

**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 387 SHORE ROAD IN THE TOWN
OF OLD LYME, CONNECTICUT

DOCKET NO. 392

Date: January 22, 2010

PRE-FILED TESTIMONY OF MICHAEL P. LIBERTINE

Q1. Please state your name and profession.

A1. Michael P. Libertine and I am the Director of Environmental Services employed by Vanasse Hangen Brustlin, Inc. ("VHB"). VHB is located at 54 Tuttle Place in Middletown, Connecticut. My responsibilities at VHB include managing and overseeing the environmental science and engineering projects, including telecommunications projects, undertaken by VHB's Middletown office.

Q2. What kind of services does VHB provide?

A2. Among many other services, VHB provides a full array of services for the permitting of telecommunications facilities, including visual impact analyses, wetlands compliance and environmental assessments under the National Environmental Policy Act of 1969 ("NEPA").

Q3. Please summarize your professional background in telecommunications.

A3. I have a B.S. in natural resources management from the University of Connecticut and a B.A. in marketing from Stonehill College. I am also a Licensed

Environmental Professional in Connecticut. I have served as the project manager for more than 1,600 environmental site assessments and field investigations for property transfers in Connecticut, Rhode Island, New Hampshire, Massachusetts, New Jersey, New York, Florida and Canada.

My background includes eighteen years of consulting in the environmental field. The scope of my consulting services includes visual resource analyses, environmental assessments for NEPA compliance, site screenings, land use evaluations, wetland assessments, vegetative surveys and noise analyses. I have assisted in the permitting of over 500 telecommunications projects in New England over the past eleven years. My responsibilities include the coordination and oversight of site screenings and environmental assessments in accordance with the NEPA, visual impact analyses and regulatory permitting support.

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

A4. T-Mobile retained VHB to perform a Visual Resource Evaluation ("Evaluation") and provide a Visual Resource Evaluation Report ("VRE Report"), a wetlands compliance analysis and a coastal consistency analysis for the proposed telecommunications facility at 387 Shore Road, Old Lyme, Connecticut (the "Facility"). I oversaw these activities associated with the proposed Facility.

Q5. Please describe the process for conducting the Visual Resource Evaluation.

A5. The Evaluation 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 VHB 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. VHB 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, VHB had the opportunity to review in-field conditions via a balloon float on May 11, 2009. The completed VRE Report and viewshed map are included in Exhibit N of the Application.

Q6. Please describe how VHB prepared the viewshed analysis for the VRE Report.

A6. VHB uses a computer modeling tool called ERSI's ArcView® Spatial Analyst, 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. VHB first constructs a digital elevation model, which is derived from Connecticut LiDAR-based digital elevation data produced by the University of Connecticut Center for Land Use Education and Research, to develop a three dimensional topographic layer of the Study Area. A forest canopy layer is then created by hand-tracing (digitizing) mature trees and woodland areas (as depicted on 2006 aerial photographs), converting this into a geographic data layer, and assigning an average height value. During the initial analysis, VHB omits the tree canopy so the only visual constraint is topography. This initial analysis provides a

reference point useful in understanding areas that may provide direct lines of sight and determining seasonal visibility fluctuations. Subsequent to the initial analysis, VHB adds the existing vegetation data (in this case, a height of 60 feet was assigned to this data layer). VHB also includes an additional data layer, obtained from the Connecticut State Department of Environmental Protection, depicting significant resource areas such as State forests and parks, recreational facilities, registered historic sites, open space lands and other sensitive visual receptors. VHB depicts on the view shed map any state-or locally-designed scenic roads and Connecticut blue-blazed hiking trails that exist in the Study Area.

Q7. Please describe how VHB conducted the balloon float.

A7. On May 11, 2009, VHB raised and maintained a four-foot diameter helium filled weather balloon at the location of the proposed Facility at a height of 80 feet to conduct the initial in-field analysis. After stabilizing the balloon, VHB 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, VHB focused its evaluation on nearby residential areas and other potential sensitive visual receptors. While the balloon was aloft, VHB took photographs from a variety of locations, settings and vantage points to assist in evaluating where the balloon was visible. VHB also recorded the latitude and longitude of each photograph using a handheld global positioning system (GPS) receiver unit. The photographs were taken using a NIKON D-80 digital camera body and NIKON eighteen to 135 millimeter lens.

VHB set the lens to fifty millimeters, which most accurately represents the unaided human eye.

Q8. How did VHB select the locations for the photographs during the in-field investigation?

A8. VHB 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. VHB selects other locations based on in-field observations made during the time of the balloon float.

Q9. Please describe the estimated visibility of the proposed Facility.

A9. The areas from which the Facility would be partially visible year round comprise approximately 679 acres. Most of this acreage (97 percent or 662 acres), however, consists of open water on the Long Island Sound. The other areas of visibility are located within the general vicinity of the proposed Facility (within one-quarter to one-half of a mile), including select portions of Shore Road (Route 156) and the existing Amtrak right of way. These potential limited views would be limited to four residential properties along Shore Road within the immediate vicinity of the Facility and to eight residential properties located in the Point O' Woods residential development to the south and southeast of the proposed Facility. There would be approximately thirty-one additional acres of potential seasonal visibility within the Study Area, limited to locations within 0.25 mile or less of the propose Facility. These areas would include approximately fourteen additional residential properties along Shore Road and within the Point O' Woods residential development.

Q10. Please describe any features that would reduce the potential visual impact of the proposed Facility.

A10. The combination of the proposed Facility's relatively low height and intervening topography and vegetation would help to reduce the potential visual impacts. The existing vegetation in the area of the Property is mixed deciduous hardwood species with an average estimated height of sixty feet. The tree canopy covers nearly 2,964 acres of the 8,042 acre Study Area — with 3,579 acres consisting of surface water, mainly portions of Long Island Sound.

Q11. Will the proposed Facility have any visual impact on any sensitive visual receptors such as scenic, historic or recreational sites, hiking trails or parks?

A11. No, the proposed Facility would not have any adverse visual impact on sensitive receptors such as scenic, historic or recreational sites, hiking trails or parks.



Michael P. Libertine

Sworn and subscribed to before me this
22nd day of January, 2010.



Notary Public
My Commission expires

KRISTINE M. PAUL
NOTARY PUBLIC
MY COMMISSION EXPIRES JAN. 31, 2014