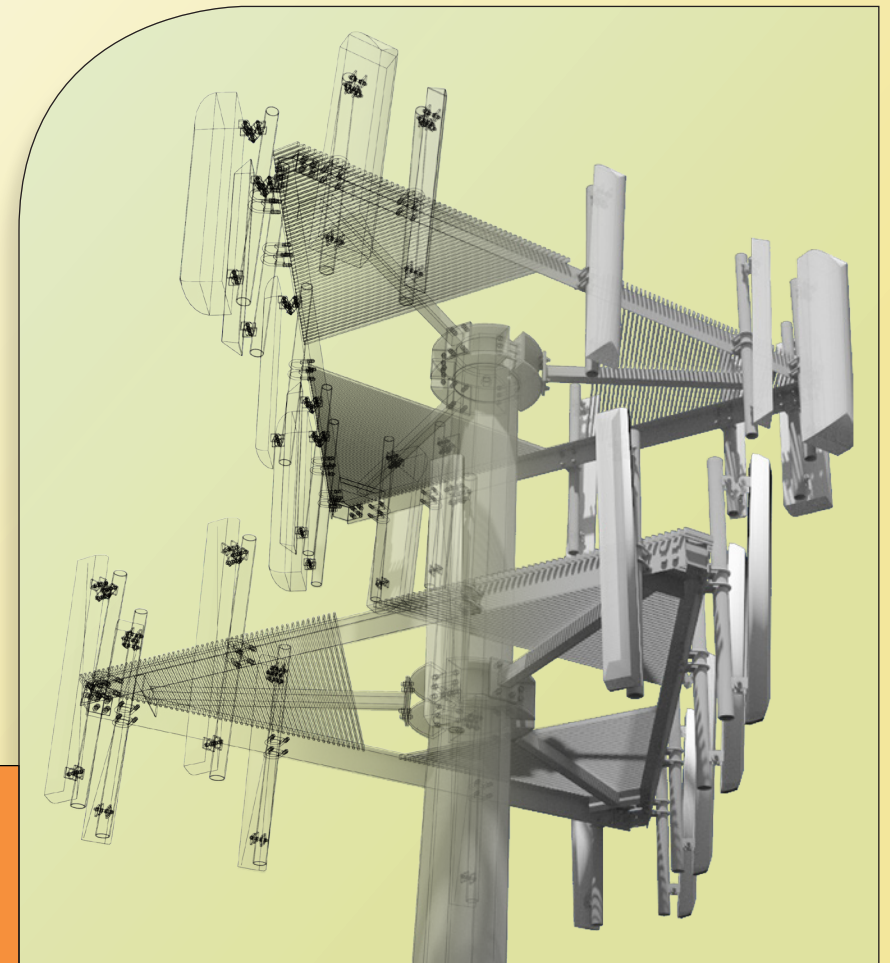


# ATTACHMENT 5

# Visibility Analysis

CT897 RIDGEFIELD  
LEDGES AT RIDGEFIELD  
RIDGEFIELD, CT 06877

*Prepared in October 2013 by:*  
All-Points Technology Corporation, P.C.  
3 Saddlebrook Drive  
Killingworth, CT 06141



# Project Introduction

Homeland Towers proposes to construct and operate a wireless telecommunications facility (“Facility”) north of Ledges Road in the Town of Ridgefield, Fairfield County, Connecticut (identified herein as the “Host Property”). All-Points Technology Corporation, P.C. (“APT”) prepared this Visibility Analysis to evaluate views associated with the proposed Facility.

## Site Description and Setting

The 3.18-acre Host Property is located north of Ledges Road and south of the intersection of Aspen Ledges Drive and Old Stagecoach Road, on the southern shoulder of Ridgebury Mountain. The Ridgefield Assessor’s Office identifies the Host Property as Map D08, Lot 0124, with no numeric street address on Ledges Road. Limited access to the Host Property currently exists via an existing rough dirt drive. The Host Property is undeveloped and the majority of it is wooded. The proposed Facility location is currently an open, overgrown field. Access to Host Property originates in a wooded area and transitions into the open field approximately 650 feet southwest of Ledges Road. The Host Property drops steeply down to the southeast.

The proposed Facility would be located in the north central portion of the Host Property (“site”), at a ground elevation of approximately 807 feet above mean sea level (“AMSL”). The Facility would include a 150-foot tall monopole and ground-mounted equipment enclosed within a 62’ by 75’ fence-enclosed compound. The monopole and 4,650± square foot, gravel-base compound would allow sufficient room for multiple antennas, equipment shelters and supporting equipment.

The Host Property is located in an RAAA Residential Zone, adjacent to a residential neighborhood.

## METHODOLOGY

APT used the combination of a predictive computer model and in-field analysis to evaluate the visibility associated with the proposed Facility on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of potential visibility throughout the entire Study Area (two miles in all directions from the site) including private properties and other areas inaccessible for direct observations. The in-field analyses included a reconnaissance of the Study Area to record existing conditions, verify results of the model, inventory visible and nonvisible locations, and provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

### Preliminary Computer Modeling

Two computer modeling tools are used to calculate those areas from which at least the top of the proposed Facility is estimated to be visible: IDRISI image analysis program (developed by Clark Labs, Clark University) and ArcGIS®, developed by Environmental Systems Research Institute, Inc. Project-

and Study Area-specific data were incorporated into the computer model, including the Facility's location, height, and ground elevation, as well as the surrounding topography and existing vegetation which are two primary features that can block direct lines of sight. Information used in the model included LiDAR<sup>1</sup>-based digital elevation data and customized land use data layers developed specifically for this analysis. The LiDAR-based Digital Elevation Model ("DEM") represents topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2000 and has a horizontal resolution of ten (10) feet. In addition, multiple land use data layers were created from National Agricultural Imagery Program (USDA) aerial photography (1-meter resolution, flown in June and July of 2011) using IDRISI image processing tools. The IDRISI tools implement light reflective classes defined by statistical analysis of individual pixels, which are then grouped based on common reflective values such that distinctions can be made automatically between deciduous and coniferous tree species, as well as grassland, impervious surface areas, water and other distinct land use features. This information is manually cross-checked with the recent USGS topographic land characteristics to quality assure the imaging analysis.

The Study Area includes a total of approximately 8,042 acres. The tree canopy within the Study Area consists mainly of mixed deciduous hardwood species interspersed with large stands of conifers, and occupies approximately 5,698 acres (representing  $\pm 71\%$  of the Study Area). Topography within the Study Area ranges in ground elevations from approximately 500 feet AMSL to 1,010 feet AMSL and is generally characterized as hilly to steep terrain.

Once the data layers were entered, image processing tools were applied and overlaid onto USGS topographic base maps and aerial photographs to achieve an estimate of locations where the Facility might be visible. First, only the topography data layer (DEM) was incorporated to evaluate potential visibility with no intervening vegetative screening. The initial omission of the forest cover data layer results in an excessive over-prediction, but provides an opportunity to identify and evaluate those areas with potentially direct sight lines toward the Facility.

Eliminating the tree canopy altogether, as performed in the preliminary analysis by assigning a 1-foot height value to this data layer, exaggerates areas of visibility because it assumes unobstructed sight lines everywhere but in those locations where intervening topography rises above the height of the proposed Facility. However, using this technique not only allows for an initial identification of direct sight lines, but also to gain some insight regarding seasonal views when the leaves are not on the trees<sup>2</sup>. This preliminary mapping is especially useful during the in-field activities (described below) to further evaluate "leaf-off" scenarios. A purposely low average tree canopy height of 50 feet was incorporated into the forest data layer and added to the DEM for a second iteration of the visibility map, thus providing a conservative assessment of intervening vegetation for use during the in-field activities to compare the outcomes of the initial computer modeling with direct observations of the balloon float.

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<sup>1</sup> LiDAR is an acronym for Light Detection and Ranging. It is a technology that utilized lasers to determine the distance to an object or surface. LiDAR is similar to radar, but incorporates laser pulses rather than sound waves. It measures the time delay between transmission and reflection of the laser pulse.

<sup>2</sup> Visibility varies seasonally with increased, albeit obstructed, views occurring during "leaf-off" conditions. Each individual Study Area includes mature vegetation with a unique composition and density of woodlands, with mast or pole timber and branching providing the majority of screening in leafless conditions. Because tree spacing, dimensions and branching patterns as well as the understory differ greatly over even small areas, creating an accurate Study Area-specific "leaf-off" tree density data layer covering a two-mile radius becomes unmanageable. Considering that a given Study Area has its own discrete forest characteristics, modeling for seasonal variations of visibility is problematic and, in our experience, even when incorporating conservative constraints into the model, the results tend to over-predict visibility in "leaf-off" conditions.

Additional data was reviewed and incorporated into the visibility analysis, including protected private and public open space, parks, recreational facilities, hiking trails, schools, and historic districts. Numerous trails systems are located within the Study Area. The nearest trail systems to the site (within 0.75 mile) are Kiah's Brook, Seth Low Pierrepont State Park, both southeast of the site, and the Ridgebury Slopes to the north. Additional trails are located approximately one mile and beyond in Hemlock Hills, Pine Mountain and Bennett's Pond State Park. Levy Park also has a network of trails approximately 1.75 miles to the south. Based on a review of publicly-available information, no designated scenic roadways are present within the Study Area.

## **In-Field Activities**

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.

### **Balloon Float and Field Reconnaissance**

A preliminary balloon float was conducted on July 15, 2013 to determine locations where the Facility might be visible. A subsequent balloon float and field reconnaissance was conducted on September 25, 2013 to obtain photographs for use in this report. The balloon float consisted of raising an approximately four-foot diameter, red helium-filled balloon tethered to a string height of 150 feet above ground level ("AGL") at the proposed Facility site. Weather conditions were favorable for the in-field activities and included sunny skies and calm winds (less than 4 miles per hour for the majority of the day). Once the balloon was secured, APT conducted a Study Area reconnaissance by driving along the local and State roads and other publicly accessible locations to document and inventory where the balloon could be seen above/through the tree mast and canopy. 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.

During the balloon float and in-field activities, several trees were randomly surveyed using a Suunto Tandem clinometer to ascertain their heights. The heights of trees adjacent to the site were field measured to document the surrounding canopy elevation. Numerous off-site locations were also selected to obtain tree canopy heights, including along roadways, wooded lots, and high- and low-lying areas to provide for the irregularities associated with different land characteristics and uses found within the Study Area. The average canopy height was developed based on these measurements and comparative observations, in this case approximately 65 feet AGL. Information obtained during the balloon float was subsequently incorporated into the computer model to refine the visibility map.

### **Photographic Documentation**

During the field reconnaissance, observations of the balloon were recorded and photo-documented to inventory those areas where it was and was not visible. Photographs were obtained from several vantage points to document the view towards the Facility.

At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") equipment. Photographs were taken with a Nikon D-3000 digital camera body and Nikon 18 to 135 mm zoom lens, with the lens set to 50 mm. A 50 mm focal length best approximates the relation of sizes between objects similar to what the human eye might perceive.

*"The lens that most closely approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm."*<sup>3</sup>

## **Final Visibility Mapping**

Information obtained during the field reconnaissance was incorporated into the mapping data layers, including observations of the balloon float, the photo locations, areas that experienced recent land use changes and those places where the initial model was found to over-predict visibility. The revised average tree canopy height data using a conservative value of 65 feet AGL was merged with the DEM and added to the base ground elevations of the forested areas data layer. Once the additional data was integrated into the model, APT re-calculated the visibility of the proposed Facility from within the Study Area to produce the final visibility map.

## **Photographic Simulations**

Photographic simulations were generated to portray scaled renderings of the proposed Facility from eleven (11) representative locations where the proposed Facility would be visible year-round. Using field data, site plan information and 3-dimension (3D) modeling software, spatially referenced models of the site area 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<sup>4</sup>.

Photo-documentation of the balloon float and photo-simulations of the proposed Facility are presented in the attachment at the end of this report. The balloon float photos provide visual reference points for the approximate height and location of the proposed Facility relative to the scene. The photo-simulations are intended to provide the reader with a general understanding of the different views that might be achieved of the Facility. It is important to consider that the locations selected are typically representative of a "worst case" scenario because they were selected to present unobstructed view lines (wherever possible), are static in nature and do not necessarily fairly characterize the prevailing views from within a given area. From several locations, moving a few feet in any direction will result in a far different perspective of the Facility than what it presented in the photograph. In some cases, a view of the Facility may be limited to the immediate area of the specific photo location (views 4, 9 and 11 demonstrate this).

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<sup>3</sup> Warren, Bruce. Photography, West Publishing Company, Eagan, MN, c. 1993, (page 70).

<sup>4</sup> As a final step, the accuracy and scale of select simulations are tested against photographs of similar existing facilities with recorded camera position, focal length, photo location, and tower location.

For presentation purposes in this report, the photographs were taken with a 50 mm focal length and produced in an approximate 7-inch by 10.5-inch format. The simulations provide a representation of the Facility under similar settings as those encountered during the balloon float and reconnaissance. Views of the Facility can change substantially throughout the season and are dependent on weather, light conditions, and the viewer location.

The table below summarizes characteristics of the photographs and simulations presented in the attachment to this report including a description of each location, view orientation, and the distance from where the photo was taken relative to the proposed Facility. The photo locations are depicted on the photolog map and the visibility analysis maps provided as attachments to this report.

### PHOTO LOCATIONS

View	Location	Orientation	Dist. To Site
1	Barlow Mountain Elementary School	Northwest	±0.59 Mile
2	Barlow Mountain Elementary School	Northwest	±0.57 Mile
3	Seth Low Pierrepont State Park	Northwest	±0.77 Mile
4	Adjacent to #34 Hobby Drive	Northeast	±0.45 Mile
5	Adjacent to #96 Hobby Drive	Northeast	±0.31 Mile
6	Ridgefield High School	Northeast	±0.69 Mile
7	Adjacent to #179 Mamasasco Road	Northeast	±1.02 Miles
8	Mamasasco Lake Boat Launch – Not visible	Northeast	±1.06 Miles
9	Adjacent to #110 Blue Ridge Road	Northeast	±1.17 Miles
10	Adjacent to #20 Tea House Lane	Northeast	±1.35 Miles
11	Barlow Mountain Road at Seth Low Pierrepont State	Northwest	±0.80 Mile
12	Ridgebury Road at Hussars Camp Place	Southeast	±1.19 Miles

## Visibility Analysis Results

Results of this analysis are graphically displayed on the visibility analysis maps provided in the attachment at the end of this report. The maps include a photolog, depicting the photo locations and corresponding simulation.

In general, the combination of rugged terrain and mature forest result in minimizing the overall visibility throughout the Study Area. Areas from where the proposed Facility would be visible above the tree canopy year-round comprise a total of approximately 141 acres. When the leaves are off the trees, seasonal views through intervening tree trunks and branches are anticipated to occur over ±199 additional acres. The shoulder of the ridge upon which the Host Property lies is prominent generally to locations west and south. As a result, the majority of views would occur from select locations within this general vista.

Locations east of the site within the Old Stagecoach Road/Aspen Ledges Road neighborhood would be effectively screened during “leaf on” conditions by the thick, intervening woods and change in topography. Seasonally, when the leaves are off the deciduous trees, immediate neighbors may be able to see portions of the tower, but views would still be obstructed. No significant views of the Facility are anticipated from locations further east of the site.

Near-range year-round views (within approximately 0.75 mile of the site) would be achieved from select locations along Barlow Mountain Road and Hobby Drive, as well as from locations at the Barlow Mountain Elementary School and Ridgefield High School grounds, and the southern shoreline of the pond at Seth Low Pierrepont State Park. Portions of the western-most trails in the state park will have limited seasonal views of the Facility through the trees.

Year-round views may also be achieved from select locations on the west shore of Mamanasco Lake, over one mile southwest of the proposed Facility site. Select areas on the elevated ridge west of the lake may have seasonal views through the trees when the leaves are down. No views of the Facility are anticipated from the boat launch area at Mamanasco Lake.

No views are anticipated from the trail systems at Kiah’s Brook or the Ridgebury Slopes. Beyond the immediate shoreline of the pond at Seth Low Pierrepont State Park, limited, seasonal views may be achieved through the trees from the western-most points along the trail system in this park. No views would be achieved from the other trail systems within the Study Area.

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

No schools or commercial child day care centers are located within 250 feet of the Host Property. The nearest school is the Barlow Mountain Elementary School, located at 115 Barlow Mountain Road, approximately 0.5 mile to the southeast. The nearest commercial child day care center (Children’s Corner) is also located at this elementary school. Year-round views of the Facility may be achieved from select locations on this property.



## ATTACHMENTS



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	BARLOW MOUNTAIN ELEMENTARY SCHOOL	NORTHWEST	+/- 0.59 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	BARLOW MOUNTAIN ELEMENTARY SCHOOL	NORTHWEST	+/- 0.59 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	BARLOW MOUNTAIN ELEMENTARY SCHOOL	NORTHWEST	+/- 0.57 MILE	YEAR ROUND



***SIMULATION***

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	BARLOW MOUNTAIN ELEMENTARY SCHOOL	NORTHWEST	+/- 0.57 MILE	YEAR ROUND



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	SETH LOW PERREPONT STATE PARK	NORTHWEST	+/- 0.77 MILE	YEAR ROUND



***SIMULATION***

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	SETH LOW PERREPONT STATE PARK	NORTHWEST	+/- 0.77 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	ADJACENT TO #34 HOBBY DRIVE	NORTHEAST	+/- 0.45 MILE	YEAR ROUND





## **SIMULATION**

PHOTO

4

LOCATION

**ADJACENT TO #34 HOBBY DRIVE**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 0.45 MILE**

VISIBILITY

**YEAR ROUND**



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	ADJACENT TO #96 HOBBY DRIVE	NORTHEAST	+/- 0.31 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	ADJACENT TO #96 HOBBY DRIVE	NORTHEAST	+/- 0.31 MILE	YEAR ROUND



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	RIDGEFIELD HIGH SCHOOL	NORTHEAST	+/- 0.69 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	RIDGEFIELD HIGH SCHOOL	NORTHEAST	+/- 0.69 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	ADJACENT TO #179 MAMANASCO ROAD	NORTHEAST	+/- 1.02 MILES	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	ADJACENT TO #179 MAMANASCO ROAD	NORTHEAST	+/- 1.02 MILES	YEAR ROUND



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	MAMANASCO LAKE BOAT LAUNCH	NORTHEAST	+/- 1.06 MILES	NOT VISIBLE





**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	ADJACENT TO #110 BLUE RIDGE ROAD	NORTHEAST	+/- 1.17 MILES	YEAR ROUND



## **SIMULATION**

PHOTO

9

LOCATION

**ADJACENT TO #110 BLUE RIDGE ROAD**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 1.17 MILES**

VISIBILITY

**YEAR ROUND**



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	ADJACENT TO #20 TEA HOUSE LANE	NORTHEAST	+/- 1.35 MILES	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	ADJACENT TO #20 TEA HOUSE LANE	NORTHEAST	+/- 1.35 MILES	YEAR ROUND



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	BARLOW MOUNTAIN ROAD AT SETH LOW PIERREPONT STATE PARK	NORTHWEST	+/- 0.80 MILE	YEAR ROUND



***SIMULATION***

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	BARLOW MOUNTAIN ROAD AT SETH LOW PIERREPONT STATE PARK	NORTHWEST	+/- 0.80 MILE	YEAR ROUND



**DOCUMENTATION**

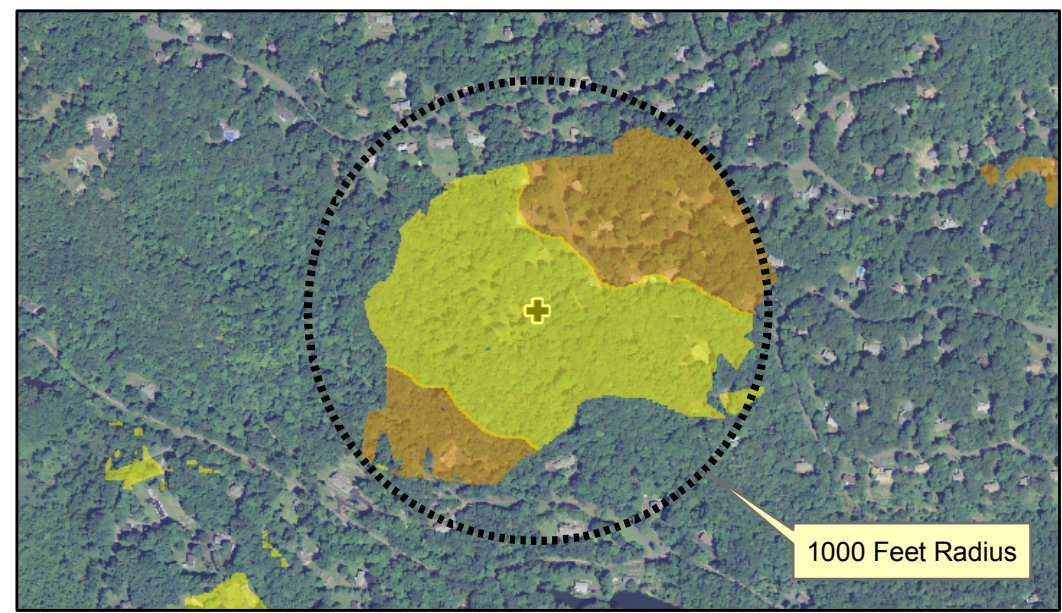
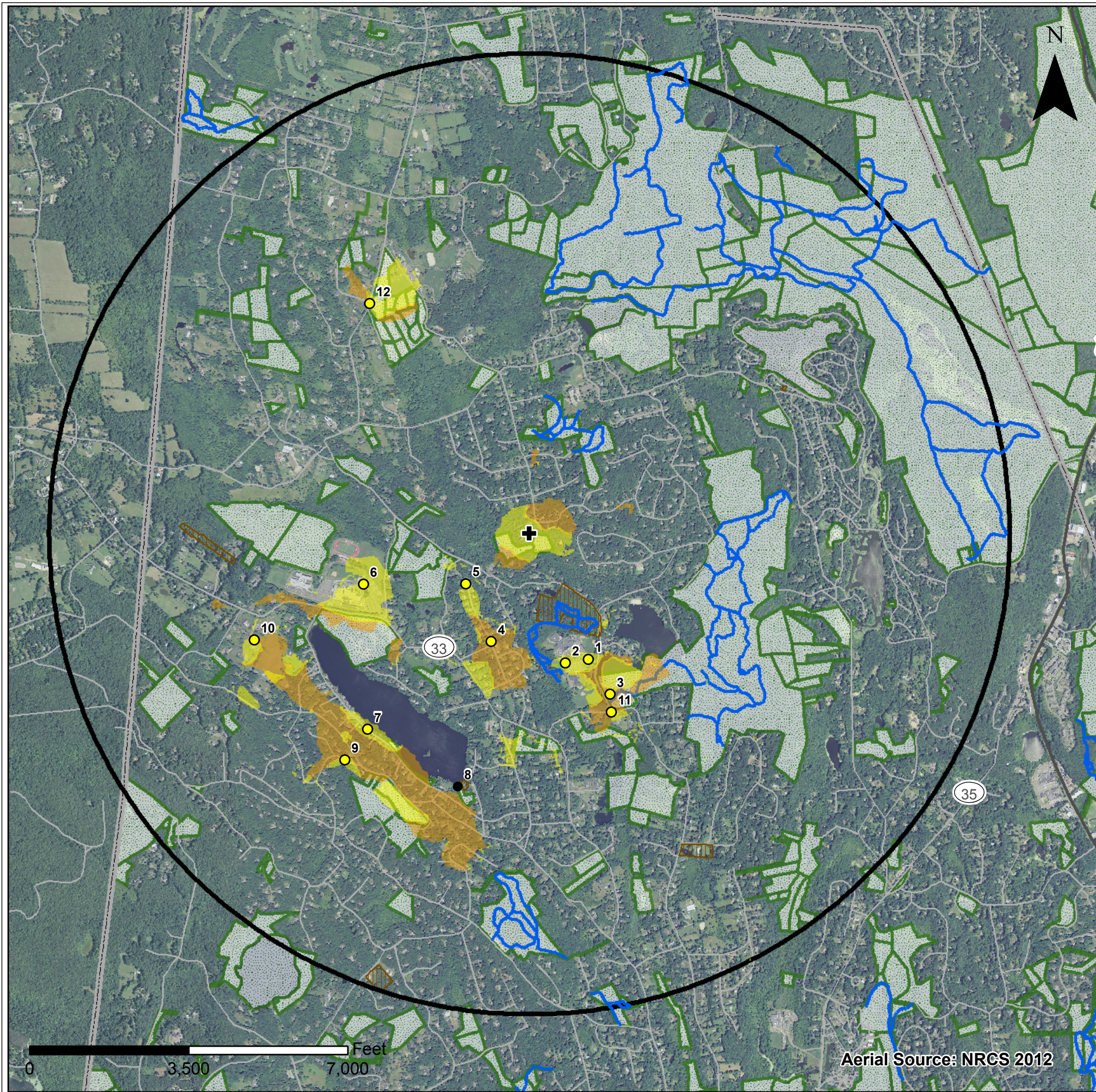
PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	RIDGEBURY ROAD AT HUSSARS CAMP PLACE	SOUTHEAST	+/- 1.19 MILES	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	RIDGEBURY ROAD AT HUSSARS CAMP PLACE	SOUTHEAST	+/- 1.19 MILES	YEAR ROUND





**VISIBILITY ANALYSIS-AERIAL BASE**  
 Proposed Wireless Telecommunications Facility  
 Ledges at Ridgefield  
 Ledges Road  
 Ridgefield, CT

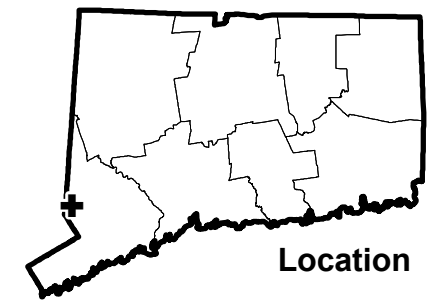
Proposed facility height is 150 feet AGL  
 Existing tree canopy height estimated as 65 feet  
 Study area includes 8,042 acres of land

Map compiled 10/1/2013

*Only those resources located within the Study Area are depicted. For a complete list of data sources consulted for this analysis, please refer to the Documentation Page. Map information field verified 7/15/13 and 9/25/13.*

**Legend**

- +** Proposed Tower
- Photo Locations**
- Not Visible
- Year-Round
- Predicted Year-Round Visibility
- Predicted Seasonal Visibility
- Trails
- 2-Mile Study Area
- ▨ Municipal Private Open Space
- ▭ Towns
- ▤ Protected Open Space



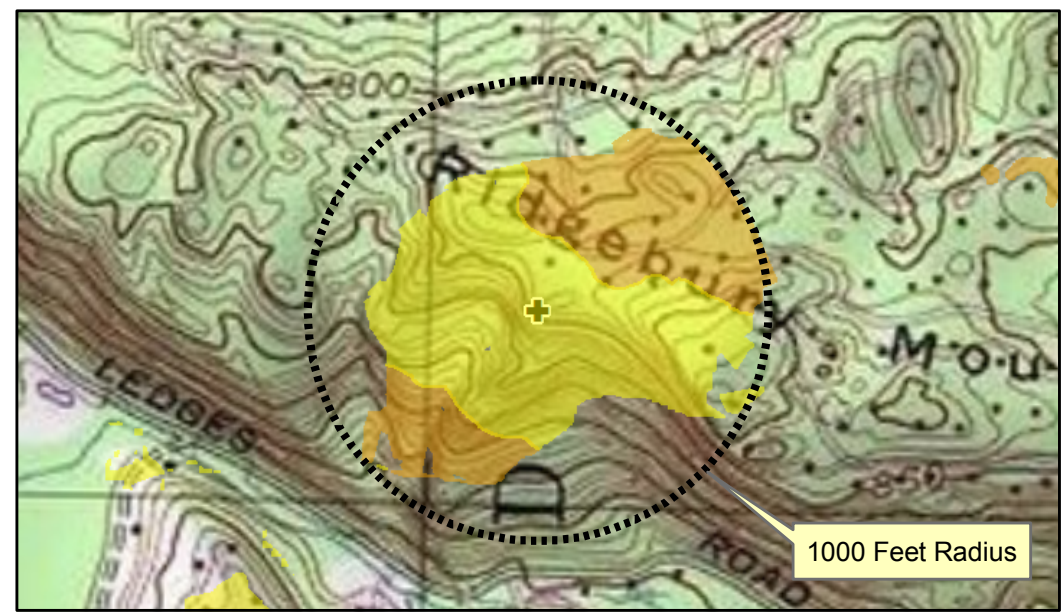
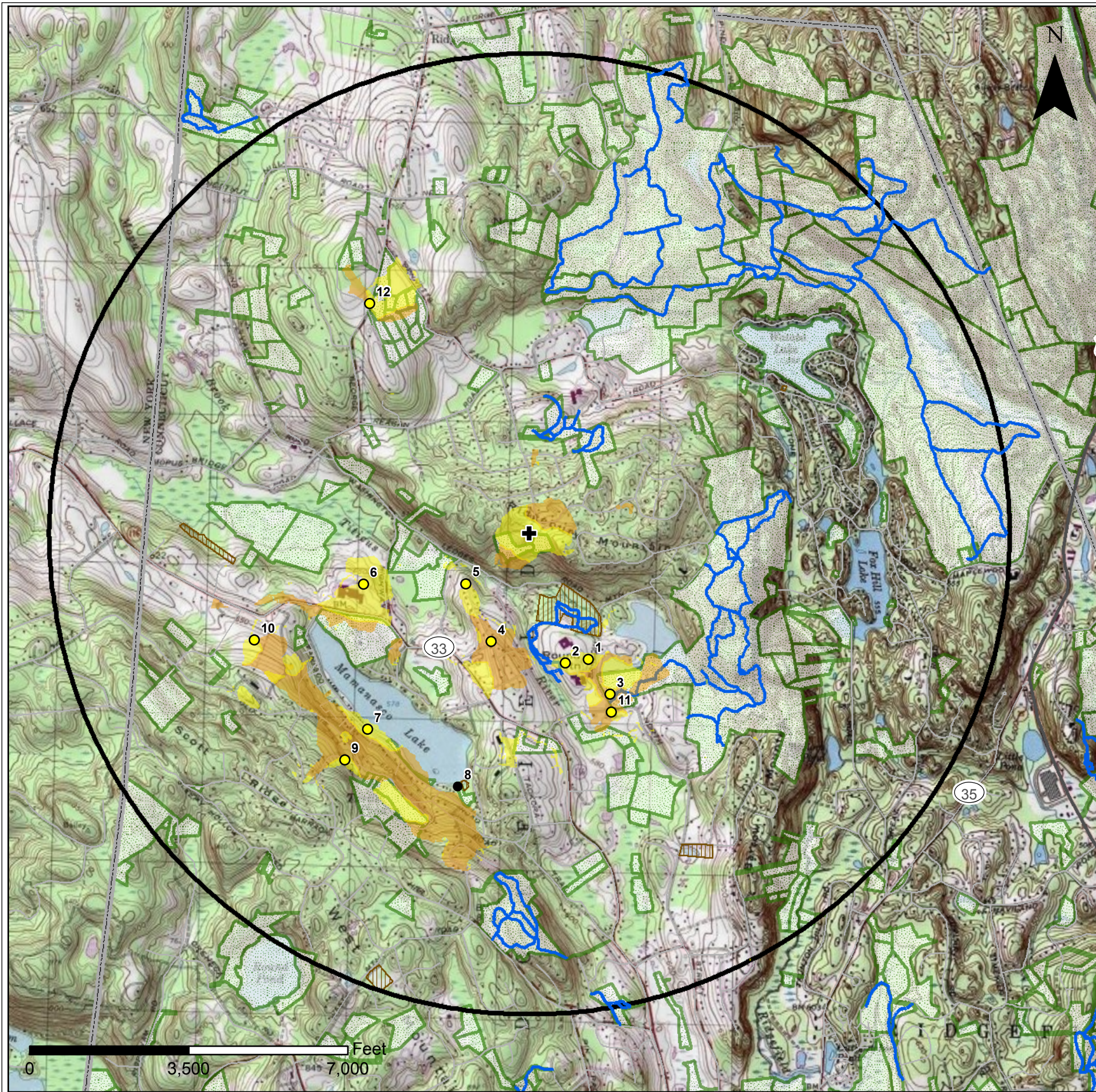
**Location**



**ALL-POINTS**  
 TECHNOLOGY CORPORATION  
 3 Saddlebrook Drive Killingworth, CT 06419  
 www.allpointstech.com



Aerial Source: NRCS 2012



**VISIBILITY ANALYSIS-TOPO BASE**  
 Proposed Wireless Telecommunications Facility  
 Ledges at Ridgefield  
 Ledges Road  
 Ridgefield, CT

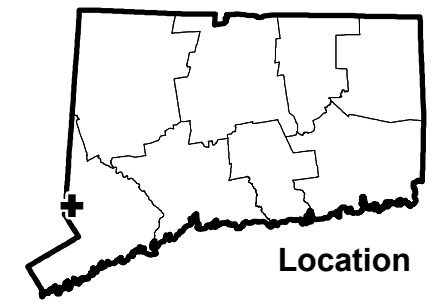
Proposed facility height is 150 feet AGL  
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 Study area includes 8,042 acres of land

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**Legend**

- +** Proposed Tower
- Photo Locations**
- Not Visible
- Year-Round
- Predicted Year-Round Visibility
- Predicted Seasonal Visibility
- Trails
- 2-Mile Study Area
- ▨ Municipal Private Open Space
- ▭ Towns
- ▤ Protected Open Space



# DOCUMENTATION

## SOURCES CONSULTED FOR VISIBILITY ANALYSIS MAPS

Ledges Road  
Ridgefield, CT

### *Physical Geography / Background Data*

Center for Land Use Education and Research, University of Connecticut (<http://clear.uconn.edu>)

\*Land Use / Land Cover (2006)

\*Coniferous and Deciduous Forest (2006)

\*LiDAR data – topography (2000)

United States Geological Survey

\*USGS topographic quadrangle maps – Bethel, CT and Peach Lake, NY (1984)

National Resource Conservation Service

\*NAIP aerial photography (2012)

Heritage Consultants

^State Scenic Highways (based on Department of Transportation data, updated monthly)

^Municipal Scenic Roads (by website, phone and/or email/fax - current)

### *Cultural Resources*

Heritage Consultants

^National Register

^ Local Survey Data

### *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 Book West – The Guide to the Blue-Blazed Hiking Trails of Western Connecticut, 19th Edition, 2006.

### *Other*

^ConnDOT Scenic Strips (based on Department of Transportation data)

\*Available to the public in GIS-compatible format (some require fees).

^ Data not available to general public in GIS format. Reviewed independently and, where applicable, GIS data later prepared specifically for this Study Area.

## LIMITATIONS

The visibility analysis map(s) presented in 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 5 feet above the ground and intervening topography and an assumed tree canopy height of 65 feet. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2012 aerial photographs, and in-field observations from publicly-accessible locations during “leaf-on” conditions. 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. No access to private properties beyond the host Property was provided to APT personnel.

The photo-simulations in this report are provided for visual representation only. Actual visibility depends on various environmental conditions, including (but not necessarily limited to) weather, season, time of day, and viewer location.