

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@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

September 26, 2002

Peter W. van Wilgen
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-007-014-060-167-020917** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Berlin, Branford, Guilford, and Woodbridge, Connecticut.

Dear Mr. van Wilgen:

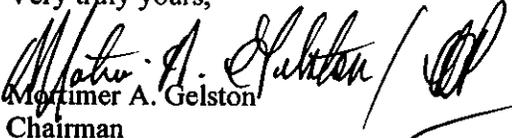
At a public meeting held on September 25, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions: 1) at the Berlin site, the foundation, anchor bolts, and the flange at elevation 110' shall be reinforced; 2) at the Branford site, SpectraSite engineering must perform material testing to confirm the steel yield strength of the tower, it must confirm the adequacy of the foundation to support the proposed changes, and the base plate must be modified as per drawing CT-0020-M1; 3) at the Guilford site, SpectraSite engineering must perform material testing to confirm the steel yield strength of the tower, it must confirm the adequacy of the foundation to support the proposed changes, the tower must be reinforced with the Dywidag system from 0' to 120', and a professional engineer must certify the successful completion of these conditions to the Council; and 4) at the Woodbridge site, the flange plate at 110' must be reinforced per drawing CT-0016-M1.

The proposed modifications are to be implemented as specified here and in your notice dated September 17, 2002. 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 sites that would not increase tower heights, extend the boundaries of the tower site, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density 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. Any additional change to 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,


Mortimer A. Gelston
Chairman

MAG/DM/laf

c: See attached list.

List Attachment.

- c: Honorable Paul C. Argazzi, Mayor, Town of Berlin
- Brian J. Miller, Town Planner, Town of Berlin
- Honorable Anthony J. DaRos, First Selectman, Town of Branford
- Justine K. Gillen, Zoning Enforcement Officer, Town of Branford
- Diana Ross, Inland Wetland Enforcement Officer, Town of Branford
- Honorable Carl A. Balestracci, Jr., First Selectman, Town of Guilford
- M. William McAvoy, Jr., Zoning Enforcement Officer, Town of Guilford
- Honorable Amey Marrella, First Selectman, Town of Woodbridge
- Samuel Spielvogel, Town Planner, Town of Woodbridge



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

HAND DELIVERED

September 17, 2002

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

RECEIVED

SEP 17 2002

CONNECTICUT
SITING COUNCIL

Re: Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Berlin, Branford, Guilford, and Woodbridge.

Dear Mr. Gelston:

In order to accommodate technological changes, implement E-911 capability and enhance system performance, Southwestern Bell Mobile Systems, LLC ("SNET" or "Cingular Wireless"; formerly SNET Mobility, LLC) plans to modify the antenna configurations at 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 located.

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

Please note that each of the structures in this Notice will require some strengthening to accommodate the new Cingular equipment array. It is Cingular's intent to have this re-enforcement done prior to installation of equipment on the these towers.

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

Mr. Mortimer A. Gelston
August 28, 2002
Page 2

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. The height of the overall structure will be unaffected. At almost all sites, new panel antennas approximately the same size will replace those previously installed. Tower mount amplifiers, approximately 5" x 9" x 13", will be added to the platform on which the panel antennas are mounted to enhance signal reception at the cell site. In addition, the mandated provision of E-911 capability *may* require installation of one LMU ("location measurement unit"), approximately nine inches high, on either the tower, the equipment shelter, or the ice bridge. At this writing, however, it appears that the new panel antennas will serve this purpose as well. One GPS receive-only antenna will be attached to the equipment shelter at each site. None of the 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.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
4. Radio frequency power density will increase due to use of additional channels broadcasting at higher power. 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) 513-7730 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Handwritten signature of Peter W. van Wilgen in blue ink, with a large flourish at the end.

Peter W. van Wilgen
Senior Manager - Construction

Enclosures

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 260 Beckley Rd, Berlin
Exempt modification approved July 15, 1992

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 152 ft

Current and/or approved: 10 Allgon ALP 110-11 panels

Planned: 9 CSS DUO1417-8686-4-0 panels or comparable
9 tower mount amplifier

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

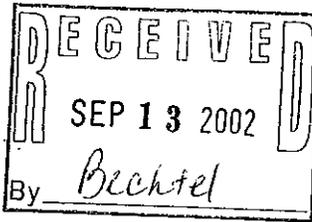
Cingular Current

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
Cingular	152	880 - 894	19	100	0.0296	0.5867	5.0

Cingular Planned

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
Cingular TDMA	152	880 - 894	16	100	0.0249	0.5867	4.2
Cingular GSM	152	880 - 894	2	296	0.0092	0.5867	1.6
Cingular GSM	152	1930 - 1935	2	427	0.0133	1.0000	1.3
Total							7.1%

Structural information: Please see attached.



#1014
CT-0019
09/11/02

Structural Analysis of 149.6' TTT Meyer Monopole w/ 12.5' Extension
Berlin, 260 Beckley Road, Berlin, CT 06037

1.0 Introduction

A structural analysis was performed on the above noted tower for the addition of proposed antennas as listed below. The analysis consisted of applying the forces caused by the existing and proposed loads, and determining the resulting stresses in the structure and its foundation.

The following criteria were used in the analysis:

- ANSI/TIA/EIA-222-F 80 mph wind [Hartford County], considering two loading cases:

- Load Case 1. 100% wind pressure, without radial ice
- Load Case 2. 75% wind pressure, with 1/2" radial ice

Information, including geometry and member sizes were obtained from Paul J. Ford Drawing 31298-027 dated 7/16/98. The structure is in good condition and capable of supporting its original full design capacity.

2.0 Antenna and Transmission Line Loading

Table 1. Existing and Proposed Antennas

Elevation (ft. A.G.L.)	Antenna	Carrier	Transmission Lines*	Notes
167.5	(1) EMS Accelerator Antenna Housing on 11' Mounting Mast	Voicestream	(6) 1-5/8" [I]	Existing
152	(9) CSS DUO-14178686-4-0 (9) ADC TMA on Platform Mount with Handrails	Cingular	(9) 7/8" [I]	Proposed Relocation
130	(3) Allgon 7184.05 on Flush Mounts	Sprint	(3) 1-5/8" [O]	Existing
125	(3) Allgon 7184.05 on Flush Mounts	Sprint	(3) 1-5/8" [O]	Existing

* [I], or [O] denotes coax installed inside or outside the monopole, respectively.

3.0 Results

Monopole Stress Levels

Elevation (<i>FL AGL</i>)	Monopole
0 to 31	0.99
31 to 70	1.08**
70 to 110	1.02**
110 to 150	0.88

**Maximum Stress Ratio: 1.00=Full Allowable.*

***Overstressed; Considered acceptable.*

Foundation Stress Levels

Base Reactions	Current Analysis	Result*
Moment (<i>kip.ft</i>)	1,706.6	Unsatisfactory
Compression (<i>kips</i>)	15.0	Unsatisfactory
Shear (<i>kips</i>)	18.3	Unsatisfactory

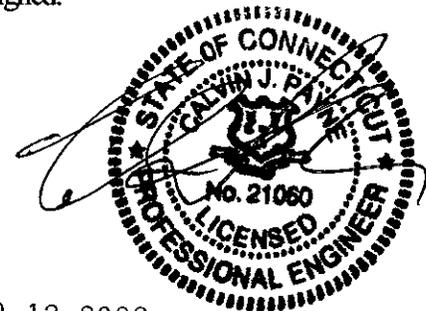
* *Based on foundation capacity*

4.0 Conclusions and Recommendations

1. The tower *is structurally adequate* to accommodate the existing and proposed antenna and transmission lines loading used in this analysis.
2. An analysis was performed using 3, 6, and 9 proposed Cingular antennas. For all three cases the foundation and anchor bolts *are not structurally adequate*, and will need to be *reinforced* to accommodate the existing and proposed antenna and transmission lines loading used
3. The flange at an elevation of 110' *is not structurally adequate* to accommodate the existing and proposed antenna and transmission lines loading used in this analysis, and will need to be *reinforced*.
4. Any future changes in loading must be reviewed by the SpectraSite Engineering Department.

Should any questions arise concerning this report please contact the undersigned.

Jason R. Manners, E.I.
Engineering Associate
919/466-4833



09-12-2002

Calvin J. Payne, P.E.
Chief Engineer



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

September 17, 2002

Honorable Bonnie L. Therrien
Town Manager, Town of Berlin
Town Hall, 240 Kensington Road
Berlin, Connecticut 06037

Re: Telecommunications facility – 260 Beckley Road

Dear Ms. Therrien:

In order to meet the requirements for improved E-911 capability and to implement a more advanced telecommunications system, Southwestern Bell Mobile Systems, LLC, a/k/a Cingular Wireless (“SBMS” or “Cingular”; formerly SNET Mobility, LLC) will be changing its antenna configuration at certain cell sites. Cingular will install panel antennas, small amplifiers and a small locator unit on the tower. 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 fully describes Cingular’s proposal. 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) 513-7730 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Peter W. van Wilgen
Senior Manager – Construction

Enclosure

CINGULAR WIRELESS
Antenna Modification

Site Address: 405 Brushy Plain Road, Branford
Exempt modification approved 9/10/92

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 153 ft

Current and/or approved: 9 Allgon ALP 110-11 panels

Planned: 6 CSS DUO1417-8686-4-0 panels or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

Cingular Current

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
Cingular	153	880 - 894	19	100	0.0292	0.5867	5.0

Cingular Planned

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
Cingular TDMA	153	880 - 894	16	100	0.0246	0.5867	4.2
Cingular GSM	153	880 - 894	2	296	0.0091	0.5867	1.5
Cingular GSM	153	1930 - 1935	2	427	0.0131	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

RECEIVED
 SEP 13 2002
 By *Bechtel*

Structural Analysis of 151.42' Monopole
 Branford, 405 Brushy Plain Rd, Branford, CT 06405

2015
CT-0020
 September 12, 2002

1.0 Introduction

A structural analysis was performed on the above noted tower for the addition of proposed antennas as listed below. The analysis consisted of applying the forces caused by the existing and proposed loads, and determining the resulting stresses in the structure and its foundation.

The following criteria were used in the analysis:

- ANSI/TIA/EIA-222-F 85 mph wind [New Haven County], considering two loading cases:

- Load Case 1. 100% wind pressure, without radial ice
- Load Case 2. 75% wind pressure, with 1/2" radial ice

Information, including geometry and member sizes were obtained from Smith Cullum Steel Data Tower Report dated 6/1/02.

1.0 Antenna and Transmission Line Loading

Table 1. Existing and Proposed Antennas

Elevation (ft. AGL)	Antenna	Carrier	Transmission Lines*	Notes
159	(1) Omni**	Snet/Cingular	(1) 1-5/8" [I]	Proposed Replacement
156	(1) Yagi**	Snet/Cingular	(1) 1/2" [I]	
153	(6) CSS DUO14178686-4-0	Snet/Cingular	(9) 7/8" [I]	
153	(6) ADC Amplifiers w/ T-Arm Mounts	Snet/Cingular		
159	(1) Omni	Snet/Cingular	(1) 1-5/8" [I]	Remove Existing
156	(1) Yagi	Snet/Cingular	(1) 1/2" [I]	
153	(9) Allgon ALP11011	Snet/Cingular	(9) 7/8" [I]	
153	w/ Platform Mount w/ Handrails			
113	(9) Decibel DB844H80-XY w/ T-Arm Mounts	Verizon	(9) 1-1/4" [I]	Existing
103	(1) Decibel Dipole w/ Standoff Mount	Town	(1) 7/8" [I]	Existing
93	(1) Decibel Dipole w/ Standoff Mount	Town	(1) 7/8" [O]	Existing
39	(1) Nokia CS72187-01 w/ Stand-off Mount	Cingular	(1) 1/2" [O]	Proposed

* [I]/[O] denotes coax installed inside or outside the monopole respectively.

**The existing platform mount at this elevation will be replaced by T-Arms, therefore the Omni and Yagi will have to be mounted directly to the monopole.

2.0 Results

Tower Member Stress Levels

Elevation (ft. A.G.L.)	Monopole
0-32	1.02**
32-70	1.10**
70-110	0.87
110-150	0.59

*Maximum Stress Ratio: 1.00=Full Allowable

**Overstressed; considered acceptable.

Foundation Stress Levels

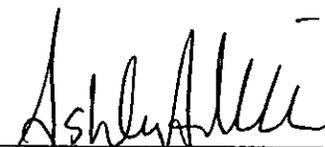
Base Reactions	Current Analysis*
Moment (kip.ft)	1643.3
Compression (kips)	16.87
Shear (kips)	17.67

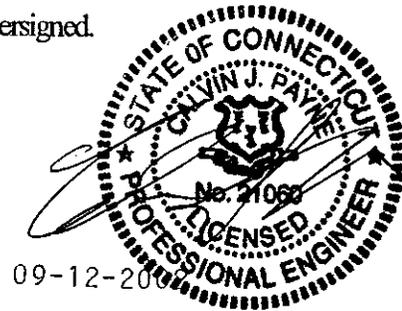
* Foundation indeterminate; further investigation required

Conclusions and Recommendations

1. The tower *is structurally adequate* to accommodate the existing and proposed antenna and transmission line loading used in this analysis.
2. The base plate *is not structurally adequate* to accommodate the existing and proposed antenna and transmission line loading used in this analysis in it's current state, but will be *structurally adequate* per modifications on drawing CT-0020-M1.
3. The foundation is indeterminate, and further investigation will be required.
4. A steel yield strength of 65 ksi was assumed for this tower. SpectraSite will perform the appropriate material testing to verify the actual steel yield strength.
5. Any future changes in loading must be reviewed by the SpectraSite Engineering Department.

Should any questions arise concerning this report please contact the undersigned.


Ashley Miller
Engineering Associate
919/466-5527



Calvin J. Payne, P.E.
Chief Engineer



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

September 17, 2002

Honorable Anthony J. DaRos
First Selectman, Town of Branford
Town Hall, 1019 Main Street
Branford, Connecticut 06405

Re: Telecommunications facility – 405 Brushy Plain Rd.

Dear Mr. DaRos:

In order to meet the requirements for improved E-911 capability and to implement a more advanced telecommunications system, Southwestern Bell Mobile Systems, LLC, a/k/a Cingular Wireless (“SBMS” or “Cingular”; formerly SNET Mobility, LLC) will be changing its antenna configuration at certain cell sites. Cingular will install panel antennas, small amplifiers and a small locator unit on the tower. 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 fully describes Cingular’s proposal. 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) 513-7730 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Peter W. van Wilgen
Senior Manager – Construction

Enclosure

CINGULAR WIRELESS
Antenna Modification

Site Address: 119 Tanner Marsh Rd, Guilford
Exempt modification approved 1/12/94

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 152 ft

Current and/or approved: 10 Allgon ALP 110-11 panels

Planned: 3 EMS MB96RR900200DPBL or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

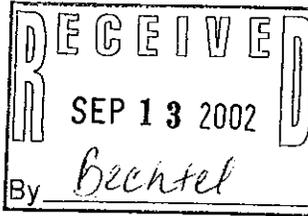
Cingular Current

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
Cingular	152	880 - 894	19	100	0.0296	0.5867	5.0

Cingular Planned

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
Cingular TDMA	152	880 - 894	16	100	0.0249	0.5867	4.2
Cingular GSM	152	880 - 894	2	296	0.0092	0.5867	1.6
Cingular GSM	152	1930 - 1935	2	427	0.0133	1.0000	1.3
Total							7.1%

Structural information: Please see attached.



#2017
CT-0022

Structural Analysis of 150' Monopole
Guilford, 119 Tanner Marsh Rd, Guilford, CT 06437

September 12, 2002

1.0 Introduction

A structural analysis was performed on the above noted tower for the addition of proposed antennas as listed below. The analysis consisted of applying the forces caused by the existing and proposed loads, and determining the resulting stresses in the structure and its foundation.

The following criteria were used in the analysis:

- ANSI/TIA/EIA-222-F 85 mph wind [New Haven County], considering two loading cases:

- Load Case 1. 100% wind pressure, without radial ice
- Load Case 2. 75% wind pressure, with 1/2" radial ice

Information, including geometry and member sizes were obtained from Smith Culum Steel Data Tower Report CT-0022, dated 7/3/01.

2.0 Antenna and Transmission Line Loading

Table 1. Existing and Proposed Antennas

Elevation (Ft. AGL)	Antenna	Carrier	Transmission Lines*	Notes
167	(3) EMS RR90-17-00DP in Canister on Pipe Mount	Omnipoint	(6) 1-5/8" [O]	Existing
157.5 157 154 152	(1) Decibel DB230 (1) 10' Omni (1) Decibel DB860 (10) Allgon ALP-11011-N w/ Platform Mount w/ Handrails	Cingular	(1) 1/2" [I] (1) 1-5/8" [I] (1) 1-5/8" [I] (10) 7/8" [I]	Remove Existing
157.5 157 154 152	(1) Decibel DB230 (1) 10' Omni (1) Decibel DB860 (3) EMS MB96RR900200DPBL (6) ADC Amplifiers w/ Platform Mount w/ Handrails	Cingular	(1) 1/2" [I] (1) 1-5/8" [I] (1) 1-5/8" [I] (6) 7/8" [I]	Proposed Reconfiguration
108.5	(1) FM Antenna	WMNR	(1) 7/8" [O]	Existing

* [I]/[O] denotes coax installed inside or outside the monopole respectively.

3.0 Results

Tower Member Stress Levels

Elevation (Fl. A.G.L.)	Monopole
0-32	1.25**
32-70	1.35**
70-110	1.34**
110-150	1.03

*Maximum Stress Ratio: 1.00=Full Allowable

**Overstressed; requires reinforcing.

Foundation Stress Levels

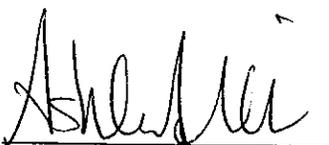
Base Reactions	Current Analysis*
Moment (kip.ft)	2,210.5
Compression (kips)	18.78
Shear (kips)	22.96

* Foundation indeterminate; further investigation required

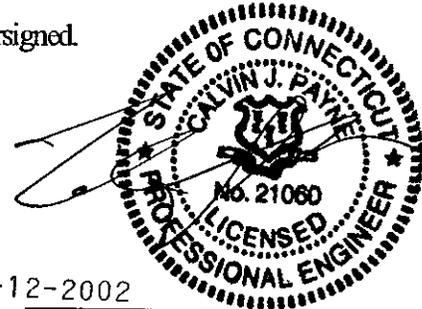
4.0 Conclusions and Recommendations

1. The tower is not structurally adequate to accommodate the existing and proposed antenna and transmission line loading used in this analysis.
2. The tower is structurally adequate to accommodate the existing and proposed antenna and transmission line loading used in this analysis with the following modifications as shown on drawing CT-0022-M1:
 - Steel yield strength of 65 ksi was assumed for this tower. SpectraSite will perform the appropriate material testing to verify the actual steel yield strength.
 - Reinforce tower with Dywidag system from 0' to 120'.
 - Foundation indeterminate; further investigation required.
3. Any future changes in loading must be reviewed by the SpectraSite Engineering Department.

Should any questions arise concerning this report please contact the undersigned.



Ashley Miller
Engineering Associate
919-466-5527

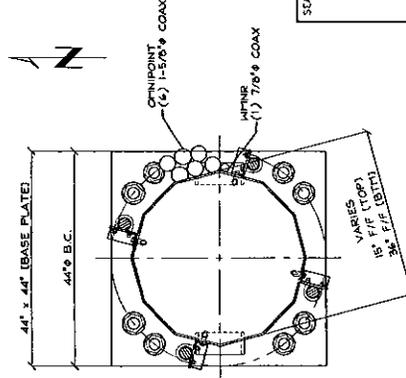
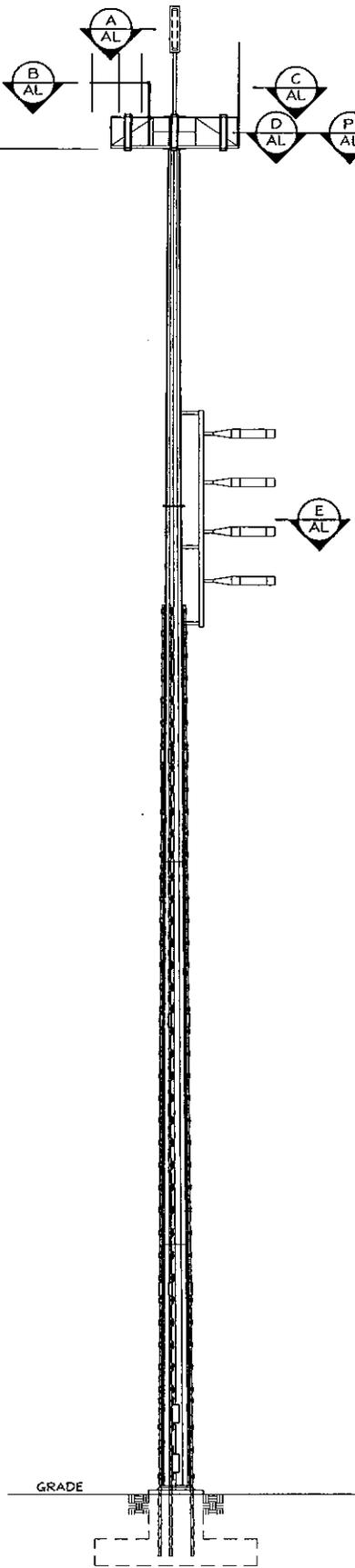
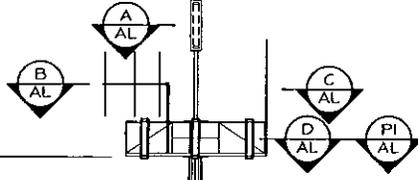


09-12-2002

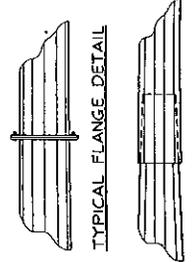
Calvin J. Payne, P.E.
Chief Engineer

GLFD-GUILFORD, CT [CT-0022]
150.0' ITT MEYER MONOPOLE

EL: 150.0'
(TOS)



PLAN VIEW



ANTENNA INFORMATION									
NO.	ELEV.	ANTENNA TYPE	ANT. DIMS. (HORIZ.)	AZIMUTH	POINT	TS-LINE I.D.	CUSTOMER	STATUS	
A	157.0'	(3) ETS 8990-17-0005P	56" x 56" x 2.75"	153°	CANISTER PIPE	(6) 1/2"	GROUNDPOINT	E	
B	157.0'	(1) DECIBEL DB280	28" x 50"	335°	PLATEFORM M/ HANDRAILS	(1) 1-5/8"	GROUNDPOINT	E	
C	154.0'	(1) DECIBEL DB260	18"	155°	PLATEFORM M/ HANDRAILS	(1) 1-5/8"	CINGULAR	E	
D	152.0'	(3) ETS 8948R-30-07-0005PBL (C) ADC	27" x 57" x 263"	200°	PLATEFORM M/ HANDRAILS	(6) 7/8"	CINGULAR	P	
E	108.5'	(1) FM ANTENNA	25"	200°	PIPE	(1) 7/8"	HFNR	E	

** (1), OR (1) DENOTES COAX INSTALLED INSIDE OR OUTSIDE MONOPOLE RESPECTIVELY.

ISSUE	DESCRIPTION	DATE	BY
4	REVISED-CINGULAR	5/27/02	JR

SpectraSite
100 REGENCY FOREST DRIVE, SUITE 400
MILWAUKEE, WI 53219
PHONE: (414) 442-0127 FAX: (414) 442-4932

TITLE: TOWER PROFILE
PROJECT: 150.0' ITT MEYER MONOPOLE
SITE: GLFD-GUILFORD, CT
DATE: 5/28/02
DRAWN: CCG
APP'D: JPB
SHEET #:
BWC #:
TP
REV: 4



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

September 17, 2002

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

Re: Telecommunications facility – 119 Tanner Marsh Rd.

Dear Mr. Balestracci:

In order to meet the requirements for improved E-911 capability and to implement a more advanced telecommunications system, Southwestern Bell Mobile Systems, LLC, a/k/a Cingular Wireless ("SBMS" or "Cingular"; formerly SNET Mobility, LLC) will be changing its antenna configuration at certain cell sites. Cingular will install panel antennas, small amplifiers and a small locator unit on the tower. 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 fully describes Cingular's proposal. 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) 513-7730 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Peter W. van Wilgen

Wilgen / SLL

Peter W. van Wilgen
Senior Manager – Construction

Enclosure

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 77 Pease Road, Woodbridge
Exempt modification approved 9/9/92

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 153 ft

Current and/or approved: 10 AllgonALP 110-11 panels

Planned: 6 CSS Duo1417-8686-4-0 panels or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

Cingular Current

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
Cingular	153	880 - 894	19	100	0.0292	0.5867	5.0

Cingular Planned

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
Cingular TDMA	153	880 - 894	16	100	0.0246	0.5867	4.2
Cingular GSM	153	880 - 894	2	296	0.0091	0.5867	1.5
Cingular GSM	153	1930 - 1935	2	427	0.0131	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

Structural Analysis of 150' ITT Meyer Monopole
 Woodbridge, 77 Pease Road, Woodbridge, CT 06525

1.0 Introduction

A structural analysis was performed on the above noted tower for the addition of proposed antennas as listed below. The analysis consisted of applying the forces caused by the existing and proposed loads, and determining the resulting stresses in the structure and its foundation.

The following criteria were used in the analysis:

1. ANSI/TIA/EIA-222-F, 85 mph wind [New Haven County], considering two loading cases:

- Load Case 1. 100% wind pressure, without radial ice
- Load Case 2. 75% wind pressure, with 1/2" radial ice

Tower information, including geometry, member sizes and foundation was obtained from Smith-Cullum Report CT-0016, dated 02/06/02. Foundation information was obtained from FDH Project 01-0303, dated 03/19/01.

2.0 Antenna and Transmission Line Loading

Table 1. Existing and Proposed Antennas

Elevation (ft. AGL)	Antenna	Carrier	Transmission Lines*	Notes
155 153	(1) 8' Omni (10) Allgon Panels on Platform Mount with Handrails	Cingular	(1) 1-5/8" (10) 7/8"	Remove Existing
155 153	(1) 8' Omni (6) CSS DUO1417 (6) ADC TMA on Platform Mount with Handrails	Cingular	(1) 1-5/8" (6) 7/8"	Proposed Replacement
125	(3) EMS RR65-18-XXDP (3) LMU's Flush Mounted	Nextwave	(1) 2-1/4"	Existing
39	(1) Nokia CS72187.01 on Standoff Mount	Cingular	(1) 1/2"	Proposed

* Coax to be installed inside monopole.

3.0 Results

Monopole Stress Levels

Elevation (ft. A.G.L.)	Combined Stress Index*
0 to 35	0.92
35 to 75	0.99
75 to 110	0.99
110 to 150	0.86

*Maximum Stress Ratio: 1.00=Full Allowable.

Foundation Stress Levels

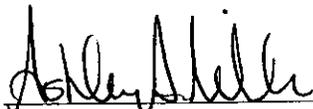
Base Reactions	Current Analysis	Result*
Moment (kip.ft)	1676.3	Satisfactory
Compression (kips)	15.5	Satisfactory
Shear (kips)	17.8	Satisfactory

*Based on foundation analysis

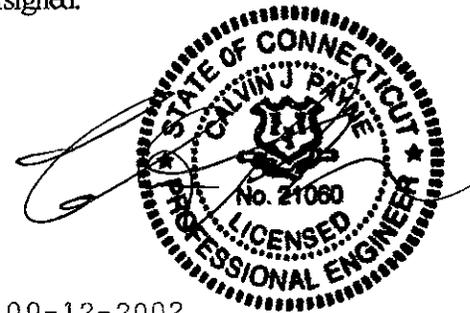
Conclusions and Recommendations

1. The tower, base plate and anchor bolts are structurally adequate to accommodate the existing and proposed antenna and transmission line loading used in this analysis.
2. The flange plate at 110' is not structurally adequate to accommodate the existing and proposed antenna and transmission line loading used in this analysis. It is structurally adequate after reinforcing the plate per the attached Drawing CT-0016-M1.
3. Any future changes in loading must be reviewed by the SpectraSite Engineering Department.

Should any questions arise concerning this report please contact the undersigned.



Ashley Miller
Engineering Associate
919-466-5527



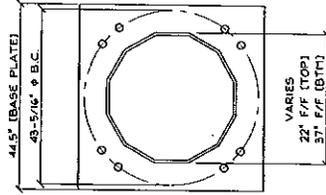
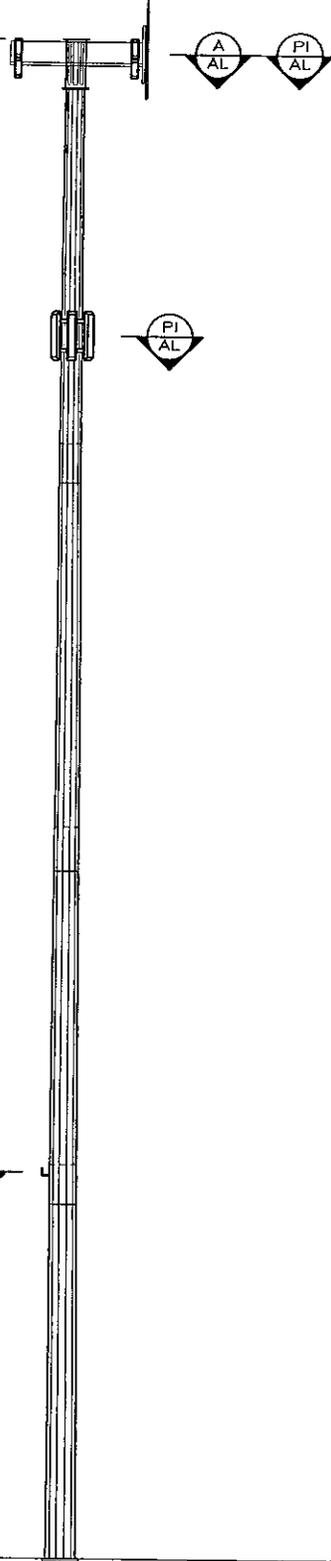
09-12-2002

Calvin J Payne, P.E.
Chief Engineer

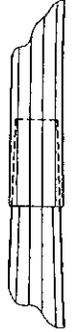
WOODBIDGE, CT [CT-0016]
155' MONOPOLE

EL: 155'
(TOS)

GRADE



PLAN VIEW



TYPICAL SPLICE DETAIL

ANTENNA INFORMATION			
NO.	LEVEL	ANTENNA TYPE	STATUS
1	155'	(1) B. OPEN	E
2	A	(2) 65' 65' 65' 65' 65'	SINGULAR
3	B	(3) 65' 65' 65' 65' 65'	SINGULAR
4	P2	(1) NOKIA GS2807-D	RETRIEVE
		(1) SECTOR	P

* COAX INSTALLED INSIDE MONOPOLE

SEAL:

5	REVISED CIRCULAR COLLO	5/12/02	JR
ISSUE	DESCRIPTION	DATE	BY
	100 RESERVACY FOREST DRIVE, SUITE 400		
	PO BOX 184-00-012 / FAX (949) 462-8972		
SpectraSite			
TITLE: TOWER PROFILE			
PROJECT: 155' MONOPOLE			
SITE: WOODBRIDGE, CT			
DATE:	02/04/02	APP'D:	DKP
OWN:	KPM	DWG. #:	CT-0016 TP-2
		REV:	5



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

September 17, 2002

Hon. Amey W. Marrella
1st Selectman, Town of Woodbridge
Town Hall, 11 Meetinghouse La.
Woodbridge, CT 06525

Re: Telecommunications facility – 77 Pease Road

Dear Ms. Marrella:

In order to meet the requirements for improved E-911 capability and to implement a more advanced telecommunications system, Southwestern Bell Mobile Systems, LLC, a/k/a Cingular Wireless (“SBMS” or “Cingular”; formerly SNET Mobility, LLC) will be changing its antenna configuration at certain cell sites. Cingular will install panel antennas, small amplifiers and a small locator unit on the tower. 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 fully describes Cingular’s proposal. 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) 513-7730 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Peter W. van Wilgen
Senior Manager – Construction

Enclosure

**CINGULAR WIRELESS
Antenna Modification**

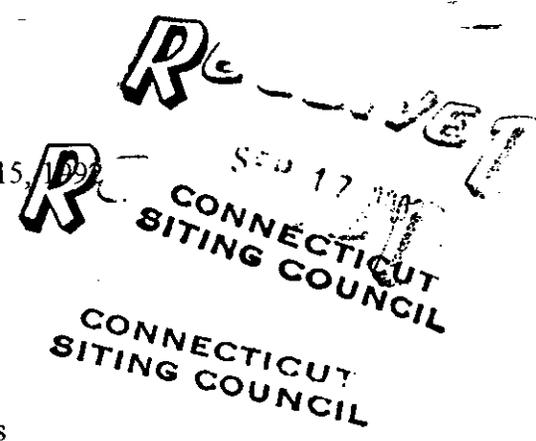
Site Address: 260 Beckley Rd, Berlin
Exempt modification approved July 15, 1999

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 152 ft

Current and/or approved: 10 Allgon ALP 110-11 panels

Planned: 9 CSS DUO1417-8686-4-0 panels or comparable
9 tower mount amplifier



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 5.0% 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 7.1%, or an additional 2.1% of the standard.

Cingular Current

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
Cingular	152	880 - 894	19	100	0.0296	0.5867	5.0

Cingular Planned

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
Cingular TDMA	152	880 - 894	16	100	0.0249	0.5867	4.2
Cingular GSM	152	880 - 894	2	296	0.0092	0.5867	1.6
Cingular GSM	152	1930 - 1935	2	427	0.0133	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 405 Brushy Plain Road, Branford
Exempt modification approved 9/10/92

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SEP 17 2002

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 153 ft

**CONNECTICUT
SITING COUNCIL**

Current and/or approved: 9 Allgon ALP 110-11 panels

Planned: 6 CSS DUO1417-8686-4-0 panels or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

Cingular Current

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
Cingular	153	880 - 894	19	100	0.0292	0.5867	5.0

Cingular Planned

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
Cingular TDMA	153	880 - 894	16	100	0.0246	0.5867	4.2
Cingular GSM	153	880 - 894	2	296	0.0091	0.5867	1.5
Cingular GSM	153	1930 - 1935	2	427	0.0131	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 119 Tanner Marsh Rd, Guilford
Exempt modification approved 1/12/94

RECEIVED
SEP 17 2002
CONNECTICUT
SITING COUNCIL

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line - 152 ft

Current and/or approved: 10 Allgon ALP 110-11 panels

Planned: 3 EMS MB96RR900200DPBL or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

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Cingular Planned

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Cingular TDMA	152	880 - 894	16	100	0.0249	0.5867	4.2
Cingular GSM	152	880 - 894	2	296	0.0092	0.5867	1.6
Cingular GSM	152	1930 - 1935	2	427	0.0133	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

**CINGULAR WIRELESS
Antenna Modification**

RECEIVED

SEP 17 2002

**CONNECTICUT
SITING COUNCIL**

Site Address: 77 Pease Road, Woodbridge
Exempt modification approved 9/9/92

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 153 ft

Current and/or approved: 10 AllgonALP 110-11 panels

Planned: 6 CSS Duo1417-8686-4-0 panels or comparable
6 tower mount amplifiers

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 5.0% 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 7.1%, or an additional 2.1% of the standard.

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Cingular Planned

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Total							7.1%

Structural information: Please see attached.

**CINGULAR WIRELESS
Antenna Modification**

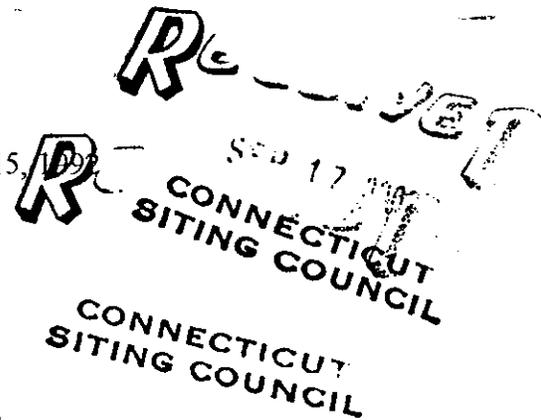
Site Address: 260 Beckley Rd, Berlin
Exempt modification approved July 15, 1997

Tower Owner/Manager: SpectraSite

Antenna configuration Antenna center line – 152 ft

Current and/or approved: 10 Allgon ALP 110-11 panels

Planned: 9 CSS DUO1417-8686-4-0 panels or comparable
9 tower mount amplifier



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 5.0% 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 7.1%, or an additional 2.1% of the standard.

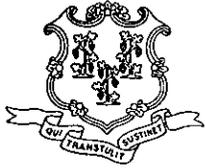
Cingular Current

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
Cingular	152	880 - 894	19	100	0.0296	0.5867	5.0

Cingular Planned

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
Cingular TDMA	152	880 - 894	16	100	0.0249	0.5867	4.2
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Cingular GSM	152	1930 - 1935	2	427	0.0133	1.0000	1.3
Total							7.1%

Structural information: Please see attached.



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@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

September 17, 2002

Honorable Paul C. Argazzi

Mayor

Town of Berlin

240 Kensington Road

Kensington, CT 06037

RE: **EM-CING-007-014-060-167-020917** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Berlin, Branford, Guilford, and Woodbridge, Connecticut.

Dear Ms. Argazzi:

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 tentatively scheduled for September 25, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/slm

Enclosure: Notice of Intent

c: Brian J. Miller, Town Planner, Town of Berlin