/OR ANY AUTHORITY HAVING JURISDICTION.
7. STOCKPILING OF CONSTRUCTION MATERIAL SHALL BE PLACED ON-SITE IN THE AREA DESIGNATED ON THIS PLAN OR AS APPROVED BY THE OWNERS REPRESENTATIVE. STOCKPILED EXCAVATED MATERIAL SHALL HAVE TWO ROWS OF SILT FENCE LOCATED AROUND ITS PERIMETER. ALL STOCKPILED MATERIAL SHALL BE MAINTAINED IN AN ORDERLY MANNER SO AS NOT TO IMPEDE ON PEDESTRIAN AND/OR VEHICULAR TRAFFIC CIRCULATION ROUTES.
8. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE OWNERS REPRESENTATIVE.
9. ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER DURING CONSTRUCTION OF THE PRACTICE THE CONTRACTOR SHALL MINIMIZE AND AVOID HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.
10. ALL EXPOSED SLOPES AND GRADED/DISTURBED AREAS, THAT WILL NOT BE FURTHER DISTURBED WITHIN 14 CALENDAR DAYS (7 DAYS FOR CONSTRUCTION SITES THAT EITHER DIRECTLY DISCHARGE TO ONE OF THE 303(d) SEGMENTS LISTED IN APPENDIX E OF THE GENERAL PERMIT OR ARE LOCATED WITHIN ONE OF THE WATERSHEDS LISTED IN APPENDIX C OF THE GENERAL PERMIT), SHALL BE TEMPORARILY SEEDED WITHIN 24 HOURS OF DISTURBANCE, IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) "EROSION AND SEDIMENT CONTROL GUIDELINES" AND THE ANSI A300 "BEST MANAGEMENT PRACTICES FOR TREE AND SHRUB PLANTING, TRANSPLANTING, MAINTENANCE AND CARE," PREPARED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), LATEST EDITIONS, AS FOLLOWS:
    - A. SEED MIXTURE AND RATE OF APPLICATION:
        - A.1. IN SPRING, SUMMER OR EARLY FALL, SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNAL) AT 30 POUNDS PER ACRES (APPROXIMATELY 0.7 POUNDS/1000 SQUARE FEET OR USE 1 POUND/1000 SQUARE FEET).
        - A.2. IN LATE FALL OR EARLY WINTER, SEED THE AREA WITH CERTIFIED 'ARDCOTSOW' WINTER RYE (CEREAL RYE) AT 100 POUNDS PER ACRE (2.5 POUNDS/1000 SQUARE FEET).
    - B. APPLICATION SHALL BE UNIFORM BY MECHANICAL OR HYDROSEED METHODS.
    - C. MULCH ALL SEEDED AREAS WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 POUNDS PER 1,000 SQUARE FEET) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
10. ALL SEEDED AREAS SHALL BE FERTILIZED, RESEEDED, AND MULCHED AS NECESSARY TO MAINTAIN VIGOROUS, DENSE VEGETATIVE COVER.
11. TEMPORARY SEED MIXTURES SHALL NOT BE PLACED ON AREAS WHERE FINAL GRADE HAS BEEN ESTABLISHED AND TOPSOIL HAS BEEN PLACED UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.

SEQUENCE OF CONSTRUCTION

CONSTRUCTION SHALL BE SEQUENCED IN SUCH A MANNER THAT ANY AREA WHICH IS DISTURBED SHALL FIRST BE PROTECTED WITH SEDIMENT EROSION CONTROLS AS INDICATED ON THIS PLAN. PARTICULAR REQUIREMENTS ARE GIVEN AS FOLLOWS:

1. DEMOLITION OF EXISTING BUILDINGS AS REQUIRED.
2. INSTALLATION OF SEDIMENT AND EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN.
3. CLEAR UNDEVELOPED PORTION OF PROPERTY WHICH IS TO BE DEVELOPED.
4. STRIP AND STOCKPILE TOPSOIL.
5. BEGIN BUILDING AND PARKING LOT CONSTRUCTION, ROUGH GRADING.
6. INSTALL STORM DRAIN SYSTEM COMPLETE (IMMEDIATELY INSTALL HAYBALE FILTERS ON ALL INLETS).
7. INSTALL PUBLIC UTILITIES (GAS, ELECTRIC AND TELEPHONE) AS REQUIRED.
8. INSTALL CONCRETE AND ASPHALT CONCRETE PAVEMENT COMPLETE.
9. FINISH GRADING, REDISTRIBUTE TOPSOIL AND ESTABLISH VEGETATION AND/OR LANDSCAPING.
10. CLEAN PAVEMENTS AND STORM DRAIN SYSTEM OF ALL ACCUMULATED SEDIMENT IN CONJUNCTION WITH THE REMOVAL OF ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
11. COMPLETE SITE AND BUILDING CONSTRUCTION.

No.	Reason	Date	By
1.	ISSUED FOR DOS COMPLETENESS	01/24/2025	PK
2.	DOS COMPLETENESS SUBMISSION	02/28/2025	NB

Physical Editors Obsolete

APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERTON ROAD, SUITE 105
WINDSOR, CT 06095

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
Civil Engineer: John Meyer Consulting, Inc.
JMC Site Development Consultants, LLC
120 BEDFORD ROAD - ARMONK, NY 10504
voice 914.273.5225 - fax 914.273.2102
www.jmcpllc.com

SITE EROSION & SEDIMENT CONTROL PLAN

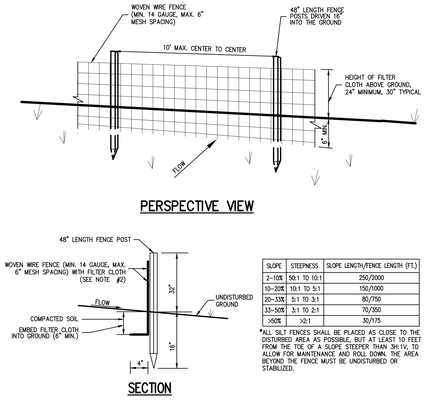
LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

Drawn:	BMS
Approved:	DV
Scale:	1" = 50'
Date:	01/24/2025
Project No:	21090
2090-SE	SE	SE.scr
Drawing No:	C-400

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NOT FOR CONSTRUCTION



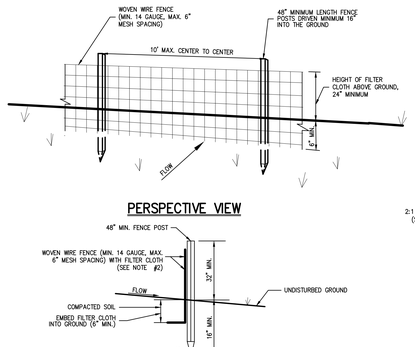
SLOPE	STEEPNESS	SLOPE LENGTH/FENCE LENGTH (FT.)
2-10%	50:1 TO 10:1	250/2000
10-20%	10:1 TO 5:1	150/1000
20-33%	5:1 TO 3:1	80/750
33-50%	3:1 TO 2:1	70/350
>50%	>2:1	30/175

*ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE, BUT AT LEAST 10 FEET FROM THE TOE OF A SLOPE STEEPER THAN 3H:1V, TO ALLOW FOR MAINTENANCE AND ROLL DOWN. THE AREA BEYOND THE FENCE MUST BE UNDISTURBED OR STABILIZED.

NOTES:

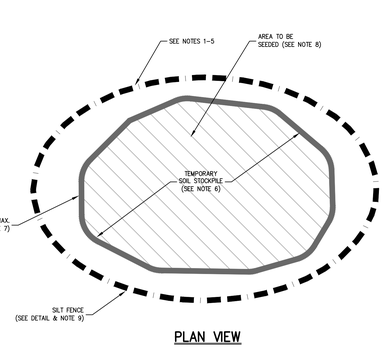
1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER T OR U TYPE OR HARDWOOD.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUAL.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE | 1

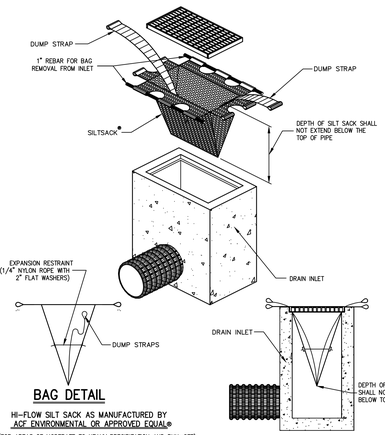


NOTES:

1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER T OR U TYPE OR HARDWOOD.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUAL.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
6. THE AREA CHOSEN FOR ALL TEMPORARY SOIL STOCKPILES SHALL BE DRY AND STABLE.
7. ALL STOCKPILED SOIL SHALL NOT CONTAIN SLOPES GREATER THAN 2:1.
8. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SEEDED WITHIN 24 HOURS. PERENNIAL OR ANNUAL RYEGRASS SHALL BE PLANTED DURING SPRING, SUMMER OR EARLY FALL. WINTER RYE (CEREAL RYE) SHALL BE PLANTED DURING LATE FALL OR EARLY WINTER.
9. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED AROUND THE PERIMETER.



TEMPORARY SOIL STOCKPILE WITH SILT FENCE | 2



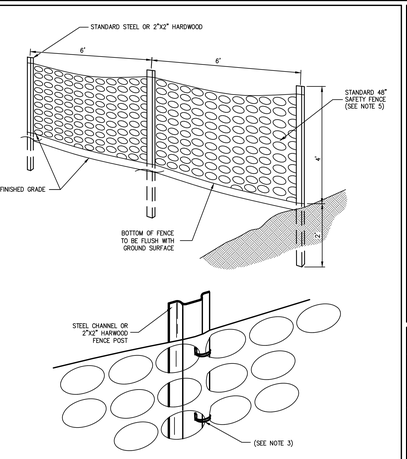
HI-FLOW SILT SACK AS MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL●

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

NOTE:
CURB INLETS SHALL BE TYPE B WITH CURB DEFLECTOR.

MANUFACTURED INSERT INLET PROTECTION | 3



NOTES:

1. SPACE SUPPORT FENCE POSTS AT 6 FOOT INTERVALS.
2. DRIVE SUPPORT POSTS 2 FEET INTO GROUND.
3. FIRMLY FASTEN FENCE MATERIAL IN PLACE BY WIRING TO FENCE POST WHILE MAINTAINING TENSION ACROSS FULL HEIGHT OF FENCE. WIRING SHALL BE DONE IN A MANNER THAT WILL PREVENT SAGGING OF FENCE MATERIAL.
4. PROVIDE PERIODIC INSPECTION AND MAINTENANCE OF FENCE INCLUDING REPAIRS AS NECESSARY AND REQUIRED.
5. PLASTIC FENCE SHALL BE INTERNATIONAL ORANGE COLOR, AS MANUFACTURED BY ADFI ENTERPRISES, INC. OR APPROVED EQUAL.
6. REMOVE CONSTRUCTION FENCE AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.

CONSTRUCTION FENCE | 4

No.	Revision	Date	By
1.	ISSUED FOR DES COMPLETENESS	01/24/2025	PK
2.	DES COMPLETENESS SUBMISSION	02/28/2025	NB

Previous Editions Obsolete

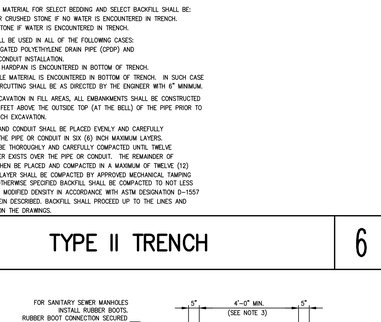
APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERTS MILL ROAD, SUITE 105
ALLENHURST, NJ

NOTES

1. STONE SIZE – USE 1" TO 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH TO BE PLACED OVER THE ENTIRE WIDTH AND LENGTH OF AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE | 5

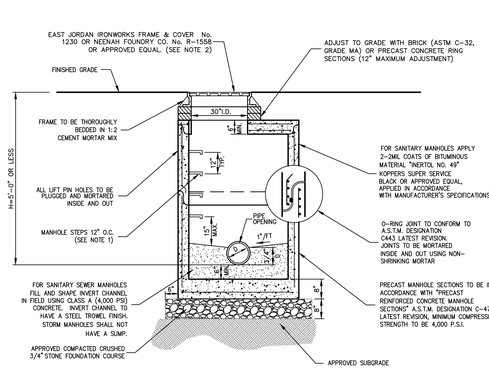


D=INSIDE DIAMETER, SPAN, OR RISE
O.D.=OUTSIDE BARREL DIAMETER, SPAN OR RISE
H.D.=OUTSIDE DIAMETER, SPAN, OR RISE Ø BELL OR BAND
W=H.D. + 2.0" – FOR 48" OR SMALLER DIAMETER, SPAN, OR RISE
W=H.D. + 2.5" – FOR GREATER THAN 48" DIAMETER, SPAN, OR RISE

NOTES:

1. FOR TYPE II TRENCH, MATERIAL FOR SELECT BEDDING AND SELECT BACKFILL SHALL BE:
   A. EITHER SAND OR CRUSHED STONE IF NO WATER IS ENCOUNTERED IN TRENCH.
   B. 3/4"CRUSHED STONE IF WATER IS ENCOUNTERED IN TRENCH.
2. TYPE II TRENCH SHALL BE USED IN ALL OF THE FOLLOWING CASES:
   A. FOR ALL CORRUGATED POLYETHYLENE DRAIN PIPE (CPDP) AND PVC PIPE AND CONDUIT INSTALLATION.
   B. WHEN ROCK OR HARDPAN IS ENCOUNTERED IN BOTTOM OF TRENCH.
   C. WHEN UNSUITABLE MATERIAL IS ENCOUNTERED IN BOTTOM OF TRENCH. IN SUCH CASE DEPTH OF UNDERCUTTING SHALL BE AS DIRECTED BY THE ENGINEER WITH 6" MINIMUM.
3. FOR ALL TRENCH EXCAVATION IN FILL AREAS, ALL EMBANKMENTS SHALL BE CONSTRUCTED TO A MINIMUM OF 2 FEET ABOVE THE OUTSIDE TOP (AT THE BELL) OF THE PIPE PRIOR TO BEGINNING ANY TRENCH EXCAVATION.
4. BACKFILL FOR PIPE AND CONDUIT SHALL BE PLACED EVENLY AND CAREFULLY AROUND AND OVER THE PIPE OR CONDUIT IN SIX (6) INCH MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED UNTIL TWELVE (12) INCHES OF COVER EXISTS OVER THE PIPE OR CONDUIT. THE REMAINDER OF THE BACKFILL MAY THEN BE PLACED AND COMPACTED IN A MAXIMUM OF TWELVE (12) INCH LAYERS. EACH LAYER SHALL BE COMPACTED BY APPROVED MECHANICAL TAMPING MACHINES. UNLESS OTHERWISE SPECIFIED BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 92% MAXIMUM MODIFIED DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D-1557 IN THE MANNER HEREIN DESCRIBED. BACKFILL SHALL PROCEED UP TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS.

TYPE II TRENCH | 6

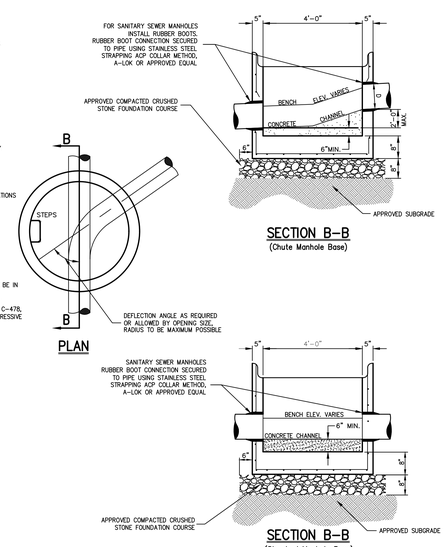


NOTES:

1. MANHOLE STEPS SHALL BE CAST IRON NEENAH No. R-1981-0 OR CAMPBELL FOUNDRY No. 2588-1 OR POLYPROPYLENE COATED STEEL (SEE SPECIFICATIONS) OR APPROVED EQUAL.
2. UNLESS OTHERWISE SPECIFIED, SANITARY SEWER MANHOLES SHALL HAVE LETTERS "SEWER" AND STORM DRAIN MANHOLES SHALL HAVE LETTERS "DRAIN" CAST ON COVER. THE COVERS SHALL HAVE VENT HOLES.
3. MANHOLES SHALL MEET OR EXCEED A.S.T.M. AND O.S.H.A. REQUIREMENTS.
4. SEE "NOTES PERTAINING TO MANHOLES" UNDER "UTILITY NOTES" ON DRAWING XXXX

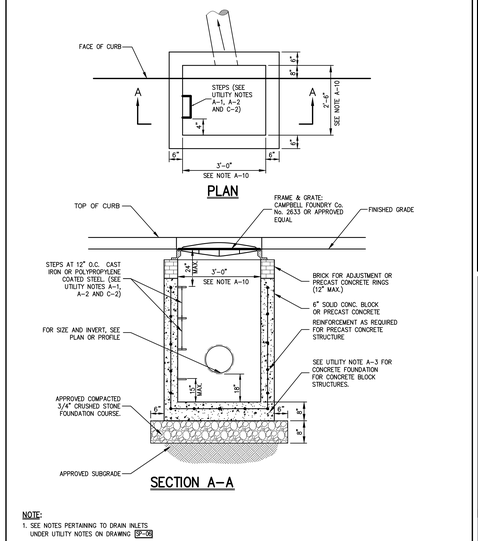
MANHOLE (TYPE A)
(H < 5'-0")

| 7



MANHOLE (TYPE A)
(H < 5'-0")

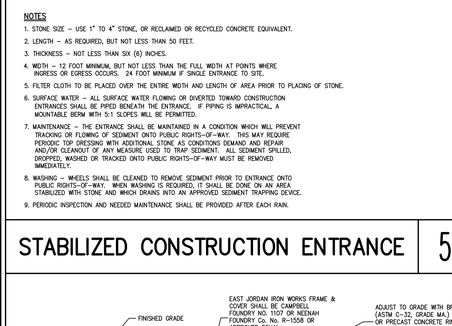
| 7



NOTE:
1. SEE NOTES PERTAINING TO DRAIN INLETS UNDER UTILITY NOTES ON DRAWING SP-09

DRAIN INLET (TYPE CI)
(with sump-w/o finger underdrains)

| 8

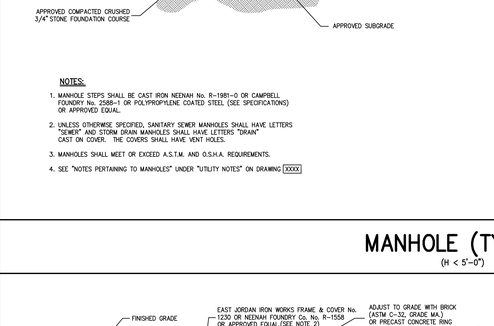


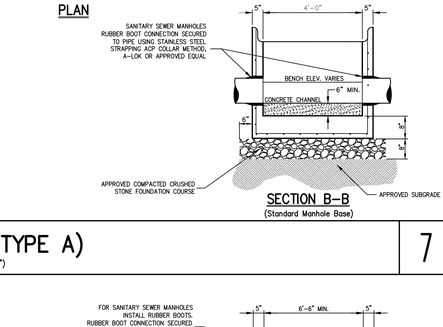
NOTES:

1. MANHOLE STEPS SHALL BE CAST IRON NEENAH No. R-1981-0 OR CAMPBELL FOUNDRY NO. 2588-1 OR POLYPROPYLENE COATED STEEL (SEE SPECIFICATIONS) OR APPROVED EQUAL.
2. UNLESS OTHERWISE SPECIFIED, SANITARY SEWER MANHOLES SHALL HAVE LETTERS "SEWER" AND STORM DRAIN MANHOLES SHALL HAVE LETTERS "DRAIN" CAST ON COVER. THE COVERS SHALL HAVE VENT HOLES.
3. MANHOLES WITH DEPTH (h) 10' OR GREATER SHALL BE FIVE (5) FEET IN DIAMETER.
4. MANHOLES SHALL MEET OR EXCEED A.S.T.M. AND O.S.H.A. REQUIREMENTS.
5. SEE "NOTES PERTAINING TO MANHOLES" UNDER "UTILITY NOTES" ON DRAWING XXXX

MANHOLE (TYPE B)
(H > 5'-0"≤10'-0")

| 9



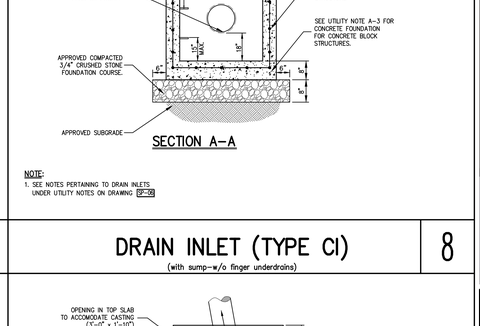


NOTES:

1. MANHOLE STEPS SHALL BE CAST IRON NEENAH No. R-1981-0 OR CAMPBELL FOUNDRY No. 2588-1 OR POLYPROPYLENE COATED STEEL (SEE SPECIFICATIONS) OR APPROVED EQUAL.
2. UNLESS OTHERWISE SPECIFIED, SANITARY SEWER MANHOLES SHALL HAVE LETTERS "SEWER" AND STORM DRAIN MANHOLES SHALL HAVE LETTERS "DRAIN" CAST ON COVER. THE COVERS SHALL HAVE VENT HOLES.
3. MANHOLES SHALL MEET OR EXCEED A.S.T.M. AND O.S.H.A. REQUIREMENTS.
4. SEE "NOTES PERTAINING TO MANHOLES" UNDER "UTILITY NOTES" ON DRAWING XXXX

MANHOLE (TYPE D)
(H > 10'-0")

| 10



NOTE
1. REINFORCE PRECAST CONCRETE TOP SLAB AND REINFORCE PRECAST CONCRETE STRUCTURE SHALL BE DESIGNED TO ACCOMMODATE AN H-20 DESIGN LOAD.
2. SEE NOTES PERTAINING TO DRAIN INLETS UNDER UTILITY NOTES ON DRAWING PPP

DRAIN INLET (TYPE DI)
(with sump-w/o finger underdrains)

| 11

CONSTRUCTION DETAILS

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

Drawn:	BMS
Approved:	DV
Scale:	NOT TO SCALE
Date:	01/24/2025
Project No:	21090
2086-DETAILS	C-900
Drawing No:	C-900

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NOTES PERTAINING TO DRAIN INLETS

A-1 STEPS WILL NOT BE REQUIRED IN INLETS LESS THAN FOUR (4) FEET IN DEPTH. STEPS WILL BE REQUIRED IN INLETS FOUR (4) FEET OR GREATER IN DEPTH. DEPTHS FOR DRAIN INLETS SHALL BE MEASURED FROM FINISHED GRADE TO INSIDE BOTTOM OF STRUCTURE (INCLUDING SUMP AS APPLICABLE).

A-2 WHEN STEPS ARE REQUIRED, STEPS SHALL COMPLY WITH THE SAME REQUIREMENTS OF ASTM STANDARD C-478, ARTICLE 13 ENTITLED "MANHOLE STEPS & LADDERS".

A-3 FOR MASONRY STRUCTURES, THE FIRST COURSE OF MASONRY SHALL BE SET IN THE CONCRETE FOUNDATION BEFORE THE CONCRETE HAS SET. CONCRETE FOUNDATION SHALL BE CLASS "A"(4000 psi) CONCRETE, TWELVE (12) INCHES THICK AND SHALL EXTEND SIX (6) INCHES BEYOND THE OUTSIDE FACE THE STRUCTURE.

A-4 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH AND CONSTRUCT THE PROPER SIZE STRUCTURE INCLUDING THE NECESSARY OPENINGS TO ACCOMMODATE THE WORK AS SHOWN ON THE PLANS OR ORDERED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

A-5 ALL NECESSARY PATCHING FOR DRAIN STRUCTURES SHALL BE ACCOMPLISHED WITH NON-SHRINKING CEMENT MORTAR GROUT, APPROVED EQUAL TO SIKA-SET AS MANUFACTURED BY THE SIKA CHEMICAL CORP.

A-6 FOUNDATIONS FOR PRECAST CONCRETE STRUCTURES SHALL BE SET ON A COMPACTED LAYER OF APPROVED CRUSHED STONE HAVING A MINIMUM COMPACTED THICKNESS OF EIGHT (8) INCHES.

A-7 ALL PIPES SHALL BE CUT FLUSH WITH THE INSIDE WALL OF THE STRUCTURE.

A-8 PROVIDE REINFORCED CONCRETE TOP SLAB FOR OVERSIZED DRAIN INLETS WITH PROPER SIZE OPENING TO ACCOMMODATE INSTALLATION OF FRAME & GRATE.

A-9 FOR MASONRY STRUCTURES GREATER THAN TEN (10) FEET IN DEPTH, THICKNESS OF MASONRY WALLS SHALL BE INCREASED TO TWELVE (12) INCHES.

A-10 FOR ALL STRUCTURES GREATER THAN 10 FEET IN DEPTH, STRUCTURES SHALL PROVIDE MINIMUM INSIDE DIMENSIONS OF 4 FEET X 4 FEET.

NOTES PERTAINING TO MANHOLES

B-1 PRECAST CONCRETE MANHOLES SHALL COMPLY WITH ASTM STANDARD C-478. MANHOLE JOINTS SHALL COMPLY WITH ASTM STANDARD C-443.

B-2 FOR PRECAST CONCRETE MANHOLES FIVE (5) FEET OR LESS IN HEIGHT, TOP CONE SECTION SHALL BE REPLACED WITH PRECAST REINFORCED CONCRETE SLAB (6" MIN. THICKNESS) WITH OPENING OF SUFFICIENT SIZE TO ACCOMMODATE MANHOLE CASTING.

B-3 FOR MANHOLES 10 FEET OR MORE IN DEPTH, MANHOLE DIAMETER SHALL BE FIVE (5) FEET.

B-4 TERMINAL MANHOLE FLOORS SHALL BE SLOPED TOWARD OUTFALL PIPE.

B-5 INVERT CHANNELS FOR PRECAST CONCRETE MANHOLES SHALL BE CONSTRUCTED OF CONCRETE.

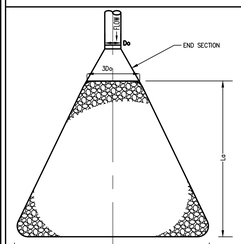
B-6 NOTES A-1, A-2, A-4, A-5, A-6 & A-7 UNDER "NOTES PERTAINING TO DRAIN INLETS" ABOVE SHALL APPLY TO MANHOLES.

NOTES PERTAINING TO PRECAST CONCRETE STRUCTURES FOR STORM DRAINS, SANITARY SEWERS AND WATER LINES

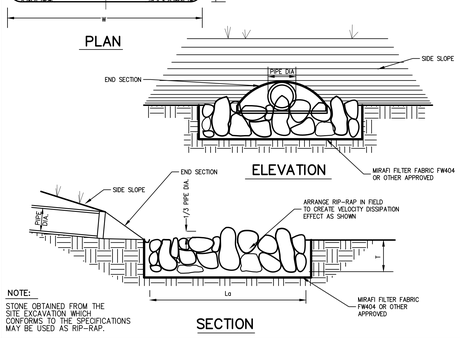
C-1 ALL PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO ACCOMMODATE AN H-20 DESIGN LOAD.

C-2 STEPS SHALL BE LOCATED WITHIN STRUCTURE TO AVOID PLACEMENT OVER PIPES WHEN PRACTICABLE.

UTILITY NOTES 12



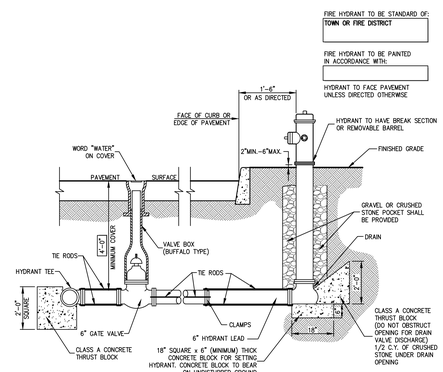
STRUCTURE	Q	Do	W	Lo	d50	T
ES F-1	13.31	1.25	15.75	14.5	0.50	0.75
ES G-1	4.57	1.25	9.75	8.5	0.33	0.75
ES H-1	3.00	1.25	9.75	8.5	0.33	0.75



NOTE:
STONE OBTAINED FROM THE SITE EXCAVATION WHICH CONFORMS TO THE SPECIFICATIONS MAY BE USED AS RIP-RAP.

RIP-RAP APRON/ENERGY DISSIPATOR 15
END SECTION

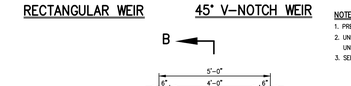
HYDRANT INSTALLATION 20



NOTES:
1. ALL CONCRETE THRUST BLOCKS SHALL BEAR ON UNDISTURBED GROUND.
2. RODDING SHALL CONSIST OF TWO 3/4" THREADED STEEL TIE RODS WITH NUTS AND WASHERS COMPLETE WITH ALL NECESSARY AND REQUIRED CLAMPS, CAREFULLY AND THOROUGHLY COVERED WITH ASPHALT OR OTHER ACCEPTABLE CORROSIVE RETARDING MATERIAL. IN GENERAL, THE METHOD AND TYPES OF MATERIAL REQUIRED IN THE INSTALLATION OF CLAMPS AND THE RODS SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL FIRE PROTECTION STANDARDS.
3. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR WITHIN TEN (10) FEET OF SANITARY SEWERS OR STORM DRAINS.
4. IF GROUND WATER IS FOUND WITHIN SEVEN (7) FEET OF THE SURFACE, HYDRANT DRAINS ARE TO BE PLUGGED. WHEN DRAINS ARE TO BE PLUGGED, THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER. SUCH HYDRANTS SHALL BE IDENTIFIED WITH A VISIBLE MARKING AS APPROVED BY THE WATER AUTHORITY.

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NOT FOR CONSTRUCTION



RECTANGULAR WEIR

45° V-NOTCH WEIR

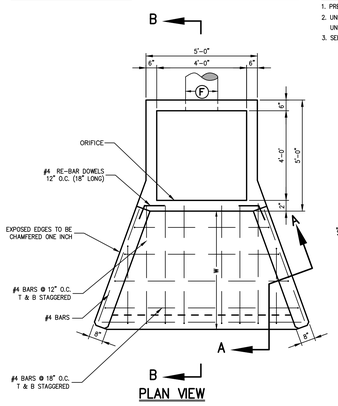
ABBREVIATIONS

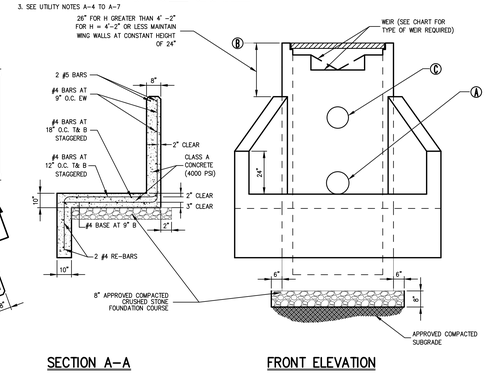
OCS	OUTLET CONTROL STRUCTURE
ELEV.	ELEVATION
IF	INFLOW
OF	OUTFLOW
NA	NOT APPLICABLE
O.C.	ON CENTER
T&B	TOP AND BOTTOM
EW	EACH WAY

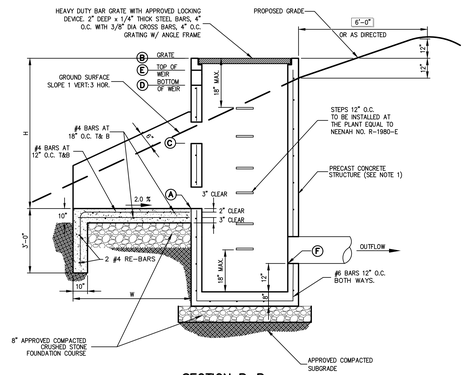
STRUCTURE CHART

BASIN No.	STRUCTURE No.	ELEV GRATE (B)	PIPE/ORIFICE SIZE AND INVERT ELEVATION			WEIR					
			PIPE OF (F)	ORIFICE (A)	ORIFICE (C)	TYPE	BOTTOM ELEV. (D)	TOP ELEV. (E)	LENGTH (L)	H	W
1B	OCS F-B	430.00	15" @ 424.15	3" @ 424.00	2 X 10" @ 425.75	RECTANGULAR	429.50	429.75	4.00'	6.00'	0.00'
1C	OCS F-5-1	445.50	15" @ 440.15	N/A	2 X 12" @ 441.60	RECTANGULAR	445.00	445.25	4.00'	5.50'	0.00'
1D	OCS G-2	434.00	15" @ 430.00	3.5" @ 430.00	2 X 12" @ 431.25	RECTANGULAR	433.00	433.50	4.00'	4.00'	0.00'
1F	OCS H-2	436.00	15" @ 432.30	N/A	2 X 12" @ 432.30	RECTANGULAR	435.00	435.50	4.00'	4.00'	0.00'

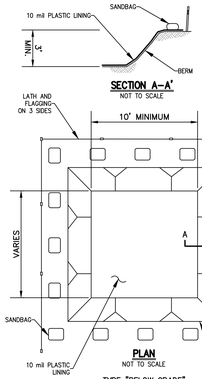
NOTES:
1. PRECAST CONCRETE STRUCTURE SHALL BE DESIGNED TO ACCOMMODATE AN H-20 DESIGN LOAD
2. UNDERDRAINS SHALL BE INSTALLED IN BASIN NOS. ☐ WHERE AND AS SHOWN IN THE PLANS
   UNDERDRAINS ARE NOT REQUIRED IN BASIN NOS. ☐ SEE DETAIL ☐
3. SEE UTILITY NOTES A-4 TO A-7

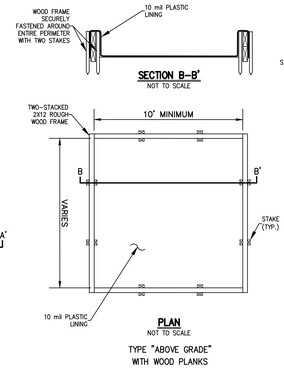


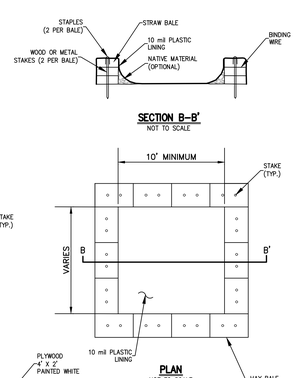


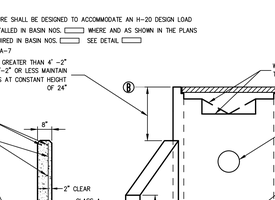


OUTLET CONTROL STRUCTURE 13
(Square)



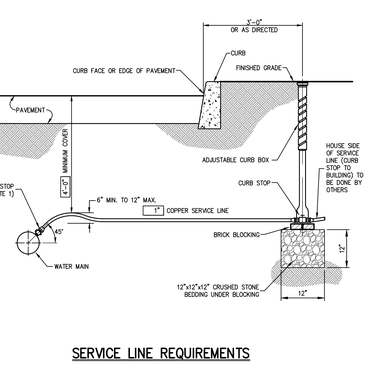






NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
3. THE CONSTRUCTION STORMWATER GENERAL PERMIT DOES NOT ALLOW OPERATORS TO DISCHARGE CONCRETE WASH WATER TO WATERWAYS, STORM DRAINS OR GROUNDWATER. OPERATORS MUST MANAGE AND CONTAIN THIS WATER TO PREVENT SPILLS, LEAKS OR DISCHARGES. DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
4. WASHOUT FACILITIES SHALL BE SIZED TO CONTAIN ALL LIQUIDS AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE AND APPROXIMATELY 50 GALLONS OF WASH WATER ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK.
5. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
6. THE CONCRETE WASHOUT SIGN (SEE PAGE 6) SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH CONCRETE WASHOUT FACILITY.
7. THE FACILITY NEEDS TO BE INSPECTED DAILY TO ENSURE PLASTIC LININGS ARE STILL INTACT AND SIDEWALLS ARE NOT DAMAGED.
8. THE FACILITY NEEDS TO BE CLEANED OR CHANGED WHEN 75% FULL.
9. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER AND INSTALL A NEW PLASTIC LINING AFTER EVERY CLEANING.
10. PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER.

CONCRETE WASHOUT 16

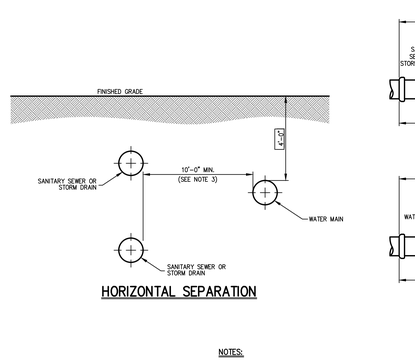


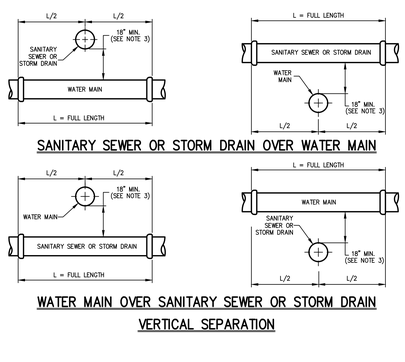
SERVICE LINE REQUIREMENTS

SIZE	SERVICE LINE(MATERIALS)	CORPORATION STOP	CURB STOP	CURB BOX	ENLARGED BASE
3/4"	COPPER, TYPE K	H-15008 N	H-15214 N	H-10308	Not Applicable
1"	COPPER, TYPE K	H-15008 N	H-15214 N	H-10308	Not Applicable
1-1/2"	COPPER, TYPE K	H-15013 N	H-15214 N	H-10310	Not Applicable
2"	COPPER, TYPE K	H-15013 N	H-15214 N	H-10310	H-10349

NOTES:
1. INSTALLATION OF 1-1/2" AND 2" CORPORATION STOPS SHALL BE MADE IN THE UPPER PIPE QUADRANT, BUT MAY BE MADE AT ANGLES LESS THAN 45° IF APPROVED BY THE OWNER'S FIELD REPRESENTATIVE.
2. SERVICE LINE SHALL HAVE NO JOINTS BETWEEN THE WATER MAIN AND CURB STOP.
3. CORPORATION STOP, CURB STOP, CURB BOX AND ENLARGED BASE FOR CURB BOX SHALL BE MUELLER COMPANY OR APPROVED EQUAL. CATALOG NUMBERS SHOWN REFER TO MUELLER COMPANY.
4. ALL SERVICE BRASS SHALL COMPLY WITH AWWA C-800. COMPONENTS IN CONTACT WITH POTABLE WATER SHALL ALSO COMPLY WITH LATEST REQUIREMENTS OF THE FEDERAL SAFE DRINKING WATER ACT.

WATER SERVICE CONNECTION 21
(2" OR LESS)

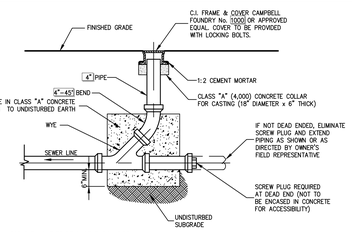




NOTES:
1. NORMAL CONDITIONS:
   A. WHENEVER A WATER MAIN MUST CROSS OVER OR UNDER A SANITARY SEWER OR STORM DRAIN, THE PIPES SHALL BE LAID TO PROVIDE A VERTICAL SEPARATION BETWEEN THEM OF AT LEAST 18 INCHES, AS MEASURED FROM THE BOTTOM OF THE HIGHER PIPE TO THE CROWN OF THE LOWER PIPE.
   B. FULL LENGTH OF WATER PIPE MUST BE CENTERED AT THE POINT OF CROSSING; NO JOINTS WILL BE PERMITTED AT THE POINT OF CROSSING.
2. WATER MAIN CROSSING UNDER SANITARY SEWERS:
   A. VERTICAL SEPARATION OF 18 INCHES MUST BE PROVIDED.
   B. ADEQUATE STRUCTURAL SUPPORT MUST BE PROVIDED FOR THE SANITARY SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING.
   C. FULL LENGTH OF WATER PIPE MUST BE CENTERED AT THE POINT OF CROSSING; NO JOINTS WILL BE PERMITTED AT THE POINT OF CROSSING.
3. IF DURING CONSTRUCTION IT IS FOUND THAT THE REQUIRED SEPARATION OF WATER MAINS, SANITARY SEWERS, STORM SEWERS AND BUILDING SANITARY SEWERS CANNOT BE MET, THE CONTRACTOR OR HIS AUTHORIZED REPRESENTATIVE SHALL IN WRITING ADVISE JOHN MEYER CONSULTING OF THE SPECIFIC CONDITIONS ENCOUNTERED. APPROVAL OF ALTERNATIVE SEPARATION CRITERIA SHALL BE OBTAINED FROM THE _____ PRIOR TO INSTALLATION.

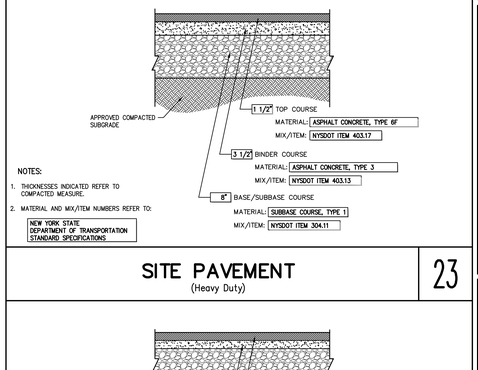
SEPARATION OF WATER AND SANITARY SEWER/STORM DRAIN LINES 22

CONCRETE LEVEL SPREADER 17

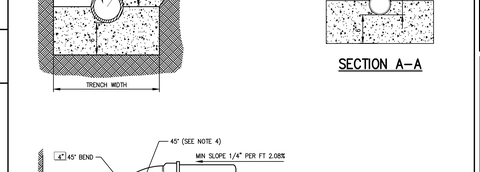


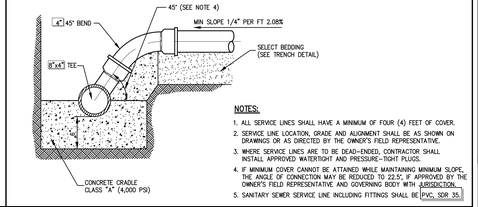
NOTES:
1. ALL PIPE MATERIAL FOR CLEANOUT TO BE DUCTILE IRON PIPE.
2. FOR INVERT OF SEWER LINE SEE PLAN.

CLEANOUT W/O MANHOLE 18



CONCRETE CRADLE 23

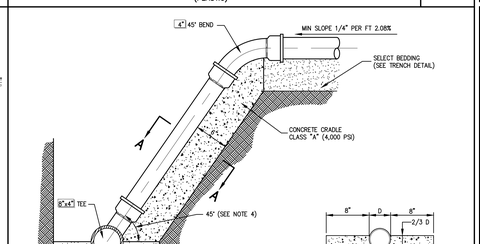




NOTES:
1. ALL SERVICE LINES SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER.
2. SERVICE LINE LOCATION, GRADE AND ALIGNMENT SHALL BE AS SHOWN ON DRAWINGS OR AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
3. WHERE SERVICE LINES ARE TO BE DEAD-ENDED, CONTRACTOR SHALL INSTALL APPROVED WATERTIGHT AND PRESSURE-TIGHT PLUGS.
4. IF MINIMUM COVER CANNOT BE ATTAINED WHILE MAINTAINING MINIMUM SLOPE, THE ANGLE OF CONNECTION MAY BE REDUCED TO 22.5°, IF APPROVED BY THE OWNER'S FIELD REPRESENTATIVE AND GOVERNING BODY WITH JURISDICTION.
5. SANITARY SEWER SERVICE LINE INCLUDING FITTINGS SHALL BE PVC, SDR 35.

SANITARY SEWER SERVICE CONNECTION 19

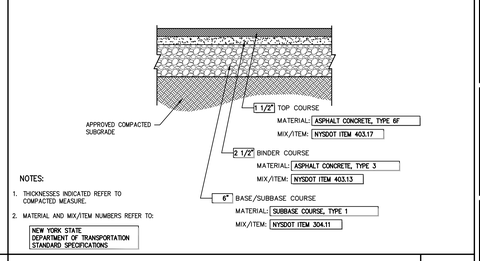
END SECTION 14
(PLASTIC)



NOTES:
1. ALL SERVICE LINES SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER.
2. SERVICE LINE LOCATION, GRADE AND ALIGNMENT SHALL BE AS SHOWN ON DRAWINGS OR AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
3. WHERE SERVICE LINES ARE TO BE DEAD-ENDED, CONTRACTOR SHALL INSTALL APPROVED WATERTIGHT AND PRESSURE-TIGHT PLUGS.
4. IF MINIMUM COVER CANNOT BE ATTAINED WHILE MAINTAINING MINIMUM SLOPE, THE ANGLE OF CONNECTION MAY BE REDUCED TO 22.5°, IF APPROVED BY THE OWNER'S FIELD REPRESENTATIVE AND GOVERNING BODY WITH JURISDICTION.
5. SANITARY SEWER SERVICE LINE INCLUDING FITTINGS SHALL BE PVC, SDR 35.

NOTES:
1. THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
2. MATERIAL AND MIX/ITEM NUMBERS REFER TO:
   NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

SITE PAVEMENT 23
(Heavy Duty)



NOTES:
1. THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
2. MATERIAL AND MIX/ITEM NUMBERS REFER TO:
   NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

SITE PAVEMENT 24
(Light Duty)

No.	Revision	Date	By
1.	ISSUED FOR DES COMPLETENESS	01/24/2025	PK
2.	DES COMPLETENESS SUBMISSION	02/28/2025	NB

Previous Editions Obsolete

APPLICANT: HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT: MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERTS MILL ROAD, SUITE 105
CONGERS, NY

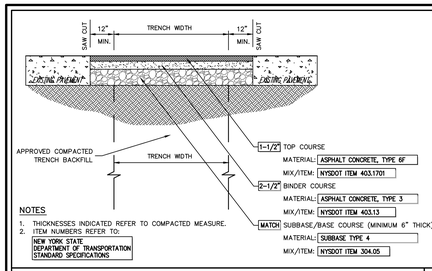
JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD - ARMONK, NY 10504
voice 914.273.5225 - fax 914.273.2102
www.jmcpllc.com

JMC

CONSTRUCTION DETAILS
LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

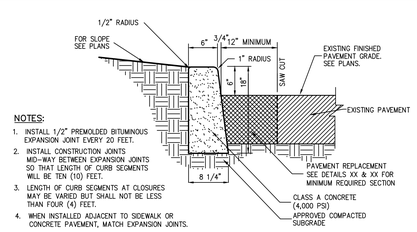
Drawn:	BMS
Approved:	DV
Scale:	NOT TO SCALE
Date:	01/24/2025
Project No:	21090
2080-074S	C-901
Drawing No:	C-901



NOTES

1. THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
2. ITEM NUMBERS REFER TO:
   NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

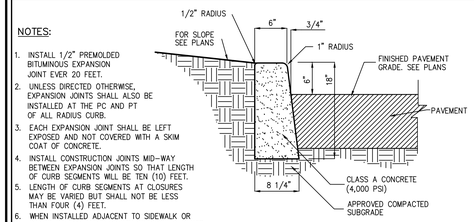
PAVEMENT REPLACEMENT OVER TRENCH 25



NOTES:

1. INSTALL 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT EVERY 20 FEET.
2. INSTALL CONSTRUCTION JOINTS MID-WAY BETWEEN EXPANSION JOINTS SO THAT LENGTH OF CURB SEGMENTS WILL BE TEN (10) FEET.
3. LENGTH OF CURB SEGMENTS AT CLOSURES MAY BE VARIED BUT SHALL NOT BE LESS THAN FOUR (4) FEET.
4. WHEN INSTALLED ADJACENT TO SIDEWALK OR CONCRETE PAVEMENT, MATCH EXPANSION JOINTS.

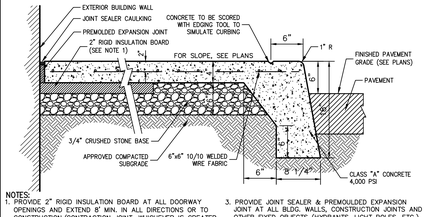
CAST-IN-PLACE CONCRETE CURB (IN EXISTING PAVEMENT) 27



NOTES:

1. INSTALL 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT EVERY 20 FEET.
2. UNLESS DIRECTED OTHERWISE, EXPANSION JOINTS SHALL ALSO BE INSTALLED AT THE PC AND PT OF ALL RADIUS CURB.
3. EACH EXPANSION JOINT SHALL BE LEFT EXPOSED AND NOT COVERED WITH A SKIM COAT OF CONCRETE.
4. INSTALL CONSTRUCTION JOINTS MID-WAY BETWEEN EXPANSION JOINTS SO THAT LENGTH OF CURB SEGMENTS WILL BE TEN (10) FEET.
5. LENGTH OF CURB SEGMENTS AT CLOSURES MAY BE VARIED BUT SHALL NOT BE LESS THAN FOUR (4) FEET.
6. WHEN INSTALLED ADJACENT TO SIDEWALK OR CONCRETE PAVEMENT, MATCH EXPANSION JOINTS.

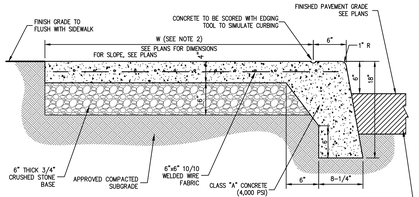
CAST-IN-PLACE CONCRETE CURB 26



NOTES:

1. PROVIDE 2" RIGID INSULATION BOARD AT ALL DOORWAY OPENINGS AND EXTEND 8' MIN. IN ALL DIRECTIONS OR TO CONSTRUCTION/CONTRACTION JOINT, WHICHEVER IS GREATER.
2. JOINT SEALER CAULKING SHALL BE PSI-641 LOW MODULUS SILICONE SEALANT, BY POLYMERIC SYSTEMS INC. OR APPROVED EQUAL. PREMOLDED EXPANSION JOINT SHALL BE FLEXCELL OR APPROVED EQUAL.
3. PROVIDE JOINT SEALER & PREMOLDED EXPANSION JOINT AT ALL BLDG. WALLS, CONSTRUCTION JOINTS AND OTHER FIXED OBJECTS (HYDRANTS, LIGHT POLES, ETC.)
4. SIDEWALK SHALL HAVE LIGHT BROOM FINISH
5. SIDEWALK CROSS SLOPE SHALL BE 1% MIN. 2% MAX.
6. FOR SIDEWALK WIDTH SEE PLAN. SIDEWALK SHALL HAVE A 3' MIN. WIDTH CLEAR FROM BACK OF CURBING.

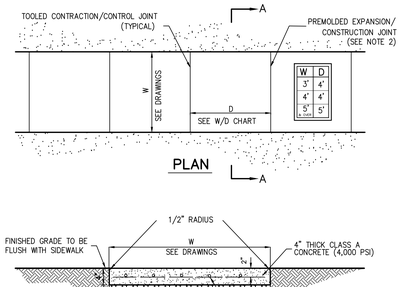
BUILDING PERIMETER MONOLITHIC CURB & SIDEWALK 28



NOTES

1. SIDEWALK CROSS SLOPE SHALL BE 1% MIN. TO 2% MAX.
2. FOR SIDEWALK WIDTH SEE PLAN. SIDEWALK SHALL HAVE A 3' MIN. WIDTH CLEAR FROM BACK OF CURBING.
3. PROVIDE JOINT SEALER & PREMOLDED EXPANSION JOINT AT ALL BLDG. WALLS, EXPANSION/CONSTRUCTION JOINTS AND OTHER FIXED OBJECTS (HYDRANTS, LIGHT POLES, ETC.)
4. SIDEWALK SHALL HAVE LIGHT BROOM FINISH.
5. PROVIDE 1/2" PREMOLDED EXPANSION JOINTS AT 20 FOOT INTERVALS UNLESS OTHERWISE DIRECTED.
6. REINFORCEMENT SHALL NOT EXTEND THROUGH EXPANSION JOINTS.
7. ALL CONTRACTION/CONTROL JOINTS AND EXPANSION/CONSTRUCTION JOINTS SHALL BE WELL TOOLED, HAND TROWELED JOINTS.

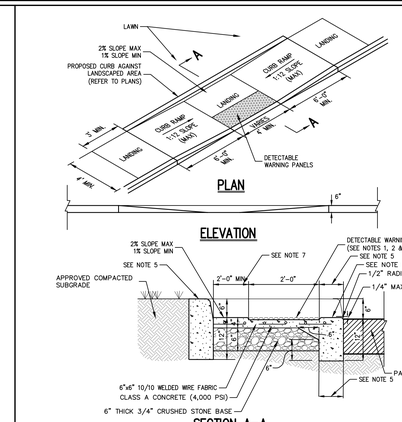
MONOLITHIC CONCRETE CURB AND SIDEWALK 29



NOTES:

1. SIDEWALK CROSS SLOPE SHALL BE 1% MIN. TO 2% MAX.
2. PROVIDE 1/2" PREMOLDED EXPANSION JOINTS AT 20' INTERVALS UNLESS OTHERWISE DIRECTED.
3. REINFORCING SHALL NOT EXTEND THROUGH EXPANSION JOINTS.
4. SIDEWALK SHALL HAVE LIGHT BROOM FINISH.
5. ALL CONTRACTION/CONTROL JOINTS AND EXPANSION/CONSTRUCTION JOINTS SHALL BE WELL TOOLED, HAND TROWELED JOINTS.

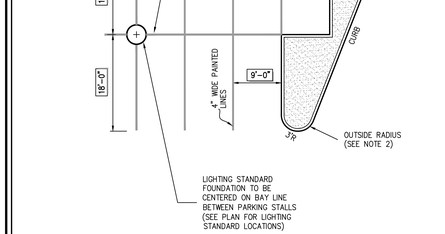
CONCRETE SIDEWALK 30



NOTES:

1. RAMPS SHALL HAVE CAST IN PLACE DETECTABLE/TACTILE WARNING SURFACE TILES AS MANUFACTURED BY ARMOR-TILE (OR APPROVED EQUAL) AND SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES, A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES.
2. DETECTABLE WARNING PANELS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT IN ACCORDANCE WITH SECTION 4.29.2, FEDERAL REGISTER, VOLUME 56, NO. 144, RULES AND REGULATIONS, APPENDIX A TO PART 36 – STANDARDS FOR ACCESSIBLE DESIGN (AMERICANS WITH DISABILITIES ACT), LATEST EDITION.
3. 24" WIDTH OF PANELS TO BE INSTALLED DIRECTLY BEHIND CURB AND IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE AND SEE CURB DETAIL FOR DIMENSIONS.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. WHEN LANDING OF RAMP ADJOINS A DOORWAY THEN THE MINIMUM DOORWAY MANEUVERING AREA SHALL BE AT LEAST THE WIDTH OF THE DOORWAY AND SHALL HAVE A MINIMUM DEPTH OF:
   MANUAL SWING DOORS = 60" MIN.
   FULL POWERED AUTOMATIC SLIDING DOORS = 48" MIN.
8. CONTRACTOR TO ENSURE TOP OF CURB MATCHES SLOPE OF RAMP.

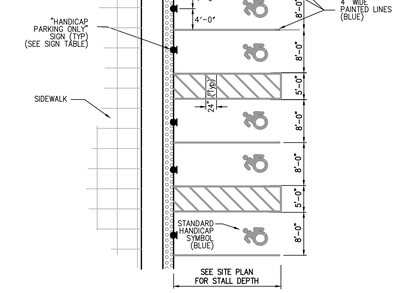
DROP CURB & RAMP (TYPE B) WITH DETECTABLE WARNING 31



NOTES

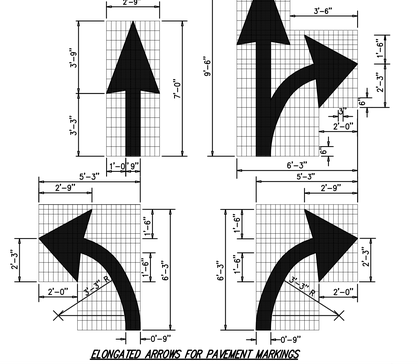
1. COLOR OF PAINT SHALL BE WHITE
2. OUTSIDE RADIUS MAY VARY DEPENDING ON SHAPE OF ISLAND. RADIUS SHALL BE AS SHOWN ON LAYOUT PLAN.

90° PARKING (SINGLE STRIPING–CURBED END) 32

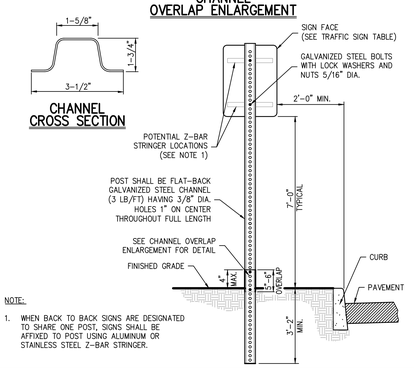


NOTE: SLOPES IN HANDICAP PARKING
1. AREAS SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
2. SEE SITE PLANS / SIGN TABLE FOR SIGN DESIGNATIONS, LOCATORS AND SPECIFICATIONS.

HANDICAP PARKING (SINGLE STRIPING – CURBLINE ALIGNMENT – W/SIDEWALK) (ADA) 33

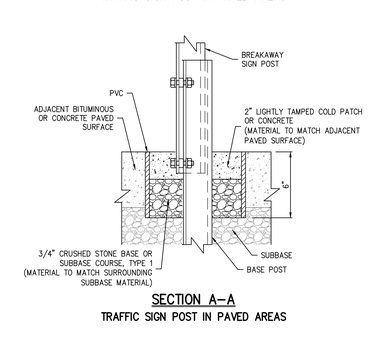


PAVEMENT TEXT & ARROWS (ON-SITE) 34

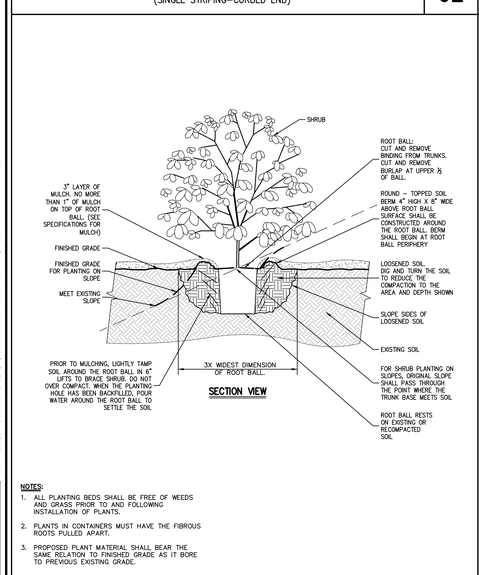


NOTE:

1. WHEN BACK TO BACK SIGNS ARE DESIGNATED TO SHARE ONE POST, SIGNS SHALL BE AFFIXED TO POST USING ALUMINUM OR STAINLESS STEEL Z-BAR STRINGER.



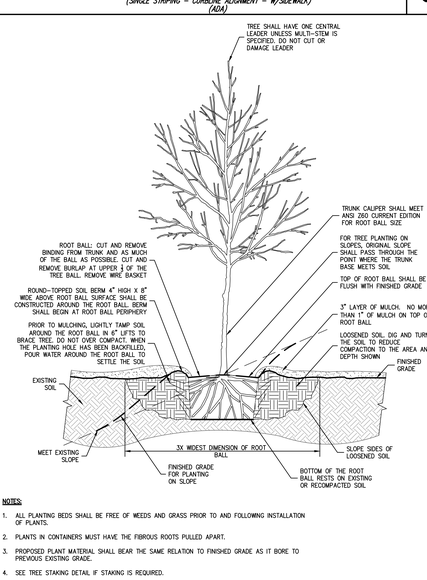
TRAFFIC SIGN POST (BREAKAWAY STEEL CHANNEL) 35



NOTES:

1. ALL PLANTING BEDS SHALL BE FREE OF WEEDS AND GRASS PRIOR TO AND FOLLOWING INSTALLATION OF PLANTS.
2. PLANTS IN CONTAINERS MUST HAVE THE FIBROUS ROOTS PULLED APART.
3. PROPOSED PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS EXISTING GRADE.

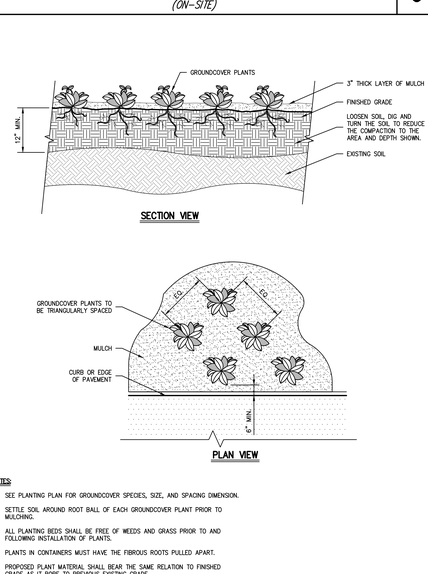
SHRUB PLANTING 36



NOTES:

1. ALL PLANTING BEDS SHALL BE FREE OF WEEDS AND GRASS PRIOR TO AND FOLLOWING INSTALLATION OF PLANTS.
2. PLANTS IN CONTAINERS MUST HAVE THE FIBROUS ROOTS PULLED APART.
3. PROPOSED PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS EXISTING GRADE.
4. SEE TREE STAKING DETAIL IF STAKING IS REQUIRED.

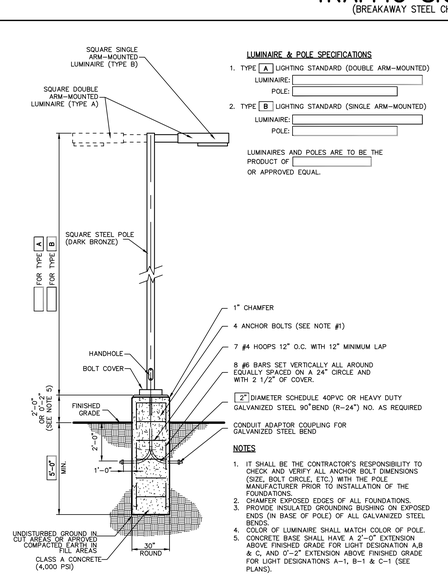
TREE PLANTING (DECIDUOUS AND EVERGREEN) 37



NOTES:

1. SEE PLANTING PLAN FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PLANT PRIOR TO MULCHING.
3. ALL PLANTING BEDS SHALL BE FREE OF WEEDS AND GRASS PRIOR TO AND FOLLOWING INSTALLATION OF PLANTS.
4. PLANTS IN CONTAINERS MUST HAVE THE FIBROUS ROOTS PULLED APART.
5. PROPOSED PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS EXISTING GRADE.

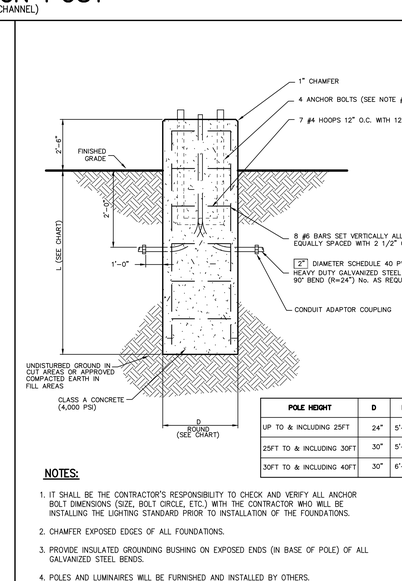
GROUNDCOVER 38



NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL ANCHOR BOLT DIMENSIONS (SIZE, BOLT CIRCLE, ETC.) WITH THE POLE MANUFACTURER PRIOR TO INSTALLATION OF THE FOUNDATIONS.
2. CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.
3. PROVIDE INSULATED GROUNDING BUSHING ON EXPOSED ENDS (IN BASE OF POLE) OF ALL GALVANIZED STEEL BENDS.
4. COLOR OF LUMINAIRE SHALL MATCH COLOR OF POLE.
5. CONCRETE BASE SHALL HAVE A 2'–0" EXTENSION ABOVE FINISHED GRADE FOR LIGHT DESIGNATION A,B & C, AND 0'–2" EXTENSION ABOVE FINISHED GRADE FOR LIGHT DESIGNATIONS A–1, B–1 & C–1 (SEE PLANS).

LIGHTING STANDARD (Arm Mounted) 39



POLE HEIGHT	D	L
UP TO & INCLUDING 25FT	24"	5'–0"
25FT TO & INCLUDING 30FT	30"	5'–0"
30FT TO & INCLUDING 40FT	30"	6'–6"

NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL ANCHOR BOLT DIMENSIONS (SIZE, BOLT CIRCLE, ETC.) WITH THE CONTRACTOR WHO WILL BE INSTALLING THE LIGHTING STANDARD PRIOR TO INSTALLATION OF THE FOUNDATIONS.
2. CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.
3. PROVIDE INSULATED GROUNDING BUSHING ON EXPOSED ENDS (IN BASE OF POLE) OF ALL GALVANIZED STEEL BENDS.
4. POLES AND LUMINAIRES WILL BE FURNISHED AND INSTALLED BY OTHERS.

LIGHTING STANDARD FOUNDATION (ROUND) 40

No.	Revision	Date	By
1.	ISSUED FOR DES COMPLETENESS	01/24/2025	PK
2.	DES COMPLETENESS SUBMISSION	02/28/2025	NB

APPLICANT: HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT: MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERTS LANE, SUITE 105
ORANGEBURG, NY

CONSTRUCTION DETAILS

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT
LETCHWORTH VILLAGE ROAD
HAVERSTRAW, NY

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JMC Planning, Engineering, LandScape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD - ARMONK, NY 10504
voice 914.273.5225 - fax 914.273.2102
www.jmcpllc.com

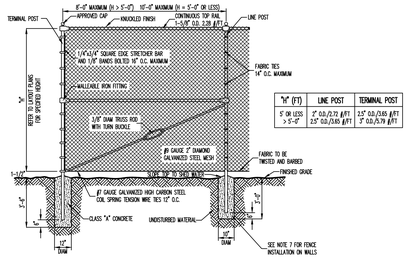
Drawn: BMS Approved: DV
Scale: NOT TO SCALE
Date: 01/24/2025
Project No. 21090
2090-DETAILS C-902 –
Drawing No.
C-902

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NOT FOR CONSTRUCTION

CHAIN LINK FENCE
(GALVANIZED)

41



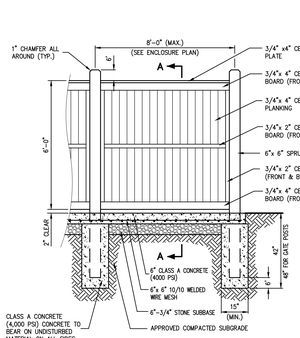
"H" (FT)	LINE POST	TERMINAL POST
5' OR LESS	2" O.D./2.72 #/FT	2.5" O.D./3.65 #/FT
>5'-0"	2.5" O.D./3.65 #/FT	3" O.D./5.79 #/FT

NOTES:

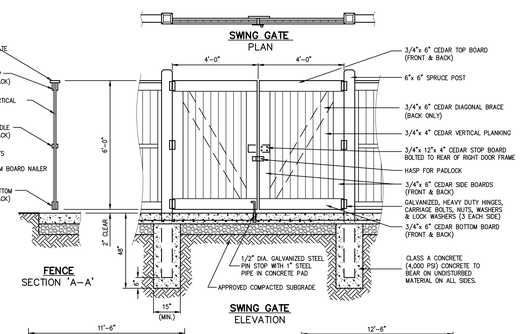
1. ALL POSTS, RAILS, FABRIC AND ACCESSORIES SHALL BE GALVANIZED.
2. POST AND RAILS SHALL BE STANDARD FULL WEIGHT GALVANIZED SCHEDULE 40 PIPE MANUFACTURED AND GALVANIZED IN ACCORDANCE WITH ASTM A120. ALL MATERIALS SHALL BE NEW AND FIRST CLASS AND SHALL NOT INCLUDE RECONDITIONED OR REROLLED PIPE.
3. FITTINGS SHALL BE MALLEABLE IRON FITTINGS CONFORMING TO THE REQUIREMENTS OF ASTM A47 GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. FABRIC SHALL BE 9 GAUGE GALVANIZED 2" MESH. TOP SELVAGE SHALL HAVE KNUCKLED FINISH.
5. TENSION WIRE SHALL BE 7 GAUGE MEETING THE REQUIREMENTS OF ASTM A641 AS MODIFIED HEREIN. THE TENSILE STRENGTH SHALL BE AT LEAST 80,000 PSI WITH A GALVANIZED COATING OF NOT LESS THAN 0.7 OZ. PER SQUARE FOOT.
6. FABRIC TIES SHALL BE MINIMUM 9 GAUGE GALVANIZED STEEL OR ALUMINUM. MINIMUM SPACING SHALL BE AS FOLLOWS:
   A. 14" O.C. AT LINE POSTS
   B. 24" O.C. AT TOP RAIL
   C. 12" O.C. AT TENSION WIRE
7. WHERE CHAIN LINK FENCE IS TO BE INSTALLED ON WALLS, THE FENCE POSTS SHALL BE IMBEDDED A MINIMUM OF TWELVE (12) INCHES IN THE WALL. NEWLY CONSTRUCTED WALLS SHALL BE PROVIDED WITH PROPER SIZE SLEEVES TO ACCOMMODATE FENCE POSTS. FENCE POSTS SHALL BE SECURELY GROUTED IN PLACE USING AN APPROVED HIGH STRENGTH, NON-SHRINKING, NON-STAINING GROUT.
8. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT SHOP AND ERECTION DRAWINGS INDICATING MATERIALS, SIZES AND DIMENSIONS OF FENCING TO THE OWNER'S FIELD REPRESENTATIVE PRIOR TO ORDERING MATERIALS FOR HIS REVIEW AND APPROVAL.
9. PRIOR TO INSTALLATION OF THE FENCE, THE CONTRACTOR SHALL CHECK THE FENCE LAYOUT WITH THE OWNER'S FIELD REPRESENTATIVE WHO MUST APPROVE THE LAYOUT BEFORE ANY OF THE WORK IS TO BE DONE.

TRASH ENCLOSURE WITH CONCRETE PAD
(WOOD)

42



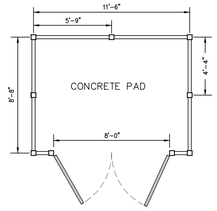
FENCE
ELEVATION



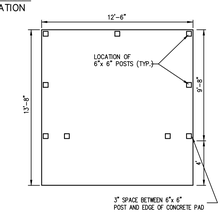
SWING GATE
ELEVATION

NOTES:

1. METAL FLANGES, CLEATS, BOLTS, SCREWS, ETC. SHALL BE STAINLESS STEEL OR GALVANIZED STEEL.
2. ALL LUMBER TO BE PRESSURE TREATED WITH WOOD PRESERVATIVE FOR IN GROUND USE. ALL LUMBER TO BE #1 GRADE.
3. SEE SITE LAYOUT PLANS FOR LOCATION.



ENCLOSURE
PLAN



CONCRETE PAD
PLAN

X

X

X



PLANT SCHEDULE OVERALL LANDSCAPE PLAN

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT COND.	REMARKS
DECIDUOUS TREES						
AR	52	Acer rubrum 'Franksred'	Red Sunset® Maple	3" - 3 1/2" CAL.	B & B	
AO	51	Acer rubrum 'October Glory'	October Glory Red Maple	3" - 3 1/2" CAL.	B & B	
AX	19	Acer x freemanii	Freeman Maple	3" - 3 1/2" CAL.	B & B	
AF	6	Acer x freemanii 'Armstrong'	Armstrong Freeman Maple	2"- 2 1/2" CAL.	B & B	
NV	18	Nyssa sylvatica	Black gum	3" - 3 1/2" CAL.	B & B	
PO	17	Platanus occidentalis	American Sycamore	3" - 3 1/2" CAL.	B & B	
QA	2	Quercus alba	White Oak	3" - 3 1/2" CAL.	B & B	
QB	14	Quercus bicolor	Swamp White Oak	3" - 3 1/2" CAL.	B & B	
QP	12	Quercus palustris	Pin Oak	3" - 3 1/2" CAL.	B & B	
QR	18	Quercus rubra	Northern Red Oak	3" - 3 1/2" CAL.	B & B	
UA	8	Ulmus americana	American Elm	3" - 3 1/2" CAL.	B & B	
EVERGREEN TREES						
JE	10	Juniperus virginiana	Eastern Redcedar	7' - 8' HT.	B & B	
PA	56	Picea abies	Norway Spruce	8' - 10' HT.	B & B	
PG	33	Picea glauca	White Spruce	8' - 10' HT.	B & B	
PS	54	Pinus strobus	White Pine	8' - 10' HT.	B & B	
TI	54	Thuja x 'Green Giant'	Green Giant Arborvitae	7' - 8' HT.	B & B	
FLOWERING & UNDERSTORY TREES						
AM	35	Amelanchier canadensis	Canadian Serviceberry	8' - 10' HT.	B & B	
BA	36	Betula alleghaniensis	Yellow Birch	8' - 10' HT.	B & B	
BD	36	Betula nigra 'BNMTF'	Dura Heat® River Birch	8' - 10' HT.	B & B	
CC	33	Cercis canadensis	Eastern Redbud	2" - 2 1/2" CAL.	B & B	
CA	25	Cornus florida 'Cherokee Brave'	Pink Dogwood	2" - 2 1/2" CAL.	B & B	
CF	11	Cornus florida 'Cherokee Chief'	White Dogwood	2" - 2 1/2" CAL.	B & B	

LANDSCAPE LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING OVERHANG
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED SAWCUT LINE
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED FENCE
- PROPOSED DOUBLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- PROPOSED SINGLE ARM LIGHTING STANDARD (DESIGN BY OTHERS)
- 2~4" WIDE YELLOW LINES 8"O.C.
- 12" WIDE WHITE STOP LINE
- TRAFFIC SIGN LOCATION & DESIGNATION
- PROPOSED DECIDUOUS TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS/PERENNIALS
- PROPOSED SHRUB MASSING

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SPECIFIED ON THE DRAWINGS SHALL BE FIRST QUALITY NURSERY GROWN STOCK, CERTIFIED TRUE TO THEIR GENUS, SPECIES AND VARIETY, ALL OF WHICH SHALL CONFORM TO THE MINIMUM STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORTI (ANSI Z60.1); LATEST EDITION.
2. ALL AREAS OF THE SITE NOT OCCUPIED BY BUILDING, PAVEMENT, OR OTHER IMPERVIOUS SURFACE, AND NOT SPECIFIED AS BEING PLANTED WITH TREES, SHRUBS OR GROUND COVER, SHALL BE LAWN.
3. ALL MULCH TO BE PLACED IN PLANTING BEDS SHALL BE CLEAN, NON-DYED, TOXIC FREE, ORGANIC MATERIAL CONSISTING OF SHREDDED HARDWOOD, ROOT MULCH SHREDDED CEDAR, OR BARK CHIPS, AS APPROVED BY THE OWNERS FIELD REPRESENTATIVE OR PROJECT LANDSCAPE ARCHITECT. THE PLACEMENT THICKNESS OF THE MULCH SHALL BE 3" AND/OR AS DIRECTED IN THE PLANTING DETAILS.
4. PLANT MATERIAL SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT THE PROJECT LANDSCAPE ARCHITECTS WRITTEN APPROVAL.
5. ALL LANDSCAPE PLANTINGS SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY PLANTING NOT SO MAINTAINED SHALL BE REPLACED WITH NEW PLANT(S) AT THE BEGINNING OF THE NEXT, IMMEDIATELY FOLLOWING PLANTING SEASON.
6. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
7. ALL PLANT MATERIAL STOCK SHALL BE WELL-BRANCHED AND WELL-FORMED, SOUND, VIGOROUS, HEALTHY, FREE FROM DISEASE, SUN-SCALD, WINDBURN, ABRASION, AND ANIMALS, INSECTS OR INSECTS EGGS, AND SHALL HAVE HEALTHY, NORMAL UNBROKEN ROOT SYSTEMS. DECIDUOUS TREES AND SHRUBS SHALL BE SYMMETRICALLY DEVELOPED, OF UNIFORM HABIT OF GROWTH, WITH STRAIGHT TRUNKS OR STEMS, AND FREE FROM OBJECTIONABLE DISFIGUREMENTS. EVERGREEN TREES AND SHRUBS SHALL HAVE WELL-DEVELOPED SYMMETRICAL TOPS WITH TYPICAL SPREAD OF BRANCHES FOR EACH PARTICULAR SPECIES OR VARIETY. ONLY VINES AND GROUND COVER PLANTS WELL ESTABLISHED IN REMOVAL CONTAINERS, INTEGRAL CONTAINERS, OR FORMED HOMOGENEOUS SOIL SECTIONS SHALL BE USED.
8. PLANTS SHALL BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. SOURCES OF ALL PLANT MATERIAL SHALL BE DISCLOSED TO PROJECT LANDSCAPE ARCHITECT AND OWNER PRIOR TO DELIVERY.
9. ALL PLANT MATERIAL SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN STOCK, AS SPECIFIED IN THE PLANT LIST. BAREROOT STOCK OF ANY KIND IS UNACCEPTABLE UNLESS SPECIFIED.
10. ALL LAWN AREAS (SOD OR SEED) SHALL RECEIVE A MINIMUM 6" THICK LAYER OF SCREENED TOPSOIL PRIOR TO INSTALLATION OF SOD OR SEED, UNLESS OTHERWISE SPECIFIED. TOPSOIL SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
11. SOIL WITHIN ALL PLANTING BEDS SHALL BE PREPARED AS DIRECTED IN THE PLANTING DETAILS AND PROJECT SPECIFICATIONS PRIOR TO INSTALLATION OF PLANT MATERIALS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN GOOD HEALTH UNTIL THE PROJECT LANDSCAPE ARCHITECT HAS PROVIDED WRITTEN ACCEPTANCE THAT THE PLANTINGS ARE COMPLETE AND IN CONFORMANCE WITH THE PLANS. THE CONTRACTOR SHALL GUARANTEE THE SURVIVAL OF THE PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE PROJECT LANDSCAPE ARCHITECT, UNLESS OTHERWISE AGREED TO WITH THE OWNER.
13. ALL AREAS DISTURBED OR DAMAGED DURING THE COURSE OF THE CONTRACTOR'S WORK SHALL BE REPAIRED OR RESTORED TO ORIGINAL OR CONSTRUCTED CONDITION AT NO ADDITIONAL COST TO OWNER.
14. FINAL LOCATION OF ALL PLANT MATERIALS SHALL BE SUBJECT TO APPROVAL BY PROJECT LANDSCAPE ARCHITECT. PROJECT LANDSCAPE ARCHITECT MAY ADJUST SPACING AND LOCATION IN FIELD PRIOR TO OR AFTER PLANTING.
15. CONTRACTOR SHALL IMMEDIATELY REPORT ANY UNSATISFACTORY SITE CONDITIONS TO THE OWNER IN WRITING. CONTRACTOR SHALL RECEIVE NO ADDITIONAL PAYMENT FOR ADDITIONAL WORK ASSOCIATED WITH THE UNSATISFACTORY CONDITIONS IF NOT PROPERLY REPORTED AND WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER.
16. ALL TREE AND SHRUB PLANTINGS INSTALLED ADJACENT TO PARKING AREAS SHALL BE SETBACK A MINIMUM OF 24" FROM EDGE OF THE PLANT TO EDGE OF PARKING AREA.
17. ALL PLANTINGS ADJACENT TO LAWN AREAS SHALL HAVE A 6" DEEP VERTICAL CUT EDGE ALONG THE OUTSIDE OF THE PLANTING BED.

No.	Revision	Date	By
1.	ISSUED FOR DEIS COMPLETENESS	01/24/2025	PK
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APPLICANT:
HAVERSTRAW GROUP LLC
16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD - ARMONK, NY 10504
voice 914.273.5225 - fax 914.273.2102
www.jmcpllc.com

OVERALL LANDSCAPE PLAN

LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

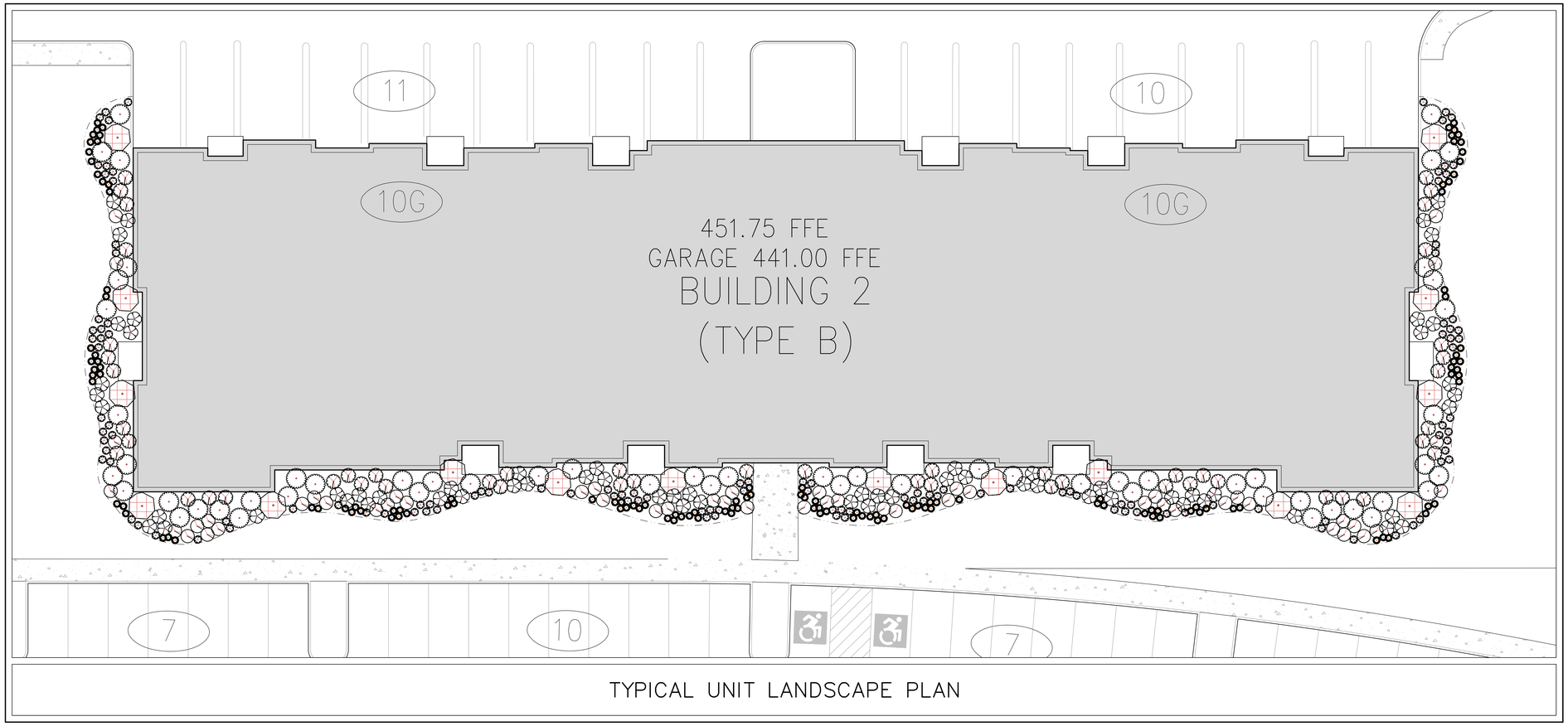
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HAVERSTRAW, NY

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Drawn:	JJ	Approved:	DV
Scale:	1" = 50'		
Date:	01/24/2025		
Project No:	21090		
21090-LAND	C-150	LAND.bor	
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TYPICAL UNIT LANDSCAPE PLAN

PROPOSED PLANTING SCHEDULE FOR UNITS

Symbol	Upright Evergreen Tree/Shrub 4' - 5' HT.	Common Name
	Ilex c aquipernyi 'Meschick' Dragon Lady	Dragon Lady Holly
	Ilex crenata 'Steedi'	Steedi Holly
	Juniperus scopulorum 'Blue Arrow'	Blue Arrow Juniper
	Thuja occidentalis 'Smaragd'	Emerald Green Giant Arborvitae
Symbol	**Shrub A - Medium Evergreen - 3 Gal.**	**Common Name**
	Ilex crenata 'Soft Touch'	Japanese Holly
	Ilex glabra 'Densa'	Dense Inkberry Holly
	Ilex glabra 'Forever Evergreen'	Forever Evergreen Inkberry Holly
	Ilex glabra ' Shamrock'	Inkberry Holly
	Kalmia latifolia 'Elf'	Dwarf Elf Mountain Laurel
	Rhododendron canadens	Dwarf Canadens Rhododenron
	Rhododendron catawbiense	Mountain Rosebay
Symbol	**Shrub B - Small Evergreen - 2 Gal.**	**Common Name**
	Ilex glabra ' Strongbox'	Strongbox Inkberry
	Ilex glabra 'Gembox'	Gembox Inkberry
	Pieris jap. 'Cavatine'	Cavatine Dwarf Andromeda
Symbol	**Shrub C - Medium Decidous - 3 Gal.**	**Common Name**
	Azalea Encore 'Autumn Cheer'	Autumn Cheer Azalea
	Ceanothus americanus	New Jersey Tea
	Clethra alnifolia 'Sweet Sixteen"	Sweet Pepper Bush - Sweet Sixteen
	Cornus stolonifera Artic Fire	Redtwig Dogwood
	Diervilla × **splendens** Red 2.0	Kodiak Red 2.0
	Hydrangea arborescens 'Invincibelle'	Smooth Hydrangea - Invincibelle
	Hydrangea quercifolia 'Ruby Slippers'	Dwarf Oakleaf Hydrangea
	Hydrangea paniculata 'Little Lime'	Little Lime Hydrangea
	Ilex verticillata Berry Poppins	Winter Berry - Berry Poppins
	Itea virginiga 'Little Henry'	Sweetspire - Little Henry
	Physocarpus **opulifolius** - Tiny Wine	Tiny Wine Ninebark
	Rosa rugosa 'Knock out' Pink or White	Knock out Roses
Symbol	**Shrub D - Small Decidous - 2 Gal.**	**Common Name**
	Aronia melanocarpa 'Low Scape Mound'	Dwarf Black chokeberry
	Hydrangea arborescens Invincibelle Mini Mauvette	Mini Mauvette Smooth Hydrangea
	Itea virginiga 'Fizzy Mizzy'	Sweetspire Fizzy Mizzy - Dwarf
	Physocarpus opulifolius 'Summer Wine' or Coppertina'	Ninebark cultivar
	Viburnum **cassinoides** 'Lil Ditty'	Lil Ditty Witherod Viburnum
Symbol	**Perennials - 2 Gal.**	**Common Name**
	Sun/Part Shade	
	Alchemilla mollis 'Thriller'	Lady's Mantle
	Agastache foeniculum	Anise Hyssop
	Amsonia tabernaemontana	Storm Cloud Blue Start
	Asclepias tuberosa 'Hello Yellow'	Butterfly Weed
	Aster novae-angliae	New England Aster
	Baptisia australis	Wild Indigo
	Carex everillo	Japanese Sedge
	Coreopsis verticillata 'Moonbeam'	Tickweed
	Echinacea purpurea	Pink Cone Flower
	Neptata mussini ' 'Little Trudy or Walker's Low'	Catmint
	Perovskia 'Dernin & Lace'	Russian Sage
	Rudbekia fulgida var. 'Little Goldstart'	Blackeyed Susan
	Part Shade/Full Shade	
	Astilbe ' japonica Deutschland	Japanese Astilbe
	Bergenia cordifolia	Heartleaf Bergenia
	Geranium macrorrhizum 'Bevan's Variety'	Cranesbill Geranium
	Heuchera americana Varieties	Coral Bells
	Dryopteris erythrosora	Autumn Fern
	Native woodland ferns	Native ferns
Symbol	**Ornamental Grasses/Ground Covers - 1 Gal.**	**Common Name**
	Sun/Part Sun	
	Sporobolus heterolepis	Prarie Dropseed Grass
	Schizachyrium Standing Ovation	Little Bluestem Grass
	Pennisetum 'Hamelin'	Dwarf Fountain Grass
	Panicum virgatum 'Shenandoah'	Red Switchgrass
	Sedum x 'Vera Jameson'	Creeping sedum
	Thymus Elfin	Creeping thyme
	Part Shade/Full Shade	
	Carex pennsylvanica	Pennsylvania Sedge
	Phlox stolonifera	Creeping Phlox
	Sedum Ternatum	Wild Stonecrop
	Tiarella ' Cutting Edge'	Foam Flower

PLANT LEGEND

- A – UPRIGHT EVERGREEN
- SHRUB B – MEDIUM EVERGREEN SHRUB
- SHRUB C – SMALL EVERGREEN SHRUB
- SHRUB D – MEDIUM DECIDUOUS SHRUB
- SHRUB E – SMALL DECIDUOUS SHRUB
- F – PERENNIALS
- G – ORNAMENTAL GRASSES/ GROUNDCOVERS

TYPICAL UNIT PLANTING NOTES:

1. LAYOUT OF PLANTING BED IS CONCEPTUAL AND MAY VARY DUE TO EXISTING SITE CONDITIONS AND MODEL ELEVATION. SPECIES CHOSEN SHALL CORRELATE WITH EXISTING SITE CONDITIONS OF EACH HOME (IE; SUN/SHADE) TO ENSURE SURVIVABILITY OF PLANT.
2. SHRUBS SHALL BE PLANTED IN GROUPS OF THE SAME SPECIES (3–5 PLANTS) TO MAINTAIN BALANCE THROUGHOUT THE GARDEN.
3. FOUNDATION PLANTS ARE IN ADDITION TO AND ARE TO BE COORDINATED WITH PROPOSED STREET TREES, OPEN SPACE PLANTINGS AND EXISTING VEGETATION TO REMAIN.
4. QUALITY OF PLANT SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK.
5. SUBSTITUTIONS PERMITTED WITH WRITTEN APPROVAL BY OWNER'S LANDSCAPE ARCHITECT AND TOWN REPRESENTATIVE PRIOR TO PLANTING.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1 inch = 10 ft.

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16 MICROLAB ROAD, SUITE A
LIVINGSTON, NJ 07039

ARCHITECT:
MINNO & WASKO ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 105
LAMBERTVILLE, NJ

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
Voice: 914.273.5225 • Fax: 914.273.2102
www.jmcpllc.com

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