DOCKET NO. 455 – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at Southington Tax Assessor Map/Lot 066053, 99 East Street, Southington, Connecticut.	}	Connecticut
	}	Siting
	}	Council

May 14, 2015

Opinion

On December 30, 2014, 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 to be located at 99 East Street in the Town of Southington, Connecticut. The purpose of the proposed facility is to replace an existing Cellco telecommunications facility located on West Peak in Meriden. The West Peak facility is an existing 150-foot tower established early in the development of Cellco's network to provide wireless service to a large geographic area. Due to the evolution of the wireless industry, the existing facility creates interference problems with other existing Cellco facilities. Cellco has decided to eliminate its West Peak Meriden cell site and pursue two new replacement cell sites in the area. The tower that is being eliminated from Cellco's network is still being used by other users. These replacement facilities would provide substantially similar coverage and significant capacity relief to the remaining cell sites in Meriden and Southington. One of the sites consists of antennas attached to an existing water tank at 528 Johnson Avenue in Meriden. The City of Meriden approved this co-location on December 10, 2014. The other site is the proposed facility, which would provide coverage and capacity relief along significant portions of Route 120, Route 364, and local roads, as well as for residences and businesses in south-central Southington.

Cellco currently operates three facilities within two and one-half miles of the proposed site. None of these existing facilities serve the area of need that the proposed facility could serve. Indeed, the Milldale site is currently at or near its capacity limits, which results in significant reductions in reliable wireless service in this area. The proposed facility would provide some capacity relief to the Milldale site.

Cellco's existing service statistics indicate rates for dropped calls and ineffective call attempts are one percent and one and one-half percent, respectively, below the service standard threshold. Cellco has other indicators of substandard service, including monthly baseline drive data, propagation modeling tools, customer complaints, and system performance monitoring reports.

In areas lacking adequate service, radio frequency propagation modeling is used to determine locations within that area where a tower could be sited to provide reliable wireless service. This area is referred to as a search ring. Properties within that search ring are sought for a cell tower location and if a parcel of property is determined feasible then a willing land owner would need to enter into a lease agreement with Cellco prior to submitting an application with the Council.

Cellco investigated seven properties, one of which is the proposed site. Three property owners were not interested in leasing space, two properties were rejected based on radio frequency engineers' assessments, and on one property Cellco was not able to locate a suitable site. During the hearing, the Council asked Cellco to evaluate the shared use of existing nearby structures: electric transmission support structures, 80 to 90 feet in height; an Eversource lattice tower adjacent to the Southington substation north of the site; and two 250-foot radio towers located about one mile west of the site. Cellco determined the Eversource lattice tower is an integral microwave link that Eversource does not lease space on for security and safety reasons. As to the transmission structures, while Cellco does share some existing electric transmission support structures, it has had difficulty scheduling installation and maintenance. Recognizing the conflict involved between Cellco's need to access its equipment and the utilities' need to protect the reliability of the grid, the Council does not oppose Cellco's business decision to avoid shared use of electric transmission structures. Finally, Cellco dismissed the shared use of the radio towers because their location is approximately 2,600 feet west of the search ring perimeter and would essentially provide redundant coverage to existing Cellco sites in Southington.

Cellco is seeking to construct a 90-foot tower as a monopine, with a total height of 97 feet, including camouflage branches, and an associated equipment compound on the westerly portion of a 27-acre property owned by the Town of Southington. The monopine design was agreed upon by the Town and some adjacent residents. The property is zoned residential, consisting primarily of agricultural fields and a leaf composting facility. Cellco would upgrade 600 feet of an existing access road from East Street and construct a new 160-foot gravel drive beyond that to the proposed site. Utility connections would be routed underground along the easterly side of the property within a utility easement from a utility pole on East Street. Cellco plans to install a 35-kilowatt propane-fueled emergency backup power generator to be used in the event commercial power is disrupted. The tower would be designed to support Cellco's antennas at the 80-foot level, future installation of Town whip antennas at the 90-foot level, and the potential for future antennas by other wireless service providers. Also, Cellco would design the tower to be extended up to 20 feet in height if additional tower height is needed by future providers. The tower setback radius would remain on the host property.

The Town wanted to preserve ongoing agricultural activity on the open field part of its property and requested that the facility be located at the edge of the forested area. This will result in four large trees being cut down for the proposed facility. The nearest inland wetland is located approximately 113 feet northeast of the limits of clearing for the proposed facility. This wetland is part of a large, expansive wetland system associated with the floodplain of Misery Brook, which is located approximately 1,000 feet to the east. The proposed site is outside the 500-year flood zone. Within the large wetland system, two distinct "cryptic type" vernal pools are located to the north and east of the proposed facility. The edge of the vernal pool nearest to the proposed site is 137 feet away.

Field observations indicate that these vernal pools have high biological value. However, the critical terrestrial habitat (CTH) of the two vernal pools has already been compromised in that it is more than 25 percent developed. The edges of vernal pool 1 and vernal pool 2 to the proposed site are approximately 145 feet and 137 feet away, respectively. Vernal pool 1 has 36.3 percent of its CTH developed and vernal pool 2 has 28.7 percent. The proposed facility would result in a 0.05 percent increase in development for the total CTH per each vernal pool envelope. Therefore, the proposed facility represents a de minimis increase in development. With best development practices utilized adjacent to the nearest vernal pool, vernal pool 2, and proper erosion and sedimentation control measures in place during construction, development of this facility should not result in any adverse impacts to the wetlands or vernal pools.

The proposed site is within an aquifer protection area for the Southington Water Department's Well Numbers 7 and 8 and the Department of Public Health (DPH) provided comments to protect this area. Cellco committed to incorporating DPH's mitigating measures in the Development and Management (D&M) Plan. The Council will so order.

According to the Department of Energy and Environmental Protection Natural Diversity Data Base, the spotted turtle (*Clemmys guttata*), a candidate State Special Concern Species, may occur in the vicinity of the proposed facility. In order to protect the species, Cellco has committed to include a Spotted Turtle Protection Plan in its D&M Plan.

An historic resource was identified at 391 Belleview Avenue, the Dr. J. Porter House. This resource is approximately 1,320 feet northwest of the proposed site. No other cultural or historic resources were identified within the 0.5 mile area of potential effect. Cellco contended the proposed monopine would be minimally visible during winter/leaf-off conditions: thus its presence would not compromise the character and integrity that give the house its historical significance. After discussion with Cellco, the State Historic Preservation Office concluded the proposed monopine would have "no adverse effect on contributing resources listed or eligible for listing on the National Register of Historic Places", with conditions that the monopine be designed and installed to be as non-visible as possible and that it be removed if not in use for six consecutive months.

As to the general visibility of this facility--if the monopine is constructed close to the way it is represented in the simulations--it will be one of the best camouflaged of any the Council has seen. Since the monopine is relatively short in height, views of it would be screened by the mature trees on the site parcel. Most year-round views would be limited to the property itself and to area roads and affected residences within a quarter-mile radius of the site, over an area of 30 acres. Even year-round, only the top portion of the tower would generally be seen. Seasonal views would extend farther away for these cases. The tower's distance and monopine design would make it virtually indistinguishable from natural trees.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the radio frequency power density levels of the antennas proposed to be installed on the tower, based on far field approximations, amount to 12.2% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure. This percentage is 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.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, maintenance and operation of the telecommunications facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish 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 telecommunications facility structure designed as a monopine at the proposed location, 99 East Street, Southington, Connecticut.