

DOCKET NO. 453 – American Tower Corporation and New Cingular Wireless PCS, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at Manchester Tax Assessor Map 133, Block 3700, Lot 701, 701 Lydall Street, Manchester, Connecticut. } Connecticut
} Siting
} Council

April 16, 2015

Opinion

On November 4, 2014, American Tower Corporation (ATC) and New Cingular Wireless PCS, LLC (AT&T) 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 wireless telecommunications facility to be located in the Town of Manchester, Connecticut. The purpose of the proposed facility would be to allow AT&T and other wireless carriers to provide reliable wireless services to an area in the vicinity of Vernon Street, Lydall Street, Meadowbrook Drive, State Highway 85 (Lake Street) and other local roads and homes in the surrounding northeast area of Manchester that borders adjacent communities of Bolton and Vernon. State Representative Kelly Luxenberg and State Senator Steve Cassano are intervenors in this proceeding.

The United States Congress recognized a nationwide need for high quality wireless services in part 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. Connecticut State law directs the Council to balance the need for development of proposed wireless telecommunications facilities with the need to protect the environment, including public health and safety.

AT&T currently operates eight facilities within a three mile radius of the proposed site; however, AT&T demonstrated a need for additional wireless service through baseline drive-test data. Furthermore, radio frequency propagation modeling is used to determine an area where a tower could be sited to provide reliable wireless service. This area is referred to as a search ring. Properties within that search ring are sought for a cell tower location and if a parcel of property is determined feasible then a willing land owner would need to enter into a lease agreement with ATC/AT&T prior to submitting an application with the Council.

ATC/AT&T investigated seven properties, one of which is the proposed site. At the suggestion of Representative Luxenberg, AT&T investigated the Manchester Conservation Land Trust property in the vicinity of Risley Reservoir. The Manchester Conservation Land Trust indicated it was not interested in leasing property for a tower site, however. Also, AT&T radio frequency engineers rejected six other properties based on not meeting coverage objectives. AT&T was asked if adjustments to existing adjacent sites' antenna configurations and power settings could solve its coverage issues but AT&T concluded adjustments would not suffice.

ATC is seeking to construct a 104-foot monopole and associated equipment compound at 701 Lydall Street on the northern portion of a 64-acre property owned by Gerald W. Reid. The property is zoned rural residential, consisting primarily of undeveloped woods with hay fields, and a small quarry operation. Utility connections would be routed underground within the access drive from a utility pole on Lydall Street. The Council is concerned that excavation for the utilities would be as close as seventeen feet to delineated wetlands and therefore will order the utility trench be installed at the greatest distance possible from the edge of the wetland. In the event commercial power is disrupted ATC plans to install an 80-kilowatt diesel-fueled emergency backup power generator to be shared by all tenants on the facility. The Council agrees with ATC's action to install a shared emergency backup power generator, as it is consistent with the Council's conclusions in Docket No. 432 – Feasibility study of backup power requirements for telecommunications towers and antennas pursuant to Public Act 12-148. The tower would be designed to support AT&T's

antennas at the top of the tower and the potential for future antennas by other wireless service providers. Also, ATC would design the tower to be extended up to 20 feet in height if additional tower height is needed by future providers. The tower setback radius would remain on the host property.

ATC would upgrade 850 feet of an existing access road from Lydall Street and construct a new 730-foot gravel drive to the proposed site. Alternate access roads with shorter lengths were considered from the ends of Deer Run Trail and Leo J. Lane. Development of these access roads would require removing numerous mature trees, causing wetland crossing disturbance and routing construction traffic through neighborhoods. The Council believes the proposed access drive is reasonable and prudent, keeping construction and access on the lessor's property. The alternate access roads are detrimental both to the neighborhoods and the environment.

Trees situated on the lessor's property near the end of Deer Run Trail were cleared by the lessor after the application was compiled and submitted to the Council. This creates a more open view of the proposed site and a 104-foot monopole. ATC agreed vegetation could be planted to buffer views of the site and the Council will require ATC to provide landscaping in the Development and Management (D&M) Plan. Views from the east would be limited by the mature trees on the site parcel. Most views of the facility from area roads and affected residences within a half-mile radius of the site would be of the top portion of the tower. Approximately 25 residences would have year-round views of the top portion of the facility. An additional 30 residences would potentially have seasonal views.

To mitigate the visibility of the site from the end of Deer Run Trail, ATC/AT&T provided an alternate location, 350 feet southeast of the proposed site. This location would be approximately 67 feet from an inland wetland and within the 100-foot vernal pool envelope. Testimony at the hearing indicated the views of the top of the tower would be shifted more to neighborhoods east of the proposed site, Leo J Lane and Bridle Path Lane. Hence, ATC/AT&T offered a compromise location 200 feet southeast of the proposed site that increases the buffer to the vernal pool envelope and moderates the view of the top of the tower between the two neighborhoods. ATC stated the landowner would consider the compromise site more acceptable than the alternate site for purposes of driving out to the fields. The Council concurs with the compromise location and will so order this location for the facility.

No trees would need to be cut down for the proposed facility, including the alternate or compromise locations. The closest wetland to the proposed facility is a complex of various habitat types that range from forested, hummock/hollow wetland areas to emergent wet meadow areas located approximately 350 feet east of the proposed site or 150 feet east of the compromise location. A portion of the access road would be within 17 feet of the wetland and this does not change regardless of the site location. Within the wetland area, there are interspersed depression areas containing sufficient hydrology to support 'cryptic' (non-classic) vernal pools. The total critical terrestrial habitat (CTH) associated with the vernal pool includes land located off the subject property totaling about 64 acres, including 15 acres consisting of existing residential development and a small quarry operation. This equates to 23.5 percent of the CTH being already developed. The proposed facility compound and majority of the access road would represent an additional 0.31 acre of development, or 0.48 percent of the total CTH. Thus, the proposed facility would not result in disturbance to the vernal pool's surrounding terrestrial habitat above the 25 percent development threshold critical for preserving the pool's ecological value¹. With best development practices utilized adjacent to a vernal pool and proper erosion and sedimentation control measures in place during construction, development of this facility should not result in any adverse impacts to the wetlands or vernal pool.

¹ Council Administrative Notice No. 53- This threshold is generally used for prioritizing vernal pool conservation efforts: Calhoun, A.J.K. and M.W. Klemens. 2002. Best Development Practices (BDPs): Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. WCS/MCA Technical Paper No. 5.

The proposed site is within the Lydall Reservoir watershed and the Department of Public Health (DPH) provided comments to protect the watershed. ATC committed to incorporating DPH's mitigating measures in the D&M Plan and the Council will so order.

According to the Department of Energy and Environmental Protection Natural Diversity Data Base, the eastern box turtle (*Terrapene carolina carolina*), a State Special Concern Species, may occur in the vicinity of the proposed facility. In order to protect the species, the Council will order ATC to include a box turtle protection plan in its D&M Plan, as it has committed to do.

The State Historic Preservation Office concluded that no historic properties would be affected by this project.

During the hearing, at the suggestion of State Representative Luxenburg and affected neighbors, the Council investigated the opportunity to use stealth technology for the proposed tower. ATC considered and rejected the use of a monopine because the existing vegetation is primarily deciduous and no deciduous trees were in proximity of the proposed site to help blend a monopine into the landscape. ATC provided a visibility analysis of a silo-like structure. Testimony at the hearing did concede that a silo would not be out of character in a field and forest landscape and did not reject the idea; however, the structure would be visible both in width and height. A silo structure must be designed upfront with the potential for a future extension. The Council considers stealth concealment on a case-by-case basis and in this case will opt for a structure designed in the form of a silo.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated by Council staff to amount to 76.6% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, as measured at the base of the tower. This percentage is 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, maintenance and operation of the telecommunications facility at the Compromise location, located approximately 200 feet southeast of the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish 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 telecommunications structure designed as a silo at a height necessary for AT&T at the Compromise location located approximately 200 feet southeast of the proposed site, 701 Lydall Street, Manchester, Connecticut, and deny the certification of the proposed site and alternate location that would have been 350 feet southeast of the proposed site.