

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

RE: APPLICATION BY PHOENIX PARTNERSHIP  
LLC, FOR A CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED  
FOR A TELECOMMUNICATIONS FACILITY  
AT 50 DEVINE STREET IN THE TOWN  
OF NORTH HAVEN, CONNECTICUT

DOCKET NO. 384

Date: November 24, 2009

**PRE-FILED TESTIMONY OF JOHN S. STEVENS**

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

A1. John S. Stevens and I am the founder, CEO and president of Infinigy Engineering & Surveying, PLLC ("Infinigy"), which is an integrated technical services company that provides architectural and engineering ("A&E") services and radio frequency ("RF") engineering, surveying and environmental services to wireless telecommunications providers and tower developers.

**Q2. Please summarize your professional background in telecommunications.**

A2. I have a BS in Civil Engineering from the University of Colorado and an MBA from the State University of New York. I am a licensed engineer in the State of Connecticut and have been since January 2008. I have worked in the wireless industry for approximately twenty years in various capacities including as a chief technical officer and senior vice president and Director of Engineering & Operations for a major wireless provider. I founded Infinigy in 2002 and have provided A&E and RF engineering, surveying and environmental services to wireless telecommunications providers and tower developers since that time.

**Q3. Please describe Infinigy's involvement in this project?**

A3. Phoenix Partnership, LLC ("Phoenix") retained Infinigy to provide A&E engineering, surveying and environmental services for the proposed telecommunications facility to be located at 50 Devine Street, North Haven (the "Facility"). Specifically, Infinigy provided the following services:

- Designing and preparing the site plans and survey for the Facility, including the site access plan, the compound plan, tower elevation, as well as the equipment specifications for the Facility.
- Provide a Visual Resource Evaluation for the proposed Facility, which assesses the visual impact, if any, of the proposed Facility on the surrounding area.
- Conducting a screen of the proposed Facility in accordance with the National Environmental Policy Act of 1969 (the "NEPA") to determine the proposed Facility's impact, if any, on the area's natural, historic, architectural or archeological resources.
- Performing a wetlands analysis to determine whether the proposed Facility would have any impact on any nearby inland wetlands systems.
- Conducting a tree inventory to determine whether any trees would have to be removed or relocated with the construction of the Facility.

**Q4. What was your role in providing Phoenix with these services?**

A4. I supervised and managed all of the work Infinigy provided to Phoenix in connection with the Facility, including the preparation of the site plans, Visual Resource Evaluation, the NEPA screen, the wetlands analysis, and the tree inventory.

**Q5. Please describe the site of the proposed Facility?**

A5. The site of the proposed Facility is located at 50 Devine Street, North Haven (the "Property") and is zoned for general industrial uses. The Property is designated on the Assessor's Map as Parcel 51, Lot 21. The Property consists of a 6.037 acre parcel and

is currently used for commercial and industrial purposes. 424 Chapel Street LLC owns the Property. The Facility would sit within a 10,000 square foot area leased by Phoenix, located in the southeasterly portion of the Property. The Property is an ideal location for a wireless telecommunications facility in that it is located away from residential properties, will result in minimal environmental impact, and has good screening from existing vegetation and the nearby transportation corridors. Please see the abutters map attached hereto as Exhibit A, which shows the properties located near the site of the proposed Facility.

**Q6. Please describe the access to the proposed Facility.**

A6. Vehicle access to the Facility would extend from Devine Street along an existing paved parking lot. This access would not require any land disturbance or tree removal.

**Q7. Please describe the proposed Facility.**

A7. The Facility would consist of a 120 foot monopole structure with antennas attached thereto, and related equipment on the ground at the base on a concrete pad. The Facility would sit within a 4,900 square foot compound within the leased area. An eight foot chain link fence would secure the equipment at the Facility. The Facility would accommodate up to six carriers with full platform arrays, including Pocket Wireless with antennas secured by a flush mount at 117' above grade level ("AGL"). Phoenix would have to remove approximately twenty-five (25) trees with a diameter at breast height of six inches. Phoenix would take special care during the removal to prevent damage to any other surrounding vegetation.

**Q8. Have the site plans for the proposed Facility changed since Phoenix consulted with the Town of North Haven?**

A8. Yes. As a result of the municipal consultation, Phoenix instructed Infinigy to move the site of the proposed Facility further away from the boundaries of the Property. Phoenix made this change at the Town's request so that the Facility's setbacks would equal three-quarters of the height of the proposed tower. The change in location also increased the distance between the proposed Facility and the wetland systems on an adjacent property. The revised site plans, appended to the Application as Exhibit B, demonstrate the increased setback distances. The site plans referenced in Exhibits Q and R of the Application are earlier iterations of the proposed Facility.

Phoenix also instructed Infinigy to shorten the height of the proposed tower from 150 feet to 120 feet. This height will allow carriers such as Pocket to provide service to the area, while also lessening the environmental and visual impacts of the Facility. Exhibit B to the Application contains the proper height of the tower.

**Q9. Please describe the process for conducting the Visual Resource Evaluation.**

A9. The Visual Resource Evaluation consists of a predictive computer model and in-field analysis. The predictive computer model assesses the potential visibility of the Facility within a five mile radius ("Study Area"). The in-field analysis consists of a "balloon float" and driving reconnaissance of the Study Area. This in-field investigation allows Infinigy 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. Infinigy assesses the results of the predictive computer

model and the in-field analysis and incorporates these results into the final viewshed map. The completed Visual Resource Evaluation (including viewshed map) is included in Exhibit N of the Application.

**Q10. Please describe how Infinigy prepared the viewshed analysis for the Visual Resource Evaluation.**

A10. Infinigy 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. During the initial analysis, Infinigy omits the tree canopy so the only visual constraint is topography. This initial analysis provides a reference point useful in determining seasonal visibility fluctuations. Subsequent to the initial analysis, Infinigy adds the data regarding the Facility and the existing vegetation. Infinigy then 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.

**Q11. Please describe how Infinigy conducted the in-field analysis for the Visual Resource Evaluation.**

A11. Infinigy traveled the local public thoroughfares within the Study Area to verify the computer generated viewshed map and inventory areas of visibility. This in-field investigation enabled Infinigy 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.

**Q12. Please describe how Infinigy conducted the balloon float.**

A12. Infinigy raised and maintained a ten foot by three foot helium filled weather balloon at the location of the proposed Facility at a height of 120 feet. While the balloon was aloft, Infinigy took photographs from a variety of locations, settings and vantage points to assist in evaluating where the balloon was visible, including above and below the tree canopy. Infinigy maintained a photographic log including locations, orientation and environmental factors. Infinigy 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 Coolpix 7600 7.1 Megapixel camera which has a focal length equivalent to thirty-five mm camera with thirty-eight to 115 millimeter zoom. The optical zoom lens for the camera was set at fifty millimeters, which most accurately represents the unaided human eye.

**Q13. How did Infinigy select the locations for the photographs during the in-field investigation?**

A13. Infinigy 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. Infinigy selects other locations based on in-field observations made during the time of the balloon float.

**Q14. Please describe the estimated visibility of the proposed Facility.**

A14. The Facility will not be visible in areas located a distance of two miles or more from the Property. Areas from which the Facility will be at least partially visible comprise approximately seventy eight acres, which is less than one percent (>1%) of the entire Study Area. Six of those acres are situated on the Property itself, which consists of commercial and industrial uses. Most of the areas with views of the tower will be within a one mile radius of the Facility. This area is confined primarily to the transportation corridors of Interstate 91, Route 40 and Route 5, with the exception of smaller areas of visibility to the north and southeast. A limited number of residences along Route 5 may have year round views of the proposed tower.

**Q15. Please describe any features of the Property that would reduce any potential visual impact of the proposed Facility.**

A15. Existing topography and mature vegetation would reduce the potential visual impacts of the proposed Facility from the surrounding areas. Additionally, there are several transportation corridors in the immediate area (Interstate 91, Route 40 and Route 5), which limit the amount of residential receptors within the vicinity of the Facility.

**Q16. Will the proposed Facility have any visual impact on any sensitive visual receptors such as scenic, historic or recreational sites, hiking trails or parks?**

A16. No, there is no anticipated visibility from the Pines Bridge Historic District approximately .7 miles away or from Sleeping Giant, Quinnipiac or Wharton Brook State Parks located between two and five miles away to the north of the Facility.

**Q17. Please describe the results of the NEPA screen conducted by Infinigy.**

A17. The Facility is categorically excluded from any requirement for further environmental review by the Federal Communications Commission ("FCC") in accordance with the NEPA and no permit is required by the FCC prior to construction of the proposed Facility.

Specifically, the Property is not designated as a wilderness area and it is not located in any areas identified as a wildlife preserve or in a U.S. Fish and Wildlife Service National Wildlife Refuge. The Facility would not affect threatened or endangered species or designated critical habitats. No National Parks, National Forests, National Parkways or Scenic Rivers, State Forest, State Designated Scenic Rivers or State Gamelands are located in the vicinity of the Facility. Further, according to the site survey and field investigations, the Facility would not impact any federal or state regulated wetlands or watercourses. The Facility would be located within a 100-year floodplain although any subsequent equipment installation is typically elevated with a pier installation above the 100-year elevation.

Infinigy also determined that consultation was required of two Tribes, the Mashantucket Pequot Tribe and the Sequahna Mars-Narragansett Indian Tribe, as they indicated a geographical interest in the area where the Property is located. The Mashantucket Tribe responded that the Facility would not have an adverse impact on its interests. The Sequahna Mars-Narragansett Indian Tribe did not respond after an initial request for more information and, therefore, Infinigy concluded that no further action was necessary.

**Q18. Would the proposed Facility have any impact on wildlife in the area, including bird migration and breeding?**

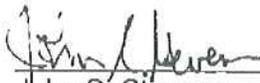
A18. The construction and operation of the proposed Facility would have no permanent adverse impacts on wildlife in the area, including bird migration and breeding. The construction area is minimal and the Facility is proximate to similar habitats that would allow for natural relocation of potential wildlife from the construction zone. The Facility would generate very little traffic once operational in that a technician might visit the site on a monthly basis post construction.

**Q19. Would the proposed Facility have any impact on any inland wetlands?**

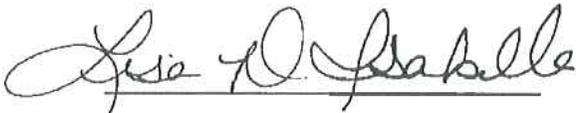
A19. No. There are no wetlands on the Property and the nearest wetlands are located more than 100 feet from the proposed Facility. Infinigy reviewed the proposed location of the Facility and the plans for construction of the Facility, the latter of which includes the extent of the disturbance associated with the construction of the Facility and related access and utility provisions. Infinigy also performed a wetlands investigation and delineation of resources for the purpose of identifying wetland ecosystems, streams and other regulated waters of the United States in accordance with the Clean Water Act.

Based upon the distance from the nearest wetlands and the relatively minimal disturbance that would be generated by the construction of the Facility, Infinigy has concluded that construction, operation and maintenance of the Facility would have no impact on any wetland system. It would not have the potential to impact adversely any wetland habitat or other navigable waterway. The Facility will also not have any impact on any federal regulated wetlands, or other waterways of the United States. Finally, the

Facility would not cause any significant changes to surface features, such as wetland fill, deforestation or water diversion.

  
\_\_\_\_\_  
John S. Stevens

Sworn and subscribed to before me this  
24<sup>th</sup> day of November, 2009.

  
\_\_\_\_\_

Notary Public  
My Commission expires 12/15/2012

**LISA D. ISABELLA**  
Notary Public, State of New York  
No. 01158198265  
Qualified in Schenectady County  
Commission Expires Dec. 15, 2012

# **EXHIBIT A**

