



VISIBILITY ANALYSIS



CHESHIRE DT CT
1021-1041 SOUTH MAIN STREET
CHESHIRE, CT

PREPARED FOR:



PREPARED BY:

All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension – Suite 311
Waterford, CT 06385

VISUAL ASSESSMENT & PHOTO-SIMULATIONS

Cellco Partnership, d/b/a Verizon Wireless ("Verizon") is seeking approval for the development of a new wireless communications facility (the "Facility") at 1021-1041 South Main Street in Cheshire, Connecticut (the "Host Property"). 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 also includes a portion of the neighboring municipalities of Hamden to the south, the border of Prospect to the west, and the border of Wallingford to the east.

Project Setting

The Host Property is a ±6.71-acre commercial parcel developed with a shopping center and associated parking lot. The area is commercially developed to the north and south along South Main Street (State Route 10). Residential development lies immediately to the west of the Host Property. Wooded land abuts commercial businesses across South Main Street to the east, with residential development beyond. The topography within the Study Area consists of relatively hilly terrain. Ground elevations range from approximately 108 feet above mean sea level ("AMSL") approximately two miles south of the Site to approximately 717 feet AMSL approximately 1.93 miles northwest of the Site. Tree cover within the Study Area (consisting of mixed deciduous hardwoods) occupies approximately 5,173 acres (or ±64.3%) of the 8,042-acre Study Area.

Project Undertaking

Based on information contained in Site Plan Drawings ("Permitting Documents;" prepared by APT, dated January 15, 2024), the proposed Facility would be located in the western portion of the Host Property (the "Site") along the edge of the existing parking lot at a ground elevation of approximately 161 feet AMSL. The Facility would include a 94-foot-tall steel monopole enclosed within an approximately 20-foot by 86-foot compound surrounded by an 8-foot-high chain link fence. Associated ground-mounted equipment would be placed within the compound. Verizon would install antennas at a centerline of 90' above ground level ("AGL"). The Facility has been designed to accommodate multiple service providers.

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 observe existing conditions, verify results of the model, inventory areas of visibility, 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 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

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.

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 Analysis 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. Considering these dynamics, areas depicting seasonal visibility on the Viewshed Analysis 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 the results of the computer modeling efforts, APT completed in-field verification activities on February 2, 2024 consisting of a crane test, vehicular and pedestrian reconnaissance, and photo-documentation. A crane was positioned at the Facility location with its boom arm extended with a brightly-colored (red) flag at a height of 94’ AGL⁵ at the proposed Site. APT conducted a Study Area reconnaissance by driving publicly accessible roads to inventory where the boom/flag could, and could not, be seen. Visual observations from the reconnaissance were used to evaluate the results of the preliminary visibility mapping, including identifying any overt discrepancies in the initial modeling, and to obtain photo-documentation from representative locations within the Study Area.

⁵ The top of the boom arm represented the top of the monopole.

Photographic Documentation and Simulations

Photographs were taken with a Canon EOS 6D digital camera body⁶ and Canon EF 24 to 105 millimeter ("mm") zoom lens. The coordinates of the proposed tower location were entered as a "waypoint" into a handheld global positioning system ("GPS") device, with the "find" tool on the GPS unit then used to provide the distance and orientation to the crane position. The geographic coordinates of each photo location were recorded as meta data using GPS technology internal to the camera. APT used a standard focal length of 50 mm to present a consistent field of view.

Photographic simulations were generated to portray scaled renderings of the proposed Facility from 13 locations presented herein where the Facility will be recognizable above 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 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 at the end of this report. The field reconnaissance photos that include the boom/flag in the view provide visual reference points for the approximate height and location of the proposed Facility relative to the scene. The corresponding photo-simulations depict 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

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

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 Analysis maps provided as attachments to this report.

Final Visibility Mapping

Information obtained during the field reconnaissance was incorporated into the mapping data layers, including observations, 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

Year-round views of the upper portions of the monopole will be prominent in front of the Host Property along South Main Street (see photo-simulations 3, 4 and 5). Residential areas within 0.2-mile will primarily experience seasonal visibility. A few select locations within this range may have year-round views of the lower portions of the Facility below the tree canopy (photos 14 and 23).

As presented on the attached Viewshed Analysis maps, predicted visibility associated with the Facility would occur mostly within 0.25-mile of the Site. The relatively low height (94' AGL) of the Facility combined with the natural vegetative screening in the Study Area serve to limit the extent of visibility.

The combined predicted visibility associated with the proposed Facility totals ± 76 acres, or $\pm 0.95\%$ of the 8,042-acre Study Area. Seasonal visibility (± 71 acres) accounts for approximately 93% of predicted visibility. Overall, the results of this analysis demonstrate that visibility of the Facility is expected over a very small portion of 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 proposed Facility. Norton Middle School is approximately 0.55-mile northwest of the Site at 414 North Brooksvale Road in Cheshire. The closest Commercial Child Day Care is Play to Learn Childcare located at 200 Mansion Road in Cheshire, approximately 0.38-mile to the northeast from the Site. The Facility will not be visible from either of these locations (see Photos 7 and 20).

Limitations

The Viewshed Analysis 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 overcast skies.

ATTACHMENTS

Table 1 - Photo Locations

Photo	Location	Orientation	Distance	Visibility
1	SOUTH MAIN STREET	NNW	+/- 0.35 MILE	NOT VISIBLE
2	SOUTH MAIN STREET	NNW	+/- 0.24 MILE	SEASONAL
3	SOUTH MAIN STREET	NW	+/- 0.15 MILE	VISIBLE
4	SOUTH MAIN STREET	W	+/- 0.13 MILE	VISIBLE
5	SOUTH MAIN STREET	WSW	+/- 0.17 MILE	VISIBLE
6	SOUTH MAIN STREET	SW	+/- 0.19 MILE	SEASONAL
7	MANSION ROAD	WSW	+/- 0.35 MILE	NOT VISIBLE
8	MANSION ROAD	SW	+/- 0.24 MILE	SEASONAL
9	SOUTH MAIN STREET	SSW	+/- 0.42 MILE	NOT VISIBLE
10	NORTH BROOKSVALE ROAD	S	+/- 0.23 MILE	NOT VISIBLE
11	NORTH BROOKSVALE ROAD	S	+/- 0.17 MILE	SEASONAL
12	BROADVIEW ROAD AT NORTH BROOKSVALE ROAD	SSE	+/- 0.13 MILE	NOT VISIBLE
13	KING ROAD	SE	+/- 443 FEET	SEASONAL
14	KING ROAD	ESE	+/- 115 FEET	VISIBLE
15	KING ROAD	N	+/- 0.11 MILE	SEASONAL
16	PACE DRIVE	N	+/- 0.24 MILE	SEASONAL
17	SHARON DRIVE	SSE	+/- 0.55 MILE	NOT VISIBLE
18	OTT DRIVE	SE	+/- 0.42 MILE	NOT VISIBLE
19	ROSEMARY LANE	ESE	+/- 0.25 MILE	NOT VISIBLE
20	NORTH BROOKSVALE ROAD	ESE	+/- 0.55 MILE	NOT VISIBLE
21	WINDING TRAIL	ESE	+/- 0.89 MILE	NOT VISIBLE
22	HILLTOP ROAD	E	+/- 0.28 MILE	NOT VISIBLE
23	BRENTWOOD DRIVE	E	+/- 0.10 MILE	VISIBLE

Photographs were taken in the Town of Cheshire unless otherwise noted.

Table 1 - Photo Locations Continued

Photo	Location	Orientation	Distance	Visibility
24	RIDGECREST DRIVE	ENE	+/- 0.19 MILE	SEASONAL
25	RIDGECREST DRIVE	NE	+/- 0.13 MILE	NOT VISIBLE
26	POUND RIDGE ROAD AT BRENTWOOD DRIVE	NNE	+/- 0.22 MILE	NOT VISIBLE
27	SOUTH BROOKSVALE ROAD	NE	+/- 1.22 MILES	NOT VISIBLE
28	SOUTH BROOKSVALE ROAD AT FERNWOOD LANE	NNE	+/- 0.74 MILE	NOT VISIBLE
29	SOUTH POND CIRCLE	NNW	+/- 0.72 MILE	NOT VISIBLE
30	MOUNT SANFORD ROAD - HAMDEN	N	+/- 1.32 MILES	NOT VISIBLE
31	HALFMOON ROAD	WNW	+/- 1.29 MILES	NOT VISIBLE
32	FAWN DRIVE AT FOREST LANE	WNW	+/- 0.41 MILE	NOT VISIBLE
33	BARYTES DRIVE	W	+/- 0.65 MILE	NOT VISIBLE
34	WALLINGFORD ROAD	SW	+/- 1.44 MILES	NOT VISIBLE
35	CHURCH DRIVE	S	+/- 1.55 MILES	NOT VISIBLE

Photographs were taken in the Town of Cheshire unless otherwise noted.

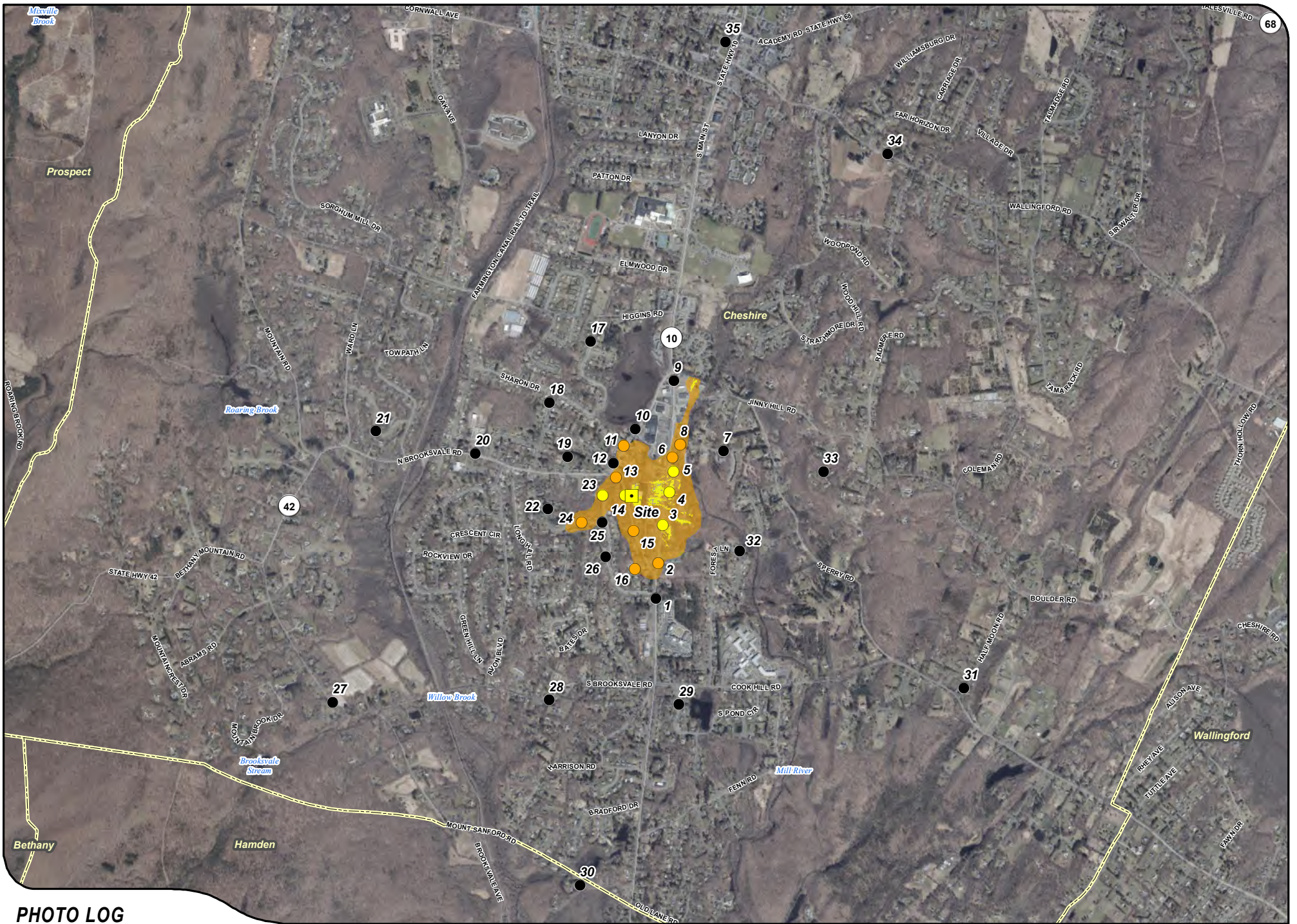
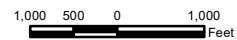


PHOTO LOG

Legend

- Site
- Seasonal
- *Areas of Potential Seasonal Visibility
- Not Visible
- Year-Round Visibility
- *Predicted Year-Round Visibility
- Municipal Boundary

*Visibility layers obtained from viewshed analysis mapping contained in this document



EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	SOUTH MAIN STREET	NNW	+/- 0.35 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 3/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	SOUTH MAIN STREET	NNW	+/- 0.24 MILE	SEASONAL



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	SOUTH MAIN STREET	NNW	+/- 0.24 MILE	SEASONAL

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	SOUTH MAIN STREET	NW	+/- 0.15 MILE	VISIBLE

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	SOUTH MAIN STREET	NW	+/- 0.15 MILE	VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	SOUTH MAIN STREET	W	+/- 0.13 MILE	VISIBLE



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	SOUTH MAIN STREET	W	+/- 0.13 MILE	VISIBLE

EXISTING



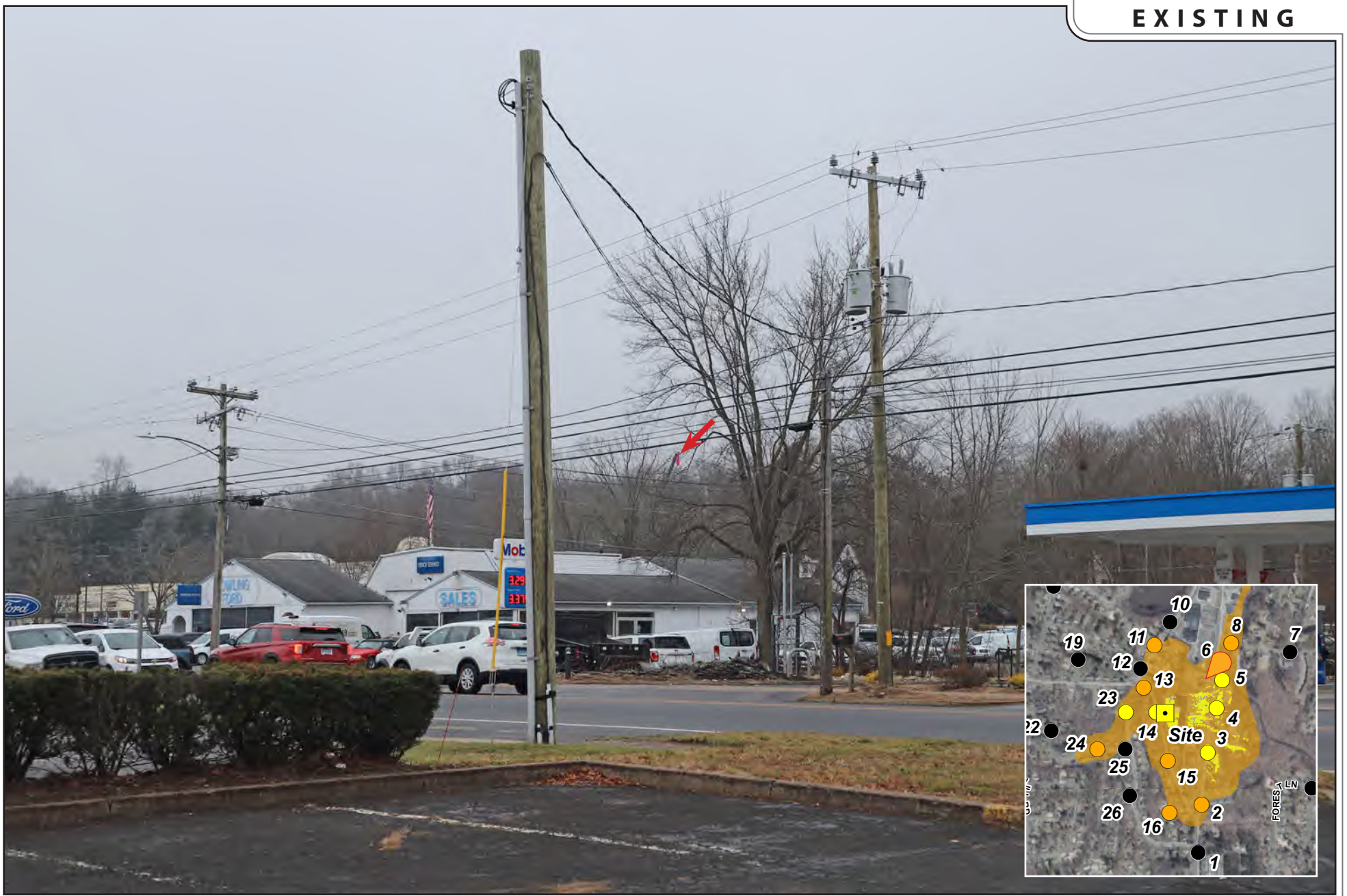
PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	SOUTH MAIN STREET	WSW	+/- 0.17 MILE	VISIBLE



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	SOUTH MAIN STREET	WSW	+/- 0.17 MILE	VISIBLE

EXISTING



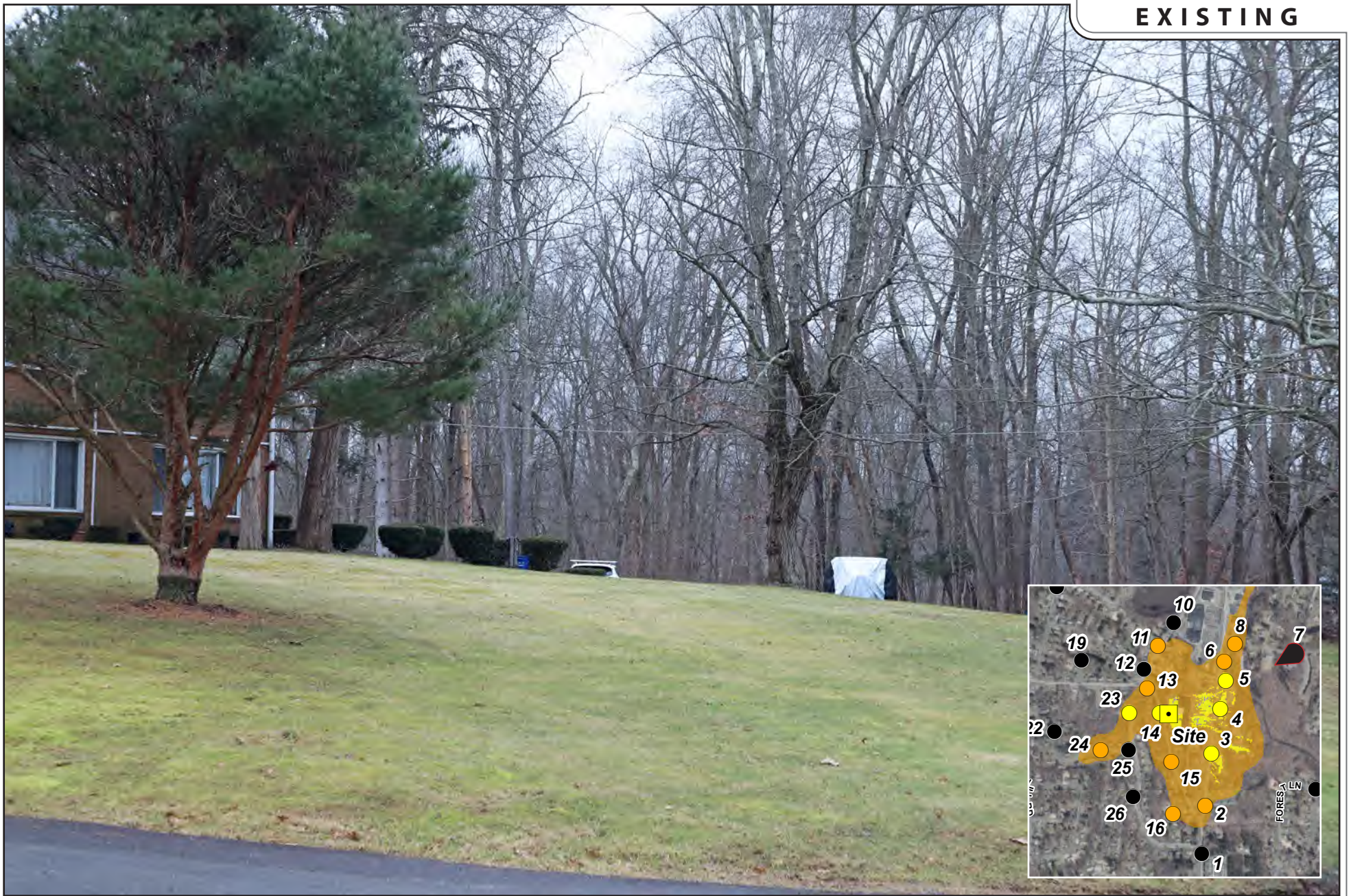
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PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	SOUTH MAIN STREET	SW	+/- 0.19 MILE	SEASONAL



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	SOUTH MAIN STREET	SW	+/- 0.19 MILE	SEASONAL

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	MANSION ROAD	WSW	+/- 0.35 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	MANSION ROAD	SW	+/- 0.24 MILE	SEASONAL

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	MANSION ROAD	SW	+/- 0.24 MILE	SEASONAL

EXISTING



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	SOUTH MAIN STREET	SSW	+/- 0.42 MILE	NOT VISIBLE

PHOTOGRAPHED ON 2/2/2024

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	NORTH BROOKSVALE ROAD	S	+/- 0.23 MILE	NOT VISIBLE

EXISTING



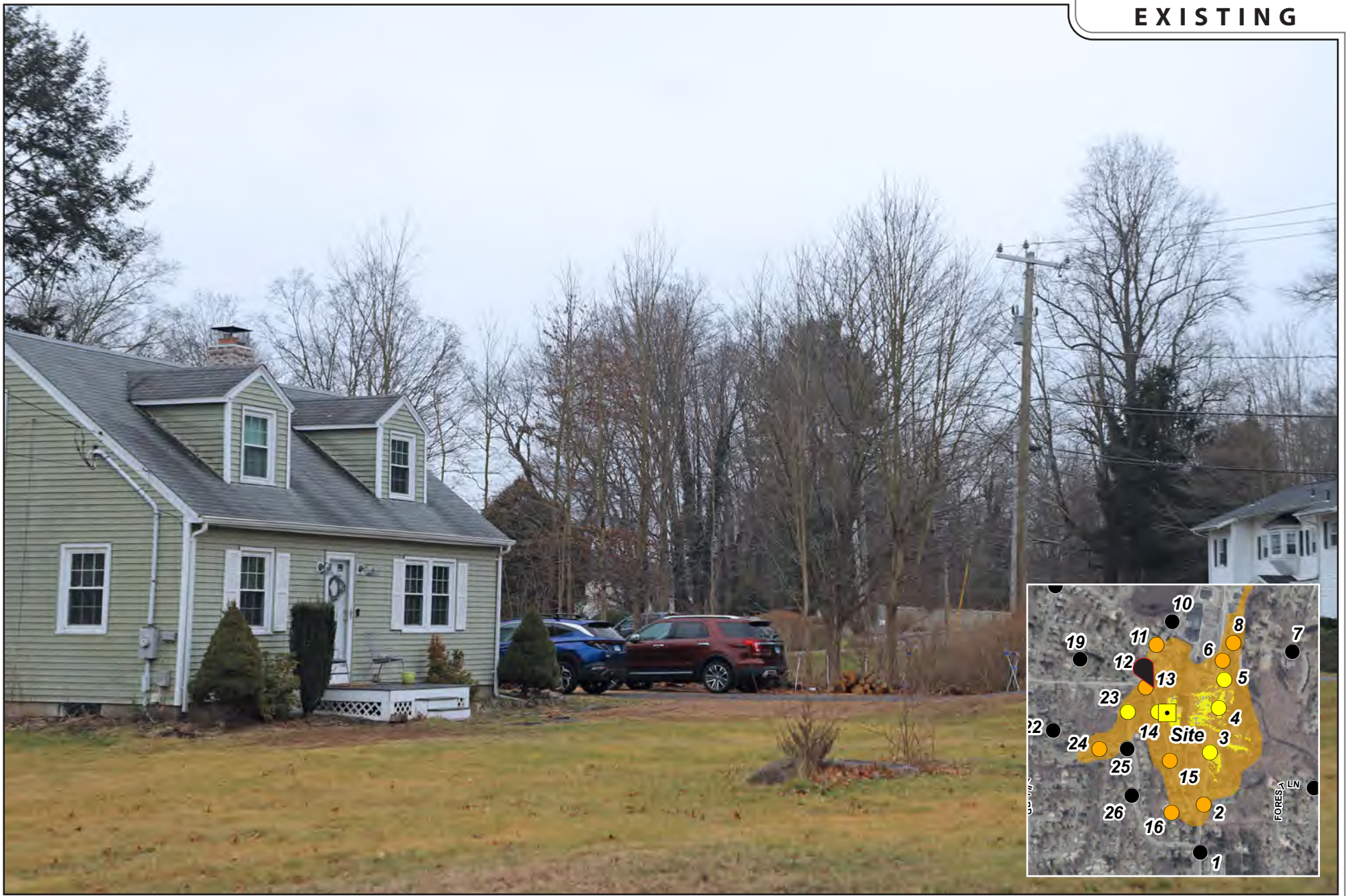
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PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	NORTH BROOKSVALE ROAD	S	+/- 0.17 MILE	SEASONAL

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	NORTH BROOKSVALE ROAD	S	+/- 0.17 MILE	SEASONAL



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	BROADVIEW ROAD AT NORTH BROOKSVALE ROAD	SSE	+/- 0.13 MILE	NOT VISIBLE

EXISTING



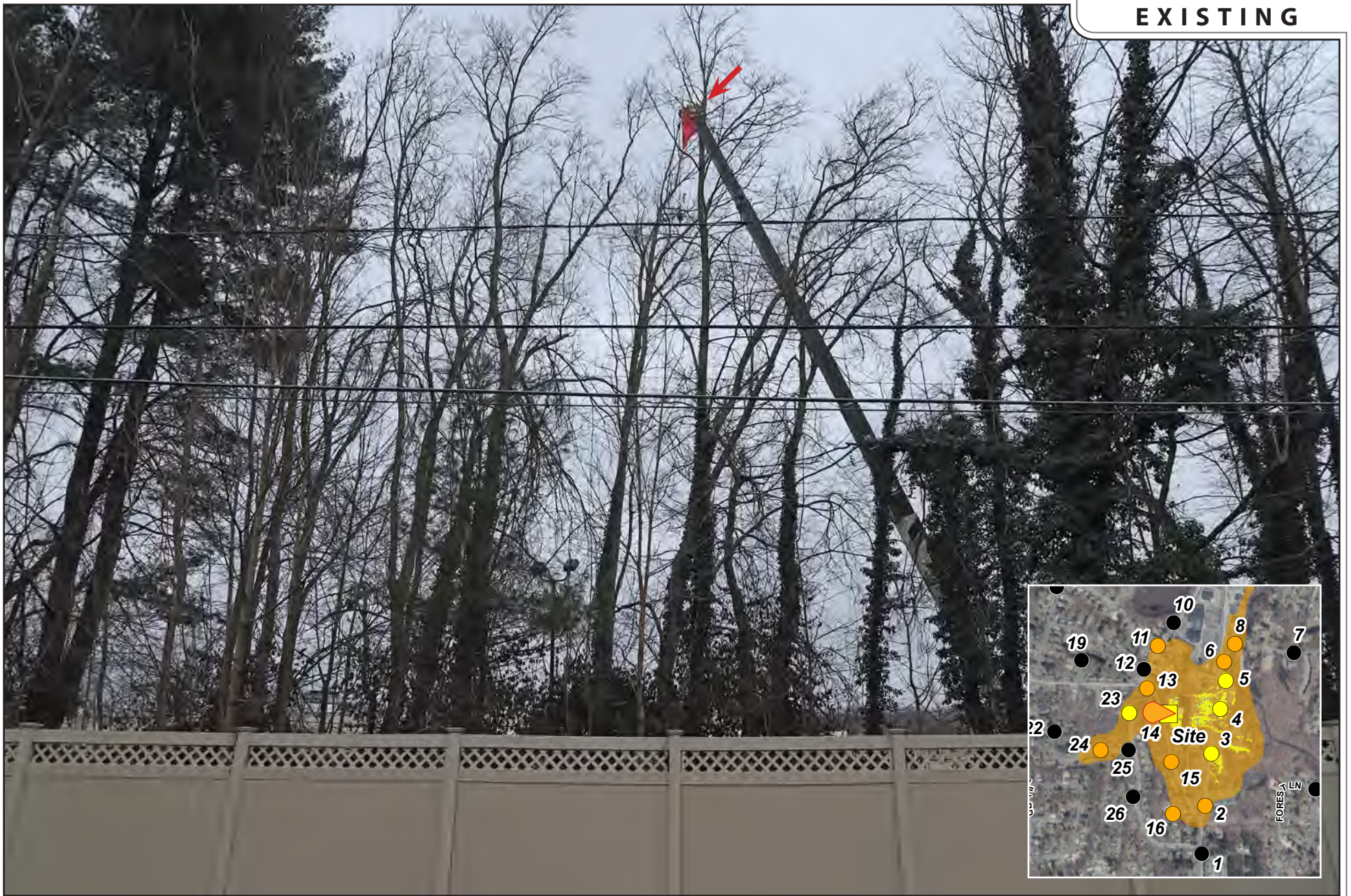
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PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	KING ROAD	SE	+/- 443 FEET	SEASONAL



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	KING ROAD	SE	+/- 443 FEET	SEASONAL

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	KING ROAD	ESE	+/- 115 FEET	VISIBLE

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	KING ROAD	ESE	+/- 115 FEET	VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	KING ROAD	N	+/- 0.11 MILE	SEASONAL

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	KING ROAD	N	+/- 0.11 MILE	SEASONAL

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	PACE DRIVE	N	+/- 0.24 MILE	SEASONAL



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	PACE DRIVE	N	+/- 0.24 MILE	SEASONAL



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	SHARON DRIVE	SSE	+/- 0.55 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
18	OTT DRIVE	SE	+/- 0.42 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
19	ROSEMARY LANE	ESE	+/- 0.25 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
20	NORTH BROOKSVALE ROAD	ESE	+/- 0.55 MILE	NOT VISIBLE



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
21	WINDING TRAIL	ESE	+/- 0.89 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
22	HILLTOP ROAD	E	+/- 0.28 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	BRENTWOOD DRIVE	E	+/- 0.10 MILE	VISIBLE

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
23	BRENTWOOD DRIVE	E	+/- 0.10 MILE	VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	RIDGECREST DRIVE	ENE	+/- 0.19 MILE	SEASONAL

PROPOSED



PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
24	RIDGECREST DRIVE	ENE	+/- 0.19 MILE	SEASONAL

EXISTING



PHOTOGRAPHED ON 2/2/2024

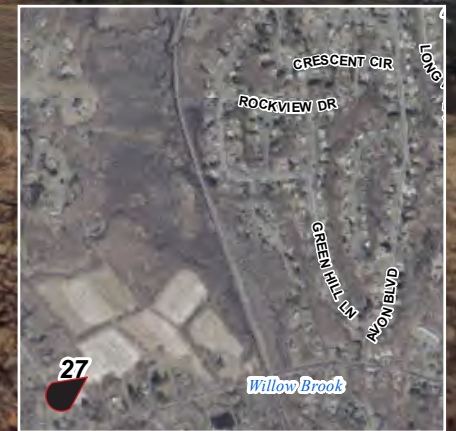
PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
25	RIDGECREST DRIVE	NE	+/- 0.13 MILE	NOT VISIBLE



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
26	POUND RIDGE ROAD AT BRENTWOOD DRIVE	NNE	+/- 0.22 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
27	SOUTH BROOKSVALE ROAD	NE	+/- 1.22 MILES	NOT VISIBLE

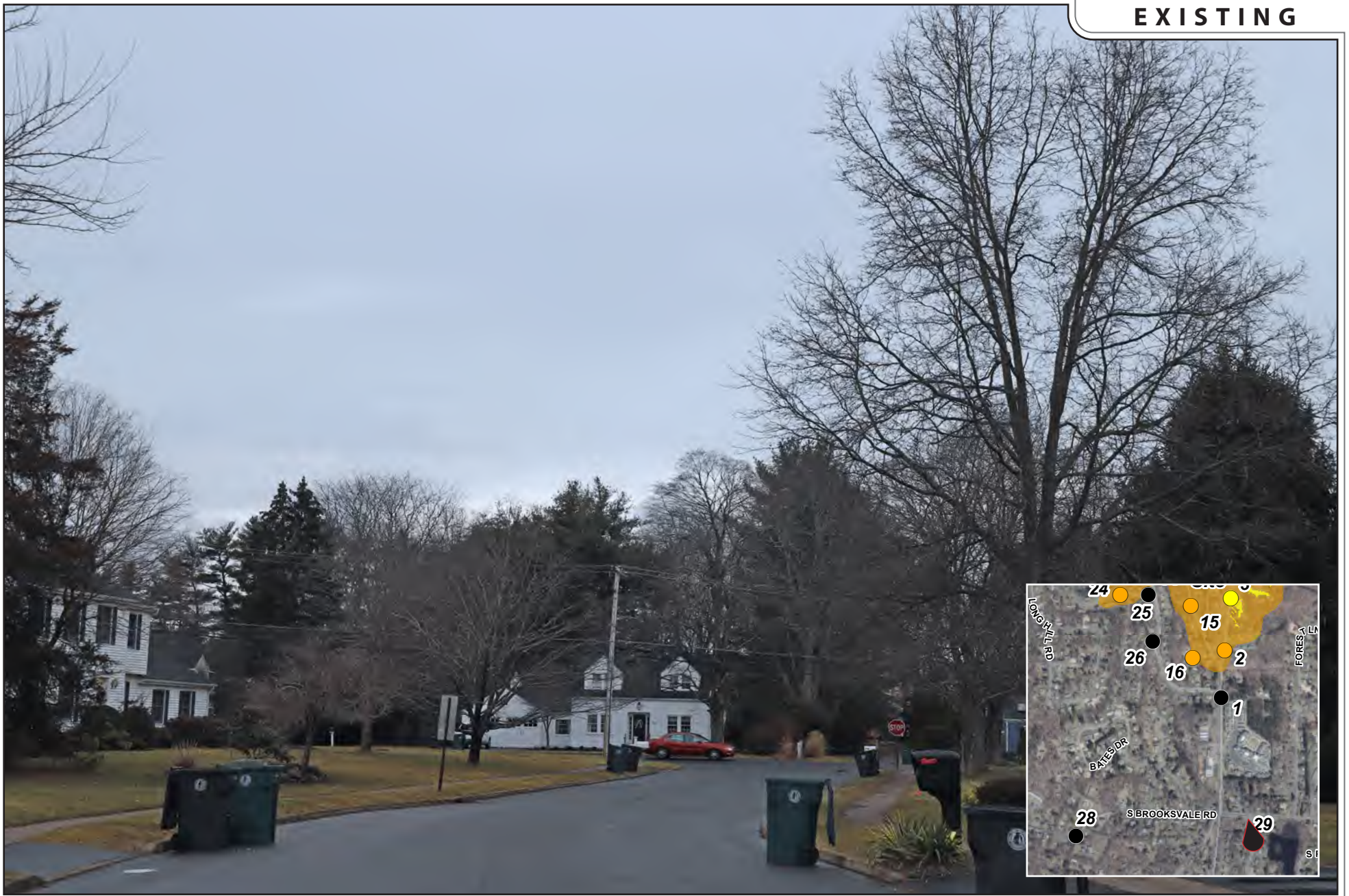
EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
28	SOUTH BROOKVALE ROAD AT FERNWOOD LANE	NNE	+/- 0.74 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
29	SOUTH POND CIRCLE	NNW	+/- 0.72 MILE	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
30	MOUNT SANFORD ROAD	N	+/- 1.32 MILES	NOT VISIBLE

EXISTING



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
31	HALFMOON ROAD	WNW	+/- 1.29 MILES	NOT VISIBLE



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
32	FAWN DRIVE AT FOREST LANE	WNW	+/- 0.41 MILE	NOT VISIBLE

EXISTING

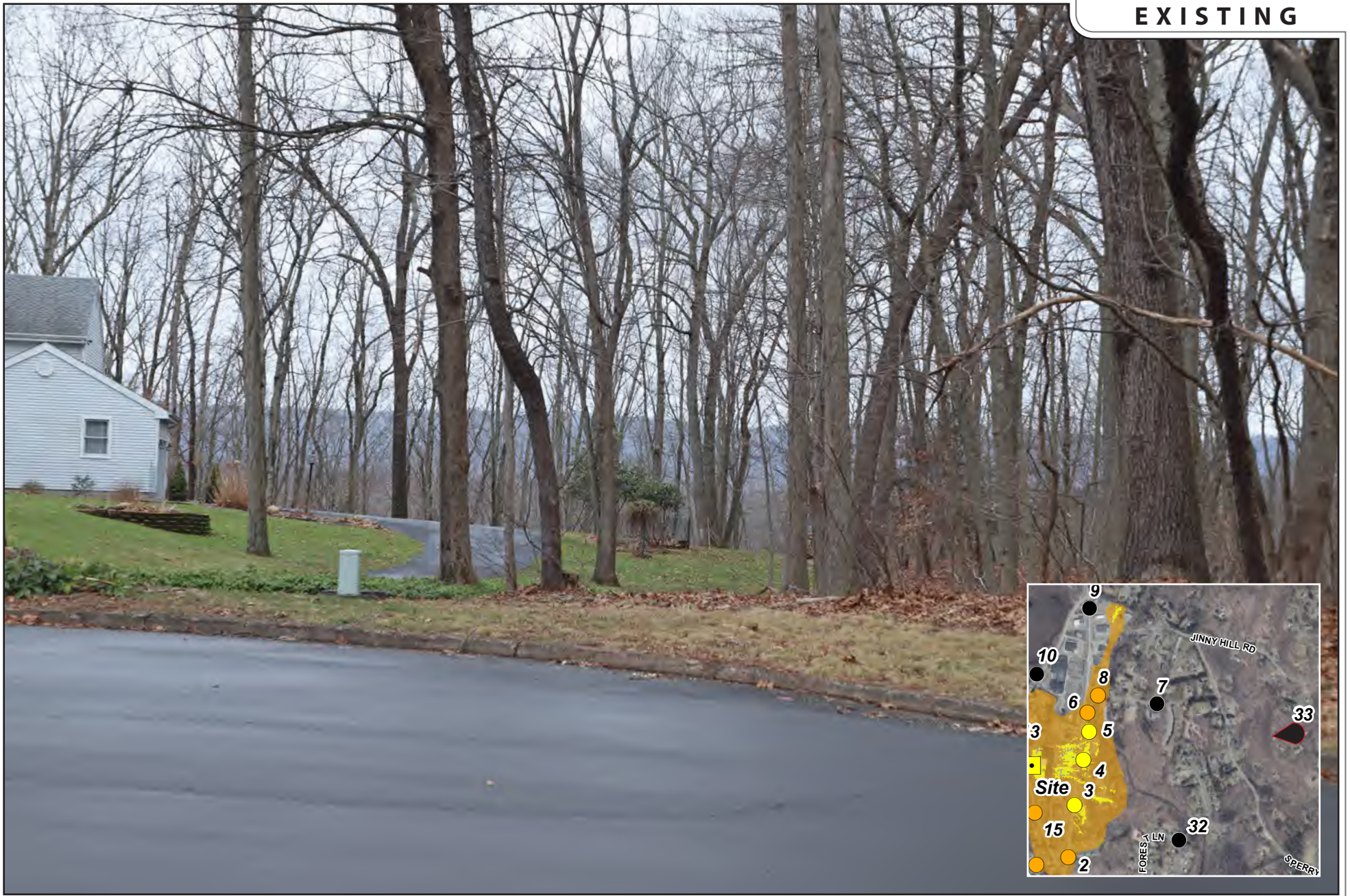


PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
33	BARYTES DRIVE	W	+/- 0.65 MILE	NOT VISIBLE

PHOTOGRAPHED ON 2/2/2024



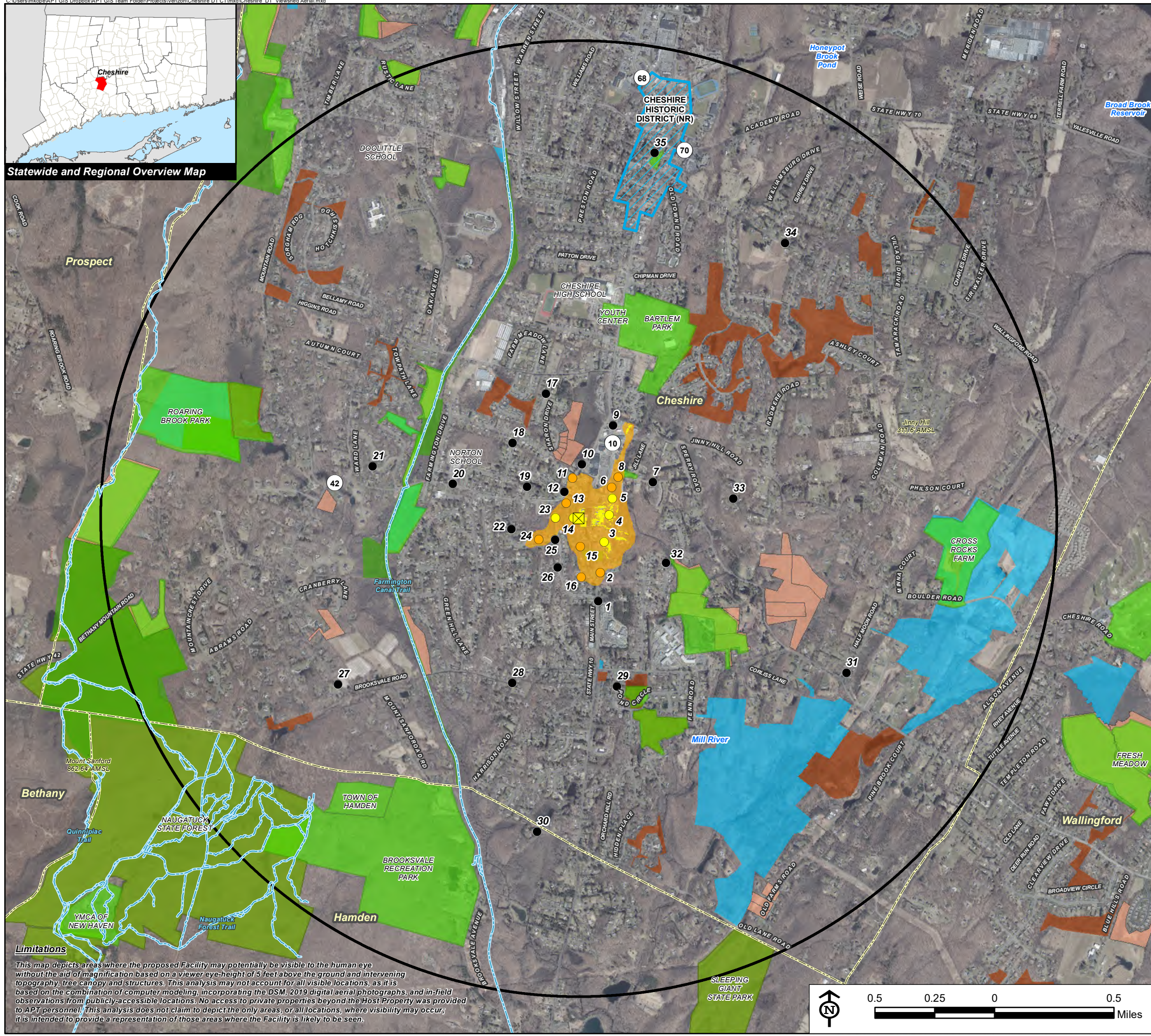
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PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
34	WALLINGFORD ROAD	SW	+/- 1.44 MILES	NOT VISIBLE



PHOTOGRAPHED ON 2/2/2024

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
35	CHURCH DRIVE	S	+/- 1.55 MILES	NOT VISIBLE

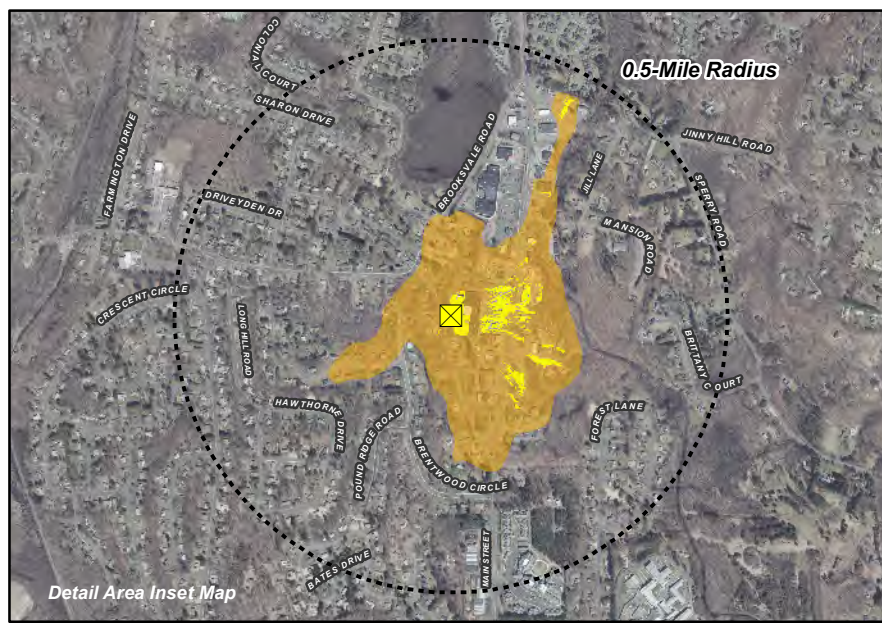


Statewide and Regional Overview Map

Prospect

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.



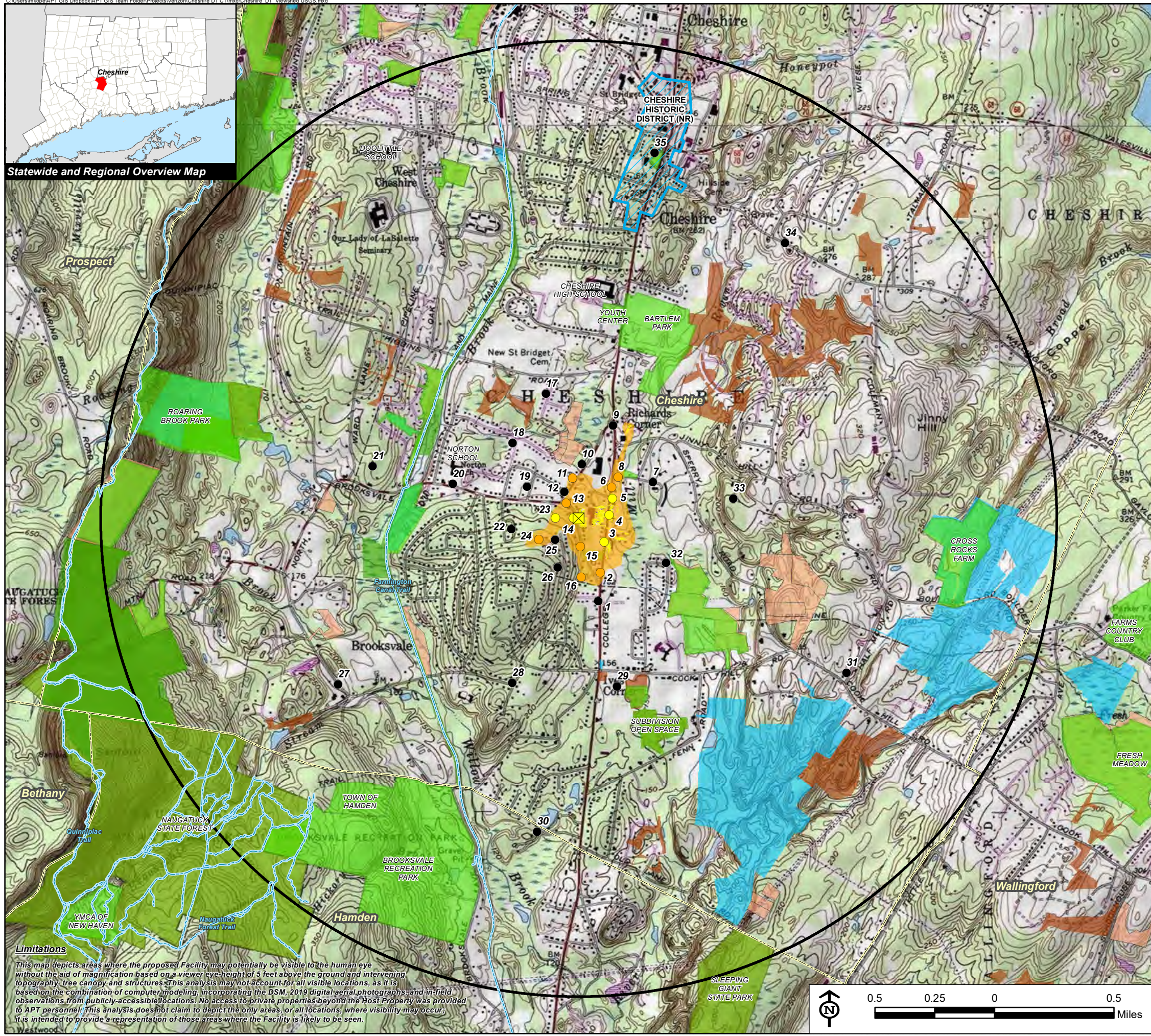
Viewshed Analysis Map
 Proposed Wireless Telecommunications Facility
 Cheshire DT CT
 1021-1041 South Main Street
 Cheshire, Connecticut

Proposed facility height is 94 feet AGL.
 Forest canopy height is derived from LIDAR data.
 Study area encompasses a two-mile radius and includes 8,042 acres.
 Existing conditions field verified by APT on February 2, 2024
 Base Map Source: 2019 Aerial Photograph (CTECO)
 Map Date: February 2024

Legend

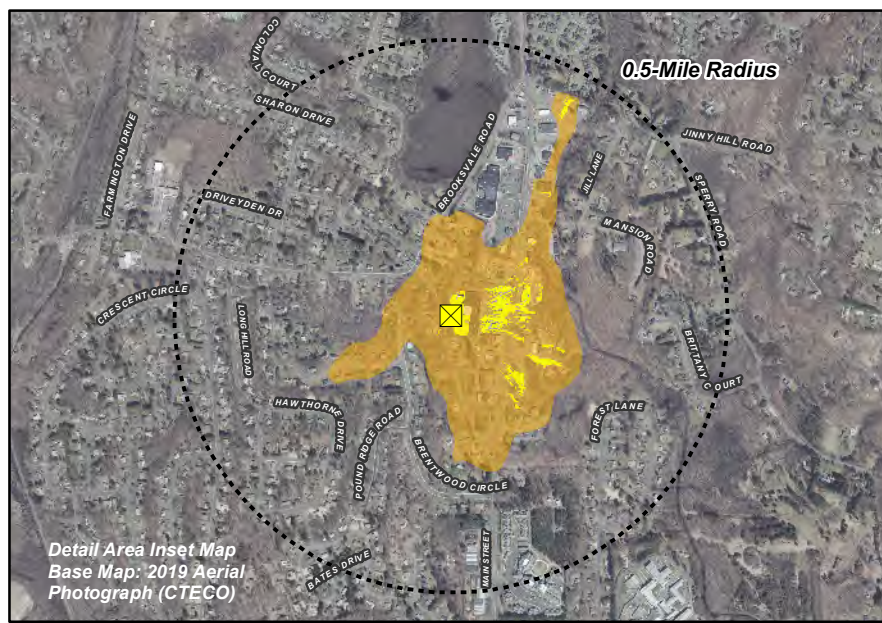
Proposed Site	Trail
Study Area (2-Mile Radius)	Scenic Highway
Predicted Year-Round Visibility (5 Acres)	DEEP Boat Launches
Areas of Potential Seasonal Visibility (71 Acres)	National Register District
Photo Locations (February 2, 2024)	Municipal and Private Open Space Property
Not Visible	State Forest/Park
Seasonal	Protected Open Space Property
Year-Round Visibility	Federal
Municipal Boundary	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.



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
 Base Map: 2019 Aerial Photograph (CTECO)

Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
 Cheshire DT CT
 1021-1041 South Main Street
 Cheshire, Connecticut

Proposed facility height is 94 feet AGL.
 Forest canopy height is derived from LIDAR data.
 Study area encompasses a two-mile radius and includes 8,042 acres.
 Existing conditions field verified by APT on February 2, 2024
 Base Map Source: USGS 7.5 Minute Topographic Quadrangle Map, Meriden, CT (1992), Mount Carmel, CT (1984), Southington, CT (1992), and Wallingford, CT (1984)
 Map Date: February 2024

Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Predicted Year-Round Visibility (5 Acres)
- Areas of Potential Seasonal Visibility (71 Acres)
- Photo Locations (February 2, 2024)
 - Not Visible
 - Seasonal
 - Year-Round Visibility
 - Municipal Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- National Register District
- Municipal and Private Open Space Property
- State Forest/Park
- Protected Open Space Property**
 - Federal
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Data Sources:

Physical Geography / Background Data
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