

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

RE: APPLICATION BY T-MOBILE  
NORTHEAST LLC FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED  
FOR A TELECOMMUNICATIONS FACILITY  
AT MOOSE HILL ROAD IN THE TOWN  
OF GUILFORD, CONNECTICUT

DOCKET NO. 417

Date: August 9, 2011

**PRE-FILED TESTIMONY OF PAUL LUSITANI**

**Q1. Please state your name and profession.**

A1. Paul Lusitani. I am a Project Engineer employed by Clough Harbour & Associates ("CHA"). CHA is located at 2139 Silas Deane Highway, Rocky Hill, Connecticut. My responsibilities at CHA include civil site design, field investigations, visual analysis studies, construction oversight, project management and technical oversight for telecommunications facilities in Connecticut and Massachusetts.

**Q2. What kind of services does CHA provide?**

A2. Among many other services, CHA provides a full array of services for the permitting of telecommunications facilities, including structural design and guidance, visual impact analyses, wetlands compliance and environmental assessments.

**Q3. Please summarize your professional background in telecommunications.**

A3. I have assisted in the permitting of over 450 telecommunications projects in New England over the past 11 years. My responsibilities include the provision of services related to civil site design, field investigations, visual analysis studies, construction oversight, project management, technical oversight and regulatory permitting support. I

have performed visual analysis studies relating to telecommunications facilities over the past 9 years. I have a B.S. in civil engineering from Central Connecticut State University. I am currently an Engineer-in-Training in Connecticut. Please see Curriculum vitae appended hereto as Attachment A.

**Q4. What services did CHA provide T-Mobile regarding the proposed Facility?**

A4. T-Mobile retained CHA to perform a visibility study ("Study") and provide a Visual Analysis Report ("Report") for the proposed telecommunications facility ("Facility") on real property known as Map 66, Parcel 64 on the Guilford Assessor's Map and commonly known as Moose Hill Road, Guilford, Connecticut ("Property"). I performed and/or oversaw these activities associated with the proposed Facility.

**Q5. Please describe the process for conducting the Study.**

A5. The Study consists of a predictive computer model and in-field analysis. The predictive computer model assesses the potential visibility of the Facility within a two mile radius ("Study Area"), including private property and/or otherwise inaccessible areas for field verification. The in-field analysis consists of a "balloon float" and drive through reconnaissance of the Study Area. This in-field investigation allows CHA to obtain location and height representations, back-check the initial predictive computer model results and assess the visibility of the proposed Facility from areas accessible to the public. CHA assesses the results of the predictive computer model and the in-field analysis and incorporates these results into the final viewshed map. In this case, CHA

had the opportunity to review in-field conditions via a balloon float on January 21, 2010. The completed Report and viewshed map are included in Exhibit N of the Application.

**Q6. Please describe how CHA prepared the viewshed analysis for the Report.**

A6. CHA uses a computer modeling tool, developed by CHA's Technology Solutions Group, to calculate the areas within the Study Area where the Facility would be visible. This software is based upon data such as the height of the Facility, the Facility's ground elevation, the surrounding topography and existing vegetation. The computer model is based upon a proprietary AutoCAD based application.

CHA first constructs a digital elevation model, which is derived from USGS topography maps, to develop a three dimensional topographic layer of the Study Area. Using this digital elevation model, CHA evaluates the visibility of the proposed Facility with topography as the only visual constraint. This initial analysis provides a reference point useful in understanding areas that may provide direct lines of sight and determining seasonal visibility fluctuations. CHA then adds vegetation using 2004 aerial photographs and conducts a second analysis. In this case, CHA assigned a height of 65 feet for the existing vegetation data. CHA verifies the areas of visibility, based upon the implementation of the elevation and vegetation data layers, during the in-field analysis.

CHA also performs research regarding the locations of potential sensitive visual receptors, such as historic sites, historic districts, recreational areas, walking trails, beaches, scenic roads as well as other sensitive visual receptors. CHA includes any existent sensitive visual receptors on the viewshed map. Historic sites and districts are

culled from the National Register of Historic Places. State parks and walking trail systems are confirmed using the Connecticut Department of Environmental Protection database. CHA determines the existence of scenic roads from the Connecticut Department of Transportation list of designated scenic roads. Finally, municipal areas, such as beaches and recreational areas, are determined using town resources and mapping.

**Q7. Please describe how CHA conducted the balloon float.**

A7. On January 21, 2010, CHA raised and maintained a red balloon, approximately 60 inches in diameter, at the location of the proposed Facility at a height of 140 feet above grade level ("AGL") to conduct the initial in-field analysis. This height comported with the initial configuration of the Facility. After stabilizing the balloon, CHA traveled the local public thoroughfares within the Study Area to verify the computer generated viewshed map and inventory areas of visibility. In conducting the drive-by reconnaissance, CHA focused its evaluation on nearby residential areas and other potential sensitive visual receptors. While the balloon was aloft, CHA took photographs from a variety of locations, settings and vantage points to assist in evaluating where the balloon was visible. CHA also recorded the latitude and longitude of each photograph using a handheld global positioning system (GPS) receiver unit. The photographs were taken using a Sony Cyber-Shot DSC-W70 Camera with a 3X zoom lens. CHA set the lens to represent 50 millimeters, which most accurately represents the unaided human eye.

**Q8. What steps did CHA implement to assess the potential visibility of the Facility reconfigured to 110 feet AGL with a stealth design?**

A8. CHA performed a new viewshed analysis, using its computer modeling tools, of the Facility at a height of 110 feet AGL, with flush mounted antennas and a monopole painted to match the bark of nearby trees. CHA compared the new viewshed analysis with the initial modeling results. Additionally, CHA revised the photo-simulations to depict the Facility at 110 feet AGL with the aforementioned stealth design. Because the reconfigured Facility consisted of a shorter monopole, CHA did not have to perform any additional in-field reconnaissance.

**Q9. How did CHA select the locations for the photographs during the in-field investigation?**

A9. CHA selected several of the photograph locations using a preliminary version of the viewshed map to identify areas adjacent to public roads within the Study Area from where the proposed Facility might be visible. CHA selects other locations based on in-field observations made during the time of the balloon float.

**Q10. Please describe the estimated visibility of the proposed Facility.**

A10. The Facility would be partially visible year round to approximately 1,072.7 acres within the 8,053 acre Study Area. The majority of these views would be distant views from the Long Island Sound.

On July 27, 2011, T-Mobile had an additional balloon float performed so CHA could confirm the results of its computer modeling regarding views of the Facility from the Long Island Sound. The balloon float consisted of an approximate 5 foot diameter

red, helium-filled weather balloon, which was tethered to a height of 110 feet AGL. CHA used the photographs to produce photo-simulations of views of the proposed Facility from the Long Island Sound. Please see viewshed (detailing photo locations on the Long Island Sound) and related photo-simulations appended hereto as Attachment B.

Views from the Long Island Sound, in the range of 1.5 miles from the facility, would reveal a distant view of the top of the Facility, which would be painted to match the bark of the surrounding trees. Views 2.0 miles or further from the Facility would incorporate a vegetative backdrop as the topography elevates inland beyond the site of the proposed Facility. Views from the Long Island Sound within 1.5 miles of the facility would reveal a view of the upper 10 to 25 feet of the Facility above the tree line.

The on-land, partial views of the Facility would be within close proximity of the Facility's proposed location – within approximately .66 miles of the Facility. Many of the abutting properties would not have views of the proposed Facility. Only 2 abutting properties would have year round views, which would include the upper portions of the Facility. These properties do not host residential dwellings. The Facility would be partially visible year round to 71 residential properties within the Study Area, most of which would experience partial views of the proposed Facility within close proximity of the Facility's proposed location.

There would be some partial, year round views of the Facility from off-shore sections of the Stony Creek – Thimble Islands Historic District and Shell Beach. These, views, however are from a distance, specifically those views from the Stony Creek – Thimble Islands Historic District. The Facility would not be visible year round from Route 146.

Areas of seasonal visibility would comprise of approximately 54.2 additional acres (0.70 percent) of the Study Area, primarily within the immediate vicinity of the proposed Facility. The areas of seasonal visibility are generally within close proximity of the proposed Facility (within 0.66 miles). Approximately 10 abutting properties would have seasonal views of the proposed Facility, 6 of which host residential dwellings. The Facility would be visible seasonally from select portions of Route 146; however, the photo-simulations demonstrate that most of those views are of the upper portions of the Facility, from a distance and through existing mature vegetation.

Additionally, the proposed Facility would not impact the Westwoods Trail system. At 110 feet AGL, the Facility would not be visible from any of the points of interest along the trail system.

**Q11. Please describe any features that would reduce potential visual impact of the proposed Facility.**

A11. The topography and existing vegetation would reduce the potential visual impact of the proposed Facility. This vegetation sits on gently rolling hills that range in ground elevation from approximately 50 feet above mean sea level ("AMSL") to approximately 150 feet AMSL. The tree canopy covers nearly 3,420 acres of the 8,053 acre Study Area. The existing vegetation in the area of the Property has an average estimated height of 65 feet. The Property is a large, 163 acre parcel, which is undeveloped and hosts existing mature vegetation.

Additionally, the proposed Facility would be designed with a stealth configuration to limit the potential visual impact. In accordance with the State Historic Preservation

Office's ("SHPO") opinion and meaningful discourse with the Scenic Road Advisory Committee, T-Mobile would design the Facility so that (1) the monopole is painted medium gray-brown to blend with the bark color of adjacent trees; (2) the antennas are installed with flush mounts; and (3) the monopole does not exceed 110 feet AGL.

**Q12. Will the proposed Facility have any visual impact on any sensitive visual receptors such as scenic, historic or recreational sites, hiking trails or parks?**

A12. The Facility would not provide year round views to Route 146 (scenic road), nor would the proposed Facility provide any views from the Westwoods Trail system. There would be some distant partial views from offshore locations near the Thimble Islands Historic District and Shell Beach. The SHPO and the Scenic Road Advisory Committee concluded that the proposed Facility would not adversely impact any sensitive visual receptors so long as the Facility design comports with SHPO's requirements, set forth in the SHPO's letter, dated February 16, 2011.



Paul Lusitani 8/9/11  
Paul Lusitani

Sworn and subscribed to before me this  
9<sup>th</sup> day of August, 2011.

Cathy L. Davis  
Notary Public  
My Commission expires 1/31/2012

# **ATTACHMENT A**

**Education**  
Central Connecticut State University  
B.S. Civil Engineering Technology

**Professional Registration**  
E.I.T. - CT

**Paul A. Lusitani, E.I.T**

**Project Engineer**

Mr. Lusitani has over 11 years of experience on telecommunications engineering projects. Mr. Lusitani has been with CHA 11 years and has served as the Project Engineer for telecommunications work for a majority of his time at CHA. In this capacity, Mr. Lusitani is responsible for telecommunications projects in the Southern New England Region with his main focus on Connecticut and Western Massachusetts. He has provided civil site design, field investigations, visual analysis studies, construction oversight, project management, QA/QC, and technical oversight for the following communications related projects:

***OptaSite – New Builds***

Design for ten raw land sites in Connecticut

***National Grid Wireless – New Builds***

Design for two raw land sites in Connecticut

***T-Mobile New England – New Builds  
(f.k.a. Omnipoint Communications Inc.)***

Design for more than 160 sites including raw lands, co-locations, smokestacks, water tanks, rooftops, church steeples, and utility towers in support of the network expansion in Connecticut and Massachusetts.

***AT & T Wireless Services - New Builds***

Design of more than 80 sites including raw land, co-locations, and rooftops in Connecticut

***MCF Communications – New Builds***

Design for five raw land sites in Connecticut.

***AT & T Wireless Services - LTE Overlay***

Design of more than 40 sites for the LTE build-out in Southern Connecticut

***Nextel Communications – New Builds***

Design for more than 50 sites in support of the Nextel network expansion in Connecticut and Massachusetts.

***T-Mobile New York – New Builds  
(f.k.a. Omnipoint Communications Inc.)***

Design for more than 100 rooftop sites in support of the network expansion in New York City and Long Island.

***SBA Towers – New Builds***

Design for more than ten raw land sites in Connecticut and Massachusetts.

# **ATTACHMENT B**



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

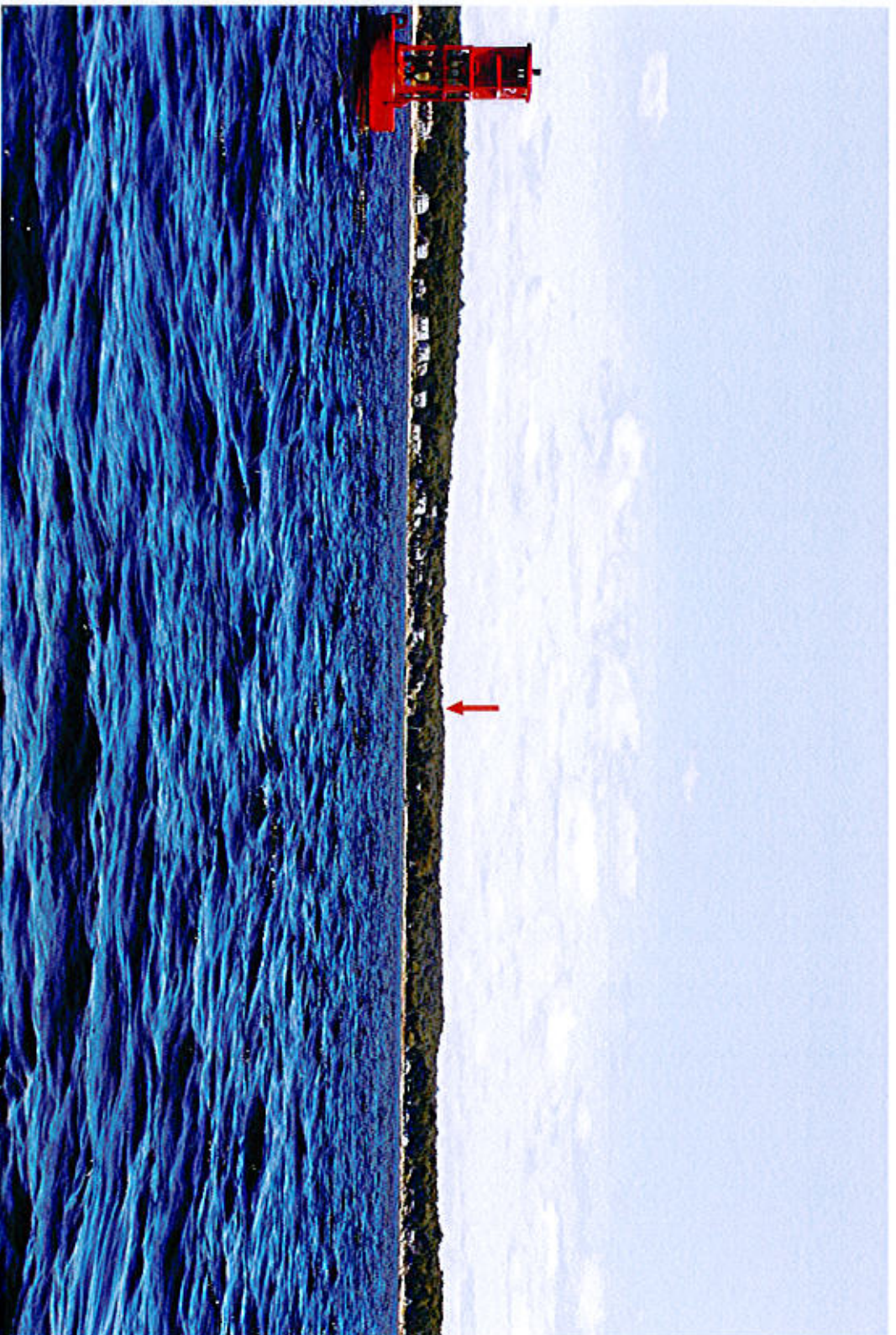


DATE: AUG 2011

SITE: CTNH805  
GUILLFORD

VIEW 1 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

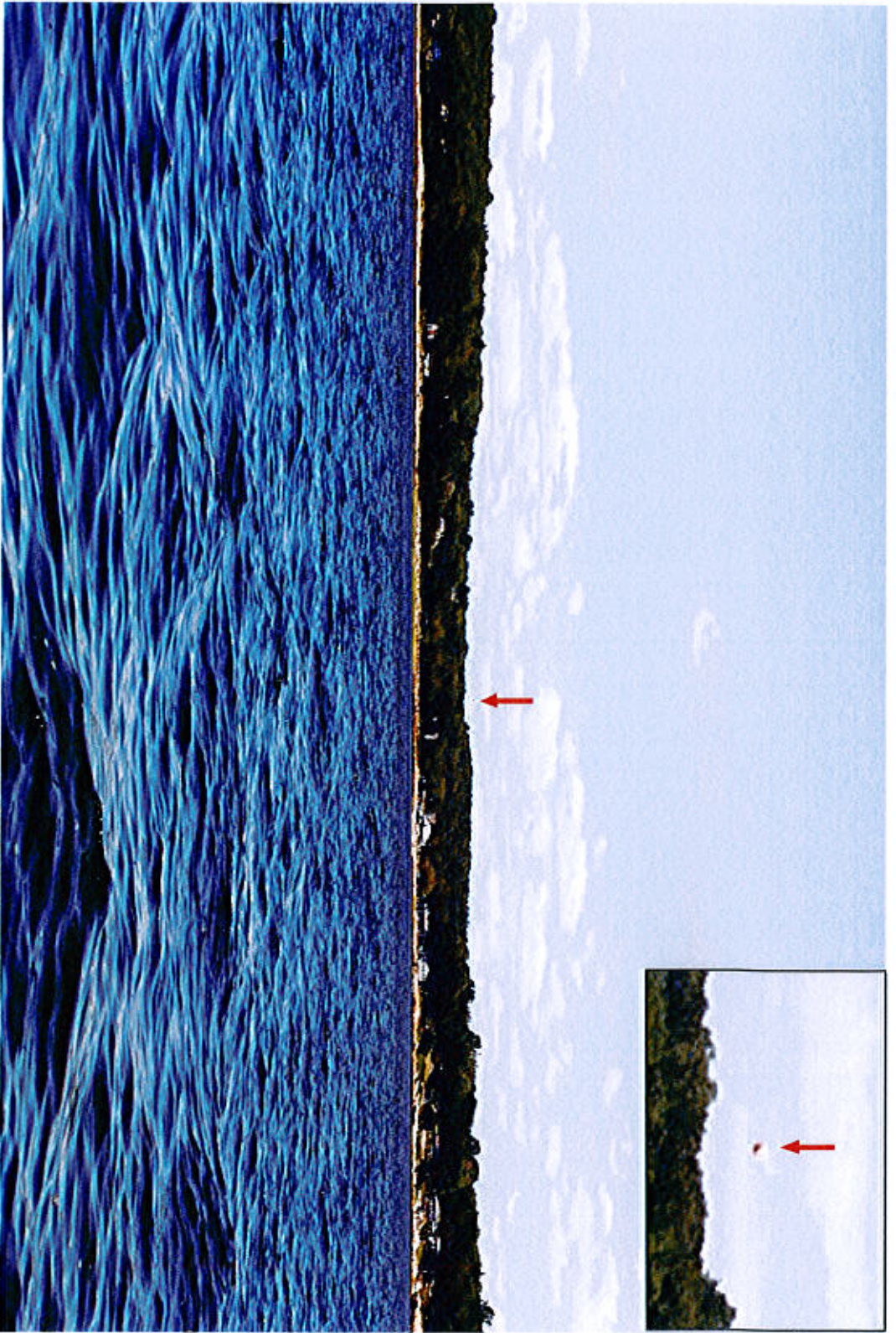


DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 1 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

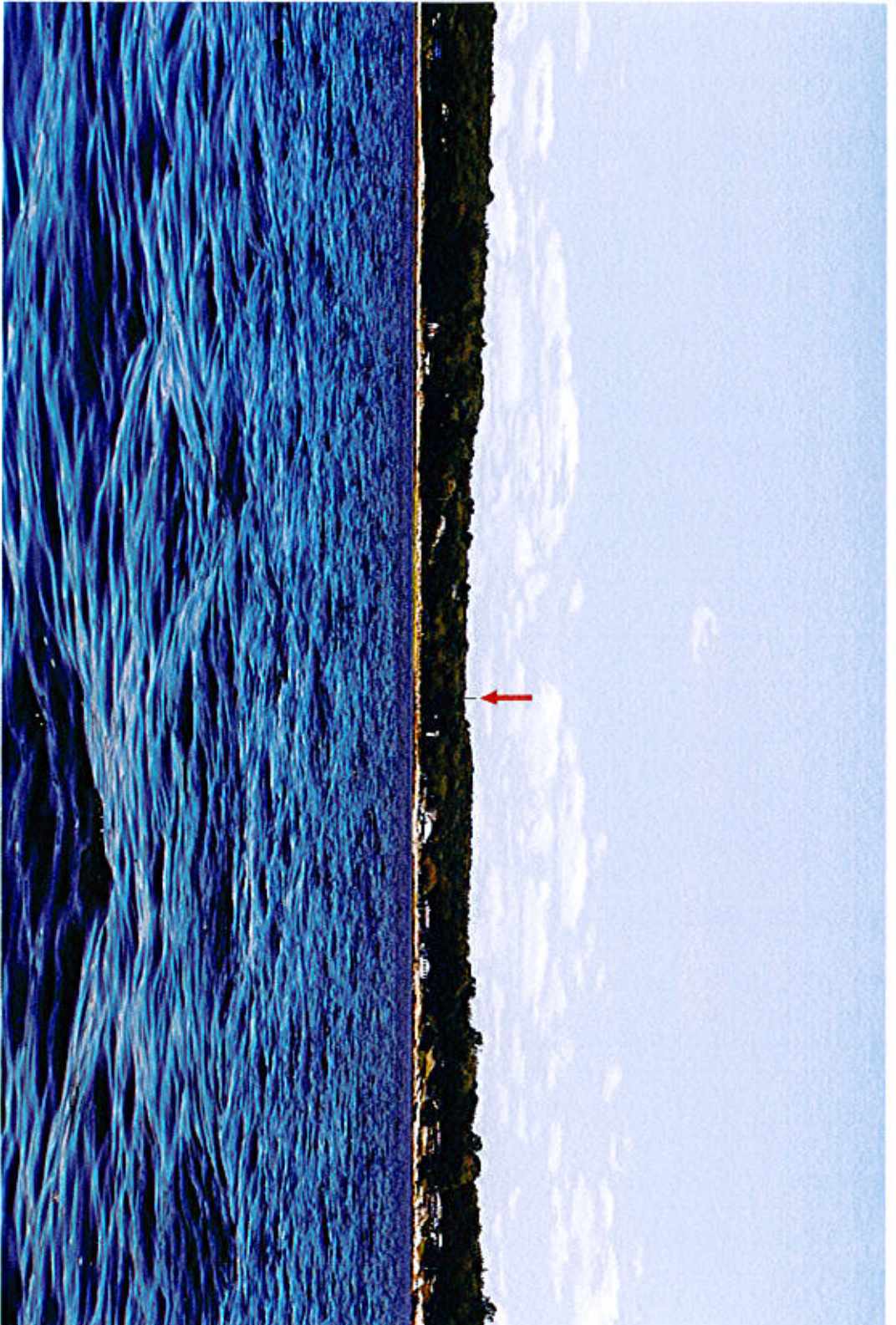


DATE: AUG 2011

SITE: CTNH805  
GUILDFORD

VIEW 2 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILDFORD

VIEW 2 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

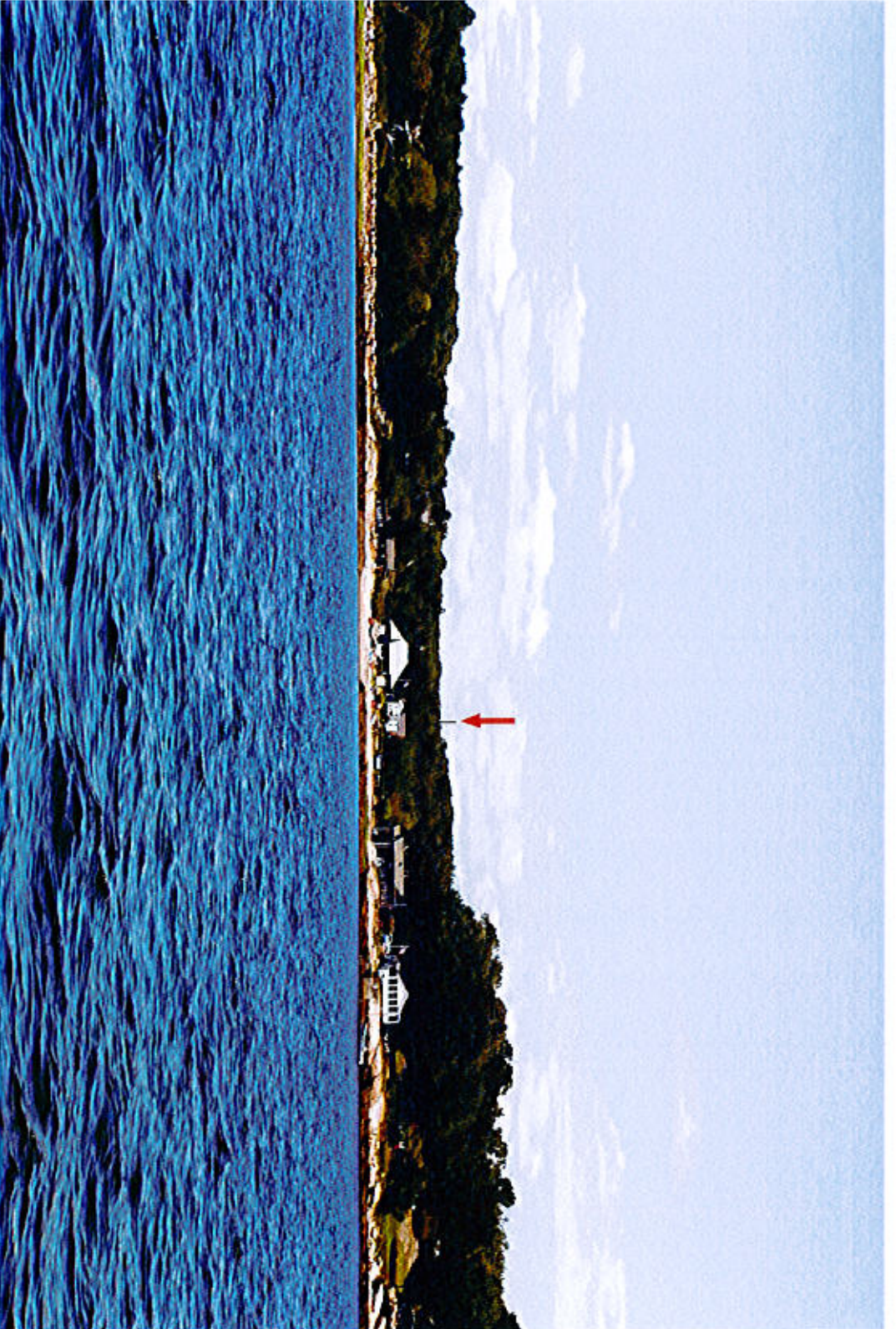


DATE: AUG 2011

SITE: CTNH805  
GUILDFORD

VIEW 3 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 3 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 4 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 4 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 5 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 5 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 6 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



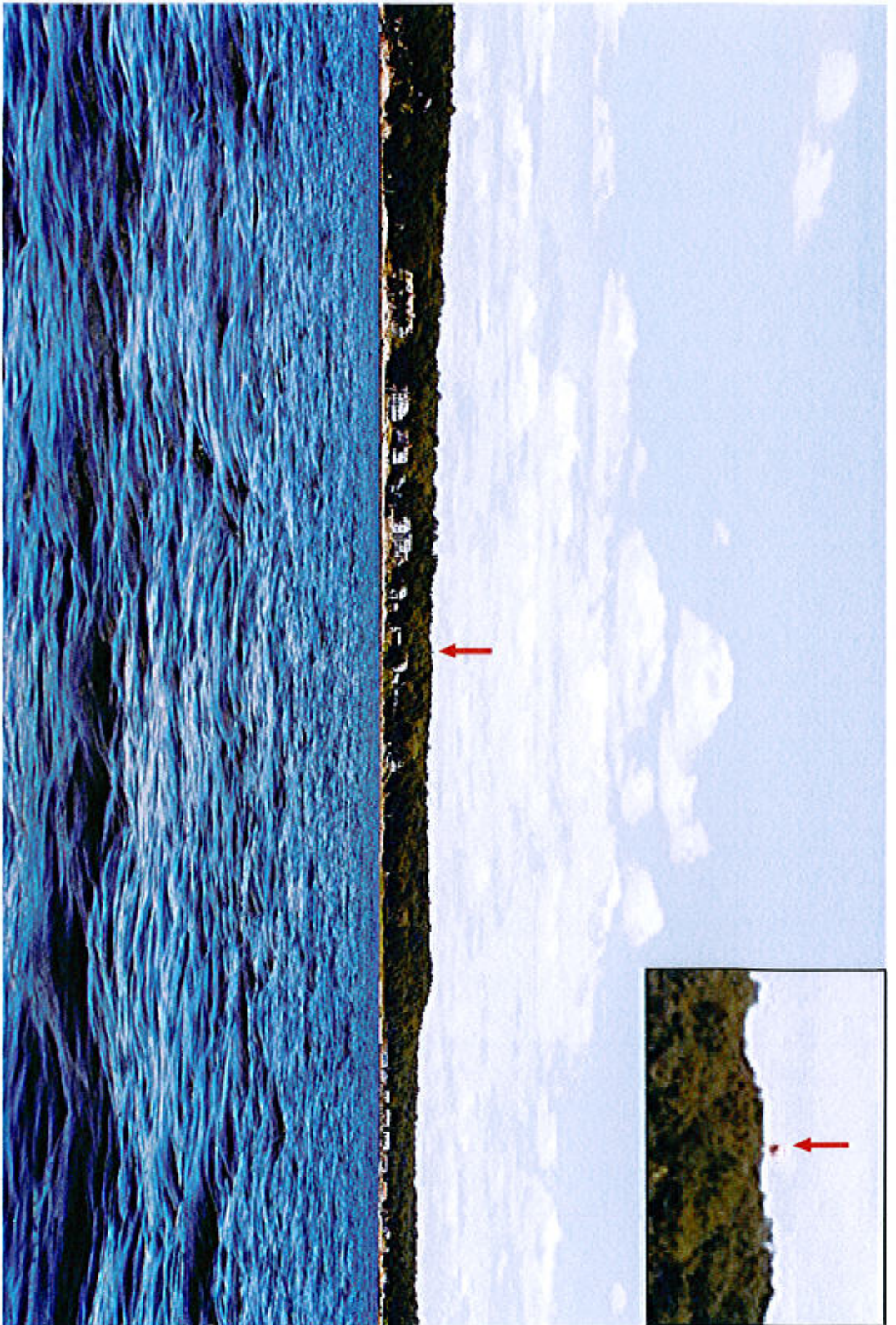
DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 6 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002





Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

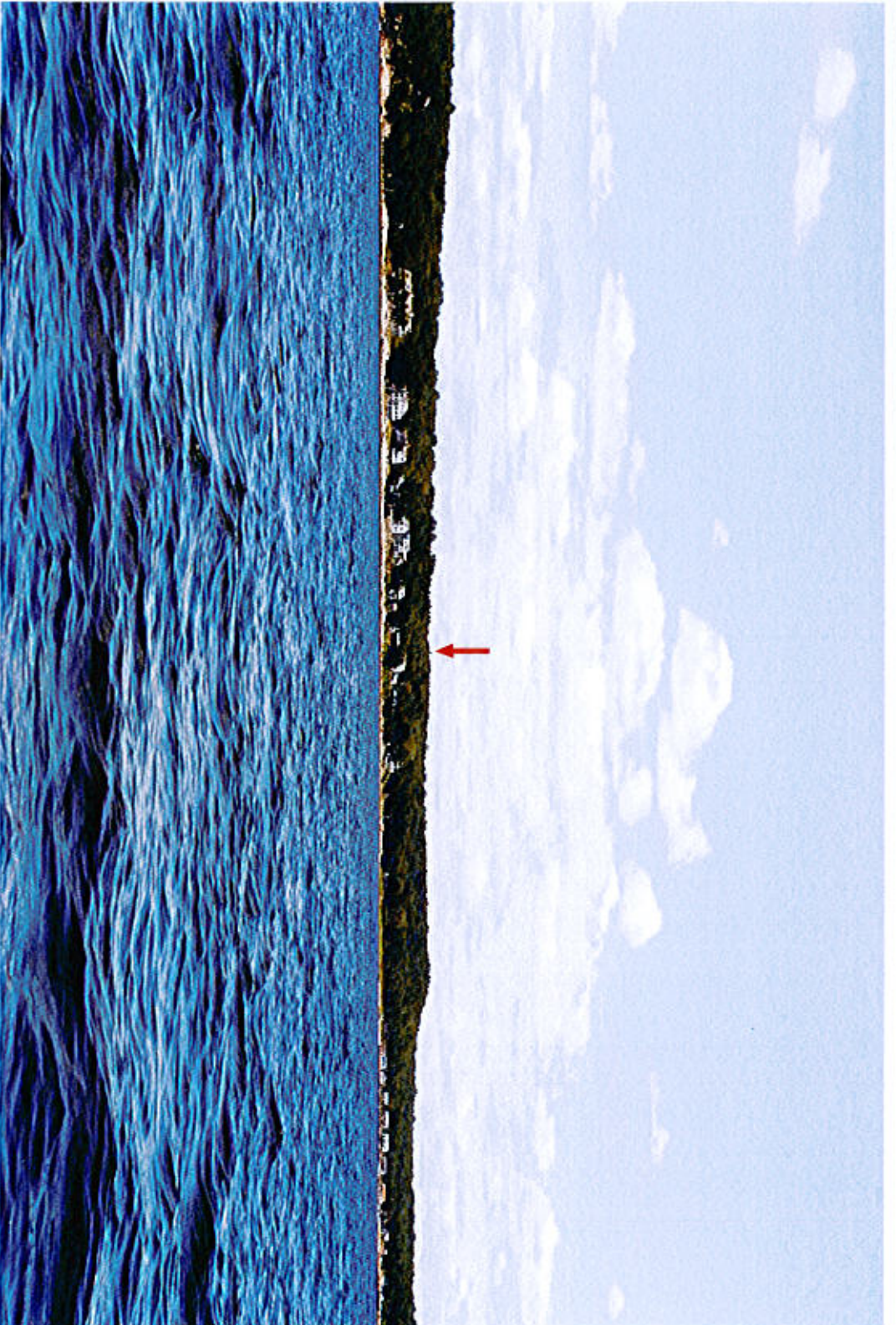


DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 7 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

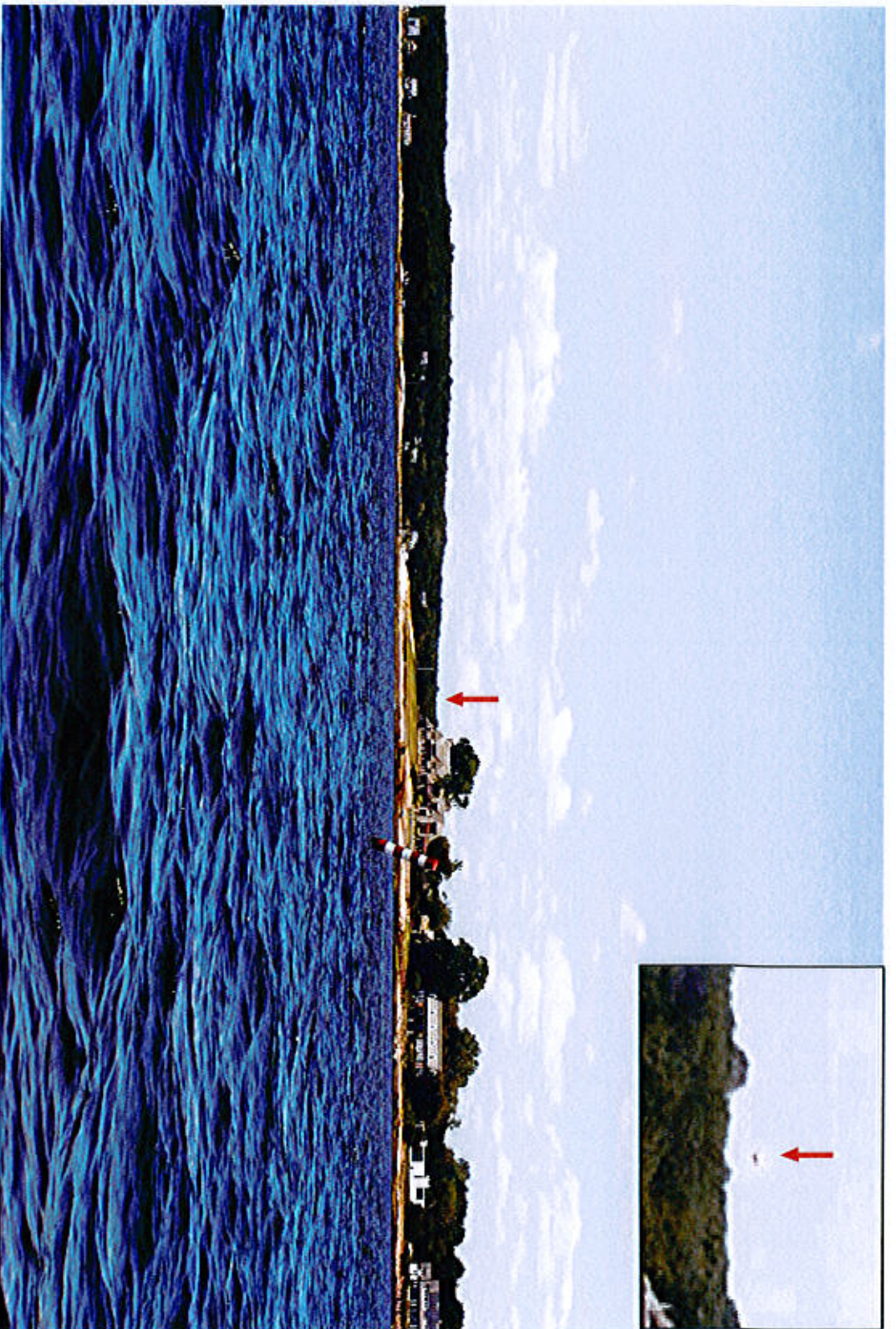


DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 7 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

SITE: CTNH805  
GUILDFORD

VIEW 8 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

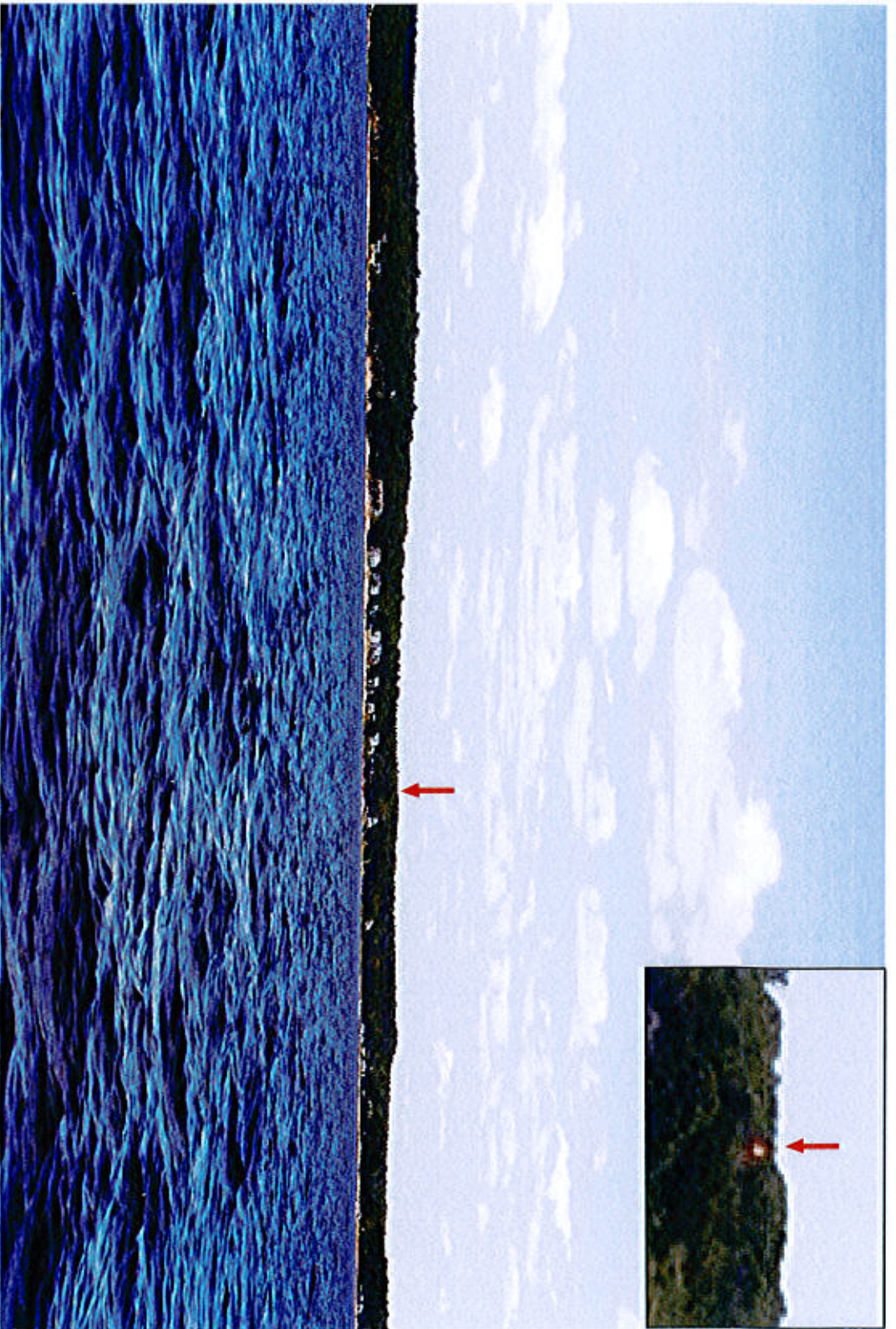


DATE: AUG 2011

SITE: CTNH805  
GUILFORD

VIEW 8 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design

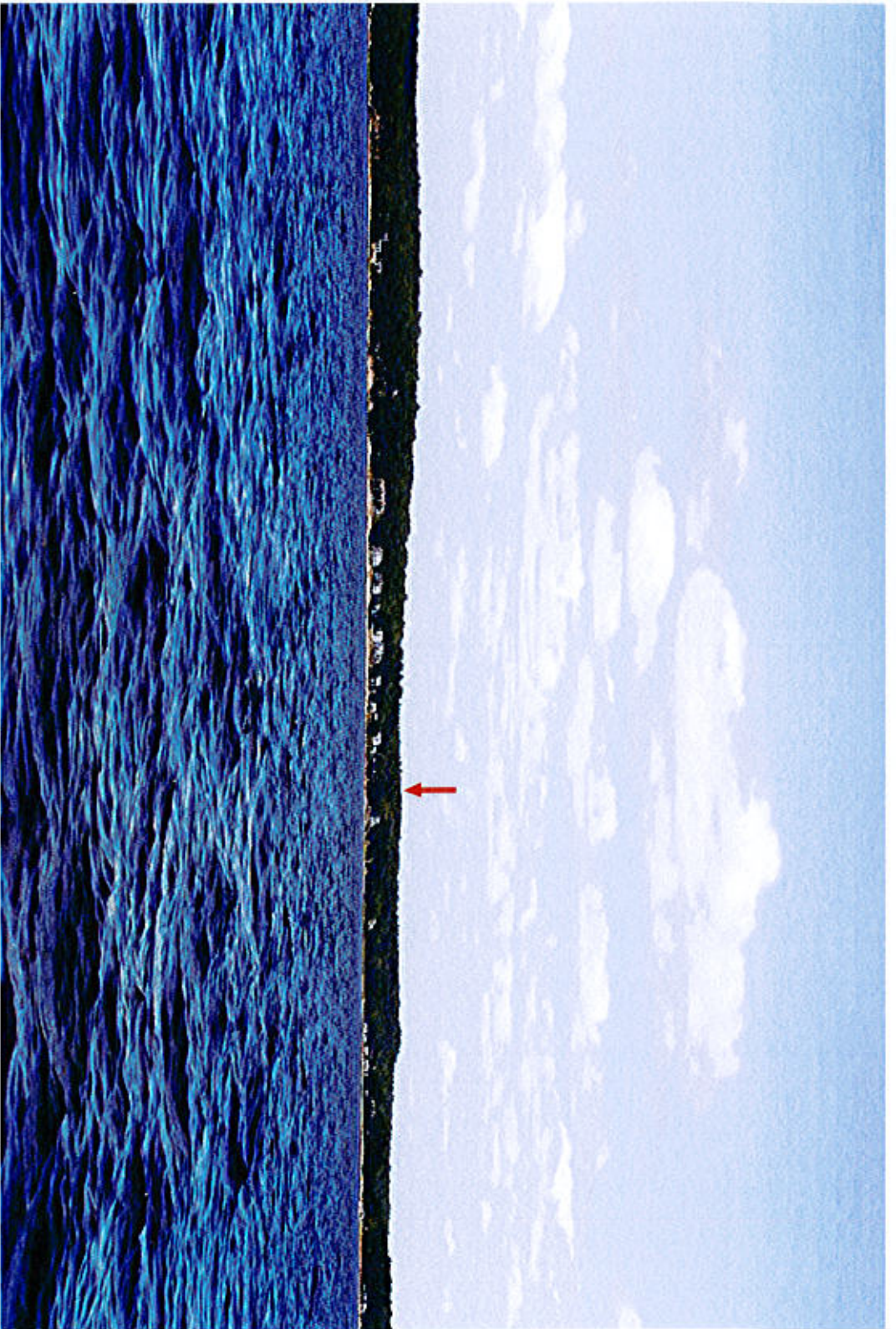


DATE: AUG 2011

SITE: CTNH805  
GUILDFORD

VIEW 9 - EXISTING VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002



Photosim for conceptual purposes only - actual antenna & equipment locations to be determined based on final engineering design



DATE: AUG 2011

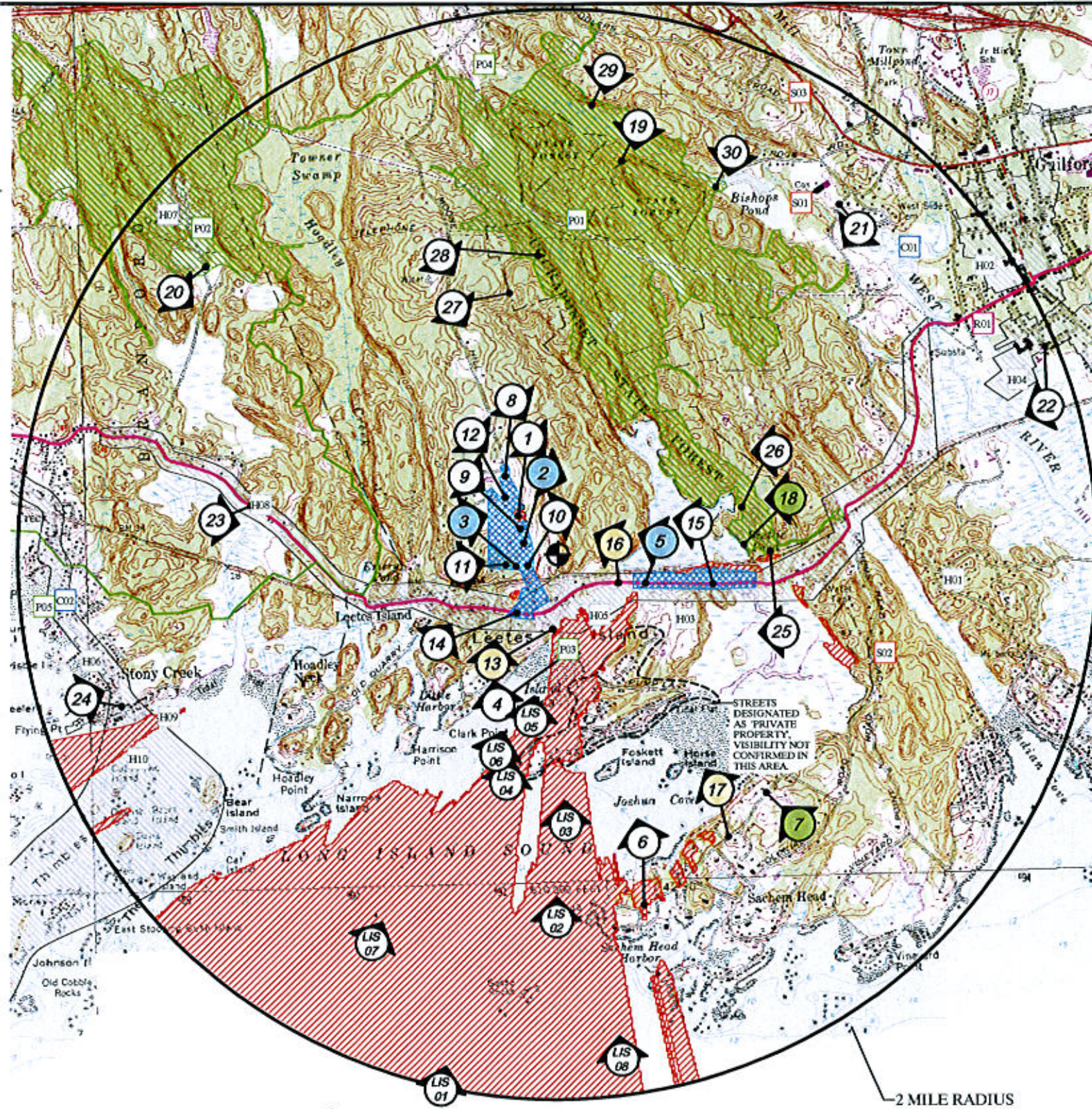
SITE: CTNH805  
GUILDFORD

VIEW 9 - PROPOSED VIEW FROM  
LONG ISLAND SOUND LOOKING  
NORTH TOWARDS SITE

**T-MOBILE NORTHEAST LLC**  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

**Distances from Photo Locations to Tower**

PHOTO	DIST. (FT)
01	1,075
02	694
03	842
04	1,849
05	1,809
06	6,987
07	6,156
08	1,829
09	875
10	620
11	1,030
12	1,503
13	1,441
14	1,386
15	3,089
16	1,321
17	6,401
18	3,656
19	7,713
20	8,856
21	8,728
22	10,343
23	6,069
24	9,003
25	4,150
26	3,700
27	5,150
28	5,800
29	8,720
30	7,760



**NOTES:**  
 1. Only visible areas are shown on the map utilizing the process described in note 2. The remainder of the map has been estimated to be nonvisible utilizing the process described in note 3.  
 2. Seasonal and year round areas of visibility were estimated from a field visual analysis within public R.O.W. and public properties. Areas shown on private property were interpolated from the field visual analysis.  
 3. Nonvisible areas were estimated from a computer generated topography & vegetation analysis and field verification of vegetation & building screening within public R.O.W. and public properties. Vegetation limits were determined from 2004 aerial photos and is assumed to be 65' high. Verification of vegetation height, coverage, and type within private areas not visible from public R.O.W. or public properties was not field verified.  
 4. Historical areas were determined from the National Register of Historic Places  
 5. Parks, schools, cemeteries, and churches were determined from street maps and field observations.  
 6. Scenic roads, if any, were determined from the CTDOT list of designated scenic roads and field observations.

**Legend**

- APPROXIMATE LOCATION OF PROPOSED MONOPOLE
- COMPUTER SIMULATION PHOTOGRAPH LOCATION
- APPROXIMATE LIMIT OF SEASONAL TOWER VISIBILITY
- APPROXIMATE LIMIT OF YEAR ROUND TOWER VISIBILITY
- CHURCH/CEMETERY
- PARKS/TRAILS
- HISTORICAL SITE
- SCHOOL
- SCENIC ROAD
- TRAIL
- APPROXIMATE LIMIT OF HISTORIC DISTRICT
- APPROXIMATE LIMIT OF TRAIL SYSTEM
- VISIBILITY HAS CHANGED FROM YEAR ROUND TO SEASONAL
- VISIBILITY HAS CHANGED FROM SEASONAL TO NON-VISIBLE
- VISIBILITY HAS CHANGED FROM YEAR ROUND TO NON-VISIBLE

- Historic Sites:**
- H01 Jared Eliot House
  - H02 Guilford Historic Town Center
  - H03 Pelatiah Leete House
  - H04 Whitfield Historic District
  - H05 Route 146 Historic District
  - H06 Issac C. Lewis Cottage
  - H07 Norcross Brothers Granite Quarry
  - H08 John Rogers House
  - H09 Stick Style House at Stoney Creek
  - H10 Stoney Creek-Thimble Islands Historic District
- Parks and Trails:**
- P01 Westwoods Trails
  - P02 Stoney Creek Quarry Preserve Trails
  - P03 Shell Beach
  - P04 Peddlers Park
  - P05 Stoney Creek Town Beach
- Schools:**
- S01 A.W. Cox Elementary School
  - S02 Community Nursery School Inc.
  - S03 KinderCare
- Church/Cemetery:**
- C01 West Side Cemetery
  - C02 Church of Christ
- Scenic Roads:**
- State Route 146
  - R01

**Visibility by Acreage**

ITEM	APPROXIMATE ACRES	% OF TOTAL AREA
2 MILE RADIUS AREA	8,053	100%
NOT VISIBLE DUE TO TOPOGRAPHY	2,963.5	36.8%
NOT VISIBLE DUE TO VEGETATION	3,962.6	49.2%
VISIBLE YEAR ROUND	1,072.7	13.3%
POTENTIAL SEASONAL VISIBILITY	54.2	0.7%

**2 MILE VIEWSHED ANALYSIS MAP**  
**MOOSE HILL ROAD, GUILFORD, CT**  
**VISUAL IMPACT ASSESSMENT**

PREPARED FOR:  
**T-MOBILE NORTHEAST LLC**  
 35 GRIFFIN ROAD  
 BLOOMFIELD, CT 06002  
 OFFICE: (860)-692-7100

PREPARED BY:  
 Driving Copyright © 2011  
**CHIA**  
 2130 Silas Deane Highway, Suite 212 - Rocky Hill, CT 06067-2538  
 Main: (860) 387-4557 • www.chiaplanet.com  
 CHIA Project No. 1457-200-1101

APRIL 2011

0 625' 1250' 2500' 5000'

**FIGURE VS-01**

**Visibility by Residence**

STREET	YEAR ROUND TOTAL	SEASONAL TOTAL	STREET	YEAR ROUND TOTAL	SEASONAL TOTAL	STREET	YEAR ROUND TOTAL	SEASONAL TOTAL
Moose Hill Road	2	13	Uncas Circle	1	None	Rockledge Circle*	8	None
Dromara Road	None	7	Shell Beach Road (North of Pump Lane)	10	None	Birch Grove*	10	None
Leetes Island Road	None	2	Shell Beach Road* (South of Pump Lane)	4	None	Beach Road*	9	None
Sanborn Road	None	1	Joshua Point Road*	8	None	Hickory Lane*	4	None
Old Sachems Head Road	8	None				Juniper Knolls*	1	None
Uncas Point Road	6	None						

\*Streets designated as 'Private Property'. Visibility not confirmed in these areas. Residence counts derived from computer visibility model and aerial imagery.