



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

August 20, 2008

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

RE: **EM-CING-060-080723** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 331 Killingworth Road, Guilford, 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 July 23, 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,

S. Derek Phelps
Executive Director

SDP/MP/cm

c: The Honorable Carl A. Balestracci, Jr., First Selectman, Town of Guilford
Regina Reid, Zoning Enforcement Officer, Town of Guilford
Carrie L. Larson, Pullman & Comley



cingular

EM-CING-060-080723

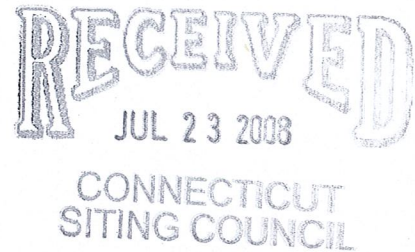
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

Steven L. Levine
Real Estate Consultant

HAND DELIVERED

ORIGINAL

July 23, 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 331 Killingworth Rd, Guilford (owner, Optasite)

Dear Chairman Caruso and Members of the Council:

To enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") plans to "dual band" the referenced site. This involves installing new antennas and associated equipment at the cell site to enable transmissions in the 850 MHz band as well as the 1900 MHz band.

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.

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 not be affected. 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 the addition of the 850 MHz 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
Dual Banding Equipment Modification**

331 Killingworth Road, Guilford
Site Number 5641
Former AT&T Site
Exempt Modification approved 10/23/02

Tower Owner/Manager: Optasite

Equipment Configuration: Self-Supporting Lattice Tower

Current and/or Approved: Three Allgon 7250 Panel Antennas @ 150 ft c.l.
Six runs 1 5/8 inch coax cables

Planned Modifications: Remove existing antennas
Install 3 Powerwave 7770 antennas (or equivalent) @ 150 ft
Install six TMA's @ 150 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 28 % 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 29.4 % 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 *							
Cingular GSM	150	1900 Band	4	250	0.0160	1.0000	26.39
Total							28.0%

* 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 *							26.39
Cingular GSM	150	1900 Band	2	427	0.0136	1.0000	1.36
Cingular GSM	150	880 - 894	2	296	0.0095	0.5867	1.61
Total							29.4%

* Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (All-Points Technology, 7/22/08)



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

July 23, 2008

Honorable Carl A. Balestracci, Jr.
1st Selectman, Town of Guilford
Town Hall 31 Park Street
Guilford, CT 06437

Re: Telecommunications Facility – 331 Killingworth Road

Dear Mr. Balestracci:

To enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC (“Cingular”) plans to “dual band” the referenced site to enable transmissions in the 850 Mhz band as well as the 1900 MHz band. This involves changing Cingular’s equipment configuration at the site.

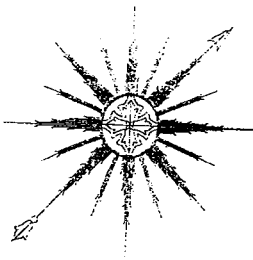
As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification 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



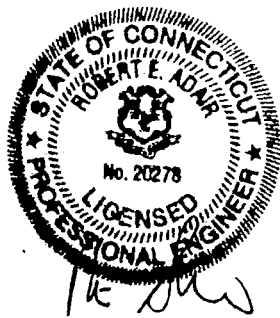
ALL-POINTS TECHNOLOGY CORPORATION, P.C.

**STRUCTURAL ANALYSIS REPORT
150' SELF-SUPPORTING TOWER
NORTH GUILFORD, CONNECTICUT**

Prepared for
Hudson Design Group, LLC

Cingular Site #5641; Guilford

July 22, 2008



APT Project #CT198610

**STRUCTURAL ANALYSIS REPORT
150' ROHN SSV TOWER
NORTH GUILFORD, CONNECTICUT
prepared for
Hudson Design Group, LLC**

EXECUTIVE SUMMARY:

All-Points Technology Corp., P.C. (APT) performed a structural analysis of this 150-foot ROHN SSV tower. The analysis was performed for Cingular Wireless's proposed replacement of their existing three panel antennas as detailed below.

Our analysis indicates the tower and foundations meet the requirements of the Connecticut State Building Code and TIA-222 with the proposed antenna changes.

INTRODUCTION:

A structural analysis was performed on the above-mentioned communications tower by All-Points Technology Corporation, P.C. (APT) for Hudson Design Group, LLC. The tower is located in North Guilford, Connecticut.

Robert E. Adair, P.E. previously visited the tower site on February and November of 2001 and again in March 2006 to record information regarding physical and dimensional properties of the structure and its appurtenances.

The structure is a 150-foot galvanized steel, Model SSV self-supporting tower manufactured by UNR-ROHN. The analysis was performed with the following antenna inventory (proposed antenna changes shown in **bold text**, future/reserved antennas in *italic text*):

Antenna	Elev.	Mount	Coax.
6' omnidirectional whip	150'	Leg	7/8"
(3) 7770.00 panels, (6) TMAs, (6) RET ¹	148'	Leg mounts	1/2", (6) 1-5/8"
(9) DB980H90 panel antennas ²	138'	(3) 12' sector mounts	(9) 1-5/8"
(6) DB844H90; (6) DB948F85 panels	128'	(3) 12' sector mounts	(12) 1-5/8"
(12) DB844H90 panel antennas	118'	(3) 12' sector mounts	(12) 1-5/8"
<i>(3) RR90-1800DP panel antennas</i>	<i>108'</i>	<i>Leg mounts</i>	<i>(6) 1-1/4"</i>

¹ Three Allgon 7250.03 panel antennas currently installed.

² Six DB980H90 panel antennas and six feed lines currently installed.

150 Old Westside Road
North Conway, NH 03860
(603) 356-5214

All-Points Technology Corporation

3 Saddlebrook Drive
Killingworth, CT 06419
(860) 663-1697

STRUCTURAL ANALYSIS:

Methodology:

The structural analysis was done in accordance with EIA/TIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures; and the American Institute of Steel Construction (AISC), Manual of Steel Construction, Allowable Stress Design, Ninth Edition.

The analysis was conducted using a fastest mile wind speed of 85 miles per hour (equivalent to 105-mph 3-second-gust) and one-half inch of radial ice over the entire structure and all appurtenances. The EIA/TIA Standard requires a minimum wind speed of 85 miles per hour for New Haven County, Connecticut.

Two loading conditions were evaluated in accordance with EIA/TIA-222-F to determine the tower's capacity. The more demanding of the two cases is used to calculate the tower capacity:

- Case 1 = Wind Load (without ice) + Tower Dead Load
- Case 2 = 0.75 Wind Load (with ice) + Ice Load + Tower Dead Load

In addition, the TIA/EIA standard permits a one-third increase in allowable stresses for towers less than 700-feet tall. Allowable stresses of tower members were increased by one-third when computing the load capacity values shown below.

Analysis:

Analysis of the tower was conducted in accordance with the criteria outlined herein with proposed antenna changes as previously described. The following table summarizes the results of the analysis based on stresses of individual leg and bracing members:

Elevation	Leg Capacity	Bracing Capacity
140'-150'	5%	15%
120'-140'	27%	46%
100'-120'	61%	25%
80'-100'	68%	56%
60'-80'	84%	78%
40'-60'	78%	77%
20'-40'	69%	98%
0'-20'	79%	62%

Bracing, Splice and Anchor Bolts:

All connection bolts were evaluated under the proposed loading. All bolts were found to be adequately sized to support the proposed loads.

Base Foundation:

The existing base foundations were evaluated assuming reinforcement previously designed by APT was installed according to drawing requirements. The foundations were determined to be adequate to support the proposed antenna changes.

Base reactions imposed with the additional antennas were calculated as follows:

Tension:	105.4 kips
Compression:	126.0 kips
Total Shear:	15.7 kips
Overturning Moment:	2137 ft-kips

CONCLUSIONS AND RECOMMENDATIONS:

Our structural analysis indicates the 150-foot ROHN SSV tower located in North Guilford, Connecticut meets the requirements of the Connecticut State Building Code and TIA-222 with Cingular Wireless's proposed antenna and equipment changes.

LIMITATIONS:

This report is based on the following:

1. Tower is properly installed and maintained.
2. All members are in new condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.

All-Points Technology Corp., P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or strengthening bracing members.
2. Reinforcing vertical members in any manner.
3. Adding or relocating stabilizers.
4. Installing antenna mounting gates or side arms.
5. Extending tower.

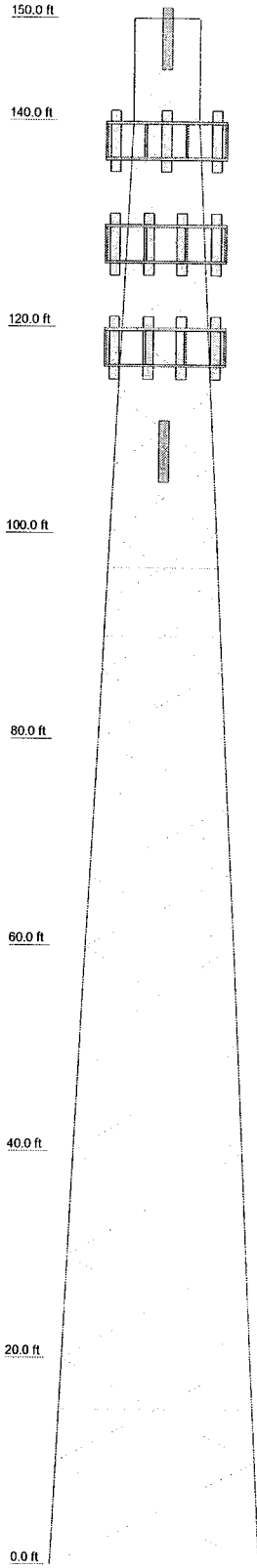
APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication and erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

All-Points Technology Corporation

150 Old Westside Road
North Conway, NH 03860
(603) 356-5214

3 Saddlebrook Drive
Killingworth, CT 06419
(860) 663-1697

Section	T8	T7	T6	T5	T4	T3	T2	T1
Legs	ROHN 5 STD	ROHN 4 X-STR	ROHN 3 X-STR	ROHN 2.5 X-STR	ROHN 2.5 X-STR	ROHN 2.5 STD	ROHN 2 STD	
Leg Grade	L3 1/2x3 1/2x1/4	L3x3x3/16	L3x3x3/16	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x3/16	L2x2x1/8	L1 1/2x1 1/2x1/8	
Diagonals								
Diagonal Grade								
Top Girts								
Horizontals	L3 1/2x3 1/2x1/4	L3x3x3/16	N.A.	N.A.	L2 1/2x2 1/2x3/16	N.A.	L2x2x1/8	
Face Width (ft)	20.75	16.65	14.6	12.55	10.5	8.5	6.5	
# Panels @ (ft)	8 @ 5	8 @ 5	2 @ 10	3 @ 6.66667	6 @ 3.33333	3 @ 6.66667	4 @ 5	3 @ 3.33333
Weight (lb)	12131.9	3086.5	2198.9	1402.8	1582.3	1143.5	706.3	302.8



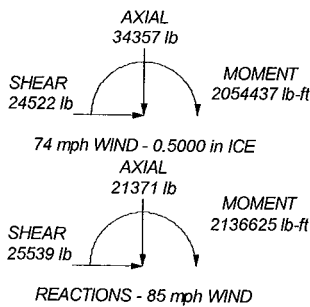
DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
6' x 1" omri whip	149	12' T-frame APT	128
7770.00	148	(2) DB844H90	128
7770.00	148	(2) DB844H90	128
7770.00	148	(2) DB844H90	128
(2) LGP2140X TMA	148	(2) DB948F85T2E-M	128
(2) LGP2140X TMA	148	(2) DB948F85T2E-M	128
(2) LGP2140X TMA	148	(2) DB948F85T2E-M	128
(2) 7020.00 RET-RCU	148	12' T-frame APT	128
(2) 7020.00 RET-RCU	148	(4) DB844H90	118
(2) 7020.00 RET-RCU	148	(4) DB844H90	118
(3) DB980H90E-M	138	12' T-frame APT	118
(3) DB980H90E-M	138	12' T-frame APT	118
12' T-frame APT	138	12' T-frame APT	118
12' T-frame APT	138	(4) DB844H90	118
12' T-frame APT	138	RR90-18-00DP	108
(3) DB980H90E-M	138	RR90-18-00DP	108
12' T-frame APT	128	RR90-18-00DP	108

MATERIAL STRENGTH

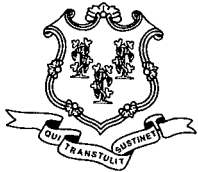
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

MAX. CORNER REACTIONS AT BASE:
 DOWN: 126023 lb
 UPLIFT: -105438 lb
 SHEAR: 15733 lb



REACTIONS - 85 mph WIND

All-Points Technology Corporation 150 Old Westside Road North Conway, NH 03860 Phone: (603) 496-5853 FAX: (603) 356-5214	Job: 150' ROHN SSV		
	Project: CT198610 Guilford		
	Client: HDG; Cingular Site #5641	Drawn by: Rob Adair	App'd:
	Code: TIA/EIA-222-F	Date: 07/22/08	Scale: NTS
Path:	Dwg No. E-1		



Daniel F. Caruso
Chairman

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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July 24, 2008

The Honorable Carl A. Balestracci, Jr.
First Selectman
Town of Guilford
Town Hall
31 Park Street
Guilford, CT 06437

RE: **EM-CING-060-080723** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 331 Killingworth Road, Guilford, Connecticut.

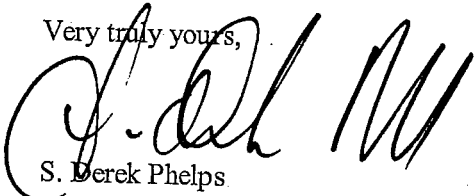
Dear Mr. Balestracci:

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 August 7, 2008.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Regina Reid, Zoning Enforcement Officer, Town of Guilford