STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

February 25, 2008

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

RE: **EM-CING-011-080125** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 28 Brewer Drive, Bloomfield, Connecticut.

Dear Mr. Levine:

At a public meeting held on February 14, 2008, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies, with the condition that the modifications in Appendix F of the structural analysis report dated January 18, 2008 and sealed by Michael Lassiter, P.E. are implemented prior to the antenna swap and a signed letter from a Professional Engineer is submitted to the Council to certify that the modifications have been properly completed.

The proposed modifications are to be implemented as specified here and in your notice dated January 25, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso
Chairman

DFC/MP/cm

c: The Honorable Sydney Schulman, Mayor, Town of Bloomfield
Thomas B. Hooper, Director of Planning, Town of Bloomfield
Crown Castle

G:\EM\CINGULAR\BLOOMFIE\dc021408.DOC

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

January 28, 2008

The Honorable Sydney Schulman
Mayor
Town of Bloomfield
Town Hall
800 Bloomfield Avenue
P. O. Box 337
Bloomfield, CT 06002-0337

RE: **EM-CING-011-080125** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 28 Brewer Drive, Bloomfield, Connecticut.

Dear Mayor Schulman:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2008, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the Council by February 13, 2008.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Thomas B. Hooper, Director of Planning, Town of Bloomfield
Louie Chapman, Jr., Director of Planning, Town of Bloomfield

EM-CING-011-080125

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

Steven L. Levine
Real Estate Consultant

ORIGINAL

HAND DELIVERED

January 25, 2008

Honorable Daniel F. Caruso, Chairman,
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing tele-communications facility located at 28 Brewer Drive, Bloomfield (owner, Crown Castle)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

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

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility

will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected. Modifications to the existing site include all or some of the following as necessary to bring the site into conformance with the plan:

- Replacement of existing panel antennas with new antennas of similar size, shape, and weight, or, installation of additional antennas of similar size, shape, and weight.
- Installation of small tower mount amplifiers ("TMA's") and/or diplexers to the platform on which the panel antennas are mounted to enhance signal reception.
- Installation of additional or larger coaxial cables as required.
- Installation of an additional equipment cabinet in existing shelters, or on existing or enlarged concrete pads.

None of these modifications will extend the height of the tower.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. Radio frequency power density may increase due to use of one GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine
Real Estate Consultant

Attachments

CINGULAR WIRELESS
Equipment Modification

28 Brewer Drive, Bloomfield, CT
Site Number 1193
Exempt Modifications 3/16/98 and 10/14/03

Tower Owner/Manager: Crown Castle

Equipment configuration: Monopole

Current and/or approved: Nine CSS DUO1417 antennas @ 100 ft c.l.
Six TMA's
Nine runs 7/8 inch coax

Planned Modifications: Remove three existing antennas
Install 3 Powerwave 7770 antennas (or equivalent) @ 100 ft
Install three diplexers @ 100 ft
Install three additional runs 7/8 inch coax (total of 12)

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 25.4 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 23.3 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							9.94
Cingular GSM *	97	880 - 894				0.5867	5.68
Cingular GSM *	97	1930 - 1970				1.0000	9.80
Total							25.4%

* Per CSC Records

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							9.94
Cingular GSM	100	880 - 894	4	296	0.0426	0.5867	7.26
Cingular GSM	100	1900 Band	2	427	0.0307	1.0000	3.07
Cingular UMTS	100	880 - 894	1	500	0.0180	0.5867	3.06
Total							23.3%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation, with recommended structural modifications installed, will have adequate structural capacity to accommodate the proposed equipment modifications. (Vertical Solutions, 1/18/08) Crown Castle will complete the structural modifications prior to Cingular making changes to its equipment on the tower. Cingular respectfully requests a conditional approval for the proposed modifications.

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

Steven L. Levine
Real Estate Consultant

January 25, 2008

Honorable Robert F. Burbank
1st Selectman, Town of Bloomfield
Town Office Bldg. 17 School Rd.
Bloomfield, CT 06232-1526

Re: Telecommunications Facility – 28 Brewer Drive, Bloomfield

Dear Mr. Burbank:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure

TOWER REINFORCEMENT, INC.

vertical solutions

January 18, 2008

John Murphy
Crown Castle International
1220 MacArthur Boulevard, Suite 200
Mahwah, New Jersey 07430
(201) 236-9032

Vertical Solutions, Inc.
PO Box 579 / 354 Raleigh Street
Holly Springs, NC 27540
(888) 321-6167
mlassiter@verticalsolutions-inc.com

Subject:	**Structural Analysis Report**
Carrier Designation:	**Cingular Co-locate** **Site Number: *Bloomfield-Brewer Drive*** **Site Name: *1193***
Crown Castle Designation:	**BU Number: *876329*** **Site Name: *Mtn. View Cem. (Filley Park)*** **JDE Job Number: *89314***
Engineering Firm Designation:	**Vertical Solutions Project Number: 080063.01**
Site Data:	**28 Brewer Dr., Bloomfield, Hartford County, CT 06002** **Latitude N41° 50' 06.6"±, Longitude W072° 44' 28.11"±** **120-ft Self-Supporting Pole Structure**

Dear Mr. Murphy,

Vertical Solutions is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the aforementioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work'.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC1: Existing + Reserved + Proposed Equipment — **Sufficient Capacity**
Note: See Table I and Table II for the proposed and existing/reserved loading.

The analysis has been performed in accordance with the TIA/EIA-222-F standard based upon a wind speed of 80-mph fastest mile.

All equipment and modifications proposed in this report shall be installed in accordance with the attached drawings for the determined available structural capacity to be effective.

We at Vertical Solutions appreciate the opportunity of providing our continuing professional services to you and Crown Castle International. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Rishi Kavathe

Rishi Kavathe
Structural Engineer In Training

STATE OF CONNECTICUT
No. 25064
LICENSED PROFESSIONAL ENGINEER

Michael L. Lassiter

Michael L. Lassiter, S.E., P.E., C.W.I.
Structural Engineer, Civil Engineer, Certified Weld Inspector
CT PE License No. 25064

JAN 23 2008

TABLE OF CONTENTS

1) INTRODUCTION

The subject tower is a 120-ft tapered monopole manufactured in 1996 by ROHN.

2) ANALYSIS CRITERIA

Specific standards and code (analysis)

- TIA/EIA-222-F – 80-mph fastest-mile basic wind speed and 1/2-in radial ice

Table 1 – Proposed (P) Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number Of Feed Lines	Feed Line Size (in)[1]
100	3	Powerwave	7770.00	-	3	7/8
	6	Powerwave	LGP13519 TMAs			

1 - Refer to Appendix B for coax location

Table 2 – Existing and Reserved (R) Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number Of Feed Lines	Feed Line Size (in)[1]
116	9	EMS	FV65-14-00NA2	Platform w/rails	9	1 5/8
	6	EMS	RR90-17-00DP		6	1 5/8
	9[2]	EMS	RR90-17-00DP		3[2]	1 5/8
107	3	EMS	DR65-18-00DPL2	Low Profile Platform	12	1 5/8
	3	Nortel	TMAs			
100	9	CSS	DUO1417-8686	Low Profile Platform	9	7/8
	6	ADC	Dual Band TMAs			
59	1	Decibel	DB536	2' Standoff	1	7/8
50	1		GPS	2' Standoff	1	1/2

1 - Refer to Appendix B for coax location.
2 – Reserved Equipment.

Specific standards and code (original design)

- ANSI/TIA-222-F, 85-mph fastest-mile basic wind speed, 1/2-in radial ice

Table 3 – Design Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number Of Feed Lines	Feed Line Size (in)
120	12	Swedcom	ALP9212	Low profile Platform	12	1 5/8
100	12	Swedcom	ALP9212	Low profile Platform	12	1 5/8

3) ANALYSIS PROCEDURE

3.1) Documents Reviewed

Refer to Appendix A for listing and descriptions of documents reviewed.

3.2) Analysis Method

RISA Tower (version 5.022), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the ANSI/TIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix.

3.3) Assumptions

1. Tower and structures were built in accordance with the manufacturer's specifications.
2. The tower and structures have been maintained in accordance with manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

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

4) ANALYSIS RESULTS

Table 4 – Tower Component Stresses vs. Capacity – LC1

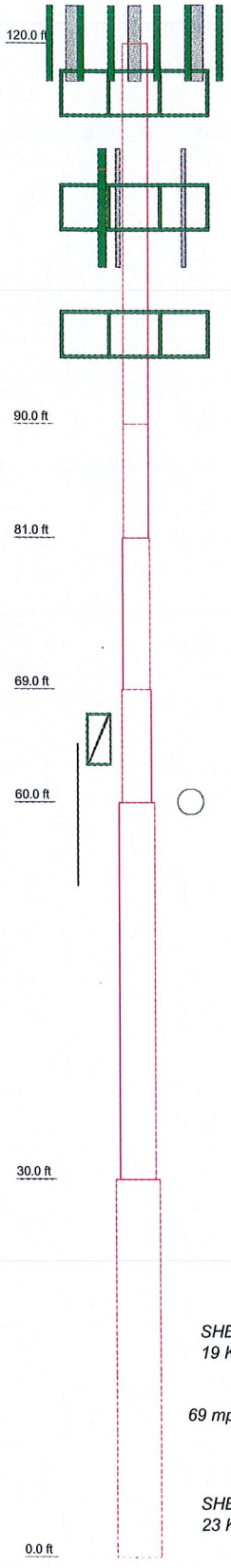
Notes	Component	Elevation (ft)	% Capacity	Pass/Fail
RISA Tower Analysis Summary:				
			Summary	
Notes:	**Component**	**Elevation (ft)**	**% Capacity**	**Pass/Fail**
	L1	120 – 90	67	Pass
	L2	90 – 81	**99**	Pass
1	L3	81 – 67	89	Pass
	L4	67 – 60	70	Pass
	L5	60 – 30	80	Pass
	L6	30 – 3	96	Pass
1	L7	3 - 0	98	Pass
Individual Components:				
Notes:	**Component**	**Comments**	**% Capacity**	**Pass/Fail**
1	Base Plate	0	73	Pass
1	Anchor Bolts	0	47	Pass
1	Base Foundation	0	67	Pass
Structure Rating (max from all components) =				**99%**

Notes:
1) See additional documentation in "Appendix E – Additional Calculations" for calculations supporting the % capacity listed.
2) Capacities up to 105% are considered acceptable based on analysis procedures used.
3) The percent capacities shown above (excluding foundations) include the 1/3 increase in allowable stresses as allowed by TIA/EIA-222-F.

4.1) Recommendations

Install modifications per the drawings in Appendix F.

Section	Size	Length (ft)	Grade	Weight (K)
1	P24x1/4	30.00	A572-42	1.9
2	P24x1/4	9.00		0.6
3	Pipe + (4) bar	12.00		1.0
4	P24x.25 w/ (4) C8x11.5	9.00		1.4
5	P30x0.375 w/ (4) C8x11.5	30.00		6.3
6	P36x0.375 w/ (4) C8x18.75	30.00		7.2
				18.5



AXIAL
32 K
SHEAR
19 K
MOMENT
1331 kip-ft
TORQUE 0 kip-ft
69 mph WIND - 0.5000 in ICE

AXIAL
27 K
SHEAR
23 K
MOMENT
1566 kip-ft
TORQUE 0 kip-ft
REACTIONS - 80 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(3) FV65-14-00NA2	116	(2) Dual Band TMA	97
(3) FV65-14-00NA2	116	(2) Dual Band TMA	97
(3) FV65-14-00NA2	116	(2) Dual Band TMA	97
PiROD 12' Platform w / handrails	116	(2) LGP13519	97
DR65-18-00DPL2	107	(2) LGP13519	97
DR65-18-00DPL2	107	(2) LGP13519	97
DR65-18-00DPL2	107	PiROD 12' Platform w / handrails	97
Valmont 13' Platform w/o Rails	107	(2) DUO1417-8686	97
TMA	107	(2) DUO1417-8686	97
TMA	107	(2) DUO1417-8686	97
TMA	107	Pirod 4' Side Mount Standoff (1)	59
7770.00 w/Mount Pipe	97	DB536	59
7770.00 w/Mount Pipe	97	2'-0" - STANDOFF	50
7770.00 w/Mount Pipe	97	Generic GPS	50

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

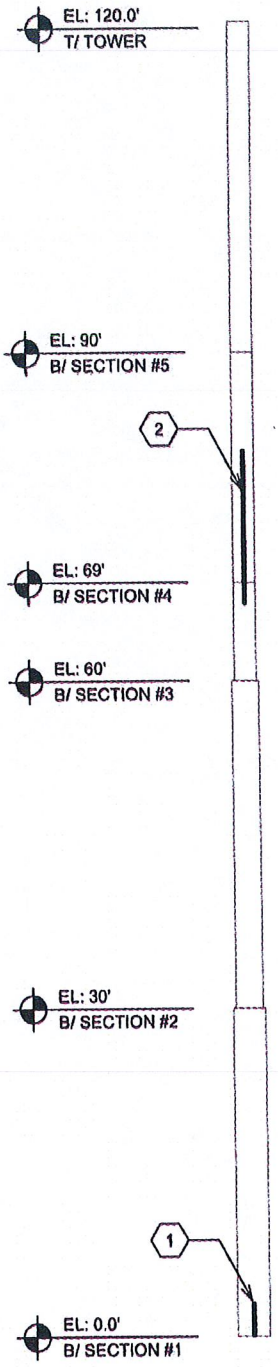
1. Tower is located in Hartford County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 60 mph wind.
5. TOWER RATING: 98.8%

Vertical Solutions, Inc.
PO Box 579 / 354 Raleigh St
Holly Springs, NC 27540
Phone: (919) 321-6167
FAX: (919) 321-1768

Job: Mtn. View Cem. (Filley Park) - 876329			
Project: VSi# 080063.01 / MR-709			
Client: Tower Reinforcements	Drawn by: Rishi	App'd:	
Code: TIA/EIA-222-F	Date: 01/22/08	Scale: NTS	
Path: L:\2008\0063_Mtn. View Cem. (Filley Park)_CT\Task 1\Models\876329_01.eri		Dwg No. E-1	

Appendix F

Modification Design Drawings



PATENT PENDING

ALL MATERIALS AND INSTALLATION MUST BE PROVIDED BY TOWER REINFORCEMENT, INC.

INDEX OF SHEETS

MODIFICATION SCHEDULE

NO.	DESCRIPTION	ELEV (FT)
1	INSTALL (3) REINFORCING BARS, SEE S-2	0 TO 3
2	INSTALL (4) REINFORCING BARS, SEE S-3	67 TO 81

MODIFICATION DESIGN PROVISIONS

MODIFICATON DESIGN IS BASED ON STRUCTURAL ANALYSIS REPORT BY VERTICAL SOLUTIONS, INC., DATED: 01/22/2008, JOB: 876329 - MOUNTAIN VIEW CEMETARY, CT. THIS REPORT IS BASED ON A SPECIFIC ANTENNA AND COAX CONFIGURATION. SEE THE REPORT FOR DETAILS. ANY OTHER ANTENNA AND COAX CONFIGURATION REQUIRES REVIEW BY THE ENGINEER OF RECORD.

CONSTRUCTION INTERFERENCES

EXISTING AND PROPOSED ANTENNAS, MOUNTS, COAX, AND HAND-HOLE RIMS ARE NOT SHOWN FOR CLARITY. CONTRACTOR SHALL COORDINATE WITH TOWER OWNER WITH RESPECT TO INTERFERENCES TO REINFORCEMENT.

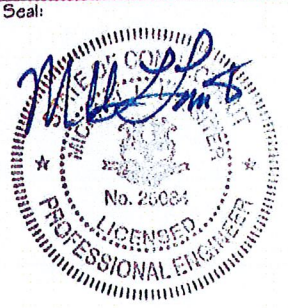
FIELD VERIFY TOWER

THE DRAWINGS PRESENTED HERE ARE BASED ON STRUCTURAL ANALYSIS REPORT AND ASSOCIATED DRAWINGS PROVIDED BY CROWN CASTLE. CONTRACTOR SHALL FIELD VERIFY TOWER DIMENSION PRIOR TO FABRICATION.

TOWER ELEVATION

SCALE: 1/16" = 1'-0"

Seal:



January 21, 2008

DRAWN BY: BJD | CHECKED BY: MLL

SHEET NUMBER: S-1 | REVISION: 0

REV	DATE
0	01-22-08

CONFIDENTIAL – PATENT PENDING

PREPARED BY:

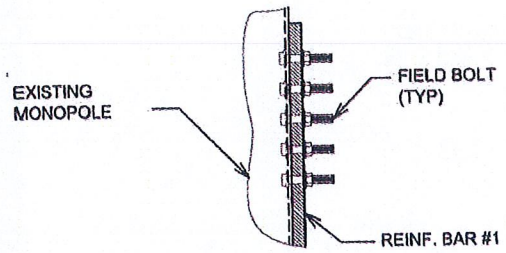
TOWER REINFORCEMENT, INC.
2301 W. Michigan St., Suite I
Evansville, IN 47712
(812) 421 - 1470

PROJECT NAME: 876329 - Mt. View Cem., CT

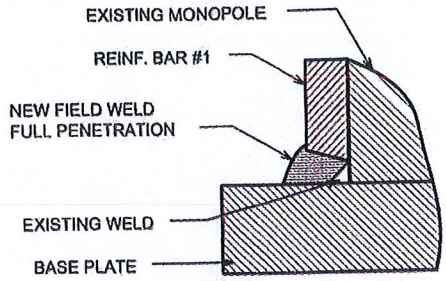
TRI JOB #: MR-709

vertical solutions

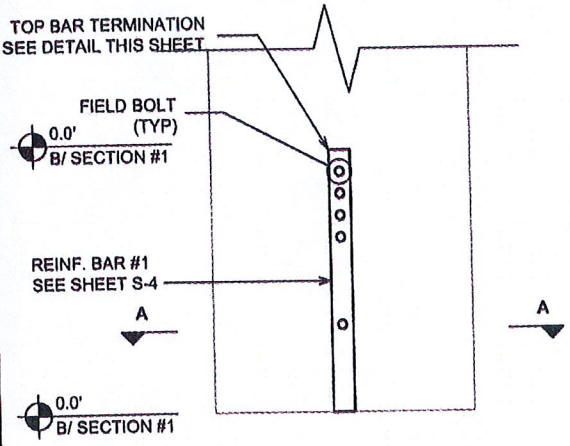
REVIEWED BY:
VSI# 080063.01

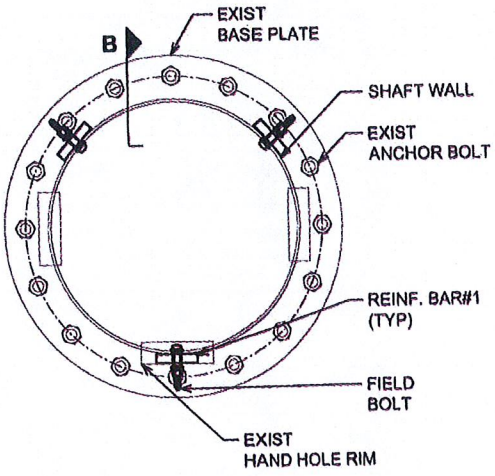


TOP BAR TERMINATION
NOT TO SCALE



SECTION B
NOT TO SCALE





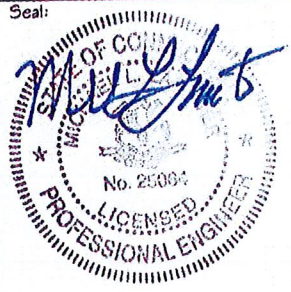
SECTION A-A
SCALE: 1/2" = 1'-0"

NOTES:
1. FIELD DRILL 30-MM Ø HOLE IN TOWER FOR EACH FIELD BOLT.
2. COAT EACH FIELD BOLT WITH SILICONE PRIOR TO INSTALLATION.

SECTION #1 ELEVATION

SCALE: 1/4" = 1'-0"

Seal:



January 21, 2008

DRAWN BY: BJD | CHECKED BY: MLL

SHEET NUMBER: S-2 | REVISION: 0

REV	DATE
0	01-22-08

CONFIDENTIAL – PATENT PENDING

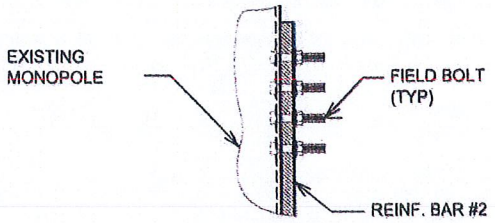
PREPARED BY:
TOWER REINFORCEMENT, INC.
2301 W. Michigan St., Suite I
Evansville, IN 47712
(812) 421 - 1470

PROJECT NAME: 876329 - Mt. View Cem., CT

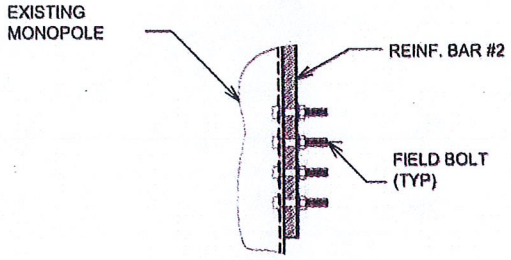
TRI JOB #: MR-709

vertical solutions

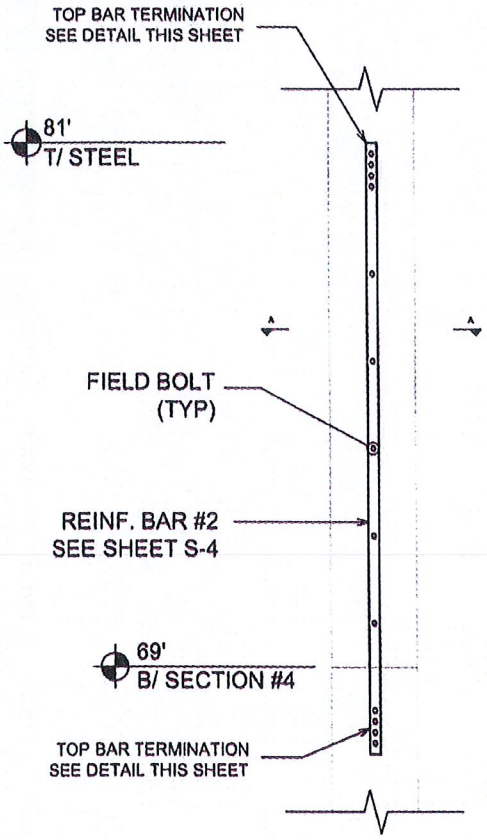
REVIEWED BY:
VSI# 080063.01

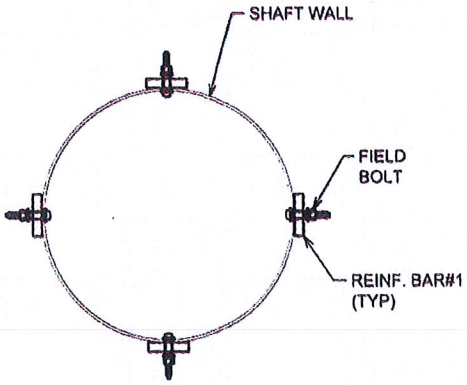


TOP BAR TERMINATION
NOT TO SCALE



BOTTOM BAR TERMINATION
NOT TO SCALE





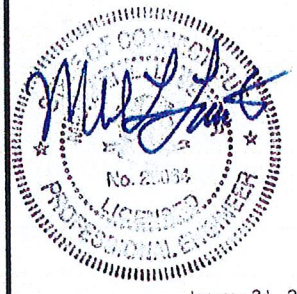
SECTION A-A
SCALE: 1/2" = 1'-0"

NOTES:
1. FIELD DRILL 30-MM Ø HOLE IN TOWER FOR EACH FIELD BOLT.
2. COAT EACH FIELD BOLT WITH SILICONE PRIOR TO INSTALLATION.

SECTION #3 & 4 ELEVATION

SCALE: 1/4" = 1'-0"

Seal:



January 21, 2008

DRAWN BY: BJD | CHECKED BY: MLL

SHEET NUMBER: S-3 | REVISION: 0

REV	DATE
0	01-22-08

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TRI JOB #: MR-709

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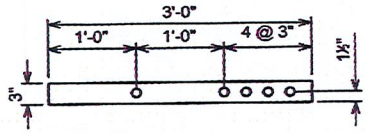
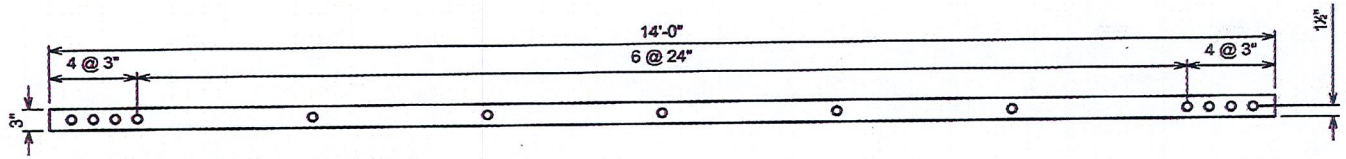
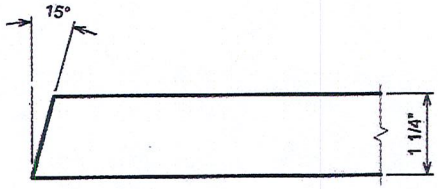


REINF. BAR #1, PL 1 1/4" (3 REQ'D)
MOUNT AT 0' TO 3' ELEVATION



REINF. BAR #2, PL 1 1/4" (4 REQ'D)
MOUNT AT 67' TO 81' ELEVATION



BEVEL DETAIL
BOTTOM OF BAR #1
FOR FULL-PEN. WELD TO BASE PL.
(NOT TO SCALE)

NOTES:
1. LABEL BARS WITH BAR #.
2. BARS ARE TO BE ASTM A572 GRADE 65 STEEL & HOT-DIP GALVANIZED.
3. HOLES IN BARS ARE 31mmØ & DIMENSIONED TO CENTERS.
4. BOTTOM OF BARS ON LEFT AS SHOWN.
5. PROJECT REQUIRES (67) 20mmØ AJAX BOLTS w/ SLEEVES.

Seal:
STATE OF CONNECTICUT
PROFESSIONAL ENGINEER
No. 25031
January 21, 2008

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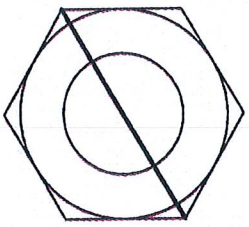
AJAX SLEEVES

AJAX BOLT SLEEVE LENGTH	# REQ'D
INCH	
1.375	13
1.5	5

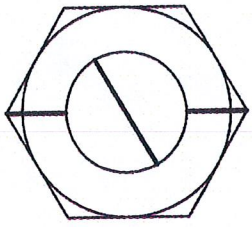
TOTAL LENGTH REQ'D = 96"
WITH EXCESS FOR CUTS = 120" = 10'

QUALITY CONTROL OF FIELD BOLTS

FOR QUALITY CONTRL PURPOSES, CONTRACTOR SHALL MARK EASH CONNECTION WITH PERMANENT MARKER PRIOR TO " TURN BEYOND SNUG TIGHT".

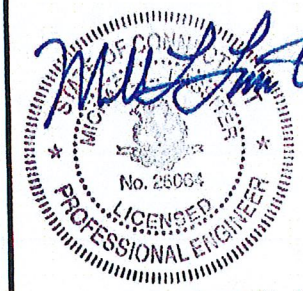


BEFORE 1/3 TURN



AFTER 1/3 TURN

Seal:



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VSI# 080063.01

GENERAL

1. ALL METHODS, MATERIAL AND WORKMANSHIP SHALL FOLLOW THE DICTATES OF GOOD CONSTRUCTION PRACTICES.

2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.

4. ANY SUBSTITUTIONS MUST CONFORM TO THE REQUIREMENTS OF THE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

5. ANY MANUFACTURED DESIGN ELEMENTS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.

6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.

8. ANY STEEL WHICH HAS BEEN FIELD CUT OR WELDED SHALL BE COLD GALVANIZED WITH 95% ZINC RICH PAINT PER ASTM A780.

9. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

Seal:

January 21, 2008

BOLT TIGHTENING PROCEDURE

1. TIGHTEN FLANGE BOLTS BY AISC- "TURN OF THE NUT" METHOD, USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIA.

3/4"	BOLTS UP TO AND INCLUDING 4.0 LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTH OVER FOUR DIA. BUT NOT EXCEEDING 8 DIA.

3/4"	BOLTS 4.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

2. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8(d)(1) OF THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

"FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND BE TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8(d)(1) THROUGH 8(d)(4).

8(d)(1) TURN-OF-THE-NUT TIGHTENING.
BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION. SNUG TIGHT IS DEFINED AS THE TIGHTNESS THAT EXISTS WHEN THE PLIES OF A JOINT ARE IN FIRM CONTACT. THIS MAY BE OBTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. SNUG TIGHTENING SHALL PROGRESS SYSTEMATICALLY...UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED.
FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

SPECIAL INSPECTION

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH IBC 2000, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a) STRUCTURAL WELDING
   b) HIGH STRENGTH BOLTS

2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2000, SECTION 1704. UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.

FIELD BOLTS

1. ALL STITCH, SPLICE & TERMINATION BOLTS ARE 20 mm ONESIDE BOLTS BY AJAX.

   a) BOLTS SHALL MEET AS 1252, PROPERTRY CLASS 8.8 (SIMILAR TO ASTM A325M)
   b) Fu = 120 ksi

2. EACH BOLT SHALL INCLUDE A 29 mm O.D. BY 20 mm I.D. SLEEVE (Fu=120 ksi)

3. BOLT HOLES SHALL BE 31 mm MAXIMUM.

APPLICABLE CODES AND STANDARDS

1. ANSI/TIA/EIA STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-F EDITION.

2. 1996 BOCA NATIONAL BUILDING CODE.

3. ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 318-99.

4. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.

5. AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.

6. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

STRUCTURAL STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.

2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.

3. ALL U-BOLTS SHALL BE ASTM A307 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.

WELDING

1. ALL WELDING SHALL BE PERFORMED BY WELDERS CURRENTLY STATE OR AWS CERTIFIED TO THE AWS D1.1 STRUCTURAL WELDING CODE, LATEST EDITION.

2. ALL FIELD WELDING SHALL UTILIZE LOW HYDROGEN ELECTRODES.

3. PRIOR TO FIELD WELDING, GRIND OFF GALVANIZING TO 1/2" BEYOND ALL FIELD WELD SURFACES.

4. ALL FIELD CUT, FIELD WELDED, OR DAMAGED GALVANIZING SURFACES SHALL BE REPAIRED WITH ZINC RICH PAINT (95% ZINC CONTENT) PER ASTM A780.

5. PRIOR TO FIELD WELDING, CONTRACTOR SHALL CLEAR THE INTERIOR OF MONOPOLE OF FLAMMABLE DEBRIS. COAXIAL CABLE SHALL BE SHIFTED AWAY FROM PROXIMITY OF THE WELD AND/OR COVERED WITH A HEAT RESISTANT BLANKET.

PAINT

1. CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1K.

REINFORCEMENT STEEL

1. ALL REINFORCEMENT BARS ARE ASTM A572 GRADE 65, Fy = 65 ksi, Fu = 80 ksi.

FIELD WELDS

1. ALL FIELD WELDS SHALL BE MADE WITH E80XX WELD RODS.

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