SARATOGA ASSOCIATES

Proposed Wireless Telecommunications Facility

Site Name: Patterson Site, NY–190
271 Cornwall Hill Road
Patterson, NY

VISUAL RESOURCE ASSESSMENT

HOMELAND TOWERS

Prepared for:
Homeland Towers
9 Harmony Street, 2nd Floor
Danbury, CT 06810

December 18, 2017

Landscape Architects, Architects, Engineers and Planners, P.C.

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#2017-052

VISUAL RESOURCE ASSESSMENT

Homeland Towers seeks approval from the Town of Patterson, NY to construct a wireless telecommunications facility (the “Project”) to be located on property owned by the Town of Patterson at 271 Cornwall Hill Road (“host property”). To address issues of potential visual impact, Saratoga Associates, Landscape Architects, Architects, Engineers, and Planners, P.C. was retained to conduct a Visual Resource Assessment ("VRA") of the proposed Project.

The study area for this VRA extends to a two-mile radius from the Project site (hereafter referred to as the “2-mile study area”). Because much of the project area is substantially wooded, detailed analysis is largely focused on viewpoints within a ½-mile radius (“½-mile study area”).

Project Description

The Project includes the construction of a 160-foot tall monopole designed to support up to four antenna platforms. Associated ground equipment located at the base of the tower will be enclosed within an 75 foot by 75 foot (5,625 square feet) fenced area ("tower site"). The tower will be located at 41° 29’ 39.3792”N, 73° 36’ 29.4884”W. The existing ground elevation in this area is approximately 442 feet above mean sea level (AMSL). Access to the tower site will be directly off of an existing driveway on the host property.

Landscape Setting

The 40.36± acre host property, owned by the Town of Patterson, is identified in County tax records as tax parcel 13.-3-37. A portion of the host property is currently used as the town highway department garage and recycling center. A recreational ball field occupies approximately two (2) acres of the host property and a solar energy facility occupies an additional 3.8 acres±. These facilities will remain upon completion of the Project.

The western and eastern edges of the property are densely wooded. The Metro-North Railroad Harlem line borders the host property to the east. The host property is zoned “R4,” residential, as defined by the Town of Patterson Code.

The tower site is approximately 230 feet south-southwest of Cornwall Hill Road (Putnam County Route 64), and 70 feet west of existing Metro-North Railroad tracks. The nearest residential structure is approximately 960 feet south-southeast of the tower site in the Somerset Drive residential neighborhood. Two (2) residential homes on Cornwall Hill Road border the host property. These residential structures are approximately 1,100 feet north-northwest of the tower site.

The topography within the 2-mile study area is characterized by rolling hills, ranging in elevation from 1,050± feet above mean sea level (amsl) at a hilltop in Wonder Lake State Park in the western part of the study area, to 430± feet amsl within the “Great Swamp,” at the east side of Pine Island, east of the tower site. The east branch of the Croton River flows from north to southeast through the study area, passing through the Great Swamp.

The two-mile study area is heavily wooded and sparsely populated. The northwestern portion of the study area is largely suburban in character, with single family residential neighborhoods,

apartments, and commercial buildings intermixed with agricultural and meadow land. Lower density residential pockets area also found among agricultural and meadow lands in the southwestern portion of the 2-mile study area, with more rural residential uses to the south. The eastern portion of the study area has little development, with commercial uses located along State Route 22. Wooded areas within and around the Great Swamp cover much of the study area. A mature tree canopy covers approximately 5,570 acres of the 8,040-acre 2-mile study area (69%)[1]. Mature tree cover in generally ranges from approximately 50 to 75 feet in height. Local mature evergreen trees may be somewhat taller.

Visual Resources

The Project is located in Putnam County, within the Town of Patterson, New York (population approximately 11,909 (2016)[2].

Wonder Lake State Park encompasses an area in the western portion of the 2-mile study area. The 1,133 acre state park has approximately 8.6 miles of walking trails. The nearest trail segment in Wonder Lake State Park is approximately 1.9 miles west of the tower site; immediately west of the existing transmission corridor that bisects the park.

Veterans Memorial Park (Town of Patterson), located approximately 1.7 miles north of the tower site, provides a variety of recreational facilities including a children's playground, baseball and soccer fields, basketball courts, a picnic pavilion, and a public beach on a small pond.

The Great Swamp Wildlife Management Area (WMA) is located adjacent to the host property on the east side of Cornwall Hill Road. The 444 acre WMA is part of the Great Swamp physiographic area, a 19.8-mile long, 4,202-acre wetland of state significance and an important stopover for migrating waterfowl[3]. A parking area for the Great Swamp WMA connects to trails on the east side of Cornwall Hill Road approximately 1,500 feet southeast of the tower site.

Roadside single-family residential development is found along portions of Cornwall Hill Road to the north and south of the tower site, as well as along numerous secondary rural roads (particularly in the western half of the 2-mile study area). The moderate density (1-10 acre) Somerset Drive planned residential subdivision is located south of the tower site. There are approximately 50 residential structures within the Somerset Drive neighborhood ranging from 960 to 4,000 feet from the tower site.

No cultural resources listed on the National Register of Historic Places are found within the 2-mile study area.

Approximately 62 miles of public roadways are within the 2-mile study area. NYS Route 22 and NYS Route 311 are the most heavily travelled roadways. NYS Route 22 has an average daily traffic volume (AADT) of 14,270 vehicles east of the tower site, NYS Route 311 has an AADT of

[1] Tree cover calculations are based on areas with 50% or greater tree canopy coverage within 30 meter x 30 meter grid cells as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset. https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

[2] https://www.census.gov/quickfacts/fact/table/pattersontownputnamcountynewyork/PST045216

[3] http://www.dec.ny.gov/outdoor/68929.html

6,102 vehicles west of the tower site, NYS Route 104 has an AADT of 3,129 vehicles south of the tower site, and NYS Route 311 has an AADT of 8484 vehicles north of the tower site.[4]

Viewshed Analysis

Viewshed mapping identifies the geographic area within which there is a relatively high probability that some portion of the proposed Project could be visible.

One viewshed overlay was prepared defining the area within which there would be no visibility of the Project due to the screening effect of intervening topography. This "bare earth" condition identifies the maximum potential geographic area within which further investigation is appropriate. A second viewshed overlay was prepared illustrating the screening effect of existing mature vegetation. The more realistic "land cover" condition identifies the geographic area where one would expect to be substantially screened by intervening forest vegetation.

Global Mapper 17.0 GIS software was used to generate viewshed areas based on publicly available topographic and land cover datasets. Topographic data was derived from the National Elevation Dataset (1/3 arc second)[5]. Using Global Mapper's viewshed analysis tool, the proposed tower location and height were input and a conservative offset of six feet was applied to account for the observer's eye level. The resulting viewshed identifies grid cells with a direct line-of-sight to the tower high point (160 feet above ground level).

Within one (1) mile of the tower site, existing forest vegetation and built structures were manually digitized from 1-foot resolution digital ortho-photographs (2016) acquired from NYS Orthos Online.[6] For the remainder of the 2-mile study area, existing forest vegetation is based on areas with 75% or greater tree canopy coverage as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset.[7]

The screening effect of vegetation and built structures was incorporated by adding 50 feet in vertical height to digitized forest areas and 25 feet to building footprints. Forested areas and building footprints were removed from the viewshed result to account for affected areas located within structures or densely wooded cover.

Based on field observation, most trees in forested portions of the study area are taller than 50 feet. This height therefore represents a conservative estimate of the efficacy of vegetative screening. It is important to note that digitized vegetation is based on interpretation of forest areas that are clearly distinguishable in the source aerial photography. As such, the potential screening value of site-specific vegetative cover such as small hedgerows, street trees and individual trees and other areas of non-forest tree cover may not be represented in the viewshed analysis.

It is noteworthy that untrained reviewers often misinterpret “bare earth” condition viewshed maps to represent wintertime, or leafless condition, visibility. In fact, deciduous woodlands

[4] http://gis3.dot.ny.gov/html5viewer/?viewer=tdv
[5] http://viewer.nationalmap.gov/viewer/
[6] https://orthos.dhses.ny.gov/
[7] https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

provide a substantial visual barrier in all seasons. Since the digitized forest cover overlay generally identifies only larger stands of woodland vegetation that are clearly distinguishable from aerial photography, the land cover viewshed map is substantially representative of both leaf-on and leaf-off seasons. The bare earth condition map is provided only to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. Such bare earth viewshed maps are generally not appropriate for public interpretation.

By themselves, the viewshed maps do not determine how much of the proposed wireless telecommunications tower would be visible above intervening landform or vegetation (e.g., 100%, 50%, 10%, etc. of total tower height), but rather the geographic area within which some portion of the facility theoretically would be visible. Their primary purpose is to provide a general understanding of a project's potential visibility and identify areas where further investigation is appropriate.

Figure 1 illustrates areas of potential Project visibility at a macro scale within the 2-mile study area. Figure 2 provides a more localized assessment of potential project visibility within the ½-mile study area.

Based on viewshed mapping, notable Project views will occur in the immediate project vicinity along Cornwall Hill Road. Brief glimpses within the ½-mile study area will occur along Somerset Drive, Sweet Corn Drive, and Cheshire Court. The vast majority of the 2-mile study area will be substantially or fully screened by intervening landform or dense forest vegetation.

Of the 8,040 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 262 acres (3.3%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 75 acres (15.0%).

Of the 62 miles of public roads within the 2-mile radius Study Area, potential project views are found along approximately 2.5 linear miles (4.0%). Of the 3.0 miles of public roads within the 1/2-mile radius study area, potential project views are found along 1.1 miles (36.6%).

Study Area Reconnaissance

Balloon Float – The Town of Patterson required a balloon float be conducted to allow the general public and local decision-makers an opportunity to observe the location and potential visibility of the proposed tower. The publicly advertised balloon float was conducted on Saturday, November 4, 2017.

The weather on November 4 was clear with visibility greater than 10 miles. One five-foot diameter red balloon was raised to an elevation of 180 feet above grade and a three-foot diameter red balloon was attached to the same tether line at an elevation of 150 feet above grade.

The balloon was tethered at 41° 29' 34.9188" N, 73° 36' 34.5564" W. The balloon was launched at 8:00am and remained aloft until approximately 3:30pm. Winds were light and variable for the duration of the balloon float. The balloon was generally stable and remained close to its desired horizontal and vertical position between 8am and 11am. After 11am wind increased to

approximately 5-7 miles per hour causing the balloon to drift approximately 10-20 feet downwind of the tether point and vary up to 20-30 feet below its intended elevation.

With the balloon in the air, an experienced visual analyst drove public roads to inventory those areas where viewshed mapping identified potential Project visibility. Photographs were taken from multiple vantage points to document views in the direction of the Project from places where a theoretical view was identified. Several locations where Project visibility was not predicted were also photographed to provide documentation of visual conditions from other areas of interest. Emphasis was placed on locations considered to be of scenic, cultural, and/or social importance to the community. Such places include recreation and conservation areas, historic resources, open spaces, local roadways, and residential neighborhoods.

Photographs were taken using a Nikon D3100 digital single lens reflex ("DSLR") camera with a lens setting of approximately 50mm[8] to simulate normal human eyesight relative to scale. The precise coordinates of each photo location were recorded in the field using a handheld global positioning system (GPS) unit. During prior field reconnaissance, the coordinates of the proposed telecommunications tower were programmed into a handheld GPS unit as a "waypoint." The "waypoint indicator" function of the GPS (arrow pointing along a calculated bearing) was used to assist the visual analyst in determining the direction of the tower site from each photo location.

Photographs taken during the field reconnaissance are provided in Appendix A – Photo Log. Photographs were taken from the following places:

Map ID	Location	Direction to Tower	Distance to Tower (feet)	Theoretical View Indicated by Land Cover Viewshed - (See Figures 1 & 2)	Tower Visible Based on 3D Modeling*	Photo/ Simulation Provided as
1	Cornwall Hill Road (at site entrance)	NNE	260	Yes	Yes	
2	Great Swamp WMA (walking trail)	ESE	1,600	Yes	Yes	Figure 3b
3	Couch Rd (at Cornwall Hill Rd)	SE	2,770	No	No	
4	Somerset Dr (north of Hampshire Ct)	SSE	3,360	No	No	
5	Somerset Dr (south of Devon Rd)	S	3,170	Yes	Yes	Figure 4b
6	Somerset Dr (at Cheshire Ct)	SSE	1,880	Yes	Yes	Figure 5b
7	Municipal Baseball Field	SW	1,080	Yes	Yes	Figure 6b
8	Cornwall Hill Rd(at Sweet Corn La)	NNW	2,160	No	Seasonal**	
9	Cornwall Hill Rd (north of Sweet Corn La)	NNW	3,460	No	Seasonal**	Figure 7b
10	Cornwall Hill Rd (at Cornwall Meadows La)	NNW	4,720	No	No	
11	Vista Ln (near Longview Dr)	NW	4,210	Yes	Yes	Figure 8b
12	State Rte 311	W	4,720	Yes	Seasonal**	
13	Powderhorn Rd (at State Rte 164)	S	5,260	No	No	
14	Watchtower Dr 9at State Rte 22)	E	8,120	Yes	Yes	
15	State Rte 22 (south of Thunder Ridge Rd)	ENE	7,510	Yes	Yes	
16	State Rte 311 (at State Rte 22)	NNE	8,330	No	No	
17	Veteran's Memorial Park	NNW	9,360	No	No	

[8] A Nikon D3100 digital SLR with an 18-55milimeter (mm) zoom lens was used for all Project photography. This digital camera, similar to most digital SLR cameras, has a sensor that is approximately 1.6 times smaller than a comparable full frame 35mm film camera. Recognizing this differential, the zoom lens used was set to approximately 31mm to achieve a field-of-view comparable to a 50mm lens on a full frame 35mm camera (31mm x 1.6 = 50mm).

18	Jill Ct	N	6,120	Yes	Yes	
19	Carmel Central School	N	4,960	No	No	
20	Bonnie Ct	N	5,020	No	No	
21	Brickhouse Rd (near State Rte 311	NW	1.060	No	No	
22	Ridgeview Dr (near Fox Wood Ter)	WNW	1,260	No	Seasonal**	
23	Cushman Rd	W	1,220	No	Seasonal**	
24	State Rte 311 (at cemetery)	WSW	1,080	No	No	
25	Cornwall Hill Rd at (at Town garage)	NNW	820	Yes	Yes	Figure 9b
26	Cornwall Hill Rd (at Great Swamp WMA driveway)	NNW	1,520	Yes	Yes	Figure 10b

* "Tower Visible Based on 3D Modeling" often differs from "Theoretical View Indicated by Land Cover Viewshed" due to the use of a highly conservative estimate of tree height in viewshed calculation (50 feet). In most cases mature woodland vegetation is significantly taller resulting in reduced project visibility.
** "Seasonal" visibility indicates photo locations where the Project may be visible through intervening deciduous vegetation during winter leaf-off season. Such views would likely be fully screened during summer leaf-on season.

The location of the balloon was under consideration as the possible tower center point at the time of the balloon study. Since the balloon study was conducted, a secondary location on the host property, approximately 595 feet northeast of the balloon location (41° 29' 39.3792"N, 73° 36' 29.4884"W), was selected as the preferred tower center. This visual assessment is based on this preferred tower location.

Photo Simulations

To illustrate how the monopole design wireless telecommunications tower will appear, photo simulations were prepared from eight (8) affected photo locations. Photo simulations were developed by superimposing a rendering of a three-dimensional computer model of the proposed Project into the base photograph taken from each corresponding visual receptor. The three-dimensional computer model was developed using *3D Studio Max Design*® software (3D Studio Max).

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise coordinates of the field camera position (as recorded by handheld GPS) and the focal length of the camera lens used (e.g. 50mm). Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's elevation (Z) value is derived from digital elevation model (DEM) data plus the camera's height above ground level. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background," and the viewport properties set to match the photograph's pixel dimensions, minor camera adjustments were made (horizontal and vertical positioning, and camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

To verify the camera alignment, elements (e.g. existing buildings, utility poles, topography, vegetation, roads, etc.) visible within the photograph were identified and digitized from digital orthophotos. Each element was assigned a Z value based on DEM data and then imported to 3D Studio Max. A 3D terrain model was also created (using DEM data) to replicate the existing local topography. The digitized elements were then aligned with corresponding elements in the

photograph by adjusting the camera target. If necessary, slight camera adjustments were made for accurate alignment.

A daylight system was created matching the exact date and time of each baseline photograph to assure proper shading and shadowing of modeled elements.

Once the camera alignment was verified, a to-scale 3D model of the proposed 160 foot tall wireless telecommunications tower was merged into the model space. The 3D model of a monopole style tower was constructed in sufficient detail to accurately convey visual character and reveal impacts. The scale, alignment, elevations, and location of the visible elements of the proposed tower are true to the conceptual design. Post production editing (i.e., airbrushing out portion of the tower that falls below or behind foreground topography and vegetation) was completed using Adobe Photoshop software. The methodology accurately represents the location, height, and visual character of the proposed tower.

Conclusions

The northwestern portion of the study area is largely suburban in character with planned single family residential neighborhoods, roadside residential uses, multi-family residential uses, and commercial buildings intermixed with agricultural and meadow land. The eastern portion of the study area has little development, with commercial uses located along State Route 22 and the forested Great Swamp covering much of the area.

Existing woodlands, roadside vegetation, and existing structures screen views of the proposed Project from most locations. Of the 8,040 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 262 acres (3.3%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 75 acres (15.0%).

Of the 62 miles of public roads within the 2-mile study area, potential project views are found along approximately 2.5 linear miles (4.0%). Of the 3.0 miles of public roads within the 1/2-mile study area, potential project views are found along 1.1 miles (36.6%). Dense vegetation and intervening topography substantially limit Project views from these travel corridors to isolated and brief glimpses.

Project views are largely limited to open areas within ½ mile of the tower site. Views are most notable across open fields in the immediate vicinity of the Project site along Cornwall Road (CR-64). Limited views from residential areas will be possible at Somerset Drive, Sweet Corn Drive, and Cheshire Court. Most residential areas are bordered by deciduous and evergreen woodland frequently limiting views to the immediate foreground.

Saratoga Associates estimates that the proposed telecommunications tower will be directly visible to some degree from roughly 15-20 residential structures within the ½ mile study area. This includes 10-14 structures on Somerset Drive and 5-6 residences on Cornwall Hill Road. As evidenced by the photo simulations, such visibility is at a distance, where the project will be visually subordinate to other built structures in view.

No resources currently listed on the National Register of Historic Places will be visually impacted by the proposed Project.

The nearest trail segment in Wonder Lake State Park is approximately 1.9 west of the tower site. No views are anticipated from State Park trails. Similarly, potential views from Veterans Memorial Park (Town of Patterson) are fully screened by local vegetation.

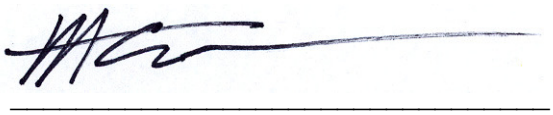
The Great Swamp Wildlife Management Area (WMA) is located adjacent to the host property on the east side of Cornwall Hill Road. The proposed tower will be visible across an open meadow above intervening perimeter trees from the maintained walking trail within the WMA.

Visual impact is defined by the NYS Department of Environmental Conservation as follows:

> *"Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place".*[9]

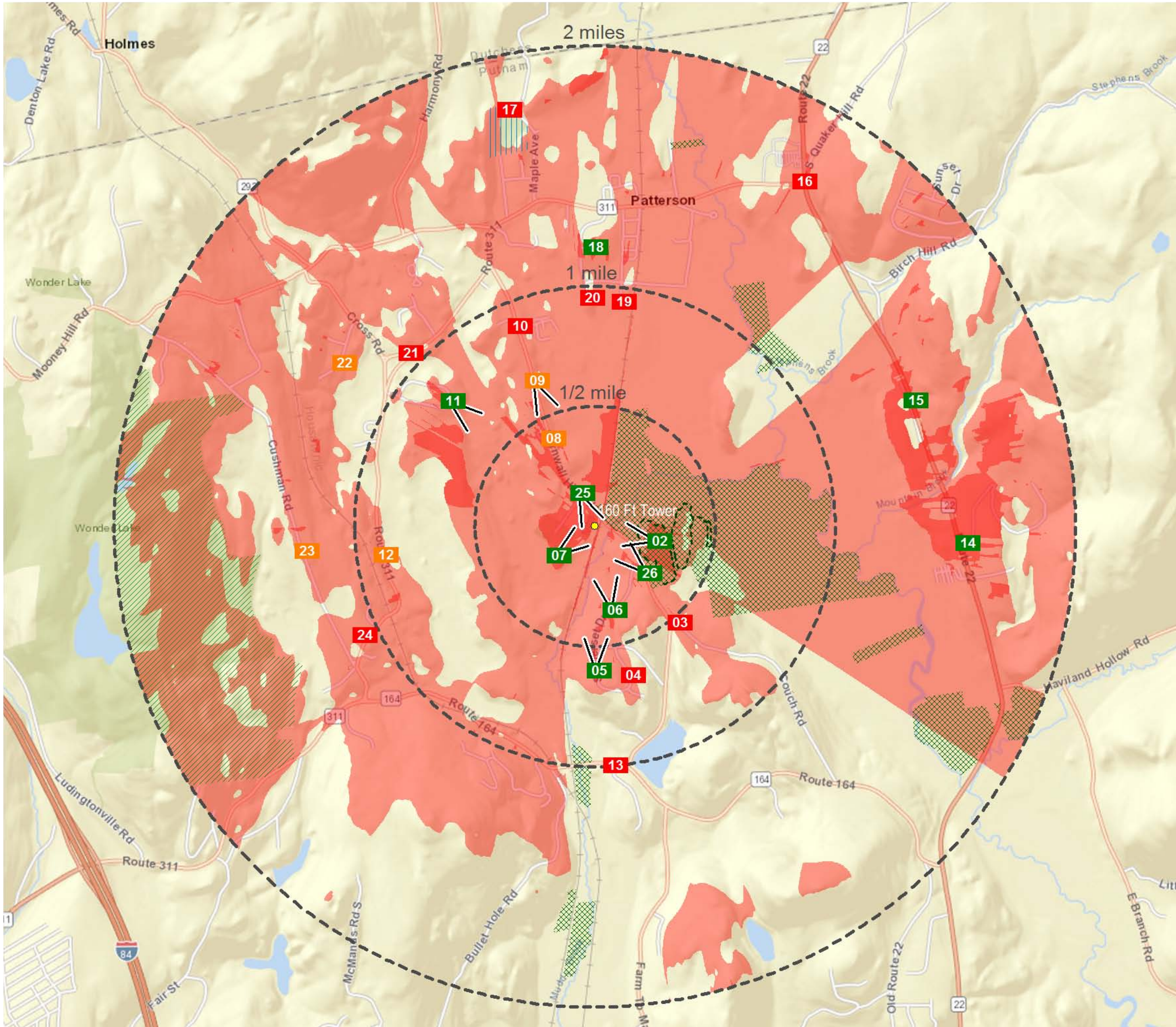
Based on the limited Project visibility identified in this visual assessment, it is reasonable to conclude that the proposed telecommunications tower will not have a detrimental effect on the scenic resources of the area, nor will it cause the diminishment of public enjoyment and appreciation of any visually sensitive place. As such, the proposed Project will not result in an adverse visual impact.

Submitted by:



Matthew W. Allen, RLA

[9] NYS DEC Program Policy for Assessing and Mitigating Visual Impact, DEP-00-2, July 31, 2000, p. 5.



LEGEND

Bare Earth Viewshed Area (Excludes existing vegetation and structures)

Land Cover Viewshed Area (Includes existing vegetation and structures)

Municipal Park

State Park

State Wildlife Management Area

Designated Trail

01 Photo Location - Tower Not Visible

01 Photo Location - Tower Visible

01 Photo Location - Tower Visible (Seasonal)

V Photo Simulation Location

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth' condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.
The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

0 ft 2000 ft 4000 ft 6000 ft

FIGURE 1

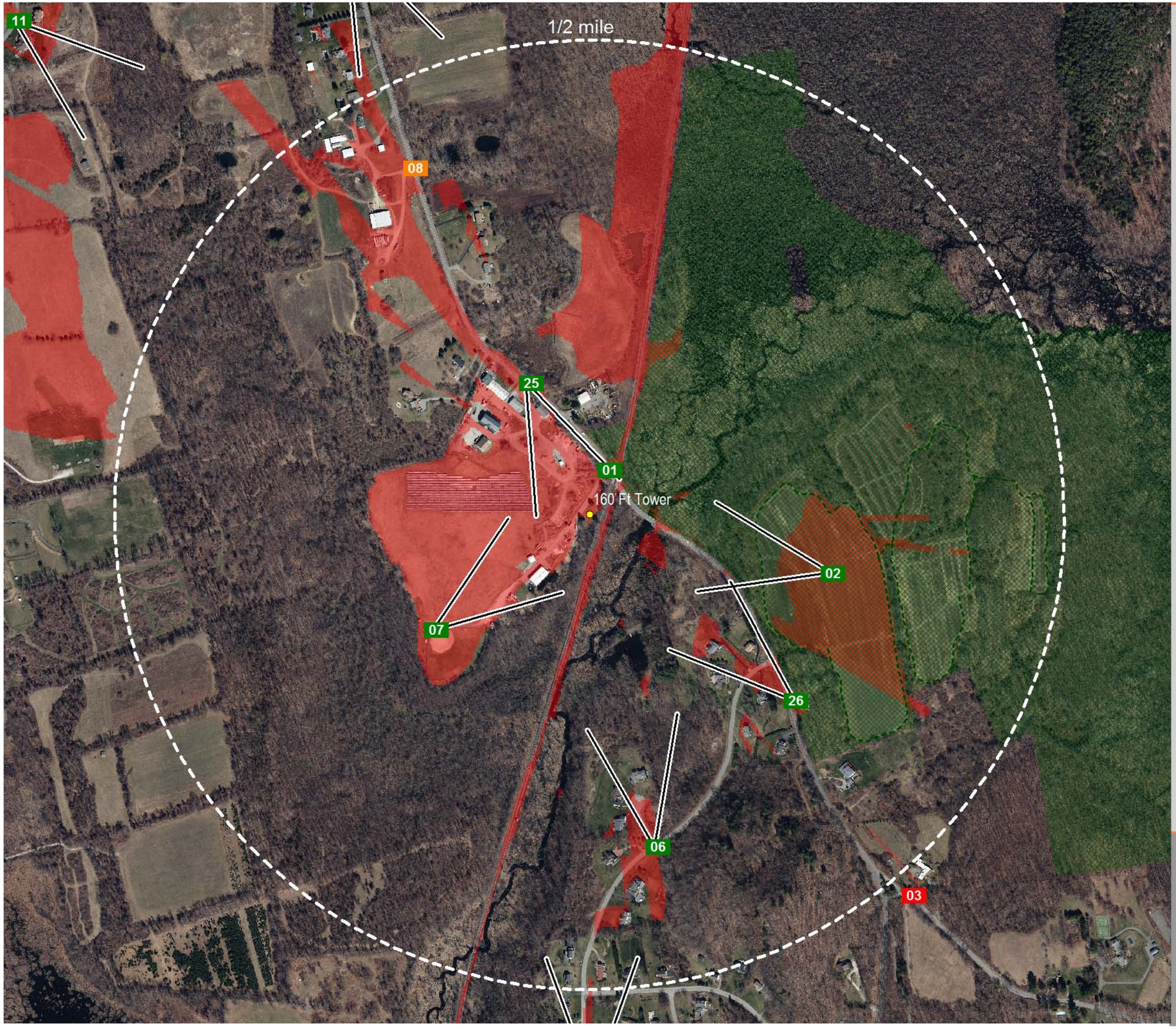
VIEWSHED MAP - 2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Patterson Site (NY 190)
271 Cornwall Hill Road
Patterson, NY



LEGEND

- Bare Earth Viewshed Area (Excludes existing vegetation and structures)
- Land Cover Viewshed Area (Includes existing vegetation and structures)
- Municipal Park
- State Park
- State Wildlife Management Area
- Designated Trail
- 01 Photo Location - Tower Not Visible
- 01 Photo Location - Tower Visible
- 01 Photo Location - Tower Visible (Seasonal)
- V Photo Simulation Location

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth' condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

0 ft 500 ft 1000 ft 1500 ft

FIGURE 2

VIEWSHED MAP - 1/2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Patterson Site (NY 190)
271 Cornwall Hill Road
Patterson, NY

Photograph Information

Date:	November 4, 2017
Time:	10:02am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 36.0000” N 73° 36’ 12.0000” W
Distance:	1,600 Feet

Figure 3a

Existing Condition

VP 2 - Great Swamp Wildlife Management Area (walking trail)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	10:02am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 36.0000” N 73° 36’ 12.0000” W
Distance:	1,600 Feet
Visibility:	Year Round

Figure 3b

Simulated Condition

VP 2 - Great Swamp Wildlife Management Area (walking trail)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	8:58am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 08.0138” N 73° 36’ 29.7426” W
Distance:	3,170 Feet

Figure 4a

Existing Condition

VP5 - Somerset Drive (south of Devon Road)

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Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	8:58am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 08.0138” N 73° 36’ 29.7426” W
Distance:	3,170 Feet
Visibility:	Year Round

Figure 4b

Simulated Condition

VP5 - Somerset Drive (south of Devon Road)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	8:49am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 21.0767” N 73° 36’ 25.0294” W
Distance:	1,880 Feet

Figure 5a

Existing Condition

VP6 - Somerset Drive (at Cheshire Court)

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Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	8:49am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 21.0767” N 73° 36’ 25.0294” W
Distance:	1,880 Feet
Visibility:	Year Round

Figure 5b

Simulated Condition

VP6 - Somerset Drive (at Cheshire Court)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 18, 2017
Time:	12:40pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 33.0998” N 73° 36’ 41.0653” W
Distance:	1,080 Feet

Figure 6a

Existing Condition

VP 7 - Municipal Baseball Field

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Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 18, 2017
Time:	12:40pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 33.0998” N 73° 36’ 41.0653” W
Distance:	1,080 Feet
Visibility:	Year Round

Figure 7b

Simulated Condition

VP 7 - Municipal Baseball Field

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	12:25pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 30’ 11.0278” N 73° 36’ 46.8288” W
Distance:	3,460 Feet

Figure 7a

Existing Condition

VP 9 - Cornwall Hill Road (north of Sweet Corn Lane)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	12:25pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 30’ 11.0278” N 73° 36’ 46.8288” W
Distance:	3,460 Feet
Visibility:	Seasonal

Figure 7b

Simulated Condition

VP 9 - Cornwall Hill Road (north of Sweet Corn Lane)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	1:41pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 30’ 06.8320” N 73° 37’ 11.0767” W
Distance:	4,720 Feet

Figure 8a

Existing Condition

VP 11 - Vista Lane (near Longview Drive)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

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Figure 8b

Simulated Condition

VP 11 - Vista Lane (near Longview Drive)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	12:32pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 46.7239” N 73° 36’ 34.0750” W
Distance:	820 Feet

Figure 9a

Existing Condition

VP 25 - Cornwall Hill Road (at Town garage)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	12:32pm
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 46.7239” N 73° 36’ 34.0750” W
Distance:	820 Feet
Visibility:	Year Round

Figure 9b

Simulated Condition

VP 25 - Cornwall Hill Road (at Town garage)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	9:52am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 29.0000” N 73° 36’ 15.0000” W
Distance:	1,520 Feet

Figure 10a

Existing Condition

VP 26 - Cornwall Hill Road (at Great Swamp WMA driveway)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

Photograph Information

Date:	November 4, 2017
Time:	9:52am
Focal Length:	51mm (film equivalent)
Camera:	14.2mp Nikon D3100
Photo Location:	41° 29’ 29.0000” N 73° 36’ 15.0000” W
Distance:	1,520 Feet
Visibility:	Year Round

Figure 10b

Simulated Condition

VP 26 - Cornwall Hill Road (at Great Swamp WMA driveway)

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

HOMELAND TOWERS

APPENDIX A

Photo Log

VP 1 - Cornwall Hill Rd (at site entrance) Distance: 260 Feet

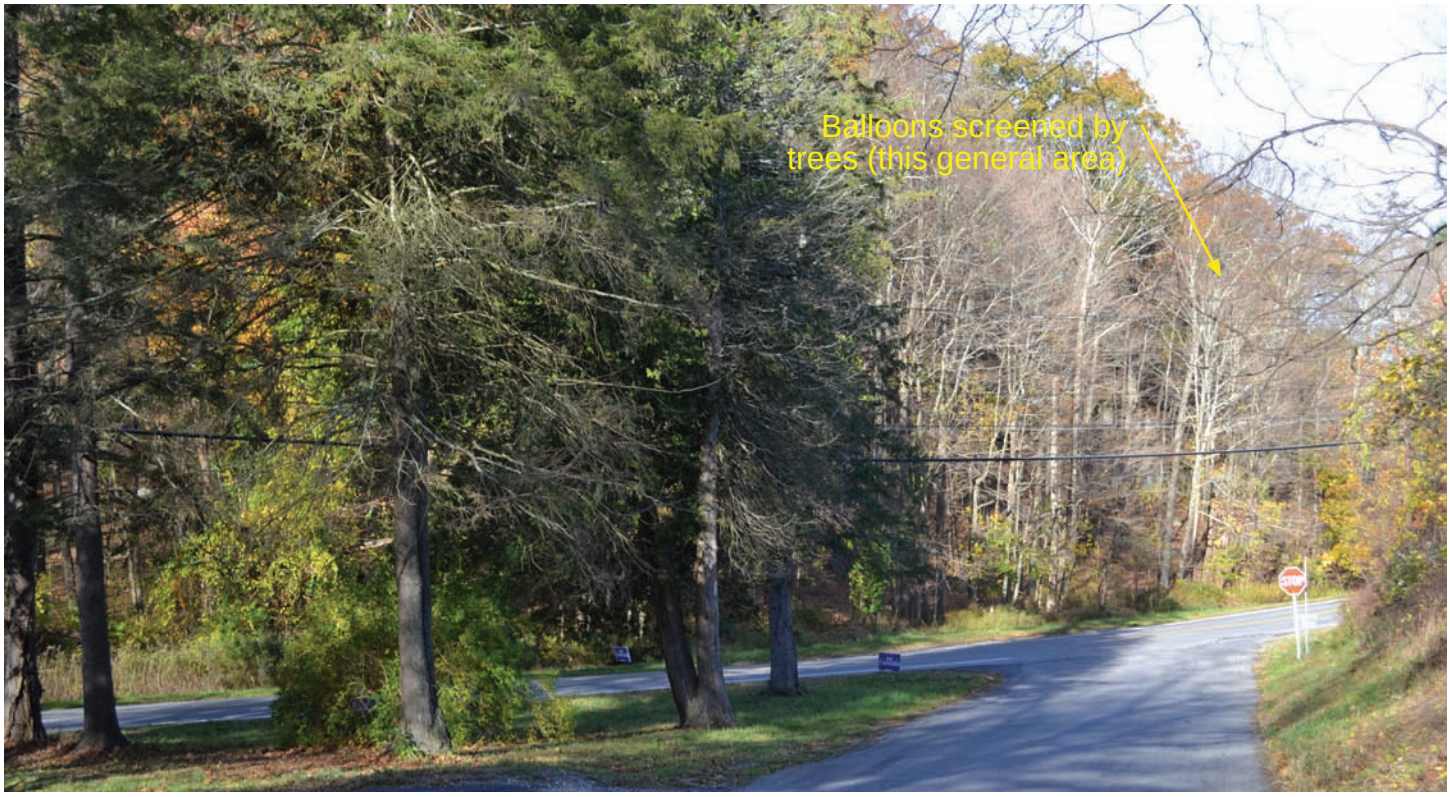
VP 2 - Great Swamp Wildlife Management Area (walking trail) Distance: 1,380 feet

Figure A1
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY



VP 3 - Couch Rd (at Cornwall Hill Rd) Distance: 2,770 feet

VP 4 - Somerset Dr (north of Hampshire Ct) Distance: 3,360 feet

Figure A2
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 5 - Somerset Dr (south of Devon Rd) Distance: 3,170 feet

VP 6 - Somerset Dr (at Cheshire Ct.) Distance: 1,880 feet

Figure A3
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 7 - Municipal Baseball Field

Distance: 1,080 feet

VP 8 - Cornwall Hill Rd (at Sweet Corn Dr)

Distance: 2,160 feet

Figure A4
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 9 - Cornwall Hill Rd (north of Sweet Corn Dr) Distance: 3,460 feet

VP 10 - Cornwall Hill Rd (at Cornwall Meadows Ln) Distance: 4,720 feet

Figure A5
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 11 - Vista Ln (near Longview Dr) Distance: 4,210 feet

VP 12 - State Rte 311 Distance: 4,720 feet

Figure A6
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 13 - Powderhorn Rd (at State Rte 164) Distance: 5,260 feet

VP 14 - Watchtower Dr (at State Rte 22) Distance: 8,120 feet

Figure A7
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 15 - State Rte 22 (south of Thunder Ridge Rd) Distance: 7,510 feet

VP 16 - State Rte 311 (at State Rte 22) Distance: 8,830 feet

Figure A8
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 17 - Veteran's Memorial Park

Distance: 9,360 feet

VP 18 - Jill Ct

Distance: 6,120 feet

Figure A9
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 19 - Carmel Central School

Distance: 4,960 Feet

VP 20 - Bonnie Ct

Distance: 5,020 feet

Figure A10
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 21 - Brickhouse Rd (near State Rte 311) Distance: 1,060 Feet

VP 22 - Ridgeview Dr (near Fox Wood Ter) Distance: 1,260 Feet

Figure A11
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 23 - Cushman Rd Distance: 1,220 Feet

VP 24 - State Rte 311 (at cemetery) Distance: 1,080 Feet

Figure A12
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY

VP 25 - Cornwall Hill Road (at Town maintenance garage) Distance: 820 Feet

VP 26 - Cornwall Hill Road (at Great Swamp WMA driveway) Distance: 1,520 Feet

Figure A12
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Patterson Site (NY-190)
271 Cornwall Hill Road
Patterson, NY