

DOCKET NO. 481 - 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 667, 665, 663 and 663R Main }
Street, Cromwell, Connecticut. } Council

July 19, 2018

Opinion

On February 23, 2018, 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 wireless telecommunications facility to be located in the Town of Cromwell, Connecticut. The purpose of the proposed facility is to provide improved wireless voice and data services in Cromwell and portions of Rocky Hill.

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.

Cellco is currently located on four existing telecommunications facilities within a two-mile radius of the proposed site. However, there are no other existing towers or sufficiently tall structures available in the area. Thus, Cellco investigated available vacant land sites for a new tower including a site suggested by neighbors at the November 30, 2015 Public Information Meeting. Of four sites reviewed by Cellco, two were rejected because the property owner was not interested in a lease for a tower at those sites, one was rejected because mutual agreement between Cellco and the property owner was not reached after nearly two years of negotiations, and one was selected – the proposed site.

The subject property (totaling approximately 7.78 acres) consists of four contiguous parcels as noted below:

- a) 663 Main Street parcel owned by Cromwell Concrete Products, Inc. (CCPI) and zoned Residential (R-15);
- b) 663R Main Street parcel owned by CCPI and zoned R-15;
- c) 665 Main Street parcel owned by Libera Real Estate Holdings, LLC and zoned Business Industrial Park District (BP);
- d) 667 Main Street parcel owned by CCPI and zoned BP.

Cellco proposes to construct a 120-foot monopole and associated equipment compound at the northwestern portion of the subject property, i.e. the 667 Main Street parcel. The remaining parcels will be used to provide access from Main Street to the tower compound.

On March 7, 2018, Cellco's counsel was contacted by counsel representing John Lael Libera, the owner of the closest abutting residence (Libera property) at 669 Main Street, Cromwell. Mr. Libera's attorney requested that Cellco consider moving the tower site 100 feet to the east of the proposed location. Subsequently, Cellco reached out to its landlord who was agreeable to such a relocation. On April 12, 2018, Cellco filed revised plans with the Council to include a 100-foot shift of the proposed facility to the east. The Council notes that this 100-foot shift to the east is a "revision" and not an "alternative," so the shifted location will be considered the proposed site.

Cellco will install six panel antennas and 12 remote radio heads on a square platform at a centerline height of 120 feet above ground level (agl). Cellco will install its equipment on a 9-foot 4-inch by 16-foot elevated platform with a canopy roof within an approximately 50-foot by 50-foot fenced compound. The proposed equipment compound will be surrounded by an eight-foot high chain-link fence. The fence will have an anti-climb weave with a mesh size of 1.25 inches.

Cellco's radio frequency propagation modeling demonstrated a need to provide wireless service to existing service gaps in the area and has presented a need to offload capacity from adjacent sites. Specifically, Cellco's existing Cromwell North (Alpha sector) and Rocky Hill 2 (Beta sector) are currently operating at or approaching their existing capacity limits, and Cellco is experiencing significant gaps in wireless service in the area at its 700 MHz and 2100 MHz frequencies. At the proposed site, Cellco would deploy 700 MHz long-term evolution (LTE) and 2100 MHz LTE services. Cellco's 850 MHz and 1900 MHz frequencies would be added in the future when needed for capacity. Cellco would need a minimum antenna height of 120 feet at the proposed site to meet its wireless service objectives.

The tower would be designed to support four levels of wireless carrier antennas (including Cellco), as well as municipal and/or emergency services antennas if needed. The tower could be designed to be extended in height by up to 20 feet. However, no other wireless carriers or the Town of Cromwell have expressed an interest in co-locating on the tower at this time. The tower radius extends beyond the nearest property boundary 35-feet to the north. Accordingly, the Council will require that the tower be designed with a yield point to ensure that the tower radius remains within the boundaries of the subject property.

Access to the proposed site from Main Street will be provided over an existing paved driveway for a total distance of 156 feet, and a new 12-foot wide and approximately 990 foot gravel access road will be constructed roughly parallel to an existing tree line along the southern property boundary to reach the compound.

Utilities will connect overhead to two existing poles on opposite sides of Main Street. Utilities will continue underground roughly parallel to the proposed access road to reach the compound. The utility trench would be on the south side of the access road near existing trees. Cellco would be willing to put protective measures in place or shift the utilities to the north side of the access road to protect the roots of the existing trees. No trees are expected to be cleared to construct the proposed facility. Accordingly, the Council will require that Cellco provide in the Development and Management Plan (D&M Plan) its final plans to protect the tree roots from the utility trenching on the subject property.

In the event an outage of commercial power occurs, Cellco will rely on a diesel-fueled generator for backup power. The generator will have an estimated 43 hours of run time before requiring refueling. Cellco will also have a battery backup system to avoid a "reboot" condition during the generator start-up delay period. The battery backup system alone could provide about four hours of backup power. During the hearing, Cellco stated that typical operation of its backup power systems would be for up to 48 hours. The Council is concerned that a two-day period between refueling is not

enough. Accordingly, the Council will require consideration of additional run time capacity for the backup generator.

According to the Natural Diversity Database, the eastern box turtle, a State-designated Species of Special Concern, exists in the vicinity of the proposed site. Cellco will implement an Eastern Box Turtle Protection Program (EBTPP). The EBTPP consists of several components: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; education of all contractors and sub-contractors prior to the initiation of work on the site; protective measures; and reporting. Accordingly, the Council will require that the final EBTPP be provided in the D&M Plan.

Connecticut is within the range of the northern long-eared bat (NLEB), a federally-listed Threatened species and State-listed Endangered species. There are no known NLEB hibernacula or known maternity roost trees near the project area, and thus the proposed project would not adversely impact the NLEB. The United States Fish and Wildlife Service (USFWS) did not respond to Cellco's NLEB submittal, and in accordance with USFWS rules, the project is deemed in compliance.

The proposed facility is not located near an Important Bird Area, as designated by the National Audubon Society. In addition, the proposed facility will comply with the U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

There are no on-site wetlands; however, two are located off-site. Wetland 2 is located approximately 160 feet to the west of the proposed tower compound. Wetland 1 is located approximately 360 feet to the northwest of the proposed tower compound. Due to the significant distance separating the proposed facility from these wetland resource areas, no likely adverse impact to wetlands or watercourses is expected to result from the proposed project. The Council further notes that the proposed 100-foot shift results in greater wetland buffers than the originally proposed 85 feet and 354 feet, respectively.

No sites listed on the National Register of Historic Places are located proximate to the proposed facility. No views of the proposed tower would be achieved from the one State-registered historic place (Wright Samuel House in Rocky Hill) approximately 0.5 mile to the northeast.

The tower will be visible year-round from approximately 108 acres within the two-mile visibility study area. The tower will be seasonally visible from approximately 224 acres within such study area. Generally, year-round views of portions of the facility would be limited to locations within less than a 0.75 mile radius of the subject property. No landscaping is proposed around the tower compound.

The proposed 100-foot shift to the east would not provide a substantially different view of the tower from the Libera property at 669 Main Street, but it would roughly center the tower behind a deciduous tree and provide more distance to mitigate views to some degree. The elevation or perceived height of the tower would be about the same. Instead, the view of the tower would shift to the right or eastward.

There are two hiking trails located about one mile from the proposed site: Dinosaur State Park trail to the north and River Highlands State Park trail to the southeast. There would be no views of the proposed tower from either trail.

A camouflaged tower design such as a concrete silo or monopine would not be practical due to an increase in visibility and cost.

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 by Council staff to amount to 29.5% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, 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 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.

The Council believes that the proposed 100-foot shift is prudent because the visual impacts on the Libera property can be mitigated to some degree, and this can be achieved at no increase in the cost of the project.

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 120-foot galvanized steel monopole telecommunications facility at the proposed site located at 667, 665, 663 and 663R Main Street, Cromwell, Connecticut.