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

September 6, 2007

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

RE: **EM-CING-006-049-115-164-167-070730** – New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 60 Rice Lane, Beacon Falls; 37 Bacon Road, Enfield; 178 New Haven Road, a/k/a Kluge Road, Prospect; 340 Bloomfield Avenue, Windsor; and 50 Woodfield Road, Woodbridge, Connecticut.

Dear Mr. Levine:

At a public meeting held on August 29, 2007, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the proposed coax lines are installed inside the pole's shaft for the Prospect tower.

The proposed modifications are to be implemented as specified here and in your notice dated July 30, 2007, including the placement of all necessary equipment and shelters within the tower compounds. 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 existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power densities measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

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 any of these facilities 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 Susan Ann Cable, First Selectman, Town of Beacon Falls
Brian Herb, Zoning Enforcement Officer, Town of Beacon Falls
The Honorable Patrick L. Tallarita, Mayor, Town of Enfield
Jose Giner, Director of Planning and Community Development, Town of Enfield
The Honorable Donald Trinks, Mayor, Town of Windsor
Mario Zavarella, Town Planner, Town of Windsor
The Honorable Edward Maum Sheehy, First Selectman, Town of Woodbridge
Terry Gilbertson, Zoning Enforcement Officer, Town of Woodbridge
SBA
Shaker Pines Fire District/SAI Communications
Michele G. Briggs, New Cingular Wireless PCS, LLC
Christopher B. Fisher, Esq., Cuddy & Feder LLP

EM-CING-006-049-115-164-167-070730

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

HAND DELIVERED

July 30, 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 5 existing telecommunications facilities located in Beacon Falls, Enfield, Prospect, Windsor, and Woodbridge

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 each of the municipalities in which an affected cell site is locate.

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 are summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each affected site. Also included is documentation of the structural sufficiency of each tower to accommodate the revised antenna configuration.

The changes to the facilities do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facilities will not be significantly changed or altered. Rather, the planned changes to the facilities fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. In each instance, the height of the overall structure will be unaffected. Modifications to the existing sites include all or some of the following as necessary to bring each 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 noted in the following 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 sites 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

60 Rice Lane, Beacon Falls, CT
Site Number 5416
Former AT&T site
Exempt Modification 7/11/02

Tower Owner/Manager: SBA

Equipment configuration: Monopole

Current and/or approved: Three Allgon 7250 antennas @ 132 ft c.l.
Six runs 1 ¼ inch coax

Planned Modifications: Remove all three existing antennas
Install three Powerwave 7770 antennas @ 132 ft c.l.
Install six TMA's @ 132 ft c.l.
Remove one outdoor cabinet
Install one outdoor cabinet

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 21.2 % 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 17.3 %.

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 *							12.91
Cingular GSM *	132	880 - 894	16	250	0.0825	1.0000	8.25
Total							21.2%

* Per CSC records.

Proposed

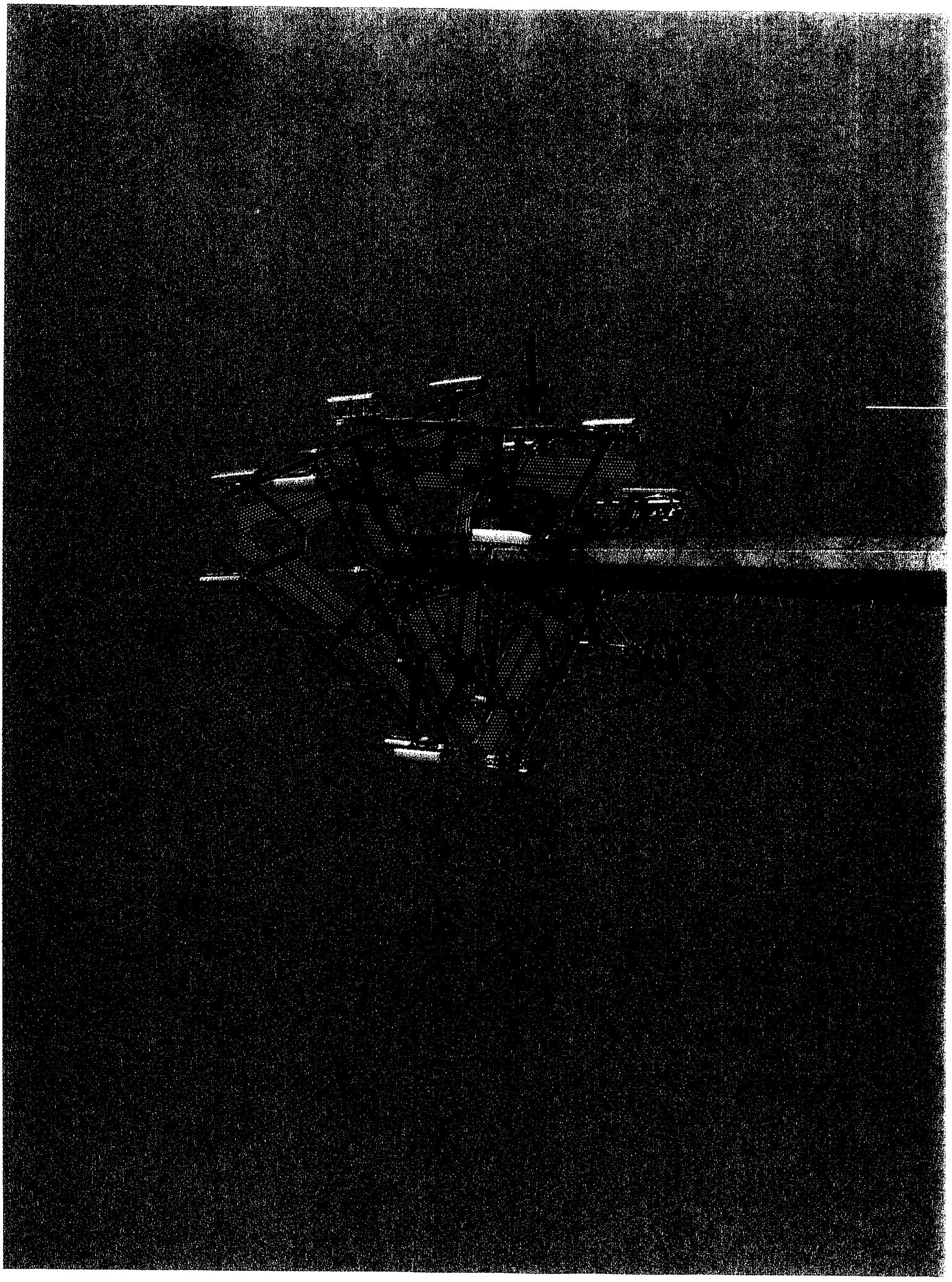
Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							12.91
Cingular GSM	132	1900 Band	3	427	0.0264	1.0000	2.64
Cingular UMTS	132	880 - 894	1	500	0.0103	0.5867	1.76
Total							17.3%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (Vertical Structures, Inc., dated 6/24/07)

NOTE: The 9 EMS antennas listed as "existing" on the structural analysis are leased, but not installed. The attached photograph shows 3 Cingular antennas presently installed at 132 ft AGL. If Cingular decides in the future to install more antennas, we would notify the Council at that time.



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 30, 2007

Honorable Susan Ann Cable
1st Selectman, Town of Beacon Falls
Town Hall, 10 Maple Avenue
Beacon Falls, Connecticut 06403

Re: Telecommunications Facility – 60 Rice Lane, Beacon Falls

Dear Ms. Cable:

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

July 24, 2007

Mr. Mark Luther
SBA Network Services
800 South Washington Ave
Scranton, PA 18505
(570) 558-3450

Subject: **Structural Analysis Report**
AT&T Change-Out #5416
SBA Site Name: Beacon Falls, CT
SBA Site Number: CT02049-S
150' Nudd M-180 Monopole Tower
Vertical Structures Job Number: 2007-007-031

Dear Mr. Luther,

Vertical Structures is pleased to provide you with the results of the structural analysis performed on the 150' tall monopole tower at the Beacon Falls site in Connecticut. The purpose of the analysis was to determine the suitability of the tower upon replacing three (3) existing EMS Wireless RR90-17-02DP panel antennas mounted on an existing platform at 132' with three (3) proposed Powerwave Technologies 7770.00 panel antennas and six (6) proposed Powerwave Technologies LGP 21401 tower mounted amplifiers for AT&T when combined with the existing and reserved equipment on the structure. This analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon an 85 MPH basic "fastest mile" wind speed, equivalent to a 105 MPH basic "3-second gust" wind speed per IBC Table 1609.3.1.

Based on our analysis we have determined the tower superstructure and foundation are sufficient for the proposed loading.

Vertical Structures appreciates the opportunity to provide this report and our continuing professional services. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Craig Aseltyne, P.E.
Project Engineer

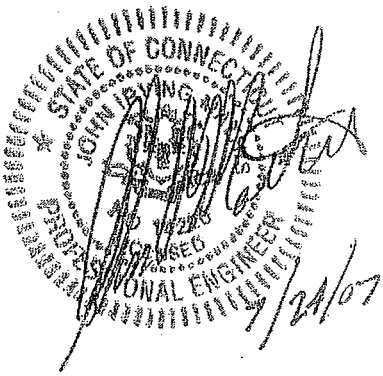


TABLE OF CONTENTS

INTRODUCTION

The subject tower is located in Beacon Falls, Connecticut. The 150' Nudd M-180 monopole tower was designed and manufactured in 2000 for SBA. The tower consists of four (4) 12-sided tapered polygonal sections joined via slip joint connections and one (1) pipe section joined via a bolted flange connection. The tower is founded on a 28' square by 3'-6" thick mat foundation bearing approximately 5' below grade. The tower base plate was reinforced in 2002 to accommodate additional loading.

ANALYSIS CRITERIA

The Beacon Falls monopole tower was analyzed in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." The proposed and existing antennas, lines and mounts considered in this analysis are listed in Table 1. The applied forces for this analysis were derived from an 85 MPH basic wind speed with no ice accumulation and a reduced 74 MPH basic wind speed with a 1/2" of radial ice accumulation. The tower was originally designed for an 85 MPH basic wind speed with no ice accumulation and a reduced 74 MPH basic wind speed with a 1/2" of radial ice accumulation. The original design loads are listed in Table 2. All cables are assumed to be routed up the interior of the pole unless noted otherwise.

Table 1 – Proposed and Existing Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
152'	Sprint	Existing	(6) Decibel DB980H90 Panels	(1) 14' L.P. Platform	(12) 1 5/8" Coax
142'	T-Mobile	Existing	(3) EMS Wireless RR90-17-02DP Panels	(1) 14' L.P. Platform	(6) 1 5/8" Coax
		Reserved	(3) EMS Wireless RR90-17-02DP Panels		(6) 1 5/8" Coax
132'	**AT&T**	**Proposed**	**(3) Powerwave 7770.00 Panels**		
			(6) Powerwave LGP 21401 TMAs		
		Remove	**(3) EMS Wireless RR90-17-02DP Panels**		
		Existing	**(9) EMS Wireless RR90-17-02DP Panels**	**(1) 14' L.P. Platform**	**(12) 1 5/8" Coax**
86'	Fire Dept.	Existing	(1) RFS PD1142-2A Omni	(1) 3' Stand-off	(1) 7/8" Coax

Table 2 – Original Design Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
150'	Co-Lo	Design	(12) Decibel DB980 Panels	(1) 16' L.P. Platform	(12) 1 5/8" Coax
140'	Co-Lo	Design	(12) Swedcom ALP9212 Panels	(1) 14' L.P. Platform	(12) 1 5/8" Coax
130'	Co-Lo	Design	(12) Swedcom ALP9212 Panels	(1) 14' L.P. Platform	(12) 1 5/8" Coax
120'	Co-Lo	Design	(12) Swedcom ALP9212 Panels	(1) 14' L.P. Platform	(12) 1 5/8" Coax
110'	Co-Lo	Design	(12) Swedcom ALP9212 Panels	(1) 14' L.P. Platform	(12) 1 5/8" Coax
80'	Co-Lo	Design	(1) RFS PD10017 Omni	(1) 4' x 6' Gateboom	(1) 1 5/8" Coax

ANALYSIS PROCEDURE

Table 3 – Resources Utilized

Resource	Remarks
Proposed Loads	SBA E-mail Dated July 9, 2007
Existing Loads	Vertical Structures Analysis No. 2002-007-003
Tower Drawing	Nudd Drawing No. 00-7342-1
Foundation Drawing	Nudd Drawing No. 00-7342-2
Geotechnical Information	SEA Consultants Reference No. 99339.02-A
Rework Drawings	o2wireless Solutions Job No. 2230-022

Analysis Methods

RISA Tower (Version 5.0), a commercially available software program, 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 ANSI/EIA/TIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

Assumptions

1. Tower and structures were built in accordance with the manufacturer's specifications.
2. The tower and structures have been maintained in accordance with manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 1 and any referenced drawings.
4. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.

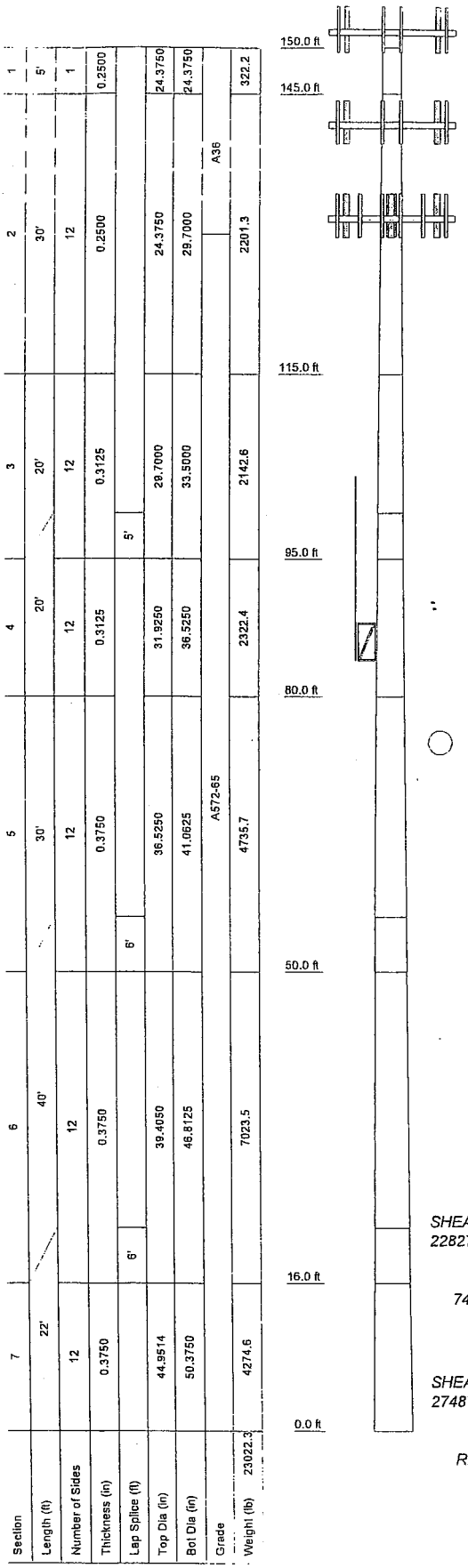
If any of these assumptions are not valid or have been made in error, this analysis may be affected, and Vertical Structures should be allowed to review any new information to determine its effect on the structural integrity of the tower.

ANALYSIS RESULTS

The Beacon Falls tower superstructure is found to be adequate for the intended loading at the wind and ice conditions considered. Calculated foundation reactions are within the allowable limits based on the provided soil information. Table 4 summarizes the condition of the tower. Capacities up to 105% are considered acceptable based on the analysis procedures used.

Table 4 – Tower Component Capacities

Section Number	Elevation	Percent Capacity Used		
		Pole	Flange Plate	Splice Bolts
1	150' – 145'	7.9	23.9	16.3
2	145' – 115'	43.3	-	-
3	115' – 95'	48.9	-	-
4	95' – 80'	63.2	-	-
5	80' – 50'	67.3	-	-
6	50' – 16'	82.4	-	-
7	16' – 0'	90.6	-	-
Anchor Bolts – Tension		71.1		
Base Plate and Gussets		70.9		
Foundation – Moment		59.4		



Section	1	2	3	4	5	6	7
Length (ft)	5'	30'	20'	20'	30'	40'	22'
Number of Sides	1	12	12	12	12	12	12
Thickness (in)	0.2500	0.2500	0.3125	0.3125	0.3750	0.3750	0.3750
Lap Splice (ft)			5'		6'	6'	
Top Dia (in)	24.3750	24.3750	28.7000	31.9250	36.5250	39.4050	44.9514
Bot Dia (in)	24.3750	29.7000	33.5000	36.5250	41.0625	46.8125	50.3750
Grade	A36				A572-65		
Weight (lb)	322.2	2201.3	2142.6	2322.4	4735.7	7023.5	4274.6

23022.3

AXIAL
38412 lb

SHEAR
22827 lb

MOMENT
2348910 lb-ft

TORQUE 767 lb-ft
74 mph WIND - 0.5000 in ICE

AXIAL
32734 lb

SHEAR
27487 lb

MOMENT
2712327 lb-ft

TORQUE 616 lb-ft
REACTIONS - 85 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Nudd 14' Low Profile Platform (VSI)	152	(3) RR90-17-02DP w/Mount Pipe (ATI)	132
(2) DB980H90 w/Pipe Mount	152	(3) RR90-17-02DP w/Mount Pipe (ATI)	132
(2) DB980H90 w/Pipe Mount	152	7770.00 w/ mount pipe (ATI)	132
(2) DB980H90 w/Pipe Mount	152	7770.00 w/ mount pipe (ATI)	132
Nudd 14' Low Profile Platform (VSI)	142	7770.00 w/ mount pipe (ATI)	132
(2) RR90-17-02DP w/Mount Pipe	142	(2) LGP21401 TMA (VSI) (ATI)	132
(2) RR90-17-02DP w/Mount Pipe	142	(2) LGP21401 TMA (VSI) (ATI)	132
(2) RR90-17-02DP w/Mount Pipe	142	(2) LGP21401 TMA (VSI) (ATI)	132
Nudd 14' Low Profile Platform (VSI) (ATI)	132	3' Sidearm (2" pipe) (VSI)	86
(3) RR90-17-02DP w/Mount Pipe (ATI)	132	PD1142-2A	86

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi	A572-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 90.6%

Vertical Structures, Inc.
309 Spangler Drive, Suite E
Richmond, KY 40475
Phone: (859) 624-8360
FAX: (859) 624-8369

Job: *Beacon Falls, CT (CT02049-S)*			
Project: *Vertical Structures Job No. 2007-007-031*			
Client: SBA	Drawn by: Asel		App'd:
Code: TIA/EIA-222-F	Date: 07/24/07		Scale: NTS
Path:			Dwg No. E-1

CINGULAR WIRELESS
Equipment Modification

37 Bacon Road, Enfield, CT
Site Number 1103
Tower Sharing 10/14/03

Tower Owner/Manager: Shaker Pines Fire District / SAI Communications

Equipment configuration: Monopole

Current and/or approved: Nine CSS DUO1417 antennas @ 168 ft c.l.
Nine runs 1 5/8 inch coax
Six TMA's @ 168 ft

Planned Modifications: Remove three existing antennas
Install three Powerwave 7770 antennas at 168 ft c.l.
Install three diplexers at 168 ft
Install three runs 1 5/8 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 13.3 % 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 14.8 % 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 *							10.95
Cingular GSM *	168	880 - 894	2	296	0.0075	0.5867	1.29
Cingular GSM *	168	1900 Band	2	427	0.0109	1.0000	1.09
Total							13.3%

* 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 *							10.95
Cingular GSM	179	880 - 894	3	296	0.0100	0.5867	1.70
Cingular GSM	168	1900 Band	2	427	0.0109	1.0000	1.09
Cingular UMTS	168	880 - 894	1	500	0.0064	0.5867	1.09
Total							14.8%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Malouf Engineering, Intl., dated 7/13/07)

MALOUF ENGINEERING INTL., INC.

STRUCTURAL CONSULTANTS

July 13, 2007

Mr. Derek Creaser
HUDSON DESIGN GROUP, LLC
representing **AT&T**
46 Beechwood Drive
North Andover, MA 01845

SUBJECT	**FEASIBILITY STRUCTURAL EVALUATION**			
Structure:	180 ft **Monopole**		Sabre Comm. – 18-Sided	
Client/ Site Name /#:	**Hudson D.G./ AT&T**	**1103 Enfield-Bacon Road**		**1103**
Owner/Site Name /#:	AT&T	1103 Enfield-Bacon Road		# 1103
MEI Project ID:	**CT00808M-07V0**			
Location:	37 Bacon Rd Enfield, CT 06082		Hartford County FCC # 1257423	
	LAT	42-0-57.4 N	LON	72-31-43.5 W

Malouf Engineering Int'l (MEI), as requested, has performed a feasibility structural evaluation of the above mentioned structure to assess the impact of the changed condition as noted below.

The structural evaluation performed used the following criteria:

CODE / STANDARD	ANSI/TIA-222-F-96 Standard / IBC 2003 Code – CT Building Code	
LOADING CASES	*Full Wind*:	80 Mph (with No Radial Ice)
	Iced Case:	69 Mph + 0.50" Radial Ice
	Service:	50 Mph

Table 1: Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
168± *	AT&T	*3*	*LGP 7770 Panels (New)*	[exist (3) 12ft LP T-Arms]	12	1-5/8"-(I) [*3 New* + 9 exist]
		[6]	[DUO1417-8686 Panels]			
		[6]	[ADC CG-1900W850 TMA's]			
		3	*LGP 13519 Diplexers (New)*			

* Note: Existing center panel antenna in ea. sector is to be replaced with above new panel + 1 new diplexer added.
** All current loading less than original design appurtenances

Table 2: Original Design Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
177		4	15ft Whips	(2) T-Arms – 4' Standoff	4	1-5/8"-(I)
169		12	6ftx6in Panel Antennas	(3) 12' T-Arms–5' Stdoff	12	1-5/8"-(I)
159		12	4ftx1ft Panel Antennas	(3) 12' T-Arms–5' Stdoff	12	1-5/8"-(I)
149		12	4ftx1ft Panel Antennas	(3) 12' T-Arms–5' Stdoff	12	1-5/8"-(I)
139		12	4ftx1ft Panel Antennas	(3) 12' T-Arms–5' Stdoff	12	1-5/8"-(I)

(I) = internal; (E) = External - as per TIA-222

The information used as source data to represent the existing structure and the related appurtenances is as follows:

Structure & Current Appurtenances	Structure data and design appurtenances loading as per original design data by Sabre Comm., ref. # 04-07104, dated 07/23/03 – Tower designed for *Max. Stress at 85.6%.*
Changed Condition	As per AT&T /Cingular Wireless RF approval email, dated 04/30/07, ver.2007-2, Supplied by Hudson Design Group, LLC on 07/09/07.

The subject structure is evaluated for the feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and the appurtenances loading was evaluated (no computer analysis performed, only relative loading magnitude comparison), in accordance with the TIA-222 Standard provisions and with the agreed limited scope of work terms and the results of this feasibility evaluation are reported. This evaluation is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination of its accuracy. This existing structure is assumed, for the purpose of this evaluation, to have been properly maintained and to be in good condition with no structural defects and with no deterioration to its capacity ('as-new').

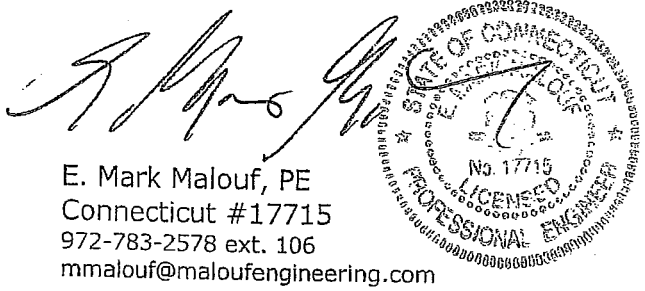
Based on the feasibility structural evaluation of the data provided, the subject structure, including foundation, would meet the minimum requirements of ANSI/TIA 222-F Standard for the proposed changed condition as stated above when considering the structure to have been properly designed for the stated appurtenances. The proposed loading would stress the structure less than the original design.

Therefore, **the installation of the noted proposed changed condition is structurally acceptable** on this existing structure in accordance with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.



E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

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 30, 2007

Mr. Matthew Coppler, Town Manager
Town of Enfield
Town Hall 820 Enfield St.
Enfield, CT 06082-2997

Re: Telecommunications Facility – 37 Bacon Road, Enfield (Fire Station)

Dear Mr. Coppler:

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

CINGULAR WIRELESS
Equipment Modification

178 New Haven Road (aka Kluge Rd), Prospect, CT
Site Number 2214
Exempt Modifications 9/28/98 and 8/1/02

Tower Owner/Manager: SBA

Equipment configuration: Monopole

Current and/or approved: Nine CSS DUO1417 antennas @ 158 ft c.l.
Nine runs 1 ¼ inch coax
Six TMA's / three diplexers / three combiners @ 158 ft

Planned Modifications: Remove three existing antennas
Install three Powerwave 7770 antennas @ 158 ft c.l.
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 18.0 % 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 23 % of the standard.

Existing / Approved

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 *							11.30
Cingular TDMA*	157	880 - 894	16	100	0.0233	0.5867	3.98
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
Total							18.0%

* 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 *							19.74
Cingular GSM	158	880 - 894	2	296	0.0085	0.5867	1.45
Cingular GSM	158	1900 Band	1	427	0.0062	1.0000	0.62
Cingular UMTS	158	880 - 894	1	500	0.0072	0.5867	1.23
Total							23.04%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (FDH Engineering, dated 7/16/07)

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 30, 2007

Honorable Robert J. Chatfield
Mayor, Town of Prospect
Town Office Building 36 Center Street
Prospect, Connecticut 06712

Re: Telecommunications Facility – 178 New Haven Road, Prospect

Dear Mayor Chatfield:

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

Structural Analysis for SBA Network Services

160' Monopole

Site Name: Prospect, CT
Site ID: CT00252-S
#2214

FDH Project Number 07-0719E

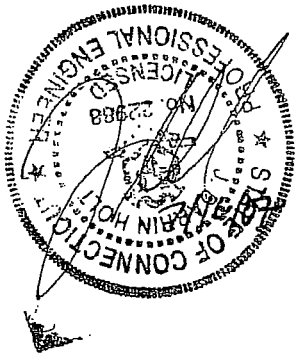
Prepared By:

Brent McLain
Project Engineer

Reviewed By:

J. Darrin Holt, PhD, PE
President
CT PE License No. 22988

FDH Engineering, Inc.
PO Box 99556
Raleigh, NC 27615
(919)-755-1012
info@fdh-inc.com



July 16, 2007

Prepared pursuant to TIA/EIA-222-F June 1996 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

TABLE OF CONTENTS

2730 Rowland Rd., Suite 100 Raleigh, NC 27615 Ph: (919)-755-1012 Fax: (919)-755-1031 info@fdh-inc.com

EXECUTIVE SUMMARY

At the request of SBA Network Services, FDH Engineering performed a structural analysis of the monopole located in Prospect, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads, pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F*. Information pertaining to the existing/proposed antenna loading, current tower geometry, and member sizes was obtained from the Nudd, Corp (Project No. 6820) original design drawings dated May, 1999, Semaan Engineering (Project No. CT-002525) modification drawings dated April 18, 2002, and SBA Network Services, Inc.

The *basic design wind speed* per *TIA/EIA-222-F* standards is 85 MPH without ice and 74 MPH with 1/2" radial ice. However, local building code stipulates that structures shall be designed to withstand a minimum design *3-second gust* wind speed of 110 MPH, which is equivalent to a 90 MPH *fastest mile* wind speed. As such, a wind speed of 90 MPH without ice and 78 MPH with ½" radial ice was used in this analysis.

Conclusions

With the existing and proposed antennas from Cingular in place at 157 ft., the tower meets the requirements of the *TIA/EIA-222-F* standards. Furthermore, provided the foundations were constructed to support the original design reactions (see Nudd, Corp Project No. 6820), the foundations should have the necessary capacity to support the existing and proposed loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH is accurate (i.e., the steel data, tower layout, existing and proposed antenna loading) and that the tower will be properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *TIA/EIA-222-F* standards are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed coax lines should be installed inside the monopole shaft.

2730 Rowland Rd., Suite 100 Raleigh, NC 27615 Ph: (919)-755-1012 Fax: (919)-755-1031 info@fdh-inc.com

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1.** *If the actual layout determined in the field deviates from this layout, FDH should be contacted to perform a revised analysis.*

Table 1 – Appurtenance Loading

Existing Loading:

No.	Centerline Elevation (ft)	Coax and Lines[1]	Carrier	Mount Type	Description
1-9	157	(9) 1-1/4"[2]	Cingular	13' Low Profile Platform	(9) CSS DUO4-8686 (6) TMAs (3) Combiners (3) Diplexors
10-19	142	(9) 1-5/8"	Nextel	T-Frame Sector Mounts	(9) Allgon ALP9212
19-28	132	(12) 1-5/8"	VzW	13' Low Profile Platform	(6) Allgon 7129.16 (6) Decibel DB844-90EEXY

1 The existing coax is located inside the pole's shaft, unless otherwise noted.
2 The existing loading for Cingular will be altered. See the proposed loading below.

Proposed Loading:

No.	Centerline Elevation (ft)	Coax and Lines	Carrier	Mount Type	Description
1-9	157	(12) 1-1/4"	Cingular	13' Low Profile Platform	(6) CSS DUO4-8686 (3) Powerwave 7770 (6) TMAs (3) Diplexors (3) Combiners

1 Currently, Cingular has (9) CSS DUO4-8686 antennas, (6) TMAs, (3) Combiners, (3) Diplexors, (9) 1-1/4" coax at 157'. According to information provided by SBA, Cingular will replace (3) antennas with (3) Powerwave 7770 antennas and install (3) 1-1/4" coax at 157'. The analysis performed with the full leased loading of (9) antennas, (6) TMAs, (3) Diplexors, (3) Combiners, and (12) coax in place at 157'.

2730 Rowland Rd., Suite 100 Raleigh, NC 27615 Ph: (919)-755-1012 Fax: (919)-755-1031 info@fdh-inc.com

RESULTS

Based on information obtained from the original design drawings, the yield strength of steel for individual members was as follows:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	42 ksi
Base Plate	36 ksi
Anchor Bolts	105 ksi

Table 3 displays the ratio (as a percentage) of actual force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 105% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information.

Table 3 – Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
L1	160 - 110	Pole	TP34.625x18x0.25	65.6	Pass
L2	110 - 95	Pole	TP38.6563x32.4625x0.25	88.2	Pass
L3	95 - 75	Pole	TP45.1875x38.6563x0.3125	75.6	Pass
L4	75 - 70	Pole	TP45.475x42.9297x0.3125	82.9	Pass
L5	70 - 30	Pole	TP58.875x45.475x0.375	78.0	Pass
L6	30 - 20	Pole	TP61.8257x55.445x0.375	87.6	Pass
L7	20 - 0	Pole	TP68.1875x61.8257x0.4375	75.6	Pass
			Anchor Bolts	OK	Pass
			Base Plate	OK	Pass

* Additional capacities from shaft reinforcement not included.

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Table 4 – Maximum Base Reactions

Base Reactions	Original Design Reactions	Current Analysis Reactions
Axial	45 k	37 k
Shear	34 k	35 k
Moment	3,435 k-ft	3,202 k-ft

GENERAL COMMENTS

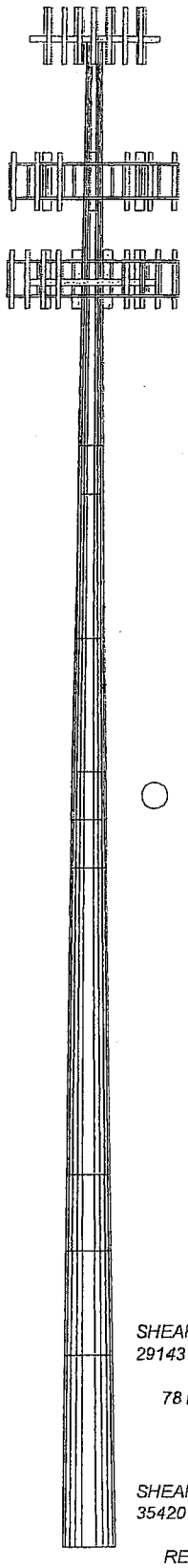
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering should be notified immediately to perform a revised analysis.

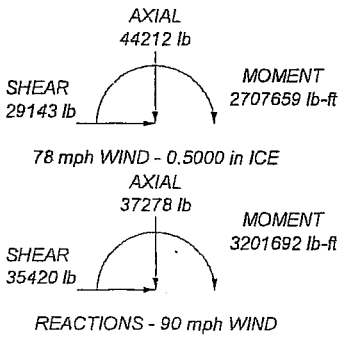
LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

2730 Rowland Rd., Suite 100 Raleigh, NC 27615 Ph: (919)-755-1012 Fax: (919)-755-1031 info@fdh-inc.com

Section	1	2	3	4	5	6	7
Length (ft)	47.00	20.00	19.00	10.00	40.00	19.00	20.00
Number of Sides	12	12	12	12	12	12	12
Thickness (in)	0.2500	0.2500	0.3130	0.3130	0.3750	0.3750	0.4380
Lap Splice (ft)	5.00		5.00		8.00		
Top Dia (in)	19.3100	32.3840	38.8500	42.9840	45.9800	55.5740	61.7200
Bot Dia (in)	34.5000	38.8500	45.3100	45.9800	58.9100	61.7200	68.1800
Grade	A572-42						
Weight (lb) 28904.8	3431.7	1937.6	2721.6	1514.8	8557.9	4549.2	6182.0





78 mph WIND - 0.5000 in ICE

REACTIONS - 90 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) DUO4-8686	157	(3) ALP 9212	142
(2) DUO4-8686	157	Pirod 12' PCS T-Frame (1) 104569	142
(2) DUO4-8686	157	Pirod 12' PCS T-Frame (1) 104569	142
7770	157	Pirod 12' PCS T-Frame (1) 104569	142
7770	157	(2) DB844-90EEXY	132
7770	157	(2) DB844-90EEXY	132
PiROD 13' Low Profile Platform	157	(2) 7129.16	132
(6) TMA	157	PiROD 13' Low Profile Platform	132
(3) Combiners	157	(2) 7129.16	132
(3) Diplexors	157	(2) 7129.16	132
(3) ALP 9212	142	(2) DB844-90EEXY	132
(3) ALP 9212	142		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-42	42 ksi	60 ksi			

TOWER DESIGN NOTES

1. Tower designed for a 90 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 78 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 50 mph wind.
4. Anchor Bolts: (18) 2" Dia ASTM A325 (Fu = 105 ksi) w/ BC = 67"
5. Base Plate: 1.75" x 68.1875" ROUND A36
6. Additional capacity from shaft reinforcement is not included.
7. Tower model shown for analysis purposes only. See the original design drawings for actual tower layout.
8. TOWER RATING: 88.2%

FDH Engineering
2730 Rowland Road
Raleigh, North Carolina
Phone: (919)755-1012
FAX: (919)755-3031

Job: *(Site ID: CT00252-S) Prospect, CT*			
Project: *07-0719E*			
Client: SBA	Drawn by: Brent McLain	App'd:	
Code: TIA/EIA-222-F	Date: 07/24/07	Scale: NTS	
Path:		Dwg No. E-1	

CINGULAR WIRELESS
Equipment Modification

340 Bloomfield Avenue, Windsor, CT
Site Number 5138
Former AT&T site
Town of Windsor P&Z 10/10/00; B.P. 2/6/01
T-Mobile and Verizon Colocations, 2004

Tower Owner/Manager: Cingular

Equipment configuration: Monopole

Current and/or approved: Twelve Allgon 7184 antennas @ 151 ft c.l.
Twelve runs 1 5/8 inch coax

Planned Modifications: Remove all existing antennas
Install six Powerwave 7770 antennas at 151 ft
Install six TMA's and six diplexers @ 151 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 31.2 % 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 32.6 % 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 *							29.92
Cingular GSM *	150	1900 Band	8	100	0.0128	1.0000	1.28
Total							31.2%

* 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 *							29.92
Cingular GSM	151	1900 Band	2	427	0.0135	1.0000	1.35
Cingular UMTS	151	880 - 894	1	500	0.0079	0.5867	1.34
Total							32.6%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (Paul J. Ford & Co., dated 7/26/07)

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 30, 2007

Peter Souza, Town Manager
Town of Windsor
Town Hall 275 Broad St.
Windsor, CT 06095-0472

Re: Telecommunications Facility – 340 Bloomfield Avenue, Windsor (Public Safety)

Dear Mr. Souza:

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

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Structural Analysis Report

PJF Project No.: **A00007-T144**

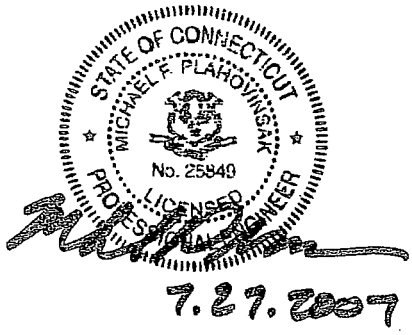
Structure: Existing 148-ft Monopole

Owner: Cingular
Manufacturer: Summit Manufacturing
Location: Hartford Co., CT
Site Name: Windsor
Site Number: 5138

Prepared For:

Hudson Design Group, LLC
46 Beechwood Drive
North Andover, MA 01845
Attn: Derek Creaser

July 26, 2007



7.27.2007

Analyzed by: KJS
Guy S. Allison, E.I.T.
Structural Engineer
gallison@pjfweb.com

Reviewed by:
Michael F. Plahovinsak, P.E.
Registered Professional Engineer

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Executive Summary

Design Standard:

Paul J. Ford and Company has analyzed the existing monopole in accordance with the Telecommunications Industry Association Standard TIA/EIA-222-F for the following *fastest mile* design wind velocities:

80 mph Basic Wind Velocity without ice
69 mph Basic Wind Velocity with 1/2" radial ice
50 mph (Operational) Basic Wind Velocity without ice

Antenna Loads:

The existing monopole was analyzed for the following antenna loading:

Status	Elevation	Description	Coax		Owner
Existing	151'	8' Directional Antenna @ 154'	(1)	1 5/8" (I)	Police Station
Proposed		*(6) Powerwave 7770 Panels w/ (6) TMA's***			*Cingular*
		(12) Diplexers			
Existing		12' Low Profile Platform	(12)	1 5/8" (I)	
Existing	140'	(3) 72" x 12" x 3" Panels*	(6)	1 5/8" (I)	T-Mobile
		12' Low Profile Platform			
Existing	120'	(12) 48" x 12" x 4" Panels*	(12)	1 5/8" (I)	Verizon
		14' Low Profile Platform			
Existing	105'	(1) 8' Omni	(1)	7/8" (I)	Police Station
		(6) 48" x 8" x 4" Panels* + (1) 8' Directional	(1)	7/8" (I)	Sprint
		14' Low Profile Platform	(6)	1 5/8" (I)	
Existing	68'	(2) Directional Antennas	(2)	7/8" (I)	Police Station
		(2) 6' Side Arm Mounts			
Existing	65'	(1) 2' Dia. Std Dish	(1)	7/8" (I)	Police Station
Existing	45'	GPS w/ 3' Side Arm Mount	1	1/2" (I)	

*Antenna sizes approximated from site photographs.
**Proposed antennas to replace existing (12) panel antennas.

If loading is different than shown in the above table, Paul J. Ford and Company should be contacted immediately to reevaluate any conclusions stated in this report.

(I) – Coax are mounted on interior of pole, and not exposed to wind.

Results:

The existing monopole and foundation have sufficient capacity to support the new antenna loading while meeting the minimum wind requirements of this analysis.

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Project Description:

Paul J. Ford and Company has analyzed the existing monopole for Hudson Design Group, LLC to determine its capacity to support the proposed antenna re-configuration at the 151' elevation.

Pole History:

Summit Manufacturing, LLC manufactured the monopole per Design No. 11986. Paul J. Ford and Company provided the design drawings in accordance with the TIA/EIA-222-F Standard for an 80 mph design wind, ref. PJF#29200-1655.

Hudson Design Group supplied Paul J. Ford and Company with an antenna inventory dated 04/16/2005, which was used to prepare the antenna loading for this analysis.

Structural Analysis:

Our analysis was completed according to the recommendations of the TIA/EIA-222-F 1996. This standard recommends a minimum design wind velocity of 80 mph (no ice) for Hartford County. If ice accumulation is considered, the TIA/EIA standard allows the design wind pressure reduced by 25% in conjunction with ½" radial ice. Our analysis was completed in compliance with the minimum wind requirements under the following load cases:

80 mph Basic Wind Velocity without ice
69 mph Basic Wind Velocity with 1/2" radial ice
50 mph (Operational) Basic Wind Velocity without ice

Existing & Proposed Antenna Loading:

Our analysis was completed using the following existing and proposed antenna loading:

Status	Elevation	Description	Coax		Owner
Existing	151'	8' Directional Antenna @ 154'	(1)	1 5/8" (I)	Police Station
Proposed		*(6) Powerwave 7770 Panels w/ (6) TMA's***			*Cingular*
		(12) Diplexers			
Existing		12' Low Profile Platform	(12)	1 5/8" (I)	
Existing	140'	(3) 72" x 12" x 3" Panels*	(6)	1 5/8" (I)	T-Mobile
		12' Low Profile Platform			
Existing	120'	(12) 48" x 12" x 4" Panels*	(12)	1 5/8" (I)	Verizon
		14' Low Profile Platform			
Existing	105'	(1) 8' Omni	(1)	7/8" (I)	Police Station
		(6) 48" x 8" x 4" Panels* + (1) 8' Directional	(1)	7/8" (I)	Sprint
		14' Low Profile Platform	(6)	1 5/8" (I)	
Existing	68'	(2) Directional Antennas	(2)	7/8" (I)	Police Station
		(2) 6' Side Arm Mounts			
Existing	65'	(1) 2' Dia. Std Dish	(1)	7/8" (I)	Police Station
Existing	45'	GPS w/ 3' Side Arm Mount	1	1/2" (I)	

*Antenna sizes approximated from site photographs.
**Proposed antennas to replace existing (12) panel antennas.

If loading is different than shown in the above table, Paul J. Ford and Company should be contacted immediately to reevaluate any conclusions stated in this report.

(I) – Coax are mounted on interior of pole, and not exposed to wind.

Results:

When the new antenna configuration is considered, the monopole has sufficient capacity to safely support the new loading while maintaining the minimum wind rating:

Member	Percent Capacity
Shaft #1	21.8%
Shaft #2	51.4%
Shaft #3	56.2%
Shaft #4	57.1%
Base Plate	42.9%
Anchor Rods	49.2%

The existing monopole foundation is adequate to support the proposed antenna configuration.

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Conclusion:

The existing monopole and foundation have adequate capacity to support the proposed loading.

If you have any questions concerning our analysis, or if we can be of further service to you, please feel free to contact us at (614) 221-6679.

Sincerely,

Paul J. Ford and Company

Guy S. Allison, E.I.T.
Structural Engineer

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

STANDARD CONDITIONS FOR FURNISHING OF PROFESSIONAL ENGINEERING SERVICES ON EXISTING STRUCTURES BY PAUL J. FORD AND COMPANY

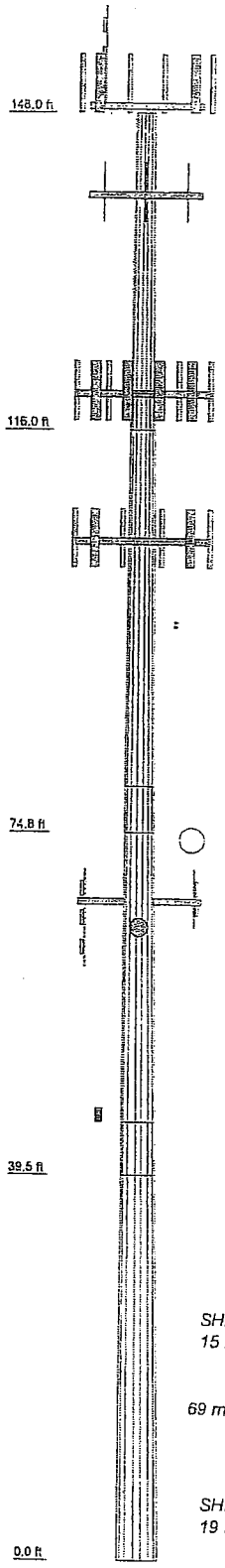
1. No allowance was made for any damaged, missing, or rusted monopole parts. The analysis of this pole assumes that no physical deterioration has occurred in any of the structural components of the pole and that all the pole members have the same capacity as the day the pole was erected.

2. It is not possible to have all of the very detailed information to perform a thorough analysis of every structural sub-component of an existing monopole. The structural analysis provided by Paul J. Ford and Company verifies the adequacy of the main structural members of the monopole. Paul J. Ford and Company provides a limited scope of service in that we cannot verify the adequacy of every weld, plate, connection detail, etc.

3. The enclosed sketches are a schematic representation of the monopole we have analyzed. If any material is fabricated from these sketches, the fabricator shall be responsible for field verifying the existing conditions and for proper fit and clearance in the field.

4. Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Section	1	2	3	4
Length (ft)	32.00	45.00	40.00	45.00
Number of Sides	18	18	18	18
Thickness (in)	0.2188	0.2500	0.3125	0.3750
Lap Splice (ft)	3.75	4.75	5.50	
Top Dia (in)	24.0000	20.0721	36.4208	42.5243
Bot Dia (in)	30.2410	37.8470	44.2220	51.3000
Grade	A607-65			
Weight (K) 20.0	2.0	4.0	5.4	8.5



AXIAL 38 K
SHEAR 15 K
MOMENT 1527 kip-ft
TORQUE 3 kip-ft
69 mph WIND - 0.5000 in ICE

AXIAL 31 K
SHEAR 19 K
MOMENT 1854 kip-ft
TORQUE 4 kip-ft
REACTIONS - 80 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
8' Directional (Police Station)	154	12' Low Profile Platform (T-Mobile-Existing)	140
(2) Powerwave 7770 (Cingular-Proposed)	151	14' Low Profile Platform (Verizon-Existing)	120
(2) Powerwave 7770 (Cingular-Proposed)	151	(4) 48" x 12" x 4" panel (Verizon-Existing)	120
(2) Powerwave 7770 (Cingular-Proposed)	151	(4) 48" x 12" x 4" panel (Verizon-Existing)	120
(2) Powerwave LGP214D1 TMA (Cingular-Proposed)	151	(4) 48" x 12" x 4" panel (Verizon-Existing)	120
(2) Powerwave LGP214D1 TMA (Cingular-Proposed)	151	14' Low Profile Platform (Sprint-Existing)	105
(2) Powerwave LGP214D1 TMA (Cingular-Proposed)	151	(2) 48" x 8" x 4" Panel (Sprint-Existing)	105
(4) Powerwave LGP13519 Diplexer (Cingular-Proposed)	151	8' Omni (Police Station)	105
(4) Powerwave LGP13519 Diplexer (Cingular-Proposed)	151	8' Directional (Sprint-Existing)	105
(4) Powerwave LGP13519 Diplexer (Cingular-Proposed)	151	(2) 48" x 8" x 4" Panel (Sprint-Existing)	105
12' Low Profile Platform (Cingular-Existing)	149	(2) 48" x 8" x 4" Panel (Sprint-Existing)	105
72" x 12" x 3" Panel (T-Mobile-Existing)	140	8' Side Arm Mount (Police Station)	66
72" x 12" x 3" Panel (T-Mobile-Existing)	140	6' Side Arm Mount (Police Station)	68
72" x 12" x 3" Panel (T-Mobile-Existing)	140	5' Directional (Police Station)	68
		8' Directional (Police Station)	66
		2 ft standard (Police Station)	65
		GPS	45
		3' Side Arm Mount	45

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
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: 57.1%

Paul J Ford and Company
250 E. Broad Street Suite 1500
Columbus, OH 43215
Phone: 614.221.6679
FAX: 614-220-4056

Job:	*148' Monopole 5138 Windsor, Hartford Co., CT*
Project:	*A00007-T144*
Client:	Hudson Design Group, LLC
Drawn by:	Guy Allison
App'd:	
Code:	TIA/EIA-222-F
Date:	07/25/07
Scale:	NTS
Path:	G:\TOWER\000_Mast\2007\A00007-T144.eri
Dwg No.	E-1

CINGULAR WIRELESS
Equipment Modification

Woodbridge Country Club
50 Woodfield Road, Woodbridge, CT
Site Number 5163
Former AT&T site
Local Zoning approval 7/3/2000

Tower Owner/Manager: Cingular

Equipment configuration: Monopole

Current and/or approved: Nine Allgon 7184 antennas @ 98 ft c.l.
Nine runs 1 5/8 inch coax

Planned Modifications: Remove existing antennas
Install three Powerwave 7770 antennas @ 98 ft c.l.
Install six TMA's @ 98 ft
Remove three runs of coax

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 3.7 % 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 9.6 % 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 *							0.00
Cingular GSM	98	1900 Band	4	250	0.0374	1.0000	3.74
Total							3.7%

* Per Siting Council 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 *							0.00
Cingular GSM	98	1900 Band	4	427	0.0639	1.0000	6.39
Cingular UMTS	98	880 - 894	1	500	0.0187	0.5867	3.19
Total							9.6%

* Per Siting Council Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (All-Points Technology Corp., dated 7/27/07)

TOWN PLAN AND ZONING COMMISSION
TOWN OF WOODBRIDGE
WOODBRIDGE, CONNECTICUT

TEL. (203) 389-3405

July 12, 2000

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
733 Summer St.,
Stamford, CT. 06901

Re: Special Permit/Site Plan Application
Telecommunication Facility
Woodbridge Country Club,
50 Woodfield Road, Woodbridge, CT.

Dear Mr. Fisher:

The Commission at its meeting on July 3, 2000 reviewed your application for AT&T of a Special Permit/Site Plan approval for an unmanned telecommunication facility consisting of a one hundred foot monopole, equipment shelter and other related improvements on a portion of lot owned by the Woodbridge Country Club, 50 Woodfield Road, Woodbridge, CT.

After discussion the Commission voted to approve the application subject to the following stipulations:

1. As offered at the Public Hearing the tower base will be designed to provide for future co-location transmission equipment which could be added upon an enlargement of the pole.

2. Any such enlargement would be subject to an application to and approval by the Town Plan & Zoning Commission.

3. AT&T will submit an estimate, based on unit cost, for the completion bond of the site improvements for the installation of the facility as shown on site plans T-1 and Z-1 prepared by URS Greiner Woodward Clyde revised to January 13, 2000.

4. This approval is conditioned upon compliance with all applicable provisions of the Woodbridge Zoning Regulations for telecommunication facilities.

Upon receipt of a completion bond satisfactory to the Commission the Enforcement Officer will be authorized to issue the necessary permits.

Sincerely yours,

Charles B. Swanson
Chairman

cc: Terry Gilbertson, Enforcement Officer

CERTIFIED MAIL RETURN RECEIPT NO. Z 720 381 193

WOOD1(WM)a1

TOWN OF WOODBRIDGE, CONN.

BUILDING PERMIT

№ 10557

Date September 11, 2000 xpd

Estimated Value $ 220,000.00

Fee $ 2,245.20

Revised Estimate $

Fee $

APPLICANTS PERMIT

This Permit is granted to Woodbridge Country Club/AT&T Wireless Contractor: Brois Const. Corp.

To Erect a Telecommunications Facility including pre-fabricated building, monopole, etc. per specifications and plans, application & TPZ Approval July 3, 2000.

At Street Address 50 Woodfield Road

as described in their Application of July 14, 2000

Property owned by Woodbridge Country Club Leased by: AT&T Wireless

By _____
Building Official

NOTE:

When any work is ready for inspection or completed the Building Department must be notified immediately. ALL PERMITS ARE TO BE POSTED ON THE JOB SITE FOR INSPECTION APPROVAL BY OFFICIAL. Permission must be obtained from the Office of Chief of Police before Building Material can be placed in the highway. Surface and roof water must not be connected with the storm drainage system unless approved. The recipient of this permit accepts this permit on the condition that he or she, as owner or as representing the owner, agrees to comply with zoning ordinances of the Town of Woodbridge and the Connecticut Building Code regarding the use, occupancy and type of building to be constructed.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

July 27, 2007

Hudson Design Group, LLC
46 Beechwood Drive
North Andover, MA 01845

Attn: Derek Creaser
Re: 100' Monopole Tower, Woodbridge, CT
Cingular Site #5163; Westville

Dear Derek,

All-Points Technology Corporation, P.C. (APT) evaluated the 100' monopole tower located at 50 Woodfield Road in Woodbridge, Connecticut for antenna changes proposed by Cingular Wireless. APT did not visit the tower site; this evaluation also relied on information provided by others, which included tower structural design calculations by Engineered Endeavors Incorporated (Job No. 7537 dated July 27, 2000), recent tower photographs, and antenna changes proposed by Cingular Wireless. The tower is designed to support six 12-panel arrays and future extension to 150'.

Cingular Wireless proposes to remove nine existing panel antennas (Allgon 7184.14) and replace them with three Powerwave 7770 panel antennas and six LGP 21401 tower-mounted amplifiers. Six of the existing nine 1-5/8" feed lines will remain in place.

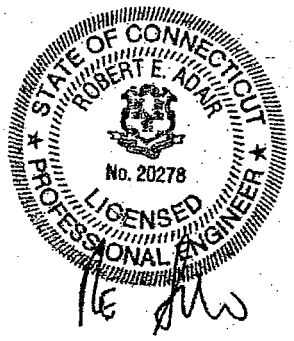
My evaluation finds the tower meets requirements of the Connecticut State Building Code and EIA/TIA-222 Revisions F & G with Cingular's proposed antenna changes and associated appurtenances. The proposed installation meets original design loads and the anticipated stress levels in the tower and foundation will be significantly less than design capacity.

Please call if you have any questions.

Sincerely,
All-Points Technology Corporation, P.C.

Robert E. Adair, P.E.
Principal

CT198440 Westville ltr 7-27-07.doc



☐ 3 SADDLEBROOK DRIVE • KILLINGWORTH, CONNECTICUT 06419 • PHONE: 860-663-1697 • FAX: 860-663-0935
☒ 150 OLD WESTSIDE ROAD • NORTH CONWAY, NEW HAMPSHIRE 03860 • PHONE/FAX: 603-356-5214

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

July 30, 2007

Honorable Edward Maum Sheehy
1st Selectman, Town of Woodbridge
11 Meetinghouse Lane
Woodbridge, Connecticut 06525

Re: Telecommunications Facility – 50 Woodfield Rd, Woodbridge

Dear Mr. Sheehy:

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

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 1, 2007

The Honorable Patrick L. Tallarita
Mayor
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: **EM-CING-006-049-115-164-167-070730** – New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 60 Rice Lane, Beacon Falls; 37 Bacon Road, Enfield; 178 New Haven Road, a/k/a Kluge Road, Prospect; 340 Bloomfield Avenue, Windsor; and 50 Woodfield Road, Woodbridge, Connecticut.

Dear Mayor Tallarita:

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.

The Council will consider this item at the next meeting scheduled for August 29, 2007, at 1:30 p.m. in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the Council by August 28, 2007.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/ig

Enclosure: Notice of Intent

c: Jose Giner, Director of Planning and Community Development, Town of Enfield