STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF CELLCO PARTNERSHIP

DOCKET NO. 416 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

DAY HILL ROAD, BLOOMFIELD, CONNECTICUT APRIL 13, 2011

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

On March 18, 2011, the Connecticut Siting Council ("Council") issued Pre-Hearing Interrogatories to Cellco Partnership d/b/a Verizon Wireless ("Cellco"), relating to the abovecaptioned docket. Below are Cellco's responses.

Question No. 1

Would Cellco's antennas comply with E911 requirements?

Response

Yes.

Question No. 2

Are there any other existing towers within a four-mile radius of the proposed site in addition to the five towers identified in Attachment 8 of the application?

Response

According to the Council's on-line Telecommunications Facility Database, there are six (6) additional telecommunications facility towers within four (4) miles of the North Bloomfield Facility that Cellco does not currently share. None of these existing towers could satisfy Cellco's North Bloomfield coverage objectives.

- Simsbury Fire Department Tower 871 Hopmeadow Street, Simsbury, CT.
 This tower is located approximately 3.1 miles to the northwest of the proposed
 North Bloomfield Facility.
- T-Mobile Power-Mount Tower 142 Duncaster Road, Bloomfield, CT.
 This power-mount is located approximately 1.2 miles to the southwest of the proposed North Bloomfield Facility.
- T-Mobile (Flagpole) Tower 30 Brae Burnie Lane, Bloomfield, CT.
 This tower is located approximately 3.1 miles to the southwest of the proposed
 North Bloomfield Facility.
- Sprint Monopole Tower 28 Brewer Street, Bloomfield, CT.
 This tower is located approximately 2.8 miles to the south of the proposed North Bloomfield Facility.
- T-Mobile Monopole Tower 100 Filley Street, Bloomfield, CT.
 This tower is located approximately 2.2 miles to the southeast of the proposed
 North Bloomfield Facility.
- Town of Windsor Tower 99 Day Hill Road, Windsor, CT.
 This tower is located approximately 3.6 miles to the east of the proposed North
 Bloomfield Facility.

Question No. 3

Are the sites identified as Cottage Grove and Bloomfield 3 on page 2 of Cellco's application the same site?

Response

No. The reference to the Cottage Grove site is incorrect. The second sentence in the first full paragraph on page 2 of the application should read, "[t]hese facilities are identified as Cellco's Simsbury, Tariffville, Windsor 2 and Bloomfield 3 cell sites."

Question No. 4

Identify distances and directions to the adjacent sites with which the proposed site would hand off signals? Include addresses of these sites.

Response

The proposed North Bloomfield Facility would interact with Cello's existing Simsbury, Tariffville, Windsor 2, Windsor and Bloomfield 3 cell sites.

Simsbury - Grist Mill Road, Simsbury, CT; 3.8 miles west of North Bloomfield.

Tariffville – 8 Hoskins Road, Bloomfield, CT; 1.7 miles northwest of North Bloomfield.

Windsor 2 – 750 Rainbow Road, Windsor, CT; 3.4 miles northeast of North Bloomfield.

Windsor – 482 Pigeon Hill Road, Windsor, CT; 3.3 miles east of North Bloomfield.

Bloomfield 3 – 785 Park Avenue, Bloomfield, CT; 3.3 miles south of North Bloomfield.

Question No. 5

What is the lowest height at which Cellco's antennas could achieve its coverage objectives from this site? Submit propagation maps showing the coverage at ten feet below this height.

Response

Cellco has determined that the 110-foot level is the minimum antenna height needed to satisfy its North Bloomfield coverage objectives. Plots showing Cellco's coverage at 100' are included behind <u>Tab 1</u>. At 100', Cellco's coverage footprint shrinks from 4.07 to 3.35 square miles at 850 MHz frequencies; 3.88 to 3.52 square miles at 1900 MHz frequencies; and 5.91 to

5.25 square miles at 700 MHz frequencies.

Question No. 6

Of the letters sent to abutting property owners, how many certified mail receipts did 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 return receipts back from all but two abutting property owners. Notice letters to Donald and Lisa Dickson and James E. and Renee M. Trzcinski were returned by the post master marked "unclaimed". Notice to each of these abutters was resent via regular mail on March 14, 2011.

Question No. 7

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

Response

Cellco's network design threshold is -85 dBm for reliable in-vehicle service and -75 dBm for reliable in-building service. Cellco's design coverage threshold (-85 dBm) is the same for all of its operating frequencies.

Question No. 8

What is the existing signal strength within the area Cellco is seeking to cover from this site?

Response

Cellco's existing signal strength in the area of the North Bloomfield Facility ranges from between -86 dBm to -96 dBm at cellular (850 MHz) and PCS (1900 MHz) frequencies.

Question No. 9

Does Cellco have any statistics on dropped calls and/or ineffective attempts 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

For those sectors of adjacent cell sites directed toward the North Bloomfield search area, Cellco experiences dropped calls at an average rate of 2.7% and ineffective attempts at an average rate of 2.5%. Cellco's network design objective for dropped calls and ineffective attempts is less than one percent (1%). Other indicators of substandard service include the results of Cellco's monthly drive tests, customer complaints, propagation modeling data and system performance data.

Question No. 10

What are the lengths of the respective coverage gaps on Routes 189 and 187 that Cellco is seeking to cover from the proposed site at cellular frequencies? At PCS frequencies?

Response

Coverage gaps along Route 189 total 0.9 miles at cellular frequencies and 1.7 miles at PCS frequencies. Coverage gaps along the Route 187 total 0.3 miles at cellular frequencies and 2.0 miles at PCS frequencies.

Question No. 11

Quantify the amounts of cut and fill that would be required to develop the proposed facility.

Response

Cellco anticipates the need for 365 cubic yards of cut and 32 cubic yards of fill to construct the proposed North Bloomfield Facility.

Question No. 12

What was the approximate radius of Cellco's search ring for this area?

Response

The radius of the North Bloomfield search ring is approximately 0.55 miles.

Question No. 13

Would any blasting be required to develop the site?

Response

Cellco does not anticipate the need for blasting to develop the cell site. A more thorough geotechnical survey of the project site would be completed if the North Bloomfield Facility is approved by the Council. The geotechnical survey would be provided to the Council as a part of Cellco's Development and Management ("D&M") Plan.

Question No. 14

Did any of the boards or commissions of the Town of Bloomfield conduct any meetings or issue any statements or recommendations regarding the proposed project? If so, provide such documentation.

Response

No.

Question No. 15

How would Cellco mount its antennas to the proposed tower?

Response

Cellco's antennas will be attached to a low profile antenna platform at the 110-foot level on the tower.

Question No. 16

Would the tower's setback radius encroach on any adjoining properties? If so, state the distance of the encroachment and who owns these properties?

Response

No. The base of the 110-foot North Bloomfield Facility tower is setback 215 feet from the closest property line to the south; 325 feet from the property line to the west; 370 from the property line to the east; and 470 from the property line to the north.

Question No. 17

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

Response

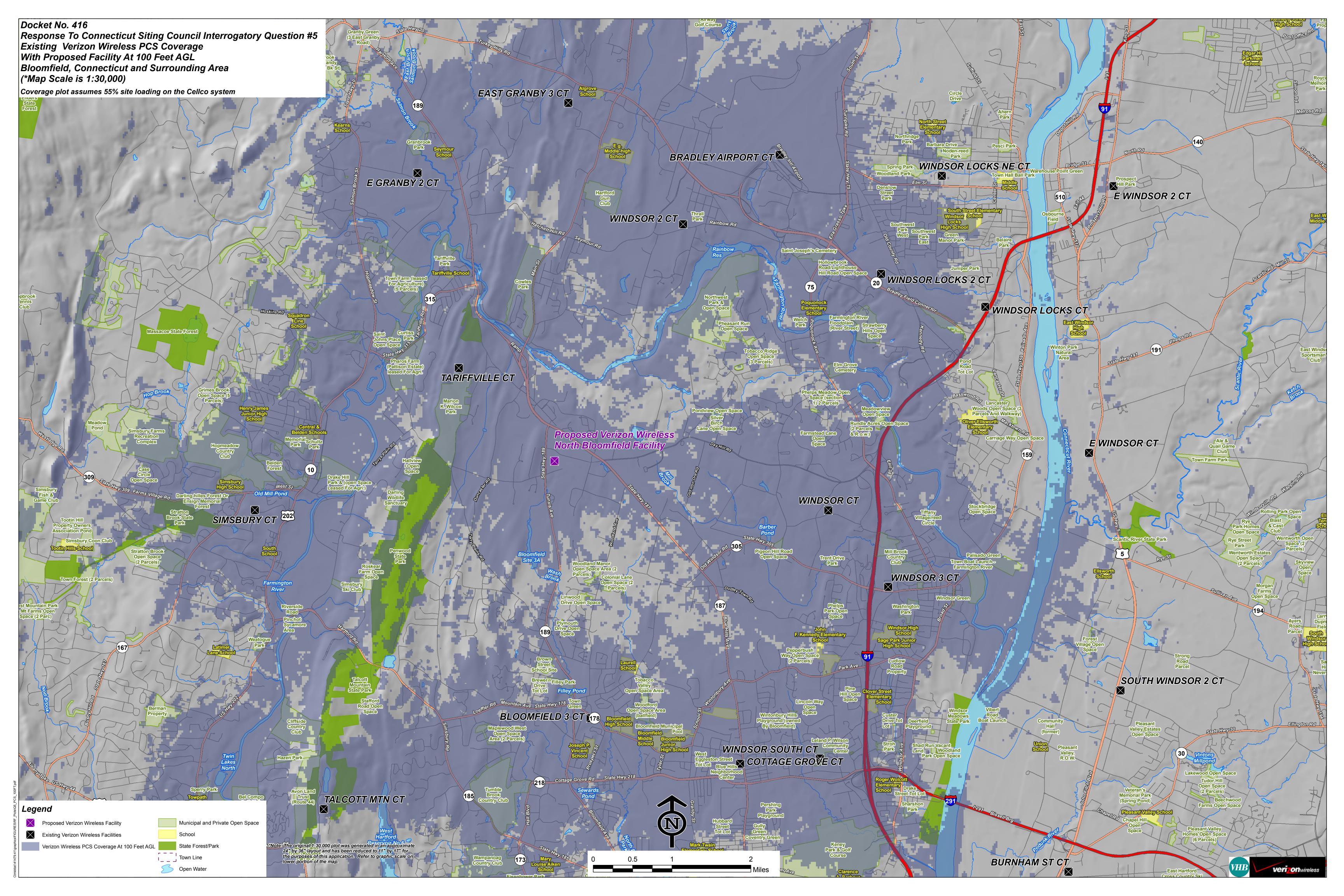
See VHB Memorandum attached behind <u>Tab 2</u> of these responses.

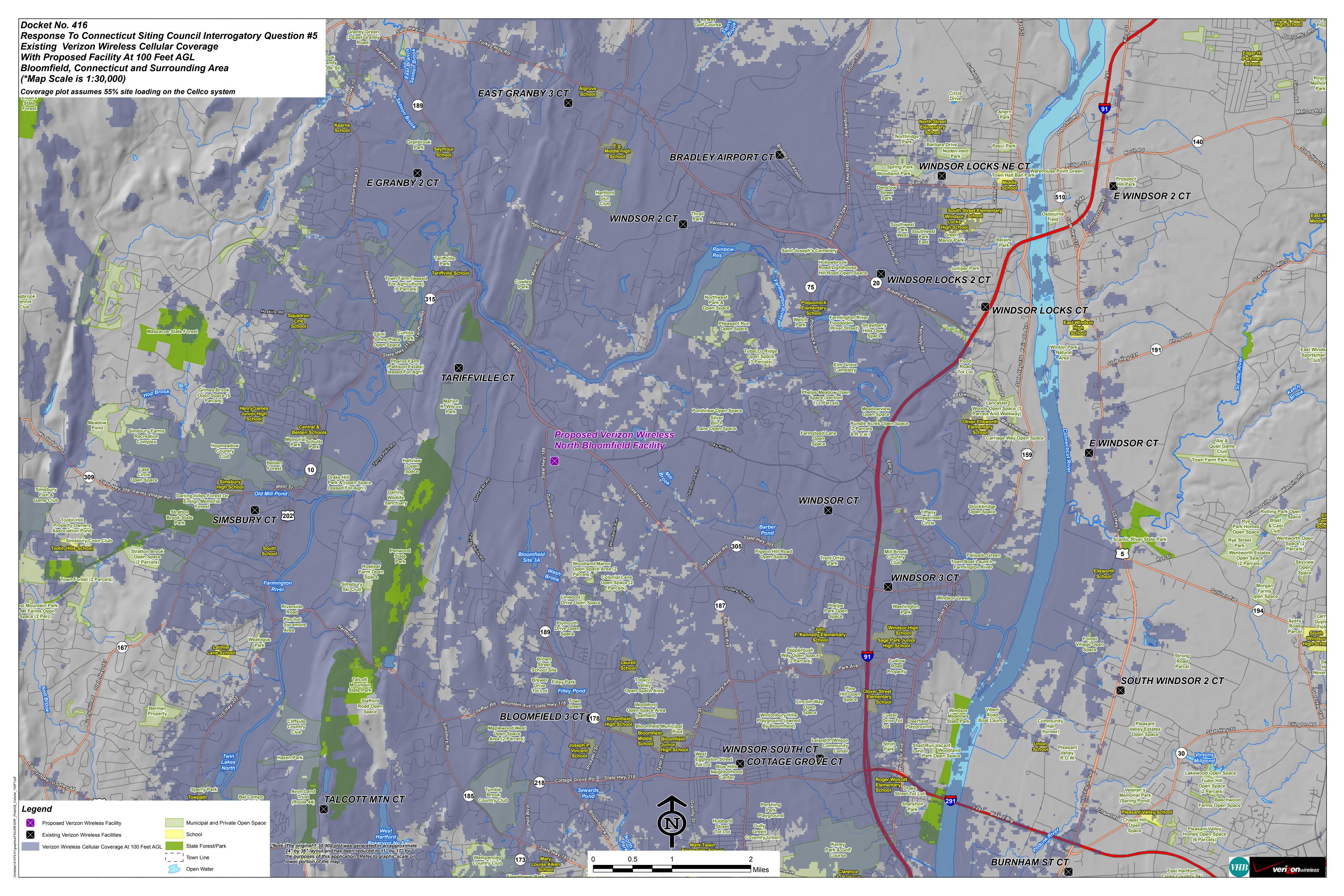
Question No. 18

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

See VHB Memorandum dated August 24, 2010, attached behind <u>Tab 2</u> of these responses.





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: April 13, 2011

Project No.: 41479.41

From: Dean Gustafson

Senior Environmental Scientist

Re: Connecticut Siting Council Docket No. 416

Migratory Bird Impact Evaluation Proposed Verizon Wireless Facility

Day Hill Road

Bloomfield, Connecticut

In response to the Connecticut Siting Council Interrogatories Nos. 17 and 18 for Docket No. 416, Vanasse Hangen Brustlin, Inc. (VHB) provides the following information with respect to potential impacts on migratory birds from a proposed wireless telecommunications facility (Facility) proposed by Verizon Wireless at Day Hill Road in Bloomfield, Connecticut.

VHB understands that Verizon Wireless proposes to construct a wireless communications facility in the south central portion of the subject property in an existing cleared area immediately adjacent to several abandoned greenhouses. The "host property" (identified in Town Assessor's records as Map 452/Lot 62) consists of approximately 10.8 acres of land that includes both wooded and open areas and is currently occupied by several abandoned greenhouses and barns. Land uses within the general vicinity of the host property consist of mixed industrial/light manufacturing facilities, commercial establishments, agriculture and medium-density residential development. A wetland resource area, consisting of a seasonally saturated forested wetland with an associated intermittent watercourse flowing through the wetland interior and a man-made pond, is located on the property west of the proposed Facility. The nearest proposed disturbance from wetlands associated with the facility is approximately 100 feet from wetland flag WF 1-13. The proposed 12-foot wide gravel access drive is located approximately 145 feet east of the nearest wetland area (near WF 1-29). Although work is proposed in proximity to nearby wetland resource area, no direct impact to wetlands is proposed by the Verizon Wireless development. Existing mature vegetation that borders the wetland area will not be disturbed by the proposed development.

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 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. The Connecticut shore and associated Atlantic Flyway are located approximately 40 miles south of the proposed Facility. Smaller inland migratory flyways are often concentrated along major riparian areas as birds make their way further inland to their preferred breeding habitats. The larger riparian features in proximity to the proposed Facility include the Farmington River, located approximately 1 mile to the north. Therefore, since the proposed Verizon Wireless Facility is not located in the Atlantic Flyway and is distant to the Farmington River, no adverse impact to migratory flyways would result from the proposed tower facility and therefore no seasonal restriction is recommended for the project.

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. The proposed project is not located within one of them (refer to attached map of CT Waterfowl Focus Areas) and the nearest Focus Area is the Connecticut River and Tidal Wetlands Complex located approximately 17 miles to the south. Therefore, since the proposed Verizon Wireless Facility is located a significant distance to the nearest Focus Area, no adverse impact to Waterfowl Focus Areas will result from the proposed tower project.

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 River in the towns of Windsor and South Windsor, approximately 6 miles east/southeast of the proposed Facility, beyond the limits of the study area shown on the enclosed Avian Resources Map. Due to the significant distance between the proposed Facility and this migratory waterfowl area, no seasonal restrictions are recommended for the project.

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 Northwest Park in Windsor, approximately 2.3 miles to the northeast along the Farmington River. Refer to the enclosed Avian Resources Map. Recognized in 2005 by Audubon Connecticut as an IBA, this area contains a variety of upland, grassland and wetlands bird species. In particular, over 60 acres of grasslands are managed for the Grasshopper Sparrow, a Species of Special Concern in Connecticut. Due to the significant distance between the proposed Facility and this IBA, 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 associated with forested floodplain habitat along the Farmington River approximately 1 mile north of the proposed Facility. Due to the distance between the proposed Facility and this nearest Critical Habitat no impact to Critical Habitats 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. The nearest survey route is located approximately 4.5 miles north of the proposed Facility in East Granby, beyond the limits of the study area depicted on the enclosed Avian Resources Map. 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 to the proposed Facility is at Peak Mountain in East Granby approximately 7.5 miles to the north, beyond the limits of the study area shown on the enclosed Avian Resources Map. Due to the significant distance to the nearest Hawk Watch Site, no adverse impact to migrating hawks is anticipated from the proposed development and therefore no seasonal restrictions are recommended for the project.

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. The nearest Bald Eagle Site to the proposed Facility is at the Barkhamsted Reservoir in Hartland approximately 11 miles to the west, beyond the limits of the study area shown on the enclosed Avian Resources Map. Due to the significant distance to the nearest Bald Eagle Site, no impact to Bald Eagles is anticipated from the proposed development and therefore no seasonal restrictions are recommended for the project.

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

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.

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 110-foot monopole tower 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. The proposed 110-foot monopole tower will accommodate three additional wireless telecommunications carriers to minimize the need to construct additional towers.

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 Bloomfield. The proposed tower's location is not subject to a high incidence of fog, mist or low ceilings and is not located within the Atlantic Flyway or a known migratory flyway. According to CTDEP, no federal and state endangered species are located in the vicinity of the proposed project.

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 110 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 within a cleared area and adjacent to existing development and therefore will not result in habitat fragmentation.

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.

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 three additional users antennas for a total of four users on this tower.

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 waterfowl species: none Closest Important Bird Area: Northwest Park (2.3± miles northeast) Closest CTDEP Critical Habitat: Farmington River forested floodplain (1± mile north) Recommended Seasonal Restriction: None

Kenneth C. Baldwin, Robinson & Cole LLP

Enclosures

cc:

