Visual Assessment & Photo-Simulations

WOODBRIDGE N2 CT
118 NEWTON ROAD
WOODBRIDGE, CT

Prepared in April 2021 by:
All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension – Suite 311
Waterford, CT 06385

Prepared for Verizon Wireless

ALL-POINTS
TECHNOLOGY CORPORATION

VISUAL ASSESSMENT & PHOTO-SIMULATIONS

Cellco Partnership, d/b/a Verizon Wireless ("Verizon Wireless") is seeking approval for the development of a new wireless communications facility (the "Facility") at 118 Newton Road in Woodbridge, Connecticut (the "Host Property"). At the request of Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed this assessment to evaluate the potential visual effects of the proposed Facility from within a 2-mile radius (the "Study Area"). The Study Area includes portions of the neighboring municipalities of Bethany to the north, Hamden to the east, and Ansonia and Seymour to the west.

Project Setting

The Host Property consists of a ±6-acre irregularly shaped parcel located on the western side of Newton Road near its intersection with Prospect Road. The parcel is developed with a single-family residence and multiple outbuildings. Remaining portions of the Host Property are largely open grassy areas with a few stands of mixed deciduous trees. Residentially-developed properties surround the Host Property in all directions.

The topography within the Study Area consists of hilly terrain. Ground elevations range from approximately 82 feet above mean sea level ("AMSL") in the southeastern portion of the Study Area to approximately 662 feet AMSL in its northeastern portion. Tree cover (consisting primarily of mixed deciduous hardwoods) occupies approximately 5,265 acres (or ±65.5%) of the 8,042-acre Study Area. Lake Dawson, located in Woodbridge, occupies approximately 47 acres (±0.5%) of the Study Area.

Project Undertaking

Verizon Wireless plans to construct the proposed Facility on the western portion of the Host Property (the "Site"). The proposed Facility would be located at a ground elevation of approximately 454 feet AMSL and include a 100-foot tall monopole and associated ground-mounted equipment within a 50-foot by 50-foot fenced compound. The tops of the proposed Verizon Wireless panel antennas would extend to a height of 104' above ground level ("AGL"). The Site would be accessed from Soundview Drive over a 12' wide gravel drive. Please refer to the current Site Drawings prepared by Hudson Design Group, LLC, dated March 30, 2021, and provided under separate cover, for details regarding the proposed Facility.

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 analyses consisted of a crane test 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[1] software and available GIS data. The predictive model incorporates Facility 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[2] LAS[3] 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[4] 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 feature which was then overlaid onto aerial photograph and topographic base maps. Since the

[1] 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.

[2] Light Detection and Ranging

[3] An LAS file is an industry-standard binary format for storing airborne LiDAR data.

[4] Each DSM cell size is 1 square meter.

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 occurs 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.

Crane Test and Field Reconnaissance

To supplement and fine tune the results of the computer modeling efforts, APT completed in-field verification activities consisting of a crane test, vehicular and pedestrian reconnaissance, and photo-documentation. The crane test and field reconnaissance were completed on March 10, 2021. The crane test consisted of positioning a crane at the proposed Facility location and

extending the crane boom with a brightly-colored flag to ±140 feet AGL[5]. This provided a fixed object unaffected by the wind. Weather conditions were favorable for the in-field activities with 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 flag 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 crane boom and flag were – and were 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[6] 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.

Photographic simulations were generated to portray scaled renderings of the proposed Facility from 12 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 photograph (the crane boom/flag) 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

[5] At the time of the crane test, the proposed monopole height was 140' AGL.

[6] 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.

at the end of this report. The field reconnaissance photos that include the crane boom 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 100-foot-tall monopole and antennas (extending to a top height of 104' AGL). 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	Visibility
1	Soundview Drive	Southeast	± 378 Feet	Year Round
2	Soundview Drive	Southeast	± 0.16 Mile	Seasonal
3	Soundview Drive	Southeast	± 0.17 Mile	Not Visible
4	Forest Glen Drive	Southeast	± 0.20 Mile	Not Visible
5	Forest Glen Drive	Southeast	± 0.21 Mile	Not Visible
6	White Oak Lane	Southeast	± 0.47 Mile	Not Visible
7	October Hill Road at Orchard Road	Southeast	± 0.31 Mile	Not Visible
8	Dogwood Circle at Newton Road	South	± 0.31 Mile	Not Visible
9	Prospect Court	Southwest	± 0.26 Mile	Seasonal
10	Newton Road	Southwest	± 0.19 Mile	Not Visible
11	Newton Road	Southwest	± 0.15 Mile	Not Visible
12	Newton Road	Southwest	± 0.14 Mile	Seasonal
13	Burnt Swamp Road	Southwest	± 0.19 Mile	Not Visible
14	Burnt Swamp Road	Southwest	± 0.16 Mile	Seasonal
15	Newton Road at Burnt Swamp Road	Southwest	± 0.14 Mile	Year Round
16	Newton Road	West	± 0.13 Mile	Year Round
17	Burnt Swamp Road at Newton Road	Northwest	± 0.15 Mile	Seasonal
18	Hampton Drive	Northwest	± 0.20 Mile	Not Visible
19	Hampton Drive	Northwest	± 0.20 Mile	Seasonal
20	Newton Road	Northwest	± 0.22 Mile	Seasonal
21	Penny Lane	North	± 0.21 Mile	Not Visible

Table 1 – Photo Locations Continued

Photo	Location	Orientation	Distance to Site	Visibility
22	Penny Lane	Northwest	± 0.21 Mile	Seasonal
23	Newton Road	Northwest	± 0.27 Mile	Seasonal
24	Ox Bow Lane	North	± 0.30 Mile	Not Visible
25	Newton Road	Northwest	± 0.40 Mile	Not Visible
26	Newton Road	Northwest	± 0.41 Mile	Not Visible
27	Amity High School	Northwest	± 0.73 Mile	Not Visible
28	Perkins Road at Amity Road	Northwest	± 0.95 Mile	Not Visible
29	Seymour Road	Southwest	± 0.90 Mile	Not Visible

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 would be limited primarily to the areas immediately surrounding the Site (within 0.25-mile or less). Select locations over open fields at a greater distance may also have views of the top of the tower, including those near the southernmost athletic fields at Amity Regional High School (±0.7 mile south), and east of Amity Road near the border of Bethany (±1.7 miles to the northeast). The nearest year-round views of the Facility would be from within the Host Property and generally at distances ranging from approximately 378 feet to 0.16 mile to the north/northwest along Soundview Drive. Photo locations 1 and 2 depicts representative year-round views from this area. Additional year-round views of the Facility would be from select locations to the east along Newton Road, at distances of approximately 0.14 mile away.

Seasonally, when the leaves are off the deciduous trees, additional areas of heavily obstructed visibility are predicted in the area surrounding the Facility. These areas extend up to approximately 0.26 mile from the Site to the southeast (as represented in Photo Locations 17, 18, 20, 22 and 23) and to the north, east and west at distances of up to approximately 0.15 mile.

Predicted year-round visibility of the proposed Facility is estimated to include approximately 11 acres. Predicted seasonal visibility is estimated to include an additional ±39 acres. Collectively, the total acreage of visibility represents less than one percent of the Study Area. The modest total viewshed of the proposed Facility is due to a combination of the relatively low tower height, variable terrain, and the mature vegetation throughout the Study Area.

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. Amity Regional High School is located approximately 0.69 mile southeast of the Site at 25 Newton Road in Woodbridge. A small pocket of year-round visibility is predicted near the southernmost baseball field. The nearest commercial child care center is Woodbridge Child Center, Inc., approximately 0.97 mile to the south of the Site at 4 Meetinghouse Lane in Woodbridge. No visibility is predicted from or in the vicinity of the day care center.

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. No access to private properties 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.

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 partly cloudy skies.

ATTACHMENTS

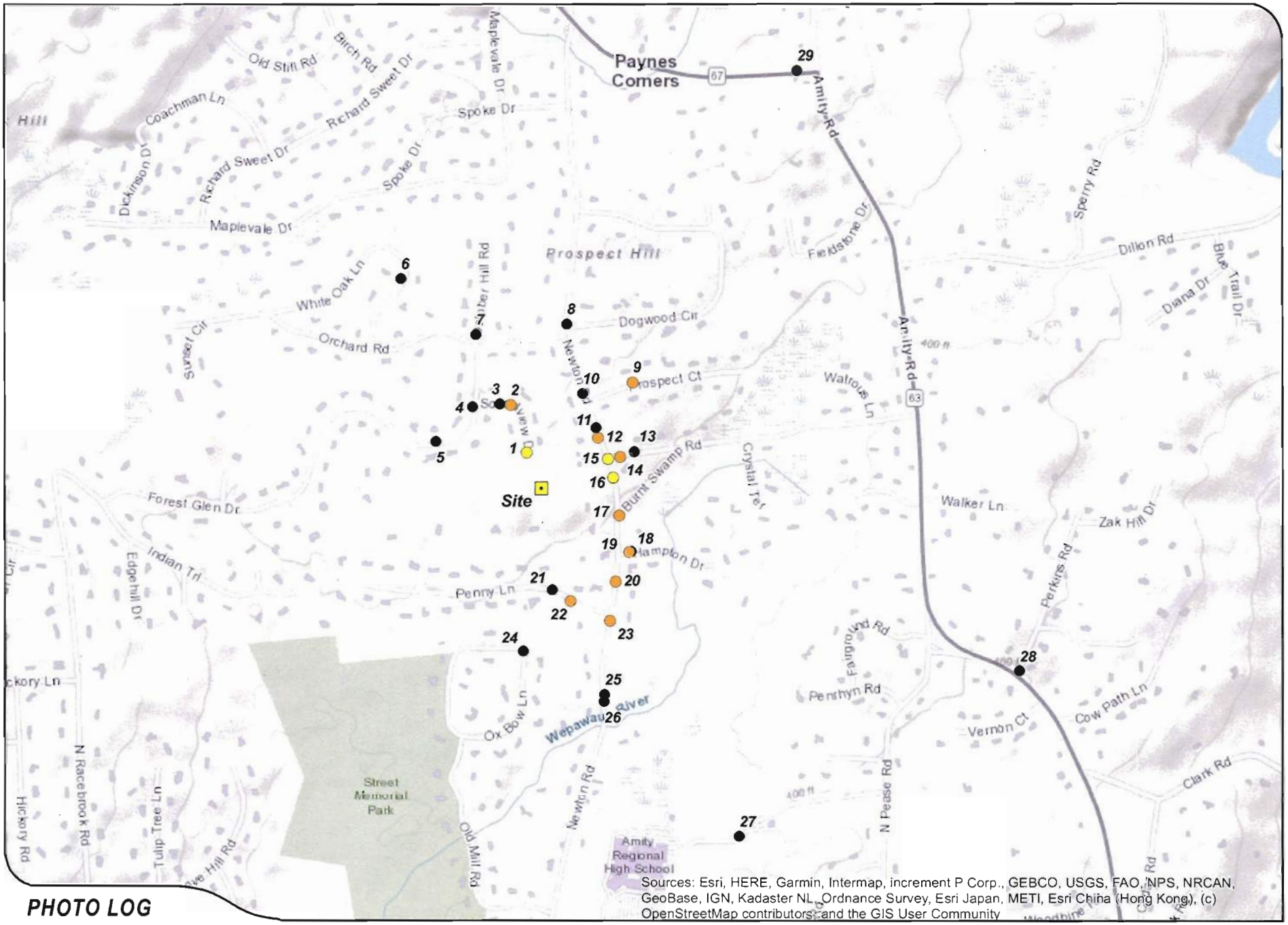


PHOTO LOG

Legend

Site · Visible · Seasonal · Not Visible

1 inch = 1,200 feet

1,200 600 0 1,200 Feet

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	SOUNDVIEW DRIVE	SOUTHEAST	+/- 378 FEET	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	SOUNDVIEW DRIVE	SOUTHEAST	+/- 378 FEET	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**SOUNDVIEW DRIVE**	**SOUTHEAST**	**+/- 0.16 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**SOUNDVIEW DRIVE**	**SOUTHEAST**	**+/- 0.16 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/9/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	SOUNDVIEW DRIVE	SOUTHEAST	+/- 0.17 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**FOREST GLEN DRIVE**	**SOUTHEAST**	**+/- 0.20 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	FOREST GLEN DRIVE	SOUTHEAST	+/- 0.21 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 1/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	**WHITE OAK LANE**	**SOUTHEAST**	**+/- 0.47 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	**OCTOBER HILL ROAD AT ORCHARD ROAD**	**SOUTHEAST**	**+/- 0.31 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/16/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	DOGWOOD CIRCLE AT NEWTON ROAD	SOUTH	+/- 0.31 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	**PROSPECT COURT**	**SOUTHWEST**	**+/- 0.26 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	PROSPECT COURT	SOUTHWEST	+/- 0.26 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	**NEWTON ROAD**	**SOUTHWEST**	**+/- 0.19 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	NEWTON ROAD	SOUTHWEST	+/- 0.15 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 1/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	**NEWTON ROAD**	**SOUTHWEST**	**+/- 0.14 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	NEWTON ROAD	SOUTHWEST	+/- 0.14 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/16/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	BURNT SWAMP ROAD	SOUTHWEST	+/- 0.19 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 1/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	**BURNT SWAMP ROAD**	**SOUTHWEST**	**+/- 0.16 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	BURNT SWAMP ROAD	SOUTHWEST	+/- 0.16 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	**NEWTON ROAD AT BURNT SWAMP ROAD**	**SOUTHWEST**	**+/- 0.14 MILE**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	NEWTON ROAD AT BURNT SWAMP ROAD	SOUTHWEST	+/- 0.14 MILE	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	NEWTON ROAD	WEST	+/- 0.13 MILE	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	**NEWTON ROAD**	**WEST**	**+/- 0.13 MILE**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	BURNT SWAMP ROAD AT NEWTON ROAD	NORTHWEST	+/- 0.15 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	BURNT SWAMP ROAD AT NEWTON ROAD	NORTHWEST	+/- 0.15 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
18	**HAMPTON DRIVE**	**NORTHWEST**	**+/- 0.20 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
19	HAMPTON DRIVE	NORTHWEST	+/- 0.20 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
19	**HAMPTON DRIVE**	**NORTHWEST**	**+/- 0.20 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	NEWTON ROAD	NORTHWEST	+/- 0.22 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	**NEWTON ROAD**	**NORTHWEST**	**+/- 0.22 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
21	PENNY LANE	NORTH	+/- 0.21 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
22	PENNY LANE	NORTHWEST	+/- 0.21 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
22	PENNY LANE	NORTHWEST	+/- 0.21 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 1/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	**NEWTON ROAD**	**NORTHWEST**	**+/- 0.27 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	**NEWTON ROAD**	**NORTHWEST**	**+/- 0.27 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	OX BOW LANE	NORTH	+/- 0.30 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
25	NEWTON ROAD	NORTHWEST	+/- 0.40 MILE	NOT VISIBLE

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
26	**NEWTON ROAD**	**NORTHWEST**	**+/- 0.41 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
27	**AMITY HIGH SCHOOL**	**NORTHWEST**	**+/- 0.73 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPHED ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
28	**PERKINS ROAD AT AMITY ROAD**	**NORTHWEST**	**+/- 0.95 MILE**	**NOT VISIBLE**

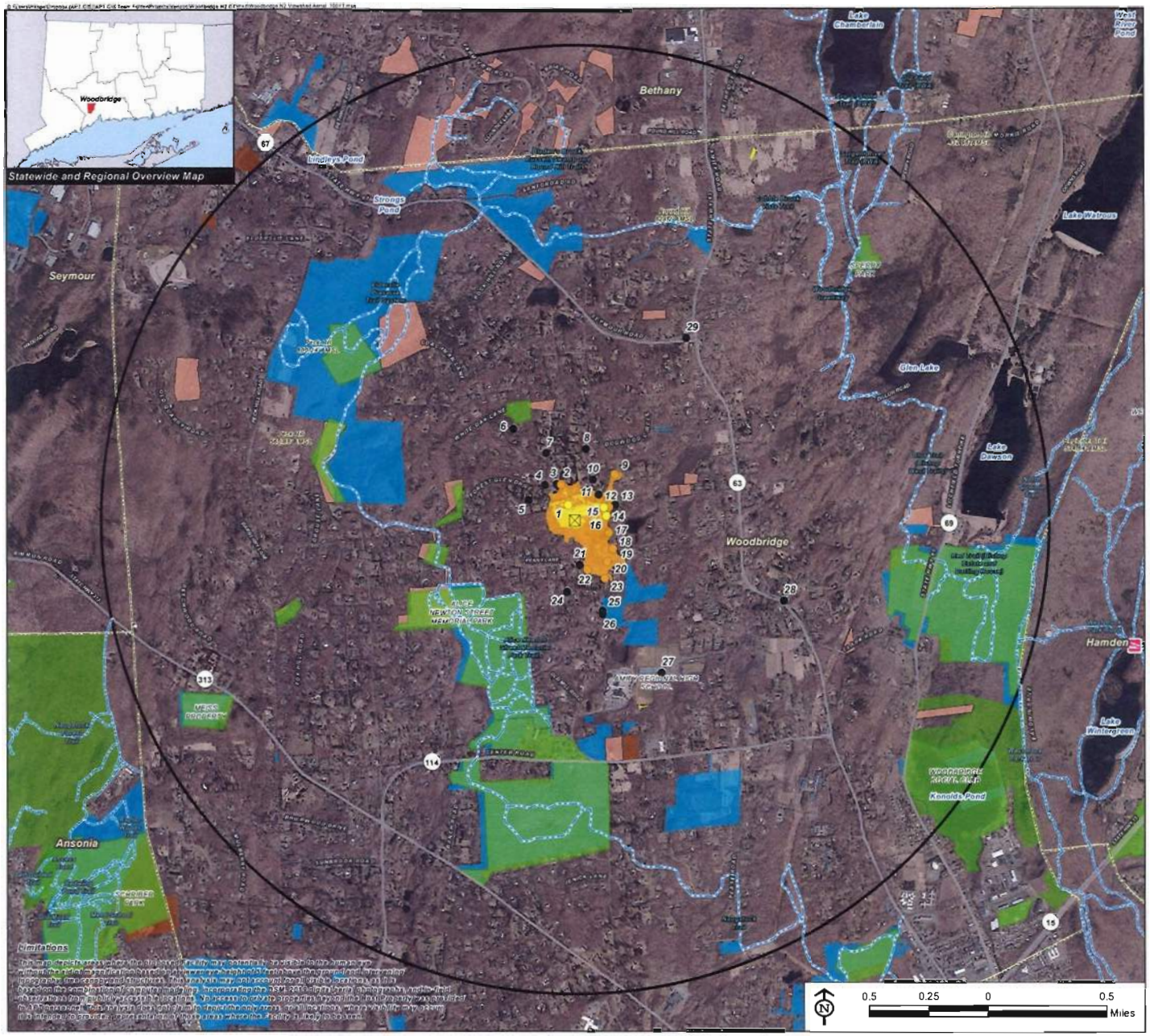
ALL-POINTS TECHNOLOGY CORPORATION

verizon

PHOTOGRAPH TAKEN ON 3/10/2021

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
29	**SEYMOUR ROAD**	**SOUTHWEST**	**+/- 0.90 MILE**	**NOT VISIBLE**



Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
Woodbridge N2 CT
118 Newton Road
Woodbridge, Connecticut

Proposed facility height is 100 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 March 10, 2021
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Date: April 2021

Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Predicted Year Round Visibility (11 Acres)
- Areas of Potential Seasonal Visibility (39 Acres)

Photo Locations (March 10, 2021)

- Not Visible
- Seasonal
- Visible
- Municipal Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal
- Land Trust
- Municipal
- 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. 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

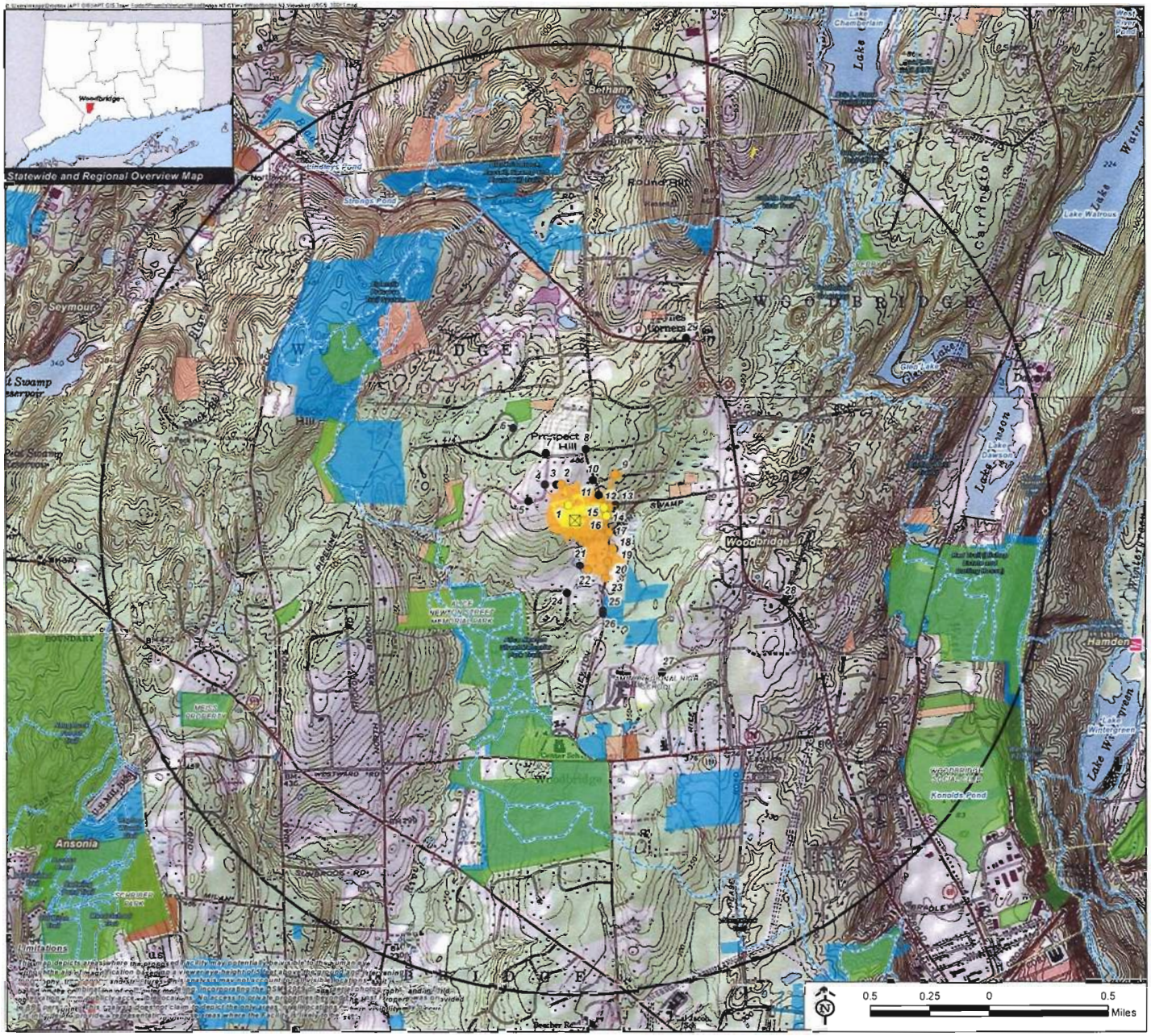
CTDOT Scenic Strips (based on Department of Transportation data)

Notes

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

verizon

All-Points Technology Corporation



Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
Woodbridge N2 CT
118 Newton Road
Woodbridge, Connecticut

Proposed facility height is 100 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 March 10, 2021
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Maps, Ansonia, CT (1984), Mount Carmel, CT (1984), Naugatuck, CT (1984) and New Haven, CT (1984)
Map Date: April 2021

Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Predicted Year-Round Visibility (11 Acres)
- Areas of Potential Seasonal Visibility (47 Acres)

Photo Locations (March 10, 2021)

- Not Visible
- Seasonal
- Visible
- Municipal Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space

- Federal
- Land Trust
- Municipal
- 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. 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.

verizon

All-Points Technology Corporation