ALL-POINTS TECHNOLOGY CORPORATION

VISIBILITY ANALYSIS

BRIDGEPORT NE
541 BROADBRIDGE ROAD
BRIDGEPORT, CONNECTICUT 06610

Prepared for:

Verizon Wireless
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OCTOBER 2016

Project Introduction

Cellco Partnership d/b/a Verizon Wireless is pursuing a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council ("Council") for the development of a new wireless communications facility ("Facility") at 541 Broadbridge Road in Bridgeport, Connecticut ("Site"). At the request of Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") prepared this Visibility Analysis to evaluate the potential visibility of the proposed Facility within a two-mile radius of the proposed site location ("Study Area"). The Study Area also includes parts of the neighboring municipalities of Trumbull and Stratford which are located in the north and southeastern portions of the Study Area, respectively.

Site Description and Setting

The Site is occupied by an existing shopping plaza with a large paved parking area. The area proposed for the Facility is located in the northeast corner of the Site at an approximate ground elevation of ±81 feet Above Mean Sea Level ("AMSL"). The proposed Facility would include a 100-foot tall monopole located within a 10-foot by 22-foot equipment compound. The equipment compound would be surrounded by an 8-foot-tall chain-link fence with privacy slats. Antenna arrays, associated appurtenances and cabling would be concealed within the monopole, which has been designed to resemble a flagpole.

Land use within the immediate vicinity is primarily a mix of medium density commercial and residential development, with the Connecticut Routes 8, 25 and 15 transportation corridors to the north and Broadbridge Road to the south. The topography within the Study Area is characterized generally by gently rolling hills and valleys with ground elevations ranging from approximately sea level to 526 feet AMSL. The tree cover within the Study Area (consisting of mixed deciduous hardwoods with interspersed conifers) occupies approximately 5,913 acres of the 8,042-acre study area (±74%).

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 including private properties and other areas inaccessible for direct observations. The in-field analyses included a balloon float and 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 were used to calculate those areas from which at least the top of the tower 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 tower'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[1]-based digital elevation and land use data. 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 by the National Oceanic and Atmospheric Administration in the years 2015 and 2016 and has a horizontal resolution of 1.5 to 2 feet. In addition to the topographic information, this LiDAR data set contains all other recorded dimensional observations (or "returns") of land features including vegetation, buildings, and other infrastructure. The results of the LiDAR DEM analysis were compared with National Agricultural Imagery Program (USDA) aerial photography (1-foot resolution, flown in 2014) using IDRISI image processing tools, to confirm its general accuracy. The IDRISI tools develop 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.

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. 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. The Hooker School, located at 138 Roger Williams Road in Bridgeport, CT, is approximately 0.37 mile to the south while the nearest daycare center, The Laurel School for Young Children located at 162 Beardsley Parkway, is approximately 0.42 miles to the northwest. The nearest recreational park, Beardsley Park located on East Main Street (CT Route 127), is approximately 0.5 mile to the west. One State Scenic Road, the Merritt Parkway (CT Route 15), is located approximately one mile to the north within the Study Area. The Housatonic Trail runs in a north/south direction approximately 0.5 mile to the east of the Site. No historic resources are located within the Study Area.

[1] 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.

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.

Balloon Float and Field Reconnaissance

Balloon floats were conducted on September 1, 2016 and again on September 21, 2016. Each balloon float consisted of raising an approximately four-foot diameter, helium-filled red balloon, tethered to a string height of 100 feet above ground level ("AGL") at the proposed Facility location, such that the bottom of the balloon represented the top height of the monopole. At the time of the balloon floats, weather conditions on both dates consisted of cloudy to partly cloudy skies with calm winds. On both occasions the balloon was secured at the proposed Facility location and a Study Area reconnaissance was performed 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 trees 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.

Photographic Documentation

APT drove the public roads within the Study Area during the balloon float and photo-documented representative areas 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 and Canon EF 24 to 105 millimeter ("mm") zoom lens. APT used a standard focal length of 50mm to provide a consistent field of view and maintain proportional scale of the subjects in the photograph (the balloon) and corresponding simulation (the tower) relative to the surroundings.

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. Once the additional field data was integrated into the model, APT re-calculated the visibility of the proposed Facility from within the Study Area to assist in producing the final viewshed map.

Photographic Simulations

Photographic simulations were generated to portray scaled renderings from 10 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 tower 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[2]. For presentation purposes in this report, the photographs were produced in an approximate 7-inch by 10.5-inch format.

Photo-documentation of existing conditions and photo-simulations of the proposed Facility are presented in the attachment at the end of this report. Where visible in the existing conditions photos, the balloon provides visual reference points for the approximate height and location of the tower 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 publicly-accessible locations selected are typically representative of a "worst case" scenario. They were chosen to present unobstructed view lines (wherever possible), are static in nature and do not necessarily fairly characterize the prevailing views from all locations within a given area. From several locations, moving a few feet in any direction will result in a far different perspective of the tower than what is presented in the photographs. A view (or non-view) of the tower may be limited to the immediate area or to a particular time of year at the specific photo location.

The simulations provide a representation of the Facility under similar settings as those encountered during the balloon float and reconnaissance. Views of the tower can change substantially throughout the season and are dependent on environmental conditions, including (but not necessarily limited to) weather, light conditions, seasons, time of day, and the viewer location.

Photograph Locations

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, the distance from where the photo was taken relative to the proposed Facility and the general characteristic of that view. The photo locations are depicted on the photolog and viewshed maps provided as attachments to this report.

[2] 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.

Photo No.	Photo Location	View Orientation	Distance to Facility	View Characteristic
1	Broadbridge Road	East	±0.47 Mile	Not visible
2	Broadbridge Road	Northeast	±0.18 Mile	Year Round
3	Duane Place	Southeast	±0.13 Mile	Year Round
4	Broadbridge Road	Northeast	±0.11 Mile	Year Round
5	Huntington Turnpike	East	±384 Feet	Year-round
6	Huntington Turnpike	Northeast	±0.23 Mile	Not Visible
7	Hooker Road	Northeast	±307 Feet	Year Round
8	Hooker Road	Northeast	±0.16 Mile	Year Round
9	Hooker Road	Northeast	±0.37 Mile	Year Round
10	Hooker Road	Northeast	±0.50 Mile	Year Round
11	Hooker Road	Northeast	±0.51 Mile	Not Visible
12	Roger Williams Road	Northeast	±0.38 Mile	Not Visible
13	Lynne Place at Alameda Place	North	±0.17 Mile	Not Visible
14	Greystone Road	Northwest	±0.20 Mile	Not Visible
15	Alameda Place	Northwest	±485 Feet	Not Visible
16	Holland Road	Northwest	±211 Feet	Year Round
17	Holland Road	Southwest	±359 Feet	Year Round
18	Iwanicki Circle	Southwest	±0.17 Mile	Not Visible
19	Huntington Turnpike, Trumbull	Southwest	±0.36 Mile	Not Visible
20	Lawlor Terrace, Stratford	Southwest	±0.74 Mile	Not Visible
21	Gannon Drive, Stratford	Southwest	±0.59 Mile	Not Visible
22	Second Hill Lane, Stratford	Northwest	±0.72 Mile	Not Visible
23	Ridgefield Drive, Stratford	Northwest	±0.52 Mile	Not Visible
24	Oak Ridge Drive, Trumbull	Southeast	±0.58 Mile	Not Visible
25	Unity Park, Trumbull	Southeast	±1.09 Miles	Not Visible
26	Quarry Road, Trumbull	Southeast	±1.05 Miles	Not Visible
27	White Plains Road, Trumbull	Southeast	±0.54 Mile	Not Visible
28	Sylvan Avenue, Trumbull	East	±1.04 Miles	Not Visible
29	Seltsam Road	Northeast	±1.08 Mile	Not visible
30	Huntington Plaza	Northeast	±0.73 Mile	Not Visible
31	East Main Street at Beardsley Park	Northeast	±0.92 Mile	Not Visible
32	East Main Street	Northeast	±1.04 Miles	Not Visible
33	East Main Street, Stratford	Northwest	±1.87 Miles	Not Visible

Photo locations in Bridgeport unless otherwise noted.

Photos were taken during “leaf-on” conditions. Some photos noted as “Not Visible” may offer limited, seasonal views through intervening trees during “leaf-off” conditions.

Photo-documentation of existing conditions during the balloon floats and simulations of the proposed Facility are presented in the attachment at the end of this report.

Visibility Analysis Results

Results of this analysis are graphically displayed on the visibility analysis maps provided in the attachment to the end of this report. The maps also include the locations of photographs and corresponding simulations.

Areas from where the Facility would be visible comprise of ±60 acres of year-round visibility and ±489 acres of seasonal visibility. Cumulatively, this equals less than 7% of the Study Area.

As seen on the visibility maps, the majority of year-round views of the Facility would occur from areas within the immediate vicinity of the Site –(approximately 0.25 mile or less). These views could extend about 0.5 mile to the southwest along Hooker Road but would quickly drop out of view the farther removed from the Site regardless of direction. Due to the relatively dense development, topography and vegetative cover throughout the Study Area, seasonal views would generally be limited to locations within ±0.75 mile of the proposed Facility. Substantial utility infrastructure exists throughout the majority of areas from which the proposed Facility would be visible.

Based on the results of this analysis, views of the entire Facility, including the equipment compound, would primarily be limited to commercial locations in the immediate area. Most views from residential locations appear to be limited to the upper portions of the monopole, which has been designed to have a slim profile with no external or horizontal appurtenances.

Proximity to Schools And Commercial Child Day Care Centers

No views of the proposed Facility would occur at schools or commercial child day care centers. The nearest school, Hooker School, located at 138 Roger Williams Road in Bridgeport is approximately 0.37 mile to the south. The nearest daycare center, The Laurel School for Young Children located at 162 Beardsley Parkway, is approximately 0.42 miles to the northwest.

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 5 feet above the ground through intervening topography, vegetation, buildings and other infrastructure. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2000 LiDAR data and 2012 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 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 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 balloon float included partly cloudy skies. The photo-simulations presented in this report provide an accurate portrayal of the Facility during comparable conditions.

ATTACHMENTS

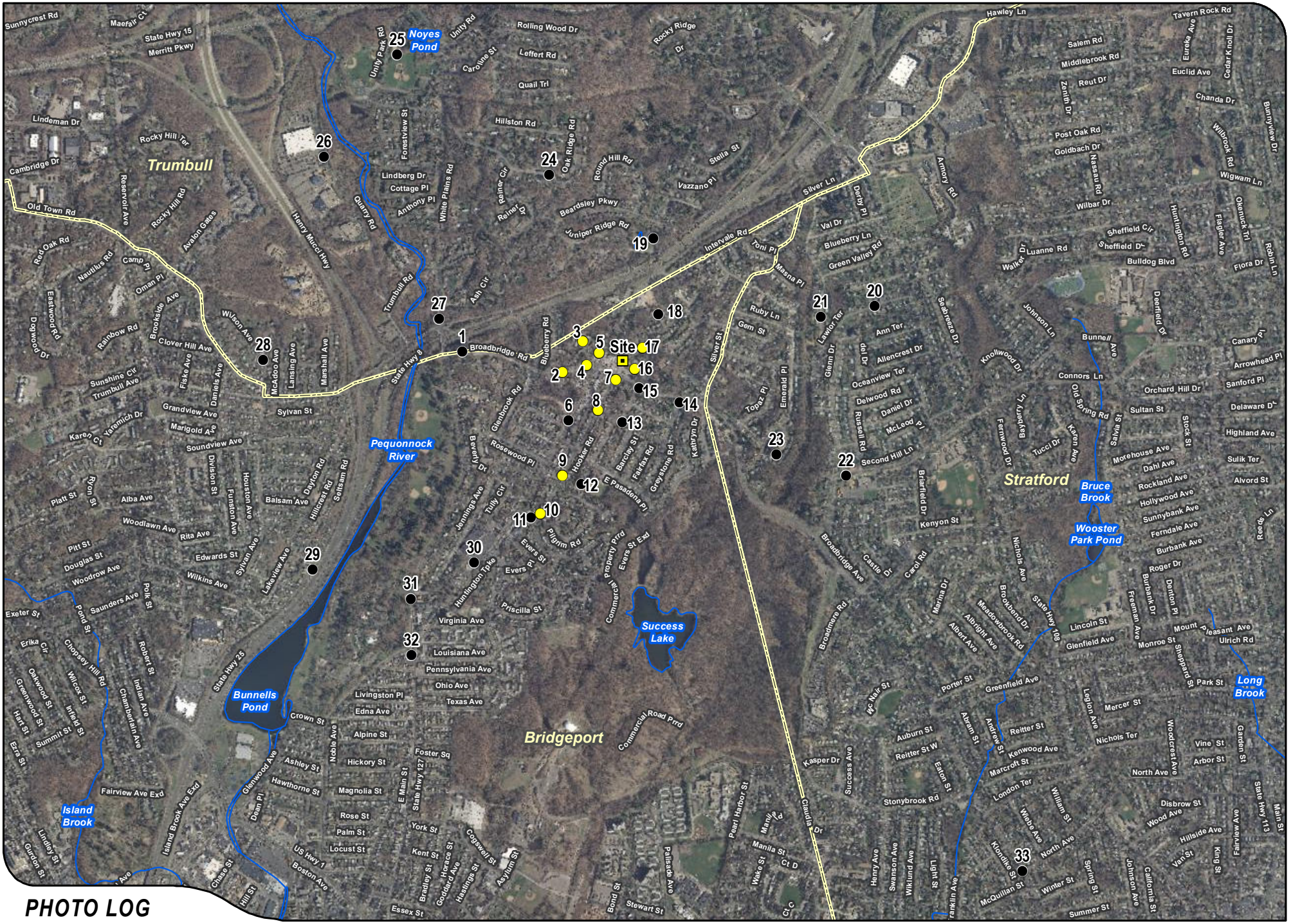

PHOTO LOG

Legend

Site | Year-Round Visibility | Not Visible

2,500 1,250 0 2,500 Feet

1 inch = 2,500 feet

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	**BROADBRIDGE ROAD**	**EAST**	**+/- 0.47 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**BROADBRIDGE ROAD**	**NORTHEAST**	**+/- 0.18 MILE**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**BROADBRIDGE ROAD**	**NORTHEAST**	**+/- 0.18 MILE**	**YEAR ROUND**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	**DUANE PLACE**	**SOUTHEAST**	**+/- 0.13 MILE**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	**DUANE PLACE**	**SOUTHEAST**	**+/- 0.13 MILE**	**YEAR ROUND**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**BROADBRIDGE ROAD**	**NORTHEAST**	**+/- 0.11 MILE**	**YEAR ROUND**

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**BROADBRIDGE ROAD**	**NORTHEAST**	**+/- 0.11 MILE**	**YEAR ROUND**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	**HUNTINGTON TURNPIKE**	**EAST**	**+/- 384 FEET**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	**HUNTINGTON TURNPIKE**	**EAST**	**+/- 384 FEET**	**YEAR ROUND**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	**HUNTINGTON TURNPIKE**	**NORTHEAST**	**+/- 0.23 MILE**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	**HOOKER ROAD**	**NORTHEAST**	**+/- 307 FEET**	**YEAR ROUND**

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	**HOOKER ROAD**	**NORTHEAST**	**+/- 307 FEET**	**YEAR ROUND**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.16 MILE**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.16 MILE**	**YEAR ROUND**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.37 MILE**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.37 MILE**	**YEAR ROUND**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.50 MILE**	**YEAR ROUND**

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PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.50 MILE**	**YEAR ROUND**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	**HOOKER ROAD**	**NORTHEAST**	**+/- 0.51 MILE**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	**ROGER WILLIAMS ROAD**	**NORTHEAST**	**+/- 0.38 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	**LYNNE PLACE AT ALAMEDA PLACE**	**NORTH**	**+/- 0.17 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	**GREYSTONE ROAD**	**NORTHWEST**	**+/- 0.20 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	**ALAMEDA PLACE**	**NORTHWEST**	**+/- 485 FEET**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	**HOLLAND ROAD**	**NORTHWEST**	**+/- 211 FEET**	**YEAR ROUND**

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	**HOLLAND ROAD**	**NORTHWEST**	**+/- 211 FEET**	**YEAR ROUND**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	**HOLLAND ROAD**	**SOUTHWEST**	**+/- 359 FEET**	**YEAR ROUND**

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	**HOLLAND ROAD**	**SOUTHWEST**	**+/- 359 FEET**	**YEAR ROUND**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
18	**IWANICKI CIRCLE**	**SOUTHWEST**	**+/- 0.17 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
19	**HUNTINGTON TURNPIKE (TRUMBULL)**	**SOUTHWEST**	**+/- 0.36 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	**LAWLOR TERRACE (STRATFORD)**	**SOUTHWEST**	**+/- 0.74 MILE**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
21	**GANNON DRIVE (STRATFORD)**	**SOUTHWEST**	**+/- 0.59 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
22	**SECOND HILL LANE (STRATFORD)**	**NORTHWEST**	**+/- 0.72 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	**RIDGEFIELD DRIVE (STRATFORD)**	**NORTHWEST**	**+/- 0.52 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	**OAK RIDGE DRIVE (TRUMBULL)**	**SOUTHEAST**	**+/- 0.58 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
25	**UNITY PARK (TRUMBULL)**	**SOUTHEAST**	**+/- 1.09 MILES**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
26	**QUARRY ROAD (TRUMBULL)**	**SOUTHEAST**	**+/- 1.05 MILES**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
27	**WHITE PLAINS ROAD (TRUMBULL)**	**SOUTHEAST**	**+/- 0.54 MILE**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
28	**SYLVAN AVENUE (TRUMBULL)**	**EAST**	**+/- 1.04 MILES**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
29	**SELTSAM ROAD**	**NORTHEAST**	**+/- 1.08 MILES**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
30	**HUNTINGTON PLAZA**	**NORTHEAST**	**+/- 0.73 MILE**	**NOT VISIBLE**

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
31	**EAST MAIN STREET AT BEARDSLEY PARK**	**NORTHEAST**	**+/- 0.92 MILE**	**NOT VISIBLE**

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EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
32	**EAST MAIN STREET**	**NORTHEAST**	**+/- 1.04 MILES**	**NOT VISIBLE**

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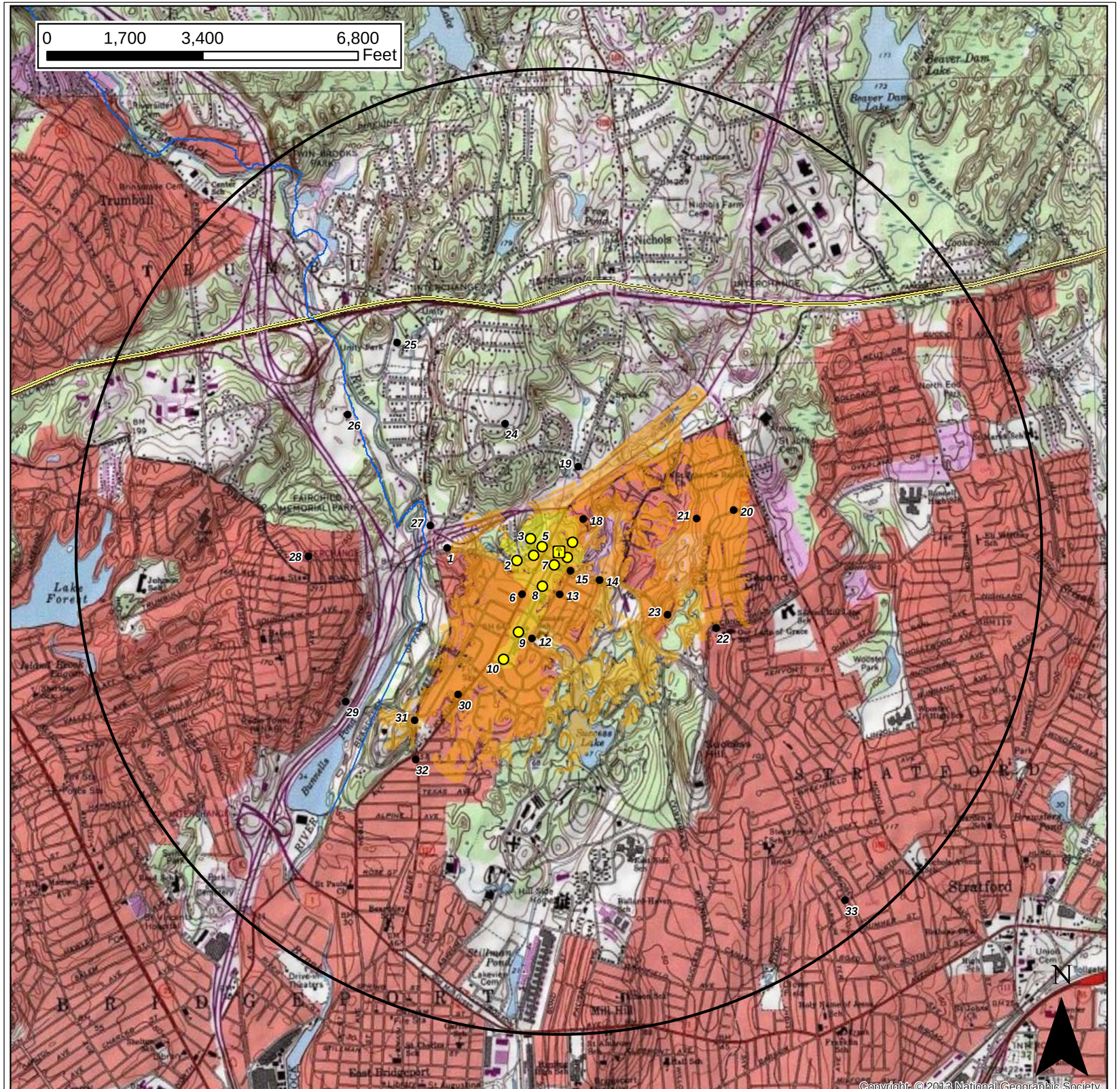
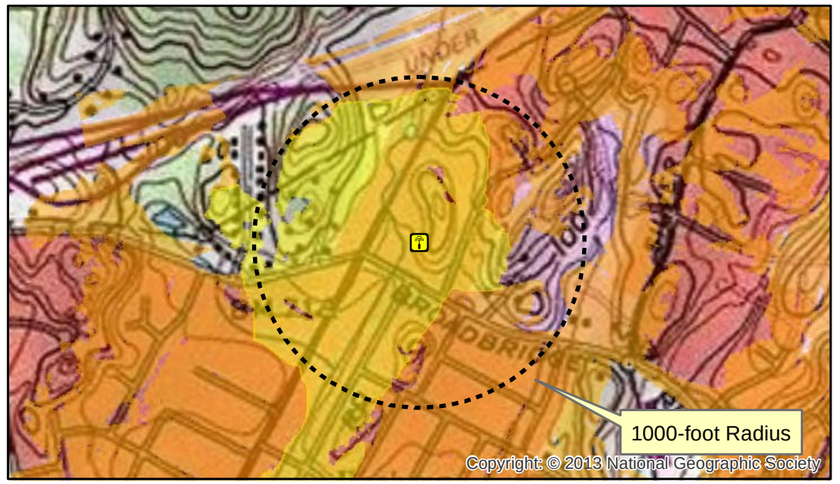
EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
33	**BROADBRIDGE AVENUE (STRATFORD)**	**NORTHWEST**	**+/- 1.87 MILES**	**NOT VISIBLE**





Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
541 Broadbridge Road, Bridgeport, CT

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 of land.
Map compiled 10/4/2016

Map information field verified by APT on 9/1/2016 and 9/21/2016.

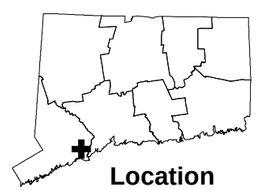
Only those resources located within the extent of the map are depicted. For a complete list of data sources consulted for this analysis, please refer to the Documentation Page.

Legend

- Proposed Tower

Photo Locations

- Not Visible
- Visible
- Trails
- Predicted Seasonal Visibility (489 Acres)
- Predicted Year-Round Visibility (60 Acres)
- Towns
- 2-Mile Study Area
- Scenic Roads



Location

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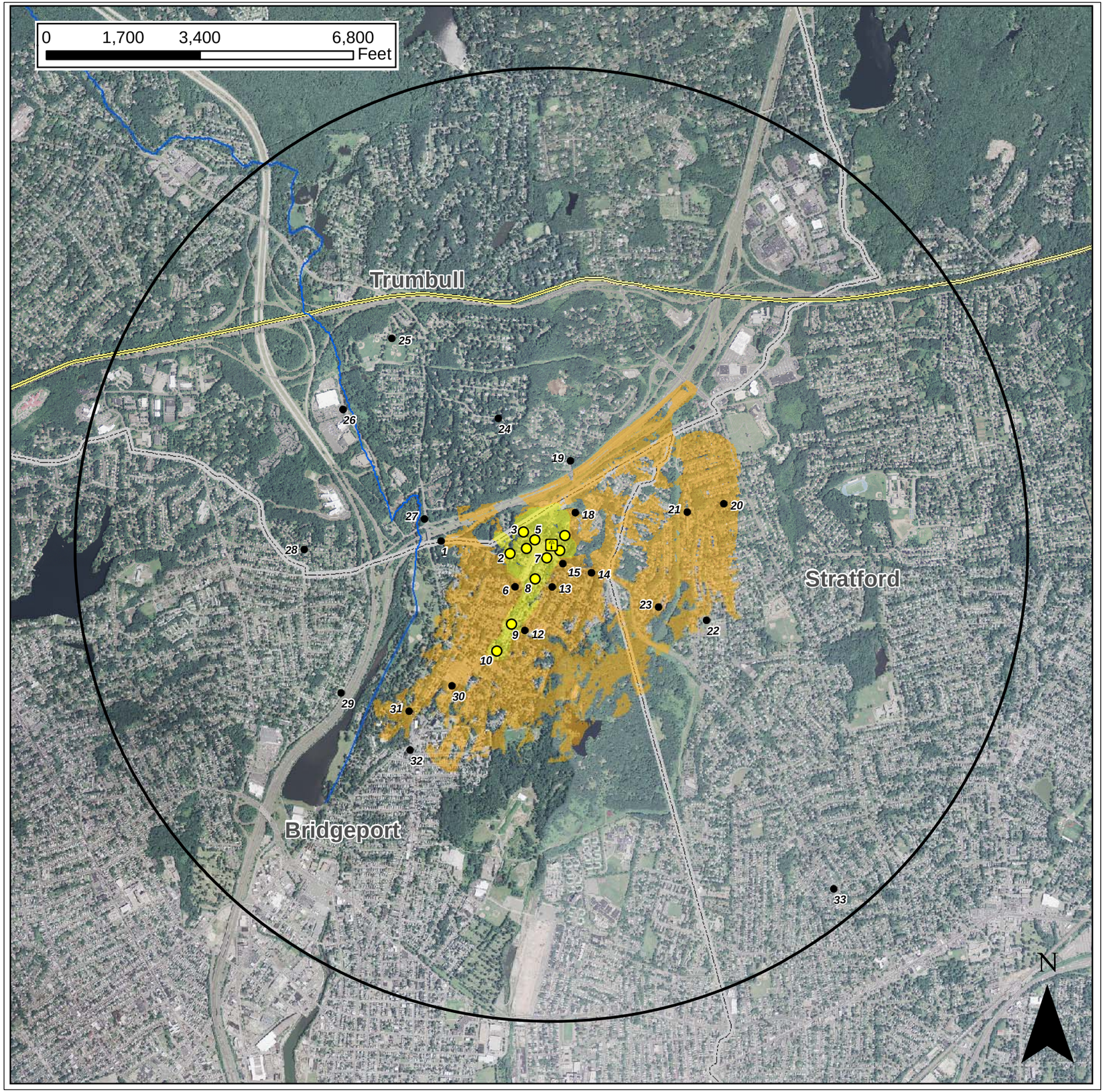

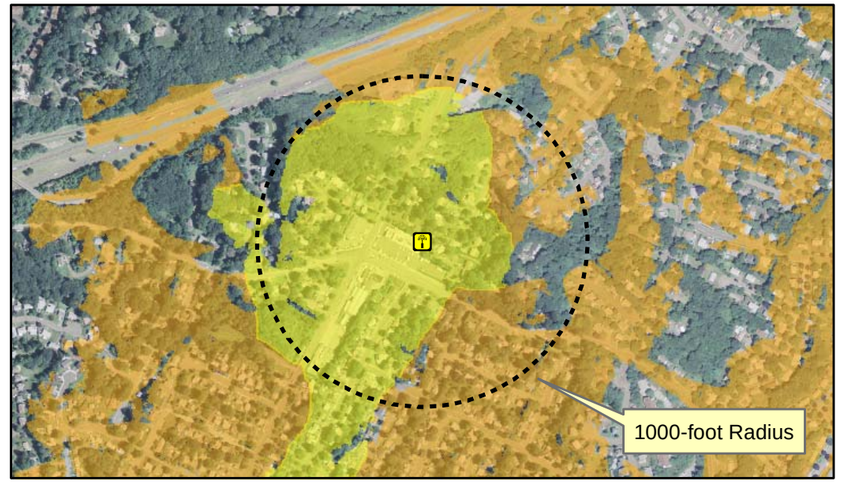

Viewshed Map – Aerial Base

Proposed Wireless Telecommunications Facility
541 Broadbridge Road, Bridgeport, CT

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 of land.
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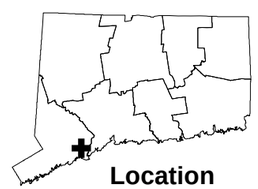
- 2-Mile Study Area
- Scenic Roads



Location

verizon wireless

ALL-POINTS TECHNOLOGY CORPORATION

DOCUMENTATION

SOURCES CONSULTED FOR VIEWSHED MAPS
541 Broadbridge Road
Bridgeport, Connecticut

Physical Geography / Background Data
Topography, Coniferous and Deciduous Forest (Heritage Consultants 2016)
*LiDAR data –NOAA 2015/2016
*USGS topographic quadrangle maps – Bridgeport (1984)
National Resource Conservation Service
*NAIP aerial photography (2014)
Department of Transportation Data
^State Scenic Highways (updated monthly)
Heritage Consultants
^Municipal Scenic Roads

Cultural Resources
Heritage Consultants
^National Register
^State Register 1966-2016
^ Local Survey Data Hri

Dedicated Open Space & Recreation Areas
Connecticut Department of Energy and Environmental Protection (DEEP)
*DEEP Property (May1997)
*Federal Open Space (1997)
*Municipal and Private Open Space (1997)
Connecticut Forest Parks Association
^Connecticut Walk Books 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.

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

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, tree canopy heights and structures. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2014 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.

The photo-simulations in this report provide a representation of the Facility under similar settings as those encountered during the balloon float and reconnaissance. Views of the tower can change substantially throughout the season and are dependent on environmental conditions, including (but not necessarily limited to) weather, light conditions, seasons, time of day, and the viewer location.