

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

# Connecticut Siting Council

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APPLICATION OF MCF COMMUNICATIONS **bg**, INC. AND  
CELLCO PARTNERSHIP  
D/B/A VERIZON WIRELESS

TOWN OF STERLING

STERLING FACILITY

DOCKET NO. \_\_\_\_\_

AUGUST 24, 2007



**TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....i

SITE LOCATION MAP .....ii

AERIAL PHOTO ..... iii

I. INTRODUCTION ..... 1

    A. Authority and Purpose ..... 1

    B. The Applicant .....4

    C. Application Fee..... 5

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50/(b)..... 5

III. REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY .....5

    A. General Information.....6

    B. Public Need and System Design .....7

        1. Public Need .....7

        2. System Design and Equipment .....8

            a. System Design .....8

            b. Cellular System Equipment.....9

        3. Technological Alternatives ..... 10

    C. Site Selection and Tower Sharing ..... 10

        1. Cell Site Selection ..... 10

        2. Tower Sharing ..... 11

    D. Cell Site Information ..... 12

        1. Site Facilities ..... 12

        2. Overall Costs and Benefits..... 12

        3. Environmental Compatibility ..... 13

            a. Primary Facility Impact is Visual ..... 13

            b. Solicitation of Agency Comments ..... 14

            c. Non-Ionizing Radio Frequency Radiation ..... 15

            d. Other Environmental Issues ..... 16

        4. Consistency with Local Land Use Controls ..... 17

            a. Planned and Existing Land Uses ..... 17

            b. Sterling Plan of Conservation and Development..... 17

            c. Town of Sterling Ordinances and Regulations ..... 17

            d. Inland Wetland and Water Course Regulations..... 18

- 5. Local Input.....19
- 6. Consultations With State and Federal Officials .....19
  - a. Federal Communications Commission .....19
  - b. Federal Aviation Administration.....19
  - d. Connecticut Department of Environmental Protection.....20
  - e. Connecticut State Historic Preservation Officer.....21
- E. Estimated Cost and Schedule .....21
  - 1. Overall Estimated Costs.....21
  - 2. Overall Scheduling.....21

- IV. CONCLUSION.....22

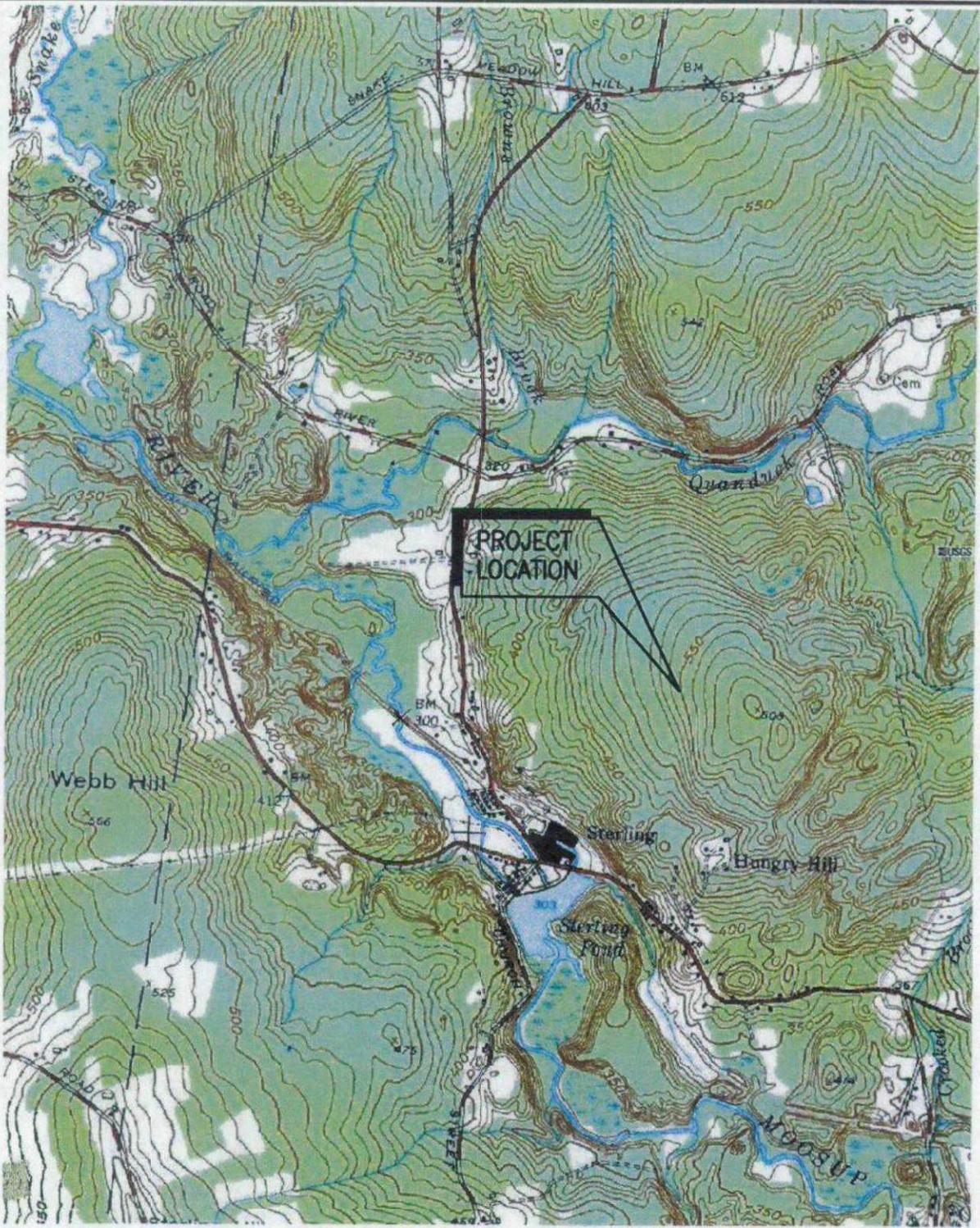
## LIST OF ATTACHMENTS

1. Sterling Cell Site – Factual Summary and Project Plans
2. Certificate of Service of Application on Government Officials and List of Officials Served
3. Legal Notice in the *Norwich Bulletin*
4. Notice to Landowners; List of Abutting Landowners; Certificate of Service
5. Federal Communications Commission Authorization
6. Coverage Maps; List of Cell Sites with Four Miles of Proposed Sterling Facility
7. Antenna and Equipment Specifications
8. Visual Impact Evaluation Report
9. State and Federal Agency Reviews
10. Wetland and Watercourse Delineation Report
11. Town of Sterling – 60-Day Review Waiver Letter
12. Federal Airways & Airspace Summary Report
13. Connecticut Siting Council Application Guide
14. Site Lease Agreement

## EXECUTIVE SUMMARY

MCF Communications bg, Inc. (“MCF”) and Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (collectively the “Applicant”) propose to construct a telecommunications tower and related facility in the Town of Sterling, Connecticut (the “Sterling Facility”). The proposed Sterling Facility would provide Cellco customers with much needed cellular and Personal Communications Service (“PCS”) coverage along Routes 14 and 14a, as well as local roads in the Sterling area.

The proposed Sterling Facility would be located on a 10.83-acre parcel owned by the Town of Sterling off Exeter Drive in the Sterling Industrial Park. At this site, MCF would construct a 140-foot telecommunications tower within a fenced compound. Cellco will install twelve (12) panel-type antennas at the 137-foot level on the tower and a 12’ x 30’ shelter located near the base of the tower. Access to the site would extend directly from Exeter Drive over a new gravel driveway a distance of approximately 70 feet to the cell site.



1 USGS TOPO MAP: ONECO 41071-F7  
 SCALE: 1" = 2000'  
 0 1000 2000  
 SCALE IN FEET



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**CHA**  
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CHA PROJ. NO. - 14957-1003

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 NORTH ANDOVER, MA 01845  
 OFFICE: (978) 687-2536  
 FAX: (978) 258-8850

SITE NAME:  
**STERLING**

SITE ADDRESS:  
**EXETER DRIVE  
 STERLING, CT 06377  
 WINDHAM COUNTY**

SHEET TITLE:  
**USGS TOPO MAP**

DATE:  
**06/22/07**

REVISION:  
**0**



**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

**IN RE:** :  
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**APPLICATION OF MCF** : **DOCKET NO. \_\_\_\_\_**  
**COMMUNICATIONS bg, INC. AND** :  
**CELLCO 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 OFF EXETER DRIVE IN** :  
**STERLING, CONNECTICUT** : **AUGUST 24, 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 MCF Communications bg, Inc. (“MCF”) and Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (collectively 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 in the Town of Sterling (“Town” or “Sterling”), Connecticut (the “Sterling Facility”). The proposed Sterling Facility would provide Cellco with much needed coverage along Routes 14 and 14a, as well as local roads in the central portion of

the Town. Cellco does not currently maintain any existing wireless facilities in the Town. What little coverage Cellco does provide in Sterling extends into the Town from its existing cell sites to the west in the Town of Plainfield. These existing sites include Cellco's Plainfield North cell site (Cellco's antennas at the 125-foot level of 178-foot SBA tower at 548 Green Hollow Road); Plainfield North 2 cell site (Cellco's antennas at the 127-foot level of 160-foot Sprint tower at 47-51 Unity Street); and Plainfield cell site (Cellco's antennas at the 110-foot level of 125-foot AT&T tower off Spaulding Hill Road).

The Sterling Facility would be located in the southeasterly portion of a 10.83-acre parcel located on the north side of Exeter Drive in the Sterling Industrial Park (the "Property"). At the Property, MCF would construct and maintain a 140-foot monopole telecommunications tower. Cellco would install a total of twelve (12) panel-type antennas (six cellular and six PCS antennas) at the 137-foot level on the tower. The antennas would not extend above the top of the tower. Equipment associated with Cellco's antennas and a back-up generator would be located inside a 12' x 30' shelter. All site improvements associated with the Sterling Facility would be located within a 70' x 70' fenced compound within a 200' x 200' leased area. Access to the Property would extend from Exeter Drive over a new gravel access driveway a distance of approximately 70 feet to the cell site. Both the tower and leased area have been designed to accommodate additional carriers.<sup>1</sup> At cellular frequencies (800 MHz), Cellco would provide coverage to an approximately 4.1 mile portion of Route 14, an approximately 3.5 mile portion of Route 14a and approximately 10.8 square miles overall from the Sterling Facility. At PCS frequencies (1900 MHz), Cellco would provide coverage to an approximately 2.31 mile portion

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<sup>1</sup> AT&T Wireless is committed to share the Sterling Facility and has executed a site lease with MCF.

of Route 14, an approximately 1.1 mile portion of Route 14a and approximately 6.6 square miles overall from the Sterling Facility.

Cellco's equipment building would house radio and related equipment 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. 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 Attachment 1, is a factual summary and set of project plans for the proposed cell site. This summary, along with the other attachments submitted as part of this Application, contains 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 13. 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**

MCF is a stock corporation organized and existing under the laws of the Commonwealth of Massachusetts, with offices located at 733 Turnpike Street, North Andover Massachusetts 01845. MCF develops, owns, manages and markets communication facilities throughout New England.

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:

Brad Gannon  
MCF Communications bg, Inc.  
733 Turnpike Street, Suite 105  
North Andover, Massachusetts 01845

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 Sterling Facility would be less than Five Million (\$5,000,000.00) 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(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(b). A certificate of service, along with a list of the parties served with a copy of the Application, is included as Attachment 2.

Notice of Cellco's intent to submit this Application was published on August 21 and 22, 2007, by Cellco in the *Norwich Bulletin* pursuant to C.G.S. Section 16-50(b). A copy of the published legal notice is included as Attachment 3. A copy of the publisher's affidavit or certificate of publication will be submitted to the Council as soon as it is available.

Attachment 4 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 Federal Communication Commission ("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 Sterling 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 site proposed in this Application has 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 5 is the FCC's authorization issued to Cellco for its cellular and PCS wireless services in 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 Sterling 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 Windham County, Cellco holds an FCC License to provide wireless services at both cellular and PCS frequencies. Pursuant to its FCC Licenses, 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

Routes 14 and 14a, as well as local roads in the central portion of Sterling east of its existing Plainfield, Plainfield North and Plainfield North 2 cell sites. (See Attachment 6).

## **2. System Design and Equipment**

### **a. System Design**

Cellco's wireless system in general and the proposed Sterling Facility have been designed and would be 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 7.

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>2</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.

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<sup>2</sup> Currently, more than 97% of all of Cellco's cell sites, nationwide, maintain on-site back-up generators.

### **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**

On October 12, 2001, MCF filed an application with the Council for a Certificate to construct a wireless telecommunications facility off Exeter Drive in Sterling, Connecticut (Council Docket No. 216). The Docket No. 216 application proposed the construction of a tower to accommodate Sprint PCS antennas at a height not to exceed 130 feet. The Docket No. 216 tower site was located on Town of Sterling property approximately 940 feet to the southeast of the proposed Sterling Facility location. The Council approved the Docket No. 216 application on April 3, 2002.

Following the Council's approval of Docket No. 216, MCF learned that Sprint was not prepared to proceed with construction of a facility at the approved tower site. As such, the Docket No. 216 tower was not built and the Certificate expired. MCF continued in its discussions with the Town of Sterling and aggressively marketed a Sterling tower site to the wireless carriers. Following the expiration of the Docket No. 216 Certificate, the Town of Sterling asked MCF to modify its land lease for the proposed tower site and move the leased area to the Property.

Cellco's goal in selecting cell sites such as the one proposed in Sterling 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 Sterling Facility will

satisfy this goal and is necessary to resolve existing coverage problems and to provide high-quality uninterrupted service along a significant portion of Routes 14 and 14a, as well as local roads in Sterling between its existing Plainfield sites and the Rhode Island state line.

At cellular frequencies (800 MHz), Cellco would be able to provide coverage to an approximately 4.1 mile portion of Route 14, an approximately 3.5 mile portion of Route 14a and an overall area of approximately 10.8 square miles from the proposed cell site. At PCS frequencies (1900 MHz), Cellco would provide coverage to an approximately 2.3 mile portion of Route 14, an approximately 1.1 mile portion of Route 14a and approximately 6.6 square miles overall from the Sterling Facility.

Cellco currently uses many of the existing towers in the immediate area, including those sites identified on the coverage maps as the Plainfield, Plainfield North and Plainfield North 2 cell sites. (See Attachment 6). None of these existing towers, however, can help to resolve the existing coverage problems identified above along Routes 14 and 14a in Sterling. (A list of tower sites within four (4) miles of the Sterling Facility is also included as part of Attachment 6).

## **2. Tower Sharing**

MCF will design and build the Sterling 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. To date, Cellco and AT&T are committed to share the Sterling Facility. MCF would also make space on its tower available to the Town's public safety entities if such a need exists.

**D. Cell Site Information**

**1. Site Facilities**

Use of the Property would require the construction of a new tower. Cellco would install twelve (12) panel-type antennas (six cellular and six PCS) at the 137-foot level on the MCF tower. The total height of the tower with appurtenances would not exceed 140 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. (See Attachments 1 and 7).

Cellco's 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 mobile and portable wireless service in the Sterling area.<sup>3</sup> The Sterling Facility would

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<sup>3</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

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 MCF and 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.

#### **a. Primary Facility Impact is Visual**

The wireless system of which the proposed Sterling Facility will 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.

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benefit from the Cellular Telecommunications Industry Association's donation of more than 50,000 cellular phones to "Neighborhood Watch" groups nationwide.

Attachment 8 contains a detailed Visual Analysis Report, prepared by Clough Harbour & Associates LLP, Inc. (the “CHA Report”) that assesses the visual impact of the proposed Sterling Facility tower. According to the CHA Report, year-round visual impact of the proposed Sterling Facility tower will be restricted to a 67.2 acre area (0.8% of the two-mile radius study area) and seasonal impacts are restricted to an area of 6.3 acres (0.1% of the study area). The proposed Sterling Facility is located immediately north of the Exeter Energy power generating facility and its 190-foot exhaust stack. The Applicant respectfully submits that, this stack is a more prominent feature on the area landscape than the proposed Sterling Facility tower would be. (See Attachment 8 – Visual Analysis Report, Attachment B – Photosimulations).

There are no residences within 1,000 feet of the proposed Sterling Facility. The closest residence is located approximately 1,200 feet to the west of the proposed tower site.

Weather permitting, MCF 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, MCF has, as a part of its National Environmental Policy Act (“NEPA”) Checklist, solicited comments on the proposed facility from the U.S. Department of the Interior, Fish and Wildlife Service (“USFWS”) and the Connecticut Historic Commission, State Historic Preservation Officer (“SHPO”). In addition, CHA has reviewed the Connecticut

Department of Environmental Protection (“DEP”) Natural Diversity Data Base (“NDDB”) and determined that, based on DEP instructions, the project will not impact any known occurrences of listed species or significant natural communities and, therefore, DEP review is not required.

Attachment 9 contains the USFWS and SHPO response letters, as well as the DEP/NDDB resources map indicating that the Sterling Facility is outside those areas designated by DEP/NDDB, as having listed species or natural communities. The USFWS response confirms that no known populations of Federal or State Endangered, Threatened or Special Concern Species occur at the proposed cell site location. The SHPO has confirmed that a facility at the proposed site location 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, 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. 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 at the 138-foot level would be 8.70% of the Standard at the proposed Facility.

**d. Other Environmental Issues**

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

Based on agency comments received and its own analysis, the Applicant 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. Celco contracts with Clean Harbors Environmental Service to respond to any spills at its cell sites within six (6) hours 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 Sterling Facility would be located in the southeasterly portion of an 10.83-acre parcel owned by the Town of Sterling. The Property is located in the Town's Industrial Park and is surrounded by vacant land to the north and east, industrial uses to the west and the Exeter Energy power plant to the south.

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

The Town of Sterling Plan of Development dated 1981 (the "Plan"), does not specifically identify telecommunications towers as a land use consistent or inconsistent with the general planning policies of the Town of Sterling.

**c. Town of Sterling Ordinances and Regulations**

The Town of Sterling Ordinances and Regulations include regulations for the establishment of Wireless Telecommunications Facilities.<sup>4</sup> (See Bulk File – Town of Sterling

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<sup>4</sup> The Town of Sterling has not adopted traditional Zoning Regulations seen elsewhere throughout Connecticut.

Ordinance and Regulations pp. 114-129). Applications for wireless facilities under the Town's jurisdiction are subject to approval by the Sterling Board of Selectman. Section 4.1.1 of the ordinance establishes a preference for the siting of telecommunications facilities on municipally-owned parcels; and in non-residential/industrial areas. The ordinance also requires a tower setback equal to the height of the tower plus 100 feet; the use of a monopole design; the placement of utilities underground; and the applicant to accommodate tower sharing, among other things.

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

The Sterling Inland Wetland and Watercourses ("IWW") Regulations regulate activity within identified wetland or watercourse areas and those upland areas within 100 feet of a wetland or watercourse or within 200 feet of the Moosup River. Five (5) copies of the Sterling IWW Regulations were filed, in bulk, with the Council.

On August 2, 2007, Soil and Wetland Scientists with Kleinfelder East, Inc. conducted a field investigation and determined that the Property did not contain any wetland or watercourse areas that would be impacted by the development of the proposed telecommunications facility. The closest wetland area is located approximately 60 feet to the north of the site compound on the Property. Copies of Kleinfelder report is included in Attachment 10.

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 090118 008B (effective March 4, 1985), the facility would not be located in flood zone C, an area of minimal flooding.

**5. Local Input**

Section 16-50(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. As discussed above, as the landowner for both the site approved in Docket No. 216 and the current proposed tower location, the Town has been closely involved in all planning and development aspects of the MCF proposal. On July 13, 2007, MCF commenced the Council application process with the filing of a technical report with the Sterling First Selectman, Russell Gray, for the new tower location. Copies of the Sterling technical report were filed in bulk with this Application. Because the tower site is located on Town property, and the Town played an integral role in selecting the site location, the Town has agreed to waive the 60-day local review period and permit MCF and Cellco to proceed directly to the Council with the Application.

Attachment 11 includes the July 16, 2007 waiver letter from First Selectman Gray.

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

Attachment 9 and Section III.D. of the Application describe MCF's and CHA's consultations with state and federal officials regarding Cellco's proposed Sterling 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, MCF has conducted the appropriate air-space analysis for the proposed Sterling Facility to determine if the proposed tower would constitute an

obstruction or hazard to air navigation. MCF's analysis has confirmed, pursuant to FAA standards, that the proposed Sterling Facility tower would not 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 12.

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

According to the USFWS, telecommunications facilities are not likely to adversely affect any federally-listed or proposed species provided the facility complies with certain evaluation criteria. (See March 6, 2007 letter from Anthony P. Tur, USFWS Endangered Species Specialist, New England Field Office - Attachment 9). A review of the list of threatened and endangered species locations attached to Mr. Tur's letter confirms that no federally-listed endangered or threatened species are known to occur in Windham County, Connecticut.

**d. Connecticut Department of Environmental Protection**

(1) Environmental and Geographic Information Center

As discussed above, based on a review of the DEP/NDDB, the project will not impact any known occurrences of State listed species or significant natural communities.

(2) Bureau of Air Management

Pursuant to R.C.S.A. § 22a-174-3, Cellco's 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 Sterling Facility.

e. **Connecticut State Historic Preservation Officer**

As discussed above, Attachment 9 also includes the SHPO's determination that the proposed Sterling Facility will have no effect on historic, architectural or 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 facility is \$789,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	150,000
(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	119,000

**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.

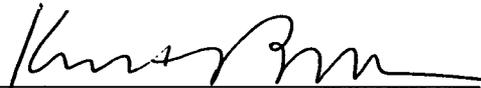
**IV. CONCLUSION**

Based on the facts contained in this Application, the Applicant submits that the establishment of the Sterling Facility, at the Property will not have any substantial adverse environmental effects. A public need exists for high quality mobile and portable wireless service in the Town of Sterling in Windham 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 Sterling Facility.

Respectfully submitted,

MCF COMMUNICATIONS bg, INC.  
AND  
CELLCO PARTNERSHIP D/B/A VERIZON  
WIRELESS

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