

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

September 29, 2008

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

EM-CING-028-080903 - New Cingular Wireless PCS, LLC notice of intent to modify an existing RE: telecommunications facility located at 29 Mahoney Road, Colchester, 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 coax should be installed inside the pole's shaft; and
- The proposed tower mounted amplifiers and diplexers should be installed behind the proposed panel

The proposed modifications are to be implemented as specified here and in your notice dated September 3, 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.

Y. W.

Executive Director

SDP/MP/jb

c: The Honorable Linda M. Riley Hodge, First Selectman, Town of Colchester Christopher Beauchemin, Town Planner, Town of Colchester SBA, Inc.

Daniel F. Caruso Chairman

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

September 4, 2008

The Honorable Linda M. Riley Hodge First Selectman Town of Colchester Town Hall 127 Norwich Avenue Colchester, CT 06415

RE: EM-CING-028-080903 – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 29 Mahoney Road, Colchester, Connecticut.

Dear Ms. Hodge:

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 September 18, 2008.

Thank you for your cooperation and consideration.

S. **p**erek Phelps Executive Director

SDP/jb

Very tr

Enclosure: Notice of Intent

c: Christopher Beauchemin, Town Planner, Town of Colchester



EM-CING-028-080903





New Cingular Wireless PCS, LLC 500 Enterprise Drive Rocky Hill, Connecticut 06067-3900

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

Steven L. Levine

ORIGINAL

HAND DELIVERED

September 3, 2008



CONNECTICUT 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 tele-Re: communications facility located at 29 Mahoney Road (owner, SBA)

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. 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 or, installation of additional antennas of a size required to accommodate UMTS.
 - 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.
 - Radome enlargement for flagpole and "stick" structures to accommodate larger antennas and additional associated equipment.

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 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

CINGULAR WIRELESS Equipment Modification

29 Mahoney Road, Colchester

Site Number 2149

Exempt Modifications approved 5/02, 2/04, and 12/06

Tower Owner/Manager:

SBA

Equipment configuration:

Monopole

Current and/or approved:

Nine CSS panel antennas @ 157 ft c.l.

Six TMA's @ 157 ft Nine runs 1 5/8 inch coax

Planned Modifications:

Remove all existing antennas

Install six new Powerwave 7770 antennas @ 157 ft c.l.

Remove all existing TMA's

Install six new TMA's and six diplexers s @ 157 ft Install three additional runs 1 5/8 inch coax (total of 12)

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 11.7 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 14.4 % 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 *	100		and an area				8.96
Cingular GSM *	157	880 - 894	2	296	0.0086	0.5867	1.47
Cingular GSM *	157	1900 Band	2	427	0.0125	1.0000	1.25
to Total							11.7%

^{*} Per CSC records.

Proposed

Company Other Users *	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
							8.96
Cingular GSM	157	880 - 894	4	296	0.0173	0.5867	2.94
Cingular GSM	157	1900 Band	2	427	0.0125	1.0000	1.25
Cingular UMTS	157	880 - 894	1	500	0.0073	0.5867	1.24
Total					0.00.0	5774113754-144-144-144-144-144-144-144-144-144-1	1.24

^{*} Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (FDH Engineering, dated 8/28/08)



FDH Engineering, Inc., 2730 Rowland Road, Suite 100, Raleigh, NC 27615, Ph. 919.755.1012, Fax 919.755.1031

August 28, 2008

Mark Luther SBA Network Services, Inc. 723 Highland Ave. Clarks Green, PA 18411

RE: 180 ft. Monopole

Site Name: Colchester 3 CT SBA Site ID: CT02652-S

FDH Project Number: 08-04161E S2

Dear Mark:

Per your request, FDH Engineering has reviewed the original design drawings and the proposed loading for the 180' monopole located in Colchester, CT. The original design drawings by Valmont Microflect (Order No. 11277-00) stipulate the tower was designed to accommodate the appurtenance loading outlined in **Table 1**.

The load resulting from the current configuration (see **Table 2**) combined with Cingular's revised loading of (6) Powerwave 7770 antennas, (6) Powerwave LGP 21401 TMAs, (6) Powerwave 21903 Diplexers, and (12) 1-5/8" coax at an elevation of 157 ft (see **Table 3**) will be below that of the original design loading. Furthermore, provided the foundation was constructed per the original design drawings, the foundation should meet *TIA/EIA-222-F* standards with both the proposed and existing appurtenances in place. The proposed coax should be installed inside to pole's shaft. The proposed TMAs and Diplexers should be installed behind the proposed panel antennas.

Our assessment has been made assuming all information provided to FDH Engineering is accurate and that the tower as been properly erected and maintained.

In conclusion, the Cingular installation should meet or exceed all applicable standards and should therefore be considered safe. Should you require additional information, please do not hesitate to contact our office.

Sincerely,

Blake A. Bartok, El Project Engineer

KluA 75t

Reviewed By:

Christopher M. Murphy, P.E.

Christopher M. Murphy

Vice President

CT PE License No. 25842

Table 1 - Design Appurtenance Loading

⊌ ∉No.	Centerline Elevation (ft)	Coax and Lines	Mount Type	եր, Description
1-12	177		Platform w/o Rails	(12) DB896
13-24	170		Platform w/o Rails	(12) DB896
25-36	160		Platform w/o Rails	(12) DB896
37-48	150		Platform w/o Rails	(12) DB896
49-60	140		Platform w/o Rails	(12) DB896

Table 2 - Existing Appurtenance Loading

No.	Centerline Elevation (ft)	Coax and Lines	Carrier	Mount Type	Description	Total Frontal C _A A _A ³ (ft ²)
1-12	177	(12) 1-5/8" ¹	T-Mobile	Low Profile Platform	(12) EMS RR90-17-02DP (3) TMAs	
13-24	167	(12) 1-5/8"	Verizon	Low Profile Platform	(6) Antel LPA-171080/8CF (6) Antel LPA-80080/6CF (6) Andrew ETM190G-12UB TMAs	
25-33 1 Curre	157	(9) 1-5/8" ²	Cingular	Low Profile Platform	(9) CSS DUO1417-8686-40	58.8

¹ Currently, T-Mobile has (3) antennas, (3) TMAs, and (6) coax installed at 177 ft. According to info provided by SBA, T-Mobile may install up to (12) antennas, (3) TMAs, and (12) coax.

Table 3 - Proposed Appurtenance Loading

No.	Centerline Elevation (ft)	Coax and Lines	Carrier	Mount Type	Description	Total Frontal C _A A _A ² (ft ²)
1-6	157	(12) 1-5/8" ¹	Cingular	Low Profile Platform	(6) Powerwave 7770 (6) Powerwave LGP 21401 TMAs (6) Powerwave 21903	38.3
1 This	s represents the	e final configuration	on for Cingular at	157 ft According	Diplexers	L

¹ This represents the final configuration for Cingular at 157 ft. According to information provided by SBA, Cingular will remove (9) CSS DUO1417-8686-40 antennas and (6) ADC Clear Gain TMAs and install (6) Powerwave 7770 antennas, (6) Powerwave LGP 21401 TMAs, (6) Powerwave 21903 Diplexers and (3) 1-5/8" coax at 157 ft. 2 Design Areas listed without ice per *TIA/EIA-222-F* standards.

² The loading for Cingular at 157 ft will be altered. See the proposed loading below.

³ Design Areas listed without ice per *TIA/EIA-222-F* standards.





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

September 3, 2008

Honorable Linda M. Hodge 1st Selectman, Town of Colchester Town Hall, 127 Norwich Avenue Colchester, CT 06415

Re: Telecommunications Facility - 29 Mahoney Road, Colchester

Dear Ms. Hodge:

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