

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

March 3, 2009

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

RE: EM-CING-036-090113 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 15 Pent Road, Deep River, 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 January 13, 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.

Thank you for your attention and cooperation.

S. Perek Phelps

Executive Director

SDP/MP/laf

c: The Honorable Richard H. Smith, First Selectman, Town of Deep River Amy Petrone, Zoning Enforcement Officer, Town of Deep River Hans Fiedler, T-Mobile USA, Inc.



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January 21, 2009

The Honorable Richard H. Smith First Selectman Town of Deep River Town Hall 174 Main Street Deep River, CT 06417

RE: EM-CING-036-090113 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 15 Pent Road, Deep River, Connecticut.

Dear Mr. Smith:

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 4, 2009.

Thank you for your cooperation and consideration.

enk Phylips

Very truly yours,

S. Derek Phelps Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Amy Petrone, Zoning Enforcement Officer, Town of Deep River





EM-CING-036-090113

New Cingular Wireless PCS, LLC

0 Enterprise Drive

ocky Hill, Connecticut 06067-3900

one: (860) 513-7636 x: (860) 513-7190

even L. Levine keal Estate Consultant

HAND DELIVERED

January 13, 2009

ORIGINAL

DECELVED

JAN 1 3 2009

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

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 15 Pent Road, Deep River (owner, T-Mobile)

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

15 Pent Road, Deep River

Site Number 5392 Former AT&T cell site

Exempt Modification approved 8/02

Tower Owner/Manager:

T-Mobile

Equipment Configuration:

Monopole

Current and/or Approved: Three Allgon 7250 panel antennas @ 160 ft AGL

Six runs 1 5/8 inch coax cable

Concrete tower foundation apron pad with outdoor cabinets

Planned Modifications:

Remove all existing antennas

Install new low profile platform @ 160 ft

Install six Powerwave 7770 antennas (or equivalent) @ 160 ft

Install six TMA's and six diplexers @ 160 ft Install six additional lines 1 5/8 inch coax

Remove one outdoor cabinet

Install one new outdoor cabinet for UMTS

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 11.5 % 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 15.3 % 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 *							10.09
AT&T GSM *	160	1900 Band	4	250	0.0140	1.0000	1.40
Total				100			11.5%

^{*} 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 *							10.09
AT&T UMTS	160	880 - 894	1	500	0.0070	0.5867	1.20
AT&T GSM	160	1900 Band	2	427	0.0120	1.0000	1.20
AT&T GSM	160	880 - 894	4	296	0.0166	0.5867	2.83
Total						1	15.3%

^{*} Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed equipment modifications. (Semaan Engineering Solutions, 12/5/08)





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

January 13, 2009

Honorable Richard H. Smith Town of Deep River Town Hall 174 Main St. Deep River, CT 06417

Re:

Telecommunications Facility – 15 Pent Road

Dear Mr. Smith:

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

APPROVED

By JACKIE DONAHUE at 1:14 pm, Jan 12, 2009



Structural Analysis Report

Prepared for:

T-Mobile USA 12920 SE 38th Street Bellevue, WA 98006

ATTN: Ms. Danielle Edson

Structure

: 178 ft PIROD Monopole

5392 PENT ROAD

Proposed Carrier

: AT&T Wireless

Site ID

: CT11237C

Site Name

: Deep River, CT

County

: Middlesex

Date

December 5, 2008

Usage

: 80.0%

Semaan Engineering Solutions, LLC 1079 N. 205th Street Elkhorn, NE 68022 Phone: 402-289-1888



Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 178 ft PIROD Monopole located at Deep River, CT, Middlesex County (site #CT11237C). The tower was originally designed and manufactured by PIROD (Drawing #206362-B dated September 29, 2000).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition. The analysis was performed in conformance with TIA/EIA-222 Rev F and local building codes for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed (fastest mile). This is in conformance with the IBC 2006: Section 1609.1.1, Exception (4) and Section 3108.4.

Basic Wind Speed:

85.0 mph

Radial Ice:

74 mph w/ 0.50" ice

Code:

TIA/EIA-222 Rev F

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
	12	S20045A1 LNA			
177.5	1	HP MW Dish, 4' Dia.	Low Profile platform	(25) 1 5/8"	T-Mobile
•	12	RR65-19-02DP			
170.0	12	DB844H90E-XY	Low Profile platform	(12) 1 5/8"	Verizon
150.0	3	742 213	Flush mounted	(6) 1 5/8"	Pocket Communication

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
	6	21903 diplexer		(10) 1.5/02	
160.0	6	21401 TMA	Low Profile platform	(12) 1 5/8"	AT&T Wireless
	6	Powerwave 7770	-	(outside)	

All transmission lines are assumed running inside of pole shaft with the exception of those for the proposed loading. These lines are assumed strapped tightly to the pole.

Results

The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 80.0%.

	Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
	Moment (ft-kips)	4,954.50	3,712.39	74.9
ſ	Shear (kips)	38.00	30.40	80.0

The analysis reactions are less than the design reactions therefore no foundation modifications are required.

Conclusion

Based on the analysis results, the existing structure meets the requirements per the TIA/EIA-222 Rev F standards for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed.

If you have any questions or require additional information, please call 402-289-1888.

Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- -- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- -- Information from drawings in the possession of Semaan Engineering Solutions, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to Semaan Engineering Solutions and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

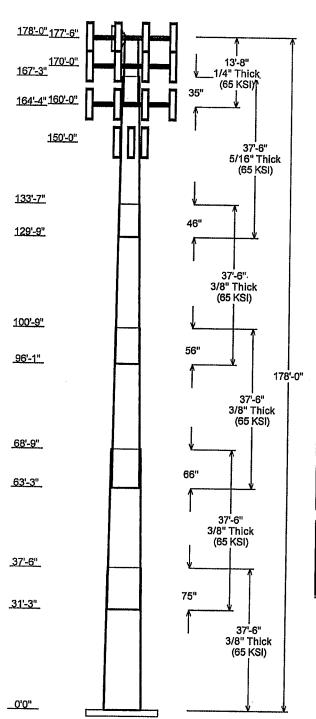
All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Semaan Engineering Solutions is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

SEMAAN ENGINEERING SOLUTIONS

1079 N.204th Avenue Elkhorn, NE 68022 Phone: 402-289-1888 Fax: 402-289-1861

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Job Information

Pole: CT11237C

Code: TIA/EIA-222 Rev F

Description:

Client: T-Mobile USA-WA Location: Deep River, CT

Shape: 18 Sides

Height: 178.00 (ft)

Base Elev (ft): 0.00

Taper: 0.245690(in/ft)

			Secti	ons P	roperties			
Shaft Section	Length (ft)		eter (in) ss Flats Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	37.500	53.78	63.00	0.375	· · · · · · · · · · · · · · · · · · ·	0.000	0.245690	65
2	37.500	46.85	56.07	0.375	Slip Joint	75.000	0.245690	
3	37.500	39.74	48.96	0.375	Slip Joint		0.245690	
4	37.500	32.43	41.64		Slip Joint		0.245690	
5	37.500	24.78	33.99		Slip Joint		0.245690	
6	13.667	22.64	26.00		Slip Joint		0.245690	

		Disc	rete Appurtenance
Attach Elev (ft)	Force Elev (ft)	Qty	Description
177.500	177.500	12	S20045A1 LNA
177.500	177.500	1	HP MW Dish, 4' Dia.
177.500	177.500	1	Low Profile platform
177.500	177.500	12	RR65-19-02DP
170.000	170.000	1	Low Profile platform
170.000	170.000	12	DB844H90E-XY
160.000	160.000	6	21903 diplexer
160.000	160.000	6	21401 TMA
160.000	160.000	6	Powerwaye 7770
160.000	160.000	1	Low Profile platform
150.000	150.000	1	Tri-Antenna Mount
150.000	150.000	3	742 213

		Linear Ap	purtenance	·
Elev From	(ft) To	Description	Exposed To Wind	
0.000	150.0	1 5/8" Coax	No	
0.000	160.0	1 5/8" Coax	Yes	
0.000	170.0	1 5/8" Coax	No	
0.000	177.5	1 5/8" Coax	No	

	Load Cases
No Ice	85.00 mph Wind with No Ice
lce	73.61 mph Wind with Ice

Reactions				
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)	
No Ice	3712.39	30.40	47.92	
Ice	3149.37	25.23	59.23	