DOCKET NO. 476 – Eco-Site, Inc. and T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 248 Hall Hill Road, Somers, Connecticut.	}	Connecticut
	}	Siting
	}	Council

February 15, 2018

Opinion

On July 20, 2017, Eco-Site, Inc. (Eco-Site) and T-Mobile Northeast, LLC (T-Mobile) (collectively, the Applicant) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of wireless telecommunications facility to be located in the Town of Somers, Connecticut. The purpose of the proposed facility is to provide wireless service to a largely residential section of western Somers including residents and travelers in the area of Hall Hill Road (Route 186), Four Bridges Road, George Wood Road, Durkee Road, and numerous other roadways and properties in the area.

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.

There are no existing towers or other sufficiently tall structures available within T-Mobile's search area that will meet T-Mobile's wireless service objectives. Thus, available vacant land sites for a new tower were investigated. Of eight sites reviewed by Eco-Site, four were rejected because the property owner was not interested in leasing space for a tower, one was rejected because of lack of coverage in the target area, and two were rejected because lease terms and/or property concerns could not be resolved in an mutually agreeable manner, and one was selected – the proposed site at 248 Hall Hill Road.

Eco-Site proposes to construct a 180-foot monopole and associated equipment compound at 248 Hall Hill Road on a 38.5-acre property owned by Debra Romano. The subject property is zoned A-1 Residential and contains a single-family residence, garage and barn with accessory hay fields. The property is used for hay production by a third party. T-Mobile will install up to nine panel antennas, a two-foot diameter microwave dish and nine remote radio units on low-profile T-arm mounts at a centerline height of 176 feet above ground level. The top of the antennas will not extend above the top of the tower. T-Mobile will install its equipment on a 10-foot by 20-foot concrete pad within the compound.

T-Mobile's radio frequency propagation modeling demonstrated a need to provide wireless service to existing service gaps in the area. While the proposed facility will provide both coverage and capacity, the need for reliable coverage is the primary driver for the facility. At the proposed site, T-Mobile will deploy 700 MHz and 2100 MHz spectrum. T-Mobile has no plans to deploy 1900 MHz at this time. T-Mobile will need an antenna centerline height of 175 feet at the proposed site to meet its coverage objectives.

The tower will be designed to support four levels of wireless carrier antennas (including T-Mobile). This furthers the Council's charge of promoting tower sharing to avoid the unnecessary proliferation of towers in the State. However, no other wireless carriers have expressed a firm interest in co-locating on the tower at this time. However, Tolland County Mutual Aid, the public safety answering point (PSAP) for Somers, requested space on the proposed tower for emergency services antennas. The Applicant is reviewing this co-location request. The tower would be located a distance greater than its height from the nearest property line. Thus, no design yield point is necessary.

Access to the tower site will be from a new 12-foot wide and approximately 1,125-foot long gravel drive extending from an existing farm gate (to be replaced) off of Hall Hill Road across a farm field to the compound. Utilities will be installed underground to the site from Hall Hill Road following the proposed gravel access drive. Utilities will connect to an existing pole on the opposite side of Hall Hill Road as the subject property. The Applicant prefers an overhead utility crossing of Hall Hill Road as opposed to an underground "trenching" across Hall Hill Road, but the final design will be subject to the utility company.

The subject property contains Connecticut Prime Farmland soils. However, the location of the proposed compound is not in active agricultural use. The total prime soil disturbance area for the proposed compound and access drive will be approximately 0.37 acre. Long term impacts to soil productivity will not be expected as the access drive will be gravel, and if necessary, the facility could be removed at the end of its useful life.

In the event an outage of commercial power occurs, T-Mobile will rely on a 7.5-kilowatt propane-fueled generator. The generator will have an estimated 80 hours of run time (at average load conditions) before requiring refueling. The final details of the backup generator will be included in the D&M Plan. T-Mobile will also have a battery backup system to avoid a "reboot" condition during the generator start-up delay period. The battery backup system alone could provide up to eight hours of backup power.

The proposed equipment compound will be surrounded by a six-foot high chain-link fence with three strands of barbed wire on top. No privacy slats are proposed. The Applicant's proposed compound fence will have a gate that will be locked for security purposes.

There are no Connecticut blue-blaze or other designated hiking trails located within two miles of the proposed site. In addition, there are no state or locally-designated scenic roads located within one mile of the proposed site.

The tower will be visible year-round from approximately 740 acres within the two-mile visibility study area. Approximately 30 to 35 residential structures within a ½-mile radius will have views the tower. However, the views will be substantially screened in most areas by roadside vegetation. No landscaping is proposed because of existing wooded areas around the proposed compound.

The shaded area of the Connecticut Department of Energy and Environmental Protection (DEEP) Natural Diversity Database represents the approximate known locations of Endangered, Threatened and Special Concern Species. The proposed project will not be located within such shaded area. Notwithstanding, one federally-listed Threatened Species, the northern long-eared bat (also a state-listed endangered species), is documented in the vicinity of the subject property. On December 21, 2016, the Applicant submitted a Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form to the U.S. Fish and Wildlife Service (USFWS). If USFWS does not respond within 30 days, it may be presumed that the project responsibilities have been fulfilled. The Applicant did not receive any response from USFWS. The Council also notes that the proposed project will not be located within 0.25 mile of a known NLEB hibernaculum or within 150 feet of a known maternity roost tree.

There are no known Important Bird Areas, as designated by the National Audubon Society, in Tolland County. In addition, the proposed facility will comply with the U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

There is a seasonally dry pond that is also a delineated wetland, located approximately 348 feet southwest of the proposed fenced tower compound. The Council notes that this could potentially be a vernal pool. Thus, as a precaution, the Applicant will adhere to a seasonal restriction to avoid construction during the February 15th through April 15th time period to avoid impacts to vernal pool species.

There will be no direct wetland impacts. The proposed erosion and sedimentation controls (E&S Controls) will protect against indirect wetland impacts. Such E&S Controls will comply with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control.* According to the record, 30 cubic yards of net cut will be either removed from the site or deposited on the site. The Council recommends that any net cut deposited on the site be placed at least 100 feet from any delineated wetland and not be placed upon any prime agricultural soils.

The proposed facility will have no effect on historic properties.

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 by Council staff to amount to 0.69% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, using a 10-dB reduction to account for the antenna pattern. This is conservatively based on all antennas 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 180-foot galvanized steel monopole telecommunications facility at the proposed site located at 248 Hall Hill Road, Somers, Connecticut.