

**DOCKET NO. 512** - Homeland Towers, LLC and New Cingular Wireless PCS, LLC d/b/a AT&T application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 60 Vale Road, Brookfield, Connecticut. } Connecticut  
} Siting  
} Council

February 2, 2023

### Opinion

On August 10, 2022, Homeland Towers, LLC (HT) 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 60 Vale Road, Brookfield, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for AT&T customers and address significant coverage deficiencies in AT&T's network in portions of southern Brookfield, eastern Danbury and northern Bethel.

The party to this proceeding is Applicants. There are no Connecticut Environmental Protection Act (CEPA) Intervenor to this proceeding. In this Opinion, the Council incorporates its record disposition of all substantive and procedural motions that were raised by Applicants 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.

HT owns numerous tower facilities in the state. HT would construct, maintain and own the proposed facility and would be the Certificate Holder. AT&T is licensed by FCC to provide personal wireless communications service throughout the state and would lease space on the proposed tower for their telecommunications equipment.

The total estimated cost of the proposed facility is \$552,000, inclusive of costs associated with AT&T equipment installation. 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 are private entities.

AT&T has significant coverage deficiencies in its wireless communications network in portions of southern Brookfield, eastern Danbury and Northern Bethel. 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, Candlewood Lake Road, Federal Road, White

Turkey Road Extension, and Routes 7 and 202. Non-reliable service for AT&T was confirmed by coverage modeling.

AT&T would operate at the 700 MHz, 850 MHz, 1900 MHz, 2100 MHz, 2300 MHz, and 3700 MHz frequencies at the site. All of AT&T's frequencies except 3700 MHz are capable of supporting 5G services. In addition to coverage needs, AT&T's proposed installation on the tower would provide capacity relief to two existing sites in Danbury.

AT&T's proposed installation at the 161-foot level of the tower would provide a 700 MHz coverage footprint of 1.83 square miles at -83 dBm and 1.42 square miles at -93 dBm. Within the 700 MHz footprint, AT&T's installation would provide approximately a total of 2.0 miles of coverage to the following main or primary roads: Route 7, Route 202, Candlewood Lake Road, Federal Road, and White Turkey Road Extension.

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.

Based on a lack of reliable wireless service for AT&T in southern Brookfield, eastern Danbury and northern Bethel, the Council finds a specific need for the facility to provide wireless services to the public.

Beginning in 2020, Applicants searched for a suitable tower site in the southern Brookfield/eastern Danbury/northern Bethel area, investigating 21 potential sites, of which only the proposed site was available and met the coverage needs of AT&T.

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. Approximately 30 utility pole small cell installations would be required to provide equivalent coverage to the target area, each costing approximately \$50,000 to \$70,000 not inclusive of front haul fiber connection costs. Therefore, the Council finds small cells are not a feasible alternative to the proposed facility.

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.

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.

HT commenced the municipal consultation process on April 14, 2022 and held a public information meeting at Town Hall on June 15, 2022. Concerns raised at the PIM included the facility's ability to improve coverage at schools, radio frequency emissions and alternative tower locations. The Town did not provide the Council with any location preferences pursuant to CGS §16-50gg.

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 is designed to accommodate four wireless carriers and municipal antennas.

The proposed site consists of a 165-foot monopole located in the northwestern portion of the 3.99-acre industrially-zoned parcel. The host parcel is developed with a single-story office building, detached garage and parking area. The southern and northeastern portions of the parcel are wooded/undeveloped.

The tower would be located in the northwestern portion of the host parcel at an elevation of 298 feet above mean sea level. A 3,150 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 12 panel antennas at a tower centerline height of 161 feet above ground level (agl). The proposed site plans depict one 22-foot whip antenna at the top of the tower and one 22-foot whip antenna at the 90-foot level of the tower for Town communications. AT&T would install a walk-in equipment cabinet on a concrete pad within the compound.

In the event an outage of commercial power occurs at the proposed site, AT&T would rely on a diesel-fueled generator with a 54-gallon belly tank. It is anticipated the generators would provide approximately 54 hours of run time before refilling is required.

The compound would be accessed by an existing paved driveway/parking area off of Vale Road and would continue along a new 12-foot wide gravel drive for a total distance of 640 feet to the compound. Utilities servicing the compound would be installed underground to a new on-site pole and then continue overhead to a new utility pole on the opposite side of Vale Road. This is the route preferred by Eversource. The Council will require that the final utility route be included in the Development and Management (D&M) Plan.

The nearest property boundary from the proposed tower and compound is approximately 36 feet and 9 feet, respectively, to the northwest (railroad corridor). The tower is designed with a yield point at 129 feet above ground level (agl) or 36 feet from the top of the tower to ensure that the tower setback radius remains within the boundary of the subject parcel. There are no residences within 1,000 feet of the proposed tower. The nearest residence is located approximately 1,273 feet to the south at 7 Park Lane.

Blasting is not expected to be necessary to construct the facility. If blasting is required, it would be conducted in accordance with state and municipal regulations. Development of the facility compound would require approximately 70 cubic yards of cut that would be replaced with clean broken stone fill.

Development of the site would disturb an approximate 0.34-acre area and would not require a DEEP-issued Stormwater Permit. HT would develop a detailed construction erosion and sedimentation (E&S) control plan that is consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control* (2002 E&S Guidelines). E&S controls would include, but not be limited to, filter socks.

The eastern-central portion of the host property contains an isolated depressional wetland. The limit of disturbance for installation of E&S controls at the site (which is approximately the nearest filter sock location) would be approximately 55 feet from the edge of the wetland at its closest point. Once site construction is completed, the facility lease area and compound would be approximately 123 feet to the wetland at its closest point. With the proposed E&S controls in accordance with the 2002 Guidelines, the proposed project would not adversely impact the wetland.

Four trees with a diameter of six inches or greater would be removed to develop the site.

The proposed facility is not located within a DEEP Natural Diversity Database buffer area.

The site is within the range of the northern long-eared bat (NLEB), a federally and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees within 0.25-mile and 150-feet, respectively, of the proposed tower.

The site is approximately 6.7 miles southwest of the Audubon at Bent of the River in Southbury, an Important Bird Area (IBA), as designated by the National Audubon Society. The proposed facility would not adversely affect the IBA and would comply with the U.S. Fish and Wildlife Service 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 National 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 effect on historic 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 35 acres (0.44% of the Study Area), including 8 residences. The tower would also be seasonally visible (leaf-off conditions from November to early May) from an additional approximately 96 acres (1.2%) of the Study Area, including 6 residences.

Year-round visibility of the tower would be generally limited to within 0.25-mile of the site and intermittently up to one mile from the site. The tower would be seasonally visible (leaf-off conditions) from areas that may extend southwestwards for up to approximately 0.72-mile, northwards for approximately 0.32-mile, eastwards for approximately 0.28-mile, and southwards for approximately 0.43-mile.

The tower was designed as a monopole to reduce its visibility from the surrounding area. A unipole would require additional height, and a monopine or "tree" monopole would have increased width due to the faux branches. Thus, both alternative designs would have an increased visual profile relative to the proposed monopole design at the site.

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.

There are no state or locally designated scenic roads located within two miles of the proposed site. No comments were received from the Town, OPM or DEEP regarding any impacts to scenic quality or resources. There are no blue blazed hiking trails maintained by the Connecticut Forest and Parks Association within two miles of the site.

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

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.

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's proposed antennas to be installed on the tower have been calculated to amount to 3.67 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure (MPE) using a far-field methodology for the proposed facility that accounts for a 6-foot tall person at ground level and the actual antenna patterns. This is conservatively based on the antennas emitting maximum power. This percentage is below federal standards established for the frequencies used by wireless companies. Prior to commencement of construction, the Council will require a final 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 patterns 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 165-foot monopole telecommunications facility located at 60 Vale Road, Brookfield, Connecticut.