

ATTACHMENT 8

Visual Assessment & Photo-Simulations

**CT076
BROOKFIELD SOUTH
60 VALE ROAD
BROOKFIELD, CT 06804**

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 60 Vale Road in Brookfield, 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 extends into the neighboring municipalities of Danbury to the west, Bethel to the south, and Newtown to the southeast.

Project Setting

The Host Property is a 3.99-acre parcel located on the western side of Vale Road. The Host Property is developed with commercial buildings and a storage yard situated immediately southeast of a railroad right-of-way ("ROW"). The rail line splits about 0.5 mile west of the Host Property such that a second, separate railroad ROW extends eastward approximately 900 feet to the south of the Facility location. An electrical transmission line corridor, which includes multiple lattice support structures and overhead wires, shares the southern-most railroad ROW. A separate electrical transmission corridor extends north to south approximately 800 feet to the west. Land use within the immediate area is primarily commercial and industrial, with residential development further to the south and east. U.S. Route 7 ("Route 7"), located to the north and west of the Host Property, generally bisects the Study Area from south to north.

The topography within the Study Area consists of relatively hilly terrain. Ground elevations range from approximately 263 feet above mean sea level ("AMSL") in the northwestern portion of the Study Area to approximately 700 feet AMSL in the northeastern portion of the Study Area. Tree cover within the Study Area (consisting primarily of mixed deciduous hardwoods) occupies approximately 3,927 acres (or $\pm 48.8\%$) of the 8,042-acre Study Area.

Project Undertaking

Homeland plans to construct the proposed Facility on the northern portion of the Host Property (the "Site"). The proposed Facility would be located at a ground elevation of approximately 298 feet AMSL and include a 165-foot tall monopole with municipal whip antennas extending to 191' above ground level ("AGL"). Associated ground-mounted equipment would be placed within a ± 45 -foot by ± 75 -foot gravel based fenced compound. The Facility has been designed to accommodate multiple service providers, with AT&T proposed as the lead tenant. Access to the Site would be gained over an existing paved drive and gravel area from Vale Road. Please refer to the current Tech Report Drawings prepared by APT, Revision 3 dated March 29, 2022, and provided under separate cover, for details regarding the proposed installation.

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 Study Area, including private properties and other areas inaccessible for direct observations. The in-field analysis 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 GIS¹ 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 LiDAR² LAS³ 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 cells⁴ within the DSM that can be seen from an observer location. Cells

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.

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 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.

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 April 4,

2022. The crane test consisted of positioning a crane at the proposed Facility location and extending the crane boom with a brightly-colored (red) flag to the top height of the tower (± 165 feet AGL). This provided a fixed object unaffected by wind. Weather conditions were favorable for the in-field activities with mostly sunny 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 flag 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 body⁵ 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, nine (9) photographs were taken at a 35mm focal length and four (4) were taken at 24mm focal length as noted in Table 1 – Photo Locations.

Photographic simulations were generated to portray scaled renderings of the proposed Facility from 26 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 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

⁵ 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.

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 flag 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	Vale Road at Tead Road*	North	± 0.40 Mile	N/A	Not Visible
2	Park Lane at Vale Road	North	± 0.39 Mile	30'-40'^^	Seasonal
3	Park Lane	North	± 0.37 Mile	50'-60'^^	Seasonal
4	Parkwood Drive	Northwest	± 0.32 Mile	30'-40'^^	Seasonal
5	Parkwood Drive at Vale Road	Northwest	± 0.29 Mile	50'-60'^^	Seasonal
6	Vale Road	Northwest	± 0.22 Mile	80'-90'	Year Round
7	Vale Road**	Northwest	± 0.17 Mile	N/A	Not Visible
8	Vale Road	Northwest	± 0.16 Mile	150'-160'	Year Round
9	63 Vale Road	Northwest	± 0.12 Mile	110'-120'	Year Round
10	Vale Road	North	± 0.10 Mile	150'-160'	Year Round
11	Host Property**	North	± 460 Feet	50'-60'	Year Round
12	Host Property	Northeast	± 448 Feet	150'-160'	Year Round
13	Vale Road**	Northwest	± 289 Feet	150'-160'	Year Round
14	Golf Quest – 1 Sand Cut Road**	South	± 250 Feet	150'-160'	Year Round
15	Golf Quest – 1 Sand Cut Road	South	± 0.14 Mile	140'-150'	Year Round

*Photograph was taken at 35 mm focal length.

**Photograph was taken at 24 mm focal length.

^Facility visible through trees in leaf-off conditions

All locations photographed during this assessment are in Brookfield.

Table 1 – Photo Locations (continued)

Photo	Location	Orientation	Distance to Site	Height of Facility Visible in Photograph	Visibility
16	Vale Road*	Southwest	± 0.11 Mile	150'-160'	Year Round
17	Sand Cut Road	Southwest	± 0.22 Mile	70'-80'	Year Round
18	Vale Road	Southwest	± 0.26 Mile	70'-80'	Year Round
19	Stony Brook Road at West Whisconier Road*	Southwest	± 0.54 Mile	N/A	Not Visible
20	Vale Road	Southwest	± 0.39 Mile	90'-100'	Year Round
21	Vale Road	Southwest	± 0.41 Mile	40'-50'	Seasonal
22	Grays Bridge Road	Southwest	± 0.45 Mile	80'-90'	Year Round
23	Grays Bridge Road	Southwest	± 0.62 Mile	60'-70'	Year Round
24	Grays Bridge Road*	Southwest	± 0.63 Mile	N/A	Not Visible
25	Route 202	Southeast	± 0.57 Mile	40'-50'	Year Round
26	Sandy Lane*	Southeast	± 0.53 Mile	N/A	Not Visible
27	Old Grays Bridge Road*	Southeast	± 0.36 Mile	N/A	Not Visible
28	Sandy Lane at Old Grays Bridge Road	Southeast	± 0.35 Mile	50'-60'	Year Round
29	Edwards Drive	Southeast	± 0.33 Mile	50'-60'^	Year Round
30	Old State Road	Southeast	± 0.44 Mile	90'-100'	Year Round
31	Old State Road*	Southeast	± 0.42 Mile	N/A	Not Visible
32	Old State Road*	Southeast	± 0.32 Mile	30'-40'^	Seasonal
33	Route 202	Southeast	± 0.46 Mile	20'-30'	Year Round
34	Route 202*	East	± 0.63 Mile	N/A	Not Visible

**Photograph was taken at 35 mm focal length.
**Photograph was taken at 24 mm focal length.
^Facility visible through trees in leaf-off conditions
All locations photographed during this assessment are in Brookfield.*

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, predicted visibility of the Facility would be primarily limited to commercial and industrial areas within approximately 0.5-mile of the Site. Predicted visibility extends up to approximately 0.75-mile in areas to the south/southwest of the Site along Route 7, and west/northwest of the Site throughout commercially developed properties along U.S. Route 202 ("Route 202").

Predicted year-round visibility, consisting of approximately 35 acres of the 8,042-acre Study Area, is limited generally to within 0.25-mile of the Site and intermittently up to approximately one mile from the Site. Photos 25 and 33 provide representative views for locations along Route 202. Photos 13, 16 and 17 provide representative views for nearby locations in the Vale Road industrial/commercial area. Predicted seasonal visibility, when leaves are off of the deciduous tree, includes an additional \pm 96 acres. Photos 2, 5 and 21 depict representative seasonal views of the Facility.

The Site is located in a heavily developed area, primarily commercial and industrial in nature with major transportation and electrical corridors. With the exception of seasonal views along some sections of Park Lane and Parkwood Drive (approximately 0.3 miles to the south), views are limited to non-residential areas.

The 26-foot-tall municipal whip antennas do not affect the extent of visibility associated with the 165-foot-tall monopole. They are not prominent features to a near-view observer and become indistinguishable beyond distances of approximately 0.25 mile away.

The relatively hilly terrain in the area helps to soften and limit the Facility's visibility to a small percentage of the Study Area. The combined predicted visibility is \pm 131 acres, or \pm 1.63% of the 8,042-acre 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 proposed Facility. Montessori Community School is located approximately 1.12 miles northeast of the Site at 21 West Whisconier Road in Brookfield. No visibility is predicted from or in the vicinity of the school. Country Kids Child Care is located approximately 0.38 mile north-northwest of the Site at 107 Old State Road in Brookfield. The proposed Facility would be visible from the child care center, as depicted in Photo 30.

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 mostly sunny skies.

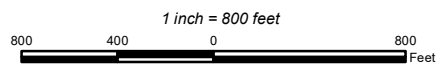
ATTACHMENTS



PHOTO LOG

Legend

- Site
- Year-Round
- Seasonal
- Not Visible





PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	VALE ROAD AT TEAD ROAD	NORTH	+/- 0.40 MILE	NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	PARK LANE AT VALE ROAD	NORTH	+/- 0.39 MILE	SEASONAL



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	PARK LANE AT VALE ROAD	NORTH	+/- 0.39 MILE	SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

3

LOCATION

PARK LANE

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 0.37 MILE

VISIBILITY

SEASONAL



PROPOSED

PHOTO

3

LOCATION

PARK LANE

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 0.37 MILE

VISIBILITY

SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

4

LOCATION

PARKWOOD DRIVE

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.32 MILE

VISIBILITY

SEASONAL



PROPOSED

PHOTO

4

LOCATION

PARKWOOD DRIVE

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.32 MILE

VISIBILITY

SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	PARKWOOD DRIVE AT VALE ROAD	NORTHWEST	+/- 0.29 MILE	SEASONAL



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	PARKWOOD DRIVE AT VALE ROAD	NORTHWEST	+/- 0.29 MILE	SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

6

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

6

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
24mm focal length

EXISTING

PHOTO

7

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.17 MILE

VISIBILITY

NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

8

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.16 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

8

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.16 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

9

LOCATION

63 VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.12 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

9

LOCATION

63 VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.12 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

10

LOCATION

VALE ROAD

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 0.10 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

10

LOCATION

VALE ROAD

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 0.10 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
24mm focal length

EXISTING

PHOTO

11

LOCATION

HOST PROPERTY

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 460 FEET

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

11

LOCATION

HOST PROPERTY

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 460 FEET

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

12

LOCATION

HOST PROPERTY

ORIENTATION

NORTHEAST

DISTANCE TO SITE

+/- 448 FEET

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	HOST PROPERTY	NORTHEAST	+/- 448 FEET	YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
24mm focal length

EXISTING

PHOTO

13

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 289 FEET

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

13

LOCATION

VALE ROAD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 289 FEET

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
24mm Focal Length

EXISTING

PHOTO

14

LOCATION

GOLF QUEST - 1 SAND CUT ROAD

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 250 FEET

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

14

LOCATION

GOLF QUEST - 1 SAND CUT ROAD

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 250 FEET

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	GOLF QUEST - 1 SAND CUT ROAD	SOUTH	+/- 0.14 MILE	YEAR ROUND



PROPOSED

PHOTO

15

LOCATION

GOLF QUEST - 1 SAND CUT ROAD

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 0.14 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO

16

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.11 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

16

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.11 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

17

LOCATION

SAND CUT ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

17

LOCATION

SAND CUT ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.22 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

18

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.26 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

18

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.26 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO

19

LOCATION

STONY BROOK ROAD AT WEST WHISCONIER ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.54 MILE

VISIBILITY

NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

20

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.39 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

20

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.39 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

21

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.41 MILE

VISIBILITY

SEASONAL



PROPOSED

PHOTO

21

LOCATION

VALE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.41 MILE

VISIBILITY

SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

22

LOCATION

GRAYS BRIDGE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.45 MILE

VISIBILITY

YEAR ROUND





PROPOSED

PHOTO

22

LOCATION

GRAYS BRIDGE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.45 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

23

LOCATION

GRAYS BRIDGE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.62 MILE

VISIBILITY

YEAR ROUND





PROPOSED

PHOTO

23

LOCATION

GRAYS BRIDGE ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 0.62 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022 35mm focal length

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	GRAYS BRIDGE ROAD	SOUTHWEST	+/- 0.63 MILE	NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

25

LOCATION

ROUTE 202

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.57 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

25

LOCATION

ROUTE 202

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.57 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022 35mm focal length

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
26	SANDY LANE	SOUTHEAST	+/- 0.53 MILE	NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO

27

LOCATION

OLD GRAYS BRIDGE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.36 MILE

VISIBILITY

NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
28	SANDY LANE AT OLD GRAYS BRIDGE ROAD	SOUTHEAST	+/- 0.35 MILE	YEAR ROUND



PROPOSED

PHOTO

28

LOCATION

SANDY LANE AT OLD GRAYS BRIDGE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.35 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
29	EDWARDS DRIVE	SOUTHEAST	+/- 0.33 MILE	YEAR ROUND



PROPOSED

PHOTO

29

LOCATION

EDWARDS DRIVE

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.33 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

30

LOCATION

OLD STATE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.44 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

30

LOCATION

OLD STATE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.44 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
35mm Focal Length

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
31	OLD STATE ROAD	SOUTHEAST	+/- 0.42 MILE	NOT VISIBLE



PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
32	OLD STATE ROAD	SOUTHEAST	+/- 0.32 MILE	SEASONAL



PROPOSED

PHOTO

32

LOCATION

OLD STATE ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.32 MILE

VISIBILITY

SEASONAL



PHOTOGRAPHED ON 4/4/2022

EXISTING

PHOTO

33

LOCATION

ROUTE 202

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.46 MILE

VISIBILITY

YEAR ROUND



PROPOSED

PHOTO

33

LOCATION

ROUTE 202

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.46 MILE

VISIBILITY

YEAR ROUND



PHOTOGRAPHED ON 4/4/2022
35mm focal length

EXISTING

PHOTO

34

LOCATION

ROUTE 202

ORIENTATION

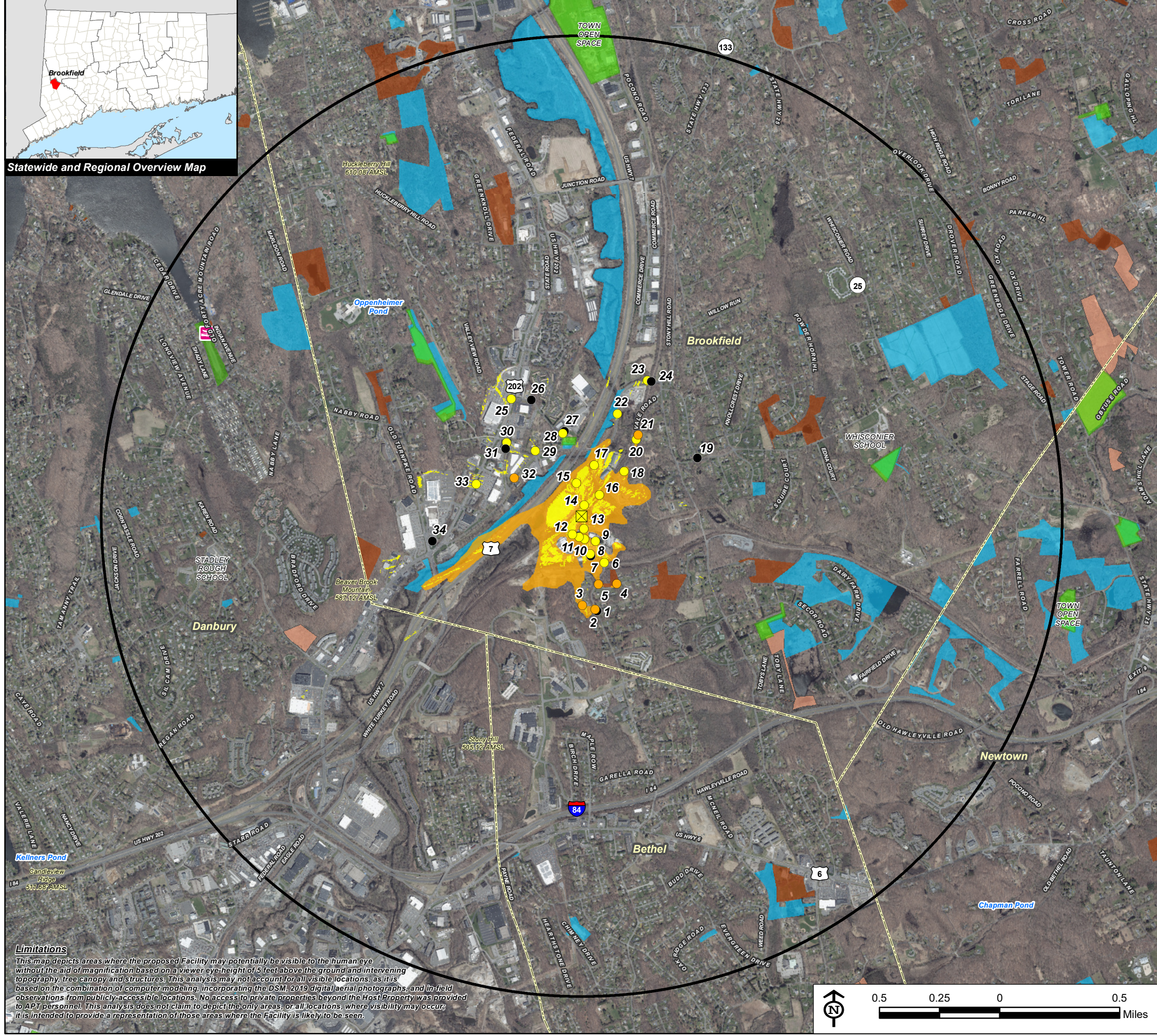
EAST

DISTANCE TO SITE

+/- 0.63 MILE

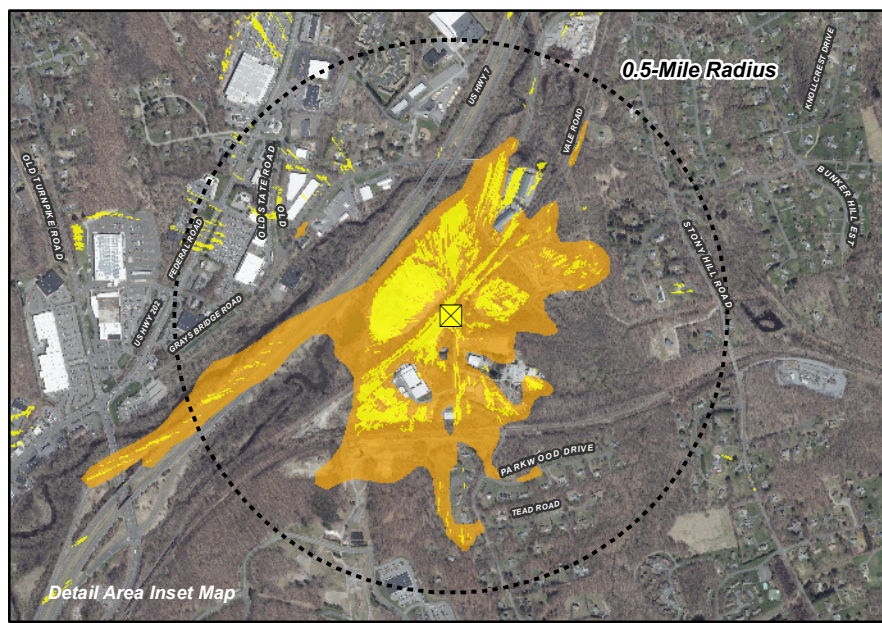
VISIBILITY

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

Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
 Brookfield South
 60 Vale Road
 Brookfield, Connecticut

Proposed facility height is 165 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 4, 2022
 Base Map Source: 2019 Aerial Photograph (CTECO)
 Map Date: April 2022

Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Year-Round
- Seasonal
- Not Visible
- Predicted Year-Round Visibility (35 Acres)
- Areas of Potential Seasonal Visibility (96 Acres)
- 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)

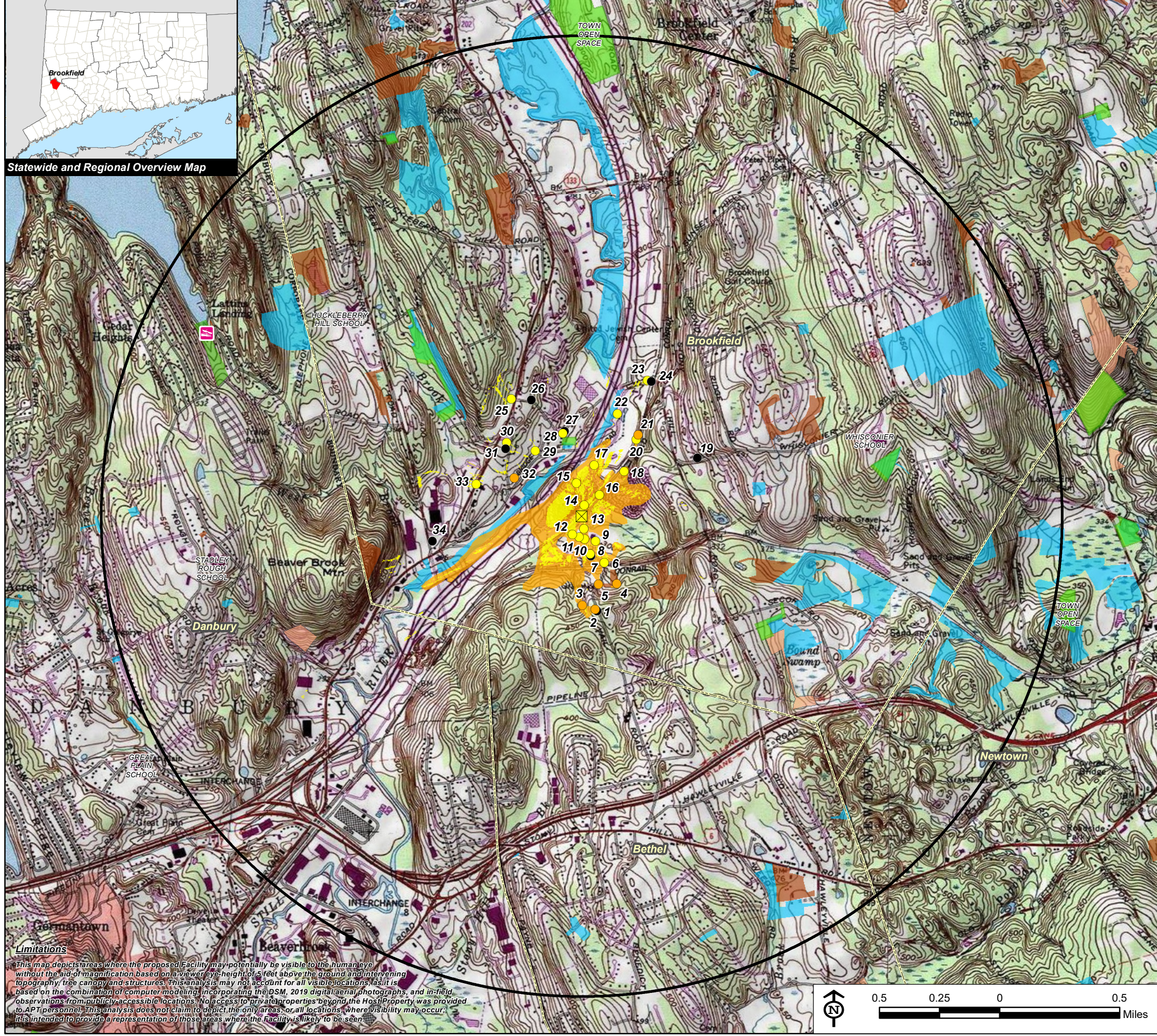
Connecticut Forest & Parks Association, Connecticut Walk Books East & West

Other
 CTDOT Scenic Strips (based on Department of Transportation data)

Notes

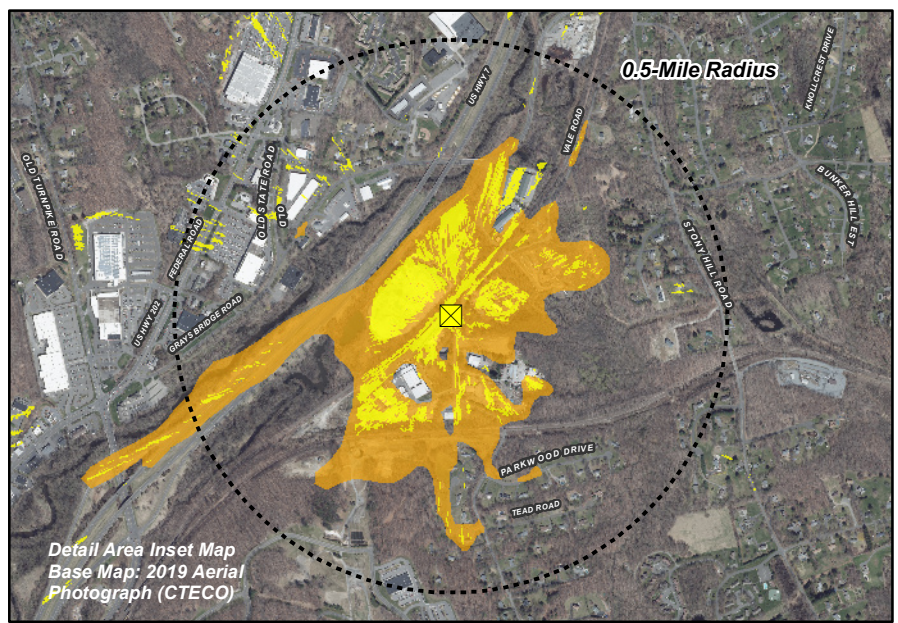
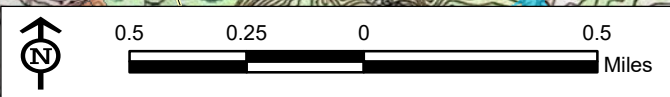
**Not all the sources listed above appear on the Viewshed Maps. Only those features within the scale of the graphic are shown.





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 Map information field verified by APT on April 4, 2022
 Base Map Source: USGS 7.5 Minute Topographic Quadrangle Map, Danbury, CT (1984) and Newtown, CT (1984)
 Map Date: April 2022

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