



Natural Resource and Open Space Protection Report

Prepared for:

CANANDAIGUA SHORES

3535 STATE ROUTE 364

TOWN OF CANANDAIGUA, NY 14424

Date:

September 27, 2021

Prepared by:



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Natural Resource and Open Space Protection Report

CANANDIGUA SHORES – TOWNHOME/RESIDENTIAL DEVELOPMENT:

September 27, 2021

Marks Engineering, P.C. (Marks Engineering) has prepared this Report for the new facility noted above located:

Tax Map # 98.19-1-20.10

3535 State Route 364

Town of Canandaigua

Ontario County

New York

Tax Map # 99.00-1-43.12

County Rd 18

Town of Hopewell

Ontario County

New York

Project Description/Intent:

The subject property(s) as outlined above shall consist of the “project site” or “site”. The “project” is a new 116 unit/24 building townhome development with 2 estate lots in the Town of Canandaigua and 9 single family residential lots in the Town of Hopewell. The project will include the development of approximately 3100 and 1800 linear feet of new dedicated road in Canandaigua and Hopewell, respectively.

Townhomes:

23 new residential townhome buildings and a community center will be constructed off the new dedicated road. The new townhomes will be wood framed buildings on a combination of slab and full basement construction. The slabs will be located on flatter sections of the site and walk-out basements are located on the sloping portions of the site. These townhomes will be marketed towards elder and young professional tenants as market rate/efficient homes. These units will always be rental units. The townhouses will be owned by a management company that will take care of maintenance of all the buildings and grounds.

Single Family Residential:

There will be 2 single family “estate lots” in the Town of Canandaigua and 9 single family lots in the Town of Hopewell. These lots will be marketed for sale to be developed by the developer or the purchaser of the lot. Lot sizes will be larger than 40,000 square feet and have more than 150 feet of frontage.



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Access to the project will be provided via connection to both New York State Route 364 and to Ontario County Road 18 (CR18). All public roads, sanitary sewers, storm sewers and watermain lines will be dedicated to the Town upon completion. Sidewalks will be installed along both sides of the dedicated road throughout the development for pedestrian circulation. The proposed sanitary sewer will connect to the existing gravity sanitary sewer within the project site. The water supply will be provided via connection to the existing 12" main located along New York State Route 364. Stormwater drainage will be managed through installation of a storm sewer network, open swales and ponding areas. Two large stormwater management facilities will be constructed to manage runoff from the developed areas of the project.

In total this development will provide housing for more than 323 people. This is broken down by 296 people in Canandaigua and 27 people in Hopewell.

The following report provides the technical data to support this project's intent to minimize impact on natural resources and preserve open space.

Existing Conditions:

Currently the site is vacant brush land and a fallow field. There are few mature hardwood trees at the northeast corner of the Canandaigua property. The site is adjacent to the Town of Gorham and agricultural lands on the south side as well as residential properties on the east, west, and north side. A mobile home park borders the property along the north side at the State Route. The site slopes from east to west with most slopes less than 15%. There are two sections near the center and eastern side of the site with 15-25% slopes. The site is zoned as Mixed-Use Overlay in Canandaigua and Residential (R-1) in the Town of Hopewell.

Natural Resources Defined:

The Town of Canandaigua has adopted an Open Space, Conservation and Scenic Views Master Plan dated June 2018 and Natural Resources Inventory (NRI) Update November 2020. These documents identify resources of interest as:

- A. Natural Ecological Communities
 - 1. Wetlands
 - 2. Woodlands
 - 3. Old Fields and Shrubland
 - 4. Wildlife Corridors
- B. Water Resources
 - 1. Watersheds
 - 2. Canandaigua Lake and Shoreline
 - 3. Streams and Riparian Corridors
 - 4. Farm Ponds
 - 5. Groundwater
- C. Steep Slopes
- D. Agricultural Land



- E. Extractive Resources
- F. Cultural Resources
 - 1. Historic Sites
 - 2. Scenic Vistas and Viewpoints
 - 3. Recreational and Other Public and Protected Land

Site Specific Natural Resource Inventory (NRI):

After review of the Town's resource mapping (Maps from Natural Resource Inventory Update November 2020), we have determined the following resources are present on our site.

Map #1 - Woodland & Wetland – Successional Northern Hardwood Forest

Map #2 – Does not include areas within Strategic Forest Protection Area

Map #3 – Site does not include Successional Old Field or Successional Shrubland

Map #4 – Wildlife Corridors – Natural Land Cover Types and Stream Corridors

Map #5 – Site does not contain any classified streams and is part of the Canandaigua Lake Watershed

Map #6 – Aquifer is not designated

Map #7 – The property does contain steep slopes between 15-25%.



Figure 1 – Steep Slopes Clip from NRI Update Nov. 2020 Map #1 (Purple = 15-25% slope).

Map #8 – Site is not within Strategic Farmland Protection Area

Map #9 – Site is not used for mining

Map #10 – Site is not a Historic Site

Map #11 – The site is partially visible from Canandaigua Lake.



Figure 2 – Land Visible from Canandaigua Clip from NRI Update Nov. 2020 Map #11 (Purple = View from Lake).



Map #12 – Site Elevations are between 700 and 899 feet above MSEL.

Map#13 – There are no scenic viewpoints within a 2-mile radius of this site.

Map #14 – Site is not included in public & protected lands

In addition to this mapping provided by the town we have reviewed the site for unmapped resources. The site has been noted as an archeologically sensitive site and a small wetland has been identified.

Furthermore, an archeological survey (phase I) has been performed by Powers Archaeology LLC and they have determined that the site does not contain evidence of significant archeological activity.

A small wetland has been delineated by Environmental Resources LLC. This wetland is approximately 3529 square feet or 0.081 acres. Environmental Resources LLC has also identified an intermittent ditch that crosses the site from south to north. Environmental Resources LLC is seeking a jurisdiction request from the United States Army Corps. Of Engineers (USACE) for these areas. It is our assumption given the size of the wetland area that the USACE will rule this a non-jurisdictional wetland.

In conclusion of this Natural Resource Inventory for the site we have found that the following resources on this site:

- 1) Successional Northern Hardwood Forest (Not included in Town's Strategic Forest Protection Area)
- 2) Steep Slopes
- 3) Views from Canandaigua Lake
- 4) Small freshwater wetland

Natural Resource Impact Mitigation:

The use of areas which include the natural resources outlined above is regulated by the Town of Canandaigua as well as NYSDEC and the USACE. Below we have outlined the natural resources, regulations and how we will mitigate our impacts.

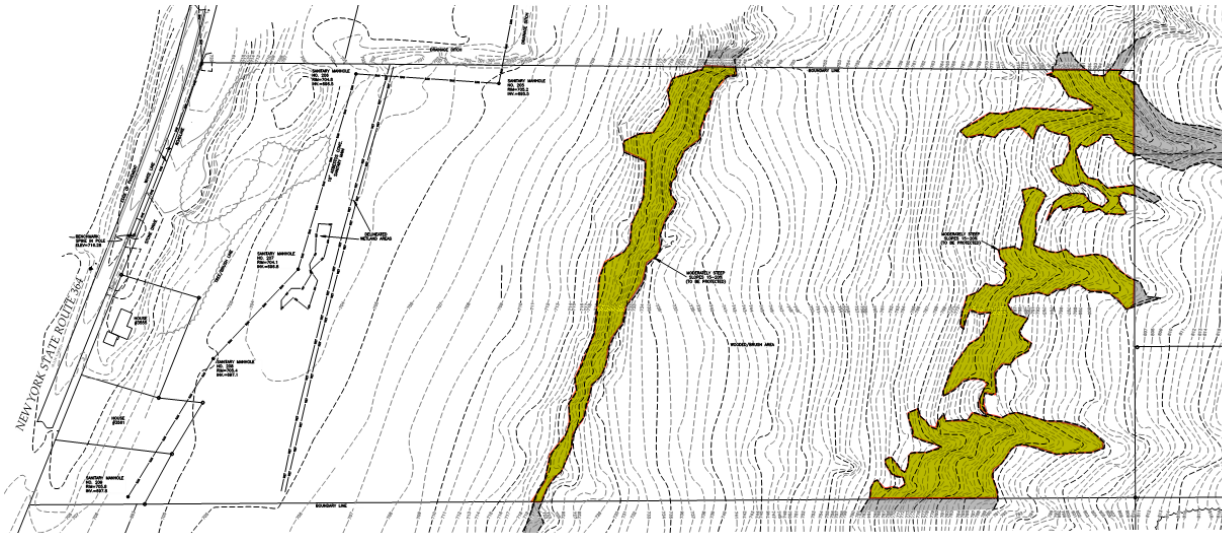
1. Successional Northern Hardwood Forest

After field survey of the current trees, we have found that most of the site vegetation is Ash, Hawthorn, Brush and softwood trees. There is a small area of hardwood trees in the northeast corner of the site. This can be best seen on the 2009 aerial image from Ontario County Oncor GIS website. The image below shows the site during late fall after the leaves have changed color. Typically, hardwoods will demonstrate an orange color from the fall foliage.



The only area of the site which shows this foliage is in the northeastern corner as outline in red. This forested area will mostly be preserved. The single-family residence will have very little disturbance in this area. Additionally, this hardwood forest is not located in the Town's Strategic Forest Protection Area.

Steep Slope Protection Areas (SSPA) include moderately steep slopes between 15-25% grade. There are two general areas of the site which include moderately steep slopes. There is a slope that runs north-south that divides the site and areas of steeper slope near the eastern side. The following image shows these areas overlaid on our topographic survey of the site.



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Land use of these steep slope areas is regulated by §220-8 of the Town Code. This code is put forth to protect the community from erosion, pollution, slope failure and altering the natural topography of the area. The code goes on to further define this site as “Zone A” as the disturbance is greater than 500 square feet and within 2000 feet of the lake mean high water mark. The SSPA allows for use and activities associated with the permitted underlying use. The MUO Zoning District once created allows for the proposed townhome/single family residential use. Furthermore, the plans prepared have minimized disturbance of these steep slope areas. Disturbance within these areas is limited to new road construction, public utility construction and residential driveways. New structures have been located outside these SSPA to further minimize impacts. Road and driveway grading will not exceed an average of five feet of cut or fill in a contiguous area of 2500 square feet. Erosion and sediment control plans as well as phasing plans have been developed to mitigate any impacts. Erosion practices such as silt fence, erosion blanket and other control practices will be implemented during construction. The project is phased so that lower portions of the site including stormwater management facilities will be completed prior to completion of construction on upper portions of the site. This will further mitigate any stormwater pollution from construction activities as construction runoff will enter the developed stormwater management facilities prior to discharging from the site.

3. Views from Canandaigua Lake

Upper portions of the site are visible from Canandaigua Lake. There are 12 new townhome (buildings #14-24) and 2 single family residential buildings that will be constructed on these upper portions of the site. The residential units should have a view of Canandaigua Lake and/or Bristol Hills. This is an important aspect of this development. The following rendering is an example of what the development will look like from Canandaigua Lake.



Figure 5 – Rendering of perspective view from Canandaigua Lake

The Town does not have a code that particularly regulates views of/or property appearance. Section §220-9A.(4) states *"Whenever natural features such as trees, brooks, drainage channels and views interfere with the proposed use of property, the retention of the maximum amount of such features consistent with the intended use of the property shall be required."* This implies that the natural view shall be retained to the maximum amount feasible with the intended use of the property. The natural aspects of this property in terms of view are the natural topography and vegetation. As mentioned previously the natural hardwood forests will be preserved. The natural brush/scrub does not have aesthetic value. The new buildings will be landscaped with new trees, shrubs and flowers which will enhance the view of the property. The view of the property will be like the surrounding community (i.e., Otetiana Cove).

The town of Canandaigua has worked on several a scenic view management plans with the latest adopted reports being an Open Space, Conservation and Scenic Views Master Plan dated June 2018 and Natural Resources Inventory Update November 2020.

In 2017 the Town staff, board and environmental conservation board did significant amount of planning to develop an ordinance for ridgeline and viewshed management. This did not result in an adopted ordinance but was included in the plans mentioned about. The work did result in a Site Specific Viewshed Analysis which was not adopted but we found it helpful to answer the questions provided.

Town Site Specific Viewshed Analysis:

- 1) Will the project result in a noticeable change in the physical characteristics of the existing environment?



No, the proposed development is a low-rise development and does not extend above the tree line on either side. The townhome structures are a single story on upper portion of the site which are more visible from the road and lake. The buildings are designed with lowest feasible roof pitch and earth tone colors to blend in with the surrounding landscape. The proposed landscaping will further help blend the development with the surrounding properties. Natural vegetation will be protected on steep slopes and areas of mature hardwood forests.

- 2) Will the project complement or contrast with the visual character desired by the community?

The project will complement the visual character of the community. The existing houses in this community are mostly all traditional one- & two-story architecture. Some the lake structures are modern and colonial style. The proposed town homes structures will match and enhance the existing community. The site will have amenities and aesthetic that will be the same if not better that the surrounding residential community.

- 3) What level of local concern is there for the types of project features and construction impacts that are proposed?

The concern for local impacts from this project is environmental and visual. The environmental concerns are drainage, steep slopes, and vegetation. The environmental aspects have been mitigating through stormwater and runoff management, erosion and sediment control as well as protection of natural vegetation on steep slopes. The visual impacts are views from Canandaigua Lake and NYS route 364. The viewshed are maintained and the buildings will be landscaped to blend with surrounding and the house structures are design to mimic other house in the community and on the opposite side of the lake.

- 4) Will the project require redesign or realignment to minimize adverse change or will mitigation, such as landscape or architectural treatment, likely be necessary?

The project has been re-designed to include a loop road to further break-up the lower portion of the site. The upper portions of the site have been planned to blend with the natural topography and match surrounding houses in the community.

- 5) Will this project, when seen collectively with other projects, result in an aggregate adverse change (cumulative impacts) in overall visual quality or character?

At this point we are un-aware of any other projects planned in this community. Most of the properties in this community are developed. For the reasons stated above this project will have minimal impact on the visual character of the community.



The town also has a Ridgeline Development Guideline document they use for project evaluation. The following is how this project follows the guideline presented:

Site Design:

Grading:

The development follows the natural topography of the ground. This is not a 15-story high rise building. There are two main levels on this project site which are separated by a steep slope area. The lower level is approximately 15 feet lower than NYS Route 364 at its lowest point. A proposed loop road is planned for the low area and the upper area has a linear road headed towards the Town of Hopewell. The upper terrace has townhome buildings which are nonlinear and private driveways extending from the main road. These buildings are situated to maximize the view of the lake from the proposed units.

Building Lot Design:

The buildings are designed as two-story patio structures at the lower level and single-story ranch structure with walk-out basements on the upper level. The lower roof lines and walk-out basements on the upper level of the project site allows for landscaping and topography screening and reduces the visual impacts. The lower level is screened by new landscaping and natural topography (lower than NYS Route 364).

Landscaping:

Disturbance to native plants and trees on steep slope areas as well as mature hardwood forests will be very limited. These areas will be protected and free of building construction. The developed site will be planted with native trees and shrubs to enhance the property aesthetics.

Utilities:

All proposed utilities will be located underground. The transformers will be screened with landscaping.

Architectural Designs:

Colors and Materials – The colors selected for the proposed buildings are earth tones. The buildings will have two colors with the gable end and porch walls having a separate color from the remainder of the buildings. See below example rendering of one of the proposed buildings.



Figure 6 – Rendering of one of the proposed buildings for appearance.



Rooflines:

The rooflines do not project above the natural ridgeline. The roof pitches are mostly oriented in the same direction as the natural terrain. The roof slope is very similar to the site grades.

Windows:

The buildings have smaller windows upstairs and down. The windows will have low reflectivity.

Lighting:

The proposed site and building lighting will meet the Town's requirements. The site lighting that is proposed will be directed straight down and have appropriate cut-off and shields. The proposed site lighting is also solar powered. Many of the site light poles are screened by and associated landscaping tree.

4. Wetlands

A small freshwater wetland has been identified by Environmental Resources, LLC. This wetland has been field delineated with flagging and survey. The wetland areas include an area of 3529 square feet and an intermittent ditch that flows north to south across the site. The following image shows these areas highlighted.

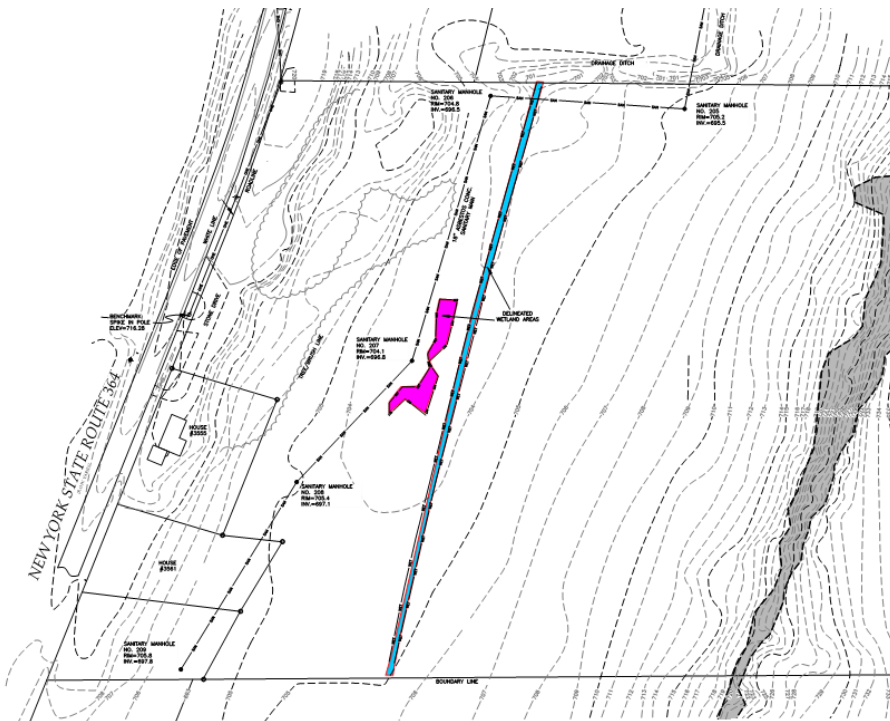


Figure 7 – Figure of identified wetland (purple) and ditch (blue). (Environmental Resources LLC)

The wetland could fall under the jurisdiction of the NYSDEC or the USACE. A delineation report has been prepared and submitted to both agencies for a Jurisdictional Determination (JD). It is assumed that these agencies will not claim jurisdiction of these areas for protection. If this is the case then the wetland will not be classified and could be filled in. If the USACE or NYSDEC claims jurisdiction of the wetlands, they will be mitigated offsite. In either case



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the wetlands will be removed. The Town does not have an ordinance to regulate activities within non-jurisdictional or jurisdictional wetlands.

Open Space Protection:

The intent of this project is to preserve open space in and around the proposed development. Open Space is defined by the Town as:

"That portion of a lot which does not contain any building, structure, parking area or travel lane, whether paved or unpaved. This portion may be in a natural state or landscaped as part of any site development."

Open space for Mixed Use Overlay zoning is further defined by Town code § 220-33E.(4) which states:

Open space. Each MUO District site shall maintain a minimum of 40% open space. Open space as defined herein does not include constrained lands (e.g., floodplains, freshwater wetlands, slopes of 15% or greater, ridgelines, shorelines, or a maximum of five acres of woodland per site). Open space also does not include driveways, parking spaces, aisles, dumpster enclosures, drainage facilities, or an area to be used for outdoor storage of materials or equipment.

Open space has been calculated for each individual lot created within this development. The proposed dedicated roadway right-of-way has been excluded from this calculation. For open space calculation we have identified the areas not designated as open space and subtract them from the total lot area. The following is a breakdown of the Open Space calculations for individual lots of this development:

LOT 1

- GREEN SPACE: 71% (847,614/1,200,759)
- AREA NOT DESIGNATED AS GREEN SPACE: 29% (353,145/1,200,759)
 - BUILDINGS: 198,177 SF
 - DRIVEWAYS/PRIVATE ROADS: 44,514 SF
 - SIDEWALK: 33,209 SF
 - SWMF: 31,297 SF
 - STEEP SLOPES: 53,177 SF
- OVERALL LAND: 1,200,759 SF

LOT 2

- GREEN SPACE: 56% (72,850/128,962)
- AREA NOT DESIGNATED AS GREEN SPACE: 44% (56,112/128,962)
 - BUILDINGS: 3,449 SF
 - DRIVEWAY: 3,234 SF
 - STEEP SLOPES: 49,429 SF
- OVERALL LAND: 128,962 SF



LOT 3

-GREEN SPACE: 56% (59,052/95,553)

-AREA NOT DESIGNATED AS GREEN SPACE: 44% (41,668/95,553)

-BUILDINGS: 3,449 SF

-DRIVEWAY: 1,718 SF

-STEEP SLOPES: 36,501 SF

-OVERALL LAND: 95,553 SF

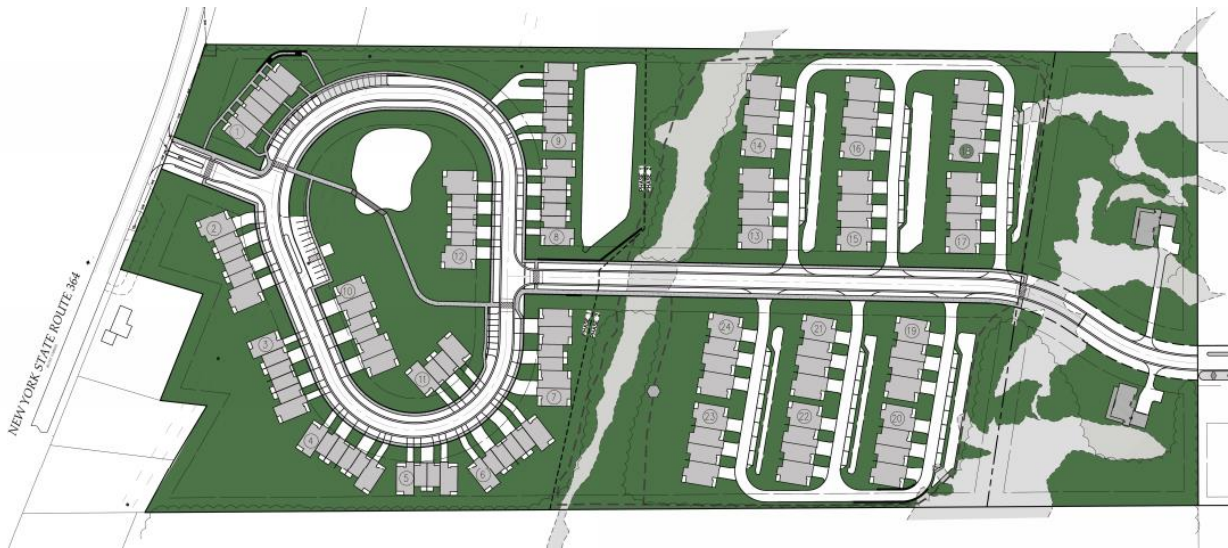


Figure 8 - Figure of the highlighted (green) open space areas