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

February 25, 2008

Steven Levine
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-052-080125** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 130 Birdseye Road, Farmington, Connecticut.

Dear Mr. Levine:

At a public meeting held on February 14, 2008, 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.

The proposed modifications are to be implemented as specified here and in your notice dated January 25, 2008, 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 Mike Clark, Chairman Town Council, Town of Farmington
Jeffrey Ollendorf, Town Planner, Town of Farmington
Crown Castle

EM-CING-052-080125

cingular raising the bar℠ | the new at&t Your world. Delivered.

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

ORIGINAL

HAND DELIVERED

January 25, 2008

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 130 Birdseye Road, Farmington (owner, Crown Castle)

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

130 Birdseye Road, Farmington, CT
Site Number 5255
Former AT&T site
Town of Farmington Building Permit #35831 dated 2/6/01

Tower Owner/Manager: Crown Castle

Equipment configuration: Monopole

Current and/or approved: Nine Allgon 7184 antennas @ 130 ft c.l.
Nine runs 7/8 inch coax

Planned Modifications: Remove all existing antennas
Install 3 Powerwave 7770 antennas (or equivalent) @ 131 ft
Install six TMA's @ 130 ft

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 25.0 % 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 27.4 % 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 *							22.88
Cingular (AT&T)	131	1900 Band	4	250	0.0210	1.0000	2.10
Total							**25.0%**

* 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 *							22.88
Cingular GSM	131	1900 Band	2	646	0.0271	1.0000	2.71
Cingular UMTS	131	880 - 894	1	500	0.0105	0.5867	1.79
Total							**27.4%**

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (B&T Engineering, 1/22/08)

Other 255

TOWN OF FARMINGTON PERMIT#: 35831

**** BUILDING PERMIT ****

DATE: 06-Feb-2001 EST. COST: 71,580.00 BUILD FEES: 946.00

DEV SEW PER: .00

WNER: MEGA COMMUNICATIONS INC LOT#: **********

********** TOTAL FEE: 946.00

LOC:* 0130 BIRDSEYE RD * **********

****

NAME & ADDRESS OF APPLICANT	DESCRIPTION OF WORK TO BE DONE
HIGHLAND CONST. ASSOC. INC.-901022	Commercial
100 W CROOKED HILL RD	Accessory building
PEARL RIVER, NY 10965	

uild.Area: Lot Area: No.Stories: Height:

OTE: ALL WORK TO BE DONE IN ACCORDANCE WITH THE APPLICATION AND PLANS APPROVED BY THE BUILDING DEPARTMENT.

C.O. FEE	ZONE FEE	DEV.PERMIT FEE	CBYD #
0.0			10501397

09-Feb-2001 13713 40361 946.00
MEGA COMMUNICATIONS INC-35831
Applicant
0130 BIRDSEYE RD

Mark St. Pierre

Building Official

:LEC X PLB_____ HTG/AC_____ SPRINKLER_____ SEWER_____ AS BUILT_____

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 25, 2008

Kathleen Eagen, Town Manager
Town of Farmington
Town Hall One Monteith Dr.
Farmington, CT 06032-1053

Re: Telecommunications Facility – 130 Birdseye Road, Farmington

Dear Ms. Eagen:

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

January 22, 2008

Mr. Ben Goodhart
Crown Castle International
9105 Monroe Road, Suite 150
Charlotte, NC 28270
(704) 321-3845

B&T Engineering, Inc.
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
ctuttle@btengineering.com

Subject:	**Structural Analysis Report**	
Carrier Designation:	**Cingular Wireless Co-Locate**	
	Carrier Site Number:	*5255*
	Carrier Site Name:	*Farmington-Deadwood Swamp*
Crown Castle Designation:	**Crown Castle BU Number:**	*876335*
	Crown Castle Site Name:	*East Farmington*
	Crown Castle JDE Job Number:	*101302*
Engineering Firm Designation:	**B&T Engineering Project Number:**	***77969***
Site Data:	**3 A Birdseye Road, Farmington, CT, Hartford County**	
	Latitude *41°-42'-56.58"*, Longitude *-72°-48'-39.08"*	
	140 Foot – Monopole Tower	

Dear Mr. Goodhart,

B&T Engineering is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the aforementioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 273222, in accordance with Application 58622, Revision 1.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC1: Existing + Reserved + Proposed Equipment **Sufficient Capacity**
Note: See Table 1 and Table 2 for the proposed and existing/reserved loading.

The analysis has been performed in accordance with the TIA/EIA-222-F standard and the Connecticut Building Code based upon a wind speed of 80 mph fastest mile.

All equipment proposed in this report shall be installed in accordance with the attached drawings for the determined available structural capacity to be effective.

We at B&T Engineering appreciate the opportunity of providing our continuing professional services to you and Crown Castle International. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Jerod Dotson
Project Engineer

Chad E. Tuttle, P.E.
President

STATE OF CONNECTICUT
CHAD TUTTLE
No. 23924
LICENSED
PROFESSIONAL ENGINEER
1/22/08

TABLE OF CONTENTS

1) INTRODUCTION

The subject structure is a 140 foot tapered monopole manufactured by Summit Manufacturing, Inc.

2) ANALYSIS CRITERIA

Specific code

- TIA/EIA-222-F – 80 mph fastest mile wind speed
- Connecticut Building Code – 100 mph 3-second gust

The controlling wind loads for this analysis were derived from TIA/EIA-222-F therefore the tower was analyzed for a fastest mile wind speed of 80 mph with no ice and 69 mph with ½" of radial ice.

Table 1 – Proposed Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
130	3 6	Powerwave	7770.00 LGP21401 TMA	Existing	Existing	--

Table 2 – Existing and Reserved Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
139#	6 9 (MLA)	Decibel --	DB980H90A-M 6' x 1' Panel	LP Platform	6 9 (MLA)	1 5/8 1 5/8
130**	**9 (remove)**	**Allgon**	**7262.02**	(3) T-Arms	9	7/8
120	12	Swedcom	ALP 9212-N	LP Platform	12	1 1/4
110	6 6	Antel	LPD-6513 LPA 185063/12CF	LP Platform	12	1 5/8
100%	3 6	Celwave Remec	APX16PV-16PVL-E S20057A1 TMA	Flush Mounts	6 12 (SLA)	1 1/4 1 5/8

*Refer to Cable Routing Drawing in Appendix B for Feedline Placement.
**** Designated antennas to be removed.**
# Structural Analysis performed using MLA loading rather than existing.
% Structural Analysis performed using SLA feedlines rather than existing.

Table 3 – Design Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
Information Not Available						

3) ANALYSIS PROCEDURE

Table 4 – Documents Provided

Document	Remarks	Reference	Source
Tower Manufacturer Drawings	Summit Manufacturing, Inc	CCI Doc ID# 1615361	CCIsites
Foundation Drawings	Summit Manufacturing, Inc	CCI Doc ID# 1440555	CCIsites
Geotech Report	Dr. Clarence Welti Geotechnical Engineering	CCI Doc ID# 1850446	CCIsites
Antenna Configuration	CCI CAD Pack	Date: 01/14/08	CCIsites

3.1) Analysis Method

RISA Tower (version 5.0.2.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the TIA/EIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1. This structural analysis **does not** include a grouted base plate.
2. Tower and structures were built in accordance with the manufacturer's specifications.
3. The tower and structures have been maintained in accordance with manufacturer's specifications.
4. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
5. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and B&T Engineering, Inc. should be allowed to review any new information to determine its effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 – Tower Component Stresses vs. Capacity – LC1

Notes	Component	Elevation (ft)	% Capacity	Pass/Fail
RISA Tower Analysis Summary:				
			Summary	
Notes:	**Component**	**Elevation (ft)**	**% Capacity**	**Pass/Fail**
	L1	140 - 91.75	87.5	Pass
	L2	91.75 - 77.1667	87.7	Pass
2	L3	77.1667 - 46.5	103.8	Pass
	L4	46.5 - 0	99.8	Pass
Individual Components:				
Notes:	**Component**	**Elevation**	**% Capacity**	**Pass/Fail**
1	Base Plate	Base	73.4	Pass
1	Anchor Rods	Base	93.9	Pass
1	Base Foundation	Base	70.4	Pass
Structure Rating (max from all components) =				**103.8 %**

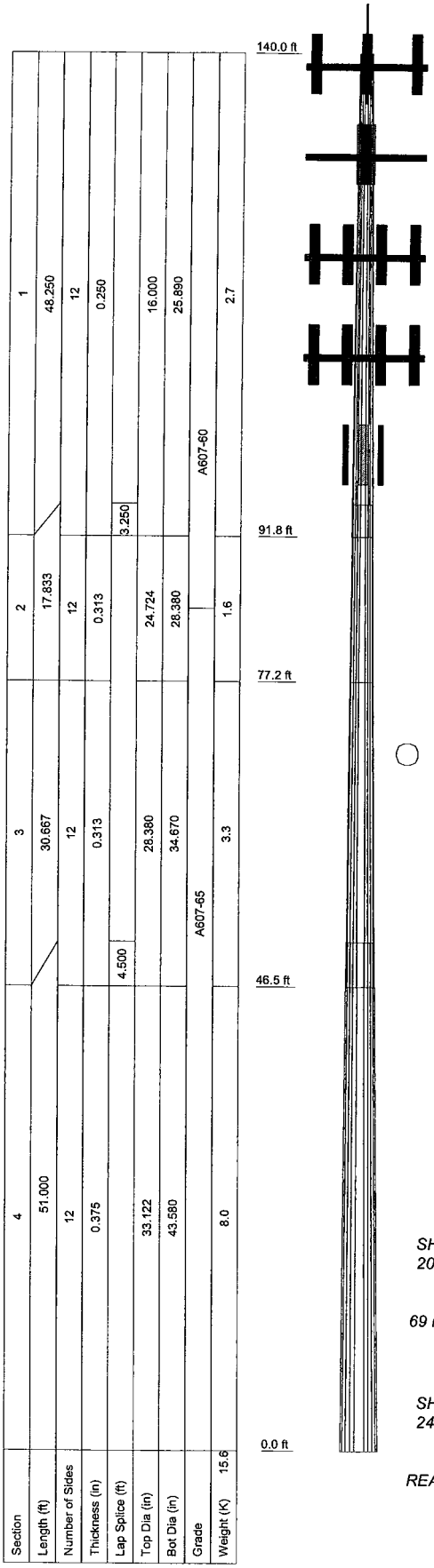
*Notes:

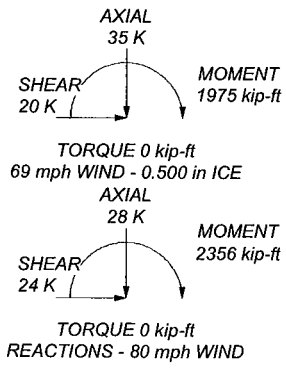
1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity listed.
2) Capacities up to 105% are considered acceptable based on analysis procedures used.
3) The percent capacities shown above (excluding foundations) include the 1/3 increase in allowable stresses as allowed by TIA/EIA-222-F.

4.1) Recommendations

APPENDIX A

RISA TOWER OUTPUT





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod (E)	140	Low Profile Platform (E)	120
(3) MLA ANTENNA (6' x 1' x 0.5' 35 LB) (MLA)	139	(2) LPD-6513 (E)	110
(3) MLA ANTENNA (6' x 1' x 0.5' 35 LB) (MLA)	139	(2) LPD-6513 (E)	110
(3) MLA ANTENNA (6' x 1' x 0.5' 35 LB) (MLA)	139	(2) LPD-6513 (E)	110
Low Profile Platform (E)	139	(2) LPA-185063/12CF (E)	110
7770.00 (P)	130	(2) LPA-185063/12CF (E)	110
7770.00 (P)	130	(2) LPA-185063/12CF (E)	110
7770.00 (P)	130	Low Profile Platform (E)	110
(2) LGP2140X TMA (P)	130	APX16PV-16PVL (E)	100
(2) LGP2140X TMA (P)	130	APX16PV-16PVL (E)	100
(2) LGP2140X TMA (P)	130	APX16PV-16PVL (E)	100
(3) T-Arms (E)	130	Flush Mount (E)	100
(4) ALP 9212-N (E)	120	Flush Mount (E)	100
(4) ALP 9212-N (E)	120	Flush Mount (E)	100
(4) ALP 9212-N (E)	120	(2) Remec S20057A1 TMA (E)	100
		(2) Remec S20057A1 TMA (E)	100
		(2) Remec S20057A1 TMA (E)	100

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 103.8%

B&T Engineering
1717 S. Boulder, Suite 300
Tulsa, Ok 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 77969 - East Farmington, CT (BU 876335)		
Project: 140' Summit Monopole / App ID: 58622 Rev 1		
Client: Crown Castle International	Drawn by: JDotson	App'd:
Code: TIA/EIA-222-F	Date: 01/22/08	Scale: NTS
Path: S:\B&T Engineering\Projects\Crown Castle\77969_876335_East Farmington\Engineering\RISA\77969_East Farmington_CT_Revised		Dwg No. E-1