
DRAFT ENVIRONMENTAL IMPACT STATEMENT

Letchworth Road Residential Development

**LETCHWORTH ROAD
TOWN OF HAVERSTRAW
ROCKLAND COUNTY, NY**

*Prepared
for:*

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*Lead
Agency:*

Town of Haverstraw Planning Board

Prepared by:



Project 21090

Date:

January 24, 2025

Revised:

February 28, 2025

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

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Appendix A **State Environmental Quality Review Act** **(SEQRA)**

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<u>Dwg. No.</u>	<u>Title</u>
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C-200	“Grading Plan”
C-220	“Cross Sections”
C-300	“Utilities Plan”
C-400	“Sediment and Erosion Control Plan”
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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 cues 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 would 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 $\pm 71,000$ cubic yards. The total amount of imported fill material required for the Proposed Action is approximately $\pm 82,500$ cubic yards. This results in a net import of approximately $\pm 11,500$ 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. Stormwater Management

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, Ductile 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 $\pm\$616,215$. This service cost estimate is based on average costs, not marginal increases. The Proposed Action is also estimated to create an average increase of $\pm\$886,677.00$ 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 $\pm\$1,502,892.00$ 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

<u>Involved Agency</u>	<u>Approval/Review</u>
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 land 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 $\pm 20,540$ square feet and the Type B buildings are proposed to have a building envelope of approximately $\pm 22,752$ 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 $\pm 71,000$ cubic yards. The total amount of imported material required is about $\pm 82,500$ cubic yards. This results in a net import of approximately $\pm 11,500$ 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.

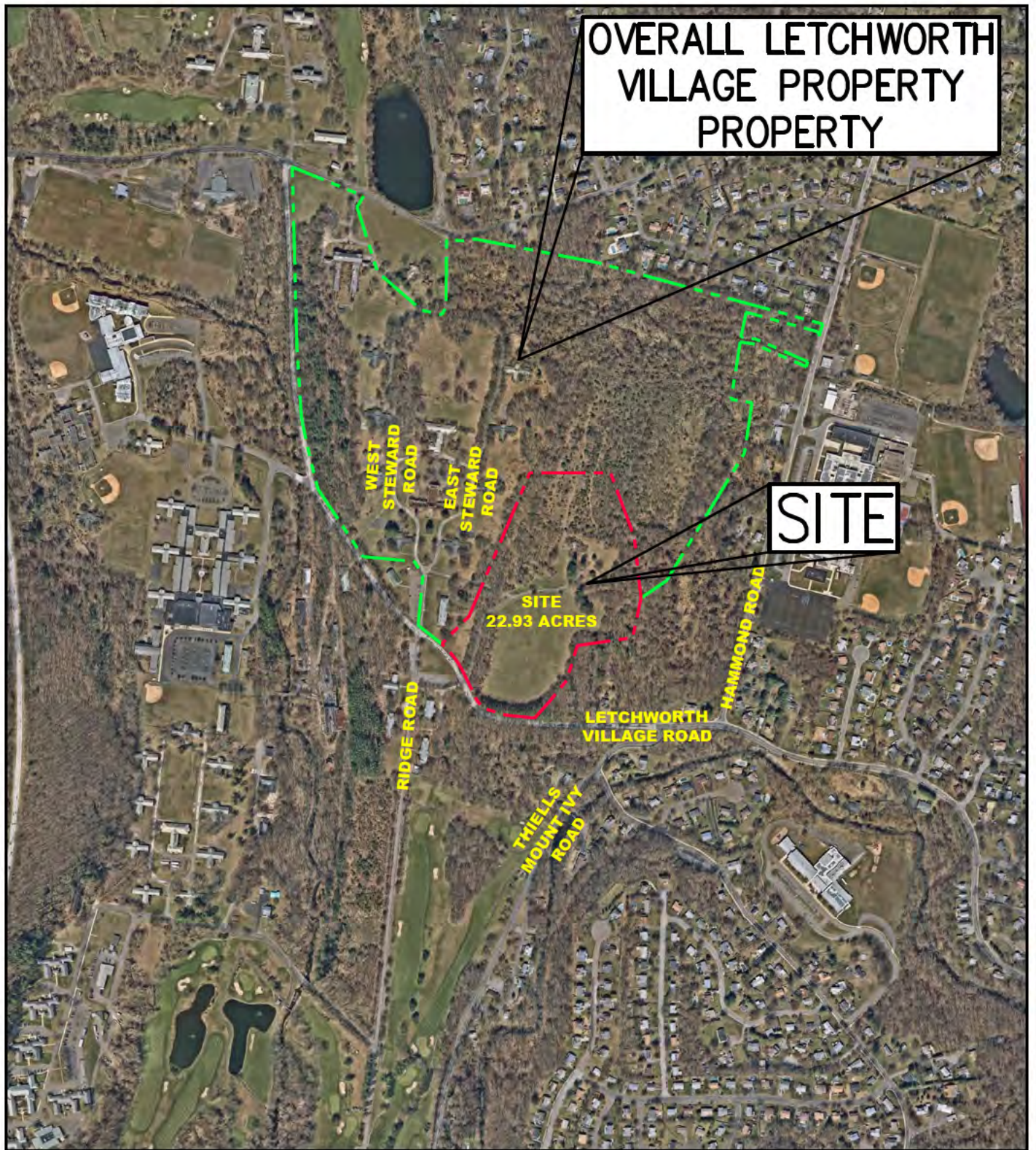
The fundamental need for the Proposed Actions stems from a basic housing supply and demand imbalance.

Table II-2
Reviews and Approvals

<u>Involved Agency¹</u>	<u>Approval/Review</u>
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
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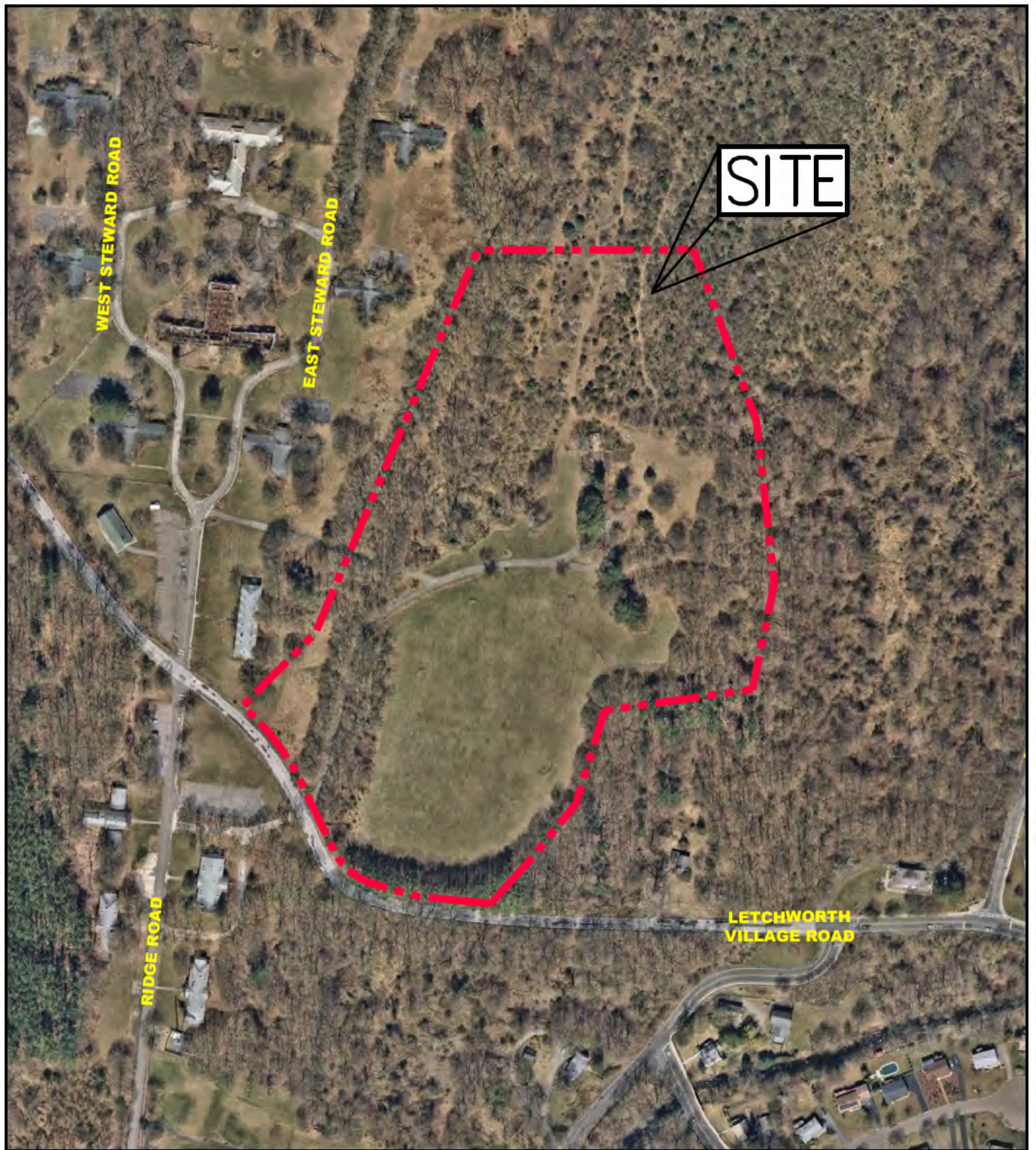
DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 1,000'

SOURCE: NEARMAP

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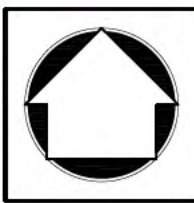


LEITCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LEITCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

AERIAL MAP

FIGURE No: II-2



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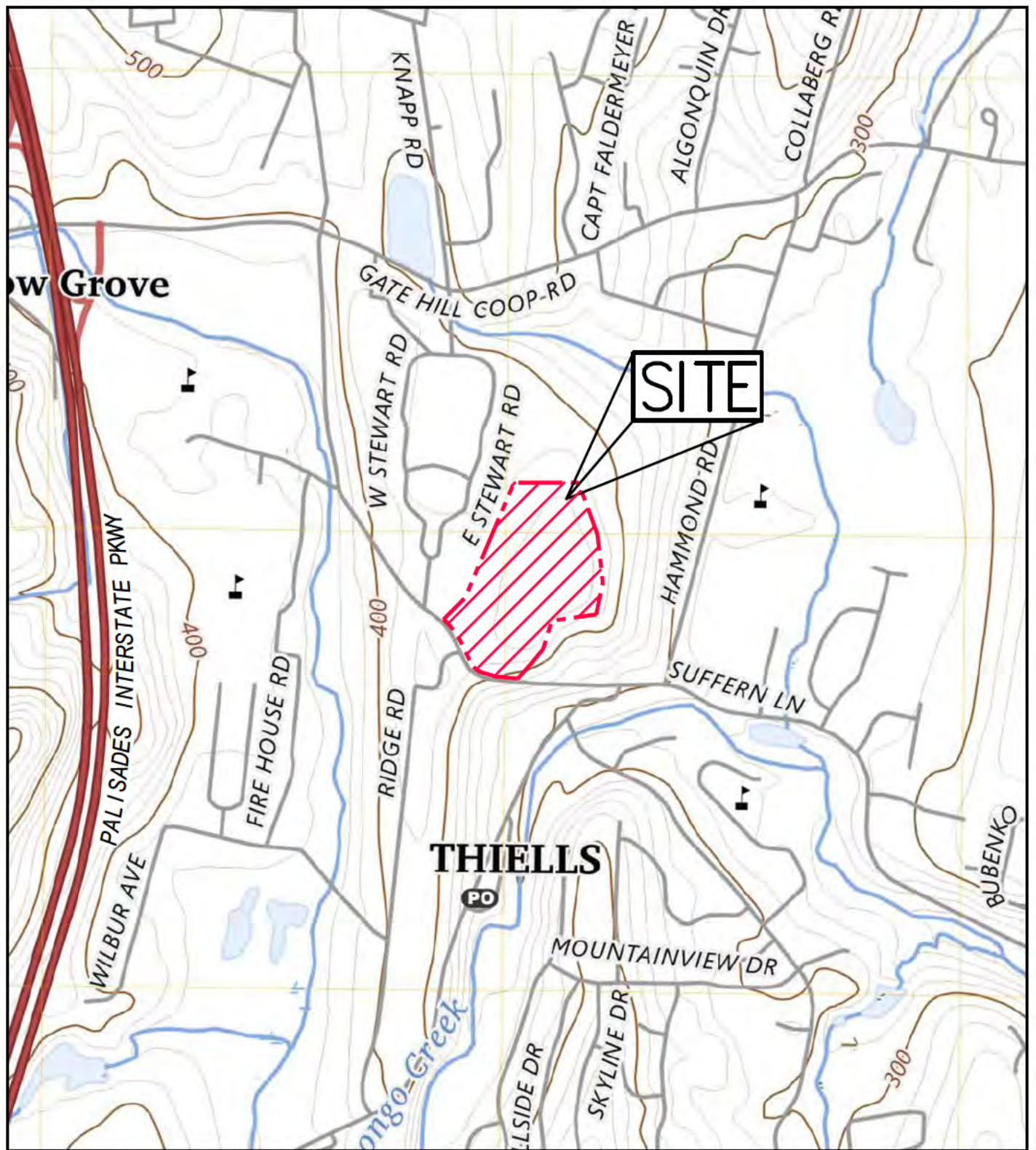
DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 300'

SOURCE: NEARMAP

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LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

SITE LOCATION MAP

FIGURE No: II-3



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DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 1,000'

SOURCE: USGS

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LETCORTH ROAD RESIDENTIAL DEVELOPMENT

LETCORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING TOPOGRAPHY MAP (2-FOOT COUNTY GIS TOPOGRAPHY)

FIGURE No: II-4



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DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 300'

SOURCE: NEARMAP/GIS

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LEGEND



AREAS OF SLOPE GREATER THAN 15%

SITE

WEST STEWARD ROAD

EAST STEWARD ROAD

RIDGE ROAD

LETCWORTH VILLAGE ROAD

LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

**STEEP SLOPES MAP
(2-FOOT COUNTY GIS TOPOGRAPHY)
FIGURE No: II-5**



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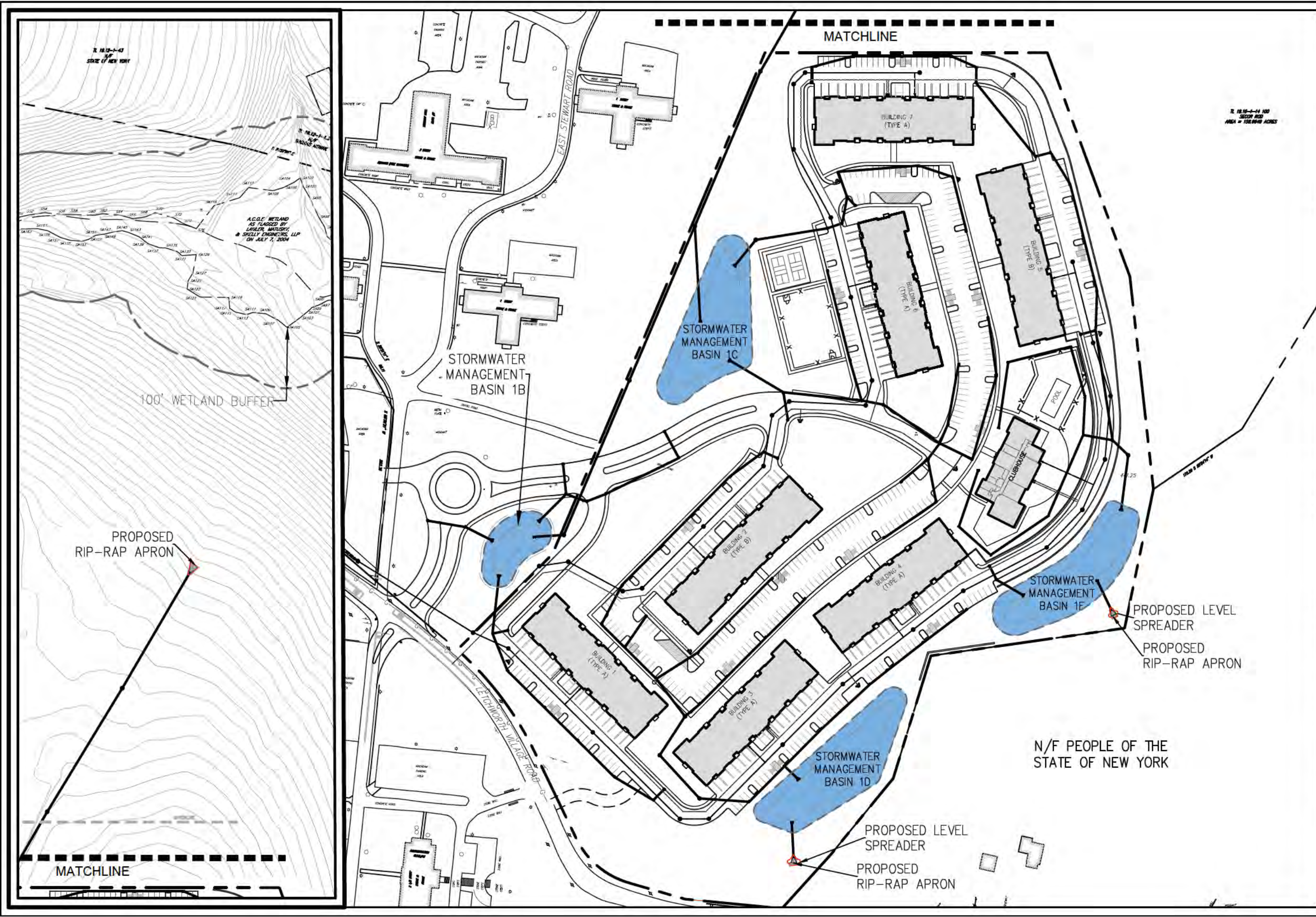
DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 500'

SOURCE: NEARMAPS/GIS

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**LETCHWORTH ROAD
RESIDENTIAL
DEVELOPMENT**

LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090

**PROPOSED STORMWATER
MANAGEMENT PRACTICES**

FIGURE No: II-6

DATE: 01/24/2025

SCALE: 1"=150'

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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. 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

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

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

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

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

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

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

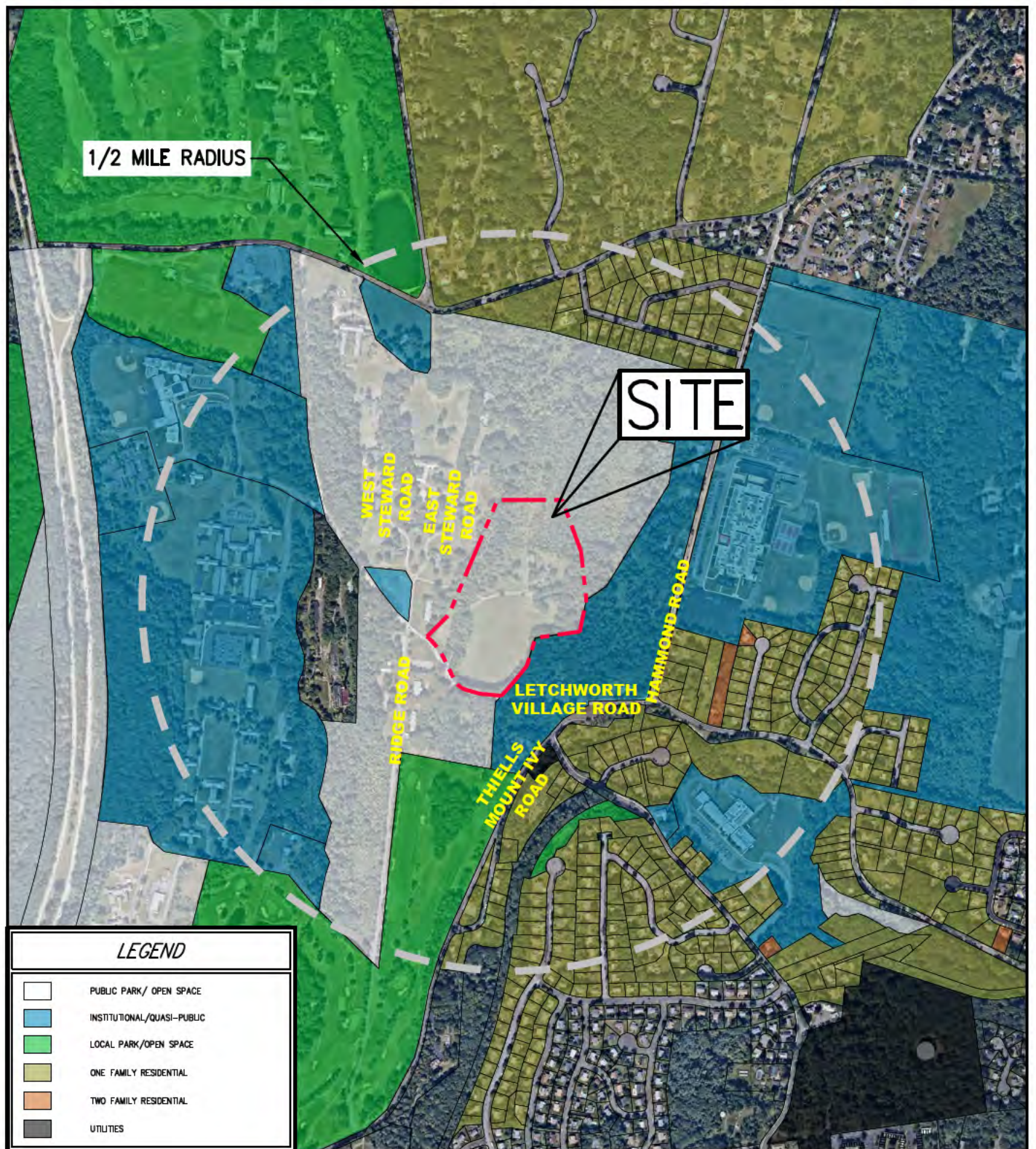
land uses. The development will be landscaped and be aesthetically pleasing for both the surrounding environment and the existing surrounding uses.

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



LEITCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LEITCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING LAND USE WITHIN 1/2 MILE RADIUS

FIGURE No: III.A-1



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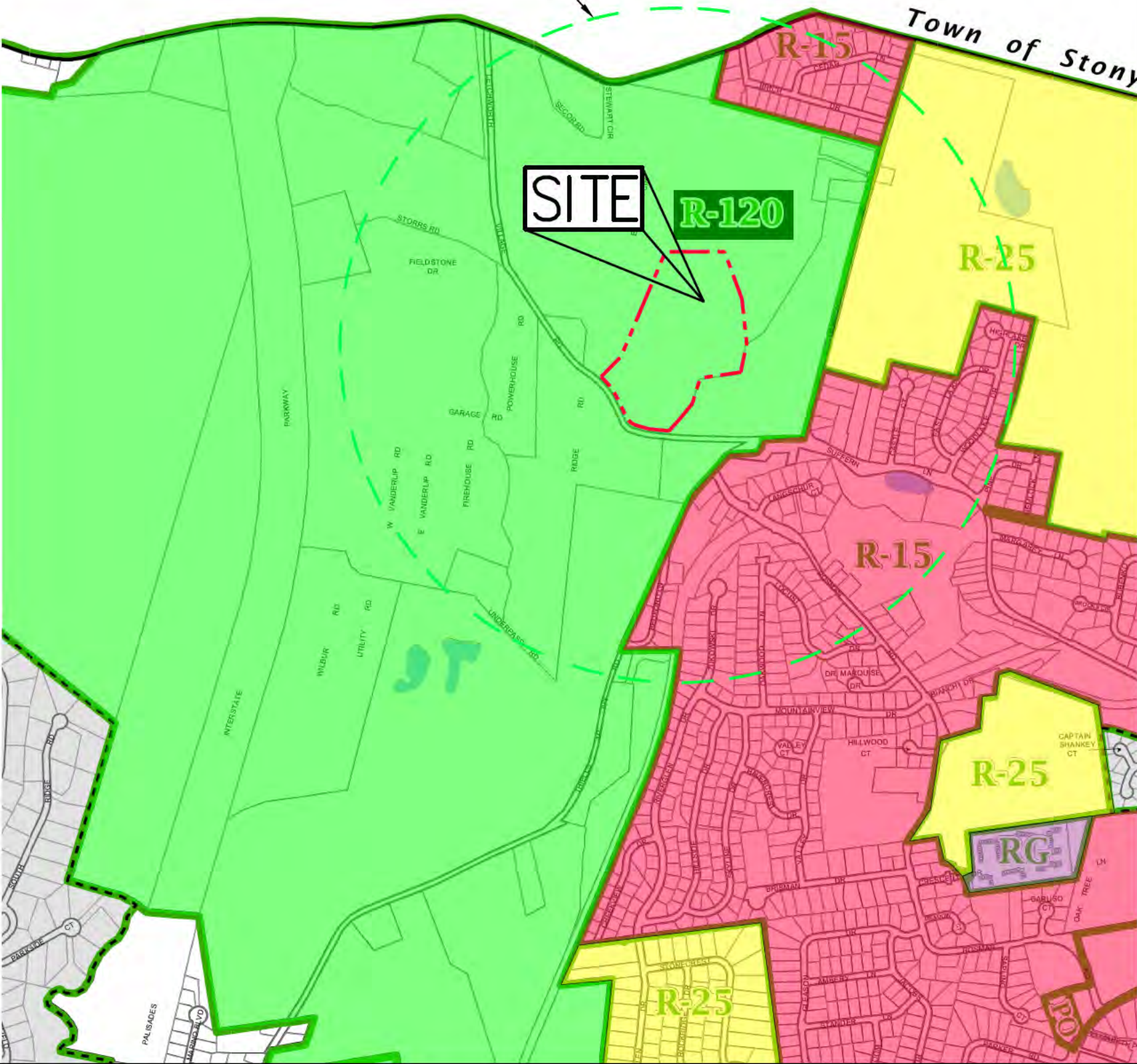
JMC PROJECT: 21090

SCALE: 1" = 1,000'

SOURCE: NEARMAP

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1/2 MILE RADIUS



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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RESIDENTIAL
DEVELOPMENT**

LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

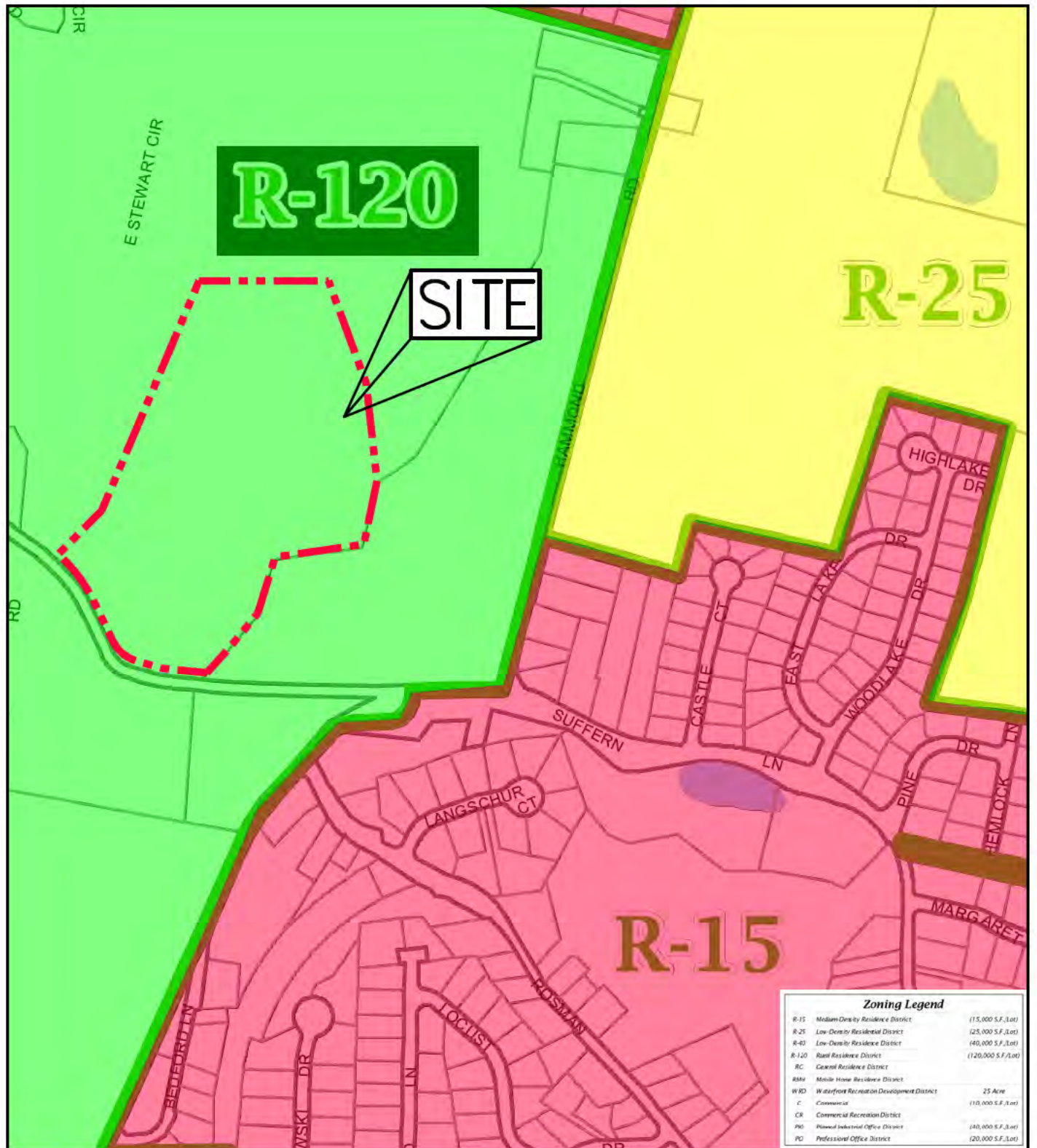
JMC PROJECT No: 21090

**EXISTING ZONING DISTRICTS
WITHIN 1/2 MILE RADIUS**

FIGURE No: III.A-2

DATE: 01/24/2025

SCALE: 1" = 1,000'



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 Residential District	(40,000 S.F./Lot)
R-120	Rural Residence District	(120,000 S.F./Lot)
RC	Cornell Residence District	
RMH	Mobile Home Residence District	
WRD	Waterfront Recreation Development District	25 Acre
C	Commercial	(110,000 S.F./Lot)
CR	Community Recreation District	
PIO	Planned Industrial Office District	(40,000 S.F./Lot)
PO	Professional Office District	(20,000 S.F./Lot)

LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH 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-off 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. Views into the site from Letchworth Village Road (West) (Figure III.B-2 and III.B-2A)

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

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. Views into the site from Langschur Court facing Northwest (Figure III.B-6)A

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.

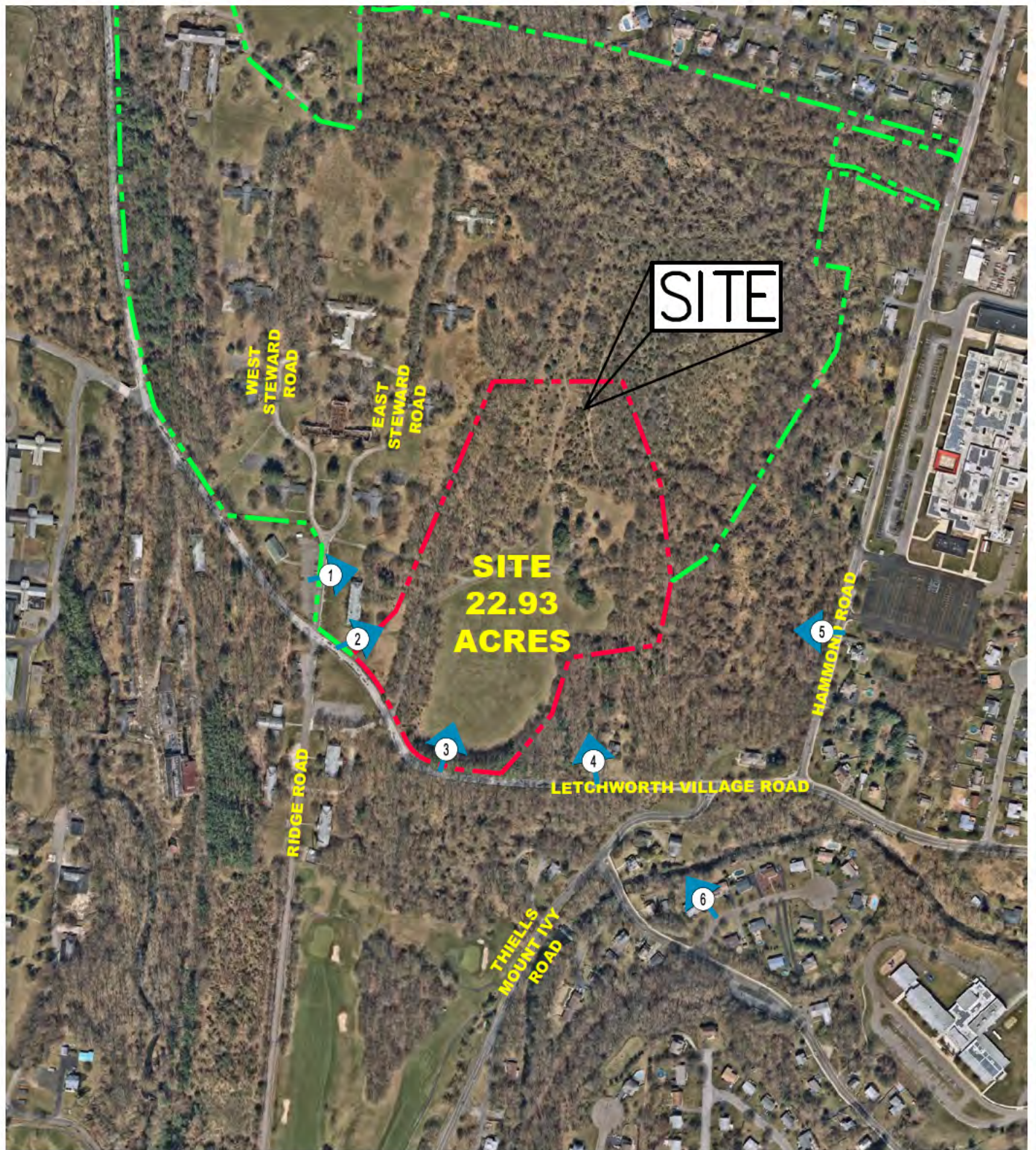
The Project Site will be landscaped with a mix of deciduous and evergreen trees, shrubbery and perennials to provide further visual mitigation from the surrounding properties in the vicinity of the property. Views into the Project Site are presented primarily from Letchworth Village Road in the vicinity 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

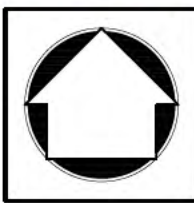


LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

PHOTO LOCATION MAP

FIGURE No: III.B-PLM



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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



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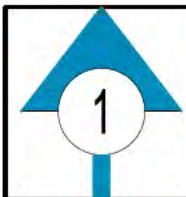


LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM CROSS LIFE CHURCH (LEAF-OFF CONDITION)

FIGURE No: III.B-1A



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SUMMER



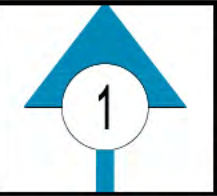
WINTER



CAMERA LOCATION MAP



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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

DATE: 01/24/2025

CAMERA LOCATION 1

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GATEWAY TWO, SUITE 1700, NEWARK, NEW JERSEY 07102
MINNOWASKO.COM

BNE REAL ESTATE

CONCEPT SITE PHOTOS
DATE: 12/18/2024
LETCHWORTH VILLAGE
HAVERSTRAW, NY
00-0217-164
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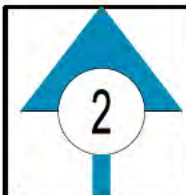


LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

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

FIGURE No: III.B-2



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JMC PROJECT: 21090

SCALE: NTS

SOURCE: PHOTO

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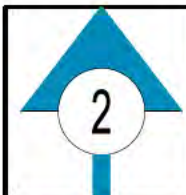


LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

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

FIGURE No: III.B-2A



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SUMMER



CAMERA LOCATION 2



CAMERA LOCATION MAP

CONCEPT SITE PHOTOS

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**LETCHWORTH ROAD
RESIDENTIAL
DEVELOPMENT**

LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

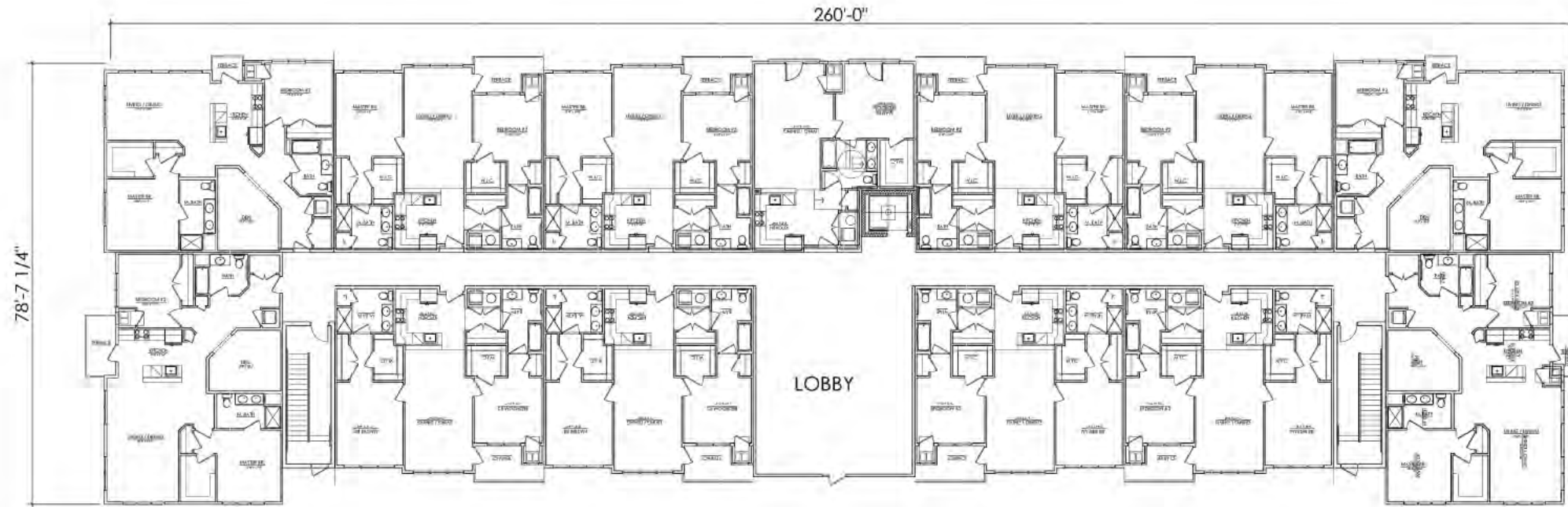
JMC PROJECT No: 21090

VIEW FROM LETCHWORTH VILLAGE ROAD ENTRANCE

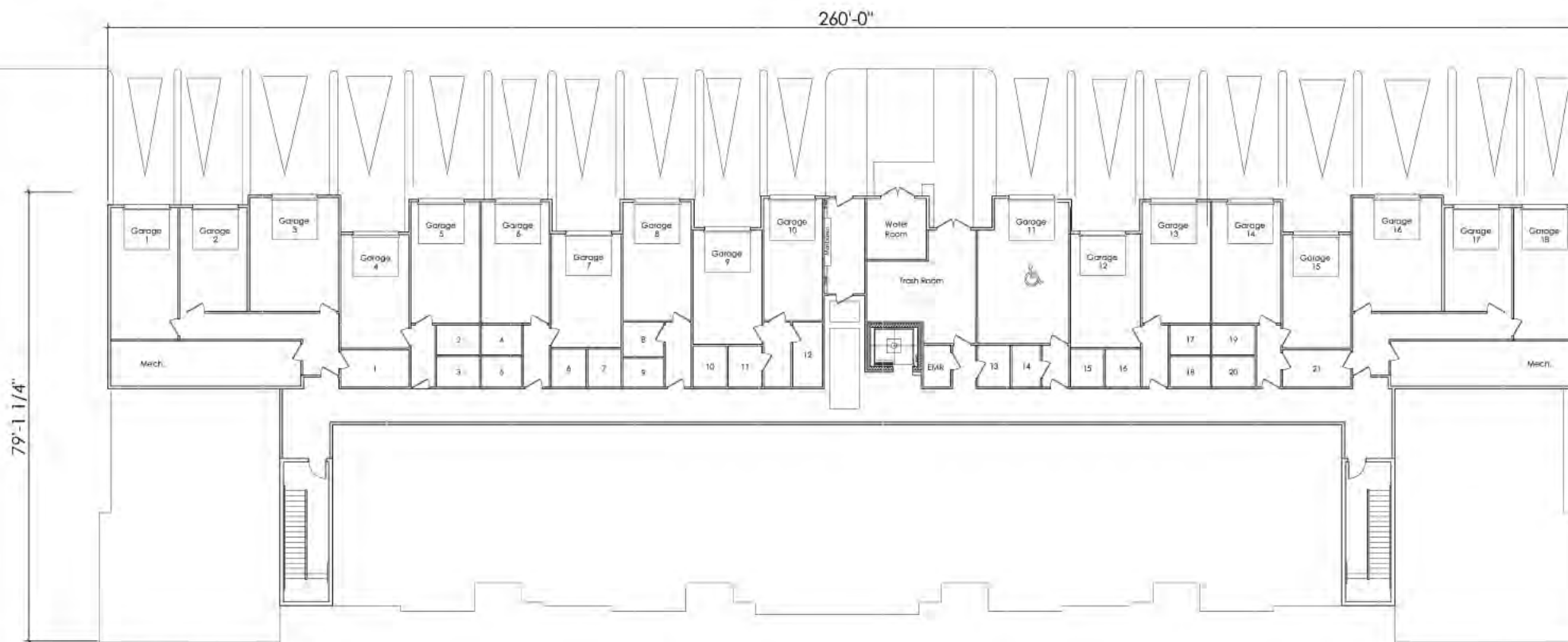
FIGURE No: III.B-2-P

DATE: 01/24/2025 SCALE: NTS

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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
40 HAVENHURST AVENUE, SUITE 200, HAVENHURST, NY 11420
TEL: (718) 261-1111 FAX: (718) 261-1112

LETCHWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCELS 19.11-11.1

PREPARED FOR:
BNE REAL ESTATE GROUP
HAVERSTRAW GROUP LLC

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A-2
BUILDING TYPE A
BUILDING PLAN

ARCHITECT: MINNO & WASKO ARCHITECTS AND PLANNERS

BUILDING FLOORPLAN (BUILDING A)

FIGURE No: FP-1

DATE: 01/24/2025

SCALE: NTS

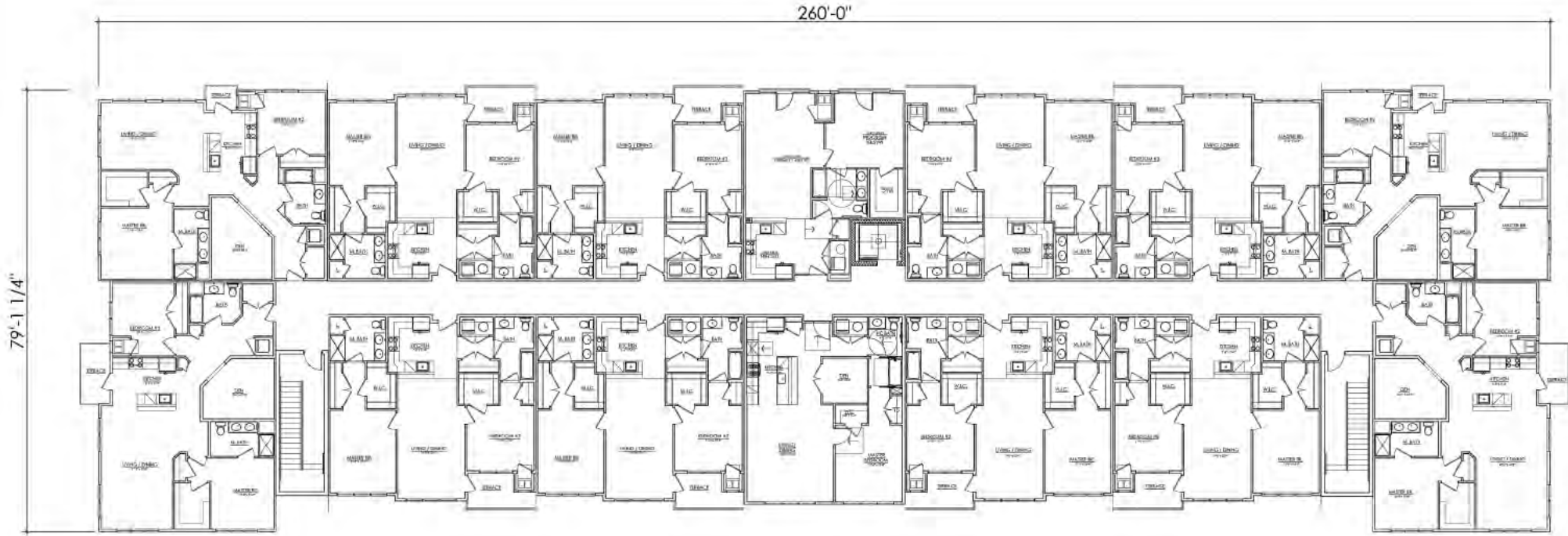
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**LETCHWORTH ROAD
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LETCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK



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

MINNO WASKO
ARCHITECTS AND PLANNERS
100 PARKWAY SOUTH, SUITE 200, HAVERSHAW, NY 12532
TEL: 518-537-1111 FAX: 518-537-1112

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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

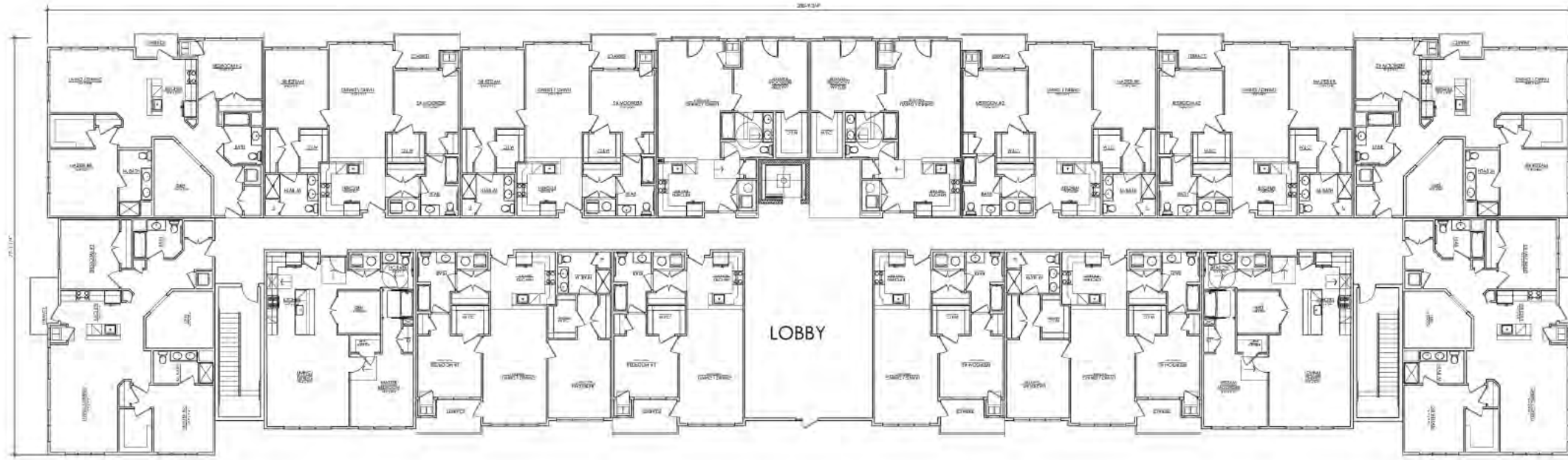
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TOWN OF HAVERSHAW, NEW YORK

JMC PROJECT No: 21090

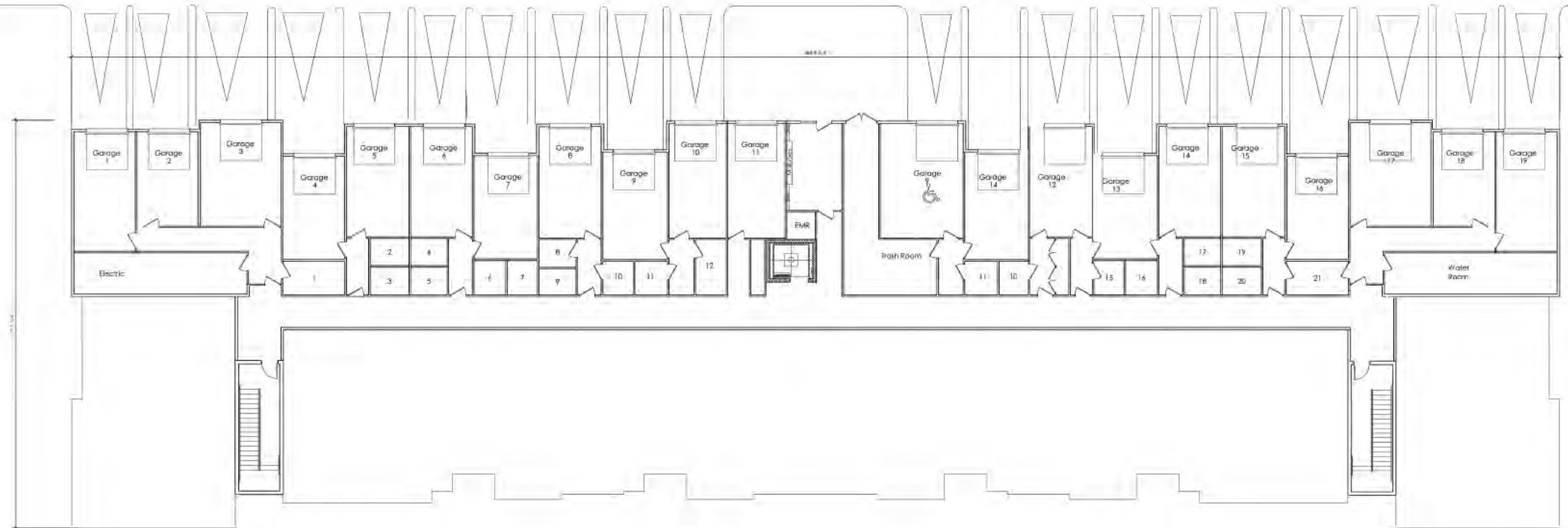
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02 GROUND FLOOR
SCALE: 3/32" = 1'-0"



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

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
100 WASHINGTON STREET, SUITE 200, NEW YORK, NY 10038
TEL: (212) 691-1000 FAX: (212) 691-1001 WWW.MINNOWASKO.COM

LETCWORTH ROAD
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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

19-00000-08
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BUILDING FLOORPLAN (BUILDING B)

FIGURE No: FP-3

DATE: 01/24/2025

SCALE: NTS

**LETCWORTH ROAD
RESIDENTIAL
DEVELOPMENT**

LETCWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

JMC PROJECT No: 21090



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NY 10504
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(FAX) 273-2102
JMCPLLC.COM



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

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
REGISTERED PROFESSIONAL ARCHITECTS AND PLANNERS
1000 JAMES STREET, SUITE 1000, NEW YORK, NY 10017

LETCWORTH ROAD
RESIDENTIAL DEVELOPMENT
HAVERSTRAW, NY
TAX PARCEL 19.11-1-1
PREPARED FOR:
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A-06
BUILDING TYPE B
BUILDING PLAN

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BUILDING FLOORPLAN (BUILDING B)

FIGURE No: FP-4

**LETCWORTH ROAD
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LETCWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

DATE: 01/24/2025

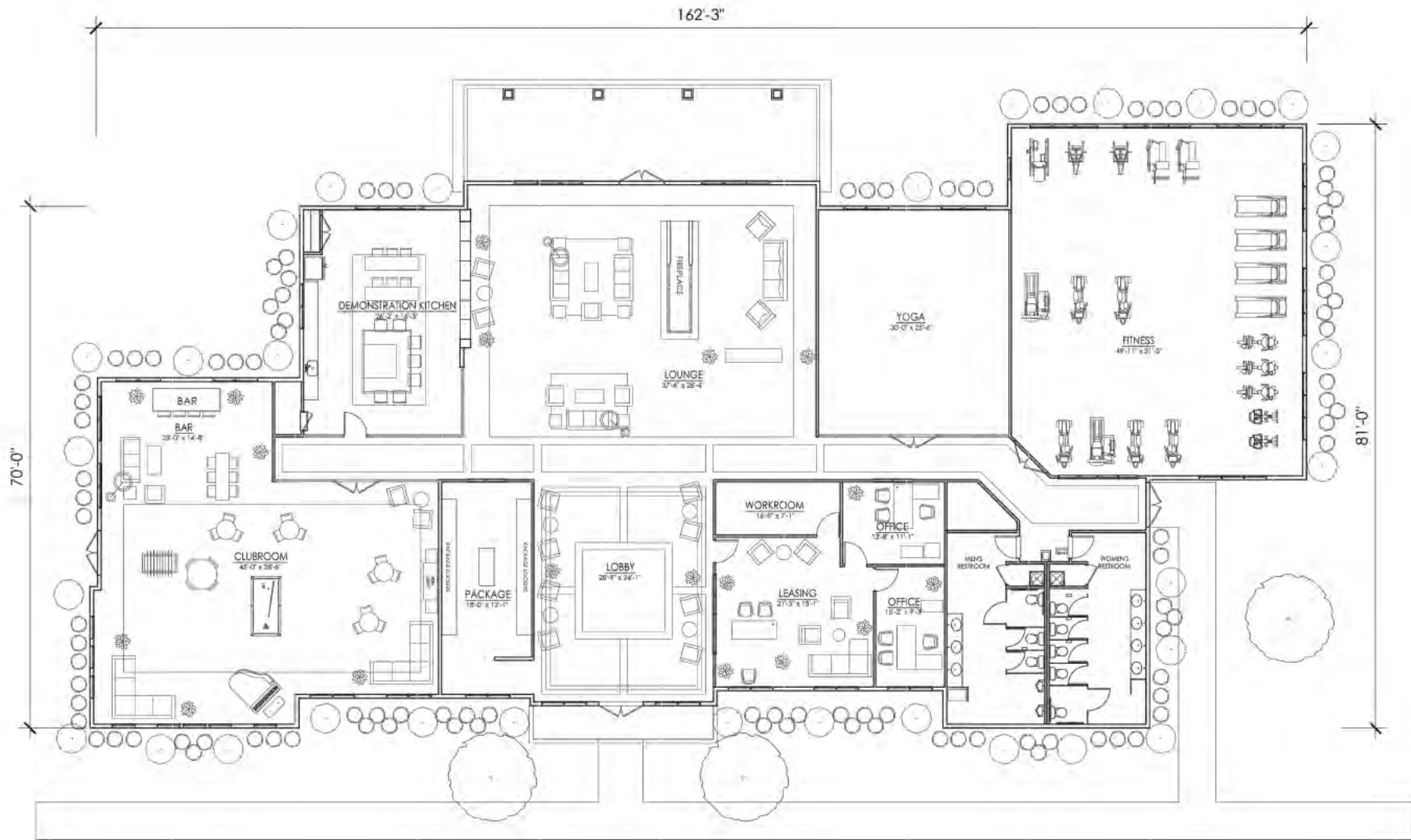
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CLUBHOUSE PLAN
SCALE: 1/8" = 1'-0"

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
100 UNIVERSITY PLACE, SUITE 1000, HAVERSTRAW, NY 12533-0001
TEL: 845.235.1000 FAX: 845.235.1001

LEITCHWORTH ROAD
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TAX PARCEL: 19.1.1.1-1
PREPARED FOR:
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A-09
CLUBHOUSE
BUILDING PLAN

2024.03.14
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CLUBHOUSE FLOORPLAN

FIGURE No: FP-5

DATE: 01/24/2025

SCALE: NTS

LEITCHWORTH ROAD RESIDENTIAL DEVELOPMENT

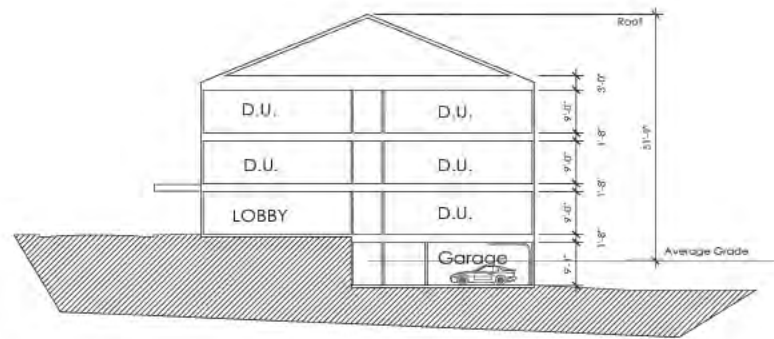
LEITCHWORTH VILLAGE ROAD
TOWN OF HAVERSTRAW, NEW YORK

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



01 ONE BEDROOM (SF)
SCALE: 1/4" = 1'-0"



02 TWO BEDROOM (SF)
SCALE: 1/4" = 1'-0"

PREPARED BY:
MINNO WASKO
ARCHITECTS AND PLANNERS
80 LAMBERT LANE, SUITE 100, LAMBERTVILLE, NEW JERSEY 07040 MINNOWASKO.COM
TWO GARDENWAY CENTER, SUITE 1700, HAVENWICK, NEW JERSEY 07030

LEITCHWORTH ROAD
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HAVENSTRAW, NY
TAX PARCEL: 19.31-1-1
PREPARED FOR:
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HAVENSTRAW GROUP LLC

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A-08
TYP. UNIT PLANS & SECTION
DESIGNED BY MINNO & WASKO ARCHITECTS AND PLANNERS



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**LEITCHWORTH ROAD
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LEITCHWORTH VILLAGE ROAD
TOWN OF HAVENSTRAW, NEW YORK

TYPICAL UNIT FLOORPLAN & SECTION

FIGURE No: FP-6

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LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LETCWORTH VILLAGE ROAD FACING NORTH (LEAF ON)

FIGURE No: III.B-3



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LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

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

FIGURE No: III.B-3A



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**LETCHWORTH ROAD
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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

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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



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LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

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

FIGURE No: III.B-4A



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CAMERA LOCATION MAP



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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

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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



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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



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CAMERA LOCATION MAP

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

CAMERA LOCATION 5

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ARCHITECTS AND PLANNERS
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BNE REAL ESTATE

LETCHWORTH VILLAGE
HAVERSTRAW, NY
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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
SCALE: NTS
DATE: 01/24/2025

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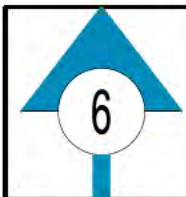


LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

VIEW FROM LANGSCHUR CT (LEAF OFF-CONDITIONS)

FIGURE No: III.B-6A



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DATE: 01/24/2025

JMC PROJECT: 21090

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SOURCE: PHOTO

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SUMMER

WINTER



CAMERA LOCATION 6

Buildings are Visually obstructed by terrain & forest year round
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CAMERA LOCATION MAP



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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



04 REAR ELEVATION
SCALE: 3/32" = 1'-0"



02 LEFT ELEVATION
SCALE: 3/32" = 1'-0"

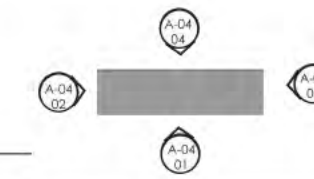


03 RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



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

ISSUE	DATE	FOR:
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01/30/2024		PRELIM & FINAL SITE PLAN
03/14/2024		PRELIM & FINAL SITE PLAN

A-04
BUILDING TYPE A
BUILDING ELEVATIONS

30-0000-01
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**LEITCHWORTH ROAD
RESIDENTIAL
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LEITCHWORTH 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"

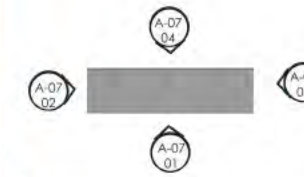


03 RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



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 METAL ROOF
- 08 ARCHITECTURAL GARAGE DOOR
- 09 ARCHITECTURAL METAL BALING
- 10 VINYL WINDOW

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LEITCHWORTH 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-07
BUILDING TYPE B
BUILDING ELEVATIONS

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BUILDING ELEVATION (BUILDING B)

FIGURE No: ELV-2

SCALE: NTS

DATE: 01/24/2025

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



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

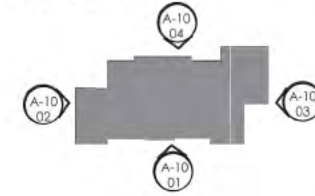


03 RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



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

KEY PLAN:



MATERIALS KEY:

- 01 HORIZONTAL LAP SIDING 01
- 02 STONE VENEER
- 03 FIBRE 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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A-10
CLUBHOUSE
BUILDING ELEVATIONS

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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 $\frac{1}{3}$ 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 $\pm 71,000$ cubic yards. The total amount of imported fill material required for the Proposed Action is approximately $\pm 82,500$ cubic yards.

This results in a net import of approximately $\pm 11,500$ 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

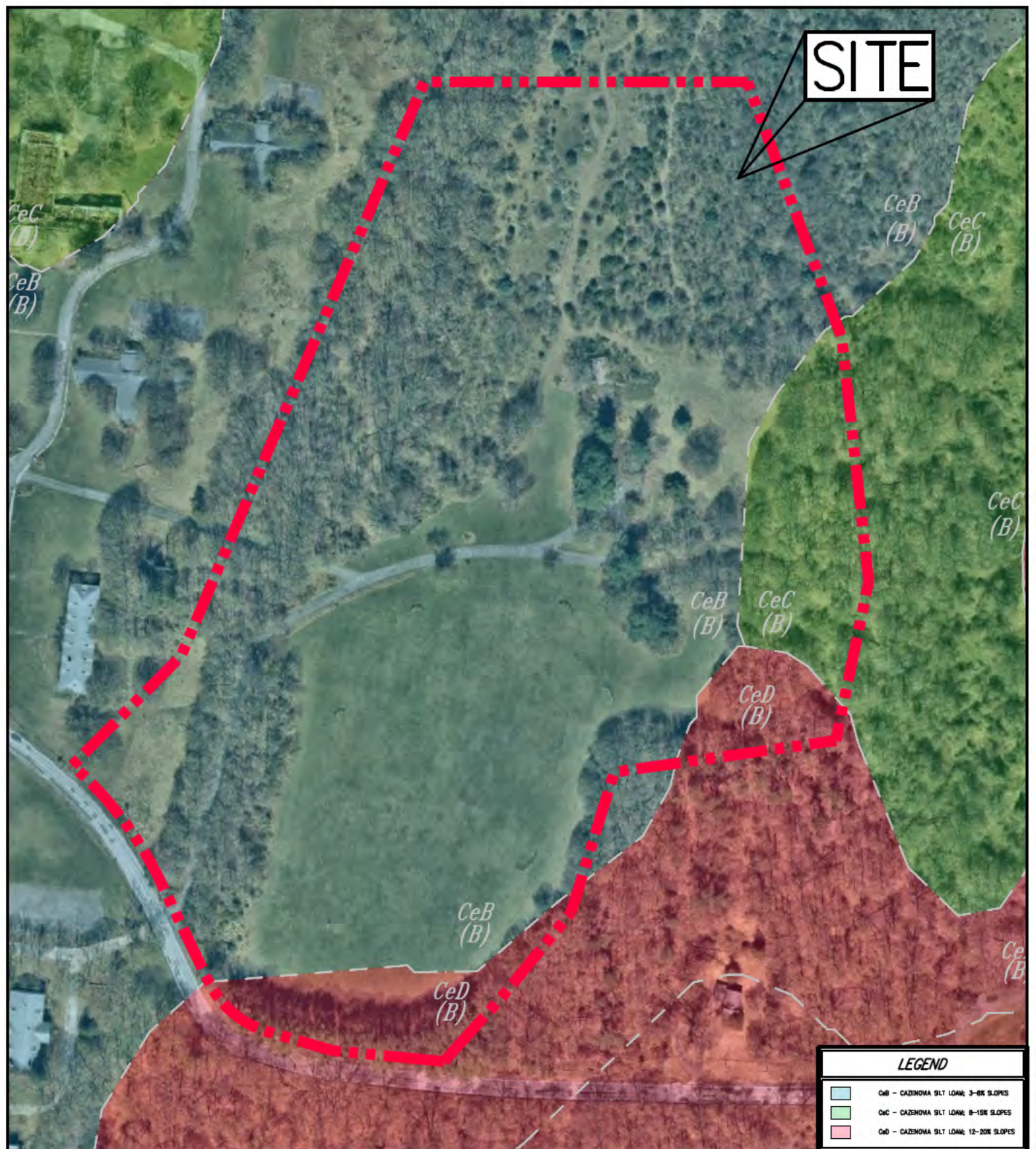
walls that are six feet in height or greater shall be submitted and approved to the satisfaction of the Town Engineer and the Town Building Inspector.

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



LETCHWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCHWORTH VILLAGE ROAD, HAVERSTRAW, NY

MAP OF SOIL TYPES (USDA SOIL SURVEY)

FIGURE No: III.C-2



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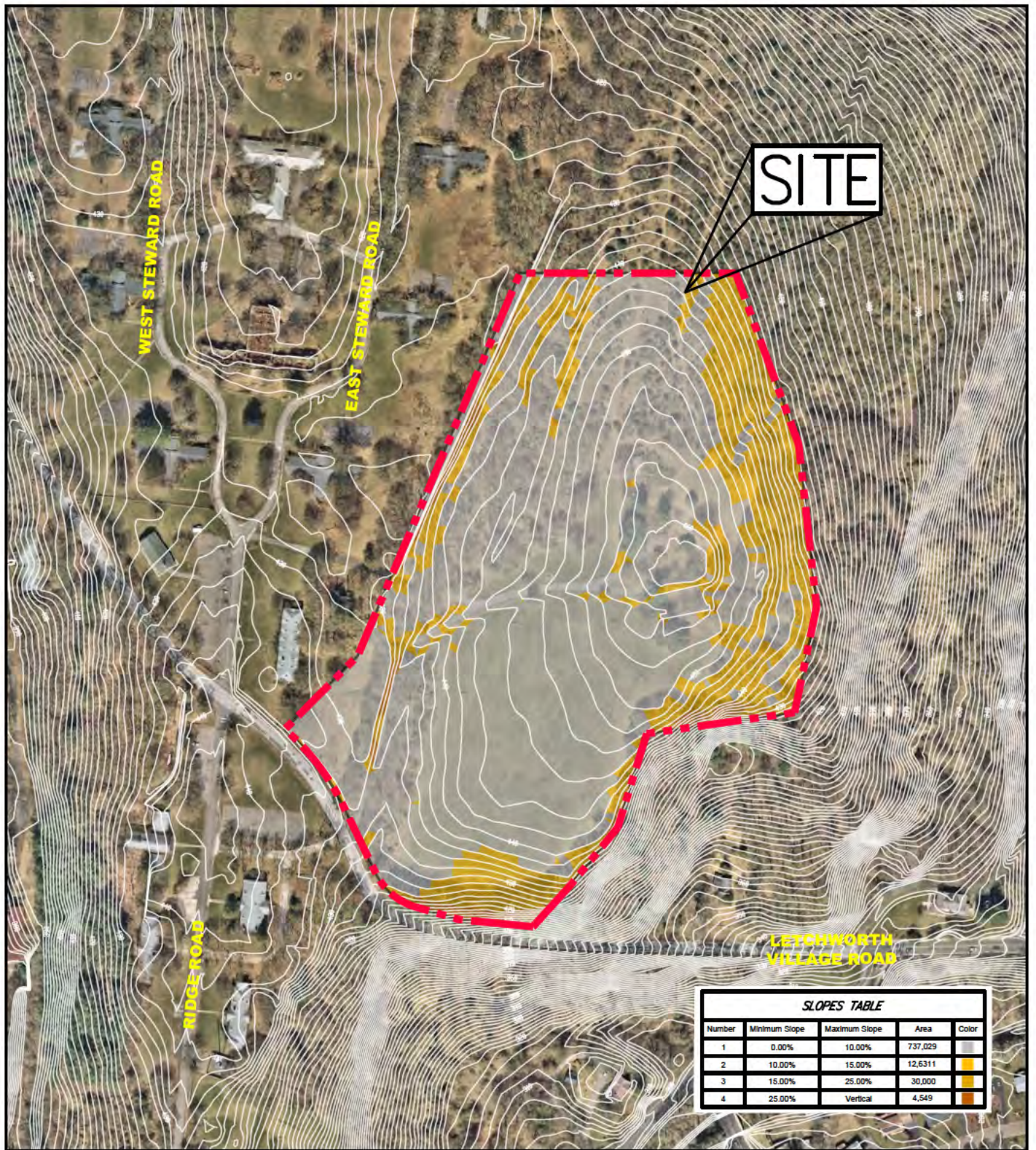
DATE: 01/24/2025

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%	7,37,029	
2	10.00%	15.00%	12,6311	
3	15.00%	25.00%	30,000	
4	25.00%	Vertical	4,549	

LETCWORTH ROAD RESIDENTIAL DEVELOPMENT

LETCWORTH VILLAGE ROAD, HAVERSTRAW, NY

EXISTING SLOPES MAP

FIGURE No: III.C-3



120 BEDFORD RD
ARMONK
NY 10504

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

JMCP LLC.COM



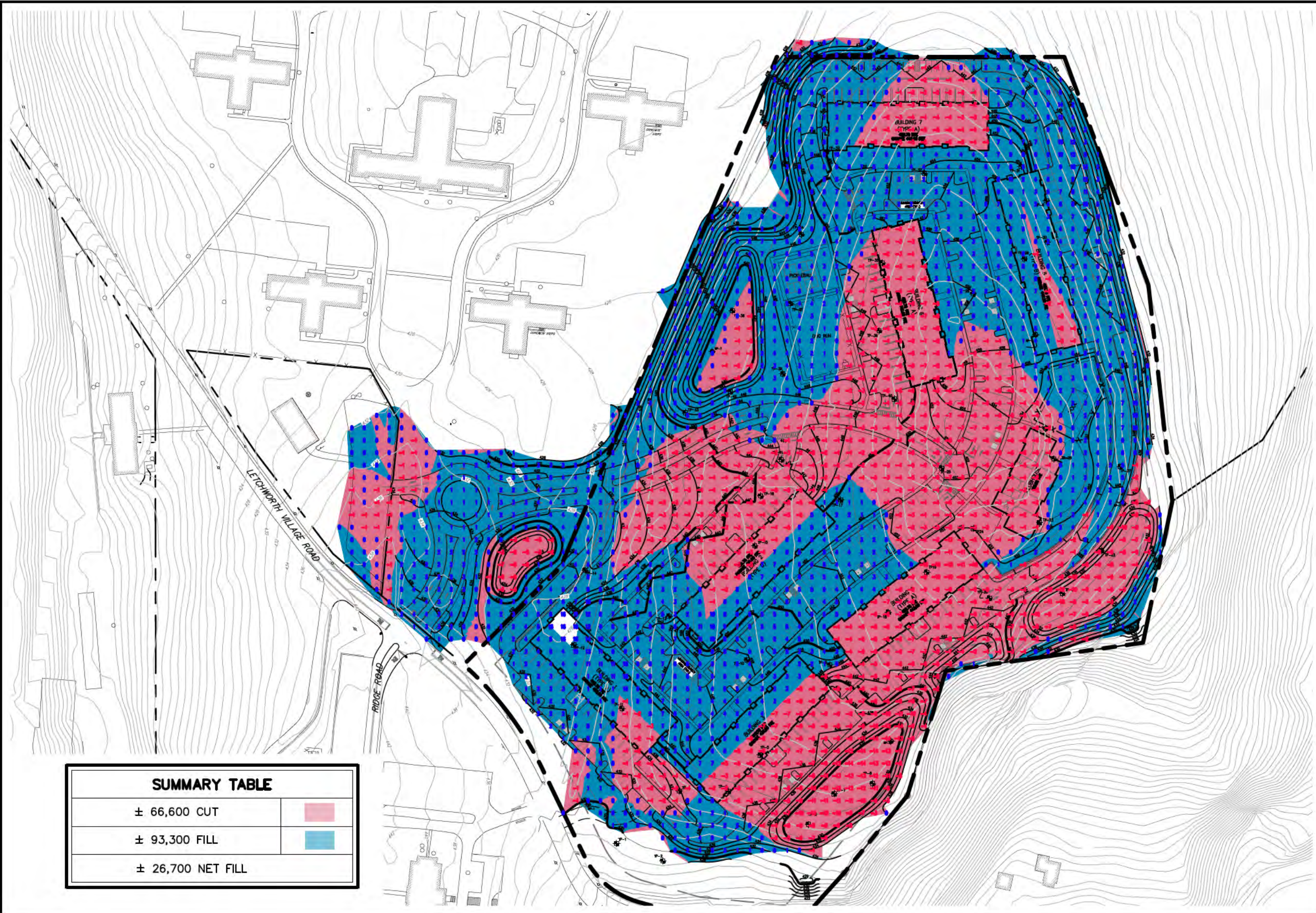
DATE: 01/24/2025

JMC PROJECT: 21090

SCALE: 1" = 500'

SOURCE: NEARMAPS/GIS

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SUMMARY TABLE	
± 66,600 CUT	
± 93,300 FILL	
± 26,700 NET FILL	

LETCWORTH 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 10604
(914) 273-5225
fax 273-2102
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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. Identification of any on-site or proximate rare, threatened, endangered or invasive species.

The New York State Department of Environmental Conservation (“NYSDEC”) Environmental Resource Mapper website was reviewed on December 17, 2024¹. 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 vegetative 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. **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**

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.

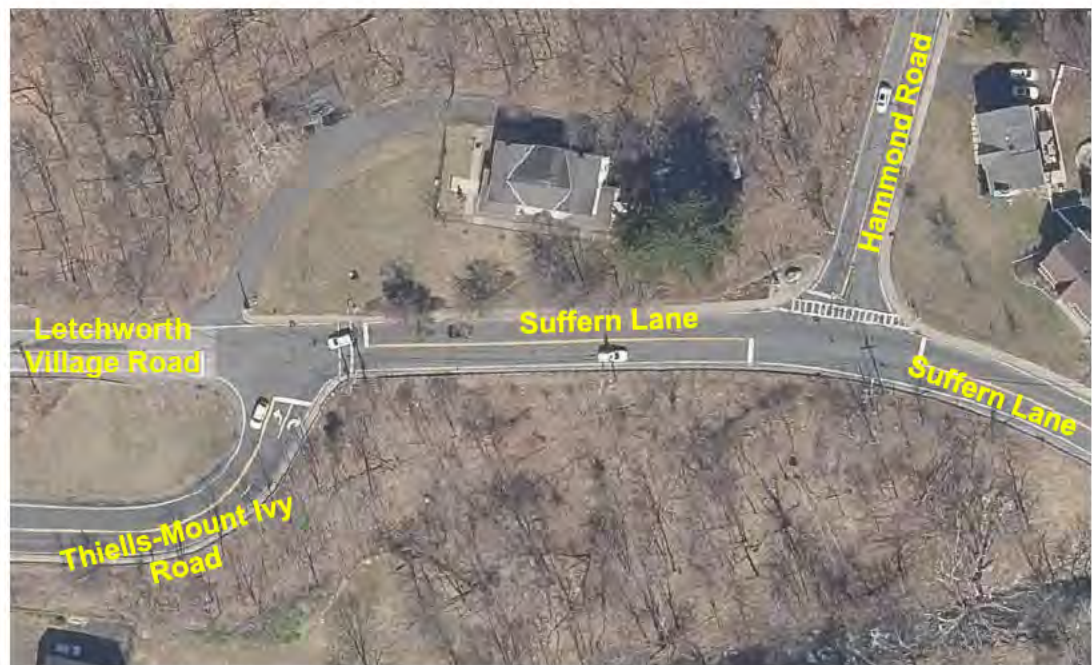


Access to the subject development is proposed through the northern leg of this intersection (opposite Ridge Road). The applicant proposes to realign the northern and southern approaches to the intersection with Letchworth Village Road to remove the skew which currently exists. Under proposed conditions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

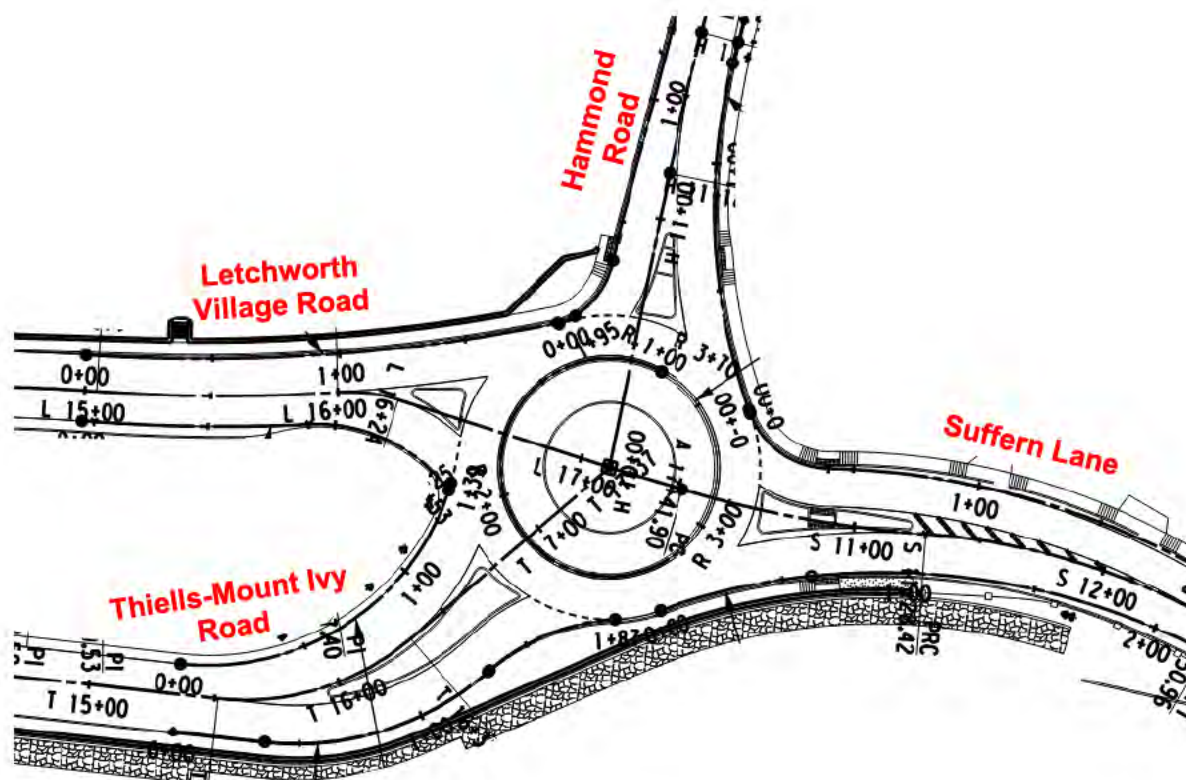
The stop sign assemblies for the approaches to the Letchworth Village Road and Ridge Road intersection include a red retroreflective signpost strip for increased visibility, however an “All-Way” supplemental plaque is not installed below the existing “Stop” signs at the intersection. The

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.

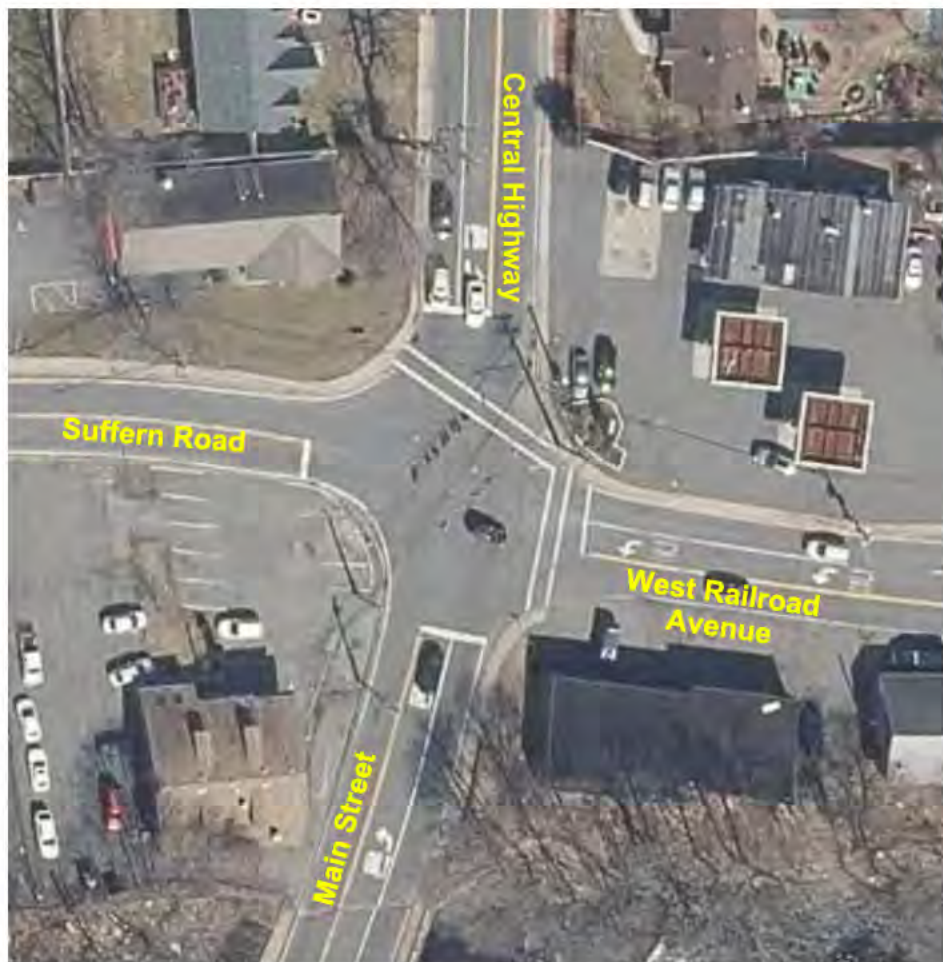
The intersection of County Route No. 94 and County Route No. 47 has historically been two offset signalized three-legged intersections. The eastbound Letchworth Village Road and westbound Suffern Lane approaches are also known as County Route No. 94. The northbound Thiells-Mount Ivy Road and southbound 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:
 - o Cross Creek Lane
- Suffern Lane intersecting with:
 - o Hammond Road
 - o Castle Court
 - o Woodlake Drive
 - o Pine Drive
 - o Margaret Lane
 - o Donaldson Lane
 - o Madison Avenue (West)

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

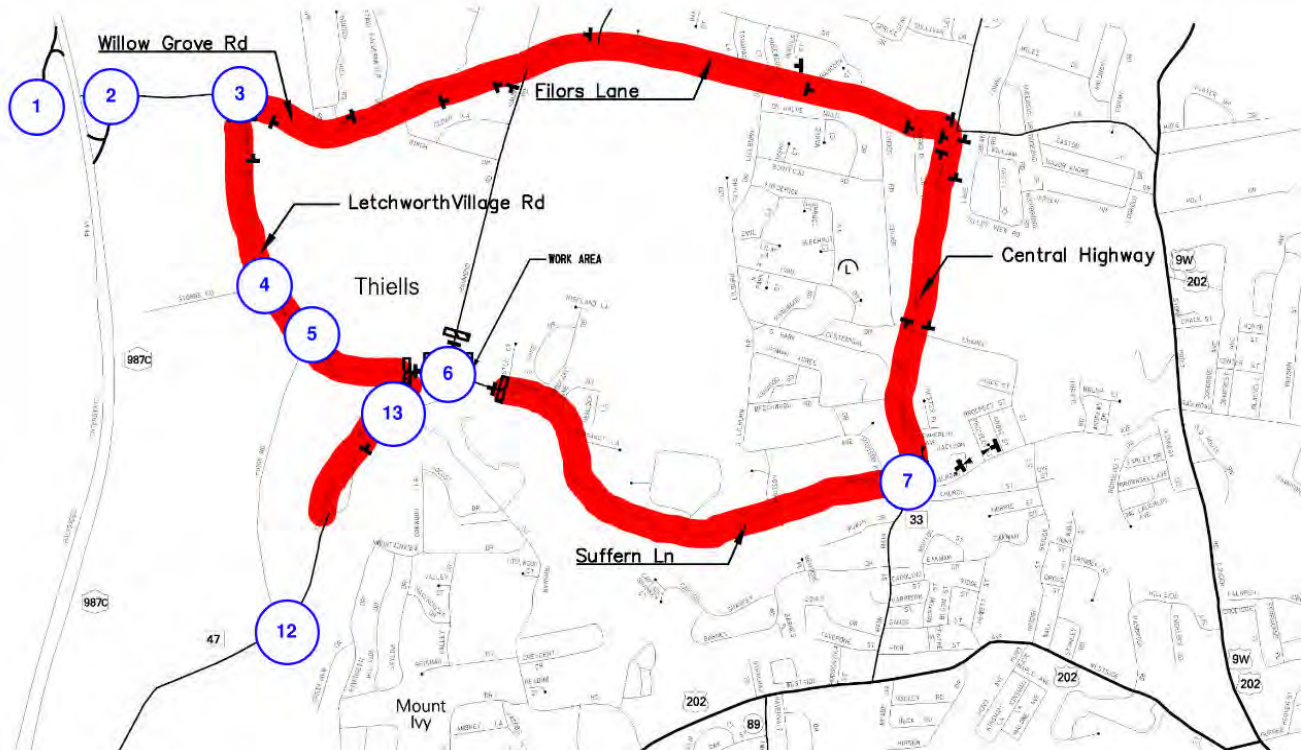
2. Existing Condition Analysis

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.

<i>Unsignalized Level of Service Criteria</i>		
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 at 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 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 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
 - o Eastbound Approach – 2 Accidents
 - o Westbound Approach – 5 Accidents
 - o 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
 - o Eastbound Approach – 11 Accidents
 - o Westbound Approach – 3 Accidents
 - o Southbound Approach – 6 Accidents
- Sideswipe Accidents
 - o Westbound Approach – 4 Accidents
 - o 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
 - o Westbound Approach – 2 Accidents
 - o Southbound Approach – 3 Accidents
- Accident Type
 - o Rear End – 3 Accidents
 - o Sideswipe – 1 Accidents

- o 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
 - o Westbound Approach – 7 Accidents
 - o Southbound Approach – 4 Accidents
 - o 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
 - o Eastbound Approach – 2 Accidents
 - o Westbound Approach – 5 Accidents
 - o 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
 - o Eastbound Approach – 1 Accidents
 - o Westbound Approach – 2 Accidents
 - o Southbound Approach – 2 Accidents
 - o Northbound Approach – 7 Accidents
- Accident Type
 - o Rear End – 8 Accidents
 - o Sideswipe – 3 Accidents
 - o 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 struck 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
 - o Rear End – 1 Accidents
 - o Fixed Object – 2 Accidents
 - o Animal – 1 Accident
 - o Right Angle – 1 Accident
 - o 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. Sight Distance Analysis

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. Multi-Modal Trip Generation

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. Build Volumes

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 northbound 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 within 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 comprised 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. Parking

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
 - o Standard – 369 Spaces
 - o Accessible – 30 Spaces
 - o Sub-Total – 399 Spaces
- Reserved parking
 - o Garage – 134 Spaces
 - o Tandem (In front of Garage) – 134 Spaces
 - o Sub-Total – 268 Spaces
- Total
 - o 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 resources¹". 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. Discussion of demographic factors in the Town of Haverstraw such as income, employment, age, etc.

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. **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**

i. **Town of Haverstraw Police Department**

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' website².

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. **Discussion of North Rockland Central School District Public School System including budget, enrollment trends, and physical capacity of each school.**

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 website³. 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 pupil⁴.

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
<i>Subtotal Elementary</i>	<i>4,052</i>	<i>4,040</i>	<i>4,018</i>	<i>3,985</i>	<i>3,998</i>	<i>4,033</i>	<i>3,910</i>	<i>3,771</i>	<i>3,753</i>	<i>3,770</i>	<i>3,806</i>	<i>-6.1%</i>
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.

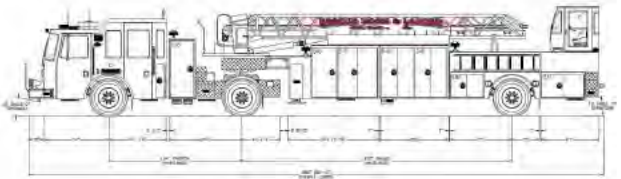
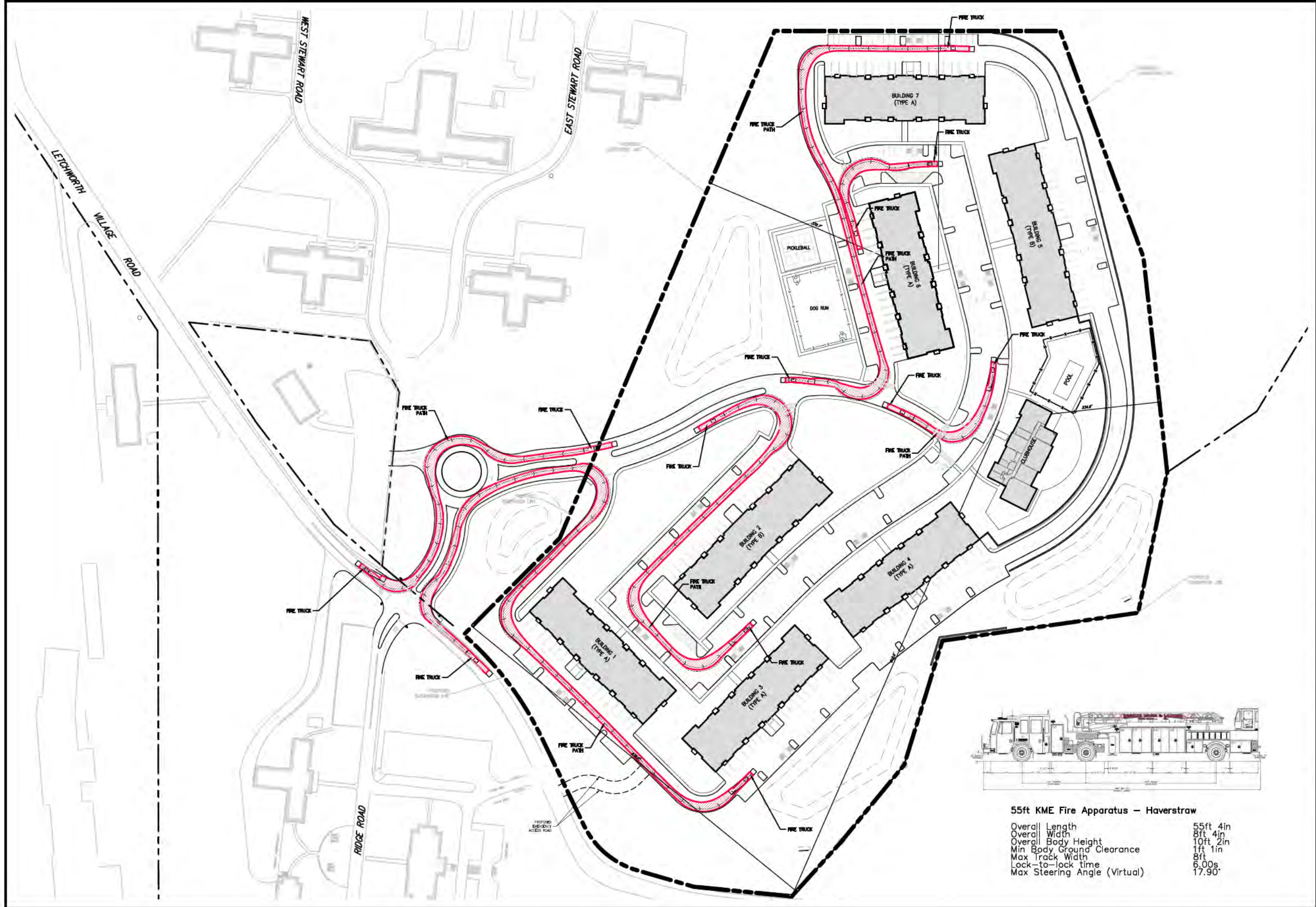
The Proposed Action will result in generally positive fiscal impacts for the Town of Haverstraw and the North Rockland Central School District since the Project Site is not currently generating any tax revenue for any community services entity. The Town Police, Fire and Ambulance Corps maintain a robust 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 – Haverstraw		
Overall Length	55ft 4in	
Overall Width	8ft 4in	
Overall Body Height	10ft 2in	
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

JMC

120 BEDFORD RD
ARMONK
NY 10504
(914) 273-5225
fax 273-2102
JMCPLLC.COM

FIRE TRUCK TURNING PLAN

JMC PROJECT: 21090

DATE: 01/24/2025

FIGURE: III.1-1

SCALE: 1" = 150'

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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 website¹. 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 pupil².

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 Police 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. Discuss employment generation resulting from construction and operation of the development

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 $\pm \$616,215$. 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 $\pm \$886,677.00$ 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 $\pm \$1,502,892.00$ 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 39¹. 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 µg/m ³	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
	PM ₁₀	primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
		primary and secondary	24-hour	150 µg/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. Provide a qualitative analysis of air impacts resulting from site preparation, construction activities, and post-construction activities

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 website¹, 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 2010². 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. Analysis of construction impacts including:

i. Identification of types of construction equipment.

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. Construction Worker and Vehicle Traffic.

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 $\pm \$17,715.00$ per lot, for a total annual tax revenue of approximately $\pm \$124,005.00$ 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

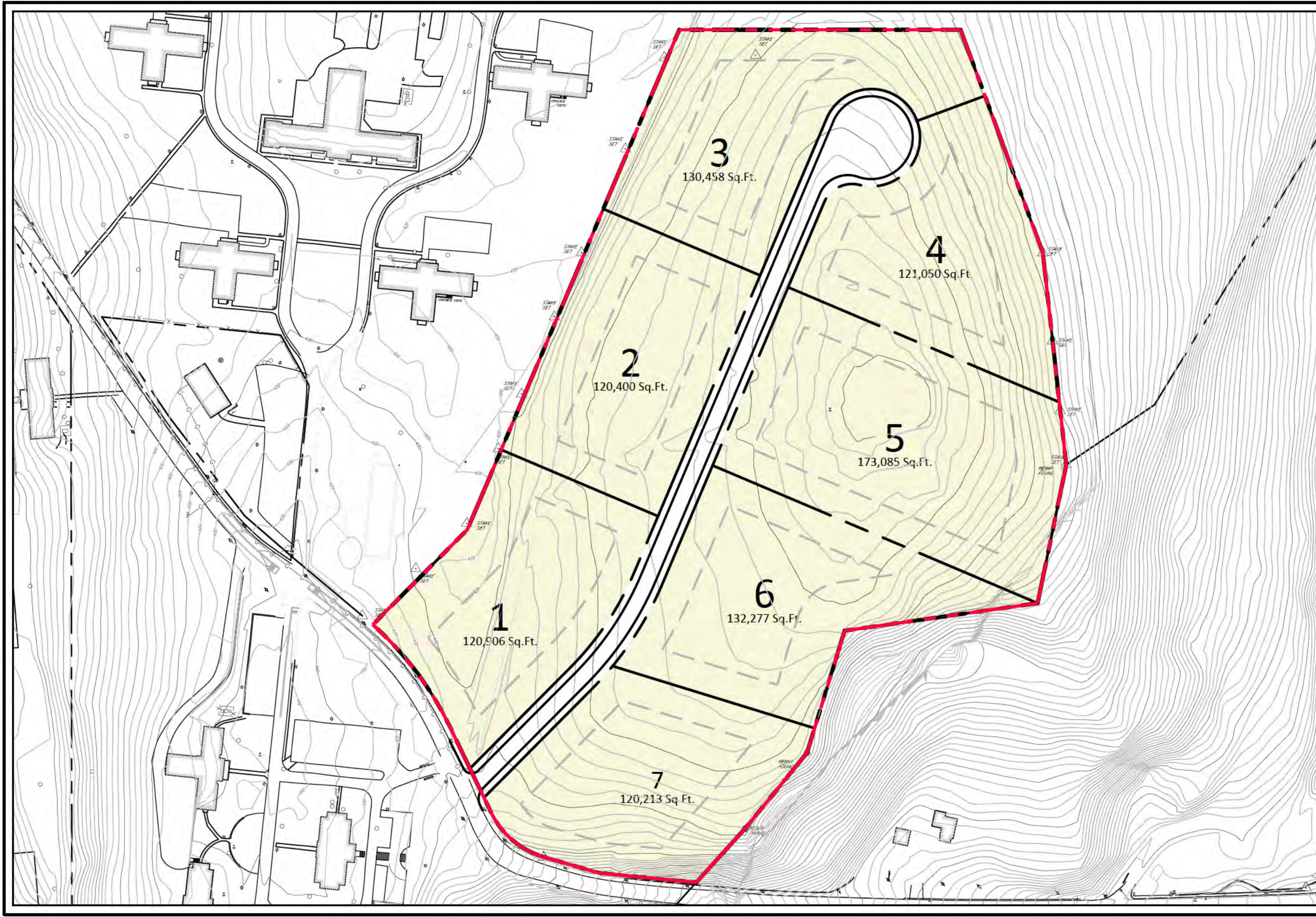
The historic resources registered by the NYSOPRHP would still be cited. Both the Proposed Action and the Conventional Subdivision Alternative would go through the same approval process with the NYSOPRHP.

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

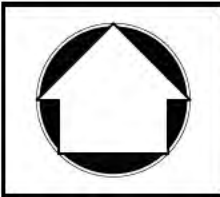
V-1 Alternative Subdivision Plan



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

JMC

120 BEDFORD RD
ARMONK
NY 10504
(914) 273-5225
(FAX) 273-2102
JMCPLLC.COM



ALTERNATIVE SUBDIVISION PLAN

FIGURE No: V-1

DATE: 01/24/2025
SCALE: 1" = 150'
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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.