DOCKET NO. 496 – Tarpon Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 800 Prospect Hill Road, Windsor, Connecticut.	}	Connecticut
	}	Siting
	}	Council

June 3, 2021

Opinion

On December 4, 2020, Tarpon Towers II, LLC (Tarpon) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 135-foot tall wireless telecommunications facility located at 800 Prospect Hill Road in Windsor, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for T-Mobile Northeast LLC (T-Mobile) in the Day Hill Road area of Windsor, between Route 187 and Interstate 91. T-Mobile is an intervenor to the proceeding.

The United States Congress recognized a nationwide need for high quality wireless services through the adoption of the Federal Telecommunications Act of 1996 and directed the Federal Communications Commission (FCC) to establish a market structure for system development and develop technical standards for network operations. The FCC preempts state or local regulation on matters that are exclusively within the jurisdiction and authority of the FCC, including, but not limited to, network operations and radio frequency emissions. Preservation of state or local authority extends only to placement, construction and modifications of telecommunications facilities based on matters not directly regulated by the FCC, such as environmental impacts. The Council's statutory charge is to balance the need for development of proposed wireless telecommunications facilities with the need to protect the environment.

T-Mobile seeks to locate at the 130-foot level of the proposed tower to improve their wireless network in the Day Hill Road area of Windsor, which is largely commercial interspersed with some residential and undeveloped areas. The area is experiencing an increase in customer demand and although T-Mobile is currently located on six existing telecommunications facilities within 1.75 to 3.0 miles from the proposed site, these existing T-Mobile facilities cannot provide adequate coverage to the proposed service area.

Specifically, the proposed facility would provide reliable wireless service to 2.2 miles of Day Hill Road, 1.0 mile of Prospect Hill Road, and 1.1 miles of roads in the Goodwin Drive/Phoenix Crossing/Old Iron Ore Road area as well as abutting developed commercial and residential areas. Additionally, the proposed facility would provide capacity relief to two adjacent T-Mobile sites located west and southeast of the site.

T-Mobile established a search ring for the proposed service area on March 28, 2020, that was generally a half-mile radius around the proposed site. Tarpon searched for properties suitable for tower development that would meet T-Mobile's wireless service objectives. Bedsides the proposed site, six other properties were investigated but were not pursued due to lack of landowner interest or coverage deficiencies.

The proposed site is located on an approximately 5.76-acre parcel developed with four office/industrial buildings and associated parking and loading areas. The proposed tower site is located in a landscaped area adjacent to a building and parking lot in the northern portion of the property. The host property is zoned Industrial. Land use immediately surrounding the subject parcel consists of industrial to the south and west, and agricultural and residential to the north and east. The nearest residence is located approximately 620 feet east-northeast of the tower site.

Tarpon would install a 135-foot monopole and an associated 48-foot by 48-foot fenced equipment compound at the site, to be accessed from an existing 360-foot long paved driveway and a new a 20-foot long, 12-foot wide gravel drive extending to the compound gate. The compound would be capable of accommodating T-Mobile's equipment and the equipment of three other wireless carriers.

T-Mobile would install 15 panel antennas and 9 remote radio heads on a platform antenna mount at a centerline height of 130 feet above ground level (agl). The total height of the facility with T-Mobile's antennas would be 135 feet agl. The antennas would offer network services in the 600 MHz, 700 MHz, 1900 MHz, 2100 MHz and 2500 MHz frequencies, providing GSM, LTE and 5G wireless services.

T-Mobile would install two equipment cabinets and a 25-kilowatt diesel fueled emergency backup generator on a 10-foot by 20-foot concrete pad within the compound. In the event there is an outage of commercial power at the site, the emergency generator could provide two days of run time before refueling is required.

Besides T-Mobile's installation, the tower would be designed to support three additional levels of antennas and municipal emergency services antennas. The tower and foundation would be deigned to support a 30-foot extension if there is a need to increase the height of the tower to promote tower sharing in the future.

The tower setback radius would extend onto property abutting the site to the north by 42 feet. The Council will order Tarpon to design a yield point on the tower to ensure the tower setback radius remains within the boundaries of the subject property.

The proposed tower would not be an obstruction or hazard to air navigation and would not require obstruction marking or lighting.

Operation of the proposed facility would comply with Department of Energy and Environmental Protection (DEEP) Noise Control Standards. Construction noise and operation of the emergency generator are exempt from the Noise Control Regulations.

The site is not located within a flood zone, an aquifer protection area, and is not near any wetlands. Development of the compound area would disturb approximately 0.08 acres of mapped prime farmland soil although this area has been previously disturbed by development of the commercial building on the host property.

The site is not located within a DEEP Natural Diversity Database area. Although the site is within the range of the northern long-eared bat (NLEB), a federally-listed threatened species and state-listed endangered species, there no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed site. Additionally, Tarpon consulted with the U.S. Fish and Wildlife Service NLEB program and determined that the proposed facility would not have an impact on the NLEB.

The site is approximately 1.0 mile south/southwest of Northwest Park in Windsor, a National Audubon Society designated Important Bird Area (IBA). The proposed facility would not affect the IBA. The proposed tower would comply with the U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

The site is located on a level, landscaped area next to a building. Limited grading would be required and several landscape shrubs would be removed to develop the compound area.

Based on a visual impact assessment within a two-mile radius of the site (Study Area-8,042 acres), the proposed tower would be visible year-round from approximately 179 acres (2.2%) and seasonally visible (leaf-off conditions) from approximately 199 acres (2.5%) of the Study Area.

Generally, year-round and seasonal views of portions of the facility would be limited to areas within an approximate 0.35-mile radius of the site, consisting of a mix of commercial, industrial, agricultural and residential areas. The most prominent year-round views would be from residential development approximately 0.2 mile north of the site in a subdivision located along Huckleberry Road and Morello Circle where intervening land consists of open agricultural fields offering little screening of the upper portions of the facility. The lower portion and the compound would be screened by a row of trees along the host property line.

No public schools or child day care centers are located within 250 feet of the proposed tower. There are no Connecticut blue-blazed hiking trails located within one mile of the proposed site.

Several historic tobacco barns that are eligible for listing in the National Register of Historic Places are located within a half-mile of the site on Old Iron Ore Road. The State Historic Preservation Office (SHPO) submitted correspondence to Tarpon stating that the proposed facility would have no adverse effect on these structures with the condition that the antennas, cables, and associated equipment be designed, painted to match adjacent materials, and installed as non-visible as possible. SHPO did not indicate what painting scheme would be acceptable. A two-tone facility painting scheme with a brown color on the lower portion and a sky blue color on the upper portion of the tower would not be more effective in reducing visibility when compared to a galvanized tower finish due to its height above the tree line when viewed from nearby areas. Reducing the antenna profile by using flush-mount antennas would require a taller tower as the number of antennas per tower height would be limited.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated to amount to 10.6% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, taking into account a 10 dB off-beam pattern loss for panel antennas and a 20 dB off-beam pattern loss for the highly focused microwave dish. This is conservatively based on all antennas of a given sector emitting maximum power. This percentage is well below federal standards established for the frequencies used by wireless companies. If federal standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. Regarding potential harm to wildlife from radio emission; this, like the matter of potential hazard to human health, is a matter of federal jurisdiction. The Council's role is to ensure that the tower meets federal permissible exposure limits.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at the proposed site, including effects on the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, agriculture, forests and parks, air and water purity, and fish, aquaculture and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, maintenance, and operation of a 135-foot galvanized steel monopole telecommunications facility at the proposed site located at 800 Prospect Hill Road, Windsor, Connecticut.