DOCKET NO. 510 - New Cingular Wireless PCS, LLC d/b/a }
AT&T and 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 92 Greens Farms Road, Westport, Connecticut. }

Connecticut

Siting

Council

January 5, 2023

Opinion

On May 26, 2022, Tarpon Towers II, LLC (TT) and New Cingular Wireless PCS, LLC d/b/a AT&T (AT&T) (collectively, Applicants), 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 at 92 Greens Farms Road, Westport, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for AT&T and Cellco Partnership d/b/a Verizon Wireless (Cellco) customers and address significant coverage deficiencies in AT&T and Cellco's networks in portions of southwestern Westport.

The parties to this proceeding are Applicants and the Town of Westport (Town). The Intervenors to this proceeding are Cellco and Donald Bergmann (Bergmann). There are no Connecticut Environmental Protection Act (CEPA) Intervenors to this proceeding. In this Opinion, the Council incorporates its record disposition of all substantive and procedural motions and objections that were raised by the parties and intervenors during the course of 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. FCC preempts state or local regulation on matters that are exclusively within the jurisdiction and authority of 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 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.

Under Connecticut General Statutes (CGS) §16-50p(b), there is a presumption of public need for personal wireless services and the Council is limited to consideration of a specific need for any proposed facility to be used to provide such services to the public.

TT owns and/or operates numerous tower facilities in the state. TT and AT&T would construct, maintain and operate the proposed facility and would be joint Certificate Holders. AT&T and Cellco are licensed by FCC to provide personal wireless communications service throughout the state. Cellco would lease space on the proposed tower for their telecommunications equipment.

The total estimated cost of the proposed facility is \$984,000, inclusive of costs associated with AT&T and Cellco's equipment installations. Neither the project, nor any portion thereof, is proposed to be undertaken by state departments, institutions or agencies or to be funded in whole or in part by the state through any grant or contract. Applicants and Cellco are private entities.

AT&T and Cellco have significant coverage deficiencies in their wireless communications networks in portions of southwestern Westport. Coverage objectives include the deployment of reliable in-vehicle

service on roads and within buildings in the proposed service areas. Public roads in the area without adequate service include, but are not limited to, Interstate-95 (I-95), Greens Farms Road and Hillspoint Road. The Metro North Railroad would also benefit from improved coverage within the proposed service area. Non-reliable service for both carriers was confirmed by coverage modeling and drive testing.

Both carriers would operate at the 700 MHz, 850 MHz, 1900 MHz, 2100 or 2300 MHz, and 3550 or 3700 MHz frequencies, all of which transmit voice and data services. All of AT&T's frequencies and Cellco's 850 MHz, 2100 MHz, and 3700 MHz frequencies are capable of supporting 5G services. In addition to coverage needs, AT&T's proposed installation would provide capacity relief to its existing site at 344 Strawberry Hill Avenue in Norwalk. Cellco's proposed installation would provide capacity relief to its existing site at 880 Post Road East in Westport.

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 network first priority to ensure emergency communications are not interrupted.

AT&T's drive tests and propagation modeling indicate that there is an existing coverage gap of about 3.9 square miles of roadway and 1.23 square miles of residential area. Cellco's drive tests and propagation modeling indicate that there is an existing coverage gap of about 3.36 square miles of roadway and 1.54 square miles of residential area.

AT&T's proposed installation at the 120-foot level of the tower would provide a 700 MHz coverage footprint of 1.23 square miles at -83 dBm and 1.02 square miles at -93 dBm. Within the -93 dBm footprint, AT&T's installation would provide 1.6 miles and 8.3 miles of new in-vehicle coverage to main roads and secondary roads, respectively. AT&T's installation would provide approximately 0.4 miles of new in-vehicle coverage along I-95 and approximately 1.7 miles of coverage along the Metro North Railroad.

Cellco's proposed installation at the 108-foot level of the tower would provide a 700 MHz coverage footprint of 1.54 square miles at -85 dB Reference Signal Received Power (RSRP) and 3.36 square miles at -95 dB RSRP, including reliable in-vehicle service to 2.6 miles of I-95, 2.6 miles of Greens Farms Road, 2.5 miles of the Metro North Railroad and 1.7 miles of Hillspoint Road at -95 dB RSRP.

In 2011, TT began searching for a site in the southwest Westport area and subsequently entered into a lease agreement with the property owner for 92 Greens Farms Road in 2013.

Cellco issued a search ring for a site in southwest Westport in the first quarter of 2016. Due to Cellco's awareness of TT's lease agreement at the proposed site, Cellco centered its search ring at 92 Greens Farms Road. Since this location met Cellco's objectives, no other properties were investigated.

AT&T began its search for a site in southwest Westport in December of 2018. The search area was centered at 57 Greens Farms Road and had a search radius of approximately 0.25 miles.

During the municipal consultation, the Town voiced concerns regarding the proposed site and recommended that the Applicants explore alternative sites at 55 Greens Farms Road, the Assumption Cemetery located at 57 Greens Farms Road and the DOT-owned properties located on Hales Road. AT&T and Cellco were able to confirm that a tower facility at all three of the Town's recommended alternative sites would satisfy their coverage objectives; however, all three sites were rejected due to the property owners not being interested in a lease agreement. A significant impact to existing wetlands was also identified for a proposed site at 55 Greens Farms Road. Subsequently, the Town suggested additional

alternative sites at 197 Compo Road South and 200 Nyala Farms, which were rejected due to insufficient space and inadequacy for AT&T's wireless network service objectives, respectively.

Small cells or distributed antenna systems would not be a practicable or feasible means of addressing the existing coverage deficiency within the proposed service area. Small cells are typically installed to provide added network capacity and fill-in coverage within a limited specific area with a higher population density. The proposed tower (macrosite) would enable AT&T and Cellco to provide wireless service to a large area.

A small cell is usually limited to one frequency, would offer significantly reduced signal propagation and would not support AT&T's FirstNet public safety network. In addition, handoffs between small cells would not be able to keep up with the average vehicle speed on highways such as I-95

The Applicants investigated 10 potential sites in total for tower development and 9 of these were ultimately rejected due to the property owners not being interested in a lease agreement or the inability of the potential site locations to satisfy the carriers coverage objectives. During the proceeding, Applicants investigated 2 additional potential sites suggested by the Council that are directly adjacent to existing AT&T sites and would not meet AT&T's coverage objectives.

For any site to be considered a feasible and prudent alternative to a proposed facility site, it must be available to host the proposed facility. Although many sites were examined and many landowners were not interested in a lease agreement for a wireless facility, the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility nor shall the Council be limited in any way by the Applicants having already acquired land or an interest therein for the purpose of siting a facility.

As of September 22, 2022, at the close of the evidentiary record in the proceeding, DOT had not corresponded further with the Town or Applicants, and DOT did not submit any comments to the Council. Although the Town believes alternative sites have not been fully considered, based on the record in this proceeding, the Council finds the alternatives identified by the Town and the DOT-owned properties preferred by the Town are not available to host the proposed facility. Thus, the proposed facility site is the only available site that would meet both AT&T and Cellco's coverage objectives.

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over telecommunications facilities throughout the state. It shall consider any location preferences provided by the host municipality under CGS §16-50gg as the Council shall deem appropriate.

The Town opposed the proposed site because it is located in a residential district and expressed a preference for the tower to be located at the DOT-owned properties on Hales Road. However, those properties are also located in residential districts and are not available to host the proposed facility. The Town also expressed a preference for a natural gas-fueled emergency backup generator and the planting of evergreen trees to provide screening of the compound and associated equipment; however, the Town did not express a preference for a stealth design. The Council will order use of natural gas to fuel the backup generator, if feasible, and development of a landscaping plan for the tower compound and associated equipment as part of the Development and Management (D&M) Plan.

Pursuant to CGS §16-50p(b), the Council shall examine whether the proposed facility may be shared with any public or private entity that provides service to the public, provided such shared use is technically, legally, environmentally and economically feasible and meets public safety concerns, and may impose reasonable conditions as it deems necessary to promote the immediate and shared use of telecommunications facilities and avoid the unnecessary proliferation of such facilities in the state. The proposed facility would be designed to accommodate four wireless carriers and local emergency service

providers and municipal antennas. The Town has not expressed an interest in co-locating emergency services antennas on the proposed facility.

The proposed site consists of a 124-foot monopole located in the western portion of the 1.99-acre residentially-zoned parcel. The host parcel is developed with a residence located in the central portion of the parcel, accessed from a driveway extending from Greens Farms Road. The remaining areas on the parcel consist of a mostly wooded area slightly sloping downward from the east of the residence.

The tower would be located at an elevation of 27 feet above mean sea level. A 2,240 square-foot equipment compound would be established at the base of the tower, with space to accommodate the equipment of four carriers and municipal emergency services.

AT&T proposes to install twelve antennas at a tower centerline height of 120 feet above ground level (agl). Cellco would install twelve antennas at a tower centerline height of 110 feet agl. AT&T and Cellco would install equipment cabinets on concrete pads within the compound.

In the event an outage of commercial power occurs at the proposed site, AT&T is proposing to install a 20-kW diesel-fueled generator with a built-in 92-gallon tank with a run time of 48 hours and Cellco proposes to install a 30-kilowatt diesel-fueled generator with a built-in 200-gallon fuel tank for backup power. Cellco estimates that a diesel-fueled generator would enable it to save between \$35,000 and \$50,000 in additional project costs. In addition, both carriers would utilize a 4-6 hour battery backup at the site to prevent a reboot condition. TT investigated extending an existing natural gas line from the street to the compound and estimates that it would cost approximately \$15,000.

The compound would be accessed via a proposed 25-foot wide access and utility easement which would include a 12-foot wide gravel vehicular driveway extending south from Greens Farms Road about 125 feet to the compound access gate located in the southeastern corner of the compound. The easement design includes a vehicle turnaround on its south side just before the access gate. The access drive would have a finished gradient of 10 percent.

Power and telco utilities would extend underground from the eastern side of the compound to the proposed access easement and then north within the access easement to a new utility pole on Greens Farms Road. An overhead utility line would extend from the new utility pole across Greens Farms Road to an existing utility pole on the opposite side of the road.

The proposed tower would be approximately 145 feet from the residence on the host property and 118 feet from the shoulder of I-95. The nearest residential property line from the base of the tower is approximately 232 feet to the east (102 Greens Farms Road). There are approximately 67 residences within 1,000 feet of the host parcel while there are approximately 228 residential properties within 1,000 feet of the DOT-owned Hales Road parcel.

The tower setback radius for the proposed site location would extend beyond the boundary of the host parcel to the south by 89 feet. TT would design a tower yield point at 89-foot level of the tower to ensure the tower setback radius remains within the boundaries of the host parcel.

Blasting is not anticipated. If necessary, TT would utilize a jack hammer for rock removal.

A wetland inspection report identified two wetland areas located within the adjacent DOT ROW along the southern and western boundaries of the host parcel. Wetland 1 is located approximately 85 feet southwest of the proposed fenced compound and consists of a small, narrow, and isolated wetland feature formed

within a small topographic depression that shows signs of previous disturbance Wetland 2 is located approximately 40 feet south of the proposed access easement at its closest point and consists of a narrow (10-12 feet wide) channelized watercourse which begins at an existing 72-inch wide reinforced concrete pipe culvert and flows eastward parallel to I-95 that shows signs of previous disturbance. This wetland is seasonally saturated and occasionally flooded.

The distance from the construction limits of disturbance for the access road to Wetland 2 is approximately 30 feet. The Council will order Applicants to increase the wetland buffer from the vehicle turnaround area of the access drive as part of the D&M Plan.

Development of the site would disturb an approximate 5,365 square foot area and would not require a DEEP-issued Stormwater Permit. TT would install appropriate erosion and sedimentation (E&S) controls in compliance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (2002 E&S Guidelines). Stormwater generated by the construction of the tower facility would be managed in accordance with the 2004 Stormwater Quality Manual.

Eight trees with a diameter of six inches or greater at breast height would be removed to develop the site. The facility is not located within a DEEP Natural Diversity Database (NDDB) buffer area. The site is within the range of the northern long-eared bat (NLEB), a federally-listed threatened species and state-listed endangered species; however, there are no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed site. TT would implement U.S. Fish and Wildlife Service (USFWS)-recommended measures for NLEB conservation. The project area does not provide suitable habitat for other federally-listed species identified by USFWS.

The site is approximately 7.5 miles northeast of the Nature Conservancy's Devil's Den Preserve in Weston, an Important Bird Area (IBA), as designated by the National Audubon Society. The proposed facility would not affect the IBA and would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The host parcel is not within a flood zone. It does not contain prime farmland soil. Operation of the facility would comply with DEEP Noise Control Standards.

No resources listed on the State or Natural Register of Historic Places were identified within 0.5-mile of the site and thus, no impact to historic resources is expected. The State Historic Preservation Office determined the proposed facility would have no adverse effect on historic or archeological resources.

Applicants prepared a visual impact assessment of the site utilizing a two-mile radius study area (Study Area-8,042 acres) and computer modeling that was supplemented with in-field studies. These analyses were used by Applicants to generate photo-simulations of the proposed tower.

Based on the visual impact assessment, the proposed tower would be visible year-round from approximately 439 acres (5.5% of the Study Area), of which 408 acres will occur from over open water on Sherwood Mill Pond. The tower would also be seasonally visible (leaf-off conditions from November to early May) from approximately 538 acres (6.7%) of the Study Area.

Approximately 50 residences within 0.5 miles of the proposed facility would have seasonal and year round views of the facility. 13 of those residences, including the host property, would have year-round views and 37 residences would have seasonal views. The tower would be seasonally visible from Greens Farms Road within 0.23 miles of the site while some sections of the road would have year-round visibility of the upper portion of the tower.

Approximately 75.8% of the predicted visibility occurs over open water and the associated tidal marsh areas. The upper portion of the tower would be visible from the western portions of Sherwood Island State Park, mostly along the shoreline of Sherwood Millpond.

A stealth monopine facility at the proposed site would cost an additional \$40,000 plus \$1,000 to \$4,000 annually for maintenance and would be more visible above the existing tree line due to the lack of existing pine trees, the addition of branches, an increased profile width of 25 to 37 feet and the comparably low height of the existing tree line.

Pursuant to CGS §16-50p(b), the Council shall examine whether the proposed facility would be located in an area of the state which the Council, in consultation with DEEP and any affected municipalities, finds to be a relatively undisturbed area that possesses scenic quality of local, regional or state-wide significance and the latest facility design options intended to minimize aesthetic and environmental impacts.

The Town considers Greens Farms Road to be scenic in character, as defined in the Town's Plan of Conservation and Development (POCD), in addition to views to and from Long Island Sound and the Saugatuck River. However, the POCD marks scenic views with directional arrows, which point toward Long Island Sound rather than toward the proposed site. Route 136, a state designated scenic road, is located approximately 0.69 miles west of the site.

The proposed site is located within a Town-designated scenic area, the boundaries of which match the boundaries of the DEEP-designated Coastal Area. The designated scenic area includes existing tower facilities at 20 Post Office Lane, 45 Ferry Lane, and 221 Post Road West as well as travel corridors (I-95, Metro North Railroad) and electric transmission line structures associated with a transmission line right-of-way.

The Council finds that the proposed facility would not be located in an area of the state that possesses scenic quality of local, regional or state-wide significance and would not substantially affect the scenic quality of its location or surrounding neighborhood. The Council also finds that landscaping with evergreen trees to screen the compound and associated equipment, as recommended by the Town, minimizes aesthetic impacts.

The host parcel is located within the coastal resource boundary, as defined by the Connecticut Coastal Management Act (CCMA). None of the coastal resources identified by the CCMA would be adversely affected by construction or operation of the tower. The resources include, but are not limited to, tidal rivers, streams and creeks, wetlands and marshes, intertidal mudflats, beaches and dunes, bluffs and headlands, islands, rocky shorefronts, and adjacent shorelands.

No public schools or commercial child day care facilities are located within 250 feet of the proposed site.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T and Cellco's proposed antennas to be installed on the tower have been calculated to amount to 59.5 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure (MPE), as measured at the base of the tower. This is conservatively based on all antennas of a given sector pointing down to the ground and emitting maximum power. This percentage is below federal standards established for the frequencies used by wireless companies. As part of the D&M Plan, the Council will require a rigorous cumulative far-field radio frequency analysis for the facility that accounts for all entities on the tower, a 6-foot tall person at ground level and the actual antenna pattern for

the proposed facility with a cumulative percent MPE at or below 100 percent, consistent with FCC methodology.

If federal power density 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 entities 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. Potential harm to wildlife from radio frequency emissions, like the potential harm to human health from radio frequency emissions, is a matter of exclusive federal jurisdiction. The Council's role is to ensure that the tower meets federal permissible exposure limits.

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, 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 124-foot monopole telecommunications facility located at 92 Greens Farms Road, Westport, Connecticut.