STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF CELLCO PARTNERSHIP

DOCKET NO. 410

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

234 MELBA ROAD, MILFORD, CONNECTICUT

JANUARY 24, 2011

RESPONSES OF CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS TO CONNECTICUT SITING COUNCIL PRE-HEARING QUESTIONS, SET TWO

On January 7, 2011, the Connecticut Siting Council ("Council") issued Pre-Hearing Questions to Cellco Partnership d/b/a Verizon Wireless ("Cellco"), relating to the abovecaptioned docket. Below are Cellco's responses.

Question No. 13

Of the letters sent to abutting property owners, how many certified mail receipts did Cellco Partnership d/b/a Verizon Wireless ("Cellco") receive? If any receipts were not returned, which owners did not receive their notice? Did Cellco make additional attempts to contact those property owners?

Response

Cellco received 56 return receipts from the 69 notices sent to abutting land owners. Thirteen (13) notices were return "unclaimed" or otherwise "undeliverable". For each of the returned notices Cellco confirmed the mailing addresses with the City Assessor's Office and resent each notice by regular mail.

Question No. 14

What frequencies are Cellco licensed to use in New Haven County?

Response

As discussed in Section III.B.1 of the Application, Cellco holds FCC licenses to provide wireless services in the 850 MHz (cellular), 1900 MHz (PCS) and 700 MHz (LTE) frequency ranges throughout Connecticut.

Question No. 15

Would Cellco's proposed facility comply with E911 requirements?

Response

Yes.

Question No. 16

Provide the following information: number of channels per sector for each antenna system that would be installed on the proposed tower, ERP per channel for each antenna system, and frequency at which each antenna system would operate.

Response

PCS Antennas

Alpha Sector – 130 ft.	Beta Sector – 130 ft.	Gamma Sector – 130 ft.
Antenna Type: MG-800T0 (1)	Antenna Type: MG-800T0 (1)	Antenna Type: MG-800T0 (1)
Frequency: Tx: 1965- 1980,1945-1950 MHz; Rx: 1885-1900,1865-1870 MHz	Frequency: Tx: 1965- 1980,1945-1950 MHz; Rx: 1885-1900,1865-1870 MHz	Frequency: Tx: 1965- 1980,1945-1950 MHz; Rx: 1885-1900,1865-1870 MHz
No. Channels: 3	No. Channels: 3	No. Channels: 3
ERP/Channel: 453 W Max	ERP/Channel: 453 W Max	ERP/Channel: 453 W Max

Cellular Antennas

Alpha Sector – 120 ft. Beta Sector – 120 ft. Gamma Sector – 120 ft. Antenna Type: BXA-Antenna Type: BXA-Antenna Type: BXA-80063/6CF (1) 80063/6CF (1) 80063/6CF (1) Frequency: Tx: 869-880,890-Frequency: Tx: 869-880,890-Frequency: Tx: 869-880,890-891.5 MHz; Rx: 824-835, 891.5 MHz; Rx: 824-835, 891.5 MHz; Rx: 824-835, 845-845-846.5 MHz 845-846.5 MHz 846.5 MHz No. Channels: 9 No. Channels: 9 No. Channels: 9 ERP/Channel: 372 W Max ERP/Channel: 372 W Max ERP/Channel: 372 W Max

LTE Antennas

Alpha Sector – 110 ft.	Beta Sector - 110 ft.	Gamma Sector – 110 ft.
Antenna Type: BXA-70063/6CF (1)	Antenna Type: BXA-70063/6CF (1)	Antenna Type: BXA-70063/6CF (1)
Frequency: Tx:746 – 757 MHz; Rx: 776-787 MHz	Frequency: Tx:746 – 757 MHz; Rx: 776-787 MHz	Frequency: Tx:746 – 757 MHz; Rx: 776-787 MHz
No. Channels: 1	No. Channels: 1	No. Channels: 1
ERP/Channel: 646 W Max	ERP/Channel: 646 W Max	ERP/Channel: 646 W Max

Question No. 17

Given the close proximity of an existing tower on the subject property to the proposed tower, would Cellco have to consider the combined power densities from both towers to ensure compliance with the FCC standards? Explain.

Response

The FCC regulations and guidelines regarding Maximum Permissible Exposure (MPE) limits are not clear as to whether emissions from two separate, but nearby, facilities would need to be taken into consideration to determine compliance with the FCC standards. That said, a

combined worst-case MPE calculation for Cellco's proposed flagpole tower (19.05 %) and the existing T-Mobile flagpole tower (22.14%) would be 41.19% of the FCC standard. The MPE of 22.14% for the T-Mobile, AT&T and Sprint antennas on the existing flagpole tower on the Property was taken form information available on the Council's database.

Question No. 18

What is the signal strength for which Cellco designs its system? For in-vehicle coverage? For in-building coverage?

Response

Cellco's minimum coverage thresholds are -85 dBm for reliable in-vehicle service and -75 dBm for reliable in-building service.

Question No. 19

What is the existing signal strength in those areas Cellco is seeking to cover from this site?

Response

Existing signal strength in this area ranges from -86 dBm to - 98 dBm.

Question No. 20

Does Cellco have any statistics on dropped calls in the vicinity of the proposed facility?

If so, what do they indicate? Does Cellco have any other indicators of substandard service in this area?

Response

From its existing cell sites surrounding the proposed Bayview Facility, Cellco experiences dropped calls at a rate of 1.49% and ineffective attempts at a rate of 2.19%. Cellco's

nationwide standard for dropped calls and ineffective attempts is less than one percent. Other information relied upon to determine the need for "reliable service" in a particular area includes baseline drive data, drive tests from particular proposed cell site locations, customer complaints, propagation modeling data and system performance data.

Question No. 21

Would the proposed facility interact with the following existing Cellco sites listed on page 2 of the Application: Milford South, Forest Heights, Old Gate, and Milford South 2? If there are any other facilities that would interact with the proposed facility, include those also.

Response

The proposed Bayview Facility will interact with Cellco's Milford South Forest Heights, Old Gate and Milford South 2 cell sites only.

Question No. 22

On page 2 of the Application, Cellco provides the coverage areas for the proposed facility at PCS, cellular, and 700 MHz service. These coverage areas are 5.5 square miles, 6.8 square miles, and 6.96 square miles, respectively. The response to Question 12 of the Council's interrogatories lists the coverage areas as 20.49 square miles, 90.0 square miles, and 101.45 square miles. Explain the difference in the coverage numbers, e.g. the later numbers include coverage over open water, etc.

Response

The overall coverage footprint figures provided on page 2 of the application do not include any coverage over the open water of Long Island Sound. The overall coverage footprint figures included in response to interrogatory no. 12, include coverage over Long Island Sound.

Given the proximity of the Bayview Facility to shore the proposed facility will offer improved wireless services to significant portions Long Island Sound.

Question No. 23

What is the route by which utilities would be brought to the facility?

Response

As indicated on Plan Sheet C-2, behind Tab 1 of the Application, Cellco anticipates that utilities would extend underground from the existing utility meter board associated with the T-Mobile facility on the property to Cellco's equipment shelter. Final routing of utilities will be subject to review and approval by United Illuminating Company.

Question No. 24

Would any blasting be required to develop the site?

Response

Cellco does not anticipate the need for blasting to construct the proposed facility.

Question No. 25

Could the flagpole tower be designed with a yield point to ensure that the tower's setback radius remains within the boundaries of the subject property?

Response

Yes.

Question No. 26

Is the proposed site within an "Important Bird Area" as designated by the National Audubon Society?

Response

No. The closest Important Bird Area is the Silver Sands/Walnut Beach/Charles Island

Natural Area Preserve in Milford, located approximately 2.1 miles to the west/southwest of the

Bayview Facility. (See discussion on page 2 of the Migratory Bird Impact Evaluation attached).

Question No. 27

Would Cellco's proposed facility comply with recommended guidelines of the United States Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact bird species?

Response

Yes. (See discussion on pages 4-6 of the Migratory Bird Impact Evaluation attached).

Question No. 28

Does Cellco anticipate the use of the backup generator as a power source until permanent electrical service is provided?

Response

No. Cellco expects to have commercial electric service available at the site at the time the cell site is activated.

Transportation Land Development Environmental Services



54 Tuttle Place Middletown, Connecticut 06457 860 632-1500 FAX 860 632-7879

Memorandum

To: Ms. Alexandria Carter Verizon Wireless

99 East River Drive

East Hartford, Connecticut 06108

Date: January 4, 2011

Project No.: 41479.46

From: Dean Gustafson

Senior Environmental Scientist

Re: Connecticut Siting Council Docket No. 410

Migratory Bird Impact Evaluation

Proposed Verizon Wireless Bayview Facility

234 Melba Street Milford, Connecticut

Vanasse Hangen Brustlin, Inc. (VHB) is pleased to provide the following information with respect to potential impacts on migratory birds from a proposed wireless telecommunications facility (Facility) proposed by Verizon Wireless at 234 Melba Street in Milford, Connecticut.

VHB understands that Verizon Wireless proposes to construct a 136-foot tall flagpole where the telecommunications antenna panels and coaxial cable would be mounted to the interior of the pole, such that no exterior antennas or associated infrastructure would be visible. Both the proposed flagpole and ground equipment would be situated within a 1,405-square foot fence-enclosed compound. The host property is currently occupied by two small commercial buildings and an existing telecommunications installation that includes a 136-foot tall flagpole and associated fence-enclosed compound area. Land use within the general vicinity of the proposed Facility is mainly comprised of high-density residential development with several commercial establishments.

VHB's research revealed the proposed Facility complies with the U.S. Fish and Wildlife Service (USFWS) guidelines for minimizing potential impacts to birds and no migratory bird species would be impacted by development of the proposed Facility. As a result, no seasonal restrictions would be recommended in association with construction or operation of the proposed Facility.

Provided below is a detailed analysis of potential impacts to migratory birds from the proposed Verizon Wireless Facility and the Facility's compliance with the USFWS guidelines.

Flyways

The proposed Facility is located in a densely developed residential and commercial section of Milford near the Connecticut coast approximately 0.25 mile north of Point Beach. The Connecticut coast lies within the Atlantic Flyway, one of the four generalized regional migratory bird flyways (Mississippi, Central, and Pacific being the others). This regional flyway is used by migratory birds traveling to and from summering and wintering grounds. The Atlantic Flyway is particularly important for many species of migratory waterfowl and shorebirds, and Connecticut's coast serves as vital stopover habitat. Migratory land birds also stop along coastal habitats before making their

way inland. Smaller inland migratory flyways are often concentrated along major riparian areas as birds make their way further inland to their preferred breeding habitats. The proposed Verizon Wireless Facility will be located within the existing development limits of the commercial property and will not impact mature vegetation or an inland wetland system located in the northern portion of the subject property. Although the proposed Verizon Wireless Facility is located in the Atlantic Flyway, no impact to avian habitat potentially used by migrating species will occur. Therefore, no impact to migratory flyways would result from the proposed tower facility and therefore no seasonal restriction is recommended for the project. In addition, since the proposed Facility complies with the U.S. Fish and Wildlife Service guidelines (as discussed in a following section) for minimizing potential impacts to birds, no migratory bird species would be impacted by development of the proposed Facility

Focus Areas

The Atlantic Joint Coast Venture (AJCV) is an affiliation of federal, state, regional, and local partners working together to address bird conservation planning along the Atlantic Flyway. The AJCV has identified focus areas identifying the most important habitats for waterfowl along the Atlantic Flyway. Connecticut contains several of these focus areas. Although the proposed project is not located within one of them (refer to attached map of CT Waterfowl Focus Areas), it is near the New Haven Harbor Focus Area. Since the proposed project occurs on an existing developed commercial property and will not impact waterfowl habitat, no adverse impact to the nearby focus area is anticipated.

CTDEP Migratory Waterfowl Data

The Connecticut Department of Environmental Protection (CTDEP) created a Geographic Information System (GIS) data layer in 1999 identifying concentration areas of migratory waterfowl at specific locations in Connecticut. The intent of this data layer is to assist in the identification of migratory waterfowl resource areas in the event of an oil spill or other condition that might be a threat to waterfowl species. This data layer identifies conditions at a particular point in time and has not been updated since 1999.

The closest migratory waterfowl area is located along the Connecticut coast, approximately 0.25 mile south of the proposed Facility; refer to the enclosed Avian Resources Map. Species utilizing this nearby coastal habitat (e.g., shallow saltwater) primarily for non-breeding wintering grounds include American Black Duck, Bufflehead, Common Goldeneye, and Lesser Scaup. Three important factors were considered in our determination that no impact to migratory or wintering waterfowl will result from the proposed development (and therefore no seasonal restrictions are recommended for the project), including: 1) the proposed project will not directly impact this migratory and wintering waterfowl area; 2) there is sufficient buffer from this area to the proposed development; and, 3) the area surrounding the proposed Facility and extending to the coast is characterized by primarily dense residential development (including homes right up to the coast line).

Important Bird Areas and Sites

Audubon Connecticut has identified 27 Important Bird Areas and Sites (IBAs) in the state. The closest IBA to the proposed Facility is the Silver Sands/Walnut Beach/Charles Island Natural Area Preserve in Milford, located approximately 2.1 miles to the west/southwest. Refer to the enclosed Avian Resources Map. This 300-acre preserve is a very important area for both wintering and nesting birds, including nesting areas that are relatively isolated from human interference. It is also the site of salt marsh and dune restoration activities conducted by the state. Due to the significant distance between the proposed Facility and this IBA, no impact to this area will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Critical Habitat

Connecticut Critical Habitats depicts the classification and distribution of 25 rare and specialized wildlife habitats in the state resulting in the creation of habitat maps to be used in land use planning and natural resource protection. It represents a compilation of ecological information collected over many years by state agencies, conservation organizations and many individuals. The Connecticut Critical Habitats information can serve to highlight ecologically significant areas and to target areas of species diversity for land conservation and protection. The nearest Critical Habitat is located approximately 1 mile northwest of the proposed Facility associated with intertidal salt marsh habitat along the Indian River and Gulf Pond; refer to the enclosed Avian Resources Map. Due to the distance between the proposed Facility and this nearest Critical Habitat, no impact to this Critical Habitat will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Breeding Bird Survey Route

The North American Breeding Bird Survey is a cooperative effort between various agencies and volunteer groups to monitor the status and trends of North American bird populations. Routes are randomly located to sample habitats that are representative of an entire region. Each year during the height of the avian breeding season (June for most of the United States) participants skilled in avian identification collect bird population data along roadside survey routes. Each survey route is approximately 24.5 miles long and contains 50 stops located at 0.5-mile intervals. At each stop, a 3-minute count is conducted. During the count, every bird seen within a 0.25-mile radius or heard is recorded. The resulting data are used by conservation managers, scientists, and the general public to estimate population trends and relative abundances and to assess bird conservation priorities. No survey routes are located within 5 miles of the proposed Facility. Bird survey routes do not represent a potential restriction to development, including the proposed Facility.

Hawk Watch Site

The Hawk Migration Association of North America (HMANA) is a membership-based organization committed to the conservation of raptors through the scientific study, enjoyment, and appreciation of raptor migration. HMANA collects hawk count data from almost two hundred affiliated raptor monitoring sites throughout the United States, Canada, and Mexico, identified as "Hawk Watch Sites." The nearest Hawk Watch Site is located approximately 5 miles northwest of the proposed Facility at a location known as Boothe Memorial Park in Stratford. Refer to the enclosed Avian Resources Map. Hawk Watch Sites do not represent a potential restriction to development, including the proposed Facility.

Bald Eagle Site

Bald Eagle Sites consist of locations of midwinter Bald Eagle counts from 1986-2005 with an update provided in 2008. This survey was initiated in 1979 by the National Wildlife Federation. This database includes data from 1986-2005 midwinter counts and includes some statewide, regional and national trends. Survey routes are included in the database only if they were surveyed consistently in at least 4 years and where at least 4 eagles were counted in a single year. A Bald Eagle Site is located near Lake Saltonstall in Branford approximately 11 miles east of the proposed Facility; located beyond the limits of the enclosed Avian Resources Map. Due to the significant distance separating the proposed Facility from this Bald Eagle Site no impact to Bald Eagles will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Compliance with USFWS's Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers

The United States Fish and Wildlife Service's *Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers* (September 14, 2000), recommends 12 voluntary actions be implemented in order to mitigate tower strikes caused by the construction of telecommunications towers:

1. Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.

Response: Collocation on an existing building, tower or non-tower structure is not available while achieving the required radio frequency (RF) coverage objectives of the proposed Facility. The existing flagpole tower located on the subject property does not have sufficient capacity to house antenna equipment to satisfy Verizon Wireless' needs.

2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration regulations permit.

Response: The proposed Verizon Wireless Facility consists of a 136-foot tall flagpole structure which requires neither guy wires nor lighting.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.

Response: Multiple towers are not proposed to be constructed at the subject property. A 135-foot flagpole structure (similar to the Verizon Wireless structure proposed) currently exists within the developed limits of the commercial property. The cumulative impact of the two towers is not anticipated to have an adverse impact to migratory birds or threatened and endangered species. Verizon Wireless is not aware of bird strikes caused by the existing flagpole structure.

4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.

Response: There are no existing antenna farms in the area that would satisfy the RF coverage objectives for this portion of Milford. Although not considered an "antenna farm", the new tower is being located on an existing tower site, which is in effect clustering the towers. Due to the proposed tower's proximity to the coast, incidence of fog, mist, and low ceilings are anticipated over the course of a typical year. The proposed Facility is not sited in a bird concentration area, as previously discussed. Although the proposed Facility is located approximately 0.25 mile north of a known migratory flyway, the low height of the proposed Facility and its distance to open water habitat mitigates for potential impact to migratory avian species. According to CTDEP, there are no known extant populations of State or Federal Endangered, Threatened or Special Concern Species at the site (N. Murray, CTDEP, pers. comm., Dec. 30, 2009).

5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used.

Response: The proposed tower height of 136 feet is less than 199 feet AGL and does not require lighting as determined by a FAA review.

6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species.

Response: The proposed tower will be unguyed and therefore visual markers are not required.

7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

Response: The proposed tower and appendant Facility is sited, designed, and constructed to accommodate proposed equipment and to allow for future collocations within the smallest footprint possible. The Facility is located on an existing developed commercial property and will not disturb mature vegetation.

8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.

Response: Significant numbers of breeding, feeding, or roosting birds are not known to habitually use the proposed tower construction area or surrounding subject property.

9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.

Response: The proposed unguyed and unlit tower has been designed to accommodate two additional antenna positions.

10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

Response: Security lighting will be down-shielded using Dark Sky compliant fixtures set on motion sensor with timer.

11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

Response: With prior notification to Verizon Wireless, USFWS personnel would be allowed access to the proposed Facility for evaluation.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

Response: If the proposed tower was no longer in use or determined to be obsolete, it would be removed within 12 months of cessation of use.

Summary

Potentially impacted species: American Black Duck, Bufflehead, Common Goldeneye, Lesser Scaup Closest Important Bird Area: Silver Sands/Walnut Beach/Charles Island Natural Area Preserve (2.1± miles west/southwest)

Closest CTDEP Critical Habitat: Indian River and Gulf Pond ($1\pm$ mile northwest) Recommended Seasonal Restriction: None

cc: Kenneth C. Baldwin, Robinson & Cole LLP

Enclosures



