



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

November 15, 2007

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

RE: **EM-CING-045-071025** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 2 Scott Road, East Lyme, Connecticut.

Dear Mr. Levine:

At a public meeting held on November 5, 2007, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the modifications specified in the structural analysis report dated May 29, 2007 and sealed by Jaime Reyes, P.E. be performed prior to the antenna swap and that a signed letter from a Professional Engineer be submitted to the Council to certify that the modifications have been properly completed.

The proposed modifications are to be implemented as specified here and in your notice dated October 24, 2007, 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.

Very truly yours,

Daniel F. Caruso

Chairman

DFC/MP/cm

c: The Honorable Beth A. Hogan, First Selectman, Town of East Lyme
Meg Parulis, Planning Director, Town of East Lyme
American Tower Corporation

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CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer

ORIGINAL



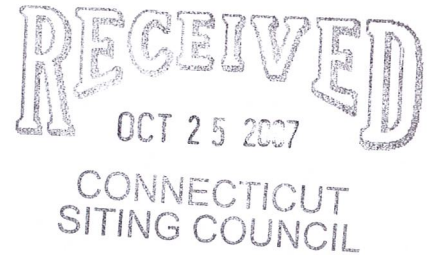
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

EM-CING-045-071025

Steven L. Levine
Real Estate Consultant

HAND DELIVERED

October 24, 2007



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 tele-communications facility located at 2 Scott Road in East Lyme

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 ("Cingular") 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 Cingular'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. Modifications to the existing site include all or some of the following as necessary to bring the site into conformance with the plan:

- Replacement of existing panel antennas with new antennas of similar size, shape, and weight, or, installation of additional antennas of similar size, shape, and weight.
- Installation of small tower mount amplifiers (“TMA’s”) and/or diplexers to the platform on which the panel antennas are mounted to enhance signal reception.
- Installation of additional or larger coaxial cables as required.
- Installation of an additional equipment cabinet in existing shelters, or on existing or enlarged concrete pads.

None of these modifications will extend the height of the tower.

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 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, 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

**CINGULAR WIRELESS
Equipment Modification**

2 Scott Road, East Lyme, CT
Site Number 2022
Docket 67.1; Exempt Mods 1/92, 9/92, 3/87, 7/02

Tower Owner/Manager: American Tower

Equipment configuration: Monopole

Current and/or approved: Nine CSS DUO1417 antennas @ 152 ft c.l.
Nine runs 1¼ inch coax
Six TMA's / three diplexers @ 152 ft

Planned Modifications: Remove three existing antennas
Install three Powerwave 7770 antennas at 152 ft c.l.
Install three additional diplexers at 152 ft (total of 6)
Install three runs 1 ¼ inch coax (total of 12)

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 9.6 % 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 7.5 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							2.46
Cingular/TDMA *	152	880 - 894	16	100	0.0249	0.5867	4.24
Cingular GSM *	152	880 - 894	2	296	0.0092	0.5867	1.57
Cingular GSM *	152	1900 Band	2	427	0.0133	1.0000	1.33
Total							9.6%

* Per CSC Records

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							2.46
Cingular GSM	152	880 - 894	3	296	0.0138	0.5867	2.36
Cingular GSM	152	1900 Band	2	427	0.0133	1.0000	1.33
Cingular UMTS	152	880 - 894	1	500	0.0078	0.5867	1.33
Total							7.5%

* Per CSC Records

Structural information:

The attached structural analysis (American Tower, 5/29/07) demonstrates that the tower and foundation will fail under the additional loading planned by T-Mobile (CSC approved 10/10/06) and Cingular. The analysis, however, lists structural modifications that would bring the entire structure into compliance if implemented. American Tower, T-Mobile, and Cingular have agreed to cooperate to perform this work, and Cingular will not modify its equipment on the tower until the necessary structural modifications have been completed. Cingular, therefore, respectfully requests a conditional approval for the equipment modifications proposed herein.



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

October 24, 2007

Honorable Beth A. Hogan
1st Selectman, Town of East Lyme
Town Hall 108 Pennsylvania Ave.
Niantic, CT 06357-0519

Re: Telecommunications Facility – 2 Scott Road, East Lyme

Dear Ms. Hogan:

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

FAILED



AMERICAN TOWERTM
CORPORATION

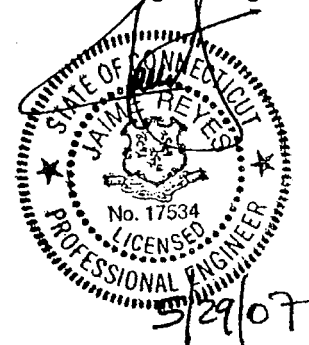
Structural Analysis Report

Structure : 150 ft. ITT Meyer monopole
ATC Site Name : East Lyme, CT
ATC Site Number : 302490
Proposed Carrier : Cingular
Carrier Site Name : East Lyme
Carrier Site Number : 2022
County : New London
Eng. Number : 40479922
Date : May 29, 2007
Usage : 156% (Pole shaft), 162% (A. Bolts)

Submitted by:
Robert Keith
Project Engineer

American Tower Engineering Services
8505 Freeport Parkway
Suite 135
Irving, TX 75063
Phone: 972-999-8900

Reviewed by:
Jaime Reyes, P.E.
Director of Engineering



Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 150 ft. monopole located at East Lyme, CT, New London County (ATC site #302490). The tower was originally designed and manufactured by ITT Meyer (AT&T Technologies, Inc. Specification AT-8935 dated April 13, 1984 – Type ‘B’ pole).

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. A 5% overstress is allowed in the existing structural members to account for program variances.

Basic Wind Speed: 95.0 mph (Fastest Mile) / 115.0 mph (3-Second Gust)
 Radial Ice: 82.3 mph (Fastest Mile) w/ ½” ice
 Code: TIA/EIA-222 Rev F / International Building Code 2003

Antenna Loads

The following antenna loads were used in the tower analysis:

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
153.0	3	Powerwave LGP13519	Platform w/Rail	-	Cingular
	6	CSS DUO1417-8686		(6) 1 ¼ (I)	
	6	ADC DD1900 TMA		-	
	1	3' Yagi		(1) 7/8 (I)	USA Mobility
	1	8 ft Omni		(1) 1 5/8 (I)	
141.0	6	Remec/S20057A1	Flush Mount	-	T-Mobile
	3	RFS APX16PV-16PVL		(12) 1 5/8 (I)	
13.0	1	4 ft Std Dish	Dish Mount	(1) RG6 (O)	USA Mobility

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
153.0	3	Powerwave LGP13519	Platform w/Rail	-	Cingular
	3	Powerwave 7770		(6) 1 ¼ (I)	

Install proposed coax inside monopole.

Results

The existing 150 ft. ITT Meyer monopole with the existing and the proposed antennas is NOT structurally acceptable per TIA/EIA-222 Rev F standards. The maximum structure usage is: 156% (Pole shaft at 73.5 ft.) and 162% (Anchor bolts).

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	1,197.0	2,300.4	192.2
Shear (kips)	13.1	23.2	177.1

The structure foundation was found to be inadequate through analysis based on geotechnical and foundation information. Modification or reinforcement of the foundation will be required.

Modifications

We recommend the following tower and foundation modifications:

- Reinforce the pole shaft using #20 Dywidag reinforcing bars embedded into the foundation. These bars will also reinforce the existing anchor bolts.
- Install (4) 1-3/8" diameter Williams R71 (150 ksi) anchors to the corners of the existing 18'-0" square footing foundation.

The final design and details of the required modifications will be a separate scope of work under a subsequent project.

Conclusion

Based on the analysis results, the structure does not meet the requirements per TIA/EIA-222 Rev F and 2003 IBC standards. However, the tower and foundation can support the existing and proposed equipment after the modifications listed below are completed.

If you have any questions or require additional information, please call 972-999-8900.

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:

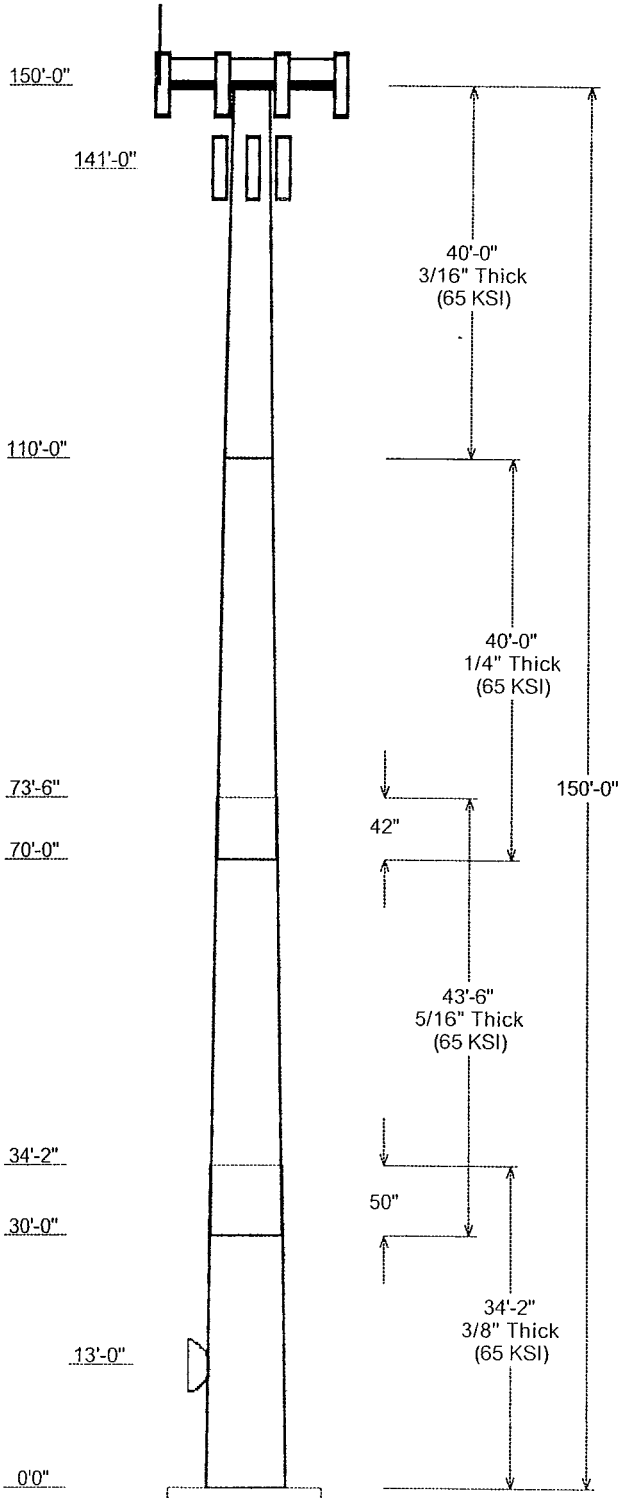
- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of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

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services 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. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

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Job Information			
Pole :	302490	Code:	TIA/EIA-222 Rev F
Description :	150 ft. ITT Meyer Monopole		
Client :	T-Mobile		
Location :	East Lyme, CT		
Shape :	12 Sides	Base Elev (ft):	0.00
Height :	150.00 (ft)	Taper:	0.150835(in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom					
1	34.167	30.84	36.00	0.375		0.000	0.150835	65
2	43.500	25.53	32.10	0.313	Slip Joint	50.000	0.150835	65
3	40.000	20.53	26.56	0.250	Slip Joint	42.000	0.150835	65
4	40.000	14.50	20.53	0.188	Butt Joint	0.000	0.150835	65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	150.000	3	Powerwave 13519
150.000	150.000	3	Powerwave 13519
150.000	150.000	3	Powerwave 7770.00
150.000	150.000	6	CSS DUO1417-8686
150.000	153.000	6	ADC DD1900 TMA
150.000	150.000	1	3' Yagi
150.000	152.000	1	Platform w/Rail
150.000	160.500	1	8 ft Omni
141.000	141.000	6	Remec/S20057A1
141.000	141.000	3	RFS APX16PV-16PVL
141.000	141.000	1	Flush Mount
13.000	13.000	1	4 ft Std Dish

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
10.000	13.000	1/2" Coax	Yes
10.000	141.0	1 5/8" Coax	No
10.000	150.0	1 1/4" Coax	No
10.000	150.0	1 1/4" Coax	No
10.000	150.0	1 5/8" Coax	No
0.000	150.0	7/8" Coax	No

Load Cases	
No Ice	95.00 mph Wind with No Ice
Ice	82.27 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2300.36	23.23	19.37
Ice	2005.57	19.06	23.80
Twist/Sway	643.69	6.44	19.46

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
Twist/Sway	13.00	0.459	0.337