

DOCKET NO. 515 - Cellco Partnership d/b/a Verizon Wireless } Connecticut
application for a Certificate of Environmental Compatibility and
Public Need for the construction, maintenance, and operation of a } Siting
telecommunications facility located at 180 School Road, Wilton,
Connecticut. } Council

August 17, 2023

Opinion

On March 17, 2023, Cellco Partnership d/b/a Verizon Wireless (Cellco), 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 180 School Road, Wilton, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for Cellco customers and address significant coverage deficiencies in Cellco's network in the central and western portions of the Town of Wilton (Town).

The party to this proceeding is Cellco. 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 Cellco 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.

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

The total estimated cost of the proposed facility is \$585,000, inclusive of costs associated with 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. Cellco is a private entity.

Cellco has significant coverage deficiencies in its wireless communications network in the central and western portions of Wilton which includes but is not limited to, Route 33 (Ridgefield Road), Route 106 (Wolfpit Road) and Route 7 (Danbury Road). Coverage objectives include the deployment of reliable in-vehicle service on roads, outdoors and within buildings in the proposed service areas.

Cellco provides wireless service to portions of Wilton from seven facilities within a four-mile radius of the proposed site. None of these existing facilities provides reliable service to the proposed service area.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz, 2100 MHz, 3550 MHz, and 3600 MHz frequencies, all of which transmit voice and data services. Cellco's 3600 MHz frequency is capable of supporting 5G services. In addition to coverage needs, Cellco's proposed installation on the tower would provide capacity relief to three existing sites in Wilton.

Cellco's proposed installation at the 120-foot level of the tower would provide a 700 MHz coverage footprint of 3.1 square miles at -85 dBm Reference Signal Received Power (RSRP) and 8.6 square miles at -95 dBm RSRP, as well as reliable in-vehicle service to 3.4 miles of Route 33 at -95 dBm RSRP.

Based on a lack of reliable wireless service for Cellco in the central and western areas of Wilton, the Council finds a specific need for a new tower to provide necessary wireless services for Cellco to an underserved area.

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 limit the number of frequencies that can be deployed, limit structure sharing with other carriers, and lack space for emergency backup power. To provide wireless service to the proposed service area would require a significant number of small cell deployments either on existing utility poles or on new utility poles along roadways or on private parcels throughout the proposed service area and would not be economically viable as a replacement for a single tower site. Therefore, the Council finds small cells are not a feasible alternative to the proposed facility.

In July 2021, the Town issued a Request for Proposals (RFP) from interested parties to lease the site, construct and manage a telecommunications facility. Cellco responded to the Town's RFP and was the sole bidder. On November 1, 2021, the Town accepted Cellco's bid and entered into a lease agreement with Cellco on June 6, 2022. The Town chose to waive the municipal consultation process since the Town had already reviewed Cellco's proposal during the RFP.

The proposed site is located on a Town-owned parcel that is used as a school bus parking lot. The site was selected by the Town through its RFP. Cellco determined that the site would satisfy its wireless service objectives. Since the site was pre-selected by the Town, Cellco did not conduct a separate site search or initiate a site selection process.

On November 2, 2022, at the request of the Town, Cellco and Town officials participated in a Public Information Meeting (PIM) attended by approximately 15 residents most of whom live northeast of the proposed tower, and four town officials. Concerns expressed at the PIM included, but were not limited to, the visual impact of the 123-foot tower, placement of the tower within a residential area, and alternative sites. Suggestions were made by attendees to shift the original tower location farther south to its currently proposed location.

To address visibility concerns from residents, Cellco and the Town agreed to move the proposed tower location 175 feet south of its original location and to install a monopole design tower. On December 2, 2022, Cellco conducted a crane test as part a visual assessment of the facility. Residents who gave their contact information at the PIM were notified of the crane test.

On March 6, 2023, the Town amended the original Land Lease Agreement to include the relocation of the proposed facility. Cellco did not present its original tower location to the Council for consideration.

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 applicant having already

acquired land or an interest therein for the purpose of siting a 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.

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.

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 123-foot stealth “tree” monopole (monopine) located in the northwestern portion of the 109.27-acre residentially zoned parcel. The host parcel is developed with schools, athletic fields and facilities, a community center and a school bus parking lot/depot which can be accessed from School Road. Portions of the parcel are undeveloped and wooded. The remaining areas on the parcel consist of a forested, sloping hillside with a wetland/stream system in the northwestern section of the host parcel.

The proposed monopine would be located adjacent to the eastern side of the school bus parking lot at an elevation of 371 feet above mean sea level. A 3,600 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.

Cellco would install 12 panel antennas and 12 remote radio heads on T-Arm antenna mounts at a tower centerline height of 120 feet above ground level. Cellco would install two equipment cabinets and a 50-kilowatt propane-fueled emergency backup generator on a 20-foot by 10-foot concrete pad within the compound. Cellco would also install a 1,000 gallon propane tank on an 18-foot by 5-foot concrete pad within the compound.

In the event an outage of commercial power occurs at the proposed site, Cellco would rely on its propane-fueled generator. Cellco anticipates the generator would provide 6 to 7 days of run time before refilling is required. During the proceeding, a question arose as to the availability of natural gas in the vicinity of the proposed site. The Council will order Cellco to explore the feasibility of a natural gas connection for the emergency backup generator and provide a cost comparison between natural gas-fueled and diesel-fueled emergency backup generation in the Development and Management (D&M) Plan.

Cellco would also install a battery backup system in order to avoid a “re-boot” condition during the generator start-up delay period. The battery backup system alone could provide up to 8 hours of backup power. The proposed equipment compound would be enclosed by an eight-foot high chain-link fence with an access gate adjacent to two existing bus parking spaces.

The compound would be accessed via the existing paved driveway within the school bus parking lot. The two existing bus parking spaces adjacent to the compound’s access gate would be converted into a 24-foot wide access drive for the facility compound. The converted parking spaces would be marked to indicate that they are for facility use only. Two replacement bus parking spaces would be constructed in the southwestern corner of the school bus parking lot.

Utilities servicing the facility are proposed to be installed underground from the compound, along the northeastern edge of the school bus parking area, to an existing pad mounted transformer located 350 feet northwest of the compound, to an existing utility pole on School Road. An alternative underground utility route would extend approximately 500 feet south of the compound to an existing utility pole on School Road. The Council will order identification of the final route for underground utilities to be provided in the D&M Plan.

The nearest abutting property boundary from the proposed tower is approximately 165 feet to the east (24 Richdale Drive). Thus, the tower setback radius for the proposed tower does not extend beyond the boundary of the host parcel and no tower yield point is necessary. There are approximately 3 residences within 1,000 feet of the proposed tower. The nearest residence is approximately 440 feet to the southwest at 15 Penny Lane.

A geotechnical survey would be performed prior to construction to evaluate existing subsurface conditions as part of the D&M Plan. The geotechnical survey would be used to design the tower and foundation. It would involve using a track-mounted boring rig. Some minor tree/brush clearing may be required to allow access for the drill rig to the boring locations. Cellco does not anticipate the need for blasting to construct the site. Subject to the results of the geotechnical survey, if ledge is encountered, Cellco would remove ledge by chipping. If blasting is required, Cellco follow appropriate protocols in accordance with state and municipal regulations.

Three forested wetland systems exist within the host parcel. Wetland 1 is a forested wetland northwest of the parking lot and is associated with poorly drained soils, hillside seeps and seasonal flooding. Wetland 2 is a forested wetland system located east of the parking lot. A vernal pool supporting wood frog, a vernal pool obligate species, is located within the interior of the wetland. Wetland 3 consists of a small isolated forested wetland system that abuts the northeast side of School Road. It is seasonally saturated and shows evidence of disturbance.

The construction limit of disturbance (LOD) is approximately 30 feet from Wetland 1, 96 feet from Wetland 2, and 112 feet from Wetland 3 at its closest points. The LOD would be approximately 151 feet from the vernal pool at its closest point.

There would be no direct impacts to the vernal pool or the associated vernal pool envelope, an area 100 feet from the edge of the vernal pool. Although development of the site would increase the developed portion of the Critical Terrestrial Habitat (CTH), an area 100 feet to 750 feet around the vernal pool, by 0.2 acres, there would be little impact given that 43% of the CTH already consists of developed land, well above the recommended 25% development limit that indicates a high-quality vernal pool.

To mitigate potential effects to the wetlands and vernal pool, Cellco would implement a Wetland and Vernal Pool Protection Plan during construction that includes an independent environmental compliance monitor to ensure erosion and sedimentation control measures are installed and maintained, contractor training, provisions for fuel storage and spill remediation, herbicide, pesticide and salt restrictions, and site inspection reporting. Cellco would also implement vernal pool Best Management Practices (BMPs) that include but are not limited to installation of appropriate erosion controls; periodic inspection and maintenance of isolation structures; herpetofauna sweeps; and contractor education and reporting.

The vernal pool BMPs would be implemented during early spring breeding (March 1 – May 25) and late summer dispersal (July 15 – September 15). The Council will require implementation of the Wetland and Vernal Pool Protection Plan.

Development of the site would disturb an approximate 0.33-acre area and would not require a DEEP-issued Stormwater Permit. Cellco 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).

Stormwater runoff within the compound would drain towards the east as a result of the 2% incline of the gravel surface. However, the gravel surface would facilitate stormwater infiltration, and thus would not contribute to off-site runoff. Cellco will not install any permanent stormwater management features. Temporary or permanent stormwater management features such as drainage swales could create decoy pools which could attract breeding amphibians such as wood frogs as they migrate to the vernal pool from the nearby adjacent forested habitats to the east and southeast.

Approximately 10 trees with a diameter of six inches or greater at breast height would be removed to construct the facility.

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. Although the proposed site is not located within 150 feet of a known NLEB maternity roost tree or within 0.25-mile of a known hibernaculum, Cellco would be willing to adhere to US Fish and Wildlife Service (USFWS) recommended measures for NLEB conservation which include but are not limited to conducting tree removal activities outside of the NLEB pup season (June 1-July 31) and active season (April 1-October 31). Due to its endangered status, the Council will order Cellco to implement the USFWS NLEB conservation measures.

The site is approximately three miles southeast of the Devils Den Nature Preserve in the Town of 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.

Prime farmland soils are located within the host parcel in wooded areas to the west, southwest, north and northeast of the school bus parking lot. Prime farmland soils are also located in the far eastern portion of the parcel adjacent to Route 7. Statewide important farmland soils are located in the west/central portion of the host parcel north of School Road. No prime farmland soils or statewide important farmland soils are located within the proposed facility compound.

The host parcel is not within a flood zone. Operation of the facility would comply with DEEP Noise Control Standards.

The Wilton Center Historic District listed on the National Register of Historic Places is located approximately 0.5 miles south of the host parcel. The proposed tower would not be visible from this listed resource. Cellco would file a historic resources report with the State Historic Preservation Office if the proposed facility is approved by the Council.

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

Based on the visual impact assessment, the proposed tower would be visible year-round from approximately 12 acres (0.2% of the Study Area) including 6 residentially developed properties within a half-mile of the

site. The tower would also be seasonally visible (leaf-off conditions from November to early May) from approximately 89 acres (1.1%) of the Study Area, including 20 residentially developed properties within a half-mile of the site.

The monopole would not be visible from Merwin Meadows Park and Allen's Meadows Park northwest and southwest of the site, respectively.

The tower would be seasonally visible from various roads within 0.5 mile of the site including, but not limited to, Richdale Drive to the north and parts of School Road to the west of the site. Year-round views beyond a half-mile include Middlebrook Farm Road 0.56 miles to the northwest, and open areas around Ambler Farm 1.25 miles northeast of the site.

No schools or commercial child day care facilities are located within 250 feet of the site. The nearest building containing a school or commercial child day care is the Middlebrook School, approximately 422 feet south of the site.

Visual impact of the facility would be reduced due to its design as a stealth "tree" monopole. A flagpole type tower would not be feasible due to the limited amount of tower-mounted equipment that can be installed at each level of the tower, necessitating a much taller tower.

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 is one state-designated and two locally-designated scenic roads located within two miles of the proposed site. The proposed tower would not be visible from any of these scenic roads. No comments were received from the Town, Office of Policy and Management 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.

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 the stealth "tree" monopole design of the facility minimizes aesthetic impacts.

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 Cellco's proposed antennas to be installed on the tower have been calculated to amount to 6.9 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.

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 at the proposed location, 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 123-foot stealth "tree" monopole telecommunications facility at 180 School Road, Wilton, Connecticut.