

Petition No. 1494
Cellco Partnership d/b/a Verizon Wireless
Durham Fairgrounds, 24 Townhouse Road, Durham
Small Wireless Facility
DRAFT Staff Report
April 14, 2022

Introduction

On March 4, 2022, the Connecticut Siting Council (Council) received a petition (Petition) from Cellco Partnership d/b/a Verizon Wireless (Cellco) for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed installation of a small wireless telecommunications facility on a new 38.5-foot wood pole at Durham Fairgrounds, 24 Townhouse Road in Durham, Connecticut.

The small wireless facility would be installed on a new wood utility pole that will not be used for electric distribution service. It would provide additional coverage and capacity relief to the Cellco network in the surrounding area.

On March 2, 2022, Cellco provided notice of the proposed small wireless facility to the Town of Durham (Town), the host property owner and abutting property owners.

On March 7, 2022, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by April 3, 2022. No comments from the Town have been received.

The Council issued interrogatories to Cellco on March 22, 2022. Cellco provided responses to the Council's interrogatories on April 5, 2022.

Jurisdiction

Pursuant to CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications towers, including associated equipment, owned or operated by the state, a public service company or a certified telecommunications provider or used in a cellular system.

Under Regulations of Connecticut State Agencies §16-50j-2a (30), "Tower" means a structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and that is high relative to its surroundings, or that is used to support antennas for sending or receiving radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, which is or is to be:

- a) **used principally to support one or more antennas** for receiving or sending radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, and
- b) owned or operated by the state, a public service company as defined in Section 16-1 of the Connecticut General Statutes, or a certified telecommunications provider, or used in a cellular system, as defined in Section 16-50i(a) of the Connecticut General Statutes. (Emphasis added).

The proposed utility pole will be used principally to support the small wireless facility. It would be owned and operated by Cellco, a certified telecommunications provider. Thus, the Council has jurisdiction over the proposed small wireless facility.

The Federal Communications Commission (FCC) specifically defined “small wireless facility” in its 2018 Report and Order as facilities that meet each of the following conditions:

1. Mounted on structures 50 feet or less in height including their antennas; or
2. Mounted on structures no more than 10 percent taller than other adjacent structures; or
3. Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater.

The proposed utility pole is 50 feet or less in height including the antennas. It is a “small wireless facility” under the FCC definition.

Proposed Small Wireless Facility

On October 17, 2014, the Council issued a Declaratory Ruling to Cellco in Petition No. 1117 for the construction maintenance and operation of a small cell telecommunications facility at the Durham Fairgrounds. The existing small cell facility is approximately 1,235 feet north of the proposed small wireless facility.

Cellco maintains four telecommunications tower sites and two small cell sites in Durham. Additional facilities in Middletown and Wallingford also provide service to Durham. Cellco is currently experiencing network reliability problems with service in the vicinity of the Durham Fairgrounds, particularly during the annual Durham Fair, an event of statewide significance. During the fair, stress on network capacity hinders reliable wireless service. In the past, Cellco has installed temporary cell tower sites as necessary; however, due to the high demand for these temporary cell tower sites throughout the state for events of statewide significance, Cellco seeks a permanent solution to maintain reliable wireless service at the Durham Fairgrounds and the surrounding area.

Cellco proposes to provide capacity relief and added coverage benefits at the fairgrounds and the immediate surrounding area. The proposed facility would provide wireless service in Cellco’s 1900 MHz, 2100 MHz, 3600 MHz and 3700 MHz frequencies.

Land use surrounding the site is residential and commercial. The proposed utility pole is located about 360 feet from the nearest residential property line northeast of the site.

Cellco would install a 38.5-foot¹ wood utility pole in the southern portion of the Durham Fairgrounds property. Three 3700 MHz antennas would be installed at 37 feet above ground level (agl); three 3600 MHz antennas would be installed at 34 feet agl; and three 1900/2100 MHz antennas would be installed at 30 feet agl. Six remote radio units would be installed on a rack at ground level within the equipment compound. The facility would be capable of providing 5G wireless services.

Equipment would be installed on a 5-foot by 4-foot concrete pad within a 16-foot by 9-foot fenced compound at the base of the pole. Fencing would include privacy slats. Bollards would be installed on the north, west and south sides of the compound. Electric and telephone service would extend underground from an existing utility pole on the Durham Fairgrounds property north of the proposed facility.

¹ The proposed wood utility pole would be approximately 51.5 feet in length. Approximately 13 feet would be buried.

Cellco would install a battery cabinet within the equipment compound to provide emergency backup power to the facility for approximately eight hours. Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the Federal Communications Commission (FCC). At present, no standards for backup power for CMRS providers have been promulgated by the FCC.

The estimated cost of the facility is \$250,000.

Public Safety

A Professional Engineer duly licensed in the State of Connecticut has certified that the proposed pole would be structurally adequate to support the proposed loading.

The calculated power density would be not more than 54.6 percent of the applicable limit using a far-field calculation.

Notice to the Federal Aviation Administration is not required.

Environmental

The proposed facility would not be located within a 100-year or 500-year flood zone. The nearest wetland is associated with the Coginchaug River floodplain, located on-site approximately 510 feet south of the proposed facility.

The proposed project is located within the shaded area of the Department of Energy and Environmental Protection (DEEP) Natural Diversity Database (NDDDB). On June 10, 2021, Cellco received a NDDDB Determination letter from DEEP stating that no negative impacts to state-listed species would occur from development of the proposed facility.

No tree removal is required for the proposed project.

Visibility of the proposed facility would be primarily limited to areas within the Durham Fairgrounds property itself. Vegetation and topography in the surrounding area would limit views of the small wireless facility from adjacent properties, specifically the residential properties to the east.

Facility Construction

Construction would occur Monday through Saturday, 7:00 AM to 7:00 PM and is expected to be completed within approximately eight weeks.

Conclusion

If approved, staff recommends the following condition:

1. Approval of any project changes be delegated to Council staff.

Site Plan



Legend

- Proposed Verizon Wireless Compound
- Proposed Verizon Wireless Equipment
- Proposed Verizon Wireless Power and Telco Service
- Existing Utility Pole (By Others)

- Subject Property
- Approximate Parcel Boundary

US Maps:
as Map Source: 2019 CT EOD Imagery
or Scale: 1 inch = 40 feet

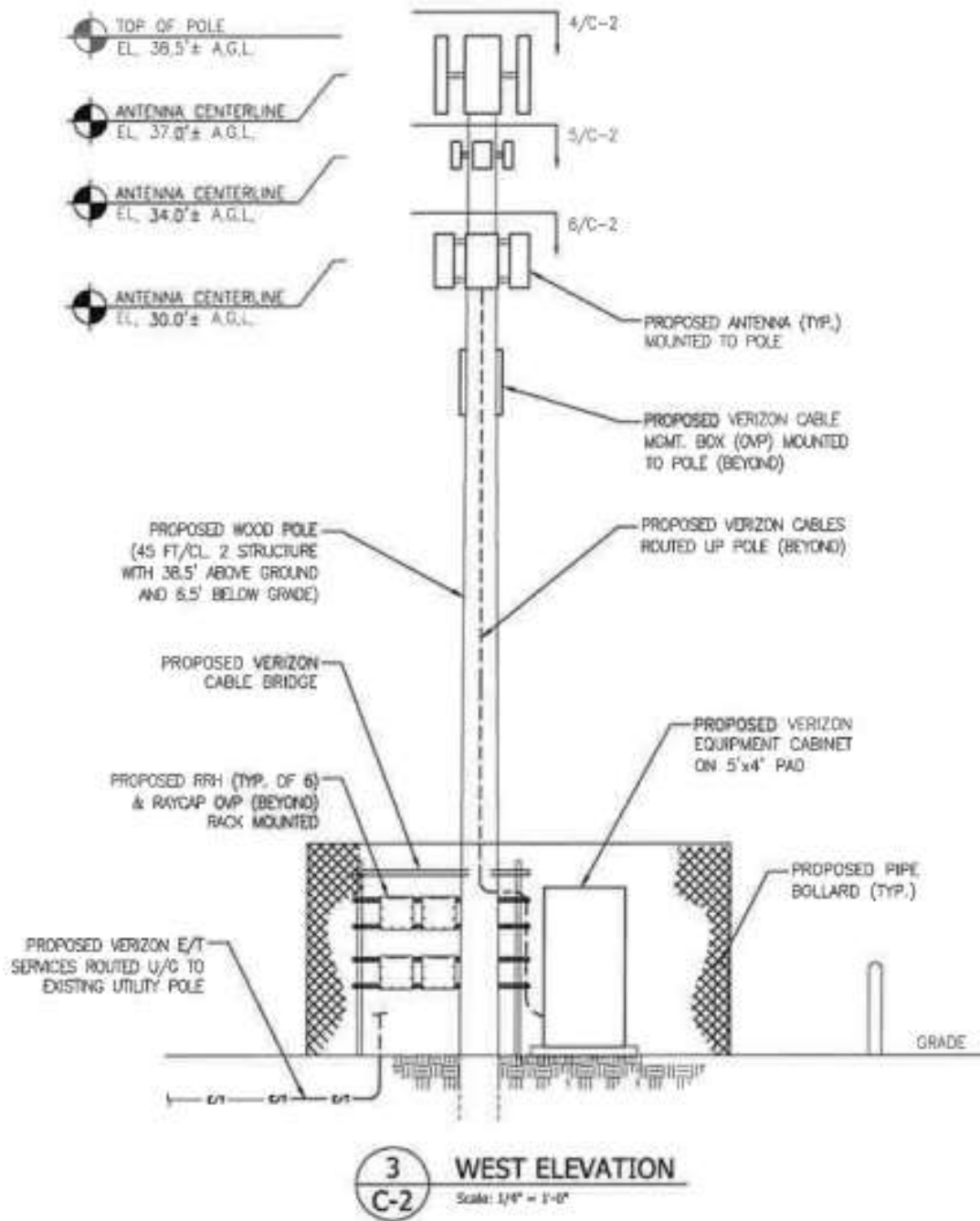


Site Schematic

Proposed Wireless
Telecommunications Facility
Durham Fair 2 CT
Durham Fairgrounds
24 Townhouse Road
Durham, Connecticut



Site Elevation



Photosimulation of Proposed Facility

