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-013-041-054-060-076-093-108-020913** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Bozrah, East Haddam, Glastonbury, Guilford, Madison, New Haven, and Oxford, 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.

The proposed modifications are to be implemented as specified here and in your notice dated September 13, 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.

I:\siting\em\cing\multiple\020913\dc092502.doc

List Attachment.

c: Honorable Keith J. Robbins, First Selectman, Town of Bozrah
Seymour Adelman, Planning and Zoning Chairman, Town of Bozrah
Honorable Susan D. Merrow, First Selectman, Town of East Haddam
James Ventres, Land-Use Administrator, Town of East Haddam
Richard J. Johnson, Town Manager, Town of Glastonbury
Kenith Leslie, Town Planner, Town of Glastonbury
Honorable Carl A. Balestracci, Jr., First Selectman, Town of Guilford
M. William McAvoy, Jr., Zoning Enforcement Officer
Honorable Thomas S. Scarpati, First Selectman, Town of Madison
Marilyn M. Ozols, Planning & Zoning Administrator, Town of Madison
Honorable John Destefano, Jr., Mayor, City of New Haven
Frank Gargiulo, Zoning Administrator, City of New Haven
Honorable Kathy P. Johnson, First Selectman, Town of Oxford
Dave Robinson, Planning & Zoning Chairman, Town of Oxford

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. Keith J. Robbins, First Selectman
Town of Bozrah
Town Hall, 1 River Rd.
Bozrah, Connecticut 06334-0158

Re: Telecommunications facility – 3 Polly Lane

Dear Mr. Robbins:

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

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

EM-CING-013-041-054-060-076-093-108-020913

September 13, 2002

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

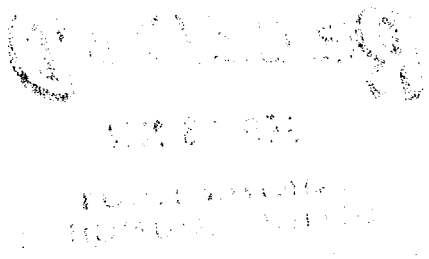
Re: Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Bozrah, East Haddam, Glastonbury, Guilford, Madison, New Haven, and Oxford.

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.

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. 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,

Peter W. van Wilgen
Senior Manager - Construction

Enclosures

CINGULAR WIRELESS
Antenna Modification

Site Address: 3 Polly Lane, Bozrah
TS-SCLP-013-990317; approved 12/8/99

Tower Owner/Manager: Alice Maynard & CDT

Antenna configuration Antenna Centerline – 192 ft

Current and/or approved: Three EMS RS90-10 panels
4" diameter pipe extension

Planned: Three EMS MB96RR900200 panels or comparable
6 tower mount amplifiers
Same pipe extension as before

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 3.2 % 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 4.5 %, or an additional 1.3 % of the standard.

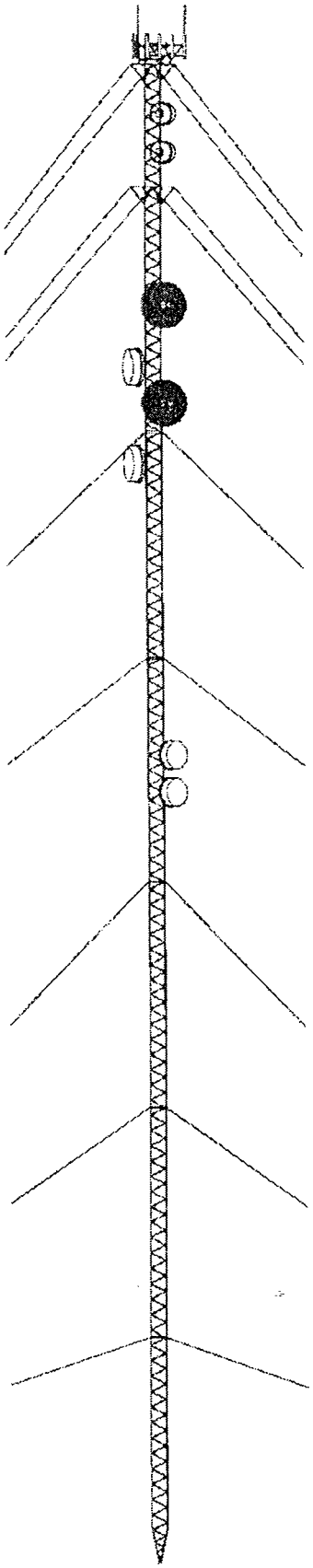
Cingular Current

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
SBMS	192	880 - 894	19	100	0.0185	0.5867	3.2

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
SBMS TDMA	192	880 - 894	16	100	0.0156	0.5867	2.7
SBMS GSM	192	880 - 894	2	296	0.0058	0.5867	1.0
SBMS GSM	192	1930 - 1935	2	427	0.0083	1.0000	0.8
Total							**4.5%**

Structural information: Please see attached.



o2wireless Solutions

GUYED TOWER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

August 20, 2002
Revision 2

SITE:
Bozrah, 2029
New Haven County, CT
180' Guyed Tower
Project Designer: Hachem k. Domloj
o2wireless Job No. 103-3637-8

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 180' guyed tower at the Bozrah site in New Haven County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
190'	**PROPOSED**	**3- MB96RR900200_BL***	**9- 1 ¼" COAX**
172'	EXISTING	9- DB844H90	9- 1 ¼" COAX
164'	EXISTING	6- ALLGON 7250	6- 1 5/8" COAX
150'	EXISTING	6- DB980H90-KM	6- 1 5/8" COAX
135'	EXISTING	12- DB844H90	12- 1 ¼" COAX

* With 6 TMA'S

AVAILABLE DOCUMENTS

All tower data information, antenna types and locations were obtained from Fred A. Nudd Corporation structural analysis dated October, 1999. o2wireless Solutions can not be held responsible for it's accuracy.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

CONCLUSIONS AND RECOMMENDATIONS:

The Bozrah tower will support the proposed loading and meet the requirements of the EIA Standard without any modifications required. The analysis is reflected in run GM3637-8 and shown in the drawing pages.

Information on the foundations and the geotechnical information were not provided. Thus, precluding any comment on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

Hachem K. Domloj, EIT
Project Designer

STATE OF CONNECTICUT
V. G. DUVALL, JR.
No. 22527
LICENSED
PROFESSIONAL ENGINEER

VG Duvall, Jr., PE
Connecticut Professional Engineer

CINGULAR WIRELESS
Antenna Modification

Site Address: 126 Parker Road, East Haddam
Co-location approved July 6, 1989

Tower Owner/Manager: Century Cable Management Corp.

Antenna configuration Antenna center line – 188 (new)

Current and/or approved: 7 whip antennas at c.l. 185

Planned: 9 CSS DUO1417-8686-4-0 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 3.4% 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 4.7%, or an additional 1.3% of the standard.

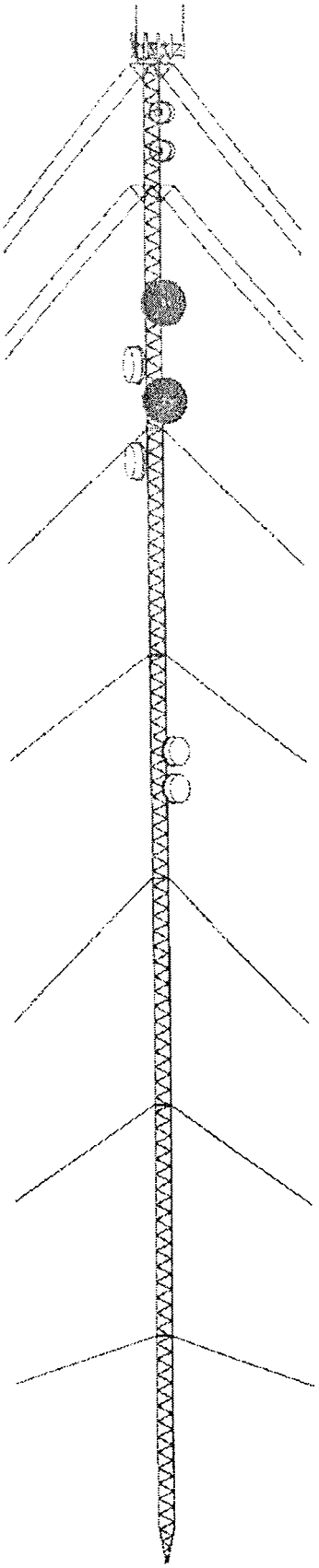
Cingular Current

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
SNET	185	880 - 894	19	100	0.0200	0.5867	3.4

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
SNET TDMA	188	880 - 894	16	100	0.0163	0.5867	2.8
SNET GSM	188	880 - 894	2	296	0.0060	0.5867	1.0
SNET GSM	188	1930 - 1935	2	427	0.0087	1.0000	0.9
Total							4.7%

Structural information: Please see attached.



o2wireless Solutions

GUYED TOWER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

September 6, 2002

SITE:
East Haddam 2053
Middlesex County, CT
300' Guyed Tower
Project Designer: Hachem k. Domloj
o2wireless Job No. 103-3637-07

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 300' guyed tower at the East Haddam site in Middlesex County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
297'	EXISTING	1- 12' YAGI	1- 3/8" COAX
294'	EXISTING	1- 8' YAGI	1- 5/8" COAX
293'	EXISTING	1- LINSAY 4- 8' ELEMENT	NONE
288'	EXISTING	1- 6' YAGI	1- 3/8" COAX
288'	EXISTING	1- LINSAY 4- 8' ELEMENT	NONE
262'	EXISTING	1- 6' YAGI	1- 3/8" COAX
259'	EXISTING	2- 10' YAGI	2- 3/8" COAX
256'	EXISTING	1- 10' YAGI	1- 3/8" COAX
251'	EXISTING	2- 10' YAGI	2- 3/8" COAX
245'	EXISTING	2- 10' YAGI	2- 3/8" COAX
238'	EXISTING	2- 10' YAGI	2- 3/8" COAX
225'	EXISTING	2- 5' WHIP	1- 3/8" COAX
214'	EXISTING	1- 5' WHIP	1- 3/8" COAX
208'	EXISTING	1- 5' WHIP	SHARED W/ 214'
196'	EXISTING	2- 12' WHIP	2- 1 5/8" COAX
196'	EXISTING	1- 8' WHIP	1- ½" COAX
194'	EXISTING	1- 8' WHIP	1- 1 ¼" COAX
191'	EXISTING	1- 10' YAGI	1- 3/8" COAX
188'	**PROPOSED**	**9- DUO1417-8686-4-0 ***	**9- 7/8" COAX**
181'	EXISTING	2- 4' 6" YAGI	2- 3/8" COAX
171'	EXISTING	1- 4' 6" YAGI	1- 3/8" COAX
161'	EXISTING	1- 4' 6" YAGI	1- 3/8" COAX
141'	EXISTING	1- 4' 6" YAGI	1- 3/8" COAX
129'	EXISTING	1- 4' 6" YAGI	1- 3/8" COAX

* 6 DDD TMA 1900 to accompany the antennas at level 188'.

AVAILABLE DOCUMENTS

- All tower data information, antenna types and locations were obtained from tower mapping.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

CONCLUSIONS AND RECOMMENDATIONS:

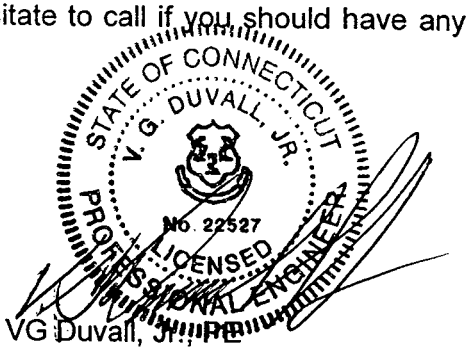
The East Haddam tower will support the proposed loading and meet the requirements of the EIA Standard without any modifications required. The analysis is reflected in run GM3637-07 and shown in the drawing pages.

Information on the foundations and geotechnical report were not provided, thus, precluding any comments on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

Hachem K. Domloj, EIT
Project Designer



VG Duvall, Jr., PE
Connecticut Professional 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 Susan D. Merrow
First Selectman, Town of East Haddam
Town Office Bldg., 7 Main St.
East Haddam, CT 06423

Re: Telecommunications facility – 126 Parker Road

Dear Ms. Merrow:

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: 2108 Main Street, Glastonbury
Notice of Intent to Modify approved August 20, 1997

Tower Owner/Manager: Town of Glastonbury

Antenna configuration Antenna center line – 166.5

Current and/or approved: 9 ALP 110-11 panel antennas

Planned: 9 CSS DUO1417-8686-4-0 panels or comparable
6 tower mount amplifiers
3 diplexers

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 4.2% 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 6.0%, or an additional 1.8% 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
SNET	166.5	880 - 894	19	100	0.0246	0.5867	4.2

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
SNET TDMA	166.5	880 - 894	16	100	0.0208	0.5867	3.5
SNET GSM	166.5	880 - 894	2	296	0.0077	0.5867	1.3
SNET GSM	166.5	1930 - 1935	2	427	0.0111	1.0000	1.1
Total							**6.0%**

Structural information: Please see attached.

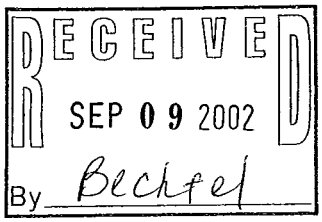
DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 170' EXISTING SELF SUPPORTING LATTICE TOWER FOR REPLACEMENT ANTENNA ARRANGEMENT

Glastonbury Police Department
2108 Main Street
Glastonbury, Connecticut
Site No.: 1083

prepared for

cingular WIRELESS

Cingular Wireless
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067



prepared by

URS

URS CORPORATION
795 BROOK STREET, BUILDING 5
ROCKY HILL, CT 06067
TEL. 860-529-8882

36911654.00000

September 6, 2002

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the reinforced 170' lattice tower located on 2108 Main Street in Glastonbury, Connecticut. The analysis was conducted in accordance with the TIA/EIA-222-E standard for wind velocity of 80 mph and 80 mph concurrent with ½" ice design wind loads. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Analysis Methodology and Loading Condition Section of this report. The proposed Cingular Wireless modification is to replace the existing Cingular Wireless antennas with the antennas listed below:

(9) DUO1417-8686 antennas and (6) TMAs and (3) Diplexers with (3) T-Frame mounts and (9) 1 1/4" coax cables	Cingular	@ 166'-6" elevation

The results of the analysis indicate the structure to be in compliance with the proposed loading condition for the tower. The tower is considered feasible with the TIA/EIA-222-E wind load classification specified above. No further analysis was conducted on the tower foundation since the forces calculated were below the original design.

This analysis is based on:

1) The tower structure's theoretical capacity not including any assessment of the condition of the tower.

2) Tower and Foundation documents prepared by Rohn Industries engineering file no. 34586PH dated July 23, 1997 and September 18, 1997.

3) Antenna inventory as specified in section 2 and 6 of this report.

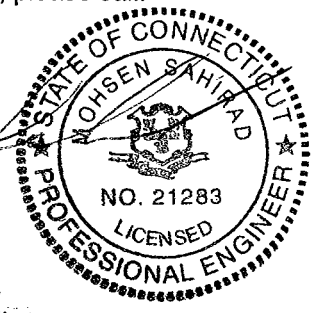
4) TIA\EIA-222-E wind load classification.

5) Antenna inventory prepared by Construction Service of Branford Communication (CSB) dated August 12, 2002.

This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables. The user of this report shall field verify the assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

If you should have any questions, please call.

Sincerely,
URS Corporation AES



Mohsen Sahirad, P.E.
Senior Structural Engineer

MS/rmn

cc: Richard R. Johanson – Bechtel
Doug Roberts – URS
N.A. – URS
A.A. – URS
CF/Book

2. INTRODUCTION

The subject tower is located on 2108 Main Street in Glastonbury, Connecticut. The structure is a self supporting 170' steel triangular tapered lattice tower manufactured by Rohn Industries.

The tower is constructed of pipe legs, diagonal angle braces and horizontal angle braces. The tower sections are all bolted together. The width of the face is 4'-6 3/4" at the top and 20'-10 3/8" at the bottom. The tower geometry and structural member sizes were taken from Rohn Industries engineering file no. 34586PH dated July 23, 1997.

The existing structure supports several communication antennas. The antenna and mount configuration as specified below:

Antenna model	Leg	Mount	Associated cable	Elevation (ft)
18' whip	Southeast	4' side arm	1/2" coax	50
PD220	Southwest	4' side arm	1/2" coax	41
PD455	Northeast	4' side arm	1/2" coax	54
1' Antenna	Southwest	4' side arm	1/2" coax	54
ASP973	Southeast	4' side arm	7/8" coax	57
PD220	Northeast	4' side arm	7/8" coax	64
11' Folded dipole	Northeast	Clamped to leg	1/2" coax	69
DB636	Southwest	4' side arm	7/8" coax	79.15
ASP 973	Southeast	4' side arm	7/8" coax	94
	Southeast	4' side arm		90
11' Folded dipole	Southeast	Clamped to leg	1/2" coax	102
DB536	Northeast	4' side arm	7/8" coax	113.655
11' Folded dipole	Northeast	Clamped to leg	1/2" coax	109
PD220	Southwest	4' side arm	7/8" coax	111
	Southwest	4' side arm		120
ASP 923	Southeast	4' side arm	1 1/4" coax	139
11' Folded dipole	Southwest	4' side arm	1/2" coax	133
PD455	Northeast	4' side arm	7/8" coax	144
	Southeast	4' side arm		140
MFF-900B	Southwest	4' side arm	1 1/4" coax	153
MFF-900B	Southeast	4' side arm	1 1/4" coax	155
MFF-900B	Northeast	4' side arm	1 1/4" coax	155.5
MFF-900B	Southwest	4' side arm	1 1/4" coax	156
Dish P-21A48GF-U	Northeast	Mounted to leg	1 5/8" coax	159
Proposed Cingular (9) DUO1417-8686 (6) TMA (3) Duplexers	**All three**	**(3) 12' T-Frame**	**(9) 1 1/4" coax**	**166.5**
12' Whip	Northeast	Mounted to T-Frame	7/8" coax	175
12' Whip	Southeast	Mounted to T-Frame	7/8" coax	175
PD455	Southwest	Mounted to T-Frame	1/2" coax	175

The structural analysis of this communications tower was performed by URS Corporation, AES (URS) for Cingular Wireless. The purpose of this analysis was to analyze the existing tower for its existing and proposed antenna loads. This analysis was conducted to evaluate twist (rotation), sway

(deflection) and stress on the tower, and the effect of forces to the foundation of the tower resulting from existing and proposed antenna arrangements.

3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

Methodology:

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

The analysis was conducted using ERI Tower 2.0. The load condition was evaluated as shown below which was compared to allowable stresses according to AISC and TIA/EIA. The load combination was investigated in ERI Tower 2.0 to determine the stress, sway and rotation.

Load Condition 1 = 80 mph Wind Load + Tower Dead Load
Load Condition 2 = 70 mph Wind Load (with ½" radial ice) + Tower Dead Load

The TIA/EIA standard permits one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For purposes of this analysis, allowable stresses of tower members were increased by one-third in computing the load capacity; in addition, the appropriate "k" factors were assigned to each member.

4. FINDINGS AND EVALUATION

The combined axial and bending stresses on the tower structure were evaluated to compare with the allowable stress in accordance with AISC. The analysis indicates that the tower legs, diagonal members, horizontal members and foundation have sufficient capacity to carry the loads applied.

The tower base reactions are as follows:

Original Tower Reactions	
Compression (kips)	206.4
Uplift (kips)	172.4
Total Shear (kips)	33.6
Moment (kips-ft)	3276

Proposed Tower Reactions	
Compression (kips)	147
Uplift (kips)	120
Total Shear (kips)	26
Moment (kips-ft)	2468

For detailed proposed tower reactions, see drawing no. E-1 in section 6 of this report.

5. CONCLUSIONS

The results of the analysis indicate the reinforced structure to be in compliance with the loading conditions and the materials and member sizes for the tower. The reinforced tower is considered feasible with the Connecticut State Police requirements and the TIA/EIA-222-E wind load classification specified above and all the existing and proposed antenna loading. The user of this report shall field

verify the assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

Limitations/Assumptions:

This report is based on the following:

A. Tower is properly installed and maintained.

B. All members were as specified in the original Construction Documents and are in good condition.

C. All required members are in place.

D. All bolts are in place and are properly tightened.

E. Tower is in plumb condition.

F. All members are galvanized.

G. All tower members were properly designed, detailed, fabricated, installed, and have been properly maintained since erection.

URS is not responsible for any modifications completed prior to or hereafter in which URS is not or was not directly involved. Modifications include but are not limited to:

A. Replacing/Removing antennas
B. Adding antennas and amplifiers

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

Ongoing and Periodic Inspection and Maintenance by the Owner:

1. After the Contractor has successfully completed the installation and the work has been accepted, the owner will be responsible for the ongoing and periodic inspection and maintenance of the tower and reinforcing system.

2. The Owner shall refer to TIA/EIA-222-E for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the Owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system is performed at least yearly and more frequently as conditions warrant. According to TIA/EIA-222-E: It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

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

Mr. Richard J. Johnson
Town Manager, Town of Glastonbury
Town Hall, 2155 Main Street
Glastonbury, Connecticut 06033

Re: Telecommunications facility – 2108 Main Street

Dear Mr. Johnson:

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: 500 Cooks Lane, Guilford
Notice of Intent to Modify approved July 15, 1992

Tower Owner/Manager: Menuncketuck Communications Corporation

Antenna configuration Antenna center line – 152.5 ft

Current and/or approved: 9 ALP 110-11

Planned: 9 CSS DUO1417-8686-4-0 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.

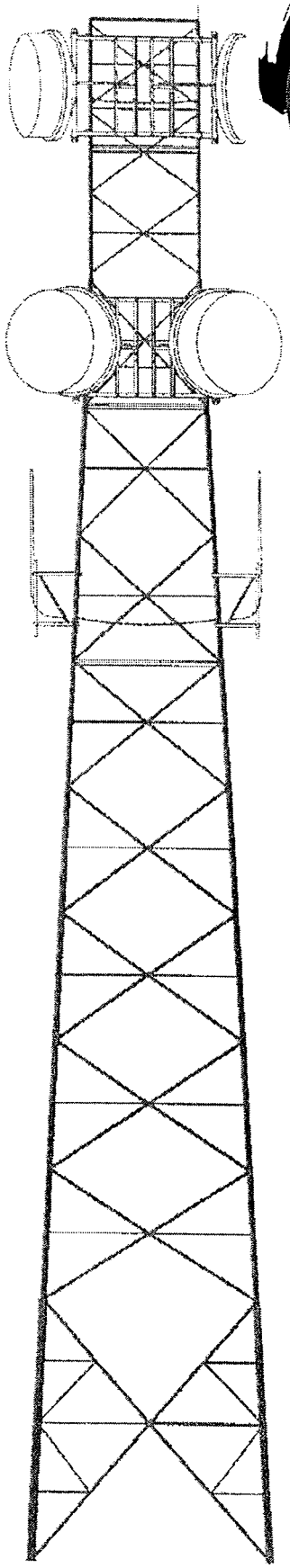
Cingular Current

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
SNET	152.5	880 - 894	19	100	0.0294	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
SNET TDMA	152.5	880 - 894	16	100	0.0247	0.5867	4.2
SNET GSM	152.5	880 - 894	2	296	0.0092	0.5867	1.6
SNET GSM	152.5	1930 - 1935	2	427	0.0132	1.0000	1.3
Total							**7.1%**

Structural information: Please see attached.



o2 Wireless Solutions, Inc.

SELF SUPPORTER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

August 27, 2002

SITE:
Guilford North 2018
New Haven County, CT
180' Rohn SS Tower
Project Designer: Hachem K. Domloj
o2wireless Solutions Job No. 103-3637-03

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 180' Rohn self supported tower at the Guilford North site in New Haven County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
180'	EXISTING	1- 6' WHIP	1- 7/8" COAX
180'	EXISTING	4- 8' WHIPS	4- 7/8" COAX
180'	EXISTING	1- 4' WHIP	1- 7/8" COAX
180'	EXISTING	1- ANTEL BCD87077	2- 7/8" COAX
180'	EXISTING	1- ANTEL BCD87077	1- 1 ¼" COAX
180'	EXISTING	1- 15' WHIP	1- 7/8" COAX
178'	EXISTING	1- SCALA 2 BAY FM	1- 7/8" COAX
175'	EXISTING	1- 8' SOLID MW DISH/RAD	1- EW52
167'	EXISTING	1- 6' HP MW DISH	1- EW52
163'	EXISTING	1- DB809DK-Y	2- 7/8" COAX
158'	**PROPOSED**	**9- DUO1417-8686-4-0***	**9- 1 ¼" COAX**
140'	EXISTING	1- 10' WHIP	1- 7/8" COAX
139'	EXISTING	1- 20' WHIP	1- 7/8" COAX
137'	EXISTING	1- 10' WHIP	1- 7/8" COAX
135'	EXISTING	1- 6' HP MW DISH	1- EW90
132'	EXISTING	1- 8' GRID MW DISH	1- 7/8" COAX
127'	EXISTING	1- 6' SOLID MW DISH/RAD	1- EW65
126'	EXISTING	1- 6' SOLID MW DISH/RAD	1- EW65
117'	EXISTING	1- 4' SOLID MW DISH/RAD	1- 7/8" COAX
116'	EXISTING	1- 8' HP MW DISH	1- EW52
115'	EXISTING	1- 15' WHIP	1- 1 ¼" COAX
111'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- 7/8" COAX
110'	EXISTING	2- SCALA OTG9-8069	2- 1 5/8" COAX
110'	EXISTING	2- DB809T3	2- 1 5/8" COAX
105'	EXISTING	2- 2 ELEMENT YAGI	1- 1 5/8" COAX
104'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- 7/8" COAX
100'	EXISTING	1- SCALA 65151-002	1- 1 5/8" COAX
96'	EXISTING	1- SCALA 65151-002	1- 1 5/8" COAX

92'	EXISTING	1- 15' DIPOLE	1- 1 5/8" COAX
89'	EXISTING	1- 8' WHIP	1- 7/8" COAX
86'	EXISTING	1- ANTEL BCD87077	1- 7/8" COAX
82'	EXISTING	2- 3' YAGI	2- ½" COAX
73'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- ½" COAX
70'	EXISTING	1- 15' WHIP	1- 7/8" COAX
70'	EXISTING	2- 3' YAGI	1- 7/8" COAX
53'	EXISTING	1- MAXRAD MFB4400	1- 7/8" COAX

* 6 DDD TMA 1900 to accompany the antennas at level 158'.

AVAILABLE DOCUMENTS

- All tower data information, antenna types and locations were obtained from tower mapping.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

CONCLUSIONS AND RECOMMENDATIONS:

The Guilford North tower will support the proposed loading and meet the requirements of the EIA Standard without any further modifications required. The analysis is reflected in run M3637-03 and shown in the drawing.

Information on the foundations and geotechnical report was not provided, thus, precluding any comments on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

Hachem K. Domloj, EIT
Project Designer

STATE OF CONNECTICUT
V G DUVALL JR.
No. 22527
LICENSED
PROFESSIONAL ENGINEER

VG Duvall, Jr., PE
Connecticut Professional 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 Carl A. Balestracci, Jr.
First Selectman
Town Hall
31 Park Street
Guilford, Connecticut 06437-2629

Re: Telecommunications facility – Cooks Lane

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
Senior Manager – Construction

Enclosure

CINGULAR WIRELESS
Antenna Modification

Site Address: 864 Opening Hill Road, Madison
EM-SCLP-076-990708

Tower Owner/Manager: North Madison Volunteer Fire Department

Antenna configuration Antenna center line - 139

Current and/or approved: 12 Allgon 7120.16 panels

Planned: 9 CSS DUO1417-8686-4-0 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 6.0% 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 8.5%, or an additional 2.5% of the standard.

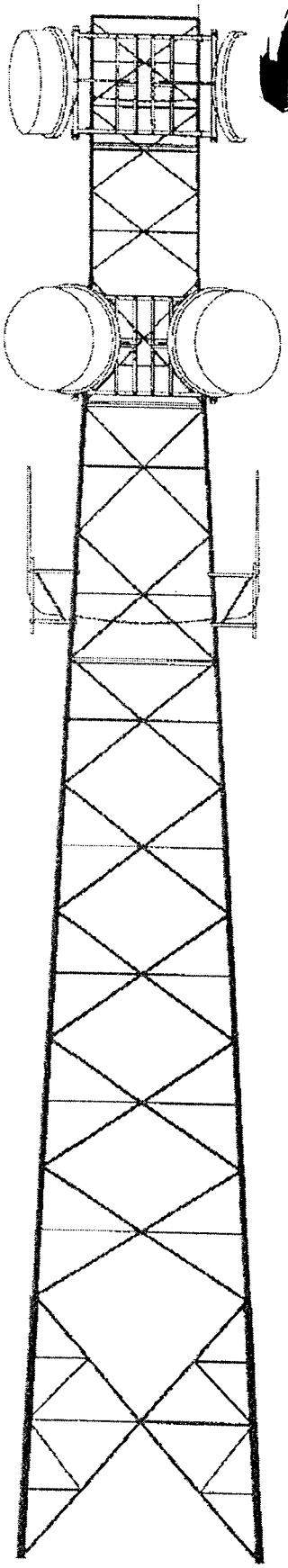
Cingular Current

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
SNET	139	880 - 894	19	100	0.0354	0.5867	6.0

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
SNET TDMA	139	880 - 894	16	100	0.0298	0.5867	5.1
SNET GSM	139	880 - 894	2	296	0.0110	0.5867	1.9
SNET GSM	139	1930 - 1935	2	427	0.0159	1.0000	1.6
Total							**8.5%**

Structural information: Please see attached.



o2 Wireless Solutions, Inc.

SELF SUPPORTER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

August 29, 2002

SITE:
Madison North 2033
New Haven County, CT
180' Rohn SS Tower
Project Designer: Hachem K. Domloj
o2wireless Solutions Job No. 103-3637-04

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 180' Rohn self supported tower at the Madison North site in New Haven County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
178'	EXISTING	1- 8' WHIP	1- ½" COAX
178'	EXISTING	1- 10' DIPOLE	1- 7/8" COAX
175'	EXISTING	1- 6" x 3" GPS	1- ½" COAX
173'	EXISTING	12- DB844H90E-XY	12- 1 5/8" COAX
163'	EXISTING	12- DB844H90E-XY	12- 1 ¼" COAX
152'	EXISTING	6- DB980H90E-M	6- 1 5/8" COAX
139'	**PROPOSED**	**9- DUO1417-8686-4-0***	**9- 1 ¼" COAX**
134'	EXISTING	3- EMS RV65-18	6- 1 5/8" COAX
115'	EXISTING	8- HIRSOHMANN E-5960	8- 2 3/8" CONDUIT
109'	EXISTING	4- HIRSOHMANN E-5960	4- 2 3/8" CONDUIT
58'	EXISTING	1- 6" x 3" GPS	1- ½" COAX

* 6 DDD TMA 1900 to accompany the antennas at level 139'.

AVAILABLE DOCUMENTS

- All tower data information, antenna types and locations were obtained from tower mapping.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

CONCLUSIONS AND RECOMMENDATIONS:

The Madison North tower will support the proposed loading and meet the requirements of the EIA Standard without any further modifications required. The analysis is reflected in run M3637-04 and shown in the drawing.

Information on the foundations and geotechnical report was not provided, thus, precluding any comments on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

Hachem K. Domloj, EIT
Project Designer

STATE OF CONNECTICUT
V. G. DUVALL, JR.
No. 22527
LICENSED
PROFESSIONAL ENGINEER

VG Duvall, Jr., PE
Connecticut Professional 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 Thomas S. Scarpati, First Selectman
Madison Town Campus
8 Campus Drive
Madison, Connecticut 06443

Re: Telecommunications facility – Opening Hill Road

Dear Mr. Scarpati:

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: 142 Baldwin Drive (West Rock Ridge), New Haven
EM-SCLP-093-990727 approved 9/16/99

Tower Owner/Manager: CT State Police

Antenna configuration Antenna center line – 77 ft

Current and/or approved: 2 EMS FS65-11 panel antennas

Planned: 2 EMS MB100RR650200DPAL panels or compar.
2 tower mount amplifiers
2 duplexers

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 18.2% 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 27.8%, or an additional 9.6% 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
SNET	80	880 - 894	19	100	0.1067	0.5867	18.2

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
SNET TDMA	77	880 - 894	16	100	0.0970	0.5867	16.5
SNET GSM	77	880 - 894	2	296	0.0359	0.5867	6.1
SNET GSM	77	1930 - 1935	2	427	0.0518	1.0000	5.2
Total							**27.8%**

Structural information: Please see attached.

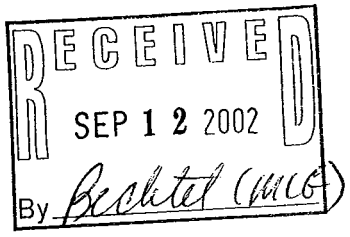
DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 120' EXISTING SELF SUPPORTING LATTICE TOWER FOR REPLACEMENT ANTENNA ARRANGEMENT

State Police Tower
142 Baldwin Drive
New Haven, Connecticut
Site No.: 2011

prepared for

cingular WIRELESS

Cingular Wireless
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067



prepared by

URS

URS CORPORATION
795 BROOK STREET, BUILDING 5
ROCKY HILL, CT 06067
TEL. 860-529-8882

36912052.00000

September 11, 2002

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the 120' lattice tower located on 142 Baldwin Drive in New, Haven. The analysis was conducted in accordance with the Connecticut State Police requirements and theTIA/EIA-222-E standard for wind velocity of 90 mph concurrent with ½" ice design wind load. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Analysis Methodology and Loading Condition Section of this report. The proposed Cingular Wireless modification is to add the antennas listed below:

(2) MB100RR650200DPAL antennas with (2) Duplexer and (2) TMA on existing mounts with existing (6) 1 1/4" coax cables	Cingular	@ 77' elevation

The results of the analysis indicate that the tower structure is in compliance with the proposed loading conditions. The tower and its foundation are considered feasible with the Connecticut State Police requirements and the TIA/EIA-222-E wind load classification specified above and all the existing and proposed antenna loading.

This analysis is based on:

1) The tower structure's theoretical capacity not including any assessment of the condition of the tower.

2) The tower report prepared by Stainless, Inc. project no. 358810 dated December 14, 1993 and its foundation dated November 23, 1993.

3) Soils report prepared by Dr. Clarence Welti, P.E., P.C. dated December 29, 1993.

4) Antenna inventory as specified in section 2 and 6 of this report and prepared by Construction Service Communication of Branford (CSB) dated 8/22/2002.

5) TIA\EIA-222-E wind load classification.

This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables. The user of this report shall field verify the assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

If you should have any questions, please call.

Sincerely,
URS Corporation AES

Mohsen Sahirad, P.E.
Senior Structural Engineer

STATE OF CONNECTICUT
MOHSEN SAHIRAD
NO. 21283
LICENSED
PROFESSIONAL ENGINEER

MS/rmn

cc: Richard Johanson – Cingular Wireless
Doug Roberts – URS
N.A. – URS
A.A. – URS
CF/Book

2. INTRODUCTION

The subject tower is located on 142 Baldwin Drive in New Haven, Connecticut. The structure is a self supporting 120' steel tapered lattice tower manufactured by Stainless Incorporated.

The tower is constructed of leg angles, diagonal angle braces and horizontal angle braces. The tower members are all bolted. The width of the tower face is 11'-4 13/16" at the top and 21'-0" at the bottom. The tower geometry and structural sizes were taken from Stainless, Inc. project no. 358810 dated December 14, 1993.

The existing structure supports several communication antennas. The antenna and mount configuration as specified below:

Antenna Type	Carrier	Mount	Elev.(ft)	Cable
DB230		Mounted to leg	49'	(1) 3/8" coax
DB212-0		(1) 1' Side arm	53'	(1) 1/2" coax
18' Dipole		(1) 3' Side arm	62.5'	(1) 7/8" coax
GPS		(1) 2' mount	64'	(1) 1/2" coax
(6) Allgon 7184.07	Sprint	(3) Stand-off mount	70'	(2) 1 5/8" coax, (4) 1 1/4" coax
(2) MB100RR650200DPAL with (2) Duplexer and (2) TMA	**Cingular (Proposed)**	**(2) Existing mounts**	**77'**	**Existing (6) 1 1/4" coax**
Folded Dipole		(1) 2' Side arm	89'	(1) 7/8" coax
20' Dipole		(1) 2' Side arm	99'	(1) 1/2" coax
(3) RR901702DP	Voicestream	(2) Stand-off mount, (1) Flush mount to leg	95'	(3) 1 5/8" coax
18' Dipole		(1) 3' Side arm	88'	(1) 7/8" coax
12' Whip		(1) 4' Side arm	100'	(1) 7/8" coax
(2) Small panels		Mounted to face	102' + 107'	(2) 1/2" coax
PD458-2		(1) Side arm mount	110'	(1) 1 5/8" coax
PD458-2		(1) Side arm mount	110'	(1) 1 5/8" coax
6' Dish		Mounted to leg	114'	(1) Elliptical
6' Dish		Mounted to leg	115.5'	(1) Elliptical
6' Dish		Mounted to leg	118'	(1) Elliptical
PD459-2		(1) Side arm mount	118'	(1) 1 5/8" coax
(3) 6' Dish (Future)	CSP	Mounted to leg	120'	(3) Elliptical
16' Whip		Mounted to leg	129'	(1) 7/8" coax

This structural analysis of the communications tower was performed by URS Corporation, AES (URS) for Cingular Wireless. The purpose of this analysis was to analyze the existing tower for its existing and proposed antenna loads. This analysis was conducted to evaluate twist (rotation), sway (deflection) and stress on the tower, and the effect of forces to the foundation of the tower resulting from existing and proposed antenna arrangements.

3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

Methodology:

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

The analysis was conducted using ERI Tower 2.0. The load condition was evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA. The load combination was investigated in ERI Tower 2.0 to determine the stress, sway and rotation.

Load Condition 1 = 90 mph Wind Load (with ½" radial ice) + Tower Dead Load

The TIA/EIA standard permits one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For purposes of this analysis, allowable stresses of tower members were increased by one-third in computing the load capacity; in addition, the appropriate "k" factors were assigned to each member.

4. FINDINGS AND EVALUATION

The combined axial and bending stresses on the tower structure were evaluated to compare with the allowable stress in accordance with AISC. The analysis indicates that the tower legs, diagonal members, horizontal members and foundation have sufficient capacity to carry the loads applied.

The tower base reactions are as follows:

Proposed Tower Reactions	
Compression (kips)	201
Uplift (kips)	161
Total Shear (kips)	48
Moment (kips-ft)	3370

For detailed proposed tower reactions, see drawing no. E-1 in section 6 of this report.

5. CONCLUSIONS

The results of the analysis indicate that the structure is in compliance with the loading conditions and the materials and member sizes for the tower. The tower is considered feasible with the Connecticut State Police requirements and the TIA/EIA-222-E wind load classification specified above and all the existing and proposed antenna loading. The user of this report shall field verify the assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

Limitations/Assumptions:

This report is based on the following:

A. Tower is properly installed and maintained.

B. All members were as specified in the original Construction Documents and are in good condition.

C. All required members are in place.

D. All bolts are in place and are properly tightened.

E. Tower is in plumb condition.

F. All members protective coating is in good condition.

G. All tower members were properly designed, detailed, fabricated, installed, and have been properly maintained since erection.

URS is not responsible for any modifications completed prior to or hereafter in which URS is not or was not directly involved. Modifications include but are not limited to:

A. Removing/Replacing antennas
B. Adding antennas and amplifiers

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

Ongoing and Periodic Inspection and Maintenance by the Owner:

1. After the Contractor has successfully completed the installation and the work has been accepted, the tower owner will be responsible for the ongoing and periodic inspection and maintenance of the tower and reinforcing system.

2. The owner shall refer to TIA/EIA-222-E, for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system is performed at least yearly and more frequently as conditions warrant. According to TIA/EIA-222-E. It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

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 John De Stefano, Jr.
Mayor, City of New Haven
Kennedy Mitchell Hall of Records
200 Orange Street
New Haven, Connecticut 06510

Re: Telecommunications facility – 142 Baldwin Drive (West Rock Ridge)

Dear Mayor De Stefano:

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: 55 Shelton Road, Oxford
Petition 308 approved 6/6/94

Tower Owner/Manager: CT Dept. of Environmental Protection

Antenna configuration Antenna center line – 92 ft

Current and/or approved: Nine panel antennas

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 13.8% 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 19.5%, or an additional 5.7% of the standard.

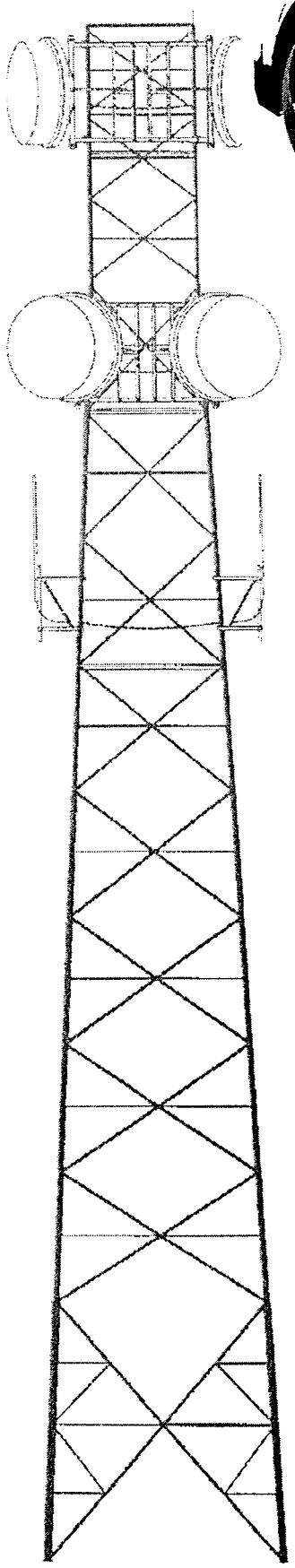
Cingular Current

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
SNET	92	880 - 894	19	100	0.0807	0.5867	13.8

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
SNET TDMA	92	880 - 894	16	100	0.0680	0.5867	11.6
SNET GSM	92	880 - 894	2	296	0.0251	0.5867	4.3
SNET GSM	92	1930 - 1935	2	427	0.0363	1.0000	3.6
Total							19.5%

Structural information: Please see attached.



o2 Wireless Solutions, Inc.

SELF SUPPORTER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

September 6, 2002
Revision 1

SITE:
Oxford 2114
New Haven County, CT
92' SS Tower
Project Designer: Hachem K. Domloj
o2wireless Solutions Job No. 103-3637-15

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 92' self supported tower at the Oxford site in New Haven County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
92'	**PROPOSED**	**6- DUO1417-8686-4-0***	**6- 7/8" COAX**
92'	EXISTING	1- DB201	1- 7/8" COAX
92'	EXISTING	1- 20' WHIP	1- 7/8" COAX
87'	EXISTING	1- 8' MW DISH W/ RAD.	1- 7/8" COAX
76'	EXISTING	1- 6 FT MW DISH W/ RAD.	1- EW65
54'	EXISTING	1- 8' DIPOLE	1- ½" COAX
40'	EXISTING	1- 3' 6" YAGI	1- ½" COAX

* 6 DDD TMA 1900 to accompany the antennas at level 92'.

AVAILABLE DOCUMENTS

- All tower data information, antenna types and locations were obtained from tower mapping.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

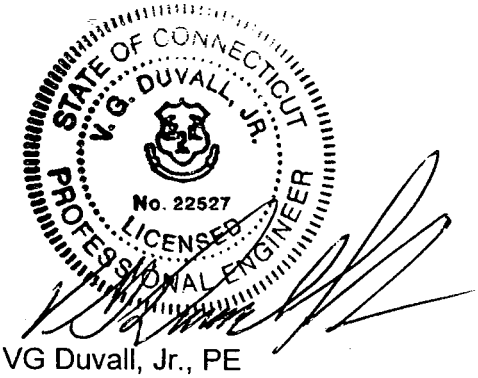
CONCLUSIONS AND RECOMMENDATIONS:

The Oxford tower will support the proposed loading and meet the requirements of the EIA Standard with no modification required. This analysis is reflected in run M3637-15 and shown in the drawing.

Information on the foundations and geotechnical report was not provided, thus, precluding any comments on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:



Hachem K. Domloj, EIT
Project Designer

VG Duvall, Jr., PE
Connecticut Professional Engineer

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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 Kathy P. Johnson
First Selectman, Town of Oxford
Town Hall, 486 Oxford Road
Oxford, Connecticut 06478

Re: Telecommunications facility – 55 Shelton Road

Dear Ms. Johnson:

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