

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

April 3, 2009

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

RE: **EM-CING-013-090202** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 3 Polly Lane, Bozrah, 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 with the following conditions:

- The recommendations specified in the structural analysis report dated December 10, 2008 and sealed by J. Russell Hill, P.E. shall be implemented; and
- A signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the recommendations have been implemented.

The proposed modifications are to be implemented as specified here and in your notice dated February 2, 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.

CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer

Thank you for your attention and cooperation.

Very truly yours,

S. Deux Philpra

S. Derek Phelps **Executive Director**

SDP/MP/laf

c: The Honorable William E. Ballinger, First Selectman, Town of Bozrah Seymour Adelman, Planning and Zoning Chairman, Town of Bozrah Cordless Data Transfer

Daniel F. Caruso Chairman

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February 10, 2009

The Honorable William E. Ballinger First Selectman Town of Bozrah Town Hall 1 River Road Bozrah, CT 06334-0158

RE: EM-CING-013-090202 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 3 Polly Lane, Bozrah, Connecticut.

Dear Mr. Ballinger:

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 February 24, 2009.

Thank you for your cooperation and consideration.

Evecutive Director

SDP/jb

Very true

Enclosure: Notice of Intent

c: Seymour Adelman, Planning and Zoning Chairman, Town of Bozrah



EM-CING-013-090202



raising the bar

ORIGINAL

New Cingular Wireless PCS, LLC 500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900 Phone: (860) 513-7636

Steven L. Levine Real Estate Consultant

Fax: (860) 513-7190

PEGETVED FEB - 2 2009 CONNECTICUT SITING COUNTY

HAND DELIVERED

February 2, 2009

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

> Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 3 Polly Lane, Bozrah (owner, Cordless Data Transfer)

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

3 Polly Lane, Bozrah Site Number 2029

Exempt Mods approved 4/99, 12/99, and 9/02

Tower Owner/Manager:

Cordless Data Transfer

Equipment Configuration:

Guyed Lattice Tower

Current and/or Approved: Three EMS panel antennas @ 192 ft AGL

on a 7-ft pole mount extension (see EM-SCLP-013-991115)

Nine TMA's @ 192 ft

Nine runs 1 ¼ inch coax cable

Equipment Shelter

Planned Modifications:

Remove all existing antennas, TMA's, and coax

Remove existing pole mount extension

Install new and stronger 7-ft tower extension

Install new lightweight boom frame @ 192 ft AGL

Install six Powerwave 7770 antennas (or equivalent) @ 192 ft

Install six TMA's and six diplexers @ 192 ft

Install twelve lines 1 5/8 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 21.6 % 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 20.8 % 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 *							17.14
AT&TTDMA*	192	880 - 894	16	100	0.0156	0.5867	266
AT&T CSM*	192	1900 Band	2	427	0.0083	1.0000	0.83
AT&T GSM*	192	880 - 894	2	296	0.0058	0.5867	0.98
Total	25 5						21.6%

^{*} 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 *					_		17.14
AT&T UMTS	192	880 - 894	1	500	0.0049	0.5867	0.83
AT&T GSM	192	1900 Band	2	427	0.0083	1.0000	0.83
AT&T GSM	192	880 - 894	4	296	0.0115	0.5867	1.97
Total							20.8%

^{*} Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed equipment modifications. (Fred A. Nudd Corp., 12/10/08)





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

February 2, 2009

William E. Ballinger, 1st Selectman Town of Bozrah Town Hall 1 River Road Bozrah, CT 06334

Re: Telecommunications Facility – 3 Polly Lane

Dear Mr. Ballinger:

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") will be changing its equipment configuration at certain cell sites.

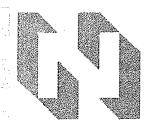
As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review AT&T's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes AT&T'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

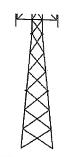
Enclosure



FRED A. NUDD CORPORATION

1743 ROUTE 104, BOX 577 ONTARIO, NY 14519 (315) 524-2531 FAX (315) 524-4249

www.nuddtowers.com



December 10, 2008

Mark LeGault Cordless Data Transfer, Inc.

Subject: Structural Analysis of a 180 ft Guyed Tower (Lat. 41-34-24 Long. 72-12-12) with Proposed 7 ft Extension

Mr. LeGault,

2029

Fred A. Nudd Corporation has completed a three-dimensional, finite element model structural analysis of the above noted guyed tower. This tower was analyzed considered appurtenance loads noted in the appurtenance loading table on the following page, along with a proposed 7 ft extension. The design loading criteria and strength design are per the TIA/EIA-222-F standard, which is the recommended design standard per the 2003 International Building Code (Sec. 1609 & 3108), including 2005 Connecticut Building Code Amendments and the 2008 Connecticut Supplement. Additional standards used in this analysis include the AISC Manual for Steel Construction, Allowable Stress Design, 9th Ed. and ACI 318-05, Building Code Requirements for Structural Concrete and Commentary. Tower and foundation dimensions have been taken from original design drawings by Fred A. Nudd Corporation (Drawing Number 02-8869-1 & 97-5463-2, dated March 27, 2002 & November 3, 1997). A generic 7 ft, 2 bay section with member sizes equal to the member sizes currently comprising the tower section was considered for the extension. Four 0.75 in A325 bolts were considered for the leg splices and all steel grades for the extension were considered A36, aside from the legs which considered minimum steel yield strength of 50 ksi.

The purpose of this analysis is to determine the structure's ability to support new AT&T equipment, as well as a 7 ft extension, installed at a rad center of 188 ft above ground level (AGL). The new equipment to be installed, which included antennas, coax, mounts and associated hardware are listed on the following page in the appurtenance loading table. All existing AT&T equipment is to be removed prior to installation of the new AT&T equipment.

Results of the analysis indicate the tower will be able to the support the design loads noted in the appurtenance loading table on the following page with slight changes to the tower guy wire applied tensions. Specific section design loads, capacities and stress ratios are provided on the following pages. Maximum member usage was found to be 95.5%.

The tower base foundation and anchors could not be completely analyzed as onsite geotechnical information was not provided for this evaluation. However, based on comparison of the structure original design reactions to the new foundation design reactions, it is reasonable to assume the existing base foundation and anchors can support the listed appurtenance loading.

After installation of the proposed 7 ft extension, the guyed tower should be re-plumbed and tensioned within TIA-222 tolerances for twist and straightness. The guy wires at elevations of 60 and 120 ft should be tensioned to 10% of their breaking strengths. The guy wires at elevation of 160 ft should be tensioned to 15% of its breaking strength.

In conclusion, the tower superstructure can support the appurtenance loading with extension. The base foundation and anchors are expected as well to be capable of supporting the existing and proposed appurtenance loading with proposed extension.

We trust this report satisfies your needs. Please contact us with any questions or concerns regarding this report.

Best Regards,

Fred A. Nudd Corporation

Appurtenance Loading

Height (ft)	Carrier	Appurtenance	Mount	Coax (in)
188	АТ&Т	(6) Powerwave 7770 (6) TMA (6) Diplexors	(3) 10 ft Lightweight Boom / Frame	(12) 1-5/8
180	T-Mobile	(9) RFS AP199015-2T2 (3) TMA (3) Diplexors (3) 12 ft Boom / Frame		(9) 1-1/4
173	Nextel	(9) Swedcom ALP-E-9011	(3) 12 ft Boom / Frame	(9) 1-1/4
152	Sprint	(9) Decibel DB980H90	(3) 12 ft Boom / Frame	(9) 1-5/8
138	Verizon	(6) Decibel DB844H90 (6) Decibel DB948F85T2E (6) TMA (6) Diplexors	(3) 12 ft Boom / Frame	(12) 1-5/8

- New AT&T coax is to be triple-stacked on the northeast tower face using Andrew Click-On hardware or similar hangers.
- Height measurement taken as distance from top of base foundation to center of appurtenance.

Foundation Reaction Comparison

Design Load	Original (kips)	Analysis (kips)	Percentage
Base Axial	118.0	114.6	97.1
Base Shear	3.6	3,3	91,7
Anchor Uplift	54,9	41.7	76.0
Anchor Shear	61.1	51.0	83.5

- Percentage less than 100% denote foundation is satisfactory for loading
- Percentage between 100 105% is considered acceptable
- Percentage greater than 105% indicates foundation analysis is required

Maximum Member Usage

Member	Percentage		
Leg	92.0		
Diagonal	95,5		
Horizontal "	64.3		
Splice Bolts	42,1		
Guys	82.7		

- · Percentage less than 100% denote member stress levels are satisfactory for loading
- Percentage between 100 105% denote member stress levels are considered acceptable
- Percentage greater than 105% indicates member strengthening is required

