Draft Generic
Environmental Impact Statement

Winston Farm Planned Development District

119 Augusta Savage Road, NYS Route 212,
Mower Hill Road and NYS Route 32
Town of Saugerties
Ulster County, New York

Lead Agency

Town of Saugerties
Town Board
4 High Street
Saugerties, New York 12477
(845) 246--2800

Prepared By

PASSERO
architecture engineering
242 W. Main Street, Suite 100
Rochester, New York 14614
(585) 325-1000

Project Sponsor

Saugerties Farm LLC
P.O. Box 683
Saugerties, New York 12477

August 15, 2024

Draft Generic Environmental Impact Statement
Winston Farm Planned Development District

NYS Route 212, Mower Hill Road, and NYS 32
Town of Saugerties
Ulster County, New York

Lead Agency:

Town of Saugerties
Town Board
4 High Street
Saugerties, New York 12477

Project Sponsor/Owner:

Saugerties Farm LLC
P.O. Box 683
Saugerties, New York 12477

Contact: David C. Brennan, Esq., Partner
Young/Sommer LLC
Attorneys At Law
Executive Woods, 5 Palisades Drive
Albany, New York 12205
(518) 438-9907 Ext. 224

Contact: Michael A. Moriello, Esq.
Riseley & Moriello
Attorneys At Law
111 Green Street
Post Office Box 4465
Kingston, New York 12402
(845) 338-6603

Project Location:

± 840 acres
119 Augusta Savage Road, NYS Route 212, Mower Hill Road, and NYS Route 32 (S/B/L Numbers 17.2-3-10; 17.2-4-32, 17.2-5-38, 17.2-5-39, 17.2-5-40, 17.2-5-41, 17.15-3-4, 17.16-1-1.110, 17.2-3-8, 17.2-3-15, and 17.16-1-36)
Town of Saugerties
Ulster County, New York 12477

Prepared by:

Passero Associates
Zina Lagonegro, EIT, AICP
242 W. Main Street, Suite 100
Rochester, New York 14614
Contact: Jess Sudol, P.E., President
(585) 325-1000
(Civil Engineer, SEQR, Architecture, Planning, Visualization, SWPPP, Climate Change, Air Quality & Solid Waste)

With Technical Assistance From:

North County Ecological Services, Inc.
25 West Fulton Street, 3rd Floor Suite
Gloversville, NY 12078
Contact: Stephen P. George, PWS
(518) 725-1007
(Endangered Species & Habitat Evaluation)

Vernon C. Hoffman. P.E.
2A Freeman's Bridge Road
Schenectady, NY 12302
(518) 382-0207
(Geotechnical Investigation)

Camoin Associates
P.O. Box 3547
Saratoga Springs, NY 12866
Contact: Rachel Selsky, AICP
(518) 889-2608
(Economic and Fiscal Impact Analysis)

Ostergaard Acoustical Associates
1460 Route 9N, Suite 209
Woodbridge, NJ 07095
Contact: Benjamin Mueller, P.E.
(973) 731-7002
(Site Sound Emissions)

Creighton Manning Engineering, LLP
145 Main Street
Ossining, NY 10562
Contact: Frank A. Filiciotto, P.E.
(914) 800-9201
(Traffic)

Ecological Solutions, LLC
121 Leon Stocker Drive
Stratton, VT 05360
Contact: Michael Nowicki, Biologist
(203) 910-4716
(Wetland Delineation)

Joseph E. Diamond, Ph.D.
290 Old Route 209
Hurley, New York 12443
(845) 338-0091
(Structural Inventory & Phase 1A Archaeological Investigation)

Atlas Archaeology LLC
628 Lakewood Road
Pine Bush, New York 12566
Contact: Dylan Lewis, MA, RPA
AtlasArchaeologyLLC@gmail.com
(Phase 1A Archaeological Investigation)

LaBella Associates (Latham)
4 British American Boulevard
Latham, NY 12110
(518) 273-0055
(Water Analysis & Soil Survey)

Blake Engineering PLLC
1898 County Road 1
Westtown, NY 10998
(845) 820-3431
Contact: Broderick Knoell, P.E., CEM, LED, AP
(Mechanical, Electrical, and Plumbing)

Date of Submission:	**August ____, 2024**
Date of Acceptance:	_____
Date by which comments must be submitted:	A public hearing on the DGEIS will be held on ____at _____ in the _____ located at _____, at which time verbal and written comments will be accepted. Written comments on the DGEIS will continue to be accepted at the offices of the lead agency a minimum of 10 days after the close of the public hearing, or until such a later date as may be established by the lead agency.
Availability of Documents:	Copies of the DGEIS are available for public review at the office of the lead agency, Office of the Town Clerk, and at https://winstonfarm.com/

APPENDICES

List of Tables

List of Figures

1.0 Introduction

This document is a Draft Generic Environmental Impact Statement (DGEIS) prepared in accordance with the State Environmental Quality Review Act (SEQRA) and its implementing regulations at 6 NYCRR Part 617 for the action contemplated herein and is based upon the Final Scope adopted by the Town of Saugerties Town Board (the "Town Board"), as lead agency, on January 4, 2023. The Final Scoping Document was posted in the January 18, 2023 ENB and it was made available on the Town of Saugerties website at https://townsaugerties.digitaltowpath.org:10234/content/Generic/View/713.

The following potential adverse environmental impacts will be explored in the DGEIS based on the Final Scoping Document:

- Soils and Topography
- Water Resources
- Plant and Animal Resources
- Agricultural Resources
- Aesthetic Resources
- Historic and Archeological Resources
- Open Space and Recreation
- Transportation
- Utility Facilities
- Energy and Climate Change
- Noise, Light, Odor, Air and Human Health Impacts
- Fiscal and Economic Impacts and Community Facilities
- Land Use, Zoning, and Community Plans

This DGEIS evaluates the potential adverse impacts associated with the proposed action to rezone and develop lands known locally as Winston Farm ("project site") to the Winston Farm Planned Development District ("PDD" or "Winston Farm PDD"). The PDD consists of a development concept plan or map and written regulations to guide future development.

Winston Farm is located west of the Village of Saugerties near the northwest corner of New York State (NYS) Route 32 and NYS Route 212 (Saugerties-Woodstock Road) at Exit 20 of NYS Thruway Interstate 87 (I-87). The project site consists of eleven contiguous predominantly vacant parcels totaling ± 840 acres located at 119 Augusta Savage Road, NYS Route 212, Mower Hill Road, and NYS Route 32, et al. The project site is currently zoned General Business (GB), Moderate Density Residential (MDR), and Hamlet

Residential (HR), and it is also within the Gateway Overlay (GO), Aquifer Protection Overlay (APO), and Sensitive Area Overlay (SAO) districts.

The Winston Farm parcels straddle the Beaver Kill, a small stream that flows north into the Kaaterskill Creek and eventually into the Hudson River in Catskill, NY. Between the Beaver Kill and Route 32, the land is relatively flat. To the west, the elevation increases from east to west through a series of tiered ridges. Most of the site drainage runs toward the Beaver Kill. A portion beyond the highest ridge elevations drains west toward unnamed tributaries to the Beaver Kill.

The western portion of the project site, ± 500 acres are heavily wooded and not readily accessible. The eastern ± 300 acres are primarily open fields that are farmed for hay and provide grazing for livestock.

Future development will depend on a range of options and future market conditions with unknown milestones and phases. Therefore, development is conceptual at this time and maps and drawings contained in this DGEIS are illustrative and nonbinding for development. Site-specific development will be subject to the review and approval procedures of the adopted Winston Farm PDD regulations, and further subject to the review and approval by the respective local, state, and federal agencies as outlined herein.

The Final Generic Environmental Impact Statement (FGEIS) will set the maximum development parameters in the PDD. Future site-specific development will require review under SEQRA. In the event that a proposed project exceeds the parameters of the FGEIS and its findings statement, the project will require the preparation of a supplemental environmental impact statement as defined by 6 NYCRR Part 617.9(a)(7).

This generic Environmental Impact Statement (EIS) is prepared pursuant to 6 NYCRR 617.10(a) “[g]eneric EISs may be broader, and more general than site or project specific EISs and should discuss the logic and rationale for the choices advanced.” A GEIS is useful when the details of a specific impact cannot be accurately indicated, as no site-specific project has been proposed, but a broad range of future projects is likely to result from the action contemplated herein.

This DGEIS discusses the future development of Winston Farm, the potential environmental impacts, and the proposed mitigation measures that have been incorporated into the PDD map and regulations.

A PDD is a widely used land use tool that allows for flexibility of site development that is sensitive to the unique characteristics of the site. PDDs are often designed with a long-term horizon in mind taking into consideration the sustainable use of resources, environmental considerations, and the evolving needs of the community.

The PDD is a thoughtful land use planning and regulatory approach that will provide a range of benefits that contribute to the creation of a sustainable, vibrant, and well-balanced mixed-use neighborhood. The intent of the PDD is to provide new housing and business opportunities and preserve and improve the quality of life, economic vitality, and opportunities for existing residents and businesses. The efficient use of land enhances the long-term viability and resilience of the district.

The PDD map and regulations will guide appropriate development and aid in positioning Winston Farm as a premier regional mixed-use destination venue for the Hudson Valley by attracting and permitting a wide range of diverse residential, nonresidential, agricultural, recreational, entertainment, hospitality, and a mix of complementary uses.

The Winston Farm PDD concept map will reflect five unique but interrelated subareas, each with its own list of permitted uses, and design and development standards.

- Subarea 1: Residential Low Density (RLD). This subarea is ± 271 acres, located near the northwest corner of the PDD, and will accommodate large-lot residential development.

- Subarea 2: Residential High Density (RHD). This subarea is ± 135 acres and, located along Saugerties-Woodstock Road, and will permit small-lot single-family, townhouse, and multi-family dwellings.

- Subarea 3: Perimeter Commercial (PC). This subarea is ± 100 acres and will permit commercial uses along Route 32.

- Subarea 4: Central Recreation (CR). This subarea is approximately ± 236 acres and is designed to offer outdoor activities, such as but not limited to, campsites and cabins, mini-golf and driving ranges, ropes courses, trails, community-centered activities, and programs, as well as a boutique hotel and spa, and the like.

- Subarea 5: High Tech Commercial (HTC). This subarea is ± 63 acres and will permit research and development, maker spaces, co-working opportunities,

incubator space, and collaborative work environments that promote organic business development and emerging technologies.

Refer to Figure 29 for the Subarea map.

The adoption of the PDD is a legislative action specific to Winston Farm that will be incorporated into the Town of Saugerties Zoning Law (zoning law). These regulations will guide the size, type, and form of development permitted in the PDD in accordance with the Town of Saugerties Zoning Laws, the Town and Village of Saugerties Comprehensive Plan (2021), and Ulster County documents and planning guides which apply.

2.0 Executive Summary

This Executive Summary is designed to provide an overview of the proposed action, a summary of the potential adverse impacts, the proposed mitigation measures, and a range of alternatives that have been considered. A review of the Executive Summary is not a substitute for the full evaluation of the action addressed in more detail in Sections 3.0 through 12.0 of this DGEIS.

To determine where development is most suitable on the site, while at the same time preserving and protecting natural resources, a host of studies have been commissioned to determine a balanced mix of uses and appropriate locations for structures and infrastructure. The most significant of these technical studies are the hydrogeologic report (Appendix C), traffic impact study (Appendix B), wetland analysis (Appendix H), habitat assessment (Appendix I), and the Economic and Fiscal analysis (Appendix D). Collectively, the conclusions of these reports establish the maximum carrying capacity of the land and aid in avoiding resource depletion, habitat degradation, traffic congestion, and the overburdening of public services. This thorough evaluation helps determine the feasibility and appropriateness of the proposed rezoning and future patterns of development.

In order to consider the impacts of development under new zoning provisions, the environmental review will need to analyze and compare a range of reasonable alternatives. The weighing of the pros and cons of the alternatives will aid in determining maximum development parameters within the Winston Farm PDD. The development concept plan submitted with the original application to the Town of Saugerties is just one iteration. To determine a range of options for the development program, the following three scenarios were analyzed:

As-of-Right (AOR) Based on Current Zoning

The AOR is based on current zoning, which permits 773 subdivided lots for single-family residential housing located on approximately 419 acres zoned residential, and ± 26 acres for commercial development zoned general business.

Sponsor's Preferred (SP)

The SP is a development scenario under the proposed zoning regulations, which responds to the conclusions of the technical reports. The SP includes approximately 155 single-family homes on various lot sizes, 110 townhouses, and 650 condo/apartment units. In addition to the residential development, the PDD also

includes a campground with 100 cabins, 419,800 square feet of commercial retail space, a 150-room boutique hotel, a conference center with 250 hotel rooms, a 5,000-person performing arts center, and 250,000 square feet of lab or light-industrial space.

Reasonable Worst-Case Scenario (RWCS)

The RWCS was created to show a reasonable maximum development scenario under the proposed zoning regulations, which includes fewer residential homes but larger commercial and tech industrial spaces compared to the SP Plan. The RWCS plan includes the construction of a residential community with approximately 133 single-family homes on various lot sizes, 115 townhouses, and 800 condo/apartment units. In addition to the residential development, the RWCS also includes a campground with 157 cabins and RV sites, 425,000 square feet of commercial retail space, a 150-room boutique hotel, a conference center with 300 hotel rooms, a 5,000-person amphitheater, and 375,000 square feet of lab or light-industrial space.

Refer to Appendix A for the scenario plan maps.

The conclusions and recommendations of the technical studies, and comments raised by the public resulted in the following changes since the original submission to the Town of Saugerties:

- The water park has been eliminated and replaced with a hotel and conference center.
- The outdoor adventure park has been eliminated from the forested area.
- The amphitheater has been changed from an outdoor venue to a completely enclosed performing arts venue with a maximum of 5,000 seats.
- The cabins have been relocated.
- The roads have been relocated to avoid wetlands.

The PDD regulations will specify allowable uses, design guidelines, parking regulations, procedural requirements, and more, that are specific to the district. Refer to Appendix P for the Winston Farm Planned Development District regulations.

Water Demand Analysis

LaBella Associates conducted a source water exploration for the project site between February 6, 2023, and May 16, 2023. Refer to the Hydrogeologic Pumping Test Report (Pump Test Report) in Appendix C.

Prior to conducting well tests, LaBella submitted and received approval for a pumping test protocol from the New York State Department of Environment Conservation (NYSDEC), the New York State Department of Health (NYSDOH), and the Town of Saugerties so that data gathered by the exploratory tests will not need to be repeated if any of the test wells are eventually used as tested.

Winston Farm Test Wells

LaBella noted in their report that in 2018, four exploratory test borings or wells (TW-1 through TW-4) were conducted on the site by WSP consultants working for the Village[1]. The Montano Well, located on an adjacent property to the northeast, was also explored.

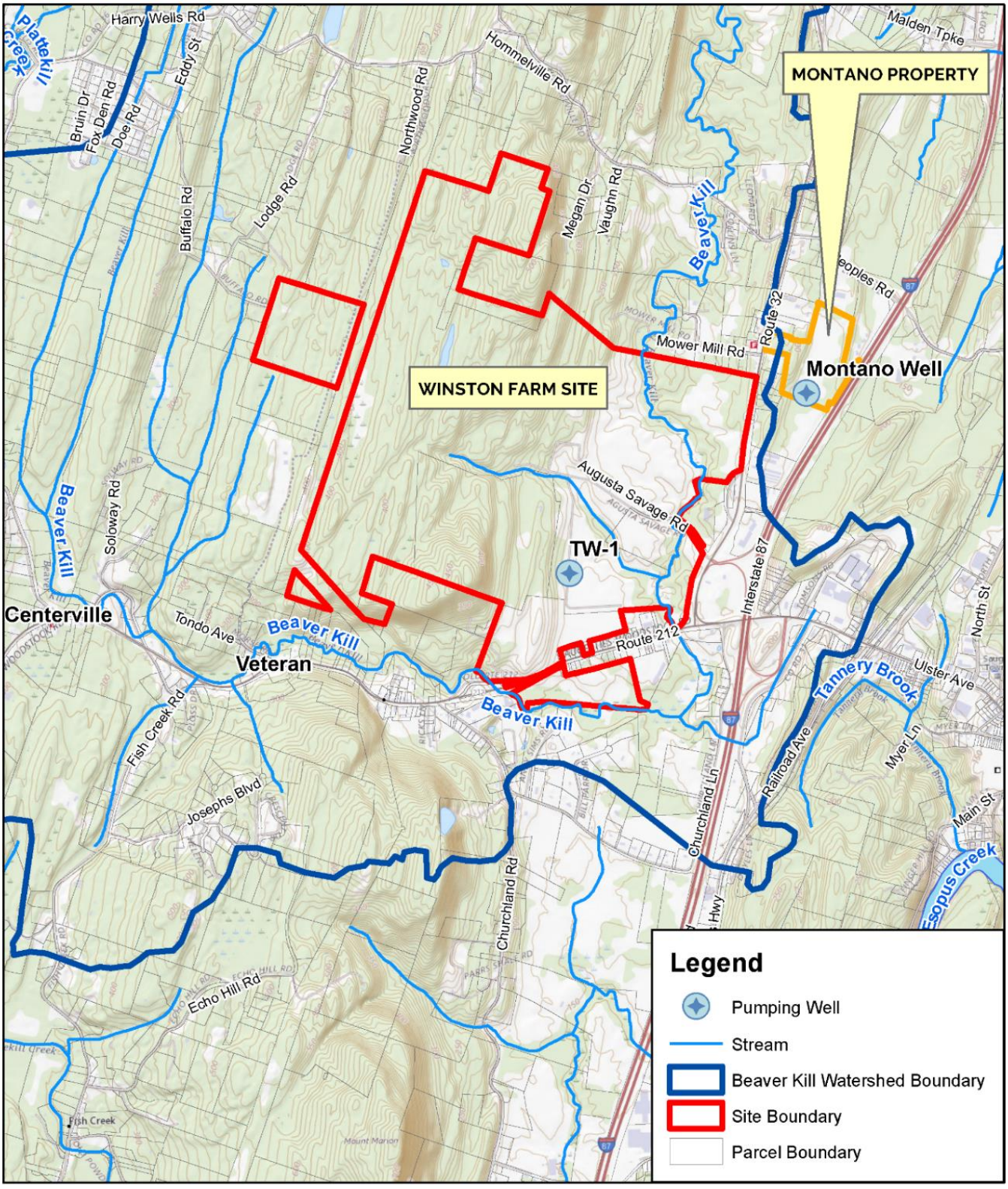
WSP conducted a flow test withdrawing 110 gallons per minute (gpm) from TW-1, determined to be the best of the four exploratory wells on the site. WSP opined that significantly more source water might be available from this location. To confirm, LaBella conducted an extended flow test at 220 gpm. The drawdown and recovery periods together lasted approximately 10 weeks. The drawdown is the change in the groundwater level due to the pumping activity, and the recovery period is the time required for the aquifer to stabilize at the static water level once pumping has stopped.

During the test period, the existing Montano Well on an adjacent site was subject to a test at 50 gpm which lasted just over 72 hours.

Refer to Figure 1 for the TW-1 and Montano Well locations.

[1] WSP, June 27, 2018, Draft Groundwater Exploration Summary, The Winston Farm Property

Figure 1: Test Well Location TW-1 and Montano Well



Source: LaBella Associates

Observation Wells

The change in water level in an observation or monitoring well can be used to establish if the water supply aquifer is connected to other aquifers or surface waters.

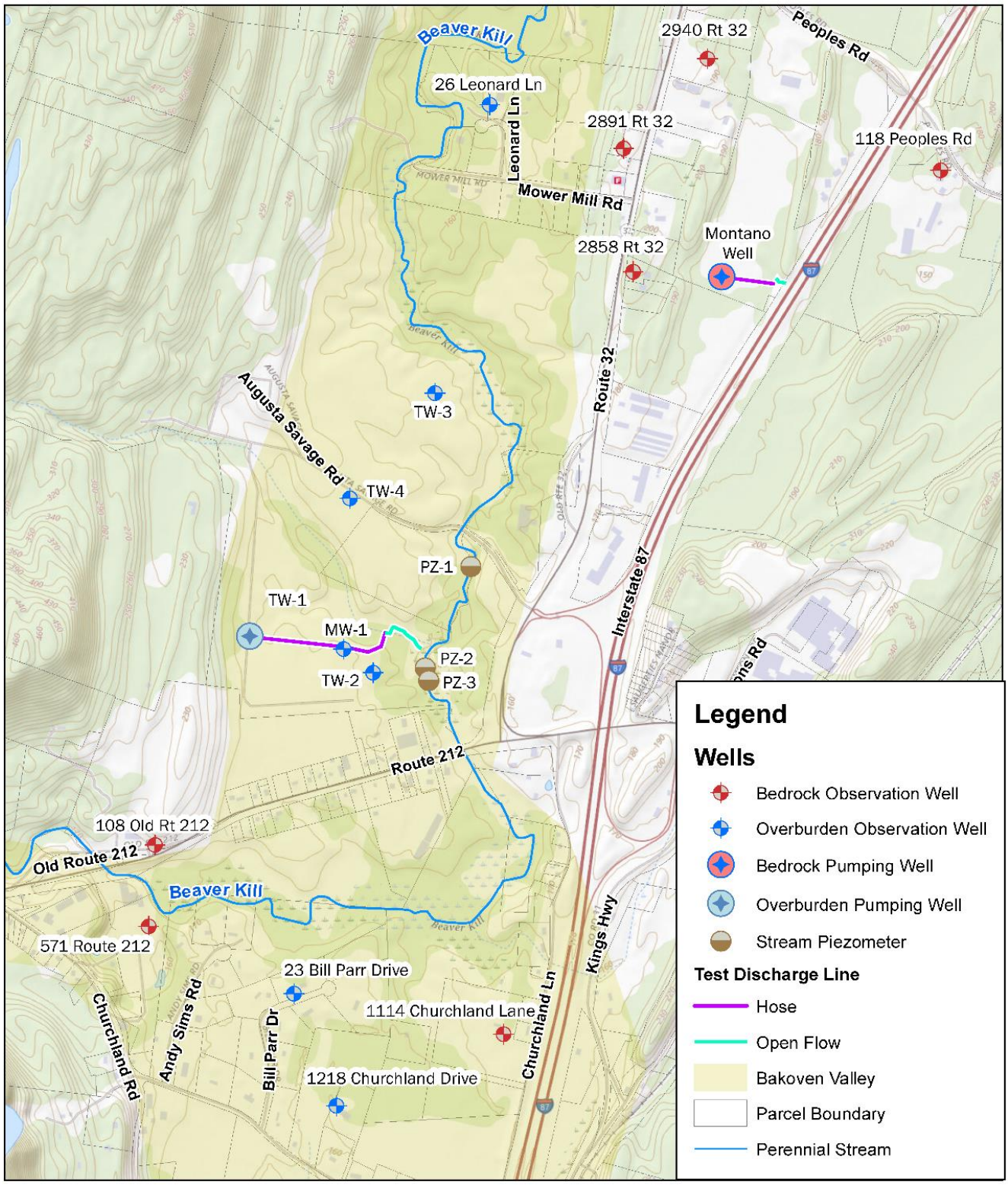
Numerous wells and stream locations were identified for monitoring during the TW-1 and Montano Well tests. For the TW-1 test, multiple private domestic wells, site wells TW-2 through TW-4, and a former site well referred to as MW-1 were established for observation well use. For the Montano Well, water levels in four off-site private wells to the west and north were established. No known wells were situated or available for monitoring to the east or south of the test well.

During TW-1 testing, all on-site observation wells showed drawdown influence, stabilizing during pumping and recovery. Wells south of Winston Farm showed minimal response, with some demonstrating lower water levels due to regional groundwater recession. Private wells to the south responded directly to TW-1 testing, exhibiting stabilized drawdown and full recovery. Observation wells north and northeast of Winston Farm showed no significant response, indicating minimal impact from TW-1 testing. One private well to the north exhibited a modest response.

Stream wells (piezometers) were installed in the Beaver Kill to monitor stream conditions during TW-1 testing. Labella monitored differences in elevation between the open stream and groundwater elevation in each stream piezometer to monitor gaining or losing stream conditions. The piezometer stations identify that stream gaining and losing conditions fluctuated responsive to precipitation events rather than to TW-1 operations. Throughout testing of the Montano Well at 50 gpm, TW-1 testing in the adjacent watershed continued at 220 gpm.

Figure 2 identifies the locations of the TW-1 well and the Montano Well, their associated observation well locations, and the location of the stream piezometers.

Figure 2: Monitoring Well Locations

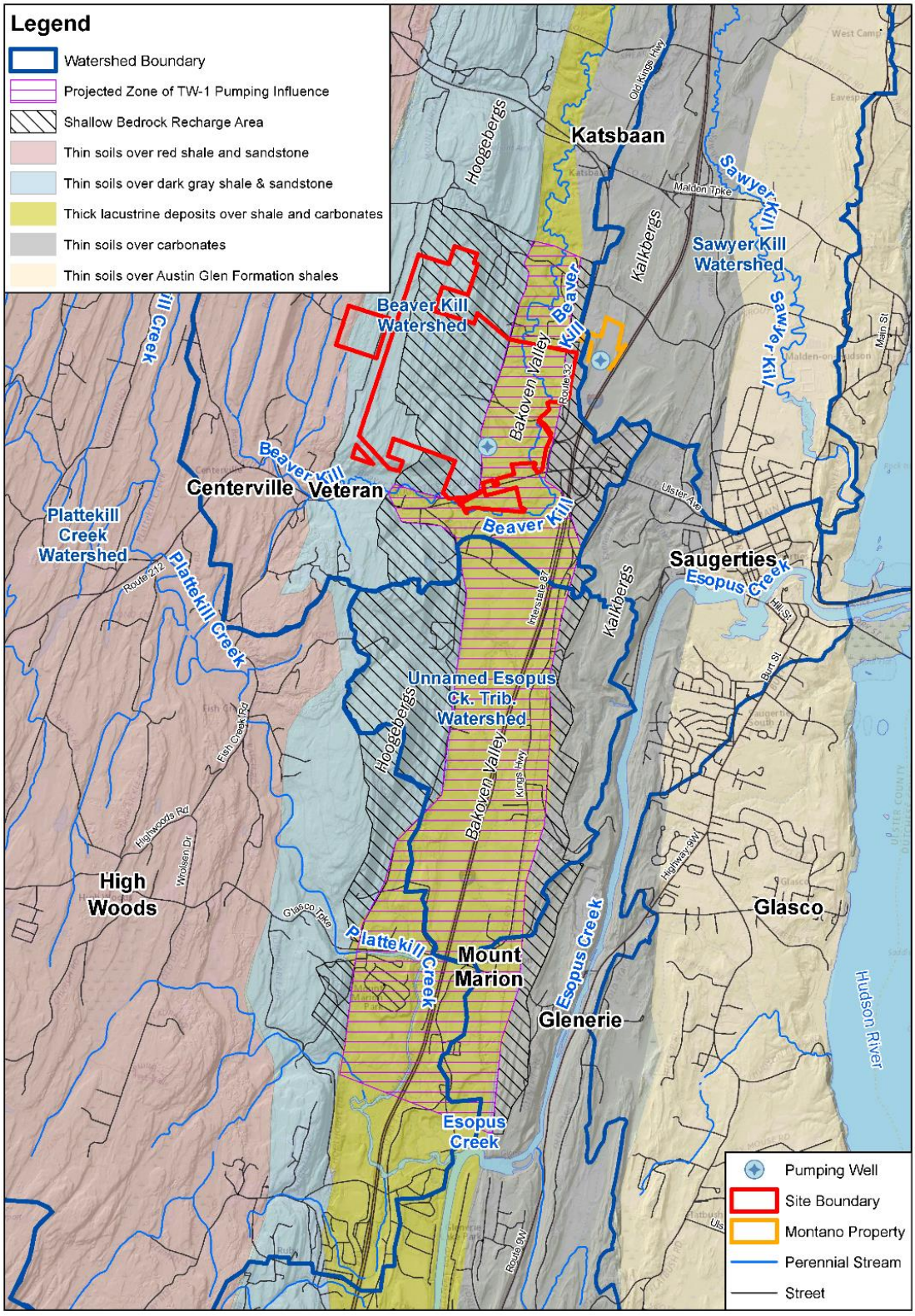


Source: LaBella Associates

Aquifers

The TW-1 well test indicates no direct link between the Bakoven Valley aquifer and the Beaver Kill stream, which rules out the Beaver Kill as TW-1's source and confirms that bedrock aquifers sustain this well. The sand and gravel aquifer's extent is uncertain but likely stretches north to south. The results of the water sampling laboratory analyses suggest that TW-1 appears to receive less contribution from eastern carbonate formations, suggesting a western source. The Montano Well, in eastern carbonate formations, receives recharge from the Sawyer Kill watershed.

Figure 3: Watershed Boundary Map



Source: LaBella Associates

Water Quality

The water quality in TW-1 and the Montano Well is satisfactory and/or readily treated. No evidence of contamination, including PFAS (per- and polyfluoroalkyl substances) compounds, was detected.

The Hydrogeologic Pumping Test Report, Appendix C, provides a comprehensive data summary table (Table 2), and the laboratory reports (Appendix 2) in accordance with New York State Department of Health (NYSDOH) drinking water quality standards.

The TW-1 water sample exceeded the following standards:

Table 1: Test Well (TW-1) Water Sample Results

Water Quality Standard	Units	TW-1	NYSDOH Drinking Water Standards
Color	Color Units	15	15
Turbidity	NTU[+]	8	5
Iron	mg/L	1.016	0.3*

[+] NTU (Nephelometric Turbidity Units) is a measure of the cloudiness of a fluid. For reference, 5 NTUs are just noticeable to the eye.
* When iron and manganese are both present, the combined standard is 0.5 mg/L.

In the TW-1 sample, elevated levels of iron and turbidity were reported, likely due to sample collection methods. However, both the iron and turbidity levels had decreased compared to previous tests, indicating potential improvement with continued well use.

Samples of the Montano Well were within guidance values.

Results of the Well Pump Testing

Approximately one month after the testing started, water levels in all on-site and off-site wells reached absolute stabilization. Once stabilization was identified, the test was allowed to run for an additional week to confirm that all monitoring points and the TW-1 test well had come into full equilibrium with regional aquifer conditions. During this additional week, water levels were observed to fluctuate modestly. Water levels in TW-3, TW-4, and one private well to the north were even rising modestly.

The extended Winston Farm TW-1 well test, drawing groundwater at 220 gpm, documented stabilized yield, helped clarify boundary condition roles, identified the most probable contributing watersheds, and ruled out direct influence on or from the Beaver Kill

stream. Off-site well water levels were documented in various private wells both north and south of the test site without reducing capacity in any monitored wells.

The Montano Well provided 50 gpm. Monitoring of private wells near the Montano site identified no measurable groundwater level influences. Natural recession was observed in the private well monitoring network, but no Montano Well test influence was noted in these monitored wells.

Typical rains arrived in late April and early May, and the water levels recorded in the aquifer returned fully to levels observed in early February 2023, before the TW-1 test began, confirming a viable pattern of aquifer recession and full recharge in this confined aquifer.

TW-1 on the Winston Farm property and the Montano Well on the adjacent property were jointly tested, confirming a net groundwater withdrawal capacity of 270 gallons per minute (gpm).

Water Demand Recommendations

A larger diameter replacement well is recommended for Winston Farm TW-1 to improve well performance efficiency. Only one replacement well may be necessary if interconnected with the Village water supply system. A second backup well may be required by the NYSDOH if the well becomes part of an independent community water system.

It should be noted that some capacity remained in TW-1 by the end of the spring 2023 test. It may be possible to withdraw 50 to 100 gpm or more additional yield from the TW-1 location after installing the recommended replacement well. If withdrawals exceeding 220 gpm are proposed, more detailed well testing may be warranted.

The Montano Well is situated more than 100 feet but less than 200 feet from a property line. Either an off-site easement will be required if this well is to satisfy NYSDOH perimeter control requirements, or the well can be relocated.

Traffic Impact Study

Creighton Manning Engineering, LLP (CM) completed a Traffic Impact Study (TIS) to evaluate potential adverse impacts associated with future development. PDDs often have a long-term horizon for development; therefore, the TIS is based on full build-out occurring at one time, while it may take several years to complete. Refer to Appendix B of the DGEIS for the TIS.

Traffic Data Collection

CM conducted traffic counts at 19 intersections in the study area. To capture typical school traffic and seasonal ski traffic, the counts were conducted during the winter season in December 2022 and January 2023.

The observed study network peak hours are as follows:

Table 2: Street Network Peak Hours

#	Period Name	Period Limits	Peak Hour
1	Weekday Morning	7:00 AM-9:00 AM (2 hours)	7:30 AM-8:30 AM
2	Weekday Evening	2:00 PM-7:00 PM (5 hours)	4:00 AM-5:00 PM
3	Friday Evening	3:00 PM-8:00 PM (5 hours)	4:30 AM-5:30 PM
4	Saturday Midday	11:00 AM – 5:00 PM (6 hours)	11:15 AM - 12:15 PM
5	Sunday Midday	11:00 AM – 5:00 PM (6 hours)	11:45 AM - 12:45 PM

Source: Creighton Manning

Future Traffic Volumes and Characteristics

The Scoping Document requires the TIS to be conducted to the estimated year of project completion (design year) plus 10 years, determined to be 2040. An annual growth rate of +0.50% was applied to the 2023 existing volumes and compounded annually for 17 years.

Trip generation determines the quantity of traffic expected to travel to and from a given site. Following is a summary of the peak hour trip generation of Winston Farm under each of the scenarios, after accounting for internal capture, pass-by trips, and diverted link trips. These trips are referred to as Primary trips.

Table 3: Trip Generation Summary

Scenario	Weekday AM Peak Hour			Weekday PM Peak Hour			Friday PM Peak Hour			Saturday Midday Peak Hour			Sunday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
AOR	408	494	902	812	700	1,512	912	750	1,662	843	753	1,596	669	662	1,331
SP	584	493	1,078	765	764	1,530	863	805	1,667	1,083	965	2,047	684	683	1,367
RWCS	708	564	1,272	943	941	1,884	1,083	1,055	2,138	1,308	1194	2,502	888	876	1,764

Source: Creighton Manning

The AOR scenario generates the fewest amount of peak-hour trips. The SP scenario will generate more trips than the AOR scenario during each of the study peak hours with the lowest difference being five total trips and the greatest difference being 451 total trips. The RWCS scenario will generate more trips than either the AOR or SP scenarios.

Traffic distribution determines where traffic is likely to go based on travel patterns and places of interest for future users. Pass-by trips were assumed to occur mostly via Augusta Savage Road rather than the NYS Route 212 site driveway since the commercial uses will be located along the NYS Route 32 frontage. Diverted Link trips were added to the I-87 northbound and southbound ramps to account for motorists diverting from their typical route to visit the site.

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Twenty-seven study intersections were evaluated under the 2023 Existing and 2040 No-Build Conditions, and the 2040 Build Condition (Build), including the AOR, SP, and RWCD scenarios. The LOS Summary Tables and detailed LOS analysis reports are provided in the TIS, Attachment H. The TIS is located in Appendix B of the DGEIS.

Left-Turn Lane Analysis

A left-turn lane analysis revealed the anticipated number of left-turns at the site driveways on NYS Route 212 and on NYS Route 32 warrant left turn lanes in the 2040 Build condition.

Traffic Signal Warrant Analysis

Based on the traffic signal warrant analysis and the 2040 Build Volumes under the Sponsors Preferred scenario, traffic signals are warranted at four of the 19 intersections studied:

- NYS Route 32/Northeast Area Driveway

- NYS Route 212/South Area Driveway
- NYS Route 32/Peoples Road
- NYS Route 32/Old Kings Highway

CM conducted a feasibility evaluation for roundabouts at the following intersections because they are either identified as requiring a signal under 2040 Build conditions or they are considered key intersections:

- NYS Route 32/Peoples Road
- NYS Route 32/Northeast Area Driveway
- NYS Route 32/Augusta Savage Road/Interstate-87 SB Ramp
- NYS Route 32/NYS Route 212
- NYS Route 212/South Area Driveway

Recommended Off-Site Traffic Mitigation

The LOS analysis reveals that off-site locations are anticipated to experience operational constraints due to the additional volumes from full build-out in the PDD. CM evaluated possible improvements that, if implemented, will improve the operations at these locations. Concerns and possible improvements to the Build condition include:

Table 4: Off-Site Traffic Mitigation Summary

Location	Build Conditions Concerns	Possible Improvements
NYS Route 32/NYS Route 212 Intersection	• Southbound delays • Overall intersection delays • Westbound and southbound queues	• Signal timing modifications • Southbound approach geometry
NYS Route 212 Signalized Intersections – 1. I-87 NB Ramp Intersection/McDonald's Driveway 2. Kings Highway 3. Big Lots Driveway	• Overall intersection delay • Eastbound delays • Queue on the corridor	• Signal timing coordination for three intersections
NYS Route 32/Peoples Road/Hommelville Road Intersection	• Delays on westbound approach • Crash History	• Proposed traffic signal
NYS Route 32/Old Kings Highway (CR 34)	• Delays on westbound approach	• Proposed traffic signal

Source: Creighton Manning

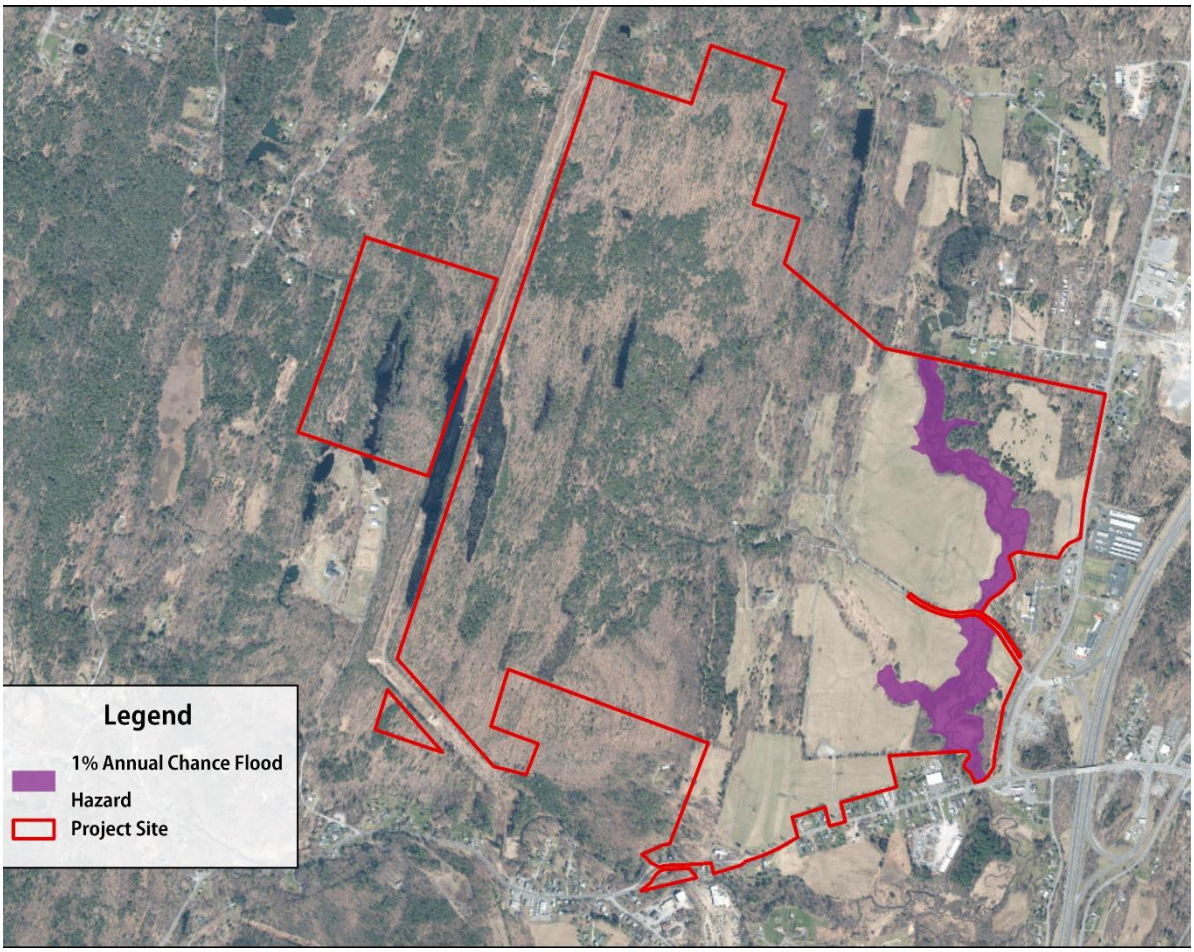
If approved, these mitigation measures will be implemented in coordination with the Town of Saugerties, Ulster County, and NYSDOT and will be funded based on the respective jurisdictional agency's preferred method. Conceptual improvement plans will be prepared subsequent to preliminary approval by the respective jurisdictional agencies.

The TIS analysis and the recommended mitigation are based on a full build-out plan of the PDD to inform decision-makers of the potential areas of concern. It is anticipated that each application that is made to the Town of Saugerties for development within the PDD will be accompanied by trip-generation information that can be compared to the TIS to identify the need and timing for implementing the recommended improvements.

Surface Waters

According to the Federal Emergency Management Agency (FEMA) National Flood Hazard FIRMette Mapper, the Beaver Kill is located in Flood Zone A.

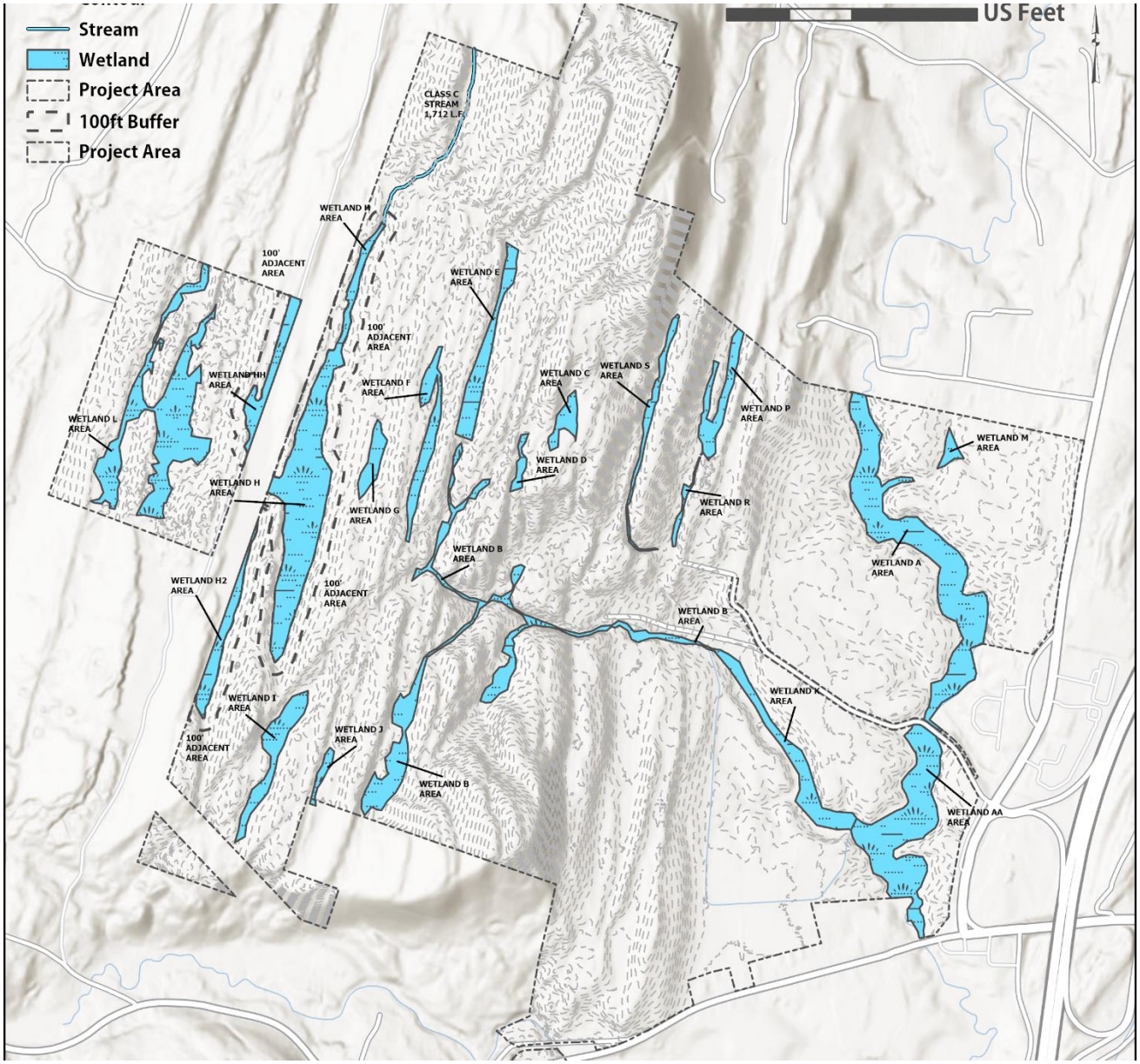
Figure 4: National Flood Hazard Firmette



The wetlands on site were delineated by Ecological Solutions, LLC. Winston Farm contains 19 wetlands and 4 watercourses located throughout the property with the main watercourse, the Beaver Kill.

NYSDEC has evaluated and confirmed the wetland delineation map and has identified three wetlands under their jurisdiction: wetlands H, H2, and HH. These wetlands are part of NYSDEC Wetland S-1, which includes a marshland and open water body. NYSDEC regulates these wetlands, including a 100 ft buffer around the boundaries of the wetland.

Figure 5: Delineated Wetland Map



The wetland map was submitted to the United States Army Corps of Engineers (USACOE) to identify which wetlands are in their jurisdiction. Of the 19 identified wetlands, 8 are identified as isolated or potentially non-jurisdictional and include Wetlands C, D, F, G, I, J, S, and R.

Habitat Assessment

North Country Ecological Services, Inc. (NCES) performed a biological assessment of the site over four consecutive seasons spanning from November 2022 through October 2023, which includes an ecological habitat assessment and an indigenous flora/fauna inventory.

The existing ecological communities were identified as follows:

Table 5: Existing Ecological Community Types

Ecological Community Type	Acres	Percentage (%)
Chestnut oak forest	115.02	18.45
Hemlock-northern hardwood forest	156.39	19.81
Successional northern hardwoods	150.37	17.90
Succession red cedar woodland	18.18	2.16
Successional old field	8.54	1.02
Mowed lawn with trees	9.51	1.13
Mowed field	2.25	0.27
Cropland/field crops	120.18	14.31
Appalachian oak-pine forest	105.85	12.60
Palustrine forested wetland	25.15	2.99
Vernal pool	7.09	0.84
Palustrine scrub-shrub wetland	0.96	0.11
Palustrine emergent wetland	39.18	4.66
Open water pond	21.38	2.55
Total	± 840 acres	100%

Source: North Country Ecological Services, Inc.

NCES evaluated flora and fauna on the site with an emphasis on the identification of endangered, threatened, and/or rare species, and the habitats which support them.

The results of the assessment revealed there are potential roost trees that provide suitable habitat for the Indiana Bat. The assessment also identified there is no suitable habitat for the bog turtle, there were no nests found for the bald eagle, and even though there were nests found for the Great Blue Heron, no Herons were observed on the site. No Northern Cricket Frog calls were observed.

There were no known endangered, threatened, and/or rare species observed on the site.

Economic and Fiscal Impact Analysis

Camoin Associates prepared an Economic and Fiscal Impact analysis to measure the economic contribution and municipal fiscal impact that a future large-scale mixed-use development will have in the Saugerties, New York Community. This report, Appendix D, provides an assessment of the total economic, employment, and fiscal impacts of the three development scenarios, AOR, SP, and RWCS.

All three scenarios are estimated to increase sales, earnings, jobs, and revenue in the Town of Saugerties. These increases are the result of new households, new jobs, and new visitors, which will be captured by the town on an annual basis. Additional temporary economic benefits will occur during the construction period.

Economic Impact

The cost of construction of the AOR, SP, and RWCS plans is estimated to be $273.9M, $457.5M, and $538.7M, respectively. Camoin Associates predicts that between 21% and 52% of the construction costs will be sourced from businesses within the Town of Saugerties depending on what is being constructed.

Table 6: Total Economic Impact

Construction-related Impacts	AOR	SP	RWCS
Construction Spending Captured in Saugerties	$62M	$173M	$205.3M
Job Creation	579	956	1,113
Earnings	$25M	$27M	$83M
Sales	$66M	$183.8M	$217.8M
Permanent Annual Impacts			
Job Creation	367	1,253	1,455
Earnings	$18.2M	$62.6M	$73.M
Sales	$59.8M	$202M	$231.4M

Fiscal Impact

Full build-out of the three scenarios will have a net positive annual fiscal impact on the Town of Saugerties of $0.62M for the AOR scenario, $1.9M for the SP, and $2.3M for the RWCS.

Table 7: Annual Fiscal Impact

	Current Zoning	Preferred	Worst Case
Net Annual Fiscal Impact to Town of Saugerties			
Total New Expenditures	$1,109,868	$885,764	$989,726
Total New Revenues	$1,729,536	$2,788,217	$3,279,410
Net Fiscal Impact	**$619,668**	**$1,902,453**	**$2,289,684**

Source: Camoin Associates

Property Tax Revenue

Full build-out in the PDD will generate recurring annual revenue for the Town of Saugerties (including the Police Department) in the form of new per capita revenue generated by new population, and property tax revenue. The property currently generates an estimated $24,396 in real property taxes (excluding school district taxes).

It is estimated that upon full build-out, the proposed project will be assessed at nearly $274M for the AOR, $457.5M for the SP, and $538.8M for the RWCS, annually. Based on 2024 property tax rates, it is projected that the scenarios will generate a total annual tax revenue for the Town, Police Department, Highway Department, Fire District, Emergency Services and Library as follows:

Table 8: Total New Revenues for the Town of Saugerties

	Current Zoning	Preferred	Worst Case
Town + Town Outside, incl. Police Dept.	$899,524	$1,401,211	$1,645,434
Highway	$372,401	$622,771	$733,656
Fire District	$217,875	$364,565	$429,532
Emergency Medical Services	$134,171	$224,505	$264,513
Library	$105,566	$175,164	$206,275
Total New Revenues	**$1,729,536**	**$2,788,217**	**$3,279,410**

Source: Camoin Associates

Saugerties Central School District Revenues

Camoin Associates calculated the impact of the scenarios on the Saugerties Central School District. Demographic multipliers and the number of planned new housing units were used to determine the expected number of new school-aged children under each scenario.

Assuming new school-age children will attend Saugerties public schools, new expenses to the school district for the increase in the school-aged population and the total new revenue generated by each of the scenarios are provided in Table 9.

The AOR scenario is expected to generate annual net expenses for the Saugerties Central School District of $1.4 M. Under the SP and RWCS, revenues outpace expenses, generating net revenues of almost $3.5M for the SP, and over $4.3M for the RWCS, respectively.

Table 9: Total Net Revenues to the Saugerties Central School District

	Current	Preferred	Worst Case
Total New Expenses	$5,144,881	$2,756,548	$2,983,237
Total New Revenue	$3,725,456	$6,230,130	$7,339,411
Net Fiscal Impact	**($1,419,425)**	**$3,473,582**	**$4,356,174**

Source: Camoin Associates

Preliminary Geotechnical Report

A preliminary geotechnical investigation was performed on Winston Farm to recommend approaches to the grading work and design of foundation systems to support a wide range of structures presumed to be constructed on the project site. Test pits and visual observation of the project site have informed the recommendation of the geotechnical report.

The results of the report revealed the following:

- Light wood-framed buildings can be supported on reinforced concrete foundations on existing virgin soils or on controlled fill which rests on the original soils. No special foundation systems are required.

- Structures with moderate or heavy loads will require a subsurface investigation based on individual development circumstances. The design loads, settlement

tolerances, and local soil conditions will determine the type of foundation required. Most or all of the structures can likely be supported on spread footing foundations given normal settlement tolerances.

- Heavy design loads or structures that will require deep fills may require deep foundations, monitoring of fill settlement, or stabilization of deep soft soils where buildings will be located.

- The soils on the site are relatively shallow with perched groundwater tables, making frost heave and thaw a major consideration for proposed roadways. Roadway design should factor in foundation and drainage systems to limit damage due to frost action.

Soil Investigation

Given the history of agricultural use of the project site, it is standard practice to assess the soil for the presence of residual pesticides, including arsenic, lead, and mercury, which are commonly found in pesticides. Future development may disturb the soil or result in direct contact with soil in residential yards, therefore a screening level soil sampling investigation was performed.

The soil samples were submitted for laboratory analysis. The data was reviewed, tabulated, and compared to state standards. In summary:

- No pesticide concentrations were detected that were greater than the standards.

- Arsenic levels across the site are slightly greater than background levels. Arsenic is a naturally occurring element commonly present in soil at and in exceedance of background concentrations in the region.

- A lead concentration was reported in soil sample WF-NW (6-8 in depth) from the northwest agricultural field (former orchard) that slightly exceeds standards.

- A mercury concentration was reported in soil sample WF-N Cent (6-8 in depth) from the north-central agricultural field that slightly exceeds standards.

Table 10: Laboratory Results of Soil Samples

Sample Location	Pesticide	Arsenic (ppm)	Lead (ppm)	Mercury (ppm)
WF-Back (0-2in)	ND	**16.7**	40.1	0.0991
WF-Scent (0-2in)	ND	**21.4**	34.8	0.0833
WF-Scent (6-8in)	ND	**22.2**	35.4	0.0797
WF-SW (0-2in)	ND	**22.3**	47.4	0.1180
WF-SW (6-8in)	ND	**33.9**	45.7	0.0881
WF-Cent (0-2in)	ND	**18.7**	37.8	0.0674
WF-Cent (6-8in)	ND	**29.6**	48.0	0.0600
WF-NW (0-2in)	ND	**27.7**	29.4	0.0598
WF-NW (6-8in)	ND	**23.1**	**67.6**	0.0619
WF-NCent (0-2in)	ND	**20.4**	38.5	0.0659
WF-NCent (6-8in)	ND	**21.9**	37.9	**0.2120**
WF-NE (0-2in)	ND	**19.1**	40.8	0.0545
WF-NE (6-8in)	ND	**24.4**	45.0	0.0556

Values and sample results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)
ND = Not detected
Bold = exceeds standards

These concentrations are not anticipated to require remediation for current uses on the project site. Development which includes residential uses will require a soil cover program (pavement, building, or two feet of clean soil) to prevent direct contact with these soils. If the soil is disposed of off-site, it will be considered solid waste requiring proper disposal.

Noise, Light, Odor and Air Emissions

Noise

Existing ambient sound levels recorded at the site were between 49 dB and 56 dB. Acoustical modeling software was used to model the expected site sound emission increases of future development.

The increase in traffic from future development will be the primary noise source and will slightly increase existing sound levels in the area. Noise from HVAC sources associated with future development will be a subtle contributor in the area. Based on NYSDEC guidelines, noise generated via concerts or other large gatherings on the project site is deemed to not result in objectionable negative acoustical impacts on the surrounding area.

For each of the AOR, SP, and RWCS scenarios, the model predicts increases in dB ranging from 0 to a maximum of 6 dB. The highest dB levels will be along Route 32 near the entrance to the project site and the exit ramp from I-87. The AOR anticipates an increase of 3 dB for a total of 59 dB, the SP anticipates an increase of 5 dB for a total of 61 dB, and the RWCS anticipates an increase of 5 dB for a total of 61 dB. The largest increase of 6 dB, from 49 to 55 dB will be near the northeast corner of the project site.

The increase in sound emissions will occur gradually over time as full build-out is reached. The anticipated sound emissions generated from future development will increase no more than 6 dB over current ambient levels. The maximum sound level of 61 dB at the driveway entrance on Route 32 will not exceed 70 dB, in accordance with the Town of Saugerties and NYSDEC policies.

Light Emissions

The site currently has residential lighting from the two occupied buildings; the caretaker's residence, and the Red Cottage (vacation rental), both of which are occupied year-round.

Once future development commences, it is anticipated that all lighting will follow the Outdoor Lighting Guidelines set by the Ulster County Planning Board enacted in September of 2000. This guidance requires all lighting to minimize light spill outside of the intended area and to be dark sky compliant.

To mitigate potential lighting impacts on adjacent neighborhoods, existing vegetation along the property boundaries at the north and west will be maintained with a 125' buffer. This will act as a natural buffer between any light generated by the future project and nearby properties.

Odor

There are no objectional odors produced on the site or in the immediate area, which are predominantly rural residential properties.

Air Quality

The latest version of the USEPA AERSCREEN program was used to estimate existing ambient air pollutant concentrations within 2 miles of Winston Farm. The largest contributor to air pollutants in the vicinity of Winston Farm is traffic traveling along NYS

Routes 32 and 212. The model was also used to estimate operational emissions from nearby buildings that may have natural gas HVAC systems.

The results of the model indicated there are no pollutants that exceed state standards. Without the knowledge of future uses at Winston Farm, their placement on the site, or the types and sizes of building systems that may contribute to air quality, an accurate evaluation of future impacts associated with full built-out is unattainable.

Climate Change

Greenhouse gases (GHG), such as carbon dioxide (CO2), methane (CH4) and nitrous oxide (N20), are released during the combustion of fossil fuels, such as coal, oil, and natural gas, to produce electricity. Total GHG is measured in metric tons of carbon dioxide equivalent (MTCO2e), which is representative of all GHG emissions.

The Town of Saugerties Community Greenhouse Gas Inventory (2010) identifies that the total GHG emissions for the Town is 267,287 MTCO2e. (Refer to appendix J for climate change analysis) Traffic accounted for the largest portion of the GHG emissions at 45%. The residential sector is the second largest producer of GHG emissions at 19%. In summary:

- Total GHG emissions include construction-related impacts and the operational impacts upon full build-out of the PDD, such as heating, hot water, and electricity; off-site power generation; employees and residents commuting to and from the property; and waste generation.

- Each of the three development scenarios anticipates that most buildings will operate entirely on electric power, with only commercial hospitality functions potentially incorporating gas usage. Therefore, there will be very little anticipated combustion of natural gas on-site for heating.

- The AOR plan is projected to emit a total of 3,444 MTCO2e annually, 100% from indirect sources (the burning of fossil fuels). The SP plan is projected to emit 6,526 MTCO2e annually, 94.4% from indirect sources. The RWCS plan is projected to emit 8,032 MTCO2e annually, 94.5% from indirect sources.

- Full build-out will take years to complete. The emission projections will be relatively high as they were derived from current power-generating infrastructure, technology, and average vehicle emissions. It is reasonable to assume that as vehicle technology and building systems improve and renewable energy use expands, indirect emissions will be reduced through better emission controls.

- New York State has an emission rate of 344.85 million MTCO2e annually, which means full build-out of the PDD will increase GHG by 0.002% for the RWCS. This increase represents a 3% increase in annual GHG emissions in the Town of Saugerties.

Solid Waste

Municipal solid waste is defined as materials discarded by residential, commercial, and institutional users. Ulster County is served by the Ulster County Resource Recovery Agency's (UCRRA) Kingston transfer station. UCRRA is obligated by law to accept all solid waste generated in Ulster County and dispose of it properly. According to the UCRRA website, there is a ten-year Solid Waste Management Plan to enhance and optimize capacity, existing programs, and recycling.

Recycling is mandatory in Ulster County. All multifamily dwellings, commercial businesses, and industrial facilities are required to separate recyclable materials from food waste and other solid waste.

A licensed waste hauler with experience providing waste and recycling removal for large mixed-use sites will be sought to serve new uses in the PDD.

The combined total of solid waste generated by future residential and non-residential uses for each of the development scenarios at full build-out is: AOR Plan, 2,122 tons/year; SP Plan, 3,742 tons/year; and RWCS, 4,445 tons/year.

Agricultural Resources

A small portion on the southern side of the site along Route 212 is identified as agricultural lands by the New York State Department of Agriculture and Markets, identified as Ulster County Agricultural District #4.

Agricultural uses will be allowable under the proposed zoning regulations. Subarea 1 Residential Low Density and Subarea 2 Residential High Density will permit agricultural uses including community gardens, agrihood, and agritourism. Subarea 3 Perimeter Commercial and Subarea 5 High Tech Commercial will permit agricultural uses and agricultural technology. Subarea 4 Central Recreation will permit agricultural uses including agrihood and agritourism.

Historic, Archaeological, and Cultural Resources

A Phase 1A Cultural Resource Investigation performed by Atlas Archeology LLC identified 26 historic archaeological ruins/mills/extraction sites (quarries), 4 historic structures, a

cemetery, and 14 known pre-contact Native American archaeological sites on the 840-acre Winston Farm property.

There are a total of 31 Native American precontact sites located within one mile of the survey area, 14 of which are within the project site survey area. There is a high likelihood that additional precontact sites will be discovered near the various streams and wetlands contained in the survey area.

Upon acceptance of the Phase 1A Archaeological Study, SHPO confirmed that a Phase 1B shovel test will need to be performed once site-specific development has been identified. A qualified firm will perform shovel testing consisting of the layout of a one-meter square grid where the soil is excavated and screened. Any culturally or historically sensitive items are recovered, cataloged, and studied. A completed Phase 1B report is required to be submitted to SHPO for review and acceptance prior to project approval and commencement of development activities.

Aesthetic Resources

The placement of buildings and roads will respect the topography and natural resources on the site. Ample setbacks will be maintained along the perimeter of the PDD, and existing and new landscaping and open space areas will preserve the rural appearance of the site and surrounding area while minimizing visibility from Route 32 and I-87.

Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.

The visual study determined that future development will be visible from Route 32, Route 212, and Augusta Savage Road at Route 32. In addition, future development will be visible from the existing structures on or adjacent to Winston Farm, such as the Winston Mansion, the Red House, and the Wynkoop Farm Tavern. Quality design, ample setbacks, and strategic placement of buildings and uses will minimize visual impacts.

The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements by establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience.

Open Space and Recreation

The Winston Farm site has been a source of local recreation, most notably the site of the Woodstock 1994 festival which hosted an estimated 350,000 attendees, and a small section of hill on the west side of the property is frequently used for sledding.

The Town of Saugerties Open Space Plan developed a vision for the Winston Farm, which included basic guidelines for use and development:

- Be environmentally sound with a focus on energy self-sufficiency
- Generate tax revenue for local government and schools
- Be historically sensitive (significant buildings and landscapes)
- Preserve at least 50% of the total site as open space

Winston Farm is ± 840 acres. The current contiguous open space is approximately 810 acres. The remaining ± 30 acres are the existing developed areas. The open space and recreation impacts associated with each of the three development scenarios upon full build-out will result in the following:

Table 11: Percent of Open Space to Remain

Scenario	Open Space Removed (Acres)	Open Space Remaining (Acres)	Open Space Remaining (%)
AOR	429	381	47.0%
SP	227	583	71.9%
RWCS	232	578	71.3%

Gas, Electric, and Sewer

Both natural gas and electric systems presently have available capacity that can be assigned to the project site. An in-depth capacity study is required to quantify the current availability and allocate services to the site. This in-depth study will be completed when site-specific development plans have been completed.

The existing Village of Saugerties wastewater system does not have enough capacity and is not close enough in proximity to the project site. Due to the conveyance and capacity challenges within the municipal collection and treatment systems, an on-site treatment modular wastewater treatment plant approach is being proposed.

Land Use, Zoning and Community Character

The project site is in the GB (General Business), MDR (Moderate Density Residential), and RH (Residential Hamlet) zoning districts.

The GB District permits retail services, shopping centers, offices, commercial uses, and high-density residential development. The MDR District permits one and two-family residential structures, agricultural uses, and small-scale convenience businesses designed to serve the residential population. The RH encourages mixed uses providing high-density residential housing, local employment, limited small-scale retail goods and services, education and other public and private facilities.

The project site is also subject to three overlay districts: Aquifer Protection Overlay (APO), Gateway Overlay (GO), and Sensitive Area Overlay (SAO). Overlay districts impose additional standards upon development which supplement the regulations of the underlying district.

The predominant land uses in the immediate vicinity of the project site consist of mostly vacant land and scattered residential uses. Commercial use immediately to the east of the site includes the Holiday Inn Hotel, a storage facility, and several commercial services beneficial to nearby residents. Commercial uses continue northward along Route 32.

The Winston Farm site is specifically mentioned in the Town and Village Comprehensive Plan. The Plan encourages environmentally sound development and describes Winston Farm as significant to the community based on its size and location near state and regional highways. The Plan describes the amendment of the zoning law to the Planned Development District (PDD) to support a mixture of uses.

The rezoning will change the zoning classification of the subject property to the Winston Farm Planned Development District. The Project Sponsor intends to comply with the Town of Saugerties Zoning Law relating to the established overlay districts.
The PDD includes a development concept plan and implementing regulations (PDD regulations) to guide future development. The regulations propose a range of potential uses including, but not limited to low- to high-density residential, retail sales and consumer service; office space; high-tech and research opportunities; makerspace and artisanal creative spaces; agri-manufacturing and research; hospitality; and indoor and outdoor entertainment and recreational opportunities, as well as a mix of related uses.

The proposed PDD regulations envision a vibrant mix of complementary building styles of varying heights and sizes, indoor and outdoor rooms, and spaces for active and passive recreation, entertainment, and social gatherings. The development in the district will incorporate design standards and guidance, creating a flexible regulatory environment that is adaptable to changing market conditions and furthers the purpose and intent of the district.

The goals and objectives of the PDD and the permitted uses are similar to the existing zoning classifications, except that the PDD allow for flexibility of buildings and uses, in a way that respects the natural environment, and the value is provided to the community.

Future site-specific development is subject to the State Environmental Quality Review Act (SEQRA), the review and approval procedures of the adopted Winston Farm PDD regulations, and the review and approval by the respective local, state, and federal agencies, including site plan review and special permit procedures of the Town of Saugerties Zoning Law, to name a few.

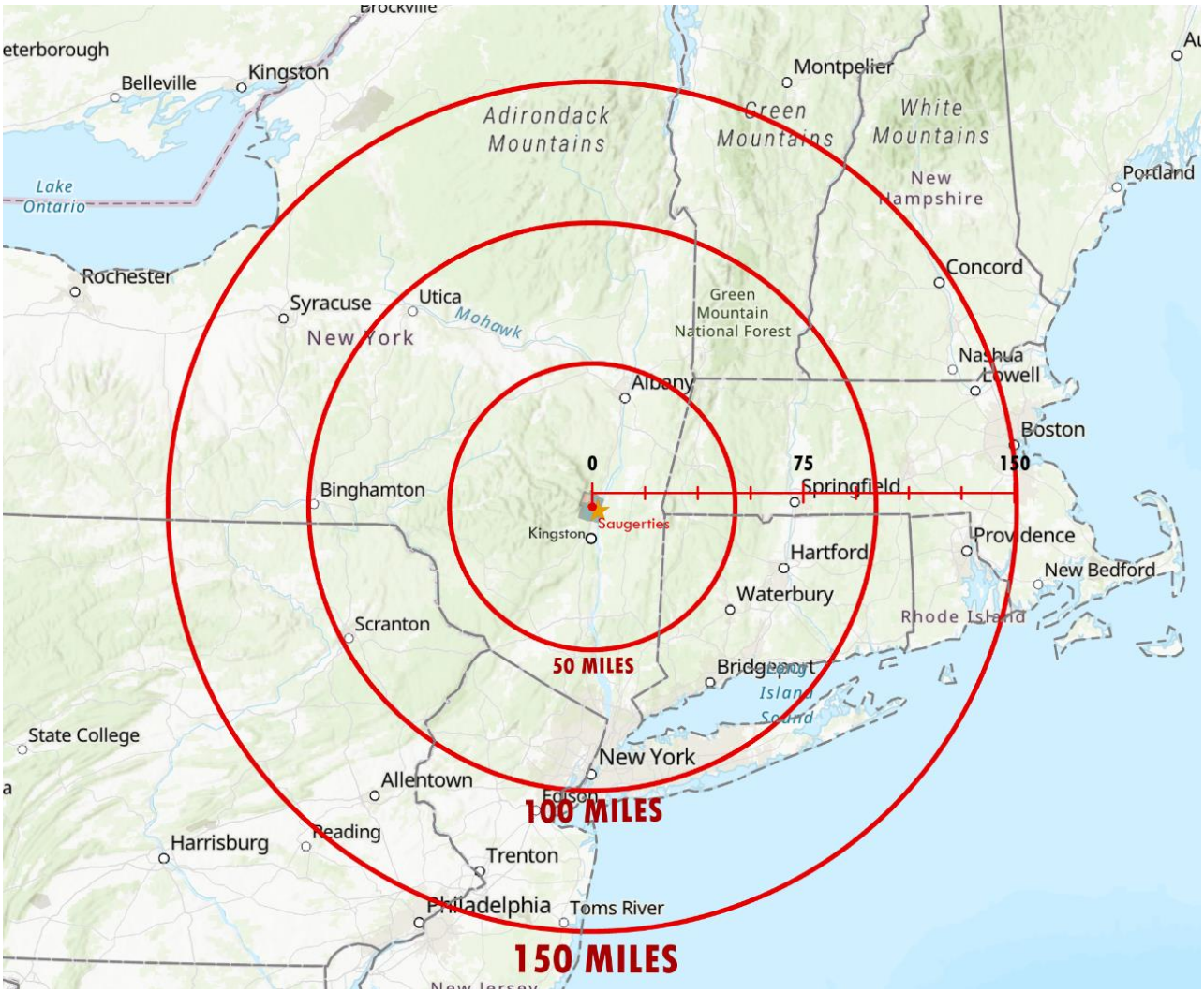
3.0 Description of the Proposed Action

Site Location

The Town of Saugerties, Ulster County, is located in the Hudson Valley Region of New York State. It is located in northern Ulster County on the western shore of the Hudson River, nestled in the foothills of the Catskill Mountains.

The Town of Saugerties is a 20-minute drive to the City of Kingston and a 2-hour drive to New York City to the south; a 45-minute drive to the City of Albany and the Capital Region to the north; a 20-minute drive to Woodstock to the west; and a 3-hour drive to Boston, MA to the east. The Village of Saugerties is within the town's borders along its eastern edge.

Figure 6: Regional Map



The subject properties are located near the northwest corner of New York State (NYS) Route 32 and NYS Route 212 (Saugerties-Woodstock Road) near Exit 20 of NYS Thruway Interstate 87 (I-87). The properties, known locally as Winston Farm, include eleven contiguous land parcels totaling ± 840 acres; Section-Block-Lot (SBL) 17.2-3-10; 17.2-3-15; 17.2-4-32; 17.2-5-38; 17.2-5-39-120; 17.2-5-40; 17.2-5-41;17.15-3-4; 17.15-3-8; 17.16-1-1-110 and 17.16-1-36. The properties are collectively referred to in this document as the "project site" or "Winston Farm."

Figure 7: Site Map

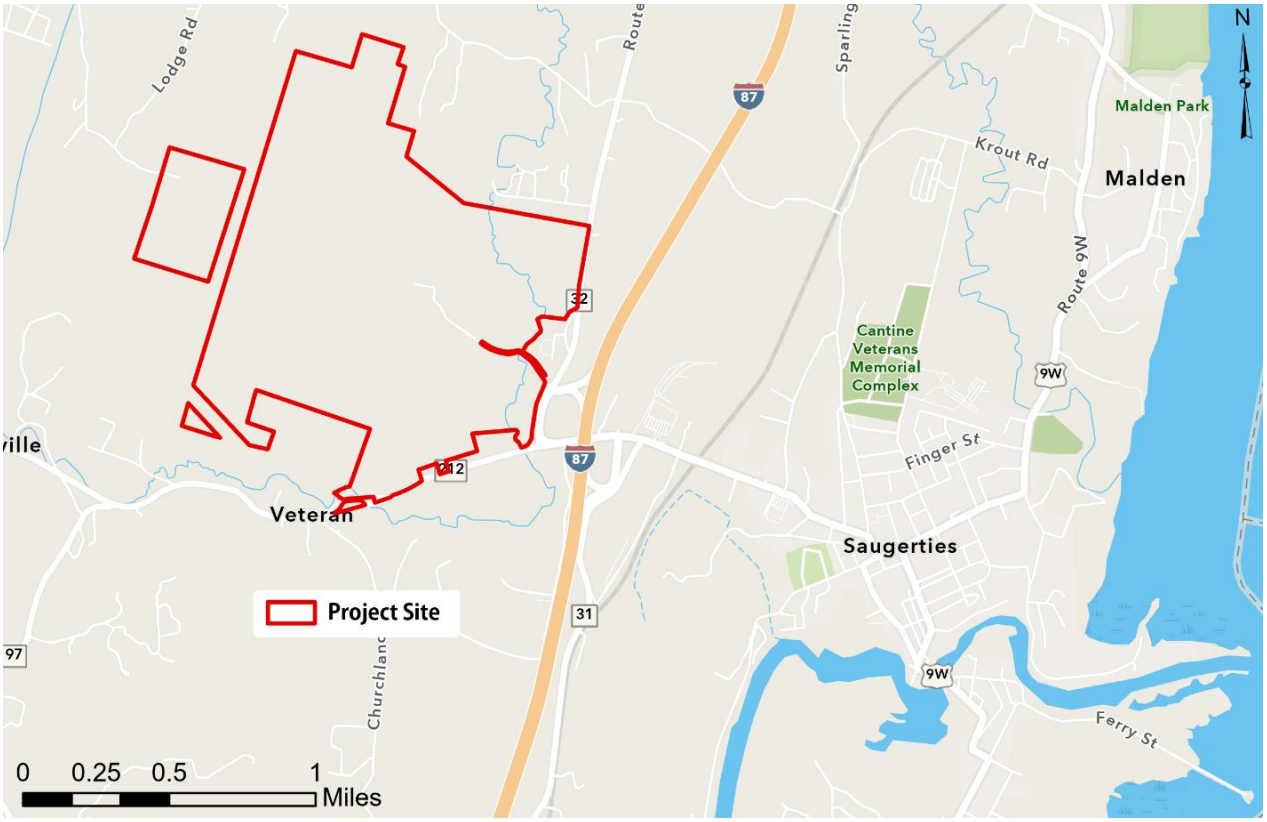
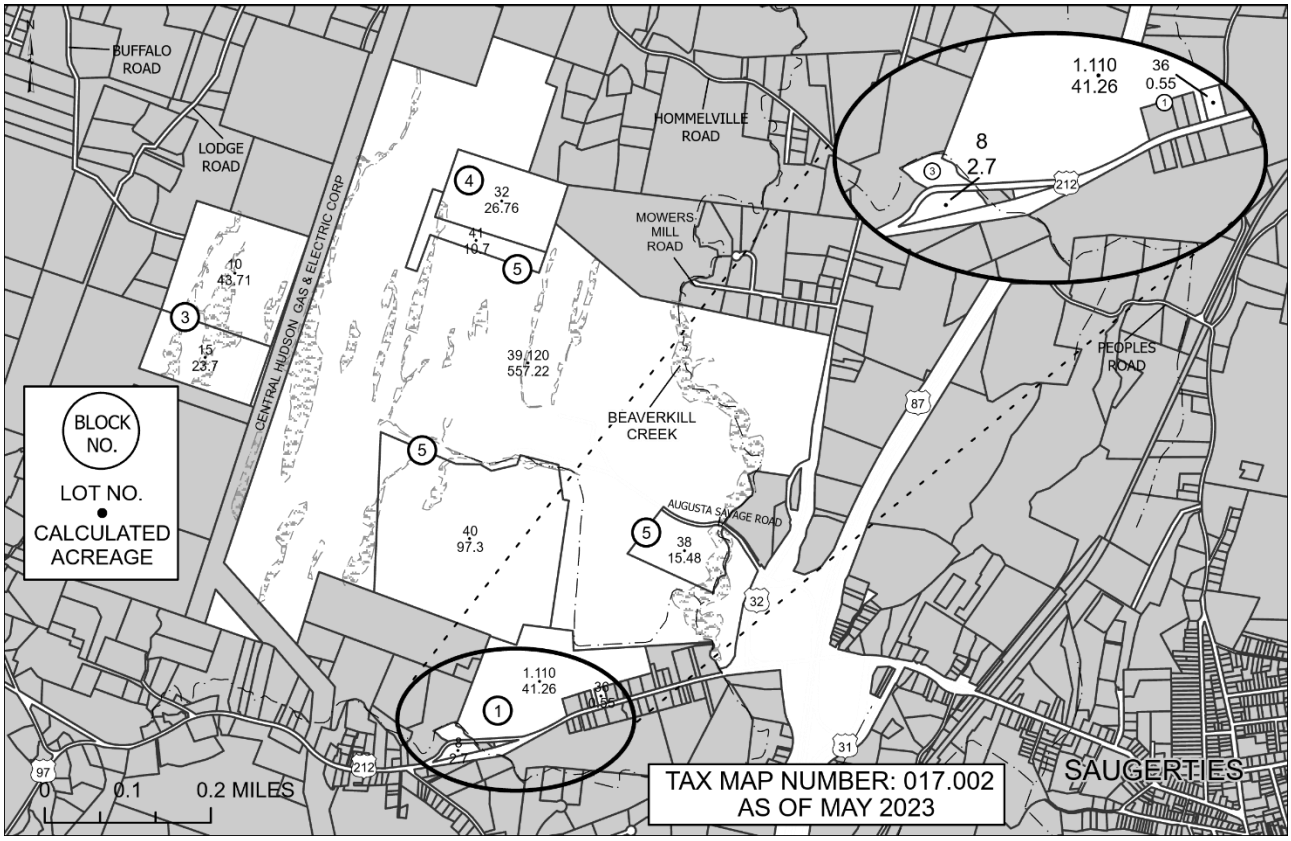


Figure 8: Tax Map



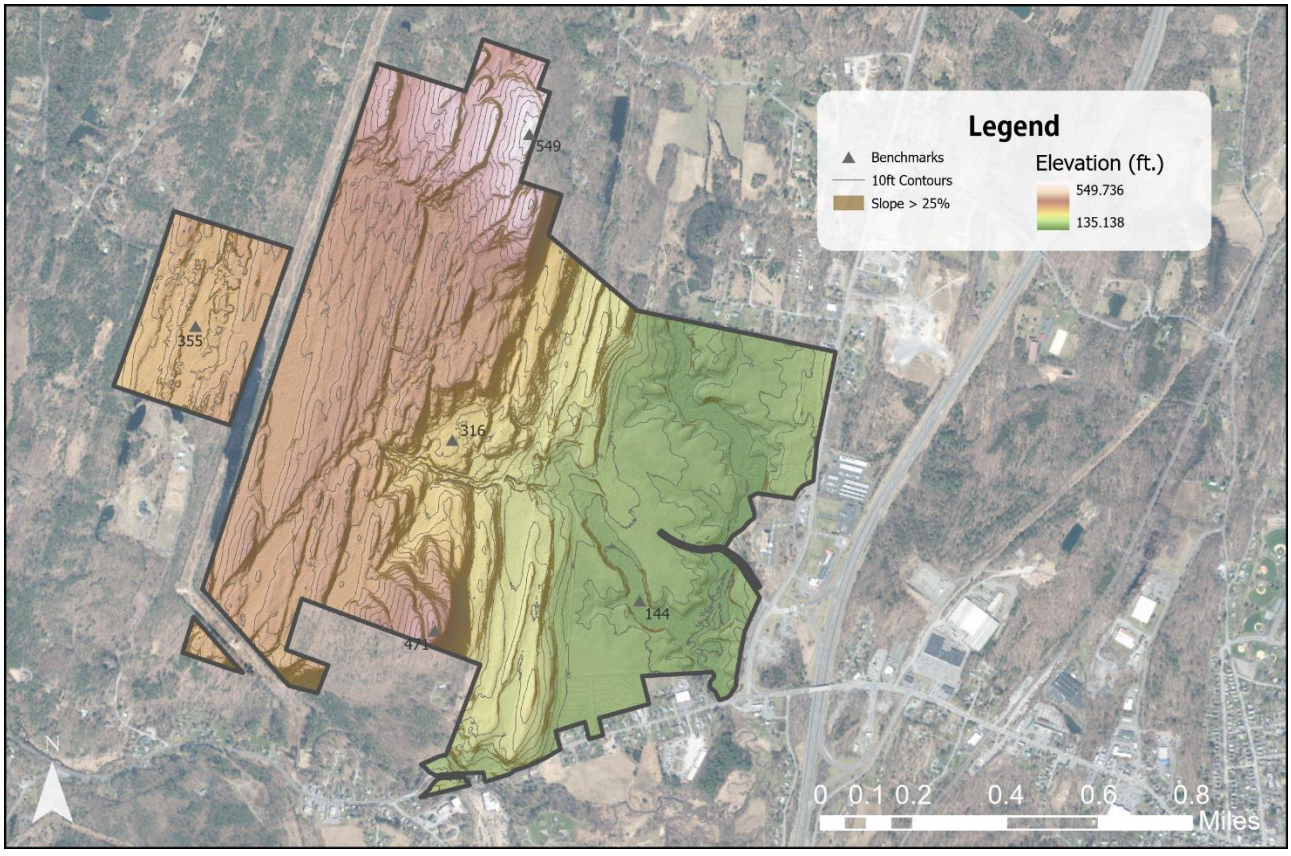
The western portion of the project site is ± 500 acres, heavily wooded, and not readily accessible. The eastern ± 300 acres of the farm parcels are primarily open fields that are farmed for hay and livestock. Access to the eastern portion of Winston Farm is primarily provided via Augusta Savage Road, which begins at Route 32 and ends where the road begins its uphill climb into the western portion of the project site. All internal roads and parking areas are dirt and gravel. Access to the western portion of Winston Farm is provided via Buffalo Road which is paved until it transitions to dirt and gravel.

Along most of its eastern boundary is the Beaver Kill, a small stream that flows north into the Kaaterskill Creek and eventually into the Hudson River in Catskill, NY. The project site is bordered on the east by Route 32, a Holiday Inn, and the Wynkoop House, a National Register listed property. To the south, the property is bordered by several houses along Route 212, including the Snyder Farm, a National Register listed farm complex. To the west, the property is partially bordered and bisected by a Central Hudson Gas and Electric right-of-way easement. A rectangular combined parcel of ± 69 acres is on the west side of the Central Hudson right-of-way easement. To the north, the project site is bordered by the

backyards of houses fronting on Mower Mill Road and other parcels that front on Hommelville Road, which is further to the north.

The Winston Farm parcels straddle the drainage divide formed by a series of tiered ridges generally running from north to south and beginning in the approximate center of the site and increasing in elevation from east to west with most of the site draining east toward the Beaver Kill, and a portion beyond the highest ridge elevations draining west, toward unnamed tributaries to the Beaver Kill. The ridge has steep slopes greater than 25% in some areas; identified in brown on Figure 9 Elevation Map. Properties along NYS Route 212 and 32 are relatively flat. The project site ranges in elevation from 150 feet above mean sea level (amsl) to approximately 450 feet amsl.

Figure 9: Elevation Map



There is an existing 30’ wide sewer and water easement to Saugerties NYHospitality LLC (Holiday Inn Express) along the west side of Route 32 between Route 212 and Augusta Savage Road. There are no other existing easements on the project site.

The site is situated in an area of glacial till and glaciofluvial deposits with bedrock relatively shallow in some areas. The bedrock is identified as the Normanskill Formation, which

includes shale, argillite, and siltstone. The eastern part of the site has grass and weed vegetation with patches of brush and trees. The current use of the lowland portions of the property is mainly as livestock farming land. The western portion of the site is primarily forested land and has extensive areas with shallow bedrock and areas where rock outcroppings predominate.

There are 19 wetlands and 4 watercourses located throughout the property with the main watercourse, the Beaver Kill, located in Flood Zone A in the eastern portion. NYSDEC has identified three wetlands under their jurisdiction in the western portion of the site. These wetlands include a 100 ft buffer around the boundaries of the wetland. Of the 19 identified wetlands, 8 are identified as isolated or potentially non-jurisdictional in accordance with USACOE regulations. These wetlands are located in the central and west portions of the site.

There is abundant flora and fauna on the site, none of which are threatened, endangered, and/or rare in accordance with State and Federal regulations.

Existing Structures on the Project Site

There are several structures or remnants of structures on the site, including the caretaker's residence, the Red Cottage (vacation rental) which is occupied year-round, an abandoned mansion, the remains of a former barn and other outbuildings, and a small family cemetery.

Figure 10: Existing Structures

Caretaker's Residence

Red Cottage

Winston Mansion

White Cottage at 148 Old Route 212

Other Structures on the Project Site

Existing Zoning Districts

The portion of the project site fronting along Route 32 is currently zoned General Business (GB) while parcels internal to the site are zoned Moderate Density Residential (MDR). Two parcels fronting Old Route 212 are within the Residential Hamlet (RH) district. Most of the site is overlaid by the Aquifer Protection Overlay (APO), the Gateway Overlay (GO), and Sensitive Area Overlay (SAO) districts.

Figure 11: Existing Zoning Map

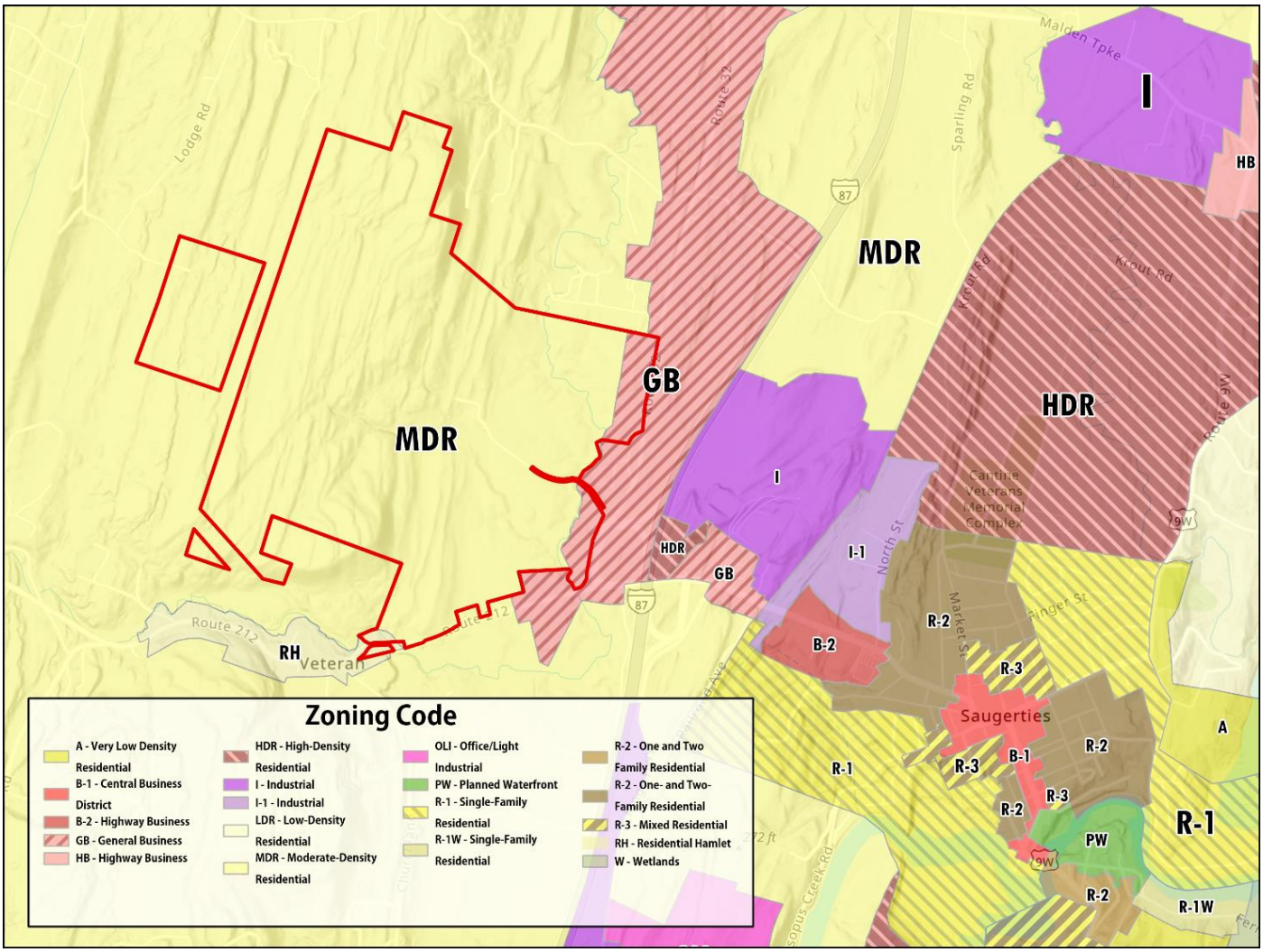
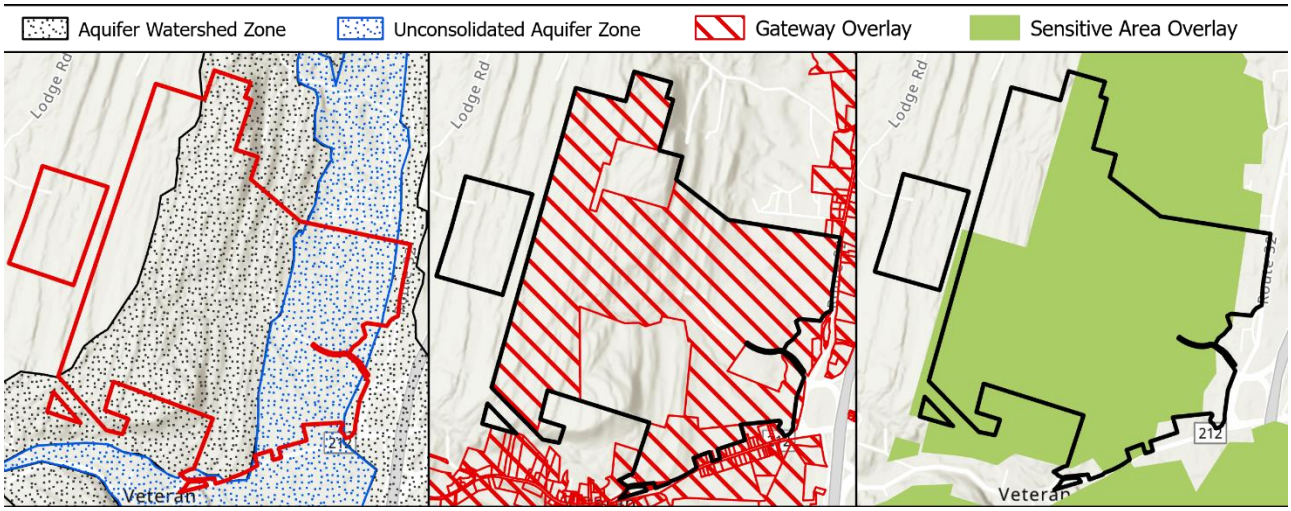


Figure 12: Existing and Proposed Zoning Overlay Districts



The GB, MDR, and RH districts are underlying zoning districts that establish the permissible uses in the districts. The GB District is characterized by retail services, shopping centers, offices, and commercial properties adjacent to Route 32. The GB District also permits high-density residential development. Adjacent to the project site in the GB district is a Holiday Inn, a cycle shop, and a storage facility. The GB district extends across Route 32 to the east to I-87. To the east of I-87 is an Industrial District with a horse stable and several manufacturing properties. The MDR District is characterized by one or two-family residential, agricultural uses, and small-scale convenience businesses designed to serve the residential population.

The APO, GO, and SAO are overlay districts that impose additional standards for development within the underlying district. The Town's overlay districts are intended to preserve, protect, and enhance the aquifer and groundwater quality, topography, wetlands, flood zones, agricultural districts, important viewsheds, historic resources, and aesthetics including building and site design that are consistent with community character. It is the Project Sponsors' intent to comply with the zoning law relating to the established overlay districts. Refer to Section 6.13 for additional information regarding the existing zoning classifications.

History of the Site

In the early part of the 20th century, the project site was developed by James O. Winston as a livestock farm breeding Guernsey cows and training harness racehorses. Winston was a civil engineer and contractor who oversaw the construction of the Ashokan Dam. He amassed more than 1000 acres in Saugerties and built a world-class farming operation. Winston Farm includes a blue stone mansion, two residential structures, a small model of the Ashokan reservoir and spillway, foundation remnants of former barns and outbuildings, and an abandoned family cemetery. Winston died in 1947, and by the 1950s uncertainty and neglect ensued for the Winston Farm property. The Schaller family purchased the property in 1961 and owned it until 2020 when it was purchased by the Project Sponsor.

Winston Farm is considered one of the most highly desirable properties in the Hudson Valley due to its history, scale, topography, scenic views, and proximity to I-87. During the Schaller family tenure, there were several proposals to develop the land, including a community college, a casino, a landfill/incinerator (1987), and a High Tech Park (2009), none of which have come to fruition. The most familiar use of the land is the 25th anniversary of the Woodstock Music Festival held in August 1994 to commemorate the original Woodstock Festival in 1969, held in Bethel, Sullivan County, 70 miles away.

The Hudson Valley Economic Development Corporation commissioned a report in 2009 titled “Winston Farm High Technology Feasibility Study & Master Plan.”[2] This report is a culmination of formal and informal studies that provide regional context, land use, and zoning facts, and identifies transportation, utility, and environmental features of the project site and surrounding area. This report establishes a baseline for the preparation of this DGEIS. Regardless that the 2009 report was conducted nearly two decades ago, the existing natural resources, transportation network, and utility infrastructure are relatively the same today. The studies and reports reviewed and commissioned for the preparation of this DGEIS will guide achievable development patterns while preserving the rich history of Winston Farm.

A Draft Environment Impact Statement (DEIS) was prepared for the landfill project in the late 1980s. The hydrogeological review for the project indicated that the soil profile (sand and gravel) may not be suitable for a landfill as it will not provide critical shear and lateral strength. Additionally, the use of the site as a solid waste facility will prohibit any future use of the valuable groundwater resource and may also potentially have detrimental effects on

[2] Winston Farm High Technology Feasibility Study Master Plan, IDC Architects, October 30, 2009

the recharge area and water quality. It is presumed that based on this information, a review of the landfill project did not proceed.

Other than the landfill project, there have been no other development applications or environmental impact statements prepared relative to the proposed development opportunities of the site.

Required Permits and Approvals

Table 12: Required Permits and Approvals

Agency	Permit/Approval
Town of Saugerties Town Board	Easements and Agreements
Saugerties Water Department	Water Connections
Town of Saugerties Planning Board	Site Plan Review
Town of Saugerties Building Department	Building Permits/Certificates of Occupancy
Town of Saugerties Engineering Department	MS4 SWPPP
Ulster County Department of Public Works	Work Permit
Ulster County Department of Sewage Management	Sewer Connections
Ulster County Planning Department (Referral)	GML 239-l, -m and -n
Ulster County Health Department	Water and Sewer
New York State Department of Environmental Conservation	SPDES Permit
New York State Department of Environmental Conservation	Wetland Delineation
New York State Department of Health	Water Supply/Treatment Improvements
New York State Department of Transportation	Work Permit
New York State Thruway Authority	Work Permit
US Army Corp of Engineers	Wetland Jurisdictional Determination & 404 Permit Review
Central Hudson Gas & Electric	Electric Service Connections
Central Hudson Gas & Electric	Gas Service Connections

Involved Agencies

Town of Saugerties Town Board
Town of Saugerties Planning Board
US Army Corp of Engineers (USACE)
Ulster County Department of Public Works
Ulster County Department of Sewage Management
Ulster County Highway Department (ECDOT)
Ulster County Health Department
New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Thruway Authority

Interested Agencies

Town of Saugerties Building Inspector
Town of Saugerties Assessor
Town of Saugerties Fire Department
Town of Saugerties Police Department
Town of Saugerties Environmental Conservation Commission
Town of Saugerties Rescue Squad
Town of Saugerties Central School District
New York State Office of Parks, Recreation, and Historic Preservation
Ulster County Planning Department
Ulster County Executive
Ulster County Department of Public Works
Ulster County Area Transit (UCAT)
US Department of Environmental Protection Fish and Wildlife Service
Others as Identified by the Town of Saugerties Town Board & Planning Board

Project Horizon and Anticipated Milestones

Upon adoption of the PDD, it is anticipated that the site will be marketed for development opportunities. Currently, there are no timeline or milestones for the installation of infrastructure or development.

4.0 SEQRA Process to Date

In accordance with SEQRA, the Project Sponsor's submittal of a Zoning Petition and Zoning Amendment Application to the Town of Saugerties on September 3, 2021, included a Part 1 Full Environmental Assessment Form (FEAF). The FEAF briefly describes the proposed zoning change of ± 840 acres of the land from General Business (GB), Moderate Density Residential (MDR), and (HR) Hamlet Residential to a Planned Development District (PDD). Refer to Appendix Q for SEQRA documentation.

The Town of Saugerties Town Board classified this project as a Type 1 Action for the purposes of environmental review based on a determination that the Project will involve the rezoning of approximately 840 acres of land; the Project occurs within a local municipality with a population under 150,000 persons and involves the construction of more than 200 residential units to be connected to existing community or public water and sewerage systems including sewage treatment works; and, the action includes a nonagricultural use occurring wholly or partially within an agricultural district (certified pursuant to Agriculture and Markets Law, Article 25-AA, sections 303 and 304). These thresholds for a Type 1 Action are set forth in 6 NYCRR Part 617.4(b). The SEQRA regulations require the Lead Agency to conduct a coordinated environmental review for all Type 1 Actions. On September 15, 2021, the Town of Saugerties Town Board initiated a coordinated review of the proposed action to request Lead Agency designation and to solicit comments from all involved and interested Agencies.

On October 6, 2021, the Town of Saugerties Town Board (Town Board) issued a Notice of Intent (NOI) to Establish Lead Agency for the action. The NOI, along with the application and Part 1 Environmental Assessment Form were sent to all involved and interested agencies. There were no written objections received in the requisite thirty-day response time, and the Town Board was designated as the Lead Agency on January 10, 2022.

Amended Petitions were submitted on May 4, 2022, and June 8, 2022, to correct the number of parcels and acreage, and to submit a revised FEAF, dated June 7, 2021, which captures these corrections. Both petitions and their supporting documentation were presented to the Town Board for their consideration.

On July 13, 2022, the Town Board adopted a Positive Declaration and issued a NOI to prepare a Draft Generic Environmental Impact Statement and Lead Agency Determination of Significance. The Positive Declaration was transmitted to all involved and interested agencies on July 22, 2022, and it was posted in the July 27, 2022, New York State Department of Environmental Conservation (NYSDEC) Environmental Notice Bulletin (ENB). On August 17, 2022, the Town Board accepted a Draft Scoping Document. A

Notice of Availability of a Draft Scope and Public Scoping Session was posted in the August 31, 2022, ENB, including the date, time, and place of the Public Scoping Session on September 21, 2022, at 6:00 PM, with receipt of written comments accepted until October 1, 2022. The draft Scoping Document and Notice of Public Scoping Session were made available on the Town of Saugerties website at http://saugerties.ny.us/winstonfarm.

This DGEIS evaluates the potential adverse impacts associated with the proposed action, which includes the rezoning of the project site, known locally as Winston Farm, consisting of eleven contiguous predominantly vacant land parcels totaling 840 ± acres located at 119 Augusta Savage Road, NYS Route 212, Mower Hill Road and NYS Route 32, et al, as a Planned Development District (PDD). The project site is currently zoned General Business (GB), Moderate Density Residential (MDR), and Residential Hamlet (RH), and it is within the Gateway Overlay (GO), Aquifer Protection Overlay (APO), and Sensitive Area Overlay (SAO) districts.

The PDD includes a development concept plan and draft implementing regulations to guide future development. The draft regulations propose a range of potential uses including, but not limited to low- to high-density residential, retail sales and consumer service; office space; high-tech and research opportunities; makerspace and artisanal creative spaces; agri-manufacturing and research; hospitality; and indoor and outdoor entertainment and recreational opportunities, as well as a mix of related uses.

5.0 Project Purpose, Need, and Public Benefit

Benefits of a Planned Development District

The change in zoning to a Planned Development District (PDD) will position Winston Farm as a premier regional mixed-use destination venue for the Hudson Valley by permitting a wide range of diverse residential, nonresidential, agricultural, recreational, entertainment, hospitality uses, and a mix of complementary uses.

A PDD is a widely used land use tool that allows for flexibility of site development that is sensitive to the unique characteristics of the site. PDDs are often designed with a long-term horizon in mind taking into consideration the sustainable use of resources, environmental considerations, and the evolving needs of the community.

The PDD is a thoughtful land use planning and regulatory approach that will provide a range of benefits that contribute to the creation of a sustainable, vibrant, and well-balanced mixed-use neighborhood. The intent of the PPD is to welcome new residents and businesses and preserve and improve the quality of life, economic vitality, and opportunities for existing residents and businesses. The efficient use of land enhances the long-term viability and resilience of the district by:

- Integrating various land uses within a single development or building where traditional zoning typically is not as flexible. This is the most significant advantage of a PDD and can include a mix of residential, commercial, cultural, and recreational spaces, fostering a more vibrant and walkable community.

- The use of visual and physical features that unify district-wide pedestrian and vehicular elements, such as integrated and extensive landscaping, lighting, walkways, site amenities, trials, and wayfinding, which promotes access for all users.

- Promoting the sharing of infrastructure such as roads, utilities, and public services, which leads to cost savings and a more efficient and sustainable use of resources.

- Encouraging multi-modal transportation opportunities with a priority on pedestrian connectivity.

- Encouraging condensed building footprints or clustered buildings to preserve open space, wetlands, viewsheds, or other ecologically sensitive resources.

- Promoting public recreational opportunities, such as trails, outdoor rooms and gathering spaces, on-site entertainment and cultural events, use of the sledding hill, etc.

- Allowing for the nimble reaction to changes in market trends, which stimulates economic development, encourages innovation, and creates and supports employment opportunities.

Community Benefits

- Community engagement will continue as development proposals are presented to the Town for review. Community participation helps ensure development aligns with the needs and desires of the community which fosters a sense of ownership and pride.

- The mix of commercial and residential spaces often results in a diverse local economy that can withstand economic fluctuations more effectively.

- The nonresidential development in the PDD will generate tax revenue that will offset additional services needed to support the residential needs in the district.

The Winston Farm PDD aligns with the Town of Saugerties Zoning Law (2008), the Town and Village of Saugerties Comprehensive Plan (2021), and the Ulster County Open Space Plan (2007), as follows:

- The Town of Saugerties Zoning Law defines a planned development district as “a mixed-use development of land that is under unified control and is planned and developed as a whole in a single development operation or programmed series of development stages. The development may include streets, circulation ways, utilities, buildings, open spaces and other site features and improvements, uses and structures that exceed the permitted scale, density, or intensity of use in the district, as well as uses not otherwise allowed by the underlying zoning.” Article X of the zoning law provides the procedures for amendment to the regulations and provisions of Chapter 245 Zoning in the manner provided by Town Law.

- The Comprehensive Plan of the Town and Village of Saugerties, 2021 (“Plan”) is a synthesis of previous planning documents, supplemented by an analysis of the existing natural and built environments and current trends in land use, population, housing needs, and transportation. Winston Farm is specifically mentioned in Goal 6A of the Plan. It is described as significant to the community based on its size and

location near state and regional highways. To implement Goal 6A, the Plan describes the amendment of the zoning law to the Planned Development District (PDD) to support a mixture of uses.

- The Plan also includes goals to amend zoning, preserve open space, and increase diversity in the housing stock, as needed, to support and ensure consistency with the Plan goals and objectives.

- The Ulster County Open Space Plan is rooted in a long history of open space protection in the county. This plan focuses on preserving environmental resources and growing "smart." Priority growth areas are identified as areas where development potential is most feasible. The Town and Village of Saugerties is identified as a priority growth area, especially along Route 32.

Goals and Objectives of the PDD

The goal of the PDD is to prepare a well-informed planning and regulatory tool that guides future development, protects the public health, safety, and welfare of the existing community, and welcomes new residents, visitors, and businesses in a way that is respectful of available resources and the carrying capacity of the land. The PDD will preserve and protect the natural landscape and make these areas accessible to the public whether living, working, visiting, or engaged in indoor and outdoor activities in the district. The flexibility of the PDD will adapt to changing market conditions and trends to ensure development remains relevant, economically viable, and in accordance with the changing needs of the community.

The implementation of regulations of the PDD envisions a vibrant mix of complementary building styles of varying heights and sizes, indoor and outdoor rooms, and spaces for active and passive recreation, entertainment, and social gatherings. The PDD incorporates the following guiding principles:

- Ensure a high-quality mixed-use style development that promotes pedestrian access and connectivity, multimodal transportation opportunities, a variety of residential, retail, and commercial uses both large and small, resort, recreational and entertainment opportunities, and enhanced access to nearby uses.

- The use of visual and physical features that unify district-wide pedestrian and vehicular elements, such as integrated and extensive landscaping, lighting, walkways, site amenities, trials, and wayfinding, which promotes access for all users.

- Preserving and protecting the existing natural resources to promote sustainability and enhance the overall quality of life for the community.

The PDD will be divided into five unique but interrelated subareas, each with its own list of permitted uses, and design and development standards, as follows:

- Subarea 1: Residential Low Density (RLD). This subarea is approximately ± 271 acres and is located near the northwest corner of the PDD. The area will accommodate single-family development and estate homes with or without in-law and accessory apartments.

- Subarea 2: Residential High Density (RHD). This subarea is approximately ± 135 acres and is located along Saugerties-Woodstock Road. Development in this area will accommodate small-lot single-family homes, townhouses, and multi-family dwellings up to a maximum of 838 residential units. Balconies, rooftop decks, and other similar features are encouraged in this district.

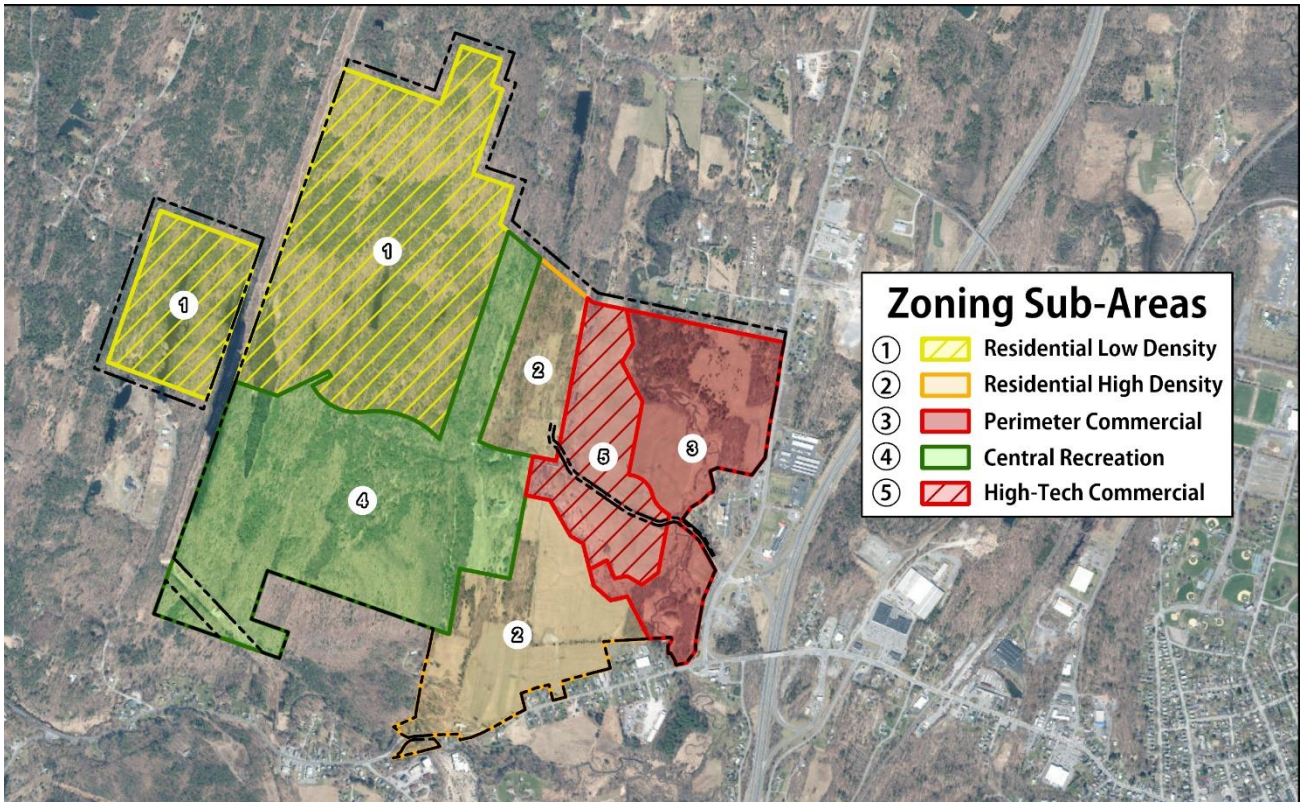
- Subarea 3: Perimeter Commercial (PC). This subarea is approximately ± 100 acres and accommodates and promotes the development of commercial uses along Route 32. This subarea will accommodate retail, hotels, resorts, indoor and outdoor entertainment facilities, and event spaces. This subarea includes the primary focal point and gateway into the district.

- Subarea 4: Central Recreation (CR). This subarea is approximately ± 236 acres and is designed to offer outdoor activities, such as but not limited to, campsites and cabins, mini-golf and driving ranges, ropes courses, trails, agrihood, community-centered activities, and programs, as well as a boutique hotel and spa, and the like.

- Subarea 5: High Tech Commercial (HTC). This subarea is approximately ± 68 acres and will promote the collection of buildings and spaces to inspire innovation, research and development, maker spaces, co-working, incubator space, and collaborative work environments that promote organic business development and emerging technologies.

The PDD will specify allowable uses, design guidelines, parking regulations, procedural requirements, and more, that are specific to the district. Refer to Appendix P for the Winston Farm Planned Development District regulations with redline changes since the original submission in June of 2021.

Figure 13: Winston Farm PDD – Subarea Map



Changes to the zoning law can bring about the potential for negative and positive changes or impacts. The goal is to carefully balance change so that impacts are reduced or eliminated to the extent practicable. Changes include the attraction of more people to the area, an increase in the potential for noise and traffic, changes in the character of the area, and impacts on natural and ecological resources. Change can also encourage and support new housing options, the retention and creation of new employment opportunities, places to visit and experience, and a huge financial boost to the local economy through short-term construction-related activities and the long-term operation of the site.

These impacts will be explored, and mitigation will be built into the PDD either directly or through reference to local laws. The PDD will incorporate appropriate design elements, amenities, or treatments to maintain and enhance the design relationships between buildings and uses within and beyond the district in order to maintain an ambiance that is unique, playful, and inviting.

Project Need

The American Planning Association (APA) website documents the benefits of new affordable housing and the percentage of the US population that is rent burdened. The APA estimates that the United States is short 4 million rental units. The APA has for the past decade placed an emphasis on policy priorities and government advocacy to place a spotlight on addressing barriers such as zoning regulations, land use policies, and lack of funding for housing programs. However, despite these efforts, the demand for affordable housing continues to outstrip the available supply, highlighting the need for sustained commitment and innovative solutions to ensure that housing remains accessible and affordable for all segments of society. In 2024, APA is focusing their advocacy on zoning reform to increase housing supply.

This national trend has been further chronicled within the Ulster County Housing Action Plan[3] (2021), and within the Town of Saugerties Housing Snapshot3 (2020), prepared by Hudson Valley Pattern for Progress. The following demographic and socioeconomic statistics are provided on page 14 of the Housing Action Plan:

- Ulster County's population is getting older. The median age in Ulster County increased from 41.2 in 2010 to 43.7 in 2018 and is expected to continue to increase over the next several years as the baby boomer generation ages. The housing implications of this are that in most Ulster localities, there is a need for more senior housing.

- Large and quickly growing employment sectors do not pay living wages. At the higher end, the Healthcare and Social Assistance sector, which as of 2018 made up 16.3% of county jobs, has an average salary of $43,258. At the lower end of wages, Accommodation and Food Services, which in 2018 accounted for 12.3% of jobs in Ulster County, offers an average wage of $22,288.

- Incomes are stagnant or declining for all but the highest earning households. The lowest earning households have seen the greatest decline in income between 2010 and 2018, with incomes down 14.3% (after adjusting for inflation).

- With dropping wages and the rising cost of living, the poverty rate in Ulster County has increased between 2010 and 2018 from 12.9% to 13.9%. In 2018, the poverty rate in the Town of Saugerties was 10.6% of the population.

[3] https://ulstercountyny.gov/planning/house-action

- A quarter of Ulster County's housing units were built over eighty years ago and nearly 60% built over 50 years ago. Older houses have a higher risk of containing lead-based paint, are in need of substantial structural repair, and replacement of major systems like heating or plumbing. In addition, the lack of insulation and lower quality windows result in higher heating and cooling costs.

- The population in the Town of Saugerties has decreased between 2010 and 2018 by 1.54%.

- Although the median household income increased 11% between 2010 and 2018, the median household spending power decreased by 3%.

- Housing costs are typically the largest part of a household budget. Approximately 13% of owners and 30% of renters in Ulster County spend more than half of their income on housing costs, an amount that makes them considered "severely cost burdened."

The housing choices offered in the PDD are needed to address the changing needs of the community, and to provide new modern, safe housing options.

Goal #9 of the Town and Village of Saugerties Comprehensive Plan identifies 21 recommendations to encourage a diverse economic base in the Town and Village. The goals and objectives of the Winston Farm PDD is in conformance with the following recommendations:

- Permit home occupations, including professional uses, with standards that prevent disruption of neighborhood character in those areas zoned for residential use.

- Make industrial-zoned parcels ready for occupancy as funds become available (including infrastructure and generic approvals) to attract appropriate businesses looking for immediate location or expansion. The Town and the Village should work with appropriate organizations to make this possible.

- Develop a land use/economic development plan for the NYS Routes 9W, 212, and 32 corridors in order to help ensure these areas will grow in a manner that is mutually beneficial to both community and property owners.

- Create an economic development plan to proactively attract small-scale businesses and other uses that serve local needs and maintain Saugerties small-town character. Support and maximize the benefits to the community, created by retail

stores within the Village, while at the same time not losing sight of the need for conveniently located services for residents.

- Adopt design standards for commercial development, to ensure commercial development is compatible and at a scale that respects Saugerties' historic architecture and character.

- Support both existing and new businesses to provide a wide range of employment, services and retail opportunities for both residents and visitors. Services should include businesses within walking distance of concentrations of population and regional retail stores that attract a larger market. Businesses of all sizes are encouraged when they offer employment opportunities to the people of the Town/Village or attract tourists to the Saugerties area.

Fiscal and Economic Benefits

A primary benefit of the proposed project is the availability of an expanded variety of goods, services, and housing options available to Town residents. In addition to temporary construction-related and permanent employment opportunities, increased tax revenues will benefit the Village, Town, and School District.

It is the objective of the Project Sponsor to develop the PDD that will attract new and creative business enterprises, new residents, and an eclectic mix of uses that create vibrant and inviting places people want to live, work, learn, and play in.

6.0 Evaluation of Potentially Significant Adverse Environmental Impacts

This section provides a detailed discussion of the known and anticipated adverse environmental impacts of this project; the severity of the impact, if any, and practical mitigation measures designed to avoid, and minimize, any potential impacts, including alternatives. This section will also address all concerns raised during the public scoping process and provide mitigation measures to reduce any potential impacts, to the maximum extent practicable. All studies referenced in this section and throughout the DGEIS are based on current environmental regulations set forth by New York State and the Town, as well as best practices in the respective field, and the conclusions of each study are made with a reasonable degree of certainty in the respective field.

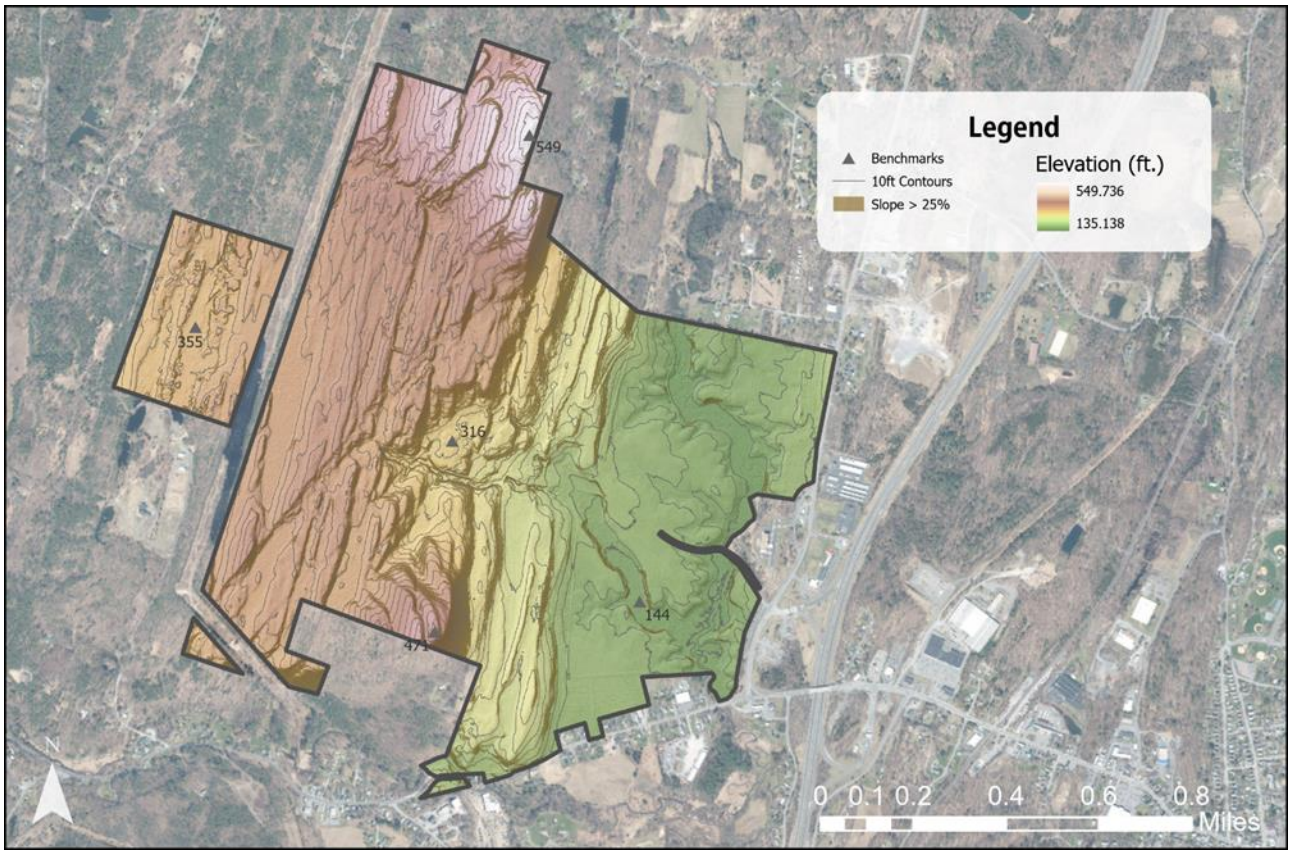
6.1 Impact on Land

6.1.1 Existing Conditions

Refer to Appendix E for the Geotechnical Report.
Refer to Appendix F for the Soil Investigation Report.
Refer to Appendix G for the Preliminary Storm Water Management Plan (SMP).

A. The Winston Farm parcels straddle the drainage divide formed by a series of tiered ridges generally running from north to south and beginning in the approximate center of the site and increasing in elevation from east to west with most of the site draining east toward the Beaver Kill, and a portion beyond the highest ridge elevations draining west, toward unnamed tributaries to the Beaver Kill. The ridge has steep slopes greater than 25% in some areas; identified in brown on Figure 9 Elevation Map. Properties along NYS Route 212 and 32 are relatively flat. The project site ranges in elevation from 150 feet above mean sea level (amsl) to approximately 450 feet amsl.

Elevation Map



B. A preliminary geotechnical investigation was performed on Winston Farm to recommend approaches to the grading work and design of foundation systems to support a wide range of structures presumed to be constructed on the project site. Test pits and visual observation of the project site have informed the recommendation of the geotechnical report and refinement of the development concept plan.

C. The site is situated in an area of glacial till and glaciofluvial deposits with bedrock relatively shallow in some areas as indicated on the Surficial Geology Map of New York, Lower Hudson Sheet. The bedrock is identified as the Normanskill Formation on the Geologic Map of New York. This bedrock formation includes shale, argillite, and siltstone. The United States Department of Agriculture (USDA) web survey maps also show areas of shallow bedrock. The eastern part of the site where more development is contemplated has grass and weed vegetation with patches of brush and trees. The current use of the lowland portions of the property is mainly as livestock farming land.

D. The western part of the project site has not been investigated given that it is primarily forested land and has extensive areas with shallow bedrock as delineated in the USDA web survey maps, refer to Figures 14 and 15 for the soil map and legend. The USDA information indicates that areas of shallow rock and rock outcrops predominate. The soil bodies there include the Arnot-Lordstown-Rock outcrop complex (ARD), Bath-Nassau-Rock outcrop complex (BOD), Lordstown-Arnot-Rock outcrop complex (LOC) and Nassau-Bath-Rock outcrop complex (NBF), among others. The development concept plan identifies Subareas 1 and 4 as the primary location for single-family lots, cabins, and other light development.

Figure 14: USDA Custom Soil Resource Map

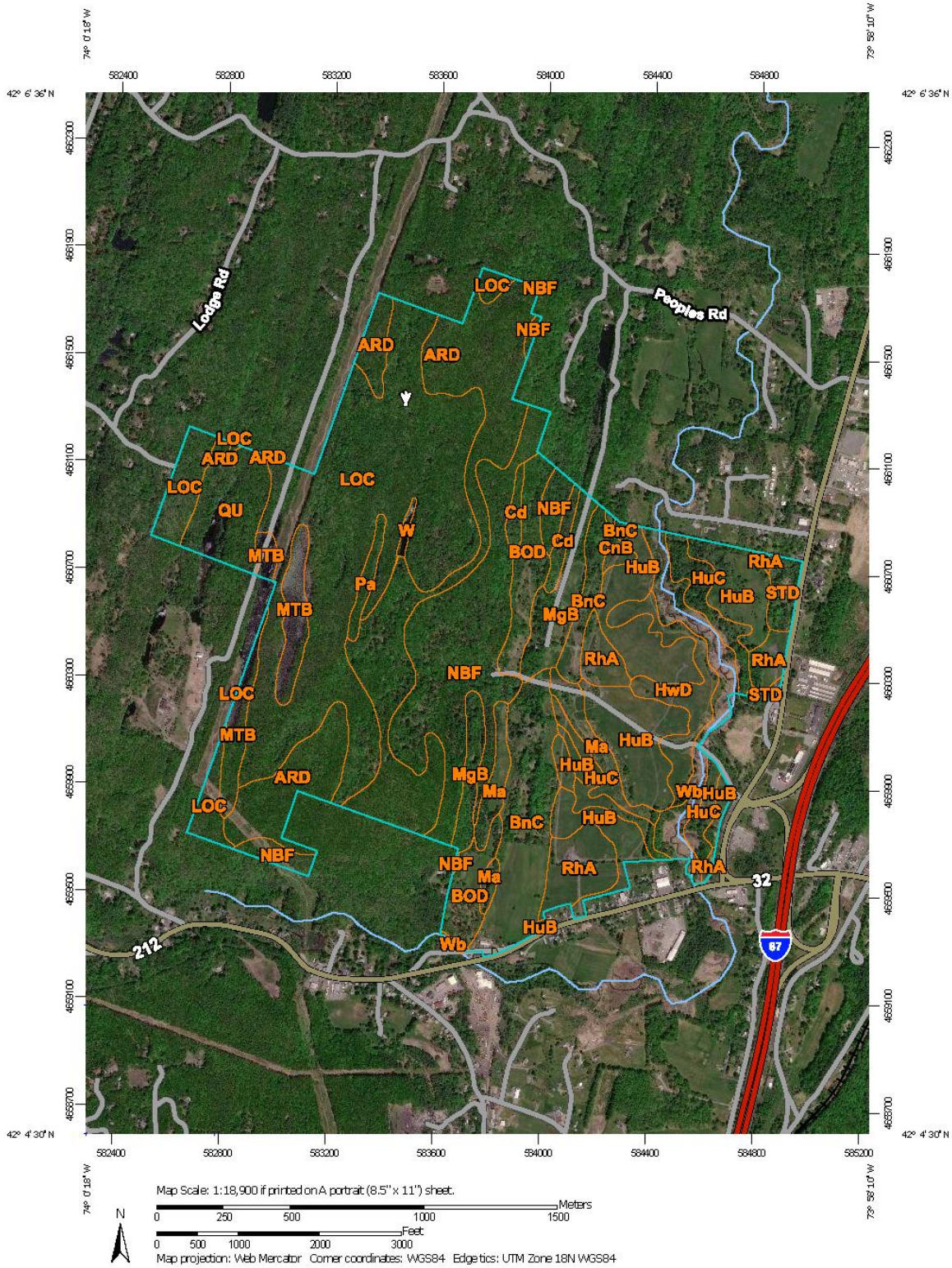


Figure 15: USDA Soil Map Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ARD	Arnot-Lordstown-Rock outcrop complex, moderately steep	126.6	15.2%
BnC	Bath-Nassau complex, 8 to 25 percent slopes	57.8	6.9%
BOD	Bath-Nassau-Rock outcrop complex, hilly	31.1	3.7%
Cd	Canandaigua silt loam, till substratum	7.5	0.9%
CnB	Chenango gravelly silt loam, 3 to 8 percent slopes	3.1	0.4%
HuB	Hudson silt loam, 3 to 8 percent slopes	87.2	10.5%
HuC	Hudson silt loam, 8 to 15 percent slopes	26.7	3.2%
HwD	Hudson and Schoharie soils, 15 to 25 percent slopes	21.5	2.6%
LOC	Lordstown-Arnot-Rock outcrop complex, sloping	203.5	24.5%
Ma	Madalin silty clay loam	21.0	2.5%
MgB	Mardin-Nassau complex, 3 to 8 percent slopes	27.7	3.3%
MTB	Morris-Tuller complex, gently sloping, very bouldery	25.2	3.0%
NBF	Nassau-Bath-Rock outcrop complex, very steep	91.2	11.0%
Pa	Palms muck	4.7	0.6%
QU	Quarry	25.8	3.1%
RhA	Rhinebeck silt loam, 0 to 3 percent slopes	33.8	4.1%
STD	Stockbridge-Farmington-Rock outcrop complex, hilly	8.2	1.0%
W	Water	1.4	0.2%
Wb	Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded	27.3	3.3%
Totals for Area of Interest		**831.3**	**100.0%**

E. The eastern portion of Winston Farm, Subareas 2, 3, and 4, which has been extensively farmed in the past, was investigated with test pits and site observation. This eastern portion of Winston Farm is the area being considered for more concentrated development. For the purpose of describing the overall subsurface pattern of Subareas 2, 3, and 5, it has been divided into an eastern area which has

deeper predominantly silt and clay or lacustrine soils, and a western area which has predominantly gravelly silt loam soils and relatively shallow soils over bedrock.

F. The soil map indicates that the soil units predominating in the eastern part of the site are fine-grained soils including silt loams or silty clay loams in agricultural or soil science terms. In engineering terminology, these soils are classified as lacustrine clay and silt soils. The names of these soil units include the Hudson soils (HuB, HuC, and HwD) along with Rhinebeck soils (RhA) and Madalin Soils (Ma). There is a substantial soil unit with shallow rock at the northeastern edge of the site (STD). In the western part of Subareas 2, 3, and 5, the soils are gravelly loam, gravelly silt loam soils (BnC, MgB), and similar soils shallow over bedrock (NBf, BOD). There are narrow strips of fine-grained silt and clay soils in the shallow rock areas to the west (Ma & Cd).

G. The depth to water table is 0-24 inches in the areas including and surrounding the wetlands, in all other areas of the PDD the water table is greater than 80 inches, regardless of subarea.

H. Light wood-framed buildings can be supported on reinforced concrete foundations on existing virgin soils or on controlled fill which rests on the original soil. Individual designers of specific structure types can design their foundations according to normal practice standards. No special foundation systems are required.

I. Structures with moderate or heavy loads will require a subsurface investigation based on individual development circumstances. The design loads, settlement tolerances, and local soil conditions will determine the type of foundation required. It is likely that most or all the structures can be supported on spread footing foundations given normal settlement tolerances. Heavy design loads or structures that will require deep fills may require deep foundations, monitoring of fill settlement, or pre-consolidation of building sites in areas where deep soft soils are encountered.

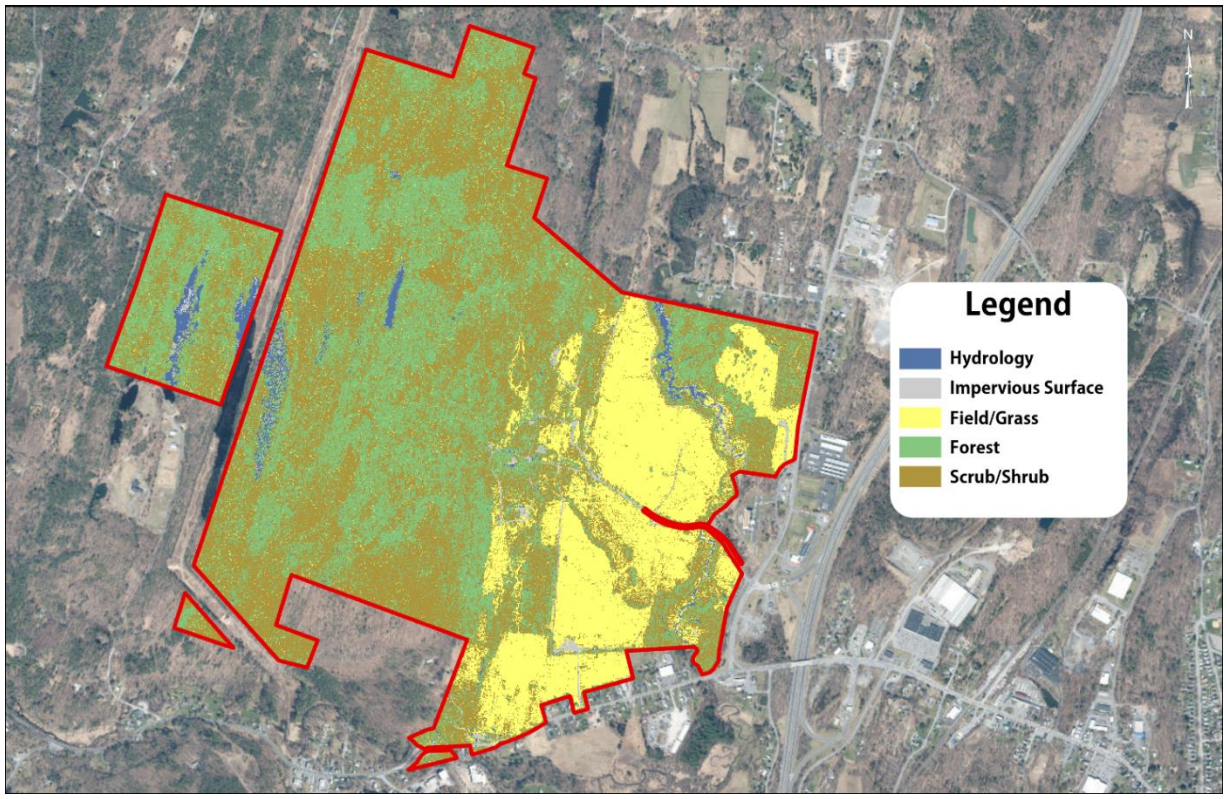
J. While the existing paved roadways appear to be in generally good condition, soils on the site have a high enough content of silt and clay with relatively shallow perched groundwater in some areas to make frost heave and thaw a major consideration. It is recommended that the design of each project include an investigation of pavements in the neighborhood to determine the need for foundations and drainage to limit damage due to frost action.

K. Relative to seismic design recommendations, building sites that have proposed footings within 10 feet of bedrock will be Site Class B, and building sites with deeper soils over bedrock will be either Site Class C or D. By default, the project site will be a Class D unless otherwise determined. The design spectral accelerations for Saugerties, NY, using American Society of Civil Engineers (ASCE) 7-16 are Ss = 0.187g and S1 = 0.054g.

L. The Geotechnical Report provided detailed recommendations for the use and compaction of soil on the site to ensure proper soil bearing to support structure loads. These recommendations include drying the soil before use and ensuring proper drainage to frost heave and unstable foundations.

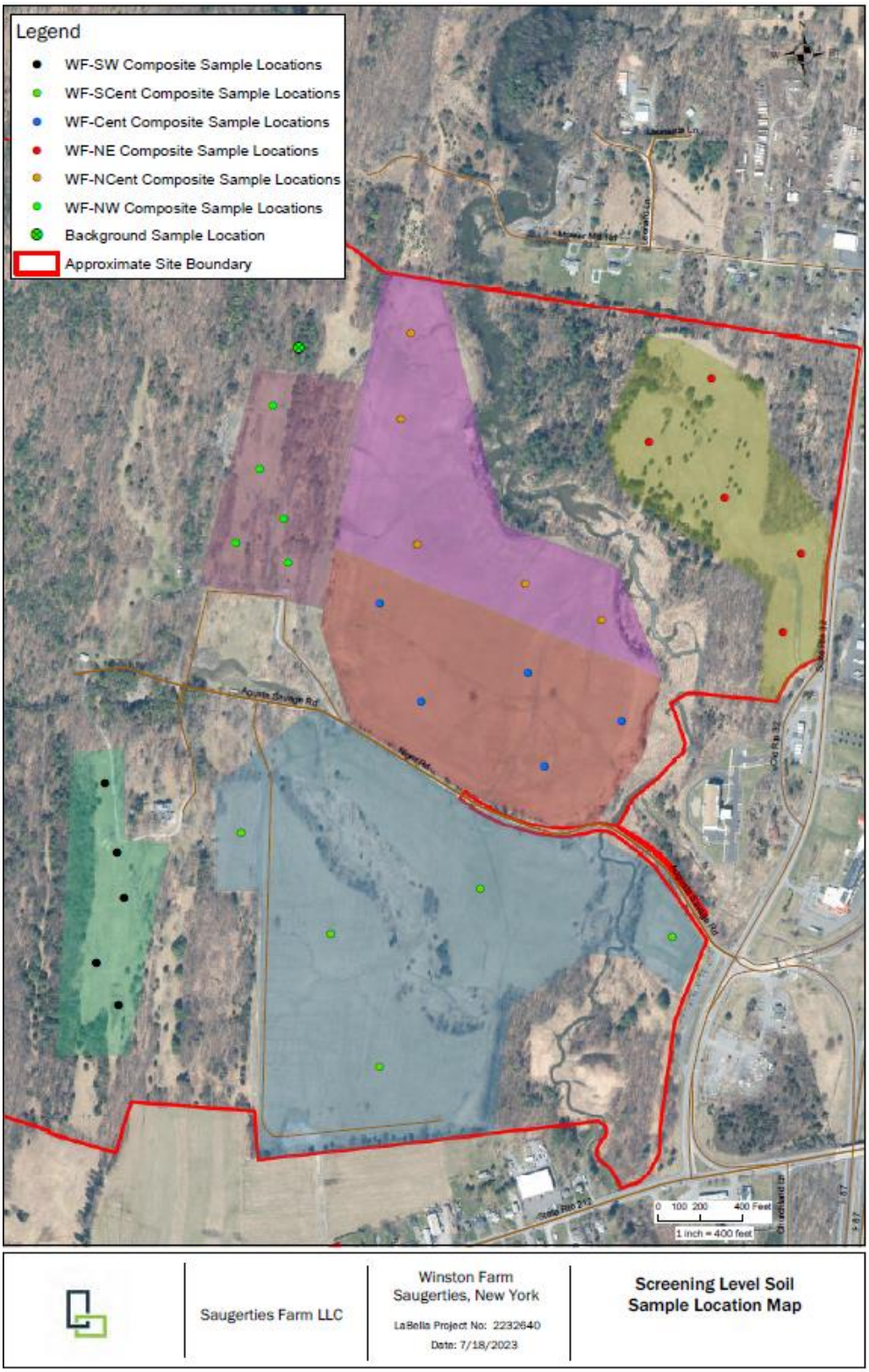
M. Existing land cover is a mixture of forested and large agricultural fields.

Figure 16: Land Cover Map



N. Given the history of agricultural use of the project site, it is standard practice to assess the soil for the presence of residual pesticides, arsenic, lead, and mercury, which are constituents commonly found in pesticides. Future development may disturb the soil or result in direct contact with soil in residential yards, therefore a screening-level soil sampling investigation was performed.

Figure 17: Screening Level Soil Location Map



O. Soil samples were taken at various locations in the eastern fields and orchards. In each of the six areas shown in Figure 17, the consultant collected five-point composite soil samples from two depth intervals (0 to 2 inches below grade, and 6 to 8 inches below grade), for a total of six composite samples.

P. In addition, one background soil sample (0 to 2 inches below grade) was collected from an area north of the former orchard area, understood to have no or limited past agricultural use, to assess background metal concentrations in project site soil.

Q. A total of 13 soil samples were submitted for laboratory analysis. The data was reviewed, tabulated, and compared to the 6 NYCRR Part 375-6.8 Unrestricted Use Soil Cleanup Objectives (UUSCOs). As an additional point of reference, the soil results table also includes the Part 375 Residential Use Soil Cleanup Objectives (RUSCOs), which are applicable to sites in a NYSDEC remediation program and can be helpful in property evaluation. In summary:

- No pesticide concentrations were detected that were greater than the laboratory method detection limit in the analyzed samples.

- Arsenic levels across the site are slightly greater than background levels.

- A lead concentration was reported in soil sample WF-NW (6-8 in depth) from the northwest agricultural field (former orchard) that slightly exceeds its UUSCO but is less than its RUSCO.

- A mercury concentration was reported in soil sample WF-N Cent (6-8 in depth) from the north-central agricultural field that slightly exceeds its UUSCO (0.18 mg/kg), but less than its RUSCO.

Soil Sample Laboratory Results

Sample Location	Pesticide	Arsenic (ppm)	Lead (ppm)	Mercury (ppm)
WF-Back (0-2in)	ND	**16.7**	40.1	0.0991
WF-Scent (0-2in)	ND	**21.4**	34.8	0.0833
WF-Scent (6-8in)	ND	**22.2**	35.4	0.0797
WF-SW (0-2in)	ND	**22.3**	47.4	0.1180
WF-SW (6-8in)	ND	**33.9**	45.7	0.0881
WF-Cent (0-2in)	ND	**18.7**	37.8	0.0674
WF-Cent (6-8in)	ND	**29.6**	48.0	0.0600
WF-NW (0-2in)	ND	**27.7**	29.4	0.0598
WF-NW (6-8in)	ND	**23.1**	**67.6**	0.0619
WF-NCent (0-2in)	ND	**20.4**	38.5	0.0659
WF-NCent (6-8in)	ND	**21.9**	37.9	**0.2120**
WF-NE (0-2in)	ND	**19.1**	40.8	0.0545
WF-NE (6-8in)	ND	**24.4**	45.0	0.0556

Values and sample results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)
ND = Not detected
Bold = exceeds limits

R. These concentrations are not anticipated to require remediation under the current use of the project site.

6.1.2 Potential Impacts

6.1.2.1 Soils

A. The PDD map and regulations, once adopted by the Town of Saugerties, will guide appropriate development in the PDD. Site-specific development will be subject to the review and approval procedures of the adopted Winston Farm PDD regulations, and further subject to the review and approval by the respective local, state, and federal agencies and their laws.

B. The soils on the project site are appropriate to support light to heavy-duty structures without the need for specialized foundation systems.

C. The concentrations of arsenic, lead, and mercury in the soil, which exceed New York State Standards, are not anticipated to require remediation under the current use of the project site.

6.1.2.2 Construction and Phasing

A. Future development of the project site will require infrastructure improvements including dedicated roads, new water supply and distribution systems, a sewer collection and treatment system, and a stormwater management system. These infrastructure improvements are typically constructed in the initial stages of construction. With each future development proposal submitted to the Town for review and approval, water distribution lines, sewer collection, and stormwater systems will be further designed and developed under site-specific parameters.

B. Generally speaking, once development is approved for the project site, the following construction milestones typically occur in the order listed. The timeline and duration are determined during project review by the Town and other reviewing agencies, and often become conditions of approval.

Table 13: Construction Milestones

Activity	Timeline	Duration
Mobilization, erosion, and sedimentation controls installed, install stormwater ponds, site clearing, topsoil stockpile, earthwork	TBD	TBD
Utility main extensions, on-site utility installations, and install street network (base coat)		
Building foundations and construction of buildings		
Finish grading, topsoil and seeding, landscaping, installing green infrastructure, paving (topcoat), and striping		
Project Completion (completion of punch list items)		

- Prior to commencing the clearing and earthwork phase, erosion and sedimentation control structures will be installed, such as, but not limited to a temporary construction entrance, perimeter silt fence, crushed stone equipment, and material storage and staging area will be established.

- Prior to commencing earthwork, the stormwater management ponds will be constructed. The stormwater management ponds will be fine-graded, seeded,

and mulched once constructed. The remaining earthwork upstream of the stormwater management ponds can then continue.

- Exposed and disturbed earth areas will be stabilized with seed and mulch in accordance with the SWPPP.

C. The construction sequence may consist of:

<u>Step 1</u>

- Confirm the integrity of construction silt fence.
- Construct temporary drainage diversion interceptor swales with stone check dams, as required.
- Cutting and chipping of trees approved for clearing within the development areas.
- Clear and grub stormwater management area and an earth fill area of sufficient size for placement of soil excavated from the stormwater management pond.
- Strip topsoil from the stormwater pond and earth fill area.
- Topsoil from other areas to be stockpiled for re-use. A silt fence is to be placed at the downhill perimeter of a stockpile before placing topsoil in a pile.
- Construct stormwater management pond forming pond banks, forebay, deep pool, rip-rap spillway, wetland bench, and outfall structure. Place filter over the inlet to outfall structure.
- Fine grade, seed and mulch pond banks and wetland bench with permanent seed mixture.
- Install silt fence at the toe of pond banks.
- Clear and grub the remaining area within clearing and grading limits.
- Complete earthwork within clearing and grading limits. Maintain disturbed areas to 5 acres or less at any given time.
- Topsoil using clean topsoil stockpiled, seed, mulch and install temporary stone check dams in permanent swales.
- Temporary seed and mulch all disturbed areas with stockpiled clean topsoil.
- Do not construct green infrastructure practices during the clearing and earthwork phase.
- Building construction may commence any time after building pads are established.

Step 2

- Upon completion of clearing/earthwork, including site stabilization, utilities can be installed on the site.
- Install additional erosion control measures such as inlet protection, as needed.
- Installation of roadways, pavements, sidewalks, and trails.
- Place permanent topsoil and seed all lawn areas.
- After ground cover is established, install green infrastructure practices.

Step 3

- Complete construction of building(s).
- Complete the WWTP, water supply system, sewer connections, any other infrastructure improvements, and landscaping.
- Occupancy to begin after certificates of occupancies have been issued.

6.1.3 Potential Mitigation Measures

A. Future development will include site preparation activities. The trees that need to be removed will be recycled and used on-site either as mulch or firewood. The vegetation will be excavated, stockpiled, and reused on-site as much as practicable to reduce the amount of material that needs to be carted off-site.

B. The concentrations of arsenic, lead, and mercury in the soil, which exceed New York State Standards, are not anticipated to require remediation under the current use of the project site. However, based on future development including residential uses, a soil cover program (pavement, building, or two feet of clean soil) is recommended to prevent direct contact with future residents. A soil cover program will be developed for site-specific development in the PDD.

C. A Preliminary Stormwater Management Plan (SMP) is a development-specific document that identifies potential sources of stormwater pollution at a construction site, describes best management practices to reduce pollutants in stormwater discharges from the construction site by controlling the volume of stormwater runoff, and identifies the types of post-construction stormwater practices appropriate for the site to comply with water quality and quantity requirements. The analysis performed to generate the preliminary SMP is necessary to understand stormwater management needs and aid in project layout and design. Even though future development is conceptual, the SMP provides insight into how to best manage runoff in accordance with NYSDEC standards, and it is one more engineering tool used to determine the appropriate, feasible future development of the project site.

6.2 Impact on Flooding, Surface Water, and Ground Water Resources

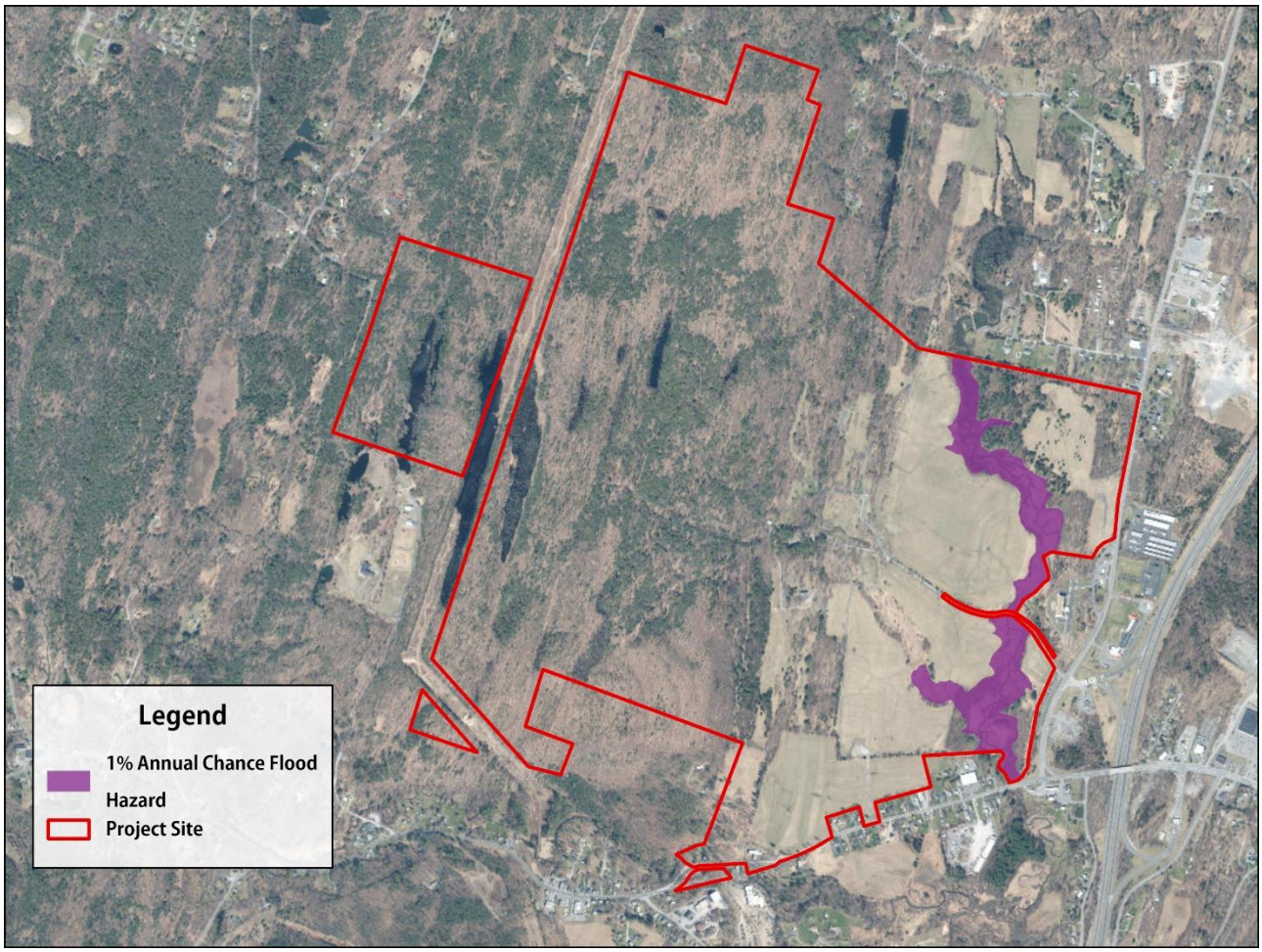
6.2.1 Existing Conditions

Refer to Appendix C for the Hydrogeologic Pump Test Report
Refer to Appendix H for the Wetland Report
Refer to Appendix K for the Water and Sewer Engineer's Report

6.2.1.1 Floodplains

A. According to the Federal Emergency Management Agency (FEMA) National Flood Hazard FIRMette Mapper, the Beaver Kill, a small stream that flows north into the Kaaterskill Creek and eventually into the Hudson River in Catskill, NY, is located in Flood Zone A. Flood Zone A is a special flood hazard area subject to inundation by the 1% annual chance flood hazard per community panel no. 3611C0305E dated 09/25/2009.

National Flood Hazard Firmette



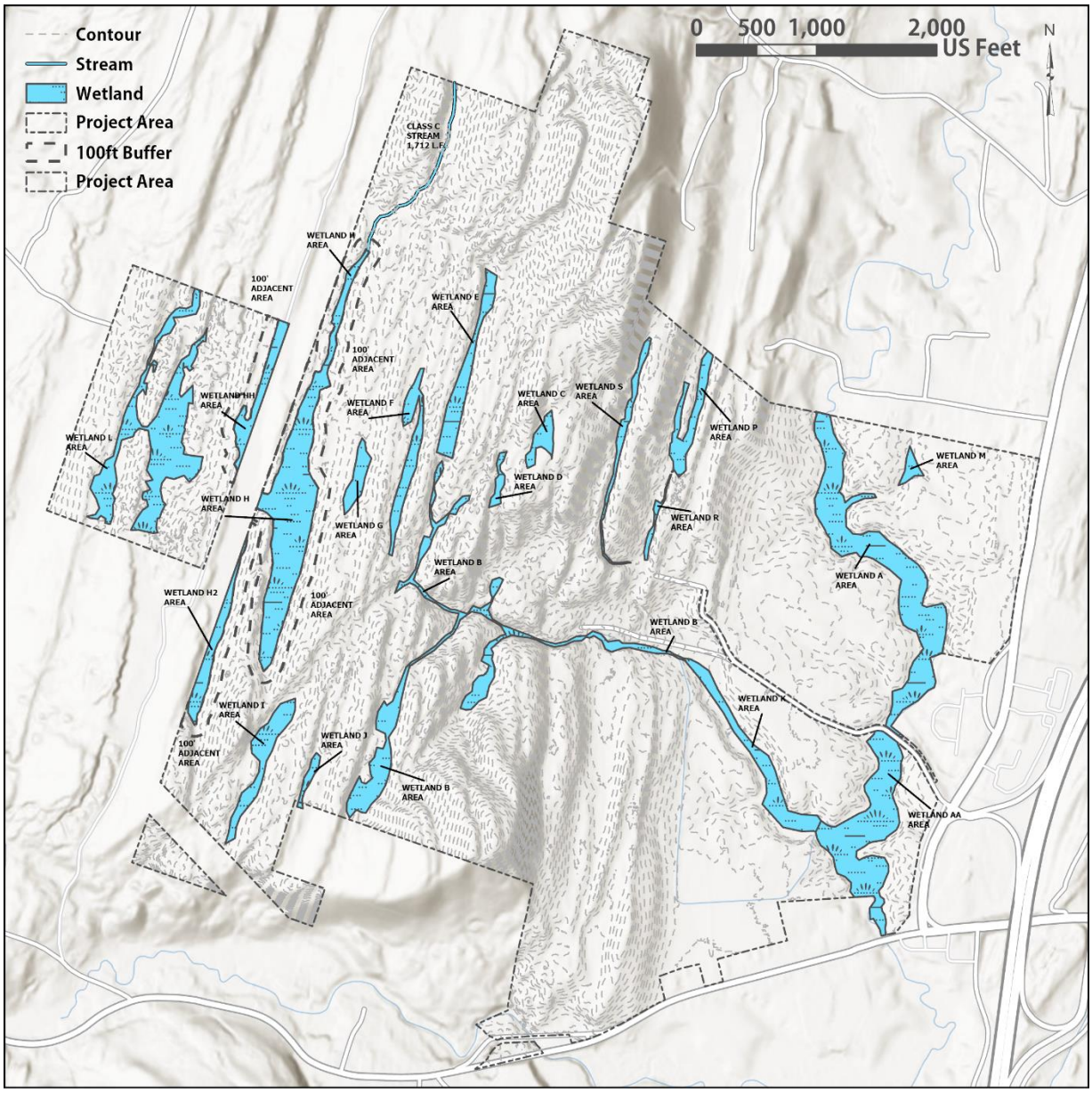
6.2.1.2 Wetlands

A. Wetlands on site were delineated by Michael Nowicki of Ecological Solutions, LLC. Winston Farm contains 19 wetlands and 4 watercourses located throughout the property with the main watercourse, the Beaver Kill, flowing off the site to Esopus Creek and then to the Hudson River.

B. NYSDEC has evaluated and confirmed the wetland delineation map and has identified three wetlands under their jurisdiction: wetlands H, H2, and HH. These wetlands are part of NYSDEC Wetland S-1 which includes a marshland and open water body. Dominant vegetation around this wetland includes broadleaf cattail, reed canary grass, common reed, sweet flag, purple loosestrife, tussock sedge, skunk cabbage, and purple-stemmed aster. NYSDEC regulates these wetlands, including a 100 ft buffer around the boundary of the wetlands.

C. The wetland map was submitted to the United States Army Corps of Engineers (USACOE) to determine which wetlands are in their jurisdiction. Of the 19 identified wetlands, 8 of them are identified as isolated or potentially non-jurisdictional and include Wetlands C, D, F, G, I, J, S, and R.

Delineated Wetland Map



6.2.1.3 Groundwater

A. LaBella Associates conducted a source water exploration for the project site between February 6, 2023, and May 16, 2023, and prepared a Hydrogeologic Pumping Test Report (Pump Test Report) of their findings. An existing well (TW-1) on the project site and an existing well on an adjacent 30-acre parcel to the northeast, known as the Montano Well, are included in the report. The Pumping Test Report is provided in Appendix C of the DGEIS.

B. Portions of Winston Farm lie in a valley sometimes referred to as the Bakoven Valley. This valley is approximately 2,000 feet wide in the Winston Farm location and extends many miles to the north and south. The Bakoven Valley is bounded to the west by the rising shale and sandstone bedrock of the geologic Hamilton Group and to the east by low ridges of Onondaga Limestone and other carbonate formations.

C. Opportunities for developing potable water sources on Winston Farm have been under consideration for some time. In 2018, exploratory test borings or wells TW-1 through TW-4 were advanced on the site by WSP consultants working for the Village[4]. The Montano Well, located on an adjacent property to the northeast, was also explored.

D. WSP conducted a 24-hour flow test withdrawing 110 gpm from TW-1, which they had judged to be the best of the four exploratory wells on the site. On the basis of the test result, WSP opined that significantly more source water might be available from this location, potentially exceeding 200 gpm. LaBella agreed that TW-1 appeared promising and conducted an extended flow test. The test was conducted at 220 gpm, and the drawdown and recovery periods together lasted approximately 10 weeks. During this period, the existing bedrock well on the Montano property was subject to a more conventional test at 50 gpm which lasted just over 72 hours.

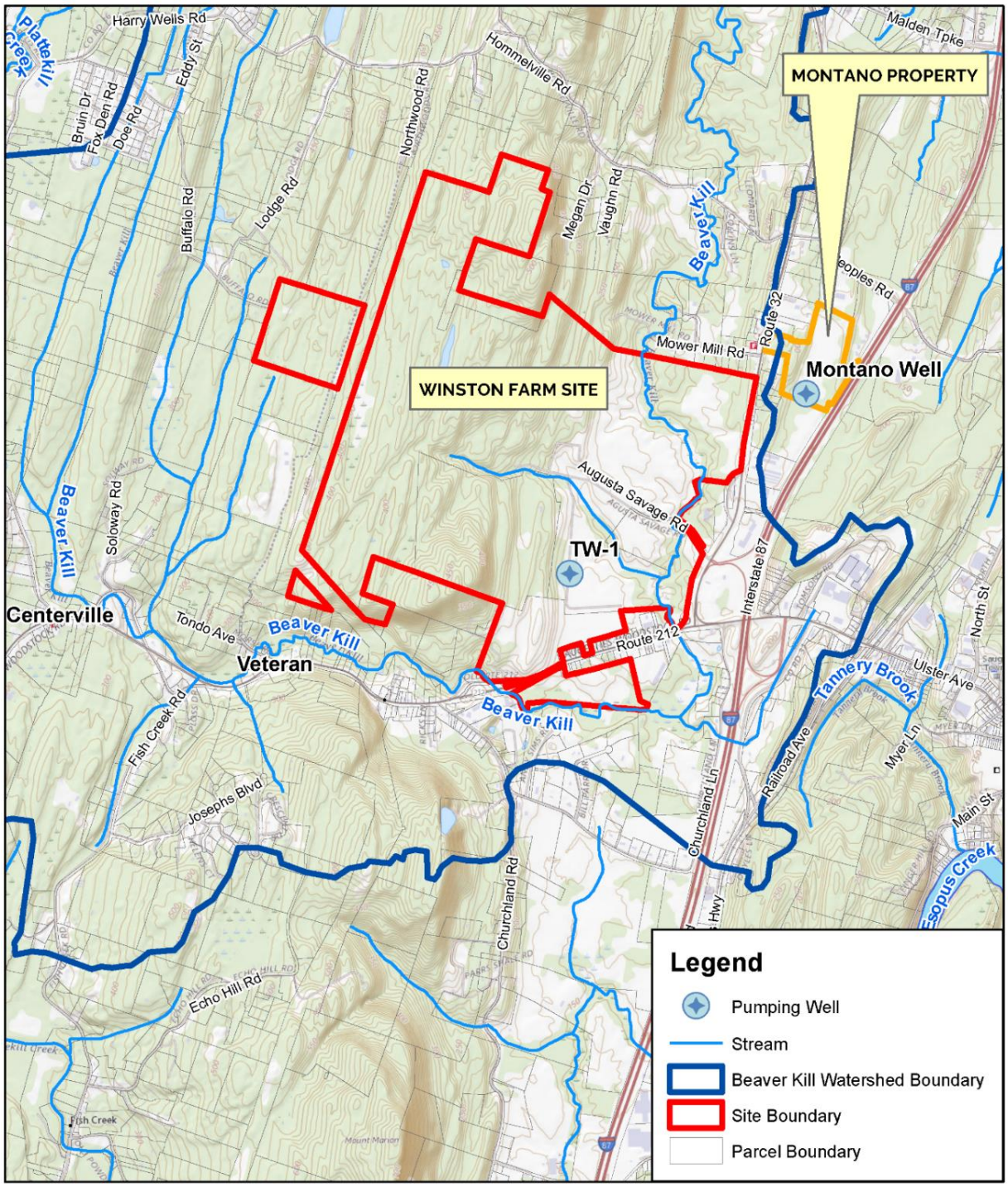
E. The Montano Well is a bedrock well installed on a former quarry parcel situated east of the Bakoven Valley in the Sawyer Kill watershed, withdrawing groundwater from the Helderberg Group geologic formations. WSP estimated a yield of 100 gpm at the Montano bedrock well. However, during LaBella's testing, 100 gpm did not support stabilized discharge. The test rate was reduced to 50 gpm, the test discharge was successfully sustained without interruption.

F. Before Labella conducted the well tests, the project team submitted and received approval for its pumping test protocol from the New York State Department of Environment Conservation (NYSDEC), the New York State Department of Health (NYSDOH), and the Town of Saugerties so that data gathered by the exploratory tests will not need to be repeated if either well or immediately adjoining replacement

[4] WSP, June 27, 2018, Draft Groundwater Exploration Summary, The Winston Farm Property

wells are eventually used as tested. Refer to Figure 1 for the locations of TW-1 and Montano Wells.

Test Well Location TW-1 and Montano Well



Source: LaBella Associates

Monitoring Wells

A. Numerous wells and stream locations were identified for monitoring during the TW-1 and Montano Well tests. The addresses and the approximate distances of monitored wells nearest to the Montano and TW-1 wells are:

Table 14: List of Monitoring Well Locations

Observation Well ID / Location	Distance/Direction from Montano Well
118 Peoples Road	1,930’ / Northeast
2940 Route 32	1,730’ / North
2891 Route 32	1,275’ / Northwest
2858 Route 32	700’ / West
Observation Well ID / Location	**Distance/Direction from TW-1**
26 Leonard Ln	4,620’ / Northeast
TW-3	2,420’ / Northeast
TW-4	1,360’ / Northeast
MW-1/S-1	750’ / East
TW-2	1,020’ / Southeast
108 Old Route 212	1,810’ / Southwest
571 Route 212	2,420’ / South
23 Bill Parr Drive	2,850’ / South
1114 Churchland Lane	3,750’ / Southeast
1218 Churchland Drive	3,780’ / South

B. For the TW-1 test, multiple private domestic wells, site wells TW-2 through TW-4, and a former site well referred to as MW-1 (believed to be well S-1 installed for a previous landfill siting study) were identified and established for use as observation wells.

C. All monitoring locations except MW-1 were equipped with water level sensors and data loggers for continuous water level monitoring. Manual data were collected from MW-1. Stream piezometers (wells) were each equipped with dual sensors to record both the open water and the piezometer water levels so that gaining stream (piezometer reading higher than stream) or losing stream (higher open flows than in piezometers) conditions are monitored.

Results of Pump Test

A. During the TW-1 Winston Farm test, all four on-site observation wells recorded drawdown influence and they each fully stabilized during the test pumping period and fully recovered during the test recovery period.

B. Wells south of Winston Farm included:

- Wells were monitored at 108 Old Route 212, 571 Route 212, and 1114 Churchland Lane (Figures 23, 24, and 25). These showed no measurable response during either the TW-1 pumping or recovery test periods. All three also demonstrated net lower water levels of several feet at the end of the TW-1 recovery test period assignable to regional groundwater recession, and they all include several recharge and recession cycles responsive to precipitation events.

- Private wells at 1218 Churchland Drive and 23 Bill Parr Lane responded directly to the TW-1 well test. These were interpreted to draw water from the same sand and gravel formation accessed by TW-1. Over the test duration, both private wells exhibited absolutely stabilized drawdown followed by full recovery. The well at 23 Bill Parr Lane was added to the monitoring network only after the well test had begun once drawdown was identified at 1218 Churchland Drive. This well was sought to monitor distance drawdown and to improve study confidence south of TW-1. Neither resident reported a well-supply failure during the test.

C. Monitored wells north and northeast of the Winston Farm included:

- Presumptive bedrock wells at 2858, 2940, and 2891 Route 32, and 118 Peoples Road. These showed no measurable response during the TW-1 pumping and recovery test periods and also demonstrated net lower, natural recession-based, water levels at the end of the TW-1 recovery test period.

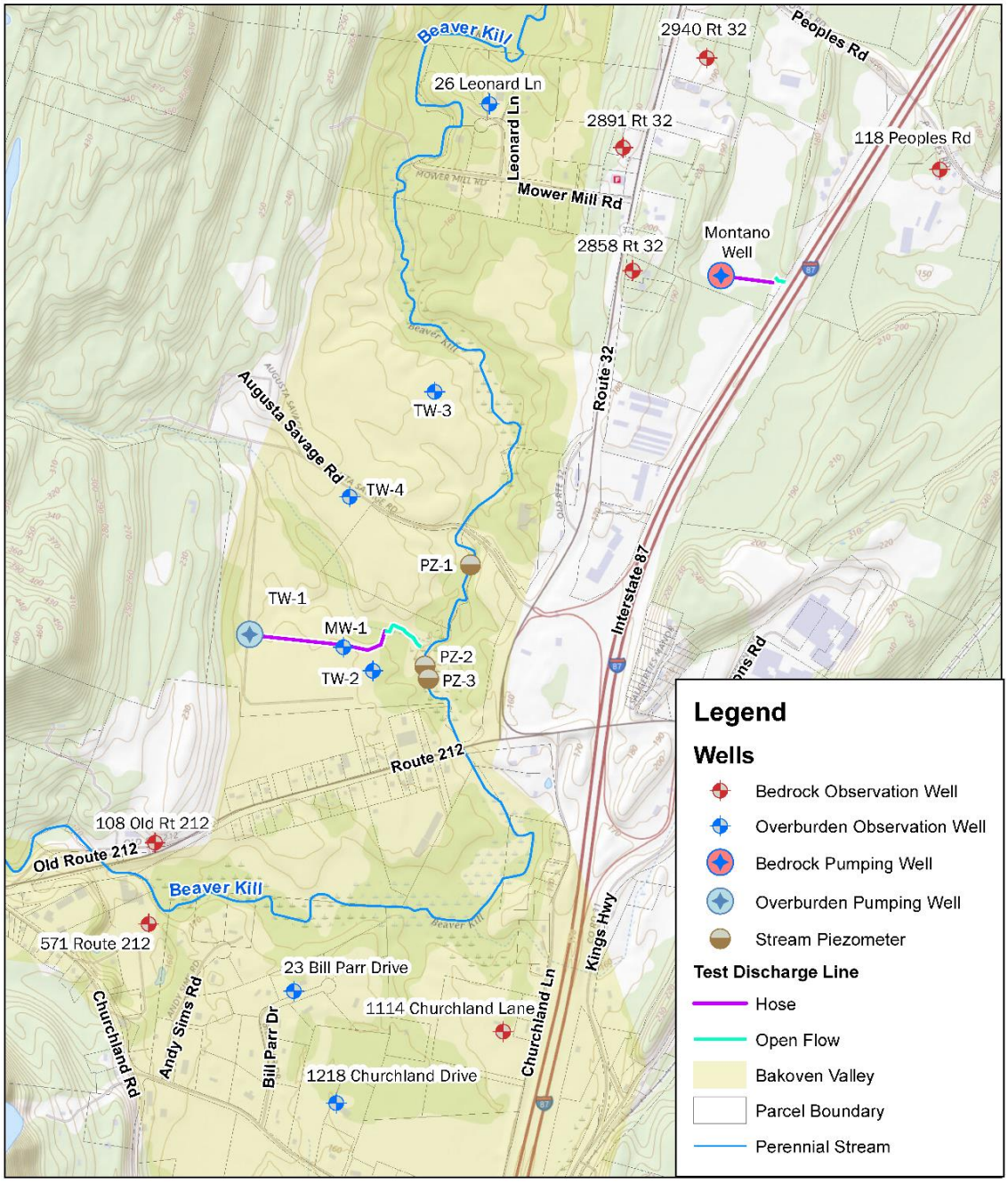
- A private well on 26 Leonard Lane responded modestly to the TW-1 well test period, falling approximately 3.6 feet during the test pumping period and recovering in about a week during the recovery period. This well was therefore estimated to draw water from the confined overburden aquifer.

D. Stream wells (piezometers) were hand-driven into the streambed of the Beaver Kill in three locations nearest to TW-1. Labella monitored differences in elevation

between the open stream water level and groundwater elevation in each stream piezometer to monitor gaining or losing stream conditions.

E. Throughout testing of the Montano Well, the TW-1 well test in the adjacent watershed was ongoing at 220 gpm.

Monitoring Well Locations



Source: LaBella Associates

F. The TW-1 well test identified no direct connection between the Bakoven Valley buried sand and gravel aquifer and the Beaver Kill. At least three factors support this conclusion:

- Well test influence extended both northeast of the Beaver Kill (26 Leonard Lane well) and south of the Beaver Kill (23 Bill Parr and 1218 Churchland Drive, indicating that the test radius of influence did not terminate at the creek. Had the creek been supplying the well flow, the test drawdown radius would have ended at the creek and expanded no further. The test data suggests the radius of influence instead extended 6,000 and 7,000 feet north of TW-1 along the Bakoven Valley and as many or more miles to the south.

- The distance drawdown data was used to calculate aquifer transmissivity and storativity parameters. Aquifer transmissivity is the overall transmission capacity of the aquifer. The storativity value is characteristic of a fully confined aquifer. A greater storativity value will have been generated if the formation had daylighted in the bed of the Beaver Kill. Storability is the volume of water released from storage per unit surface area of the aquifer per unit decline in hydraulic head. The hydraulic head is the elevation to which water will rise in a well connected to a point in an aquifer under pressure, which provides an indication of the direction of groundwater flow.

- Three stream piezometers were installed and monitored along the Beaver Kill during the TW-1 test. The stream piezometer stations identify that stream gaining and losing conditions fluctuated responsive to precipitation events rather than to TW-1 operations. The stream exhibited losing conditions during much of the TW-1 pumping period but then switched to gaining conditions through many additional weeks of the TW-1 recovery period. Had the creek been supplying induced flow to the well, the stream would have continued losing flow condition through the full recovery period. This did not occur.

Aquifers

A. Ruling out the Beaver Kill as a direct source supporting TW-1 leaves the bedrock aquifers adjoining the confined Bakoven Valley sand and gravel aquifer as the sustaining groundwater source. In addition, the data suggests TW-1 receives less contribution from carbonate bedrock formations east of the Bakoven Valley since the water samples taken from TW-1 are less hard and lower in total dissolved solids (TDS) than that of the Montano Well. This suggests that bedrock formations

generally west of the Bakoven Valley supply most of the sustaining recharge to the Bakoven Valley confined sand and gravel aquifer.

B. The full north-to-south extent of the sand and gravel is unconfirmed, but the data suggests TW-1 may draw water from over a mile north of Winston Farm, and a map interpretation suggests the sand and gravel is continuous at least as far south as the Mt. Marion community over 3 miles to the south, and perhaps even beyond although at some point the Bakoven Valley itself appears to narrow and converge with the alignment of the Esopus Creek near Lake Katrine.

C. The Aquifer Protection Overlay (APO) was established to preserve the quality and quantity of the Town's groundwater resources to ensure a safe and adequate water supply and to preserve groundwater resources currently in use and those aquifers have potential for future use as a public water supply.

D. The APO consists of two zones, the Unconsolidated Aquifer Zone, and the Aquifer Watershed Zone. Both of which apply to the project site. The Unconsolidated Aquifer Zone consists of those land areas overlying the unconsolidated aquifer. The Aquifer Watershed Zone consists of adjacent land areas that do not overlie the aquifer but are where surface water runs across the land after rainfall or flooding and eventually enters the aquifer area.

E. There is a significant list of uses that are prohibited in the APO under § 245-25C of the zoning law, which also apply to future development in the PDD. The Project Sponsors intend to comply with the zoning law relating to the established overlay district.

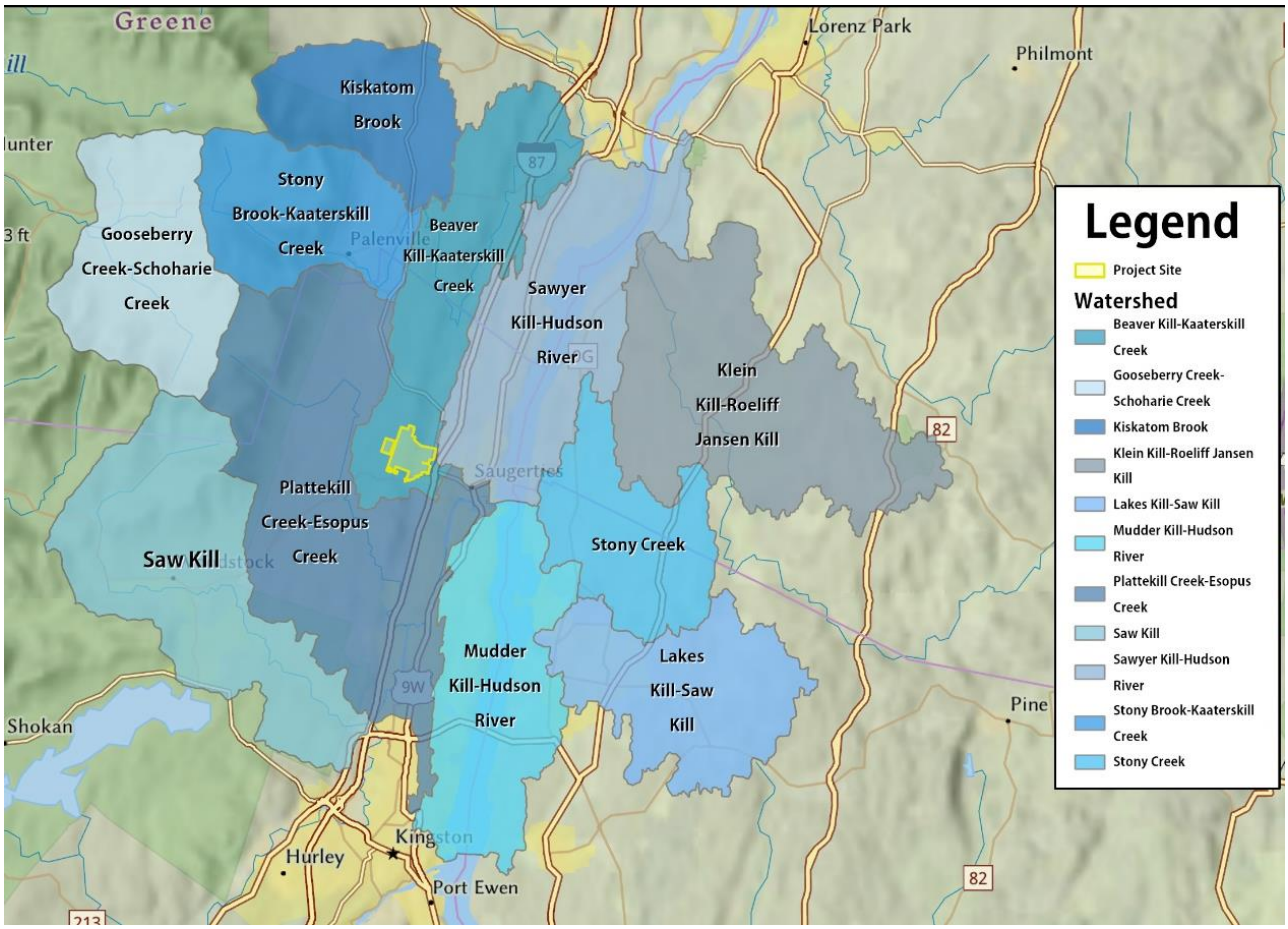
Watersheds

A. The delineation of unconfined bedrock aquifer areas directly adjoining and upslope of the Bakoven Valley, including parts of three watersheds of the Plattekill Creek, the Esopus Creek, and the Beaver Kill collectively sum to approximately 3.2 square miles and can reasonably provide groundwater recharge directly into the confined sand and gravel aquifer. Such an area is large enough that the annual regional aquifer recharge will be able to sustain the proposed TW-1 well withdrawals in addition to existing withdrawals. In addition to the 3.2 square miles directly adjoining bedrock aquifer recharge area, some groundwater reasonably migrates vertically through the Bakoven Valley clays. Finally, deeper groundwater flow from the full watersheds of the Plattekill Creek, Esopus Creek, and Beaver Kill may have

connections to the deepest buried bedrock margins of the buried Bakoven valley abutting the buried sand and gravel.

B. The Montano Well, installed in carbonate formations east of the Bakoven Valley, east of the Beaver Kill watershed, and demonstrating hard water characteristic of carbonate bedrock formations, receives recharge from areas east of the Bakoven Valley in the Sawyer Kill watershed.

Figure 18: Watershed Map



Water Quality

A. Water quality in the TW-1 and Montano Well was satisfactory and/or readily treated. No evidence of contamination, including PFAS (per- and poly-fluoroalkyl substances) compounds, was detected.

B. The Pumping Test Report, Appendix C of the DGEIS, provides a comprehensive data summary table (Table 2), and the laboratory reports (Appendix 2) in accordance with 10 NYCRR Part 5, Subpart 5-1 drinking water quality standards.

C. The TW-1 water sample was equivalent to or exceeded the following standards:

Table 15: Water Quality Results

Water Quality Standard	Units	TW-1	NYSDOC Drinking Water Standards
Color	Color Units	15	15
Turbidity	NTU[+]	8	5
Iron	mg/L	1.016	0.3*

[+] NTU (Nephelometric Turbidity Units) is a measure of the cloudiness of a fluid. For reference, 5 NTUs are just noticeable by the eye.
* When iron and manganese are both present, the combined standard is 0.5 mg/L.

D. No analytes in the Montano Well water sample exceeded Maximum Contaminant Levels (MCLs) or guidance values. The high TDS and hardness in this well (464 mg/L and 292 mg/L, respectively) reflect the Montano Well's location in a carbonate bedrock aquifer.

E. In the Winston Farm TW-1 sample, only iron and turbidity were reported as elevated. The iron detection is however likely related to the sample turbidity since the sample was collected in an acid-preserved bottle which draws iron from any particulates. The value of turbidity during this test (8 NTU) was less than during the 2018 test (21.2 NTU). Similarly, the iron level was diminished in this test (1.02 mg/L vs. 1.67 mg/L), and the turbidity is expected to continue decreasing with well use.

F. On or around March 6, 2023, approximately one month after the testing started, water levels in all on-site and off-site wells reached absolute stabilization. Once stabilization was identified, the test was allowed to run an additional week to confirm that all monitoring points and the TW-1 test well had come into full equilibrium with regional aquifer conditions. During this additional week, water

levels were observed to fluctuate modestly. Water levels in TW-3, TW-4, and the 26 Leonard Lane wells were even rising modestly.

G. Well TW-1 on the Winston Farm property and the Montano Well on the adjacent property were jointly tested, evaluating, and confirming a net groundwater withdrawal capacity of 270 gallons per minute (gpm). Both are six-inch diameter wells.

H. The extended Winston Farm TW-1 well test, drawing groundwater from the confined Bakoven Valley sand and gravel aquifer and conducted at 220 gpm, documented stabilized yield, helped clarify boundary condition roles, identified most probable contributing watersheds, and ruled out direct influence on or from the Beaver Kill stream. The off-site well water level influence was documented in select presumptive overburden private wells both north and south of the test site without reducing capacity in any monitored wells. No measurable influence was recorded in presumptive or known bedrock private wells monitored during the test.

I. The Montano Well, drawing groundwater from a carbonate bedrock aquifer in the watershed of the Sawyer Kill provided 50 gpm. Monitoring of bedrock private wells near the Montano site identified no measurable groundwater level influences. Water levels in four off-site private wells were monitored during the Montano Well test, to the west, north, and northeast within 1,500 feet of the test well, at 2858, 2940 and 2891 Route 32, and 118 Peoples Road, respectively. No known wells were situated or available for monitoring within 1,500 in directions to the east or south of the test well. Natural recession was observed in the private well monitoring network, but no Montano Well test influence was noted in these monitored wells.

J. Typical rains arrived in late April and early May, and the water levels recorded in the aquifer returned fully to levels observed in early February 2023, before the TW-1 test began, confirming a viable pattern of aquifer recession and full recharge in this confined aquifer.

6.2.2 Potential Impacts

A. There is concern that the water needed to supply new uses in the PDD will have a permanent adverse effect on the existing aquifer(s) and their ability to produce water to supply residents and businesses that already rely on it for drinking water.

B. There is a concern that activity in the PDD, either construction-related or upon full build-out, that the aquifer can become contaminated and affect nearby wells that residents and businesses rely on as their drinking water source.

6.2.3 Potential Mitigation Measures

A. LaBella Associates recommends that for long-term use of the Winston Farm TW-1 location, one or more larger diameter replacement wells are recommended, both to facilitate the use of standard pumps and to improve well performance efficiency. Either 8-inch or 10-inch wells with stainless steel wire wrapped screens are recommended. Only one replacement well may be necessary if the source is interconnected with the Village water supply system, while a second well, as a backup to the first, is likely to be required by the NYS Department of Health if the wells become part of an independent community water system.

B. If future yield requirements from the TW-1 location remain at 220 gpm or less, only 24-to-72-hour confirmatory testing of such larger-diameter wells will be necessary to confirm the replacement well designs since the present report already validated 220 gpm sustainable groundwater capacity.

C. The Montano Well is situated more than 100 feet but less than 200 feet from a property line, so either an off-site easement will be required if this well is to satisfy NYSDOH perimeter control requirements, or the well can be relocated.

D. Some capacity remained in TW-1 over the well screen by the end of the spring 2023 test and larger-diameter replacement wells with more specifically designed well screens will improve well efficiency, so it may be possible to withdraw 50 to 100 gpm or more additional yield from the TW-1 location after installing the recommended replacement well(s). If withdrawals exceeding 220 gpm are proposed, more detailed well testing which repeats certain elements of the present test will likely be warranted.

E. As noted in the Hydrogeologic Report, permanent drawdown of the existing aquifers is unlikely. It is LaBella's professional opinion that the delineation of unconfined bedrock aquifer areas directly adjoining and upslope of the Bakoven Valley, including parts of three watersheds of the Plattekill Creek, the Esopus Creek, and the Beaver Kill collectively sum to approximately 3.2 square miles and can reasonably provide groundwater recharge directly into the confined sand and gravel aquifer. Such an area is large enough that the annual regional aquifer recharge will be able to sustain the proposed TW-1 well withdrawals in addition to existing

withdrawals. In addition to the 3.2 square mile directly adjoining bedrock aquifer recharge area, some groundwater reasonably migrates vertically through the Bakoven Valley clays. Finally, deeper groundwater flow from the full watersheds of the Plattekill Creek, Esopus Creek, and Beaver Kill may have connections to the deepest buried bedrock margins of the buried Bakoven valley abutting the buried sand and gravel.

F. Contamination of the groundwater and aquifer is unlikely. Future development in the PDD will be connected to a sewer system where waste will be conveyed to an on-site wastewater treatment plant (WWTP). The water supply will be from the well(s) on-site. The PDD will not permit the types of uses that typically produce or can unintentionally release contaminants into the environment. The common contaminants of groundwater and aquifers include improper disposal of waste, which can seep into the ground and reach the aquifer; the use of chemicals in agriculture, such as pesticides and fertilizers, which can leach into the groundwater; leaky storage tanks containing gasoline, oil, chemicals, or other types of liquids; septic systems; uncontrolled hazardous waste; landfills; chemicals and road salts; etc.

G. The WWTP will provide proper treatment of sewer waste in accordance with NYSDOH standards before discharging to the Beaver Kill. Monitoring and testing are required to ensure compliance will all laws.

H. The public and private wells that are used for drinking water are subject to water quality monitoring and testing in accordance with federal, state, and local agencies in recognition of safe drinking water standards. These agencies may include the US Environmental Protection Agency (EPA), NYSDEC, NYSDOH, and the Ulster County Department of Health.

I. It seems reasonable to suggest that when the ground is excavated, that disturbance may have an impact on groundwater, nearby wells, and water resources including streams and aquifers. Earthmoving activities that disturb the soil and leave exposed areas cause erosion and sediment control concerns, which are typically confined to the earth’s surface and are conveyed via runoff. The aquifers and the nearby wells are hundreds of feet deep. A certain amount of soil may infiltrate the ground, but the ground and nearby wetlands act as a natural filter. It is unlikely that disturbance of the soil will have a significant impact on the quality of the drinking water either through the aquifer or in the nearby wells. As for the surface water, the Preliminary Stormwater Management Plan (SMP) Appendix G of the DGEIS, includes an

erosion and sedimentation control plan to be undertaken prior to and during construction, which includes, at a minimum, silt fence, soil stockpile protection, monitoring and minimizing the extent and duration of exposed areas, stabilizing exposed areas, and wetland protection. All erosion and sediment control measures are routinely inspected to ensure efficacy.

6.3 Impacts on Plants and Animals

6.3.1 Existing Conditions

Refer to Appendix I for the Biological (Habitat) Assessment Report.

A. North Country Ecological Services, Inc. (NCES) was retained by the Project Sponsor to evaluate the potential impacts on biological resources due to the zoning change and development of the Winston Farm property.

B. A qualitative Biological Assessment was performed that included an ecological habitat assessment and an indigenous flora/fauna inventory encompassing the entire site (NCES completed field surveys over four consecutive seasons (spring, summer, fall, and winter) spanning from November of 2022 through October of 2023.

C. Prior to field visits the NYSDEC Natural Heritage Office (NHO) and the U.S. Fish and Wildlife Service (USFWS) were consulted to obtain any potential records of occurrence of endangered, threatened, or rare species found on the site. This correspondence is found in Appendix I.

D. During the field surveys, NCES traversed the site to document the existing conditions and identify the ecological community types that are present. During each of the field reviews, NCES biologists actively searched the existing community types for flora and fauna, as well as endangered, threatened, and/or rare species. The property was also reviewed for habitats that will be deemed conducive to the presence of those species documented by the NHO and USFWS.

E. Existing ecological communities were determined using definitions presented in the Ecological Communities of New York State and are shown in Table 5.

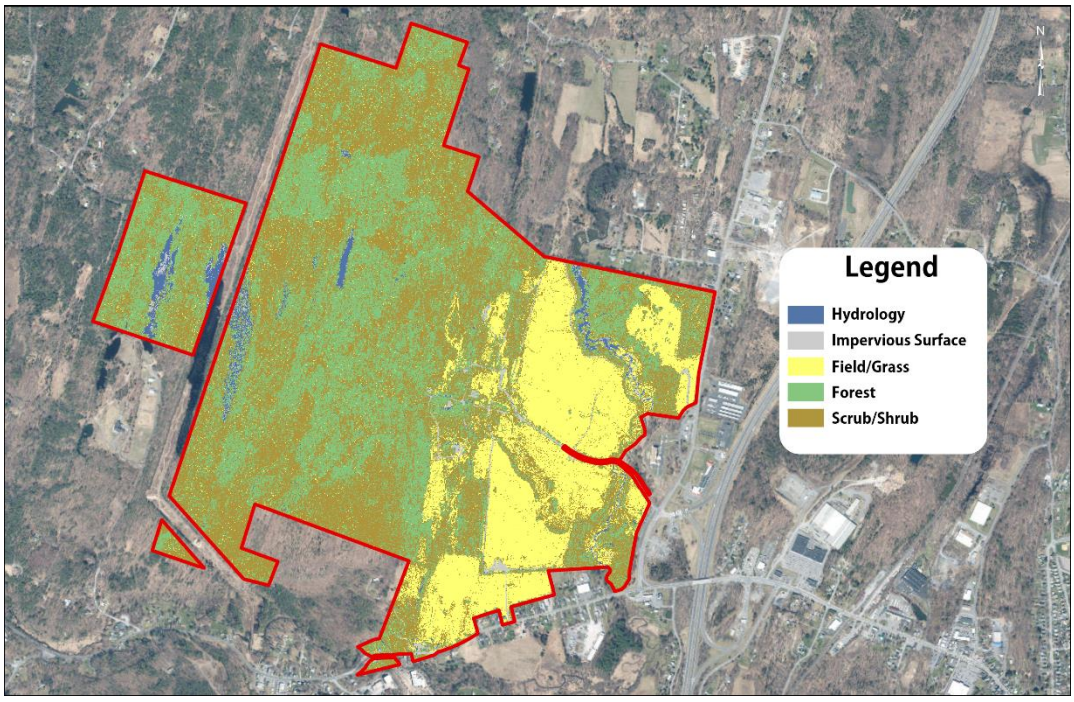
Existing Ecological Community Types

Ecological Community Type	Acres	Percentage (%)
Chestnut oak forest	115.02	18.45
Hemlock-northern hardwood forest	156.39	19.81
Successional northern hardwoods	150.37	17.90
Succession red cedar woodland	18.18	2.16
Successional old field	8.54	1.02
Mowed lawn with trees	9.51	1.13
Mowed field	2.25	0.27
Cropland/field crops	120.18	14.31
Appalachian oak-pine forest	105.85	12.60
Palustrine forested wetland	25.15	2.99
Vernal pool	7.09	0.84
Palustrine scrub-shrub wetland	0.96	0.11
Palustrine emergent wetland	39.18	4.66
Open water pond	21.38	2.55
Total	±840 acres	100%

Source: North Country Ecological Services, Inc.

F. More broadly, land cover on the site can be categorized as hydrology (water resources), field, grass, scrub/shrubland, trees, and impervious surface area. See Figure 16. For an existing land cover map.

Existing Land Cover Map



G. During the field visits, plants were identified by direct observation, while animals were identified visually; by vocalization, tracks, scat, or other physical remains (bones, fur, feathers, etc.). As a result of the multi-season survey, NCES physically confirmed a total of 177 species of flora and 132 species of fauna on the site. A full list of species can be found in the appendices of the biological report.

H. During field assessments, NCES identified several non-native invasive plant species, including Tatarian honeysuckle, common buckthorn, Japanese barberry, purple loosestrife, common reed, and oriental bittersweet. They also found terrestrial invasive species such as the Emerald ash borer (EAB) and the Hemlock wooly adelgid (HWA). Signs of EAB infestation, such as dead or dying trees with characteristic S-shaped patterns under the bark and multiple exit holes, were observed on ash trees in forested wetlands on-site. HWA infestation signs, including white wooly ovisacs on the underside of eastern hemlock branches, were noted primarily in the western portions of the site, west of the utility corridor. Woody invasives were found along logging roads and foot trails in forested areas, while herbaceous invasives were contained within emergent wetlands adjacent to these trails.

I. Based on observations made, frequent animal movement of larger fauna such as deer, bear, fox, coyote, etc. was noted along the ridges found within the central and western portion of the site.

J. Aquatic fauna, such as the beaver was noted on site along the riparian buffers of the Beaver Kill and open-water ponds located on site.

K. Amphibians and reptiles were found in and around the aquatic resources on-site, with snake sheds and predated turtle eggs discovered near larger wetlands like the Beaver Kill and Wetland area H. All the aquatic resources on-site possessed a habitat that is conducive to amphibian breeding, including some vernal pools utilized by frogs and salamanders. The observation of salamanders was generally limited to scrub-shrub wetlands, vernal pools, and open water ponds, except for red-backed salamanders and red efts, which were documented throughout the undeveloped forested uplands. The turtles that were observed predominately existed within the open water portions of the site.

L. Bird species such as warblers, vireos, and woodpeckers were found within the interior of the forested uplands. Bald Eagles were observed soaring over the site and perched along the Beaver Kill during a few surveys. NCES did not note any nests on site. Other bird species were observed in other areas of the site and included sparrows, wrens, finches, starlings, and robins.

M. Near the larger open water resources, wood ducks, black ducks, mallards, green-winged teals, kingbirds, flycatchers, swallows, and herons were observed. During the various site surveys, no waterfowl nests were discovered along the shorelines of the Beaver Kill or open water communities.

N. A minimal amount of bird activity was noted within the central portions of the site as this area has a monotypic forested community. These areas contained a thick overstory of eastern hemlock, maple, and oaks with a lack of herbaceous vegetation.

O. NCES consulted with the NYSDEC Natural Heritage Office (NHO) and identified that green rock cress (*Borodinia missouriensis*), a New York State threatened vascular plant was documented at the site in 2001.

P. Information obtained from the United States Fish and Wildlife Service (USFWS) indicated that there is potential for the Indiana Bat (Myotis sodalist) and the

Monarch Butterfly (*Danaus Plexippus*) to be on the site. The Monarch Butterfly is currently a candidate species only, it does not receive protection under the Endangered Species Act.

Q. During the ecological investigations, NCES assessed the site in search of habitats that exhibit the criteria for potential summer roosting sites and suitable foraging habitats for Indiana Bats. NCES also searched for any caves, mines, or other man-made structures that can be used as roosts or as an over-wintering hibernaculum. Potential roost trees were identified such as shagbark hickory, oaks, black cherry, dead/dying ash, sugar maple, and dead/dying elm. A presence/absence survey such as mist netting, acoustical monitoring, or radio telemetry was not completed at this time.

R. A Phase I Habitat evaluation was completed for the endangered Bog Turtle (*Glyptemys muhlenbergii*). The purpose of the Phase I Habitat evaluation is to determine if a habitat conducive to the inhabitation of Bog Turtles is present within, or immediately adjacent to the site. Based on the ecological conditions observed, no vegetated wetlands exhibiting the characteristics of Bog Turtle habitat are found within the boundaries of the site. Further, no Bog Turtle habitat was documented within any of the aquatic resources identified on site.

S. NCES also evaluated the site for Northern Cricket Frogs, a NYS-listed endangered species. The Northern Cricket Frog is not a federally listed endangered or threatened species. During the 2023 survey sessions, no Northern Cricket Frog calls were noted and NCES assumes there are none within the property.

T. According to the 2017 Rare Animal List, the Great Blue Heron is “common, widespread, and abundant” both geographically and within NYS. NCES did not observe any Blue Herons during the field review but noted a total of 5 communal nests (rookery) within the southern portion of Wetland H.

U. To summarize, during the field reviews, no endangered species were identified on the project site.

6.3.2 Potential Impacts

A. With the loss of vegetation on the site, there is the potential to displace inhabitant animals.

B. There are no endangered or threatened plant or animal species on the project site. See Appendix I for the Biological Report.

C. Current zoning allows the construction of the AOR Plan which has the potential to fragment conservation areas and can impact the biodiversity of the area. Great care has been taken in developing the SP Plan to create a contiguous open space area where plants and animals will not be disturbed. By concentrating development on the eastern portion of the site closest to the existing highways, existing animal habitats and travel corridors will be minimally impacted.

D. Future site-specific development will require correspondence with the NYSDEC and the USFWS to determine if additional endangered/threatened species need to be studied, and if further mitigation measures are necessary.

E. The SP Plan and the RWCS Plan concepts propose to conserve ±230 acres of open space that will be used as habitat for existing species.

F. Existing wildlife corridors such as the Beaver Kill, streams, open water ponds, and the utility line on the western side of the property will be avoided to minimize disturbances.

6.3.3 Potential Mitigation Measures

A. A significant portion of the property (± 70%) will remain open space and readily available to continue to support the habitat of existing species. This portion of the property will continue to offer the same ecological communities, vegetative cover types, and wildlife travel corridors as are currently present on the site.

B. There are no Bald Eagle nests found on the project site. In addition, there are no proper ecological conditions present on the site suitable for Bog Turtle habitat.

C. No clearing of vegetation will occur between April 1st and November 31st which is the known roosting and pup-rearing season for the Indiana Bat.

D. Wildlife habitats on adjacent properties offer the same species composition, function, and benefit to sustain indigenous species that may be displaced by the development. Existing animal species on the property can and will utilize these available habitats for food, water, and shelter. They can navigate through the wooded areas that will remain in place to reach similar habitats to the west, north, and south of the site.

E. Avoidance of the most significant forested areas, selective clearing, and limits imposed on the amount of clearing will reduce and minimize impacts to the greatest extent practicable. Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.

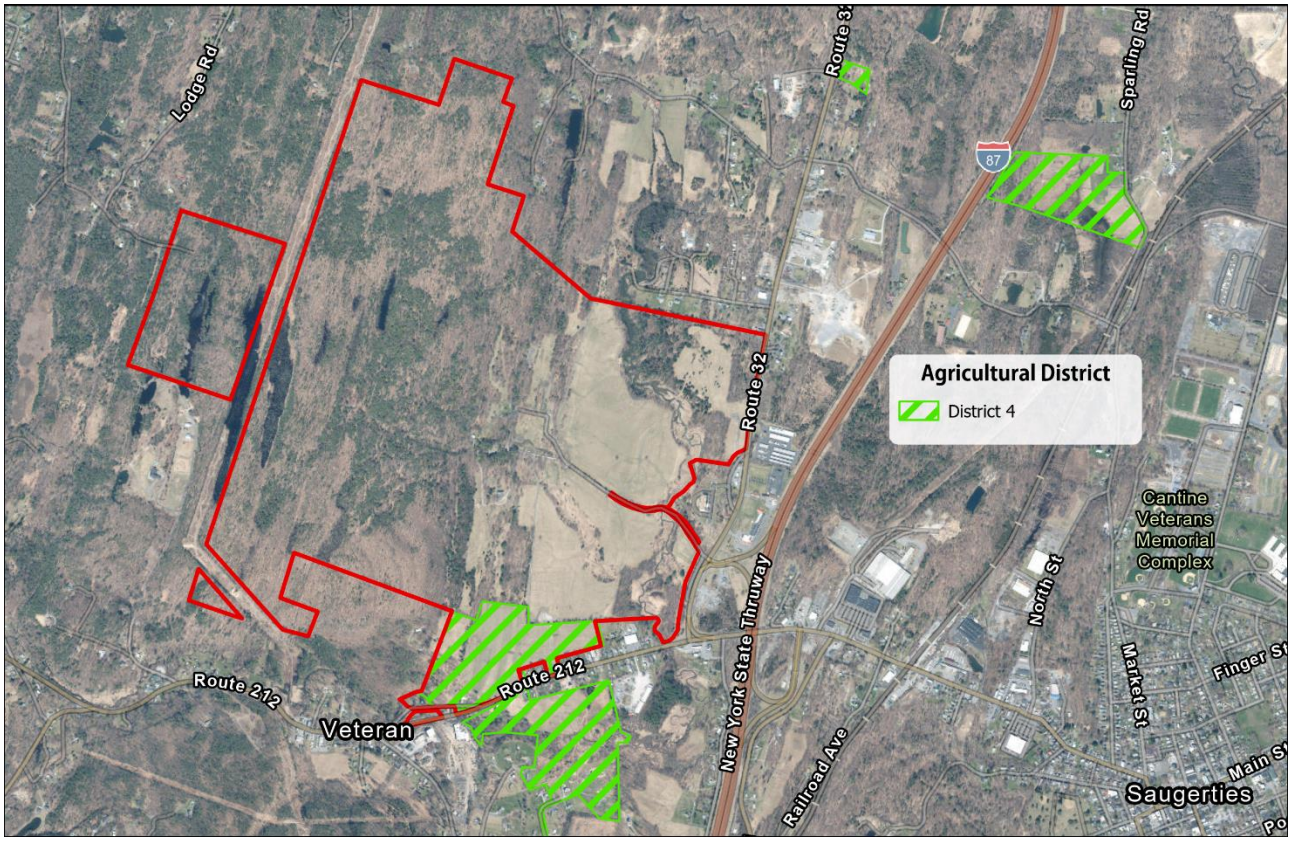
F. According to SEQRA regulations Part 617.10(c), Generic EISs should set forth thresholds for which future actions (development) can be undertaken. As development plans progress or change over time, each site-specific development proposed in the future under the new proposed zoning must have a lower environmental impact than the threshold established in this Generic EIS.

6.4 Impact on Agricultural Resources

6.4.1 Existing Conditions

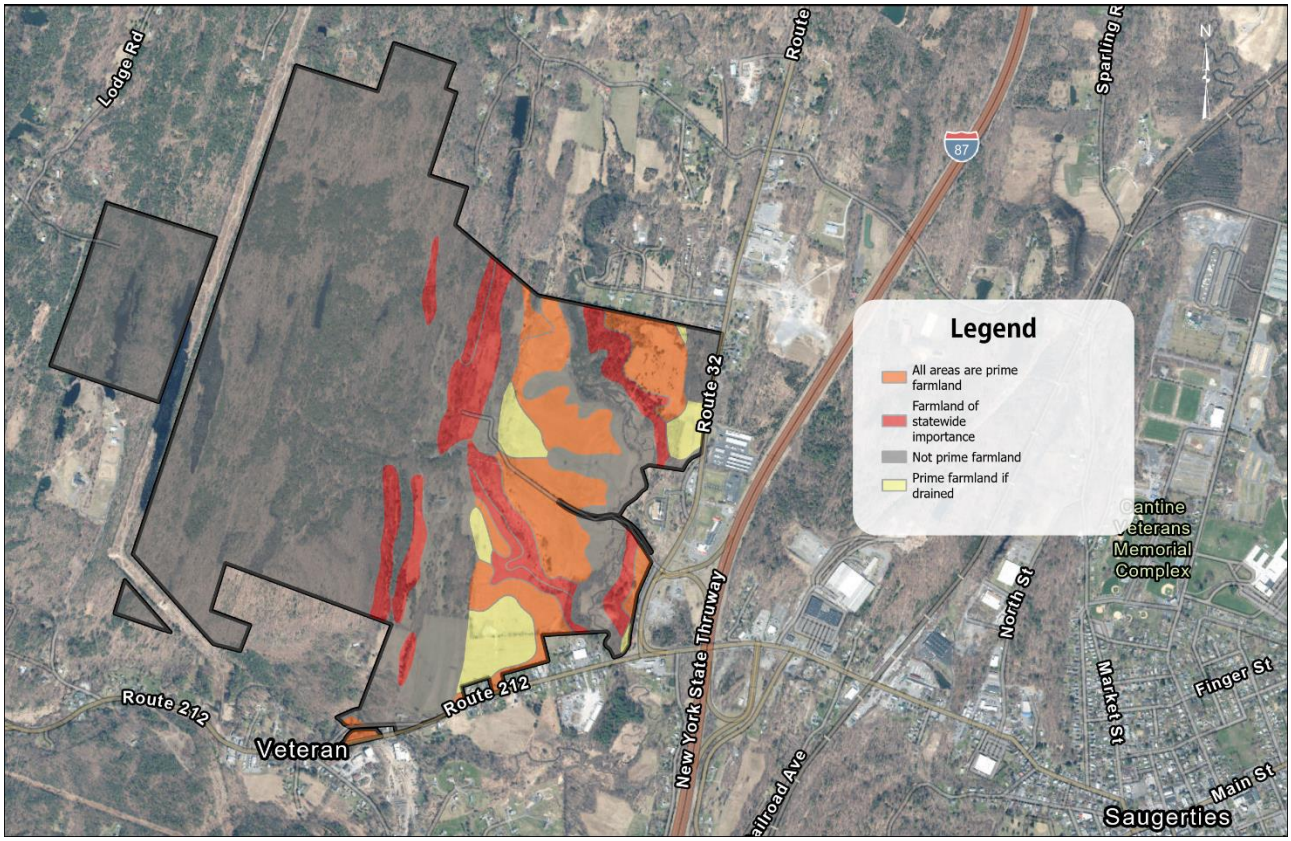
A. A small portion on the southern side of the site along Route 212 is identified as agricultural lands by the New York State Department of Agriculture and Markets, identified as Ulster County Agricultural District #4. According to the NYS Department of Agriculture and Markets, “Agricultural districts do not preserve farmland in the sense that the use of land is restricted to agricultural production forever. Rather, districts provide benefits that help make and keep farming as a viable economic activity, thereby maintaining land in active agricultural use.” Districts are renewed every 8 years and provide property tax benefits to owners. In practice, agricultural districts may include land that is actively farmed, idle, and forested, as well as residential and commercial. Refer to Figure 19.

Figure 19: Ulster County Agricultural District Map



B. According to the United States Department of Agriculture (USDA) Soil Classification System, farmland soil is classified as either prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. Using the USDA Web Soil Survey, Figure 20, prime farmland, and farmland of statewide importance are present on the site. In the approximately 840± acres of the project site, ±83 acres are classified as farmland of statewide importance.

Figure 20: USDA Farmland Soil Classification Map



C. The Town of Saugerties does not have an adopted Agricultural or Farmland Protection Plan.

D. Ulster County adopted an Agricultural and Farmland Protection Plan in 1997 and is currently working on updating this plan. According to their website, “a draft plan will be prepared in 2024 after the release of agricultural census data.” They state that much has changed in the county since the adoption of the last plan as local development pressures, macroeconomic trends, and a higher frequency of storms are having an impact on agriculture in the county.

E. Development pressures within the Town, the proximity to residential uses, and the length of time most of the property has been vacant created a much lower agricultural value on the property. Converting wetland and woodland areas to agricultural use is impractical and economically unsound.

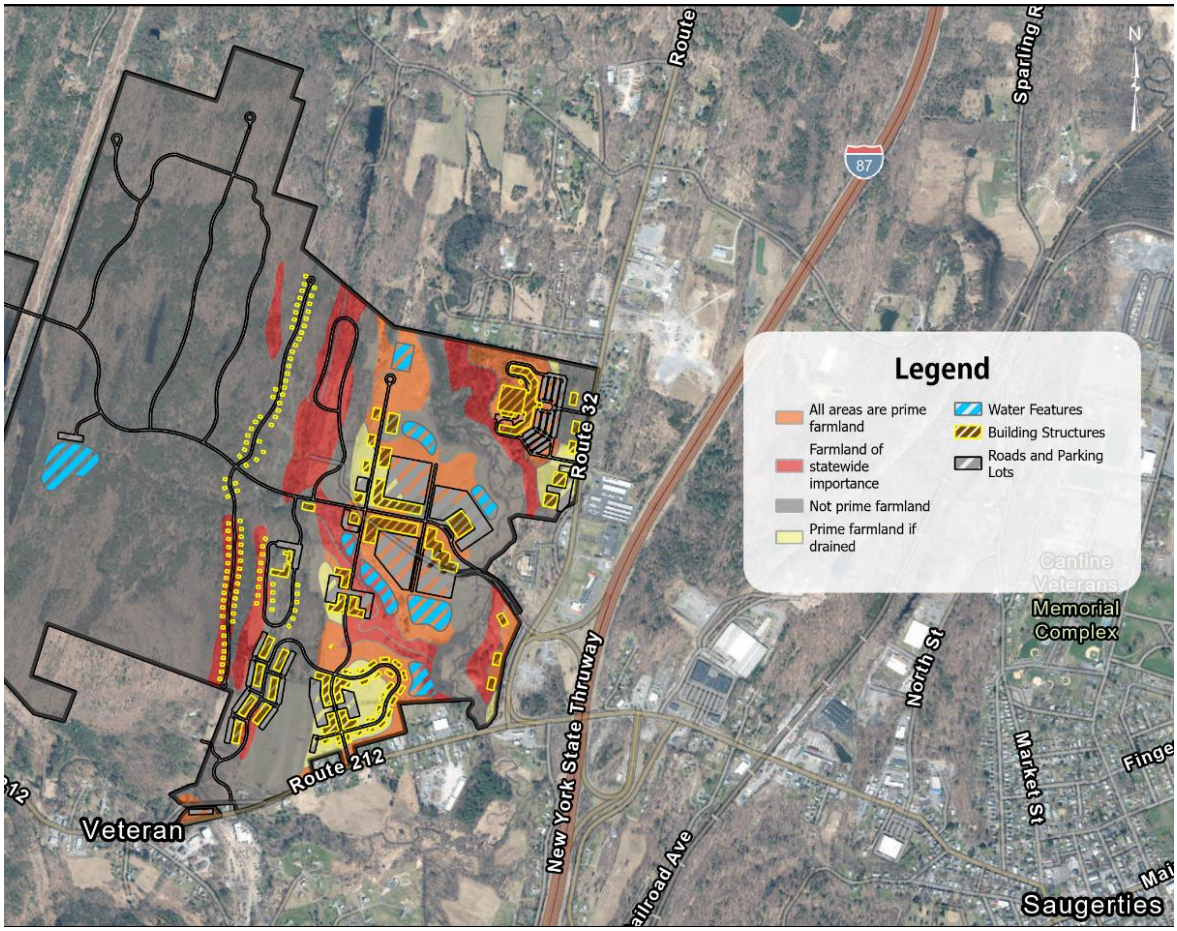
F. The historic use of the subject property as a dairy farm makes it unlikely that pesticides or herbicides were applied to agricultural sections of the property.

Though unlikely, if these chemicals were used then according to American Society of Testing and Materials (ASTM) Standards, normal use and application of pesticides does not constitute a Recognized Environmental Condition (REC) due to past usage of pesticides or herbicides.

6.4.2 Potential Impacts

A. There will be a loss of agricultural land because of this project. However, this loss is minimal in comparison to the 4,775.24 acres of cropland found in Ulster County. USDA CropScape data was used to determine that fallow cropland (crops not actively being farmed) fluctuated between 2012 to 2021. In 2015, nearly 44% of the cropland in Ulster County was underutilized.

Figure 21: Farmland Soil in Sponsor's Preferred Plan



B. Prime farmland is classified nationally by the USDA Natural Resources Conservation Service (NRCS). Soils must meet criteria based on their moisture, temperature, erodibility, pH, and water table to be considered prime farmland. Soils that are designated as “Prime Farmland if Drained” meet all the prime farmland criteria except for depth to seasonal high-water table. Farmland of Statewide importance differs by state. In New York, farmland of statewide importance includes land that does not meet the criteria for prime farmland but contains mineral soils in certain land classes. It is important to note that when land is classified as prime farmland or farmland of statewide importance, it does not necessarily mean that land is or can be farmed. These classifications are only based on the soil properties and do not consider other environmental factors such as weather, slope, size of field, and economic conditions.

C. The loss of agricultural land will not have a significant long-term impact on food production in the Saugerties area as several other larger farms in the region currently produce fresh products.

D. Agricultural uses will be allowable under the proposed zoning regulations. Subarea 1 Residential Low Density and Subarea 2 Residential High Density will permit agricultural uses including community gardens, agrihood and agritourism. Subarea 3 Perimeter Commercial and Subarea 5 High Tech Commercial will permit agricultural uses and agricultural technology. Subarea 4 Central Recreation will permit agricultural uses including agrihood and agritourism.

E. The reduced amount of agriculture on the site offers benefits to its residential neighbors as any use of fertilizers or potential pesticides in the future will be significantly reduced.

F. The PDD regulations (Appendix P) introduce new agriculturally related uses defined as:

AGRICULTURAL TECHNOLOGY

Businesses which focus on agriculture, horticulture, and aquaculture with the aim of improving yield, efficiency, and profitability. Businesses may provide research, management, and oversight to the farm sector to enhance and improve the production of farm products and/or processes, improved systems of food security, plan for sustainable food production, aid in the distribution of farm-based goods and marketing of farm products, and coordinate financing. Businesses may also buy and sell agricultural produce or provide goods and

services to farms. The manufacturing and storage of pesticides, fertilizers, and farming equipment is not included.

AGRIHOOD

An agrihood is a community which integrates farms and gardens to supply locally grown food to its residents and businesses. The purpose is to facilitate food production and provide green space, recreation, aesthetics, and value for a community.

AGRITOURISM

Agricultural uses, farms and ranches, which as part of their operations also invite visitors to their enterprises. Agritourism can include farmer's markets, corn mazes, petting farms, hayrides, u-pick operations, and farm tours. These activities help educate the community about farming operations and provide additional revenue.

6.4.3 Potential Mitigation Measures

A. The PDD permits agricultural uses in each of the subareas.

B. When land is classified as prime farmland or farmland of statewide importance, it does not necessarily mean that land is or can be farmed. These classifications are only based on the soil properties and do not consider other environmental factors such as weather, slope, size of field, and economic conditions. Agricultural District 4 located on the site is presently the site of the sledding hill and has slopes not conducive for farming.

C. Given that the loss of agricultural land on the Winston Farm site is minimal compared to the rest of the County, no further mitigation is warranted.

6.5 Impact on Aesthetic Resources & Community Character

Refer to Appendix M for the Visual Study

6.5.1 Existing Conditions

A. The site gently increases in elevation from east to west. From Route 32 looking toward the west. Open fields, croplands, pastures, and mature wooded areas are visible from Route 32. Beyond the wooded areas, the peaks of the Catskill Mountains are visible in the distance with no distinct features visible without the use of binoculars.

B. There are 19 wetlands and 4 watercourses located throughout the property with the main watercourse, the Beaver Kill, which bisects the property in a north to south direction near Route 32.

C. Near the signal light on Route 32 at I-87, there are several commercially developed properties and a park-and-ride along the Route 32 frontage. Building heights in this area range from a single-story convenience store to a 4-story hotel, and a vacant 1-1/2-story stone structure. Further north along Route 32, adjacent to Winston Farm, is a mix of one- and two-story, smaller-scale commercial and residential use.

D. The east side of Route 32 between Route 212 and the I-87 exit is built up with commercial development, including several hotels, a restaurant, and what looks to be a municipal materials storage yard, which buffers views of I-87 in the distance. Further north is a mix of small-scale commercial and residential uses.

E. Both sides of Route 212 are characterized by one- and two-story commercial or residential buildings, each with mature vegetation in the front or rear yards or both, which buffer views of the site from public vantage points along Route 212.

F. There are eight historic buildings on or within one mile of the site. The structures on the site are centrally located and not visible from public vantage points. Refer to Section 6.6 for more details on Historic resources.

G. There is no distinct building or architectural style in the immediate vicinity of the site.

H. The buildings in the center of the Village of Saugerties are characterized by two- to three-story, flat roof structures with commercial uses on the first floor and residential on the upper floors. There are also multi-story high-density residential structures along these corridors. The predominant building materials along Main Street and Route 9W are brick, wood, and stucco. One- to two-story residential structures populate the main streets further away from the center of the village and on secondary streets, where pitched roofs and vinyl finishes are introduced.

I. The Hamlet of Malden is located along the Hudson River to the east of the site. The Hamlet of Malden Reconnaissance Survey of Historic Resources (Survey number 21R00146) is still under review by the State Historic Preservation Office (SHPO). As of the preparation of this document, there were 103 properties surveyed, of which one was deemed eligible for listing on the National Register. The remaining sites were coded as undetermined or not eligible. The study area has not been listed on the State or National Register of Historic Places.

J. The Hudson Valley is known for its pristine mountain ranges, watercourse, and spectacular views. Saugerties is nestled between the foothills of the Catskill Mountains and the Hudson River with extensive frontage on Plattekill and Esopus creeks.

K. The area surrounding the subject property can generally be described as rural agricultural.

6.5.2 Potential Impacts

A. There is a concern that future development in the PDD will have an impact on the existing viewshed and character of the community. To assess the potential visual impacts of the proposed development on the surrounding area, a visual study was performed to assess the magnitude of the visibility of the Winston Farm site from various vantage points identified in the scoping document.

B. Photographs used for the visual study were taken in leaf-on and leaf-off conditions.

C. The visual study considers potential impacts future development may have from public vantage points along Route 32, Route 212, and I-87 for each of the AOR, SP, and RWCS plans. The height of future buildings in the PDD were considered in this study. Buildings up to 60 feet high are permitted in Subareas

3 and 5 along Route 32. Buildings up to 48 feet in height will be permitted in Subareas 2 and 4. Subarea 1 will permit buildings up to 40 feet in height:

Table 16: Proposed Building Heights

Subarea	Proposed Subarea	Minimum Building Height	Maximum Building Height
1	Residential Low Density	N/A	40 feet
2	Residential High Density	24 feet	48 feet
3	Perimeter Commercial	24 feet	60 feet
4	Central Recreation	24 feet	48 feet
5	Tech and Business Park	N/A	60 feet

D. The visual study includes aerial views and perspective of the three development scenarios from the north, south, east, and west.

E. The images in the visual study identify the balance of open space and development that is planned in the PDD, with higher intensity uses near Route 32 and low intensity uses in the central and northwest areas of the site.

F. The Visual Study identifies that development at Winston Farm is visible from certain, but not all, vantage points identified in the scoping document. Winston Farm is visible from the location notes in bold text below. The other locations do not have viewsheds of Winston Farm because of the topography, buildings, and mature vegetation.

- **NYS Route 32**
- I-87
- **NYS Route 212**
- People's Road
- Canoe Hill Road
- Hommelville Road
- Buffalo road
- Mower Hill Road
- **Augusta Savage Road and Route 32**
- **Identified historic listed or eligible buildings**
    - **Winston Mansion**
    - **Red House**

    - **Wynkoop Farm Tavern**
- Identified scenic areas
    - Esopus Bend Nature Preserve
    - Sloan Grove Park
- NYS parks and Historic Sites

6.5.3 Potential Mitigation Measures

A. Future development will include ample setbacks from Route 32 and Route 212. In addition, an undisturbed 125-foot buffer, approximately 38 acres, will be provided along the west and north property lines to buffer uses in the PDD from adjacent properties. This approach, including the existing and proposed landscaping and open space buffers, aims to preserve the rural appearance of the site and surrounding area while minimizing visibility from Route 32 and I-87 and surrounding properties.

B. Avoidance of the most significant forested areas, selective clearing, and limits imposed on the amount of clearing will reduce and minimize impacts to the greatest extent practicable. Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.

C. The building placement, and the location of roads and driveways have been strategically designed to take advantage of the existing topography. Taller buildings and higher intensity uses are located in the lower areas along Route 32 and Route 212.

D. The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements and establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience. No particular architectural style is mandated or prohibited; rather the architectural standards and guidelines are intended to promote a unified place. The advisory guidelines are intended to provide insight into some of the desired characteristics of the district, while the standards set the minimum requirements for architectural quality. The mandatory standards are applicable to building elements that are clearly visible from the public right-of-way.

E. While future development will change the visual character of the subject property from undeveloped vacant land to developed land, the proposed development is consistent with existing development in the immediate surrounding area.

F. Generous setbacks will be maintained along Route 32 and Route 212. Existing mature vegetation will be retained through selective clearing, and new landscaping will be installed to protect the existing rural appearance of the area. Overall, the proposed development is not expected to result in significant adverse impacts on aesthetic resources including from publicly accessible views.

G. The visual study determined that future development will be visible from Route 32, Route 212, August Savage Road at Route 32. In addition, future development will be visible from the existing structures on or adjacent to Winston Farm, such as the Winston Mansion, the Red House, and the Wynkoop Farm Tavern. Quality design, ample setbacks and strategic placement of building and uses will minimize visual impacts.

6.6 Impacts on Historic and Archeological Resources

6.6.1 Existing Conditions

Refer to Appendix L for the Historic and Archeological Reports

A. A Phase 1A Cultural Resource Investigation performed by Atlas Archeology LLC identified 26 historic archaeological ruins/mills/extraction sites (quarries), 4 historic structures, a cemetery, and 14 known pre-contact Native American archaeological sites on the 840-acre Winston Farm property. For confidentiality purposes, precise locations, photographs, and descriptions of the precontact sites are not provided. Following is an inventory of the historic and archeological resources on the site:

   a. Of the 26 historic archaeological sites, 12 sites contain either bluestone or limestone bricks and are speculated to be ruins of former Wynkoop or Winston estates. These sites are mostly destroyed, with the remains of spare bricks, walls, and pillars.

   b. The cemetery of the Wynkoop Family, who inhabited the Winston Farm site in the mid-1800s. Over 14 named graves are found on the site, all sharing the Wynkoop surname. Most of the headstones are still visible and in legible condition, with some being partially buried or damaged.

c. A small 5-sided bluestone structure with a door.

d. A small bluestone reservoir with an opening to release excess water, located near Winston Mansion.

e. Three dams, all of which retain mill ponds scattered about the Winston Property. These dams are made of primarily bluestone.

f. Five former quarries that span most of the western area of the Winston property.

g. A large fireplace composed of glacial cobbles, fieldstone, and bluestone. The fireplace is isolated from other sites and assumed to have originated from the Winston estate.

h. An ornamental pool composed of fieldstone and bluestone, assumed to have originated from the Winston estate.

i. A foundation located near Augusta Road is currently covered by blacktop.

B. There are a total of 31 Native American precontact sites located within one mile of the survey area, 14 of which are within the boundaries of the survey area. There is a high likelihood that additional precontact sites will be discovered near the various streams and wetlands contained in the survey area.

C. According to the New York State Office of Parks, Recreation, and Historic Preservation (SHPO) Cultural Resource Information System (CRIS), there are 8 historic structures on Winston Farm or within a one-mile radius. These structures are identified as listed, eligible for listing, or not eligible for listing on the National Register of Historic Places (NR), as follows:

Table 17: Historic Structures on or within a 1-mile Radius

Name	Address	Listing	On/Off the Site
Augusta Savage House & Studio	189 Old Route 32	Listed	Off
No Name	21 Teatsel Street	Eligible	Off
Snyder Farm	108 Old Route 212	Eligible	On
Two-story Cottage	148 Old Route 212	Not eligible	On
Wynkoop Farm Tavern; Early Masonic Meeting Hall	6932 NY Rote 32	Listed	Off
Winston Mansion	Augusta Savage Road	Eligible	On
Red Cottage	Augusta Savage Road	Eligible	On
Caretaker's house	Augusta Savage Road	Eligible	On

D. There is one National Register District and two National Register Listed properties in the Village of Saugerties: the Main-Partition Streets Historic District (NR# 90NR01109), the DuBois-Kierstede Stone House at 199 Main Street (NR# 98NR01338), and the Loerzel Beer Hall at 213 Partition Street (NR# 90NR01110).

E. The Hamlet of Malden Reconnaissance Survey of Historic Resources (Survey number 21R00146) is still under review by SHPO. As of the preparation of this document, there were 103 properties surveyed, of which one was deemed eligible for listing on the National Register. The remaining sites were coded as undetermined or not eligible.

Existing Structures on the Site

Caretaker's Residence

Red Cottage

Winston Mansion

White Cottage at 148 Old Route 212

Other Structures on the Project Site

6.6.2 Potential Impacts

A. Under all 3 development scenarios, the known 26 historic archaeological sites,14 known pre-contact Native American archaeological sites, and the historic buildings within the project boundary will remain undisturbed.

6.6.3 Potential Mitigation Measures

A. Upon acceptance of the Phase 1A Archaeological Study, SHPO confirmed that a Phase 1B shovel test will need to be performed once site-specific development has been identified. A qualified firm will perform shovel testing consisting of the layout of a one-meter square grid where the soil is excavated and screened. Any culturally or historically sensitive items are recovered, cataloged, and studied. A completed Phase 1B report is required to be submitted to SHPO for review and acceptance prior to project approval and commencement of development activities.

6.7 Impacts on Open Space and Recreation

6.7.1 Existing Conditions

A. The Winston Farm site has been a source of local recreation, most notably the site of the Woodstock 1994 festival which hosted an estimated 350,000 attendees, and a small section of hill on the west side of the property is frequently used for sledding.

B. The project site is approximately 840 acres. The area of the site that currently consists of structures, roads, and other impervious surface is ± 30 acres. The remaining 810 acres is contiguous, non-fragmented open space.

C. Open space is defined by the Town of Saugerties zoning law as “Land left in a natural state for conservation and agricultural purposes or land landscaped for scenic purposes, devoted to active or passive recreation, or devoted to the preservation of distinctive architectural, historic, geologic or botanic sites. The term shall not include land that is paved, used for the storage, parking or circulation of automobiles, or occupied by any structure. Open space may be included as a portion of one or more large lots or may be contained in a separate open space lot but shall not include private yards within 50 feet of a principal structure.”

D. Surrounding areas of the project site that act as open space for the Town of Saugerties include the Catskill Mountains, the Great Vly-Sawyerkill, the Limestone and Shale Ridge, the Kaaterskill Wetlands, the Beaver Kill Corridor, High Woods, the Lower Esopus Creek Corridor, and the Hudson River Estuary. These regional

landmarks are shelters for local plants and animals and contain hundreds of wetlands and acres of protected forest.

E. The Town of Saugerties Open Space Plan developed a vision for the Winston Farm, which included basic guidelines for use and development, which are also applicable to other large parcels with similar characteristics:

- Be environmentally sound with a focus on energy self-sufficiency
- Generate tax revenue for local government and schools
- Be historically sensitive (significant buildings and landscapes)
- Preserve at least 50% of the total site as open space.

6.7.2 Potential Impacts

A. The current contiguous open space is approximately 810 acres. The remaining ± 30 acres are the existing developed areas. The open space and recreation impacts associated with each of the three development scenarios upon full build-out will result in the following:

Table 18: Open Space Impacts

Scenario	Open Space Removed (Acres)	Open Space Remaining (Acres)	Open Space Remaining (%)
AOR	429	381	47.0%
SP	227	583	71.9%
RWCS	232	578	71.3%

6.7.3 Potential Mitigation Measures

A. To reduce potential impacts, a minimum of ½ acre per residential parcel has been set aside for open space in both the Sponsor's Preferred Plan (SP) and the Reasonable Worst-Case Scenario (RWCS).

B. In the Sponsor's Preferred Plan (SP), ± 583 acres of contiguous open space will remain undisturbed.

C. The sledding hill on the western portion of the site will remain open space in all three development scenarios.

6.8 Impacts on Transportation

6.8.1 Existing Conditions

Refer to Appendix B for the Traffic Impact Study

A. Given that the existing site is primarily undeveloped there is no turning movement, level of service, or accident data for the project site.

B. The TIS, prepared by Creighton Manning Engineering, LLP (CM) provides an analysis of the existing street network; road conditions; intersections (signalized and unsignalized); transit, pedestrian, bicycle facilities, and school bus stops; traffic operations (Level of Service or LOS), and recommendations for improvements and mitigation over time as development occurs in the PDD. Refer to the summary table in Attachment B of the TIS, which is located in Appendix B of the DGEIS.

C. The study network peak hours are determined to be:

#	Period Name	Period Limits	Peak Hour
1	Weekday Morning	7:00 AM-9:00 AM (2 hours)	7:30 AM-8:30 AM
2	Weekday Evening	2:00 PM-7:00 PM (5 hours)	4:00 AM-5:00 PM
3	Friday Evening	3:00 PM-8:00 PM (5 hours)	4:30 AM-5:30 PM
4	Saturday Midday	11:00 AM – 5:00 PM (6 hours)	11:15 AM - 12:15 PM
5	Sunday Midday	11:00 AM – 5:00 PM (6 hours)	11:45 AM - 12:45 PM

D. Ulster County Area Transit (UCAT) provides one bus route that operates within the vicinity of the proposed development, Kingston Saugerties (KS). The available capacity of the UCAT bus route was estimated based on the total number of bus trips per day and a 35-person capacity per bus. The KS bus route operates 16 trips on weekdays and 5 trips on Saturdays, which equates to an approximate 560-person and 175-person capacity on weekdays and Saturdays, respectively.

E. Additionally, there is an existing Park-and-Ride facility located along the NYS Route 32 site frontage. This facility provides 43 parking spaces and a sheltered bus stop that is served by Greyhound and Trailways express lines, which provide one inbound and one outbound bus trip per day including weekdays, Saturdays, and Sundays.

F. There are no existing pedestrian accommodations along the subject site's frontages with NYS Route 212 and NYS Route 32, or within its general proximity. A sidewalk is provided along the northerly side of NYS Route 212 east of Interstate-87, and then along both sides of NYS Route 212 further east beyond Railroad Avenue. There is no dedicated bicycle trail/path within the site proximity; however, the Village of Saugerties defines a bicycle loop, known as "Bike Route B" that traverses Peoples Road and Hommelville Road, which is approximately one mile north of the NYS Route 32 site frontage. Additionally, the majority of roadways surrounding the subject site provide shoulders that may be used by cyclists.

6.8.2 Potential Impacts

A. CM conducted traffic counts at 19 intersections in the study area. To capture typical school traffic and seasonal ski traffic, the counts were conducted during the winter season in December 2022 and January 2023.

B. Traffic counts were conducted when schools were in normal session and did not follow or precede any holidays. The counts captured the breakdown in vehicle classifications (lights, buses, heavy vehicles) as well as bicycles and pedestrians. These peak periods coincide with the anticipated peak operation times of the proposed development.

C. Automatic Traffic Recorders (ATRs) were installed to collect traffic volume, speed, and classification data over several days in December 2022 and January/February 2023, at 9 locations along NYS Route 21, Kings Highway, Railroad Avenue, and NYS Route 32 in accordance with the DGEIS Scoping Document.

D. The Novel Coronavirus/COVID-19 pandemic was anticipated to have an effect on the turning movement counts. The observed volumes from each study period were compared to historical ATR data collected by NYSDOT between 2017 and 2019, as well as ATR data collected by CM in 2014 and 2019. Calibration factors were used to properly account for pre-COVID traffic conditions. The findings of the traffic volume comparison and the calibration factors were presented to and validated by the Town's Traffic Consultant, Colliers Engineering & Design (Colliers).

E. The TIS was conducted for the estimated year of project completion (design year) plus 10 years. In keeping with NYSDOT standards, CM rounded the design year to 2030 and prepared traffic projections for 10 years beyond the estimated time of completion – 2040. CM calculated an annual growth rate of +0.50%. This growth rate, upon review and approval by Colliers, was applied to the 2023 existing calibrated volumes and compounded annually for 17 years.

F. The TIS took into consideration three other developments in the area that, if approved and constructed, can potentially increase traffic within the study area. The volume of traffic generated by these other developments was added to the future growth traffic volumes projected to 2040. A review of the NYSDOT "Project In Your Neighborhood" web portal revealed there are no planned or ongoing projects within the study area.

Project	Type	Location	Source of Trip Generation	Total Peak Hour Trips Generated in Study Area by Projects				
				Weekday AM	Weekday PM	Friday PM	Saturday Midday	Sunday Midday
Glasco Apartments	Multifamily	Route 9W/ 260 Glasco Tpke	Colliers	57	70	70	52	46
The Villa Residences	Senior Housing	49 Spaulding Lane	Colliers	15	17	17	19	19
SherLilly, LLC	Dog Training Facility	51 Industrial Drive	Daniel J Gosselin, P.E.	10	10	10	31	31

G. Trip generation determines the quantity of traffic expected to travel to and from a given site. The Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, is the industry standard used for estimating trip generation for proposed land uses based on data collected at similar uses. The trip generation for the proposed development was estimated for each of the three scenarios: AOP, SP, and RWCS. In order to provide a realistic estimate of trip generation, various credits were considered, including:

- Internal Capture. ITE states that in mixed-use developments, such as that identified in the Winston Farm PDD, individual land uses tend to interact by attracting a portion of each other's trip generation.

- Pass-By. ITE states that not all traffic entering or exiting a site driveway is necessarily new traffic added to the roadway system. A shopping center, for example, attracts a certain percentage of the traffic already in the roadway

network where a passerby will stop before continuing to their primary destination.

- Diverted-Link. Use, such as a gas station, is expected to attract a certain percentage of traffic already traveling within the vicinity but requires a traveler to divert from their original path in order to access the site before returning to the normal path towards their primary destination.

H. Following is a summary of the overall peak hour trip generation of the subject site under all three scenarios, after accounting for internal capture, pass-by trips, and diverted link trips. These trips are referred to as Primary trips. Please note that no transit trip reductions were applied in this report.

Scenario	Weekday AM Peak Hour			Weekday PM Peak Hour			Friday PM Peak Hour			Saturday Midday Peak Hour			Sunday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
AOR	408	494	902	812	700	1,512	912	750	1,662	843	753	1,596	669	662	1,331
SP	584	493	1,078	765	764	1,530	863	805	1,667	1,083	965	2,047	684	683	1,367
RWCS	708	564	1,272	943	941	1,884	1,083	1,055	2,138	1,308	1194	2,502	888	876	1,764

I. Traffic distribution was determined based on potential travel patterns and places of interest for the future users of the project. The analysis assumes that the commercial and residential components will attract approximately 50% of their trips from “inner town” local roads and 50% from I-87, while the hotel and recreational components will attract approximately 80% of their trips from I-87 and 20% from local roads. Pass-by trips were assumed to occur mostly via Augusta Savage Road rather than the NYS Route 212 site driveway since the commercial uses will be located along the NYS Route 32 frontage. Diverted Link trips were added to the I-87 northbound and southbound ramps to account for motorists diverting from their typical route to visit the site.

J. Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using the Synchro Version 11 software, which automates the procedures contained in the Highway Capacity Manual. Twenty-seven study intersections were evaluated under the 2023 Existing and 2040 No-Build Conditions, and the 2040 Build Condition including the AOR, SP, and RWCD scenarios. The LOS Summary Tables and detailed LOS analysis reports are provided in the TIS, Attachment H. The TIS is located in Appendix B of the DGEIS.

K. A left-turn lane analysis was conducted to determine whether the Build traffic volumes warrant a northbound left-turn lane on NYS Route 212 at the site driveway, and on NYS Route 32 at the northeast site driveway. The anticipated number of left turns does meet the suggested warrant criteria for a left turn in the Build condition for the site driveways on NYS Route 212 and NYS Route 32 during the study peak hours.

L. An analysis was conducted to determine if the Build traffic volumes warrant the installation of a traffic signal at the following locations:

- NYS Route 32/Northeast Area Driveway
- NYS Route 212/South Area Driveway
- NYS Route 32/Peoples Road
- NYS Route 32/Old Kings Highway

M. Based on the traffic signal warrant analysis and the 2040 Build Volumes under the Sponsors Preferred scenario, traffic signals are warranted at all four of the above-listed intersections.

N. CM conducted a feasibility evaluation for roundabouts at the following intersections:

- NYS Route 32/Peoples Road
- NYS Route 32/Northeast Area Driveway
- NYS Route 32/Augusta Savage Road/Interstate-87 SB Ramp
- NYS Route 32/NYS Route 212
- NYS Route 212/South Area Driveway

These intersections were selected as the project proposes to either improve them with a signal, or they are considered key intersections. The New York State Department of Transportation (NYSDOT) Highway Design Manual was used to determine the feasibility of a roundabout based on several factors. Each of the above-listed intersections can benefit from a roundabout.

6.8.3 Potential Mitigation Measures

A. Twenty-seven study intersections were evaluated under the 2023 Existing and 2040 No-Build Conditions, and the 2040 Build Condition including the AOR, SP, and RWCD scenarios. The LOS summary reveals that off-site locations are expected to experience operational constraints due to the additional volumes

from full build-out in the PDD. The Summary Tables and detailed LOS analysis reports are provided in the TIS, Attachment H. The TIS is located in Appendix B of the DGEIS.

B. CM evaluated possible improvements that, if implemented, will improve the operations at these locations. The Build condition concerns and possible improvements include:

Table 19: Traffic Mitigation Measures

Location	Build Conditions Concerns	Possible Improvements
NYS Route 32/NYS Route 212 Intersection	• Southbound delays • Overall intersection delays • Westbound and southbound queues	• Signal timing modifications. • Southbound approach geometry
NYS Route 212 Signalized Intersections – **4. I-87 NB Ramp Intersection/McDonald's Driveway** **5. Kings Highway** **6. Big Lots Driveway**	• Overall intersection delay • Eastbound delays • Queue on the corridor	• Signal timing coordination for three intersections
NYS Route 32/Peoples Road/Hommelville Road Intersection	• Delays on westbound approach • Crash History	• Proposed traffic signal
NYS Route 32/Old Kings Highway (CR 34)	• Delays on westbound approach	• Proposed traffic signal

C. If approved, the above improvements will be implemented in coordination with the Town of Saugerties, Ulster County, and NYSDOT and will be funded based on the respective jurisdictional agency's preferred method. Conceptual improvement plans will be prepared subsequent to preliminary approval by the respective jurisdictional agencies.

D. The TIS analysis and the recommended mitigation are based on a full build-out plan of the PDD to inform decision-makers of the potential areas of concern. It is anticipated that each application that is made to the Town of Saugerties for development within the PDD will be accompanied by trip generation information that can be compared to the TIS to identify the need and timing for implementing the recommended improvements.

E. Tables 6-10 summarize the traffic operations at the above intersections for each of the peak hours studied if those improvements were implemented. The No-Build and unmitigated SP and RWCS conditions are also shown in the tables for comparison.

Table 20: LOS Summary Table with Mitigation (Weekday AM)

Intersection		Control	Weekday AM Peak Hour				
			2040 No-Build	SP	SP – W/ Mit	RWCS	RWCS – W/ Mit
NY 32/NY 212/Speedway Driveway		S					
NYS Route 212, EB	L		B (13.9)	B (14.1)	B (16.3)	B (14.1)	B (17.0)
	TR		B (15.2)	B (15.5)	B (17.9)	B (15.4)	B (18.7)
NYS Route 212, WB	LT		B (30.4)	C (32.6)	D (40.5)	C (32.2)	D (41.7)
	R		A (0.4)	A (0.8)	A (0.8)	A (0.9)	A (0.9)
Speedway Driveway, NB	LTR		B (12.3)	B (13.5)	D (42.8)	B (13.7)	D (46.5)
NYS Route 32, SB	LT/*L		C (34.9)	**F (166.4)**	C (32.2)	**F (190)**	C (31.7)
	R/*TR		A (8.9)	A (9.9)	B (12.9)	B (10.1)	B (12.7)
	Overall		B (16.6)	**E (60.7)**	C (21.1)	**E (67.8)**	C (21.1)
NY 212/I-87 NB Ramp/McDonalds Driveway		S					
NYS Route 212, EB	L		B (13.9)	B (16.7)	B (12.8)	B (17.3)	B (17.1)
	T		E (67.7)	**F (146.2)**	D (45.2)	**F (156.8)**	**F (86.3)**
	R		A (8.8)	A (9.1)	A (6.8)	A (9.1)	A (8.4)
NYS Route 212, WB	L		B (16.5)	C (20.5)	C (27.0)	C (21.0)	C (31.9)
	TR		B (17.1)	C (21.5)	B (12.8)	C (22.3)	B (16.3)
I-87 Northbound Ramp, NB	L		C (31.1)	C (33.8)	D (44.1)	D (35.9)	D (42.9)
	LTR		C (28.5)	C (32.1)	D (40.4)	C (33.7)	D (40.1)
N Manheim, SB	L		C (34.6)	D (37.8)	D (52.8)	D (38.5)	D (47.4)
	TR		C (33.2)	D (36.2)	D (43.3)	D (36.8)	D (45.1)
	Overall		D (37.9)	**E (61.7)**	C (29.9)	**E (64.4)**	D (43.5)
NY 212/Kings Highway/Buns Burger Drw		S					
NYS Route 212, EB	L		A (6.6)	A (7.3)	A (4.3)	A (7.4)	A (3.2)
	T		B (10.4)	B (11.7)	A (4.9)	B (11.9)	A (3.8)
	R		A (9.5)	B (10.5)	A (1.1)	B (10.6)	A (0.7)
NYS Route 212, WB	LTR		A (2.6)	A (2.8)	A (2.8)	A (2.8)	A (2.5)
Kings Highway, NB	LT		D (42.2)	D (45.1)	D (40.8)	D (45.3)	D (45.6)
	R		C (26.3)	C (25.7)	C (25.1)	C (25.7)	C (28.2)
N Chestnut Street, SB	LTR		A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	Overall		B (11.2)	B (12.4)	A (8.1)	B (12.6)	A (8.3)
NY 212/Big Lots Driveway		S					
NYS Route 212, EB	L		A (2.6)	A (2.7)	A (4.5)	A (2.8)	A (2.5)
	T		A (3.8)	A (4.1)	A (5.7)	A (4.1)	A (3.7)
NYS Route 212, NB	T		A (9.5)	B (10.6)	B (11.4)	B (10.7)	B (11.4)
	R		A (7.6)	A (8.3)	A (9.0)	A (8.4)	A (9.0)
NYS Route, SB	L		A (27.8)	C (27.2)	C (26.8)	C (27.2)	C (29.9)
	R		C (27.8)	C (27.2)	C (26.8)	C (27.2)	C (29.9)
	Overall		A (7.5)	A (8.2)	A (9.3)	A (8.3)	A (8.6)
NY 32/Peoples Rd/Hommelville Rd		U/S					
Hommelville Rd, EB	LTR		C (15.8)	C (19.2)	B (12.9)	C (19.6)	B (13.0)
Peoples Road, WB	LTR		C (21.1)	**F (50.4)**	B (14.0)	**F (55.7)**	B (14.2)
NYS Route 32, NB	LTR		A (8.8)	A (9.3)	A (5.4)	A (9.3)	A (5.4)
NYS Route 32, SB	LTR		A (8.1)	A (8.5)	A (6.6)	A (8.5)	A (6.7)
	Overall		--	--	A (6.8)	--	A (6.8)
NY 32/CR 34 (Old Kings Highway)		U/S					
CR 34, WB	LR		C (21.3)	D (34.5)	B (16.6)	**E (36.7)**	C (23.2)
NYS Route 32, NB	TR		--	--	A (8.2)	**--**	A (6.9)
NYS Route 32, SB	LT		A (0)	A (0)	B (11.5)	A (0)	A (9.1)
	Overall		--	--	B (10.9)	--	B (10.2)

Table 21: LOS Summary Table with Mitigation (Weekday PM)

Intersection		Control	Weekday PM Peak Hour				
			2040 No-Build	SP	SP – W/ Mit	RWCS	RWCS – W/ Mit
NY 32/NY 212/Speedway Driveway		S					
NYS Route 212, EB	L		B (14.1)	B (14.3)	D (36.1)	B (14.4)	D (35.1)
	TR		B (14.1)	B (13.7)	C (23.6)	B (13.7)	C (26.1)
NYS Route 212, WB	LT		C (31.8)	C (37.1)	**E (55.7)**	D (37.3)	**F (92.9)**
	R		A (0.8)	A (1.7)	A (1.7)	A (2.1)	A (2.1)
Speedway Driveway, NB	LTR		B (14.0)	B (16.7)	D (54.8)	B (16.7)	D (49.5)
NYS Route 32, SB	LT/*L		D (42.5)	**F (398.3)**	**E (62.7)**	**F (450.6)**	D (48.3)
	R/*TR		B (10.5)	A (11.9)	B (14.6)	B (11.9)	B (12.1)
	Overall		B (19.7)	**F (126.9)**	C (32.8)	**F (144.8)**	C (34.2)
NY 212/I-87 NB Ramp/McDonalds Drw		S					
NYS Route 212, EB	L		B (14.9)	B (19.2)	B (16.1)	B (19.9)	C (20.3)
	T		D (48.8)	**F (145.7)**	E (60.6)	**F (156.2)**	**E (69.3)**
	R		A (8.7)	A (9.4)	A (7.0)	A (9.7)	A (7.9)
NYS Route 212, WB	L		B (16.3)	C (20.7)	C (32.6)	C (21.2)	D (36.2)
	TR		C (20.2)	C (27.8)	C (21.4)	C (29.3)	C (20.7)
I-87 Northbound Ramp, NB	L		C (32.7)	D (38.1)	D (41.0)	D (40.7)	D (44.5)
	LTR		C (28.1)	D (35.4)	D (37.5)	D (37.9)	D (42.4)
N Manheim, SB	L		D (35.3)	D (39.6)	D (53.0)	D (40.2)	D (53.1)
	TR		C (33.0)	D (37.0)	D (41.3)	D (37.5)	D (48.9)
	Overall		C (30.6)	**E (57.1)**	C (34.2)	**E (59.3)**	D (36.9)
NY 212/Kings Highway/Buns Burger Drw		S					
NYS Route 212, EB	L		A (8.4)	A (9.0)	A (6.1)	A (9.0)	A (5.2)
	T		B (19.0)	C (21.4)	A (9.8)	C (21.4)	A (9.3)
	R		B (13.5)	B (14.4)	A (2.1)	B (14.4)	A (0.9)
NYS Route 212, WB	LTR		A (4.8)	A (5.1)	A (5.5)	A (5.1)	A (5.8)
Kings Highway, NB	LT		E (68.3)	**F (85.0)**	D (48.4)	**F (86.3)**	D (49.1)
	R		C (24.7)	C (24.3)	B (19.0)	C (24.3)	B (22.0)
N Chestnut Street, SB	LTR		C (27.5)	C (27.0)	C (20.7)	C (27.0)	C (24.4)
	Overall		C (22.7)	C (26.9)	B (14.9)	C (27.2)	B (14.9)
NY 212/Big Lots Driveway		S					
NYS Route 212, EB	L		A (4.1)	A (4.4)	A (6.4)	A (4.4)	A (6.4)
	T		A (7.2)	A (8.2)	B (12.2)	A (8.2)	B (12.0)
NYS Route 212, NB	T		B (17.0)	B (18.2)	C (20.2)	B (18.2)	C (21.1)
	R		B (14.4)	B (15.0)	B (16.4)	B (15.0)	B (17.3)
NYS Route, SB	L		C (29.0)	C (28.5)	C (21.9)	C (28.5)	C (25.7)
	R		C (28.0)	C (27.5)	C (21.2)	C (27.5)	C (24.9)
	Overall		B (13.9)	B (14.6)	B (16.3)	B (14.6)	B (17.0)
NY 32/Peoples Rd/Hommelville Rd		U/S					
Hommelville Rd, EB	LTR		C (23.9)	E (35.8)	B (14.3)	E (35.8)	B (16.9)
Peoples Road, WB	LTR		D (27.3)	**F (229)**	B (15.9)	**F (229)**	B (19.3)
NYS Route 32, NB	LTR		A (8.7)	A (9.2)	A (6.9)	A (9.2)	A (9.9)
NYS Route 32, SB	LTR		A (9.1)	A (9.9)	A (6.4)	A (9.9)	A (9.2)
	Overall		--	--	A (7.3)		B (10.2)
NY 32/CR 34 (Old Kings Highway)		U/S					
CR 34, WB	LR		**E (39.3)**	**F (146.3)**	C (24.0)	**F (149.9)**	C (24.2)
NYS Route 32, NB	TR		--	--	B (13.8)	--	B (13.9)
NYS Route 32, SB	LT		A (0)	A (0)	A (8.6)	A (0)	A (8.7)
	Overall		--	--	B (13.0)	--	B (13.2)

Table 22: LOS Summary Table with Mitigation (Friday Midday)

Intersection		Control	Friday Midday Peak Hour				
			2040 No-Build	SP	SP – W/ Mit	RWCS	RWCS – W/ Mit
NY 32/NY 212/Speedway Driveway		S					
NYS Route 212, EB	L		B (12.4)	B (14.4)	C (27.6)	B (14.4)	C (28.9)
	TR		B (12.9)	B (14.2)	C (22.9)	B (14.3)	C (22.8)
NYS Route 212, WB	LT		C (26.5)	D (35.6)	D (44.4)	D (35.5)	**E (57.5)**
	R		A (1.2)	A (3.1)	A (3.1)	A (4.1)	A (4.1)
Speedway Driveway, NB	LTR		B (14.0)	B (16.2)	**E (75.1)**	B (16.2)	B (48.7)
NYS Route 32, SB	LT/*L		D (29.7)	**F (335.3)**	D (40.2)	**F (416.6)**	**F (63.8)**
	R/*TR		B (10.4)	B (11.4)	B (13.4)	B (11.5)	B (12.5)
	Overall		B (13.6)	**F (96.2)**	C (23.0)	**F (122.1)**	C (30.9)
NY 212/I-87 NB Ramp/McDonalds Drw		S					
NYS Route 212, EB	L		B (16.8)	C (21.1)	C (31.0)	C (21.1)	C (23.3)
	T		D (45.9)	**F (143.7)**	**F (100.3)**	**F (146.6)**	**E (62.7)**
	R		A (8.0)	A (9.1)	A (7.9)	A (9.5)	A (7.0)
NYS Route 212, WB	L		B (17.7)	C (21.6)	C (30.0)	C (21.6)	D (50.1)
	TR		C (22.5)	C (31.1)	C (25.6)	C (31.2)	C (26.8)
I-87 Northbound Ramp, NB	L		D (36.4)	D (48.9)	D (49.6)	**E (68.2)**	D (53.4)
	LTR		C (30.5)	D (45.2)	D (44.6)	**E (61.6)**	D (50.9)
N Manheim, SB	L		D (37.5)	D (40.6)	D (47.2)	D (40.6)	**E (57.6)**
	TR		D (36.0)	D (39.1)	D (42.8)	D (39.1)	D (54.9)
	Overall		C (31.3)	**E (57.7)**	D (46.6)	**E (61.8)**	D (39.9)
NY 212/Kings Highway/Buns Burger Drw		S					
NYS Route 212, EB	L		A (8.4)	A (9.0)	A (3.2)	A (9.0)	A (4.3)
	T		B (19.1)	C (21.6)	A (8.0)	C (21.8)	A (8.9)
	R		B (13.1)	B (14.1)	A (0.5)	B (14.2)	A (0.5)
NYS Route 212, WB	LTR		A (5.9)	A (6.3)	A (6.8)	A (6.3)	A (7.5)
Kings Highway, NB	LT		E (66.3)	**F (84.6)**	D (48.1)	**F (85.3)**	D (51.7)
	R		C (24.8)	C (24.4)	B (19.2)	C (24.4)	C (24.2)
N Chestnut Street, SB	LTR		C (27.6)	C (27.1)	C (20.8)	C (27.1)	C (26.6)
	Overall		C (23.0)	C (27.7)	B (14.9)	C (27.8)	B (16.3)
NY 212/Big Lots Driveway		S					
NYS Route 212, EB	L		A (3.7)	A (4.0)	A (6.4)	A (4.0)	A (5.5)
	T		A (6.3)	A (7.0)	B (10.5)	A (7.0)	A (9.3)
NYS Route 212, NB	T		B (16.3)	B (17.6)	B (18.7)	B (17.6)	C (22.6)
	R		B (14.2)	B (15.0)	B (15.7)	B (15.0)	B (19.2)
NYS Route, SB	L		C (28.8)	C (28.2)	C (21.6)	C (28.2)	C (27.7)
	R		C (28.2)	C (27.7)	C (21.3)	C (27.7)	C (27.2)
	Overall		B (13.2)	B (13.8)	B (14.9)	B (13.8)	B (16.8)
NY 32/Peoples Rd/Hommelville Rd		U/S					
Hommelville Rd, EB	LTR		C (16.4)	C (22.8)	B (17.2)	C (23.4)	B (17.5)
Peoples Road, WB	LTR		D (24.6)	**F (320.9)**	B (19.3)	**F (355.8)**	B (19.7)
NYS Route 32, NB	LTR		A (8.4)	A (8.9)	A (7.2)	A (9.0)	A (7.2)
NYS Route 32, SB	LTR		A (9.5)	B (10.5)	A (5.2)	B (10.6)	A (5.2)
	Overall		--	--	A (7.3)	--	A (7.4)
NY 32/CR 34 (Old Kings Highway)		U/S					
CR 34, WB	LR		E (38.0)	**F (161.8)**	C (23.6)	**F (182.0)**	C (23.8)
NYS Route 32, NB	TR		--	--	B (19.7)	--	C (20.9)
NYS Route 32, SB	LT		A (9.3)	A (10.0)	A (7.4)	B (10.0)	A (7.5)
	Overall		--	--	B (16.1)	--	B (16.9)

Table 23: LOS Summary Table with Mitigation (Saturday Midday)

Intersection		Control	Saturday Midday Peak Hour				
			2040 No-Build	SP	SP – W/ Mit	RWCS	RWCS – W/ Mit
NY 32/NYS Route 212/Speedway Driveway		S					
NYS Route 212, EB	L		B (11.4)	B (14.3)	C (24.4)	B (14.4)	C (23.5)
	TR		B (12.7)	B (15.5)	C (26.9)	B (15.6)	C (25.7)
NYS Route 212, WB	LT		C (23.7)	C (32.5)	D (48.6)	C (32.7)	C (56.2)
	R		A (0.7)	A (2.0)	A (2.0)	A (2.5)	A (2.5)
Speedway Driveway, NB	LTR		B (12.7)	B (13.9)	**F (81.7)**	B (14.0)	D (48.5)
NYS Route 32, SB	LT/*L		C (25.9)	**F (329.3)**	D (38.4)	**F (397.8)**	**E (62.1)**
	R/*TR		A (9.3)	B (10.2)	B (11.3)	B (10.3)	B (10.7)
	Overall		B (13.4)	**F (108.8)**	C (24.6)	**F (132.8)**	C (32.2)
NY 212/I-87 NB Ramp/McDonalds Drw		S					
NYS Route 212, EB	L		B (13.3)	B (18.9)	B (15.2)	B (19.9)	C (20.2)
	T		C (32.6)	**F (134.2)**	D (46.0)	**F (155.4)**	**E (77.7)**
	R		A (8.6)	A (9.6)	A (6.7)	B (10.1)	B (8.1)
NYS Route 212, WB	L		B (13.2)	B (20.0)	C (25.1)	C (20.5)	C (33.1)
	TR		B (17.2)	C (26.7)	B (16.9)	C (28.4)	C (23.6)
I-87 Northbound Ramp, NB	L		C (31.1)	D (38.0)	D (42.4)	D (42.4)	D (41.9)
	LTR		C (28.2)	D (35.6)	D (38.9)	D (38.7)	D (39.4)
N Manheim, SB	L		C (34.0)	D (39.6)	D (48.6)	D (40.1)	D (46.2)
	TR		C (32.4)	D (37.5)	D (41.9)	D (38.1)	D (43.9)
	Overall		C (24.2)	D (53.1)	E (28.7)	**E (58.1)**	D (38.4)
NY 212/Kings Highway/Buns Burger Drw		S					
NYS Route 212, EB	L		A (7.2)	A (8.3)	A (9.6)	A (9.4)	A (3.7)
	T		B (14.7)	B (18.1)	C (22.4)	B (18.4)	A (7.3)
	R		B (10.8)	B (12.6)	C (33.3)	B (12.7)	A (0.7)
NYS Route 212, WB	LTR		A (3.7)	A (4.3)	A (7.0)	A (4.4)	A (4.6)
Kings Highway, NB	LT		D (45.9)	D (52.2)	D (42.7)	D (52.8)	D (43.2)
	R		C (25.2)	C (24.2)	B (18.3)	C (24.2)	C (23.2)
N Chestnut Street, SB	LTR		C (28.2)	C (27.2)	C (24.2)	C (27.1)	C (26.2)
	Overall		B (14.6)	B (17.4)	C (21.1)	B (17.6)	B (11.1)
NY 212/Big Lots Driveway		S					
NYS Route 212, EB	L		A (3.0)	A (3.3)	A (5.0)	A (3.3)	A (5.3)
	T		A (5.1)	A (6.0)	B (11.1)	A (6.1)	A (8.8)
NYS Route 212, NB	T		B (12.5)	B (14.6)	C (27.5)	B (14.7)	B (16.5)
	R		B (10.6)	B (12.0)	C (21.3)	B (12.1)	B (13.5)
NYS Route, SB	L		C (29.2)	C (28.1)	C (25.0)	C (28.0)	C (27.0)
	R		C (28.6)	C (27.5)	C (24.6)	C (27.5)	C (26.6)
	Overall		B (10.7)	B (11.8)	B (19.7)	B (11.9)	B (13.8)
NY 32/Peoples Rd/Hommelville Rd		U/S					
Hommelville Rd, EB	LTR		C (19.2)	D (33.3)	B (14.1)	D (34.5)	B (14.2)
Peoples Road, WB	LTR		D (20.5)	**F (298)**	B (15.7)	**F (337.9)**	B (15.8)
NYS Route 32, NB	LTR		A (8.3)	A (9.0)	A (7.0)	A (9.1)	A (7.1)
NYS Route 32, SB	LTR		A (8.8)	A (9.7)	A (6.2)	A (9.8)	A (6.2)
	Overall		--	--	A (7.3)	--	A (7.4)
NY 32/CR 34 (Old Kings Highway)		U/S					
CR 34, WB	LR		C (21.8)	**F (69.7)**	C (22.4)	**F (78.5)**	C (22.7)
NYS Route 32, NB	TR		--	--	B (10.4)	--	B (10.8)
NYS Route 32, SB	LT		A (0)	A (0)	A (7.3)	A (0)	A (7.4)
	Overall		--	--	B (10.4)	--	B (10.8)

Table 24: LOS Summary Table with Mitigation (Sunday Midday)

Intersection		Control	Sunday Midday Peak Hour				
			2040 No-Build	SP	SP – W/ Mit	RWCS	RWCS – W/ Mit
NY 32/NY 212/Speedway Driveway		S					
NYS Route 212, EB	L		B (13.7)	B (13.9)	C (20.5)	B (13.9)	B (19.4)
	TR		B (15.5)	B (15.8)	C (23.7)	B (15.8)	C (22.9)
NYS Route 212, WB	LT		C (26.9)	C (29.5)	D (43.7)	C (29.6)	D (38.8)
	R		A (0.6)	A (1.1)	A (1.1)	A (1.4)	A (1.4)
Speedway Driveway, NB	LTR		B (11.0)	B (12.4)	D (43.5)	B (12.7)	E(69.1)
NYS Route 32, SB	LT/*L		C (23.6)	**F (219.1)**	C (27.9)	**F (278.5)**	D (43.1)
	R/*TR		A (7.9)	A (9.0)	B (11.7)	A (9.1)	B (9.5)
	Overall		B (14.0)	**E (77.4)**	B (19.6)	**F (98.3)**	C (23.9)
NY 212/I-87 NB Ramp/McDonalds Driveway		S					
NYS Route 212, EB	L		B (13.1)	B (16.6)	B (14.6)	B (17.4)	B (15.4)
	T		D (37.1)	**F (96.7)**	D (42.8)	**F (108.9)**	D (47.8)
	R		A (9.0)	A (9.5)	A (7.9)	A (9.7)	A (8.2)
NYS Route 212, WB	L		B (15.1)	B (19.7)	C (22.2)	C (20.3)	C (24.3)
	TR		C (20.2)	C (26.0)	B (19.8)	C (27.4)	C (22.0)
I-87 Northbound Ramp, NB	L		C (29.7)	C (32.5)	D (38.3)	C (34.5)	D (39.6)
	LTR		C (27.2)	C (30.6)	D (35.3)	C (32.7)	D (37.0)
N Manheim, SB	L		C (33.2)	D (37.2)	D (42.0)	D (38.0)	D (42.0)
	TR		C (31.1)	C (34.7)	D (39.1)	C (35.5)	D (39.1)
	Overall		C (26.8)	D (43.5)	C (28.6)	D (46.2)	C (30.5)
NY 212/Kings Highway/Buns Burger Drw		S					
NYS Route 212, EB	L		A (6.4)	A (7.1)	A (2.6)	A (7.2)	A (3.2)
	T		B (13.0)	B (15.0)	A (5.6)	B (15.2)	A (5.9)
	R		A (9.9)	B (11.0)	A (1.0)	B (11.1)	A (0.9)
NYS Route 212, WB	LTR		A (4.1)	A (4.2)	A (4.2)	A (4.2)	A (4.2)
Kings Highway, NB	LT		D (42.4)	D (45.6)	D (41.7)	D (45.8)	D (38.9)
	R		C (25.9)	C (25.3)	C (23.9)	C (25.3)	C (22.8)
N Chestnut Street, SB	LTR		C (29.2)	C (28.5)	C (26.8)	C (28.4)	C (26.0)
	Overall		B (13.5)	B (15.0)	A (9.8)	B (15.1)	A (9.5)
NY 212/Big Lots Driveway		S					
NYS Route 212, EB	L		A (2.9)	A (3.0)	A (1.8)	A (3.0)	A (4.4)
	T		A (4.6)	A (5.0)	A (3.8)	A (5.0)	A (6.7)
NYS Route 212, NB	T		B (11.0)	B (12.3)	B (12.9)	B (12.4)	B (13.6)
	R		A (9.7)	B (10.7)	B (11.2)	B (10.7)	B (11.8)
NYS Route, SB	L		C (30.2)	C (29.4)	C (27.7)	C (29.4)	C (26.9)
	R		C (29.5)	C (28.9)	C (27.7)	C (28.8)	C (26.4)
	Overall		B (10.4)	B (10.8)	B (10.4)	B (10.9)	B (11.8)
NY 32/Peoples Rd/Hommelville Rd		U/S					
Hommelville Rd, EB	LTR		C (19.2)	C (24.5)	B (19.1)	D (25.2)	B (19.4)
Peoples Road, WB	LTR		D (23.5)	**F (173)**	C (20.7)	**F (212.6)**	C (21.2)
NYS Route 32, NB	LTR		A (9.8)	B (10.5)	A (4.1)	B (10.5)	A (4.1)
NYS Route 32, SB	LTR		A (8.3)	A (8.8)	A (7.1)	A (8.8)	A (7.4)
	Overall		--	--	A (6.7)	--	A (6.9)
NY 32/CR 34 (Old Kings Highway)		U/S					
CR 34, WB	LR		E (38.0)	**F (108.2)**	C (21.7)	**F (126.1)**	C (21.9)
NYS Route 32, NB	TR		--	--	A (7.2)	--	A (7.4)
NYS Route 32, SB	LT		A (0)	A (0)	B (14.3)	A (0)	B (14.8)
	Overall		--	--	B (12.4)	--	B (12.7)

U = Unsignalized Intersection | S = Signalized Intersection

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches
L, T, R = Left-turn, Through, and/or Right-turn movements
X (Y.Y) = Level of service (Average delay in seconds per vehicle)

6.9 Impacts to Utility Facilities

6.9.1 Existing Conditions

Refer to Appendix K for the Water & Sewer Engineer's Report
Refer to Appendix O for the Energy Demand Report

6.9.1.1 Water and Wastewater

A. The Town of Saugerties obtains its drinking water from the Village of Saugerties. The Village of Saugerties Water System is the only major public water supply system in the vicinity of the property. The sole source of this water system is the Blue Mountain Reservoir which has a 6-million-gallon storage capacity. The four main streams that flow into the Blue Mountain Reservoir are the Plattekill, Cotton, Lucaskill, and Manorville, which make up a watershed area that spans approximately 18.5 square miles.

B. The water is fed from the reservoir to the water treatment plant, which is designed to treat 1.8 million gallons per day (MGD).

C. This water system serves approximately 4,500 people through 1,475 connections in the Village and 5,770 people through 2,168 connections in the Town. Within the Town of Saugerties, there are four water districts – Bluestone Park, Glasco, Malden, and Kings Highway. The Project Site is closest to the Kings Highway District.

D. Historically, the total annual produced water at the Blue Mountain Reservoir is as follows:

Table 25: Annual Public Water Production

Year	Total Annual Water Production (gallons)
2018	320,601,000
2019	320,601,000
2020	315,870,000
2021	324,330,243
2022	341,488,455

E. The Town has four sewer districts – Kings Highway, Barclay Heights, Malden, and Glasco. Kings Highway is the closest district to the project parcel, however conveyance to each district and capacity within each are limited.

F. Over the past decade, previous sewer reports and assessments were completed for previous ideas and concepts suggested on the property. The findings were compiled, and it was determined the existing Village of Saugerties wastewater system does not have enough capacity and is not close enough in proximity to the project site. Due to the conveyance and capacity challenges within the municipal collection and treatment systems, an on-site treatment modular wastewater treatment plant approach is being considered.

G. Conceptual plans and programs for this new on-site wastewater treatment plan are in development and will be finalized after the proposed zoning change of the property and when site-specific development occurs.

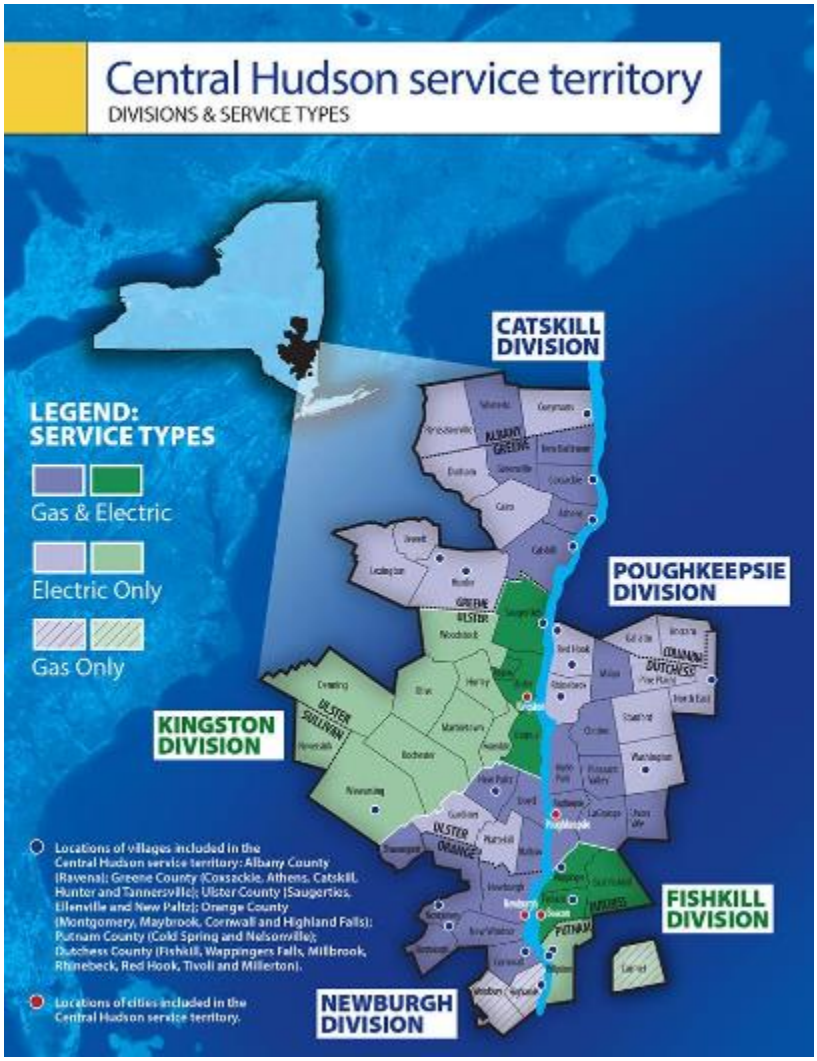
6.9.1.2 Gas, Electric

A. Blake Engineering, PLLC was retained by the Project Sponsor to evaluate the potential impacts on energy due to the zoning change of the Winston Farm property.

B. The project site is located within the service area of Central Hudson Gas & Electric Corp. (Central Hudson) for natural gas and electricity.

C. Central Hudson delivers natural gas and electricity in a defined service territory that extends from the suburbs of metropolitan New York City north to the Capital District at Albany. Below is a service territory map from the Central Hudson website which shows that the Project Site is centrally located within the company’s coverage area and is part of the Kingston Division.

Figure 22: Central Hudson Service Territory



D. The project site is located close to the existing Central Hudson distribution infrastructure. There is an existing substation located due east of the project site entrance, on the opposite side of NY State Thruway (I-87). There is an existing natural gas distribution line running along Route 32. This is a 120 PSI radial feed in a 6" plastic line.

E. Both natural gas and electric systems presently have available capacity that can be assigned to the project site, but an in-depth capacity study is required to quantify the current accurate availability and allocate services to the site. This in-depth study will be completed when site-specific development plans have been completed.

F. It is important to note that although there is system capacity available from Central Hudson, modifications to the distribution system will be required to serve loads at the project site.

G. The Town of Saugerties has entered a Community Choice Aggregation partnership (CCA) which allows participating municipalities to procure energy supply service on behalf of eligible customers in the community. Saugerties is one of twelve towns in the mid-Hudson region that have joined this program to leverage collective bargaining power to purchase bulk energy at lower prices. Using this agreement, the energy supply is purchased by the municipality's CCA and delivered by Central Hudson using their distribution infrastructure.

H. The existing electricity and gas demand to the project site is minimal as the only structures currently at the site are the caretaker's residence, the property owner's seasonal residence, an abandoned mansion, and the remains of a former barn.

I. There is currently a single-phase overhead electric service that enters the project site from Route 32 and continues along Augusta Savage Road to the center of the site. According to the Central Hudson Electrification Hosting Capacity database, these utility lines that run along Augusta Savage Road are fed from feeder #3002 from the Saugerties substation. These feeders operate at 13.20 kV and serve the area to the north of the project site to the town and county line.

J. The feeders are rated for 6 MVA and are currently operating at a summer peak load of 5.29 MVA and a winter peak load of 5.62 MVA. Based on this data there is insufficient capacity in the existing feeders to serve the project site. New feeders from the substation will be required, assuming there is still available capacity at the substation at the time of work. The DGEIS is focused on evaluating impacts associated with a zoning change of the property. This deficiency in capacity will be addressed at a later time when site-specific development information is available.

6.9.1.3 Telecommunications

A. Telecommunications services are predominantly provided to the area by Spectrum, Archtop Fiber, and Crown Castle. Spectrum provides cable TV, internet, and telephone while Archtop Fiber provides internet and telephone services. Crown Castle provides internet services via its fiber network to commercial clients as well as owning a portfolio of cell towers and small cell nodes for wireless infrastructure.

B. Crown Castle has existing fiber optic distribution that runs along Route 32 in front of the project site as well as two cellular towers located within one to two miles away. Archtop Fiber is a relatively new company to the area and is in the process of building out its fiber optic network.

6.9.2 Potential Impacts

6.9.2.1 Water and Wastewater

A. The current development concepts entail a mix of estate homes, single-family homes, townhomes, multifamily units, commercial, hospitality, and outdoor entertainment venues. Water demands for each of the different scenarios were calculated both using projected loading rates, per the 2014 NYSDEC New York Design Standards for Intermediate Sized Wastewater Treatment Systems, and probable loading rates using historical data provided by the Village Water Department. An Engineering Report for the proposed water and sewer improvements can be found in Appendix K.

B. The projected flow based on the program for each scenario is presented below:

Table 26: Sponsor's Preferred Plan – Projected Scenario Based Water Flow

Scenario	Demand (GPD | gpm)
Total Average Daily Flow	395,500 GPD (275.0 gpm)
Maximum Daily Flow (Factor of 2)	791,000 GPD (549.0 gpm)
Peak Flow (Factor of 4)	1,582,000 GPD (1,099 gpm)

Table 27: Reasonable Worst Case Plan – Projected Scenario Based Water Flow

Scenario	Demand (GPD | gpm)
Total Average Daily Flow	427,270 GPD (297 gpm)
Maximum Daily Flow (Factor of 2)	854,540 GPD (593 gpm)
Peak Flow (Factor of 4)	1,709,080 GPD (1,187 gpm)

Table 28: As-of-Right Plan – Projected Scenario Based Water Flow

Scenario	Demand (GPD | gpm)
Total Average Daily Flow	283,900 GPD (197 gpm)
Maximum Daily Flow (Factor of 2)	567,800 GPD (394 gpm)
Peak Flow (Factor of 4)	1,135,600 GPD (789 gpm)

C. Water demand calculations take into consideration current water-saving fixtures to promote sustainability in future development occurring on the project site.

D. Plans for future development on the Winston Farm site include the proposal of a public water system on the site that will serve various uses on the site and in the community.

E. To explore groundwater resources, two existing wells were further tested to understand drawdown and recovery capacity. Labella Associates performed an extended length flow test on the existing well located on the site called TW-1. The test discovered that the well water yield stabilized and was able to sustain a flow of 220 gpm. The hydrogeologic pump test results can be found in Appendix C.

F. Well water used for domestic water use will be treated to NYS drinking water standards. Turbidity and high iron levels were identified as potential areas of concern in the raw water from the aquifer. Proposed treatment plans include using greensand filters to remove iron from the water to levels below the recommended maximum contaminant levels (MCL). To address turbidity caused by suspended particles, methods such as coagulation, sedimentation, and filtration are being considered. Sodium hypochlorite will be used to treat iron levels, and while not present in this aquifer the proposed filters to be used are rated to remove other chemicals and compounds as well, such as manganese and hydrogen sulfide. The water will then be disinfected with UV or chlorine. Piping materials and fittings will meet safety standards, and the system will include valves, meters, and sample taps for quality control.

G. A water storage tank is also proposed and will meet all NYS guidelines. This water tank will provide adequate storage for the operational storage of 1.5 times the average daily demand, emergency storage equal to the average daily demand, and for the required fire flow rate. This will be a low-profile water storage tank that will be minimally visible to the public. The tank and its foundation will be designed based on the findings and recommendations of a geotechnical soil investigation at the specific site development stage of the project.

H. The water distribution system will be designed and operated to maintain a minimum residual pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow including fire flow. The average day demand, maximum day demand, and fire flow under peak hourly demand scenarios will be simulated to assess the minimum available pressure and the maximum available fire flow while maintaining a minimum 20 psi residual

pressure. The normal working pressures in the distribution system will be maintained between 35 and 100 psi at ground level.

I. Once constructed, the internal water main and its appurtenances will remain private.

J. Hydrants will be installed throughout the distribution system at all road intersections, dead-end lines, and all high points, and will be spaced at intervals in accordance with the NYS Fire Code.

K. Each multi-family and commercial unit and building will be served by a domestic water service and a fire protection service line. Each single-family residence will be served by a domestic water service. All proposed multi-family residential dwellings will be provided with a fire sprinkler system conforming to the NYS Building Code and the NYS Fire Code.

L. The proposed water system improvements have been designed in accordance with application standards and guidelines including the Recommended Standards for Water Works (Ten States Standards), NYSDOH, and American Water Works Association (AWWA) standards standard specifications and details.

M. Proper operation of the public water system will require regular attention, testing, and maintenance to satisfy NYS compliance and monitoring requirements. All operations are to be performed and supervised by the designated water system operator.

N. The wastewater treatment system will be designed to handle the strengths of the sewage based on the final plans to be completed later at the site-specific level.

O. An on-site wastewater treatment plant is proposed. The on-site wastewater treatment plant will be modular, allowing for expansion and adaptation as the project develops, which also provides the opportunity to expand if and as additional users are contracted. The system will be sized to handle peak flows (four times the average daily flow).

P. Due to the differences in elevation, several pump stations will be used to convey sewage from different points of the project to the on-site wastewater treatment

plant. The pump stations will be designed to have adequate capacity for the peak hourly flow and will take into consideration the system's peak flow time periods to discharge flow.

Q. For the average and peak wastewater flows, it is estimated that three proprietary membrane bioreactor (MBR) treatment trains will be used. The on-site treatment plant is composed of a headworks building, individual MBR treatment trains capable of treating 122,000 gpd each, a sludge dewatering-storage system, and a laboratory building. The headworks consist of flow equalization, primary treatment, and fine screening of the sewage followed by activated sludge aeration. The sludge that is fine-screened is then dewatered and stored and can optionally be treated on-site. The MBR treatment train contains filtration and treatment followed by an ultraviolet (UV) disinfection process.

R. These processes treat the wastewater to effluent concentrations in line with projected State Pollutant Discharge Elimination System (SPDES) limits for effluent discharge. Once a SPDES permit is issued, the processes will be adjusted to meet the issued effluent limits. The proposed discharge point will be the Beaver Kill, a NYSDEC class C classified stream that flows through the site. The stream flows south to north through the property towards the Kaaterskill in Greene County.

S. The operation, monitoring, and maintenance of the on-site wastewater treatment plant will be performed by and under the direct supervision of a New York State licensed wastewater operator contracted by the owner of the facilities.

T. The proposed internal sanitary sewer collection system has been designed per application standards and guidelines including the Recommended Standards for Wastewater (Ten States Standards), and NYSDEC Intermediate Standards for Wastewater Systems standard specifications and details.

6.9.2.2 Gas, Electric

A. Projected utility loads were generated for the AOR, SP, and the RWCS Plans. The data includes projected annual consumption for electricity and natural gas as well as the peak demand.

Table 29: Project Energy Demand Calculations

Winston Farm Energy Demand - As of Right Plan						
Category	**Quantity**	**Units**	**Projected Annual Electricity Consumption (kWh)**	**Projected Annual Natural Gas Consumption (ccf)**	**Projected Electricity Demand (kW)**	**Projected Natural Gas Demand (ccf)**
Residential - Estate Lots	0	Lots	0	0	0	0
Residential - Single Family	773	Lots	8,178,093	634,997	3,734	483
Residential - Townhouses	0	Units	0	0	0	0
Residential - 4 Story Apartments	0	Units	0	0	0	0
Camping - Cabins	0	Cabins	0	0	0	0
Camping - RV Sites	0	Sites	0		0	0
Commercial/Retail - 1st Floor Only	0	SF	0	0	0	0
Commercial/General Business	26	Acres	4,009,379	91,200	915	52
Commercial - Boutique Hotel	0	Keys	0	0	0	0
Commercial - Amphitheater	0	Person	0	0	0	0
Commercial - Conference Center	0	Keys	0	0	0	0
Tech Industrial - 1 Story	0	SF	0	0	0	0
		Totals	**12,187,472**	**726,197**	**4,650**	**535**

Winston Farm Energy Demand - Sponsor's Preferred Plan						
Category	**Quantity**	**Units**	**Projected Annual Electricity Consumption (kWh)**	**Projected Annual Natural Gas Consumption (ccf)**	**Projected Electricity Demand (kW)**	**Projected Natural Gas Demand (ccf)**
Residential - Estate Lots	76	Lots	1,302,642	101,145	595	77
Residential - Single Family	78	Lots	825,215	64,075	377	49
Residential - Townhouses	110	Units	754,161	58,558	344	45
Residential - 4 Story Apartments	650	Units	2,785,254	216,264	1,272	165
Camping - Cabins	100	Cabins	514,201	39,926	293	30
Camping - RV Sites	0	Sites	0	0	0	0
Commercial/Retail - 1st Floor Only	132800	SF	2,802,345	63,744	640	36
Commercial/Retail	287000	SF	6,056,272	137,760	1,383	79
Commercial - Boutique Hotel	150	Keys	670,727	15,257	153	9
Commercial - Amphitheater	5000	Person	886,284	20,160	253	12
Commercial - Conference Center	250	Keys	3,392,075	77,158	774	44
Tech Industrial - 1 Story	250000	SF	13,988,863	318,200	2,662	182
		Totals	**33,978,038**	**1,112,246**	**8,746**	**726**

Winston Farm Energy Demand - Reasonable Worst Case Plan						
Category	Quantity	Units	Projected Annual Electricity Consumption (kWh)	Projected Annual Natural Gas Consumption (ccf)	Projected Electricity Demand (kW)	Projected Natural Gas Demand (ccf)
Residential - Estate Lots	76	Lots	1,302,642	101,145	595	77
Residential - Single Family	57	Lots	603,042	46,824	275	36
Residential - Townhouses	115	Units	788,441	61,219	360	47
Residential - 4 Story Apartments	800	Units	3,428,005	266,171	1,565	203
Camping - Cabins	100	Cabins	514,201	39,926	293	30
Camping - RV Sites	57	Sites	520,125		297	0
Commercial/Retail - 1st Floor Only	-				0	0
Commercial/Retail	425000	SF	8,968,347	204,000	2,048	116
Commercial - Boutique Hotel	150	Keys	593,335	13,496	135	8
Commercial - Amphitheater	5000	Person	886,284	20,160	253	12
Commercial - Conference Center	300	Keys	3,392,075	77,158	774	44
Tech Industrial - 1 Story	375000	SF	20,983,294	477,300	3,992	272
		Totals	**41,979,791**	**1,307,400**	**10,589**	**844**

B. The data presented above is based on full build-out of the three scenarios. Compared to the AOR Plan, the electricity demand is 88% higher in the SP Plan and 128% higher in the RWCS Plan. Compared to the AOR Plan, the natural gas demand is 36% higher in the SP Plan and 58% higher in the RWCS Plan.

C. In all scenarios it is anticipated that future construction will occur in phases with the energy consumption scaling up accordingly. During construction it is anticipated there will be some temporary electrical services that will be used for construction trailers and to support daily activities although these loads will be much less than that required for permanent structures.

D. Energy conservation is regulated at the state level. The design and plans for residential buildings must comply with the New York State Energy Conservation Construction Code. The code specifies the requirements for heating and cooling systems, the hot water system, the electrical system, material and equipment specifications, and sealing the building envelope to meet compliance standards.

E. The Town of Saugerties is a designated New York State Clean Energy Community demonstrating their commitment to clean energy. NYSERDA developed the NYStretch-2020 supplement to the 2020 Energy Conservation Construction Code of New York State (State Energy Code). This model code is available for voluntary adoption by local governments as a more stringent local energy code to meet energy and climate goals by accelerating the savings

obtained through local building energy codes. Although the Town of Saugerties has not yet adopted the NYStretch-2020, the PDD regulations supports the goals and objectives of this code by encouraging energy-efficient building designs and systems.

F. Energy saving fixtures and appliances are encouraged throughout the project to promote sustainability, thereby reducing greenhouse gas emissions and reliance on fossil fuels.

6.9.2.3 Telecommunications

A. The addition of another provider to the area gives additional options to consumers while also increasing overall communication capacity and speeds.

B. While development of the project site will require expansion of telecommunications infrastructure to connect through the property, there is available capacity from the current providers to deliver service for any of the proposed development options without impacting services to current customers.

6.9.3 Potential Mitigation Measures

A. To reduce energy consumption and demand at the project site, various energy-saving techniques and technologies can be used by designing the buildings and site to meet the New York Stretch Code. Implementation of the Stretch Code includes increasing the thermal resistance of building envelopes including windows and doors, reducing lighting power densities, improving lighting controls, and increasing fan power limitations among other energy savings methods.

B. In addition to reducing energy consumption by using high-efficiency equipment and improving the thermal efficiency of buildings, on-site renewable energy power generation is another technique for reducing the amount of energy consumed by the utility company.

C. Green building initiatives will help to reduce the overall carbon footprint of the project. The LEED (Leadership in Energy and Environmental Design) program has a varied list of design elements in which credits are applied to achieve various LEED certifications, which include construction techniques, materials selection, and operational practices which reduce environmental impact, energy consumption, natural resource usage, and provide a better quality of life for the

occupants and the surrounding community. LEED certification is based on developer preference and will be determined for each site-specific development.

D. At the site development level, buildings can be designed with provisions for future solar installations by designing the roofs of buildings to accommodate the additional load, be free from obstructions, and be oriented and sloped for ideal solar capture. Building designs can include interconnection pathways for electric and reserved space in the service panel for future connection. Taking this another step further is the integration of solar photovoltaic panels as part of the initial building construction.

E. There is the opportunity to utilize solar power with ground-mounted arrays or solar canopies for parking lots. Solar canopies provide a dual benefit with covered parking for drivers to provide protection from the elements while also generating renewable energy. The solar canopies can also be paired with on-site battery storage and EV charging stations to maximize the effectiveness of the system. Solar photovoltaic panels provide an opportunity to incorporate an on-site renewable energy source which will reduce electricity demand from the utility grid, reduce the use of fossil fuels, and subsequently reduce greenhouse gas emissions.

F. As mentioned above, EV charging stations can be integrated with an on-site solar generation system or can be implemented as standalone chargers connected solely to grid power. In either case, they can be incorporated throughout the PDD at commercial locations and residential sites. Including EV in the design will help to provide access to charging and can be modular to expand the system to support increased adoption of EVs.

G. Another option for reducing the consumption of fossil fuels is to limit the natural gas usage at the project site. While it might not be feasible to completely forgo natural gas for some of the larger commercial and tech/industrial applications based on current technologies, there are viable options for all electric equipment for residential and smaller commercial applications.

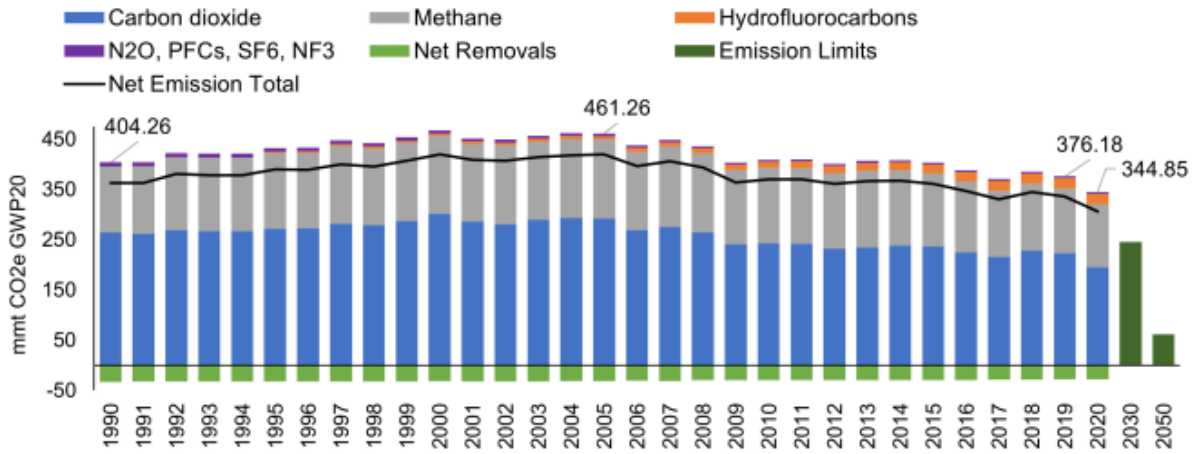
6.10 Impacts to Climate Change

6.10.1 Existing Conditions

A. To assess the potential adverse environmental impacts associated with full build-out of the Winston Farm PDD, three development scenarios are being compared: (1) Current Zoning (as-of-right plan (AOR)), (2) Sponsor's Preferred plan (SP), and (3) the Reasonable Worst-Case Scenario (RWCS).

B. To meet the requirements of the CLCPA, the NYSDEC releases an annual emissions report to monitor and address climate change across the state. As of this writing, the 2022 New York State Statewide Green House Gas (GHG) Emissions Report is the most recent version of the annual report which provides data between 1990 and 2020. The goal of the report is to measure the progress in reducing GHG emissions and to make greenhouse gas information accessible to a broad audience.

Figure 23: NYS Statewide GHG by Gas, 1990-2020 (mmt CO_2e)



C. According to the NYSDEC, the 2020 statewide gross GHG emissions were 344.85 million metric tons of carbon dioxide equivalent (mmt CO2e) using the CLCPA method of GHG emissions accounting. This is a 15% reduction from baseline 1990 levels and an 8% reduction from 2019 emissions levels. Of all greenhouse gases, Carbon Dioxide (CO_2) and methane (CH_4) comprised the largest portion of emissions at 56% and 36%, respectively. It was reported that 75% of emissions were the result of energy production.

D. According to the guidebook, the Statewide numbers shown in Figure 1 for 2020 (344.85 mmt CO2e) do not reflect current values and are “likely anomalous and reflective of the economic impacts of the COVID-19 global pandemic.” For all statewide emissions analysis, the NYSDEC used 2019 results to better reflect current conditions. In 2019, emissions totaled 376.18 mmt CO2e and the largest contributor of emissions was fuel combustion, accounting for 46% of total emissions. Fuel combustion included electric power generation (6%), residential (11%), commercial (6%), industrial (2%), and transportation (21%).

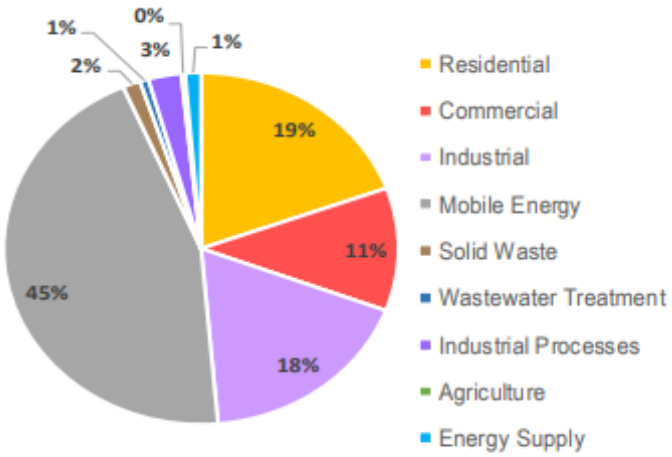
E. The Town of Saugerties used GHG data published in 2010 by New York State to establish a baseline for the preparation of their Community Greenhouse Gas Inventory. This inventory identifies that the total GHG emissions for the Town of Saugerties is 267,287 metric tons of carbon dioxide equivalent (MTCO2e).

F. Of this total, mobile energy (transportation) accounted for the largest portion of the community GHG emissions at 45%. The residential sector is the second largest producer of community GHG emissions at 19%. In the past decade, the town has taken several measures such as constructing EV charging stations, amending the town zoning ordinance allowing large solar projects, and launching a website dedicated to informing the public about climate change to reduce emissions.

Town of Saugerties Community GHG Inventory (2010)

GHG EMISSION SECTORS	$MTCO_2e^*$
Residential	51,913
Commercial	30,236
Industrial	47,847
Mobile Energy	120,027
Solid Waste	3,865
Wastewater Treatment	1,895
Industrial Processes	7,231
Agriculture	799
Energy Supply	3,473
Total Emissions	267,287
Population	19,482
Per Capita Emissions	14

*Metric Tons of Carbon Dioxide Equivalent



Source 2019 Town of Saugerties GHG Inventory

G. The Nature Conservancy (TNC) created the Resilient Land Mapping Tool designed to identify and prioritize areas that are ecologically resilient to climate change impacts by assigning a resilience score. This score estimates the capacity of the land to maintain ecological function and species diversity as the climate changes. Areas of higher resilience reflect a wide range of micro-climates and high local connectedness. The lands that comprise Winston Farm are predominantly classified as average resiliency, with areas of higher climate resiliency on the northern and southern borders.

H. The PDD is undeveloped, and therefore, GHG emissions for the site are consistent with those of natural areas. Emissions for natural areas are so low that they are negligible and are not quantified.

I. Carbon sequestration of the site is also assumed to be consistent with that of natural areas. Carbon sinks are areas where carbon is stored on the site. The primary carbon sinks on the Winston Farm property are the vegetation and the soil.

J. To estimate current carbon sequestration, Winston Farm was divided into two subareas: forested land and unforested land. Unforested land consists of agricultural fields, developed land, and surface water where little to no trees are present. There are ± 591 acres of forested land on the site (69%) and ± 270 acres of unforested land on the site (31%).

K. The United States Department of Agriculture (USDA) Basal Area Guide was used to estimate 100 trees per acre for the forested land, and a conservative 25 trees per acre for the unforested land, resulting in 65,850 trees located on the ± 840-acre site. Data from the USDA Forest Products Laboratory shows a range of carbon sequestration per tree of 22 to 48 pounds of CO2e per year. The ± 65,850 trees in the PDD sequester approximately 657 to 1,434 metric tons of CO2e per year.

L. A carbon sequestration rate of 0.3 metric tons of carbon per acre of undisturbed land gathered by Lal et al. was used to calculate estimated carbon sequestration by soil. On a ± 840-acre site, it is estimated that 258.3 metric tons of carbon per year are sequestered into the soil.

M. The existing electricity and gas demand to the project site is minimal as the only structures currently at the site are the caretaker’s residence, the property owner’s seasonal residence, an abandoned mansion, and the remains of a former barn.

6.10.2 Potential Impacts

A. Future development in the PDD was assessed for its climate change impacts through GHG emissions and evaluated for compliance with both state and local climate regulations. There will be unavoidable GHG emissions during construction and the operation of future uses; however, communities can confirm a project effectively achieves climate objectives by comparing a proposed project's GHG emissions against its expected benefits.

B. Per the NYSDEC Emissions Guidebook, construction emissions are more accurately represented qualitatively, while direct and indirect emissions from future project operations are projected and quantified.

C. GHG emissions during construction are primarily emitted from the burning of fuel to power construction equipment such as excavators, payloaders, bulldozers, structural drills, generators, air compressors, etc. Another source of emissions during construction activities in the PDD will be from worker vehicles commuting to and from the site, and on-site operation of trucks. A small amount of GHGs will also be emitted from power generation to supply the construction site with electricity.

D. During construction, emissions also result from the manufacture and transportation of building materials for the site, often called embodied carbon emissions. Embodied carbon is the carbon dioxide (CO2) associated with the manufacturing of building materials, extraction, transport to the manufacturer, and the transport of materials to the job site. According to the United States Environmental Protection Agency (USEPA), the industrial sector accounts for 'nearly a third' of the U.S. annual GHG emissions, and manufacturing construction materials and products accounts for 11% of global annual GHG emissions. Product-specific embodied carbon impacts for various construction materials can be found on the product information label, identified as the Environmental Product Declarations (EPDs).

E. There will be a minimal loss of carbon sequestration due to the clearing of trees for future development in the PDD. ± 303 acres of trees will be cleared under the AOR, ± 206 acres will be cleared for the SP, and ± 211 acres will be cleared for the RWCS.

F. Once future uses are operational, direct GHG emissions will occur from combustion processes associated with heating, hot water, and electricity. It is anticipated that most new buildings will operate entirely on electric power, with only commercial

hospitality functions potentially incorporating gas usage. Therefore, there will be very little anticipated combustion of natural gas on-site for heating.

G. The as-of-right (AOR) plan has no commercial hospitality functions and is projected to have no direct GHG emissions, the SP plan includes a potential hospitality building with 250 keys, and the RWCS plan includes a potential hospitality building with 300 keys. Using the Cornell Hotel Sustainability Benchmarking Index 2023 it is estimated that the carbon footprint of hotels is 1.46 MTCO2e per room. This results in a conservative estimate of 365 MTCO2e emissions for the SP plan and 438 MTCO2e emissions for the RWCS plan.

H. Indirect GHG emissions represent the largest sources of emissions at both the state and local levels. Indirect GHG emissions from future development in the PDD will result from required offsite power generation, employees and residents commuting to and from the property, and waste generation on the site. It is important to note that the estimated emissions are reflective of the current energy infrastructure, vehicle emissions standards, EV demand, and building systems standards, which are conservative and subject to change over time. It is reasonable to assume that as vehicle technology and building systems improve and renewable energy use expands, indirect emissions will be reduced through better emission controls. Therefore, annual indirect emissions as stated in the climate change analysis (refer to Appendix J) are conservative and a relatively high estimation of future emissions.

I. Adding projected indirect GHG emissions generated from offsite power generation, employees and residents commuting to and from the property, and waste generation on the site results in the total projected indirect GHG emissions for each of the scenarios. The AOR plan will generate approximately 3,444 MTCO2e per year, the SP plan will generate approximately 6,161 MTCO2e per year, and the RWCS plan will generate approximately 7,594 MTCO2e per year from indirect sources.

J. The USEPA defines upstream emissions as those occurring from purchased or acquired goods that businesses in the PDD will use. For example, if a future business uses plastic to produce its products, then the production and transportation of that plastic will qualify as upstream emissions. Without the knowledge of future uses at Winston Farm an accurate evaluation of upstream emissions upon full built-out is unattainable.

K. Total GHG emissions for each of the scenarios can be calculated by combining the direct and indirect sources of GHG emissions. It is important to note that these GHG projections are measured at full build-out of each of the scenarios and there will be no GHG emissions based on the zoning change alone.

L. The AOR plan is projected to emit 3,444 MTCO2e annually, 100% of which is from indirect sources. The SP plan is projected to emit 6,526 MTCO2e annually, 94.4% of which is from indirect sources. The RWCS plan is projected to emit 8,032 MTCO2e annually, 94.5% of which is from indirect sources. As full build-out will take multiple years to complete, this emission total is anticipated to be relatively high as it was derived from current power-generating infrastructure, technology, and average vehicle emissions. Higher-efficiency vehicles and technology are being released annually, which will decrease the overall GHG emissions. New York State had an emission rate of 344.85 million MTCO2e annually, which means there will be approximately a 0.002% increase in GHG emissions in the state due to the full build-out of the RWCS. For emissions resulting from the Town of Saugerties, the project will result in a 3% increase in annual GHG emissions.

M. There will be unavoidable GHG emissions during the construction and operation of future uses; however, communities can confirm a project effectively achieves climate objectives by balancing a future project's GHG emissions against its expected benefits. While the impact on New York State emissions is negligible, the Town of Saugerties will need to compare the many benefits of a future project against the 3% projected increase in GHG emissions.

Table 30: Projected Total GHG Emissions

As-of-Right			
Sources	**Type**	**MTCO$_2$e**	**% of Total**
Hotel	Direct	0	0%
Energy	Indirect	1,288	37.4%
Traffic	Indirect	1,622	47.1%
Solid Waste	Indirect	534	15.5%
Total		**3,444**	**100%**
Sponsor's Preferred			
Sources	**Type**	**MTCO$_2$e**	**% of Total**
Hotel	Direct	365	5.6%
Energy	Indirect	3,592	55%
Traffic	Indirect	1,868	28.6%
Solid Waste	Indirect	701	10.8%
Total		**6,526**	**100%**
Reasonable Worst-Case Scenario			
Sources	**Type**	**MTCO$_2$e**	**% of Total**
Hotel	Direct	438	5.5%
Energy	Indirect	4,438	55.3%
Traffic	Indirect	2,322	28.8%
Solid Waste	Indirect	834	10.4%
Total		**8,032**	**100%**

6.10.3 Potential Mitigation Measures

A. Emission-reducing strategies and mitigation are focused on the full build-out development of the project site under each of the conceptual scenarios.

B. It is recommended that future development in the PDD be constructed with energy conservation and efficiency as a top priority. Constructing buildings that are 100% electric helps reduce GHG emissions by approximately 40% compared to using natural gas sources. In New York State, new buildings are required to meet the 2020 Energy Conservation Construction Code of New York State. This code reduces overall energy emissions of buildings by providing guidance to reduce power consumption for heating and air conditioning (HVAC), lighting, water heating, and appliances. This will reduce indirect GHG emissions from power generation.

C. For the apartment units, new construction is choosing low carbon design by installing higher efficiency lighting, ENERGY STAR appliances, programmable thermostats, and air source heat pumps, to name a few.

D. Another strategy for reducing GHG emissions is to construct on-site renewable power generation which reduces the amount of indirect emissions due to energy sources. One of the primary objectives of the NYS Energy Plan is to reduce greenhouse gas emissions, with a particular emphasis on increasing the share of renewable energy in the state's power grid. The plan sets a target of achieving 50% of all energy from renewable sources by 2030. New buildings can be designed to provide a space for future solar installations or EV charging stations in parking lots.

E. Supporting the use of electric and the installation of EV charging stations has the potential to reduce indirect emissions due to traffic. According to NYSERDA, registration of EVs in New York State increased by 231% from 2020 to 2022.

F. Attention to building orientation and design, proper sizing of HVAC units, installation of high-efficiency lighting (inside and outside) and appliances (i.e., ENERGY STAR), and the use of programmable thermostats will reduce energy demand and increase energy efficiency in each of the apartment units. The use of air-source heat pumps (heating and hot water), ENERGY STAR appliances, and LED lighting throughout is proposed for this project to comply with a low-carbon design.

G. There are several ways to reduce GHG emissions during the construction of the project including the reuse of existing vegetation, where possible, including trees and brush removed during clearing. It is anticipated that during cut and fill activities, excavated material will be reused on-site to reduce or eliminate emissions due to the transport and disposal off-site.

H. Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.

I. Over 400 acres of the property will be zoned open space to conserve the site's carbon sequestration. Recycling of materials during construction will further reduce landfill emissions.

6.11 Noise, Light, Odor, Air, and Human Health Impacts

6.11.1 Existing Conditions

Refer to Appendix N for the Site Sound Emissions Report

6.11.1.1 Noise

A. Ostergaard Acoustical Associates (OAA) conducted a sound emissions study to gather existing ambient sound levels to be used for modeling future sound impacts as they relate to future development. OAA collected survey data spanning from 3:30 pm on Friday, August 18, 2023, to 1:30 pm on Friday, August 25, 2023. Refer to Appendix N for the Site Sound Emissions study.

B. There are no Ulster County or Town of Saugerties noise codes currently available. Therefore, a New York State Department of Environmental Conservation (NYSDEC) policy titled “Assessing and Mitigating Noise Impacts” was referenced to define increases in noise.

C. According to NYSDEC policy, an increase in ambient sound level by 0-to-3 dB should have no appreciable effect on receptors (people and habitat). An increase of 3-to-6 dB is tolerable but may impact those with highly sensitive receptors. Increases of more than 6 dB require closer scrutiny, while increases of 10 dB deserve consideration of avoidance and mitigation measures in most cases. It should be noted that the Town of Saugerties considers noise greater than 70dB to be objectionable.

D. Existing ambient sound levels were recorded at the site between 49 dB and 56 dB.

6.11.1.2 Light

A. The site currently has residential lighting from the two occupied buildings on the site, the caretaker’s residence, and the Red Cottage (vacation rental) which are occupied year-round.

B. Light from passing cars on Route 32 and I-87 can be seen from the very eastern portion of the property. Tree cover near the Beaver Kill blocks these light sources from being seen anywhere else on the site. The existing topography of the site creates a high point where light from surrounding adjacent residential properties can be seen.

C. The site is screened from the nearby neighborhoods to the west and north by trees that will remain as a 125’ buffer between the proposed development and the adjacent residential neighborhood.

6.11.1.3 Odor

A. There are no objectional odors produced on the site or in the immediate area, which are predominantly rural residential properties.

6.11.1.4 Air

A. Air quality is regulated by two primary laws and regulations: the federal Clean Air Act (CAA) and the National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50). The New York State Implementation Plan (SIP), in compliance with the CAA, governs air quality in New York State. The CAA established NAAQS for six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), Ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2). Table 31 shows the current NAAQS.

Table 31: National Ambient Air Quality Standards

Pollutant		Primary / Secondary	Averaging Time	Level	Form
Carbon Monoxide		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead		Primary and Secondary	Rolling 3-month average	0.15 µg/m^3	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	1-year	53 ppb	Annual Mean
Ozone		Primary and Secondary	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate Matter	$PM_{2.5}$	Primary	1-year	12.0 µg/m^3	Annual mean, averaged over 3 years
		Secondary	1-year	15.0 µg/m^3	Annual mean, averaged over 3 years
		Primary and Secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and Secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide		Primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations. Averaged over 3 years
		Secondary	3-hours	0.5 ppm	Not to be exceeded more than once per year

B. In accordance with the CAA, there are 4 designations for areas based on the NAAQS: attainment, nonattainment, maintenance, and unclassifiable. Attainment is when an area has better air quality than the NAAQS. Nonattainment is when an area has worse air quality than the NAAQS. Maintenance is an area that is in transition from nonattainment to attainment. If there is not enough data to make a determination, then an area is designated as unclassifiable. Nonattainment areas are further classified as extreme, severe,

serious, moderate, or marginal based on the degree of noncompliance with the NAAQS. Winston Farm is presently designated as attainment for all criteria pollutants.

C. General provisions in New York's air pollution control regulations such as 6 NYCRR Part 200.6 (Acceptable Ambient Air Quality), 6 NYCRR Part 200.7 (Maintenance of Equipment), 6 NYCRR Part 211.1 (Air Pollution Prohibited), 6 NYCRR Part 211.2 (Visible Emissions Limited) govern all entities that may produce emissions. These general duty provisions protect air quality even when no formal air permit or other regulation is applicable.

D. The latest version of the USEPA AERSCREEN program was used to estimate ambient air pollutant concentrations within 2 miles of Winston Farm. The largest contributor to air pollutants in the vicinity is traffic traveling along Route 32 and I-87 AERSCREEN was also used to estimate emissions from nearby buildings that may have natural gas HVAC systems.

E. The USEPA AERSCREEN model requires several parameters when running the model to determine geographic location and surface conditions. Regulatory default parameters in the model were used. The traffic roadway emission source was modeled as an area source using a rural dispersion option. The sources for the model were identified at the entrance of the site and extended 50 m (± 164 feet) into the site. These sources were chosen to reflect the most at-risk receptors located on the site. The residences within 50 m (± 164 feet) of the boundary of the site are the most at risk for potential air pollution from nearby roadways. Emission rates for traffic were calculated based on the peak AM and PM traffic volumes.

F. Table 32 shows the results of the AERSCREEN model, which shows the maximum concentration occurring within 2 miles of the project site. The AERSCREEN models 1-hour concentration results. Estimated concentrations are well below NAAQS as shown in the table.

Table 32: AERSCREEN Model Results – Existing Conditions

Pollutant	NAAQS ($\mu g/m^3$)	Maximum Model Result ($\mu g/m^3$)	NYSDEC Measurement ($\mu g/m^3$)	Total ($\mu g/m^3$)
CO Peak 1-Hour	40,000	1935.0	140.3	2075.3
$PM_{2.5}$ Peak 1-Hour	35	6.0	2.5	8.5
PM_{10} Peak 1-Hour	150	26.92	12.7	39.6

6.11.2 Potential Impacts

6.11.2.1 Noise

A. The acoustical modeling software CadnaA was used to model anticipated site sound emissions for the site.

B. The model analyzes distance attenuation, terrain, various types of ground cover, shielding by structures, reflections from existing and proposed buildings, and increases in traffic for full build-out of the AOR, SP, and RWCS scenarios.

C. Referring to Table 33 for tabular data, and Figures 24, 25, and 26 for locational information, the model predicts increases in dB ranging from 0 to a maximum of 6 dB:

- The highest projected dB levels will be along Route 32 near the entrance to the project site and the exit ramp from I-87.
- The AOR anticipates an increase of 3 dB for a total of 59 dB.
- The SP anticipates an increase of 5 dB for a total of 61 dB.
- The RWCS anticipates an increase of 5 dB for a total of 61 dB.
- The largest increase of 6 dB, from 49 to 55 dB, is anticipated at the northeast corner of the project site.

Table 33: CadnaA Predicted Sound Levels

Acoustical Model Receptor (dB)	Predicted Sound Emissions (dB)	Ambient Sound Level (dB)	Calculated Future Sound Level (dB)	Difference (dB)
AOR Plan				
A	40	49	50	1
B	41	49	50	1
C	54	49	55	**6**
D	56	56	**59**	3
E	51	56	57	1
F	54	56	58	2
G	50	56	57	1
H	45	47	49	2
I	51	47	52	5
SP Plan				
A	40	49	50	1
B	41	49	50	1
C	54	49	55	**6**
D	56	56	**59**	3
E	51	56	57	1
F	54	56	58	2
G	50	56	57	1
H	45	47	49	2
I	51	47	52	5
RWCS Plan				
A	39	49	49	0
B	39	49	49	0
C	54	49	55	**6**
D	60	56	**61**	5
E	52	56	57	1
F	57	56	60	4
G	49	56	57	1
H	42	47	48	1
I	47	47	50	3

For each of the predicted sound emissions images for the AOR, SP, and RWCS plans, The A-weighted sound emission contours are 5 feet above grade for sound from HVAC

equipment and motor vehicle activity. HVAC units are shown with a pink "+" symbol. Road sources are shown in dark red; buildings and parking areas are shown in white; the Winston Farm property boundary is outlined in red; and elevation contour lines are shown in teal. Sound emissions were tabulated at 15 feet above grade for all receptors.

Figure 24: Predicted Sound Emissions – AOR Plan

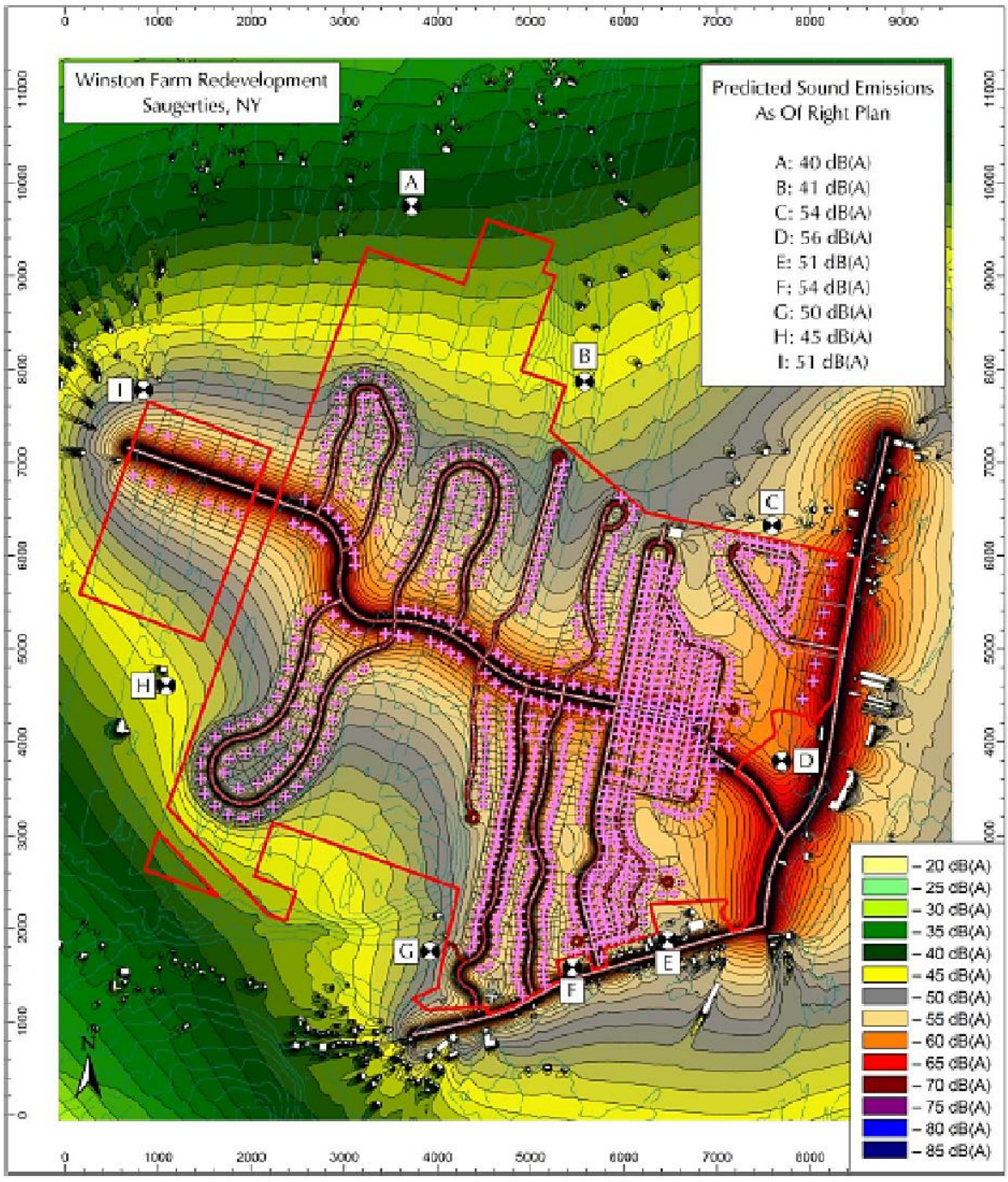


Figure 25: Predicted Sound Emissions – SP Plan

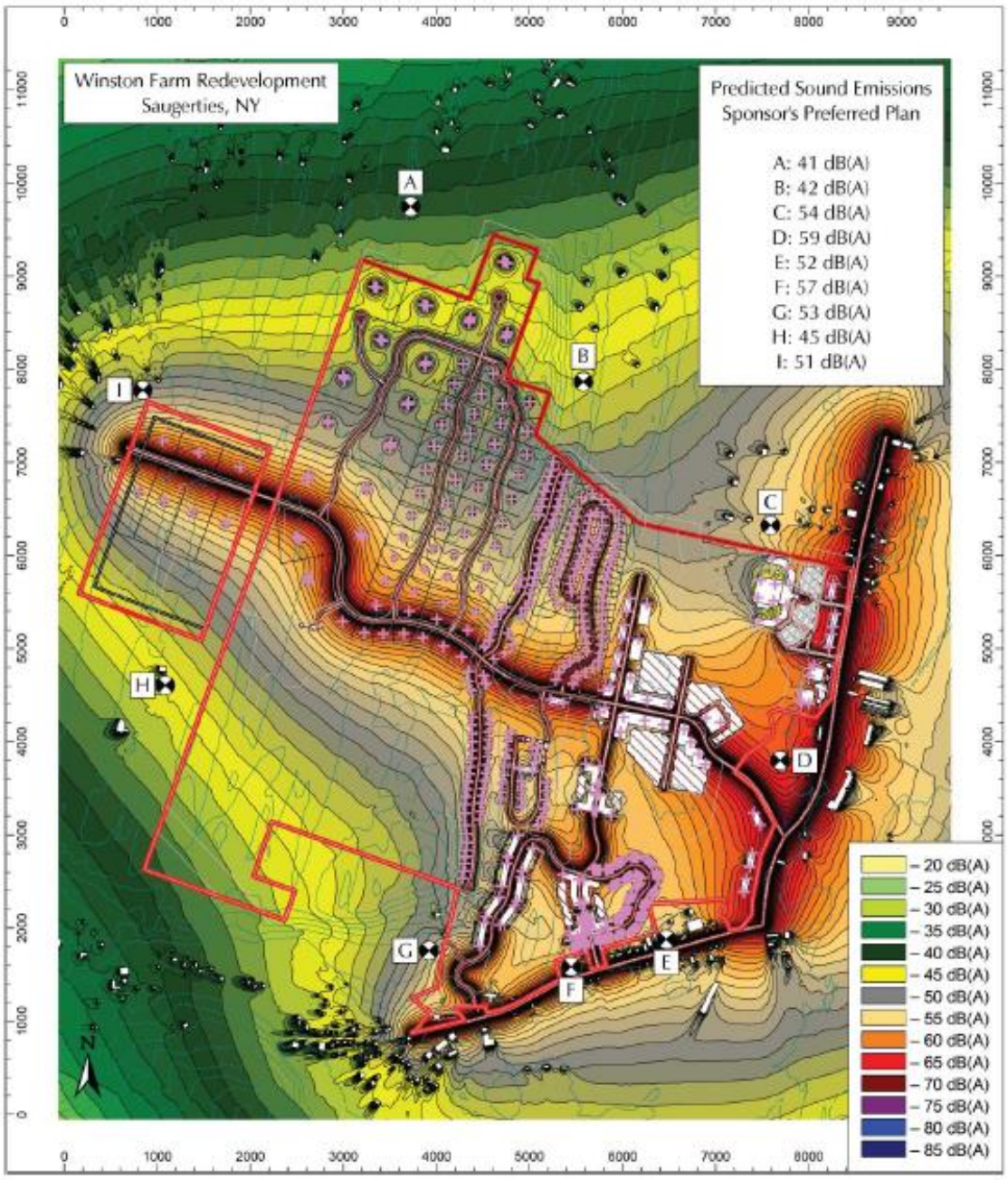


Figure 3 — A-weighted sound emission contours, 5 feet above grade, for sound from HVAC equipment and motor vehicle activity for the Sponsor's Preferred Plan. HVAC units shown with a pink "+" symbol. Road sources shown in red. Buildings shown in white, redevelopment property boundary outlined in red, and elevation contour lines shown in teal. Sound emissions tabulated at 15 feet above grade for all Receptors.

Figure 26: Predicted Sound Emissions – RWCS Plan

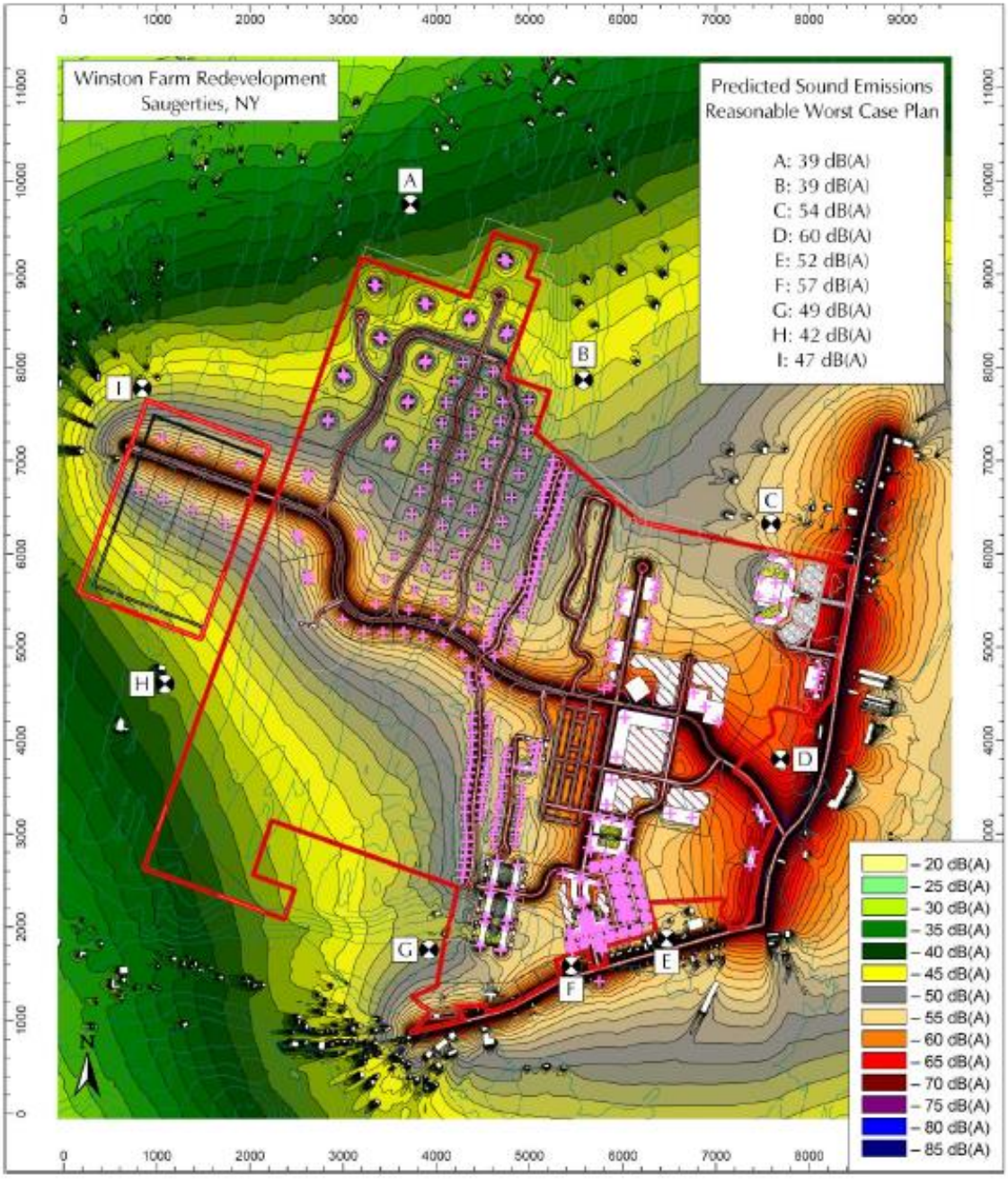


Figure 4 — A-weighted sound emission contours, 5 feet above grade, for sound from HVAC equipment and motor vehicle activity for the Reasonable Worst Case Plan. HVAC units shown with a pink "+" symbol. Road sources shown in red. Buildings shown in white, redevelopment property boundary outlined in red, and elevation contour lines shown in teal. Sound emissions tabulated at 15 feet above grade for all Receptors.

D. Main driveways from Route 32 and Saugerties-Woodstock Road were modeled using the entirety of average daily traffic data provided by the project's traffic engineer, at a speed of 55 mph, and were assumed to contain 20% heavy vehicles (trucks). Traffic was then dispersed across the roadway network with the majority using the main throughways.

E. Roadways to commercial/industrial areas were assumed to have 5% of the traffic from the closest main driveway and to contain 20% of heavy vehicles. These secondary roads were assumed to have a speed limit of 45 mph. Minor branch roads were assumed to have 8 daily motor vehicle trips for each residential dwelling or lot and 10% of the traffic counts were conservatively assumed to be heavy vehicles. Tertiary roads were assumed to have a speed limit of 30 mph. All road sources were modeled using CadnaA's road source model with 2 lanes of traffic, 4 feet above grade with smooth pavement.

F. The study indicates the increase in traffic from future development will be the primary noise source and will slightly increase existing sound levels in the area. Noise from HVAC sources associated with future development will be a subtle contributor in the area. Based on NYSDEC guidelines, noise generated via concerts or other large gatherings on the project site is deemed to not result in objectionable negative acoustical impacts on the surrounding area.

G. Construction activities are temporary in nature, however the equipment, such as bulldozers, front-end loaders, and dump trucks can typically produce maximum sound levels of 80 dB(A) at 50 feet. Any increase was deemed to not result in negative acoustical impacts on the surrounding area per NYSDEC guidelines.

H. Based on the foregoing, the findings in the report support and conclude that all three plan scenarios will not create significant adverse sound impacts.

I. The increase in sound emissions will occur gradually over time as full-build out is reached. The anticipated sound emissions generated from future development will increase no more than 6 dB over current ambient levels. The maximum sound level of 61 dB at the driveway entrance on Route 32 will not exceed 70 dB in accordance with the Town of Saugerties and NYSDEC policies.

6.11.2.2 Light

A. Once future uses are operational, it is anticipated that lighting will be located along the driveway entrances and internal to the site in parking areas, residential neighborhoods, commercial areas, and the conference center. These lights will primarily consist of decorative pole lights. Residential neighborhoods will have residential-style lights. It is anticipated that no future lighting will cast light onto adjacent residential properties or cause glare that will impact motorists traveling by the property.

B. Once future development commences, it is anticipated that all lighting will follow the Outdoor Lighting Guidelines set by the Ulster County Planning Board enacted in September of 2000. This guidance requires all lighting to minimize light spill outside of the intended area and to be dark sky compliant.

6.11.2.3 Odor

A. Future development in the PDD will have construction equipment, generally running on gas or diesel fuel, that has the potential to produce odors during the day during earthmoving or paving operations. Due to the size of the site, it is anticipated these odors will not reach any adjacent properties.

B. Odors can be reduced to the extent practicable by ensuring the equipment is properly maintained, including the use of emission control devices, and by reducing vehicle idling time, minimizing haul distances on site, and reusing all soil on-site to eliminate the need to truck spoil materials to a disposal location.

C. Once future uses are operational, it is anticipated that no objectionable odor will be produced.

6.11.2.4 Air

A. A widely accepted methodology for preparing an air quality analysis for construction and operation activities was applied to Winston Farm. The methodology includes the use of projected vehicle and traffic data, and the anticipated operating schedule of resident vehicles. This data was combined with the United States Environmental Protection Agency (USEPA) emission factor and dispersion models to estimate emissions and traffic air quality effects. The New York State Department of Environmental Conservation (NYSDEC) air

quality monitoring data was used to determine impacts to nearby residents that might arise from air pollution.

B. General provisions in New York State's air pollution control regulations govern all sources that may produce emissions. Future development will adhere to general duty provisions to minimize emissions during the construction process. Erosion control measures will be used as needed to limit the production of fugitive dust during soil movement.

C. Construction-related emissions are primarily associated with the exhaust fumes from heavy equipment (backhoes, bulldozers, graders, etc.). Other emissions can come from delivery trucks traveling to and from the site, dust from site preparation, land clearing, material handling, equipment movement on unpaved areas, and from the temporary storage and transfer of soil and other raw materials. Construction emissions are temporary in nature and generally are confined to the construction site and the access/egress roads.

D. There are no ton/year emission limits with regards to construction activity, however there are general provisions in New York's air pollution control regulations such as 6 NYCRR Part 200.6 (Acceptable Ambient Air Quality), 6 NYCRR Part 200.7 (Maintenance of Equipment), 6 NYCRR Part 211.1 (Air Pollution Prohibited), 6 NYCRR Part 211.2 (Visible Emissions Limited), that govern all entities that may produce emissions. These general duty provisions protect air quality when no formal air permit or other regulation is applicable. The Winston Farm Project will adhere to these general duty provisions to minimize emissions during construction.

6.11.3 Potential Mitigation Measures

6.11.3.1 Noise

A. Noise impacts from construction activities are temporary in nature and can be mitigated by limiting construction to daytime hours, limiting the operation of equipment near receptors for extended periods of time, avoiding placement of stationary equipment near receptors, such as generators, compressors, and office trailers, and avoid placement of construction storage and parking areas near receptors.

6.11.3.2 Light

A. To mitigate potential lighting impacts on adjacent neighborhoods, existing vegetation along the property boundaries at the north and west will be maintained with a 125’ buffer. This will act as a natural buffer between any light generated by the future project and nearby properties.

6.11.3.3 Odor

A. Given that the future operation of the project is not anticipated to produce objectionable odor, mitigation measures are not required.

6.11.3.4 Air

A. Construction-related air quality impacts are temporary and will be limited to a short period of time. General provisions in New York’s air pollution control regulations govern all entities that may produce emissions. The Project will adhere to these general duty provisions to minimize emissions during construction. Contractors will limit vehicle and equipment idling in compliance with New York State’s idling Law. Dust control measures, such as watering will be used, as needed to limit the production of fugitive dust during soil and construction material handling. Construction air quality impacts are unavoidable and will occur with any future development activity on the site.

B. Heavy truck idling will be compliant with the New York idling regulations (6 NYCRR 217-3) which limits idling to 5 minutes or less except during periods when vehicles will park for more than 2 hours when air temperature is continuously below 25 degrees Fahrenheit.

C. If necessary, any qualifying stationary sources of air pollutants, such as diesel engine generators or HVAC equipment, will properly register in accordance with New York’s air permits and registration regulations. All stationary sources will comply with New York State regulations.

6.12 Fiscal & Economic Impacts and Community Services

6.12.1 Existing Conditions

6.12.1.1 Population, Socioeconomics & Housing

A. Camoin Associates was retained by the Project Sponsor to measure the economic contribution and municipal fiscal impact that a future large-scale mixed-use development will have in the Saugerties, New York Community. This analysis is based on full build-out occurring at one time, while it may take several years to complete. The full Economic and Fiscal Impact analysis can be found in Appendix D.

B. The Town's population has been declining throughout the last 10 years, a trend that is projected to continue through 2028. The Town of Saugerties has a higher median age compared to the state and the nation. The Town's median age is projected to increase during the next 5 years.

C. Educational attainment in Saugerties is identified as 94% of individuals over the age of 25 having at least a high school degree. This is higher than the percentages for the state (89%) and the nation (90%).

D. In 2021, 37% of households in the Town of Saugerties spent more than 30% of their income on housing. 19% of households spent more than 50% of their income on housing. It was determined that between 2010 and 2023, the number of owner and renter-occupied housing units increased in the Town. During the next five years, the number of renter-occupied housing units is expected to decline.

E. In 2023, the median household income in Saugerties was slightly below the state's median income and higher than the national median income. See below.

Table 34: Town of Saugerties Household Income Levels

Percent of Households by Income Level

Income Level	2023 Estimates			2028 Projections		
	Saugerties	New York	United States	Saugerties	New York	United States
<$15,000	7.6%	10.9%	9.5%	6.9%	10.0%	8.3%
$15,000 - $24,999	10.2%	7.0%	7.1%	8.3%	5.8%	5.7%
$25,000 - $34,999	7.6%	6.7%	7.4%	6.4%	5.7%	6.2%
$35,000 - $49,999	9.5%	9.4%	10.8%	9.2%	8.5%	9.5%
$50,000 - $74,999	15.0%	14.8%	16.5%	13.9%	14.2%	15.6%
$75,000 - $99,999	10.9%	11.9%	12.8%	10.2%	11.9%	12.9%
$100,000 - $149,999	14.7%	16.3%	16.9%	15.7%	17.2%	18.6%
$150,000 - $199,999	11.2%	9.2%	8.6%	13.7%	10.7%	10.7%
$200,000+	13.5%	13.8%	10.6%	15.8%	15.9%	12.4%

Source: Esri

F. The occupancy of households varies slightly seasonally. 87% of all housing units in Saugerties are occupied while 13% are vacant. Of the 13% that are vacant 6% or 600 units are used seasonally.

G. Saugerties residents are employed all over the Hudson Region and beyond. During 2021, nearly 23% of Saugerties employed residents worked within the Town limits. Outside of Saugerties, the City of Kingston is the most common area that Saugerties resident workers commute to followed by the Town of Ulster and the Borough of Manhattan.

H. Between 2017 and 2022, many industries in the Town of Saugerties experienced job declines. It is important to note the COVID-19 pandemic potentially influences this decline. Other industries such as the Accommodations and Food Services Industry added approximately 100 jobs between 2017 and 2022 and had the largest share of Saugerties workers. In addition, the Mining, Quarrying, and Oil and Gas Extraction Industry had the highest job growth rate in the Town of Saugerties. However, this increase only accounted for about 10 new jobs. Other Industries such as Retail Trade, Construction, and Health Care employ large shares of Saugerties workers.

6.12.1.2 Community and Emergency Services

A. The Town of Saugerties is situated in Ulster County, New York. The proposed PDD will be serviced by several municipal providers including the Town of Saugerties, the Town of Saugerties Highway Department, Ulster County, the Saugerties Public Library, the Saugerties Police Department, the Centerville Fire District, and the Saugerties Central School District. The Town is also served by the Diaz Memorial Ambulance Service, a not-for-profit corporation providing Emergency Medical Services.

B. The Town has a wide range of community services such as the Saugerties Public Library and Frank D. Greco Multipurpose Senior Citizens Recreation Center. The Town public library has 14 employees, is located in an 8,000 square foot facility that was renovated in 2011 and serves about 19,090 residents with a budget of $690,510. Residents of the proposed PDD will have access to several municipal parks such as Cantine Veterans Memorial Complex, Glasco Mini-Park, George J. Terpening Sr. Memorial Park, Glasco Little League Complex, Bigelow Park, Mt. Marion Park, JayCee Field, and Kiwanis Ice Arena.

C. Police services are provided by the Saugerties Police Department. The Department's service area is confined to Town limits (including the Village). The Police Department currently has 28 full-time officers, 17 part-time staff, and six volunteers. With four divisions including the Detective Division, Dispatch Division, K9 Division, and Patrol Division, the Police Department responds to approximately 11,000 calls per year. The Saugerties Police Department provides a wide variety of services to the community, such as patrol, investigations, school resource officers, canine, emergency response team, detective division, communications division, volunteer services, and special events.

D. The Centerville Fire District provides fire protection services in the response area and is made up of two independent fire companies, both with their own stations: Cedar Grove and Centerville. The Centerville Fire District is an all-volunteer squad that historically has between 60–70 active firefighters per year. The District has a board with five elected commissioners, a Chief officer, a Deputy Chief, and two station chiefs. The District provides mutual aid to surrounding area departments and is sometimes called on to support areas in Green County.

E. The Diaz Memorial Ambulance Service, Inc. is a not-for-profit corporation that provides emergency medical service (EMS) to towns and villages in Ulster County, including the Town of Saugerties. Diaz Ambulance bills private individuals and their insurance companies for their service. The Diaz Memorial Ambulance Service responds to approximately 3,500 calls per year with four ambulances. The Town of Saugerties currently contracts with Diaz Memorial Ambulance Service and pays approximately $1.5 million per year to ensure residents are covered by Diaz and have access to services.

F. The property currently generates an estimated $24,396 in real property taxes (excluding school district taxes).

6.12.1.3 Solid Waste

A. Given that the proposed action is for the zoning change of the property and no development is being considered at this time, companies have not been selected to provide refuse/solid waste collection services. A licensed waste hauler with experience providing waste and recycling removal for large mixed-use sites will be sought. There are several waste haulers that potentially service Ulster County, such as County Waste, Thompson Sanitation, Waste Management, and Welsh Sanitation Service.

B. It is anticipated that regardless of the collector, all refuse will be taken to the Ulster County Resource Recovery Agency's (UCRRA) Kingston transfer station. UCRRA is a permitted solid waste facility regulated by the NYSDEC, obligated in accordance with Ulster County Waste Management Law to accept all solid waste generated in Ulster County and dispose of it properly. All trash collection must pass through the UCRRA facility.

C. UCRRA is a public benefit corporation that develops, finances, and implements a comprehensive Countywide solid waste management program. According to the UCRRA website, there is a ten-year Solid Waste Management Plan[5] (2020-2029) to enhance and optimize capacity, existing programs, and recycling.

D. The closest Ulster County transfer station is in Kingston at 999 Flatbush Road and includes a recycling and composting facility. The UCRRA released a landfill

[5] https://ucrra.org/local-solid-waste-management-plan/

siting study on July 27, 2024. Two sites in the Town of Wawarsing, NY are recommended for Further Planning and Study.

E. Recycling is mandatory in Ulster County. All multifamily dwellings, commercial businesses, and industrial facilities are required to separate recyclable materials from food waste and other solid waste. Recyclable materials include newspaper, mixed paper, glass bottles, jugs and jars, metal cans, plastic, corrugated cardboard, and paperboard. Residents also have the option to bring waste and recycling to the Municipal Transfer Station and Recycling Center located at 1765 NY 212 in Saugerties.

6.12.2 Potential Impacts

6.12.2.1 Population, Socioeconomics & Housing

A. To quantify the impact of future development in the PDD on the local economy, direct economic impacts such as on-site jobs and secondary economic impacts generated throughout the economy through the economic “ripple” effect were also measured.

B. The three scenarios will have economic impacts on the Town’s economy because of temporary construction-related spending, new permanent jobs on-site, spending by new residents within the Town, and new visitor spending.

C. It is assumed that between 21% and 52% of the construction costs will be sourced from within the Town of Saugerties depending on what is being constructed.

D. The PDD will support the development of additional housing units in the Town. The Sponsor’s Preferred Plan is proposed to create 799 units, the Reasonable Worst Case Scenario Plan is proposed to create 918 units, and the As-of-Right Plan is proposed to create 676 units.

E. Future development in the PDD will address several issues and goals identified in the 2021 Ulster County Housing Action Plan:

- Declining population: The PDD will attract new residents to the Town and County.

- Accommodation and Food Services Sector: The PDD will support the continued growth of this important sector and offer job opportunities that will encourage higher earning potential.

- Age of Housing: The PDD will add newly built units to the overall housing stock where nearly 60% was built 50 years ago.

- Implement Upzoning: The PDD is proposed to be a dense, mixed-use development that will create infrastructure efficiencies, create a walkable community, and support economic and cultural vibrancy.

F. New Residents will make purchases in the region, thereby adding dollars to the Town of Saugerties economy.

G. Expected price points for the new housing units vary depending on whether units are rental or for-sale units and the type of lot (estate, single-family, townhome, four-story, etc.). Given the anticipated price points for new housing units, the annual income of each new household will need to fall in the range of $70,000-$150,000 to avoid being cost-burdened.

H. Two of the scenarios (SP Plan and RWCS Plan) include adding several new lodging operations to the Town of Saugerties. It is assumed that 100% of the guests staying in the proposed new lodging reside outside of the Town of Saugerties and are therefore bringing new economic activity to Saugerties. The Boutique Hotel, Cabins, and RV sites are more likely to be utilized by individuals traveling for leisure purposes possibly with friends/family whereas individuals staying at the conference center may be more likely to be traveling independently for business:

Table 35: New Visitors for each Development Scenario

New Visitors

Accommodation Type	Current Zoning	Preferred	Worst Case
Boutique Hotel			
Number of Rooms	0	150	150
New Guests (1.5 people per room)	0	225	225
New Visitor Nights (occupancy rate: 55.2%)	**0**	**124**	**124**
Conference Center			
Number of Rooms	0	250	300
New Guests (1 person per room)	0	250	300
New Visitor Nights (occupancy rate: 55.2%)	**0**	**138**	**166**
Cabins			
Number of Rooms	0	100	100
New Guests (1.5 people per cabin)	0	150	150
New Visitor Nights (occupancy rate: 55.2%)	**0**	**83**	**83**
RV Sites			
Number of Rooms	0	0	57
New Guests (1.5 people per site)	0	0	86
New Visitor Nights (occupancy rate: 55.2%)	**0**	**0**	**47**
Net New Visitors	**0**	**345**	**420**
Annual Net New Visitors	**0**	**125,925**	**153,226**

Source: Passero Architecture and Engineering, CoStar, Camoin Associates

I. New visitors will make purchases in the region, thereby adding dollars to the Town of Saugerties economy:

Table 36: Visitor Spending per Development Scenario

Spending Basket: New Visitors

		Total Net New Visitor Spending in Saugerties		
Category	Spending per Visitor per Day	Current Zoning (No Impact)	Preferred (125,925 new visitor days)	Worst Case (153,226 new visitor days)
Food	$52	No Change	$6,548,100	$7,967,728
Transportation	$19	No Change	$2,392,575	$2,911,285
Attractions/Amusements	$14	No Change	$1,762,950	$2,145,158
Miscellaneous Retail Spending	$25	No Change	$3,148,125	$3,830,639
Total Spending	**$110**	**No Change**	**$13,851,750**	**$16,854,809**

Source: Tourism Economics, Economic Impact of Visitors in New York; Bureau of Labor Statistics-Consumer Price Index Mid Atlantic 2018-2022; Lightcast; Camoin Associates

J. Using the potential structure types and square footage of proposed uses, an estimated number of net new jobs was calculated. Since it is assumed approximately 92% of the newly occupied residential units will be filled with individuals who are new to Saugerties, this means that 92% of the jobs associated with maintaining the new residential areas will also be new. 100% of the non-housing related jobs are classified as net new because without development in the PDD, these following jobs will not exist:

Table 37: Jobs Created by Each Development Scenario

New On-Site Jobs

	Current Zoning	Preferred	Worst Case
Townhouses	37	37	37
Assume 92% of Jobs are New	**34**	**34**	**34**
Four Story Apartment Building	45	47	47
Assume 92% of jobs are new	**41**	**43**	**43**
Camping	**0**	**18**	**18**
General Commercial - Retail	**73**	**134**	**148**
Commercial - Restaurant	**94**	**173**	**191**
Commercial - Personal Services	**11**	**20**	**22**
Boutique Hotel	**0**	**27**	**27**
Conference Center	**0**	**44**	**53**
Amphitheater	**0**	**165**	**165**
Tech Industrial	**0**	**217**	**326**
Total New Jobs	**260**	**882**	**1,034**
Net New On-Site Jobs	**254**	**876**	**1,027**

Source: Passero Architecture and Engineering, US Energy Information Administration Commercial Buildings Energy Consumption Survey, National Apartment Association, Barclays Center, Camoin Associates

K. The Saugerties Central School District has approximately 2,300 enrolled students. There are six schools within the district, including Cahill School, Morse School, Mt. Marion Elementary School, Riccardi Elementary School, Saugerties Junior High School, and Saugerties Senior High School. The School District has been losing enrollment over the last 10 years, from over 2,750 students enrolled in the 2013–2014 school year. Total school district expenditures in the most recent year are over $74 million, with an average total spending per pupil of $25,000 per year.

L. In addition to the fiscal impact on the Town of Saugerties, Camoin Associates calculated the impact of the scenarios on the Saugerties Central School District. Based on demographic multipliers and proposed new housing units, the following

tables show the expected new school-age children and the fiscal impact on the School District for each scenario.

Table 38: Expected New School-Age Children by Scenario

Winston Farm New School-Age Children by Tenure and Scenario

	Current Zoning			Preferred			Worst Case		
	Rented	Owned	Total	Rented	Owned	Total	Rented	Owned	Total
Population Group									
K-12 Students	1,113	6,133	**7,246**	1,113	6,133	**7,246**	1,113	6,133	**7,246**
Recent Mover Households	7,466	14,083	**21,549**	7,466	14,083	**21,549**	7,466	14,083	**21,549**
Multipliers									
K-12 Students	0.149	0.435	**0.336**	0.149	0.435	**0.336**	0.149	0.435	**0.336**
New Units	0	773	**773**	760	154	**914**	915	135	**1,050**
New Population									
K-12 Students	0	337	**337**	113	67	**180**	136	59	**195**

Note: Renter data are for those living in buildings with at least five units. Owner data are for those living in homes with values between roughly $165,000 and $494,000.

Source: Camoin Associates using 2021 5-Year American Community Survey PUMS data

Table 39: Expected Fiscal Impact to School District by Scenario

Winston Farm PDD Fiscal Impact on Saugerties Central School District, Expenditures

	Current	Preferred	Worst Case
2022–23 School- and Central-Level Local/State K–12 Spending	$56,238,164	$56,238,164	$56,238,164
State K–12 Aid to Saugerties CSD	$22,171,617	$22,171,617	$22,171,617
Local K–12 Spending	$34,066,547	$34,066,547	$34,066,547
2022–23 K–12 Enrollment	2,229	2,229	2,229
Total Local Spending per Pupil	$15,283	$15,283	$15,283
Max Expected New Public School Students	337	180	195
New School Expenditures	**$5,144,881**	**$2,756,548**	**$2,983,237**

Source: Saugerties School District 2022-23 Budget Statement and Transparency Report, Camoin Associates

M. The Saugerties Central School District 2023-2024 property tax rate is $13.644301 per $1,000 of assessed value. The Winston Farm property owners currently pay an estimated $50,087 in school property taxes. Given each scenario's estimated new assessed value of improvements upon full build-out, the total new revenue generated for the district ranges from $3.72 million to $7.34 million.

Table 40: Net Fiscal Impact on School by Scenario

Winston Farm PDD Fiscal Impact on Saugerties Central School District, Annual Net Fiscal Impact by Scenario

	Current	Preferred	Worst Case
Total New Expenses	$5,144,881	$2,756,548	$2,983,237
Total New Revenue	$3,725,456	$6,230,130	$7,339,411
Net Fiscal Impact	**($1,419,425)**	**$3,473,582**	**$4,356,174**

Source: Camoin Associates

6.12.2.2 Community and Emergency Services

A. A full build-out of the PDD will generate recurring annual revenue for the Town of Saugerties (including many community services) in the form of both new per capita revenues and property tax revenue.

B. Based on construction costs, upon full build-out, development in the PDD will add $279.3 million to $538.8 million in assessed value to the Town.

Table 41: Net Fiscal Impact on Community Services per Scenario

Winston Farm PDD Net Fiscal Impact on Town of Saugerties

	Current Zoning	Preferred	Worst Case
Town + Town Outside, incl. Police Dept.			
New Expenditures	$506,711	$470,724	$534,750
New Revenues	$899,524	$1,401,211	$1,645,434
Net Fiscal Impact	$392,813	$930,487	$1,110,684
Highway			
New Expenditures	$305,381	$139,215	$141,842
New Revenues	$372,401	$622,771	$733,656
Net Fiscal Impact	$67,020	$483,556	$591,814
Centerville Fire District			
New Expenditures	$101,688	$97,718	$111,223
New Revenues	$217,875	$364,565	$429,532
Net Fiscal Impact	$116,186	$266,847	$318,308
Emergency Medical Services			
New Expenditures	$130,959	$125,846	$143,239
New Revenues	$134,171	$224,505	$264,513
Net Fiscal Impact	$3,212	$98,659	$121,274
Library			
New Expenditures	$65,129	$52,260	$58,672
New Revenues	$105,566	$175,164	$206,275
Net Fiscal Impact	$40,437	$122,904	$147,604
Total Fiscal Impact			
New Expenditures	$1,109,868	$885,764	$989,726
New Revenues	$1,729,536	$2,788,217	$3,279,410
Total Net Fiscal Impact	**$619,668**	**$1,902,453**	**$2,289,684**

Source: Camoin Associates

6.12.2.3 Solid Waste

A. The USEPA estimates the average person generates 4.9 pounds of solid waste per day and there is an average number of 2.5 people per household, which results in 12.25 pounds of solid waste generated per day per household. A household is the equivalent of one residential unit which can be an estate lot, single-family lot, townhome, apartment, cabin, or RV site. The annual amount of solid waste anticipated to be generated by residential uses, are as follows:

Table 42: Solid Waste – Residential Uses

Scenario	# Residential Units	Solid Waste Generation (Tons)
AOR	773	1,728
SP	1,014	2,267
RWCS	1,204	2,698

B. The American Institute of Architects New York (AIANY) Zero Waste Calculator[6] was used to estimate the amount of solid waste that will be generated by nonresidential uses. The inputting of the projected number of employees by industry (hotel, offices, restaurant, retail, and light industrial), Table 42, resulted in the amount of solid waste that will be generated by future uses.

[6] https://www.zerowastedesign.org/waste-calculator/

Table 43: Solid Waste – Commercial and Industrial Uses

Proposed Use	AOR		SP		RWCS	
	Jobs	Solid Waste Generation (Tons)	Jobs	Solid Waste Generation (Tons)	Jobs	Solid Waste Generation (Tons)
Retail, non-food	73	121	134	222	148	245
Restaurant	94	258	173	475	191	525
Office	11	15	20	28	22	31
Boutique Hotel	0	0	27	44	27	44
Conference Center	0	0	44	72	53	87
Amphitheater*	0	0	165	274	165	274
Tech Industrial*	0	0	217	360	326	541
Total:		**394**		**1,475**		**1,747**

*Multipliers are not available for amphitheaters and tech industrial. The retail non-food multiplier was used to estimate waste generation.

C. The total anticipated solid waste generation upon full build-out of the PDD for the AOR Plan is 2,122 tons per year; the SP will generate 3,742 tons per year; and the RWCS is anticipated to generate 4,445 tons per year.

Table 44: Annual Total Solid Waste Generation

AOR	SP	RWCS
2,122	3,742	4,445

D. According to the Ulster County Resource Recovery Agency (UCRRA) website, New York State generates 17.7 million tons of waste per year. Ulster County generates about 109,000 tons of waste per year. Therefore, at full build-out the AOR Plan will realize a 1.9% increase in solid waste disposal needs; the SP Plan will realize a 3.4% increase in solid waste disposal needs; and the RWCS Plan will realize a 4% increase in solid waste disposal needs.

E. According to the UCRRA website, Ulster County's waste is exported via long-haul transport tailors to Seneca Meadows in Seneca Falls NY. UCRRA sends out 10-15 tractor-trailer transport vehicles per day, six days per week. Each truck can hold about 32 tons.

6.12.3 Potential Mitigation Measures

A. Full build-out will have a net positive annual fiscal and economic impact on the Town of Saugerties. The scenarios will generate nearly $619,668 for the AOR Plan, $1,902,453 for the SP Plan, or $2,289,684 for the RWCS Plan more in revenue than expenses.

B. Upon full build-out, AOR Plan will cost the Saugerties Central School District nearly $1,419,425 more annually, however, the SP Plan and the RWCS Plan are not expected to generate any new costs and will in fact increase revenue. The SP Plan is expected to generate nearly $3,473,582 in additional net revenue, and the RWCS Plan is expected to generate nearly $4,356,174 in additional net revenue.

C. Future residential tenants and homeowners will be made aware of the mandatory recycling law and the importance of recycling and proper disposal of solid waste.

D. No additional mitigation measures are proposed.

6.13 Impacts to Land Use, Zoning, and Community Plans

6.13.1 Existing Conditions

6.13.1.1 Zoning

A. The project site is in the GB (General Business), MDR (Moderate Density Residential), and RH (Residential Hamlet) zoning districts.

B. The GB district is located along Route 32 in the far eastern portion of the site and is ± 31 acres (3.8%). The majority of the property is zoned MDR and is 790 ± acres (95.8%). The RH district is located along Old Route 212 and consists of 3.4 acres (0.4%).

C. The surrounding areas to the north, south, and west are zoned MDR. To the west on the edge of the two-mile buffer is a Low-Density Residential Zoning District. There are Industrial Zoning Districts to the east. Further to the east within two miles of the project site is the Village of Saugerties. The Village of Saugerties Zoning is similar to the Town of Saugerties Zoning, where residential districts are categorized by density. The Village of Saugerties mostly consists of residential districts, and the B-1 Business District is located along the main streets in the village.

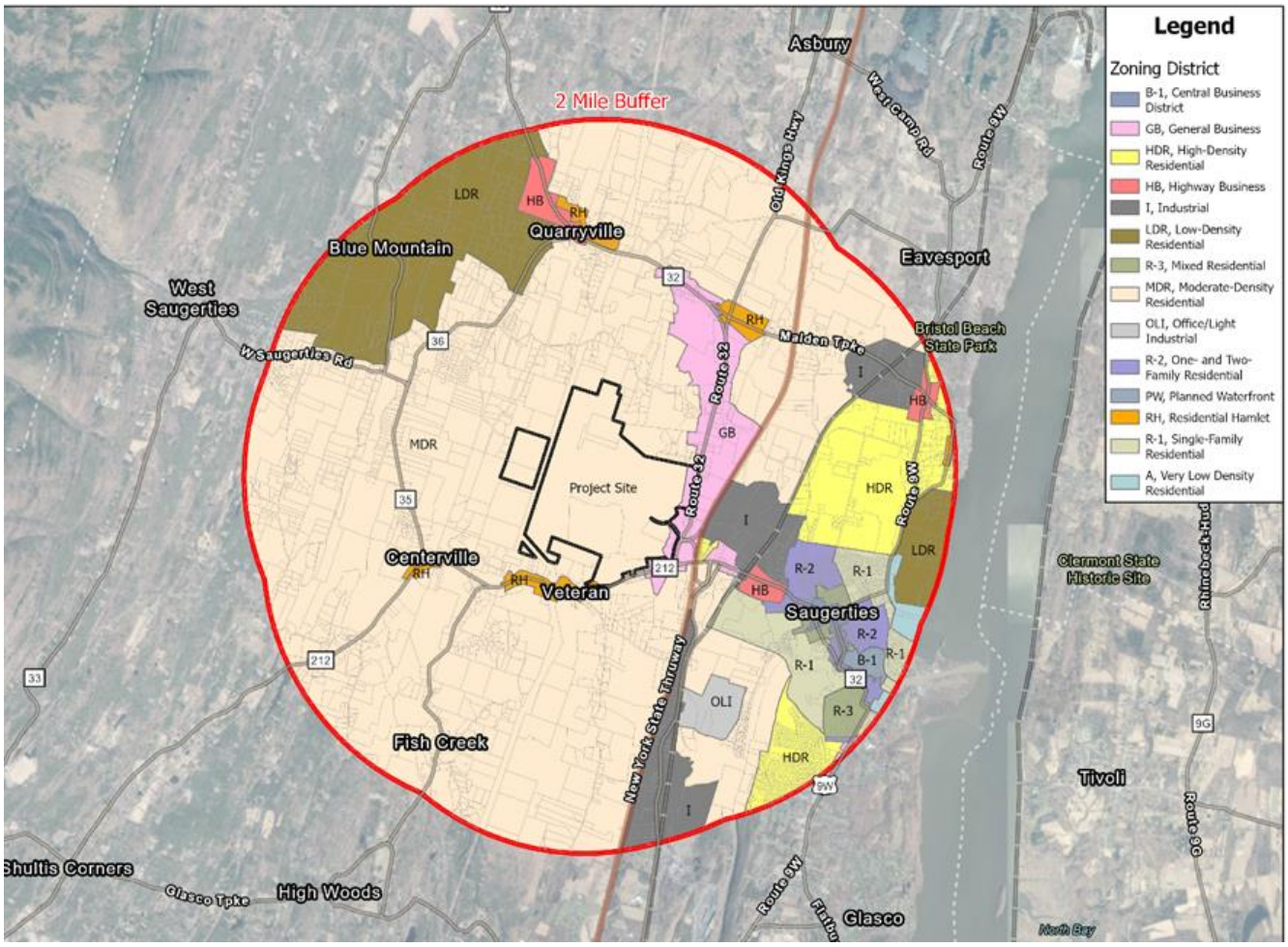
D. The GB District is characterized by retail services, shopping centers, offices, and commercial properties adjacent to Route 32. The GB District also permits high-density residential properties. Adjacent to the project site in this district is a Holiday Inn hotel, a cycle shop, and a storage facility. To the east past the GB District and on the opposite side of the I-87 is an Industrial District with a horse stable and several manufacturing properties.

E. The MDR District is characterized by one or two-family residential structures, agricultural uses, and small-scale convenience businesses designed to serve the residential population.

F. The RH District reflects the mixed uses providing high-density residential housing, local employment, limited small-scale retail goods and services, education and other public and private facilities, which are compatible with the residential character of the district.

G. Within two miles of the project site is the Village of Saugerties. The zoning classifications change in the Village but are similar in function. The Town residential zoning categories of LDR, MDR, and HDR are named R-1, R-2, and R-3 in the Village. Usage requirements in the Village for residential properties do not differ significantly from residential properties in the Town. Much of the Village consists of residential properties with a strip of commercial along Main Street and a Business District next to Route 32. Further outside the extent of the two-mile radius are residential properties up to the Hudson River.

Figure 27: Zoning Districts Within a Two-Mile Radius



H. The project site is also subject to three overlay districts: Aquifer Protection Overlay[7] (APO), Gateway Overlay[8] (GO), and Sensitive Area Overlay[9] (SAO). Overlay districts impose additional standards upon development which supplement the regulations of the underlying district. The Town's overlay districts are intended to preserve, protect, and/or enhance the aquifer and groundwater quality, topography, wetlands, flood zones, agricultural districts, important viewsheds, historic resources, and aesthetics including building and site design that is consistent with community character.

I. The APO was established to preserve the quality and quantity of the Town's groundwater resources to ensure a safe and adequate water supply, and to preserve groundwater resources currently in use that contribute to the public water supply.

J. The APO consists of two zones, the Unconsolidated Aquifer Zone, and the Aquifer Watershed Zone, both of which apply to the project site. The Unconsolidated Aquifer Zone consists of land areas overlying the unconsolidated aquifer. The Aquifer Watershed Zone consists of adjacent land areas that do not overlie the aquifer, but where surface water runs across the land after rainfall or flooding and eventually enters the aquifer area.

K. There is a significant list of uses that are prohibited in the APO under § 245-25C of the zoning law.

L. The purpose of the GO is to enhance the attractiveness of gateway areas by protecting the views, natural topography, and historic fabric along important transportation corridors. Development activity within 200 feet of the center line of the roadway, or which is visible from the roadway, is subject to additional development and design standards of the GO under § 245-27 of the zoning law. The GO applies to development along the following transportation corridors:

- Route 9W.
- Route 32.
- Route 32A.
- Route 212.

[7] § 245-25 Aquifer Protection Overlay, Town of Saugerties Zoning Law, https://ecode360.com/13646588
[8] § 245-27 Gateway Overlay, Town of Saugerties Zoning Law, https://ecode360.com/13646704
[9] § 245-24 Sensitive Area Overlay, Town of Saugerties Zoning Law https://ecode360.com/13646557

M. The SAO protects areas characterized by environmental conditions which are deemed to be significant development constraints having a high concentration of one or more of the following features:

- Areas with a slope of 15% or greater
- State or federal wetlands
- Soils with a high clay content and/or which are poorly drained and have a slow rate of permeability
- Areas within the 100-year flood plain
- Agricultural district designation
- Groundwater recharge areas
- Areas in the Town tributary to the Town of Saugerties' Blue Mountain Reservoir

N. Under §245-24 of the zoning law, the SAO identifies the uses permitted in the underlying district, except those which are identified in §245-11 that require a special use permit.

O. §245-24E of the SAO further provides a list of prohibited uses, which can be waived by the Town Planning Board if sufficient evidence is presented that the specific property or land area does not include the above features, or in the case of groundwater recharge, that a satisfactory system for artificial recharge is provided.

6.13.1.2 Land Use

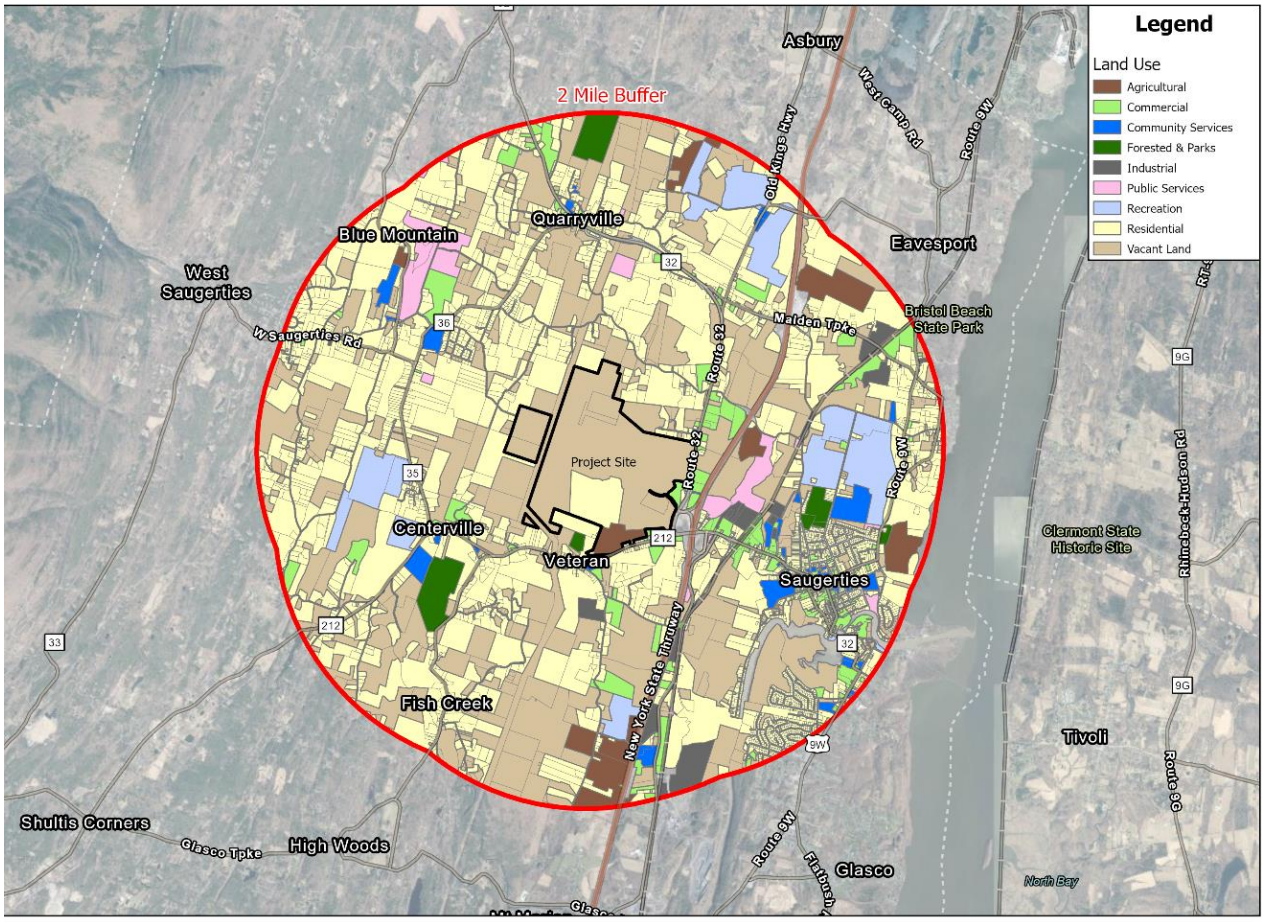
A. Current land uses within a two-mile radius are shown in Figure 28. The predominant land uses in the immediate vicinity of the project site consist of mostly vacant land and scattered residential uses. Commercial use immediately to the east of the site includes the Holiday Inn Hotel, a storage facility, and several commercial services beneficial to nearby residents. Commercial uses continue northward along Route 32.

B. The project site itself contains vacant land, residential, and agricultural land uses. Much of the project site is vacant land with residential properties in the central southern part of the site, and a small agricultural use in the southeast area of the site.

C. Under current zoning, future land uses will largely stay the same, as shown in Figure 29. Allowable uses under existing zoning include residential and agricultural uses. On the east side of the property along Route 32 commercial land uses are allowed.

D. To conserve tracts of environmentally significant areas, the Town of Saugerties has implemented a Conservation Subdivision Law that specifies the maximum number of allowed residential units based on the acreage of unconstrained land on the property. § 245-23 Conservation Subdivisions defines constrained acreage as wetlands, floodplains, and slopes over 25% that are 2000 SF or more in contiguous sloped area. The Winston Farm site under current residential zoning is a total of ± 804 acres with 175.8 acres of constrained land. Using the formula from the town law, the maximum number of residential units under current zoning is ± 672.38 units. Under § 261-b of the Town Law, the residential density may be increased by up to 15% if permanent public open space is provided with Planning Board approval. This increase allows a maximum number of ± 773 residential units under current Town Law.

Figure 28: Current Land Use Within a Two-Mile Radius



6.13.1.3 Community Plans

A. The Comprehensive Plan of the Town and Village of Saugerties, 2021 (“Plan”), builds upon previous goals, recommendations, and strategies set in the 1999 and 2013 joint Comprehensive Plans. This Plan was prepared by the Comprehensive Plan committee that consisted of members from the Town and Village of Saugerties. The 2021 update is a synthesis of previous plans and is supplemented by an analysis of the existing natural and built environments and current trends in land use, population, housing needs, and transportation.

B. The Winston Farm site is specifically mentioned in Goal 6A of the Plan, relating to certain large parcels. The intent of this goal is to promote environmentally sound development. The Plan describes Winston Farm as significant to the community based on its size and location near state and regional highways. To implement Goal 6A, the Plan describes the amendment of the zoning law to the Planned Development District (PDD) to support a mixture of uses.

> "The Winston Farm is the largest singly owned property in the Town of Saugerties. It is unique not only because of its size but, also, its excellent access to state and regional highways, its physical assets and features and its historic significance."

C. The Plan outlines the following guiding principles for Winston Farm, which are also applicable to other large parcels in Saugerties:

- Be environmentally sound with a focus on energy self-sufficiency
- Protect the aquifer
- Preserve open space, forested lands, and the viewshed
- Foster job opportunities with livable wages
- Generate tax revenue for local government and schools
- Be historically sensitive, preserving or restoring significant buildings and landscapes

D. The implementation strategies of the Plan support the preparation of a Generic Environmental Impact Statement (GEIS) to evaluate the effects of future development at the Winston Farm site and the necessary measures to mitigate potential negative impacts. The Plan also supports an amendment to the zoning law that establishes a Planned Development District which will allow the use of large sites with direct access to state or county roads. It is envisioned that this district will include a mixture of uses subject to design standards and open space preservation requirements.

E. The Plan also emphasizes the importance of preserving recreation, open space, and natural resources, increasing diversity in the housing stock, as well as the economic base.

F. The Ulster County Open Space Plan has a long history of open space protection. This plan focuses on preserving environmental resources and growing "smart." The Plan states, "Communities that plan ahead to protect open spaces, preserve their natural resources while creating a vision for accommodating sustainable and

compact development are likeliest to succeed economically." The Town and Village of Saugerties is identified as a priority growth area, especially along Route 32.

G. The 2009 Winston Farm High Technology Feasibility Study Master Plan concluded after evaluating nine sites in the region that Winston Farm was the most favorable greenfield site for technology development. A list of guiding principles emerged from the public participation process. The Project Sponsor, at a minimum, has incorporated these guiding principles into the creation of the Winston Farm PDD:

- A high-tech village open and connected to the larger Saugerties and Hudson Valley communities containing a mix of complementary land uses.
- Appropriate balance between environmental and economic considerations.
- 'Anchor' industries consist of a mix of R&D-oriented high-tech facilities and sustainable manufacturing.
- Supporting uses consisting of a mix of restaurants, shops, recreation, arts venues, educational center offering workforce training, and museum/interpretive center highlighting Hudson Valley heritage.
- At least 50% of the total site will be preserved as open space.

6.13.2 Potential Impacts

6.13.2.1 Zoning

A. The rezoning will change the zoning classification of the subject property from GB, MDR, and RH zoning to a PDD (Planned Development District) zoning district. The Project Sponsor intends to comply with the zoning law relating to the purpose and intent of the established overlay districts: Aquifer Protection Overlay (APO), Gateway Overlay (GO), and Sensitive Area Overlay (SAO), designed to supplement the development regulations of the underlying district.

B. Potential impacts include the attraction of more people, an increase in the potential for noise and traffic, a change to the character of the area, impacts to natural and ecological resources, and it can also bring new housing options, the retention and creation of new employment opportunities, new places to visit and experience, and a huge financial boost to the local economy.

C. The goal of the PDD is to prepare a well-informed planning and regulatory tool that guides future development, protects the public health, safety, and welfare of the existing community, and welcomes new residents, visitors, and businesses in a way that is respectful of available resources and the carrying capacity of the land. The PDD will preserve and protect the natural landscape and make these areas accessible to the public whether living, working, visiting, or engaged in indoor and outdoor activities in the district.

D. The implementation of regulations of the PDD envisions a vibrant mix of complementary building styles of varying heights and sizes, indoor and outdoor rooms, and spaces for active and passive recreation, entertainment, and social gatherings. The development in the district will incorporate the following design standards and guidance, creating a flexible regulatory environment that is adaptable to changing market conditions and furthers the purpose and intent of the district:

   - To ensure a high-quality mixed-use style development that promotes pedestrian access and connectivity, multimodal transportation opportunities, a variety of residential, retail, and commercial uses, both large and small, resort, recreational, and entertainment opportunities, and enhanced access to nearby uses.

   - To use visual and physical features that unify district-wide pedestrian and vehicular elements, such as integrated and extensive landscaping, lighting, walkways, site amenities, trails, and wayfinding, which promotes access for all users.

E. The PDD includes a development concept plan and implementing regulations (PDD regulations) to guide future development. The regulations propose a range of potential uses including, but not limited to low- to high-density residential, retail sales and consumer service; office space; high-tech and research opportunities; makerspace and artisanal creative spaces; agri-manufacturing and research; hospitality; and indoor and outdoor entertainment and recreational opportunities, as well as a mix of related uses.

F. The PDD is divided into 5 subareas. These subareas describe the predominant type of development envisioned to occur in each section of Winston Farm, as follows:

- Subarea 1: Residential Low Density (RLD). This subarea is approximately ± 271 acres and is located near the northwest corner of the PDD. The area will accommodate single-family development and estate homes with or without in-law and accessory apartments.

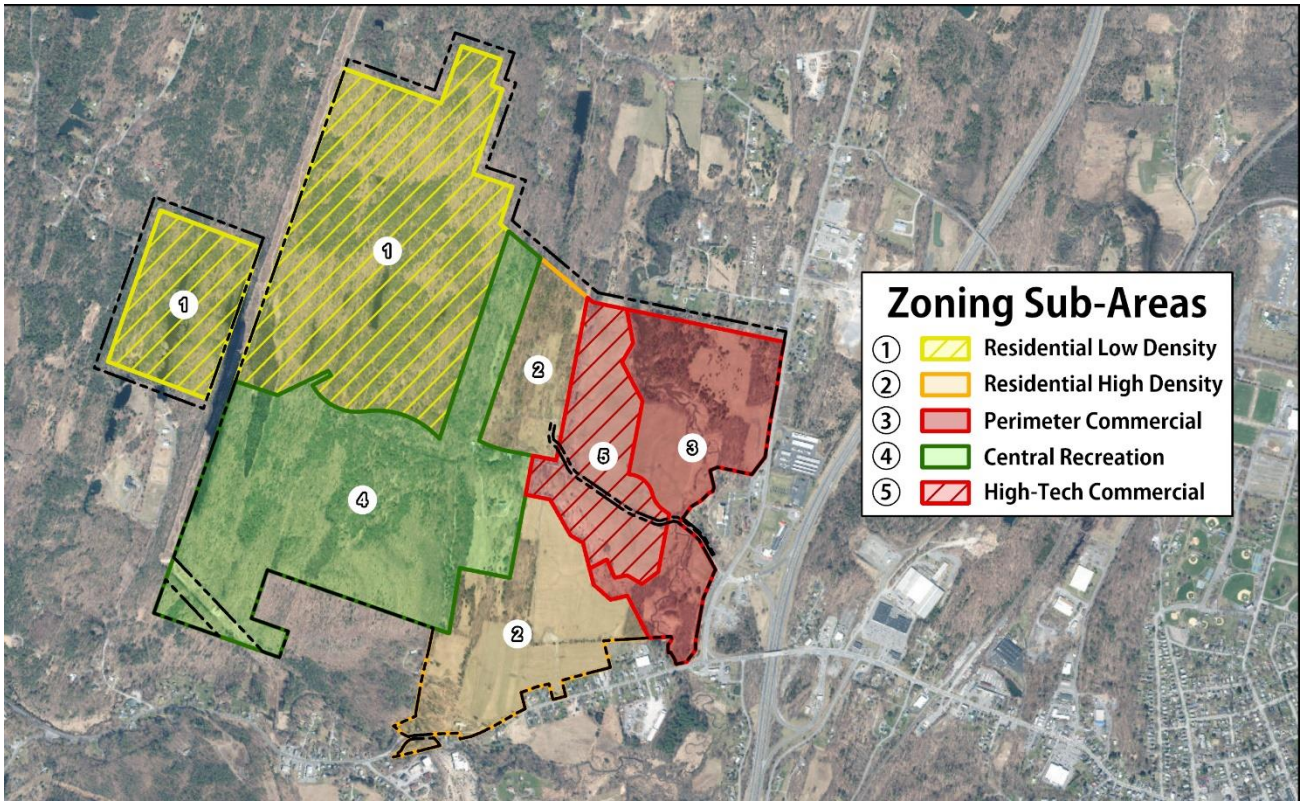
- Subarea 2: Residential High Density (RHD). This subarea is approximately ± 135 acres and is located along Saugerties-Woodstock Road. Development in this area will accommodate small-lot single-family homes, townhouses, and multi-family dwellings up to a maximum of 835 residential units. Balconies, rooftop decks, and other similar features are encouraged in this district.

- Subarea 3: Perimeter Commercial (PC). This subarea is approximately ± 100 acres and accommodates and promotes the development of commercial uses along Route 32. This subarea will accommodate retail, hotels, resorts, indoor and outdoor entertainment facilities, and event spaces. This subarea includes the primary focal point and gateway into the district.

- Subarea 4: Central Recreation (CR). This subarea is approximately ± 236 acres and is designed to offer outdoor activities, such as but not limited to, campsites and cabins, mini-golf and driving ranges, ropes courses, trails, community-centered activities, and programs, as well as a boutique hotel and spa, and the like.

- Subarea 5: High Tech Commercial (HTC). This subarea is approximately ± 68 acres and will promote the collection of buildings and spaces to inspire innovation, research and development, maker spaces, co-working, incubator space, and collaborative work environments that promote organic business development and emerging technologies.

Figure 29: Winston Farm PDD Subarea Map



G. Development in the Winston Farm PDD shall be subject to Site Plan review by the Planning Board. The Planning Board shall review each future proposal to ensure that it complies with the purpose and objectives of the Winston Farm PDD, and Article VII Planning Board; Site Plan Review; Special Use Permit of the Town of Saugerties Zoning Law.

H. A proposed use that does not comply with the permitted uses listed in a particular subarea but is permitted in one of the other subareas, or which exceeds the maximum density listed, shall require a Special Use Permit from the Planning Board, in accordance with Article VII Planning Board; Site Plan Review; Special Use Permit of the Town of Saugerties Zoning Law.

I. Development and redevelopment which requires a special use permit approval by the Planning Board shall also be subject to site plan review.

J. Development and redevelopment in the PDD is subject to § 245-24 Sensitive Area Overlay District, § 245-25 Aquifer Protection Overlay District, and § 245-27 Gateway Overlay District.

K. Certain uses in the PPD regulations identify by chapter and section number where additional requirements may apply under the Town of Saugerties Zoning Law by chapter and section number.

L. The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements for new development and redevelopment by establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience. No particular architectural style is mandated or prohibited; rather the architectural standards and guidelines are intended to promote a unified place. The PDD provides both mandatory (shall) standards and advisory guidelines (encouraged). The advisory guidelines are intended to provide insight into some of the desired characteristics of the district, while the standards set the minimum requirements for architectural quality. The mandatory standards are applicable to building elements that are clearly visible from the public right-of-way.

M. The PDD regulations expand on agricultural uses by introducing the terms agricultural technology, agrihood, and agritourism to respond to the changing needs of the farming community and the ways in which businesses are sourcing food or supporting agricultural activities in some way.

N. An appeal of any section of the PDD regulations shall be subject to § 245-37 Variances and appeals of the Town of Saugerties Zoning Law.

O. Modifications to the PDD Development Concept Plan (DCP) and regulations shall be subject to Article X Amendments of the Town Law.

6.13.2.2 Land Use

A. Land uses in the vicinity of Winston Farm will benefit from new residents and business. New residents contribute to the workforce and they, along with new business, are in need of goods and services, which they will seek from within the community.

B. Winston Farm is aptly placed immediately adjacent to I-87, which aids in the efficient delivery of goods and services to their destination.

C. The Sponsor's Preferred Plan (SP), which includes a mix of residential, commercial, and high tech business generates more revenue and places less dependence on public services than the As-of-Right Plan, which was 100% residential.

6.13.2.3 Community Plans

A. The adoption of the PDD is a legislative action specific to Winston Farm that will be incorporated into the Town of Saugerties Zoning Law (zoning law).

B. The PDD regulations will guide the size, type, and form of development permitted in the PDD in accordance with the Town of Saugerties Zoning Laws, the Town and Village of Saugerties Comprehensive Plan (2021), and Ulster County documents and planning guides which apply.

C. The Winston Farm PDD aligns with the Town of Saugerties Zoning Law (2008), the Town and Village of Saugerties Comprehensive Plan (2021), and the Ulster County Open Space Plan (2007), as follows:

- The Town of Saugerties Zoning Law defines a planned development district as "a mixed-use development of land that is under unified control and is planned and developed as a whole in a single development operation or programmed series of development stages. The development may include streets, circulation ways, utilities, buildings, open spaces and other site features and improvements, uses and structures that exceed the permitted scale, density, or intensity of use in the district, as well as uses not otherwise allowed by the underlying zoning." Article X of the zoning law provides the procedures for amendment to the regulations and provisions of Chapter 245 Zoning in the manner provided by Town Law.

- The Comprehensive Plan of the Town and Village of Saugerties, 2021 ("Plan") is a synthesis of previous planning documents, supplemented by an analysis of the existing natural and built environments and current trends in land use, population, housing needs, and transportation. Winston Farm is specifically mentioned in Goal 6A of the Plan. It is described as significant to the community based on its size and location near state and regional highways. To implement Goal 6A, the Plan describes the amendment of the zoning law to the Planned Development District (PDD) to support a mixture of uses.

- The Plan also includes goals to amend zoning, preserve open space, and increase diversity in the housing stock, as needed, to support and ensure consistency with the Plan goals and objectives.

- The Ulster County Open Space Plan is rooted in a long history of open space protection in the county. This plan focuses on preserving environmental resources and growing "smart." Priority growth areas are identified as areas where development potential is most feasible. The Town and Village of Saugerties is identified as a priority growth area, especially along Route 32.

Development in the PDD will be subject to site plan review approval by the Town Planning Board, and special use permit where applicable.

D. Development in the PDD is subject to the requirements of the Sensitive Area Overlay District, Aquifer Protection Overlay District, and the Gateway Overlay District.

6.13.3 Potential Mitigation Measures

A. The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements by establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience. The PDD regulations:

- Encourage a diverse range of architectural styles that reflect the heritage, history, and preferences of the community.

- Require the use of retaining walls to limit tree clearing and ground disturbance, which also adds visual interest to the landscape and preserve and protect natural resources.

- Limit tree clearing to primarily the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species, where practicable.

- Specify the use of a mix of building materials which complement the natural surroundings, reflect the desired aesthetic character, and ensure durability and longevity. Materials shall add visual interest, texture, and depth to the facades.

- Specify the use of quality building materials such as brick, natural or synthetic stone, cementitious stucco, fiber cement panels, painted wood clapboard siding, vinyl siding, and metal when part of an overall design. Real log and timber-frame designs are encouraged to reflect the natural surroundings.

- Identify appropriate massing and scale for large-scale buildings.

- Encourage façade variations, appropriate window configurations, the use of vertical elements, recesses, projections, and modulation, to break up the building wall, which creates an active façade.

- Require shared outdoor spaces, gathering spaces, and amenities.

- Require residential uses to be connected to the sidewalk system.

- Require that buildings and amenities be accessible.

- Suggest the strategic placement of landscaping to soften building foundations and walls.

- Recommend and encourage community gardens.

B. Future development is unlikely to result in significant adverse land use or zoning impacts, nor will it establish precedent-setting aspects relating to the project layout and design, or the approval process, as municipal agencies are only bound by prior precedents upon essentially the same facts. The proposed project is consistent with the proposed permitted uses and the existing character of the built environment. The following design elements and practices effectively mitigate any potential adverse environmental impacts associated with the zoning change to the PDD district:

- The locations of buildings, building spacing, zoning subareas, and roads are purposeful and use the existing topography as a design advantage. Higher intensity uses are tucked further into the site away from Route 32 and any adjacent residential properties.

- Development in the PDD will be setback a minimum of 125’ along the west and north property lines. The use of existing and proposed landscaping and open space buffers is intended to preserve the rural appearance of the site and surrounding area and to minimize viewsheds onto the property from Route 32 and I-87.

- The preservation of a large portion of the project site to the southwest will be attained by creating trails and open space. This section is to conserve the scenic character and protect the natural environment in this area.

7.0 Proposed Mitigation Measures

Land and Soil

- Trees that need to be removed will be recycled and used on-site as mulch or firewood.

- Vegetation will be excavated, stockpiled, and reused on-site as much as possible to minimize off-site material removal.

- For future residential development, a soil cover program (pavement, building, or two feet of clean soil) is recommended to prevent direct contact with future residents. A soil cover program will be developed for site-specific development in the PDD.

- A Stormwater Pollution Prevention Plan (SWPPP) is a development-specific document that identifies potential sources of stormwater pollution at a construction site, describes best management practices to reduce pollutants in stormwater discharges from the construction site by controlling the volume of stormwater runoff, and identifies the types of post-construction stormwater practices appropriate for the site to comply with water quality and quantity minimum requirements.

- A site-specific SWPPP will be developed in accordance with the “New York Standards and Specifications for Erosion and Sedimentation Control” for each applicable development proposal. Each SWPPP will identify potential sources of stormwater pollution, describe best management practices to reduce pollutants, and determine suitable post-construction stormwater practices.

Flooding, Surface Water, and Ground Water Resources

- Larger diameter replacement wells will be installed at the Winston Farm TW-1 location to improve performance. There is the potential the TW-1 can supplement the community water system.

- Water quality monitoring and testing of the public drinking water source will comply with US Environmental Protection Agency (EPA), NYSDEC, NYSDOH, and the Ulster County Department of Health standards.

- Future development will be connected to a sewer system with wastewater treated on-site, and the PDD will not permit activities that risk contamination.

- An on-site wastewater treatment plant will provide proper treatment of sewer waste in accordance with NYSDOH standards.

- A Stormwater Pollution Prevention Plan (SWPPP) will address erosion and sediment control during construction, including measures such as silt fences and wetland protection, with regular inspections to ensure effectiveness.

Plants and Animals

- Approximately 70% of the property will be preserved as open space to support the habitat of existing species, maintaining the current ecological communities, vegetative cover types, and wildlife travel corridors. The site does not contain Bald Eagle nests or suitable habitat for Bog Turtles. To protect the Indiana Bat during its roosting and pup-rearing season, no vegetation clearing will occur from April 1st to November 31st.
- Significant forested areas will be avoided, and clearing will be limited and selective, focusing on the removal of dead or dying trees and those infested with invasive vines.

Agricultural Resources

- The PDD permits agricultural uses in each of the subareas.

Aesthetic Resources & Community Character

- The most significant forested areas will be avoided, selective clearing, and limits imposed on the amount of clearing will reduce and minimize impacts. Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.

- The building placement, and the location of roads and driveways have been strategically designed to take advantage of the existing topography.

- Taller buildings and higher intensity uses are located in the lower areas along Route 32 and Route 212.

- An undisturbed 125-foot buffer of approximately ± 38 acres will be provided along the west and north property line to buffer uses in the PDD from adjacent properties.

- Setback areas will include existing mature vegetation, as well as new landscaping to preserve the rural appearance of the site and surrounding area and minimize visibility from Routhe 32 and I-87.

- The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements by establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience.

- Future development will be visible from Route 32, Route 212, August Savage Road at Route 32. Future development will also be visible from the existing structures on or adjacent to Winston Farm, such as the Winston Mansion, the Red House, and the Wynkoop Farm Tavern. Quality design, ample setbacks and strategic placement of building and uses will minimize visual impacts.

Historic and Archeological Resources

- The locations and types of historic and archeological resources have been identified and documented in a Phase 1A Archaeological Study. These resources will remain intact.
- Future site-specific development will require a Phase 1B investigation to recover, catalog, and study the items found. The completed Phase 1B report will be submitted to SHPO for review and approval before the project can proceed and development activities begin.

Open Space and Recreation

- To reduce potential impacts, a minimum of ½ acre per residential parcel has been set aside for open space in both the Sponsor's Preferred Plan (SP) and the Reasonable Worst-Case Scenario (RWCS).
- In the Sponsor's Preferred Plan (SP), ± 583 acres of contiguous open space will remain undisturbed. The sledding hill on the western portion of the site will remain open space.

Transportation

- The installation of traffic mitigation measures will be determined during site plan review for each request for approval. These mitigation measure, based on full build-out, are as follows:
    - NYS Route 32/NYS Route 212 Intersection, modification of signal timing and adjusting the geometry of the southbound approach.
    - NYS Route 212 Signalized Intersections (I-87 Northbound Ramp/McDonald's Driveway, Kings Highway, and Big Lots Driveway), improve signal timing coordination across these three intersections.
    - NYS Route 32/Peoples Road/Hommelville Road Intersection, installation of a traffic signal.
    - NYS Route 32/Old Kings Highway (CR 34), installation of a traffic signal.

Utility Facilities

- Buildings will be designed to meet the New York Stretch Code, which includes increasing the thermal resistance of building envelopes, reducing lighting power densities, improving lighting controls, and increasing fan power limitations. High-efficiency equipment and improved thermal efficiency will further reduce energy use, while on-site renewable energy generation is being considered to decrease reliance on utility power.
- Green building initiatives, such as the LEED program, are encouraged to reduce the project's carbon footprint by incorporating sustainable design elements such as construction techniques, material selection, and operational practices that lower environmental impact and enhance quality of life. LEED certification will be determined based on developer preference for each specific development.
- EV charging stations can be integrated with solar systems or connected to grid power, supporting the adoption of electric vehicles.
- Natural gas usage will be limited to reduce the use of fossil fuels. While eliminating natural gas may not be feasible for larger commercial and industrial applications, all-electric equipment is a viable option for residential and smaller commercial uses.

Climate Change

- The use of electricity instead of gas is encouraged in the PDD to reduce greenhouse gas (GHG) emissions. It is anticipated that construction will follow New York State's 2020 Energy Conservation Construction Code to decrease energy emissions by providing guidelines for reducing power consumption for heating, air conditioning, lighting, water heating, and appliances, thereby reducing indirect GHG emissions from power generation.
- Building orientation, proper HVAC sizing, high-efficiency lighting and appliances, and programmable thermostats, air-source heat pumps and LED lighting are anticipated to promote a low-carbon design.
- On-site renewable power generation is permitted in the PDD.
- Over 400 acres of the property will be zoned central recreation to conserve the site’s carbon sequestration.
- Recycling of materials during construction will further reduce landfill emissions.

Noise, Light, Odor, Air, and Human Health

- Construction activities will be limited to daytime hours.
- The placement of stationary equipment, such as generators, compressors, and office trailers, and construction storage areas near receptors for extended periods of time will be avoided.
- Buildings will be setback from Route 32 and Route 212 to reduce noise and light impacts.
- Site lighting will follow the Outdoor Lighting Guidelines set by the Ulster County Planning Board enacted in September of 2000. This guidance requires all lighting to minimize light spill outside of the intended area and to be dark sky compliant.
- To mitigate potential light impacts on adjacent neighborhoods, existing vegetation along the property boundaries at the north and west will be maintained with a 125’ buffer. This will act as a natural buffer between any light generated by the future project and nearby properties.
- Odor impacts are not anticipated and therefore there are no mitigation measures identified.

- Construction on the site will adhere to the NYS air quality provisions to minimize emissions during construction.
- Dust control measures, such as watering, will be used as needed to limit the production of fugitive dust during soil and construction material handling.
- Contractors will limit vehicle and equipment idling in compliance with New York State's idling Law.
- If necessary, any qualifying stationary sources of air pollutants, such as diesel engine generators or HVAC equipment, will properly register in accordance with New York's air permits and registration regulations. All stationary sources will comply with New York State regulations.

Fiscal & Economic Impacts and Community Services

- Full build-out will have a net positive annual fiscal and economic impact on the Town of Saugerties. The scenarios anticipate generating nearly $619,668 for the As-of-Right Plan (AOR), $1,902,453 for the Sponsor's Preferred Plan (SP), or $2,289,684 for the Reasonable Worst-Case Plan (RWCS). Should the land remain vacant, it will generate an estimated $24,396 in real property taxes (excluding school district taxes).
- It is estimated that upon full build-out, the SP will be assessed at nearly $457.5M. Based on 2024 property tax rates, it is projected that the scenarios will generate a total annual tax revenue for the Town, Police Department, Highway Department, Fire District, Emergency Services and Library of $2,788,217.
- Upon full build-out, the AOR will cost the Saugerties Central School District nearly $1,419,425 more annually. The SP and the RWCS are not expected to generate any new costs and will, in fact, increase revenue.
- The SP Plan is expected to generate nearly $3,473,582 in annual net revenue to the School District.
- The cost of construction of the SP is estimated at $457.5M. Between 21% ($96M) and 52% ($237.9M) of the construction costs will be sourced from businesses within the Town of Saugerties.
- The SP Plan will create 956 construction jobs and 1,253 permanent jobs.
- The SP Plan is anticipated to generate construction-related earnings of $27M, and permanent annual earnings of $62.5M.

- Construction-related sales (spending) for the SP Plan is anticipated to be $183.8M, and the permanent annual sales are anticipated to be $202M.
- Future residential tenants and homeowners will be made aware of the mandatory recycling law and the importance of recycling and proper disposal of solid waste.

Land Use, Zoning, and Community Plans

- The building placement, and the location of roads and driveways have been strategically designed to take advantage of the existing topography. Taller buildings and higher intensity uses are located in the lower areas along Route 32 and Route 212.

- Future development will include ample setbacks from Route 32 and Route 212. In addition, an undisturbed 125-foot buffer of approximately 38 acres will be provided along the west and north property line to buffer uses in the PDD from adjacent properties. This approach, including the existing and proposed landscaping and open space buffers, aims to preserve the rural appearance of the site and surrounding area while minimizing visibility from Routhe 32 and I-87 and surrounding properties.
- The preservation of a large portion of the project site to the southwest will be attained by creating recreation spaces and open space. This section is to conserve the scenic character and protect the natural environment in this area.

8.0 Unavoidable Environmental Impacts

This DGEIS is prepared to discuss the significant environmental impacts associated with the rezoning of property, which includes the Town of Saugerties review and approval of a development concept plan and the implementation regulations, in this case for the Winston Farm Planned Development District (PDD). The rezoning alone does not have impacts on the environment, but it is reasonable to suggest that in order to determine if the rezoning is feasible that potential impacts associated with development of the site are addressed.

Land development creates unavoidable impacts on the environment and the surrounding community. These impacts can be reduced, eliminated, or mitigated to the extent practical in order to ensure post-development conditions are as close to pre-development conditions as possible. Any additional unavoidable impacts identified by the Town Board will be addressed in the Final Generic Environmental Impact Statement (FGEIS) and/or Findings Statement.

The short-term impacts will occur during the construction activities; however, these impacts will be temporary and cease upon completion of the construction phase of the project. These impacts include:

- Presence of construction and delivery vehicles on the site and on surrounding roads.

- Localized construction-related noise generated during site preparation and construction. Construction will be limited to permitted hours and days set forth by the Town.

- Although an erosion and sediment control plan will be in place prior to and during construction, erosion, sedimentation, and dust may occur.

- There will be a temporary increase in construction-related traffic associated with mobilization, clearing, grubbing, and grading activities, and delivery of materials and supplies.

- Construction-related GHG emissions on-site associated with the burning of fuel (diesel and gasoline) to power construction equipment (excavators, payloaders, bulldozers, generators, air compressors, etc.), worker commuting, and on-site vehicle operations (dump trucks, pickup trucks, fuel trucks, etc.).

Upon completion of the proposed project, long-term adverse impacts will occur. These impacts include:

- The conversion of portions of agricultural land to non-agricultural uses.
- There will be a minimal increase in traffic in the street network over the full build-out horizon.
- Stormwater generation will increase post-development due to the increase in impervious surface area, and the need to maintain stormwater quantity and quality in perpetuity.
- Permanent alteration to existing topography to grade areas for roads, driveways and building pads.
- A loss of woodland vegetation and its associated habitat. Avoidance of the most significant forested areas, selective clearing, and limits imposed on the amount of clearing will reduce and minimize impacts to the greatest extent practicable.
- Tree clearing will focus primarily on the removal of dead or dying trees and/or those which are infested with invasive vines which contribute to the degradation of native tree species.
- The driveways and new buildings along Routh 32 and Route 212 may be visible from public vantage points, which are new to the landscape.
- There will be an increase in population that places a demand on goods, services, and public services.
- The project generates additional solid waste, which will be managed by the Ulster County Resource Recovery Agency.
- The project creates a new demand for water. The use of on-site wells is sufficient to serve future development in the PDD without placing a burden on the public drinking water system.
- The project creates a new demand for sanitary sewer disposal. Future development in the PDD will be served by sewers which will convey waste to an on-site WWTP that will treat the sewerage before being released into the Beaver Kill.

- The project creates a new demand for electricity, which can be provided by Central Hudson's existing system.

- Development of the site will cause a loss of woodland vegetation and natural animal habitats.

- A federally regulated wetland in the northern portion of the project site will be minimally disturbed for the installation of the nature trail. A USACE permit is necessary prior to the commencement of work, which will ensure minimal disturbance to the resource.

- Off-site power generation, resident commuting, and waste generation disposal and transport will potentially increase GHG emissions as an indirect source.

- Embodied emissions from the fabrication and transportation of construction materials will increase.

- The clearing of trees and vegetation will result in a loss of carbon sequestration.

- The generation of solid waste during the construction and operation phases results in unavoidable GHG emissions.

9.0 Irreversible and Irretrievable Commitment of Resources

Development and redevelopment contribute to a certain commitment of resources (natural and man-made) that will be consumed, converted, or made unavailable for further use. The full build-out of the PDD will result in a permanent commitment of both natural and human resources. The resources required for the construction and operation of future uses are as follows:

- Building materials will be committed during project construction, including stone, asphalt, plastics, metals, wood, steel, concrete, and topsoil.

- Construction-related equipment (excavators, payloaders, bulldozers, generators, air compressors, etc.), the post-construction use of gas-burning appliances and equipment, and the gas and electric demand to power new uses will require the irreversible use of fossil fuels.

- Construction-related activities and the operation of new uses will contribute to the release of greenhouse gases into the air.

- Development will result in the removal of all or a portion of land that is currently being used for agricultural purposes.

- Land clearing will reduce carbon sequestration and natural habitat.

10.0 Growth-Inducing Impacts

Growth-inducing aspects can generally be described as long-term secondary effects of a development, which can be directly or indirectly related to a project. Direct growth-inducing aspects include the increase in population due to job creation and the construction of new housing. Indirect growth-inducing aspects, such as new infrastructure systems extended to a project site not previously served, can reduce development constraints, and attract additional economic development.

The Sponsor's Preferred Plan (SP) will create 799 housing units, which will be a mix of townhouses, apartments, hotels, conference centers, cabins, and other residential uses. The creation of these housing units will lead to an estimated 876 permanent new jobs on-site. These jobs will stem from a variety of proposed uses in the PDD, including restaurant workers, hotel staff, industrial tech jobs, as well as conference center and amphitheater employees. The additional housing units will attract an estimated 125,925 net new visitors to the area annually.

Future development will promote increased construction employment, and on a cumulative basis, an increase in long term demand for goods and services that will have a steady multiplier effect in the community.

Property tax in the PDD will generate an estimated annual new revenue of $2.7 Million for the Town of Saugerties: including $622,771 for the highway, $363,565 for the fire district, $224,505 for emergency medical services, and $175,164 for the library under the SP scenario.

The SP scenario anticipated 1,746 new residents. This increase in population will generate recurring annual revenue to benefit the Town of Saugerties. Overall, future development in the PDD will add an estimated $279.3 million to $538.8 million in assessed value to the Town upon full build-out.

Increases in local population after the full build-out in the PDD will add an estimated 180 K-12 students to the Saugerties Central School District. This increase in population is estimated to generate a net revenue of $3.4M for the Saugerties Central School District under the SP scenario.

Development in the PDD will be served by private water and sewer. The creation or extension of water or sewer districts is not required to facilitate future development.

11.0 Cumulative Impacts

Cumulative impacts are defined by page 80 of the SEQR handbook as impacts that occur "... when multiple actions affect the same resource(s). These impacts can occur when the incremental or increased impacts of an action, or actions, are added to other past, present, and reasonably foreseeable future actions. Cumulative impacts do not have to all be associated with one sponsor or applicant. They may include direct or secondary impacts, long-term impacts, and synergistic effects."

Three nearby projects have the potential to contribute to cumulative impacts. These projects are:

- Glasco Apartments at 260 Glasco Turnpike is a 162-unit multifamily development located ± 6 miles southeast of Winston Farm, east of I-87.

- The Villa Residences at 49 Spaulding Lane is still under review by the Town of Saugerties. The original proposal was for 121 affordable senior housing units. According to the May 2024 Town of Saugerties Planning Board minutes, the project scope has changed from senior housing to multifamily. The number of units has been reduced to ± 80, and for-sale units have been added. The Villa Residences is located ± 3.5 miles southeast of Winston Farm, south of the Village of Saugerties.

- Dream Dogs Training Center at 51 Industrial Drive is a 17,000 square foot facility on the east side of I-87 ± 4.0 miles south of Winston Farm.

Future development at Winston Farm will be served by private wells and a wastewater treatment plant. Given the distance of the above projects from the Winston Farm site, it is unlikely that there will be cumulative impacts on natural resources, energy demand, traffic, public facilities, and public services.

Winston Farm will have a positive impact on the community by offering an array of goods, services, housing, new jobs, entertainment, and recreational opportunities. The diverse mix of complementary uses at Winston Farm will promote and enhance the quality of life of the Saugerties community. The new residents at Winston Farm, Glasco Apartments, and The Villa Residences will generate a positive economic impact by patronizing existing and future businesses, such as the Dream Dogs Training Center. The nonresidential development at the Winston Farm will generate tax revenue that will offset additional services needed to support the residential needs of the community. There are no other known development projects in the Town of Saugerties that will either impact or be impacted by future development at Winston Farm.

12.0 Project Alternatives

Pursuant to 6 NYCRR 617.9(b)(5)(v) of the implementing regulations of SEQRA, a DGEIS is required to include a range of reasonable alternatives to the proposed action that are feasible, considering the objectives and capabilities of the project sponsor. The Final Scope dated January 4, 2023, requires a level of detail sufficient to permit a comparative assessment of costs, benefits, and environmental risks of each alternative.

In order to consider the impacts of development under new zoning provisions, the environmental review will need to analyze and compare a range of reasonable alternatives. The weighing of the pros and cons of the alternatives will aid in determining maximum development parameters within the Winston Farm PDD. The development concept plan submitted with the original application to the Town of Saugerties is just one iteration. The following sections evaluate each of the alternatives to the proposed action. The table below provides a comparative analysis of the preferred plan and project-related details for the proposed actions and three main alternatives.

Alternative Impact Comparison			
Impact	**As-of-Right Plan**	**Reasonable Worst-Case Scenario**	**Sponsor's Preferred Plan**
Land Use			
Total Project Cut (cubic yards)	124,083	331,717	269,745
Total Project Fill (cubic yards)	359,953	755,658	404,921
Net Cut to be Imported (cubic yards)	235,870	423,941	135,176
Residential Units			
Residential Units	676	918	799
Natural Resources			
Total Site Area (acres)	842.7	842.7	842.7
Total Area of Disturbance (acres)	429	232	227
Total Wetland Area (acres)	83.16	83.16	83.16
Wetland Disturbance (acres)	0	0	0
Community Resources			
New Annual Visitors	0	125,925	153,226
Total Trip Generation (Weekday PM)	1,512	1,884	1,530
Increase in K-12 Students	337	195	180
Tax Revenue for the Town of Saugerties	1.7 M	2.7 M	3.2 M
Water Demand (gpm)	197	297	275

12.1 Alternative 1: No Action

The no action alternative shows a maximum build-out plan for as-of-right development. This alternative was evaluated as the “As-of-Right” (AOR) plan and can be found in Appendix A. The AOR is based on current zoning, which permits 773 subdivided lots for single-family residential housing located on approximately 419 acres zoned residential, and ± 26 acres for commercial development zoned general business. Alternative 1 requires the removal of a majority of the wooded area leaving minimal buffers to wetlands and the fragmentation of existing habitats. Moreover, this alternative is not consistent with the Town and Village of Saugerties Comprehensive Plan. The Plan describes the amendment of the zoning law to the Planned Development District (PDD) to support a mixture of uses.

All three scenarios will generate new jobs, provide new housing, and increase spending and revenue. This plan generates the lowest fiscal and economic benefit and will cost the Saugerties Central School District nearly $1,419,425 more annually.

The objective of the project sponsor is to prepare a well-informed PDD that guides future development, protects the public health, safety, and welfare of the existing community, and welcomes new residents, visitors, and businesses in a way that is respectful of available resources and the carrying capacity of the land. The no action alternative does not achieve the objectives of the project sponsor, nor is it economically feasible.

12.2 Alternative 2: RWCS

The reasonable worst-case scenario (RWCS) alternative shows a maximum build-out scenario for the most intense use of the land. This alternative was evaluated as the RWCS Plan and can be found in Appendix A. The RWCS was created to show a reasonable maximum development scenario under the proposed zoning regulations, which includes fewer residential homes but larger commercial and tech industrial spaces compared to the SP Plan.

The RWCS plan includes the construction of a residential community with approximately 133 single-family homes on various lot sizes, 115 townhouses, and 800 condo/apartment units. In addition to the residential development, the RWCS also includes a campground with 157 cabins and RV sites, 425,000 square feet of commercial retail space, a 150-room boutique hotel, a conference center with 300 hotel rooms, a 5,000-person amphitheater, and 375,000 square feet of lab or light-industrial space.

Although the RWCS Plan has the potential to generate nearly $4,356,174 in additional net revenue, it is the plan that also is the most impactful on the environment.

Alternative 2 may achieve the project sponsor's objectives, however it is not environmentally friendly and has the potential to create significant adverse impacts that are objectionable to the community and impractical to mitigate. This alternative is not economically viable.

12.3 Alternative 3: Traditional Neighborhood

Alternative 3 shows a traditional neighborhood development plan. This alternative was used to evaluate potential impacts of a revised site layout and can be found in Appendix A. The revised layout includes access to Subarea 5: High-Tech Commercial only from Saugerties-Woodstock Road and access to Subarea 3: Perimeter Commercial from Route 32. This alternative also offers 75% conservation of the site to be used for passive public recreation.

The western portion of the site is left largely undisturbed in order to preserve the wooded area. Access to the site is via Route 32 or Saugerties-Woodstock Road.

This alternative provides a traditional neighborhood development plan where residential density goals are not achieved and properties are clustered in subareas 2, 3, and 5. This alternative was dismissed as it does not achieve the Project Sponsors' residential density goals and offers lower economic and fiscal benefits to the Town of Saugerties.

12.4 Alternative 4: Reduced Scale of Uses

This alternative specifically evaluates the effects of removing the water park and amphitheater from the proposed development as shown in the original Concept Plan. The Sponsors Preferred Plan already depicts the removal of the water park. Removal of the Amphitheater would result in a reduction of 6.5 acres of impervious construction and a reduction of 9.5 acres of disturbance. This alternative would increase the prairie grass coverage by 9.5 acres.

Based on the traffic analysis it can be assumed that removing the Amphitheater would result in the reduction of traffic that would typically occur outside of peak hours and therefore would have little effect the traffic report. As the water park has already been removed from the Sponsors Preferred Plan, the water and sewer usage would only be reduced by the demand required for the Amphitheater.

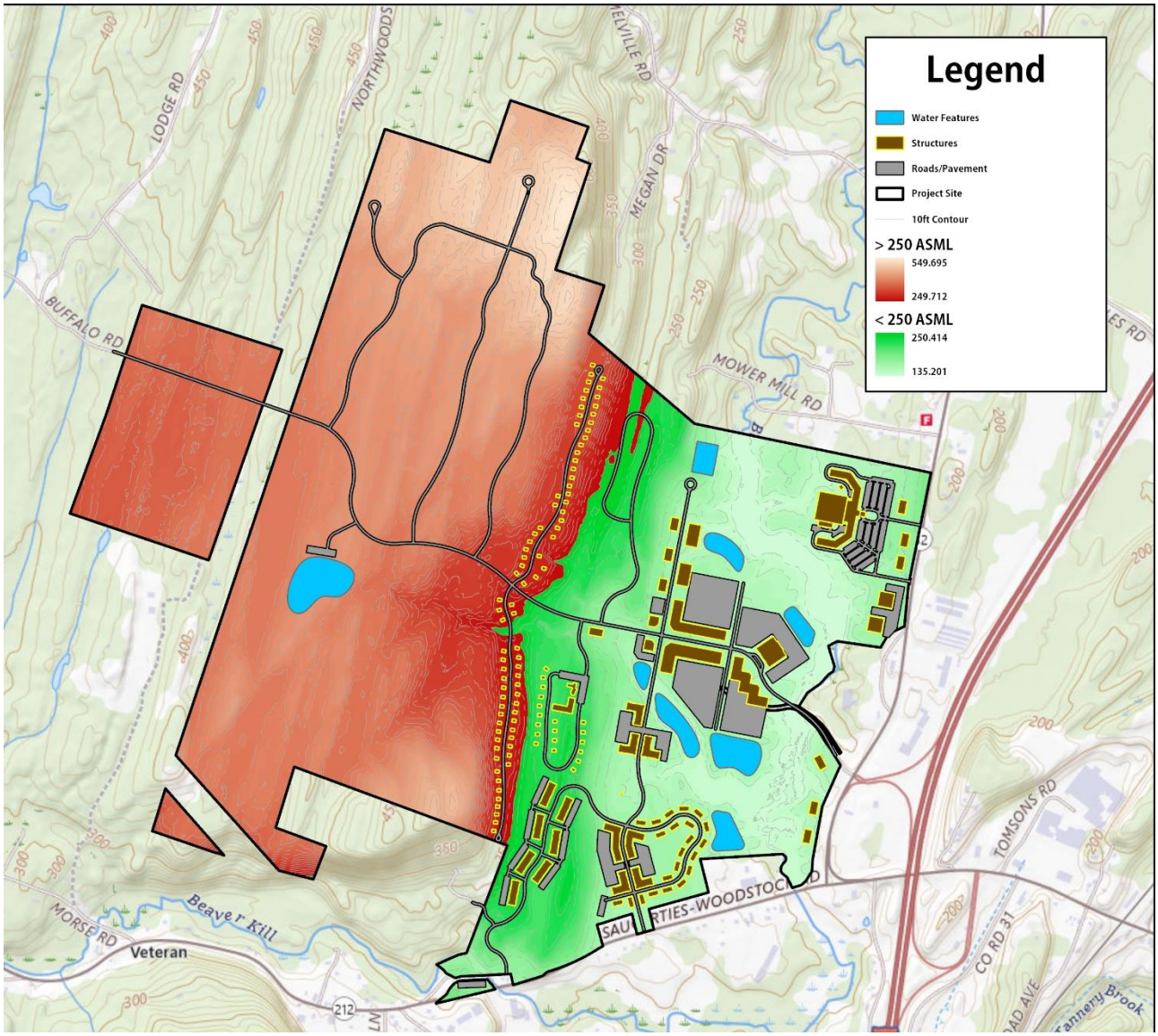
12.5 Alternative 5: Alternative Subarea 1 Layout

This alternative evaluates using the existing Conservation Subdivision regulations in the Town of Saugerties Zoning Law to layout the estate lots. This alternative would reduce the area utilized by the estate lots from 106.2 Acres to 43.6 acres, a reduction of 62.6 acres of land that would be under individual lot ownership.

This alternative results in reducing the length of the proposed roads that will serve the lots from 5,173 linear feet (LF) to 1,373 LF, a reduction of 3,800 LF of road (2.1 acres of impervious). It can be assumed that the impervious buildout (homes and driveways) on the “cluster sized lots” will be similar to that built on the larger lots. This alternative would likely reduce the number of stream crossings required by one but does not affect the proposed wetland disturbance as depicted on the Sponsors Preferred Plan. This alternative was dismissed, as constructing large clusters of development on the western portion would require increased grading which is not economically feasible.

12.6 Alternative 6: Lower Elevation Layout

This alternative evaluates impacts of not constructing residential, commercial, or industrial buildings on ground with an elevation over 250 feet above mean sea level (amsl). The lower elevation layout removes any potential development in Subareas 1 and 4. This alternative was dismissed as it does not achieve the Project Sponsors’ residential density goals and offers lower economic and fiscal benefits to the Town of Saugerties.



12.7 Alternative 7: LEED Neighborhood Development

LEED (Leadership in Energy and Environmental Design) certification is a globally recognized rating system that evaluates the sustainability of buildings in terms of design, construction, and operation. Achieving LEED Silver certification or higher demonstrates a commitment to sustainable building practices across several key areas, including energy efficiency, water conservation, use of sustainable materials, and indoor environmental quality. Buildings with LEED Silver certification incorporate strategies to minimize environmental impact, improve energy performance, and enhance occupant health and comfort.

Alternative 7 evaluates impacts based on a project that would meet LEED Neighborhood Development standards of silver or better. The desire to comply with LEED standards is typically a decision made by the end-user or ultimate owner; therefore, it is too early in the process to determine the results of a LEED status development for the entire project.

LEED certification is based on developer preference and will be determined for each site-specific development. Green building initiatives, such as the LEED program, are encouraged for all future development in the PDD to reduce the project's carbon footprint by incorporating sustainable design elements such as construction techniques, material selection, and operational practices that lower environmental impact and enhance quality of life.

12.8 Alternative 8: Balanced Open Space Alternative

Alternative 8 evaluates a map that identifies areas where development would have the greatest and least sensitivity. In this plan development occurs in 27% of the land and 73% is preserved as open space. This alternative is very similar to Alternatives 3 and 6. The western portion of the site is left largely undisturbed in order to preserve the wooded area.

This alternative provides a more clustered development plan where residential density goals are not achieved and properties are clustered in Subareas 2, 3, and 5. If only 27% of the land is to be developed, then the cost of installing the infrastructure required for development would be unfeasible. This alternative was dismissed, as it does not achieve the Project Sponsors' residential density goals and offers lower economic and fiscal benefits to the Town of Saugerties.

12.9 Alternative 9: Reduced Density Alternative

Alternative 9 evaluates the effect of reducing the number of units and bedrooms to not exceed existing code provisions. As the Sponsor's Preferred Plan does not propose a greater number of units or density that are allowed by the Town, the Sponsor's Preferred Plan fulfills this alternative.

12.10 Alternative 10: Fewer Exemptions from Existing Codes

The Sponsors Preferred Plan does not contemplate nor require exemptions from the existing Town code. The proposed PDD language uses the existing Town code parameters and applies them to various areas within the project development. The PDD regulations provide design standards and guidelines for building placement, materials, and architectural elements by establishing a minimum level of architectural quality, which positively contributes to the character of the PDD and enhances the public experience.

The PDD regulations provide even stricter limits on development within the PDD. They encourage a diverse range of architectural styles that reflect the community's heritage and preferences. The regulations emphasize the use of retaining walls to limit tree clearing, protect natural resources, and add visual interest to the landscape. Tree clearing is restricted to removing dead or infested trees wherever possible. A mix of durable building materials is specified to complement the natural surroundings and add visual interest, with recommended materials including brick, stone, stucco, and wood.

The guidelines also address appropriate massing and scale for large buildings, encourage façade variations, and require shared outdoor spaces and connectivity to sidewalks. Accessibility is mandated for buildings and amenities, with strategic landscaping suggested to enhance building aesthetics. Community gardens are recommended and encouraged to foster community engagement.

12.11 Additional Alternative Analysis

Sponsor’s Preferred Plan

The Sponsor’s Preferred (SP) plan represents the current project proposal, which is a modification of the original submission in response to community feedback and to information obtained from consultant reports commissioned for the DGEIS. The site layout and building clustering reduces and/or eliminates significant environmental impacts to the maximum extent practicable.

The SP is a development scenario under the proposed zoning regulations, which responds to the conclusion of the technical reports. The SP proposes approximately 155 single-family homes on various lot sizes, 110 townhouses, and 650 condo/apartment units. In addition to the residential development, the PDD also proposes a campground with 100 cabins, 419,800 square feet of commercial retail space, a 150-room boutique hotel, a conference center with 250 hotel rooms, a 5,000-person performing arts center, and 250,000 square feet of lab or light-industrial space.

The SP plan meets the objectives of the project sponsor: to prepare a well-informed PDD that guides future development, protects the public health, safety, and welfare of the existing community, and welcomes new residents, visitors, and businesses in a way that is respectful of available resources and the carrying capacity of the land.