DOCKET NO. 517 - MCM Holdings, LLC application for a	}	Connecticut
Certificate of Environmental Compatibility and Public Need for		
the construction, maintenance, and operation of a	}	Siting
telecommunications facility located at the Boy Scouts of America		
Camp Hoyt, 288 Simpaug Turnpike (Parcel No. 12-29), Redding,	}	Council
Connecticut.	<i>,</i>	
		March 28, 2024

Opinion

On August 15, 2023, MCM Holdings, LLC (MCM), 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 150-foot wireless telecommunications facility at 288 Simpaug Turnpike, Redding, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for Cellco Partnership d/b/a Verizon Wireless (Cellco) customers and address significant coverage deficiencies in Cellco's network in portions of northwestern Redding, southwestern Bethel, and southern Danbury.

The party to this proceeding is MCM. The Intervenors to the proceeding are Cellco, the Grouped Resident Intervenors¹ and the Grouped Business Intervenors². 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. 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.

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.

MCM owns and/or operates numerous tower facilities in the state. MCM 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 and would lease space on the proposed tower for their telecommunications equipment.

The total estimated cost of the proposed facility is \$750,000, 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. MCM and Cellco are private entities.

¹ Pursuant to CGS §16-50n(c), the Council grouped Dorothy DeLuca, Suzanne Fogle, JoAnn Villamizar, Danielle Caldwell, Meredith Miller, Tim K. Keyes, Michael Ungerer and CJL Lancaster.

² Pursuant to CGS §16-50n(c), the Council grouped New Pond Farm Education Center and Marchant Farm, LLC.

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Cellco's network does not have reliable service in portions of northwest Redding, southwest Bethel, and southern Danbury, including but not limited to, the areas around Route 53, Long Ridge Road, Simpaug Turnpike, and Umpawaug Road. Cellco provides wireless service to portions of northern Redding from five existing facilities within three miles of the proposed site. None of these existing facilities provides reliable service to the proposed service area, and three of these facilities host antenna sectors that are operating at exhaust in the direction of the proposed site.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 3500 MHz wireless service at the site, all of which transmit data services. The 3500 MHz service band is designed to support 5G services.

Cellco's proposed installation at the 146-foot level of the tower would provide reliable in-building and invehicle 700 MHz service to a 3.7 and 9.2 square mile area, respectively. It would also provide 850 MHz, 1900 MHz, 2100 MHz and 3500 MHz services which are nonexistent in the proposed service area. These frequencies provide faster downlink speeds than the 700 MHz network. In addition to providing reliable service to the surrounding area, the site would provide capacity relief to exhausted 700 MHz sectors at three existing Cellco facilities in Redding and Danbury, allowing customers closer to those facilities to have better network performance.

Although available on-line, Cellco's network service area maps provided by its marketing department are not used to determine the need for a new facility, rather they are used exclusively for marketing and have different thresholds than those used to design Cellco's operating network. They include disclaimers regarding accuracy with no guarantee of service. Cellco's radio frequency engineers use an in-house coverage modeling program to determine network performance and service needs.

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.

Based on a lack of reliable wireless service for Cellco in northwest Redding and adjacent areas, the Council finds a specific need for the facility. Although the proposed site provides necessary reliable coverage to portions of the greater area of need, it cannot meet all of the coverage needs of Cellco due to hilly terrain and the expansiveness of the underserved area, especially at the higher frequencies within Cellco's network. Additional facilities may be required in the future to provide reliable wireless services to areas that remain underserved.

MCM began searching for a site in the northern portion of Redding area in 2014/2015, based on its own analysis that a telecommunications carrier may need a tower to serve the surrounding area. MCM subsequently signed a lease with the Boy Scouts of America for a site at its 170-acre Camp Hoyt. The host parcel is used as a Boy Scout camp and contains several buildings, associated camp structures, hiking trails and a gun range, accessed by a paved and gravel drive extending from Simpaug Turnpike and ending at a gravel parking area.

Cellco issued a search ring for a site in northwest Redding in the first quarter of 2016, and during this search, determined that MCM's site at Camp Hoyt would meet its coverage objectives. Cellco also examined the possibility of collocation at existing towers in the surrounding area, but none were able to

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provide adequate, reliable service to the proposed service area due to topography or distance from the area of need.

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 applicant 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.

MCM presented the Town with a technical report for the site in April 2023 and participated in a public information meeting at the Town Hall on June 8, 2023. At the request of the Town, MCM conducted a balloon float to simulate the height of the proposed facility on July 24, 2023.

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, including Cellco, and municipal antennas.

The proposed facility consists of a 150-foot monopole that is painted brown within a 4,880 square foot compound located in the northern portion of the Camp Hoyt property. No other wireless carriers expressed an interest in co-locating on the tower at this time.

Cellco proposes to install 9 antennas and 9 remote radio heads on an antenna platform at a tower centerline height of 146 feet above ground level. Cellco would install two equipment cabinets and a propane-fueled emergency backup generator on a 10-foot by 20-foot concrete pad within the compound. The compound can support radio equipment of three other carriers.

To deter unauthorized access to the compound and tower, the compound would be enclosed by an eightfoot chain link fence, accessed through a locked, 12-foot-wide gate. In addition to the security fence, the Council will order MCM to incorporate removable climbing pegs at the lower eight to ten feet of the tower.

In the event an outage of commercial power, Cellco would rely on its 50-kilowatt propane-fueled generator and associated 1,000-gallon propane tank that would provide approximately 3.5 days of run time before refilling is necessary. Cellco would also provide a battery backup power source for use in the event the generator does not start. The compound has enough space to accommodate two other 500-gallon propane tanks for use by other carriers. To encourage the use of emergency backup power for all carriers that may locate on the site in the future, the Council recommends MCM re-design the compound to include space for a fourth emergency backup power generator and associated 500-gallon propane tank.

The site would be accessed using the existing Hoyt Camp driveway and parking lot. At the end of the parking lot, MCM would construct a new 12-foot wide, 125-foot long gravel access drive to the compound. Utilities servicing the facility would be installed underground along the access road to an existing utility pole at the edge of the parking lot. A transformer, using insulating mineral oil would be located within 25

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feet of a wetland on the host parcel. To ensure water quality is not impacted in the event of an oil leak, the Council will order MCM install a transformer with a secondary containment system and/or a low-level oil alarm.

The nearest property boundary from the proposed tower is approximately 272 feet to the south at 101 Marchant Road (New Pond Farm Education Center). The tower setback radius for the proposed tower would remain within the boundary of the host parcel. No camp buildings or outdoor gathering areas are within the tower setback radius. A hiking trail is located within 90 feet of the tower site, therefore, the Council will order MCM to design the tower with a yield point to ensure the tower would not impact the hiking trail.

There is one residence within 1,000 feet of the site, located approximately 935 feet to the west at 208 Simpaug Turnpike.

A geotechnical survey would be performed prior to construction to evaluate existing subsurface conditions as part of the Development and Management (D&M) Plan. Some minor tree/brush clearing may be required to allow access for the drill rig to the soil boring locations.

The tower site is located in a forested area southeast of the Camp Hoyt parking lot. The development area slopes gently to the west. Construction of the site would require 345 cubic yards of excavation. Excess material would be disposed of off-site. Portions of a stonewall adjacent to the site would be removed to facilitate construction. MCM does not anticipate the need for blasting to construct the facility. If bedrock is encountered, a rock chipper would be used for rock removal. The proposed facility would be constructed in compliance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*.

Development of the site would require the removal of 19 trees with a diameter of six inches or greater at breast height.

Two wetland areas were identified near the site; one west of the site adjacent to the existing parking lot (Wetland 1), and the other in a forested area east of the site (Wetland 2). A high-quality vernal pool, supporting wood frog and spotted salamander, is located within Wetland 2. The construction limit of disturbance is 19 feet to Wetland 1 and 430 feet to Wetland 2 at its closest point. Post construction, the proposed access drive and compound are approximately 24 feet and 48 east of Wetland 1 at its closest point. MCM would implement a wetland and vernal pool protection plan during construction that includes on site monitoring, protective barriers and site inspections. Due to the proposed distance to Wetland 1, the Council recommends that MCM examine the feasibility of reasonably shifting the facility site further away from Wetland 1. To mitigate potential effects to the wetlands and vernal pool, the Council will order a Wetland and Vernal Pool Protection Plan be submitted to the Council prior to construction.

A review of the DEEP Natural Diversity Database indicated the Appalachian blue butterfly may occur in the general area of the site. The butterfly can be found in dry mixed woodlands and edge areas with black cohosh, a host plant. MCM conducted a survey for black cohosh in the site development area and no plants were found; therefore, no protection measures for the butterfly and host plant are necessary.

Although the northern long-eared bat (NLEB), a federally-listed and state-listed endangered species, is known to occur throughout Connecticut, 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. Additionally, the U.S. Fish and Wildlife Service (USFWS) determined that the proposed facility would not have an impact on the NLEB.

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The site is within the range of the bog turtle, a federally-listed threatened species and state-listed endangered species that inhabits specific wetland habitat types comprised of wet meadows, pastures and fens in areas underlain with limestone. Although the site does not support bog turtle habitat, MCM would implement bog turtle protection measures, including but not limited to contractor education, site inspections, and isolation barriers. The Council will order the Bog Turtle Protection Plan to be submitted to the Council prior to construction.

The proposed facility is not proximate to a National Audubon Society designated Important Bird Area. The facility would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The proposed facility would have no effect on sites listed on or eligible for listing on the National Register of Historic Places.

The site is within the Saugatuck Reservoir public water supply watershed, an active source of drinking water for the Aquarion Water Company (Aquarion). MCM would consult with Aquarion prior to construction and has developed a petroleum materials storage and spill prevention plan to ensure watershed resources are not impacted during site construction.

The site is not within a flood zone, an aquifer protection area or within an area with prime farmland soil. Operation of the facility would comply with DEEP Noise Control Standards.

Based on MCM's visual impact assessment within a two-mile radius of the site (Study Area-8,042 acres), the proposed tower would be visible year-round (above the trees) from approximately 2 acres of the Study Area, mostly over open fields and water, at distances of approximately 0.4-mile to the east and approximately 1 mile to the north.

The tower would be seasonally visible (leaf-off conditions) from approximately 44 acres of the Study Area with most of this seasonal visibility occurring from locations on the host parcel and on the abutting New Pond Farm Education Center parcel. Other areas with seasonal visibility include, but are not limited to, Simpaug Turnpike northeast of the site, isolated locations within 0.75 mile of the site, and from two residences within 0.25 mile of the site, 235 Simpaug and 208 Simpaug Turnpike.

To screen some views of the facility from camp facilities and the abutting New Pond Farm Education Center, privacy slats would be installed on the chain link fence and 8-foot evergreens would be planted on the north, west and south sides of the compound. MCM would paint the tower brown in order to blend it in with the surrounding deciduous forest.

There are no Connecticut blue-blazed hiking trails or state designated scenic roads located within two miles of the proposed site. The tower would be visible from an education center hiking trail located in a forested area approximately 300 feet to the southwest.

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 Plan of Conservation and Development identifies Marchant Road, Umpawaug Road and Side Cut Road, all within 0.6-mile of the site, as Town scenic roads. No year-round views of the tower are

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anticipated from these roads. No comments were received from the Town, Office of Policy and Management or DEEP regarding any impacts to scenic quality or resources.

Pursuant to CGS \$16-50p(a)(3)(F), for a telecommunications facility proposed to be installed on land near a building containing a school, the facility will not be less than 250 feet from the building containing a school unless the location is acceptable to the chief elected official of the municipality or the Council finds that the facility will not have a substantial adverse effect on the aesthetics or scenic quality of the neighborhood in which such school is located. No 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. The Council also finds that a brown painted monopole design minimizes aesthetic impacts to the surrounding area.

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 9.0 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 150-foot monopole telecommunications facility, painted brown, at 288 Simpaug Turnpike, Redding, Connecticut.