

## 2.0 DESCRIPTION OF THE PROPOSED ACTION

This section of the DEIS provides a description of the project site and location, and a description of the Proposed Action, including the public need for the project and the associated demographic target. This section also includes an evaluation of the social and economic benefits of the project, the objectives of the project sponsor, and a description of required approvals, reviews, and permits.

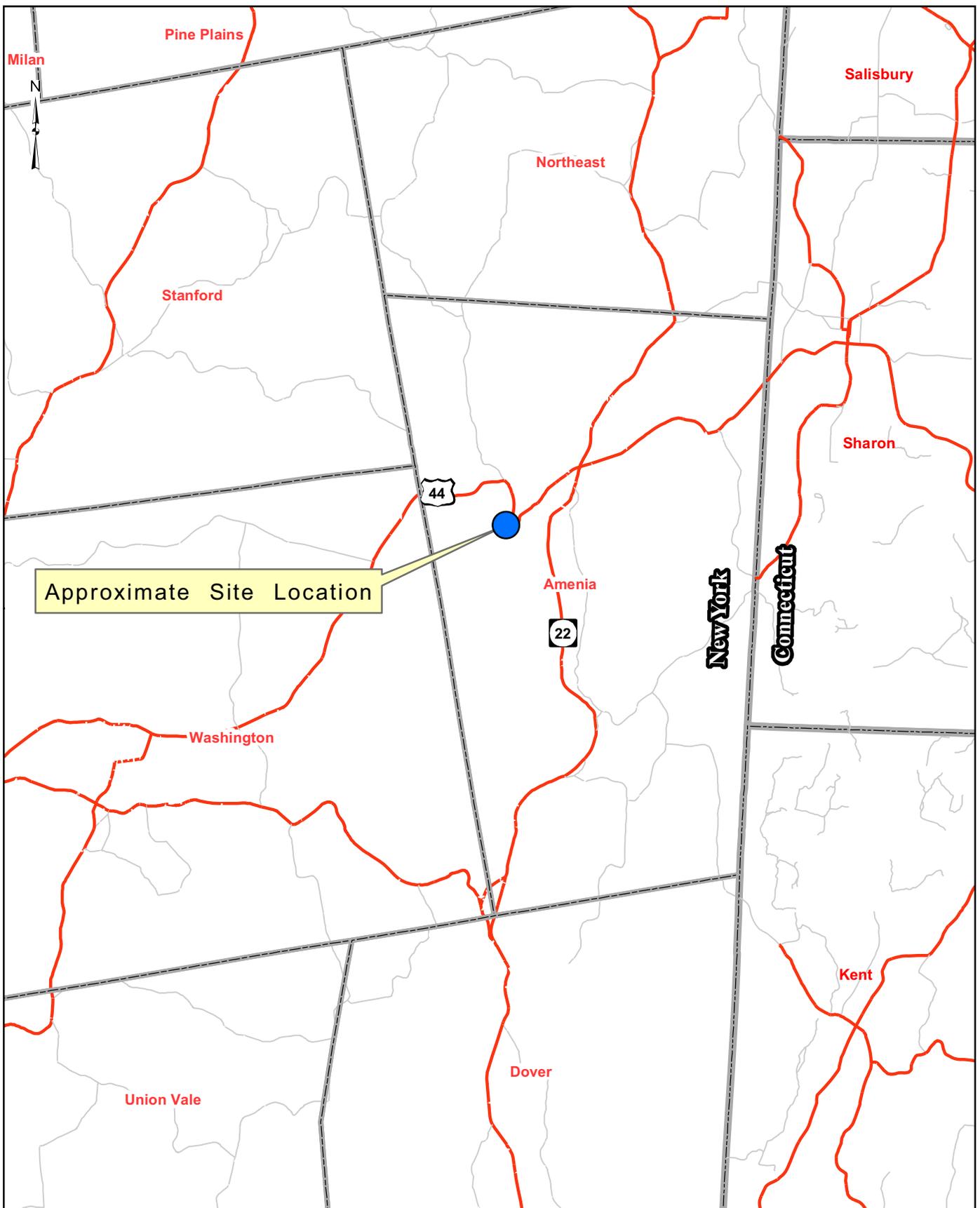
Please note that through the course of the DEIS process and discussions with the Town Planning Board and its consultants, the “Traditional Neighborhood Alternative” has become the Applicant’s preferred alternative and the subject of a full environmental analysis, as described in Section 5.0. For a description of the existing conditions of the project site for each impact issue (e.g., soils and geology, vegetation, etc.), which are applicable to both the Proposed Action and the Traditional Neighborhood Alternative, please see the first part, “Existing Conditions,” of Sections 3.1 through 3.19.

### 2.1 Site Location and Description

#### 2.1.1 Site Description

The 670±-acre project site is located west of NYS Route 22 in the Town of Amenia in eastern Dutchess County, New York, approximately 25 miles east of Poughkeepsie, NY and five miles west of Sharon, CT. The site is approximately ½-mile southwest of the hamlet of Amenia and two miles north of the hamlet of Wassaic. It is accessible via US Route 44 from the east and west and NYS Route 22 from the north and south. The Wassaic Metro-North train station with service into New York City’s Grand Central Station is located approximately ½-mile south of the site. Figure 2-1 illustrates the site’s location within the region.

Approximately 170 acres of the project site consists of the Silo Ridge Country Club, an 18-hole golf course and clubhouse with associated amenities. The project area also includes approximately 47± acres of ponds, streams, and wetlands and 12± acres of roads, buildings, and other paved surfaces. A 2.2-acre parcel north of Route 44 is developed with an unoccupied residential building. The remaining acreage consists primarily of undeveloped land not in agricultural use. This includes approximately 230 acres of wooded land on the hillsides and ridge to the west of the golf course. Table 2-1 summarizes the general site information.



Approximate Site Location



Silo Ridge Resort Community

Regional Location Map

Town of Amenia, Dutchess County, New York

1 inch equals 10,833 feet

Figure 2-1

Drawn by: PWC

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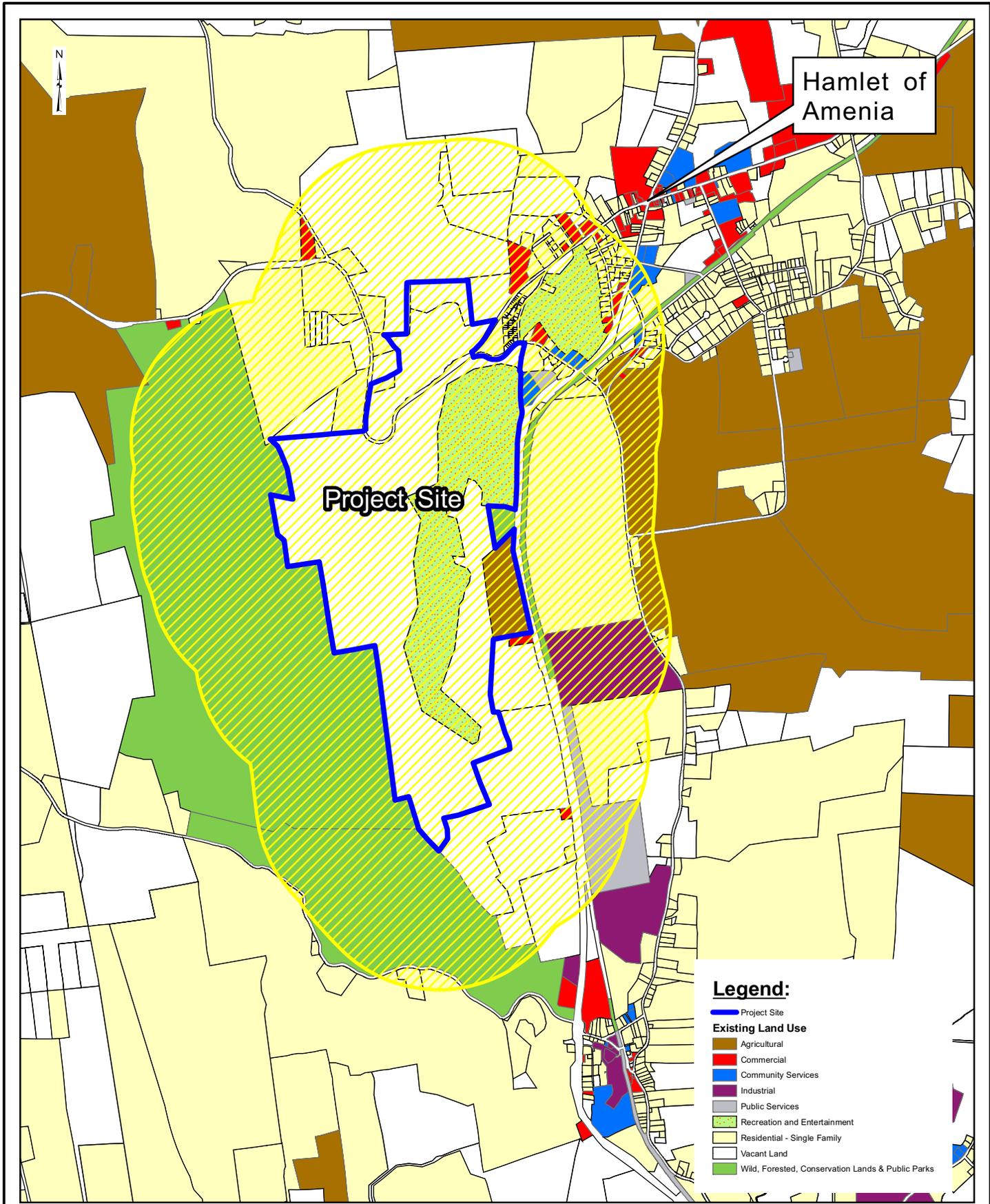
**Table 2-1 Summary of Site Information**

Parcel ID Number	Acreage	Location	Existing Land Use
132000-7066-00-732810	170 acres	West of NYS Route 22, south of US Route 44	Silo Ridge Country Club
132000-7066-00-670717	402.20 acres	West of NYS Route 22, south of US Route 44, west of and contiguous to the golf course	Vacant, wooded hillside
132000-7066-00-860725	27.25 acres	West of NYS Route 22, south of US Route 44	Vacant/disturbed
132000-7066-00-709177	68.71 acres (combined)	North of US Route 44	Vacant/forested
132000-7066-00-742300			
132000-7066-00-628131	2.2 acres	North of US Route 44	Residential

According to New York State Property Classification Codes,<sup>9</sup> land uses within a ½-mile radius of the project site include: agricultural; commercial; community and public services; industrial; residential; recreation and entertainment; wild, forested, conservation lands and public parks; and vacant land (see Figure 2-2, “Existing Land Uses within ½-Mile Radius of Project Site”). As shown on the Figure, the predominant land use within a ½-mile radius is “wild, forested, conservation lands and public parks.” It should be noted that much of the land within the project site that is identified as “vacant land” on the Figure is forested, particularly in the western portion of the site.

The hamlet of Amenia is a relatively densely developed area that is comprised of uses typical of a small town or village center. The hamlet supports a mix of residential, community and public service, commercial, and recreational land uses. Amenia Town Hall is located on Mechanic Street within the hamlet.

<sup>9</sup> The property classification codes are used in determining assessment information for tax purposes in New York State.



- Legend:**
- Project Site
  - Existing Land Use**
  - Agricultural
  - Commercial
  - Community Services
  - Industrial
  - Public Services
  - Recreation and Entertainment
  - Residential - Single Family
  - Vacant Land
  - Wild, Forested, Conservation Lands & Public Parks



**Silo Ridge Resort Community**  
**Existing Land Uses**  
**within 1/2-Mile Radius of Project Site**

Town of Amenia, Dutchess County, New York

1 inch equals 2,500 feet

**Figure**  
**2-2**

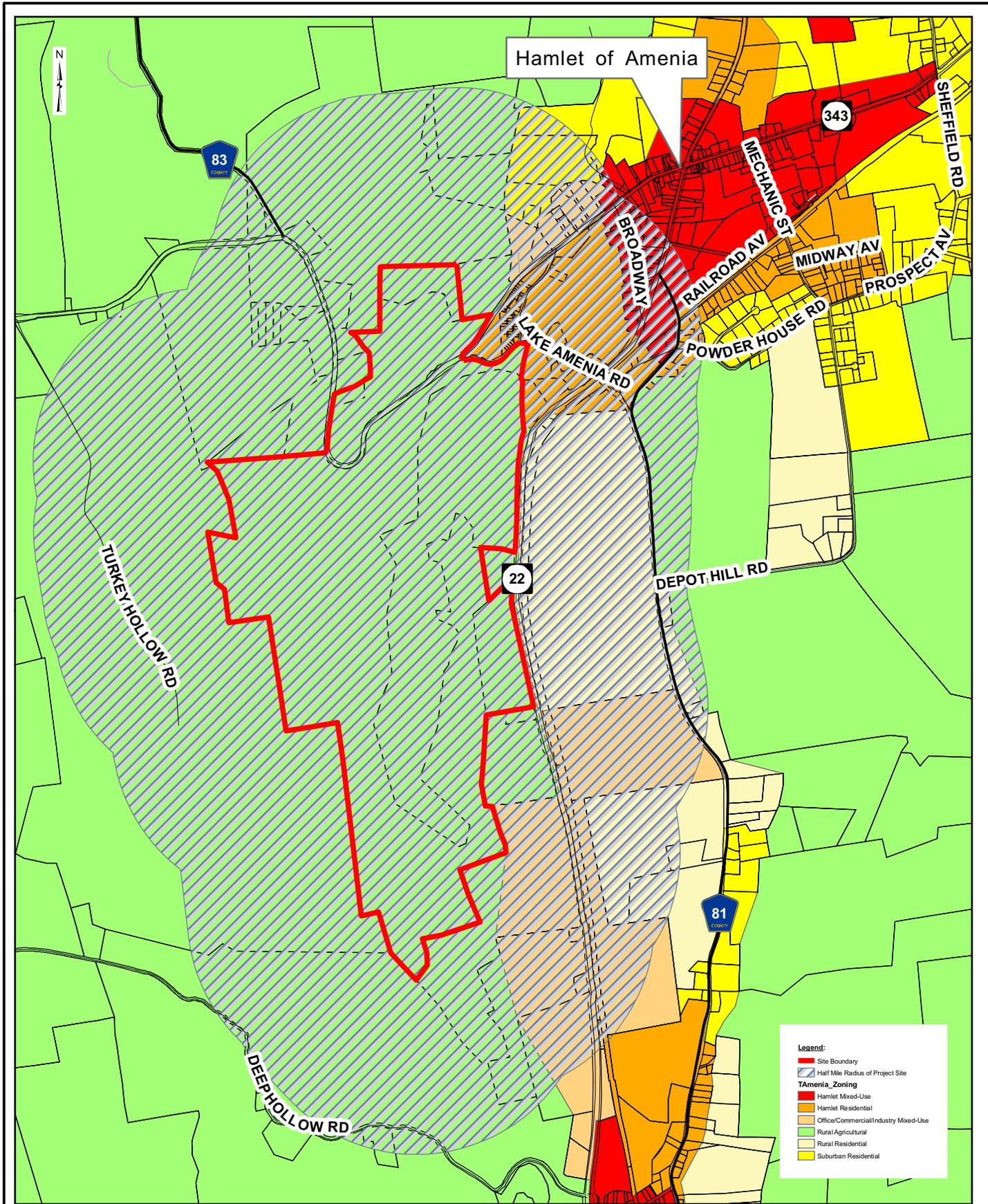
To the north of the site are primarily single-family residences and vacant land. The areas to the east and south of the project site are comprised of low to moderate density development, including single-family residences, vacant land, and commercial, agricultural, and industrial uses. The majority of the land to the west of the project site is comprised of undeveloped, forested land on sloping hillsides, much of which belongs to the Tamarack Preserve.

The project site is zoned Rural Agricultural (RA) according to the Town's Zoning Code (adopted on July 19, 2007) and is also identified as within the Resort Development Overlay District (RDO). Properties generally to the north, south, and west of the project site are zoned RA, with a small area to the southeast of the site along Route 22 zoned as Office/Commercial/Industry Mixed-Use (OC) (see Figure 2-3). The area directly east of the site across Route 22 is zoned Rural Residential (RR). To the northeast of the site within the hamlet of Amenia are the Hamlet Residential (HR) and Hamlet Mixed-Use (HM) Districts, with lower-density residential districts as well as small areas of Highway Commercial (HC) just outside the hamlet (refer to Figure 3.8-2, "Zoning Map," in Section 3.8). Further to the east across Route 22 is another area of RDO zoning as well as the RA District. The hamlet of Wassaic also has HR and HM Districts with a small area of HC along Route 22. Lower-density residential districts surround the business and mixed-use zones. The project's zoning compliance is described in more detail in Section 3.8.

The project site is located in a Dutchess County agricultural district. In accordance with Section 283-a of New York State Town Law, an Agricultural Data Statement has been prepared for the project and is included in Appendix 9.16. According to land use data from Dutchess County, none of the parcels within 500 feet of the project site were identified as in agricultural use. However, it appears from aerial photography that two of the properties may be in agricultural use. These are identified in the Agricultural Data Statement.

### 2.1.2 Existing Site Constraints

As noted above, the 670±-acre project area is largely vacant and undeveloped, except for a 2.2-acre residential parcel and the existing golf course and its associated amenities, which include a clubhouse and banquet facilities. The recreational facilities, including the golf course, encompass approximately 135 acres of the 170±-acre parcel. The 18-hole golf course is open to the public and supports approximately 30,000 rounds of golf per year. The clubhouse and banquet facilities are used for special events, including conferences, meetings, weddings, and other special occasion parties. In addition to the golf course, open space on the project site also includes the approximate 230-acre hillside and ridge in the western portion of the site.



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**Silo Ridge Resort Community**  
**Zoning Designations within**  
**1/2-Mile Radius of Project Site**

Town of Amenia, Dutchess County, New York

Source: Town of Amenia Zoning Data, 2003

Drawn by: PWC

1 inch equals 2,000 feet

**Figure**  
**2-3**

The project site has varying topography, with slopes ranging from almost 100% to nearly flat. Site elevations range from approximately 480 feet above mean sea level (msl) to over 1,100 feet above msl. The northern end of the site north of Route 44 generally slopes southeasterly toward Route 44. The western portion of the site is higher in elevation than the rest of the site and slopes toward the central and eastern areas of the site. Approximately 58% of the project area has slopes greater than or equal to 15%.

A 100-foot wide easement granted to the New York State Electric & Gas Corporation traverses a small part of the project site. As shown on SP1, "Existing Conditions Plan" contained in "Engineering Drawings," the easement crosses the northeastern-most corner of the site near the proposed wastewater treatment plant, then crosses West Lake Amenia Road and Route 44 and runs across the northern-most section of the parcels north of Route 44. Approximately 4.75 acres of the project site is covered by this easement. There is also a 66-foot wide abandoned roadway, identified on the site survey as "Former Turnpike Road," that crosses a portion of the project site near the hairpin turn on Route 44.

A small area in the northeast portion of the project site along Route 22, south of Route 44, is adjacent to Amenia/Cascade Brook. Approximately 11.6± acres of this area of the site are within Flood Zone AE according to the National Flood Insurance Program's Flood Insurance Rate Map (FIRM) community panel number 361332 0006D. Flood Zone AE denotes a "Special Flood Hazard Area Inundated by the 100-year Flood" where base flood elevations have been determined. All other areas of the project site appear to be outside of the 100-year flood plain. See Figure 3.2-1, "Existing Streams, Ponds, Floodplains, and Wetlands."

According to the Wetland Delineation Report prepared for the proposed project (see Appendix 9.6), there are eight streams on the project site, two of which are perennial (flow year-round) and seven of which are intermittent (dry some of the time). One of the perennial streams is Amenia/Cascade Brook, which enters the project site south of Route 44, traverses along the eastern property boundary, and exits the site near the existing golf course entrance on Route 22. The other perennial stream is unnamed and flows through "Wetland L/LL." From Wetland L/LL the stream flows southeasterly and drains into Amenia/Cascade Brook off of the project site. The remaining streams are denoted on the wetland delineation map. There are 11 wetlands located throughout the project site, totaling approximately 36 acres. The total acreage of all surface water on the project site, including ponds, streams, and delineated wetlands, is approximately 47± acres. Please see Figure 3.2-1 for more information.

In accordance with the Final Scoping Document, Figure 2-4 illustrates the areas of wetland soils on the subject property. The Dutchess County Soil Survey does not identify any organic soils as mapped on the subject site.<sup>10</sup> Of the soils mapped on the project site, the Fluvaquents and the Wayland Silt Loam are hydric (or wetland) soils formed in alluvial situations, and an area mapped as water is also identified. There are 31± acres of Fluvaquent and Wayland Silt Loams, 6± acres of water, and approximately 623 acres of non-hydric soils mapped on the subject property. The 623 acres of otherwise upland soils may include hydric inclusions (smaller pockets of wetland soil) that are not specifically mapped by the Dutchess County Soil Survey due to their small size. As noted in the above paragraph, the wetland delineation survey identified a total of 47± acres of wetlands, ponds, and streams on the project site.

### 2.1.3 Existing Infrastructure

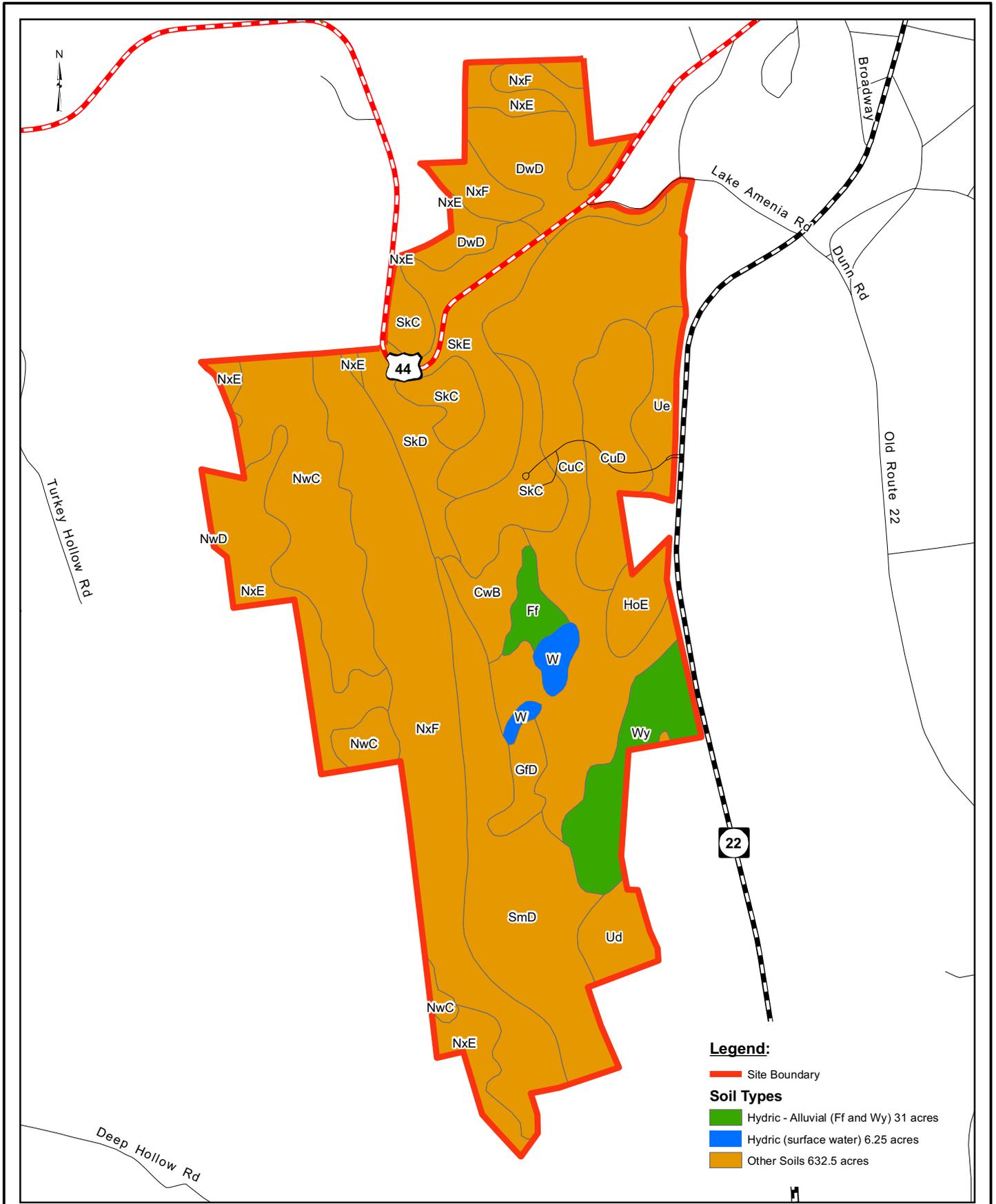
#### *Water Supply*

The project site currently obtains water from a combination of sources. The existing clubhouse is served by a water supply system consisting of an onsite groundwater supply well, water treatment equipment, and finished water storage. The main water supply well is located approximately 50 feet north of the existing clubhouse. The maintenance building near the main entrance off NYS Route 22 is served by a separate groundwater supply well. This well is located approximately 46 feet from the northwest corner of the maintenance building.

The existing golf course irrigation system is a separate and independent system used to irrigate the tees, greens, and fairways. In total, approximately 135± acres are currently irrigated. Irrigation water is drawn from a natural spring pond onsite and distributed via a network of underground piping to irrigation sprinklers. The irrigation pond is fed by a natural spring source, a small onsite stream, and by stormwater runoff from the site. According to the owner of the golf course, the existing irrigation pond has adequate capacity to meet current irrigation water demand. In association with the proposed project, irrigation demand for the golf course is expected to remain about the same due to improvements in efficiency of the new irrigation; ultimately, treated wastewater is proposed to be released upstream of the irrigation pond so that it can be recycled to support irrigation water requirements.

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<sup>10</sup> The only organic soils mapped in Dutchess County are Carlisle muck, Medisaprists, and Palms muck.



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**Silo Ridge Resort Community**  
**Map of Hydric-Alluvial & Hydric Soils**

Town of Amenia, Dutchess County, New York

Source: United States Department of Agriculture (USDA)

Drawn by: PWC

1 inch equals 1,300 feet

**Figure 2-4**

### *Wastewater Treatment*

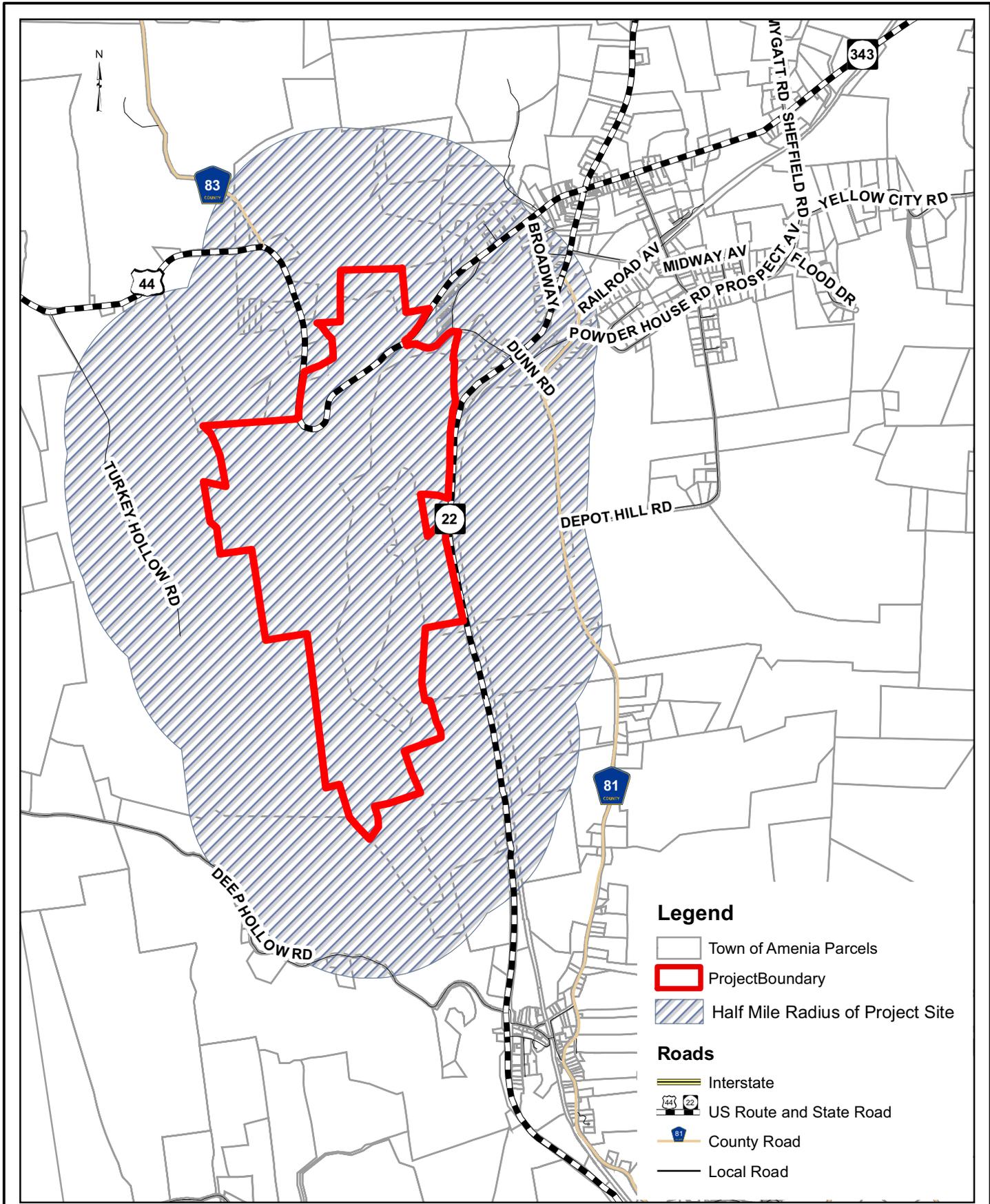
The existing sanitary wastewater system consists of an onsite septic system with subsurface disposal via leach field. The system operates under New York State Pollution Discharge Elimination System (SPDES) permit number NY0234966, with a permitted flow rate of 0.0126 million gallons per day (MGD) or 12,600 gallons per day (gpd) and a permit expiration date of 2025. Because the water source for the clubhouse is a non-metered private well, and because wastewater is not normally directly metered, the actual flow rate to the septic system is unknown. It is believed to be below the permitted limit given the size and capacity of the clubhouse facility. This belief is substantiated by the theoretical flow rates shown in Table 3.14-1 (see Section 3.14, “Utilities – Wastewater”) for the proposed clubhouse facilities; while the proposed clubhouse and associated facilities are likely to generate greater flows than the existing clubhouse facilities, the flows are still below the permitted limit using calculation methods approved by the New York State Department of Environmental Conservation (NYSDEC).

### *Site Access*

The project site is currently accessible via a main entrance on NYS Route 22. This entrance provides access to the Silo Ridge Country Club. The residential parcel north of Route 44 is accessed by a driveway on the eastbound side of Route 44. The eastern boundary of the project site is Route 22, which is a major north-south transportation route through eastern Dutchess County. US Route 44 bisects the project site in the northern portion of the property. Route 44 is a State-owned and maintained roadway, which traverses east/west through Dutchess County and into Ulster County and east into Connecticut. Areas immediately north and west of the project site are sparsely developed and are accessed via rural roadways.

### *Roadway Network*

The road network within a ½ mile radius of the project site is comprised of federal, state, county, and local roads, as shown on Figure 2-5. US Route 44 traverses through the northern portion of the site and includes the “hairpin turn” also known as DeLavergne Hill. The topography of US Route 44 in the vicinity of the project site is windy with steep changes in elevation. NYS Route 22 runs parallel to the eastern boundary of the site and is straighter and more level in this area. Both US Route 44 and NYS Route 22 lead to the Hamlet of Amenia. From the north, County Route 83 (also known as Smithfield Valley Road) feeds into US Route 44, and from the south, County Route 81 (also known as Old Route 22) connects with NYS Route 22. Branching off the State and County roads within this radius are numerous local roads, which include West Lake Amenia Road, Dunn Road, Broadway Avenue,



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**Silo Ridge Resort Community**  
**Existing Road Network Map**  
**within 1/2-Mile of Project Site**

Town of Amenia, Dutchess County, New York

Source: Parcels and Roads - Dutchess County Office of Real Property Service, 2005

Drawn by: PWC

1 inch equals 2,500 feet

**Figure**  
**2-5**

Morton Place, East Broadway, Birch Drive, Powder House Road, and Depot Hill Road.

#### 2.1.4 Site & Subdivision Plans

The Proposed Action consists of the development of a luxury golf-oriented resort community. The proposed development program is summarized in Table 2-2.

**Table 2-2 Proposed Action Development Program**

<b>Land Use</b>	<b>Number/Size</b>
Single Family Units	41
Townhome Units	328
Hotel:	
Rooms	320
Banquet Hall	5,000 sf
Conference Areas	5,000 sf
Restaurant	125 seats
Spa/fitness center	15,000 sf
Retail store & shop	2,000 sf
Golf Clubhouse (Existing to be renovated):	
Banquet Hall	10,000 sf
Restaurant	100 seats
Retail store/Offices	2,000 sf

It should be noted that the Proposed Action differs slightly from what was originally described in the Final Scoping Document, adopted by the Town of Amenia Planning Board on November 17, 2005. The Final Scoping Document describes the proposed project as consisting of “two resort hotels with a total of up to 320 rooms, banquet space, two restaurants, conference space, and a spa and wellness center.” Since adoption of the Final Scoping Document, the Applicant has made small changes to the proposed development program to better match anticipated market demands. Only one hotel is proposed, but it will be developed in phases and will occupy two separate buildings that will be connected via a pedestrian walkway. The hotel and the golf clubhouse are each proposed to have a restaurant and banquet space, which could be used for special events. Conference space is proposed to be included in the hotel, which would provide space for meetings and corporate events. The Applicant has also recently acquired a 2.2±-acre residential parcel directly contiguous to the project site on the north side of Route 44; this parcel is now included in the project area, bringing the new acreage of the site to approximately 670± acres.

The Proposed Action is described in detail below, including its conformance to the Town's existing zoning and subdivision regulations. The proposed site plan is included in "Engineering Drawings" as SP2, "Overall Layout Plan."

Furthermore, consistent with Section 5.2 of the Final Scope, the Applicant considered a "Traditional Neighborhood Alternative" plan as part of the DEIS. Based upon the review to date, it is the Applicant's position that the Traditional Neighborhood Alternative is preferred over the Proposed Action, as it has fewer environmental impacts and more benefits than the Proposed Action, fulfills the intention of the Traditional Neighborhood Alternative as set forth in the Final Scope, and as more fully described in Section 5.2 of this DEIS, offers a superior design to the Proposed Action.

### *Site Access and Internal Circulation*

The proposed project will have a total of six entrances. Three entrances will provide access to the main golf course site. The Resort Entrance, currently the existing entrance into the site from Route 22, will serve as the main entrance. A second entrance, known as the Loop Road Entrance East, will be constructed to the south of the Resort Entrance along Route 22. The third access point to the main portion of the project site, identified as Loop Road Entrance North, will be located along Route 44 and will provide access to the residential areas on the north side of the main site.

There will be one driveway on West Lake Amenia Road to allow access to the wastewater treatment plant and water treatment facility. The other two access points will be located on Route 44. One will be on the west side of the hairpin turn, providing access to the townhomes in Area M, the water storage tank, overlook deck, and Artisan's Park (all of which are described below). The last access point will be located directly across from the Loop Road Entrance North and will provide access to the townhomes in Area L (described below).

A series of internal roadways will be constructed to connect all components of the project and provide safe circulation and traffic flow. The roads will be privately owned and maintained and have been designed to Town standards. However, the Applicant is willing to consider an alternative design standard for the roadways in an effort to maintain the rural character of the site, if the Town so desires. As shown on the site plan, seven distinct roads are identified. They are as follows:

- Road 1 (Main Entrance) – This roadway provides access from Route 22 via the Resort Entrance to the hotel, golf clubhouse, and Golf District townhomes. Its length is approximately 1,575 linear feet.
- Road 2 (Outer Loop Road) – This roadway begins at Route 22 via the Loop Road Entrance East and provides access to the majority of the residential

development in the southern and western portions of the project site. Its total length is approximately 13,200 linear feet.

- Road 3 – This roadway connects Roads 1 and 2 and provides access to the Resort District townhomes and some of the Area B townhomes. Its length is approximately 2,600 linear feet.
- Road 4 – Road 4 begins at the Loop Road Entrance North on Route 44 and provides access to the townhomes in Area J. It also intersects with Roads 5 and 6. Road 4 has a length of 3,850 linear feet.
- Road 6<sup>11</sup> – Road 6 branches off of Road 4 and provides access to the townhomes in Area K. It has a total length of approximately 925 linear feet.
- Road 7 – Road 7 begins on the west side of the hairpin turn on Route 44 and provides access to the townhomes in Area M, as well as to the water storage tank, observation deck, and Artisan’s Park. Its total length is approximately 1,025 linear feet.
- Road 8 – Road 8 also begins on Route 44, directly across from the Loop Road Entrance North. It provides access to the townhomes in Area L and is approximately 1,325 linear feet in length.

### *Pedestrian Circulation, Landscaping, and Site Amenities*

The Proposed Action includes a pedestrian system with sidewalks, walkways, paths and trails. It combines on- and off-road routes to link private residential areas with the golf course, club house and hotel and their amenities. Off-road paths and trails could be used by bicyclists and pedestrians, and would connect with existing golf cart paths wherever the existing and proposed layouts coincide. Refer to SP2, “Overall Layout Plan,” at the end of this document for the locations of proposed sidewalks and connections to existing cart paths and trails.

The overall layout plan shows links to the existing trail system in the western hillside at the north and south ends of the site. To the north, an existing trail leaves the western wooded slope at the parcel boundary with Route 44 and continues south through the open meadow with two forks that meet the Interior Road 4. The southern trail link terminates at Road 2 and a residential driveway.

Off-site pedestrian circulation systems in proximity to Silo Ridge include sidewalks in the hamlet of Amenia and the Harlem Valley Rail Trail, which runs

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<sup>11</sup> Please note that there is no “Road 5” labeled on the site plan. A previous version of the site plan included Road 5, which was then removed. For simplicity, the remaining roads were not renumbered.

northeasterly through an area near the eastern sections of the project site. The only route between Silo Ridge and these systems would require crossings and travel along US Route 44 and NYS Route 22, where there are no existing pedestrian facilities. As both of these roads are under the control of the New York State Department of Transportation (NYSDOT), it is outside the Applicant's control to provide direct pedestrian links to them. At present, the nearest access point for the Harlem Valley Rail Trail is in the Hamlet of Amenia.

There is sufficient road width along Routes 44 and 22 to support both pedestrian and bicycle use if the NYSDOT would provide facilities. The Dutchess County and New York State Departments of Transportation have been establishing bike routes and walking paths along many roadways, with bicyclist sharing the rights-of-way with motor vehicles. NYS Route 343 is a designated bicycle route, and US Route 44 and NYS Route 22 are under consideration for future bicycle and pedestrian routes.

The Applicant also intends to provide a shuttle connection between the resort and the Wassaic train station, just to the south of the site. The shuttle would be operated by the Silo Ridge Resort Community and would allow people from the New York City area and other points south and west, who either wish to stay at the hotel or who own residential units at the resort, to travel to their destination without the use of a personal vehicle. The Applicant will also provide shuttle service between the resort and the hamlet of Amenia to allow for convenient patronage of and visitation to the stores and other opportunities within the hamlet.

Landscaping will be provided throughout the project site. A specific landscaping plan will be developed later in the design phase of the project. The proposed resort development was arranged onsite to utilize existing tree masses for screening and softening, which allowed the majority of onsite vegetation to be retained. Additional trees will be provided at varying intervals along roads for shade and cadence. New landscaping around buildings will focus views and provide pedestrian scale, color and ornamental interest. Shade, flowering and evergreen tree plantings combined with shrub masses and herbaceous layer plantings will seamlessly knit the development back into the natural landscape.

In addition to the pedestrian amenities described above, the proposed project also includes recreational amenities for residents and guests, including tennis courts and pools associated with the hotel and spa. The project also proposes a public overlook and passive recreation area off of Route 44 at the hairpin turn.

#### *Golf Course and Clubhouse Renovations*

The existing Silo Ridge Country Club golf course and clubhouse will undergo renovations as part of the proposed project. The golf course will be improved

through the relocation of trees, regrading of greens and fairways, and the incorporation of new stormwater management facilities.

The clubhouse will undergo interior and exterior renovations to allow it to blend with the architecture of the proposed hotel and surrounding new development. The building's siding and stone will be replaced to match the new hotel construction, and a large covered porch will be added to the South façade of the building, which faces the golf course. The existing elevated esplanade will also be extended to the new hotel.

Interior renovations will also be provided in order to upgrade amenities and services in keeping with the proposed hotel. Renovations include a remodeled dining area and a new bar, cocktail lounge, billiards area, and cigar bar and lounge. The new enclosed porch will provide a large-scale covered event space off of the remodeled dining area.

### *Hotel Component*

The proposed project includes the construction of a new luxury golf-oriented resort hotel with up to 320 rooms, which will be operated as a condominium hotel. Each fully furnished unit will contain a kitchenette rather than a full kitchen and be designed and marketed for sale as a hotel unit. In addition, it is anticipated that restrictions will be placed on the length of continuous stay for roughly half of the units in the hotel to ensure that the hotel operator has a continuous supply of units available for rental. All sales contracts will include assertive language referencing the zoning requirements and requiring unit owners to follow the rules. In addition, all unit owners will be required to sign a "Unit Management Agreement" which will set forth all of the occupancy rules. Hotel management will be under instructions to rent out rooms when the owner is not in occupancy. The Town will have the right to check the hotel registry in order to perform conformance audits. The hotel registry will also be a record of sales tax and hotel occupancy tax. These records must be kept, and like the registry, can be inspected.

Each owner will own an undivided interest in common elements of the hotel and will pay common charges related to their use and maintenance. Hotel unit owners will also pay a common Hotel Charge associated with the costs of operating the hotel.

As noted above, while the Final Scoping Document described the project as having two hotels, the Proposed Action has since been modified slightly to include only one hotel, which will be constructed in phases and will occupy two separate buildings with a ground-floor pedestrian connection.

The lower level of Phase 1 of the hotel will contain an indoor lap pool and associated facilities, such as locker rooms, an office, equipment storage, the mechanical room. The golf pro shop will also be located on this level, along with golf cart storage, housekeeping facilities, a staff area, and receiving. Part of the two-level spa will also be on the lower level of Phase 1. This level will open out toward the golf course and will provide access to the outdoor pool and grounds.

The ground level of Phase 1 of the hotel will contain the fitness center; the second level of the spa facility; a café, restaurant, and lounge; ballroom; kitchen facilities, hotel offices; a meeting room; and the lobby. This level will be considered the main floor and will be accessible from the entry drive and parking area. The upper two floors of Phase 1 will each contain 60 hotel rooms and associated housekeeping support areas.

Level 1 of Phase 2 will contain the small retail space, which will likely support a salon, convenience store, dry cleaners, and other facilities. There will also be a restaurant/café, lobby, library/lounge, and 35 hotel rooms. Levels 2 through 4 of Phase 2 will each contain 55 hotel rooms and housekeeping support areas.

The target market for the proposed condominium hotel units would include: (1) individuals that travel to Dutchess County, or the surrounding area, for recreation and relaxation purposes on a regular basis; (2) families that are looking to purchase a hotel condominium unit and have visited the area before, particularly those from New York City; and, (3) investors that are interested in the condominium hotel market. Some degree of regularity of use is expected, but not in excess of the occupancy standards.

### *Residential Component*

The Proposed Action consists of 369 homes, which includes 328 townhome units and 41 single-family residences. The residential units will be laid out along the edges of the golf course, both in order to preserve the golf course and to minimize the visual impact of the residential development by following the site's topography.

### *Single-Family Homes*

As shown on the site plan, there will be two areas of single-family homes (identified as Areas E and F on the site plan) in the western portion of the project site, near the base of the hillside. These homes will be located along Road 2, the "Outer Loop Road," which will be accessible from Route 22 via the Resort Entrance and Loop Road Entrance East and from Route 44 via the Loop Road Entrance North.

The single-family homes will have a mix of three, four, and five bedrooms, with an average number of four bedrooms, ranging in size from approximately 3,000 to 4,300 square feet.

The single-family homes are expected to appeal to households currently residing in large estate homes throughout Dutchess County and the surrounding area seeking residence at the site. These homes will also serve as: (1) a family retreat for high-income households who live in a major urban center (primarily New York City) and who are seeking a second weekend home for recreation and relaxation; (2) those looking for residences who are willing to accept a longer commute to afford such a home; and (3) older, empty-nester households who have sold their family home and purchased a condominium in a warmer climate, but who seek to own a single-family style home in the region, where multigenerational family gatherings can take place.

## Townhomes

Eleven groupings of townhomes are proposed, with an average size of three bedrooms. One cluster of 40 units arranged in four 10-unit townhouse buildings, identified as Area A, "Resort District," is proposed to the south of Phase 2 of the hotel. Surface parking for these units will be provided on the east side of the proposed buildings. A grouping of 36 units arranged in three 12-unit buildings, known as Area H, "Golf District," is proposed to the west of Phase 1 of the hotel. This area will have its own surface parking on the north side of the buildings. Area A will be accessible via Roads 2 and 3 from both the Resort Entrance and the Loop Road Entrance East, while Area H will be most directly accessed via the Resort Entrance and Road 1.

The remaining townhomes are arranged in four-unit buildings. There are three groupings of townhomes in the southeastern portion of the project site (shown as Areas B, C, and D on the site plan), comprising a total of 128 units. The Outer Loop Road will provide the most direct access to this area of the development via the Loop Road Entrance East; they will also be accessible via Road 3 and the Resort Entrance.

Area G will consist of a grouping of 20 townhomes in the northwestern portion of the site, south of Route 44 and tucked back into the tree line. This area will be most directly accessible via Road 4 from the Loop Road Entrance North. Road 5 will then provide direct access to the individual units and will terminate in a cul-de-sac. Another area known as Area I will be comprised of eight units to the immediate north of the hotel parking area, adjacent to Hole #9 of the golf course. Road 1, the main entrance road, will provide access to these units via the Resort Entrance.

Area J, the "Village Center," is proposed on the south side of Route 44, directly north of the golf course clubhouse. This area will consist of 12 buildings (48 units) with a central "green" and village feel. The last townhouse area on the southern portion of the project site is known as Area K, which will be a small grouping of three buildings (12 units). Both Areas J and K will be accessed from the Loop Road Entrance North via Road 4.

Two clusters of townhomes are proposed on the property north of Route 44. Area L will consist of six buildings (24 units) accessed via Road 8 and Area M will consist of three buildings (12 units), accessed via Road 7. The entrance for Road 8 is proposed to be directly across from the Loop Road Entrance North, while Road 7 will be directly across from an existing driveway. Road 7 will also provide access to the proposed water storage tank and observation deck and the Artisan's Park, described below.

The townhomes include a mix of two- and three-bedroom units and range in size from approximately 2,000 to 2,800 square feet. The target market for the proposed townhouse units at this location include: (1) young, high-income households (some families) who live in a major urban core (primarily New York City) that travel to Dutchess County, or the surrounding area, for recreation and relaxation purposes on a regular basis; (2) older, empty-nester households who have sold their family home and purchased a condominium in a warmer climate, but who seek to maintain a secondary residence in the region.

#### *Impervious Surface Area, Grading, and Open Space*

The proposed project will ultimately preserve approximately 75% of the site (500± acres) as open space, including the 230-acre hillside and ridge in the western portion of the site. Impervious areas would total approximately 17±% (115± acres), consisting of a combination of roads, parking areas, buildings, cart paths, etc.

In addition to the golf course and undeveloped open space, the project includes an observation deck and Artisan's Park near Area M of the townhomes on DeLavergne Hill. The observation deck is proposed for the top of the water storage tank and will afford views of the entire valley below. The Artisan's Park is proposed to be a place for passive recreation such as picnicking, painting, drawing, and enjoying the views. Motorists driving by along Route 44 will be able to safely pull off the road and into a designated parking area.

Based on the preliminary Grading Plan for construction of roads, the hotel, and residential buildings, it is estimated that approximately 483,000 cubic yards of cut and 596,000 cubic yards of fill will be required. An additional 156,500 cubic yards of cut and 43,500 cubic yards of fill are projected to occur in association with the proposed golf course improvements. Overall grading is estimated at 639,500 cubic yards of cut and fill to be balanced onsite; therefore, material will not be taken offsite or delivered to the site for construction purposes.

#### *Conformance to Existing Zoning and Subdivision Regulations*

According to the Town's recently adopted zoning (July 19, 2007), the project site is within the RA District and the RDO District, which permits the construction of a master planned resort community. Site plan approval would be required to

implement individual components of the development plan and a Special Use Permit would be required for the master plan. Conformance with the Town's Zoning Law, Site Plan Regulations, and Subdivision Regulations is described in detail in Section 3.8, "Land Use and Zoning."

### 2.1.5 Utilities

#### *Water Supply and Distribution System*

The proposed water supply system for the project is a community system, which will be designed to provide a suitable supply of water for the project, meeting all appropriate criteria of the NYSDOH and Ten States Standards for Water. The water system will contain groundwater wells, a water treatment facility, a water storage tank, and a water distribution system to accommodate the demand created by the proposed development. See SP5, "Overall Water Master Plan," in "Engineering Drawings" at the end of this document.

#### *Wastewater Collection and Treatment System*

The Applicant's preferred alternative for the wastewater collection system is a combination of low pressure sewers and gravity sewers. See SP4, "Overall Wastewater Master Plan," in "Engineering Drawings." Because of their reliability and relatively low cost, gravity sewers have been selected for use in areas where they are practical. Low pressure sewers have been selected in areas where widely varying topography makes gravity sewers impractical. In the low pressure sewer areas of the collection network, each served building or house will be equipped with a grinder pump station that will convey wastewater to a low pressure collection trunk. All low pressure sections of the system will ultimately empty into a gravity section or into a pump station. Because of site topography, wastewater from most of the site will be pumped via a force main to a final length of gravity pipe that will terminate at the onsite wastewater treatment plant (WWTP).

The preferred alternative for wastewater treatment is the construction of a new, privately owned and operated WWTP on the Silo Ridge property. A wastewater transportation corporation, encompassing the extents of the project, would own and operate the collection system and WWTP. The preferred treatment option is a sequencing batch reactor (SBR) with tertiary filtration. The likely alternative to the preferred treatment option is a membrane bioreactor (MBR). Both technologies use the same biological process to treat wastewater and differ primarily in their final filtration method. There is no substantive difference in site or environmental impact between the two treatment technologies. Final selection of the treatment method will be confirmed in later design phases of the project and will be subject to Dutchess County Department of Health (DCDOH) and NYSDEC approval.

For the Proposed Action, the WWTP is proposed to be located in the northeastern corner of the Silo Ridge Country Club property. The facility would consist of advanced biological treatment, gravity settling of solids, advanced filtration to remove residual solids, and disinfection prior to surface water discharge. The proposed WWTP outfall location is an unclassified onsite intermittent stream that drains to onsite Class C irrigation ponds. These ponds are tributary to Amenia/Cascade Brook, a Class C<sub>t</sub> stream, which is ultimately tributary to Wassaic Creek and the Housatonic River. The WWTP will include a comprehensive odor control strategy, including full enclosure in a dedicated building, appropriate ventilation, and aeration of various process tanks to prevent septic conditions.

### 2.1.6 Purpose/Objectives of Project Sponsor

The objective of the project sponsor is to create a resort destination in Amenia that will provide first-rate amenities set in the natural beauty of the Harlem Valley. The resort will build on the existing Silo Ridge Country Club and expand services to include hotel amenities, a spa, world class restaurants, and luxury residential opportunities. One of the goals of the project will be to preserve important views and the rural character of the Town. The project will also take advantage of the site's proximity to a Metro-North commuter train line to Grand Central Terminal in New York City.

The proposed project will create a variety of new jobs for local residents, generate substantial tax revenues for the Town, County, and School District, and enhance Amenia's tourism economy, as further discussed below.

## 2.2 Project Purpose, Need and Benefits

### 2.2.1 Public Need and Benefits

The Proposed Action will contribute significant economic and fiscal benefits to the Town of Amenia, Dutchess County, and the region as a whole. The Town of Amenia will receive approximately \$829,000 in annual property tax revenues from the project, including nearly \$120,000 to the Amenia Fire District, which will result in an annual tax surplus to the Town of approximately \$200,000 after accounting for the costs of providing services to the project site. The Webutuck Central School District will receive \$3,505,700± annually in property taxes, yielding an annual surplus of \$2,140,400±. It should be noted that the surplus figures are actually quite conservative, as the project's permanent resident and student populations are not expected to approach the numbers presented in the fiscal analysis. Furthermore, the project will be privately owned and maintained, thus removing the cost burden of road maintenance, snow removal, and infrastructure maintenance from the Town.

Construction of the proposed project is expected to generate between 1,400 and 1,800 construction jobs,<sup>12</sup> many of which would be filled by the local workforce. Once operational, the resort will be a large employer in an area where the majority of residents presently commute outside of Town to work. The proposed project is expected to create approximately 228 full-time-equivalent (FTE) jobs ranging from unskilled labor positions to management level opportunities. Each direct job will also indirectly generate additional jobs within the local area and region. The operation of the hotel will provide increased opportunities for other industries in the region. Demand for such things as food, paper, uniforms, linens, toiletries, and cleaning services will increase, thus creating additional job opportunities and indirectly benefiting those providers, their employees, and the regions in which they operate.

The project will be a significant boost to the Town's tourism industry and will complement existing tourism opportunities such as the Harlem Valley Rail Trail, local wineries, and the area's natural and rural beauty. The Town's 1991 Master Plan even notes that the Silo Ridge golf course will be a stimulus for future tourism and economic development. According to a 2002 study by Marist College Bureau of Economic Research,<sup>13</sup> out-of-region visitors within a ten-county region (including Dutchess County) spend an average of \$108 on meals/food, \$45 on transportation/gas, and \$81 on shopping (on retail goods other than souvenirs and books) per trip. These figures are good estimates of tourism spending for the region. As applied to future visitors to Silo Ridge, assuming an average hotel occupancy of 50% and an average length of stay of three nights, Silo Ridge hotel guests are projected to spend approximately \$2 million on meals and food, \$800,000 on transportation and gas, and \$1.5 million on retail goods annually, much of which is expected to occur locally and within the region. This is a significant positive economic impact for the Town and the region.

### *Affordability*

The proposed project is intended to be a high-end luxury resort and vacation community. According to data derived from the 2000 Census and published by HUD, the estimated 2005 median income for a four-person family in Dutchess County is \$73,400.<sup>14</sup> Low-income families, per the HUD definition, are those who earn between 30% and 80% of the median family income for an area. Therefore, low-income families of four in Dutchess County earn between \$22,000 and \$58,000 annually.

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<sup>12</sup> Urban Land Institute, *Development Impact Assessment Handbook*, 1994. Based on the anticipated cost of construction.

<sup>13</sup> Davis, Dr. Ann, 2002. Report of Interviews at Hudson River Valley National Heritage Area. Marist College Bureau of Economic Research.

<sup>14</sup> New York State 2005 median family income limits by Metropolitan Statistical Area, [www.huduser.org](http://www.huduser.org), obtained on April 21, 2006.

Given the intent of the proposed project to be utilized as a second-home community and vacation-style resort, an affordable housing component has not been proposed. The project is intended to be marketed primarily to people seeking a vacation destination for a second home. Of course, nothing would preclude local community residents from purchasing units in the Silo Ridge Resort Community, but the expected users of the project are more likely to be people traveling to the area from elsewhere in the region for vacation purposes. In light of the level of amenities and services to be offered in the proposed project and the associated market value of the residential units, the proposed units would not be considered affordable to low-income families.

## **2.3 Construction and Operation**

### **2.3.1 Construction Schedule**

The basic framework for construction phasing is provided below. Due to the many variables that can affect construction, including weather, soil and groundwater conditions, equipment availability, etc., the proposed phasing is generalized and is subject to change as the project moves forward, depending on many factors, including market demand.

It is anticipated that construction would be complete in late 2012.<sup>15</sup> The project sponsor's intention is to construct the project in the following order:

#### **PHASE I: Late 2007 - 2008**

- Sales Office
- Golf Course
- Renovate Existing Golf Clubhouse
- Phase I Hotel and Parking
- Area M Townhomes
- Clear Grub and Rough Grade entire site
- Master Storm Water System
- Master Water System and Water Building

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<sup>15</sup> Please see Section 5.2 for a discussion of the anticipated construction schedule and phasing for the Traditional Neighborhood Alternative.

- Master Wastewater System and WWTP
- Golf Maintenance and Receiving Facility

PHASE II: 2009 – Late 2010

- Phase II Hotel and Parking
- Area J – Village Center
- Area A – Resort District
- Area H – Golf District
- Area I – Townhomes

PHASE III: Late 2010 - 2012

- Area B – Townhomes
- Area C – Townhomes
- Area D - Townhomes
- Area E – Single Family
- Area F – Single Family
- Area G – Townhomes
- Area K – Townhomes
- Area L – Townhomes

It is anticipated that site construction activities will be performed during regular day light hours and that typical safety measures, such as orange construction fence, signage, designated material storage areas, etc., will be utilized throughout the duration of construction. As part of the site plan approval process, a detailed safety plan will be developed and submitted to the Town, identifying the measures needed for the safety of the residents, guests, operational staff, employees and construction related personnel. The safety plan will cover the safety measures needed for two distinct groups: non-construction personnel and construction-related personnel. The safety plan will cover safety policies, emergency procedures, emergency vehicle access, traffic flow, parking, demarcation of construction areas, materials handling,

staging, maintenance, monitoring, enforcement, signage, lighting and personal protective equipment.

A section of the safety plan will specifically address the fact that residents, operational staff and guests, will be using the completed portions of the site while other areas of the site are being constructed. This section of each applicable component or area specific safety plan will be communicated to each distinct group on an ongoing basis.

In accordance with the Preliminary Master Stormwater Pollution Prevention Plan (SWPPP) prepared for the Proposed Action (see Appendix 9.5.1), erosion and sediment control practices, pollution control techniques, construction housekeeping practices, and stormwater management techniques will be implemented throughout construction of the project. These are briefly summarized below.

#### *Temporary Erosion and Sediment Control Measures*

Prior to construction, stabilized construction entrances will be installed to reduce the tracking of sediment onto public roadways. Any sediment that is spilled, dropped, or washed onto public roadways is required to be removed immediately. To ensure the stability and effectiveness of all protective measures and practices during construction, all erosion and sediment control measures employed will be inspected by the Operator's engineer at least every seven calendar days and within 24 hours of the end of a storm even of ½-inch or greater.

Water trucks will be used onsite as needed to control dust generated by construction activities. Dust control must be provided by the general Contractor to a degree that is acceptable to the owner and is in compliance with the applicable local and State dust control requirements.

Any material that must be stockpiled will be stored in an area away from storm drainage, water bodies, and/or water courses, and will be properly protected from erosion by a surrounding silt fence barrier. Prior to the initiation of and during construction activities, a silt fence will be established along the perimeter of areas to be disturbed that lie up-gradient of water courses or adjacent properties. Daily inspections and inspections immediately after significant storm events will be conducted to ensure the proper functioning of the silt fences.

Within 14 days after construction ceases on any particular area of the site, all disturbed areas that will not be disturbed again for at least 21 days will be temporarily seeded and mulched to minimize erosion and sediment loss. Concrete blocks surrounded by wire mesh and crushed stone will be placed around both existing catch basins, and proposed catch basins once they are installed, to keep

sediment from entering the basins and storm sewer system. Crushed stone will be replaced as necessary to ensure proper functioning of the structures.

Erosion control blankets will be installed on all slopes greater than 3:1. These blankets will provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses associated with high runoff flow velocities. Stone check dams will be installed within drainage ditches to reduce the velocity of stormwater runoff, to promote settling of sediment, and to reduce the transport of sediment off-site. Temporary sediment basins will be constructed to intercept sediment-laden runoff and reduce the amount of sediment leaving the disturbed areas and to protect drainage ways, properties, and rights-of-way.

### *Permanent Erosion Control Measures*

Disturbed areas will be reseeded in accordance with the contract documents. All areas at final grade must be seeded and mulched within 14 days of completion of the major construction activity. Final site stabilization is achieved when all soil-disturbing activities have been completed and a uniform vegetative cover with a density of 80% has been established, or equivalent stabilization measures (such as the use of mulches or geotextiles), have been employed on all unpaved areas and areas not covered by permanent structures. This protection will reduce the depth, velocity, and energy of water such that the flow will not erode the receiving water course or water body.

### *Other Pollutant Controls*

In addition to sediment control, the SWPPP includes control measures for solid waste disposal, sanitary facilities, sources of water, and long-term pollutants. No solid materials, including building materials, are allowed to be discharged from the site with stormwater; they must all be collected and placed in containers, which will be emptied periodically by a contracted trash disposal service and hauled away from the site. Substances that have the potential for polluting surface and/or groundwater, such as gasoline from equipment, must be controlled by whatever means necessary to ensure that they are not discharged from the site.

Temporary sanitary facilities will be provided onsite during the construction process. These facilities are required to comply with State and local sanitary or septic system regulations.

Non-stormwater components of site discharge must be clean water. Water used for construction must be from a public water supply or private well approved by the Health Department. Any water used for construction that is not from an approved public supply must not discharge from the site; it can instead be retained in ponds until it evaporates or infiltrates.

In addition to permanent stormwater management facilities, which are described briefly below, construction-related stormwater controls that will provide benefits after construction include sediment basins and rip-rapped outfalls. Temporary sediment basins that do not interfere with normal operations and that appear to provide long-term benefits may be left in place after construction is completed.

### *Construction Housekeeping Practices*

These practices consist of general housekeeping during construction to ensure an orderly and safe environment. The construction contractor will designate areas for equipment cleaning, maintenance, and repair, which will be utilized by all subcontractors and protected by a temporary perimeter berm. Detergents will not be used for large-scale cleaning of vehicles, pavements surfaces, buildings, etc.

A Spill Prevention and Response Plan will be developed by the site contractor. This plan will identify the steps to be followed in the case of an accidental spill and will include the names and numbers of people and agencies that must be notified. The plan will include Material Safety Data Sheets (MSDS) for all materials to be stored onsite. All onsite workers will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular safety meetings will be held, which all workers will be required to attend.

Construction materials will be stored in a designated staging area, which will be located in an area that minimizes the impacts of the construction materials on stormwater quality. All chemicals, paints, solvents, fertilizers and other toxic materials will be stored in waterproof containers. Any runoff containing such materials must be collected, removed from the site, treated and disposed of at an approved solid waste or chemical disposal facility.

## 2.3.2 Operations

### *Operation of the Sewage Treatment Plant and Infrastructure*

#### Daily Operations

Operation of the system will require daily, but not continuous, attendance by a licensed wastewater operator. Most of the processes will be automatic and controlled by an industrial-grade computer called a “programmable logic controller” (PLC). The function of the operator will be to verify proper operation of the control system, to modify the controls as needed, to sample the wastewater to ensure that adequate treatment is being supplied, and to perform routine and preventive maintenance on equipment. A detailed description of the automated processes of the WWTP is included in the Wastewater Report located in Appendix 9.8 of the DEIS.

The automated control system will generate alarms to announce the failure of equipment or the existence of unacceptable operating parameters (high water levels, etc.). These alarms will be sounded locally on the control panel, and also will be automatically transmitted to the operator by an auto-dialing feature in the Master Control Panel in the event that the operator is not at the WWTP. The auto-dialing feature will be capable of executing a notification “chain” to several recipients if the first call goes unanswered. The data storage feature of the Master Control Panel will create a historical database of all alarms and when they were acknowledged.

Wastewater and effluent will be sampled from various locations within the WWTP and analyzed for two purposes: regulatory compliance and operational performance. The quality of effluent will be tracked as required by the SPDES permit. The results of the sampling will be reported in the monthly report required by the NYSDEC for SPDES permit compliance. The operational performance of the system will be checked to tell the operator how well the system is functioning and whether adjustments need to be made to the control system in order to increase performance and effluent quality. Wastewater will be sampled from various stages in the WWTP process, not just from the plant effluent.

### Emergency Operations

The WWTP will be operated from the electrical power grid for the Silo Ridge property. However, in the event of a power outage, it is essential that the WWTP be capable of continued operation. Failure to do so could result in accumulation and overflow of untreated wastewater, with environmental and regulatory consequences. Therefore, the WWTP will be equipped with an emergency generator that will be installed when the plant is built. The generator will be sized and fueled to provide at least 24 hours of continuous WWTP operation during a power failure. The generator will be fueled by a local tank of diesel, propane, or natural gas. If diesel is used, appropriate containment and spill control measures will be implemented to prevent accidental release. An automatic transfer switch (ATS) will be provided in the electric room of the plant to automatically switch power to the generator when an outage occurs. This generator will be shared with the adjacent water treatment plant for the proposed project.

The pump stations throughout the project site will also be provided with emergency power from a generator, with an ATS for automatic switch-over in the event of a power failure. The collector system grinder pump stations will be provided with generator receptacles. In the event of an extended power outage, the residents will have the capability to connect a personal generator to this receptacle to maintain grinder pump station operation. In the absence of emergency power, each pump station has a sufficient volume to provide a short period of storage capacity (typically up to 24 hours) before a generator is required. Whether or not to provide

emergency standby power to a pump station depends on the anticipated ownership of that pump station. Standby power will be provided by the wastewater transportation corporation (transcorp) to community pump stations owned and operated by the corporation. These pump stations include any units that serve multiple residences or buildings, where no other clear owner could be possible. Because these community pump stations would be part of the community system operated by the transcorp, their continued operation (even during power outage) is the responsibility of the transcorp. In addition to community pump stations, the proposed Wastewater Master Plan also includes individual grinder pump stations that serve just one home. It is likely that these individual pump stations will be owned by the homeowner, not by the transcorp. Therefore, the transcorp will not be responsible for providing standby power for them.

### *Ownership and Maintenance of Hotel, Golf Course, and Community Facilities*

The proposed project, including all internal site roadways and utilities, will be privately owned and maintained. A Master Homeowners' Association (HOA) will be established for the entire site, which will be responsible for maintaining roads, landscaping, snow removal, and upkeep of the grounds, as well as contracting for trash hauling services and maintenance of common infrastructure. In addition, each phase of the hotel as well as each area of residential homes will be structured and operated as a separate condominium, each with its own common elements and associated common charges.

### *Integrated Pest Management Plan*

The Final Scoping Document required the Applicant to describe an Integrated Pest Management (IPM) Plan for the golf course that "proposes a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic health risks, including safe storage and handling of pesticides and fertilizers." In part to meet this requirement, as well as to develop and ensure an environmentally sensitive approach to golf course and community management, the Applicant joined together with Audubon International (AI) and enrolled in its Silver Signature Program. AI is a not-for-profit environmental organization that focuses on sustainable natural resource management. The Audubon Signature Program provides comprehensive environmental planning assistance to landowners with projects in the design and development stages. The program focuses on wildlife conservation and habitat enhancement, water quality management and conservation, waste reduction and management, energy efficiency, and Integrated Pest Management. Projects that receive Audubon Signature Status are considered internationally significant environmental demonstration sites for sustainable resource management. For participants in the Silver Signature Program, AI prepares a Natural Resource Management Plan (NRMP), which defines how the development will be constructed and managed so that natural resource protection and human use of the property will be integrated.

The draft NRMP prepared for the proposed development, of which IPM is a part, is included in Appendix 9.11. The IPM plan is summarized below, while other aspects of the NRMP are described in Sections 3.2, 3.3, and 3.4.

As described in the NRMP, IPM is a management program that uses information about turfgrass pest problems and environmental conditions that may precipitate these problems, and integrates these with turfgrass cultural practices and pest control measures to prevent or control unacceptable levels of pest damage. It is a preventative approach incorporating a number of objectives, including: 1) development of a healthy turf that can withstand pest pressure; 2) judicious and efficient use of chemicals; 3) enhancement of populations of natural, beneficial organisms; and 4) effective timing of handling of pest problems at the most vulnerable stage, often resulting in reduced pesticide usage. IPM is an ecologically based system that uses biological and chemical approaches to control.

IPM strategies have been incorporated into every aspect of the proposed Silo Ridge Resort Community and have taken into consideration the entire scheme of golf course operations as they relate to environmental impact. IPM programs rely on six basic approaches for plant and environmental protection. These include the following:

1. Regulatory – using certified seed and sod to prevent unwanted weed contamination and selecting the best adapted turfgrass species;
2. Genetic – selecting improved grasses which perform well in specific areas and show a resistance to pest problems;
3. Cultural – following recommendations made for proper primary and secondary cultural practices which will maintain the turf in the healthiest condition and influence its susceptibility and recovery from pest problems. Practices such as aerification, vertical mowing, topdressing, maintenance of proper soil nutrient levels, sound irrigation management and proper mowing techniques should produce a high quality turf;
4. Physical – cleaning equipment to prevent spreading of diseases and weeds from infected areas;
5. Biological – enhancing populations of natural antagonists and for a limited number of health problems biological control can be widely used whereby natural enemies are introduced to effectively compete with the pest; and

6. Chemical – pesticides are a necessary and beneficial approach to turf pest problems, but use can be restricted in many cases to curative rather than preventive applications.

The management techniques within the IPM Plan, combined with other Best Management Practices (BMPs) for resource protection, are an important part of the NRMP for the proposed project. In conjunction with the prevention and monitoring strategies outlined in the NRMP, these practices will help to minimize the project's potential impact to terrestrial and aquatic resources.

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