

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

# Connecticut Siting Council

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APPLICATION OF CELLCO PARTNERSHIP  
D/B/A VERIZON WIRELESS

TOWN OF WASHINGTON  
WASHINGTON NORTH FACILITY

DOCKET NO. \_\_\_\_\_  
MARCH 29, 2007



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3. Certificate of Service of Application on Government Officials and List of Officials Served
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## EXECUTIVE SUMMARY

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) proposes to construct a telecommunications tower and related facility at one of two locations in the northwesterly portion of the Town of Washington (the “Washington North Facility”). The proposed Washington North Facility would provide for much needed coverage along the heavily-traveled Route 202 and local roads in the area.

The first alternative site would be located on a 32.07-acre parcel at 6 Mountain Road in Washington (“Site 1”). At Site 1, Cellco would construct a 150-foot telecommunications tower disguised as a pine tree. Simulated branches will extend an additional seven feet above the top of the tower to a height of 157 feet above ground level (“AGL”). Cellco will install twelve (12) panel-type antennas at the 150-foot level on the tower and a 12’ x 30’ shelter located near the base of the tower. Access to Site 1 would extend from Mountain Road through a parcel located at 16 Mountain Road, then over a new gravel driveway to the cell site, a total distance of approximately 1,065 feet to the cell site.

The second alternative site would be located on a 1.25-acre parcel at 167 New Milford Turnpike (Route 202) in Washington (“Site 2”). At Site 2, Cellco would construct a 150-foot telecommunications tower disguised as a pine tree. Simulated branches will extend an additional seven feet above the top of the tower to a height of 157 feet AGL. Cellco will install twelve (12) panel-type antennas at the 150-foot level on the tower and a 12’ x 30’ shelter located near the base of the tower. Access to Site 2 would extend from New Milford Turnpike, over a portion of an existing gravel driveway, a distance of approximately 200 feet, then over a new gravel driveway, an additional distance of approximately 150 feet to the cell site.



Source: Kent and New Preston Connecticut USGS 7.5 Minute Topographic Quadrangle Maps



Quadrangle Location

**Vanasse Hangen Brustlin, Inc.**

USGS Topographic Map  
Proposed Verizon Wireless  
Telecommunications Facility

- Two Alternative Site Locations
- Site 1 - 6 Mountain Road  
Washington, Connecticut
- Site 2 - 167 New Milford Turnpike  
New Preston, Connecticut





Source: 2005 Digital Aerial Photograph



Quadrangle Location

\* Note: Alternative sites are located approximately 0.46 mile apart

**Vanasse Hangen Brustlin, Inc.**

Aerial Photograph  
Proposed Verizon Wireless  
Telecommunications Facility

Two Alternative Site Locations

Site 1 - 6 Mountain Road

Washington, Connecticut

Site 2 - 167 New Milford Turnpike

New Preston, Connecticut



**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 IN** :  
**WASHINGTON, CONNECTICUT** : **MARCH 29, 2007**

**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 from the Connecticut Siting Council (“Council”) a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility, disguised as a pine tree, in the northwesterly portion of the Town of Washington, Connecticut (the “Washington North Facility”). The proposed Washington North Facility would provide for much needed coverage along the heavily-traveled Route 202 and local roads in the northwesterly

portion of Washington. Cellco currently experiences a significant gap in coverage between its existing New Milford East cell site and Litchfield SW cell site. Cellco's New Milford East facility consists of antennas located at the 140-foot level on an existing 160-foot Global Signal tower at 399 Chestnut Lane in New Milford. Cellco's Litchfield Southwest facility consists of antennas located at the 140-foot level on an existing 150-foot SBA tower at 1291-1293 Bantam Road in Litchfield.

In this application Cellco proposes to construct a tower at one of two proposed alternative site locations, either of which would satisfy Cellco's objective in this area. The first alternative cell site would be located on a 32.07-acre parcel located at 6 Mountain Road in Washington ("Site 1"). Site 1 is located in the Town's R-1 Residential zone district and is currently used for residential purposes by the property owner. At Site 1, Cellco would construct a 150-foot telecommunications tower disguised as a pine tree. Simulated branches would extend an additional seven feet above the top of the tower. The total height of the tree tower would be 157 feet above ground level ("AGL"). At Site 1, Cellco would install a total of twelve (12) panel-type antennas with their centerline at the 150-foot level on the tower. Equipment associated with the antennas and a back-up generator would be located within a 12' x 30' shelter located near the base of the tower. All site improvements associated with the proposed Site 1 Facility would be located within a 80' x 120' leased area. Access to Site 1 would extend from Mountain Road over an existing driveway on a 5.34 acre parcel at 16 Mountain Road, then over a new gravel driveway constructed on the property at 6 Mountain Road to the cell site. The new gravel driveway will follow, for most of its length an existing dirt path on the property. The total driveway length is approximately 1,065 feet. Both the tower and leased area have been designed to accommodate additional carriers. Cellco would provide coverage to an approximately 3.5

mile portion of Route 202 and an approximately 4.64 square mile area overall from the proposed Site 1 Facility.

The second alternative cell site would be located on a 1.25-acre parcel located at 167 New Milford Turnpike (Route 202) in Washington ("Site 2"). Site 2 is located in the Town's B-3 Marble Dale Business zone. At Site 2, Cellco would construct a 150-foot telecommunications tower also disguised as a pine tree. Simulated branches would extend an additional seven feet above the top of the tower. The total height of the tree tower would be 157 feet AGL. At Site 2, Cellco would install a total of twelve (12) panel-type antennas with their centerline at the 150-foot level on the tower. Equipment associated with the Cellco antennas would be located in a 12' x 30' shelter located near the base of the tower. All site improvements associated with the proposed Site 2 Facility would be located within a 60' x 95' leased area. Access to Site 2 would extend from New Milford Turnpike, along an existing gravel driveway, a distance of approximately 200 feet, then along a new gravel driveway, an additional distance of approximately 150 feet to the cell site. Both the tower and leased area have been designed to accommodate additional carriers. Cellco would provide coverage to an approximately 3.4 mile portion of Route 202 and an approximately 3.6 square mile area overall from the proposed Site 2 Facility.

The equipment building at either site would house radio and related equipment of Cellco, including (a) receiving, transmitting, switching, processing and performance monitoring equipment; and (b) automatic heating and cooling equipment. A back-up generator would also be installed within the equipment building 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, which would be screened. Cellco's equipment building would be equipped with a silent

intrusion and systems alarm 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 will visit the cell site on a monthly basis. More frequent visits may be required if there are problems with the cell site equipment.

Included in this Application as Attachments 1 and 2, are factual summaries and project plans for the Site 1 and Site 2 Facilities, respectively. 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.

In accordance with Paragraph I(F) of the Council's "Application Guide" for Community Antenna Television and Telecommunication Towers, a copy of the Application Guide is included as Attachment 14. The Application Guide contains references to the specific pages of this Application and the attachments where the information required under Section VI of the Application Guide may be found.

**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). Operation of the wireless telecommunications systems and related activities are Cellco's sole business in the State of Connecticut.

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.

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 the applicant's attorneys:

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 Site 1 Facility would be approximately Eight Hundred Fifty Thousand (\$850,000.00) Dollars. The estimated total construction cost for the Site 2 Facility would be approximately Eight Hundred Thousand (\$800,000.00) Dollars. Pursuant to Section 16-50v-1a(b) of the Regulations of Connecticut State Agencies, an application fee of \$1,000 accompanies this Application in the form of a check payable to the Connecticut Siting Council.

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

Copies of this Application have been sent by certified mail, return receipt requested, to municipal, regional, state and federal officials, pursuant to C.G.S. Section 16-50(l)(b). A certificate of service, along with a list of the parties served with a copy of the Application, is included as Attachment 3.

Notice of Cellco's intent to submit this Application was published on March 26 and 27, 2007, by Cellco in the *Waterbury Republican-American* pursuant to C.G.S. Section 16-50(l)(b). A

copy of the published legal notice is included as Attachment 4. A copy of the publisher's affidavit or certificate of publication will be submitted to the Council as soon as it is available.

Attachment 5 contains a certification that notices were sent to each person appearing of record as an owner of property 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 property owners 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 wireless facility proposed to be installed.

#### **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.

More recently, 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 new telecommunications technologies.

Cellco's proposed Washington North Facility would be part of the 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 sites proposed in this Application have been selected, so as to maximize the geographical coverage and quality of service while minimizing the total number of cell sites required.

Because the FCC and the United States Congress have determined that there is a pressing public need for high-quality 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 proposed 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 Connecticut. This system, together with Cellco's system throughout its east coast 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.

Included as Attachment 6 is the FCC's authorization issued to Cellco for its wireless (PCS) service in Litchfield 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 facility proposed in this Application 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 Litchfield County, Cellco holds an FCC License to provide PCS service. Pursuant to its FCC License, Cellco has developed and continues to develop a network of cell sites to serve the demand for wireless service in the area. Cellco's network currently experiences significant gaps in coverage along Route 202, and along local roads in the northwesterly portion of Washington. As depicted on the coverage maps included in Attachment 7, Cellco cannot provide service to customers traveling along Route 202 in Washington from its existing New Milford East and Litchfield SW cell sites.

**2. System Design and Equipment**

**a. System Design**

Cellco's wireless system in general and the proposed Washington North Facility have been designed and developed to allow Cellco to achieve and to maintain high quality service without interruption from dropped calls and interference.

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 radiated. System modulation is narrowband frequency modulation for all voice channels at 30 kilohertz ("kHz").

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) carriers network.

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 the two MTSOs located in Windsor and Wallingford and the various connector cell sites around the state.

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 4.0 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. The cell site equipment primarily provides for: message control on the calling channel; call setup and supervision; radio frequency equipment control; internal diagnostics; response to remote and local test commands; data from the mobile or portable unit in both directions and on all channels; scan receiver control; transmission of power control commands; rescanning of all timing; and commands and voice channel assignment. Additional information with respect to the Lucent Flexent® Modular Cell 4.0 equipment is contained in Attachment 8.

To maintain the reliability and integrity of its network, Cellco, as a matter of corporate policy, installs back-up generators at each of its cell site locations.<sup>1</sup> These generators are appropriately sized to handle the significant electric load requirements of a cell site including Cellco's radio equipment and air conditioning units. These generators allow Cellco to maintain a highly reliable wireless network, insuring that its customers and local emergency service providers can use its wireless services when commercial power to the area is, for whatever the reason, unavailable. Interruptions in commercial power in Cellco's New England market are common and result most frequently from adverse weather conditions.

### **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 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 such as the one proposed in Washington is to locate its facilities 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 Site 1 and Site 2 locations will satisfy this goal and are necessary to resolve existing coverage problems and to provide high-quality uninterrupted service along a significant portion of Route 202 and local roads in the area. Specifically, Cellco will be able to provide coverage to a 3.5 mile portion of Route 202 and an

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<sup>1</sup> Currently, more than 97% of all of Cellco's cell sites, nationwide, maintain on-site back-up generators.

overall area of approximately 4.64 square miles from the Site 1 Facility; and a 3.4 mile portion of Route 202 and an overall area of approximately 3.6 square miles from the Site 2 Facility.

The methodology of cell site selection for Cellco's wireless system generally limits the search for possible locations to a specific area on the overall grid for the area. A list of existing towers or other non-tower structures considered is included in Attachment 9. Cellco currently uses many of the existing towers in the immediate area, including those sites identified on the coverage maps as New Milford East and Litchfield SW. (See Attachment 7). Neither of these existing towers can help to resolve the existing coverage problems along Route 202 in Washington. Cellco also regularly investigates the use of existing, non-tower structures in an area as an alternative to building a new tower. Due to the nature of development in the northwest Washington area the steeple at the New Preston Congregational Church was the only existing structure considered. Descriptions of each of the sites investigated are included in the Site Search Summary (Attachment 9). The site search summary details the reason why each site, other than the Site 1 and Site 2 Facilities, were not presented to the Council. The Site Search Summary together with the site information contained in Attachments 1 and 2, support Cellco's position that the sites selected represent the most feasible alternatives of the sites investigated.

## **2. Tower Sharing**

Cellco will design the Washington North Facility so that it could be shared by other wireless carriers. This type of tower sharing arrangement would potentially reduce, if not eliminate, the need for other carriers to build separate towers in this same area in the future. Notice of Cellco's intent to file this application was sent to representatives of New Cingular Wireless, Sprint Nextel and T-Mobile. Sprint Nextel was the only carrier to respond to this notice. Sprint Nextel informed Cellco that it was not interested in sharing the Washington North Facility at this time. Cellco

would also make space on its tower available to the Town's public safety entities if such a need exists. The Town of Washington First Selectman was made aware of the offer at the initial local contact meeting on January 19, 2007.

**D. Cell Site Information**

**1. Site Facilities**

Use of either of the proposed locations would require the construction of a new tower. At Site 1, Cellco would install twelve (12) panel-type directional antennas at the 150-foot level on the tree tower. Simulated branches would extend an additional seven feet above the top of the tower. The total height of the tree tower with appurtenances would be 157 feet AGL. At Site 2, Cellco would install twelve (12) panel-type directional antennas at the 150-foot level on the tower. Simulated branches would extend an additional seven feet above the top of the tower. The total height of the tree tower with appurtenances would be 157 feet AGL.

Cellco would install a 12' x 30' single-story equipment shelter near the base of the approved tower to house Cellco's receiving, transmitting, switching, processing and performance monitoring equipment and the required heating and cooling equipment. A back-up generator would be installed within the equipment 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, which would be screened by landscaping if necessary. (See Attachments 1 and 2).

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, Cellco 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 mobile and portable wireless service in the Washington area.<sup>2</sup> The Washington North 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 mobile and portable 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.

The overall costs to Cellco 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 of the facility, 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.

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<sup>2</sup> Businesses across the State have become more dependent on wireless telecommunication services. The public safety benefits of wireless telephone service are illustrated by the improved Connecticut State Police 911 emergency calling system. The 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. As a deterrent to crime, the general public will further benefit from the Cellular Telecommunications Industry Association's donation of more than 50,000 cellular phones to "Neighborhood Watch" groups nationwide.

a. **Primary Facility Impact is Visual**

The wireless system of which the proposed Washington North 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 impact. 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 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, flagpoles, and church bell towers, to name a few, can help to further reduce visual impacts associated with these structures. This is the case with respect to the Washington North Facility. Attachment 10 contains a detailed Comparative Visual Resource Evaluation Report, prepared by VHB, Inc. (the “VHB Report”) that assesses the visual impact of the proposed Site 1 and Site 2 towers. The VHB Report concludes that “the topography and extensive tree cover contained within the Study Area serve to minimize the year-round visibility associated with each of the Alternate Sites.” For example, year-round views of the Site 1 tower are limited to 13 acres within the 8,042 acre Study Area (0.16% of the Study Area). Year-round views of the Site 2 tower are limited to 12 acres within the 8,042 Study Area (0.14% of the Study Area). Seasonal views of the Site 1 and Site 2 locations are limited to 48 acres (0.59%) and 36 acres (0.44%) respectively within the 8,042 acre Study Area.

There are no residences within 1,000 feet of the Site 1 Facility. The landowner’s home is the closest residence to the Site 2 Facility, and is located approximately 150 feet to the southwest of

the tower site. There are approximately eighteen (18) residences within 1,000 feet of the Site 2 Facility.

Weather permitting, Cellco will raise a balloon with a diameter of at least three (3) feet at the proposed cell site on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council.

**b. Solicitation of 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 Environmental Protection, Public Health, Public Utility Control, Economic Development, and Transportation, the Council on Environmental Quality, and the Office of Policy and Management. In addition to the Council's solicitation of comments, Cellco has, as a part of its National Environmental Policy Act ("NEPA") Checklist, received comments on the proposed facility from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS"), Environmental and Geographic Information Center of the Connecticut Department of Environmental Protection ("DEP") and the Connecticut Historical Commission, State Historic Preservation Officer ("SHPO"). Attachment 11 contains the USFWS, DEP and SHPO response letters. Both the USFWS and the DEP have confirmed that no known populations of Federal or State Endangered, Threatened or Special Concern Species occur at either of the proposed cell site locations. The SHPO has confirmed that a facility at either of the proposed site locations will have no effect on historical, architectural or archeological resources listed on or eligible for the National Register of Historic Places.

This review by state administrative agencies furnishes ample expert opinion on the potential environmental impacts from the facility proposed in the Application, in the context of the criteria which the Council must consider.

**c. Non-Ionizing Radio Frequency Radiation**

In August 1996, the FCC adopted a hybrid ANSI/NCRP Standard for exposure to Radio Frequency (“RF”) emissions from telecommunications facilities like the one proposed in this Application. The ANSI Standard was adopted by the State of Connecticut in C.G.S. Section 22a-162 and Section 22a-162a “for the purpose of preventing possible harmful effects in human beings from exposure to electromagnetic fields in the frequency range of 300 Kilohertz (kHz) to 100 Gigahertz (GHz). . . .”

To ensure compliance with the applicable standards, the Applicant 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. 65E, Edition 97-01 (August 1997) (“OET Bulletin 65”). The calculation is a conservative, worst-case approximation for RF power density levels at the closest accessible point to the antennas, in this case the base of the tower, and with all antennas transmitting simultaneously on all channels at full power. The calculations indicate that the maximum power density level for Cellco antennas would be 2.46% of the Standard at either the Site 1 or Site 2 Facilities.

**d. Other Environmental Issues**

No sanitary facilities are required for the proposed site. The proposed facilities and operations at the proposed site will not cause any significant air, water, noise or other environmental impacts, or hazard to human health.

Based on agency comments received, Cellco submits that the proposed facility will have no significant adverse effect on scenic, natural, historic or recreational features, and that none of the potential effects from the facility alone or cumulatively with other effects is sufficient reason to deny this Application.

As discussed above, Cellco will install a back-up generator inside a segregated 10' x 12' generator room within its equipment shelter. Adequate safeguards have been designed into Cellco's generator system and room that eliminate, to the greatest extent possible, the potential for environmental impacts associated with the generator. For example, the generator maintains a double-walled fuel tank with leak detection. The generator's operating and leak detection systems are monitored 24/7 by Cellco.

In addition to the safeguards built into the generator unit itself, the concrete floor of the generator room in the equipment shelter is recessed, several inches, creating a bowl-like effect. The floor area inside the generator room is capable of containing the capacity of 120% of all generator fluids (fuel and oil). Leak detection alarms are also installed in the generator room floor and are monitored remotely. All refueling operations occur inside the generator room. As an additional safeguard, Cellco maintains a service contract with Clean Harbors Environmental Service to respond to any spills or similar environmental problems at its cell sites. Under this contract, Clean Harbors must respond to a particular cell site within six (6) hours of a report of an event. Each generator is exercised weekly to ensure that it is operating properly and is inspected and maintained on a regular basis.

#### **4. Consistency with Local Land Use Controls**

The Connecticut Siting Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended on February 16, 2007, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Development 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 Site 1 Facility would be located on a vacant 32.07-acre parcel owned by H. Ray and Carol A. Underwood. The property is zoned R-1 Residential. The Underwood property is surrounded by low density residential areas, agricultural uses and small commercial uses along Route 202. To our knowledge, the property owner has no plans to develop any portion of the 32.07-acre parcel on which the Site 1 Facility would be located.

The proposed Site 2 Facility would be located on a 1.25-acre parcel owned by Unica and Lloyd Waldron. The Site 2 property is zoned B-3 Marble Dale Business. The Site 2 parcel is surrounded by low density residential areas, agricultural land and small commercial uses along Route 202.

**b. Washington Plan of Conservation and Development**

Section 6, of the Town of Washington Town Plan of Conservation & Development dated December 2003 (the “Plan”), entitled “Address Other Community Issues” includes recommendations to help the Town “continue to address telecommunications issues”. This section of the Plan recognizes the Council’s exclusive jurisdiction over Cellco’s proposed Washington North telecommunications facility and encourages municipal involvement in the Council’s tower siting process. Contrary to the recommendations in the Plan, the Town has not yet developed a Town-wide telecommunications facility plan.

**c. Zoning Regulations**

According to the Town Zoning Map, Site 1 is located in the R-1 (Farming and Residential) zone; and Site 2 is located in the B-3 (Marble Dale) Business zone. According to Section 13.19 of the Town of Washington Zoning Regulations (“Zoning Regulations”), towers are permitted in both the R-1 and B-3 zones subject to the approval of a Special Permit after a

showing of compliance with the General Requirements as set forth in Section 13.19.8. A copy of the Washington Zoning Regulations were submitted, in bulk, along with this Application.

**d. Inland Wetland and Water Course Regulations**

The Washington Inland Wetland and Watercourses (“IWW”) Regulations regulate activity within identified wetland or watercourse areas and those upland areas within 100 feet of a designated wetland or watercourse. Five (5) copies of the Washington IWW Regulations were filed, in bulk, with the Council when this application was filed. On January 6, 2007, Dean Gustafson, Professional Soil Scientist with VHB, Inc., conducted a field investigation at both Site 1 and Site 2 locations and determined that neither facility location contained any wetland or watercourse areas that would be impacted by the proposed development activity. Copies of Mr. Gustafson’s reports are 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, Cellco 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.

According to the Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel Number 0900570005 (effective June 3, 1988), neither proposed facility location would be located in a designated flood zone.

**5. Local Input**

Section 16-50l(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. On January 19, 2007, Cellco representatives met with Town of

Washington First Selectman Richard C. Sears to commence the sixty (60) day municipal consultation process. At this meeting, Mr. Sears received copies of technical information summarizing Cellco's plans to establish a telecommunications facility in Washington. On March 5, 2007, Cellco representatives attended a public informational meeting hosted by the Washington Zoning Commission during which it presented the Washington North tower proposal to municipal officials and members of the public in attendance. At the request of the First Selectman, Cellco conducted a balloon test at both Sites 1 and 2 on Sunday, March 18, 2007. Notice of the balloon float was sent to the owners of land that abuts the Site 1 and Site 2 locations, was posted on the Town of Washington web site and was discussed in two newspaper articles published after the March 5, 2007 meeting.

**6. Consultations With State and Federal Officials**

Attachment 11 and Section III.D. of the Application describe Cellco's consultations with state and federal officials regarding Cellco's proposed Washington North 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 with all of its tower applications, Cellco has conducted the appropriate air-space analysis for the proposed Site 1 and Site 2 locations to determine if the proposed towers would constitute an obstruction or hazard to air navigation. Cellco's analysis has confirmed, pursuant to FAA standards, that neither site tower would constitute an obstruction or hazard to air navigation and therefore no obstruction marking or lighting would be required. A copy of the Federal Airway & Airspace Summary Report is included in Attachment 13.

**c. United States Fish and Wildlife Service**

According to the United States Department of the Interior, Fish and Wildlife Service, no federally-listed or proposed, threatened or endangered species or critical habitat under its jurisdiction are known to occur at either Site 1 or Site 2. See Attachment 11.

**d. Connecticut Department of Environmental Protection**

**(1) Environmental and Geographic Information Center**

As discussed above, Attachment 11 contains the DEP's Environmental and Geographic Information Center's findings that there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species present at either Site 1 or Site 2.

**(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 DEP 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 facility.

**e. Connecticut State Historic Preservation Officer**

As discussed above, Attachment 11 also includes the SHPO's determination that the proposed site will have no effect on archeological resources listed on or eligible for the National Register of Historic Places.

**E. Estimated Cost and Schedule**

**1. Overall Estimated Costs**

The total estimated cost of construction of the proposed Site 1 Facility is \$850,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	200,000
(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	130,000

The total estimated cost of construction of the proposed Site 2 Facility is \$800,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	200,000
(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	80,000

## 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 Washington North Facility, at either Site 1 or Site 2, will not have any substantial adverse environmental effects. A public need exists for high quality mobile and portable wireless services in the Town of Washington in Litchfield 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. Moreover, the cell site proposed in this Application will help to provide a level of service in the area that is commensurate with the public demand currently and in the foreseeable future.

WHEREFORE, Cellco respectfully requests that the Council grant this Application for a Certificate of Environmental Compatibility and Public Need for the proposed site in Washington.

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON  
WIRELESS

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