STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc



Daniel F. Caruso Chairman

May 5, 2009

Steven L. Levine Real Estate Consultant New Cingular Wireless PCS, LLC 500 Enterprise Drive Rocky Hill, CT 06067-3900

RE: EM-CING-019-090408- New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Tatnic Hill Road, Brooklyn, Connecticut.

Dear Mr. Levine:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated April 8, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Affirmative Action / Equal Opportunity Employer

Thank you for your attention and cooperation.

SDP/MP/laf

The Honorable Roger Engle, First Selectman, Town of Brooklyn Chester Dobrowski, Zoning Enforcement Officer, Town of Brooklyn Christopher B. Fisher, Esq., Cuddy & Feder LLP



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

April 17, 2009

The Honorable Roger Engle First Selectman Town of Brooklyn Town Hall P. O. Box 356 Brooklyn, CT 06234-0356

RE: **EM-CING-019-090408-** New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Tatnic Hill Road, Brooklyn, Connecticut.

Dear Mr. Engle:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by May 1, 2009.

Thank you for your cooperation and consideration.

Very truly

Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Chester Dobrowski, Zoning Enforcement Officer, Town of Brooklyn







EM-CING-019-090408

New Cingular Wireless PCS, LLC

500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant

HAND DELIVERED

April 8, 2009

ORIGINAL

SITING COUNCIL

Honorable Daniel F. Caruso, Chairman, and Members of the Connecticut Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

> New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Tatnic Hill Road, Brooklyn (owner, AT&T Corp)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall

squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

- 1. The height of the overall structure will be unaffected.
- 2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.
- 3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
- 4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine

Real Estate Consultant

Attachments

NEW CINGULAR WIRELESS Equipment Modification

Tatnic Hill Road, Brooklyn

Site Number 2075

Exempt Mods 4/90, 11/96, and 10/02

Tower Owner/Manager:

AT&T Corporation

Equipment Configuration:

Guyed Lattice Tower

Current and/or Approved: Nine CSS panel antennas @ 82 ft AGL

Six TMA's and three diplexers @ 82 ft

Nine 1 5/8 inch coax cables

Equipment Shelter

Planned Modifications:

Remove all existing antennas, TMA's, and diplexers

Install six Powerwave 7770 antennas @ 82 ft Install six TMA's and six diplexers @ 82 ft Install three additional runs 15/8 inch coax

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 25.8 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 19.9 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users *							0.00
AT&T TDMA *	80	880 - 894	16	100	0.0899	0.5867	15.32
AT&T GSM *	80	1900 Band	2	427	0.0480	1.0000	4.80
AT&T GSM *	80	880 - 894	2	296	0.0333	0.5867	5.67
Total	a company		The state of the s	Å	SERVICE OF THE PARK		25.8%

^{*} Per CSC Records

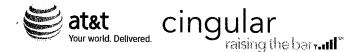
Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users *							0.00
AT&T UMTS	82	880 - 894	1	500	0.0267	0.5867	4.56
AT&T GSM	82	1900 Band	2	427	0.0457	1.0000	4.57
AT&T GSM	82	880 - 894	4	296	0.0633	0.5867	10.79
Total	Canada and Asia	A Marian			B ()	Supplied to	19.9%

^{*} Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (Communication Structures Engineering, 3/31/09).



New Cingular Wireless PCS, LLC

500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant

April 8, 2009

Honorable Roger Engle 1st Selectman, Town of Brooklyn Town Hall 4 Wolf Den Rd. Brooklyn, Connecticut 06234-0356

Re: Telecommunications Facility - Tatnic Hill Road, Brooklyn

Dear Mr. Engle:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine

Real Estate Consultant

Enclosure



Communication Structures Engineering, Inc.

Mr. Larry Montee AT&T Corporation National Tower Engineering 1200 Peachtree Street; Atlanta, GA 30309

March 31, 2009

Re: Structural Analysis of AT&T's Existing 80-ft Lattice Steel Guyed Tower at Brooklyn, CT in Windham County, CT AT&T Corporate Site Name: Brooklyn, CT / AT&T Mobility Site Brooklyn / Site No. 2075 Location: Tatnic Hill Road, Brooklyn, CT, 06234 / Latitude N 41° 46' 05", Longitude W 71° 58' 17";

Dear Mr. Montee,

Communication Structures Engineering, Inc. has completed a structural review of the existing 80-ft Lattice Steel Guyed Tower located at this AT&T Corporation site known as Brooklyn, CT. In accordance with your request, we have performed a structural analysis of this tower to check its capability to support the existing loads as well as the new loads from the proposed AT&T Mobility panel antennas & transmission line changes. In accordance with AT&T's Requirements the specific loading criteria that we utilized were those prescribed by "2003 International Building Code" and "ANSI/TIA/EIA-222-F", "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." Per the above Code & Standards the wind speed that we utilized for the analysis of this structure was the "3 second gust wind speed" of 105-mph (equivalent to a "fastest-mile wind speed" of 85-mph) as specified for Windham County, CT. A description of the existing tower, our structural analysis procedure, and the results of CSEI's structural analysis follow:

EXISTING TOWER INFORMATION & DATA

The 80-ft Lattice Steel Guyed Tower at this site was originally built for Southern New England Telephone (SNET). The original year of construction & fabricator of the tower is not known. In 1990 the tower was modified by Rose Chulkoff & Rose Engineering (of NYC) to support the current configuration of cellular equipment. At that time both the tower & foundation were significantly strengthened and all eight (8) existing guy cables were replaced. A four-sided frame at the top 80-ft level was added to support the new cellular antenna mounts.

CSEI used the existing tower modification drawings and tower foundation modification drawings from our records to perform the structural modeling of this tower. A representative of CSEI climbed and field measured some of the tower members that were not provided on the existing modification drawings. The existing antenna information, provided to us by AT&T Corporation, was used to determine the existing tower & equipment loads for this analysis. AT&T's *Tenant Specification Document* that was submitted by AT&T Mobility was utilized to determine the currently proposed AT&T Mobility antenna and cable requirements for this tower.

DESIGN CRITERIA

See the attached page for the applicable Design Criteria and Antenna Configuration that were used for this structural analysis.

STRUCTURAL ANALYSIS PROCEDURE

The referenced design criteria combined with wind tunnel test data from tests conducted on AT&T towers, and antenna platforms were utilized to determine the applicable loads for this structure. A frame analysis was performed utilizing the stated wind loads and a computer model of the tower framing modeled on Power Line Systems' "Tower Program". The load carrying frame members of this structure were then checked for compliance with the AISC ASD "Specification for Structural Steel Buildings" which is a reference specification recognized by the "2003 International Building Code" and "ANSI/TIA/EIA-222-F".

RESULTS OF STRUCTURAL ANALYSIS

Our analysis found that all of the existing tower members had maximum stress levels that were less than the allowable stresses permitted by the AISC Specification and the "2003 International Building Code". The maximum stressed existing steel tower members were found to be stressed to 76% of their calculated capacity. The existing guy cables and tower foundation were stressed to less than 75% of their calculated capacity. We have therefore concluded that this existing tower is capable of supporting the existing loads as well as the proposed AT&T Mobility additions in compliance with the "2003 International Building Code" & "ANSI/TIA/EIA-222-F" design criteria. This tower will not require any structural modifications or changes to support the listed equipment provided the AT&T Mobility antennas and transmission lines are installed in accordance with requirements listed on the Design Criteria page.

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ON CENSER IN

If AT&T Mobility or any other carriers add any future additional equipment to this tower, this structure should be re-analyzed at that time. CSEI would be happy to respond to any questions regarding this structural analysis.

Sincerely,

James E. Boltz, P.E. (CT P.E. #20122)

Attachments: 1.) Design Criteria for AT&T's 80-ft Guyed Lattice Tower at Brooklyn, CT

2.) Structural Calculations for AT&T's 80-ft Guyed Lattice Tower at Brooklyn, CT

DESIGN CRITERIA

AT&T Corp. Tower Site: Brooklyn, CT

LOCATION: Tatnic Hill Road, Brooklyn, CT, 06234 Latitude N 41° 46' 05", Longitude W 71° 58' 17" Windham County, CT

DESIGN STANDARDS

2003 INTERNATIONAL BUILDING CODE ~ 105 MPH (3 Second Gust Wind Speed) & ANSI/TIA/EIA-222-F~ 85 MPH (Fastest Mile Wind Speed)

In addition to the loads from the existing tower framing and platforms the loads from the following antennas and their associated transmission lines were considered in the analysis.

ANTENNA CONFIGURATION (Used for Structural Analysis)

Existing Antennas - To be Removed

(AT&T Mobility) Nine CSSDU01417-8686 Panel Antennas at approximately 83-ft above tower base plate
and nine associated runs of 1.625 inch diameter coaxial cable. (Note: The existing cables if undamaged
may remain and be used as part of the new (proposed) Configuration listed below.)

Existing Antennas - To Remain on Tower

 (Unknown customer) One Omni Antenna mounted at 80-ft above tower base plate (at the top of the tower) and one associated transmission line.

New (Proposed) AT&T Mobility Antenna & Cable Configuration

- Six Powerwave 7770 (55" X 11" X 5") Panel Antennas with up to Six (6) TMA's & Six (6) Diplexers.
 Antennas & TMA's/Diplexers are to be installed on the existing mounts that are at an approximate centerline of 83-ft above tower base plate.
- Twelve runs of 1.625-inch dia. coax cable & three runs of 0.375"dia. R.E.T. Cables.
 (The existing cables if undamaged may remain and be used as part of this new configuration.)

Note: The twelve new AT&T Mobility 1.625-inch diameter coaxial cables shall be stacked in two rows with one row directly behind the other (using snap-stax or equivalent hangers) such that six coaxial are mounted in a 2nd row directly behind a first row of six cables so that six cables are exposed to wind loading and six coaxial cables are shielded from wind loading.

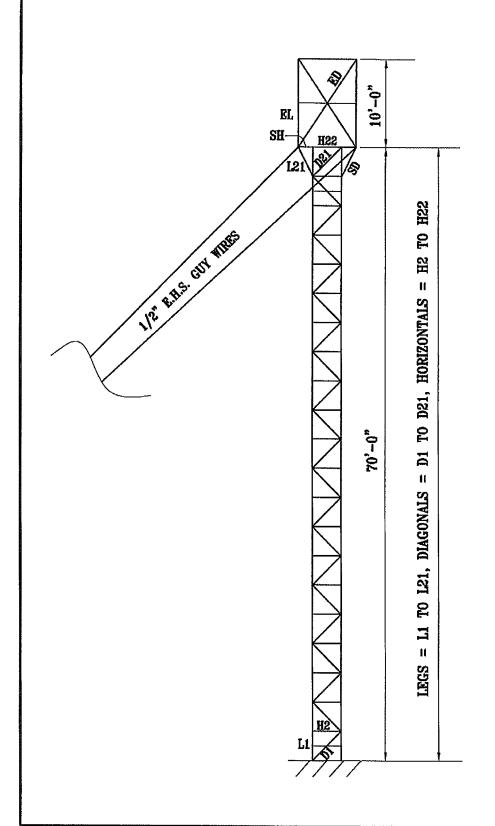
Customer Antenna & Cable Mounts and Their Connections to Tower

The loads stated above include the applicable overall tower dead and wind loads from the listed customer antennas and transmission lines that were provided to CSEI. CSEI's structural analysis applies these loads at the tower truss panel points (joints where tower braces connect) that are closest to the customer equipment location. CSEI's structural analysis of this overall tower structure does not include tower stresses that could occur from improper customer equipment attachments that may locally stress individual tower braces. The attachment of the individual customer's equipment is not a part of CSEI's scope of work. CSEI assumes that these attachments, in accordance with good engineering practice, will be designed and installed to properly connect close to the tower panel points in such a manner as to not introduce significant local stresses to the existing tower bracing members. Improperly connected customer equipment can significantly stress individual tower members and consequently reduce the overall load capacity of the entire tower structure.

The design and installation of all customers' antenna & cable mounts and their proper connections to this tower are the responsibility of the individual customers and their engineers, suppliers & contractors.



80'-0" GUYED TOWER ANALYSIS MODEL FOR BROOKLYN, CT





Communication Structures Engineering, Inc. 5579-B Chamblee Dunwoody Rd. / Suite 517 Dunwoody, Georgia 39338 (770) 951-5080