

ATTACHMENT 5C

Proposed Wireless Telecommunications Facility

East Haven Riverside VFD
82 Short Beach Road (Route 142)
East Haven, Connecticut

Prepared for



Prepared by **VHB/Vanasse Hangen Brustlin, Inc.**
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April 2012

Visual Resource Evaluation

North Atlantic Towers, LLC seeks approval from the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need to construct a wireless telecommunications facility (“Facility”) at one of two locations. One of the proposed locations is a parcel located at 82 Short Beach Road (identified herein as the “host property”) in the Town of East Haven, Connecticut. This Visual Resource Evaluation was conducted to evaluate the visibility of the Facility within a two-mile radius of the proposed Site location (“Study Area”). Nearly half of the Study Area includes land located within the neighboring municipalities of Branford, Connecticut to the east. The western-most portion of the Study Area consists of land located in New Haven, Connecticut. Attachment A contains a map that depicts the proposed location of the Facility and the limits of the Study Area.

Project Introduction

The proposed East Haven Facility includes the installation of a 103-foot tall monopole tower with an associated fence-enclosed compound area that measures approximately 2,500 square feet. The proposed East Haven Facility would be located at a ground elevation of approximately 60 feet Above Mean Sea Level (AMSL). Access to the Facility would be provided via an existing parking area currently located on the host property.

Site Description and Setting

Identified in the Town of East Haven land records as Map/140/Block 1324/Lot 004, the host property consists of approximately 0.91 acres of land and is currently occupied by the East Haven Riverside Volunteer Fire Department building and associated parking area. Land use within the general vicinity of the host property is mainly comprised of high-density residential development. Segments of US Route 1, Route 100, Route 142, Route 146 and Interstate 95 are contained within the Study Area. In total, the Study Area features approximately 126 linear miles of roadways.

The topography within the Study Area is generally characterized by gently rolling hills with moderate changes in ground elevations ranging from sea level to approximately 200 feet AMSL. The Study Area contains approximately 2,632 acres of surface water, dominated in large measure by portions of Long Island Sound located roughly 0.38-mile to the southeast of the proposed Facility. Other water bodies within the Study Area include, but are not limited to, the Farm River located 0.18-mile to the southeast of the proposed Facility; portions of Lake Saltonstall located approximately 1.23-mile to the north; and the mouth of the Branford River located nearly two miles to the east. The Study Area consists mainly of mixed deciduous hardwood species that occupy approximately 1,805 acres of the 8,042-acre study area (22%). The average tree canopy height throughout the Study Area was estimated to be approximately 65 feet.



METHODOLOGY

To evaluate the visibility associated with the proposed Facility, VHB used the combination of a predictive computer model and in-field analysis. The predictive model provided a preliminary assessment of potential visibility throughout the entire study area, including private property and other areas inaccessible for direct observations. A “balloon float” and Study Area reconnaissance were subsequently conducted for field verification to back-check the initial computer modeling results, to obtain location and height representations, and to provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

Visibility Analysis

VHB uses ArcGIS® Spatial Analyst, a computer modeling tool developed by Environmental Systems Research Institute, Inc., to calculate the areas from which at least the top of the proposed Facility is expected to be visible. Project- and Study Area-specific data were incorporated into the computer model, including Facility height, its ground elevation, underlying and surrounding topography and existing vegetation. Information used in the model included Connecticut LiDAR¹-based digital elevation data and a digital forest (or tree canopy) layer developed for the Study Area. The LiDAR-based Digital Elevation Model (DEM) represents ten-foot spatial resolution elevation information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2000 and has a horizontal resolution of ten (10) feet. The LiDAR-based data was edited in 2007 made available by the University of Connecticut through its Center for Land Use Education and Research (CLEAR). To create the forest layer, mature trees and woodland areas depicted on aerial photographs (ranging in dates from 2004 to 2008) were manually digitized (hand traced) in ArcGIS®, creating a geographic data layer for inclusion in the computer model. The black and white, digital aerial photographs, obtained from the Connecticut Department of Transportation, were flown in the spring of 2004 and selected for use in this analysis because of their image quality and depiction of pre-leaf emergence (i.e., “leaf-off”) conditions. These photographs are half-foot pixel resolution. The more recent aerial photographs (2006 and 2008) were overlaid and evaluated to identify any new development resulting in the removal of trees.

Once the specific data layers were entered, the ArcGIS® Spatial Analyst Viewshed tool was applied to achieve an estimate of locations where the proposed Facility could be visible. First, only topography was used as a possible visual constraint; the tree canopy was omitted to evaluate potential visibility with no intervening vegetative screening. The initial omission of this data layer resulted in an excessively conservative prediction, but it provided an opportunity to identify areas within potential direct lines of sight of the Facility.

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

The forest data layer was then overlaid and built into the DEM, using a conservative average tree canopy height of 50 feet, to establish a baseline assessment of intervening vegetation. The resultant preliminary viewshed map was used during the in-field activities (described further below) to compare the outcome of the initial computer modeling with observations of the balloon float to identify any significant deviations that may have occurred due to land use changes. Information obtained from the field reconnaissance was ultimately incorporated into the model to refine the viewshed map.

The average tree canopy height was also refined based on information collected in the field using a combination of a hand-held laser range finder, clinometer and comparative observations. The revised average tree canopy height, in this case 65 feet, was then incorporated into the model and the results displayed on the viewshed map. The forested areas were overlaid on the DEM with a height of 65 feet added to the base elevation and the visibility from within the Study Area calculated.

As a final step, the forested areas were extracted from the areas of visibility, using a conservative assumption that a person standing within the forest will not be able to view the proposed Facility beyond a distance of approximately 500 feet. Depending on the density of the intervening tree canopy and understory of the surrounding woodlands, it is assumed that some locations within this distance could provide visibility of at least portions of the proposed Facility at any time of the year. In "leaf-on" conditions, this distance may be overly conservative for most locations. However, for purposes of this analysis, it was reasoned that forested land beyond 500 feet of the proposed Facility would consist of light-impenetrable trees of a uniform height.

Also included on the map is a data layer, obtained from the State of Connecticut Department of Environmental Protection ("CTDEP"), which depicts various land and water resources such as parks and forests, recreational facilities, dedicated open space, CTDEP boat launches and other categories. The map also depicts town hiking trails/walking paths in the Town of Branford (based on GIS data provided by the Town) and the Shoreline Greenway Trail, portions of which follow existing road rights-of-way within the Study Area. Lastly, based on a review of available data published by the Connecticut Department of Transportation and discussions with staff in New Haven, East Haven and Branford, it was determined that there are no state or locally designated scenic roadways contained within the Study Area.

Balloon Float and Study Area Reconnaissance

Vanasse Hangen Brustlin Inc., (VHB) conducted a balloon float on June 6, 2011 to further evaluate the potential viewshed within the Study Area. The balloon float consisted of raising and maintaining an approximate five-foot diameter, helium-filled balloon at the proposed site location at a height of 125 feet, which was the height of the proposed Facility at the time the float was conducted. During the balloon float, VHB staff conducted a drive-by reconnaissance along the public roads located within the Study Area to evaluate the results of the preliminary viewshed map, inventory where the balloon was, and was not, visible and to

obtain photographic documentation. Weather conditions during the float included temperatures of approximately 80 degrees Fahrenheit, sunny skies and calm winds.

Photographic Documentation

During the in-field activities, the balloon was photographed from a number of different vantage points to document the actual view towards the proposed Facility. As was noted above, the June 6, 2011 balloon float was conducted at 125 feet which was the height of the proposed Facility during that time. This is indicated on the photographs contained in Attachment A. Several locations where the balloon was not visible are included as well as locations where the balloon was visible but the proposed 103-foot tall Facility will not be visible. The locations of the photos are described in the table below.

View	Location	Orientation	Dist. To Site	Visibility
1	Route 142 north of Jefferson Place	Northwest	± 0.25-Mile	Year-Round
2	Hilton Avenue	West	± 0.06-Mile	Year-Round
3	Hilton Avenue	Northwest	± 0.07-Mile	Year-Round
4	Adjacent to #18 Hilton Avenue	Northwest	± 0.08-Mile	Year-Round
5	Vera Street at Route 142	Southwest	± 0.05-Mile	Year-Round
6	Vera Street	Southwest	± 0.13-Mile	Not Visible
7	Hilda Street at Vernon Street	Southwest	± 0.13-Mile	Not Visible at 103Feet
8	Hilda Street	South	± 0.13-Mile	Not Visible
9	End of Hilda Street	Southeast	± 0.03-Mile	Year-Round
10	Fairview Avenue approaching Route 142	Southeast	± 0.09-Mile	Year-Round
11	Hemingway Avenue (Route 142) overlooking East Haven Town Green	Southeast	± 1.27-Mile	Not Visible at 103Feet
12	East Haven Town Green – View from Gazebo	Southeast	± 1.22-Mile	Not Visible
13	River Street at Green Lawn Cemetery	Southeast	± 1.17-Mile	Year-Round
14	River Street At Green Lawn Cemetery	Southeast	± 1.12-Mile	Not Visible at 103Feet
15	Adjacent to #33 Helen Road	Southwest	± 0.79-Mile	Not Visible at 103Feet
16	Intersection of Burr Street and Fort Hale Adjacent to Tweed Airport	Southeast	± 1.92-Mile	Not Visible
17	Mansfield Grove Road at Whalers Point Road	Northeast	± 0.78-Mile	Not Visible at 103Feet

Photographs of the balloon from the view points listed above were taken with a Nikon D-3000 digital camera body equipped with a Nikon 18-135 mm zoom lens. For the purposes of this analysis, a lens setting of 50 mm was utilized to obtain views of the balloon for the more distant photographic locations (beyond 0.13 mile) listed above. “The lens that most closely

approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm.² A lens setting of 24 mm was employed for Views 2 through 5, View 7 and Views 9 and 10 to provide a greater field of view given the aspect and distance between the site and these photographic locations.

The locations of the photographic points are recorded in the field using a GPS-enabled tablet computer and were subsequently plotted on the maps contained in the attachments to this document.

Photographic Simulation

Photographic simulations were generated for the representative locations where the balloon was visible during the in-field activities. The photographic simulations portray a scaled rendering of the proposed Facility from these locations, with four wireless service providers represented. Using field data, site plan information and 3-dimension (3D) modeling software, a spatially referenced model of the site area and Facility were generated. Geographic coordinates (latitude and longitude) were collected in the field for all of the photograph locations via GPS and later used to generate 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. The balloon was included in the photographs to provide a visual marker and to cross-reference the height and proportions of the proposed Facility. As was noted previously in this report, the initial balloon float was conducted at 125 feet AGL. The photographic simulations included in this analysis reflect the currently proposed height of 103 feet AGL. The height was reduced to comply with the State Historic Preservation Officer's determination of no adverse effect. Since the height of the monopole depicted in the simulations is primarily determined based on 3D modeling techniques (as indicated above), the height at which the balloon was previously flown is of no consequence in terms of portraying the overall height of the proposed Facility. The balloon float photographs, though flown at 125 feet, provide a useful visual marker and allow viewers to cross-reference the height and proportions of the proposed Facility. A photolog map and the simulations are contained in Attachment A.

CONCLUSIONS

Based on this analysis, areas from where the proposed 103-foot tall Facility would be visible above the tree canopy comprise approximately 1,446 acres. As depicted on the attached viewshed map (Attachment B), the majority of year-round visibility would occur over open

² Warren, Bruce. *Photography*, West Publishing Company, Eagan, MN, c. 1993, (page 70).

Note: Focal lengths ranging from 17 mm to 50 mm can approximate views similar to that achieved from the unaided human eye. Two key factors to consider when determining what specific focal length to use to best represent "real world" conditions is field of view and relation of sizes between objects in the frame. A 17 mm focal length has a wider field of view, which is more representative of the overall extent (including peripheral vision) that the human eye typically sees. At this focal length, relation of sizes between objects is skewed and not entirely accurate to what the human eye experiences. A 50 mm focal length has a narrower field of view than that of the human eye; however, the relation of sizes between objects is more representative to that of what the human eye perceives. When producing photographic simulations, VHB has chosen to use a 50 mm focal length whenever possible. For presentation purposes, such as in this report, the photographs are produced and viewed in an approximate 6.5" by 9.5" format. VHB has determined that when viewing a proposed facility at this format size, it is important to provide the largest representational image while maintaining an accurate relation of sizes between objects within the frame of the photograph.

water on portions of Long Island Sound. Potential views over open account for roughly 1,362 acres of the 1,445-acre total (representing approximately 94% of the anticipated year-round visibility). Areas of year-round visibility over undeveloped tidal marshes to the northwest and northeast total an additional \pm 54 acres within the Study Area. Other areas of potential year-round visibility that are land-based, account for approximately 30 acres and extend to select portions of Route 142, Fairview Avenue, Hilda Street, Vera Street, Hilton Avenue, Jefferson Place, River Street, Highland Avenue and Brown Road. Given the high density of residential development within the general vicinity of the proposed host property, VHB estimates that at least partial year-round views of the proposed Facility may be achieved from portions of approximately 35 residential properties located within the Study Area. The locations of these properties are identified in the table provided below. Limited year-round views may also extend to select portions of the Shoreline Greenway Trail that follow Fairview Avenue (represented in View 10) and portions of the Farm River State Park.

The viewshed map also depicts several additional areas where seasonal (i.e. during “leaf off” conditions) views are anticipated. These areas comprise approximately 27 additional acres and are generally located within the immediate vicinity (0.25 mile) of the proposed Facility, as well as a more remote area that encompasses limited portions of the East Haven Town Green and the East Lawn Cemetery (\pm 1.25-mile to the northwest of the site). VHB estimates that seasonal views of the proposed Facility may be achieved from portions of approximately 36 additional residential properties within the Study Area; most of these views would likely be somewhat obstructed by existing vegetation and neighboring structures even during “leaf-off” conditions. The locations of these properties are also included in the table below.

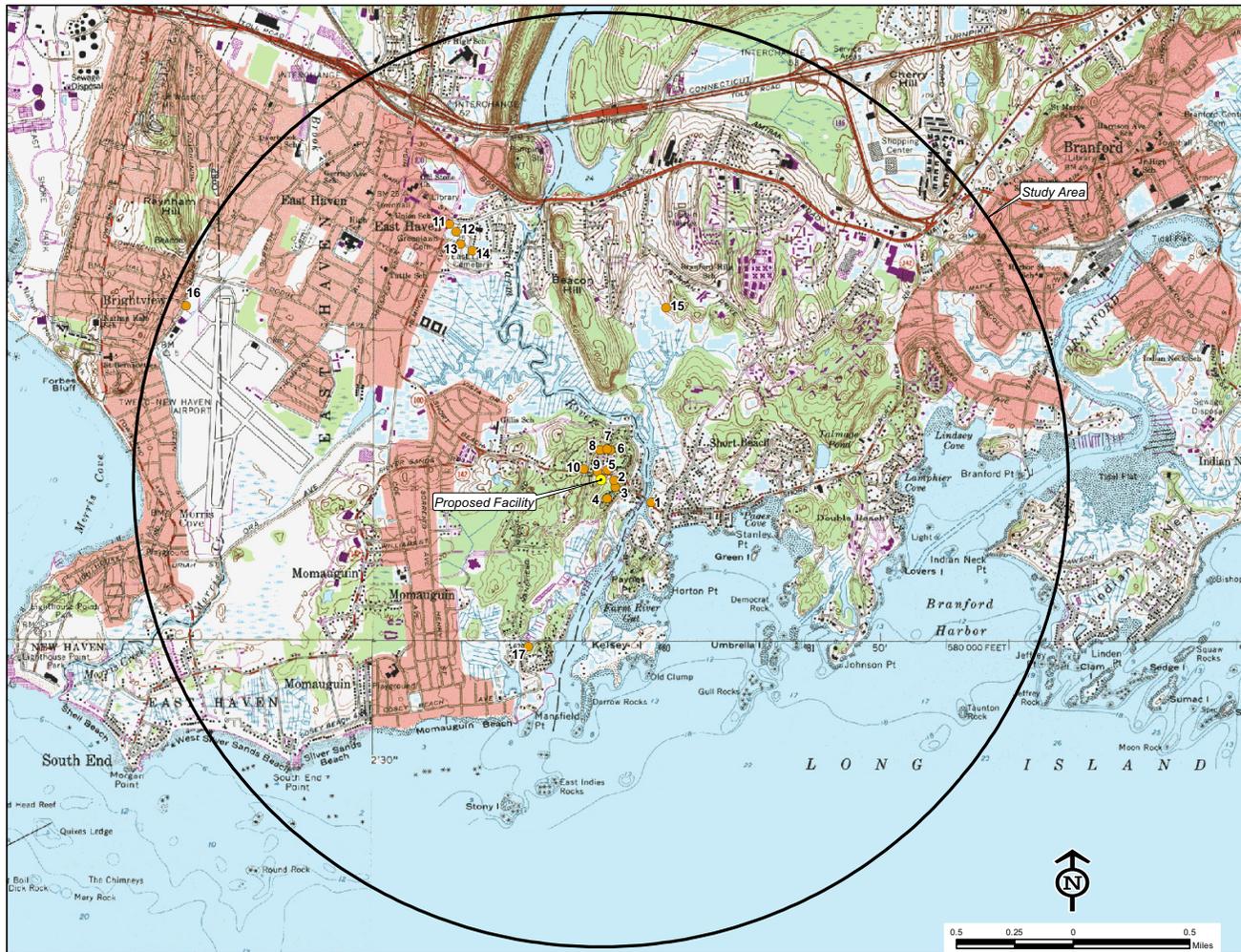
Location	Number of Residential Properties	Number of Residential Properties
	With Potential Year-Round Visibility (Leaf-On)	With Potential Seasonal Visibility (Leaf-Off)
Route 142	6	3
Fairview Avenue	5	5
Hilda Street	1	8
Vera Street	6	4
Hilton Avenue	9	8
Jefferson Place	1	4
Highland Avenue	5	2
Park Place	-	1
Cliff Street	-	1
Brown Road	2	-
TOTAL:	35	36

*Indicates potential year-round or seasonal visibility from portions of “residential” properties. For purposes of this analysis, the term “residential” property may include undeveloped or agricultural land, forested tracts with some clearing, and/or parcels with non-residential structures. Potential visibility on a residential property does not necessarily mean that views would be achieved from within residential dwellings, exterior decks, porches or patios that might be located on such properties. Further, it may be possible to view the Facility from within portions of the shaded areas indicating potential visibility, but not necessarily from all locations within those shaded areas.

Attachment A

Study Area Map, Balloon Float Photographs, and Photographic Simulations

PHOTOLOG MAP



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PHOTOGRAPHIC DOCUMENTATION



BALLOON FLOWN AT 125'

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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ROUTE 142 NORTH OF JEFFERSON PLACE	NORTHWEST	0.25 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC SIMULATION



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ROUTE 142 NORTH OF JEFFERSON PLACE	NORTHWEST	0.25 MILE +/-	YEAR-ROUND

ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

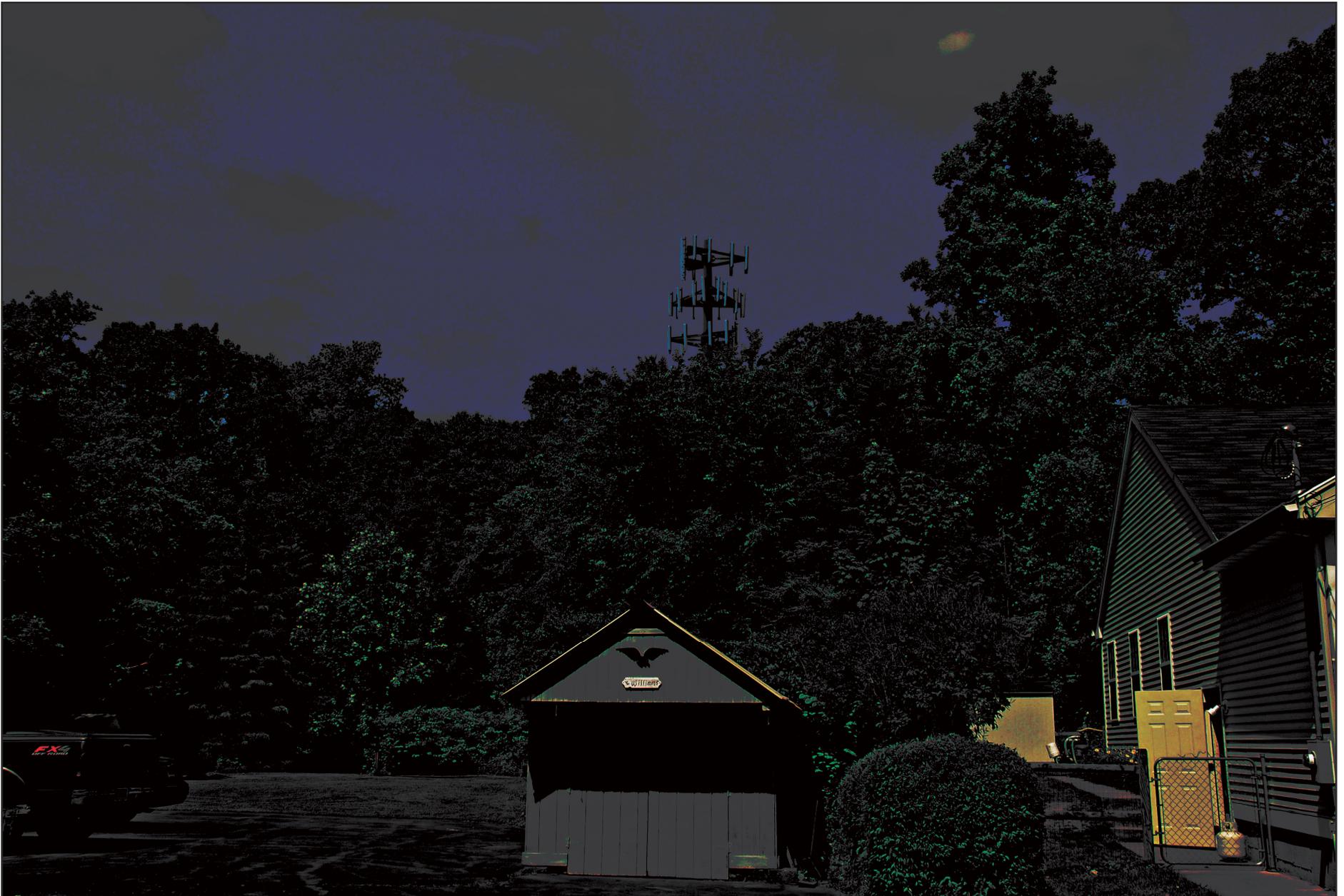
PHOTOGRAPHIC DOCUMENTATION



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	HILTON AVENUE (24mm focal length)	WEST	0.06 MILE +/-	YEAR-ROUND

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PHOTOGRAPHIC SIMULATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	HILTON AVENUE (24mm focal length)	WEST	0.06 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	HILTON AVENUE (24mm focal length)	NORTHWEST	0.07 MILE +/-	YEAR-ROUND

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PHOTOGRAPHIC SIMULATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	HILTON AVENUE (24mm focal length)	NORTHWEST	0.07 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	ADJACENT TO #18 HILTON AVENUE (24mm focal length)	NORTHWEST	0.08 MILE +/-	YEAR-ROUND

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PHOTOGRAPHIC SIMULATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	ADJACENT TO #18 HILTON AVENUE (24mm focal length)	NORTHWEST	0.08 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



ctmidat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	VERA STREET AT ROUTE 142 (24mm focal length)	SOUTHWEST	0.05 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC SIMULATION



ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	VERA STREET AT ROUTE 142 (24mm focal length)	SOUTHWEST	0.05 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	VERA STREET	SOUTHWEST	0.13 MILE +/-	NOT VISIBLE

PHOTOGRAPHIC DOCUMENTATION



BALLOON FLOWN AT 125'

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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	HILDA STREET AT VERNON STREET (24mm focal length)	SOUTHWEST	0.13 MILE +/-	NOT VISIBLE AT 103'

PHOTOGRAPHIC DOCUMENTATION



ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	HILDA STREET	SOUTH	0.13 MILE +/-	NOT VISIBLE

PHOTOGRAPHIC DOCUMENTATION



BALLOON FLOWN AT 125'

ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	END OF HILDA STREET APPROACHING HOST PROPERTY ON ROUTE 142 (24mm focal length)	SOUTHEAST	0.03 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC SIMULATION



Portions of Proposed Monopole Visible Through Trees

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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	END OF HILDA STREET APPROACHING HOST PROPERTY ON ROUTE 142 (24mm focal length)	SOUTHEAST	0.03 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	FAIRVIEW AVENUE APPROACHING ROUTE 142 (24mm focal length)	SOUTHEAST	0.09 MILE +/-	YEAR-ROUND

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PHOTOGRAPHIC SIMULATION



Portions of Proposed Monopole Visible Through Trees

ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
10	FAIRVIEW AVENUE APPROACHING ROUTE 142 (24mm focal length)	SOUTHEAST	0.09 MILE +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



ctm\ddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
11	HEMINGWAY AVENUE (ROUTE 142) OVERLOOKING EAST HAVEN TOWN GREEN	SOUTHEAST	1.27 MILES +/-	NOT VISIBLE AT 103'

PHOTOGRAPHIC DOCUMENTATION



c:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
12	EAST HAVEN TOWN GREEN - VIEW FROM GAZEBO	SOUTHEAST	1.22 MILES +/-	NOT VISIBLE

PHOTOGRAPHIC DOCUMENTATION



BALLOON FLOWN AT 125'

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	RIVER STREET AT GREEN LAWN CEMETERY	SOUTHEAST	1.17 MILES +/-	YEAR-ROUND

ctm10dat\40938.07\graphics\FIGURES\40938.07_Photosim

PHOTOGRAPHIC SIMULATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
13	RIVER STREET AT GREEN LAWN CEMETERY	SOUTHEAST	1.17 MILES +/-	YEAR-ROUND

PHOTOGRAPHIC DOCUMENTATION



ct:\mddat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
14	RIVER STREET AT GREEN LAWN CEMETERY	SOUTHEAST	1.12 MILES +/-	NOT VISIBLE AT 103'

PHOTOGRAPHIC DOCUMENTATION



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VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
15	ADJACENT TO #33 HELEN ROAD	SOUTHWEST	0.79 MILE +/-	NOT VISIBLE AT 103'

PHOTOGRAPHIC DOCUMENTATION



ctmiddat40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
16	INTERSECTION OF BURR STREET AND FORT HALE ADJACENT TO TWEED AIRPORT	SOUTHEAST	1.92 MILES +/-	NOT VISIBLE

PHOTOGRAPHIC DOCUMENTATION



ct:\midat\40938.07\graphics\FIGURES\40938.07_Photosim

VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
17	MANSFIELD GROVE ROAD AT WHALERS POINT ROAD	NORTHEAST	0.78 MILE +/-	NOT VISIBLE

Attachment B

Viewshed Map

Viewshed Analysis
Proposed North Atlantic Towers
Wireless Telecommunications Facility
East Haven Riverside Volunteer
Fire Department (CT1109-D)
82 Short Beach Road, East Haven, Connecticut

NOTE:
 - Viewshed analysis conducted using ESRI's Spatial Analyst.
 - Proposed facility height is 103 feet.
 - Existing tree canopy height estimated at 65 feet.
 - Study Area is comprised of a two-mile radius surrounding the proposed facility and includes 8,042 acres of land.

DATA SOURCES:
 - Digital elevation model (DEM) derived from Connecticut LiDAR-based Digital Elevation Data (collected in 2000) with a 10-foot spatial resolution produced by the University of Connecticut and the Center for Land Use Education and Research (CLEAR); 2007
 - Forest areas derived from 2004, 2006 and 2008 digital orthophotos with 0.5-foot, 1-foot and 1-meter pixel resolutions, respectively; digitized by VHB, 2010
 - Base map comprised of Branford (1984), New Haven (1984) and Woodmont (1971) USGS Quadrangle Maps
 - Municipal and Private Open Space data layer provided by CT DEP, 1997
 - Federal Open Space data layer provided by CT DEP, 2004
 - CT DEP Property data layer provided by CT DEP, December 2010
 - CT DEP boat launches data layer provided by CT DEP, Dec 2008
 - Scenic Roads layer derived from available State and Local listings

Map Date: 4/10/2012

Legend

-  Proposed Tower Location
-  Photographs - June 6, 2011
-  Balloon is not visible
-  Balloon visible above trees
-  Year-Round Visibility (Approx. 1,146 acres - 94% over open water)
-  Seasonal Visibility (Approx. 27 acres)
-  Protected Municipal and Private Open Space (CT DEP, 1997)
-  Cemetery
-  Preservation
-  Conservation
-  Existing Preserved Open Space
-  Recreation
-  General Recreation
-  School
-  Uncategorized
-  CT DEP Property (CT DEP, December 2010)
-  State Forest
-  State Park
-  DEEP Owned Waterbody
-  State Park Scenic Reserve
-  Historic Preserve
-  Natural Area Preserve
-  Fish Hatchery
-  Flood Control
-  Other
-  State Park Trail
-  Water Access
-  Wildlife Area
-  Wildlife Sanctuary
-  Federal Open Space (CT DEP, 2004)
-  Boat Launches (CT DEP, Dec 2009)
-  Scenic Road (State and Local)
-  Hiking Trail
-  Town Line

Inset Map
Town of East Haven



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