

# ABOUT THIS DOCUMENT

This document accompanies the Master Development Set of Plans. Together they form the complete Master Development Plan (MDP) that is required under the Town of Amenia Zoning Law, Resort Development Overlay District (RDO), for any development that involves any uses other than those allowed in the RA district. The Master Development plan requires special permit approval by the Planning Board and shall be consistent with the Town of Amenia Comprehensive Plan.

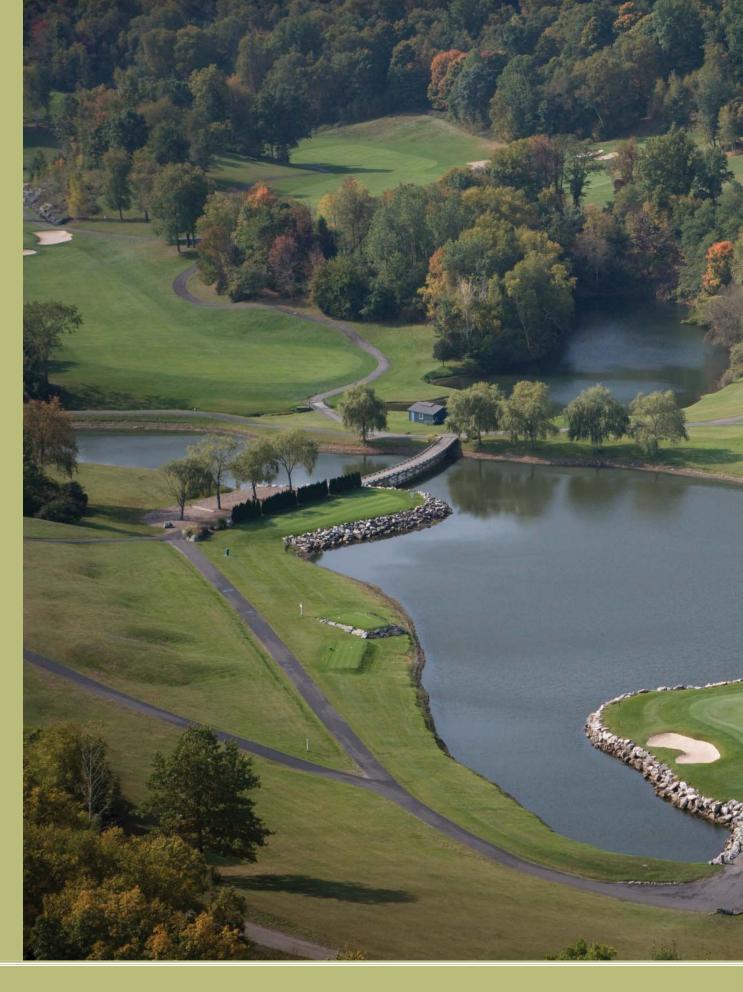
This MDP is intended to be an informational outline including a conceptual level of detail for the resort development and includes the vision, design goals, access and road layouts, proposed buildings and uses, building footprints, building heights, total square footage, recreational facilities, elevations and architectural character, landscape character, sustainable features, golf course layout, open space system, natural resource, habitat and buffer management plans, infrastructure, phasing, and zoning compliance along with other commitments of the resort development. In addition to the plans, elevations and tables, precedent images are utilized to further support the vision of the resort.

Many of the plans utilized in this booklet are included in the Master Development Set of Plans accompanying this booklet as Appendix A. A list of plan sheets with a brief description of each sheet is in Appendix B.

The Master Development Plan is a culmination of the hard work and efforts of Millbrook Ventures and its team of professional consultants, the Town of Amenia Planning Board and its team of professional consultants and the public. For a list of the professional consultants contributing to the formulation of the Master Development Plan please see Appendix C.

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SILO RIDGE



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#### Our Vision

Silo Ridge Resort has been designed to create a unique, family oriented, healthy-living, five-star destination resort lifestyle community that focuses on year round recreational, outdoor and sporting activities. The resort seeks to promote tourism for the region and provides for significant protection of open space and natural resources. Silo Ridge will be an all-season luxury resort village complete with a 300 unit hotel, a spa, a Clubhouse, a renovated 18 hole championship golf course, and a mix of single family homes, golf villas, vineyard cottages and other residences grouped around courtyards and greens. The resort is located on approximately 670 expansive acres of stunning countryside in the foothills of the Berkshire Mountains in Amenia, Dutchess County, New York, known for its pastoral landscape and agricultural heritage.

At the heart of the new resort will be a Village Green with a skating pond, bounded by shops and residences along Main Street to the north and, to the south by the hotel and spa. A smaller green just to the northwest, the Upper Green, will serve as a formal entry for the new Clubhouse and will begin the transition to small neighborhoods of single family homes clustered along the base of the mountain beyond.

Silo Ridge has been designed as a series of buildings grouped in neighborhoods around green spaces which tuck into the natural topography in the manner of historic towns, farmsteads and villages in the surrounding Dutchess County countryside, where small pockets of development preserve open spaces. The proposed landscape plan builds on goals outlined by Audubon International's sanctuary program to create a community that integrates seamlessly with its natural surroundings. This harmony of building, siting and landscape design will create the sense of having arisen organically over time. The resort location, just 85 miles north of New York City with multiple daily round-trip train service from Grand Central Station to within a half mile of the resort property, enhances the vision of the resort and its ability to attract residents and tourists alike.

#### Following is the Resort Development Summary:

- 300 unit Luxury Hotel with Restaurants
- Spa and Wellness Center
- Conference and Banquet Center
- Clubhouse with 18 hole Championship Golf Course
- Village Green Retail Shops
- vvinery Restauran
- 41 Single family Homes
- 19 Golf Villa
- 19 Vineyard Cottages
- 107 Town Homes
- 152 Flats
- Sales Office, Welcome House and Maintenance Facilities
- Water and Wastewater Treatment Facilities



SILO RIDGE



## **Existing Conditions**

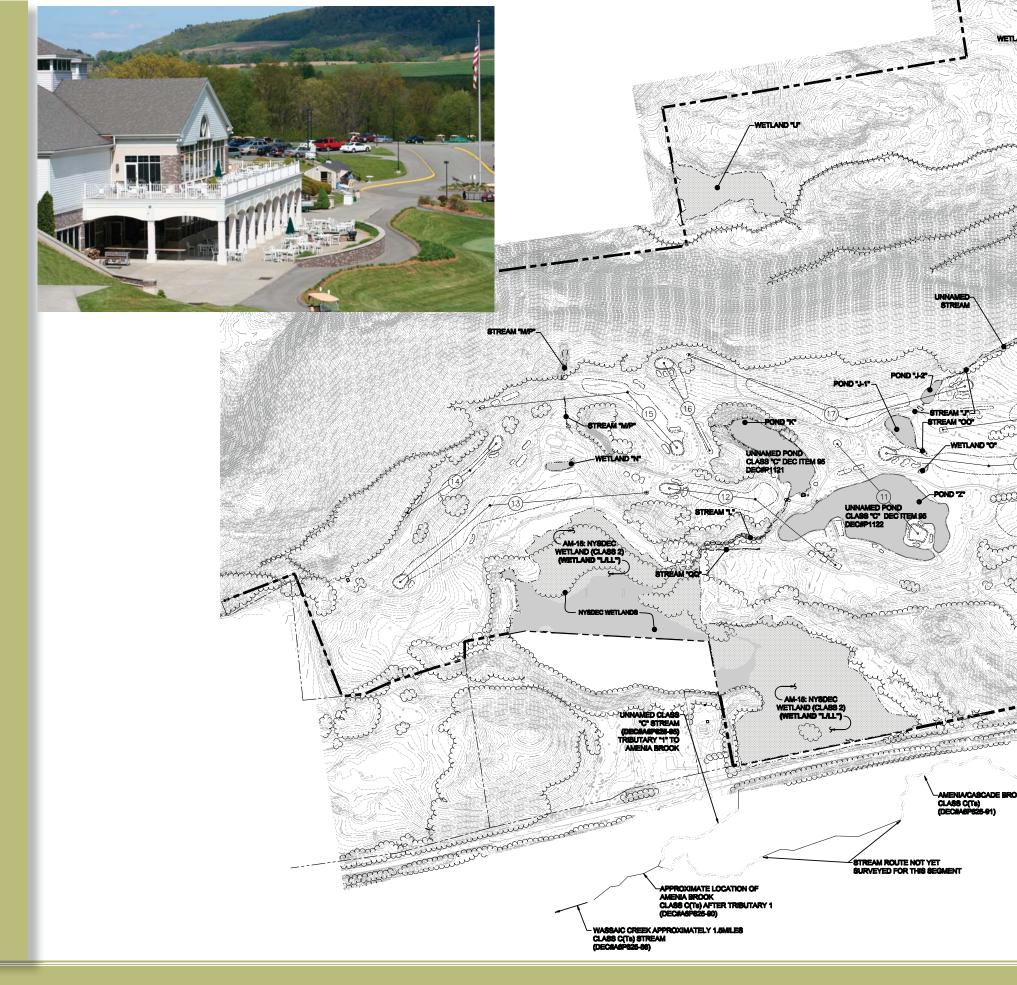
The 670±-acre project site is located west of NYS Route 22 in the Town of Amenia in eastern Dutchess County, New York, approximately 25 miles east of Poughkeepsie, NY and five miles west of Sharon, CT. The site is approximately ½-mile southwest of the hamlet of Amenia and two miles north of the hamlet 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.

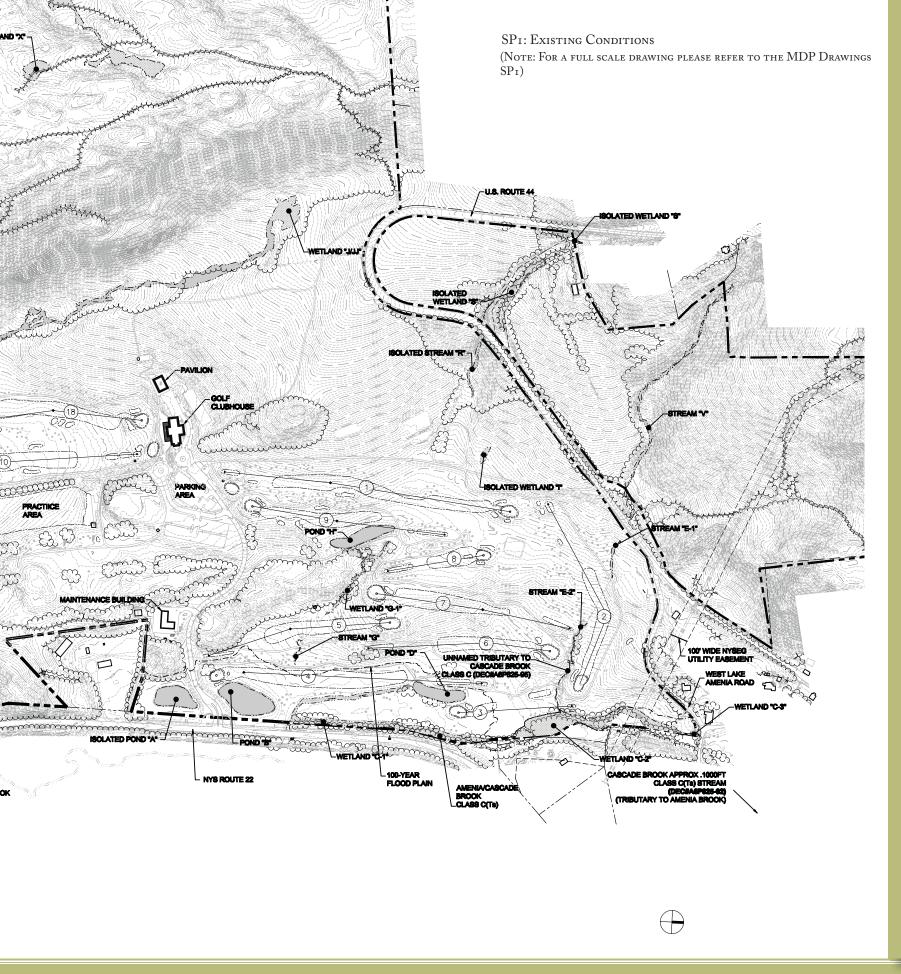
Approximately 170 acres of the project site consists of the Silo Ridge Country Club, an 18-hole golf course and clubhouse with associated amenities. The project area also includes approximately 47± acres of ponds, streams, and wetlands and 12± acres of roads, buildings, and other paved surfaces. A 2.2-acre 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.

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. 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" is forested, particularly in the western portion of the site.

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 it associated amenities, which include a clubhouse and banquet facilities. The recreational facilities, including the golf course, encompass approximately 135 acres of the 670±-acre parcel. 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.

The project site has varying topography, with slopes ranging from almost 100% to nearly flat. Approximately 58% of the project area has slopes greater than o equal to 15%.





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 the 100-year flood plain. All other areas of the project site appear to be outside of the 100-year flood plain.

According to the Wetland Delineation Report prepared for the proposed project, there are eight streams on the project site, two of which are perennial (flow year-round) and six 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. 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 12 wetlands located throughout the project site, totaling approximately 36 acres.

The project site currently obtains water from a combination of sources. The existing clubhouse is served by a water supply system consisting of an on site groundwater supply well, water treatment equipment, and finished water storage. 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 on site and distributed via a network of underground piping to irrigation sprinklers. The irrigation pond is fed by a natural spring source, a small on site stream, and by storm water runoff from the site.

The existing sanitary wastewater system consists of an on site 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.

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 westbound 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. U.S. Route 44 bisects the project site in the northern portion of the property.

Note: See Appendix F for Soils and Geology

## Conservation Analysis Summary

Starting at Route 22 and moving from east to west, one encounters large wetlands and water courses punctuated by steep, wooded, rocky hills. Continuing west, there is a relatively level but undulating plain interrupted by a few steep and wooded hills, and natural and manmade water bodies, crossed by water courses, that emanate from the steep slopes further west. The existing golf course and Clubhouse have been developed on 170 acres of this plain. To the west of the golf course is the toe of a steep continuous slope that rises approximately 420 feet in elevation. The land levels off at the ridgeline of this slope and begins to undulate to the west, where vernal pools are evident in the spring.

The entire upland area of steep slopes and upper level land consists of approximately 230 acres of un-fragmented forest land.

Standing on the existing golf course and looking north, a tall grassland rises somewhat uniformly towards the hairpin turn on Route 44. The land within the hairpin turn affords a spectacular scenic vantage point from which to view the valley and folding hills to the south; and across the Hamlet to the Berkshires in the east.

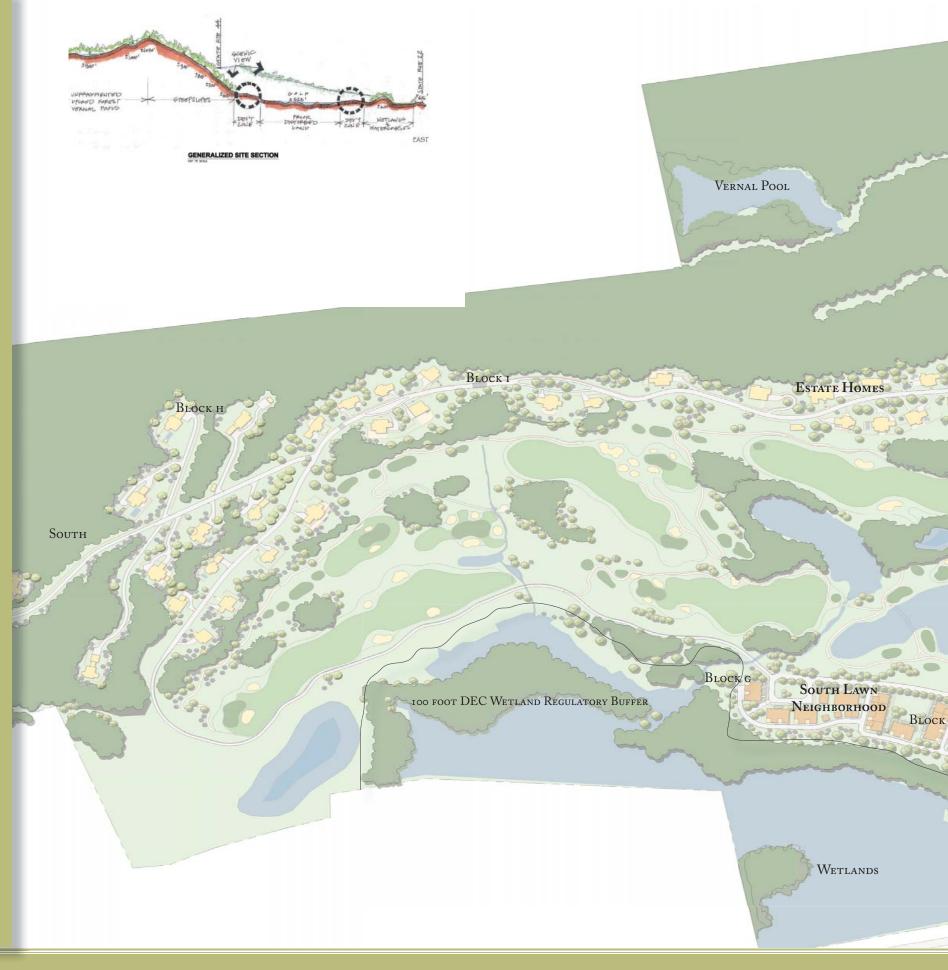
On the extreme northeast portion of the site, just south of West Lake Amenia Road between Route 22 and Route 44, a cultural resource site containing historic/modern artifacts.

#### Planning and Design Considerations

The most logical location for the championship course expansion was to develop it in the same general location as the existing course. The hotel, residential and commercial components of the project were then placed along the edges of the golf course between the wetland complex and the steep slope complex, and behind and around the intervening wooded hills that separate the golf-course's front 9 from the back 9. The intent of this approach is to protect by avoidance, the major contiguous portions of the wetland/water course and steep slopes/un-fragmented forest complexes, and to use the existing natural topography and vegetation as a screen/buffer to reduce the visual affect of the development from the hairpin turn vantage point. The archaeological site to the north is also avoided.

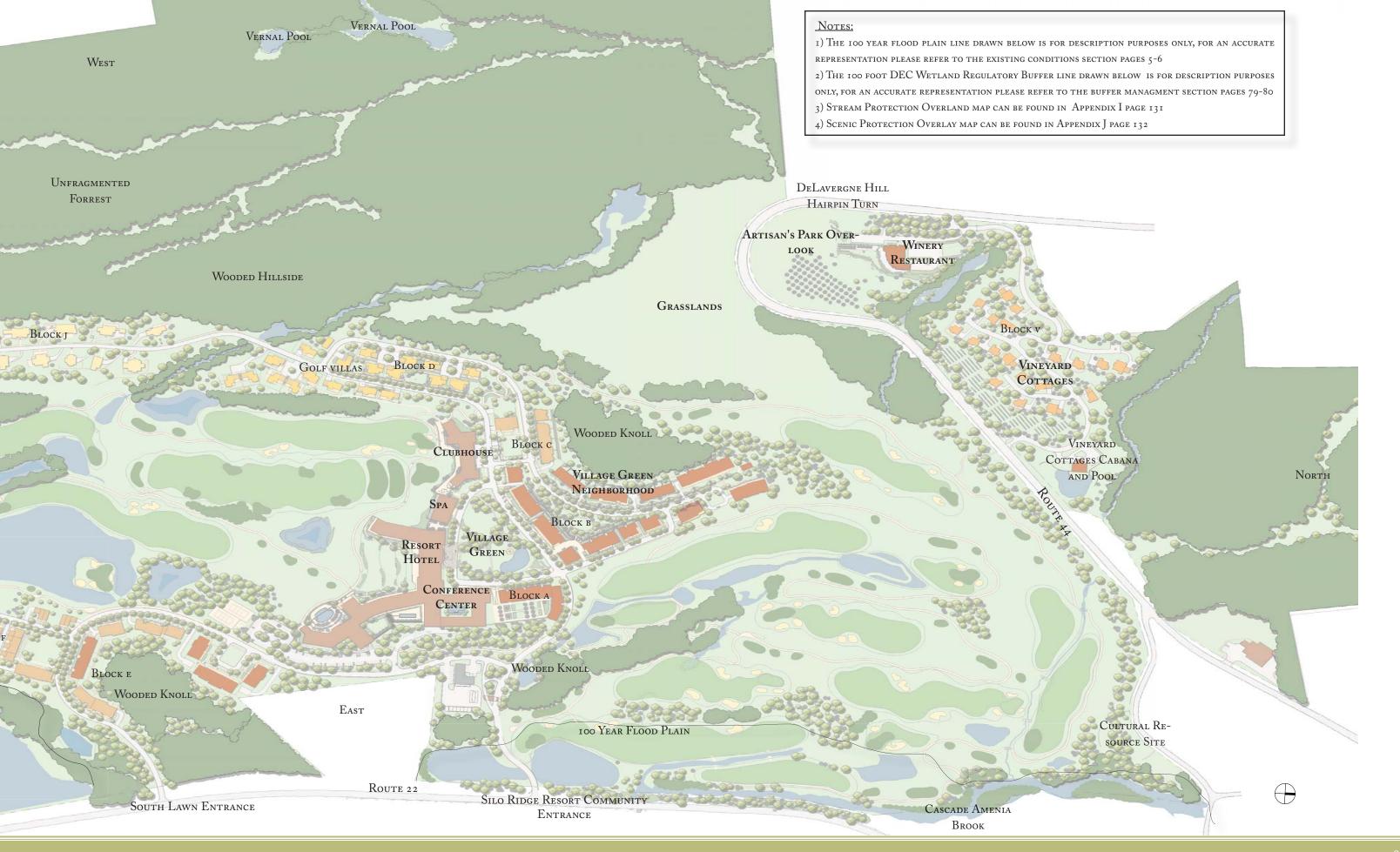
The final architectural plan responds to this conceptual arrangement with the following strategies:

- 1. Taller buildings are located where there is the greatest visual buffer; roads and development are aligned along edge conditions between wooded areas and open land to allow backdrop and shadowing for structures;
- 2. Site specific building types are developed that respond to topographic conditions;
- 3. Articulated building masses, facades, roof lines and fenestration are contextual and in scale; and
- 4. The color and materials palette are selected to integrate and harmonize with the natural conditions of the site.



SILO RIDGE

MILLBROOK VENTURES







The Welcome House

# PLANNING THE RESORT DESIGN GOALS

#### Village Green at the Center

Silo Ridge is designed with a relatively dense center of buildings focused on a village green, with neighboring residential groups clustered along hillsides to preserve views and open space. The architecture around the Village Green will take its cues from other nearby Hudson Valley towns, with buildings designed in a variety of vernacular styles. The resort hotel will anchor the green, but surrounding residential buildings with their small retail spaces will play a strong supporting role.

Characteristic details will include sloped roofs with simple overall shapes; painted clapboard or wood shingled walls with contrasting trim; projecting cornices, eaves, towers and dormers; porches and balconies; large storefront windows and projecting painted retail signs. Colors will range from white to cream to more saturated colors such as ochre and blue, and a range of accompanying trim colors. The variety of building sizes, colors and details will create the effect of a village that has developed over time.

#### Gentle Transition, Village to Country

Beyond the Village Green Neighborhood, homes and townhomes will share casual green courts in clusters that will become less dense the further they are from the center. In contrast to buildings along the Village Green, the colors of these buildings will be earth toned, and some will be clad in naturally aged cedar shingles in order to blend with the surrounding landscape. The landscape will also become less formal, with trees, flowering shrubs, and groundcover to complement the street trees. Site lighting will be minimal.

At the furthest distance from the Village Green Neighborhood, larger homes will occupy larger lots, with coverage minimized to lessen the impact on existing trees and topography. These homes will be required to be covered in naturally aged cedar shingles, with painted wood trim and stone foundations. Plantings will emphasize native species. There will be no site lighting in these areas.

#### Defined Neighborhoods

Neighborhoods will be organized around greens and squares, pedestrian oriented thoroughfares within a block, and shared entry courts for homes and villas. These shared spaces will bolster neighborhood identity, clearly mark important addresses, and provide landmarks for way-finding. The plan proposes a wide variety of building sizes, shapes and uses that will work together to create diversity in the spirit of places that have evolved over time.

Each neighborhood will offer a unique character differentiated by signage details, paving, and wall materials. Plantings in each neighborhood will help integrate development into the surrounding natural landscape.

#### Respect for the Natural Landscape

Along the hillsides beyond the Village Green, building forms will be suited to the topography to blend with this rural setting. Homes will be appropriately sited on the rolling wooded landscape to minimize disturbance to the natural grade. Streets and roadways are designed to maximize views of the landscape and to rest comfortably on the topography. Forested portions of the site, among this valley's greatest assets, will be preserved. The plan calls primarily for native tree and shrub species. Planting will be a crucial component of the integration of buildings into the surrounding countryside; it will also be used to screen and protect sensitive view corridors.

All buildings in Silo Ridge will employ a variety of roof dormers to provide fenestration for attic floors. With roofs occupied, buildings sit lower to the ground, blending better with the natural landscape.

#### Traditional Neighborhoods

The Traditional Neighborhood Design (TND) approach was utilized for the resort and this creates a pedestrian friendly environment by concentrating approximately 64% of the proposed residential units and all 300 hotel units within ¼ mile radius of the resort core Village Green, which facilitates and encourages comfortable pedestrian travel between the various resort components and amenities. In addition to the residential units and hotel, this resort core area also includes the spa, dining facilities, retail uses, below-ground parking, the Clubhouse and pro-shop, and banquet/conference facilities. The MDP also incorporates mixed use buildings and small-scale ground floor retail uses with residential uses on the upper floors and emphasizes the use of spaces such as greens and courtyards to unify the development and foster interaction among people. These elements of the project's design contribute to a sense of place and vitality, which are key elements of a traditional neighborhood concept.

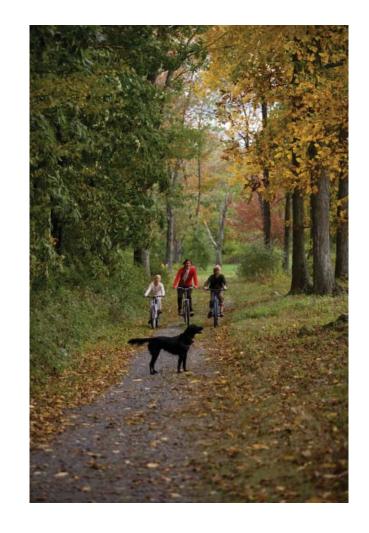
Along with the residences in the resort core, additional attached residences are located a short walk away southeast of the resort core in the South Lawn neighborhood adjacent to the Island Green Pond. These homes are located between the golf course to the west and the treed knolls and wetlands to the east. Building massing of these South Lawn residences gradually decreases to the south, indicative of a typical neighborhood further from the core of a village. Detached Golf Villas are located west of the clubhouse and 18th hole fairway, single family Estate Homes are located on a meandering country road along the western edge of the golf course and detached Vineyard Cottages are located north of Route 44 to the east of the Winery Restaurant and Artisan's Park Overlook. The artisan's Park Overlook is intended to serve as a tourist destination and afford an opportunity for visitors of the region to enjoy the views from a safe location on DeLavergne Hill. The project is intended to be built and heavily marketed as a second-home, resort style community, where the majority of residential unit owners are expected to be part-time residents who occupy their homes on weekends or for short vacation stays.

The Championship Golf Course designed by Els Design will seek Audubon International's Silver Certification and will be an integral part of the community and neighborhoods. The MDP layout also proposes a system of sidewalks and golf cart paths throughout the site to connect all major components of the development. The walks and paths will be separated from the street by planting strips and planting areas, and will follow the street alignment in some places and deviate from it in other locations to adjust to natural vegetation and topography. Street trees will be provided as needed to create shade and visual interest to the streetscape.















#### Commercial Component Descriptions Hotel, Spa, Retail and Amenities

The 475,000 square foot condominium-hotel is proposed on the south side of the Village Green and is one of the key components of the Resort Core Area. The hotel-condominium includes a 150 seat restaurant, 30 seat café, bar/lounge, 300 seat banquet facilities and 145 seat conference space. Access will also be provided to the spa and fitness facilities through the hotel. The hotel building is proposed to be four stories from the front (north side) and five stories from the golf course (south side), with the top floor contained entirely within the roof. The ground level of the hotel-condominium will contain the lobby, lounge, gift shop and service areas. The upper levels will contain the hotel units. The level below the lobby houses the restaurant, banquet space, and conference rooms, as well as the kitchen and additional service areas. This level opens up to ground level on the south side of the building with views of the golf course. The lower level of the hotel-condominium contains service areas as well as the fitness center and an indoor pool.

Pursuant to section 121-74 of the Amenia Zoning Law, hotel-condominiums are limited to transient occupancy and part-time residences. "Transient occupancy' means that the unit can not be occupied by any occupant for more than 48 days in any calendar year nor more than 15 contiguous days. "Part-time residences' means that the unit can not be occupied by any occupant for more than 120 days in any calendar year nor more than 30 contiguous days.

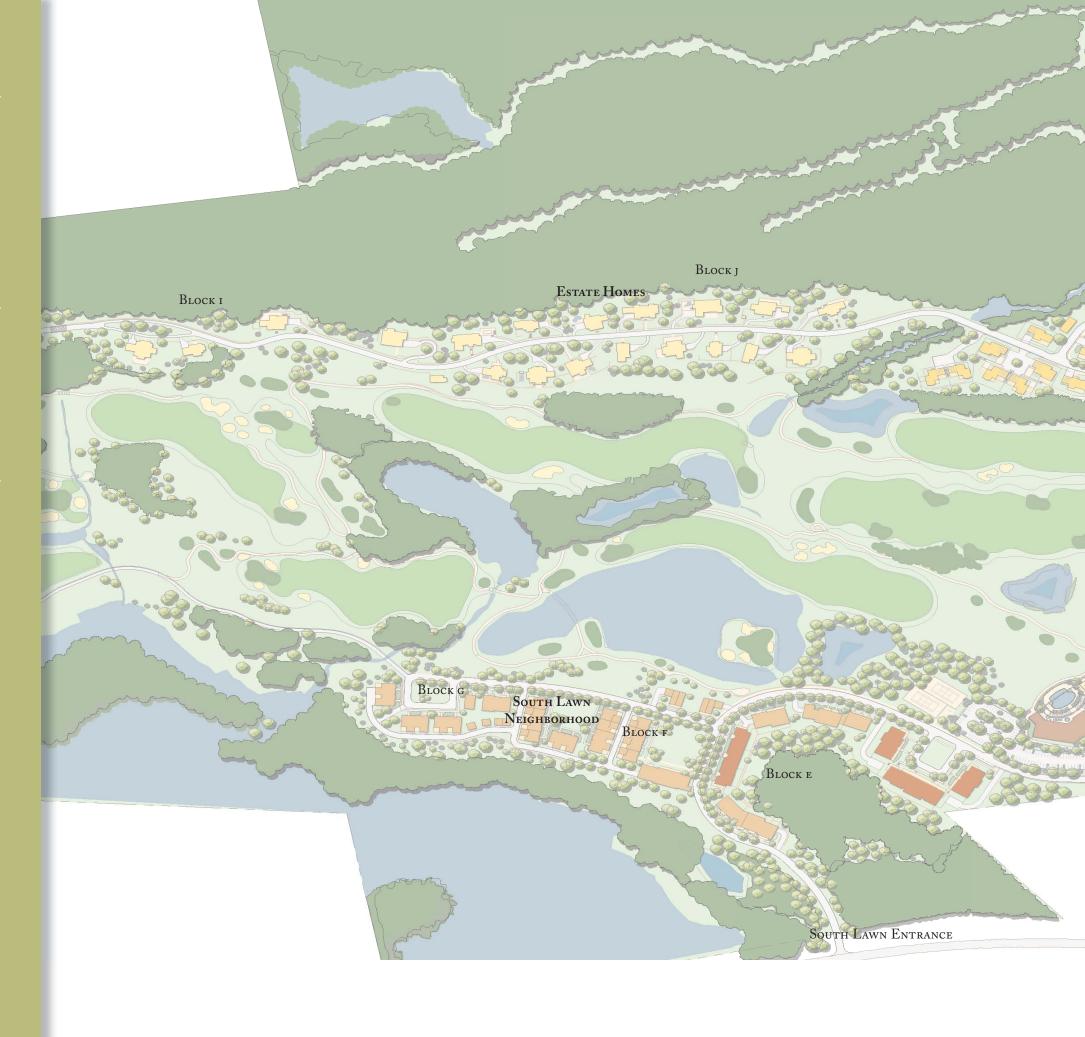
Small-scale retail uses totaling 26,127 square feet are proposed in the vicinity of the Village Green in buildings CR-1, CR-2, CR-17, spa products shop, hotel gift shop, and Clubhouse pro shop. Buildings CR-1, Cr-2 and CR-17 have residential units on the upper floors

The 46,000 square foot spa facility is located adjacent to the hotel-condominium on the east side of the Village Green center. The spa operator will have the discretion to limit use of the spa to hotel guests and residents of the Silo Ridge Resort Community.

A separate amenities building (the "cabana") is proposed for the vineyard cottage residential units north of Route 44. This building will house restrooms and changing areas and will provide access to a pool.

#### Clubhouse

The existing Clubhouse will be demolished and a new 29,000 square food clubhouse will be constructed at the same approximate location, just slightly south of the existing building's footprint. The uses proposed for the new clubhouse are generally the same as those presently in operation in the clubhouse and include an, 80 seat private dining area, 40 seat bar/lounge, private locker rooms and restroom facilities. A 4,000 square foot golf pro shop will be located in the Village Green and will include facilities for hotel guests on the lower level. The clubhouse will be for residents and club members only, and will include a 7,000 square feet of golf cart storage. Access to the golf course and driving range will be severely restricted from its current availability to Town residents, both in terms of limited tee times and in terms of increased greens fees





#### Winery Restaurant

Winery Restaurant: An 80 seat winery themed, old world style restaurant (5,000 square feet) and outdoor patio, complete with an extensive wine cellar on the lower level, will be developed approximately 530' north of the hairpin turn or Route 44. An orchard and/or decorative grapes are expected to be part of the landscape features in this section of the project north of Route 44 in keeping with the vineyards and agricultural nature of the region. The restaurant will look to source fine food locally and promote tourism for the region.

#### An Artisan's Park Overlook

The Artisan's Park Overlook is located just south of the Winery Restaurant. This overlook is intended to serve as an additional tourist destination in Amenia and a safe place from which visitors can enjoy the views over the golf course and down through the valley. Parking for this overlook is at the Winery Restaurant and a path will allow for a short walk to the overlook. Benches and perennial flowers are expected to be placed in the overlook area.

#### Welcome House

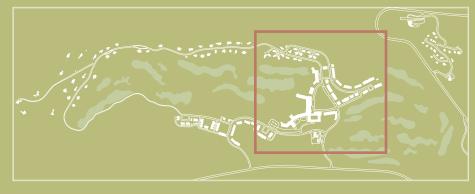
The primary purpose of the Welcome House will be for resort personnel to greet visitors, provide directions or instructions to visitors and identify persons entering the Property and their intended destination(s). It will not be necessary to be a guest of the hotel, resort or golf course to enter the Property, however, non-guest access to the resort is restricted to the village green, retail shops and hotel restaurants or any other amenity offered by the resort operator to non-guests during operating hours. Similarly, it will not be necessary to be on a pre-approved list to enter the Property. Resort operator personnel shall have the authority to grant or deny access if resort personnel determine that a situation requiring immediate investigation or intervention by resort security or law enforcement authorities exists. Moreover, resort operator personnel shall have the authority to deny access and to remove persons who are not visiting areas open to the general public during established business hours, who have been previously disruptive to other people visiting the resort and to the operation of the resort, and who have misrepresented their stated intent or purpose for visiting the resort. However, there shall be no arbitrary denial of access to the areas open to the general public. No admission or entry fee may be charged as a condition of allowing vehicles, bicycles, or pedestrians to enter the Property unless there is a special event, such as a golf tournament.

# VILLAGE GREEN NEIGHBORHOOD

From the village entry, Main Street will guide residents and visitors to the Village Green. In the manner of many New England towns, the center of Silo Ridge is focused upon an informal green. Anchored along its south side by the resort hotel, curving paths wind through the Village Green, lined with mixed shade trees and smaller ornamental trees, defining spaces for organized events, active play, or passive enjoyment of the surroundings. A pond which can be used for skating in the winter presents a lively active introduction to the Village. Along Main Street, which will be lined with trees and lighted with traditional, pedestrian-scale pole lights, visitors will encounter a small assortment of resort shops, concierge services and cafes. Residences above the retail will help maintain the lively setting.

Three streets will organize the Village Green Neighborhood: Main Street, Upper Drive, and Green Street. The Village Green, Upper Green and Middle Greens create opportunities for passive recreation and views. A mix of rolling topography, level areas for small get-togethers, and ornamental plantings make these spaces inviting gathering points for neighbors and visitors. Residences not facing one of the three greens will face the surrounding golf course.

All buildings and roads in the Village Green Neighborhood take advantage of the existing topography in a manner consistent with charming towns and villages nearby Roadways have been designed to allow both pedestrians and motorists safe access to the golf course and views beyond.



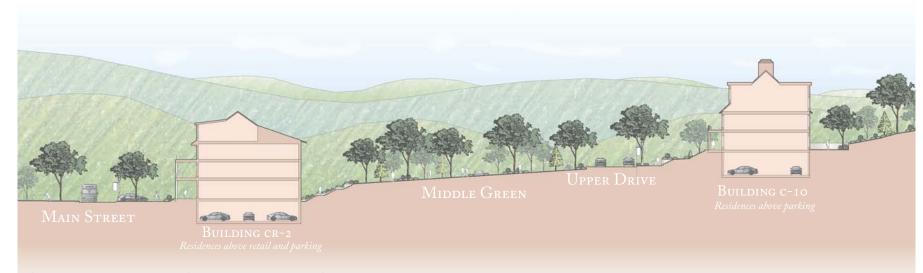
Vrs. Dr. vs.

Project Key Plan





Section through Clubhouse and Upper Green demonstrates the dual level relationship of the Clubhouse to its entry along Main Street and to the golf course below. Club parking is concealed beneath the terraced edge of the Upper Green.



Section through Main Street and Middle Green demonstrates how buildings and roadways are layered with the landscape to complement the existing grade. Buildings along Upper Drive are elevated above the roadway with terraces, steps and stone walls.



#### Features Of The Village Green Neighborhood

THE VILLAGE GREEN will be the organizational and functional center of the Silo Resort Community, and will provide the primary address for all the major resort buildings. It features spaces for passive and active recreation, including meandering tree-lined paths and a skating pond.

THE MIDDLE GREEN will provide a sloped wooded buffer between the buildings along Main Street and Upper Drive. There is significant grade change between Main Street and Green Street, that will be negotiated by terraced gardens and planted slopes An elliptical clearing creates a destination point for gatherings in the Middle Green.

THE UPPER GREEN will be a small park located on one of the highest points in the Village Green Neighborhood, just to the west of the Village Green. It will serve as the primary address of the Clubhouse and will link Main Street with Upper Drive Two and three story residential buildings will define the green on its sloping sides and its uphill side. The Upper Green will accommodate a below-grade parking garage which will provide concealed parking for the Clubhouse. A significant grade change from north to south is accommodated by a series of low seat walls with sloping lawns between. The landscape of the Upper Green is left quite open to the panoramic views to the south.

MAIN STREET will be lined with buildings of varying architectural character. These buildings, which will include at street level small resort-oriented shops and cafes, wil convey the feel of a small Hudson Valley town. Buildings along Main Street wil be generally clapboard, stucco and shingled, and painted mostly in light colors with darker trim. These buildings will be more colorful, and will show greater stylistic and material diversity than buildings farther out from the green, which will tend toward earthier tones in order to blend more closely to the landscape and to each other. The streetscape will incorporate paving materials such as brick and stone, tree planting, and shrubs to create comfortable spaces both to move through and to linger in.

GREEN STREET lines the south and east sides of the Village Green, and conveys visitors to and from the resort hotel. As it ascends northward along the golf course, its buildings transition from a village character to a more rural character.

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#### The Village Green Neighborhood Details

Block A: Located east of the Village Green contains building CR-1 with retail shops on the first floor with flats and duplexes on the upper floors over the retail.

Block B: Located north of the Village Green and surrounding the Middle Green contains Buildings CR-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-15, C-16, and CR-17. The CR designation is for retail on the first floor with residential units above. The C designation is for residential units comprised of flats and stacked duplexes. Parking for these units is located on the lower level

Block C: Located north of the Clubhouse and surrounding the Upper Green contains buildings C-12, C-13 and C-14. Parking for these units is located on the lower level.

#### Units Description

Retail: 1,693 +/- avg sf at first floor

Flats Type 1: 2 bedrooms standard flat with an average size of 1,548 sf

<u>Duplex Stacked Type 1</u>: 3 bedrooms duplex flat with an average size of 1,725 sf

Flats Type 2: 2 bedrooms standard flat with an average size of 1,572 sf

<u>TH Duplex Stacked Type 2</u>: 3 bedrooms duplex town home with an average size of 2,250 sf

TH 18.5: 3 bedrooms 18.5' wide town home with an average size of 2,287 sf

TH 22: 3 bedrooms 22' wide town home with an average size of 2,450 sf

# Unit Count By Block

Description	Building Key	Unit Quantity	Retail	Flats Type 1	Duplex Stacked Type 1	Flats Type 2	TH Duplex Stacked Type 2	TH 18.5	TH 22
Village Center East: Block A	CR-1	27	5	26	1				
		27	5	26	1	0	0	0	0
Village Center North: Block B	CR-2 C-3 C-4 C-5 C-6 C-7 C-8 C-9 C-10 C-11 C-15 C-16	2 14 7 6 8 12 18 8 8 8 6 12 12	2	11 7 4 8 8	2 3 2 4 4	6 12 12 4 4 4 6	1 6 4 4 4		1
		121	6	38	15	48	19	0	1
Village Center at Clubhouse: Block C	C-12 C-13 C-14	7 2 5						5	7 2
	<u> </u>	14	0	0	0	0	0	5	9

# MDP DETAIL

Description	Building Key	Building Footprint	Estimated Building SF	Estimated Building Height (ft): Mid-Point Highest	Estimated Bedrooms	Form of Ownership
Village Center East: Block A	CR-1	19,200 <b>19,200</b>	50,428 <b>50,428</b>	48	55 <b>55</b>	Condominium
Village Center North: Block B	CR-2 C-3 C-4 C-5 C-6 C-7 C-8 C-9 C-10 C-11 C-15 C-16	3,600 9,000 4,500 4,500 6,000 7,800 13,200 8,000 8,000 4,500 9,600 9,600	6,837 22,198 10,833 9,640 14,132 18,864 32,364 15,288 15,288 15,288 9,432 19,280 26,054 <b>215,498</b>	42 48 40 44 44 48 35 35 35 35 40 48	6 31 14 18 24 42 20 20 20 20 12 28 28	Condominium
Village Center at Clubhouse: Block C	C-12 C-13 C-14	7,700 1,980 4,625 <b>14,305</b>	17,150 4,900 11,435 <b>33,485</b>	35 35 35	21 6 15 <b>42</b>	Condominium Condominium Condominium

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# South Lawn Neighborhood

The South Lawn Neighborhood will be clustered along a series of public and semi-private greens which address the golf course while taking advantage of the site's topographical opportunities. The forms of these clusters are inspired by the small farmstead groupings of the region, as well as by garden city suburbs from the early twentieth century in the United States and Europe. The South Lawn Neighborhood as a whole has a distinctive character very much related to its proximity to the golf course, with each small collection of buildings and its associated open space forming a more intimate grouping within the whole.

Residences include townhomes, attached homes, duplexes, and stacked flats. All buildings will feature porches, lawns, and terraces, as well as rear and side-yard spaces. Some buildings include below-grade parking, while others back onto traditional alleys serving attached and detached garages. Most buildings vary in height from two to three stories, and a few buildings will rise to four stories. Like Silo Ridge as a whole, occupied roofs in the South Lawn Neighborhood keep building masses lower to the ground. Dormer windows in a variety of configurations provide interest and soften roof profiles. Eaves and overhangs create shadow, interest, and detail.

The identity of each townhome and attached home is balanced with the identity of the building as a whole. Each unit has individual entries, porches, gardens, and/or terraces front and rear. End-units feature side-entries and side-porches, and are laid out to the advantage of their three exposures. Buildings are linked by stone walls and wood fences, and often incorporate a terrace level raised slightly above the level of the sidewalk.



KEY PLAN





#### Features of the South Lawn Neighborhood

SOUTH LAWN will be a sloping park with framed views to the golf course and to the mountainside beyond. Directly connected to townhome rows along two sides, it will be defined by South Lawn Drive to the north and South Lawn Lane to the west. As the organizational center of the neighborhood, it serves an important wayfinding purpose for visitors arriving from the Village Green Neighborhood and from Route 22.

SOUTH MEWS will be a low symmetrical grouping of wide, two-story townhomes around a shared pedestrian mews. Each townhome has front and rear gardens, golf views, and alley access.

SOUTH CLOSE is a low group of townhomes and attached homes clustered at the south end of the neighborhood. It is accessed from front via the South Close, and from rear via the alley system.

CRESCENT ROW will skirt the base of the wooded knoll, its townhomes curving along a course-front country lane. Buildings are raised above the roadway, and are tied together with small stone walls and garden terraces. These walls and plantings lend a unique character to the neighborhood. Parking is below-grade, which allows for rear gardens for each home and trail access to the wooded knoll above. Stone retaining walls carve out private spaces for each home at the base of the hill. The wooded knoll with its dense forest will be left undisturbed.

NORTH CLOSE will provide a formal terminus for the neighborhood, and is characterized by a grouping of prominent two to four story buildings fitted with single story and double-story condominiums. Its slightly larger scale will create a transition to the adjacent resort hotel and Village Green Neighborhood.



#### THE SOUTH LAWN NEIGHBORHOOD DETAILS

Block E: Located southeast of the hotel contains 7 residential buildings S-1 through S-7 with flats, duplexes and townhomes. Parking is on the lower level.

Block F: Located east of the Island Green Pond contains 7 residential townhome buildings S-8 through S-14. Parking is both on grade in attached garages and on the lower level.

Block G: Located east of the Island Green Pond contains 5 residential townhome buildings S-15 through S-19. Parking is both on grade in attached and detached garages.

#### Units Description

Flats Type 2: 2 bedrooms standard flat with an average size of 1,572 sf

<u>TH Duplex Stacked Type 2</u>: 3 bedrooms duplex town home with an average size of 2,250 sf

TH 18.5: 3 bedrooms 18.5' wide town home with an average size of 2,287 sf

TH 22: 3 bedrooms 22' wide town home with an average size of 2,450 sf

TH 24: 3 bedrooms 24' wide town home with an average size of 2,259 sf

TH 28: 3 bedrooms 28' wide town home with an average size of 2,300 sf

TH 32: 3 bedrooms 32' wide town home with an average size of 2,259 sf

TH 40: 3 bedrooms 40' wide town home with an average size of 2,608 sf

# Unit Count By Block

Description	Building Key	Unit Qty	Flats Type 2	TH Duplex Stacked Type 2	TH 18.5	TH 22	TH 24	TH 28	TH 32	TH 40
South Lawn Crescent: Block E	S-1	8	6	1		1				
	S-2	12	12							
	S-3	8	6	1		1				
	S-4	7					6	1		
	S-5	5						5		
	S-6	11		11						
	S-7	9			6		3			
		60	24	13	6	2	9	6	0	0
Courtle Louise Block F (40th 4s = )	0.0	0				4		0	4	
South Lawn: Block F (12th tee)	S-8	8				4		2	1	1
	S-9	2				2 2				
	S-10 S-11	2 4				2				4
	S-11 S-12	4								4
	S-12 S-13									4 2 4
	S-13 S-14	2 4								4
	3-14	4								4
		26	0	0	0	8	0	2	1	15
South Lawn: Block G (12th fairway)	S-15	4				2		2 1		
	S-16	1						1		
	S-17	2								2
	S-18	2								2 2
	S-19	2								2
		11	0	0	0	2	0	3	0	6

# MDP DETAIL

Description	Building Key	Building Footprint	Estimated Building SF	Estimated Building Height (ft): Mid-Point Highest Gable	Estimated Bedrooms	Form of Ownership
South Lawn Crescent: Block E	S-1	6,000	14,132	35	18	Condominium
	S-2	8,100	18,864	48	24	Condominium
	S-3	6,000	14,132	35	18	Condominium
	S-4	8,460	15,854	35	21	Condominium
	S-5	5,000	11,500	35	15	Condominium
	S-6	10,000	24,750	48	33	Condominium
	S-7	9,000	20,499	35	27	Condominium
		52,560	119,731		156	
South Lawn: Block F (12th tee)	S-8	7,500	19,267	35	24	Condominium
	S-9	1,980	4,900	35	6	Condominium
	S-10	1,980	4,900	35	6	Condominium
	S-11	6,400	10,432	24	12	Condominium
	S-12	6,400	10,432	24	12	Condominium
	S-13	3,200	5,216	24	6	Condominium
	S-14	6,400	10,432	24	12	Condominium
		33,860	65,579		78	
South Lawn: Block G (12th fairway)	S-15	4,500	9,500	35	12	Condominium
South Lawii. Block & (12th idirway)	S-15 S-16	1,260	2,300	24	3	Condominium
		,		24		
	S-17	3,200	5,216		6	Condominium
	S-18	3,200	5,216	24	6	Condominium
	S-19	3,200	5,216	24	6	Condominium
		15,360	27,448		33	

2 2

# Homes and cottages

Homes and cottages in Silo Ridge will be located in three areas: The Estate Homes skirt the base of the mountainside with views east towards the course and Amenia beyond; the Golf Villas are sited just to the west of the Clubhouse and resort hotel; and the Vineyard Cottages are sited adjacent to the winery, along the hillside north of Route 44.

Block D: Located west of the 18th hole contains the 19 Golf Villas (G-1 to G-19). Parking is in attached 2 car garages with many fronting shared courtyards.

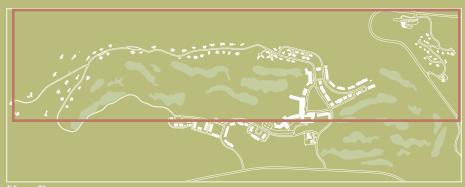
Block H: Located west of hole 13 contains 16 single family fee simple homes H-26 to H-41 on individual home sites. Parking is in attached or detached 2 car garages.

Block I: Located west of hole 15 contains 9 single family fee simple homes H-17 to H-25 on individual home sites. Parking is in attached or detached 2 car garages.

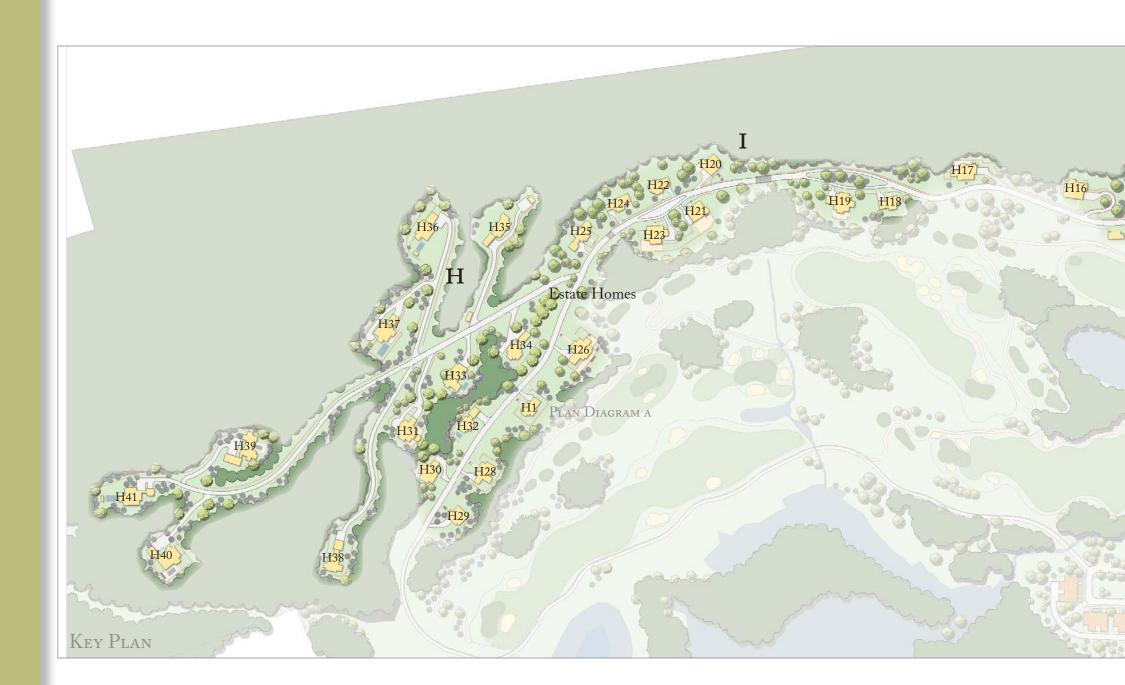
Block J: Located west of hole 17 contains 16 single family fee simple homes H-1 to H-16 on individual home sites. Parking is in attached or detached 2 car garages.

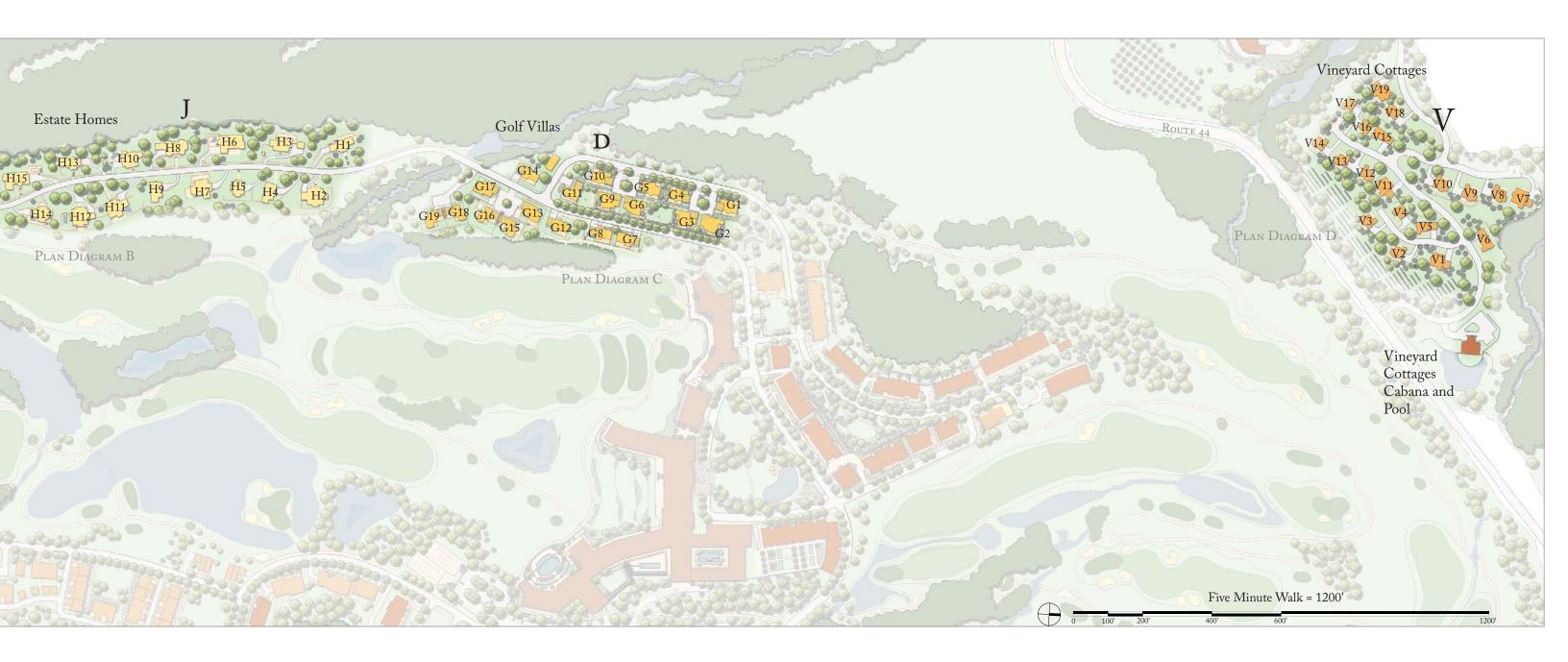
Block V: Located north of Route 44 contains 19 vineyard cottages V-1 to V-19. Parking is in 2 car attached or detached garages.

A separate amenities building (the "cabana") is proposed for the vineyard cottage residential units north of Route 44. This building will house restrooms and changing areas and will provide access to a pool.



Key Plai

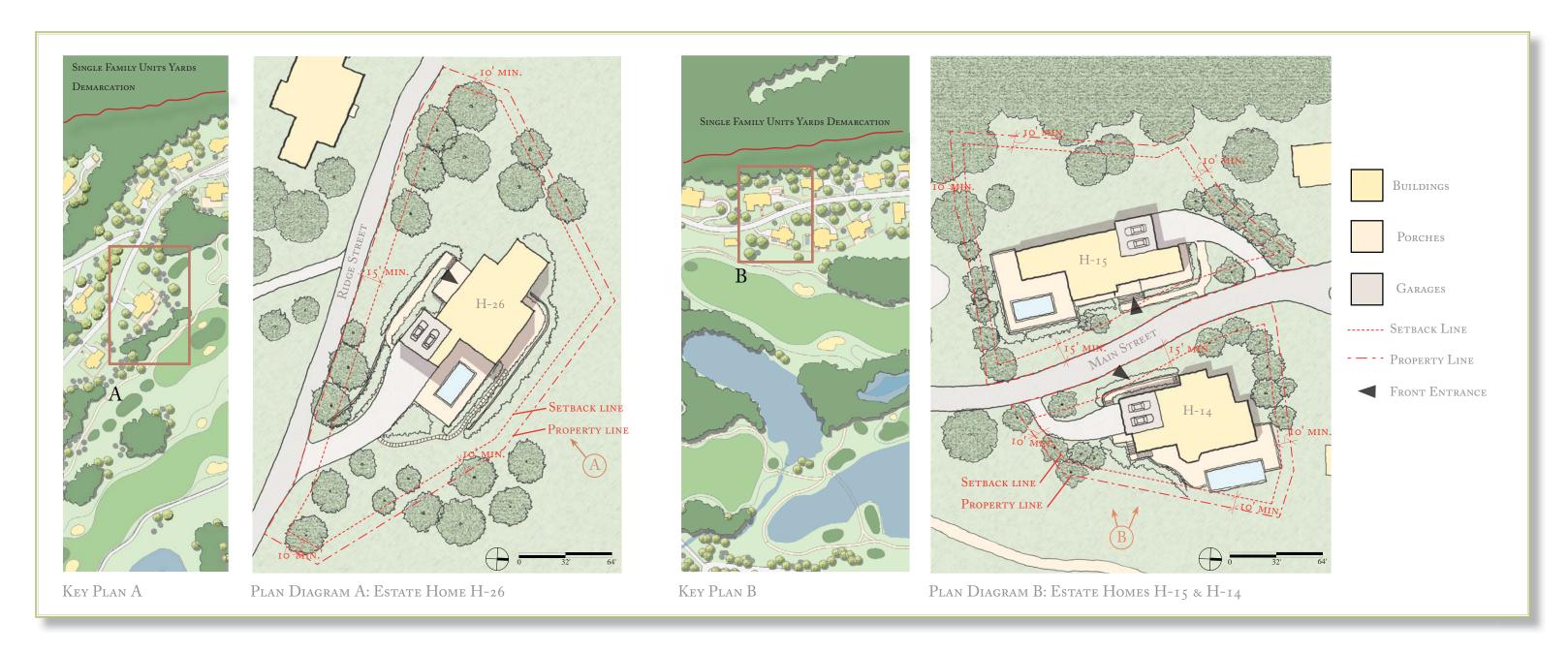




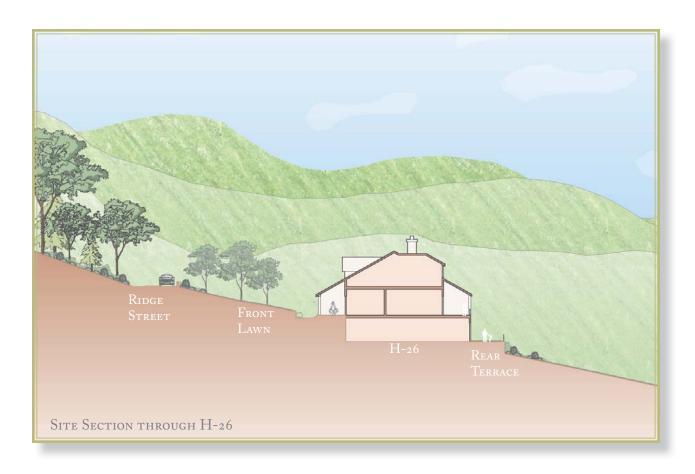
#### Estate Homes

ESTATE HOMES are sited along the base of the mountainside with views east towards the course, and Amenia beyond. These homes are designed to respect the existing topography and to blend into the rolling hillside, with minimal disturbance to the existing tree line. These homes are required to be covered in naturally aged cedar shingles with painted wood trim. Single family home sites that abut natural areas at the toe of the forested slope on the west side of the golf course will have the limits of the yards demarcated. (See Key Plan A, and B indicating where these demarcation will occur(red line)) The means and methods of this demarcation will be reviewed and approved by the Planning Board during Site Plan review. In the

area between the house and the demarcations, both native and non-native plants will be permitted. However all homeowners are restricted from using plants or groups of plants considered to be invasive or potentially invasive. The list of invasive or potentially invasive plants will be finalized by the Town's environmental consultants during Site Plan review.



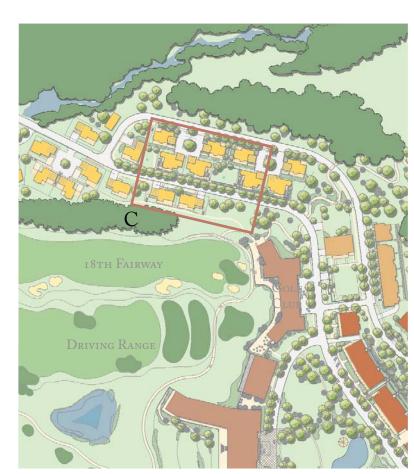
Description	Building Key	Unit Qty	Single family	Building Footprint Combined SF	Estimated Building Combined SF	Estimated Building Height (ft): Mid- Point Highest Gable	Estimated Bedrooms	Form of Ownership	Notes
Single Family Homes									
Block H (13th & 14th hole):	H-26 to H-41	16	16	48,000	75,200	35		Fee Simple	
Block I (15th and 16th hole):	H-17 to H-25	9	9	27,000	42,300	35		Fee Simple	
Block J (17th hole):	H-1 to H-16	16	16	48,000	75,200	35		Fee Simple	
		41	41	123,000	192,700		158		4,700 sf average



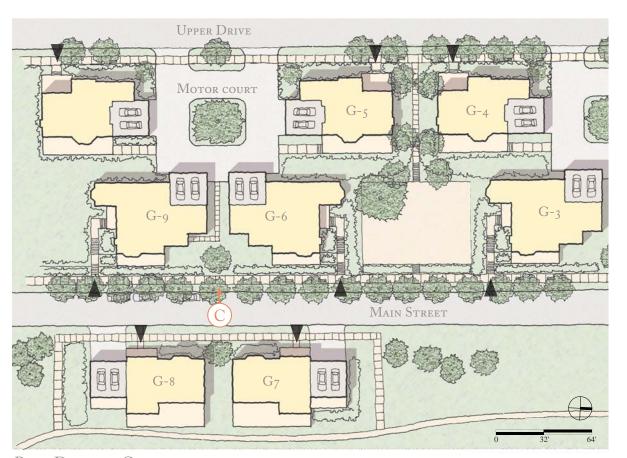


## GOLF VILLAS

GOLF VILLAS are located adjacent to the Clubhouse and face out over the eighteenth fairway. Most homes in this neighborhood have front entrances from Main Street or Upper Road. These homes will be set around an alternating arrangement of small gravel motor courts and shared gardens, which together provide parking access and open golf views to each home. The villas will be tied together via small garden walls and retaining walls, and are designed to step down with the grade.



PROJECT KEY PLAN C



Plan Diagram C

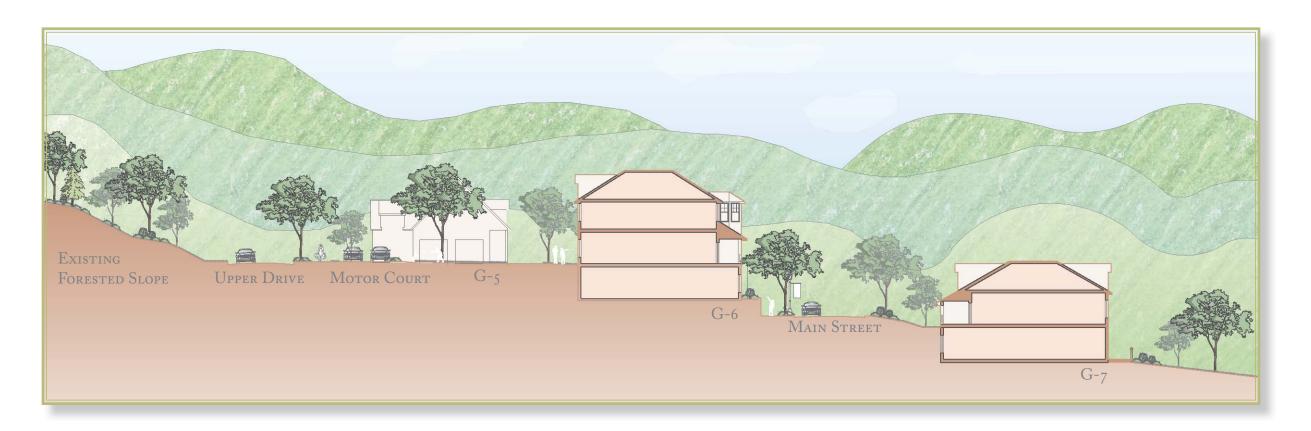
Buildings

Porches

Garages

Front Entrance

Description	Building Key and #	Unit Qty (not incl retail)	Golf Villas	Building Footprint Combined SF	Estimated Building Combined SF	Estimated Building Height (ft): Mid-Point Highest Gable	Estimated Bedrooms	Form of Ownership	Notes
Golf Villas: Block D	G-1 to G-19	19	19	47,025	58,900	35	57	Condominium	
		19	19	47,025	58,900		57		3,100 sf Average



# VINEYARD COTTAGES PLANNED BY LOONEY RICKS KISS, ARCHITECTS, INC.

VINEYARD COTTAGES are grouped within small enclaves allowing the vineyard to weave into the neighborhood. They have been sensitively placed in the topography to create privacy for the homes and their outdoor living spaces. They are designed as 1-1/2 story to 2-1/2 story single family homes in several configurations, accommodating upward and downward slopes. Each home will be sited so as to create minimal disruption of the existing grade, and clustered along the hillside in groupings, to preserve open space between them and to maintain a discreet, picturesque profile on the landscape.

Description	Building Key	Unit Qty (not incl retail)	Vineyard Cottages TH Detached		Building Footprint Combined SF	Estimated Building Combined SF	Estimated Building Height (ft): Mid- Point Highest Gable	Estimated Redrooms	Form of Ownership	Notes
Vineyard Cottages: Block V	V-1 to V-19	19	19		33,250	51,300	28	57	Condominium	
		19	19		33,250	51,300		57		2,700 sf Average



#### Silo Ridge Resort Community MDP Bulk Design Standards

						Building Setba	cks		Landscape Bu	ffers (minimum)			
Permitted Use	Maximum Permitted Units/Keys (Note K)	Minimum Lot Area (SF)	Minimum Lot Width (ft)	Maximum Lot Coverage (%) (Note H)	Front (ft) (Notes C, D)	Rear Standard/Alley (ft) (Note E)	Side/Combined (ft) Note F)	Minimum Distance to Centerline Fairway (ft)	Interior SRRC Roads (ft) (Note J)	Exterior (RT 44, RT 22, Cascade Amenia Road) (ft) (Note J)		Maximum Building Height (ft): Mid-Point Highest Gable	Bedrooms (Note M)
Hotel (Notes A, B)	300 units w/ 67 lockoffs equals 367 keys	NA	NA	NA	8	20	0	NA	5	100	477	70	437
Spa (Note B)	NA	NA	NA	NA	8	100	0	NA	5	100	37	52	NA
Conference/Banquet (Notes B)	NA	NA	NA	NA	8	20	0	NA	5	100	60	36	NA
Club House	NA	NA	NA	NA	8	20	40	NA	5	100	100	42	NA
Winery Restaurant (G)	NA	NA	NA	NA	140	245	538	NA	5	100	30	28	NA
Retail in 1st floor on Main Street	NA	NA	NA	NA	12	20	12	NA	5	100	31	NA	NA
Welcome House	NA	NA	NA	NA	8	20	0	NA	0	100	0	25	NA
Maintenance	NA	NA	NA	NA	20	20	20	NA	5	100	24	35	NA
Wastewater Treatment Plant	NA	NA	NA	NA	70	70	70	NA	NA	30	4	31	NA
Employee Parking Area	NA	NA	NA	NA	NA	NA	NA	180	5	100	120	NA	NA
Residential													
Single Family (Fee Simple) Category 1: < 15,500 and ≥ 23,000	12	15,500	120	45%	15	10	20	150 (I)	15	100	48	35	158
Single Family (Fee Simple) Category 2: < 23,000 and ≥33,000	21	23,001	120	38%	15	10	20	150 (I)	15	100	84	35	Incl in abov
Single Family (Fee Simple) Category 3: < 33,000	8	33,001	120	32%	15	10	20	150 (I)	15	100	32	35	Incl in abov
Golf Villas (Condominium)	19	NA	NA	NA	15	10	10	150	5	100	57	35	57
Vineyard Cottages (Condominium)	19	NA	NA	NA	15	10	6	NA	5	100	38	28	57
Multi-Family	259	NA	NA	NA	12	5	6	150	5	100	527	48	635
Total	638										1,668		1,344

#### Notes:

- A Hotel front setback is 8' at front entry curb inset
- B Hotel, banquet and spa side setback is 0' due to spa/hotel/banquet connection
- C Setbacks do not include porte cochere(s) for any building
- D Front setbacks are measured from face of curb/road edge to face of building/porch face not including protruding steps.
- E Rear Standard/Alley setbacks are measured from face of building to closest building if applicable or face of curb for road/alley. Rear setbacks do not include patios/retaining walls/steps. Single Family rear setback is property line to structure.
- F Side Combined setbacks are measured from face of building to face of next closest building or to face of curb/road edge. Side setbacks do not include patios/retaining walls/steps. For Single Family the dimension is both side yards combined with 10' minimum for each property. WWTP is to property line.
- G All winery restaurant setbacks are to Route 44: Front to the west, side to the south, rear to the east. The south measurement is to the furthest point out on the arc of the curve.
- H Maximum Lot Coverage is computed as the total amount of impervious surface on the lot divided by the total lot area. Impervious surfaces are as defined in Zoning Law adopted July 2007.
- I Single family minimum distance to centerline of fairway generally exceeds 150' however there may be several instances closer to tee boxes that are less than 150'. Measured from face of building to centerline of fairway.
- Interior landscape bufffers are measured from face of curb or road edge to face of building. Exterior landscape buffers will be interupted in certain instances by sidewalks, drives and roads. WWTP exterior buffer is depth of island at access.
- K Unit count matches MDP submitted 4-3-08
- L Provided Parking matches MDP submitted 4-3-08
- M Bedroom Count matches MDP submitted 4-3-08. The Single Family bedroom count is not broken down by lot size.





The Welcome House

# ARCHITECTURAL ELEVATIONS AND CHARACTER

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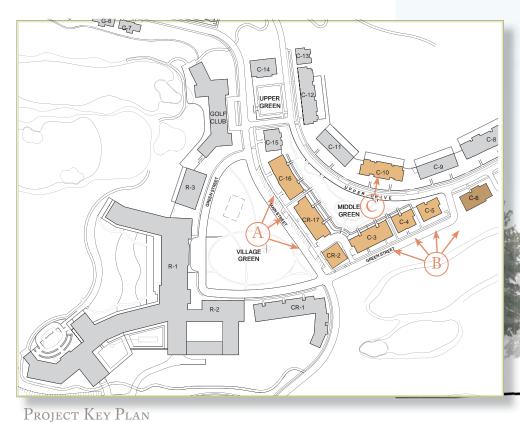
#### Architectural Elevations and Character

Village Green Residences and Shops	33
Hotel and Resort, Spa, Clubhouse, and Conference Center	37
South Lawn Residences	45
Homes and Cottages	47
Vinery Restaurant	51



Building C-16, Residences along Main Street

Building CR-17, Residences and Shops along Main Street



Building C-3, Residences along Green Street





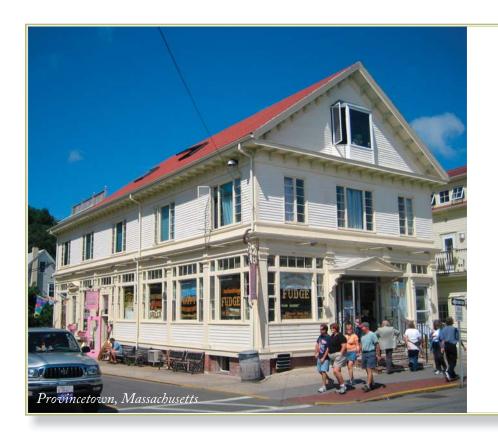
Building CR-2, Residences and Shops at the corner of Main Street and Green Street



Building C-10, Residences along Upper Drive



## VILLAGE GREEN NEIGHBORHOOD CHARACTER



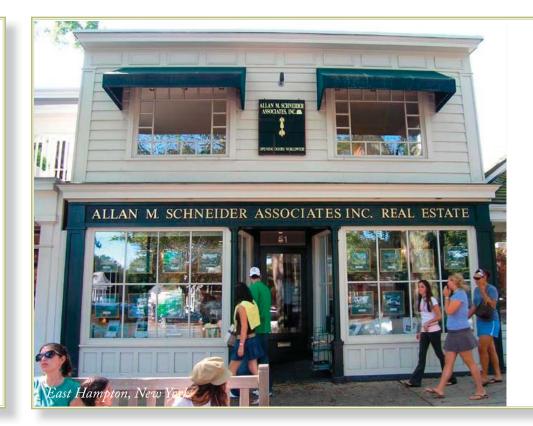
Sloped roof, simple overall massing.

Classical painted wood details at eaves and gables.

Large shop-front windows at the street level are surrounded by painted decorative wood trim.

Above the ground floor the building is residential in character.

Painted shingle or clapboard walls.



Recessed entrance with side windows creates diagonal views into the storefront displays.

Painted clapboard walls with classical wood details.

Large storefront windows surrounded by painted wood trim and integral window muntins.

Painted and carved retail sign externally illuminated if necessary.

Operable awnings are encouraged.

Sloped roof, simple overall massing.

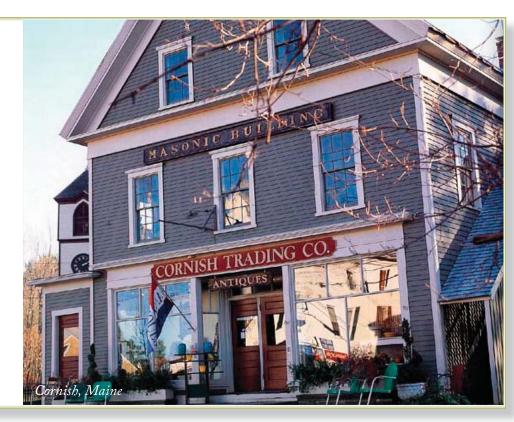
Projecting cornices and eaves.

Retail signs are sculpted and painted in a contrasting color.

Large shop-front windows surrounded by painted wood details dominate the street level.

Painted clapboard or wood-shingle walls.

Trim color contrasts with walls.



Asymmetrical towers and dormers.

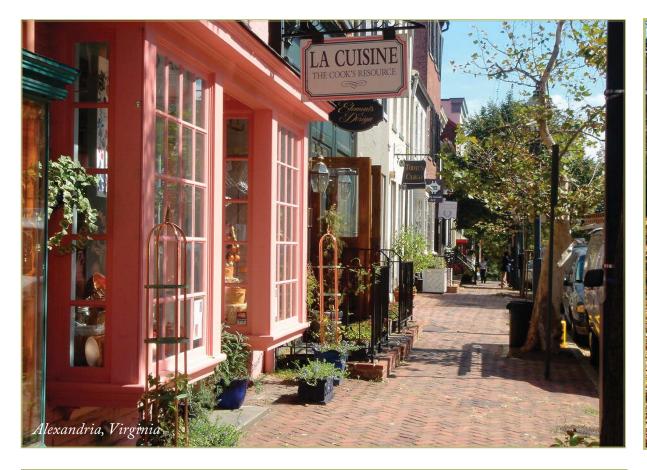
Ground level street front is dominated by large windows with painted frames and details.

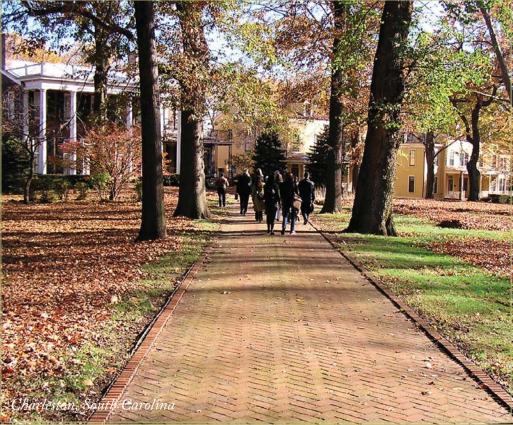
Painted clapboard walls with classical or Victorian detailing.

Dentils at eaves.

Painted and carved retail sign externally illuminated if necessary.













# Color Palette

These buildings will be faced in painted wood and occasionally in stucco, and colors will range from white to cream to more vibrant colors, creating the typical variety found in Hudson Valley towns.





Brown









CONTRASTING TRIM COLORS

















PAINTED SHINGLE, STUCCO AND CLAPBOARD COLORS



Dusty Green Dusty Blue













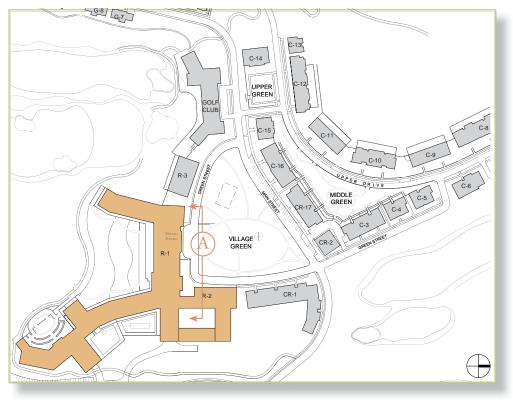






# RESORT HOTEL

THE RESORT HOTEL is the focus of the Village Green Neighborhood. A prominent clapboard building with a stone base, wood porches and colonnades, inset and projecting balconies, garden spaces and out-buildings, the hotel is massed as a collection of buildings that step down the hillside and provide a natural transition from the level of the Village Green to the level of the golf course below. The spa and conference center front the green adjacent to the hotel, and are designed as separate buildings with a different but complementary character. Site amenities include a family swimming pool; intimate courtyard gardens with flowering plants and reflecting pools, and curving lawn terraces that step down naturally to the golf course to the south. From Route 22, the hotel and spa will appear as a rambling collection of low buildings screened by trees and other landscape elements.



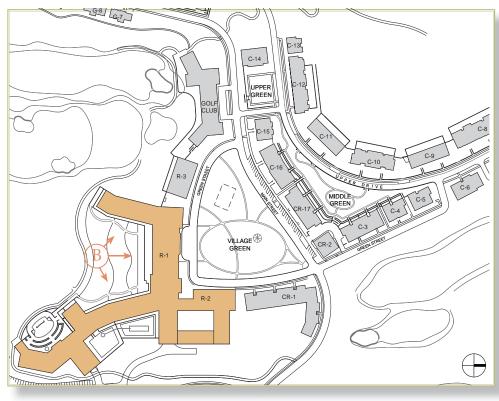
KEY PLAN



A: Resort Hotel North Elevation (Facing Village Green)



Hotel Entrance



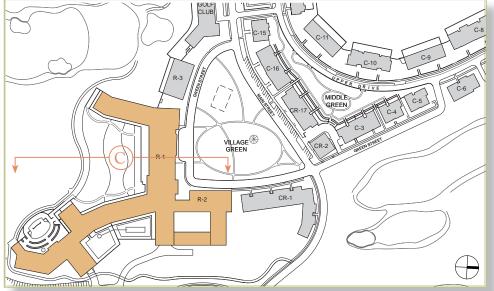
Key Plan



B: Resort Hotel South Elevation (Facing Golf)







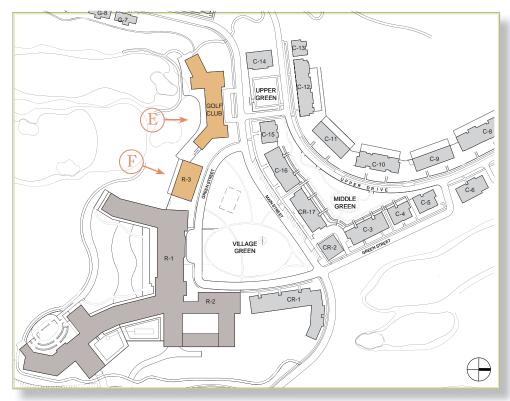


# Clubhouse and Conference Center

The Clubhouse will be a prominent Shingle Style building, one of the icons of the resort. Its entrance, set off by shade trees and ornamental shrubs, will front the Upper Green and command dramatic views to and from the golf course. The Club will negotiate the descending grade, using roof lines and gently sloping paths to move with the landscape. Careful detailing will play an important role in integrating the building with its surroundings. A terrace at the lower level of the building, adjacent to the course, will accommodate outdoor dining and golf carts.



E: Clubhouse South Elevation (Facing Golf)



KEY PLAN



F: Spa South Elevation (Facing Golf)

# RESORT HOTEL CHARACTER



Sloped roofs in brown or green shingles.

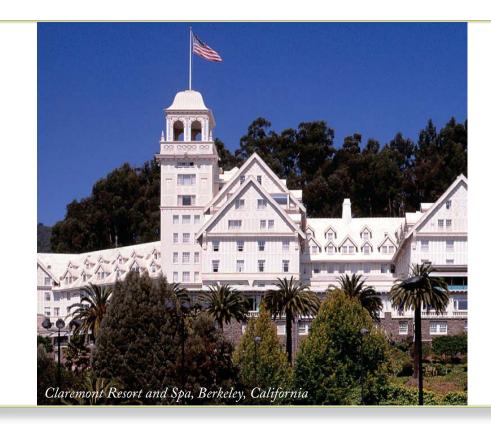
Gables and dormers break down building mass.

Differing window rhythms.

Simple double-hung windows dominate.

Complexity achieved with dormers, towers, porches, railings, chimneys and lattice.

A bright wall color, white or cream.



# RESORT HOTEL COLOR PALETTE



Brown, green or natural roof shingles



Cream or white clapboard



White trim

# CLUBHOUSE CHARACTER







# Clubhouse Color Palette



Brown, green or natural roof shingles



Cream or white clapboard

aream or wishe empount



White trim

## A: Elevations Around South Lawn Green

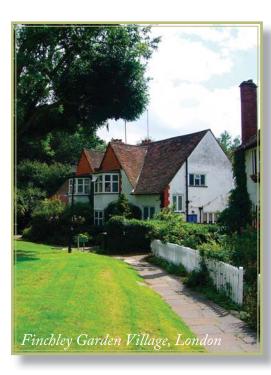


Building S-6, Stacked Townhomes

### RESIDENTIAL CHARACTER IMAGES





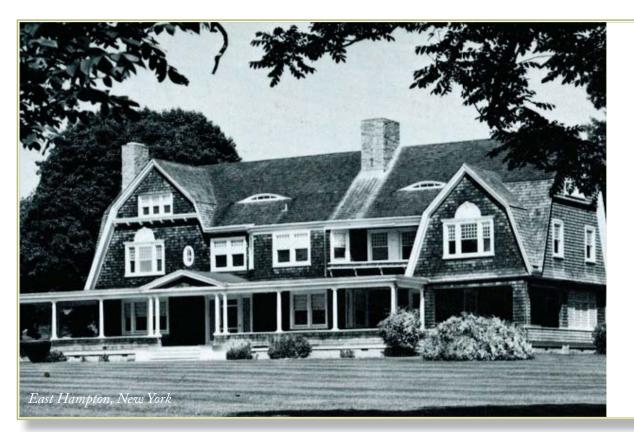


Project Key Plan





Building S-11, Attached Homes



Single gambrel roof dominates composition.

Gables break down scale of mass.

Dormers punctuate the roof.

Masonry chimneys.

White painted windows and wood trim.

Window use true muntins, or applied to both interior and exterior of window..

Double-hung windows dominate; specially shaped windows (ovals and Palladian groupings with arches) are used sparingly.

Naturally aged, machine-cut cedar shingles on roofs and walls.

# Color Palette

#### Roof Colors







BrownDark Green Natural Aged

#### Trim Colors









Painted Shingle and Clapboard Colors



White



Dark Red



Dark Green





# Homes and Cottages

## East Golf Villas Elevation:



Estate Homes Elevation:

Golf Villa G-10

Golf Villa G-9



Golf Villa G-5



Estate Home H-26



Estate Home H-15

Estate Home H-14



VINEYARD COTTAGE V-13

VINEYARD COTTAGE V-12

VINEYARD COTTAGE V-11

# Homes and Cottages Character



Single gable roof dominates composition.

Asymmetrical massing.

Covered porches.

Naturally aged cedar shingle and clapboard walls.

Cedar shingle roof.

Trim painted in one consistent color.

Half-round metal leaders with full-round metal downspouts.

Painted wood brackets.

Masonry chimney (brick or stone.)



Single gambrel roof dominates composition.

Shed and hipped dormers.

White painted piers define exterior covered porch.

Classical entablature at eave.

Naturally aged cedar shingles on roofs and walls.

White painted wood trim.

Window sashes painted dark green or black to contrast with white trim.

Single gable roof dominates composition.

Consistent use of double-hung windows with occasional special windows.

Decorative painted wood panels or shutters used to create window groupings.

Heavy shadow lines from projecting trim. Simple piers support classical entablature at porch.

All windows and trim painted the same color. Special shaped shingles distinguish different wall areas.



Single gambrel roof dominates composition.

Asymmetrical dormer composition.

Double-hung windows.

White painted window trim connects to white painted trim at eaves and tops of walls.

Classical columns and entablature at porch.

Masonry chimney (brick or stone.)



# COLOR PALETTE FOR PAINTED TRIM

Homes and Cottages will be clad in naturally aged cedar shingles, with trim color to be guided by the palette shown at right.



Dark Green

Cream



Dusty Blue



White

Dus

Dusty Green



## Winery Restaurant

#### Winery Restaurant

Winery Restaurant: An 80 seat winery themed, old world style restaurant (5,000 square feet) and outdoor patio, complete with an extensive wine cellar on the lower level, will be developed approximately 530' north of the hairpin turn on Route 44. An orchard and/or decorative grapes are expected to be part of the landscape features in this section of the project north of Route 44 in keeping with the vineyards and agricultural nature of the region. The restaurant will look to source fine food locally and promote tourism for the region.

#### An Artisan's Park Overlook

The Artisan's Park Overlook is located just south of the Winery Restaurant. This overlook is intended to serve as an additional tourist destination in Amenia and a safe place from which visitors can enjoy the views over the golf course and down through the valley. Parking for this overlook is at the Winery Restaurant and a path will allow for a short walk to the overlook. Benches and perennial flowers are expected to be placed in the overlook area.



NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION

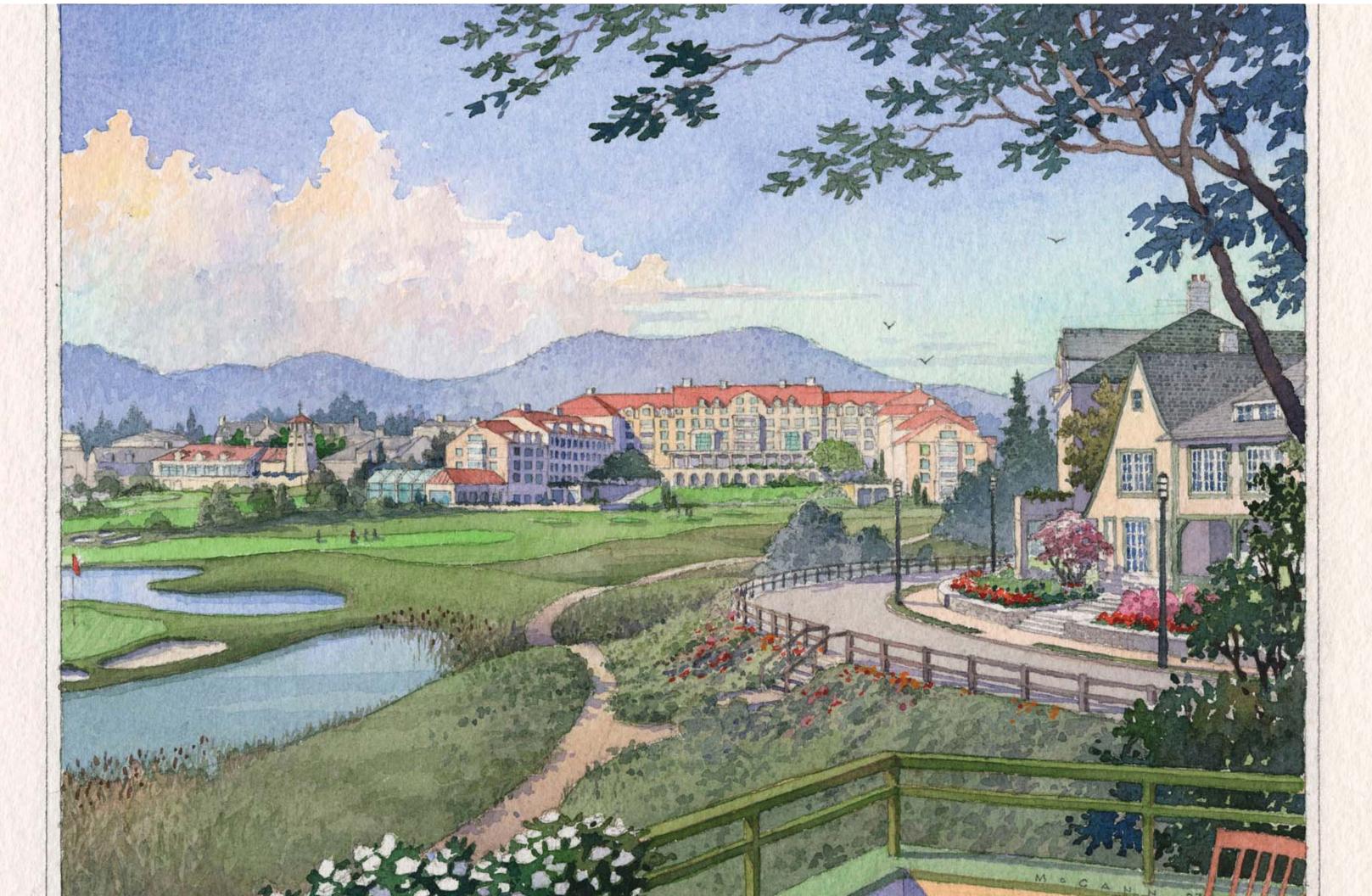


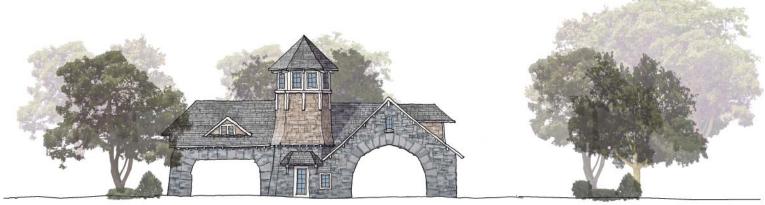
WEST ELEVATION











The Welcome House

# Landscape Character

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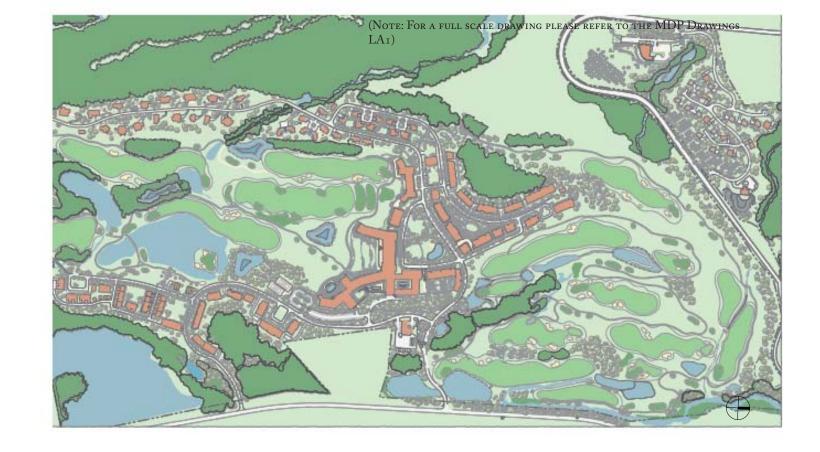
# Landscape Character

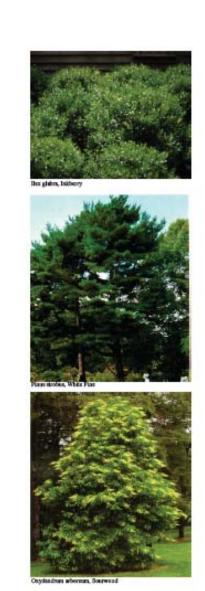
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#### Landscaping

The project proposes extensive landscaping with primarily native species to provide screening, buffering, visual interest, habitat, carbon reduction, erosion control, spatial definition, and shade and cooling to mitigate effects on conservation areas. The proposed landscaping is designed with viewshed effects in mind, to greatly reduce the apparent mass of the project, screen the development from view and transition the edges of the development into the natural landscape. The conceptual landscaping plan contained in sheet LA-1 of the MDP plan set offers trees at varying intervals along roads and sidewalks for shade and cadence. New landscaping around structures 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 help to screen the development. The following commitments will enhance the natural beauty of the resort community.

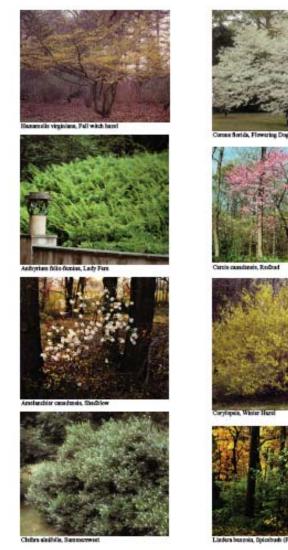
- The preservation of the 80% of the site as oper space including the 230 acre hillside on the west side of the golf course.
- The project will utilize clearing and grading limits to ensure the vegetation is only removed in areas where it is necessary.











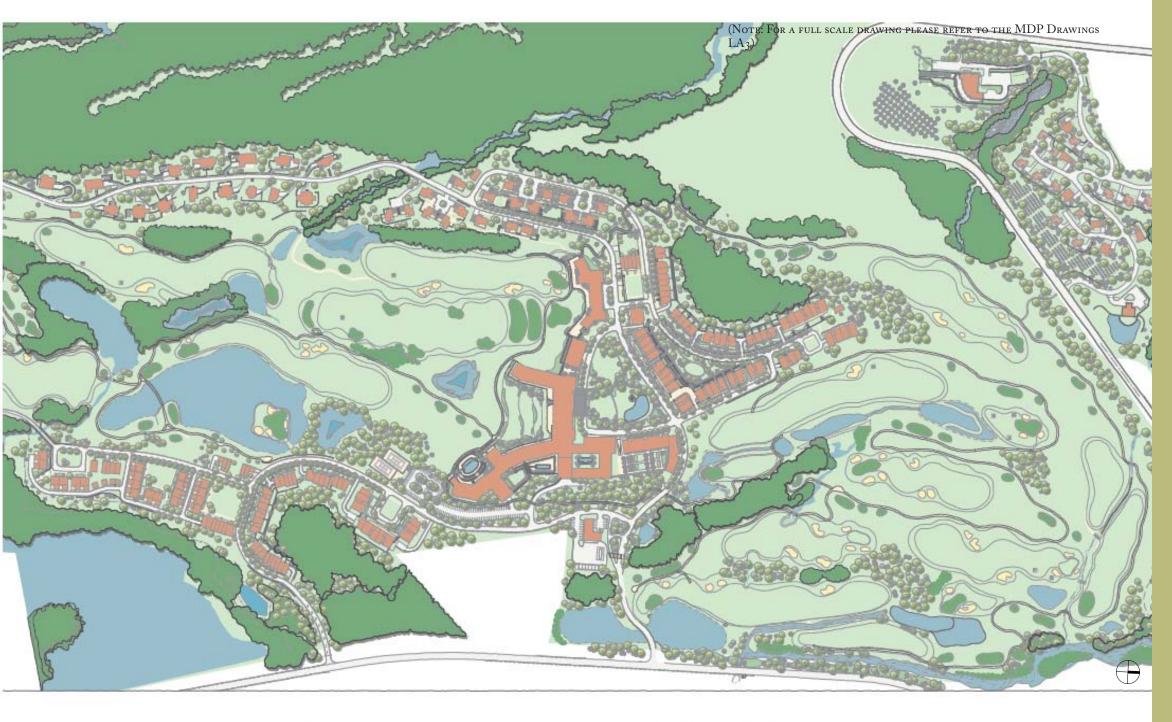


- Native plant species will be used in the planting palettes for vegetative buffers, habitat restoration areas, and out-of-play areas within the golf course in accordance with the Habitat Management Plan. Planting and early maintenance schedules will be followed so as to minimize the colonization of disturbed areas by invasive species. All mitigation plantings in buffer areas and stormwater retention structures will be overseen by the Town's environmental consultants.
- Landscaping around the proposed hotel-condominium homes, roadways, parking areas and site amenities Native plant species will be used as much as possible in accordance with the NRMP.
- The implementation of a comprehensive Habitat Management Plan for the site. (Please refer to pages 71-76 for more information on the HMP and the NRMP)
- The implementation of a Natural Resources Management Plan (NRMP) which provides for the management of golf course and community lawns of the site.
- The preservation of the cluster of shagbark hickories located along the edge of the golf course above the southwest bank of Wetland L/L.
- Maintain the island forest habitats on the south end of the site to allow some (particularly for birds) habitat connectivity between Wetland L/LL and the western slopes.
- In areas of steep slopes, cutting of existing vegetation will be minimized by field surveying each building site including trees 8" caliper and larger prior to site plan submission and custom designing each building for the site.
- Maintenance of a naturally vegetated area of 750 feet surrounding the pool (Wetland U). No more than 25% of the zone 100-750 feet from the vernal pool should be disturbed if the vernal is to remain a viable habitat

#### Use of native plantings

- Native plants of local stock (Harlem Valley, southern New England origin) will be used for all natural plantings associated with the Habitat Management Plan. If the applicant is unable to achieve these habitat goals, the applicant must demonstrate during Site Plan review why the use of only native plants is not possible.
- Single family home sites that abut natural areas at the toe of the forested slope on the west side of the golf course will have the limits of the yards demarcated. (See map indicating where these demarcation will occur(red line)) The means and methods of this demarcation will be reviewed and approved by the Planning Board during Site Plan review. In the area between the house and the demarcations, both native and non-native plants will be permitted. However all homeowners are restricted from using plants or groups of plants considered to be invasive or potentially invasive. The list of invasive or potentially invasive plants will be finalized by the Town's environmental consultants during Site Plan review.
- There will be clear language excluding any expansion into or use of the areas beyond the demarcations of any structures play sets, gardens, shed, wood piles, vehicles etc. and that this area will not be used for the disposal of yard or other waste No firewood etc. can be removed from the protected area and deadfall left in situ. Homeowners will be provided with information at purchase and at closing that discusses these restrictions and the reason for their emplacement.
- A landscape planting plan will be evaluated during Site Plan review. This plan will give preference to trees indigenous to the Harlem Valley. For example, the Eastern Red Cedar is indigenous to old fields in the Harlem Valley and therefore may be very appropriate for the site.

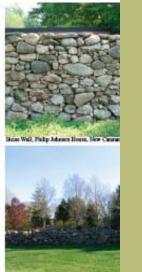




# The House, Millsmook, NY We let the Mill, Stone Harre, NY







#### Retaining Walls

Due to the hilly site conditions, and the rural settings, walls are an important component of the design. Retaining walls are used to create outdoor rooms for individual units sited on hillsides as well as to differentiate the golf course from the adjacent residences. Wall heights have been restricted to a maximum of 6'-8': where greater grade changes need to be accommodated, multiple lower, stepped walls, softened with plants, are used. Most site walls- retaining or free standing- are to be constructed of local stone. Walls attached or immediately adjacent to the buildings will be more architectural in character, with a concrete structure and veneered stone face. Walls located in remoter parts of the landscape will be rustic in appearance and construction; either dry-laid or with mortar deeply raked back (to appear dry laid). In certain locations stone retaining walls give uniform and distinctive character to the streetcape.

#### Signage

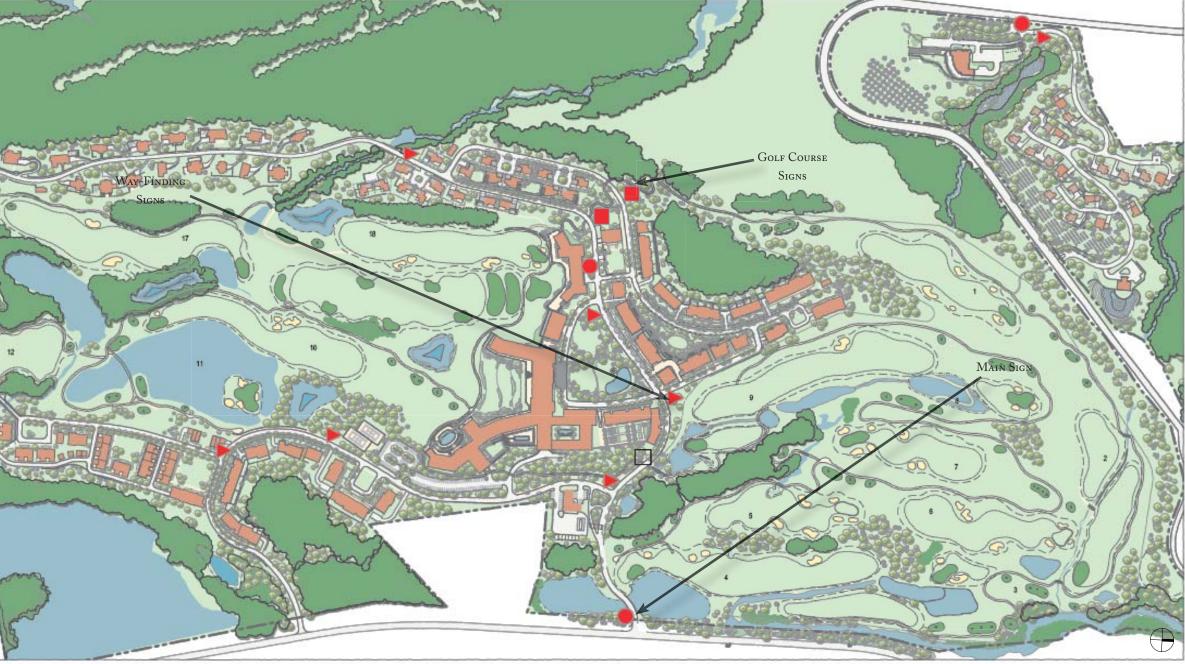
Silo Ridge Resort's signage will be simple and elegant. The entry sign on route 22 will incorporate stone with subtle lettering. Directional and street signage for the site will be developed as a coordinated group. Signs will be mounted either on buildings or on low-or-mid-rise poles necessary for visibility. Materials may include wood, stone, wrought iron, or other metal; the key being clear and simple conveyance of information. Different neighborhoods will be designated with distinctive graphics to lend a specific character and sense of uniqueness to each.

It is anticipated that the front entry sign, and the Winery Restaurant sign will be lit. Signs visible from public roads will be high quality yet will have an understated elegance character about them. The applicant has committed to no internally illuminated signs. Furthermore the applicant has committed to the Dark Skies standards discussed in Appendix E; final signs design will be completed during site plan review.

The signs will be in compliance with zoning section 121-39 which sets the following purpose:

The purpose of this section is to control the location size, quantity, character, and lighting of signs in order to maintain the attractive appearance of the Town and avoid conditions of clutter and unsightliness. Through these regulations the Town seeks to:

- 1. Protect public health and safety by ensuring that signs do not create dangerous conditions, obstruct vision necessary for traffic safety, or confuse, distract, or mislead motorists bicyclists, or pedestrians; and
- 2. Promote the general welfare by creating a more attractive visual environment that preserves the Town's historic and rural character, protects property values encourages economic growth, enables businesses and other establishments to identify themselves, and minimizes negative impacts of signs on adjoining properties.



(Note: For a full scale drawing please refer to the MDP Drawings  ${\rm LA}_5)$ 



























#### Lighting

A detailed lighting plan that specifies lighting location intensity and trespass will be prepared during Site Plan review Silo Ridge commits to the following nighttime lighting limits that will minimize light pollution (skyglow, light trespass, and glare):

#### Up-light

- No more than 2% of the light (measured in lumens) emitted from the street lighting, area lighting (parking lots, storage areas, utilitarian building-mounted lighting, etc.) and path lighting will be directed upward. All of these fixtures will have "cutoff" optical systems that direct almost all light downward.
- No internally illuminated signs.

#### High Brightness and Glare

- No more than 300 lumens shall be emitted from any fixture between 80 degrees and 90 degrees. (0 degrees is straight downward from the fixture; 180 degrees is straight overhead.)
- Street, path, and area lighting poles will not exceed 20' in height. The Winery Restaurant parking area lights are expected to be pedestrian level lamp posts or bollard style lights due to the sensitive nature of the location of this facility. Full height street lights will not be used in the Winery Restaurant parking area.
- Where bright arc tubes from metal halide lamps (bulbs) or LED products would be glaring for pedestrians beneath the fixtures, prismatic lenses or diffusers will be used to reduce the direct glare of the light source.
- No lighting will be used on the practice range for extending the hours of operation. Nighttime lighting used will be for staff use only, and will cease within one hour of dusk.
- No street or area lighting fixtures will be tilted upward to project light farther, since this can turn a good-quality fixture into one that produces glare or skyglow.
- No street lights will be used in the Vineyard Cottages or Single Family Home sections of the resort. Portions of blocks B, and C and all of blocks D, E, F and G are expected to utilize pedestrian level lampposts as opposed to full height street lights.
- Light spillage into natural areas (forests and wetlands) has been minimized and/or avoided by ecologically-friendly lighting design and lighting regimes.





(Note: For a full scale drawing please refer to the MDP Drawings  $\mathrm{LA}_2$ )



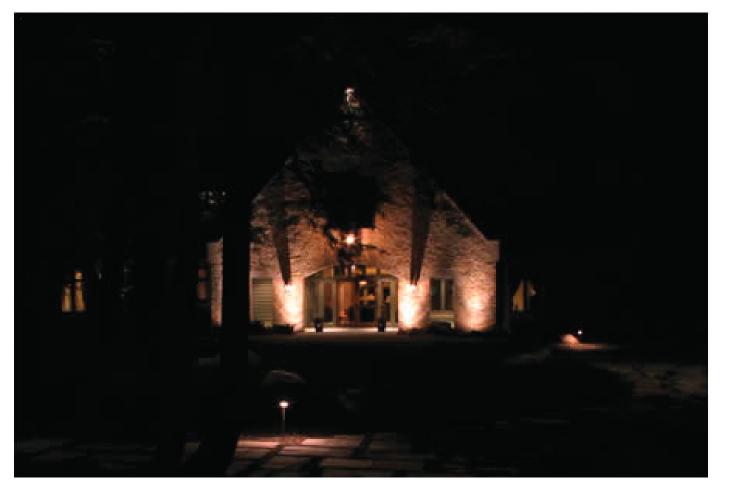












#### Energy Us

- The outdoor lighting system will use 75% or less of the power allowed by the ASHRAE/IESNA 90.1 2004 energy standard.
- Continuous lighting, (i.e. street lighting on regular pole spacings located continuously along a street or roadway) will be used in areas of high vehicle/pedestrian conflict only. It will be limited to the resort core/Village Green areas in the town. All other areas will use street lighting at intersections, cross-walks, or other areas of potential safety concern.
- Pedestrian pathway lighting will be used at steps, ramps, turns important meeting points, or points of safety concern only Lighting will not be continuous.
- No lighting fixtures used for street lighting, area lighting, or path lighting will use a higher wattage lamp or lighting system than 150W.

#### Decorative Lighting

• Wall sconces, post-top lighting, pedestal lighting, or hanging lanterns used outdoors for decorative purposes will be limited to 400 lumens per bulb unless they emit their light downward only (400 lumens is the approximate light output of a 40W incandescent bulb.)

#### Façade Lighting

- Any façade lighting will direct 90% or more of its lumens toward
  the façade, allowing no more than 10% of the lumens to escape to
  the sky. Façade lighting will be minimal, using no more than 50%
  of the power allowed by the ASHRAE/IESNA 90.1 2004 Energy
  Standard.
- Façade lighting will be shut off within ½ hour after curfew. Landscape Lighting
- Landscape lighting, if used, will use lamps emitting less than 1000 lumens (equivalent to a 50W MR16 halogen lamp.)
- All landscape lighting will be switched off within ½ hour after curfew.

#### Curfex

In order to preserve the quiet and darkness of night, the Community at Silo Ridge will establish a curfew, after which decorative or unneeded lighting will be extinguished. As an example, curfew may be set not later than 11 pm during the week, and 1 am on weekends (Friday included) in order to allow residents and guests later hours for dinner, activities, and entertainment. It may be possible to reduce street, area, and path lighting within a set time after curfew.

A complete lighting parameters narrative was provided by Naomi Miller Lighting Design for the resort and can be found in Appendix E.

#### Visual Commitment

Caring for the natural beauty of the site and protecting views from the surrounding countryside, is of prime importance to Silo Ridge Resort. The Master Development Plan accomplishes this primarily through careful site layout, building design, and landscaping.

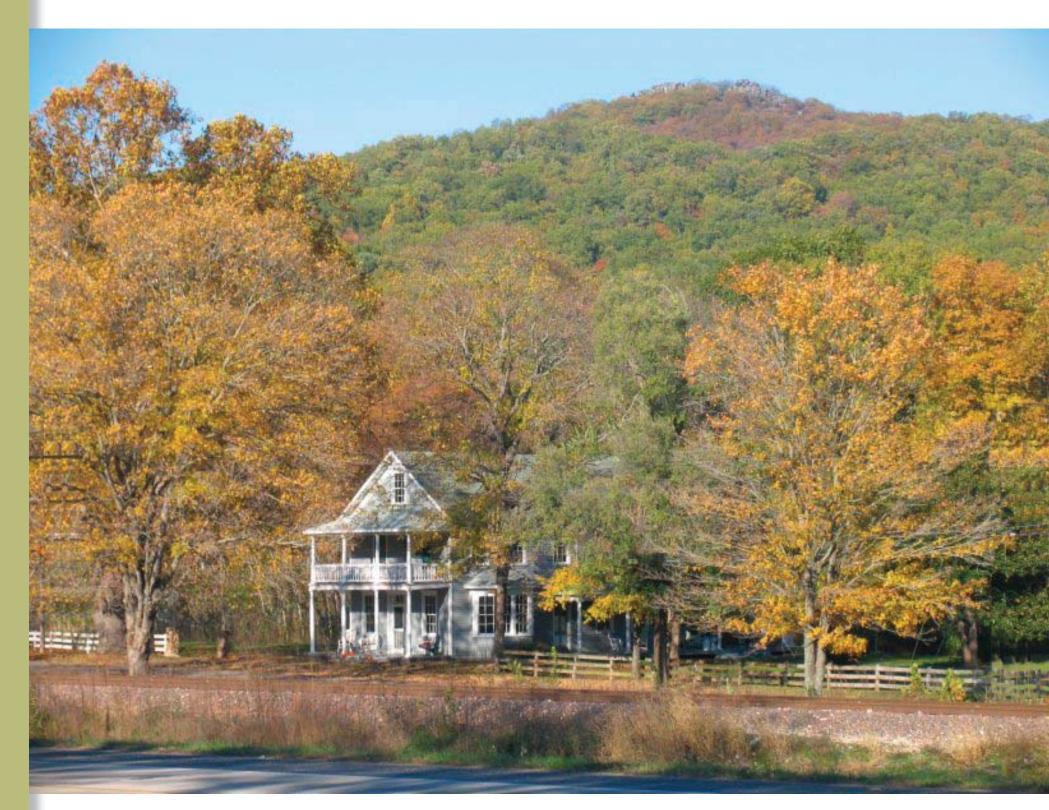
Site design measures include clustering of many buildings to reduce sprawle effect, the sensitive use of existing natural topography and vegetation to shield buildings with the combined net affect being ridgelines and cherished views to distant hills are preserved.

Building design measures include use of natural building materials, carefully selected building colors, placing units in the building's roof space to reduce massing, placing many parking spaces below grade, and stepping buildings with the natural contours of the land. The combined net effect is to knit many buildings back into the landscape.

Landscaping will be employed to further screen many buildings. The landscape utilized for the main screening areas will be designed to naturalize with the adjacent surroundings over time.

The interaction between effective site design, building materials and colors and exceptional screening in combination make these measures more effective than if they were undertaken independently.

As the Master Development Plan is advanced, a Confirmatory Visual Assessment will be conducted as part of the Site Plan review. The assessment will need to confirm the above measures were employed to the satisfaction of the Planning Board.





#### Statement of Methodology (Visual Analysis)

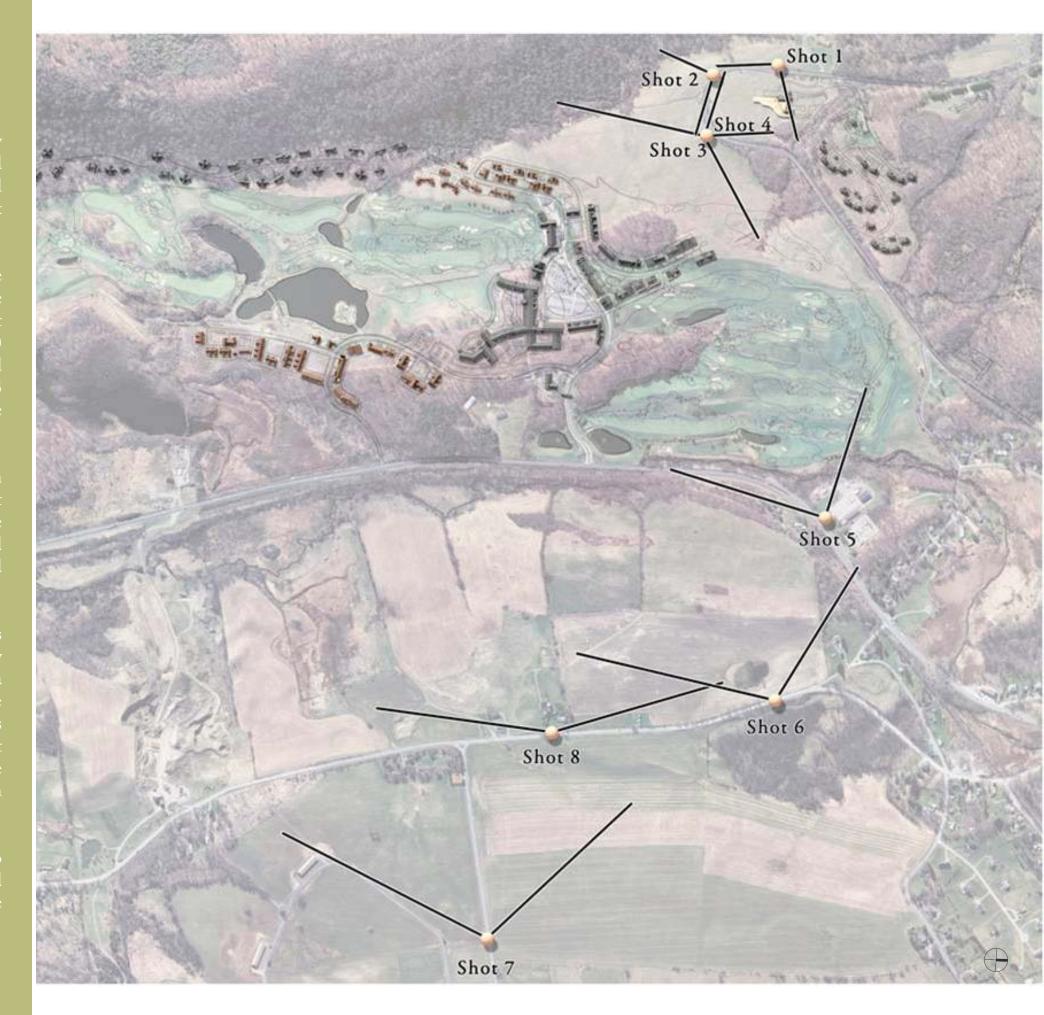
In order to evaluate the visual impact of the Silo Ridge Resort Community development upon the environment one must be able to observe the proposed structures accurately placed within the landscape. To accomplish this, digital technologies are deployed to demonstrate what impact the future complex will have on critical view sheds around the property.

Using engineering documentation, a 3D model of the site is developed. The provided topographical information (supplied to Virtual Sciences by the Applicant) was imported into the 3D application (3ds max by Autodesk) at the proper scale. A satellite image of the site (obtained via Google Earth) was then brought into the 3d application and matched it to the digital topography. To further ensure accuracy, a 10 Meter/7.5 Minute USGS SDTS Digital Elevation Model of Amenia, NY that encompasses the entire Silo Ridge site was acquired and used for alignment reference.

Mass models of the proposed buildings were developed using a combination of CAD documents and design reference information provided by Robert A. M. Stern Architects (RAMSA). They were then accurately placed in the site model utilizing the building footprints from the site plan (X, Y axis) and the finished floor elevations (Z axis) specified. The combined buildings and site plan represent the completed 3D dataset.

Photography of the existing conditions was taken at the (8) eight locations called out by the Planning board as visually sensible in the site (8 view points are represented in the map). The photography was acquired using a digital camera with a 50 mm focal length. Matching virtual cameras were created in the 3D dataset based on knowledge of the locations from site visits and then pinpointing those locations on the 3D typography. The correct camera parameters were calculated based on information provided by the site photographs and general knowledge of technical differences between digital and film cameras.

The site photography was then imported into the 3D application and used to further ensure the alignment of the virtual cameras. Alignment was checked based on existing information visible in the photographs (i.e. structures, tree lines, power poles, drives and cart paths, golf course features).







Unmitigated Visual Simulations are included in this Visual Impact Analysis strictly as a tool (or theoretic step) to help assess the effectiveness of the Mitigated Visual Simulations included in this presentation. However, the Applicant is not proposing to build an unmitigated project.



#### Panoramic Images – Existing Conditions

- Each viewpoint contains a multitude of images digitally stitched togethe to form a panoramic image (Except for Viewpoint 4)
- The panoramic image allows the user to observe the entire view shed is scale and context of the broader landscape

#### Panoramic Images – Unmitigated Images

• Proposed Buildings and/or neighborhood blocks are shown in "white model format" without any additional screening to confirm methodology was properly executed prior to mitigation

#### Panoramic Images – Mitigated Images

- Mitigated Images represent views after proposed construction using earth toned colors, natural roof colors and incorporating vegetation and other natural screening
- Landscape screening and/or mitigation is depicted as 5 years of growtlafter planting

# Viewpoint 1 (Mitigated)



VIEWPOINT 3 (MITIGATED)







(Note: The following images are 2 of the 8 viewpoints. These images are located in Appendix G of the Silo Ridge Community Final Environmental Impact Statement dated september, 16, 2009.)





The Welcome House

# Sustainable Community

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# Sustainable Community

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#### Sustainable Approach and Features

Millbrook Ventures is committed to making this resort environmentally sensitive utilizing a sustainable approach. The natural beauty of the site, its natural resources and proximity to the rail station enhance this vision. The attributes of the site itself along with methods anticipated to be implemented will help achieve this sustainable goal. Our approach is to offer an active, vibrant, and healthy lifestyle community that will provide high quality, healthy and efficient facilities and residences, while preserving and protecting the natural resources of the community.

The sustainable approach will conserve resources, utilize energy more efficiently, and reduce operation and maintenance costs which in turn will make a positive difference in contributing to a more sustainable world and will provide long term value. The resort staff will be stewards of the resort environment. The healthy lifestyle approach of the resort will not end with the buildings and grounds as the cuisine will also be reflective of the owner's passion for organic and locally sourced offerings.

The Resort has registered for and is pursuing LEED Silver certification for the hotel, spa, and clubhouse and is seeking Energy Star certification for residential units. All of the homes will meet Energy Star requirements and the project is compliant with Audubon International's standards for new development.

LEED certification is a program offered by The U.S. Green Building Council (USGBC). USGBC is a 501(c)(3) nonprofit membership organization with a vision of a sustainable built environment within a generation. Its membership includes corporations, builders, universities, government agencies, and other nonprofit organizations. USGBC is dedicated to expanding green building practices and education, and its LEED® (Leadership in Energy and Environmental Design) Green Building Rating System<sup>TM</sup>.

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a voluntary, consensus-based national rating system for developing high-performance, sustainable buildings. LEED addresses all building types and emphasizes state-of-the-art strategies in five areas: sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality.

Silo Ridge Resort offers the following in its goal of sustainability:

- Proximity to rail station
- Shuttle service for customers to and from rail station and hamlet of Amenia
- Proximity to bike pat
- Bike availability, bike racks and storage
- Promoting healthy lifestyle including walking, biking running, golfing, swimming, physical fitness in general along with healthy food choices
- Below grade parking
- Roof gardens on two parking structures
- 80% open space
- Restore portion of wetlands Ll
- Protection of many habitats utilizing the Natural Resource Management Plar (NRMP) and Habitat Management Plan (HMP)
- Protection of water resources using NRMP, HMP and Stormwater Pollution Prevention Plan (SWPPP)
- Lighting parameters that reduce light pollution
- Pervious surfaces on many sidewalks and patios Using pervious materials at the winery restaurant parking, and draining that through a buffer planting area.
- Southern exposure for many buildings
- Provision of a wastewater treatment plant is an important aspect of the sustainability of the project by enabling the clustering of the development footprint, thereby allowing large portions of the site to remain undeveloped.

As the building and engineering work advances many more opportunities for wate efficiency, energy and atmosphere, materials and resources, indoor environmenta quality and innovation during design will become evident and be analyzed in furtherance of the resort's sustainable vision.





#### Golf Course

The Silo Ridge Golf Course will be renovated under the direction of Ernie Els Design team. Ernie Els Design is committed to transporting Ernie's goodwill across cultures and borders, in order to create classic golf courses of distinction. Together, we will create an attractive destination that adheres to the principles of sustainable development and sound environmental practice.

One of the sustainable features of the golf course is that it is registered in the Audubon International Signature Program and will seek Silver certification (See Appendix D). The Audubon Signature Program provides comprehensive environmental planning assistance to new developments. The program helps landowners and developers design for the environment so that both economic and environmental objectives are achieved. Once construction is complete, involvement in an Audubon Signature Program ensures that managers apply sustainable resource management practices in the long term stewardship of the property. In preparation for this program a Natural Resource Management Plan (NRMP) was prepared for Silo Ridge. The NRMP along with the Habitat Management Plan (HMP) will be utilized in oversight of the 80% open space, 537 acres, to be placed in Conservation Easement.

Millbrook Ventures, LLC has agreed to test the soil, per the proscribed protocol in the Findings Statement, on the current golf course land prior to construction to determine the risks of such soil to construction workers and future residents and golf course workers on the site. If the level of any pesticide, herbicide, or fungicide is above the residential and/or commercial/industrial Soil Cleanup Target Level, the applicant will implement a soil remediation plan to reduce the risk.

## Open Space

Section 121-18(C)(4) of the Zoning Law requires that a minimum of 80% of the total land area of the Property be preserved by a conservation easement as open space. For purposes of the RDO, open space may include farmland and farm structures, ponds and streams, and recreational land such as golf courses, cross country ski trails, equestrian trails, and hiking trails. The Project complies with this 80% protected open space requirement. Sheet SP-5 of the Master Development Plan indicates the Open Space calculations for the +/- 537 acres being preserved.

This open space land will be preserved by a conservation easement consistent with the provisions of section 121-20(K) of the Zoning Law regulating the preservation of open space in conservation subdivisions through the use of conservation easements. All of the open space land will be placed in one or more perpetual conservation easements that fully comply with the provisions of section 121-20(K) of the Zoning Law, and that is deemed acceptable by the Planning Board with the advice and assistance of its attorney. The grantee of any conservation easement shall be a municipal or not-for-profit organization that is acceptable to the Planning Board and that is qualified to hold conservation easements under applicable law.

Deed restrictions shall be added to all deeds for the Property, or any portion thereof, implementing the requirements of the Conservation Easements. Restrictions shall be added to the HOA documents as necessary to implement the requirements of the Conservation Easements.

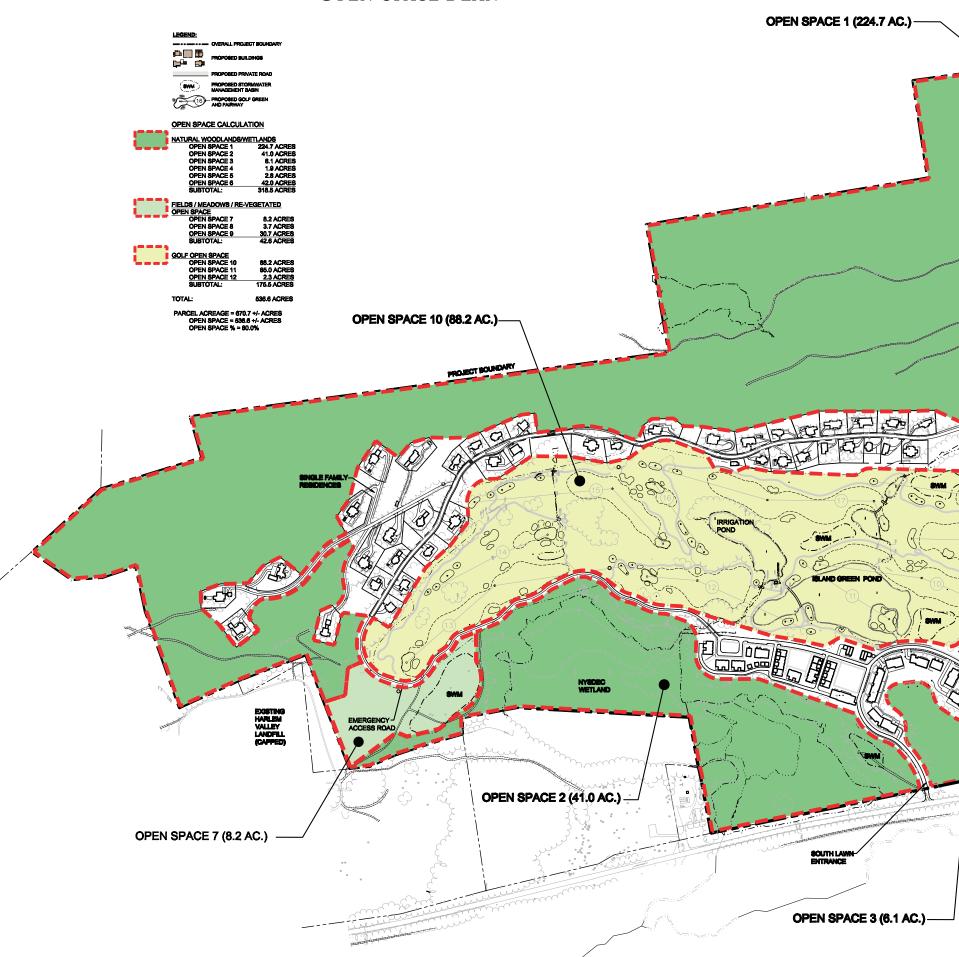
The deed restrictions and HOA documents shall be in a form acceptable to the Planning Board with the advice and assistance of its attorney. The Conservation Easements, and the deed restrictions and HOA documents implementing the Conservation Easements, shall be approved by the Planning Board during Site Plan review.

In identifying which land should be designated for this open space protection, the RDO requires that priority be given to land in the Scenic Protection Overlay (SPO) (Appendix J), and Stream Corridor Overlay (SCO) districts (appendix I), especially the view to and from DeLavergne Hill, ridgelines, historic resources, unique ecosystems, prime agricultural land, and water resources. Portions of the Property are located in the SPO and SCO districts, most notably the land on DeLavergne Hill including the area inside the Route 44 hairpin turn, and the Amenia Cascade Brook. The Property also contains land in the iconic DeLavergne Hill viewshed, some of which is also visible from Route 22 and Depot Hill Road, as well as additional State and federal wetlands, local wetlands and watercourse, vernal pools, steep slopes, and historic resources.

The following +/- 537 acres will be preserved as open space

- The open fields south of DeLavergne Hill
- The open field south of the Winery Restaurar
- The open field south of the gon cours
- The wooded slopes and ridges on the western portion of the property
- The wooded knolls north and south of the village core
- The wetlands on the eastern portion of the property
- The golf course

# OPEN SPACE PLAN





### Wildlife

The following measures, in conjunction with implementation of the Natural Resource Management Plan Habitat Management Plan and Open Space Plan will play an important part in protecting wildlife on the resort grounds.

- Initially proposed homes have been relocated from areas adjacent to headwaters of Wetland J/JJ to protect the habitat of the dusky salamander.
- Homes and development in the headwater areas of Stream M/P have been pulled away from this area to reduce impacts in this location.
- The project will restore severely eroded stream channels and culverted drainages in three locations; stream becrestoration, stream bank restoration and daylighting currently culverted drainage.
- Habitats will be enhanced with six different planting palettes for different locations throughout the site. Fiv palettes of native species are being used in aquatic and upland habitat enhancement. A sixth palette is to be use to establish vegetative cover in stormwater management basin wet pools and attenuation basins.
- In certain locations, the project implements conservation buffers 100 feet wide, water quality buffers 50 feet wide (of terrestrial vegetation) around critical habitat and riparian buffers, respectively.
- Mitigation structures are being employed, including bottomless box culverts, golf course foot bridges, and wildlife tunnels to ensure habitat connectivity. In some instances, the Applicant may seek Planning Board approval to use an oversized bottomless arched culvert based on engineering and cost considerations. The Planning Board may approve such a request if the Planning Board's biodiversity consultant determines that the use of the oversized bottomless arched culvert is appropriate under the circumstances.
- Terrestrial habitat enhancements are proposed to provide plant communities with additional refuge, forag and, in some cases, breeding habitat for resident birds, mammals and herpetofauna.
- Aquatic habitat enhancements are proposed to provide additional functional value for aquatic and semi aquatic wildlife species.
- Sensitive and productive habitats will be protected during construction and operation activities at the site
- The habitat management plan includes two significant aquatic habitat restoration projects. The first project i a streambed restoration/streambed stabilization and erosion control project on a tributary to Cascade/Amenia Brook. The second project includes a 1.5 acre floodplain restoration in the Cascade/Amenia Brook floodplain
- Preserve the gravelly/sandy bank along the southwest edge of Wetland L/LL, as this area serves as a nesting area for turtle and snake species.
- To facilitate wetland and wildlife habitat preservation, open space including buffer areas surrounding wetland will be maintained to the extent practical.
- The proposed project will preserve approximately 537 acres of the site as open space, including the preservation of a contiguous 230-acre natural area adjacent to and ecologically connected with the 2,400 acre Tamarac Preserve.
- The layout provides for a variety of interconnected spaces throughout the site will allow some wildlift movement.
- Enhancement and wetland mitigation around Wetland L/LL is proposed consisting of approximately 2.7. acres, a majority of which contains existing golf course fairway and 925 LF of cart path. These activities ma include cart path removal and planting of shrub or tree vegetation to enhance the buffer's habitat values.
- Additional habitat protection measures, including provision of a 500-foot minimum buffer to the vernal poc (Wetland U).
- The project will follow the guidance of the Natural Resource Management Plan (NRMP) included in Appendix 9.11, which include minimizing the removal of native vegetation; saving native plants that must be removed for later replanting; and re-vegetating with native plantings wherever possible.
- Mitigating measures to help reduce excess nutrients and pollutants into surface water bodies include Bes Management Practices (BMPs), Integrated Pest Management, and Erosion Control Measures.
- The proposed project will utilize onsite stormwater management practices and attain compliance with Phas II stormwater regulations.
- Re-vegetation of the Cascade Amenia Brook floodplain will benefit wood furtles if they are still extar
- The area designated adjacent to SWM-10 as enhanced turtle and snake nesting area shall be preserved in
- Require a 150 foot vegetated buffer along headwater streams R/S and V except specific reductions approved during Site Plan review where a buffer of less than 150 feet in limited areas is needed. This 150 foot buffer does not apply to the proposed improvement of the existing Miller driveway, which will become an access road into the winery restaurant and Vineyard Cottage area. Permeable surfaces will be used as practicable in this area. I is noted that several units in the current plan are inside the 150' buffer.
- Maintenance of a naturally vegetated area of 750 feet surrounding the pool (Wetland U). No more than 25% of the zone 100-750 feet from the vernal pool should be disturbed if the vernal is to remain a viable habitat.
- Implement a solid waste management plan that addresses the accessibility of waste and refuse on the site from subsidized species (raccoons, skunks).

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# The Natural Resource Management Plan

The Natural Resource Management Plan (NRMP) prepared for the Silo Ridge Resort Community by Audubon Environmental details a science-based and comprehensive management program. The program employs organic and Integrated Pest Management strategies, and incorporates other Best Management Practices (BMP) that protects both aquatic and terrestrial resources. This synergistic approach afford maximum protection for resources. The focus is on prevention, management and monitoring to protect resources:

- 1. Prevention: Prevent environmental problems before they occur by educating the staff, designing the course and community from an environmental perspective, implementing source prevention practices, and using ecological risk assessment protocols to identify pesticides for use at the golf course and community.
- 2. Management: Manage potential problems at the source. Implement a construction management program, implement an integrated pession management plan, and incorporate land use best management practices. The program relies on redundancy of resource protection strategies an example being the use of "Best Management Practices (BMP) trains". A BMP Train is a protection system in which individual BMPs are linked in sequence like the cars of a train. Therefore, the more BMPs that are incorporated into the system, the better the performance of the treatment train.
- 3. Monitoring: Conduct an environmental monitoring program that evaluates the effectiveness of the management program. This include evaluating the golf course and community protocols each year to ensure that prevention and management strategies are ongoing. Thi management approach has proven effective throughout the US, Asia, Canada, and Europe. Below, are steps that are taken to minimize the potential for environmental degradation.

#### **PREVENTION**

As the old adage goes, "an ounce of prevention is worth a pound of cure." Prevention is the first step in successful resource management

- 1. Educating the golf course superintendent and community maintenance team is an important element of the Audubon International Signature Program. Audubon International staff train the management team in the use of the management programs identified in the NRMN Training of the staff and review of the golf course and community, and the NRMP occurs in an annual re-certification audit and review.
- 2. Design the property to include protective measures, including management zones and structural and nonstructural BMPs, and design to minimize the amount of maintained turf at the golf course, the community common space, and for home lawns. Even though some of these practices are not implemented until the community has residents or the golf course is operational, they should be identified during the design phase. By getting the design "right," the potential for negative environmental incidents is greatly reduced.
- 3. Implement source prevention practices in the cultural program for the golf course and community. The following are included in the management program for the Silo Ridge Resort Community:
- Resistant Turf Varieties. Use of plant varieties that are resistant to insects, nematodes, diseases, etc., in order to reduce pesticide use
- Cultural Management of Pests. Use cultural practices to partially substitute for pesticides. This is possible by making certain the soil and turf conditions are optimal for resisting damage by pest problems.
- Irrigation Water Management. Water is the carrier for pesticide movement. Judicious use of irrigation will preclude excessive soil moisture conditions and prevent downward movement of materials.
- Nutrient Management. Minimize the use of soluble nitrogen sources which could leach into groundwater or run off into surface water.
- Biological Control of Pests. Use of natural enemies as part of an Integrated Pest Management (IPM) program which can reduce the use of
  pesticides. Biological controls which provide effective pest management for turf grasses are limited; however, they will be implemented where
  practical.
- Restrictions on Spraying. No spray zones are established.
- Rotation of Pesticides. To prevent pest resistance
- Pesticide Selection. A "least toxic" pesticide selection process has been evaluated and is a component of the NRMP, which is updated annually.
- Correct Application of Pesticides
- Correct Pesticide Container Disposal
- Pesticide/Fertilizer Storage Mixing/Loading Areas
- 4. Develop a list of pesticides that may be used at the course and community if pest problems exceed thresholds by conducting ecological risk assessments of the pesticides. The models and data analysis process of the US Environmental Protection Agency are used to conduct risk assessments of the pesticides that are included in the program. This risk assessment follows US EPA protocols and identifies pesticides that exhibit potential risk from either exposure or toxicity. The risk assessment is based on chemical characteristics (e.g., solubility, persistence binding capacity), toxicity (human health and aquatic), application data, and site conditions. Pesticides that exhibit a potential risk to human or aquatic environments, either by surface water flow or groundwater by leaching, are excluded from use at the golf course and community. The models and the assumptions built into the models make this a conservative (i.e., protective) approach to selecting pesticides. Pesticides are evaluated and updated each year during the annual re-certification audit and review.
- 5. Once pesticides are selected using the risk assessment, the selected pesticides are then ranked for use by the Environmental Impact Quotient methods developed at Cornell University so that the golf course superintendent and community maintenance team have easy access to this information when making management decisions.

### **MANAGEMENT**

The goals of BMPs are as follows: 1) to reduce the off-site transport of sediment, nutrients and pesticides; 2) to control the rate, method and type of chemicals being applied; and 3) to reduce the total chemical load by use of Integrated Pest Management, which is a BMP.

- 1. A construction management program is implemented. Managing site disturbance during clearing and construction is an important step in minimizing ecological damage to the site. Specific construction management practices are identified (Section 3.0). Site disturbance is minimized, especially along the property boundary and preserve areas.
- 2. Identify potential pest problems. This was done based on the known incidence of pest pressures at golf courses and community landscapes n the area.
- 3. Develop a turf cultural program that results in healthy turf. Healthy turf is the most resistant to problems. (See Chapters 5.3 and 6.2 of the NRMP for this program.) In addition to identified course maintenance activities, thresholds are set for pest problems and treatment does not occur unless pest thresholds are exceeded. A scouting program is defined for the course and community to assess conditions and pest concerns.
- 4. Integrated Pest Management (IPM), a Best Management Practice, is the cornerstone of the day-to-day management of the course and community because management of turf grass pests does not rely on a single control practice. IPM uses information about turf grass pest problems including environmental conditions which may precipitate these problems, and integrates these with turf grass cultural practices and pest control measures not to eradicate pests, but to prevent or control unacceptable levels of pest damage. The IPM program is summarized in Figure 6-1 of the NRMP
- 5. Special Management Zones have been established around water resources and natural areas (NRMP, Section 4.1). No spray zones (where no pesticides are used) and limited spray zones (where only spot treatment occurs) are defined.
- 5. Land use BMPs are designed to remove, filter, detain, or reroute potential contaminants carried in surface water. Land Use Best Management Practices include: subsurface drainage, land absorption areas (vegetated filter strips), regulated runoff impoundment, grassed waterway or butlet, and critical area planting.

#### ENVIRONMENTAL MONITORING

Environmental monitoring provides a means to measure the success of the design, construction and operations of the golf course and community through an environmental monitoring program also will evaluate the effectiveness of the management program.

- 1. The monitoring program encompasses sampling groundwater and surface water to determine if any detrimental effects on the environmental effects of the environmental effects on the environmental effects of the environm
- 1) To provide data that assesses environmental conditions, thus providing a basis for measuring compliance with environmental regulation and
- 2) To ensure that IPM and the BMPs are functioning properly
- 2. Pesticides are included in the monitoring program based on the results of the Risk Assessment. If the "risk ratio" for any pesticide exceeds 0.5 and they are used at the golf course or community, then the pesticide has been included in the monitoring program. The "risk ratio" is the quotient of the maximum anticipated concentration of the pesticide divided by its effects criteria (see Pesticide Selection in the NRMP, Section 6.4, for a description of the maximum anticipated concentration and effects criteria). A risk ratio of a given pesticide which is greater than 1.0 indicates that the maximum anticipated concentration exceeds the effects criteria; meaning that the use of that pesticide at the Silo Ridge community and golf course represents more than a negligible risk. A risk ratio of less than 1.0 indicates that the use of that pesticide represents only negligible risk. By including as analytes all pesticides whose risk ratio is greater than one-half the point at which risk is presumed to be more than negligible, the monitoring program design ensures that all potentially risky pesticides are monitored for. And, the continued use of a pesticide at the golf course and community is dependent upon the pesticide not being detected at concentrations which are below any chronic or acute levels in the water.
- 3. Monitoring results are forwarded to Audubon International to help the community and golf course assess Program effectiveness. A detailed above, this process of protecting resources is based on all of the various strategies working synergistically. Based on over a decade monitoring results at other Signature Projects, the programs outlined in the NRMP are both effective and successful at managing resource



# Habitat Management Plan

The objective of the Habitat Management Plan (HMP) for the Silo Ridge Resort is to address specific concerns regarding the project's potential effects upon on-site habitats and the resident or transient wildlife species that utilize these habitats. The Chazen Companies (TCC) developed the HMP to address potential risks to habitat quality and to describe the measures to be taken to mitigate these potential risks. A concurrent objective of the HMP is to address specific efforts to provide quality nabitat for populations and assemblages of animal species that utilize the Site for critical habitat throughout all, or a portion of their annual ife cycle.

#### APPROACH

The development of the HMP utilized information that was gathered during early Site investigations to prepare the DEIS. This information included on-site field investigations, input from federal and state agencies, and local conservation groups. Later efforts included additional site visits and a more expansive investigation of the applicable scientific literature.

Brief summaries of the approaches that TCC took to characterize the existing habitats and resident flora and fauna within the Site are presented below. To characterize/inventory the existing habitats and wildlife resources, TCC completed a Habitat Assessment in 2005. In total, seven field visits and 126 man-hours were dedicated to characterizing the existing Site conditions. It should be noted that many of these studies were focused on a specific task (e.g., delineating wetland boundaries), and not all of the time spent on-Site was concentrated on inventorying existing habitats and wildlife resources. However, these studies were valuable for characterizing the vegetative communities and noteworthy observations of flora and fauna species were recorded during these efforts. TCC completed several intensive data collection efforts to inventory the existing habitats and wildlife resources on the Site during supplementary studies conducted in 2007. A total of 16 days and 244 man-hours were logged on-site during these supplementary studies. These supplementary studies primarily focused on determining the presence/absence of endangered, threatened, and/or rare and special concern (ETR) species at the Site. Focused ecological survey conducted at the Site included an amphibian and reptile survey (including a timber rattlesnake (Crotalus horridus) survey), breeding bird survey, botanical survey, Phase I and II bog turtle (Clemmys muhlenbergii) surveys, and an Indiana bat (Myotis sodalis) survey; Correspondence from the NYSDEC dated May 9, 2005 indicated that Hill's pondweed (Potamogeton hillii), a State-listed threatened species, is documented within NYSDEC dated May 9, 2005 indicated that Fill's pondweed (votamogeton hillii), a State-listed threatened species, is documented within NYSDEC Wetland DEC (AM-15), a portion of which is located within the project site and it is assumed that conditions within the wetland have not changed and that the plant still exists in this area. TCC completed additional visits to the Site in

Investigations to identify management methods and habitatenhancement options (e.g., planting palettes) included reviews of the applicable scientific literature and technical reports focusing on best management techniques for varied habitats and species. The HMP for the Site utilizes the following multi-step approach to address habitate quality for wildlife populations at the Site:

- 1. Characterize and Inventory Existing Habitats
- 2. Identify Critical and Sensitive Habitat and Wildlife Resources.
- Critical habitats for wildlife populations of special managemen concern.
- Sensitive habitats that may be degraded by development at the Site.

- 3. Conserve Existing High Quality and Critical Habitat
- 4. Restore Damaged Habitats to Restore Ecological Service
- 5. Enhance Existing Habitats Affected or Potentially Affected Development.
- 6. Mitigate Effects of Site Development (where possible
- Conservation Buffer
- Water Ouality Buffe
- Mitigation Structure
- Terrestrial Habitat Enhancement
- Aquatic Habitat Enhancements

7. Protect Sensitive and Productive Habitats During Operations at Activities at the Site

The HMP will address both habitat/species viability issues (includin habitat enhancements) and buffer management issues (buffer creation and maintenance). These objectives are intertwined but not indistinguishable. Good buffers provide protections against, an mitigation of, the potentially damaging effects of sedimentation, thermal inputs, and nutrient and contaminant loadings associated with storm water flow, irrigation runoff, and general habitat disturbances (Fische and Fischenich 2000). Habitats benefit from energy inputs, in the form of labile carbon in leaf litter, to support more productive aquatifood webs (Kominoski et al. 2007). Cooler waters also contain greate concentrations of oxygen for aquatic organisms. Good buffers also provide, in many instances, good terrestrial and aquatic edge habitate. However, good buffers require a certain degree of attenuation capability to be truly effective for the purposes expected of them. To that end minimum requirements of width and vegetation type are identified for the two classes of buffers identified in the Buffer Management Pla (BMP).

Good habitat will provide ecological services to wildlife. Habitat related ecological services are geared toward providing essential nesting foraging and shelter areas for particular species of animals or assemblage of interrelated species. Good habitat may function as an effective buffe if there is sufficient area and attenuation capability. In certain instances narrow strips of vegetation (e.g., hedgerows) provide valuable habitat fo certain species of wildlife, in the absence of any water quality buffering capabilities. Contrary to performance criteria for buffers, minima enhancements of existing habitat can result in a measurable increase in ecological services to a few dependent or transient individuals or an isolated subpopulation of animals.

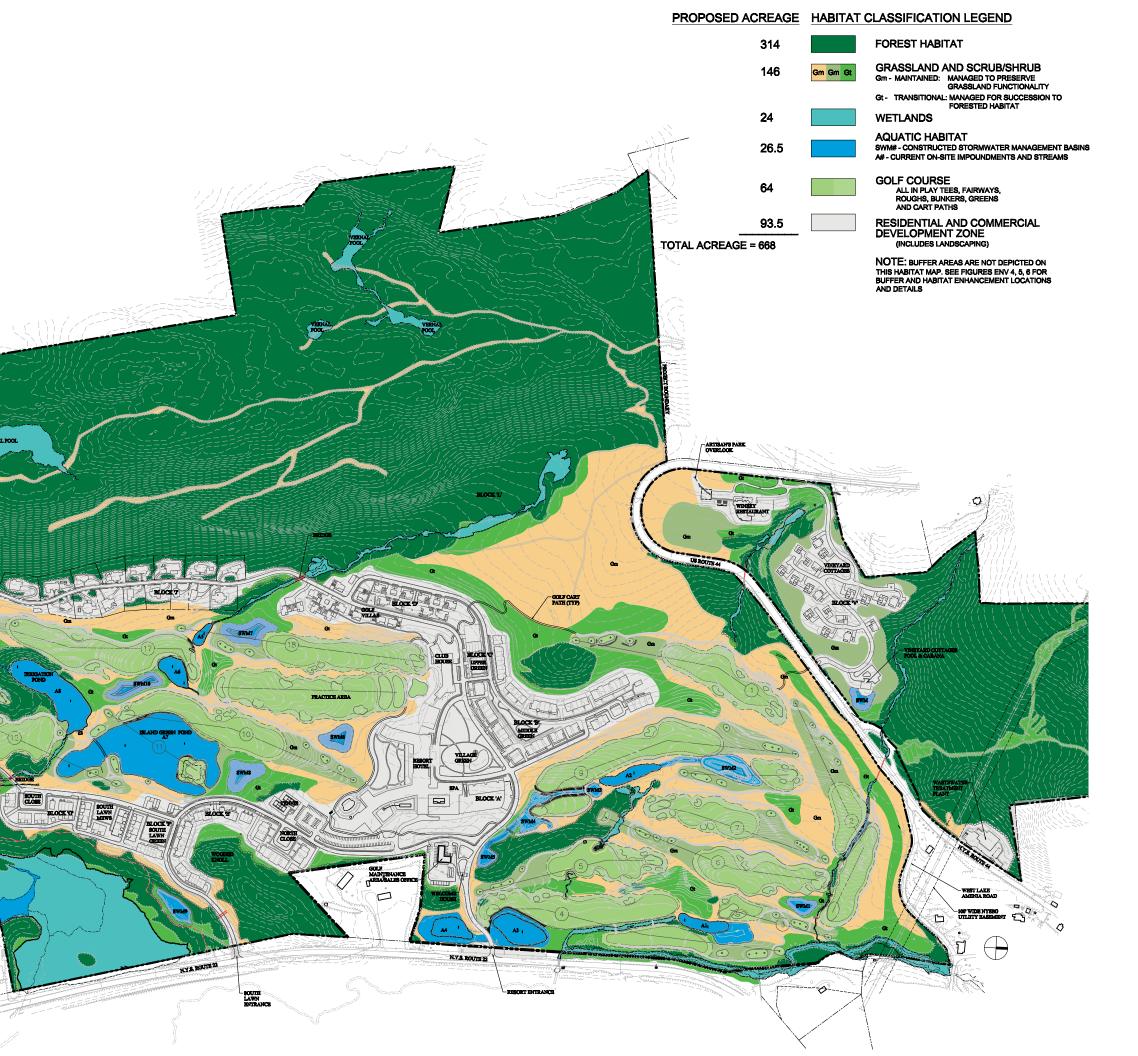
This HMP and its accompanying BMP have been designed to provide sustainable habitat services to resident wildlife species on the Site. Maintenance schedules for mowing will be effective at maintaining grassland functionality. Forest management directives will be effective at preserving the integrity of sensitive riparian, wetland and vernal pool habitats contained within. The establishment of transitional grasslands with tree and shrub plantings in areas adjacent to tall grass will allow for the perpetual maintenance of a heterogeneous, irregular and soft edge between grasslands and forests thereby minimizing the damaging actions of nest predators and maximizing the benefits that a productive edge habitat can provide for both woodland and grassland species (Gillihan 2000). On the golf course, modified turf maintenance activities described in the IPM will protect the sustained productivity of riparian and aquatic edge buffers and habitat enhancement areas.

(Note:All bibliographic references in the text can be located in the Habitat Management Plan submitted with the Final Environmental Impact Statement dated September, 16 2009)

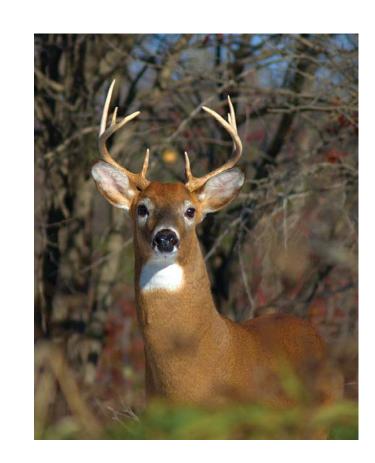












# The Buffer Management Plan

The BMP's primary objective is to mitigate the effects of Site development. Activities leading to the degradation of aquatic and wetland resources can be mitigated to a large extent through efforts which intercept and redirect the environmental fate and transport processes that carry excess nutrients, mobile contaminants and eroding soil particles to sediment sinks in these natural features (Lowrance et al. 1984; Peterjohn and Correll 1984). Thermal pollution can be mitigated in some instances by simply replacing tree and shrub canopy coverage along stream banks to increase shading of affected streams (PADEP 2005). Damaging thermal hydrologic shocks to aquatic systems that originate as heated storm water runoff from impervious surfaces in a developed plot of land require considerably greater efforts to ameliorate the harmful effects to receiving waters. The SWPPP for the Site is the mitigation tool for addressing storm-related events where channeled overland runoff can be captured and attenuated prior to its introduction to surface waters. SWPPP design is not addressed in the buffer management plan except to identify the proposed locations of SWPPP storm water management basins (SWM), and to identify the extent of a 30 foot buffer area surrounding the draft design wet pool, attenuation basins, and adjacent terrestrial habitat. A standard planting list for SWM wet pools/attenuation basins is also provide in Appendix G. The BMP will focus on reducing sediment, nutrient, and contaminant transport and loading associated with overland sheet flow and ephemeral drainage swales that are not captured by the SWPPP.

Development activities leading to habitat loss are more difficult to mitigate against, and in absolute terms lost habitat is difficult to recover. Wherever possible, existing high quality habitat will be targeted for conservation and insulated from all degrading effects of development (e.g., the approach used for NYSDEC administered Adjacent Areas for wetlands). However, ecological services can be conserved, or alternatively replaced, to varying extents by enhancing habitats that have suffered injury or damage in the past. In this manner the BMP will focus on reestablishing canopy cover for on-site streams and on enhancing aquatic edge and shoreline habitats with a variety of terrestrial and aquatic planting groups.

# Drainage, Stormwater Management and Erosion Control

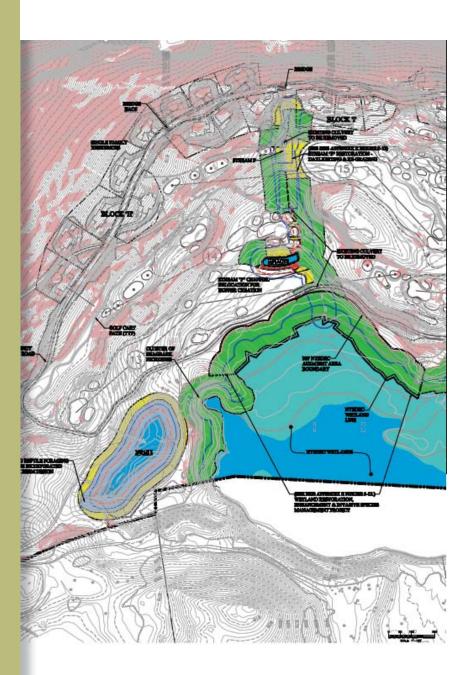
for the layout in Master Development Plan in accordance with applicable NYSDEC regulations. The Town of Amenia has found that the preparation of a Master SWPPP was adequate under SEQRA to demonstrate the review of soil erosion control and stormwater management issues. As part of the site plan review process, a detailed final SWPPP will be prepared. This final SWPPP will be reviewed by the Town Engineer, other Town Consultants and the NYSDEC. The SWPPP will also include a detailed erosion and sediment control (E&SC) plan designed in accordance with and approved by the NYSDEC. This plan will identify specific E&SC measures that will be implemented to protect adjacent aquatic resources. This will include a Phasing Plan for soil disturbance. Erosion control measures are designed to minimize soil loss. Sediment control measures are intended to retain eroded soil and prevent it from reaching water bodies or adjoining properties. Temporary erosion and sediment control measures that will apply during construction generally include:

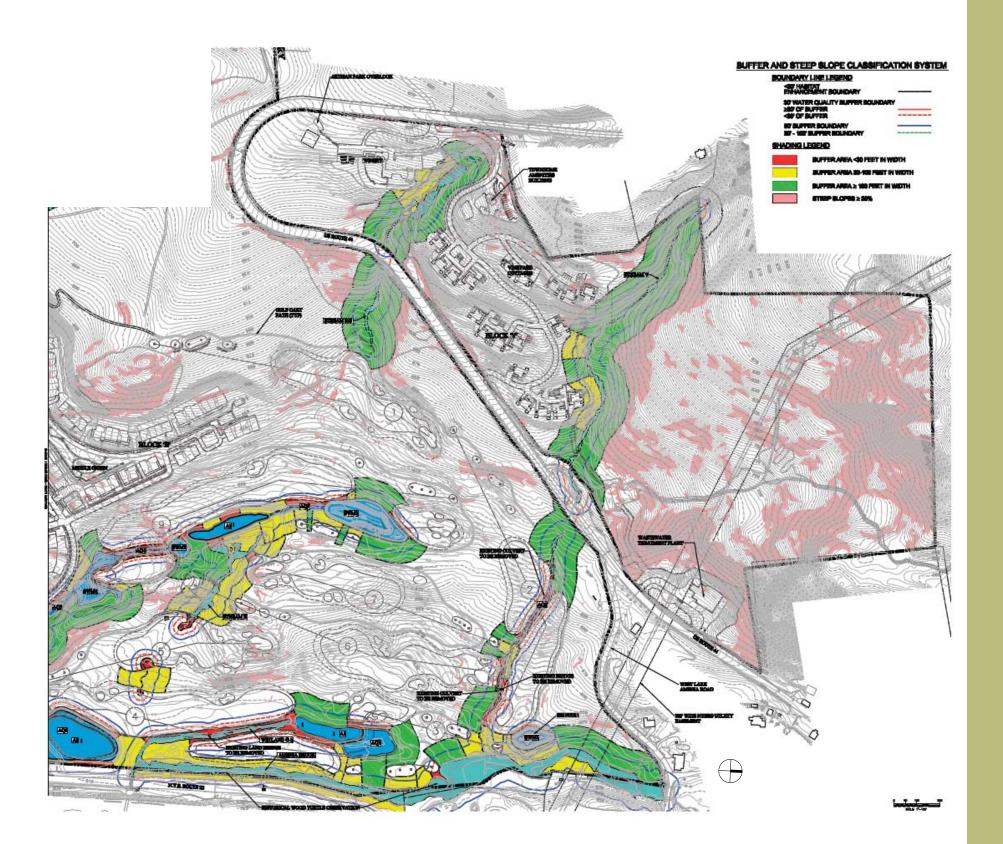
- Stabilized Construction Entrance
- Dust Contro
- Temporary Soil Stockpile
- Temporary Seeding
- Stone Inlet Protection Barrie
- Erosion Control Blanke
- Stone Check Dam
- Temporary Sediment Basin

(Note:All bibliographical references in the text can be located in the Buffer Managment Plan submitted with the Final Environmental Impac Statement dated September, 16 2009)









Permanent erosion and sediment control measures to be implemented after completion c construction include the following:

- Establishment of Permanent Vegetation
- Rock Outlet Protection

Other mitigation measures include

- Cutting of existing vegetation will be minimized by field surveying each building site including trees 8" caliper and larger prior to site plan submission and custom designing each building for the site;
- Roadways have been aligned along contour lines to reduce grading impacts and stee road/drive grades; and
- Impacts from grading activities will be temporary and be fully mitigated by use of lov retaining walls, soil stabilization and re-vegetation with native species where appropriate.
- Housing units located on steep slopes are designed with terracing. The floor grades will be split from front to back or back to front adjacent to topographic slopes.
- A more detailed geotechnical evaluation will be performed in support of final site designed during Site Plan Review.
- Use double silt fencing in all areas of special concern, i.e., all wetlands and upslope of the Cascade/Amenia Brook and all other streams.
- Limit construction traffic/ heavy equipment to specifically marked travel lanes only, t minimize compaction of soils on steep slopes greater than 15%
- Erosion control measures will be installed before construction of the proposed project begins. Stabilized construction entrances, silt fences, sediment traps and water quality basins will be constructed to prevent soil erosion, sedimentation in surface water bodies and tracking of soil onto adjacent roads. All erosion and sediment control structures will be designed in accordance with the

New York State Standards and Specifications for Erosion and Sediment Control.

Stormwater pollutant controls utilized during construction will include, but are not limited to, the following:

- Stabilization of construction entrances to reduce the tracking of sediment onto publi roadways and permanent traffic corridors to avoid "routes of convenience" that are potentially more detrimental.
- Employment of dust control measures including the use of water trucks to reduce dust generated on site.
- Temporary stockpiling of materials, such as topsoil, in areas away from storm drainage water bodies and/or courses, and encircled by silt fence barriers to prevent sedimentation.
- Placement of silt fencing, along the perimeter of areas to be disturbed to reduce sedimen
- Temporary seeding and mulching on all disturbed areas, including topsoil stockpiles, where there will not be any further disturbance for longer than 7 days to minimize erosion and sediment loss.
- Placement of stone inlet protection barriers consisting of concrete blocks surrounded by wire mesh and crushed stone around catch basins to keep sediment from entering the catch basins and storm sewer system.
- Installation of erosion control blankets on all slopes exceeding 3:1 to provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses associated with high runoff flow velocities associated with steep slopes.
- Installation of stone check dams within drainage ditches to reduce the velocity o stormwater runoff, to promote settling of sediment, and to reduce sediment transpor offsite.
- Construction of temporary sediment basins 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.
- Soil disturbances will be limited to 5 acres or less at any one time. If more than 5 acres will be disturbed at any one time, permission form the NYSDEC will be required.

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Construction housekeeping practices will be implemented to help maintain stormwater quality. These measures include:

- Material resulting from the clearing and grubbing operation will be stockpiled up-slope from adequate sedimentation controls.
- Areas designated for equipment cleaning, maintenance, and repair will be protected by a temporary perimeter berm.
- Detergents will not be used for large scale washing (i.e., vehicles, buildings, pavement surfaces, etc.)
- A Spill Prevention and Response Plan will be developed for the site detailing the steps that need to be followed in the event of an accidental spill.
- Construction materials shall be stored in a dedicated staging area designed to minimize the impacts of the construction materials on stormwater quality.
- Weekly inspection of all erosion and control measures by a NYS DEC qualified inspector.
- Compliance with NYS DEC Phase II Stormwater Management.
- Placing substantial parking underground
- Installing roof gardens on the two largest parking structures on the site which serve the hotel/spa and the clubhouse
- Using pervious materials on many sidewalks and patios
- Using pervious materials at the winery restaurant parking and draining through a buffer planting area.
- Implementation of the NRMP which includes stormwater controls, Integrated Pest Management, and specific monitoring requirements for surface water and groundwater. The NRMP will include a management plan for alternative road de-icing compounds where practicable.
- The Habitat Management Plan will be implemented as a mitigation measure. This document describes a system of vegetated buffers throughout the project site, ranging from very narrow aquatic habitat buffers to larger buffers of 100 feet or more to effectively protect certain water resources, habitats and water quality.
- The Habitat Management Plan describes a system of vegetated buffers throughout the project site, ranging from very narrow aquatic habitat buffers to larger buffers of 100 feet or more to effectively protect certain water resources, habitats and water quality.
- Riparian and bank stabilization improvements to Amenia Cascade Brook are included in the proposed project plan, along with significant floodplain revegetation in this area. The NYS DEC will review mitigation project activities in close proximity to the stream.
- Most of the existing golf course provides for no buffers along wetlands or streams; as mitigation, the Habitat Management Plan proposed for the new golf course improves upon the existing condition in terms of water feature improvements, at least some vegetated buffers around most water resources, and the riparian enhancements listed above.
- Enhancement of NYSDEC Adjacent Area for DEC Wetland (AM-15), Stream Restoration, and Pond Enhancement. These activities are illustrated on DEIS Figure 5-12, "Stream, Pond & Wetland Enhancement Plan".
- The project will not have any direct impacts to the State-regulated DEC Wetland (AM-15). Enhancement and wetland mitigation are proposed within the 100 foot regulated adjacent area, approximately 2.75 acres, a majority of which contains existing golf course fairway and 925 linear feet of cart path. These activities may include cart path removal and planting of shrub or tree vegetation to enhance the buffer's habitat values.
- Treat all stormwater generated from the commercial and residential development and the roadways serving that development to the East of Hudson standards as shown in Chapter 10 of the New York State Stormwater Management Design Manual (August 2003). These are the treatment standards required within the New York City watershed, a phosphorous restricted watershed and because of the sensitivities of the Amenia Cascade Brook and the DEC Wetland AM-15 these standards are deemed appropriate mitigation for the intensity of this development. It is the preference of the Town to utilize a "treatment train" which includes a series of vegetated stepped biofiltration wetlands for the stormwater outflow to pass through prior to directly discharging into the receiving waters of Amenia Cascade Brook and DEC Wetland (AM-15). These stepped biofiltration wetlands will further reduce the pollutant loads and will reduce the flashiness of stormwater entering the receiving waters. If, at the time of Site Plan review,

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- the applicant wishes to use an alternative management practice, the applicant must demonstrate the alternative will achieve a pollutant removal and detention of water that is equal to or greater than the stepped biofiltration wetlands. It is noted that a treatment train design approach is not necessary for stormwater management facilities which discharge into receiving waters which ultimately convey run-off (i.e. existing tributary upstream ponds, stream, drainage ditches, etc...) into Cascade Amenia Brook or DEC Wetland (AM-15).
- In the South Lawn Neighborhood area adjacent to DEC Wetland (AM-15) extra environmental protections will
  be utilized including that certain developed areas slope away from the DEC Wetland and any proposed underground
  chambers or cleaning devices are being secondarily run through stepped bio- filtration to clean the storm water.
- Locating stormwater ponds at least 100 feet from the Amenia Cascade Brook and the DEC Wetland L/LL (AM-15).
- The design will avoid point discharges and will use level spreaders for stormwater outflows into vegetative buffers in stream buffer and wetland buffer areas unless during Site Plan review the applicant can demonstrate that a level spreader is inappropriate and will result in a greater impact to the environment than a point discharge.
- Retaining all existing forest area within buffers and on undeveloped slopes
- Re-vegetation of the adjacent hillside south of the Miller house which slopes down to stream R/S with plants that will stabilize the slope and prevent erosion.
- Stream V (channel and banks) just north of Route 44 exhibits severe erosion. Bank stabilization and re-vegetation along with removal of the existing brush and other debris from the banks of the stream is recommended in this area
- Stream V (south of Route 44). This stream channel is severely eroded just before it enters the Amenia Cascade
  Brook. While an erosion control plan has been presented in the Habitat Management Plan, this plan will be refined
  during Site Plan review and preparation of the Final SWPPP and which will subject to review and approval by the
  Planning Board during Site Plan review. The use of check dams is recommended, and details will require review
  before they are finalized.
- Require a 150 foot vegetated buffer along headwater streams R/S and V unless the applicant can demonstrate
  during Site Plan review that a buffer of less than 150 feet in limited areas is needed. This 150 foot buffer does not
  apply to the proposed improvement of the existing driveway of the house where Block V will be located, which
  will become an access road into the winery restaurant and Vineyard Cottage area. Permeable surfaces will used as
  practicable in this area. It is noted that several units in the current plan are inside the 150' buffer.
- Biomonitoring will be used to inform mitigation for impacts to stream flow, in-stream biota and water quality
   When the data is collected and evaluated, effective mitigation will be developed and achieved during Site Plar
- Hill's pondweed Utilize East of Hudson stormwater design for water quality. The east of Hudson stormwater standards were specifically targeted to maintain water quality in DEC Wetland (AM-15) and therefore maintair the habitat of Hill's Pondweed which depends upon clean, non-eutrophied waters.









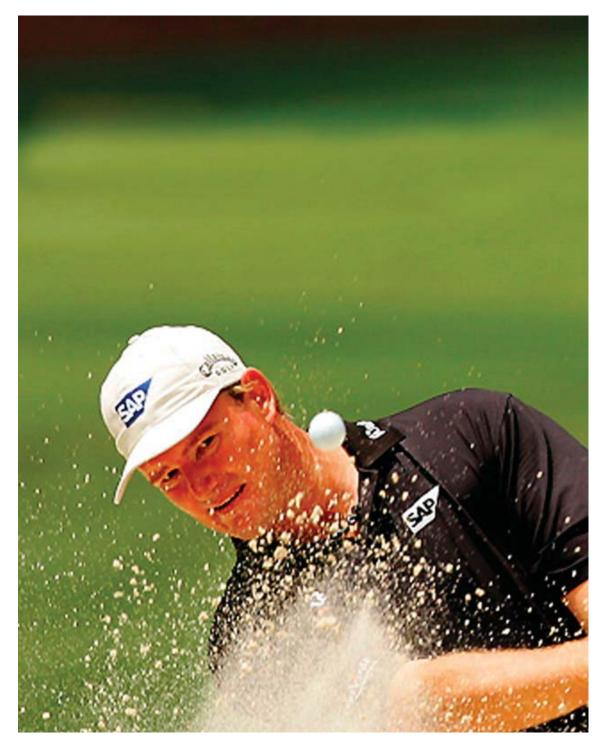
The Welcome House

# AMENITIES

# Amenities At the Resort

- Golf
- Spa and Wellness
- Swimming indoor and outdoor
- Indoor fitness
- Tennis
- Hiking and Biking
- Ice Skating

18 Hole Ernie Els Designed Championship Golf Course



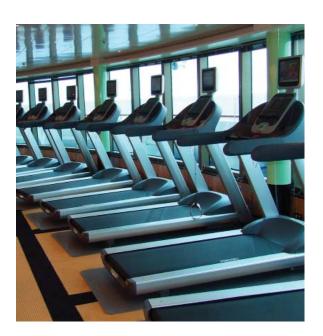
Ice Skating open to the Public on the Village Green



STATE OF THE ART SPA AND WELLNESS CENTER



Indoor Fitness



Indoor and Outdoor Pool



Hiking and Biking



RACQUETBALL AND SQUASH COURTS

Outdoor Tennis Courts



Indoor Basketball Court









The Welcome House

# Infrastructure

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# <u>Infrastructure</u>

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## Roads, Site Access and Circulation

The current entrance to the golf course will remain and will serve the Village Green core area, including the hotel-condominium and flats and townhomes in Blocks A, B, and C. That entrance will also serve as the main entry point for the Block D villas and the single-family units at the base of the western hillside. The second main entrance will be further south on Route 22 and will provide access to the townhomes and single-family homes on the east side of the golf course in the vicinity of the 12th hole. A connection between the east and west roadways will be maintained for emergency access and will also be used as a pedestrian path.

The northern portion of the project site, north of Route 44, will have two entry points for access to the winery restaurant and to the vineyard cottage units. The first entrance heading east on Route 44 will be at the top of DeLavergne Hill and will provide access to the winery restaurant, the vineyard amenities building, and the vineyard cottage units (Block V). The road continues eastward through the clusters of residential units and meets up again with Route 44, providing a secondary access point to this interior roadway.

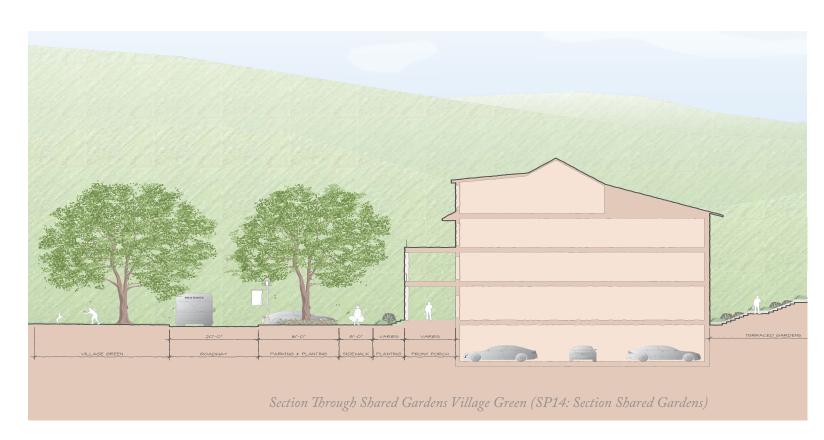
The project sponsor seeks to install gates at all entrances to the development, except that the proposed gate for the entrance at the top of DeLavergne Hill would not interfere with access to the winery restaurant and Artisan's Park. Rather, it would be placed on the access road to the vineyard cottage units located to the east of the entrance to the winery restaurant parking lot.

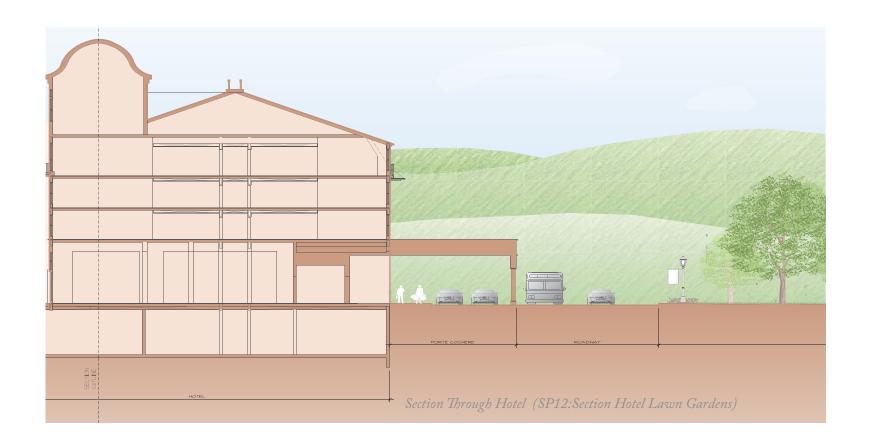
Roads throughout the community will be paved. Road profiles will vary depending on their location within the resort. For instance, the more heavily traveled roads in the resort core will be wider than those serving the more remote areas. Stone curbs may not be utilized in certain locations in order to promote drainage through vegetated swales. Sidewalks will be concrete pavers, bluestone, concrete or any combination thereof. Alternate pervious sidewalk materials will be evaluated. Pervious paving will be evaluated, for certain locations of roadway, such as the vineyard cottages, during site plan review.

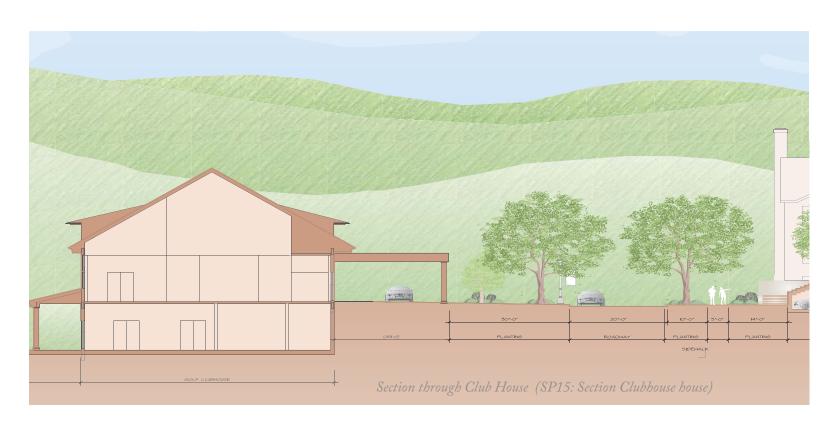
Some typical road profiles will be as follows:

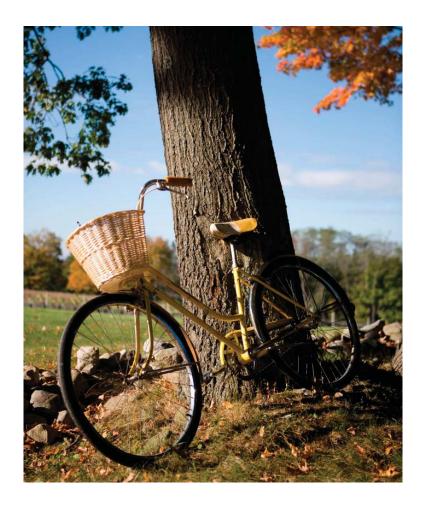
- Village Green area: Road (24' to 32' wide), 6" curb, planting strip (5' minimum) parking on one side, if applicable (7' parallel to 16' diagonal), sidewalk (5' to 8') on one side. The location of the planting strip may vary in the Village green area depending on the parking. For example, at the diagonal parking on the north side the planting strip may be located between the sidewalk and the building facades. Curbs to be granite or Belgian block
- Blocks B, C, E: Road (20' to 24' wide), 6"curb, if applicable, parking on one side, if applicable (7' parallel) planting strip (5' minimum), sidewalk (4' to 5') or one side.
- Blocks D, F, G: Road (20' to 24' wide), 6"curb, if applicable, planting strip (5' minimum), sidewalk (4' to 5') on one side.
- Blocks H, I, J, V: Road (18' to 20' wide), 6"curb, if applicable. These roads will be rural in character. Road widths less than 20' will require fire departmen approval.

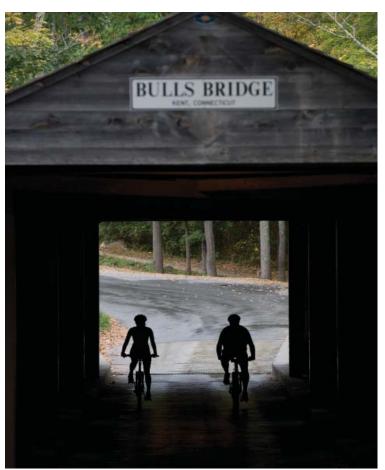












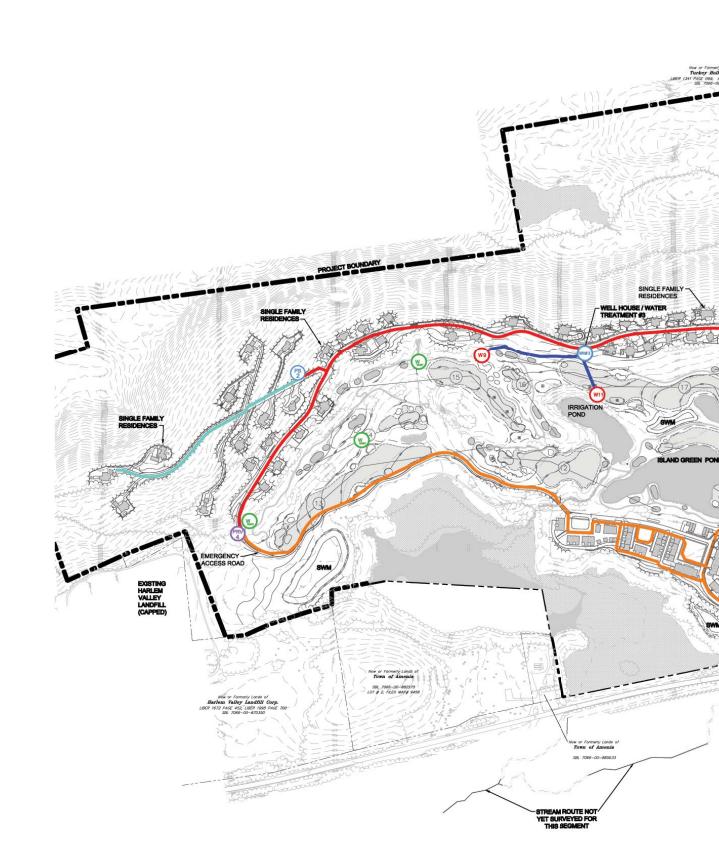
### Water

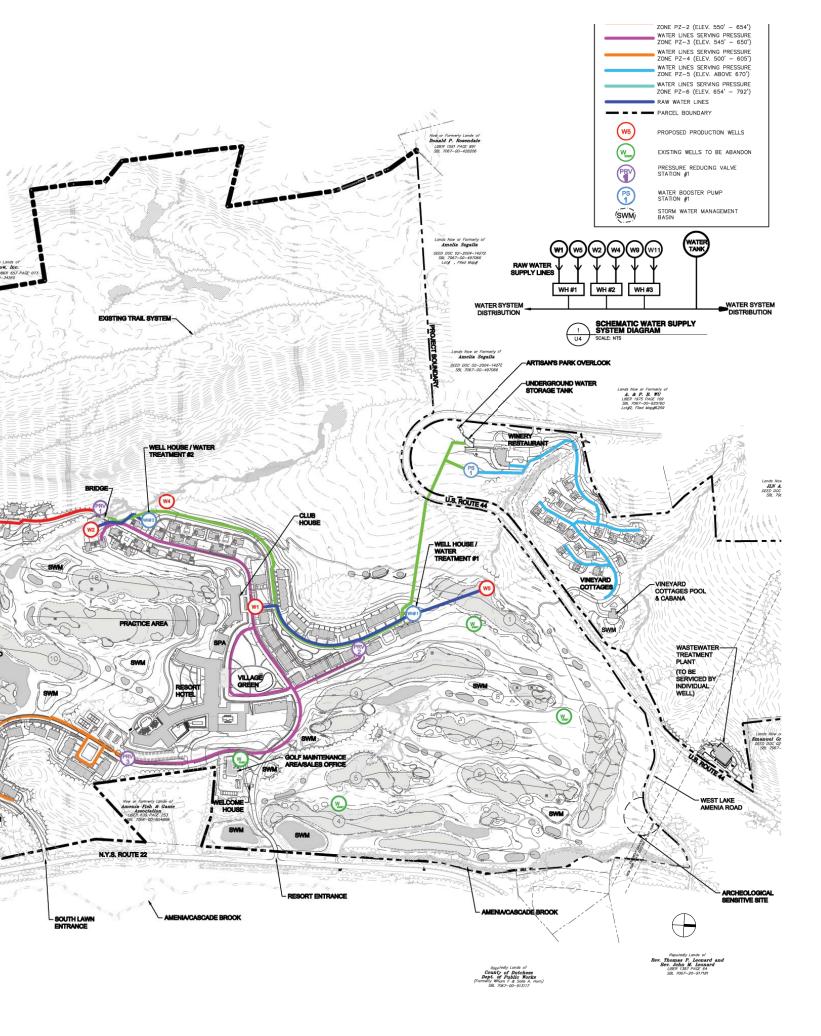
Based on the previously discussed resort program, the projected average day water demand is approximately 195,580 gallons per day (gpd) or 136 gallons per minute (gpm). The anticipated maximum daily flow is approximately 391,000 gpd (272 gpm), with a maximum hourly flow of 816 gpm.

To meet the water demand of this project, groundwater sources must be capable of providing 272 gpm with the largest producing well out of service, and the proposed water treatment facilities must be capable of treating this amount. The conveyance systems of the water treatment facilities will be designed to meet the anticipated maximum daily water demand. With the combined capacity of the site's present groundwater wells totaling 283 gpm with the largest well out of service, the anticipated groundwater yield will be sufficient to meet the anticipated maximum day demand for the project.

The project includes an onsite community water supply system consisting of six new groundwater wells, three (3) well house water treatment facilities, an underground water storage tank and a distribution system. The water distribution system for the project will consist of approximately 20,000 linear feet of eight-inch water mains with approximately 360 individual service connections. Fire hydrants will be located along roadways. The buried water storage tank will be located directly south of the winery restaurant. The estimated maximum daily water demand is 272 gallons minute.

The proposed residential and mixed uses will require approximately 136 gpm of water to meet average demand. This water will also be withdrawn from the site aquifer to support potable uses. However, to minimize withdrawal impacts generated by both uses (potable and irrigation), the project will return approximately 80% of the potable withdrawals in the form of treated wastewater that would be released into the Island Green Pond to supplement irrigation demand. The project thus leaves the overall site water budget largely unchanged during dry periods, aside from consumptive losses from the residential and mixed uses, which is normally judged to be no more than approximately 20% of the potable water delivery, of approximately 28 gpm for the proposed project.









## Sewer System

The project includes an onsite wastewater collection and treatment system capable of treating 197,000 gallons per day of wastewater associated with the project. The wastewater treatment plant (WWTP) will also reserve capacity for another 181,375 gallons per day of wastewater to serve the Hamlet of Amenia. The proposed sanitary system will consist of a gravity collection and conveyance system supplemented by low pressure sewers and the WWTP.

The projected wastewater flow for the project is an average volume of approximately 197,000 gallons per day (gpd). The footprint of the proposed WWTP is identified on Sheet SP-4 of the MDP. The proposed site plan for the WWTP and proposed elevations for the WWTP are also provided in the MDP on Sheet U-2 and U-3, respectively.

Gravity sewers have been selected in areas of the site where practical. Low pressure sewers have been selected in areas where widely varying topography makes gravity sewers impractical. All low pressure sections of the system will ultimately empty into a gravity section or into a pump station. Each served building or house in the low pressure sewer areas of the collection network will be equipped with a grinder pump station that will convey wastewater to a low pressure collection trunk. There will be two pump stations that discharge to the same force main, which itself discharges to that portion of the gravity system flowing directly to the WWTP.

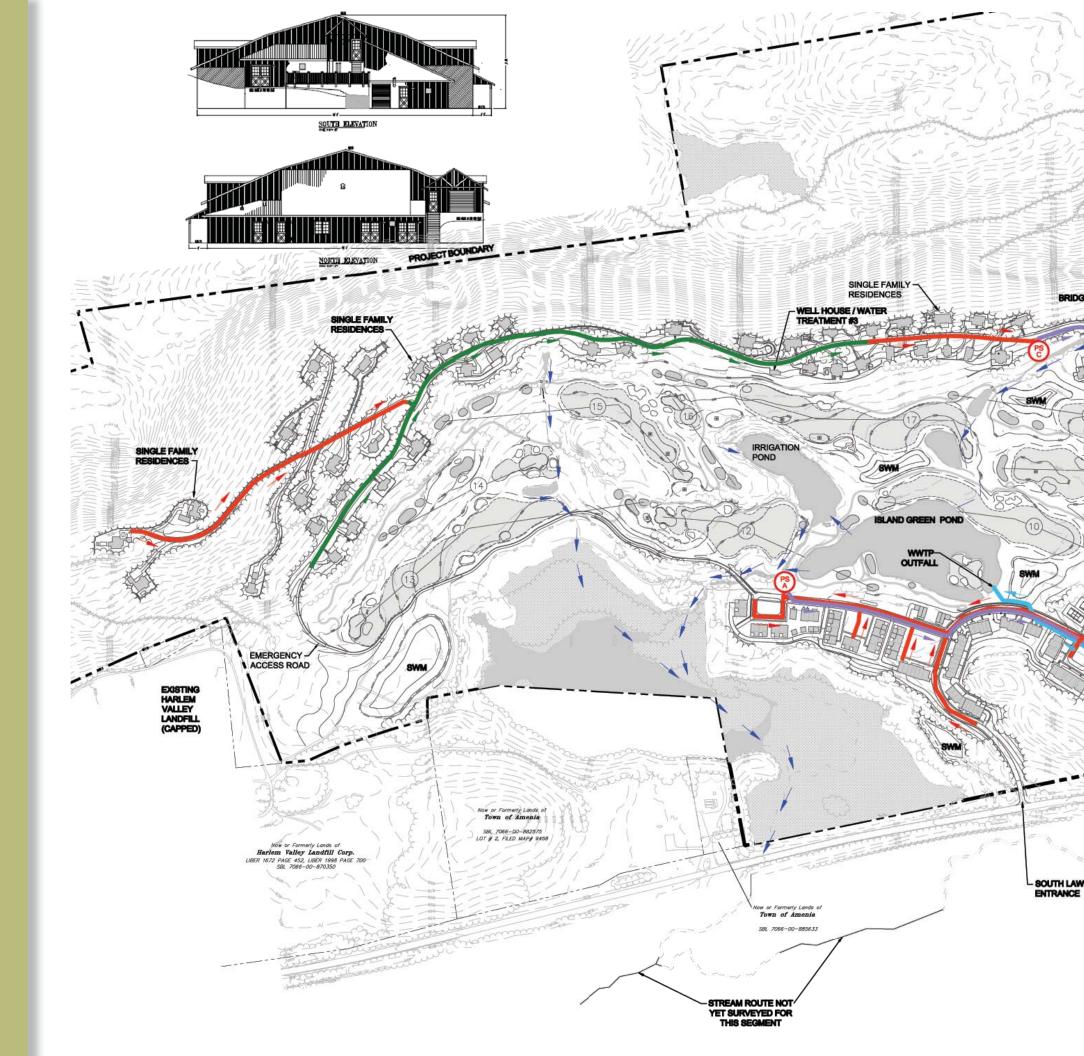
The WWTP will consist of advanced biological treatment, gravity settling of solids, advanced filtration to remove residual solids, and disinfection prior to a surface water discharge. The wastewater will be treated to intermittent stream standards, the highest level of treatment available, without treating to drinking water standards. This treated water from the onsite WWTP is discharged through a force main, which is routed in a southerly direction to a point of outfall at the Island Green Pond. From there it will be used to irrigate the golf course, a practice that is acceptable to the regulatory agencies.

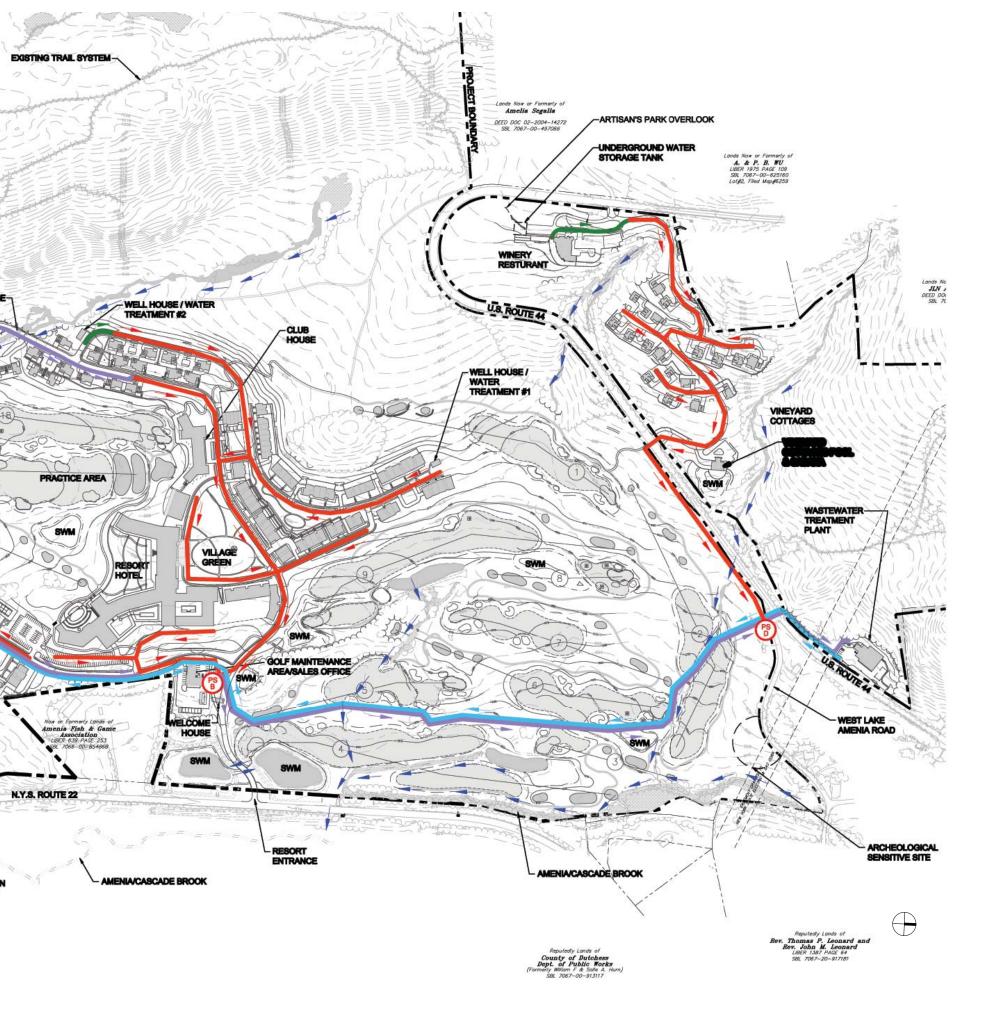
The applicant proposes to build the WWTP with additional capacity for the Town of Amenia, 181,375 gallons per day. The cost of constructing the larger facility with excess capacity to accommodate the Town's wastewater will be borne solely by the Silo Ridge development.

This WWTP, including the excess capacity reserved for the Town, shall be constructed during Phase 1 of the project at no cost to the Town and/or any improvement district that the Town or County may form. No portion of the cost of constructing the WWTP shall be included in any rates, fees, or other amounts that are charged to end-users in the anticipated hamlet of Amenia sewer system. There shall be a continuing offer of dedication of the WWTP to the Town of Amenia, the County of Dutchess, or any improvement district that they may create, at no cost to those entities.

Surface Water Quality - The wastewater treatment technology for this project will be selected to meet all effluent quality requirements as required by NYSDEC. The anticipated effluent quality values can be readily achieved. When met, these stringent standards will help preserve the water quality of the downstream Class C irrigation ponds, Amenia/Cascade Brook (Class Ct), and downstream water bodies. Onsite public health will be protected by disinfection of the effluent, and by the fact that the effluent will be diluted in the Irrigation Pond before reuse.

The reuse of treated WWTP effluent for golf course irrigation, combined wi captured storm water, will eliminate the need to use potable water for irrigation. Since the Silo Ridge project will utilize onsite wells for potable water, this will furth reduce impact on the underlying aquifer. It should be noted that the Irrigation Points already a spring-fed water body, and some groundwater is therefore used for irrigation in that mapper.





The proposed location of the WWTP is on the north side of Route 44. It is proposed that the tanks be placed outdoors, with low-profile engineered covers for odor control, except that any tank within 500 feet of other structures will be placed inside the building housing the tertiary treatment processes. A building next to the tanks would contain the tertiary treatment processes (filtration and UV disinfection) and support facilities (office, chemical room, blower room, solids dewatering room, storage, etc.). The WWTP is anticipated to be steel-frame, with roof and siding materials selected by the project architect to blend with the surrounding buildings and landscape. The low pressure sewer pump stations will be entirely subsurface, with only an at-grade access hatch for each. The community pump stations will be either entirely below-grade with an access hatch, or will consist of a small above-grade structure containing pumps and controls. Each of the community pump stations also will be equipped with an enclosed emergency generator with appropriate muffling, and will have sufficient landscaping, fencing, or architectural features to allow them to have a negligible visual impact. Pavement has been kept to a minimum, with enough paved area only to provide truck access and maneuvering for deliveries and solids hauling, and a small number of parking spaces for WWTP operators.

Odor - Odor issues will be mitigated by proper operation of aerated processes and by enclosing the treatment process inside a building or under covered tanks. The main treatment process tanks will be aerated and mixed to maintain oxygen level and prevent septic conditions that lead to the generation of most offensive odors. Odor control technology options, if needed, include activated carbon or a scrubber All other portions of the WWTP process are expected to yield negligible odors and will be subjected simply to standard ventilation and climate control in the building. Any future equipment used for odor control would be located within the building All ventilation will conform to the Ten States Standards, NFPA, and any other applicable standards.



WWTP Precedent Image

# Parking Management Strategy and Transportation

Applicable Zoning Provisions and Other Standard

In pertinent part, the RDO Section 121-18, Resort Development Overlay District, specifically provides that the off-street parking requirements elsewhere set forth by ordinance shall not apply; this provision recognizes the varying forms and circumstances of development, allowing for considerable discretion in determining the specific parking requirements for projects such as the Silo Ridge Resort Community. Dimensional and density standards shall be as approved by the Planning Board in the Master Development Plan, based upon the physical characteristics of the site, the character of the proposed development, relevant performance standards in this Chapter, and the requirements of the SEQR process.

There are no specific industry standards, guidelines or recommendations, whether from the National Parking Association or the International Parking Institute and its various state affiliates, or from a wide sampling of references in the field of transportation demand management that will recognize the form and circumstances of a resort-oriented mix of land uses integrated into a single plan of development and taking into account the unique factors pertinent to one such development.

It was also determined that the Professional Golf Association, which does have minimum standards for parking for driving ranges, offers no standards for 18-hole golf courses. A sampling of codes throughout the nation and information obtained from golf courses and golf management professionals supported the need for flexibility in determining the appropriate number of parking spaces for any given golf course, especially one that is the centerpiece of a resort-oriented development including residential land uses. Factors such as exclusivity and wait times, tee time policies and intervals, the pace of play and the availability of amenities all come into consideration

#### Approach

The developer's team has worked diligently toward an overall parking requirement that will be appropriate for the nature of the development and all of the conditions that will apply. As the project plans have unfolded the mix of land uses on the Silo Ridge Resort Community campus has presented certain opportunities for shared parking and the application of parking management techniques. The proximity of various land uses, as is explained in the Urban Land Institute's report on "Shared Parking," affects the overall supply of parking required by reason of complimentary variations in the demand for parking at different intervals of time, day or season in this regard, an obvious example would include seasonal differences in the demand for parking to support the golf course and the skating pond. Similarly, the demand for parking to support conference activities will peak at different times than will the demand for parking to support recreational activities.

In addition, the ULI report recognizes the concept of "captive parkers," or those who participate in multiple land uses while already parked on campus, such as in the case of golfers who also stay in the hotel, shop, dine or visit the spa on a single trip to the campus (without increasing the overall demand for parking). A review of land uses planned for the Silo Ridge Resort Community "campus" as a whole reveals that an appreciable but incalculable portion of patrons will be in this category at any given time. This accounts for an appreciable reduction in the demand for parking compared to unrelated, stand-alone land uses.

The team also reviewed the Transportation Demand Management Encyclopedia, a frequently cited comprehensive reference of research from the Victoria Transport Policy Institute, which provides some applicable information on shared parking to justify parking reductions. This source speaks to some of the shared parking opportunities that arise out of relationships between non-conflicting land uses such as for a church and a theater, or a church and a bank, and provides strong support that "...parking requirements for retail, restaurant, hotel, convention and conference uses may be reduced where it can be determined that some portion of the patronage of these businesses comes from other uses..."

This same source supported the need for formal agreements between property owners to secure shared parking arrangements; however, the project team recognized that such arrangements would not be applicable in this case because the Silo Ridge Resort comes under the control of s single developer. In addition, the major advantage that the Silo Ridge Resort has over more typical shared parking arrangements is that the primary method for sharing is one of managed parking through valet services, rather than the more difficult (and less predictable) arrangement of shared parking in a self-park fashion; the plan is that the valet service will be able to shift among and between available parking supplies to match peak demands of complimentary land uses as/when required.

Pull In Building Key and Current Below Grade Below Grade at Standard Parking Description Driveway On Stree Level Street Upper Green Garage Garage Parking R - 1 R - 2 Club House Golf Club Winery Retail in 1st floor of CR-1, CR-2, CR-17 Winery Welcome House Velcome House intenance Wastewater Treatment Plant WWTP 120 mployee Lot Totals Single Family Block H (13th & 14th hole): H-26 to H-41 Block I (15th and 16th hole) : Block J (17th hole): H-17 to H-25 32 H-1 to H-16 Vineyard Cottages: Block V V-1 to V-19 /ineyard Cottages Pool and Cabana Totals 1,094 Village Center East: Block A CR-1 Village Center North: Block B C-5 C-6 27 C-7 35 C-8 C-9 C-10 10 C-11 C-16 19 Village Center at Golf Club: Block C C-12 C-13 Golf Villas: Block D G-1 to G-19 Totals South Lawn Crescent: Block E S-1 S-2 S-3 6 S-4 10 S-5 S-6 S-7 14 14 South Lawn: Block F (12th tee) S-8 S-9 1 S-10 S-11 S-12 S-13 12 0 0 South Lawn: Block G (12th fairway) 2 S-17 S-18 Totals 1,668 

Accordingly, a wide variety of factors, including but no limited to the following, were also put on the table for evaluation among team members:

- Proximity to rail station, plans for shuttle service (for residents, guests, customers and employees traveling on campus and to/from the Town and train station), and the likelihood of arrivals by means other than single-occupant vehicles.
- There will be a significant reliance on valet parking at the core or the resort; this will allow for a greater number of vehicles to be stored in a given area (as opposed to self-park arrangements), while also allowing for a sharing of parking resources among a greater number of land uses. Vehicle storage capacities are now accounted for and valet queuing areas have been identified in relation to the land uses that will be supported with this service. Sheet P-3 of the MDP Set of Plans indicates the location of the 2 valet parking facilities. Parking area 1 adjacent to the spa with direct access off the east side of the Village green contains 470 valet parking spaces and Parking area 3 north of the clubhouse contains 100 valet parking spaces.
- Overlapping parking allocations arising out of internal relationships (between land uses) invite a number of opportunities for "shared parking," resulting in an overall parking requirement that is less than would be the total parking requirement for individual land uses under standalone circumstances.
- The developer's hospitality advisor indicates that the hotel plan will focus on an overall occupancy of 70 percent.
- Many of the participants in any given land use are already accommodated in the parking allocation for one or more other land uses; the developer's resort advisor indicates that, on average, about 80 percent of spa users (not envisioned as a "day spa") will already be on campus as residents or guests; roughly the same percentage will apply to conference patrons, and about 50 percent of banquet patrons will already be on campus.
- A considerable but as-yet undetermined percentage of golf course patrons will also be parked on campus, either in residential areas or at the hotel. The developer expects that this will account for a majority of golfers, as the golf course is expected to operate primarily as a semi-private facility.
- Retail and office space land uses are accessory and incidental to the primary land uses.

All of this has given the developer confidence that the parking allocations presented in the development plan are reasonable.

Highlights of Parking Provisions in the Plan

This is particularly the case because the majority of parking from other than residential land uses will be accommodated with managed parking rather than as self-parking; the latte would require a greater number of parking spaces than would otherwise be the case.

The overall allocation of parking for residential land uses will exceed what is called for by traditional zoning criteria; this will leave a balance of parking that can be made available as and when required for shared parking and parking management strategies such as valet parking. For example, parking spaces (92) for flats and townhomes in Block B in buildings C-3 C-4, C-5, C-16 and CR-17 are convenient to the Village Green and could be made available for shared parking if any were available based on residential occupancy. The resor component is not relying on these spaces at all. These would only be used for valet convenience if they were available. It addition, the plan provides for 113 unassigned on-street parking spaces conveniently located in the residential areas. These 113 spaces will be primarily used by residential unit owners or their guests. The resort component is not relying on these spaces in their shared parking calculations, however could be utilized in certain parking management strategies such as an event.

The key to all of this is that the developer plans to manage the assignment of variable parking demand on an as-needed basis through the provision of valet parking services for the "hospitality" component of the campus. In this regard, the demand for parking – whether it be generated by the golf course, the hotel, the spa or any of the associated activities – is to be met by valet services that the developer plans to staff and manage as required in order that storage of valet vehicles can be managed among and between three separate below grade parking facilities. The developer anticipates that the storage location of any one vehicle compared to another will remain transparent to customers, so that staff can maximize the use of vehicle storage areas while minimizing the turnaround time for retrieval of stored cars.

#### Resort Shuttle Service

Shuttle service will be provided between the resort and the hamlet of Amenia and the Wassaic Metro North train station.

#### Metro North Rail Service

Currently, Metro North has daily round trip commutes service starting at 5:10 a.m. from the Wassaic train station to Grand Central Station in New York City. The one way trave time is 2 hours +/-. The first morning train leaving Grand Central to Wassaic is 6:03 a.m. The last train at night leaving Grand Central Station is 9:54 p.m. The train schedules noted are as currently listed on the Metro North Railroad website and are subject to change.

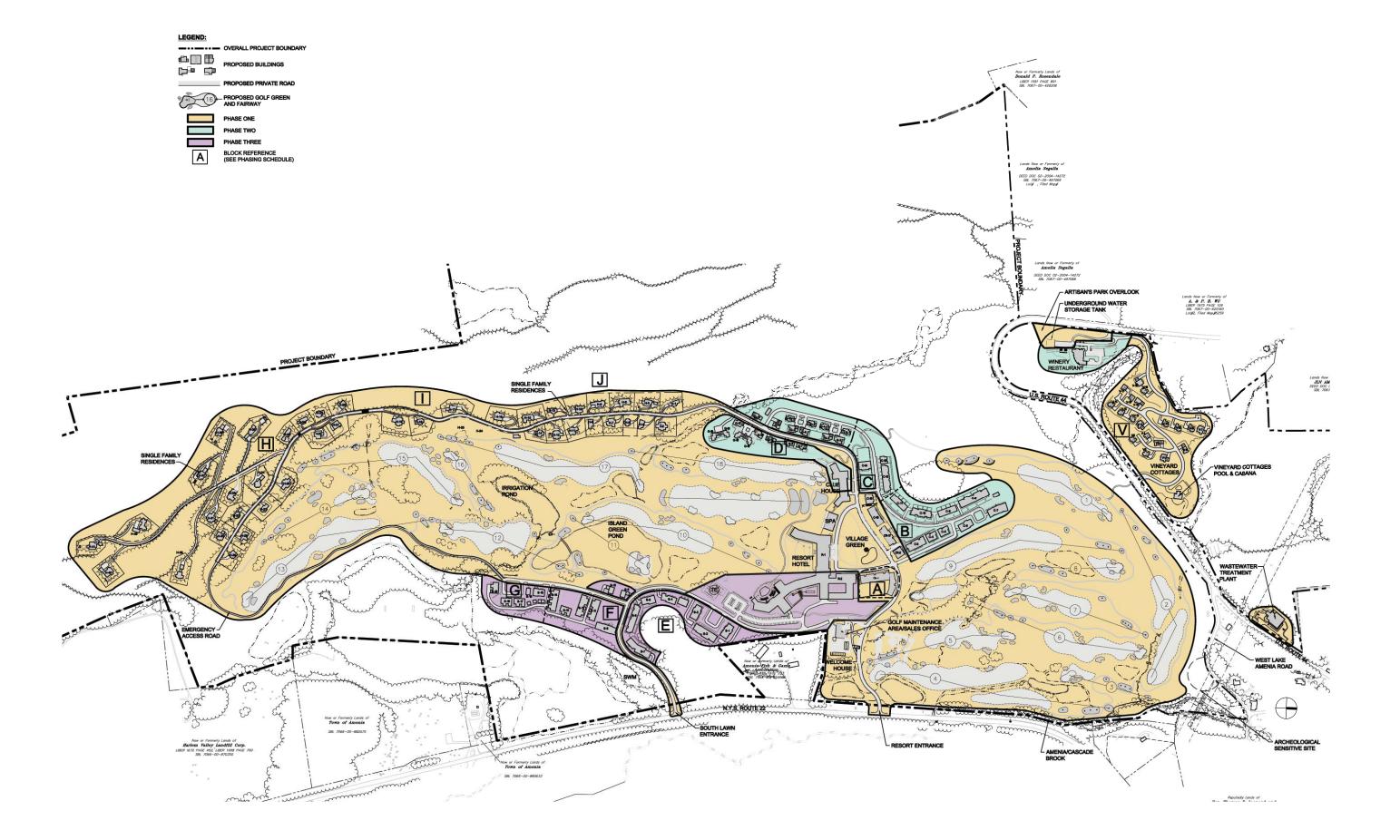
According to the MTA, ridership is monitored almost daily and as demand increases, service will be increased as deemed appropriate by MTA.

Description	Program	Provided Parking	Parking per Zoning (if stand alone use)	Allocation and Calculation Notes
Residential				
Flats (All 2 bedroom)	136	281	204	
Townhome and Vineyard Cottage (All 3 bedroom)	142	284	213	
Single Family/Villa Units:	60	221	120	
Residential Total	338	786	537	The parking spaces (92) for flats and townhomes in Block B in buildings C-3, C-4, C-5, C-16 and CR-17 are convenient to the Village Green and could be made available for shared parking if any were available based on residential occupancy. The resort component is not relying on these spaces at all. These would only be used for valet convenience if they were available.
Hospitality				
Hotel	300	467	437	
Hotel Restaurant and Lounge	150	10	50	Following a generally accepted practice in matters of parking and as endorsed by ULI in Shared Parking, a reduction is taken to account for resort consultant's estimate that 80% of the potential 150 peak period users are "captive parkers" already on campus and within walking distance of the facility (150 peak users requires 1 space per 3 users, this is reduced by 80%, resulting in 10 spaces provided).
Banquet	300	50	100	Following a generally accepted practice in matters of parking and as endorsed by ULI in Shared Parking, a reduction is taken to account for resort consultant's estimate that 50% of the potential 300 peak period users are "captive parkers" already on campus and within walking distance of the facility (300 peak users requires 1 space per 3 users, this is reduced by 50%, resulting in 50 provided).
Conference	145	10	48	Following a generally accepted practice in matters of parking and as endorsed by ULI in Shared Parking, a reduction is taken to account for resort consultant's estimate that 80% of the potential 145 peak period users are "captive parkers" already on campus and within walking distance of the facility (145 peak users requires 1 space per 3 users, this is reduced by 80% resulting in 10 provided).
Retail on green (includes Café)	18,700	31	75	Incidental land use for which 2/3 of the of the anticipated users will be within walking distance. (75 required for retail on green reduced by 67% results in 25. 31 are provided.) These spaces are short term convenience spaces.
Golf Course and Club	29,000	100	116	An estimate of 100 spaces is sufficient within the total Parking Plan. Predictable variations by time of day, day of week and season of the year indicate that a surplus of parking capacity will be available for sharing with other uses, as is a generally accepted practice in matters of parking endorsed by ULI in Shared Parking.
Clubhouse Restaurant and Lounge	120	0	40	Incidental land uses for which 100% of Clubhouse Restaurant users accounted for in other parking calculations
Clubhouse Pro Shop	4,000	0	16	Incidental land uses for which 100% of Pro Shop users accounted for in other parking calculations
Spa	46,000	37	184	Following a generally accepted practice in matters of parking and as endorsed by ULI in Shared Parking, a reduction is taken to account for resort consultant's estimate that 80% if the potential 184 peak period users are "captive Parkers" already on campus and within walking distance of the facility (184 peak users reduced by 80% results in 37 spaces provided).
Hospitality Shared Use Total		704	1,066	The above peek user on campus %'s were provided by the hotel operator/hospitality consultants. Variations in demand will be served by means of a managed valet service, properly staffed to handle peak demand periods. The portion of the surplus residential noted above that may be available for hospitality use is not figured into the reduction % calculation. If it were, the Shared Reduction % would decrease.  Hospitality Shared Reduction is 34% or 362 spaces reduced for "captive parkers" already on campus or within walking distance.
Other	_			
Employee Lot (east of hotel)		120	157	Not all 228 employees are working at the same time. Carpooling, shuttle, mass transit and shared parking account for an additional reduction. The 157 per zoning is based on estimated hotel employees for the lodging facility zoning parking requirement.
Winery Restaurant	80 seat	30	27	Stand Alone
WWTP Maintenance Building		4 24	10	Stand Alone for O&M Stand Alone for employees
Other Total		178	194	
Grand Total		1,668	1,797	

Footnotes: In addition, <u>Transportation Demand Management Encyclopedia</u>... a frequently cited comprehensive reference of research from the Victoria Transport Policy Institute, provides some information on shared parking to justify parking reductions. As the ULI publication addresses the captive parker, this reference further supports the practice in stating that "...Parking requirements for retail, restaurant, hotel, convention and conference uses may be reduced where it can be determined that some portion of the patronage of these businesses comes from other uses...Parking requirements may be reduced up to 90 percent as appropriate."

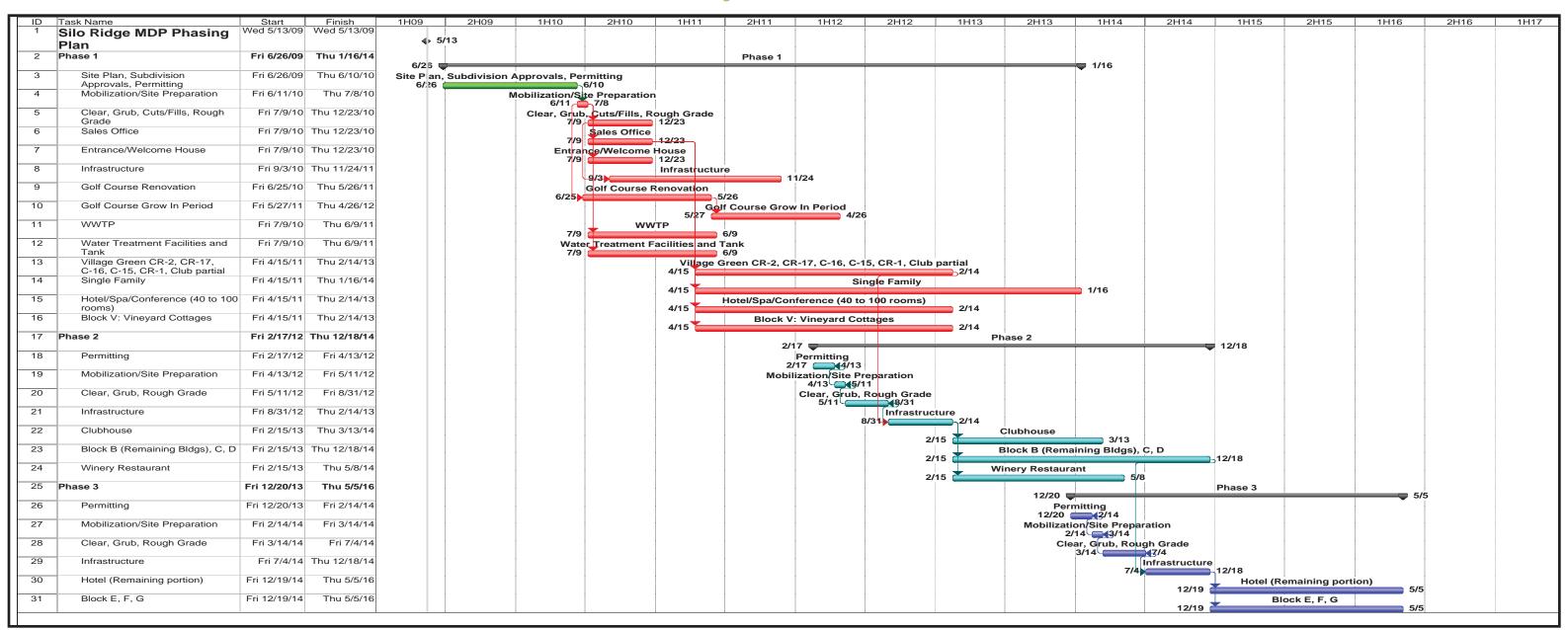
113 of the residential parking spaces in lines 1 and 2 above are unassigned on street parking spaces (see sheet P-2 right column also) that will be primarily used by residential unit owners or their guests. The resort component is not relying on these spaces in their shared parking calculations.

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PHASING PLAN

# PROJECT PHASING



### Phase I

- Entry and Welcome House
- Sales Office
- Wastewater treatment plant in its entirety (PB to determine if they want the capacity for the hamlet included)
- Water treatment facilities
- Hotel: 40 to 100 units. Balance of units in phase 3.
- Spa: To be located at the previous location of the conference facility utilizing the same footprint as the previous conference facility.
- Conference facility
- Parking Structure 1 or a portion thereof based on parking ratios
- 4,000 SF Clubhouse (Partial facility)

- Village Green buildings CR-1, CR-2, CR-17, C-16, and C-15. These buildings contain 59 condominium units and 11 retail spaces
- 41 single family homes Blocks H, I, J
- Vineyard Cottages and amenities
- Public Overlook Artisan's Park
- Golf Course renovations

# Phase II

- The remainder of the Clubhouse
- Parking Structure 2
- The remainder of Block B buildings, C-3 through C-11
- Block C, buildings C-12, C-13 and C-14
- 19 Golf Villas Block D
- •Winery Restaurant

## Phase III

- The remainder of the hotel units (200 to 260 units)
- Parking structure 3
- South Lawn Blocks E, F, and G





The Welcome House

# Home Owners Association Management Structure

## HOA Management Structure

Silo Ridge Resort Community Home Owners Association -- the HOA -- will be a master home owners association responsible for managing and governing the Project on an overall basis and as a unified entity. The HOA will also be responsible for ensuring compliance with the conditions of the Findings Statement applicable to the common areas and facilities of the Silo Ridge Community. The master HOA documents will set forth general standards for the operation and maintenance of the Project that must be complied with by all components ("Component" or "Components"). In addition, the Project must be maintained in accordance with all laws, regulations and governmental approvals. No portion of the Project, except the WWTP, as described below, will be excluded or will be exempt from membership in the HOA.

The HOA will have responsibility for maintaining, operating and managing the common areas and facilities of the Silo Ridge Resort Community. These common areas ("Common Areas") include all roads, infrastructure, parking lots, landscaping, irrigation, signage, wetlands, watercourses, trails, open space and other common facilities of the Property. Specifically, the Common Areas will include the Conservation Easement (except the golf course portion ("Golf Course") which will belong to and be governed by The Club component, as described below); the Habitat Management Plan (as it pertains to areas outside the Golf Course); the Natural Resource Management Plan (as it pertains to development areas outside the Golf Course); and the Stormwater Management Plan. The foregoing is not an exhaustive list or definition of the Common Areas.

At some point in the future, the land on which the WWTP is located will be subdivided into a separate lot ("WWTP Lot") and the WWTP Lot may be donated to the hamlet of Amenia Sewer District whereby said WWTP Lot will no longer be under the direct oversight of the HOA. Until such time of donation, the HOA will have direct oversight over the Transportation Corporation formed for the WWTP and Silo Ridge Wastewater Conveyance System.

The Board of Directors of the HOA will be responsible for the governance of the HOA and will work with a Property Manager to maintain the Common Areas. The HOA will collect an escrow fee from HOA Owners for the post-construction review by the Town of Amenia engineer of inspection and maintenance reports required in connection with the Stormwater Pollution Prevention Plan and will be responsible for the payment of the fee to the Town of Amenia. The HOA will also be committed to dedicating sufficient resources to the ongoing care, maintenance, life-cycle and eventual replacement of the vegetative screening contained in the landscaping plan for the Project. In addition, the HOA shall contract with a private hauler to remove all solid waste and recyclables from the Project in compliance with all applicable federal, state and local rules and regulations.

The individual Component associations, governed by their own Board of Directors (see attached chart) wil be responsible for governance of the buildings and amenities within the Component.

#### Costs and Expense

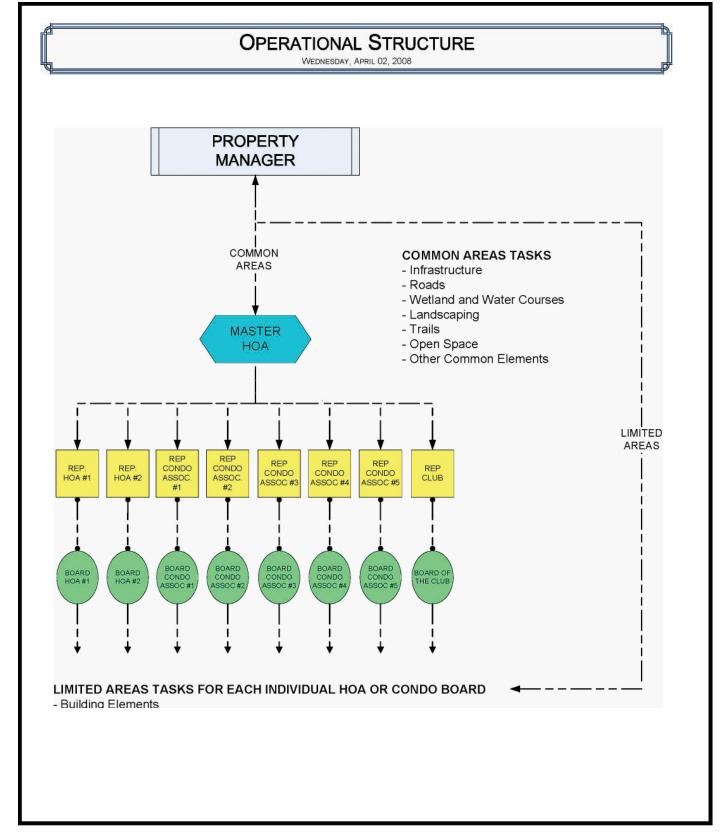
The costs and expenses of operating the HOA and of making capital improvements to the Common Areas shall be included in the HOA Budget, which will be prepared annually. There shall be an allocation of the operational costs and expenses and capital improvement costs ("HOA Common Charges") among the various Components, in accordance with a formula consistent with proscribed parameters set forth in its New York Condominium Act and Attorney General Regulations.

Individual Components shall also prepare budgets annually which include the costs and expenses of operating and maintaining and of making capital improvements to the buildings and amenities (e.g. common entrance and hallways, swimming pool for the specific use of the Unit Owners of the Component) within the Component These costs and expenses will solely be allocated among

Component Owners ("Component Common Charges").

The HOA will collect HOA Common Charges from Owners, pay bills, regulate the use and enjoyment of the Property in accordance with all governmental approvals, address infra-structure repairs, maintain the Property and establish a governing entity (e.g. HOA Board of Directors) to accomplish these tasks. Each Component will collect Component Common Charges from Component Owners and pay bills for Component expenses Each Component Board will govern by the respective Owners thereof, subject to the terms of the master HOA and will make decisions solely affecting that particular Component.

Upon the sale and conveyance of a Unit by Sponsor to a Purchaser, the Purchaser becomes a member of the HOA as well as the individual Component where the Unit is located.



HOA #1: COMPOSED OF SINGLE FAMILY RESIDENCES (BLOCKS H, I, J)

HOA #2: COMPOSED OF GOLF VILLAS (BLOCK D)

CONDO ASSOC. #1: COMPOSED OF FLATS, DUPLEX (BLOCKS A, B)

CONDO ASSOC. #2: COMPOSED OF TOWNHOMES (BLOCKS B, C)

CONDO ASSOC. #3: COMPOSED OF TOWNHOMES (BLOCKS E, F, G)

CONDO ASSOC. #4: COMPOSED OF VINEYARD COTTAGES (BLOCK V)



Upon subsequent transfers, the new Unit Owner automatically becomes a member of the HOA and of the Component. No member may exempt himself from contributing toward the HOA Common Charges of Component Common Charges, for example, by waiving the use of improvements maintained by the HOA of by the Component.

#### Governance

The Board of Directors of the HOA will consist of eight (8) members represented by a member elected or designated from each of the eight (8) Components in the HOA. Each Board member serving on the HOA Board will also be a member of the Component Board. Each Board Member serving on the HOA Board shall be entitled to one (1) vote, and each vote will be weighted equally

The Board of Directors of each Component Board will be elected by the Component's Members (all Owners comprise the Members of the Component and the HOA). Each Component Unit Owner shall be entitled to one (1) vote, and the weight of each vote will be in accordance with each Unit Owner's Common Interest. The Common Interest will be determined in accordance with all laws and regulations of the State of New York including submission of all required documentation and certifications with the New York State Department of Law. There will be the flexibility within each Component to adjust and revise the weight of voting rights of Component members during the development of the Project to take into account such factors as the number of Owners of its respective Components, disparity in sizes and locations of Units and other factors.

For each HOA Component, during an initial control period anticipated to end after 95% of the units in that HOA Component are sold, Sponsor shall have the right to designate a majority of the Board of that Component, as well as the right to designate that HOA Component's representative to the Board of Directors of the HOA. Initially, Sponsor will retain a majority ownership of the Project and will be engaged in selling houses and condominium interests. Following the expiration of the Initial Control Period (as such term will be defined in the respective governing documents), control will then be in the hands of the respective home owners/condominium unit owners. The HOA documents will provide a mechanism to redefine the Initial Control Period if, after a reasonable time period, the Components have not been developed.

Hotel Condominium Unit Owners, for example, will be members of their own Component association and will have the right to be represented by one (1) member of the HOA Board. In turn, they will have their own Component association to govern the affairs of the Hotel Condominium. Each Hotel Condominium Unit Owner shall have the right to cast one (1) vote on behalf of the Condominium Hotel Unit and will be responsible for HOA Common Charges and Component Common Charges.

The Golf Course, located within the Club Component, is located in part of the overall open space that will be subject to the 80% open space Conservation Easement. The Club will maintain the Golf Course, including the Clubhouse. The Club will have direct oversight of the Natural Resource Management Plan, the Habitat Management Plan and the Conservation Easement as it pertains to the Golf Course. The Clubhouse will also be responsible for ensuring compliance with the conditions of the Findings Statement applicable to the Golf Course.

Components may contain their own homeowner and condominium associations that are responsible for the buildings and amenities within the individual Component. Specifically, there will be two Component with smaller homeowners associations (one for the single family homes, and one for the golf villas) and five Components with condominium associations (one for the flats and duplexes near the Village Green, one for the townhomes near the Village Green, one for the townhomes near the South Lawn, one for the Vineyard Cottages, and one for the Hotel-Condominium).

#### Dispute Resolution

The Declaration and By-laws and Rules and Regulations of the HOA will set forth a structure and mechanism to govern the HOA. In turn, each Component will be subject to its own By-laws and Rules and Regulations. In general, disputes, either between Components or between an Owner and a Component, will be subject to binding arbitration.

#### Documentation

Deed restrictions shall be added to all deeds for the Property, or any portion thereof, implementing the equirements of the Conservation Easements. The HOA documents will include provisions to implement the equirements of the Conservation Easements.





The Welcome House

# Zoning Compliance and Waiver Requirement

Pursuant to the Town's revised Zoning Law, adopted on July 19, 2007 as Local Law No. 2 of 2007(the "Zoning Law"), the Project Site is currently classified within the Resort Development Overly (RDO) District, with the Rural Agricultural (RA) District as the underlying' zoning district.

As more fully set forth in § 121-18 of the Zoning Law, the RDO provides a procedure for master planned development of large properties to promote resort development, tourism, recreation, and open space protection. The regulations of the RDO supersede the use and dimension regulations of the underlying RA District in cases where there is a conflict. Among the allowable uses in the RDO District are the following:

- All uses allowed in the RA District
- Lodging facilities, hotel-condominium, meeting rooms, and conference facilities;
- Restaurants
- Retail, recreational, and service businesses associated with the resort use:
- Riding academy and other equestrian uses
- Such other uses that may be approved by the Planning Board in issuing a Special Permit for a development plan consistent with the purposes of the RDO.

The RDO requires a Master Development Plan (MDP) for any proposed use that is not allowed in the underlying RA zoning district. According to Section 121-18 (3) (b) of the Zoning Law, the MDP must include a conceptual Site Plan showing an open space system (including preserved open space), access and road layouts proposed buildings (including their uses, footprint, height, and total square footage proposed recreational facilities, proposed utilities (including water supply and wastewater disposal), and a phasing plan if the project is to be built in phases. When buildings will be visible from public roads, bicycle trails, or other publicly accessible areas, submission of proposed elevations of buildings and proposed architectural standards and covenants is required. Architectural standards and covenants may also substitute for any of the design standards that would otherwise be applied to the RDO. Sign standards may also be developed as part of the architectural standard and may substitute for other signage requirements in the Zoning Law. The MDD must also contain a management plan for the future management of the proposed development as a unified entity.

As set forth in Section 121-18(C)(2), the RDO also includes a provision for th submission of a conservation analysis to the Planning Board; however, for project for which a DEIS has been submitted prior to adoption of this provision, the DEIS substitutes for the conservation analysis. Here, the environmental analysis in the Applicant's accepted DEIS served as the conservation analysis for the Project.

The RDO also contains a provision (§121-18C(5)) limiting retail establishment that sell goods and supplies to no more than 5% of the total footprint of the proposed buildings within the development. This limitation applies to retail stores and not to hotel, spa, or restaurant uses. The enclosed MDP proposes 26,127 sf o retail space, which provides a retail to footprint ratio of +/- 4.5%, in compliance with the foregoing.

The RDO requires a minimum of 80% of the total land area of the parcel to be preserved by a conservation easement as open space, with a maximum impervious surface coverage of 15% of the total site area. The RDO gives priority in open space protection to land within the Scenic Protection Overlay (SPO) and Stream Corridor Overlay (SCO) districts, especially the view to and from DeLavergne Hill ridgelines, historic resources, unique ecosystems, prime agricultural land, and water resources. The Silo Ridge MDP includes proposed open space of 80% of the total land and area to be protected by way of a Conservation Easement, and +/- 6% impervious coverage proposed for the total site area Open space land preserved under this subsection may include farmland and farm structures, ponds and streams and recreational land such as golf courses, cross-country ski trails, equestrian trails and hiking trails. As a condition of the Findings Statement, deed restrictions will be added to all deeds for the Property, or any portion thereof, implementing the requirements of the Conservation Easements. As a further condition of the Findings Statement, restrictions will be added to the HOA documents as necessary to implement the requirements of the Conservation Easements. Protected open space does not include land lying under non-agricultural structures taller than 20 feet nonagricultural buildings larger than 200 square feet in footprint area, or land that is covered by impervious surfaces other than trails or golf cart paths. In addition to the

80% open space requirement, the RDO also requires open space buffers of at least 100 feet from any existing residential uses that are not within the RDO District. Such buffers may be wooded or open and may contain trails, but may not contain any buildings or other recreational structures. This requirement does not apply where residential uses to be buffered lie across a State or County highway from the RDO District

The maximum height of 35 feet may be increased to five stories in the RDO District at the discretion of the Planning Board based on a visual analysis. The Planning Board may waive the 35-foot height limit, provided that a visual impact analysis is performed in the course of SEQRA review, to ensure that no significant views are adversely impacted, that any impacts on views are mitigated to the maximum extent practical, and that the building is sited to minimize visual impacts by taking advantage of natural topography. The following proposed buildings are over 35' (as measured to the midpoint of highest gable):

• Hotel R-1, Spa R-3, R-2, Clubhouse, CR-1, CR-2, C-3, C-4, C-5, C-6, C-7, C-8, C-16, CR-17, S-2, and S-6. See Building Height Key Plan indicating location of the above buildings.

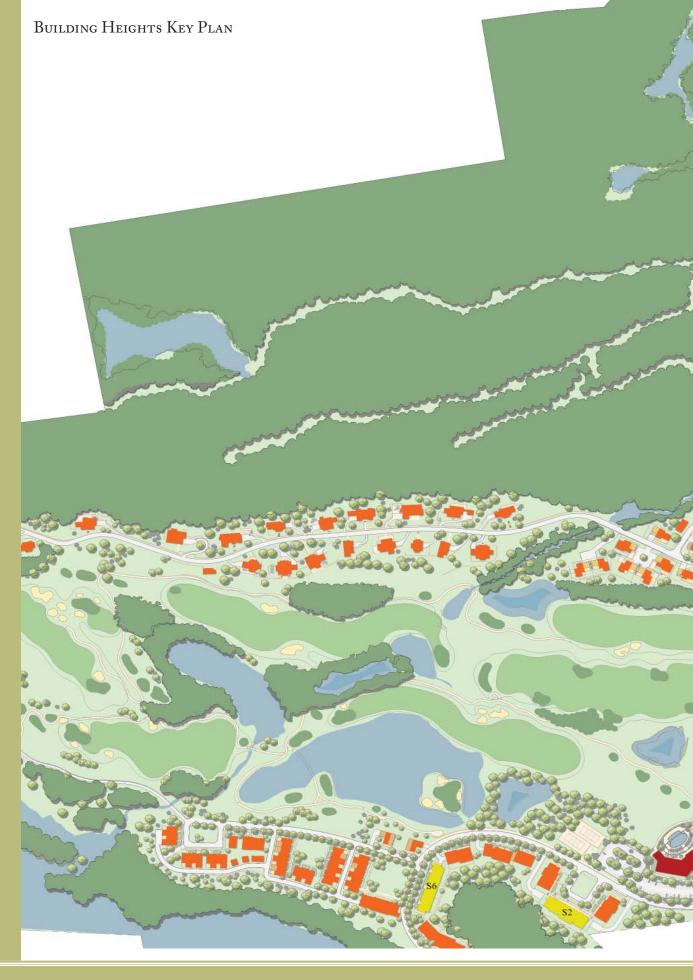
Thus, the project will require waivers from the 35' maximum building heigh limitation in Section 121-18(C)(10)(b). To grant the waivers, the Planning Board must find that:

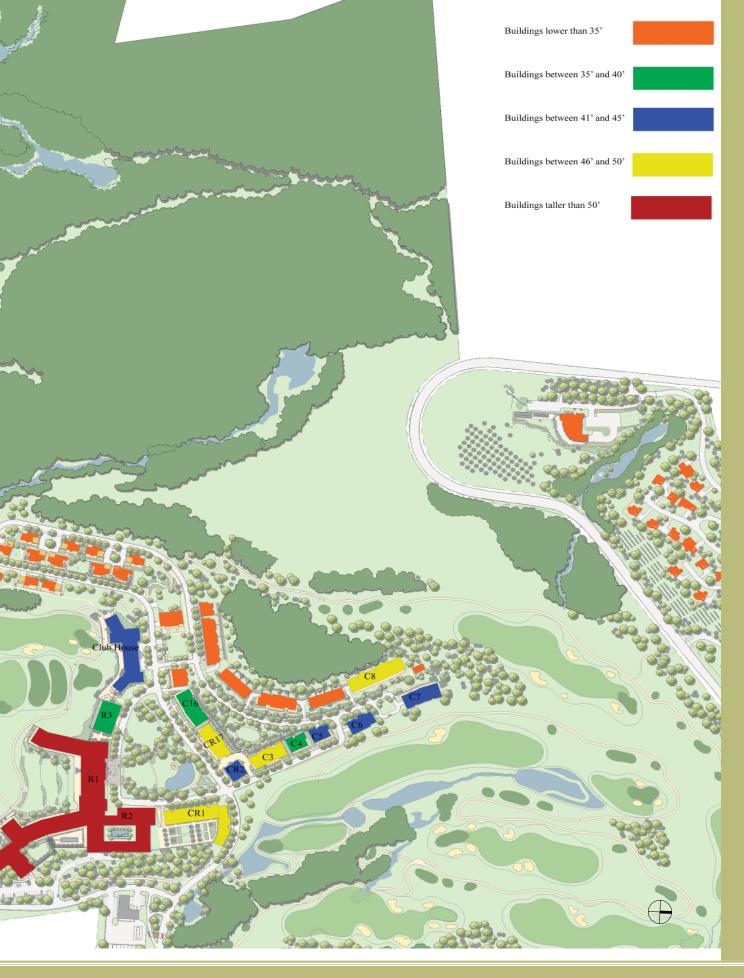
- No significant views are adversely impacted.
- Any impacts on views are mitigated to the maximum extent practical.
- Building(s) are sited to minimize visual impacts by taking advantage of natura topography.

As noted above, no building is permitted to be more than 5 stories in height counting the stories from average grade at the front of the building, and excluding any story contained within a roof. The project complies with the limitation on the number of stories provided in this Section, as no buildings are more than five stories tall in accordance with this definition. The Applicant has prepared an analysis of the project's potential visual impacts, which included photosimulations, renderings an architectural and landscape character booklet, and a video to demonstrate the potential visibility and visual impact of the project. The Applicant has also illustrated which buildings will be visible from the viewpoints selected by the Planning Board to be analyzed and has illustrated and identified the viewpoints from which building that need waivers will be visible. Please see Appendix G of the FEIS.

The density and dimensional standards in §121-11, and all other density and dimensional regulations in the Zoning Law other than those contained in Section 121-18, do not apply to the RDO District and are superseded by the RDO. Other dimensional and density standards are approved by the Planning Board in the MDP based upon the physical characteristics of the site, the character of the proposed development, relevant performance standards contained within the Zoning Law and the requirements of the SEQR process. The proposed density/dimensional/bulk table for the Project, previously set forth in the FEIS, is now provided on page 30 of this book.

With regard to gates, the main entrance will have a manned Welcome House located prior to the entry gates. The primary purpose of the Welcome House will be for resort personnel to greet visitors, provide directions or instructions to visitors and identify persons entering the Property and their intended destination(s). It will not be necessary to be a guest of the hotel, resort or golf course to enter the Property, however, non-guest access to the resort is restricted to the village green, retail shops and hotel restaurants or any other amenity offered by the resort operator to non-guests during operating hours. Similarly, it will not be necessary to be on a pre-approved list to enter the Property. Resort operator personnel shall have the authority to grant or deny access if resort personnel determine that a situation requiring immediate investigation or intervention by resort security or law enforcement authorities exists. Moreover, resort operator personnel shall have the authority to deny access and to remove persons who are not visiting areas open to the general public during established business hours, who have been previously disruptive to other people visiting the resort and to the operation of the resort, and who have misrepresented their stated intent or purpose for visiting the resort.





However, there shall be no arbitrary denial of access to the areas open to the general public. No admission or entry fee may be charged as a condition of Illowing vehicles, bicycles, or pedestrians to enter the Property unless there is a special event, such as a golf tournament. The other 3 entry gate locations will be unmanned.

In addition to the waiver of the 35' height limitation noted above, the Applicant also seeks permission to allow for several other components of the Project including: permission to maintain the proposed roads as private streets and to install gates at all four entrances to the Project, (except the winery restaurant) permission to install a gate at the entry way of the proposed Wastewater Treatment Plant ("WWTP"); permission to disturb approximately 20 acres of slopes greater than thirty percent (30%) (See "B" below), permission to fill two small wetland areas not regulated by the ACOE or NY DEC, and permission to build a portion of the access road to the Vineyard Cottages within the 100 foot residential open space buffer.

The layout of streets, blocks, public spaces, and buildings in the RDO district shall follow the principles of Traditional Neighborhood Development described in § 121-12.1 to the extent practical, unless the Planning Board determines that this requirement does not apply as provided in §121-12.1(H)(2) which states, in relevant part, that. the requirements of subsections B, D, E, F, and G above may apply if such requirements are consistent with the proposed resort use of the property.

The Project Sponsor has acknowledged that the Project does not fully comply with the above-described TND principles as applied to the single family homes Vineyard Cottages, private streets, and gated entrances. Instead, the Project Sponsor has indicated that it will seek a determination from the Planning Board during the special use permit process that full compliance with these TND principles is not practical, nor is it consistent with, the proposed resort use of the Property.

#### Compliance with Other Zoning Requirements

In addition to the foregoing, there are several provisions in the Zoning Law that require the Planning Board to make findings about the project's impact or scenic resources and steep slopes.

#### Section 121-36(A), Steep Slope Regulation

Section 121-36 of the Zoning Law requires the implementation of certain erosion and sediment control mechanisms and practices on steep slopes greater than 15% to avoid soil erosion and sedimentation.

Section 121-36 also prohibits any disturbance on slopes of 30% or greater including cutting of vegetation or construction of driveways unless: (1) the applicant can demonstrate that there is no feasible alternative and that the impacts of land disturbance will be fully mitigated by the best available engineering, erosion control, and visual impact mitigation practices; or (2) the applicant can demonstrate that the impacts of disturbing these steep slopes do not negatively impact visual resources, that the areas impacted are part of a broader plan for a site that weighs and balances the full range of environmental issues, and that such disturbance is fully mitigated by engineering and soil erosion control practices. The project will disturb approximately 20 acres of slopes greater than 30%. The project will also disturb approximately 83 acres of slopes between 15% and 30%.

To reduce impacts to 30% slopes or greater, this MDP proposes the relocation of the single family homes further to the south, where less disturbance will occur to slopes greater than 30%. Tree clearing would also be reduced by approximately 0.9 acres. However, impervious surface coverage increases with this plan, as the development is spread over greater areas of the site. Previously proposed single family homes at the area of headwaters to Wetland J have been eliminated and impacts to more than 800 lineal feet along Stream J have been eliminated.

#### Response 3.1-5-GP33 in the FEIS describes the engineerin

practices that will be implemented to ensure that there are no adverse impacts resulting from grading and development on slopes of 30% or greater. With respect to visual impacts, the Applicant has prepared photosimulations, renderings, an architectural and landscape character booklet, and a video to demonstrate the potential visibility and visual impact of the project. The Applicant has also illustrated which buildings will be visible from the viewpoints selected by the Planning Board to be analyzed. (Appendix G of the FEIS). A Confirmatory Visual Analysis will be conducted during Site Plan approval

#### Section 121-14, Stream Corridor Overlay District

Section 121-14 of the Zoning Law, Stream Corridor Overlay District, requires site plan approval for activities involving more than 10,000 square feet of grading within the SCO District. The project will involve approximately 6 acres (261,360 sf) of grading within the SCO along Amenia/Cascade Brook and therefore requires site plan approval under this provision. Within the SCO District, the Planning Board may grant Site Plan approval only if it finds that with appropriate conditions attached, the proposed activity will not result in degradation of scenic character and will be aesthetically compatible with its surroundings, and will not result in erosion or stream pollution from surface or subsurface runoff.

The SCO includes all land lying within 150 feet of the top of the bank or each side of the Amenia-Cascade Brook. No principal structure can be located within 100 feet of the Amenia-Cascade Brook, and no accessory structure 200 square feet or larger can be located within 50 feet of the Amenia-Cascade Brook. Development in the SCO is only permitted if it will not result in degradation of the scenic character or the stream, and will not result in erosion or stream pollution from surface or subsurface runoff.

In making a determination as to whether development in the SCO will result in erosion or stream pollution from surface or subsurface runoff, the Planning Board shall consider slopes, drainage patterns, water entry points, soil erosivity denth to bedrock and high water table, and other relevant factors.

arsuant to section 121-18(C)(10)(a) of the RDO regulations, the Planning pard may waive specific requirements of the Stream Corridor Overlay istrict, where streams and water features are integrated into the Master evelopment Plan, provided that the Plan provides for water quality protection d mitigation of water quality impacts consistent with the purposes of the ream Corridor Overlay District.

The Applicant proposes several mitigation measures that will be implemented to ensure that erosion and sediment control are adequate to protect water quality. The Applicant has also provided a detailed analysis of the project's potential visual impacts and has incorporated mitigation where necessary to reduce the significance of any impacts. (See Appendix G of the FEIS.)

Section 121-14.1, Scenic Protection Overlay District (Appendix J) The SPO includes land lying within 800 feet of the Route 22 and Route 44 right-of-ways, and within 500 feet of the Harlem Valley Rail Trail. Pursuant to section 121-14.1 of the Zoning Law, the purpose of the SPO is to regulate land uses within designated scenic corridors and ridgeline areas to protect the Town's scenic beauty and rural character. Accordingly, development in the SPO is only permitted if it will not significantly impair scenic character and will be aesthetically compatible with its surroundings. Such development must also locate and cluster buildings in a manner that minimizes their visibility from public places, and that minimizes the removal of native vegetation.

The project site lies within the scenic viewshed from DeLavergne Hill. This viewshed is identified as an important scenic resource in the Town and in the surrounding area. Within the SPO District, Site Plan approval may only be granted if, with appropriate conditions attached, the proposed activity:

- Will not significantly impair scenic character and will be aesthetically compatible with its surroundings.
- Will minimize the removal of native vegetation, except where such removal may be necessary to open up or prevent the blockage of scenic views and panoramas from publicly accessible places
- Will locate and cluster buildings and other structures in a manner that minimizes their visibility from public places.
- Will be at least 40 feet below the crest line of any ridge and will not disturb the continuity of the treeline when viewed from a publicly accessible place.
- Will not result in clearing a building site area, including accessory structures and parking area, greater than 30,000 square feet in area for a single-family residence.
- Will comply with the requirements of Section G (Landscape), H (Architecture), I (Fences) and J (Rural Siting Principles), except where site features are screened from public roads or trails.

  Each point is discussed below.
- Will not significantly impair scenic character and will be aesthetically compatible with its surroundings.

As discussed previously, the Applicant has provided a detailed analysis of the project's potential visual impacts and has incorporated mitigation where necessary to reduce the significance of any impacts. (See Appendix G. of FEIS)

• Will minimize the removal of native vegetation, except where such removal may be necessary to open up or prevent the blockage of scenic views and panoramas from publicly accessible places.

The development plan makes use of the varying topography of the site to reduce the amount of tree clearing that will be needed. Existing tree masses are used where feasible to act as screening features or to be incorporated into the overall design scheme of the project. The project will also utilize clearing and grading limits to ensure the vegetation is only removed in areas where it is necessary.

 Will locate and cluster buildings and other structures in a manner that minimizes their visibility from public places.

The site design utilizes clustering by creating groupings of buildings around courtyards or greens, and by creating a "village core" in the center of the development where more dense land uses are concentrated..

- Will be at least 40 feet below the crest line of any ridge and will not disturb the continuity of the treeline when viewed from a publicly accessible place.
- Will comply with the Town of Amenia Zoning Law 121-14.1(G), where a continuous green buffer, at least 100 feet deep, shall be

maintained along route 44.

The tallest part of any roof on the project is the ridge line of the tower roof on the winery building. The finish floor elevation of the winery is 812' and the ridge line of the tower roof is 39' 6" above the finish floor, or at an elevation of 851.6'. Referring to Figure ES-3, which shows the USGS map of Amenia, the elevation of the top of the ridgeline north of the winery is 1140', to the east is 1100' and to the west is 960'.

The highest point of any project building is 100'± lower than any crest of any ridge line in the region around the site and therefore the project complies with this requirement of the Zoning Law.

• Will not result in clearing a building site area, including accessor structures and parking area, greater than 30,000 square feet in are for a single-family residence.

The project does not involve such grading activities.

Will comply with the requirements of Section G (Landscape), I (Architecture), I (Fences) and J (Rural Siting Principles), excep where site features are screened from public roads or trails.

The SPO outlines architecture, landscaping, and fencing standards which apply to new developments in the SPO District. The project will adhere to these standards, as illustrated in this MDP.

Section 121-35 of the Zoning Law regulates wetlands and watercourses. The requirements of this section are in addition to any requirements that may apply to a watercourse located in the SCO. This regulation is based upon the Town's determination that the protection of its wetlands and watercourses helps to maintain water quality and the health of natural ecosystems, reduces flooding erosion and sedimentation, and protects important wildlife habitaters.

Pursuant to section 121-35(C), the Planning Board may impose conditions on development in addition to DEC and ACOE requirements where those additional conditions are necessary to minimize damage to wetlands and watercourses. Such conditions may include modifications in the size and scope of the project, as well as changes in the location of structures or other improvements on the parcel. The Planning Board is not limited by the regulations of the DEC and ACOE, and may impose protections on wetlands and related upland habitat areas that are more stringent than required by these agencies provided that such conditions are reasonable and based upon the advice of a qualified expert.

The Conclusion of the SEQRA Process and Adoption of the Findings Statement

Since the time of the submission of the Applicant's initial Special Permit/MDP application on April 3, 2008, the following actions have been taken by the Planning Board, as "Lead Agency" under the New York State Environmental Review Act ("SEORA"):

- On September 16, 2008, the Planning Board accepted the Final Environmental Impact Statement ("FEIS") and deemed it to be complete, based upon its determination that the FEIS provides a sufficient basis for the Planning Board and all involved agencies to carry out their decision-making and findings responsibilities under section 617.11 of the SEORA regulations.
- After accepting the FEIS as complete, the Planning Board caused a Notice of Completion and the FEIS to be circulated, published and posted on a link to the Town's official website as required by SEORA.
- The Planning Board accepted written comments on the FEIS through October 24, 2008, and considered the written comments that its received from involved and interested agencies and members of the public during its preparation and issuance of a Findings Statement.

• Finally, on January 8, 2009, the Planning Board adopted a Findings Statement that: (1) considers the relevant environmental impacts, facts and conclusions disclosed in the FEIS, (2) weighs and balances the relevant environmental impacts with social, economic and other considerations, (3) provides a rationale for the Planning Board's decision, (4) certifies that the requirements of SEQRA, have been meet; and (5) certifies that consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and (5) certifies that adverse environmental impacts will be avoided for minimized to the maximum extent practicable by incorporating those mitigation measures that were identified as practicable as conditions to the Findings Statement.

Compliance With Major Project Special Permit Criteria (Section 121-63 Of The Zoning Law)

In order to grant a Major Project Special Permit, the Planning Board needs to establish that a Major Project:

1. Will Comply with all land use district, overlay district and other specific requirements of this and other chapter and regulations, and will be consistent with the purposes of this chapter and of the land use district in which it is located.

the Project Site is located in the Kurai Agriculturai (RA) District and the Resort Development Overlay (RDO) District. It is also ocated within the Aquifer Overlay District (AO) and portions of the site are within the Scenic Protection Overlay District (SPO) and the Stream Corridor Overlay District (SCO). In accordance with the RDO, a MDP has been prepared for the proposed project. The proposed MDP meets the minimum required 80% open space requirement and is below the maximum 15% impervious surface area proposing approximately 6±%). However, the hotel buildings and some of the residential buildings would exceed the 35-foot height imitation contained in the RDO. The RDO allows the Planning Board to waive the 35-foot height limit to allow a maximum height of five stories counted from the average grade at the front of the building (excluding any story within a roof), provided that visual mpacts will not be significant. Thus, waivers will be requested for the hotel and some of the residential buildings. The Applicant also seeks permission or approval for a number of other components of the Project, including: permission to maintain the proposed roads as private streets and to install gates at all four entrances to the Project, permission to disturb approximately 20 acres of slopes greater than thirty percent (30%), permission to fill two small wetland areas not regulated by the ACOE or NY DEC, and permission to build a portion of the access road to the Vineyard Cottages within the 100 foot residential open space buffer. The RDO gives the Planning Board discretion regarding dimensional and density standards, including parking. The nature of the proposed resort development is such that much of the parking will be shared among the different uses onsite. The Applicant commissioned a Parking Study, which was discussed in the DEIS and subsequently refined during development of the MDP (Please see Sheets P-1 to P-8 of the MDP), to identify minimum parking standards for the Project. These parking figures were based on the

A visual analysis was prepared for the project as required by the SPO District. The Findings (page 92, VII.4.) state that the "adverse environmental effects revealed in the EIS process will be minimized or avoided to the maximum extent practicable by implementing the mitigation measures identified herein.

The Applicant seeks permission to satisfy its obligations under the Town's Workforce Housing Law by making a substantial contribution toward the cost of providing sewer infrastructure to the hamlet of Amenia. Specifically, the Applicant proposes to satisfy its Workforce Housing Law obligations by constructing 181,375 gallons per day of excess capacity in its wastewater treatment plant at no cost to the Town, reserved exclusively for the anticipated hamlet of Amenia sewer system.

Will not result in excessive off-premises noise, dust, odors, solid waste, or glare, or create any public or private nuisances.

It is projected that the difference in noise levels between present and anticipated future conditions will not exceed 3 dB, which is not generally perceptible. (See, also Section 3.16 of the DEIS and the FEIS, and Findings, pp. 83-84). During construction, dust control measures will be implemented to minimize the potential for off-site dust impacts. Construction impacts are evaluated in Section 2.3 of the DEIS and FEIS, and in the SWPPP, at Appendix 9.5.2. No outdoor construction activities will occur on Sundays.

The proposed wastewater treatment plant will be designed to mee all applicable County and State regulations, and will not generat any excessive odors. (See, pp. 78 - 81 of the Findings Statement and DEIS/FEIS Section 3.14) The Harlem Valley transfer station and the Dutchess County Resource Recovery Plant have adequat capacity to handle the increase in solid waste from the proposed project. (See, Section 3.15 of the DEIS and the FEIS, and pp.82 83 of the Findings Statement.) Given the position of proposed structures and the distance from public rights-of-way, the Project is not expected to cause any glare impacts. (See, Section 3.6 of the DEIS and FEIS, and pp.50-51 of the Findings Statement.)

The proposed uses are allowable uses within the RDO, and are therefore considered desired uses within the Town. The proposed uses will not cause any public or private nuisance.

3. Will not cause significant traffic congestion, impair pedestrian safety, or overload existing roads, considering their current width surfacing, and condition, and any improvements proposed to be made to them by the applicant.

The Project will not cause significant traffic congestion, impai pedestrian safety, or overload existing roads. As a component of the DEIS, a comprehensive evaluation of the project's impacts on the local transportation system was performed. The Traffic Impact Study (TIS) included an evaluation of highway capacity as measured in Level of Service (LOS) and traffic delays. The TIS concluded tha all intersections analyzed will maintain an acceptable level of service except:

- Route 44 at Route 22 (Hamlet of Amenia) indicates a sligh deterioration in capacity, particularly during the Saturday Mid-Dapeak hour period and the Sunday PM peak hour period.
- Route 22 at Lake Amenia Drive and Dunn Road (CR 81 indicates deterioration in level of service (LOS) for the side road Lake Amenia Road and Dunn Road (CR 81) to an unacceptabl LOS F for both the Weekday PM peak hour and the Sunday PM peak hour, west bound only. However, the computed 95th percentil queue lengths are of the order of one to two vehicles during pea periods. Re-assessment of this location is recommended upon project completion in conjunction with input from NYSDOT.
- Route 22 at Existing Main Site Access indicates deterioration during the weekend peak periods analyzed.

The Applicant proposes to pursue installation of a traffic signal a this location, thus mitigating any impacts. The TIS also evaluated traffic safety (vehicular & pedestrian) as well as short-term construction related impacts. The Project incorporates a number of non-motorized transportation features and no impact to pedestrian safety is anticipated. (See, also, Section 3.7 of the FEIS, and pp. 57 60 of the Findings Statement.)

4. Will be accessible to fire, police, and other emergency vehicles.

As noted in Sections 3.10 and 5.2 of the DEIS, the Silo Ridge Resort Community development will be accessible to police, fire, and other emergency vehicles. The design of the Project Site was developed with cooperation and input from emergency services personnel to make certain that the needs of these providers would be met. The proposed MDP includes an emergency roadway around the southern end of the site that connects the east and west sides of the development. This road provides an alternate means of access that does not require going past the hotel and the main center of the development, which could better enable emergency services personnel to assist in an emergency on the west side of the development. Furthermore, representatives of the project team met with the Town of Amenia Fire Chief on May 22, 2007, for initial discussions on the Project layout from the perspective of emergency access, circulation, and safety. Roadway widths, fire hydrant spacing, turning radii, and access were discussed and it was the Fire Chief's opinion that the site plan appeared reasonable with respect to those items. Ongoing consultation with the fire department will occur during the design process, to ensure that adequate fire safety measures are incorporated into the plan. (See, also, Section 3.10 of the FEIS, the correspondence from Amenia Fire Company #1 Chief Shawn Howard, dated July 31, 2008, attached to the FEIS as Appendix E, and pp. 70-72 of the Findings Statement.)

Will not overload any public water, drainage, or sewer system, or any other municipal facility.

The Project will not overload any public water, drainage, or sewer

#### Water

No impacts to public water supplies are anticipated. The Project's estimated average daily water demand is 495,580 gpd, with a maximum daily flow demand of 272 gpm. Water supply of 283 gpm can be provided with the largest producing well out of service by a series of on-site groundwater wells. The installation and operation of the water supply system will be regulated by the NYSDOH as a public water supply.

#### Stormwater (Drainage)

Stormwater generated from the planned project will be managed consistent with applicable NYSDEC requirements, General Permit requirements of GP02-01, and State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity GP-0-08-001 (or current) Stormwater runoff from the site will be collected and conveyed via a combination of closed (piped) and open (swale) systems Stormwater quantity controls and quality treatment systems will be installed consistent with NYSDEC requirements, and sized to accommodated 50- and 100-year storm events. Moreover, all stormwater generated from commercial and residential development and the roadways for the Project will be subject to the "East of the Hudson" standards, as set forth in Chapter 10 of the New York State Stormwater Management Design Manual (August 2003). The East of Hudson standards are the stringent treatment standards required within the New York City (phosphorus restricted) Watershed although it should be noted that the Project site is not actually

located within the New York City Watershed. (See, also, Section 3. of the DEIS and FEIS, and pp.32-36 of the Findings Statement.)

#### Wastewater (Sewer

No adverse impacts to municipal sewer systems are anticipated. The project is estimated to generate an average daily flow of 197,000 gpc of wastewater. A new onsite wastewater collection and treatmen system will be constructed to manage the project's wastewater. The wastewater system will be constructed to treat effluent in compliance with NYSDEC SPDES requirements. (See Section 3.14 of the DEIS and FEIS, and pp.78-82 of the Findings.)

The Applicant proposes to construct 181,375 gallons per day of excess capacity in its wastewater treatment plant at no cost to the Town, reserved exclusively for the anticipated hamlet of Amenia sewer system.

#### Other Municipal Facilities

The DEIS evaluated impacts to Police, Fire, and Emergency Service and included an evaluation of the Project's fiscal impacts. Whil the Project will create modest increases in demand for municipal services, the impacts will be off-set by additional tax revenues. (See also, Section 3.17 of the FEIS, and pp. 70-72 and 84-85 of the Findings.)

Will not materially degrade any watercourse or other natural resource or ecosystem, or endanger the water quality of an aquifer.

Out of the approximate 36 acres of wetlands onsite, the Project will result in 0.11 acres of wetland disturbance and 0.012 acres of temporary disturbance, all of which will be mitigated as provided in the FEIS. An Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan (SWPPP) have been prepared for the site in accordance with NYSDEC regulations. A Natural Resource Management Plan, which includes an Integrated Pest Management Plan, was also prepared, which describes prevention and monitoring strategies to minimize the project's potential impact to terrestrial and aquatic resources. Additionally, Appendix F of the FEIS and MDP drawings ENV-1 to ENV-6 describe a Habitat Management Plan (HMP) and Buffer Management Plan for the entire site.

Approximately 38 acres of previously undisturbed areas will be disturbed during grading and construction activities. Erosion and sediment control practices and compliance with permitted requirements for all onsite wetland disturbances will serve to reduce secondary impacts to vegetative communities. Mitigation measures identified in Section 3.3 of the FEIS and pages 38-40 of the Findings will further reduce potential impacts. The proposed layout in conjunction with the HMP has been designed to minimize permanent disturbance to sensitive habitats, restore degraded habitats and preserve natural open space and wildlife habitat. The layout of the development will leave approximately 80% of the site as open space, including approximately 230 acres along the hillsides and the entire length of the ridge, continuing to allow for wildlife movements. For a full evaluation of the impacts of the project on these resources, please see Section 3.1-3.4 of the DEIS and FEIS and pp.13-45 of the Findings, which also sets forth applicable mitigation measures.

7. Will be suitable for the property on which it is proposed considering the property's size, location, topography, vegetation soils, natural habitat, and hydrology, and, if appropriate, its abilit to be buffered or screened from neighboring properties and public roads.

The Project Site meets the physical requirements of the RDO, such as size and access from a County or State highway. The Project has been designed to make use of existing topography as much as possible so that landforms and vegetation help to screen buildings from view. Development was arranged onsite to utilize existing tree masses for screening and softening and to limit clearing of woodland habitat. Trees will be provided at varying intervals along roads and sidewalks for shade and cadence. New landscaping around structures will focus views and provide pedestrian scale, color and ornamental interest. Stormwater management facilities have been sited in areas with preferable soils. The hillside and ridge in the western portion of the site are remaining largely undisturbed to protect wildlife and existing habitat. (See, also, Section 1.0 Executive Summary Subsection VII.1 Site Overview of the FEIS, which discusses the Project's suitability for the property.)

8. Will be subject to such conditions on operation, design an layout of structures, and provision of buffer area as may be necessar to ensure compatibility with surrounding uses and to protect the natural, historic, and scenic resources of the Town.

Conditions of operation, design and layout, and buffers have beer included as mitigation measures in the adopted Findings Statement toward protecting natural, historic and scenic resources of the Town

9. Will be consistent with the goal of concentrating retail uses in hamlets, avoiding strip commercial development, and buffering non-residential uses that are incompatible with residential use.

The Project's retail uses and restaurants will provide for onsite entertainment and convenience. These uses are not intended to create a new "town center" that would compete with the hamlet of Amenia. In fact, there is intended to be a synergy between the proposed resort and the hamlet, where retail uses in the hamlet would experience positive effects due to the existence of the proposed resort use. The non-residential uses on the Project site are concentrated in the center of the site with surrounding residential uses to encourage pedestrian activity and create a vibrant core area. However, certain non-residential uses are located outside this resort core area, including the winery restaurant, artisan's park, underground water storage tank, and wastewater treatment plant.

10. Will not adversely affect the availability of affordable housing in the Town

The Project is not reducing the amount of affordable housing within the Town of Amenia. The workforce housing section of the Zoning Law (Section 121-42 (P)(d)) recognizes that as an alternative to the provision of workforce housing, a substantial contribution toward the cost of providing water and/or sewer infrastructure in the hamlets of Amenia and Wassaic could potentially satisfy the requirements of the workforce housing provision. As noted above, the Applicant is offering to construct the Project's WWTP with sufficient excess capacity to serve the Town in the future. If the Town does not accept this excess capacity offer relative to the proposed WWTP the Applicant will comply with the workforce housing requirement by constructing 34 units of employee or workforce housing offsite (Section 121-42(P)(b)).

The proposed offer to build a WWTP with capacity to serve the hamlet, if accepted, should facilitate a mixture of new housing opportunities within the hamlet, available to young families, retired the elderly, and working people of moderate income who live and/owork in the town of Amenia.

11. Will meet the applicable Site Plan requirements for approval. The Project will meet all site plan requirements applicable to reso development in the RDO.

12. If a property is in a "residential" district, will have no greate overall off-site impact than would full development of the propert with uses permitted by right, considering relevant environmenta social, and economic impacts.

As noted above, the Project Site is currently classified in the RDO (Resort Development Overlay) District, with the underlying zoning district classification RA (Rural Agricultural). With respect to the RA District, it should be noted that the primary use of "Agriculture" is classified in the Zoning Law as a "business" use. Moreover, allowable uses within the RDO are primarily tied to resort development, including the following: lodging facilities, hotel-condominium, conference facilities, restaurants, retail, recreational and service businesses associated with the resort use, among other things.

As further noted above, the Findings Statement adopted on January 8, 2009, certifies, inter alia that "consistent with social, economic and other essential consideration...the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable,", and further "certifies adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating those mitigation measure that were identified as is practicable in the Findings Statement."

In addition, the Zoning Law specifically states that the RDG provides use and design flexibility to encourage the development of resort communities and more intensive development than it allowed by underlying zoning. This flexibility is offered in exchang for protection of "open space resources, including scenic viewshedderidgelines, water resources, and ecosystems." The Project protect 80% of the site as open space, including the hillside and ridge in the western portion of the site. The Applicant has also partners with Audubon International for management of the site's natural resources, including aquatic and terrestrial ecosystems, and has worked diligently with the Town's ecological expert to ensure sufficient study and protection of such ecosystems.

Town and Webutuck Central School District, and due to its nature as a resort community, it will generate little increase in demand for public services. As previously noted, the Project is intended to be built and marketed as a second home, resort style community. The Project also represents an opportunity for increased employment and tourism in Amenia and the region, which will result in significant direct and indirect benefits to the local economy. (See, also, p.10 of the Comprehensive Plan Update of the Town of Amenia, adopted on July 19, 2007, Sections 3.17, 3.18 and 3.19 of the DEIS and FEIS, and pp. 84-88 of the Findings Statement.)





APPENDIX A

MASTER DEVELOPMENT SET OF PLANS: ATTACHED



APPENDIX B
LIST OF PLAN SHEETS AND DESCRIPTION OF EACH SHEET

#### Sheet T1 Title Sheet:

- Project Name and Applicant information
- Vicinity Map identifies the location of the project and its relation to Ameria
- Site Location Map indicates the project boundaries and adjoining property owners along with the associated lot and tax map numbers.
- List of Drawings shows the description of drawings that make up the MDP along with dates of drawings and revision dates
- Project Team: This lists the organizations that are most involved with the project at this point in time.

# Sheet SP1 Existing Site Conditions:

- This plan shows the existing conditions of the Silo Ridge property including but not limited to golf course, roads, buildings, wetlands and watercourses, boundaries, contours. This is looking down on the site from above (typical) at a scale of 1" = 200'. The scale is shown in the Title Block at the lower right hand corner (typical). This "scale" represents 1" measured on the plan equals 200' at the actual site.
- Typically to get oriented on a plan you locate something you are familiar with. As an example, Route 22 can be seen at the bottom of the page and the existing Silo Ridge Clubhouse can be seen at approximately the center of the page. The direction arrow at the upper left hand corner of the sheet indicates north is to the right.
- Contour lines indicate the elevation of the ground above sea level at 2' intervals. The closer the contour lines are to each other the steeper the grade. As an example, the dark band of contour lines (close together) about 2/3 of the way up the sheet indicates steep terrain.
- The project boundary is the bold dashed line surrounding the property.

### Sheet SP 2 Overall Site Plan:

• This sheet shows the layout of the Master Plan as designed by Robert A.M. Stern Architects (RAMSA) and incorporates modifications per the Findings Statement whereby single family homes, the winery restaurant and vineyard cottages are shifted. This is an overall layout plan indicating buildings, roads, golf course layout and water features. The intent is for this sheet to be an illustrative plan that is supported by more technical details on later sheets in the MDP.

# Sheet SP 3 Building Key Plans

- This sheet shows the layout of the Master Plan as designed by Robert A.M. Stern Architects (RAMSA) and incorporates modifications per the Findings Statement whereby single family homes, the winery restaurant and vineyard cottages are shifted. This plan includes but is not limited to concept road configurations approximate building footprints, and golf course layout.
- Overall project boundary is shown
- Each building is identified by letter and number. Further details for each building can be found on Sheet SP4.

# Sheet SP 4 Program Details

- This sheet includes the Unit Count, Program Detail and other Master Development Plan Information. The items included in this table are reflective of what is shown on the Key Plan. For example C-10 is shown on the Key Plan, you then locate C-10 on the Program Details sheet and find further information such as # of units, square footage, maximum height, and ownership offering, among other things.
- The detail on this sheet is also broken down by proposed Phasing

# Sheet SP 5 Open Space Plan

• This sheet indicates the open space areas when the project is completed. Per Resort District Overlay in July 2007 Zoning Law, 80% open space is required. This plan indicates how the 80% open space calculation was derived. The open space is broken down into different habitat designations which are color coded.

# Sheet SP 6 Overall Phasing Plan

- This sheet shows the concept of how the project is expected to be phased by color coding the phases on the Master Plan. Each color is a different phase.
- The Phasing Schedule shows the anticipated time allocated to each component of each phase.
- The Phasing proposed is conceptual and as sales, marketing and financing details are further defined, the overall phasing will be updated accordingly to reflect this.

# Sheet SP 7 Site Plan – Phase 1 Village Core

- This sheet is an enlargement plan of the Village Core area, which includes roads, driveways, plantings and building footprints. Building footprints are in brown, lawn areas in light green and trees shown in dark green.
- The scale is 1/32" = 1'- 0

## Sheet SP 8 Site Plan - Phase 1 Hotel, Spa and Pool:

- This sheet is an enlargement plan of the Hotel, Spa and Pool area, which includes roads, drives, parking areas, plantings, building footprints, pool and spa areas. Building footprints are in brown, lawn areas light green, and trees shown in dark green.
- The scale is 1/32" = 1'- 0'

# Sheet SP 9 Site Plan - Phase 1 Clubhouse and Villas:

- This sheet is an enlargement plan of the Clubhouse and Villas area, which includes roads, drives, paths, plantings, Golf course area with some contours and building footprints. Building footprints are in brown, lawn are light green and trees shown in dark green.
- The scale is 1/32" = 1'- 0"

#### Sheet SP10 Site Plan – Phase 1 Welcome House:

- This sheet is an enlargement plan of the Welcome House are showing the smooth flow from the Main entrance road into the site. This includes paths, fairway areas with contour elevations for holes 4 and 5 to the right side, building footprints, plantings, large pond and grass areas.
- The scale is 1/32" = 1'- 0

# Sheet SP11 Site Plan – Phase 1 Winery:

- This sheet is an enlargement plan of the Winery area which includes the building footprint, driveway, parking areas, planting and Artisan's Park overlook area.
- The scale is 1/32" = 1'- 0"

Sheet SP12 Site Sections – Hotel Lawn and Gardens:

This sheet shows section views of the Hotel area including the Terrace stairway, trees and Hotel Lawn. The section location is depicted in the Key Plan box on the bottom right of this drawing.

Sheet SP 13 Site Sections – Phase 1 Hotel Pool

This sheet shows section views of the Hotel pool area which includes the stepped terraces, trees, pool terrace and golf path areas.

Sheet SP 14 Site Sections – Phase 1 Shared Gardens:

• This sheet shows section views of the Shared Garden areas for the hotel and spa.

Sheet SP 15 Site Sections – Phase 1 Clubhouse:

This sheet shows section views of the Clubhouse area which includes the underground parking, terraced lawn over the parking area, roads, sidewalks and planting areas.

Sheet SP 16 Site Sections – Phase 1 Golf Villas:

This sheet shows a section view of a typical Golf Villa as it relates to the contours of the site. This section includes roads sidewalks, parking, trees, lawns, drives, yards, sidewalk terraces and transitions into the golf course.

Sheet SP 17 Site Sections – Phase 1 Winery:

This sheet shows a section view of the Winery area which includes sidewalks, parking lot, plantings, trees and are observation area.

Sheet A-1 Elevations:

• This sheet shows Architectural elevations from RAMSA

Sheet A-2 Elevations:

• This sheet shows Architectural elevations from RAMSA

Sheet A-3 Elevations:

• This sheet shows Architectural elevations from RAMSA

Sheet A-4 Elevations:

• This sheet shows Architectural elevations from RAMSA

Sheet A-5 "Winery" Restaurant Elevations

• This sheet shows the 4 conceptual architectural elevations of the "winery" themed restaurant

Sheet A-6 Winery Renderings from Visual Points # 1 and #4 we need to get up to date pictures per Hayes memo

• This sheet shows 2 photosimulations of the winery from the visual analysis provided during the SEQR process

Sheet P-1 Parking Table:

• This table shows how the parking allocation has evolved. On the left portion it indicates DEIS minimum parking requirement, in the center it shows Preliminary Master Development Plan allocation and on the right is the Master Development Plan allocation. This plan also has the "Shared Use" reduction calculations.

Sheet P-2 Parking Allocations:

• This sheet shows specific information as to how many parking spaces have been allocated to each building or use and what type of parking facility is provided.

Sheet P-3 Parking Site Plan

 This sheet shows the layout for the 3 main underground parking structures. Sheet P-4 Parking One – Plan:

• This sheet shows the layout of the main Parking Structure for the resort

Sheet P-5 Parking One – Sections:

• This sheet shows typical sections views of the main Parking Structure

Sheet P-6 Parking Two – Plan:

• This sheet shows the layout of under hotel Parking Garage

Sheet P-7 Parking Three – Plan:

 This sheet shows the layout of the parking at the Clubhouse/ Upper Green area.

Sheet P-8 Parking – Residential Garages

• This sheet shows a few typical layouts of the parking areas for some of the Residential multi-family buildings.

Sheet GP-1 Grading Plan:

• This sheet shows the northern half of the site which includes the layout of roads, buildings, retaining walls and proposed grading contours in two foot increments. The darker contours represent the proposed grades. The contour numbers represent the elevation in feet above sea level.

Sheet GP-2 Grading Plan:

• This sheet shows the southern half of the site which includes the layout of the roads, buildings, retaining walls and proposed grading contours in two foot increments.

#### Sheet U-1 Overall Wastewater Master Plan:

- This sheet indicates the wastewater conveyance system with colored lines identifying specific pipe uses.
- The Legend shows the colors identifying pipe uses.

Sheet U-2 Wastewater Treatment Plant – Site Plan:

• This sheet indicates specific layout of the structure at the WWTP site

Sheet U-3 Wastewater Treatment Plant – Elevations:

• This sheet shows elevation views of the Wastewater Treatment plant

Sheet U-4 Overall Water Supply System Master Plan:

- This sheet indicates the water supply system with colored lines identifying specific pipe uses.
- The legend shows the colors identifying pipe uses.

Sheet LA-1 Site Diagram – Planting:

- This sheet shows the proposed planting design layout.
- Photos indicate proposed typical plantings to be used.

Sheet LA-2 Site Diagram – Lighting: need updated plan based on SOYKA

• This sheet shows the proposed site lighting along the main roadways (Upper Drive, Main Street, South Lawn Drive and South Lawn Lane). This is conceptual in nature and will be more fully refined during Site Plan to verify compliance with LEED requirements and the Naomi Miller Lighting Standards and Parameters.

Sheet LA-3 Site Diagram – Walls:

• This sheet shows a plan view of the site with estimated wall locations indicated. Photos of typical stone walls and stairs are also shown with a description of how we plan to blend into the natural landscape. This concept plan reflects the architects understanding of key landscape stone wall features.

Sheet LA-4 Site Diagram – Materials and Furnishings:

• This sheet shows the proposed concept Paving, Curbing, Sidewalks, Steps, Pathways and Site furnishings. See the key note box on the right side of the drawing for the appropriate color coded symbols.

Sheet LA-5 Site Diagram – Signage:

 This sheet shows a plan view of the proposed location of signage for the Main areas, the Golf Course areas and the Way finding areas. See the key note box on the right side of the drawing for the appropriate symbols.

Sheet LA-6 Precedent Images – Hotel, Spa and Pool

• This sheet shows examples of other Pools and Spas. We intend on using these as a guide in our design.

Sheet LA-7 Precedent Images – Winery

This Sheet shows examples of other Winery and Valley views.
 We will use these as a guide for the look we want to achieve.

Sheet ENV-1 Environmental Constraints Map

• This sheet shows slopes, wetlands, golf course and buffers.

Sheet ENV-2 Habitat Management Plan- Existing Conditions Sheet ENV-3 Habitat Management Plan- Proposed Conditions

Sheet ENV-4 Habitat Management Plan- Buffering Plan North

Sheet ENV-5 Habitat Management Plan- Buffering Plan Center

Sheet ENV-6 Habitat Management Plan- Buffering Plan South

• These ENV sheets depict the habitat management zones and buffer zones for the golf course and adjacent natural areas. End



APPENDIX C
PROFESSIONALS ASSOCIATED WITH THE PROJECT.

Millbrook Ventures has partnered with various providers to aid in the execution of Silo Ridge Resort Community. The descriptions in this section were derived from publicly available information provided by the development partners.

Leading Hotels of the World is a leader in luxury hospitality and hotel marketing. The organization represents over 430 of the world's finest hotel, spas and resorts. The company has 24 regional offices in key cities around the world. The organization provides additional services including extensive sales and promotional activities, advertising and public relations programs, and owners/guests programs. In 2005, the company developed The Leading Spas of the World program, which is the first global evaluation and certification program for the spa industry.

Robert A.M. Stern Architects (Lead Architect), a world-renowned architectural firm with over thirty-eight years of experience, is the lead design architect for the project. Robert A.M. Stern Architects (RAMSA) is a 300-person firm of architects, landscape architects, and support staff, all among the top of their respective professions. Over its history, the firm has established an international reputation as one of the leading design firms in the world, with major projects in the United States, Europe, Asia, and South America. It has won numerous design awards, including the National Honor Awards of the American Institute of Architects. Robert A.M. Stern is personally involved in the Silo Ridge Resort Community development. Each project maintains an attention to detail and a commitment to design while still providing unique and beautiful work.

Ernie Els Design (Architect & Design) is a leading golf course designer, and is led by one of the most successful golfers of the current era. Over the past 15 years, Mr. Els has won almost 60 professional tournaments, including two US Open Championships and an Open

Championship, and a record six World Matchplay titles. During the past 18 months, Mr. Els has designed courses in the United States, Australia, the Bahamas, China, South Africa, Mauritius and Dubai. Ernie Els Design began designing courses in 1997. It is expected that the golf course at Silo Ridge will be Ernie Els' first course designed in the United States.

Jensen | Fey Architecture, Planning & Interior Design (Associate Architect Commercial), founded in 1995, designs hospitality, mixed use, office, retail, residential, and community projects. Jensen | Fey provides value beyond design and construction. Their designs create staffing, operational, and functional efficiencies that generate cost savings during the life of the building. Jensen | Fey works to produce the greatest value for its client's budget, and continually challenges itself to design solutions with this in mind. For many years Jensen | Fey has provided LEED Certification guidelines to numerous projects around the United States and is a pioneer and leader in LEED Certification building. Jensen Fey has worked with RAMSA before in the Associate Architect capacity.

Minno & Wasko and Planners (Associate Architect Residential) is an award-winning, mid-sized firm located along the Delaware River in Lambertville, New Jersey. For the past 10 years, the firm's commitment to quality design, meticulous detailing, superior materials and energy efficiency has been recognized by its peers through numerous industry awards for excellence in architectural design and planning. Minno & Wasko has worked with RAMSA before in the Associate Architect capacity.

Looney Ricks Kiss, established in 1983, has expertise in the areas of planning, research, environment, architecture, and interior design. Today, LRK is composed of 220 professional architects, designers, planners and administrative staff located in nine different offices throughout the United States. LRK has been involved in numerous projects ranging from single family homes to planned developments with residential, mixed use, and commercial components. It was awarded the Builders Choice Project of the Year for 2007. LRK consulted on the single-family homes area of the Silo Ridge Resort Community in preparation for the April 2008 MDP submission to the Planning Board.

The Chazen Companies (Site and Civil Engineering) is a professional engineering firm that provides technical expertise in engineering, environmental, surveying and planning consultation services. It is working with Millbrook Ventures to create and provide all the necessary studies and documentation that the developers are required to obtain for the development and future entitlements. The Chazen Companies has 150 professionals in five offices located throughout the Northeast and has been providing its engineering expertise since 1947.

Delaware Engineering (WW and WWTP) offers expertise in civil and environmental engineering to the public and private sectors. Their expertise lies in the ability to design, build, and operate state-of-the-art treatment facilities, providing tertiary wastewater treatment. The company is composed of a design staff of formally trained engineers and hands-on technical professionals, all of whom are involved in water and wastewater treatment design projects from inception to plant start-up and debugging. The firm has enjoyed steady growth over the past 15 years and now employs 50 professionals based in three offices in Upstate New York (Albany, Oneonta, and Walton).

Thomas J. Calu (Parking Consultant) was the Director of Economic Development and Parking for the New Jersey Transit and has over 30 years of experience in this field. He has established his own consulting services, serving both public and private sectors in parking matters. Mr. Calu has been recognized to provide full services in owner representation, initiation and oversight in feasibility studies and demand analysis, site planning, design, financing and project delivery strategies, revenue contract operations, access and revenue control systems, operational planning, security, customer service, pricing and policy.

The Pike Company (Construction Managers) of Rochester, New York is a leader in construction management and general contracting. This family-owned commercial builder has had a role in creating scores of high profile structures in Upstate New York. The firm's accomplishments have been significant since its first project of size, the original Stromberg- Carlson Company plant, which was built in Rochester in 1901. The firm's projects include the Rochester Museum and Science Center, as well as the Rochester Savings Bank. Outside the region, The Pike Company's preconstruction and construction expertise has been put to use in building schools, hospitals, commercial and industrial developments, bridges, highways, marine projects, and tunnels from Maine to Florida and as far west as Vancouver, British Columbia. Included among its major achievements nationally are the Universe of Energy pavilion and the World of Motion pavilion at Walt Disney World's Epcot and IBM Corporation's \$150 million Class 190 semiconductor manufacturing facility in Manassas, Virginia.

# Naomi Miller Lighting Design (Exterior Lighting Consultant) of Troy, NY

Design philosophy is that architectural lighting should meet the human needs of the users in terms of visibility, comfort, aesthetic appearance, and psychological response. It also needs to be responsive to the needs of the owner/manager in terms of initial and maintained cost, and responsible to the environment through energy effectiveness and prudent use of materials. Special interest in lighting education, lighting quality and human factors, energy-efficient lighting for residential, institutional, and commercial uses. Specialties include nighttime lighting impacts on perceptions of safety, physiological effects of light on humans and wildlife, and appreciation of night skies.

# Audubon Environmental, North Carolina (Natural Resource management Plan and Golf Course Sanctuary Program)

Audubon Environmental helps communities protect and sustain their land, water, wildlife, and natural resources. Our staff of scientists and subject matter experts work as partners with land owners and developers to protect, preserve, and enhance the environment within the context of the land's character and plans for human use.

We are united behind a single social purpose: To better the world by creating sustainable communities that balance what's right for the environment with what's right for business and the public at large. That philosophy, and our science, is at work all over the place. And everywhere we've been around the globe, we've proven that there really is a viable intersection between public and private interest. And we're really passionate about finding it.

Our clients range from small local municipalities to large resort developers, but they all look to us for the same thing: Sound science, practical environmental planning, exclusive certifications and responsive, innovative service

Cuddy & Feder (Land Use Legal Counsel) - Daniel F. Leary is a partner of the Firm and Vice-Chairman of the Land Use Department. Mr. Leary concentrates his practice in real estate development, zoning, and related environmental law. He is admitted to practice in the States of New York and Connecticut and in the United States District Court of the Southern District of New York and the United States Court of Appeals for the Second Circuit. He regularly represents developers, schools, non-profit organizations and the telecommunications industry in land use review and approval processes and litigation. Mr. Leary also represents municipalities and industrial development agencies in a variety of environmental matters. Prior to joining the firm, Mr. Leary served as the first Deputy County Attorney of the County of Putnam. Earlier, he served as the Town Attorney for the Town of Kent, New York.

Kramer Levin Naftalis & Frankel LLP (Hospitality & Land Acquisitions) is an international, full-service law firm with offices in New York and Paris. Their main practice with respect to the project is real estate services including the acquisitions and disposition of properties and all aspects of the development process, including but not limited to, condominium and cooperative developments as well as ground lease transactions. KLN has received numerous awards including ranking in the top 100 Most Prestigious Law Firms in America by Vault Rankings (2008), the National Law Journal Pro Bono Award (2006), and partner Gary P. Naftalis was named one of The National Law Journal 100 most influential lawyers in America (2006).

Paul Hastings (Legal) is a leading international law firm providing services and establishing partnerships with many of the world's top financial institutions, Fortune 500 companies and leading corporations. Established in 1951, the company has grown to include 1,200 attorneys serving clients from 18 worldwide offices. The 18 worldwide offices have provided its clients with the best legal advice and provided a full range of services to clients throughout the globe. Paul Hastings has been recognized with numerous awards and rankings including America's Leading Lawyers by Best Lawyers, Top-Tier Rankings in the Legal 500 Guide for Real Estate, Employment and Tax, high ranks in the Vault Guide to the Top 100 Law Firms (2008), amongst many others.

Holland & Knight – Executive Legal Counsel – Nick Milano Nicholas G. Milano, the real estate practice group leader for the Fort Lauderdale and West Palm Beach offices, focuses his real estate practice on the representation of lenders, developers and borrowers. He handles real estate contract drafting and negotiation, advanced title examination and issuance of title insurance as well as leasing issues for major retail

clients. Mr. Milano is experienced representing developers and managers in the acquisition or disposition of hotels and drafting related documents. Mr. Milano also represents owners and contractors in construction-related matters including construction contract negotiation and drafting as well as mechanic's lien and bonding issues.

# TOWN OF AMENIA CONSULTANTS REVIEWING THE PROJECT

GREENPLAN, MARY ANN JOHNSON, AICP

Daniels and Porco (Legal Counsel)
Michael Hayes, Esq.

RHODE, SOYKA AND ANDREWS (ENGINEER)
MIKE SOYKA

Dr. Michael Klemens (Ecological Resources)

GEORGE JANES, AICP





APPENDIX D
AUDUBON SIGNATURE PROGRAM LEVELS





The program begins when the development project registers, and continues through construction, grand opening and long-term management. Audubon Signature services and requirements also vary depending on the program level. The program involves:

- An initial site assessment conducted by Audubon International staff
- The development of a Natural Resource Management Plan (NRMP) that serves as a construction and operations manual for the property.
- Implementation of the Natural Resource Management Plan. Site visits during major phases of the project.
- Training and education for construction and operational personnel.
- An on-site Environmental Audit to assess compliance with program and site-specific requirements.
- Long-term management in accordance with Audubon Signature standards.

A project that complies with the minimum requirements for all Signature Projects and meets applicable site-specific requirements is designated as a Certified Audubon Signature Sanctuary.

Gold Level: The highest level Signature Program for U.S. and international projects includes multiple new land uses (e.g., residential, recreational areas, and commercial development), but is available to single-land-use projects, as well. Projects must register prior to the completion of the design. A staff member of Audubon Environmental Services, Inc. prepares an Environmental Master Plan, which guides siting, design, and management decisions relative to environmental aspects of the project. They also prepare the Natural Resource Management Plan and supplement Audubon International staff to offer extensive environmental education and on-site technical assistance in sustainable development and best management practices.

Note: Silo Ridge Resort was already in the approval and planning stages when Audubon was contacted for participation and therefore could not qualify for the Gold Level status.

**Silver Level:** For U.S. or international projects that involve one or more land uses (e.g., residential community with golf course or other amenities) in the planning stage, including a major redevelopment. A staff member of Audubon Environmental Services, Inc. prepares the Natural Resource Management Plan and supplements Audubon International staff in providing education and technical assistance in sustainable development and best management practices. Training and guidance for construction and operational personnel are also provided to guard against costly mistakes and ensure that the project achieves success.

Bronze Level: For U.S. projects that involve only a single new land use (e.g., sports complex, church, golf course) in the planning stage, including a major redevelopment. The Natural Resource Management Plan for the project is drafted by project consultants, rather than Audubon Environmental Services, Inc., but must meet Audubon International approval. Audubon International staff work primarily with the land or facility manager for educational purposes, reviews the Natural Resource Management Plan, and conducts the on-site audit to make final certification determination.



Appendix E
Lighting

# Design Intent Statement on Outdoor Lighting

Sustainability of lighting encompasses many issues: energy use becaus of power generation impacts on air quality and global climate change use of materials because of their embodied energy; toxic by-products of mining, manufacturing and transportation; and light's unintended negative impact on flora, fauna, and human biology. The unwanted consequences of outdoor lighting include three main issues: Light Pollution (Sky Glow) Light Trespass, and Glare.

## Energy Use

Shutting off lights when not needed, reducing usage to only the amount of light needed, and using energy-efficient lighting products are the three principal ways to reduce energy use in the Silo Ridge community. Reduced energy use in turn reduces environmental pollution, resulting damage to the environment and human health, and reduces the need to build costly power plants.

## Light Pollution, Light Trespass, and Glare

Light Pollution (Sky Glow) is unwanted stray light in the atmosphere from light emitted directly upward by luminaires, or reflected from the ground. Particles in the air scatter the light, creating a glowing haze above a city or site. This light pollution is both a waste of energy because it serves no purpose, and it diminishes the ability of people and astronomical instruments to observe the night sky. Furthermore, light pollution and stray light disrupt the migration pattern of birds and can negatively affect the survival of frogs and sea turtles and other creatures.

Light pollution can be minimized by using the lowest wattage lamps that achieve the target light levels, and by selecting luminaires (light fixtures) that emit minimal, if any, light directly upward. Light emitted horizontally from light fixtures (from 90° to 100° as measured from straight downward) contributes most strongly to light pollution, so it is important to use fixtures that direct less light at those angles.

Light Trespass is light emitted toward neighboring properties where i is not wanted. Sometimes this light enters bedroom windows, making it difficult for people to sleep, and sometimes it becomes a distracting or annoying patch of brightness seen from a distance. Street lights that emit light near horizontal angles, and wallpacks (lensed wall fixtures that emit a lot of horizontal light, such as the fixture shown below) are the biggest culprits for Light Trespass, although pole-mounted parking lot of sportsfield lighting fixtures can cause problems also.

Light trespass can be minimized or eliminated through the careful selection location, and aiming of luminaires. It is important to choose luminaires that direct their light onto the intended areas, away from neighboring properties.

Glare is created when a light source is very bright relative to its background. It can be distracting or uncomfortable (called "Discomfort Glare"), or can interfere with a driver or pedestrian's ability to see clearly. The latter is called "Disability Glare" or "Veiling Glare" and is very dangerous.

Glare can be reduced by choosing luminaires that direct light only where it is needed. By shielding the excessive brightness of the lamp or optical system from important viewing angles, we can improve the clarity of seeing for both the driver and pedestrian.

#### LEED®

Leadership in Energy and Environmental and Design (LEED®) is a program through the United States Green Building Council (USGBC) that has established goals for sustainable projects. This report will outline the goals for the Silo Ridge Hotel and Clubhouse's site lighting.

## Lighting Zones and Responsible Outdoor Lighting

LEED® Sustainable Sites Credit (SS8: Light Pollution Reduction) aims to reduce light pollution and impact on the nocturnal environment. This is accomplished by restricting the light leaving the interiors of buildings on the site, limiting light trespass, and limiting upward light.

The LEED® rating system classifies projects according to the following light zones: LZ1 – Dark (Parks and Rural Settings), LZ2 – Low (Residential), LZ3 – Medium (Commercial/Industrial, High-Density Residential), and LZ4 – High (Major City Centers, Entertainment Districts). Silo Ridge's main street with clubhouse and retail/restaurant areas qualifies as LZ2 and the following are the LEED® requirements for this zone.

#### I.72 - I.om

Design exterior lighting so that all site and building mounted luminaires produce a maximum initial illuminance value no greater than 0.10 horizontal and vertical footcandles at the site boundary and no greater than 0.01 horizontal footcandles 10 feet beyond the site boundary. Document that no more than 2% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down). For site boundaries that abut public rights-of-way, light trespass

requirements may be met relative to the curb line instead of the site boundary.

The IESNA Luminaire Cutoff Classifications describe the light distribution of outdoor fixtures as

Non Cutoff, Semi-Cutoff, Cutoff, and Full Cutoff. Fixtures with the IESNA classification of Full Cutoff meet the LEED® requirement because no light is emitted at or above 90°. A few fixtures classified as IESNA

"Cutoff" can also meet this LEED® requirement. (Note: The IESNA is in transition between using the "Cutoff" classifications and a new system called the Luminaire Classification System (LCS). This report will use the older system until the new system is fully published and in wider use.)

The image at left is a polar graph representing the photometric distribution from a sample Full Cutoff luminaire. The center of the graph represents the lighting fixture and the curved outline shows the relative intensity of the light emanating from it. 0° is the bottom center of the graph (and towards the ground in application), while 180° is a line straight upward from the light fixture. The horizontal line radiating from the center is 90°. Light emitted in the 75°-90° range is often perceived as glaring. Light emitted above 90° contributes the most to light pollution, particularly the zone from 90° to 100°.

In addition to the exterior requirements, the LEED® credit limits the amount of light leaving the interior of the building at night. While daylighting a building reduces energy use during the day, after dark the glazing allows light to pass through it in to the surrounding site or into the night sky. The credit requires the lighting to be automatically shut off during non-business hours, or requires that the interior luminaires not direct their maximum luminous intensity (candlepower) through any of the glazing.

# Other Sustainability Goals and Standards

#### Dark Skies

The International Dark-Sky Association (IDA) strives to preserve the beauty, wonder, and scientific resource of the night sky. It offers a voluntary rating system for outdoor luminaires. Manufacturers can submit their product performance data to the IDA for an evaluation of light pollution potential. Approved products receive a Fixture Seal of Approval (FSA), allowing the product to be advertised as IDA-Approved™ dark sky friendly product. Since this program is relatively new and voluntary, not all outdoor lighting manufacturers seek the FSA. However, all fixtures using lamps higher than 150W recommended for use at the Silo Ridge will strive to meet the IDA's FSA, and will be clearly shown and described during site plan review.

#### Controls to reduce lighting

Another good idea for reducing light pollution and unnecessary energy use is turning off outdoor lighting after a business has closed, or reducing lighting levels late at night when there is less traffic in roadways and parking lots. A community such as Silo Ridge is likely to have many fewer residents and staff using walkways and parking lots late at night, so some of the lighting can be shut off completely, and other areas shut down to hallevel late at night. For example, the employee parking lot can have all but the closest parking area lighting shut off at a curfew hour. Street lighting could be shut down to half level at night, with every other post-top fixture extinguished.

Green Principles, including toxicity and component materials - Silo Ridge is setting an example of responsibility in sustainability. It follows that the luminaires installed on the site should follow "green" principles. As an example, Silo Ridge will avoid products that use polycarbonate, PVC, and ABS materials because they can have toxic implications in manufacturing or in use. Although LEED® certification standards do not ban these materials, it discourages their use.

Mercury is a heavy metal that can be toxic to humans and animals. Almost all conventional light sources except for incandescent lamps use tiny amounts of mercury as an integral part of the light production. While this sounds frightening, the alternative is worse. Fluorescent and metal halide lamps are far more efficient than incandescent or even LED light sources at this point in time, so they use much less power. If we were to revert to incandescent lamps and LED light sources for all light production, we would be doubling to quadrupling our energy use, which would result in far greater production of hazardous mercury through fossil fuel power plant emissions. At this point in time it is impractical to completely eliminate mercury from lamps, so we recommend using lamps that exhibit long life, low mercury content, and excellent energy efficiency. We also recommend recycling spent lamps, so that mercury can be recycled and kept out of waste streams where they could cause environmental damage. LED light sources can be specified now for low-level path lighting, some soft building accent lighting, and step lighting. In the near future, LEDs may be appropriate for street lighting as well.

Green principles encourage the use of reducing material use, reusing materials, and recycling materials at the end of their useful life. The intent of LEED® credits 4.1 and 4.2 (Recycled Content) is to increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

Outdoor light fixtures and poles, as well as interior lighting fixtures, principally use steel and aluminum for their durability. Steel and aluminum can be recycled at the end of their useful life. At this point in time, few lighting products on the market promote their recycled content. As specifiers for LEED® projects, we are encouraging manufacturers to consider

- increasing recycled content of their products
- designing products for disassembly (i.e. when product reaches end of life, the various parts can be easily separated for recycling or reuse)
- recyclable or biodegradable packaging, and
- responsible production processes

#### Local manufacturing

The LEED® rating systems offers points for using a specific portion of materials that were manufactured (defined as manufacturing completed) within a 500 mile radius of the project site. This reduces the greenhouse gases generated through transporting goods long distances, and works to strengthen local economies. Credits MR 5.1 and 5.2 of the LEED® Materials and Resources section explicitly exempt mechanical, electrical, and plumbing (MEP) equipment from this requirement. In the spirit of this credit, however, manufacturers within a 500-mile radius of Amenia NY will be in the first tier of considerations for Silo Ridge.

#### On-site renewable energy and photovoltaic-powered lighting

LEED® Credit EA2 encourages the development and use of products that have integral power supplies, reducing the burden on the electrical grid. There are some outdoor lighting products with integral photovoltaic panels on the market. Unfortunately these products are very expensive and have exhibited significant field problems, so the technology is not sufficiently mature or reliable for use at Silo Ridge except for demonstration purposes. Fortunately, nighttime lighting is seldom a significant load on the electrical grid when the grid is strained, perhaps with the exception of very cold winter days between 4:30 and 5:30 pm. Photovoltaic panels that feed back to the electrical grid are more effective than photovoltaic systems tied to outdoor lighting at this point in time.

#### Lighting Performance - Outdoor

When lighting is designed for a community, we want it to bring out the beauty of the architecture and landscape, but it also must perform well functionally. This means it must provide the lighting levels and quality of light that helps residents, guests, and staff to perform the visual work that helps them gather information about their environment or task. This translates to seeing moving and parked cars, faces and gestures of people around them, signage, edges of sidewalks and stairs and roadways, pedestrians in a crosswalk, ice on pavement, etc. Because there are so many different types of visual tasks and spaces, the criteria for good quality lighting will vary. Target illuminances (footcandles), uniformity ratios, energy limits, and other criteria are derived from Illuminating Engineering Society of North America (IESNA) standards and the New York Energy Conservation Code (NYECC)

It is important that new or replacement fixtures be durable, easy to maintain and energy-efficient, because an installation that lasts a long time and is inexpensive to operate is also more economical and more sustainable in the long run.

Good lighting practice for outdoor nighttime visibility includes

- providing enough light to help users see important details in an are
- providing sufficient lighting uniformity that important details in the darker areas can still be seen
- minimizing disabling glare for pedestrians and drivers, and
- avoiding excessive brightness that can temporarily blind users as they move from brighter areas to darker areas.

It is important to understand that the human visual system can see in bright sunshine and also in moonlight, but not at the same time. It takes time for the visual system to adapt to brighter or lower light levels. In general, it can only see details within a range of 100 to 1 in luminance (measurable brightness), and without careful design, nighttime environments can easily exceed this range by 10 or 100 times. The result is that excessively bright luminaires, walls, or signs can make it difficult or impossible for users to see a patch of ice on the sidewalk or a deer darting out across the roadway.

# Design Principles for Silo Ridge

Balancing the need for nighttime lighting with the goal of reducing energy use and light pollution is challenging. The best practice is to put light on roadways in places that have the highest potential for vehicle/vehicle conflict or vehicle/pedestrian conflict. At Silo Ridge, continuous polemounted roadway lighting will be limited to conflict areas (crosswalks and intersections). Vehicle headlights will supply needed illumination between light poles. This meets the LEED® goals for reducing energy consumption and material consumption (SS8, Energy Performance Credit EA1).

Parking lots pose greater potential for pedestrian/vehicle conflict and vehicle/vehicle conflict, so these are traditionally lighted more uniformly although the number of fixtures illuminated after business hours will be reduced. Heavily used pathways may have pole-mounted lighting in orde to improve the perception of safety for pedestrians, but this lighting also will be reduced or eliminated at night through controls.

Building facades and signage may be considered for lighting also, but they will be lighted from the top downward wherever possible, and "floodlighting" or "façade washing" from the ground will be avoided since stray light could annoy neighbors. Instead, nighttime visibility can be achieved with lighting techniques that provide lines or dots of light (for example) to highlight key architectural details, instead of washes of light on large surfaces. This reduces energy use as well as light pollution.

Building entrances need to be illuminated for safety, and this is enforced by code. Public entrances may have small amounts of low-output decorative lighting (750 lumens per fixture, maximum). Additional lighting may be used as long as it is fully shielded so that it emits no light above horizontal. Service entrances will use fully-shielded lighting only, so that all light is emitted downward. Any non-shielded lighting that is needed for deliveries, for example, will be switched on temporarily only.

Landscape lighting can accentuate exterior plantings while providing wayfinding and a psychological sense of brightness. Too often, landscape lighting equipment uses high wattage sources, but it takes very little wattage (and lumens) to get a dramatic effect, if the landscape lighting is carefully done. Landscape lighting that relies primarily on downward lighting from trees or building eaves can be combined with small amounts of uplight to achieve this effect. Lamp wattages will be limited to 20W maximum light sources (1200 lumens per fixture, maximum), and specified fixtures will be carefully located, aimed, and louvered to maximize enjoyment, while reducing glare and distraction. Landscape lighting will be extinguished at the curfew hour.

Silo Ridge proposes using warm-color sources (3000K) that are close to incandescent in appearance. These include warm-color ceramic metal halide lamps, pin-based compact fluorescent lamps, small numbers of halogen lamps, and a few warm-color LED products. This will support the traditional look of flame and early incandescent lights. (Blue-white light from metal halide or mercury lamps, or orange light from High Pressure Sodium lamps will not be used.)

Smaller-scale lighting fixtures and poles will be specified to reinforce the residential scale of the community. Pole-mounted street lights will range between 12 and 15' in height on streets, and will be spaced 50 to 65 fee apart on the few streets that are continuously lighted. Parking lots will use poles up to 20' in height in order to reduce the total number of fixtures required. Lighting will be designed in accordance with Town of Amenia Zoning Law §121-40L.

Lighting uniformity and Target Light Levels (Illuminance)

The following tables list target light levels. In general, Silo Ridge designers and engineers will design for the lowest light levels in these standards, knowing that the community desires low light levels, and knowing that with lower ambient light levels and less fixture glare, the eye's dark adaptation allows it to see well at low light levels.

Illuminance is the amount of light (lumens) falling on a given area and is measured in footcandles (SI Units: Lux). The Illuminating Engineering Society of North America (IESNA) and related subcommittees publish Recommended Practices (RP) and a Lighting Handbook that contains illuminance guidelines. The tables below list the recommended illuminance and uniformity ratios recommended by the IESNA (Eavg = avg. illuminance Emin = min. illuminance).

Table 1 – Lighting Recommendations for Roadways with Low Pedestrian Conflict

Roadway	Horizontal Illuminance (footcandles)	Uniformity $E_{avg}$ / $E_{min}$	Reference
Collector	0.4 - 0.6	4	IESNA RP-8-00
Local	0.3 - 0.4	6	IESNA RP-8-00
	dividual parking lots. T	The horizontal illuminance values	in roads around the site and local roads are listed as a range because the value

Table 2 – Lighting Recommendations for Intersections

	C		
Type of Intersection		nation (fc) at roadway	Uniformity
	according to Pedestrian Area Classification		$ m E_{avg}$ / $ m E_{min}$
	Medium	Low	
Major/Collector	2.2	1.5	3
Collector/Local	1.6	1	4
Local/Local	1.4	0.8	6
These values are based of	on continuously ligh	ited roadways. For non-conti	nuously lighted roadways, the
illuminance targets are for the conflict area of the intersection, and the uniformity values are not			
applicable outside the intersection area.			

Table 3 – Lighting Recommendations for Pedestrian Ways and Class 1 Bikeways

	Avg. Horiz. Illum. on Pavement (fc)	Uniformity $E_{max}$ / $E_{min}$	Reference
Commercial Areas	1	≤ 10:1	RP-33-99
Intermediate Areas	0.5	≤ 10:1	RP-33-99
Residential Areas	0.2	≤ 10:1	RP-33-99
	Sidewalks	(Roadside) and Type B Bikew	ays
Walkways & Bikeways	0.5	≤ 10:1	RP-33-99
Pedestrian Stairways	0.5	≤ 10:1	RP-33-99

Table 4 – Lighting Recommendations for Additional Exterior Areas

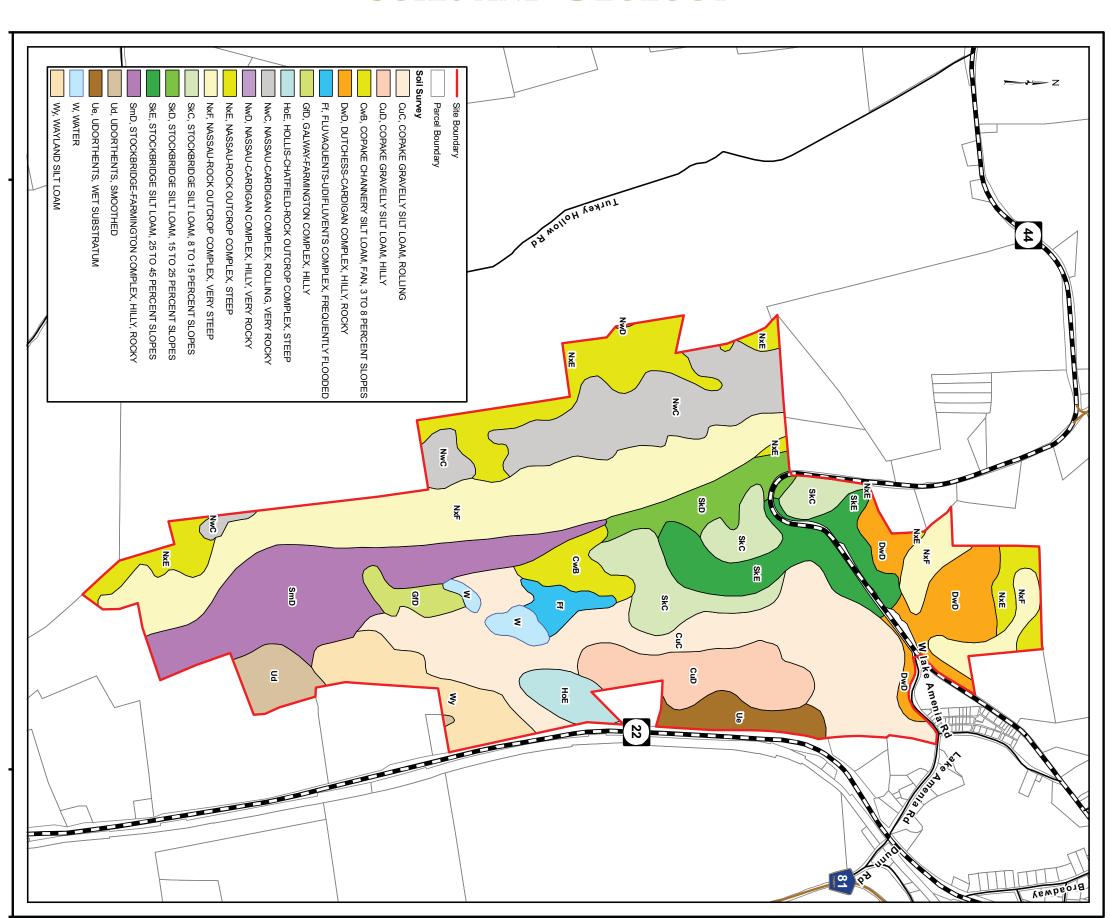
Horiz. fc	Vertical fc	Illuminance ratios	Notes
5 avg.	3 avg.		
3 avg.	3 avg.		
0.2 min.	0.1 min.	20:1 (max:min)	2,3
10 avg.	3 avg.		
1 avg.	0.3 avg.		
ting Handbook	, 9 <sup>th</sup> Edition Chapter 22		
	5 avg. 3 avg. 0.2 min. 10 avg. 1 avg. ting Handbook	5 avg. 3 avg. 3 avg. 3 avg. 0.2 min. 0.1 min. 10 avg. 3 avg. 1 avg. 0.3 avg. ting Handbook 9 <sup>th</sup> Edition, Chapter 10.	5 avg. 3 avg. 3 avg. 20:1 (max:min) 20:1 (max:min) 10 avg. 3 avg. 1 avg. 0.3 avg. 1 avg. 0.3 avg. 1 avg. 0.3 avg. 1 avg. 0.3 avg. 1 avg. 0.4 Edition, Chapter 10. ting Handbook, 9 <sup>th</sup> Edition Chapter 22.

Non-lighting strategies for improving safety

Lighting is one method for improving safety; but non-visual strategies also work well. The intersections might have the recommended illuminance, but rumble strips could be more effective in slowing drivers as they enter the intersection, thereby making the intersection safer.

Contrast is the single most important aspect of nighttime visibility. Withou sufficient contrast, the amount of lighting must be increased to make the object more visible. Objects, words, people.... everything is more visible as its contrast against the background increases. White painted crosswall stripes against black pavement are highly visible, for example. High contrast markings, possibly using retro-reflective paints or similar material can make the edges of roadways more visible than overhead lighting can.

# APPENDIX F SOILS AND GEOLOGY



#### Soils: Existing Conditions

According to the United States Department of Agriculture (USDA) Dutchess Count Soil Survey16 for this site, 17 soil types are identified on the 670±-acre project site, a illustrated on "Soils Map." The following offers the location and detailed description of the various soil classifications identified for this site.

Copake gravelly silt loam, rolling (CuC): This soil unit consists of very deep, well drained soils formed in glaciofluvial deposits high in limestone fragments. Permeability is moderate or moderately rapid in the surface layer and subsoil, and very rapid in the substratum Surface runoff is medium and the erosion hazard is moderate. Slopes are complex and range from 5 to 16%. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth greater than 6 feet. This unit has been identified in the northeast portion of the site.

Copake gravelly silt loam, hilly (CuD): This soil unit consists of very deep, well drained soils formed in glaciofluvial deposits high in limestone fragments. Permeability is moderate or moderately rapid in the surface layer and subsoil, and very rapid in the substratum. Surface runoff is medium and the erosion hazard is severe. Slopes are complex and range from 15 to 30%. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth greater than 6 feet. This unit has been identified in the northeast portion of the site Copake channery silt loam, fan, 3-8% slopes (CwB): This soil unit consists of very deep gently sloping and well drained soils formed in glacial outwash deposits. Slopes are generally smooth. Permeability is moderate or moderately rapid in the surface layer and subsoil, and very rapid in the substratum. Surface runoff is slow and the erosion hazard is slight. Depth to bedrock is more than 60 inches and the depth to the seasonal high water table (April-May) ranges from 3 to 6 feet. This unit meets the criteria for prime farmland. This mapping unit has been identified in the central portion of the project site.

Dutchess-Cardigan complex, hilly, rocky (DwD): This unit consists of very deep, well drained Dutchess soils and moderately deep, well drained Cardigan soils that formed in glacial till deposits. The Dutchess soil has a depth to bedrock of more than 60 inches and the seasonal high water table is at a depth of more than 6 feet. The Cardigan soil has a depth to bedrock of between 20 and 40 inches and a seasonal high water table at a depth of more than 6 feet. Both the Dutchess and Cardigan soils in this group have moderate permeability, rapid surface runoff, and severe erosion potential. This soil complex is identified on the northern portion of the project site, north of US Route 44.

Fluvaquents-Udifluvents complex, frequently flooded (Ff): This unit consists of nearly level, very deep, somewhat poorly drained to very poorly drained Fluvaquents and very deep, moderately well drained to somewhat excessively drained Udifluvents. It is subject to frequent flooding and soil characteristics such as texture, gravel content, and drainage are variable within short distances. Surface runoff is slow to ponded and the erosion hazard is moderate. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth of between 0.5 feet and 6 feet. This map unit is identified in a small area in the central portion of the project site, adjacent to a wetland area.

Galway-Farmington complex, hilly (GfD): This unit consists of moderately deep well drained and moderately well drained Galway soils and shallow, well drained and somewhat excessively drained Farmington soils that formed in glacial till deposits. Slope are complex and range from 15 to 30%. Permeability is moderate, surface runoff is rapid and erosion hazard is severe. For Galway soils, the depth to bedrock is 20 to 40 inches and the seasonal high water table is perched at a depth of 1.5 to 3 feet. For Farmington soils the depth to bedrock is 10 to 20 inches and the seasonal high water table is at a depth of more than 6 feet. This map unit is identified in a small area in the central portion of the project site adjacent to a wetland area.

Hollis-Chatfield-Rock outcrop complex, steep (HoE): This unit consists of shallow, we drained and somewhat excessively drained Hollis soils; moderately deep, well drained an somewhat excessively drained Chatfield soils; and areas of rock outcrop. It is typicall found on hills and side slopes that are underlain by folded schist, granite, or gneis bedrock. Slopes are complex and range from 25% to 45%. Hollis soils have a typical dept to bedrock of 10-20 inches, while Chatfield soils have a depth to bedrock of 20-40 inche Both soils have very rapid surface runoff, a very severe erosion hazard, and a depth to the seasonal high water table of more than 6 feet. This soil complex is mapped in a small are of the eastern central portion of the site near Route 22.

Nassau-Cardigan complex, rolling, very rocky (NwC): This unit consists of shallow somewhat excessively drained Nassau soils and moderately deep, well drained Cardigar soils that formed in glacial till deposits. Slopes are complex and range from 5 to 16%. Both soils have moderate permeability, medium surface runoff, moderate erosion hazard, and a depth to the seasonal high water table of more than 6 feet. Nassau soils have a depth to bedrock of between 10 and 20 inches and Cardigan soils have a depth to bedrock of 20 to 40 inches. This map unit is identified in the western portion of the project site.

Nassau-Cardigan complex, hilly, very rocky (NwD): This unit consists of shallow, somewhat excessively drained Nassau soils and moderately deep, well drained Cardigan soils that formed in glacial till deposits. It is found on hills and side slopes that are underlain by folded shale bedrock.

Nassau soils are commonly on upper slopes and near areas of rock outcrop and Cardigar soils are commonly on lower concave slopes. Rock outcrop covers 2% to 10% of the surface Slopes are complex and range from 15% to 30%. Both soils have moderate permeability rapid surface runoff, severe erosion hazard, and a depth to the seasonal high water table of more than 6 feet. Nassau soils have a depth to bedrock of between 10 and 20 inches and Cardigan soils have a depth to bedrock of 20 to 40 inches. This soil complex is mapped in a very small area in the western hills of the project site.

Nassau-Rock outcrop complex, steep (NxE): This unit is comprised of shallow, somewhat excessively drained Nassau soils and areas of rock outcrop. Slopes are complex and range from 25% to 45%. Permeability is moderate, surface runoff is very rapid, and the erosion hazard is very severe. The depth to bedrock is 10 to 20 inches and the seasonal high water table is at a depth of more than 6 feet. NxE soils are found on the far western edge of the project site.

Nassau-Rock outcrop complex, very steep (NxF): This unit is comprised of shallow somewhat excessively drained Nassau soils and areas of rock outcrop. It is found on hill and side slopes that are underlain by folded shale bedrock. Slopes are complex and range from 45% to 70%. Permeability is moderate, surface runoff is very rapid, and the erosion hazard is very severe. The depth to bedrock is 10 to 20 inches and the seasonal high wate table is at a depth of more than 6 feet. This complex is mapped in the eastern hillsides of the project site and in areas north of Route 44.

Stockbridge silt loam, 8-15% slopes (SkC): This unit consists of very deep, sloping and well drained soils formed in glacial till deposits. Permeability is moderate in the surface layer and subsoil, and slow in the substratum. Surface runoff is rapid and erosion hazard is moderate. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth greater than 6 feet. Stockbridge soils are generally located within the central portion of the project site north and south of the hairpin turn in US Route 44. This soil is identified as a soil of statewide significance by the Natural Resources Conservation Service (NRCS), indicating it is viable for agriculture.

Stockbridge silt loam, 15-25% slopes (SkD): This unit consists of very deep, moderately steep, well drained Stockbridge soils that formed in glacial till deposits. Slopes are smooth. Permeability is moderate in the surface layer and subsoil and slow to moderately slow in the substratum. The depth to bedrock is more than 60 inches and the seasonal high water table is at a depth of more than 6 feet. Stockbridge soils are generally located within the central portion of the project site north and south of the hairpin turn in US Route 44.

Stockbridge silt loam, 25-45% slopes (SkE): This unit consists of very deep, steep, and well drained Stockbridge soils that formed in glacial till deposits. Slopes are smooth Permeability is moderate in the surface layer and subsoil, and slow or moderately slow in the substratum. Surface runoff is very rapid and erosion hazard is very severe. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth greater than 6 feet. Stockbridge soils are generally located within the central portion of the project site north and south of the hairpin turn in US Route 44.

Stockbridge-Farmington complex, hilly, rocky (SmD): This unit consists of very deep, we drained Stockbridge soils and shallow, well drained and somewhat excessively drained Farmington soils that formed in glacial till deposits. Slopes are complex and range from 1 to 30%. Permeability is moderate in the surface layer and subsoil, and slow or moderatel slow in the substratum. Surface runoff is rapid and erosion hazard is severe. Depth to bedrock is more than 60 inches and the seasonal high water table is at a depth greater than 6 feet. SmD soils are identified in a band running north/south through the central portion of the project site.

Udorthents, smoothed (Ud): This unit consists of very deep, somewhat excessively drained to moderately well drained soils that have been altered by cutting and filling. Slopes are dominantly 0 to 8% but range from 8 to 25% on the sides of excavations and along highways. The characteristics of this soil are so variable that an onsite soil investigation is typically needed to determine suitability for proposed land uses. This unit is mapped in the southeastern portion of the project site, adjacent to Route 22.

Udorthents, wet substratum (Ue): This unit consists of moderately well drained soils that have been altered by filling. It is found on filled depressions, drainageways, and areas of tidal marsh. Slopes are dominantly 0 to 3%, but range up to 8%. The characteristics of this soil unit are so variable that an onsite soil investigation is typically needed to determine suitability for proposed land uses. This unit is mapped in a small area along Route 22 in the northern portion of the project site.

Wayland silt loam (Wy): This unit consists of very deep, nearly level, and poorly drained and very poorly drained Wayland soils that formed in alluvium deposits. It is found on flood plains. Slopes are smooth and range from 0 to 3%. Permeability is moderate to moderately slow in the surface layer and slow in the subsoil and substratum, surface runoff is slow, the erosion hazard is slight, and the depth to the seasonal high water table is 0.5-1.0 foot. The Table below provides a summary of the specific limitations for each soil unit within the project area. The construction limitation designations of "slight," "moderate," and "severe" refer to level of engineering which may be necessary to develop on a particular soil type. Soils with "slight" limitations are generally favorable for development and any limitations are easily overcome. Soils with "moderate" or "severe" limitations may require some special design, planning, or maintenance to address or minimize the limitation.

Soil Category Approximate Disturbance (Acres) Statewide Importance 63± Prime Farmland < 0.1± Hydric 0.9± Partially Hydric < 0.1±

Amount of Estimated Slope Disturbance		
Slope Category	Acres Disturbed	Percent of Disturbed Slopes
0-10%	99 <u>+</u>	40%
10-15%	42 <u>+</u>	17%
>15%	105 <u>+</u>	43%
Total	246 <u>+</u>	100%

126

# APPENDIX G PLANTING PLANS AND SPECIAL HABITAT VALUE

## Silo Ridge Resort Community

#### Planting Plans

# P0 – Littoral Shelf Group for Emergent Aquatic Habitat Enhancement Margins

Plant species for the P0 group have been selected to be consistent with the littoral aquatic communities present in the onsite and contiguous wetlands at the Silo Ridge property. Prior to establishing a final list, a qualitative survey will be completed to confirm the species proposed for this planting and to identify new species that can be added to the list.

#### <u>Sedge</u>

Fringed Sedge (Carex crinita)
Shallow Sedge (Carex lurida)
Wool Grass (Scirpus cyperinus

Rush

Soft Rush (Juncus effusus)

Dark Green Bull Rush (Scirpus atrovirer

Forb

Broadleaf Cattail (Typha latifolia)

# P1 - Shoreline Group for Aquatic Habitat Enhancement Margins

#### Grasses

Rice Cut Grass (Leersia oryzoides)

Sedges

Water Sedge (Carex aquatilis Awl Sedge (Carex stipata)

#### Rushes

Soft Rush (Juncus effusus var. Pylaei)
Hardstem Bull Rush (Scirpus acutus)
Dark Green Bull Rush (Scirpus atrovirens

#### Forbes

Swamp Milkweed (Asclepias incarnata)
Marsh Marigold (Caltha palustris)
Spotted Joe-pye Weed (Eupatorium maculatu

# P2 - Short Grasses and Forbs for In-Play Buffers and Habitat Enhancements

#### <u>Grasses</u>

Little Bluestem (Schizachyrium scoparium

Poverty Grass (Danthonia spicata)

Sideoats Gramma (Bouteloua curtipendula)

Tufted Hairgrass (Deschampsia cespitosa)

Purple Lovegrass (Eragrotis spectabilis

#### Forbes

Common Evening Primrose (Oenothera biennis)

Columbine (Aquilegia canadensis)

Heath Aster (Aster ericoides)

New England Aster (Aster novae-angliae)

Canada Trick-trefoil (Desmodium canadense)

Wild Lupine (Lupinus perennis)

Wild Bergamot (Monarda fistcos

Sundrops (Oenothera fruticosa)

Beardtongue (Penstemon digitalis)

Perennial Phlox (Phlox paniculata)

Cut-leaf Coneflower (Rudbeckia laciniata)

Blue Vervain (Verbena hastata)

# P4 - Shrubs and Trees for Out-of-Play Buffers and Habitat Enhancements

#### Shrubs (OblWet)

Bog Laurel (Kalmia polifolia)

#### Shrubs (FacWet)

Swamp Dogwood (Cornus amomum ssp. Oblique)

Gray Dogwood (Cornus foemina ssp. Racemosa)

High-bush Cranberry (Vibernum opulus var. Americanum)

Nannyberry (Viburnum lentago)

Southern Arrowwood (Bibernum dentatum)

Elderberry (Sambucus canadensis

### Trees (FacWet)

River Birch (Betula nigra)
Bitternut (Carya cordiformis)
Silver Maple (Acer saccharinum)

American Larch (Larix laricina)

Eastern White Cedar (Thuja occidentalis)

Green Ash (Fraxinus pennsylvanica)

### Shrubs (FacUpland)

Witch Hazel (Hamamelis virginiana

Black Raspberry (Rubus occidentali

Staghorn Sumac (Rhus hirta)

Chokecherry (Prunus virginiana)

## Trees (FacUpland)

Red Maple (Acer rubrum)

Paper Birch (Betula papyrifera)

Shagbark Hickory (Carya ovata)

Butternut (Juglans cinerea)

Beech (Fagus grandifolia)

Pin Cherry (Prunus pennsylvanica)

Eastern Cottonwood (Populus deltoides)

Bur Oak (Quercus macrocarpa)

Eastern Red Cedar (Juniperus virginiana)

Balsam Fir (Abies balsamea)

Eastern White Pine (Pinus strobus)

White Spruce (Picea glauca)

Red Pine (Pinus resinosa

# P5 - Aquatic Bench Plants, Wetland Shelf and Erosion Control/ Restoration Group for Storm Water Management Basins.

#### Sedges

Bearded Sedge (Carex comosa)

Fringed Sedge (Carex crinita

Wool Grass (Scirpus cyperinus

#### Kushes

Soft Rush (Juncus effusus)

Hardstem Bull Rush (Scirpus acutus

#### <u>Forbes</u>

Sweet Flag (Acorus americanus)

Pickerelweed (Pontederia cordata)

Burreed (Sparganium americanum)

Arrow Arum (Peltandra virginica)



# APPENDIX H LEED CERTIFICATION

In the United States and in a number of other countries around the world, LEED certification is the recognized standard for measuring building sustainability. Achieving LEED certification is the best way for you to demonstrate that your building project is truly "green."

The LEED green building rating system -- developed and administered by the U.S. Green Building Council, a Washington D.C.-based, nonprofit coalition of building industry leaders -- is designed to promote design and construction practices that increase profitability while reducing the negative environmental impacts of buildings and improving occupant health and wellbeing.

The LEED rating system offers four certification levels for new construction -- Certified, Silver, Gold and Platinum -- that correspond to the number of credits accrued in five green design categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and Innovation & Design Process.

# LEED Project Checklist

Sustainable Sites 14 Possible Points Prereq 1 Construction Activity Pollution Prevention Required Credit 1 Site Selection 1 Credit 2 Development Density/Community Connectivity 1	
Credit 1 Site Selection 1	
Credit 2 Development Density/Community Connectivity 1	
Credit 2 Development Density/Community Connectivity 1	
Credit 3 Brownfield Redevelopment 1	
Credit 4.1 Alternative Transportation, Public Transportati	on
Access 1	
Credit 4.2 Alternative Transportation, Bicycle Storage	8
Changing Rooms 1	
Credit 4.3 Alternative Transportation, Low Emitting & Fu	ıel
Efficient Vehicles 1	
Credit 4.4 Alternative Transportation, Parking Capacity 1	
Credit 5.1 Site Development, Protect or Restore Habitat 1	
Credit 5.2 Site Development, Maximize Open Space 1	
Credit 6.1 Stormwater Design, Quantity Control 1	
Credit 6.2 Stormwater Design, Quality Control 1	
Credit 7.1 Heat Island Effect, Non-Roof 1	
Credit 7.2 Heat Island Effect, Roof 1	
Credit 8 Light Pollution Reduction 1	

Water Efficiency 5 Possible Points	
Credit 1.1 Water Efficient Landscaping, Reduce by 50%	
Credit 1.2 Water Efficient Landscaping, No Potable Use	
Irrigation	
Credit 2 Innovative Wastewater Technologies	
Credit 3.1 Water Use Reduction, 20% Reduction	
Credit 3.2 Water Use Reduction, 30% Reduction	1
Energy & Atmosphere 17 Possible Points	
Prereq 1 Fundamental Commissioning of the Building 1	Energy
Systems Required	0)
Prereq 2 Minimum Energy Performance Required	
Prereq 3 Fundamental Refrigerant Management Require	$\mathrm{d}$
Credit 1 Optimize Energy Performance	1–10
Credit 2 On-Site Renewable Energy	1–3
Credit 3 Enhanced Commissioning	
Credit 4 Enhanced Refrigerant Management	1
Credit 5 Measurement & Verification	
Credit 6 Green Power	
erealt o Green Fower	
Materials & Resources 13 Possible Points	
Prereq 1 Storage & Collection of Recyclables Required	
Credit 1.1 Building Reuse, Maintain 75% of Existing	Walls
Floors & Roof	1
Credit 1.2 Building Reuse, Maintain 95% of Existing	Walls
Floors & Roof	1
Credit 1.3 Building Reuse, Maintain 50% of Interior	Non-
Structural Elements	1
Credit 2.1 Construction Waste Management, Divert 509	
Disposal	1
Credit 2.2 Construction Waste Management, Divert 759	
Disposal	1
Credit 3.1 Materials Reuse, 5%	1
Credit 3.2 Materials Reuse, 10%	
Credit 4.1 Recycled Content, 10% (post-consumer + 1/	
consumer)	1
Credit 4.2 Recycled Content, 20% (post-consumer + 1/	2 pre-
consumer) Cuadit 5.1 Danianal Matariala 1004 Fretuartad Duagaa	
Credit 5.1 Regional Materials, 10% Extracted, Proces	sea &
Manufactured Regionally	
Credit 5.2 Regional Materials, 20% Extracted, Proces	
Manufactured Regionally	
Credit 6 Rapidly Renewable Materials 1	
Credit 7 Certified Wood	

Indoor Environmental Quality 15 Possible Points	
Prereq 1 Minimum IAQ Performance Required	
Prereq 2 Environmental Tobacco Smoke (ETS) Con	itro
Required	
Credit 1 Outdoor Air Delivery Monitoring	
Credit 2 Increased Ventilation	
Credit 3.1 Construction IAQ Management Plan, Du	ring
Construction	
Credit 3.2 Construction IAQ Management Plan, Be	for
Occupancy	
Credit 4.1 Low-Emitting Materials, Adhesives & Sealants	
Credit 4.2 Low-Emitting Materials, Paints & Coatings	
Credit 4.3 Low-Emitting Materials, Carpet Systems	
Credit 4.4 Low-Emitting Materials, Composite Wood	8
Agrifiber Products	
Credit 5 Indoor Chemical & Pollutant Source Control	
Credit 6.1 Controllability of Systems, Lighting	
Credit 6.2 Controllability of Systems, Thermal Comfort	
Credit 7.1 Thermal Comfort, Design	
Credit 7.2 Thermal Comfort, Verification	
Credit 8.1 Daylight & Views, Daylight 75% of Spaces	
Credit 8.2 Daylight & Views, Views for 90% of Spaces	
Innovation & Design Process 5 Possible Points	
Credit 1.1 Innovation in Design	
Credit 1.2 Innovation in Design	
Credit 1.3 Innovation in Design	
Credit 1.4 Innovation in Design	
Credit 2 LEED Accredited Professional	
Project Totals 69 Possible Points	

# LEED C eritfication Levels

Certified 26–32 points

Silver 33–38 points

**Gold** 39–51 points

Platinum 52–69 points

# APPENDIX I Town of Amenia Hydrological Overlay Districts

#### Legend

Parcel Boundaries

Streams

Water Bodies

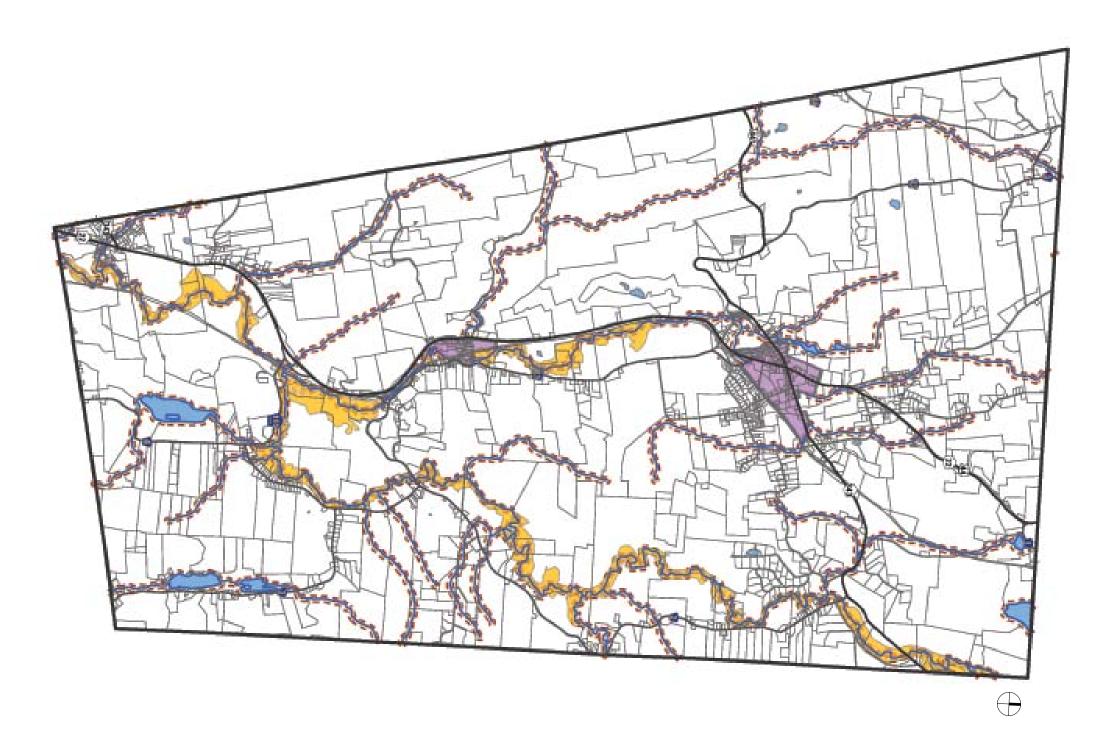
Floodplain Overlay District

150' Stream Corridor Overlay District

Hamlet Exclusion Areas

Minor Streams- Dutchess County Environmental Management Council, 1998 Water Bodies- Dutchess County Environmental Management Council, 1999 Floodplains- FEMA Q3 Data, 1996

For Discussion Purposes Only Subject to Field Verification



# APPENDIX J Town of Amenia Scenic Protection Overlay

