

DOCKET NO. 501 – New Cingular Wireless PCS, LLC }	Connecticut
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a }	Siting
telecommunications facility located at 106 Sharon Road, Lakeville (Salisbury), Connecticut. }	Council

August 26, 2021

Opinion

On April 1, 2021, New Cingular Wireless PCS, LLC (AT&T or 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 a wireless telecommunications facility located at 106 Sharon Road, Lakeville (Salisbury), Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for AT&T customers in the Lakeville area of Salisbury.

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.

AT&T would construct, maintain and own the proposed facility and would be the Certificate Holder. AT&T is licensed by the FCC to provide personal wireless communications service throughout the state.

AT&T currently has no adequate wireless service in the Route 41 and Route 112 area of southwestern Salisbury. AT&T has four existing wireless telecommunications facilities within a four-mile radius of the proposed site but none of these sites provide adequate coverage to the target area.

AT&T's radio frequency propagation modeling and a drive test demonstrated a need to provide wireless service to the Route 41 and Route 112 area. AT&T proposes to provide wireless service via 700 MHz, 850 MHz, 1900 MHz, and 2100 MHz frequencies for both voice and data. The 700 MHz frequency provides the largest area of service and therefore defines the coverage footprint of the AT&T wireless network. Other higher frequencies (850 MHz, 1900 MHz, 2100 MHz) would be used to provide capacity for AT&T's network, reduce the loading on the 700 MHz spectrum and therefore maximizing the geographic reach of the facility.

Coverage modeling indicates the proposed site would provide 5.2 square miles of service to the area surrounding the tower (700 MHz at -93 dBm), which includes, but is not limited to, 1.04 miles on Route 41 and 0.7 mile on Route 112.

AT&T's deployment would enable customers to make wireless emergency calls within the service area. In addition to wireless call capability, AT&T's deployment would feature emergency communication FirstNet services. These services are provided through a federal program to establish emergency communications to areas with deficient wireless service. FirstNet gives emergency responders on AT&T's 700 MHz 4G LTE network first priority to ensure emergency communications are not interrupted.

As of June 29, 2021, the Town had not expressed an interest in co-locating emergency services antennas on the proposed tower.

A search for a facility in the Lakeville area began approximately March 2014 when AT&T established a search ring for this facility. The search ring has a 0.25-mile radius and was centered near the intersection of Sharon Road and Route 44. AT&T deferred this site in 2016 for business reasons and reactivated its search ring in March 2018.

After determining there were no suitable structures within the search area, AT&T searched for properties suitable for tower development. AT&T investigated 4 parcels/areas. Three of these parcels/areas were rejected because they would not meet AT&T's coverage objectives. The proposed site at the Wake Robin Inn located at 106 Sharon Road was selected because it would meet AT&T's coverage objectives.

Subsequently, AT&T presented a technical report to the Town on June 18, 2020 based on an originally proposed 104-foot tower on the Wake Robin Inn property. Subsequently, the height of the facility was reduced to 94 feet as part of AT&T's consultation with the State Historic Preservation Office (SHPO) to avoid impacts to historic resources. On January 4, 2021, AT&T submitted a supplement to the technical report to the Town based on a 94-foot tower height.

The proposed site consists of a 94-foot monopole facility located on a 11.52-acre parcel at 106 Sharon Road. The parcel, zoned Rural Residence 1, is developed with a private inn known as the Wake Robin Inn and contains two buildings and one garage. The tower site, at an existing elevation of 855 feet above ground level, is located in the southern portion of the property and southeast of the Wake Robin Inn's garage building. The proposed facility would consist of a 94-foot monopole within a 50-foot by 50-foot, fenced compound. The tower and compound would be designed to support AT&T and one additional wireless carrier.

AT&T proposes to install 6 panel antennas and 9 remote radio heads on a sector frame antenna mount at a tower centerline height of 90 feet.

The compound would be accessed utilizing an existing paved driveway and an existing gravel access way off of Sharon Road. It would be extended via a new 12-foot wide, 231-foot gravel driveway to reach the compound. Utilities to the compound would be installed underground along the access route to Sharon Road.

In the event an outage of commercial power occurs at the proposed site, AT&T originally proposed a 20-kW diesel-fueled generator with a 92-gallon fuel tank to be installed within the southeastern portion of the compound. Given that the site is proximate to a DEEP-designated Aquifer Protection Area (APA), the Council will require that AT&T provide plans for a propane-fueled generator in lieu of a diesel generator in the Development and Management (D&M) Plan.

The nearest property boundary from the proposed tower is approximately 140 feet to the south. Thus, the tower setback radius would remain within the boundaries of the subject property. Additionally, the nearest on-site structure is the Wake Robin Inn's garage is located over 100 feet from the tower location, and thus, all on-site buildings/structures are outside of the tower setback radius.

A geotechnical study has not yet been performed. Subject to its results, it might be necessary to remove ledge either by mechanical means or via blasting. Mechanical means would be AT&T's first choice for bedrock removal. The Council will require submission of Geotechnical Study results and plans for any ledge removal in the D&M Plan.

The project would require an approximate net excavation of 269 cubic yards (cy). The base layer of the compound would require 67 cy of structural fill. Approximately 28 cy of rock, 33 cy of washed stone and 85 cy of gravel base would be required for the compound and driveway construction. Excavated material would be removed from the site.

Wetland A is a large scrub/shrub and forested wetland system oriented in a north-south direction along the eastern portion of the subject property. The tower compound would be located approximately 102 feet northwest of Wetland A. Wetland B is a small, forested wetland system located west of the existing gravel and paved parking lot in the west-central portion of the subject property. The new portion of the access would be located approximately 113 feet southeast of Wetland B.

The project staging area would be located within the 100-foot buffer of Wetland B. AT&T selected this location because it's an existing, already disturbed gravel parking area. AT&T would utilize erosion controls around this staging area to be protective of wetlands. Use of this already disturbed area would avoid additional tree clearing.

Erosion and sedimentation controls for the project would be consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control* (2002 E&S Guidelines). Thus, no adverse impacts to wetland resources are expected.

Approximately 29 trees in total would be removed to develop the site. Of the 29 trees, 10 would be at least 14 inches in diameter at breast height. The site is not located within core forest.

The site is not located within a flood zone. While the site is proximate to a DEEP-designated APA, the site is not located within an APA. The site does not contain mapped prime farmland soils. Operation of the facility would comply with DEEP Noise Control Standards.

By letter dated May 20, 2020, DEEP Natural Diversity Database Program determined that the project would not be expected to negatively impact state-listed species.

By letter dated June 20, 2020, AT&T consulted with the United States Fish and Wildlife Service (USFWS) who concluded the facility is not expected to adversely impact the northern long-eared bat (NLEB). Thus, the tree clearing would not have a seasonal restriction and may commence at any time of the year.

The site is approximately 3 miles from a National Audubon Society designated Important Bird Area (Miles Wildlife Sanctuary and Housatonic State Forest Block). The proposed tower would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The Applicant prepared a visual impact assessment of the site utilizing a one-mile radius study area and computer modeling that was supplemented with in-field studies. These analyses were used by the Applicant to generate photo-simulations of the proposed tower.

Based on a visual impact assessment within a one-mile radius of the site (Study Area-2,011 acres), the proposed tower would be visible year-round from approximately 248.1 acres (or 12.3%) and seasonally visible (leaf-off conditions) from approximately 27.3 acres (or 1.36%) of the Study Area. The majority of the year-round views of the facility (or about 233.9 acres) would be located over Wonoskupomuc Lake, and about 12.3 acres of the seasonal visibility area would also be located over the lake.

AT&T performed a supplemental balloon flight to further evaluate the views of the facility over the lake. Based the results, the actual visibility of the facility over Wonoskupomuc Lake is expected to be minimal because the top of the tower would be close to or slightly above the existing tree line.

Outside of Lake Wononskupomuc, year-round visibility for the facility would be concentrated in the following main areas: a 3.6 acre area of farmland and residential property along Wells Hill Road to the east-northeast of the site and a 6.1 acre grassy area at the Hotchkiss School property. The majority of the views would be the upper 25 percent of the tower. The remaining 4.73 acres of scattered year-round visibility of the proposed facility to the north, southwest and east are located more than 0.5 mile from the site. Topography, vegetation and the relative height of the tower would be expected to obscure (partially or totally) the views of the tower from most locations in the study area during year-round conditions.

Outside of Lake Wonoskupomuc, the majority of the seasonal visibility of the proposed tower would be located in areas to the north, southwest and east of the facility at a distance of more than 0.5 mile. The views are expected to be intermittent, distant and partially obscured by existing vegetation.

Two state-designed scenic roads, Routes 41 and 44, are located within two miles of the proposed facility. There would be limited, sporadic year-round views of the facility from these roads.

There are no “blue-blazed” hiking trails located within the one-mile study area.

No public schools or commercial child day care facilities are located within 250 feet of the proposed site. Furthermore, no such facilities are within one-half mile of the proposed site.

By letter dated November 25, 2020, SHPO determined that the proposed project would not have an adverse effect on sites listed on or eligible for listing on the National Register of Historic Places

The tower and tower-mounted equipment are proposed to be painted brown per AT&T’s consultation with SHPO. Reducing the antenna profile by using flush-mounted antennas is not proposed because it require a 10-foot increase in tower height to allow for two levels of AT&T antennas. Thus, the tower would utilize one level of AT&T antennas on a sector frame antenna mount. The Council will require that plans for the tower and tower-mounted equipment to have a brown finish be included in the D&M Plan.

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 18.2% of the FCC’s General Public/Uncontrolled Maximum Permissible Exposure, taking into account a 10 dB off-beam pattern loss for the antennas. This is conservatively based on all antennas of a given sector emitting maximum power. This is conservatively based on all antennas of a given sector pointing down to the ground and 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.

After considering the record in this matter, the Council finds a need for a new tower to provide necessary wireless coverage to an underserved area. The Council notes that the height has already been reduced from 104 feet to 94-feet to avoid impacts to historic areas, and such height reduction would decrease visibility, particularly year-round views. An additional 10-foot (or more) reduction in tower height (i.e. lower AT&T antenna centerline height to 80 feet) would place the antenna height close to that of the existing tree line.

That would also place the next carrier (below AT&T) at or below the tree line and could adversely impact ability of the tower to support additional co-locations.

The site would also offer FirstNet emergency communication service allowing for first responder communication to service subscribers.

The Council finds that the proposal would not cause unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources of the state. The Council has considered all reasonable alternatives and finds that the proposal represents the best alternative consistent with the reasonable requirements of the public health, safety and welfare.

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 94-foot brown monopole telecommunications facility at the proposed site located at 106 Sharon Road, Salisbury, Connecticut.