

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF NEW CINGULAR  
WIRELESS PCS, LLC (AT&T) FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED FOR  
THE CONSTRUCTION, MAINTENANCE  
AND OPERATION OF A  
TELECOMMUNICATIONS TOWER  
FACILITY AT 28 GREAT OAK LANE  
IN THE TOWN OF  
REDDING, CONNECTICUT

DOCKET NO. 404

November 9, 2010

NEW CINGULAR WIRELESS PCS, LLC ("AT&T")  
RESPONSES TO SITING COUNCIL INTERROGATORIES (SET ONE)

Q1. What is AT&T's minimum signal level threshold for in-building and in-vehicle use?

A1. AT&T designs for -82 dBm in-vehicle coverage and -74 dBm in-building coverage.

Q2. What is the current signal strength in the proposed service area? Does AT&T have any dropped calls/ineffective attempt statistics for the proposed service area? If so, please provide.

A2. Current signal levels range significantly in the proposed service area from -110 dBm to -80 dBm due to the terrain fluctuations. This type of spotty unreliable coverage is not acceptable for users of the AT&T network. AT&T customers are often mobile, making calls from their vehicles, their places of business and their homes. In addition, many customers are now substituting cell phones for their landline phone service as their only means of voice communications. To properly serve these customers, the service must be reliable, especially since the service will be carrying their 911 calls. Dropped calls are above system wide averages and objectives and blocking/ineffective attempts are not an issue given the low capacity environment in this area of the State. That data is considered proprietary by AT&T but is not necessarily relevant in this particular Docket because this area is known as a poor coverage area by both benchmark data and customer experience which necessitates a coverage solution.

Q3. Provide PCS coverage plots, using the scale and thresholds in Application Attachment 1 that depicts the following:

- a) coverage from existing/approved AT&T sites; and
- b) coverage from existing/approved AT&T sites and the proposed sites.

A3. PCS plots are attached as Exhibit A.

Q4. Identify the amount of cellular and PCS coverage (square miles) provided by the site.

A4. Proposed Cellular Incremental(-82 dBm): 4.21 sq mi  
Proposed PCS Incremental (-82 dBm): 3.75 sq mi

Q5. Please respond to the Connecticut Department of Public Health's comments, dated October 5, 2010.

A5. The referenced Connecticut Department of Health ("DOH") letter contains eight (8) recommendations intended to protect the public water supply watershed. The first two recommendations are that standard erosion control and inspection measures be incorporated into the project plans. This is the case with all D&M Plans as reviewed and approved by the Council. The third recommendation is that AT&T not conduct any on-site servicing of machinery, something it does not do as part of tower site construction and any other long term maintenance of its facilities does not involve potential pollutants. The fourth and fifth recommendations relate to refueling and fuel storage for the permanent diesel generator proposed as part of the project. AT&T will add details to its construction drawings that would be reviewed as part of any D&M Plan that incorporate these recommendations including the request for a spill kit as part of recommendation six. The final two DOH recommendations refer to the local water company, Aquarion, which can be contacted and allowed to inspect the AT&T facility during the construction phase. Of note, the underlying property is actively used as the Town's Highway Garage and coordination of these matters will need to involve the Town itself as the property owner.

Q6. Please provide a copy of AT&T's Power Density Report, dated August 16, 2010.

A6. The Power Density Report, dated August 16, 2010, is attached as Exhibit B.

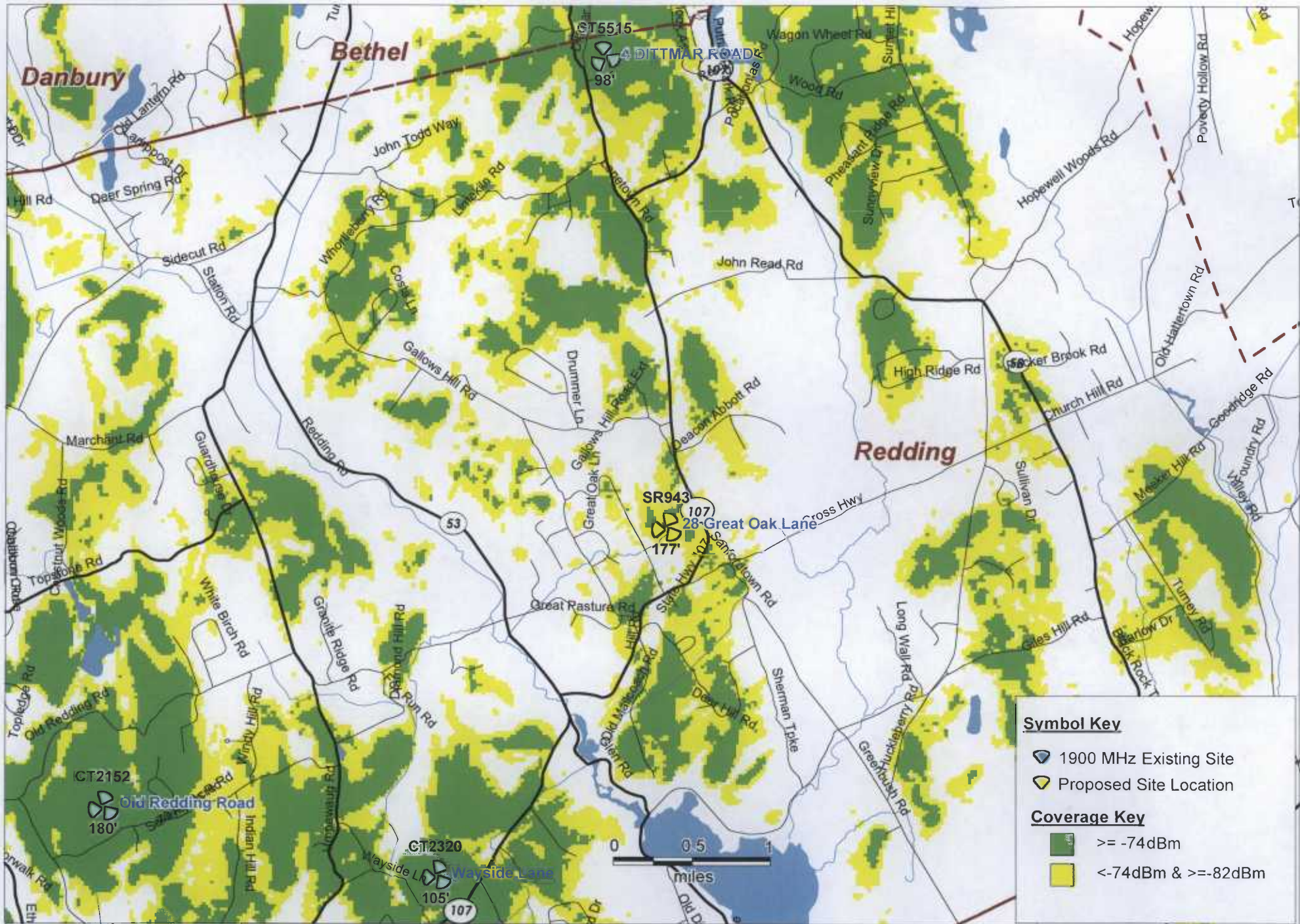
Q7. Approximately when did AT&T establish a search ring for the site? Did the search area shift over time to account for changes in technology or the development of adjacent sites? Approximately when did AT&T begin discussion with the town regarding the proposed site?

A7. As noted in the Application, this project has an approximately decade long history in the Town of Redding prior to AT&T's interest. AT&T's search ring for this area of Redding was initially released when it was a PCS only carrier and dates to approximately the the year 1999/2000. The same search ring/site is shown in Docket 284 (which was decided in 2004) as proposed site CT-518 and in this same location at the Town's Highway Garage. Subsequent to the merger with Cingular, this AT&T search ring was maintained in the same location and given the search ring number SR943. Counsel for AT&T began discussions with Town representatives on this site in 2004 during the proceedings in Docket 284.

- Q8. In Application Attachment 6, FCC NT Submission Packet Maps Attachment page 3, the Redding Historic District is shown as #1. Are locations # 2, 3, 4, 5 also part of the historic district?
- A8. No, the locations # 2, 3, 4, & 5 depicted in the NEPA report prepared by the Ottery Group for AT&T are not part of the Historic District. These locations are considered to be other historic resources that were evaluated by the Ottery Group and CT SHPO.
- Q9. Regarding Historic Resource #3 (Daniel and Esther Bartlett House), page 2 of the Historic Properties Attachment states the proposed tower would be visible year-round from most areas of this property; however the corresponding Historic Property Form states the tower would be seasonally visible. Please explain the discrepancy and how this discrepancy affects the "no effect" determination made by the Ottery Group and SHPO.
- A9. The statement of visibility included in Ottery's Historic Properties Attachment was based on its review of views 2, 3 and 6 that are included in VHB's Visual Resource Evaluation Report which was prepared in 2009 as part of Town consideration of the project. Those views are from nearby properties and roads with similar lines of sight and vantage points for the proposed tower facility. The photo taken during the winter and as shown in the Historic Property Form was prepared by Ottery and also used as a reference and does indicate potential visibility at a distance which was referred to as seasonal. These materials were all evaluated by CT SHPO during the period of March 2010 through June 2010 as part of Ottery's NEPA and Section 106 Consultations with that agency. As noted in its own correspondence dated June 7, 2010, CT SHPO conducted its own "extensive field review" and concluded the project would have no adverse effect on historic resources. As such, Ottery's characterizations of the views do not effect the final determination of SHPO or their conclusion that the proposed tower would not have an adverse effect n the Daniel and Esther Bartlett House which is based on those reasons that resource is listed on the National Register, the distance to the resource from the project site, the quality of the visibility which is largely seasonal with intervening development in the same lines of site and the use of a "stealth" pole to minimize the profile of the structure itself.
- Q10. Would AT&T's proposed facility comply with recommended United States Fish and Wildlife Service guidelines for minimizing potential impacts to bird species? Please explain.
- A10. Yes. The structure is under 200' in height, does not require FAA lighting and has no guyed wires. A November 8, 2010 memorandum prepared by Vanasse Hangen Brustlin, Inc. ("VHB memorandum") reviewing the proposed Facility's compliance with recommended U.S. Fish & Wildlife Service guidelines is attached as Exhibit C.

## **EXHIBIT A**





PCS Existing Coverage

Redding, CT

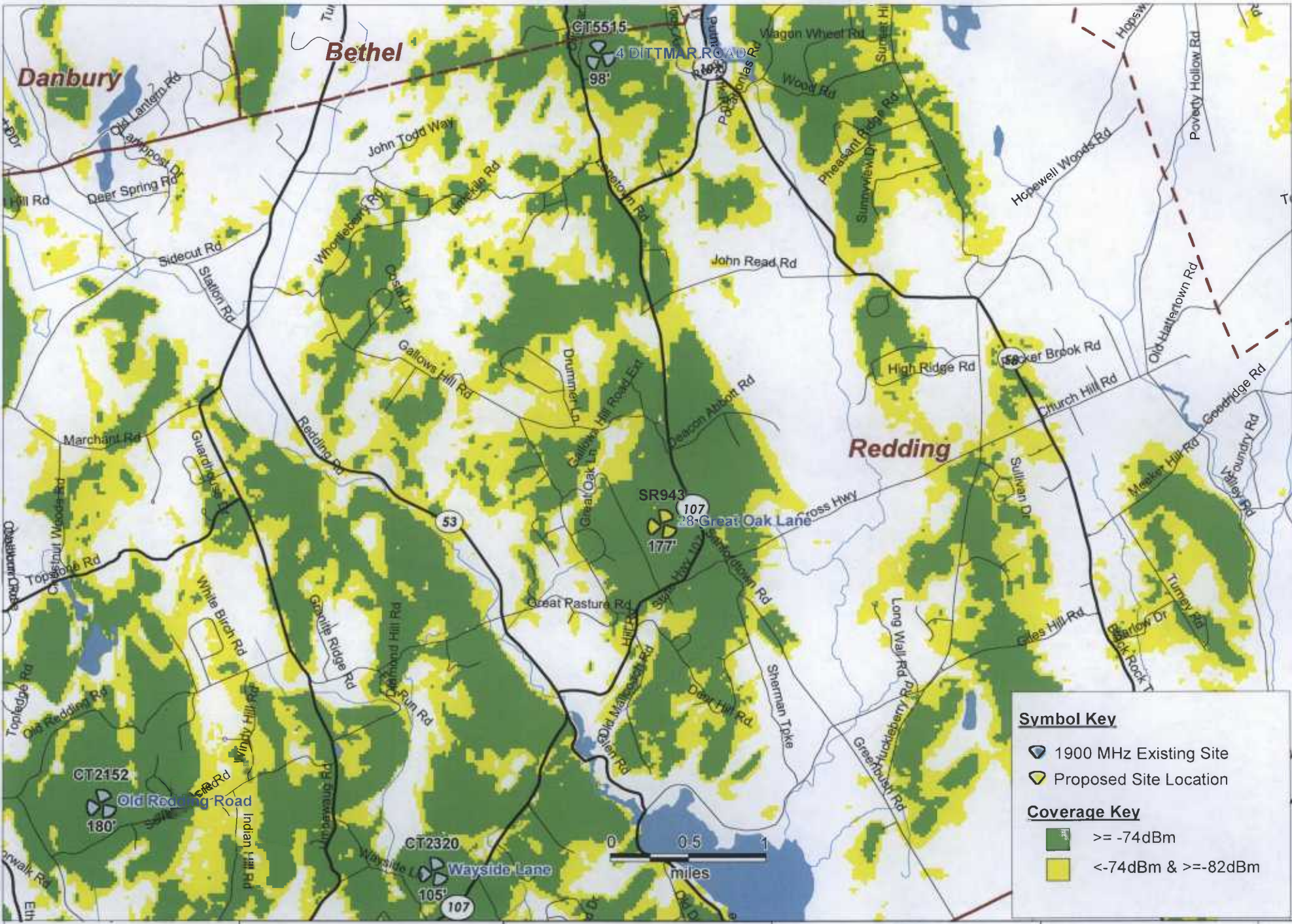
28 Great Oak Lane  
Redding, CT 06896



PREPARED ON  
DATE: 10/28/2010

REV





**Symbol Key**

- 1900 MHz Existing Site
- Proposed Site Location

**Coverage Key**

- >= -74dBm
- <-74dBm & >=-82dBm

PCS Existing & Proposed Coverage

Redding, CT

28 Great Oak Lane  
Redding, CT 06896



PREPARED ON \_\_\_\_\_  
DATE: 10/28/2010  
REV # \_\_\_\_\_

## EXHIBIT B



Tony Wells  
C Squared Systems  
920 Candia Road  
Manchester, NH 03109  
603-657-9702  
Tony.Wells@csquaredsystems.com



August 16, 2010

Connecticut Siting Council

Subject: New Cingular Wireless, Redding, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless to investigate the RF Power Density at the proposed site located at 28 Great Oak Lane, Redding, CT.

Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and pointing directly at the ground. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Location	Carrier	Antenna Centerline Height Above Ground Level (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm <sup>2</sup> )	Limit	% FCC MPE Limit General Public/Uncontrolled
Ground Level	AT&T UMTS	177	880	1	500	0.0062	0.5867	1.05%
	AT&T UMTS	177	1900	1	500	0.0062	1.0000	0.62%
	AT&T GSM	167	880	3	296	0.0123	0.5867	2.10%
	AT&T GSM	167	1900	1	427	0.0059	1.0000	0.59%
	<b>Total</b>							

**Summary:** Under worst-case assumptions, the RF Power Density at the proposed site located at 28 Great Oak Lane, Redding, CT will not exceed 4.36% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

A handwritten signature in cursive script that reads 'anthony wells'.

Anthony Wells  
Managing Partner



## EXHIBIT C



**Memorandum**

To: Mr. Christopher Fisher  
Cuddy & Feder LLP

Date: November 8, 2010

Project No.: 41502.01

From: Mike Libertine  
Director, Environmental Services

Re: Connecticut Siting Council Docket No. 404  
Response to Interrogatory #10  
Proposed New Cingular Wireless Facility  
Redding, Connecticut

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In response to the Connecticut Siting Council Interrogatory No. 10 for Docket No. 404, Vanasse Hangen Brustlin, Inc. (VHB) provides the following information with respect to the proposed Facility's compliance with recommended U.S. Fish & Wildlife Service Guidelines for minimizing potential impacts to bird species. We have provided the attached *Avian Resources Map* to assist the Council in its review of this information.

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.

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 New Cingular Wireless Facility consists of a 180-foot tall stealth monopole tower 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 for this project.

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 the Town of Redding. The proposed tower is not located in an area with a high incidence of fog, mist, and low ceilings, however, occasional incidences of fog, mist, and low ceilings are anticipated throughout the year. The proposed Facility is not located in any known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries) or known migratory or daily movement flyways.

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 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. The facility would not be located in known raptor or waterbird concentration areas nor adversely impact daily movement routes. Further, it would not be located in major diurnal migratory bird movement routes or stopover sites. Since the tower will be unguyed, 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 facilities would be sited, designed and constructed to accommodate proposed equipment and to allow for future collocations within the smallest footprint possible.

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 at least three additional users for a total of four users.

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 would be down-shielded and set on motion sensor with timer. Lighting would not extend beyond the perimeter of the proposed compound area.

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 New Cingular 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.

Attachment


























cc: David Vivian, SAI



# Avian Resources Map

Proposed Telecommunications Facility  
 Redding Highway Department  
 28 Great Oak Lane  
 Redding, Connecticut

## Legend

-  Proposed Facility
-  Bald Eagle Site
-  Hawk Watch Site
-  Important Bird Site
-  Bat Site
-  Breeding Bird Survey Route
-  Town Boundary
-  Natural Diversity Database (CTDEP, 8/2010)
-  Migratory Waterfowl (CTDEP, 1999)
-  Important Bird Area
-  Federal Open Space (CTDEP, 2004)
- CT DEP Property (CT DEP, 12/2009)**
-  State Forest
-  State Park
-  DEP Owned Waterbody
-  State Park Scenic Reserve
-  Historic Preserve
-  Natural Area Preserve
-  Fish Hatchery
-  Flood Control
-  Other
-  State Park Trail
-  Water Access
-  Wildlife Area
-  Wildlife Sanctuary
-  Open Water

**Bird Data Sources:**  
 Bald Eagle Sites: [Mehner Bald Eagle Count Survey website](http://www.mnh.state.nh.us/birds/bald_eagle_count_survey/)  
[http://www.mnh.state.nh.us/birds/bald\\_eagle\\_count\\_survey/](http://www.mnh.state.nh.us/birds/bald_eagle_count_survey/)  
[http://www.mnh.state.nh.us/birds/bald\\_eagle\\_count\\_survey/](http://www.mnh.state.nh.us/birds/bald_eagle_count_survey/)  
 Hawk Watch Sites: [Hawk Migration Association of North America \(HMANA\), Hawk Count website: http://www.mnh.state.nh.us/birds/hawk\\_watch/](http://www.mnh.state.nh.us/birds/hawk_watch/)  
[http://www.mnh.state.nh.us/birds/hawk\\_watch/](http://www.mnh.state.nh.us/birds/hawk_watch/)  
 Migratory Waterfowl: [CTDEP GIS, 1999](http://www.mnh.state.nh.us/birds/migratory_waterfowl/)  
[http://www.mnh.state.nh.us/birds/migratory\\_waterfowl/](http://www.mnh.state.nh.us/birds/migratory_waterfowl/)  
 Important Bird Sites/Areas: [National Audubon Society, Audubon Connecticut](http://www.mnh.state.nh.us/birds/important_bird_sites/)  
[http://www.mnh.state.nh.us/birds/important\\_bird\\_sites/](http://www.mnh.state.nh.us/birds/important_bird_sites/)  
 Breeding Bird Survey Routes: [Pasture Wildlife Research Center of the U.S. Geological Survey and the Canadian Wildlife Service's National Wildlife Research Center](http://www.mnh.state.nh.us/birds/bird_survey/)  
[http://www.mnh.state.nh.us/birds/bird\\_survey/](http://www.mnh.state.nh.us/birds/bird_survey/)

Base Map Source: 2004 aerial photograph with 0.5-foot resolution.



0.5 0.25 0 0.5 Miles



**Vannuse Hangen Brustlin, Inc.**

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