

## **ATTACHMENT 8**

# **Visual Assessment & Photo-Simulations**

**NEW CANAAN NORTHWEST  
1837 LLC  
1837 PONUS RIDGE ROAD  
NEW CANAAN, CT 06840**

**Prepared For:**

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## **VISUAL ASSESSMENT & PHOTO-SIMULATIONS**

Homeland Towers, LLC ("Homeland") is seeking approval for the development of a new wireless communications facility (the "Facility") at 1837 Ponus Ridge Road in New Canaan, Connecticut (the "Host Property"). At the request of Homeland, All-Points Technology Corporation, P.C. ("APT") completed this assessment to evaluate the potential visual effects of the proposed Facility from within a two-mile radius (the "Study Area"). The Study Area includes portions of the neighboring municipalities of Stamford to the west and Pound Ridge, NY to the north.

### **Project Setting**

The Host Property consists of a  $\pm 5.16$ -acre irregularly shaped residential parcel located on the eastern side of Ponus Ridge Road. The surrounding area consists of the Laurel Reservoir (the "Reservoir") immediately to the west and wooded and residential land to the north, east, and south. The topography within the Study Area consists of relatively hilly terrain. Ground elevations range from approximately 200 feet above mean sea level ("AMSL") along the Rippowam River in the southeastern portion of the Study Area to approximately 604 feet AMSL in its northwestern portion. Tree cover within the Study Area (consisting primarily of mixed deciduous hardwoods with interspersed stands of conifers) occupies approximately 5,144 acres (or  $\pm 63.96\%$ ) of the 8,042-acre Study Area. Open water occupies approximately 420 acres ( $\pm 5\%$ ) of the Study Area, with the Reservoir accounting for 258 acres.

### **Project Undertaking**

Homeland plans to construct the proposed Facility on the north-central portion of the Host Property (the "Site"). The proposed Facility would be located at a ground elevation of approximately 394 feet AMSL and include a 110-foot tall brown monopole designed to resemble a pine tree ("monopine"). Faux branches would extend approximately five (5) feet above the top of the pole to provide a conical top, bringing the total Facility height to  $\pm 115'$  above ground level ("AGL").<sup>1</sup> Antenna arrays would be concealed within faux branching affixed to the monopole. Associated ground-mounted equipment would be placed within an irregularly shaped  $\pm 3,000$  sq. ft. gravel based fenced compound. The Facility has been designed to accommodate multiple service providers. Access to the Site would be gained over a new 12' wide paved and gravel access drive. Please refer to the current Site Drawings prepared by APT, dated December 13, 2021, and provided under separate cover, for details regarding the proposed installation.

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<sup>1</sup> Municipal whip antennas are planned for future installation and would extend an additional 10 feet to 125' AGL.

## **Methodology**

APT used the combination of a predictive computer model, in-field analysis, and a review of various data sources to evaluate the visibility associated with the proposed Facility on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of visibility throughout the entire Area, including private properties and other areas inaccessible for direct observations. The in-field analysis consisted of a balloon float and field reconnaissance of the Study Area to record existing conditions, verify results of the model, inventory seasonal and year-round view locations, and provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

### **Preliminary Computer Modeling**

To conduct this assessment, a predictive computer model was developed specifically for this project using ESRI's ArcMap GIS<sup>2</sup> software and available GIS data. The predictive model incorporates Project and Study Area-specific data, including the Site location, its ground elevation and the proposed Facility height, as well as the surrounding topography, existing vegetation, and structures (the primary features that can block direct lines of sight).

A digital surface model ("DSM"), capturing both the natural and built features on the Earth's surface, was generated for the extent of the Study Area utilizing State of Connecticut 2016 LiDAR<sup>3</sup> LAS<sup>4</sup> data points. LiDAR is a remote-sensing technology that develops elevation data by measuring the time it takes for laser light to return from the surface to the instrument's sensors. The varying reflectivity of objects also means that the "returns" can be classified based on the characteristics of the reflected light, normally into categories such as "bare earth," "vegetation," "road," "surface water" or "building." Derived from the 2016 LiDAR data, the LAS datasets contain the corresponding elevation point data and return classification values. The Study Area DSM incorporates the first return LAS dataset values that are associated with the highest feature in the landscape, typically a treetop, top of a building, and/or the highest point of other tall structures.

Once the DSM was generated, ESRI's Viewshed Tool was utilized to identify locations within the Study Area where the proposed Facility may be visible. ESRI's Viewshed Tool predicts visibility by identifying those cells<sup>5</sup> within the DSM that can be seen from an observer location. Cells where visibility was indicated were extracted and converted from a raster dataset to a polygon

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<sup>2</sup> ArcMap is a Geographic Information System desktop application developed by the Environmental Systems Research Institute for creating maps, performing spatial analysis, and managing geographic data.

<sup>3</sup> Light Detection and Ranging

<sup>4</sup> An LAS file is an industry-standard binary format for storing airborne LiDAR data.

<sup>5</sup> Each DSM cell size is 1 square meter.

feature which was then overlaid onto aerial photograph and topographic base maps. Since the DSM includes the highest relative feature in the landscape, isolated “visible” cells are often indicated within heavily forested areas (e.g., from the top of the highest tree) or on building rooftops during the initial processing. It is recognized that these areas do not represent typical viewer locations and overstate visibility. As such, the resulting polygon feature is further refined by extracting those areas. The viewshed results are also cross-checked against the most current aerial photographs to assess whether significant changes (a new housing development, for example) have occurred since the time the LiDAR-based LAS datasets were captured.

The results of the preliminary analysis are intended to provide a representation of those areas where portions of the Facility may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of five (5) feet above the ground and the combination of intervening topography, trees and other vegetation, and structures. However, the Facility may not necessarily be visible from all locations within those areas identified by the predictive model, which has its limitations. For instance, the computer model cannot account for mass density, tree diameters and branching variability of trees, or the degradation of views that occur with distance. As a result, some areas depicted on the viewshed maps as theoretically offering potential visibility of the Facility may be over-predictive because the quality of those views is not sufficient for the human eye to recognize the Facility or discriminate it from other surrounding or intervening objects.

### **Seasonal Visibility**

Visibility also varies seasonally with increased, albeit obstructed, views occurring during “leaf-off” conditions. Beyond the variabilities associated with density of woodland stands found within any given Study Area, each individual tree also has its own unique trunk, pole timber and branching patterns that provide varying degrees of screening in leafless conditions which, as introduced above, cannot be precisely modeled. Seasonal visibility is therefore estimated based on a combination of factors including the type, size, and density of trees within a given area; topographic constraints; and other visual obstructions that may be present. Taking into account these considerations, areas depicting seasonal visibility on the viewshed maps are intended to represent locations from where there is a potential for views through intervening trees, as opposed to indicating that leaf-off views will exist from within an entire seasonally-shaded area.

## **Balloon Float and Field Reconnaissance**

To supplement and fine tune the results of the computer modeling efforts, APT completed in-field verification activities consisting of a balloon float, vehicular and pedestrian reconnaissance, and photo-documentation. The balloon float and field reconnaissance were completed on April 7, 2021. The balloon float involved raising a brightly-colored, approximately 4-foot diameter, helium-filled balloon tethered to a string height of  $\pm 110$  feet AGL<sup>6</sup> at the proposed Site. Weather conditions were favorable for the in-field activities with calm winds and mostly clear skies.

APT conducted a Study Area reconnaissance by driving along local and State roads and other publicly accessible locations to document and inventory where the balloon could be seen above and through the tree canopy and other visual obstructions. Visual observations from the reconnaissance were also used to evaluate the results of the preliminary visibility mapping and identify any discrepancies in the initial modeling.

## **Photographic Documentation and Simulations**

During the Study Area reconnaissance, APT obtained photo-documentation of representative locations where the balloon was – and was not - visible. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body<sup>7</sup> and Canon EF 24 to 105 millimeter ("mm") zoom lens. APT typically uses a standard focal length of 50mm to present a consistent field of view. On occasion, photos are taken at lower focal lengths to provide a greater depth of field and to provide context to the scene by including surrounding features within the photograph. During this evaluation, three (3) photographs were taken at a 35mm focal length as noted in Table 1 – Photo Locations.

Photographic simulations were generated to portray scaled renderings of the proposed Facility from 11 locations presented herein where the Facility may be recognizable above or through the trees. Using field data, site plan information and 3-dimensional (3D) modeling software, spatially referenced models of the Site and Facility were generated and merged. The geographic coordinates obtained in the field for the photograph locations were incorporated into the model to produce virtual camera positions within the spatial 3D model. Photo-simulations were then created using a combination of renderings generated in the 3D model and photo-rendering software programs, which were ultimately composited and merged with the existing conditions photographs (using Adobe Photoshop image editing software). The scale of the subjects in the

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<sup>6</sup> The bottom of the balloon represented the top of the monopole.

<sup>7</sup> The Canon EOS 6D is a full-framed camera which includes a lens receptor of the same size as the film used in 35mm cameras. As such, the images produced are comparable to those taken with a conventional 35mm camera.

photograph (the balloon) and the corresponding simulation (the Facility) is proportional to their surroundings.

For presentation purposes in this report, the photographs were produced in an approximate 7-inch by 10.5-inch format. When reproducing the images in this format size, we believe it is important to present the largest view while providing key contextual landscape elements (existing developments, street signs, utility poles, etc.) so that the viewer can determine the proportionate scale of each object within the scene. Photo-documentation of the field reconnaissance and photo-simulations of the proposed Facility are presented in the attachment at the end of this report. The field reconnaissance photos that include the balloon in the view provide visual reference points for the approximate height and location of the proposed Facility relative to the scene. All simulations were created to represent the proposed monopole and antennas. The photo-simulations are intended to provide the reader with a general understanding of the different view characteristics associated with the Facility from various locations. Photographs were taken from publicly accessible areas and unobstructed view lines were chosen wherever possible.

Table 1 – Photo Locations summarizes the photographs and simulations presented in the attachment to this report, and includes a description of each location, view orientation, distance from where the photo was taken relative to the Site, and the general characteristics of the view. The photo locations are depicted on the photolog and viewshed maps provided as attachments to this report.

**Table 1 – Photo Locations**

Photo	Location	Orientation	Distance to Site	Height of Facility Visible in Photograph	Visibility
1	Ponus Ridge Road	Southeast	± 0.26 Mile	N/A	Not Visible
2	Ponus Ridge Road	Southeast	± 0.17 Mile	30'-40'	Seasonal
3	Ponus Ridge Road	Northwest	± 0.12 Mile	50'-60'	Seasonal
4	Dan's Highway*	West	± 0.21 Mile	N/A	Not Visible
5	Dan's Highway	Northwest	± 0.16 Mile	40'-50'	Seasonal
6	Ponus Ridge Road*	Northwest	± 0.14 Mile	10'-20'	Seasonal
7	Ponus Ridge Road	Northwest	± 0.17 Mile	20'-30'	Year Round
8	Ponus Ridge Road	Northwest	± 0.22 Mile	N/A	Not Visible
9	Lake Wind Road	Northwest	± 0.22 Mile	30'-40'	Seasonal
10	Lake Wind Road	Northwest	± 0.24 Mile	N/A	Not Visible
<i>*Photograph was taken at 35 mm focal length. Unless otherwise noted, photograph locations are in New Canaan.</i>					

**Table 1 – Photo Locations Continued**

Photo	Location	Orientation	Distance to Site	Height of Facility Visible in Photograph	Visibility
11	Lake Wind Road	Northwest	± 0.31 Mile	N/A	Not Visible
12	Ponus Ridge Road	Northwest	± 0.28 Mile	N/A	Not Visible
13	Ponus Ridge Road	North	± 0.35 Mile	20'-30'	Seasonal
14	Ponus Ridge Road	North	± 0.40 Mile	N/A	Not Visible
15	Ponus Ridge Road	Northwest	± 0.96 Mile	N/A	Not Visible
16	Reservoir Lane – Stamford	Northeast	± 0.60 Mile	N/A	Not Visible
17	Fernwood Drive – Stamford	Northeast	± 0.81 Mile	N/A	Not Visible
18	Laurel Road – Stamford	Northeast	± 0.66 Mile	N/A	Not Visible
19	Laurel Road – Stamford	Northeast	± 0.75 Mile	10'-20'	Seasonal
20	Laurel Road – Stamford	Northeast	± 0.76 Mile	0'-10'	Year Round
21	Laurel Road – Stamford	Northeast	± 0.75 Mile	N/A	Not Visible
22	High Ridge Cemetery Association – Stamford	Northeast	± 1.06 Miles	N/A	Not Visible
23	Mayapple Road at High Ridge Road – Stamford	Northeast	± 1.06 Miles	N/A	Not Visible
24	Trinity Pass – Stamford	Southeast	± 0.73 Mile	N/A	Not Visible
25	Trinity Pass Road*	Southeast	± 0.67 Mile	N/A	Not Visible
26	Rolling Meadow Lane at Trinity Pass Road – Pound Ridge, NY	Southeast	± 0.81 Mile	N/A	Not Visible
27	Lost District Drive	Southeast	± 0.43 Mile	N/A	Not Visible
28	Lost District Drive	Southeast	± 0.56 Mile	N/A	Not Visible
29	Lost District Drive	Southwest	± 0.33 Mile	N/A	Not Visible
30	Lost District Drive	Southeast	± 0.30 Mile	N/A	Not Visible
31	Squires Lane	South	± 0.26 Mile	N/A	Not Visible
32	Squires Lane	South	± 0.23 Mile	40'-50'	Seasonal
33	Squires Lane	South	± 0.17 Mile	60'-70'	Seasonal
34	Oenoke Ridge	Southwest	± 1.05 Miles	N/A	Not Visible
35	West Road	West	± 1.03 Miles	N/A	Not Visible
36	Riding Stable Trail – Stamford	Southeast	± 0.96 Mile	N/A	Not Visible
37	Craig Court – Stamford	Southeast	± 1.07 Miles	N/A	Not Visible
38	High Ridge Road – Pound Ridge, NY	Southeast	± 1.15 Miles	N/A	Not Visible
39	Pound Ridge Golf Club – Pound Ridge, NY	Southeast	± 1.25 Miles	N/A	Not Visible
40	Pound Ridge Golf Club – Pound Ridge, NY	Southeast	± 1.37 Miles	N/A	Not Visible
41	Upper Shad Road at High Ridge Road – Pound Ridge, NY	Southeast	± 1.61 Miles	N/A	Not Visible

\*Photograph was taken at 35 mm focal length.

Unless otherwise noted, photograph locations are in New Canaan.

## **Final Visibility Mapping**

Information obtained during the field reconnaissance was incorporated into the mapping data layers, including observations of the field reconnaissance, the photograph locations, areas that experienced recent land use changes and those places where the initial model was found to over or under-predict visibility. Once the additional data was integrated into the model, APT recalculated the visibility of the proposed Facility within the Study Area.

## **Conclusions**

As presented on the attached viewshed maps, views of the Facility from land would be limited seasonally (when leaves are off the deciduous trees) and primarily to locations within close proximity of the Site (less than  $\pm 0.25$ -mile) and the shoreline of the Reservoir. Approximately 98.5% of predicted year-round visibility of the Facility is estimated to occur over open water on the Reservoir to the west and southwest of the Site.<sup>8</sup> Photo 7 depicts representative year-round views from publicly accessible areas within the immediate vicinity of the Site on land. Photo 20 depicts a year-round view as seen from the western shore of the Reservoir.<sup>9</sup>

Areas of obstructed visibility are predicted to occur at the limits of predicted year-round visibility along the shoreline of the Reservoir, and within approximately 0.3-mile of the Site on land. Photos 5, 7, 9 and 13 depict representative seasonal views from these areas.

Predicted year-round visibility of the proposed Facility is estimated to include approximately 198 acres, 195 acres of which occur over open water on the Reservoir. Predicted seasonal visibility is estimated to include an additional  $\pm 80$  acres, with approximately 21 acres occurring in forested areas immediately surrounding the Reservoir. Collectively, the total  $\pm 278$  acres of visibility represent  $\pm 3.5$  percent of the 8,042-acre Study Area. Approximately 77.33% of predicted visibility is from the Reservoir.

## **Proximity to Schools And Commercial Child Day Care Centers**

No schools or commercial day care centers are located within 250 feet of the proposed Facility. West Elementary School of New Canaan is located approximately 2.4 miles southeast of the Site at 769 Ponus Ridge Road in New Canaan. No visibility is predicted from or in the vicinity of the school. The nearest commercial child care center is Family Extensions, Inc. approximately 3 miles to the southeast of the Site at 45 Grove Street in New Canaan. No visibility is predicted from or in the vicinity of the day care center.

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<sup>8</sup> The Reservoir and surrounding watershed property is not open to the public.

<sup>9</sup> Although Photo 20 was not taken over open water, the representation of the Facility is similar to the views expected over a majority of the Reservoir.

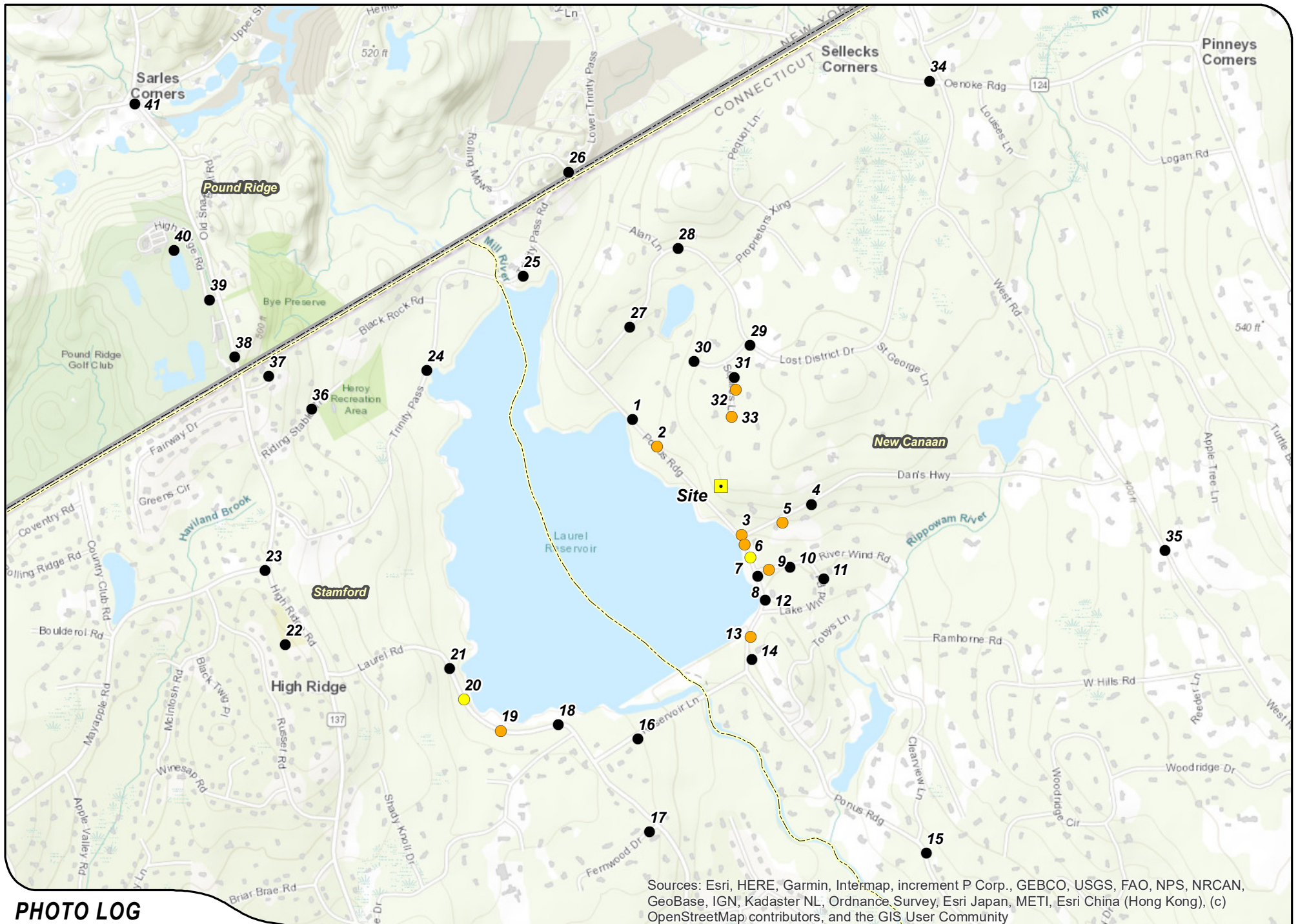
## **Limitations**

The viewshed maps presented in the attachment to this report depict areas where the proposed Facility may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of five (5) feet above the ground and intervening topography, tree canopy, and structures. This analysis may not account for all visible locations, as it is based on the combination of computer modeling, incorporating aerial photographs, and in-field observations from publicly accessible locations. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the field review and reconnaissance. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location. Weather conditions on the day of the field review included calm winds and mostly sunny skies.



## **ATTACHMENTS**



## PHOTO LOG

Legend

■ Site 
 ● Visible 
 ● Seasonal 
 ● Not Visible 
  Municipal Boundary 
  State Boundary



1 inch = 1,500 feet

1,500 750 0 1,500 Feet





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

1

LOCATION

PONUS RIDGE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.26 MILE

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	PONUS RIDGE ROAD	SOUTHEAST	+/- 0.17 MILE	SEASONAL





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	PONUS RIDGE ROAD	SOUTHEAST	+/- 0.17 MILE	SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	PONUS RIDGE ROAD	NORTHWEST	+/- 0.12 MILE	SEASONAL





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	PONUS RIDGE ROAD	NORTHWEST	+/- 0.12 MILE	SEASONAL





PHOTOGRAPHED ON 4/7/2021  
35mm focal length

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	DAN'S HIGHWAY	WEST	+/- 0.21 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	DAN'S HIGHWAY	NORTHWEST	+/- 0.16 MILE	SEASONAL





**PROPOSED**

PHOTO

5

LOCATION

DAN'S HIGHWAY

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.16 MILE

VISIBILITY

SEASONAL





35mm focal length  
PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	PONUS RIDGE ROAD	NORTHWEST	+/- 0.14 MILE	SEASONAL





**PROPOSED**

PHOTO

6

LOCATION

PONUS RIDGE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.14 MILE

VISIBILITY

SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	PONUS RIDGE ROAD	NORTHWEST	+/- 0.17 MILE	YEAR ROUND





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	PONUS RIDGE ROAD	NORTHWEST	+/- 0.17 MILE	YEAR ROUND





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO

8

LOCATION

PONUS RIDGE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	LAKE WIND ROAD	NORTHWEST	+/- 0.22 MILE	SEASONAL





**PROPOSED**

PHOTO

9

LOCATION

LAKE WIND ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	LAKE WIND ROAD	NORTHWEST	+/- 0.24 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	LAKE WIND ROAD	NORTHWEST	+/- 0.31 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

12

LOCATION

PONUS RIDGE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.28 MILE

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	PONUS RIDGE ROAD	NORTH	+/- 0.35 MILE	SEASONAL





**PROPOSED**

PHOTO

13

LOCATION

PONUS RIDGE ROAD

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 0.35 MILE

VISIBILITY

SEASONAL





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	PONUS RIDGE ROAD	NORTH	+/- 0.40 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	PONUS RIDGE ROAD	NORTHWEST	+/- 0.96 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	RESERVOIR LANE - STAMFORD	NORTHEAST	+/- 0.60 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	FERNWOOD DRIVE - STAMFORD	NORTHEAST	+/- 0.81 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
18	LAUREL ROAD - STAMFORD	NORTHEAST	+/- 0.66 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

19

LOCATION

LAUREL ROAD - STAMFORD

ORIENTATION

NORTHEAST

DISTANCE TO SITE

+/- 0.75 MILE

VISIBILITY

SEASONAL





**PROPOSED**

PHOTO

19

LOCATION

LAUREL ROAD - STAMFORD

ORIENTATION

NORTHEAST

DISTANCE TO SITE

+/- 0.75 MILE

VISIBILITY

SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	LAUREL ROAD - STAMFORD	NORTHEAST	+/- 0.76 MILE	YEAR ROUND





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	LAUREL ROAD - STAMFORD	NORTHEAST	+/- 0.76 MILE	YEAR ROUND





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO

21

LOCATION

**LAUREL ROAD - STAMFORD**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 0.75 MILE**

VISIBILITY

**NOT VISIBLE**





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO

22

LOCATION

**HIGH RIDGE CEMETERY ASSOCIATION - STAMFORD**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 1.06 MILES**

VISIBILITY

**NOT VISIBLE**





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	MAYAPPLE ROAD AT HIGH RIDGE ROAD - STAMFORD	NORTHEAST	+/- 1.06 MILES	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	TRINITY PASS - STAMFORD	SOUTHEAST	+/- 0.73 MILE	NOT VISIBLE





35mm focal length  
PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
25	TRINITY PASS ROAD	SOUTHEAST	+/- 0.67 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
26	ROLLING MEADOW LANE AT TRINITY PASS ROAD - POUND RIDGE, NY	SOUTHEAST	+/- 0.81 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
27	LOST DISTRICT DRIVE	SOUTHEAST	+/- 0.43 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
28	LOST DISTRICT DRIVE	SOUTHEAST	+/- 0.56 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
29	LOST DISTRICT DRIVE	SOUTHWEST	+/- 0.33 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

30

LOCATION

LOST DISTRICT DRIVE

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.30 MILE

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

31

LOCATION

SQUIRES LANE

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 0.26 MILE

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
32	SQUIRES LANE	SOUTH	+/- 0.23 MILE	SEASONAL





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
32	SQUIRES LANE	SOUTH	+/- 0.23 MILE	SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
33	SQUIRES LANE	SOUTH	+/- 0.17 MILE	SEASONAL





**PROPOSED**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
33	SQUIRES LANE	SOUTH	+/- 0.17 MILE	SEASONAL





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
34	OENOKE RIDGE	SOUTHWEST	+/- 1.05 MILES	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
35	WEST ROAD	WEST	+/- 1.03 MILES	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
36	RIDING STABLE TRAIL - STAMFORD	SOUTHEAST	+/- 0.96 MILE	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

37

LOCATION

CRAIG COURT - STAMFORD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 1.07 MILES

VISIBILITY

NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

**EXISTING**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
38	HIGH RIDGE ROAD - POUND RIDGE, NY	SOUTHEAST	+/- 1.15 MILES	NOT VISIBLE





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO

39

LOCATION

**POUND RIDGE GOLF CLUB - POUND RIDGE, NY**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 1.25 MILES**

VISIBILITY

**NOT VISIBLE**





PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
40	POUND RIDGE GOLF CLUB - POUND RIDGE, NY	SOUTHEAST	+/- 1.37 MILES	NOT VISIBLE



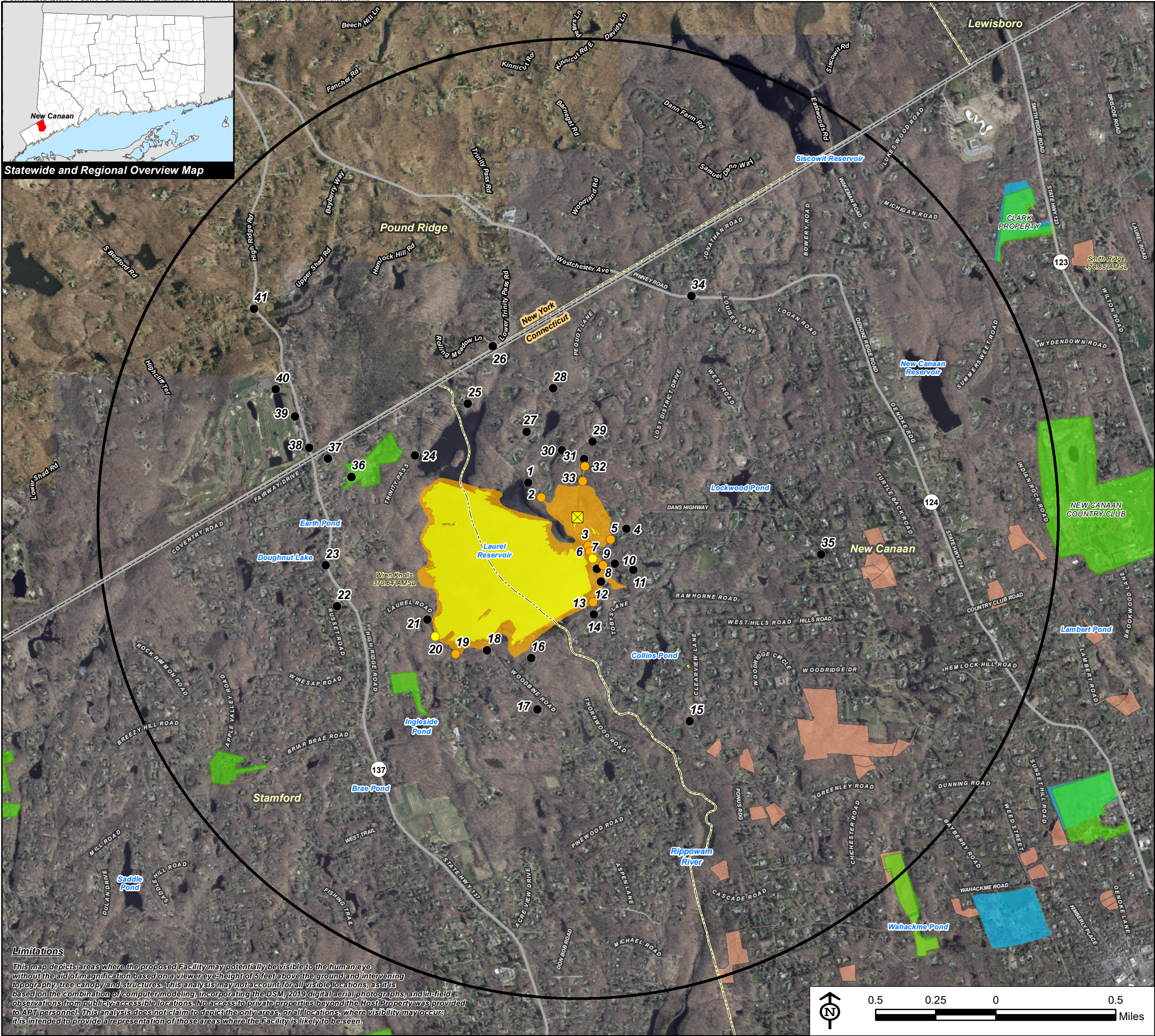


PHOTOGRAPHED ON 4/7/2021

## EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
41	UPPER SHAD ROAD AT HIGH RIDGE ROAD - POUND RIDGE, NY	SOUTHEAST	+/- 1.61 MILES	NOT VISIBLE

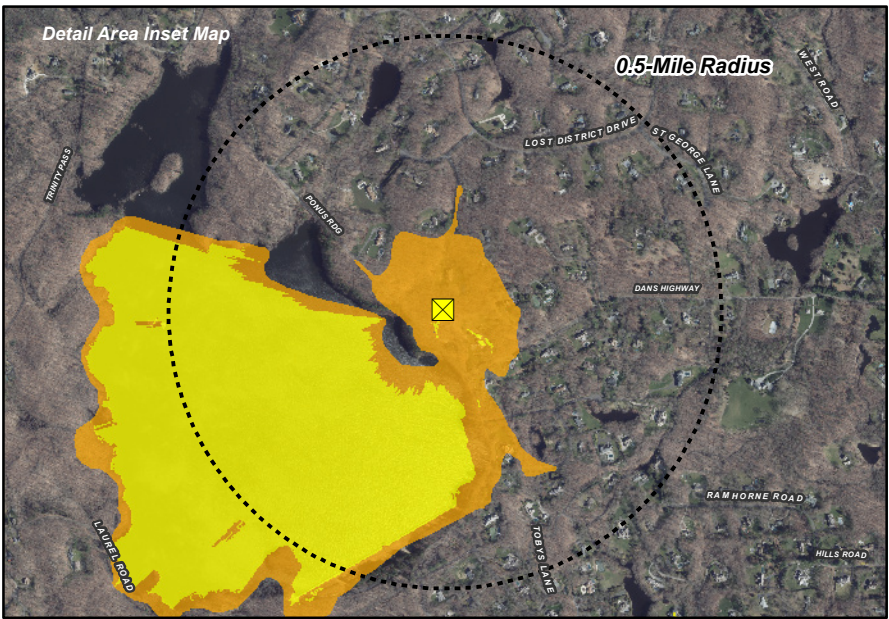




Statewide and Regional Overview Map

**Limitations**

This map depicts areas where the proposed Facility may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of 5 feet above the ground and intervening topography, tree canopy and structures. This analysis may not account for all visible locations, as it is based on the combination of computer modeling, incorporating the DSM, 2019 digital aerial photographs, and in-field observations from publicly-accessible locations. No access to private properties beyond the Host Property was provided to APT personnel. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.



Detail Area Inset Map

0.5-Mile Radius

## Viewshed Analysis Map

Proposed Wireless Telecommunications Facility  
New Canaan Northwest  
1837 Ponus Ridge Road  
New Canaan, Connecticut

Proposed facility height is 115 feet AGL.  
Forest canopy height is derived from LiDAR data.  
Study area encompasses a two-mile radius and includes 8,042 acres.  
Map information field verified by APT on April 7, 2021  
Base Map Source: 2019 Aerial Photograph (CTECO) and 2016  
New York State GIS Clearinghouse Aerial Photograph  
Map Date: January 2022

**Legend**

- |   |   |
|---|---|
| Proposed Site   | Trail                                     |
| Study Area (2-Mile Radius)  | Scenic Highway                            |
| <b>Photo Locations (April 7, 2021)</b>  | DEEP Boat Launches                        |
| Visible   | Municipal and Private Open Space Property |
| Seasonal  | State Forest/Park                         |
| Not Visible   | <b>Protected Open Space Property</b>      |
| Predicted Year-Round Visibility (198 Acres; +/- 195 acres occurs over Laurel Reservoir) | Federal                                   |
| Areas of Potential Seasonal Visibility (80 Acres)                                       | Land Trust                                |
| State Boundary  | Municipal                                 |
| Municipal Boundary  | Private                                   |
|   | State                                     |

**Data Sources:**

**Physical Geography / Background Data**

A digital surface model (DSM) was created from the State of Connecticut 2016 LiDAR LAS data points and the City of New York Department of Environmental Protection 2009 LiDAR LAS data points. The DSM captures the natural and built features on the Earth's surface.

Municipal Open Space, State Recreation Areas, Trails, County Recreation Areas, and Town Boundary data obtained from CT DEEP. Scenic Roads: CTDOT State Scenic Highways (2015); Municipal Scenic Roads (compiled by APT)

**Dedicated Open Space & Recreation Areas**

Connecticut Department of Energy and Environmental Protection (DEEP): DEEP Property (May 2007); Federal Open Space (1997); Municipal and Private Open Space (1997); DEEP Boat Launches (1994)

Connecticut Forest & Parks Association, Connecticut Walk Books East & West

**Other**

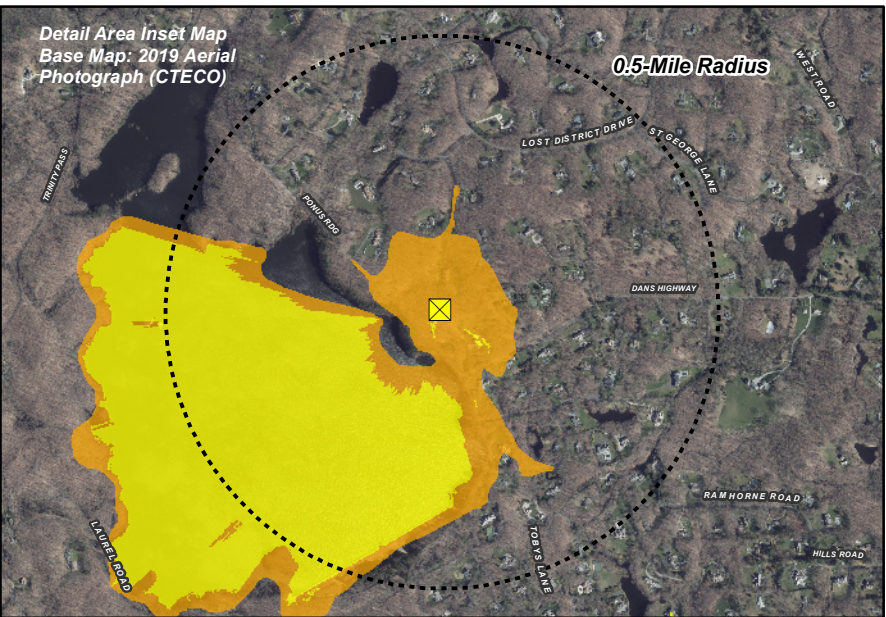
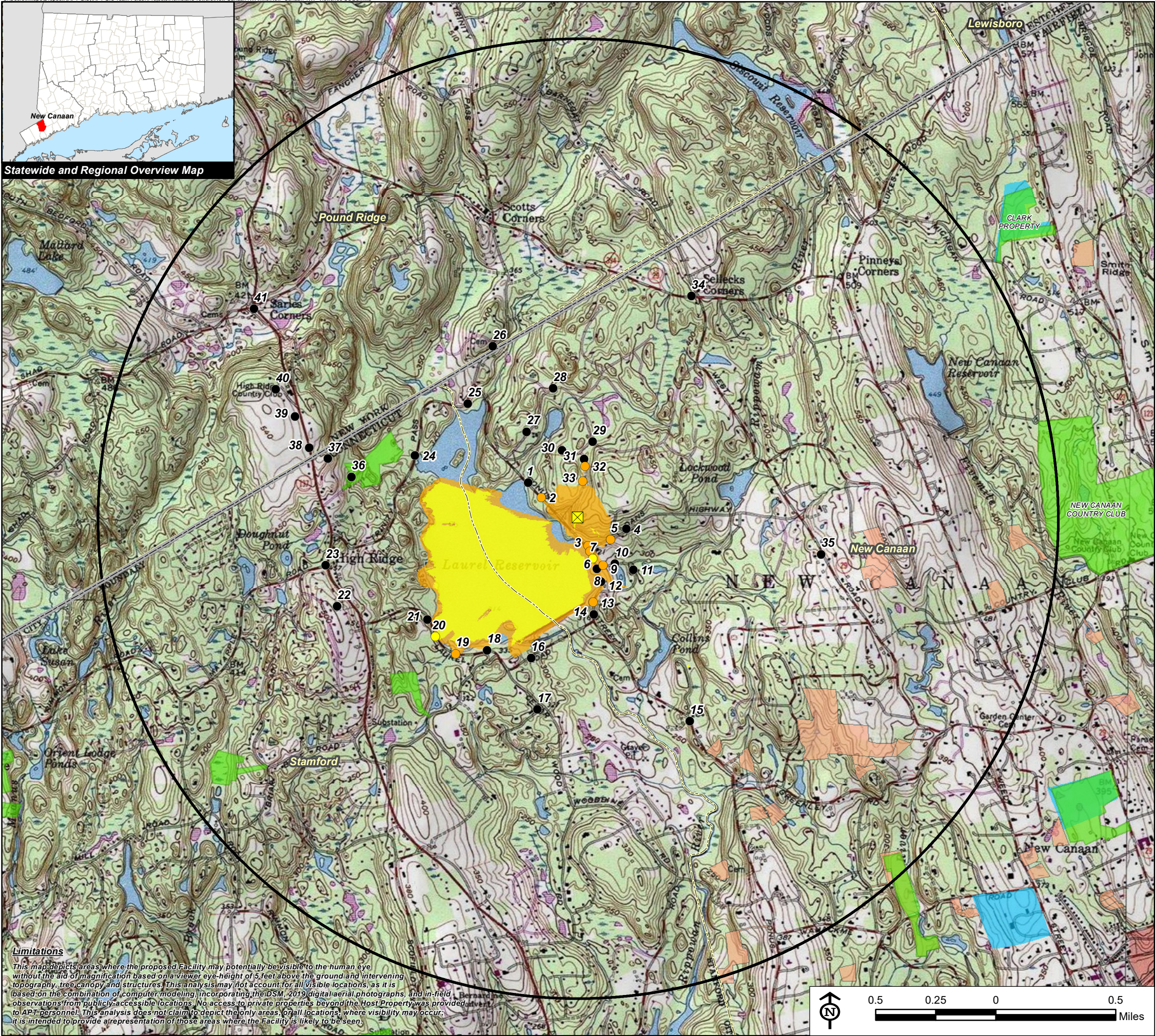
CTDOT Scenic Strips (based on Department of Transportation data)

**Notes**

\*\*Not all the sources listed above appear on the Viewshed Maps. Only those features within the scale of the graphic are shown.







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Map information field verified by APT on April 7, 2021  
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Map, Pound Ridge, NY-CT (1971)  
Map Date: January 2022

### Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Photo Locations (April 7, 2021)
  - Visible
  - Seasonal
  - Not Visible
- Predicted Year-Round Visibility (198 Acres; +/- 195 acres occurs over Laurel Reservoir)
- Areas of Potential Seasonal Visibility (80 Acres)
- State Boundary
- Municipal Boundary
- Trail
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