

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

Connecticut Siting Council

APPLICATION OF CELLCO PARTNERSHIP
D/B/A VERIZON WIRELESS

TRUMBULL SE 4 FACILITY

DOCKET NO. _____

FEBRUARY 26, 2014



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3. Legal Notice in the *Connecticut Post*
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5. Federal Communications Commission Authorization
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EXECUTIVE SUMMARY

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (“Applicant”), proposes to construct a telecommunications tower and related facility (the “Trumbull SE 4 Facility”) on an approximately 14 acre parcel at 60 Commerce Drive in Trumbull, Connecticut (the “Property”). The Property is owned by Pilot Corporation of America. The Trumbull SE 4 Facility would provide enhanced wireless services and increase network capacity in southeast Trumbull particularly along portions of Route 8, areas within the Trumbull Corporate Park and to the surrounding residential neighborhoods.

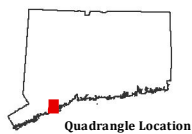
At this site, Cellco proposes the construction of an 80-foot monopole tower. Cellco would install up to fifteen (15) panel-type antennas at a centerline height of 80 feet above ground level (“AGL”). The top of Cellco’s antennas will extend above the top of the tower to an overall height of approximately 83 feet AGL. Cellco would also install a 12’ x 30’ shelter on the ground near the base of the tower to house its radio equipment and a diesel-fueled back-up generator. The tower and equipment shelter will be located within a 24’ x 77’ fenced compound. Vehicular access to the tower site would extend from Commerce Drive over an existing paved driveway and parking areas, a distance of approximately 1,365 feet, then over a short (100 feet) gravel driveway extension to the facility compound. Utilities would extend from existing service along Commerce Drive.

Site Location Map



Source: U.S.G.S. 7.5 Minute Topographic
Quadrangle Maps (Long Hill, Bridgeport)

Proposed Verizon Telecommunications Tower 60 Commerce Drive Trumbull, Connecticut



Quadrangle Location



Friday, February 14, 2014



Site Aerial Map



Legend

-  Proposed Tower Location
-  Proposed 24' x 77' +/- Gravel/Fenced Compound Area

Proposed Verizon Telecommunications Tower 60 Commerce Drive Trumbull, Connecticut

Tuesday, January 28, 2014



**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

IN RE:	:	
	:	
APPLICATION OF CELLCO	:	DOCKET NO. _____
PARTNERSHIP D/B/A VERIZON	:	
WIRELESS FOR A CERTIFICATE OF	:	
ENVIRONMENTAL COMPATIBILITY	:	
AND PUBLIC NEED FOR THE	:	
CONSTRUCTION, MAINTENANCE AND	:	
OPERATION OF A WIRELESS	:	
TELECOMMUNICATIONS FACILITY	:	
AT 60 COMMERCE DRIVE, TRUMBULL,	:	
CONNECTICUT	:	FEBRUARY 26, 2014

**APPLICATION FOR CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED**

I. INTRODUCTION

A. Authority and Purpose

This Application and the accompanying attachments (collectively, the “Application”) is submitted by Cellco Partnership d/b/a Verizon Wireless (“Cellco”) or the (“Applicant”), pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (“C.G.S.”), as amended, and Sections 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (“R.C.S.A.”), as amended. The Application requests that the Connecticut Siting Council (“Council”) issue a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility on an approximately 14 acre parcel at 60 Commerce Drive in Trumbull, Connecticut (the “Property”). This site is known as Cellco’s “Trumbull SE 4 Facility”.

The proposed cell site would be located in the northerly portion of the Property immediately adjacent to an existing office building. At this location, Cellco would construction an 80-foot self-supporting monopole telecommunications tower. Cellco would install up to fifteen (15) panel-type antennas with their centerline at the 80-foot level. The top of Cellco's antennas would extend above the top of the tower to an overall height of approximately 83 feet above ground level ("AGL"). Equipment associated with Cellco's antennas and a diesel-fueled back-up generator would be located in a 12' x 30' shelter near the base of the tower within a 24' x 77' fenced compound. A small retaining wall will be installed along the north side of the compound to maintain a level gravel compound surface. Vehicular access to the site would extend from Commerce Drive over an existing paved driveway and parking area a distance of approximately 1,365 feet, then over a short gravel driveway extension an additional distance of 100 feet to the cell site. Utilities will extend underground from existing service along Commerce Drive.

The proposed Trumbull SE 4 Facility will provide reliable wireless service to a 2.30 mile portion of Route 8, and an overall area of 4.93 square miles at 850 MHz frequencies; a 2.1 mile portion of Route 8, and an overall area of 4.09 square miles at 1900 MHz frequencies; a 2.60 mile portion of Route 8, and an overall area of 5.75 square miles at 700 MHz frequencies; and a 2.20 mile portion of Route 8, and an overall area of 3.85 square miles at 2100 MHz frequencies.

The tower and facility compound area would be designed to accommodate additional carriers as well as state or local emergency services antennas and equipment if a need exists. Cellco's equipment shelter would house radio and related equipment, including (a) receiving, transmitting, switching, processing and performance monitoring equipment; and (b) automatic

heating and cooling equipment. Cellco's back-up generator would also be installed in a segregated generator room within the shelter for use during power outages and periodically for maintenance purposes.

The tower and equipment shelter would be enclosed by an 8-foot high security fence and gate. Cellco's equipment shelter would be equipped with a silent intrusion and system alarms and will be monitored on a 24-hour basis to receive and to respond to incoming alarms or other technical problems. The equipment building would remain unstaffed, except as required for maintenance. Once the cell site is operational, maintenance personnel generally visit the cell site on a monthly basis. More frequent visits may be required if there are problems with the cell site equipment.

The primary purpose for the Trumbull SE 4 Facility is to provide enhanced wireless telecommunications services and increased network capacity in southeast Trumbull, particularly along portions of Route 8, in the Trumbull Corporate Park and in the surrounding residential areas. Cellco's existing Trumbull 2, Stratford North and, to a lesser extent, Trumbull East cell sites are currently operating at or near their respective capacity limits.

Cellco's existing Trumbull 2 cell site consists of antennas on the roof of the Trumbull Marriott Hotel at 180 Hawley Lane in Trumbull and is located approximately 0.75 miles south of the proposed Trumbull SE 4 Facility. Cellco's existing Stratford North cell site consists of antennas at the 98-foot level on an existing 110-foot tower at 630 James Farm Road in Stratford and is located approximately 1.25 miles east of the proposed Trumbull SE 4 Facility. Cellco's existing Trumbull East cell site consists of antennas at the 84-foot level on a water tank at 605 Huntington Street in Shelton and is located approximately 1.0 miles north of the proposed

Trumbull SE 4 Facility.

Included in this Application, as Attachment 1, is a factual summary and project plans for the Trumbull SE 4 Facility. This summary, along with the other attachments submitted as part of this Application, contain all of the site-specific information required by statute and the regulations of the Council.

B. The Applicant

Cellco is a Delaware Partnership with an administrative office located at 99 East River Drive, East Hartford, CT, 06108. Cellco is licensed by the Federal Communications Commission (“FCC”) to operate a wireless telecommunications system in the State of Connecticut within the meaning of C.G.S. Section 16-50i(a)(6). Cellco has extensive national experience in the development, construction and operation of wireless telecommunications systems and the provision of wireless telecommunications service to the public. Operation of the wireless telecommunications systems and related activities are Cellco’s sole business in the State of Connecticut.

Correspondence and/or communications regarding this Application may be addressed to:

Sandy Carter, Regulatory Manager
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

A copy of all such correspondence or communications should also be sent to:

Robinson & Cole LLP
280 Trumbull Street
Hartford, Connecticut 06103-3597
(860) 275-8200
Attention: Kenneth C. Baldwin, Esq.

C. Application Fee

The estimated total construction cost for the Trumbull SE 4 Facility would be less than \$5,000,000. Therefore, pursuant to Section 16-50v-1a(b) of the Regulations of Connecticut State Agencies, an application fee of \$1,250 accompanies this Application in the form of a check payable to the Council.

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50(b)

Copies of this Application have been sent to municipal, regional, state and federal officials, pursuant to C.G.S. Section 16-50(b). A certificate of service, along with a list of the officials served with a copy of the Application, is included as Attachment 2.

Notice of Cellco's intent to submit this Application was published on February 21 and 22, 2014, by Cellco in the *Connecticut Post* pursuant to C.G.S. Section 16-50(b). A copy of the published legal notice is included as Attachment 3. An Affidavit of Publication will be forwarded to the Council as soon as it is available.

Attachment 4 contains a certification that notice of Cellco's intent to file this application were sent to each person appearing of record as an owner of land that may be considered to abut the Property in accordance with C.G.S. Section 16-50(b), as well as a list of the landowners to whom such notice was sent and a sample notice letter.

III. REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY

The purpose of this section is to provide an overview and general description of the proposed Trumbull SE 4 Facility.

A. General Information

Prior to the 1980's, mobile telephone service was characterized by insufficient frequency

availability, inefficient use of available frequencies and poor quality of service. These limitations generally resulted in problems of congestion, blocking of transmissions, interference, lack of coverage and relatively high cost. Consequently, the FCC, in its Report and Order released May 4, 1981 in FCC Docket No. 79-318, recognized the public need for technical improvement, wide-area coverage, high quality service and a degree of competition in mobile telephone service.

The federal Telecommunications Act of 1996 (the “Act”) emphasized and expanded on these aspects of the FCC’s 1981 decision. Among other things, the Act recognized an important nationwide public need for high-quality wireless telecommunication services of all varieties. The Act also expressly promotes competition and seeks to reduce regulation in all aspects of the telecommunications industry in order to foster lower prices for consumers and to encourage the rapid deployment of advanced wireless technologies.

The proposed Trumbull SE 4 Facility would be part of Cellco’s expanding wireless telecommunications network envisioned by the Act and has been developed to help meet these nationwide goals. In particular, Cellco’s system has been designed, and the cell site proposed in this Application has been selected, so as to maximize the geographical coverage and quality of service and improve network capacity to allow for the efficient and reliable use of Cellco’s advanced wireless services.

Because the FCC and the United States Congress have determined that there is a pressing public need for high-quality wireless telecommunications service nationwide, the federal government has preempted the determination of public need by states and municipalities, including the Council, with respect to public need for the service to be provided by the Trumbull SE 4 Facility. In addition, the FCC has promulgated regulations containing technical standards for

wireless systems, including design standards, in order to ensure the technical integrity of each system and nationwide compatibility among all systems. State and local regulation of these matters is likewise preempted. The FCC has also exercised its jurisdiction over and preempted state and local regulation with respect to radio frequency interference issues by establishing regulations in this area as well.

Pursuant to FCC authorizations, Cellco has constructed and currently operates a wireless system throughout the State of Connecticut. This system, together with Cellco's system throughout its New England and nationwide markets, has been designed and constructed to operate as one integrated, contiguous system, consistent with Cellco's business policy of developing compatibility and continuity of service on a regional and national basis.

Recognizing the public safety benefits that enhanced wireless telecommunications networks can provide, the United States, Congress also enacted the Wireless Communications and Public Safety Act of 1999 to promote and enhance public safety by making 911 the universal emergency assistance number, furthering the deployment of wireless 911 capabilities and further encouraging the construction and operation of seamless, ubiquitous and reliable wireless networks. The Enhanced 911 Act was enacted for the specific purpose of enhancing and promoting Homeland Security, public safety and citizen activated emergency response capabilities. These goals and other related responsibilities imposed on wireless service providers can only be satisfied if Cellco maintains a reliable wireless network.

Included as Attachment 5 is a copy of the FCC's authorization issued to Cellco for its wireless service in Fairfield County, Connecticut. The FCC's rules permit a licensee to modify its system, including the addition of new cell sites, without prior approval by the FCC, as long as the

licensee's authorized service area is not enlarged. The proposed Trumbull SE 4 Facility would not enlarge Cellco's authorized service area.

B. Public Need and System Design

1. Public Need

As noted above, the Act has pre-empted any state or local determination of public need for wireless services. In Fairfield County, Cellco holds an FCC License to provide wireless services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges. Pursuant to its FCC Licenses, Cellco has developed and continues to develop a network of cell sites to serve the demand for enhanced wireless services in the area. Cellco's network currently provides coverage in Trumbull and the surrounding towns from its existing cell sites in the area. Cellco's existing Trumbull 2, Stratford North and Trumbull East facilities will directly interact with the proposed Trumbull SE 4 Facility. Plots showing coverage from Cellco's existing facilities in the area, alone and together with coverage from the proposed Trumbull SE 4 Facility, are included as Attachment 6.

2. System Design and Equipment

a. System Design

Cellco's wireless system in general and the proposed Trumbull SE 4 Facility, in particular, have been designed and developed to allow Cellco to achieve and to maintain high quality, reliable wireless service without disruption.

The system design provides for frequency reuse and hand-off, is capable of orderly expansion and is compatible with other wireless systems. The resulting quality of service compares favorably with the quality of service provided by conventional wireline telephone service. The

wireless system is designed to assure a true cellular configuration of base transmitters and receivers in order to cover the proposed service area effectively while providing the highest quality of service possible. Cell site transmissions are carefully tailored to the FCC's technical standards with respect to coverage and interference and to minimize the amount of power that is transmitted.

Mobile telephone switching offices ("MTSOs") in Windsor and Wallingford are interconnected and operate Cellco's wireless systems in Connecticut as a single network, offering the subscriber uninterrupted use of the system while traveling throughout the State. This network is further interconnected with the local exchange company ("LEC") and inter-lata (long distance) carrier networks.

Cellco has designed its wireless system in conformity with applicable standards and constraints for wireless systems. Cellco's system is also designed to minimize the need for additional cell sites in the absence of additional demand or unforeseen circumstances.

b. Cellular System Equipment

The key elements of the cellular system are Cellco's two MTSOs located in Windsor and Wallingford and the various connector cell sites around the state. Cellco's CDMA wireless networks are deployed on two platforms: the earlier AUTOPLEX system, using Series II base stations, and the FLEXENT CDMA system, using smaller, more compact modular base stations. Because the Series II base stations are no longer manufactured, the newer CDMA systems, using smaller, more compact modular base stations are used for all current installations.

The major electronic components of each cell site are radio frequency transmission and receiving equipment and cell site controller equipment. Cellco's cellular system uses Lucent Flexent® Modular Cell 4.0B cell site equipment to provide complete cell site control and

performance monitoring. This equipment is capable of expanding in modules to meet system growth needs. Additional information with respect to the Lucent Flexent® Modular Cell 4.0B equipment is contained in Attachment 7.

3. Technological Alternatives

Cellco submits that there are no equally effective technological alternatives to the proposal contained herein. In fact, Cellco's wireless system represents state-of-the-art technology offering high-quality wireless service. Cellco is aware of no viable and currently available alternatives to its system design for carriers licensed by the FCC.

C. Site Selection and Tower Sharing

1. Cell Site Selection

Cellco's goal in selecting cell sites, like the one described above, is to locate a facility in such a manner as to allow it to build and to operate a high-quality wireless system with the least environmental impact. Cellco has determined that the proposed Trumbull SE 4 Facility satisfies this goal and would help resolve existing capacity and to a lesser extent coverage problems and provide high-quality reliable wireless service in southeast Trumbull, primarily along portions of Route 8, within the Trumbull Corporate Park and in the residential neighborhoods in the area.

The methodology of cell site selection for a wireless system generally limits the search for possible locations to a specific site search area or ring established by Cellco's Radio Frequency Engineers and network designers. In any search area, Cellco first examines the use of existing towers or other sufficiently tall structures that might help satisfy its wireless service objectives. A list of existing towers or other non-tower structures considered is included in Attachment 8. Cellco currently shares three (3) existing towers within approximately 2.0 miles of the Trumbull SE 4

Facility location. These sites will directly interact with the proposed Trumbull SE 4 Facility and are identified on the coverage maps included in Attachment 6. These adjacent tower sites cannot, however, satisfy Cellco's need for additional coverage and capacity in and near the designated Trumbull SE 4 search area. Cellco also regularly investigates the use of existing, non-tower structures in an area, when available, as an alternative to building a new tower. No existing non-tower structures of suitable height exist in southeast Trumbull. Cellco initiated a site search process for the Trumbull SE 4 cell site and identified the property at 60 Commerce Drive as a viable candidate for a cell site. Cellco determined that an antenna centerline height of 80 feet at the 60 Commerce Drive location would satisfy its coverage objectives in the area. The Site Search Summary (Attachment 8) together with the site information contained in Attachment 1 support Cellco's position that the site selected represents the most feasible alternative of the sites investigated.

2. Tower Sharing

If approved, the Applicant will design the facility tower and compound to be shared by other wireless carriers, and the Town, or local emergency service providers, if a need exists. This type of tower sharing arrangement would reduce, if not eliminate, the need for these other carriers or municipal entities to develop a separate tower in this same area in the future. As of the date of this filing, no other carrier nor the Towns of Trumbull or Stratford have expressed any interest in the Trumbull SE 4 Facility.

D. Cell Site Information

1. Site Facilities

Cellco proposes to construct a new 80-foot tall monopole tower and install up to fifteen (15)

panel-type directional antennas at the top of the tower. The top of Cellco's antennas would extend to an overall height of approximately 83 feet AGL. Cellco would install a 12' x 30' single-story shelter near the base of the tower to house its receiving, transmitting, switching, processing and performance monitoring equipment and the required heating and cooling equipment. A diesel-fueled back-up generator would also be installed in a segregated room inside the shelter for use during power outages and periodically for maintenance purposes. The tower and equipment shelter would be surrounded by an 8-foot high security fence and gate. (*See Attachment 1 – Project Plans*).

The equipment shelter would be equipped with silent intrusion and systems alarms. Cellco personnel will be available on a 24-hour basis to receive and to respond to incoming alarms. The equipment building will remain unstaffed, except as required for periodic maintenance purposes.

2. Overall Costs and Benefits

Aside from the limited visual impacts discussed further below, the Applicant believes that there are no significant costs attendant to the construction, maintenance, and operation of the proposed cell site. In fact, the public will benefit substantially from its increased ability to receive high-quality, reliable wireless services in southeast Trumbull.¹ The Trumbull SE 4 Facility would be a part of a communications system that addresses the public need identified by the FCC and the United States Congress for high-quality, competitive wireless service. Moreover, the proposed cell site would be part of a system designed to limit the need for additional cell sites in the future.

¹ Businesses across the State have become more dependent on wireless services. The public safety benefits of wireless telephone service are illustrated by the Connecticut State Police Enhanced 911 emergency calling system. The E-911 emergency calling system is available statewide to all wireless telephone users. Numerous other emergency service organizations have turned to wireless telephone service for use during natural disasters and severe storms when wireline service is interrupted or unavailable.

The overall costs to the Applicant for development of the proposed cell site are set forth in Section III.E. of the Application.

3. Environmental Compatibility

Pursuant to Section 16-50p of the General Statutes, in its review of the Application, the Council is required to find and to determine, among other things, the nature of the probable environmental impact, including a specification of every significant adverse effect, whether alone or cumulatively with other effects, on, and conflicting with the policies of the state concerning the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish and wildlife.

a. Primary Facility Impact is Visual

The wireless system of which the proposed Trumbull SE 4 Facility would be a part has been designed to meet the public need for high-quality, reliable wireless service while minimizing any potential adverse environmental affect. In part because there are few, if any other adverse impacts, the primary impact of facilities such as this is visual. This visual impact will vary from location to location around a proposed tower, depending upon factors such as vegetation, topography, the distance of nearby properties from the tower and the location of buildings and roadways in a “sight line” toward the tower. Similarly, visual impact of a tower facility can be further reduced through the proper use of alternative tower structures; so-called “stealth installations.” Where appropriate, telecommunications towers camouflaged as trees, for example, can help to further reduce visual impacts associated with these structures. Attachment 9 contains Visibility Analysis and Photographic Simulations prepared by All-Points Technology Corporation for the Trumbull SE 4 Facility. The Visibility Analysis assesses the visual impact of the proposed 80-foot tower on the

surrounding areas and includes photographic simulations for the Council's review and consideration.

According to the Visibility Analysis, areas where the top portion of the tower would be visible above the tree canopy comprise approximately 61 acres or 0.75 percent of the 8,042 acre study area. Year-round visibility of the Trumbull SE 4 tower is generally limited to select areas within ½ mile of the Property. Areas where seasonal views are anticipated comprise approximately 144 additional acres, generally occurring in the Trumbull Corporate Park and some residential areas to the east.

There are forty (40) single family residences within 1,000 feet of the Trumbull SE 4 Facility. The closest residence is located approximately 390 feet to the east at 2945 Huntington Road.

Weather permitting, the Applicant will raise balloons with a diameter of at least three (3) feet at the Trumbull SE 4 Facility location on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council.

b. Environmental Reviews and Agency Comments

Section 16-50j of the General Statutes requires the Council to consult with and to solicit comments on the Application from the Commissioners of the Departments of Energy and Environmental Protection, Public Health, Public Utility Regulatory Authority, Economic Development, and Transportation, the Council on Environmental Quality, and the Office of Policy and Management, Energy Division. In addition to the Council's solicitation of comments, Cellco, as a part of the National Environmental Policy Act ("NEPA") Checklist, solicits comments on the proposed cell site from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS"),

Environmental and Geographic Information Center of the Connecticut Department of Energy Environmental Protection (“DEEP”) and the Connecticut Historical Commission, State Historic Preservation Officer (“SHPO”). Information on the USFWS and DEEP reviews regarding impacts on known populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the proposed site are included in Attachments 10 and 11.

(1) **USFWS Compliance Determination**

According to the USFWS Compliance Determination dated January 16, 2014 for the proposed cell site, no federally listed endangered or threatened species are known to occur in Trumbull, Connecticut. The proposed development of the Trumbull SE 4 Facility will not, therefore, result in any effect on federally-listed, endangered or threatened species. (See USFWS Compliance Determination – Attachment 10).

(2) **DEEP Natural Diversity Database Review**

According to DEEP records, a State special concern species, the *Eastern Box Turtle*, may occur in the vicinity of the Trumbull SE 4 Facility. DEEP recommends that certain guidelines be followed to protect the *Eastern Box Turtles*. Consistent with its practice, Cellco, through Dean Gustafson at All-Points Technology Corporation (“APT”) has established an *Eastern Box Turtle* protective measures program to avoid unintentional mortality of this turtle species during construction. These measures are outlined in a letter to Elaine Hinsch dated February 18, 2014. A copy of the DEEP Determination and Mr. Gustafson’s February 18, 2014 letter are included in Attachment 11.

(3) **Wetlands Investigation**

As discussed in Section III.D.4.d. below, the development of the Trumbull SE 4 Facility

will not impact the nearest wetland areas approximately 230 feet to the west of the proposed tower and 180 feet west of the west end of the proposed retaining wall. The proposed utility easement is approximately 30 feet from the edge of this same wetland area. A Wetland Investigation report is included in Attachment 12.

(4) State Historic Preservation Officer

There are no historic resources within one-half mile of the Trumbull SE 4 Facility location. Regardless, on January 7, 2014, Cellco filed a request for State Historic Preservation Office (“SHPO”) review of this tower proposal. On January 30, 2014, SHPO determined that “no historic properties will be affected by this project”. A copy of Cellco’s submission to SHPO and SHPO’s final determination are included in Attachment 13.

c. Non-Ionizing Radio Frequency Radiation

The FCC has adopted a standard for exposure to Radio Frequency (“RF”) emissions from telecommunications facilities like those proposed in this Application. To ensure compliance with the applicable standards, Cellco has performed maximum power density calculations for the proposed cell site according to the methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65, Edition 97-01 (August 1997) (“OET Bulletin 65”). The calculation is a conservative, worst-case approximation for RF emissions at the closest accessible point to the antennas, in this case the base of the tower, and assumes that all antennas are transmitting simultaneously, on all channels, at full power. Even under these absolute worst-case conditions, the calculations indicate that the maximum permissible exposure level for Cellco’s 700, 850, 1900 and 2100 MHz antennas would still be below (98.35%) the FCC’s Standard. Actual RF emissions levels from the proposed facility would be far below these “worst-case” calculations.

d. Other Environmental Issues

No sanitary facilities are required for the Trumbull SE 4 Facility. The operations at the approved Trumbull SE 4 Facility will not cause any significant air, water, noise or other environmental impacts, or hazard to human health.

Based on agency comments received and field investigations by the Cellco project team, the Applicant submits that the Trumbull SE 4 Facility will have no significant adverse effect on scenic, natural, historic or recreational features, and that none of the potential effects alone or cumulatively with other effects is sufficient reason to deny this Application.

4. Consistency with Local Land Use Controls

The Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended in July 2012, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Conservation and Development (the "Plan") and Zoning Regulations, as well as a description of planned and existing uses of the site location and surrounding properties.

a. Planned and Existing Land Uses

The proposed Trumbull SE 4 Facility is located on an approximately 14 acre parcel owned by Pilot Corporation of America. The Property is located in an Industrial (I-L3) zone and is located in the Trumbull Corporate Park.

b. Plan of Conservation and Development

The Town of Trumbull Plan of Conservation & Development (dated October 10, 2006) (the "Plan"), does not identify telecommunications facilities as a land use consistent or inconsistent with the general planning and conservation principles or policies of the Town. Four

(4) copies of the Plan were filed, in bulk, with the Council.

c. Zoning Regulations

According to the Town's Zoning Map, the Property is located in Trumbull's Industrial (I-L3) zone. Pursuant to Article XII of the Trumbull Zoning Regulations, Wireless Telecommunications Facilities and Towers are permitted in all zones subject to the approval of a Special Permit from the Planning and Zoning Commission. Towers must be located on lots containing a minimum of 10 acres; must be setback at least 200 feet from a property line, 500 feet from an archeological site, 2,000 feet from a historic district and 750 feet from a residence, school, church or other public building.

d. Inland Wetland and Watercourse Regulations

The Trumbull Inland Wetlands and Watercourses Commission Regulations (the "IWWC Regulations") define Regulated Activity as any operation within, or use of, a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution of the land of such wetlands or watercourses or within 100 feet of the wetland or watercourse. Four (4) copies of the Trumbull IWWC Regulations were filed, in bulk, with the Council.

Dean Gustafson, Professional Soil Scientist with APT, conducted a field investigation and completed a Wetlands Investigation report for the proposed Trumbull SE 4 Facility. The closest wetland area to the tower is located approximately 230 feet west. This same wetland area is 180 feet from the west end of the proposed retaining wall and 30 feet from the edge of the proposed utility easement. In his Wetlands Investigation Memorandum, Mr. Gustafson concludes that the Trumbull SE 4 Facility will have no temporary or permanent direct impact to

wetlands or watercourses. Cellco's Wetlands Investigation report is included in Attachment 12.

In accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation, adequate and appropriate soil erosion and sedimentation control measures will be established and maintained throughout the cell site construction period. In addition, the Applicant will employ appropriate construction management practices to ensure that no pollutants would be discharged to any nearby watercourse or wetland areas or to area groundwater during the construction process. Four (4) copies of the Trumbull IWWC Regulations were filed, in bulk, with the Council.

According to the Federal Emergency Management Agency Flood Insurance Rate Map ("FIRM"), Map Numbers 09001C0432F, Panel 432 of 626 (Effective June 18, 2010) the proposed facility would be located in Flood Zone X, an area outside the 500 year flood zone. A copy of the FIRM is also included in Attachment 14.

5. Local Input

Section 16-50j(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. On November 7, 2013, Cellco representatives met with Trumbull's First Selectman, Timothy Herbst, to commence the ninety (90) day municipal consultation process. Mr. Herbst received copies of technical information summarizing Cellco's plans to establish a telecommunications facility as described above. At this meeting, Cellco discussed, in detail, the aspects of the proposed Trumbull SE 4 Facility, the site location being considered, the need for wireless service improvements in southeast Trumbull and the Connecticut Siting Council application process. That same day, Cellco delivered copies of this technical information to John A. Harkins, Mayor of the Town of Stratford. The Trumbull-Stratford town line is within 2,500 feet

(to the east) of the proposed Trumbull SE 4 Facility.

6. Consultations With State and Federal Officials

Attachments 10, 11 and 12 and Section III.D. of the Application describes consultations with state and federal officials regarding the proposed Trumbull SE 4 Facility.

a. Federal Communications Commission

The FCC did not review this particular proposal. As discussed above, FCC approval is not required where the authorized service area is not enlarged.

b. Federal Aviation Administration

As it does with all of its tower applications, Cellco conducted on air-space analyses for the proposed Trumbull SE 4 Facility to determine if the proposed tower would constitute an obstruction or hazard to air navigation. These analyses have confirmed, pursuant to FAA standards and guidelines, that the proposed tower would not constitute an obstruction or hazard to air navigation. Therefore, no obstruction marking or lighting would be required. A copy of the TOWAIR Determination Results is included in Attachment 15.

c. United States Fish and Wildlife Service

See Section III.D.3.b.(1) above.

d. Connecticut Department of Energy and Environmental Protection

(1) Environmental and Geographic Information Center

See Section III.D.3.b.(2) above.

(2) Bureau of Air Management

Pursuant to R.C.S.A. § 22a-174-3, the on-site emergency back-up generator proposed as a

part of this Application will require the issuance of a permit from the DEEP Bureau of Air Management. As proposed, this emergency generator will be run only during the interruption of utility service to the cell site and periodically as required for maintenance purposes. Cellco will obtain the necessary permit prior to installing the generator at the Trumbull SE 4 Facility.

e. Connecticut State Historic Preservation Officer

See Section III.D.3.b.(4) above.

E. Estimated Cost and Schedule

1. Overall Estimated Costs

The total estimated cost of construction for the Trumbull SE 4 Facility is \$700,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	130,000
(3)	Power systems costs of approximately	20,000
(4)	Equipment building costs of approximately	50,000
(5)	Miscellaneous costs (including site preparation and installation) of approximately	50,000

2. Overall Scheduling

Site preparation and engineering would commence following Council approval of Cellco's Development and Maintenance ("D&M") Plan and are expected to be completed within two to four weeks. Due to the delivery schedules of the manufacturers, installation of the building and installation of the tower are expected to take an additional two weeks. Equipment installation is expected to take an additional two weeks after installation of the building and installation of the tower. Cell site integration and system testing is expected to require two weeks after equipment

installation.

IV. CONCLUSION

Based on the facts contained in this Application, Cellco submits that the establishment of the Trumbull SE 4 Facility will not have any substantial adverse environmental effects. A public need exists for high quality reliable wireless service in the Town of Trumbull and throughout Fairfield County, as determined by the FCC and the United States Congress, and a competitive framework for providing such service has been established by the FCC and the Telecommunications Act of 1996. Cellco submits that the public need far outweighs any possible environmental effects resulting from the construction of the proposed cell site.

WHEREFORE, Cellco respectfully requests that the Council grant this Application for a Certificate of Environmental Compatibility and Public Need for the proposed Trumbull SE 4 Facility.

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON
WIRELESS

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