TRM
TOWER RESOURCE MANAGEMENT

ORIGINAL

EM-METROPCS-069-090728

July 25, 2009

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification**
246 East Franklin Street Killingly, CT

Dear Mr. Phelps:

MetroPCS Massachusetts, LLC d/b/a MetroPCS ("MetroPCS") intends to install antennas on the existing 130-foot self-supporting monopole owned by SBA. Please accept this letter as notification pursuant to R.C.S.A. § 16-50J-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50J-73, a copy of this letter is being sent to Bruce E Benway, Town Manager, Town of Killingly. Mr. Charles R. Hutchins is the owner of the property on which the tower is located.

The facility consists of a 155-foot self-supporting monopole tower capable of supporting multiple carriers within a fenced compound at 246 East Franklin Street Killingly, CT. The tower is currently occupied by Verizon Wireless with antennas located at the 155-foot level, Sprint occupies the 147-foot level, VoiceSteam occupies the137-foot level and Cingular occupies the 127-foot level on the tower. MetroPCS intends to install six (6) 742-351 Kathrein antennas and six (6) 860-10025 Kathrein Remote Control Units at the 117-foot level on the tower. Associated equipment will be located on a 10' x 16' concrete equipment pad on the ground near the base of the tower, within the fenced compound. Attached behind Exhibit A are Project Plans for the proposed MetroPCS facility.

30 Lyman Street, Suite 12
Westborough, MA 01581
Fax: 508-389-1749

TRM
TOWER RESOURCE MANAGEMENT

The planned modifications to the Preston facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not increase the overall height of the existing tower. MetroPCS antennas will be mounted with their centerline at the 117-foot level on the 155-foot tower.

2. The proposed installation of associated equipment will not require an extension of the fenced compound.

3. The proposed installation will not increase the noise levels at the facility by six decibels or more.

4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. The RF power density calculations for existing and MetroPCS antennas would be 20.30% of the FCC standard. A cumulative power density calculations table is included behind Exhibit B.

Included behind Exhibit C is a Structural Analysis Report confirming that the tower can support the existing and MetroPCS antennas, and associated equipment.

For the foregoing reasons, MetroPCS respectfully submits that the proposed antenna installation at the facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Douglas L. Culp

Real Estate Consultant for MetroPCS

860-463-5511

30 Lyman Street, Suite 12
Westborough, MA 01581
Fax: 508-389-1749

Exhibit A

Design Drawings

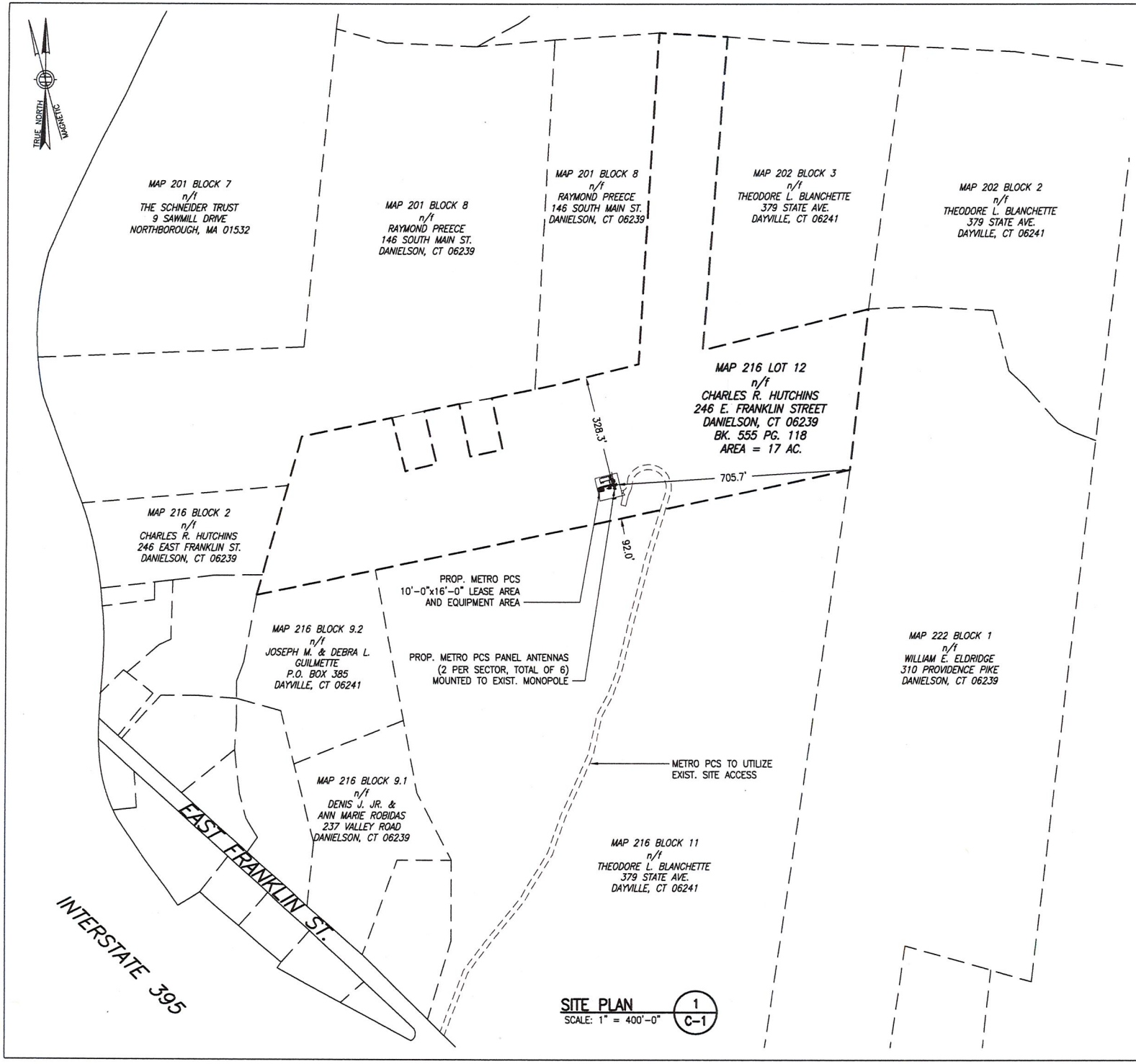
And

Antenna Cut Sheets

MetroPCS Site NLD0056A

246 East Franklin Street

Killingly, Connecticut



SITE PLAN (1 / C-1)
SCALE: 1" = 400'-0"

metroPCS
Unlimit Yourself.

285 BILLERICA ROAD
THIRD FLOOR
CHELMSFORD, MA 01824
TEL (978) 244-7000
FAX (978) 244-7240

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil · Structural · Land Surveying

201 BOSTON POST ROAD WEST
SUITE 301
MARLBOROUGH, MA 01752
TEL (508) 481-7400
FAX (508) 481-7406

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	06/01/09	CONN. SITING COUNCIL PLAN	CMC	JMT	JMT

NOT TO SCALE | DESIGNED BY: JMT | DRAWN BY: CMC

APPROVALS

SITE OWNER — DATE

CONSTRUCTION MANAGER — DATE

RF ENGINEER — DATE

SITE ACQUISITION — DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HERIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

SITE ID
NLD0056A

SITE NAME
SBA EAST FRANKLIN ST.
DANIELSON

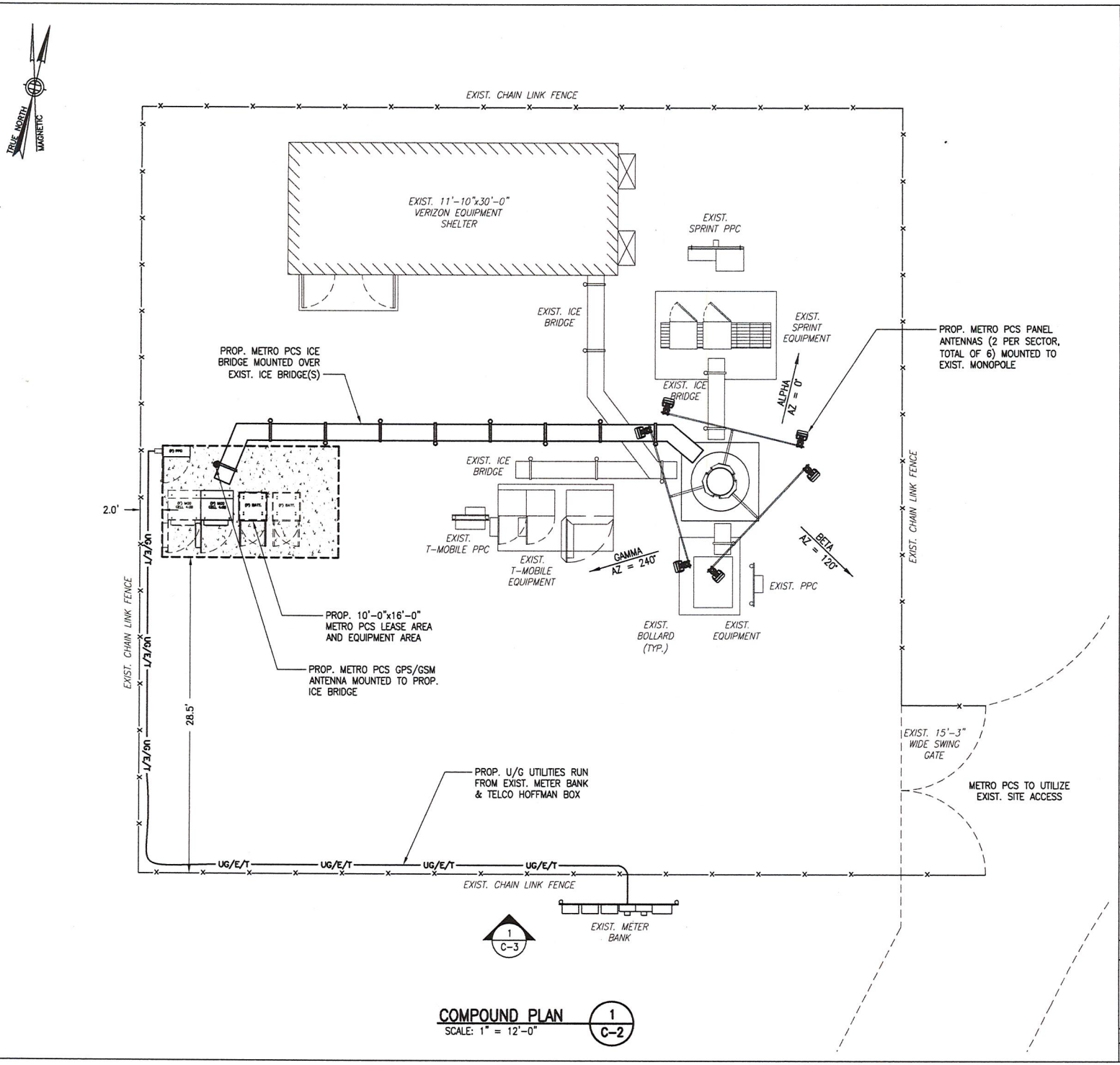
SITE ADDRESS
246 EAST FRANKLIN STREET
DANIELSON, CT
06239

METRO PCS LEASE AREA

EQUIPMENT: 10'-0"x16'-0"=160.0 S.F.

TOTAL: = 160.0 S.F.

PROJECT NO.	DRAWING NAME	DATE	SHEET NO.	REV
736.254	C-1	06/01/09	1 OF 4	0



COMPOUND PLAN

SCALE: 1" = 12'-0"

1
C-2

metroPCS
Unlimit Yourself.

285 BILLERICA ROAD
THIRD FLOOR
CHELMSFORD, MA 01824
TEL (978) 244-7000
FAX (978) 244-7240

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil · Structural · Land Surveying

201 BOSTON POST ROAD WEST
SUITE 301
MARLBOROUGH, MA 01752
TEL (508) 481-7400
FAX (508) 481-7406

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	06/01/09	CONN. SITING COUNCIL PLAN	CMC	JMT	JMT

NOT TO SCALE | DESIGNED BY: JMT | DRAWN BY: CMC

APPROVALS

SITE OWNER — DATE

CONSTRUCTION MANAGER — DATE

RF ENGINEER — DATE

SITE ACQUISITION — DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HERIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

SITE ID
NLD0056A

SITE NAME
SBA EAST FRANKLIN ST.
DANIELSON

SITE ADDRESS
246 EAST FRANKLIN STREET
DANIELSON, CT
06239

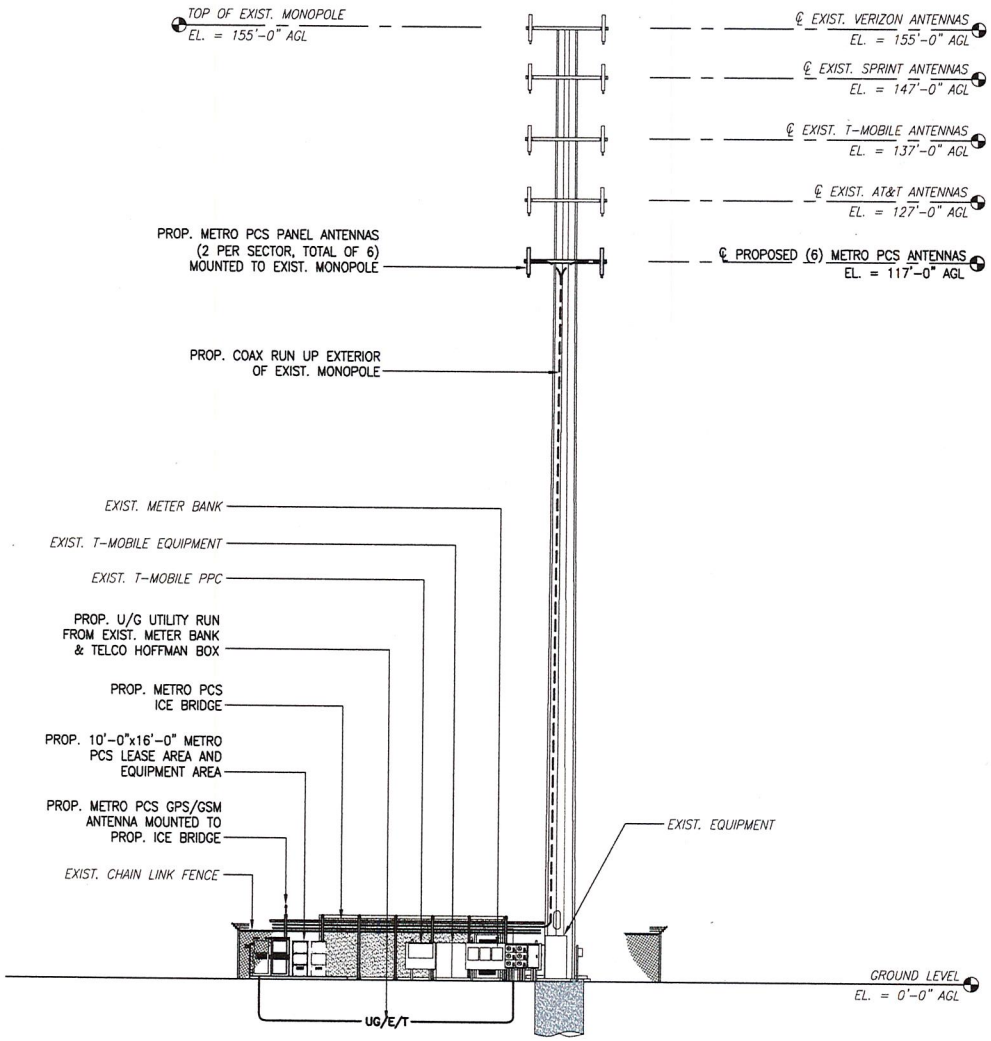
METRO PCS LEASE AREA

EQUIPMENT: 10'-0"x16'-0"=160.0 S.F.

TOTAL: = 160.0 S.F.

PROJECT NO.	DRAWING NAME	DATE	SHEET NO.	REV
736.254	C-2	06/01/09	2 OF 4	0

AZIMUTHS	
ALPHA	0°
BETA	120°
GAMMA	240°



SOUTH TOWER ELEVATION

SCALE: 1" = 30'-0"

1
C-3

metroPCS
Unlimit Yourself.

285 BILLERICA ROAD
THIRD FLOOR
CHELMSFORD, MA 01824
TEL (978) 244-7000
FAX (978) 244-7240

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil · Structural · Land Surveying

201 BOSTON POST ROAD WEST
SUITE 301
MARLBOROUGH, MA 01752
TEL (508) 481-7400
FAX (508) 481-7406

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	06/01/09	CONN. SITING COUNCIL PLAN	CMC	JMT	JMT

NOT TO SCALE | DESIGNED BY: JMT | DRAWN BY: CMC

APPROVALS

SITE OWNER — DATE

CONSTRUCTION MANAGER — DATE

RF ENGINEER — DATE

SITE ACQUISITION — DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HERIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

SITE ID
NLD0056A

SITE NAME
SBA EAST FRANKLIN ST.
DANIELSON

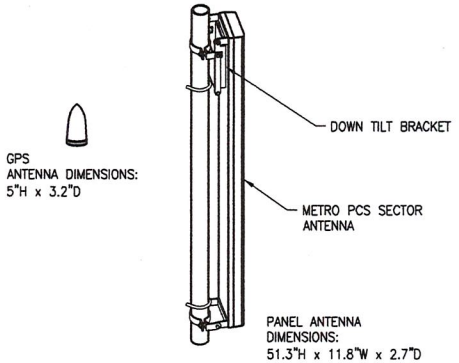
SITE ADDRESS
246 EAST FRANKLIN STREET
DANIELSON, CT
06239

METRO PCS LEASE AREA

EQUIPMENT: 10'-0"x16'-0"=160.0 S.F.

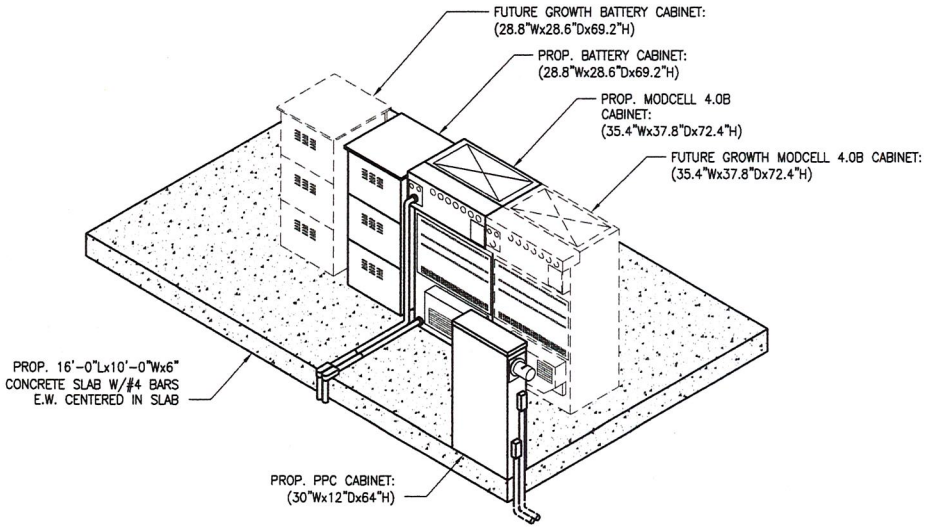
TOTAL: = 160.0 S.F.

PROJECT NO.	DRAWING NAME	DATE	SHEET NO.	REV
736.254	C-3	06/01/09	3 OF 4	0



GPS & PANEL ANTENNA DETAIL (1 / C-4)

SCALE: NOT TO SCALE



EQUIPMENT DETAIL (2 / C-4)

SCALE: NOT TO SCALE

metroPCS
Unlimit Yourself.

285 BILLERICA ROAD
THIRD FLOOR
CHELMSFORD, MA 01824
TEL (978) 244-7000
FAX (978) 244-7240

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil · Structural · Land Surveying

201 BOSTON POST ROAD WEST
SUITE 301
MARLBOROUGH, MA 01752
TEL (508) 481-7400
FAX (508) 481-7406

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	06/01/09	CONN. SITING COUNCIL PLAN	CMC	JMT	JMT

NOT TO SCALE | DESIGNED BY: JMT | DRAWN BY: CMC

APPROVALS

SITE OWNER _____ DATE _____

CONSTRUCTION MANAGER _____ DATE _____

RF ENGINEER _____ DATE _____

SITE ACQUISITION _____ DATE _____

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HERIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

SITE ID
NLD0056A

SITE NAME
SBA EAST FRANKLIN ST.
DANIELSON

SITE ADDRESS
246 EAST FRANKLIN STREET
DANIELSON, CT
06239

METRO PCS LEASE AREA

EQUIPMENT: 10'-0"x16'-0"=160.0 S.F.

TOTAL: = 160.0 S.F.

PROJECT NO.	DRAWING NAME	DATE	SHEET NO.	REV
736.254	C-4	06/01/09	4 OF 4	0

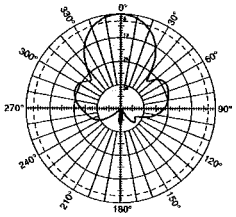
KATHREIN
SCALA DIVISION

742 351

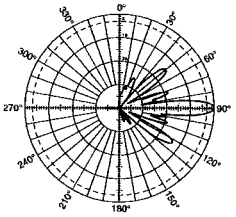
35° Panel Antenna

Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled downtilt is available as a retrofitable option.

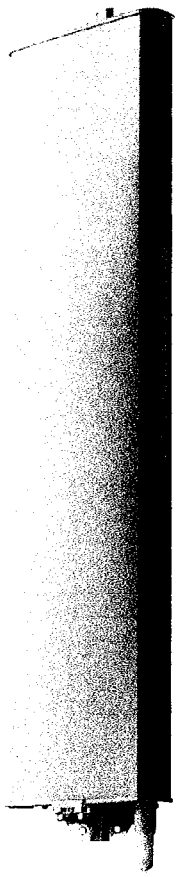
- 0-8° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt control.
- Will accomodate future 3G / UMTS applications.



Horizontal pattern
±45°- polarization



Vertical pattern
±45°- polarization



General specifications:

Frequency range	1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>30 dB (co-polar)
Connector	2 x 7/16 DIN female
Isolation	>30 dB
Maximum input power	300 watts (at 50°C) per input
Weight	29.8 lb (13.5 kg)
Dimensions	51.3 x 11.8 x 2.7 inches (1304 x 299 x 69 mm)
Equivalent flat plate area	5.48 ft² (0.509 m²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	62.6 x 12.7 x 4.3 inches (1589 x 322 x 108 mm)
Shipping weight	32 lb (14.5 kg)
Mounting	Fixed and tilt mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

See reverse for order information.

Specifications:	**1710–1880 MHz**	**1850–1990 MHz**	**1920–2170 MHz**
Gain	20.2 dBi	20.5 dBi	20.7 dBi
Horizontal beamwidth	36° (half-power)	35° (half-power)	33° (half-power)
Vertical beamwidth	7.4° (half-power)	7° (half-power)	6.7° (half-power)
Electrical downtilt continuously adjustable	0°–8° (manual or optional remote control)	0°–8°	0°–8°
Sidelobe suppression for: First sidelobe above main beam Horizontal pattern	0° 4° 8° T 18 17 16 dB >14 dB	0° 4° 8° T 18 18 17 dB >14 dB	0° 4° 8° T 18 17 16 dB >14 dB
Cross polar ratio Main direction 0° Sector ±30°	 20 dB (typical) >10 dB	 20 dB (typical) >10 dB	 20 dB (typical) >10 dB

*Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

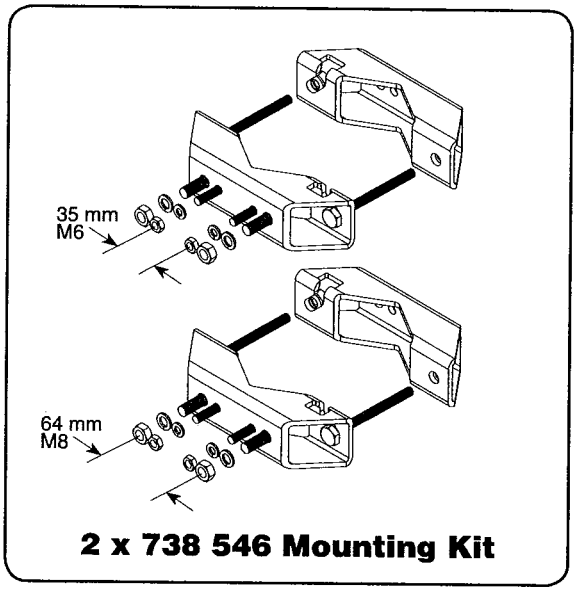
10708-E
936.2209/g

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

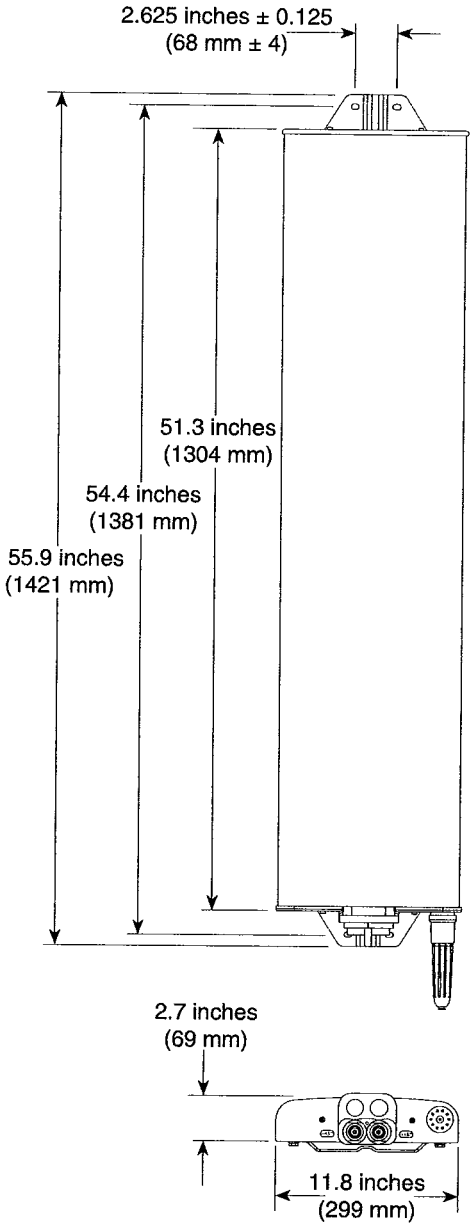
KATHREIN
SCALA DIVISION

742 351

35° Panel Antenna



2 x 738 546 Mounting Kit

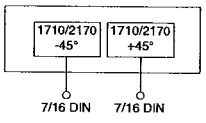


Mounting Options:

Model	Description
2 x 736 548	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
737 978	Tilt Mount Kit 0–16 degrees downtilt angle.

Order Information:

Model	Description
742 351	Antenna with 7/16 DIN connectors 0°–8° adjustable electrical downtilt



All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

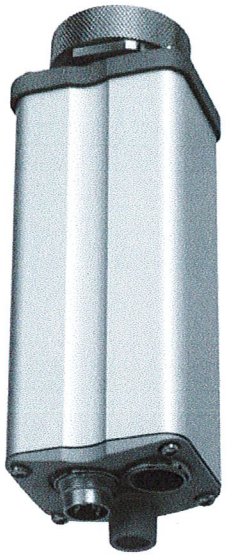
KATHREIN
SCALA DIVISION

860 10025

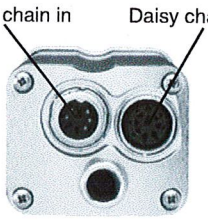
Remote Control Unit

Kathrein's 860 10025 Remote Control Unit allows operators to control the electrical tilt of compatible antennas without direct access to the antenna.

- Automatically calibrates to the antenna. There is no need to preset the antenna's electrical tilt or the 860 10025 when installing the unit.
- Allows control of the antenna either locally through a laptop computer, on site desktop computer, the optional central control unit; remotely via an ethernet network or over the internet.
- May be retrofitted to compatible antennas without dismantling or removing the antenna.
- Suitable for daisy chain and splitter solutions.
- Suitable for outdoor use.



860 10025
Remote Control Unit



Bottom of RCU

Daisy chain termination

Specifications:

Input voltage range	10–30 V (pin 1 and pin 6)
Power Consumption	<1 W (standby); <8.5 W (motor activated)
Connectors [1]	2 x 8 pin connector according to IEC 60130-9 conforming with AISG Daisy chain in: male; Daisy chain out: female
Hardware interfaces	RS485A/B (pin 5, pin 3) power supply (pin 1, pin 6); DC return (pin 7) conforming with AISG
Logical interface [2]	Command set conforming to 3GPP/AISG 2.0 or AISG 1.1
Logical interface ex factory [3]	Conforming to AISG 1.1
Adjustment time (full range)	40 seconds (typical, depending on antenna type)
Adjustment cycles	>50,000
Temperature range	-40°C to +60°C
Protection class	IP 24
Housing material	Profile: Aluminum, coated Cover: Zinc diecast, coated varnished housing (RAL 7035, light gray)
Weight	1.16 lb (525 g) (without daisy chain termination)
Dimensions	7.6 x 2.4 x 2 inches (194 x 60 x 50 mm) (with daisy chain termination)
Shipping dimensions	9.6 x 4 x 3.7 inches (245 x 102 x 93 mm)
Standards	EN 60950-1 (Safety) EN 55022 (Emission) EN 55024 (Immunity) ETS 300019-1-4 (Environmental) UL 60950-1; 1st edition
Certifications	CE, UL FCC 15.107 Class B

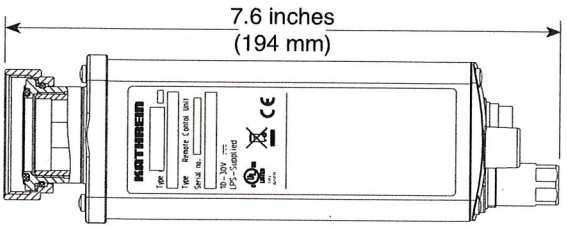
Order Information:

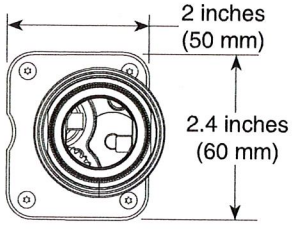
Model	Description
860-10025	Remote control unit with daisy chain termination

[1] The tightening torque for attaching the connector must be 0.5–1.0 Nm (hand tightened).

[2] The protocol of the logical interface can be switched from AISG 1.1 to 3GPP/AISG 2.0 and vice versa with a vendor specific command. Please contact Kathrein for further information.

[3] **Please note:** Ex factory, the communication protocol of the RCU (type-no. 860 10025) is **preset to AISG 1.1**. Therefore, start-up operation is only possible in an RET system supporting AISG 1.1. If the RET system supports 3GPP/AISG 2.0, the RCU must be set to 3GPP/AISG 2.0 before installation (i.e. with Kathrein PCA 860 10046) Please contact Kathrein for further information.





10853-E
936.2849/c

All specifications are subject to change without notice.
The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

Exhibit B

Power Density Calculations

MetroPCS Site NLD0056A

246 East Franklin Street

Killingly, Connecticut

Site Name: SBA E Franklin St Danielson
Antenna Height: MetroPCS @117 Ft.

Control Number	Site	Carrier	# Channels	ERP/Ch	Ant Ht	Power Density (mW/cm2)	MHz	S	% MPE	Site Total
EM-CING-069-080508	Danielson - 246 East Franklin Street	Cingular GSM	2	427	127	0.0190	1900	1.0000	1.90%	
EM-CING-069-080508	Danielson - 246 East Franklin Street	Cingular GSM	2	296	127	0.0132	880	0.5867	2.25%	
EM-CING-069-081024	Danielson - 246 East Franklin Street	Cingular UMTS	1	500	127	0.0111	880	0.5867	1.90%	
EM-VER-069-061103	Danielson - 246 East Franklin Street	Verizon	9	200	155	0.0269	875	0.5833	4.62%	
EM-VER-069-061103	Danielson - 246 East Franklin Street	Verizon PCS	3	485	155	0.0218	1970	1.0000	2.18%	
TS-BAM-069-990701	Danielson - 246 East Franklin Street	Sprint	11	122	147	0.0223	1962	1.0000	2.23%	
TS-OCI-069-990707	Danielson - 246 East Franklin Street	V'Stream	2	449	137	0.0172	1930	1.0000	1.72%	
	Danielson - 246 East Franklin Street	MetroPCS	3	443.61	117	0.0350	2140	1.0000	3.50%	20.30%

* Source: Siting Council

Exhibit C

Structural Analysis

MetroPCS Site NLD0056A

246 East Franklin Street

Killingly, Connecticut

VERTICAL STRUCTURES, INC.

July 23, 2009

Mr. Shawn Nottage
SBA Network Services
18 Ballou Street, #7
Putnam, CT 06260
(860) 816-6608

Subject:

Structural Analysis Report
Metro PCS Co-Locate
SBA Site Name: Danielson, CT
SBA Site Number: CT-00302-S
155' Nudd M-200 Monopole Tower
Vertical Structures Job Number: 2009-007-021

Dear Mr. Nottage,

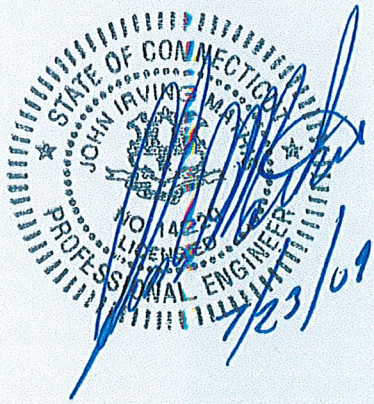
Vertical Structures is pleased to provide you with the results of the structural analysis performed on the 155' tall monopole tower at the Danielson site in Connecticut. The purpose of the analysis was to determine the suitability of the tower upon adding six (6) proposed Kathrein 742 351 panel antennas mounted on three (3) proposed T-Arms at 117' for Metro PCS when combined with the existing and reserved equipment on the structure. This analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon an 85 MPH basic "fastest mile" wind speed, equivalent to a 100 MPH basic "3-second gust" wind speed per IBC Equation 16-34.

Based on our analysis we have determined the tower superstructure and foundation are sufficient for the proposed loading provided the required modifications detailed in Appendix C have been completed.

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

Respectfully submitted,

Chris Sandlin, P.E.
Project Engineer



309 Spangler Drive • Suite E • Richmond, Kentucky 40475 • (859) 624-8360 • Fax (859) 624-8369

July 23, 2009

Mr. Shawn Nottage
SBA Network Services
18 Ballou Street, #7
Putnam, CT 06260
(860) 816-6608

Subject: **Structural Analysis Report**
Metro PCS Co-Locate
SBA Site Name: Danielson, CT
SBA Site Number: CT-00302-S
155' Nudd M-200 Monopole Tower
Vertical Structures Job Number: 2009-007-021

Dear Mr. Nottage,

Vertical Structures is pleased to provide you with the results of the structural analysis performed on the 155' tall monopole tower at the Danielson site in Connecticut. The purpose of the analysis was to determine the suitability of the tower upon adding six (6) proposed Kathrein 742 351 panel antennas mounted on three (3) proposed T-Arms at 117' for Metro PCS when combined with the existing and reserved equipment on the structure. This analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon an 85 MPH basic "fastest mile" wind speed, equivalent to a 100 MPH basic "3-second gust" wind speed per IBC Equation 16-34.

Based on our analysis we have determined the tower superstructure and foundation are sufficient for the proposed loading provided the required modifications detailed in Appendix C have been completed.

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

Respectfully submitted,

Chris Sandlin, P.E.
Project Engineer

TABLE OF CONTENTS

INTRODUCTION 3

ANALYSIS CRITERIA 3
Table 1 – Proposed and Existing Loads 3
Table 2 – Original Design Loads 4

ANALYSIS PROCEDURE 4
Table 3 – Resources Utilized 4
Analysis Methods 4
Assumptions 4

ANALYSIS RESULTS 5
Table 4 – Modified Tower Component Capacities 5
Required Modifications 5

APPENDIX A
Output from Computer Programs

APPENDIX B
Cable Routing Drawing

APPENDIX C
Required Modification Drawings

INTRODUCTION

The subject tower is located in Danielson, Connecticut. The 155' Nudd M-200 monopole tower was designed and manufactured by Fred A. Nudd Corporation for SBA in 1998. The existing structure consists of four (4) 12-sided tapered polygonal tubes joined via slip joint connections. The tower is founded on a 33' square by 3'-6" thick mat bearing 4' below grade. The tower was previously reworked in 2002 and 2009 to accommodate additional loading. For the purpose of this analysis, the required modifications detailed in Appendix C are considered to be complete.

ANALYSIS CRITERIA

The Danielson monopole tower was analyzed in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." The proposed, existing, and reserved antennas, cables, and mounts considered in this analysis are listed in Table 1. Applied forces in this study were derived from an 85 MPH basic "fastest mile" wind speed with no ice and a reduced 74 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The tower was originally designed for an 85 MPH basic "fastest mile" wind speed with no ice and a reduced 74 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The original design loads are listed in Table 2. All cables are assumed to be routed in accordance with the drawing in Appendix B.

Table 1 – Proposed and Existing Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
155'	Verizon Wireless	Existing	(6) Antel LPA-185080/12CF_2 Panels (6) Decibel DB844H80E-XY Panels	14' L.P. Platform	(12) 1 5/8" Coax
147'	Sprint	Existing	(6) Decibel DB980H90E-M Panels	14' L.P. Platform	(6) 1 5/8" Coax
137'	T-Mobile	Existing	(4) Dapa 59212 Panels	14' L.P. Platform	(4) 1 5/8" Coax
		Reserved	(2) Dapa 59212 Panels		(2) 1 5/8" Coax
127'	AT&T Mobility	Existing			(6) 1 5/8" Coax
		Reserved	(6) Powerwave 7770 Panels (6) Powerwave LGP21401 TMAs (6) Powerwave LGP21903 Diplexers	14' L.P. Platform	(6) 1 5/8" Coax
117'	**Metro PCS**	**Proposed**	**(6) Kathrein 742 351 Panels**	**(3) 12' T-Arms**	**(12) 1 5/8" Coax (1) 3/8" Coax**
80'	Sprint	Existing	(1) GPS Antenna	(1) 4' Sidearm	(1) 1/2" Coax
31'	American Messaging	Reserved	(1) Andrew DB589 Omni	(1) 4' Sidearm	(2) 7/8" Coax

Table 2 – Original Design Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
157'	Co-Lo	Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 2 1/4" Coax
147'	Co-Lo	Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 2 1/4" Coax
137'	Co-Lo	Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 2 1/4" Coax
127'	Co-Lo	Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 2 1/4" Coax

ANALYSIS PROCEDURE

Table 3 – Resources Utilized

Resource	Remarks
Proposed Loads	SBA E-mail
Existing Loads	SBA E-mail
Tower Drawings	Nudd Drawing No. 98-6410-1
Foundation Drawings	Nudd Drawing No. 98-6410-4
Geotechnical Report	Jaworski Geotech Project No. C98423G
Rework Drawings	Vertical Structures Job No. 2002-007-001
Rework Drawings	Vertical Structures Job No. 2008-007-031
Rework Drawings	Appendix C

Analysis Methods

RISA Tower (Version 5.3), a commercially available software program, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the ANSI/TIA/EIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

Assumptions

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

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

ANALYSIS RESULTS

The Danielson tower superstructure is found to be adequate for the intended loading at the wind and ice conditions considered provided the required modifications detailed in Appendix C have been completed. Calculated foundation reactions are within the allowable limits based on the provided soil information. Table 4 summarizes the condition of the modified tower.

Table 4 – Modified Tower Component Capacities

Section Number	Elevation	Percent Capacity Used		
		Pole	Flange Plate	Splice Bolts
1	155' – 115'	57.1	-	-
2	115' – 100'	99.5	-	-
3	100' – 70'	99.0	-	-
4	70' – 57'	98.7	-	-
5	57' – 36'	88.2	-	-
6	36' – 0'	94.1	-	-
Anchor Bolts – Tension		79.0		
Base Plate & Gussets – Bending		58.4		
Foundation – Moment		54.0		

Required Modifications

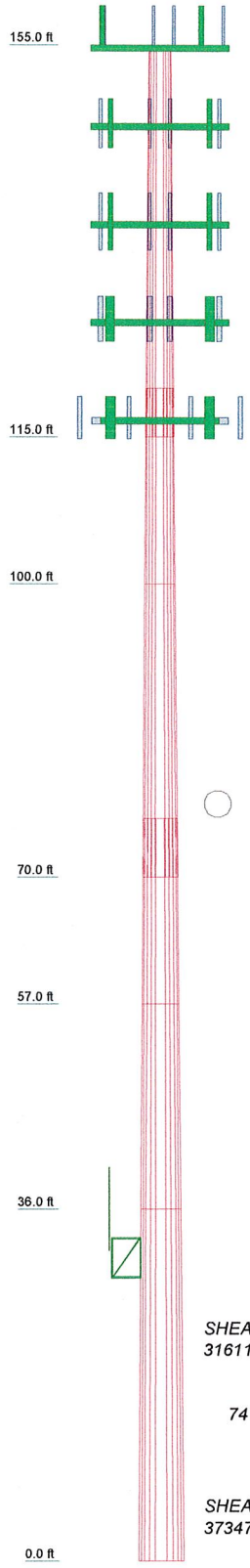
Modifications (A) and (B) are required to remedy the deficiencies identified in Vertical Structures Job No. 2009-007-020. Required modification drawings are provided in Appendix C. If requested, Vertical Structures will supply the material necessary to make the required modifications.

(A) Reinforce the pole from 58' to 14'.

(B) Install additional anchor bolts.

APPENDIX A

Section	1	2	3	4	5	6
Length (ft)	40.00	20.00	30.00	19.00	21.00	36.00
Number of Sides	12	12	12	12	12	12
Thickness (in)	0.2500	0.2500	0.3125	0.3750	0.4717	0.5164
Lap Splice (ft)	5.00		6.00			
Top Dia (in)	26.1250	32.3427	36.1815	40.1629	43.8097	47.8403
Bot Dia (in)	33.8024	36.1815	41.9395	43.8097	47.8403	54.0000
Grade	A36M-50			A36M-53 (VSI)		
Weight (lb) 27537.4	3255.7	1863.4	3980.3	3248.5	4922.5	10267.0



AXIAL
49726 lb

SHEAR
31611 lb

MOMENT
3328979 lb-ft

TORQUE 1663 lb-ft
74 mph WIND - 0.5000 in ICE

AXIAL
40199 lb

SHEAR
37347 lb

MOMENT
3816593 lb-ft

TORQUE 1681 lb-ft
REACTIONS - 85 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Nudd 14' Low Profile Platform (VSI)	155	14' Low-Profile Platform	127
(2) DB844H80E-XY w/Mount Pipe	155	(2) 7770.00 w/ mount pipe	127
(2) DB844H80E-XY w/Mount Pipe	155	(2) 7770.00 w/ mount pipe	127
(2) DB844H80E-XY w/Mount Pipe	155	(2) 7770.00 w/ mount pipe	127
(2) LPA-185080/12CF_2 w/ mount pipe	155	(2) LGP21401 TMA (VSI)	127
		(2) LGP21401 TMA (VSI)	127
(2) LPA-185080/12CF_2 w/ mount pipe	155	(2) LGP21401 TMA (VSI)	127
		(2) LGP21903 TMA	127
(2) LPA-185080/12CF_2 w/ mount pipe	155	(2) LGP21903 TMA	127
		(2) LGP21903 TMA	127
Nudd 14' Low Profile Platform (VSI)	147	12' (4" Pipe) T-Arm (VSI) (Metro PCS)	117
(2) DB980H90E-M w/Mount Pipe	147	12' (4" Pipe) T-Arm (VSI) (Metro PCS)	117
(2) DB980H90E-M w/Mount Pipe	147	12' (4" Pipe) T-Arm (VSI) (Metro PCS)	117
(2) DB980H90E-M w/Mount Pipe	147	(2) 742 351 w/ Mount Pipe (Metro PCS)	117
6' x 2" Antenna Mount Pipe (VSI)	147		
6' x 2" Antenna Mount Pipe (VSI)	147	(2) 742 351 w/ Mount Pipe (Metro PCS)	117
6' x 2" Antenna Mount Pipe (VSI)	147		
Nudd 14' Low Profile Platform (VSI)	137	(2) 742 351 w/ Mount Pipe (Metro PCS)	117
(2) 59212 w/Mount Pipe	137		
(2) 59212 w/Mount Pipe	137	4' Sidearm (4" single tube) (VSI)	80
(2) 59212 w/Mount Pipe	137	Generic GPS (VSI)	80
6' x 2" Antenna Mount Pipe (VSI)	137	4' Sidearm (4" single tube) (VSI)	31
6' x 2" Antenna Mount Pipe (VSI)	137	DB589	31
6' x 2" Antenna Mount Pipe (VSI)	137		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36M-50	50 ksi	65 ksi	A36M-53 (VSI)	53 ksi	65 ksi

TOWER DESIGN NOTES

1. Tower is located in Windham County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 99.5%

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

Job:	***Danielson, CT (CT-00302-S) (Modified)***		
Project:	***Vertical Structures Job No. 2009-007-021***		
Client: SBA	Drawn by: csandlin		App'd:
Code: TIA/EIA-222-F	Date: 07/23/09		Scale: NTS
Path: \\tsclvs1\csandlin\Open\2009-007-021 Danielson, CT\RISA\Danielson_Mpdified.eg			Dwg No. E-1

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
									(53 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	27.0466	20.8294	1780.0119	9.2632	13.5328	131.5336	3606.7867	10.2516	6.3315	25.326
	34.9948	27.0097	3881.0867	12.0118	17.5097	221.6541	7864.1338	13.2934	8.3890	33.556
L2	34.4772	25.8347	3396.2706	11.4892	16.7535	202.7196	6881.7651	12.7150	7.9979	31.991
	37.4578	28.9248	4766.5713	12.8635	18.7420	254.3258	9658.3658	14.2359	9.0266	36.107
L3	37.4578	36.0931	5927.1766	12.8411	18.7420	316.2512	12010.0668	17.7639	8.8591	28.349
	43.4190	41.8872	9264.4076	14.9025	21.7247	426.4464	18772.2014	20.6156	10.4023	33.287
L4	42.7719	48.0439	9707.9206	14.2441	20.8044	466.6286	19670.8791	23.6457	9.7587	26.023
	45.3551	52.4474	12629.4046	15.5496	22.6934	556.5229	25590.5978	25.8130	10.7360	28.629
L5	45.3551	65.8249	15780.2399	15.5150	22.6934	695.3665	31975.0444	32.3970	10.4768	22.211
	49.5279	71.9470	20605.3479	16.9580	24.7813	831.4882	41752.0212	35.4101	11.5571	24.501
L6	49.5279	78.6906	22494.1841	16.9420	24.7813	907.7085	45579.3155	38.7291	11.4373	22.148
	55.9049	88.9330	32470.5729	19.1471	27.9720	1160.8241	65794.1840	43.7701	13.0880	25.345

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in
L1 155.00-115.00				1	1	1		
L2 115.00-100.00				1	1	1		
L3 100.00-70.00				1	1	1		
L4 70.00-57.00				1	1	1		
L5 57.00-36.00				1	1	1		
L6 36.00-0.00				1	1	1		

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	155.00 - 8.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	A	No	Inside Pole	147.00 - 5.00	6	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	B	No	Inside Pole	137.00 - 5.00	6	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	127.00 - 2.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM) (Metro PCS)	B	No	CaAa (Out Of Face)	117.00 - 5.00	12	No Ice	0.02	0.82
						1/2" Ice	0.02	2.33
LDF2-50A (3/8 FOAM) (Metro PCS)	B	No	CaAa (Out Of Face)	117.00 - 5.00	1	No Ice	0.00	0.08
						1/2" Ice	0.00	0.65

Tower Input Data

There is a pole section.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in Windham County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 50 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	√ Assume Rigid Index Plate	√ Calculate Redundant Bracing Forces
Use Moment Magnification	√ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
√ Use Code Stress Ratios	Use Clear Spans For KL/r	√ SR Leg Bolts Resist Compression
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	√ All Leg Panels Have Same Allowable
Escalate Ice	√ Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Consider Feedline Torque
Use Special Wind Profile	√ Project Wind Area of Appurt.	Include Angle Block Shear Check
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Poles
√ Leg Bolts Are At Top Of Section	√ SR Members Have Cut Ends	Include Shear-Torsion Interaction
√ Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	√ Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination		

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	155.00-115.00	40.00	5.00	12	26.1250	33.8024	0.2500	1.0000	A36M-50 (50 ksi)
L2	115.00-100.00	20.00	0.00	12	32.3427	36.1815	0.2500	1.0000	A36M-50 (50 ksi)
L3	100.00-70.00	30.00	6.00	12	36.1815	41.9395	0.3125	1.2500	A36M-53 (VSI) (53 ksi)
L4	70.00-57.00	19.00	0.00	12	40.1629	43.8097	0.3750	1.5000	A36M-53 (VSI) (53 ksi)
L5	57.00-36.00	21.00	0.00	12	43.8097	47.8403	0.4717	1.8868	A36M-53 (VSI) (53 ksi)
L6	36.00-0.00	36.00		12	47.8403	54.0000	0.5164	2.0656	A36M-53 (VSI) (53 ksi)

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
LDF4-50A (1/2 FOAM)	C	No	CaAa (Out Of Face)	80.00 - 5.00	1	No Ice	0.06	0.15
						1/2" Ice	0.16	0.84
LDF5-50A (7/8 FOAM)	C	No	CaAa (Out Of Face)	31.00 - 5.00	2	No Ice	0.06	0.33
						1/2" Ice	0.11	1.30
Plate Reinforcement	C	No	CaAa (Out Of Face)	58.00 - 0.00	1	No Ice	0.35	0.00
						1/2" Ice	0.40	0.00

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
L1	155.00-115.00	A	0.000	0.000	0.000	0.000	157.44
		B	0.000	0.000	0.000	0.396	128.08
		C	0.000	0.000	0.000	0.000	511.68
L2	115.00-100.00	A	0.000	0.000	0.000	0.000	73.80
		B	0.000	0.000	0.000	2.970	222.60
		C	0.000	0.000	0.000	0.000	295.20
L3	100.00-70.00	A	0.000	0.000	0.000	0.000	147.60
		B	0.000	0.000	0.000	5.940	445.20
		C	0.000	0.000	0.000	0.630	591.90
L4	70.00-57.00	A	0.000	0.000	0.000	0.000	63.96
		B	0.000	0.000	0.000	2.574	192.92
		C	0.000	0.000	0.000	1.169	257.79
L5	57.00-36.00	A	0.000	0.000	0.000	0.000	103.32
		B	0.000	0.000	0.000	4.158	311.64
		C	0.000	0.000	0.000	8.673	416.43
L6	36.00-0.00	A	0.000	0.000	0.000	0.000	152.52
		B	0.000	0.000	0.000	6.138	460.04
		C	0.000	0.000	0.000	17.413	631.89

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
L1	155.00-115.00	A	0.500	0.000	0.000	0.000	0.000	157.44
		B		0.000	0.000	0.000	0.596	165.59
		C		0.000	0.000	0.000	0.000	511.68
L2	115.00-100.00	A	0.500	0.000	0.000	0.000	0.000	73.80
		B		0.000	0.000	0.000	4.469	503.90
		C		0.000	0.000	0.000	0.000	295.20
L3	100.00-70.00	A	0.500	0.000	0.000	0.000	0.000	147.60
		B		0.000	0.000	0.000	8.939	1007.81
		C		0.000	0.000	0.000	1.630	598.80
L4	70.00-57.00	A	0.500	0.000	0.000	0.000	0.000	63.96
		B		0.000	0.000	0.000	3.873	436.72
		C		0.000	0.000	0.000	2.519	266.76
L5	57.00-36.00	A	0.500	0.000	0.000	0.000	0.000	103.32
		B		0.000	0.000	0.000	6.257	705.46
		C		0.000	0.000	0.000	11.823	430.93
L6	36.00-0.00	A	0.500	0.000	0.000	0.000	0.000	152.52
		B		0.000	0.000	0.000	9.237	1041.40
		C		0.000	0.000	0.000	25.173	703.79

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L1	155.00-115.00	0.0144	0.0083	0.0209	0.0121
L2	115.00-100.00	0.2407	0.1390	0.3420	0.1975
L3	100.00-70.00	0.2142	0.1546	0.2761	0.2348
L4	70.00-57.00	0.1290	0.2002	0.1155	0.3179
L5	57.00-36.00	-0.2408	0.3950	-0.2760	0.5177
L6	36.00-0.00	-0.3536	0.4239	-0.4629	0.5738

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Nudd 14' Low Profile Platform (VSI)	C	None		0.0000	155.00	No Ice 1/2" Ice	32.00 42.00	32.00 42.00	1350.00 1750.00
(2) DB844H80E-XY w/Mount Pipe	A	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.58 4.20	5.63 6.73	35.55 77.48
(2) DB844H80E-XY w/Mount Pipe	B	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.58 4.20	5.63 6.73	35.55 77.48
(2) DB844H80E-XY w/Mount Pipe	C	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.58 4.20	5.63 6.73	35.55 77.48
(2) LPA-185080/12CF_2 w/ mount pipe	A	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.55 3.99	5.99 6.94	32.40 72.35
(2) LPA-185080/12CF_2 w/ mount pipe	B	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.55 3.99	5.99 6.94	32.40 72.35
(2) LPA-185080/12CF_2 w/ mount pipe	C	From Centroid-Face	4.04 0.81 2.00	10.0000	155.00	No Ice 1/2" Ice	3.55 3.99	5.99 6.94	32.40 72.35
**									
Nudd 14' Low Profile Platform (VSI)	C	None		0.0000	147.00	No Ice 1/2" Ice	32.00 42.00	32.00 42.00	1350.00 1750.00
(2) DB980H90E-M w/Mount Pipe	A	From Centroid-Face	4.04 0.00 0.00	0.0000	147.00	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 69.84
(2) DB980H90E-M w/Mount Pipe	B	From Centroid-Face	4.04 0.00 0.00	0.0000	147.00	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 69.84
(2) DB980H90E-M w/Mount Pipe	C	From Centroid-Face	4.04 0.00 0.00	0.0000	147.00	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 69.84
6' x 2" Antenna Mount Pipe (VSI)	A	From Centroid-Face	4.04 0.00 0.00	0.0000	147.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
6' x 2" Antenna Mount Pipe (VSI)	B	From Centroid-Face	4.04 0.00	0.00	0.0000	147.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83
6' x 2" Antenna Mount Pipe (VSI)	C	From Centroid-Face	4.04 0.00	0.00	0.0000	147.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83
**										
Nudd 14' Low Profile Platform (VSI)	C	None			0.0000	137.00	No Ice 1/2" Ice	32.00 42.00	32.00 42.00	1350.00 1750.00
(2) 59212 w/Mount Pipe	A	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	5.00 5.56	4.30 5.49	40.15 79.48
(2) 59212 w/Mount Pipe	B	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	5.00 5.56	4.30 5.49	40.15 79.48
(2) 59212 w/Mount Pipe	C	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	5.00 5.56	4.30 5.49	40.15 79.48
6' x 2" Antenna Mount Pipe (VSI)	A	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83
6' x 2" Antenna Mount Pipe (VSI)	B	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83
6' x 2" Antenna Mount Pipe (VSI)	C	From Centroid-Face	4.04 0.00	0.00	0.0000	137.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	23.00 33.83
**										
14' Low-Profile Platform	C	None			0.0000	127.00	No Ice 1/2" Ice	25.00 31.00	25.00 31.00	1000.00 1300.00
(2) 7770.00 w/ mount pipe	A	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	6.22 6.77	4.35 5.20	56.90 102.99
(2) 7770.00 w/ mount pipe	B	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	6.22 6.77	4.35 5.20	56.90 102.99
(2) 7770.00 w/ mount pipe	C	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	6.22 6.77	4.35 5.20	56.90 102.99
(2) LGP21401 TMA (VSI)	A	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	1.29 1.45	0.36 0.48	14.10 21.26
(2) LGP21401 TMA (VSI)	B	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	1.29 1.45	0.36 0.48	14.10 21.26
(2) LGP21401 TMA (VSI)	C	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	1.29 1.45	0.36 0.48	14.10 21.26
(2) LGP21903 TMA	A	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	0.27 0.34	0.18 0.25	11.02 13.44
(2) LGP21903 TMA	B	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	0.27 0.34	0.18 0.25	11.02 13.44
(2) LGP21903 TMA	C	From Centroid-Face	4.04 0.00	0.00	0.0000	127.00	No Ice 1/2" Ice	0.27 0.34	0.18 0.25	11.02 13.44

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
**									
12' (4" Pipe) T-Arm (VSI) (Metro PCS)	A	From Centroid-Face	4.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	5.40 6.60	3.00 4.00	150.00 225.00
12' (4" Pipe) T-Arm (VSI) (Metro PCS)	B	From Centroid-Face	4.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	5.40 6.60	3.00 4.00	150.00 225.00
12' (4" Pipe) T-Arm (VSI) (Metro PCS)	C	From Centroid-Face	4.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	5.40 6.60	3.00 4.00	150.00 225.00
(2) 742 351 w/ Mount Pipe (Metro PCS)	A	From Centroid-Face	6.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	6.06 6.52	2.92 3.54	48.05 86.61
(2) 742 351 w/ Mount Pipe (Metro PCS)	B	From Centroid-Face	6.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	6.06 6.52	2.92 3.54	48.05 86.61
(2) 742 351 w/ Mount Pipe (Metro PCS)	C	From Centroid-Face	6.50 0.00 0.00	0.0000	117.00	No Ice 1/2" Ice	6.06 6.52	2.92 3.54	48.05 86.61
**									
4' Sidearm (4" single tube) (VSI)	C	From Centroid-Leg	3.75 0.00 0.00	0.0000	80.00	No Ice 1/2" Ice	0.90 1.25	2.40 3.00	95.00 120.00
Generic GPS (VSI)	C	From Centroid-Leg	5.75 0.00 0.00	0.0000	80.00	No Ice 1/2" Ice	1.40 1.70	1.40 1.70	25.00 30.00
**									
**									
4' Sidearm (4" single tube) (VSI)	C	From Centroid-Leg	4.00 0.00 0.00	0.0000	31.00	No Ice 1/2" Ice	0.90 1.25	2.40 3.00	95.00 120.00
DB589	C	From Centroid-Leg	6.00 0.00 5.00	0.0000	31.00	No Ice 1/2" Ice	2.13 3.00	2.13 3.00	11.50 27.39

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P lb	Allow. P_a lb	Ratio $\frac{P}{P_a}$
L1	155 - 115 (1)	TP33.8024x26.125x0.25	40.00	0.00	0.0	30.000	26.2372	-8672.66	787115.00	0.011
L2	115 - 100 (2)	TP36.1815x32.3427x0.25	20.00	0.00	0.0	29.173	28.9248	-12353.10	843829.00	0.015
L3	100 - 70 (3)	TP41.9395x36.1815x0.3125	30.00	0.00	0.0	31.800	40.7284	-16792.70	1295160.00	0.013
L4	70 - 57 (4)	TP43.8097x40.1629x0.375	19.00	0.00	0.0	31.800	52.4474	-21852.60	1667830.00	0.013
L5	57 - 36 (5)	TP47.8403x43.8097x0.4717	21.00	0.00	0.0	31.800	71.9470	-27908.90	2287910.00	0.012
L6	36 - 0 (6)	TP54x47.8403x0.5164	36.00	0.00	0.0	31.800	88.9330	-40179.50	2828070.00	0.014

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P lb	Allow. P_a lb	Ratio $\frac{P}{P_a}$

Pole Bending Design Data

Section No.	Elevation ft	Size	Actual M_x lb-ft	Actual f_{bx} ksi	Allow. F_{bx} ksi	Ratio $\frac{f_{bx}}{F_{bx}}$	Actual M_y lb-ft	Actual f_{by} ksi	Allow. F_{by} ksi	Ratio $\frac{f_{by}}{F_{by}}$
L1	155 - 115 (1)	TP33.8024x26.125x0.25	392162.50	-22.505	30.000	0.750	0.00	0.000	30.000	0.000
L2	115 - 100 (2)	TP36.1815x32.3427x0.25	811395.00	-38.285	29.173	1.312	0.00	0.000	29.173	0.000
L3	100 - 70 (3)	TP41.9395x36.1815x0.3125	1395891.67	-41.555	31.800	1.307	0.00	0.000	31.800	0.000
L4	70 - 57 (4)	TP43.8097x40.1629x0.375	1921466.67	-41.432	31.800	1.303	0.00	0.000	31.800	0.000
L5	57 - 36 (5)	TP47.8403x43.8097x0.4717	2563650.00	-36.998	31.800	1.163	0.00	0.000	31.800	0.000
L6	36 - 0 (6)	TP54x47.8403x0.5164	3816591.67	-39.454	31.800	1.241	0.00	0.000	31.800	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P}{P_a}$	Ratio $\frac{f_{bx}}{F_{bx}}$	Ratio $\frac{f_{by}}{F_{by}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	155 - 115 (1)	TP33.8024x26.125x0.25	0.011	0.750	0.000	0.761 ✓	1.333	H1-3 ✓
L2	115 - 100 (2)	TP36.1815x32.3427x0.25	0.015	1.312	0.000	1.327 ✓	1.333	H1-3 ✓
L3	100 - 70 (3)	TP41.9395x36.1815x0.3125	0.013	1.307	0.000	1.320 ✓	1.333	H1-3 ✓
L4	70 - 57 (4)	TP43.8097x40.1629x0.375	0.013	1.303	0.000	1.316 ✓	1.333	H1-3 ✓
L5	57 - 36 (5)	TP47.8403x43.8097x0.4717	0.012	1.163	0.000	1.176 ✓	1.333	H1-3 ✓
L6	36 - 0 (6)	TP54x47.8403x0.5164	0.014	1.241	0.000	1.255 ✓	1.333	H1-3 ✓

Section Capacity Table

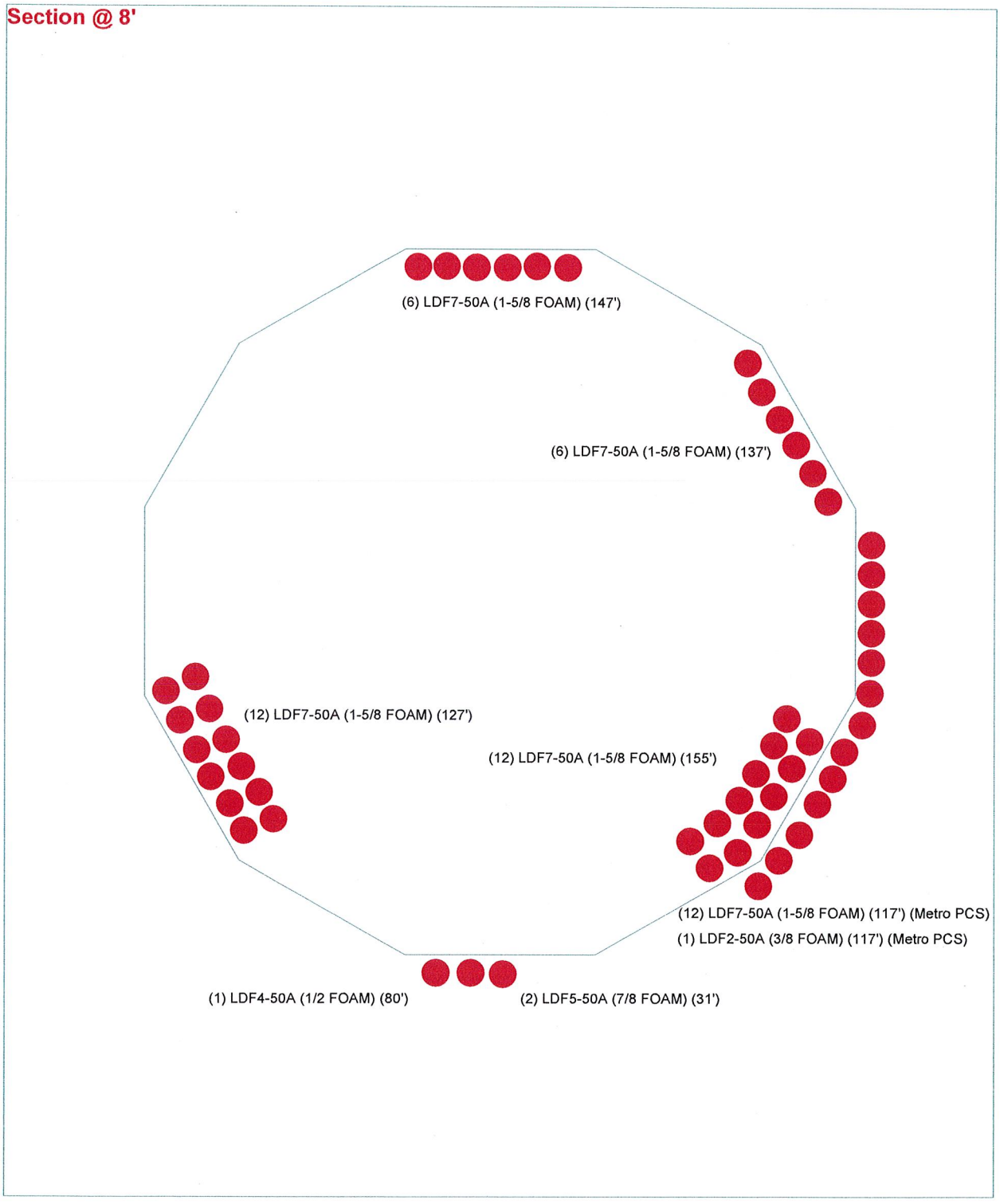
Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	$SF*P_{allow}$ lb	% Capacity	Pass Fail
L1	155 - 115	Pole	TP33.8024x26.125x0.25	1	-8672.66	1049224.25	57.1	Pass
L2	115 - 100	Pole	TP36.1815x32.3427x0.25	2	-12353.10	1124824.01	99.5	Pass
L3	100 - 70	Pole	TP41.9395x36.1815x0.3125	3	-16792.70	1726448.21	99.0	Pass
L4	70 - 57	Pole	TP43.8097x40.1629x0.375	4	-21852.60	2223217.30	98.7	Pass
L5	57 - 36	Pole	TP47.8403x43.8097x0.4717	5	-27908.90	3049783.90	88.2	Pass
L6	36 - 0	Pole	TP54x47.8403x0.5164	6	-40179.50	3769817.15	94.1	Pass
							Summary	
						Pole (L2)	99.5	Pass
						RATING =	**99.5**	**Pass**

APPENDIX B

Feedline Plan

8'

Round Flat App In Face App Out Face



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

Job: ***Danielson, CT (CT-00302-S) (Modified)***		
Project: ***Vertical Structures Job No. 2009-007-021***		
Client: SBA	Drawn by: csandlin	App'd:
Code: TIA/EIA-222-F	Date: 07/23/09	Scale: NTS
Path: \\Nas1\amathis\Current Jobs\2009-007-020-Danielson, CT\RISA\Danielson.eri		Dwg No. E-7

APPENDIX C

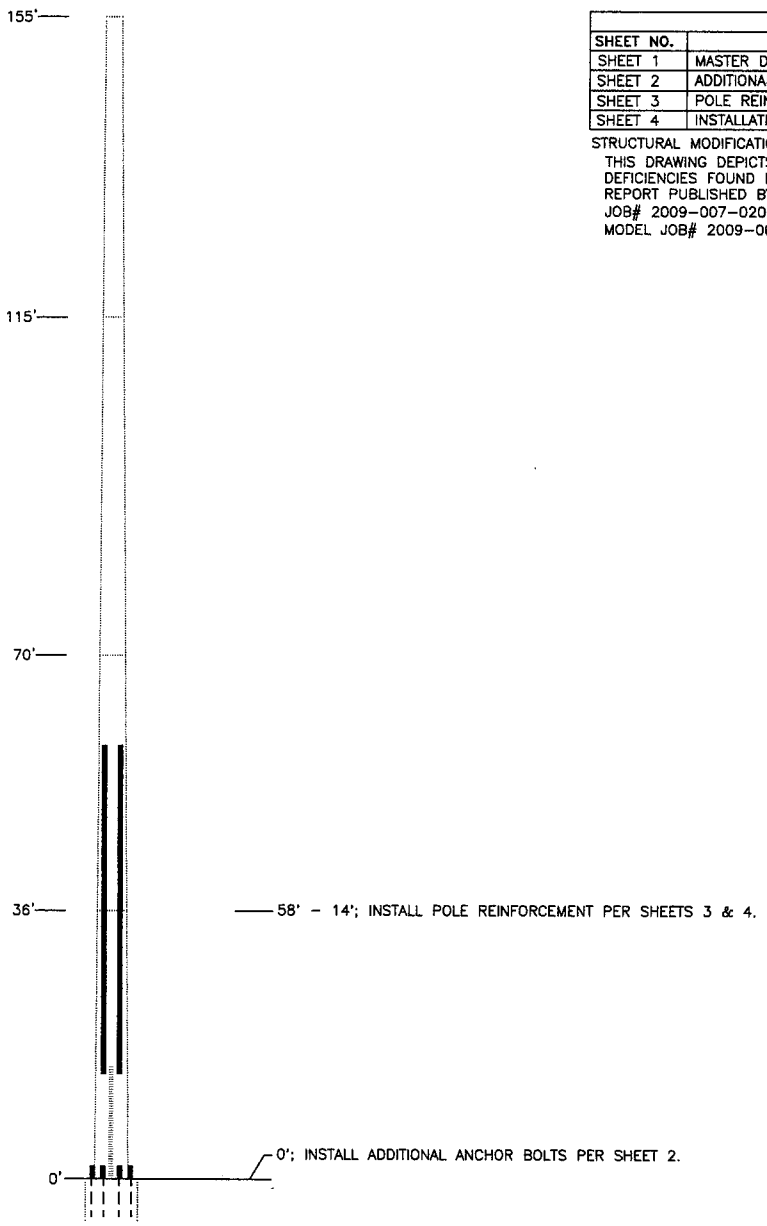


TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
SHEET 1	MASTER DRAWING INCLUDING NOTES
SHEET 2	ADDITIONAL ANCHOR BOLT INSTALLATION (0')
SHEET 3	POLE REINFORCEMENT INSTALLATION (58' - 14')
SHEET 4	INSTALLATION & PART DETAILS

STRUCTURAL MODIFICATIONS:

THIS DRAWING DEPICTS THE REWORK REQUIRED TO REMEDY THE DEFICIENCIES FOUND IN THE DANIELSON, CT TOWER PER THE REPORT PUBLISHED BY VERTICAL STRUCTURES ON 6-23-09, JOB# 2009-007-020. (REWORK PER FINAL MODIFIED RISA MODEL JOB# 2009-007-021.)

TECHNICAL SPECIFICATION NOTES:

1. **CONTRACTOR: CALL VERTICAL STRUCTURES AT (859) 624-8360 TO MAKE SURE YOU HAVE THE LATEST REVISION OF THIS DRAWING.**
2. CONTACT THE ENGINEER CONCERNING ANY CHANGES OR MODIFICATIONS THAT MAY BE REQUIRED DUE TO THE EXISTING CONDITIONS.
3. ALL BOLTS 1/2" OR LESS TO BE INSTALLED WITH H OR 2H NUTS.
4. ALL BOLTS GREATER THAN 1/2" TO BE INSTALLED WITH 2H NUTS.
5. LOCKING MECHANISM FOR BOLTS TO BE PALNUTS OR LOCKWASHERS.
6. ALL U-BOLTS TO BE INSTALLED WITH 2H NUTS AND LOCKWASHERS.
7. ANY HARDWARE REMOVED FROM THE EXISTING TOWER MUST BE REPLACED WITH NEW HARDWARE OF EQUAL SIZE AND QUALITY UNLESS NOTED OTHERWISE.
8. AFTER FIELD MODIFICATIONS OF ANY STEEL MEMBERS, COAT EXPOSED STEEL SURFACES WITH TWO COATS OF SHERWIN WILLIAMS PART #143-0255 ZINC CLAD COATING, CONTAINING 97% ZINC DUST TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS. IF REQUIRED, PAINT ALL AREAS AFFECTED OR NEW STEEL WITH MATCHING TOWER PAINT.
9. FINISHING SPECIFICATIONS - ALL MATERIAL TO BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
   A. FABRICATED MATERIAL - ASTM A123.
   B. HARDWARE - ASTM A153.
   C. GUY WIRE - ASTM A475
10. ELEVATIONS SHOWN ARE NOMINAL AND NOT EXACT.

WELDING SPECIFICATION NOTES:

1. SURFACES TO BE CLEARED OF GALVANIZATION BEFORE FIELD WELDING ANY MATERIAL.
2. CARE MUST BE TAKEN TO ENSURE THAT THE COAX AND GALVANIZATION INSIDE THE POLE ARE NOT DAMAGED BY HEAT DURING WELDING.
3. WELDER TO BE AWS CERTIFIED AND USE E70XX RODS.
4. A LOW-HEAT WELDING PROCEDURE SHOULD BE EMPLOYED. PROCEDURE MUST BE SUBMITTED TO VERTICAL STRUCTURES FOR REVIEW PRIOR TO CONSTRUCTION.
5. AFTER INSTALLING REINFORCEMENT, COAT EXPOSED STEEL SURFACES WITH TWO COATS OF SHERWIN WILLIAMS PART #143-0255 ZINC CLAD COATING, CONTAINING 97% ZINC DUST TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS. IF REQUIRED, PAINT ALL AREAS AFFECTED OR NEW STEEL WITH MATCHING TOWER PAINT.

MATERIAL SPECIFICATION NOTES:

1. PART FABRICATION DETAILS MUST BE APPROVED BY VERTICAL STRUCTURES, INC. BEFORE USE. REVIEW MAY INCLUDE RECEIPT OF MILL CERTIFICATIONS WHEN NECESSARY.
2. NO FIELD FABRICATION OF TOWER REWORK MATERIAL IS ALLOWED. ALL STEEL TO BE SHOP FABRICATED.
3. IT IS THE RESPONSIBILITY OF THE MATERIAL SUPPLIER TO GUARANTEE PROPER FITUP. ALL DIMENSIONS USED IN FABRICATION DETAILS MUST BE FIELD VERIFIED.

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	7-16-09	JAC

VERTICAL STRUCTURES, INC.
P.O. Box 1486
Richmond, KY 40476
Phone: (859) 624-8360
Fax: (859) 624-8369
Email: engineering@verticalstructures.com

FOR

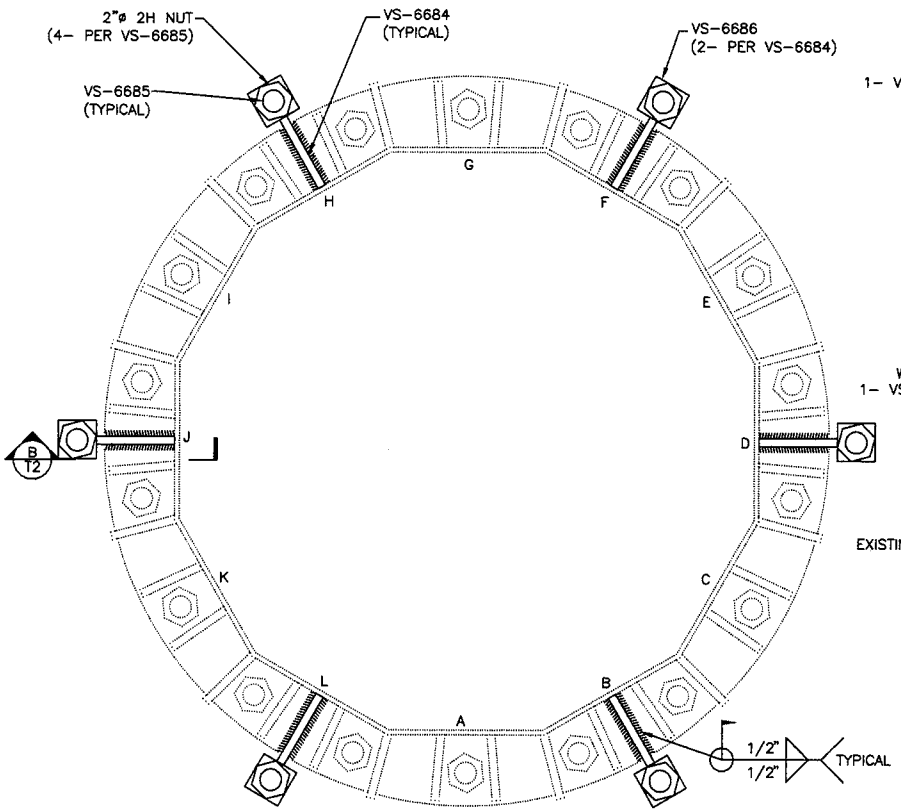
SBA

2009 MODIFICATIONS
TOWER REWORK FOR A
155' NUDD M-200 MONOPOLE
SITE: DANIELSON, CT

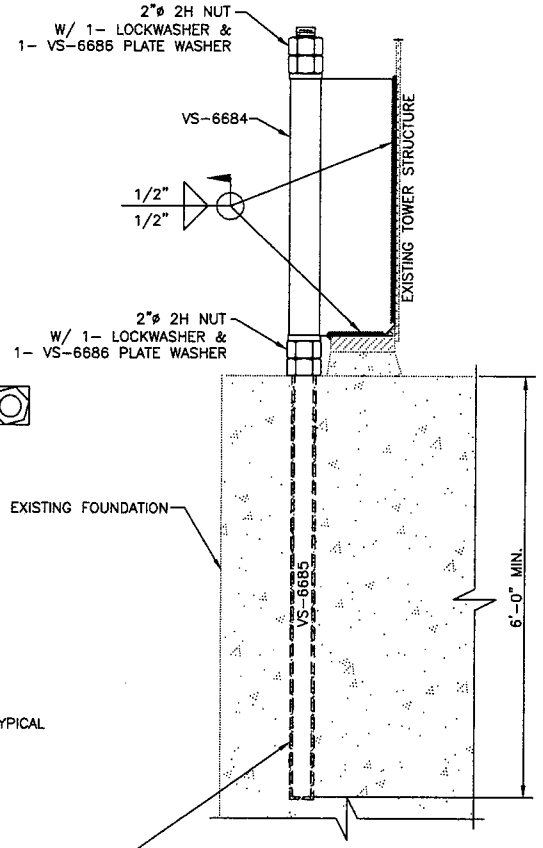
SBA SITE# CT-00302-S	
DRAFTSPERSON: J. COMBS	DATE 7-16-09
CHK'D BY: ANP	DATE
ENGR: CS	DATE

SHEET 1 OF 4 | B TA2009007021-T1 | SCALE: NONE

BILL OF MATERIALS			
MARK NO.	QTY.	DESCRIPTION	MATERIAL GRADE
VS-6684	6	ANCHOR LUG WELDMENT FOR A 2"ø S.R.	ASTM A572 GRADE 50
VS-6685	6	ANCHOR BOLT, 2"ø ALLTHREAD	ASTM A193 GRADE B7
VS-6686	12	PLATE WASHER, 3/4" THICK	ASTM A572 GRADE 50
XY2001	24	2H NUT, 2"ø	–
–	–	8000 PSI NON-SHRINK CEMENTITIOUS GROUT (AS NEEDED)	–



A/T2 PLAN VIEW @ BASE PLATE
STEPBOLTS, SAFETY CLIMB, AND PORTS NOT SHOWN FOR CLARIFICATION



B/T2 SECTION

DRILL 3"ø HOLE, CLEAN WITH BRISTLE BRUSH, REMOVE ALL WATER AND DUST W/ CLEAN COMPRESSED AIR. ANCHOR THE BOLTS W/ 8000 PSI NON-SHRINK CEMENTITIOUS GROUT. READ PRODUCT INSTRUCTIONS FOR PROPER MIXING AND PLACEMENT.

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	7-16-09	JAC

VERTICAL STRUCTURES, INC.
P.O. Box 1486
Richmond, KY 40476
Phone: (859) 624-8360
Fax: (859) 624-8369
Email: engineering@verticalstructures.com

FOR

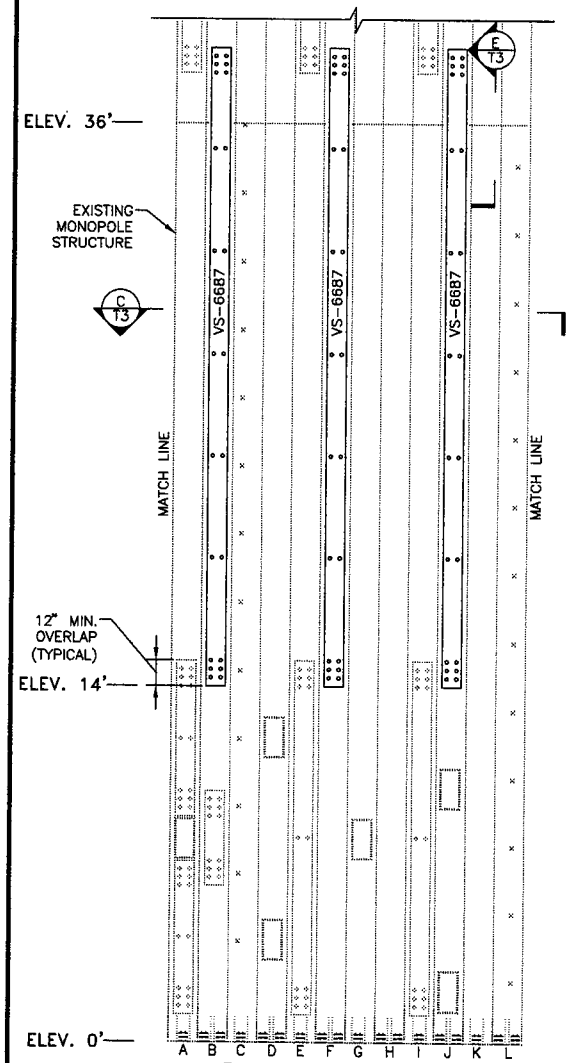
SBA

2009 MODIFICATIONS
TOWER REWORK FOR A
155' NUDD M-200 MONOPOLE
SITE: DANIELSON, CT

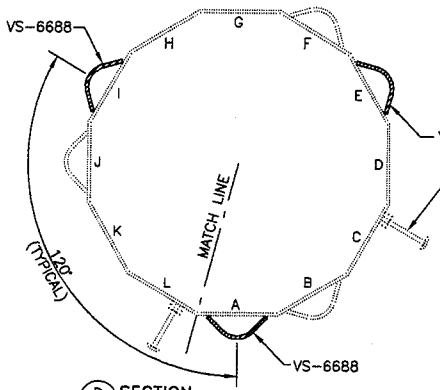
SBA SITE# CT-00302-S		
DRAFTSPERSON: J. COMBS	DATE 7-16-09	
CHK'D BY: ANP	DATE	
ENGR: CS	DATE	

SHEET 2 OF 4 | B TA2009007021-T2 | SCALE: NONE

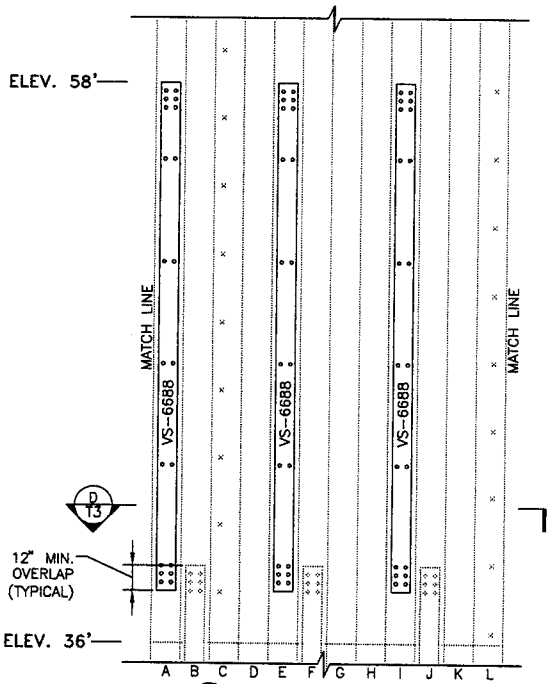
BILL OF MATERIALS			
MARK NO.	QTY.	DESCRIPTION	MATERIAL GRADE
VS-6687	3	BENT PLATE REINFORCEMENT, 10" X 1/2"	ASTM A572, GRADE 65
VS-6688	3	BENT PLATE REINFORCEMENT, 10" X 1/2"	ASTM A572, GRADE 65



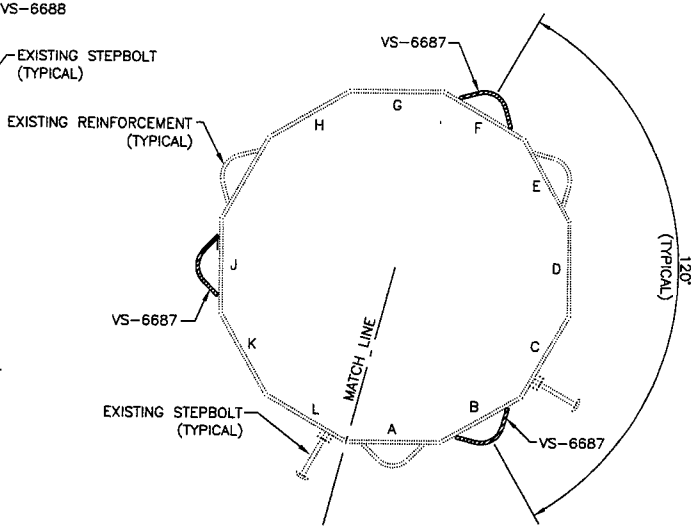
A T3 FOLD OUT VIEW
TAPER NOT SHOWN FOR CLARITY



D T3 SECTION
IF CHANGES TO THE PLACEMENT OF NEW REINFORCEMENT IS NECESSARY, 120° SEPERATION MUST BE MAINTAINED.



B T3 FOLD OUT VIEW
TAPER NOT SHOWN FOR CLARITY



C T3 SECTION
IF CHANGES TO THE PLACEMENT OF NEW REINFORCEMENT IS NECESSARY, 120° SEPERATION MUST BE MAINTAINED.

E T3 SECTION

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	7-16-09	JAC

VERTICAL STRUCTURES, INC.
P.O. Box 1496
Richmond, KY 40476
Phone: (859) 624-8360
Fax: (859) 624-8369
Email: engineering@verticalstructures.com

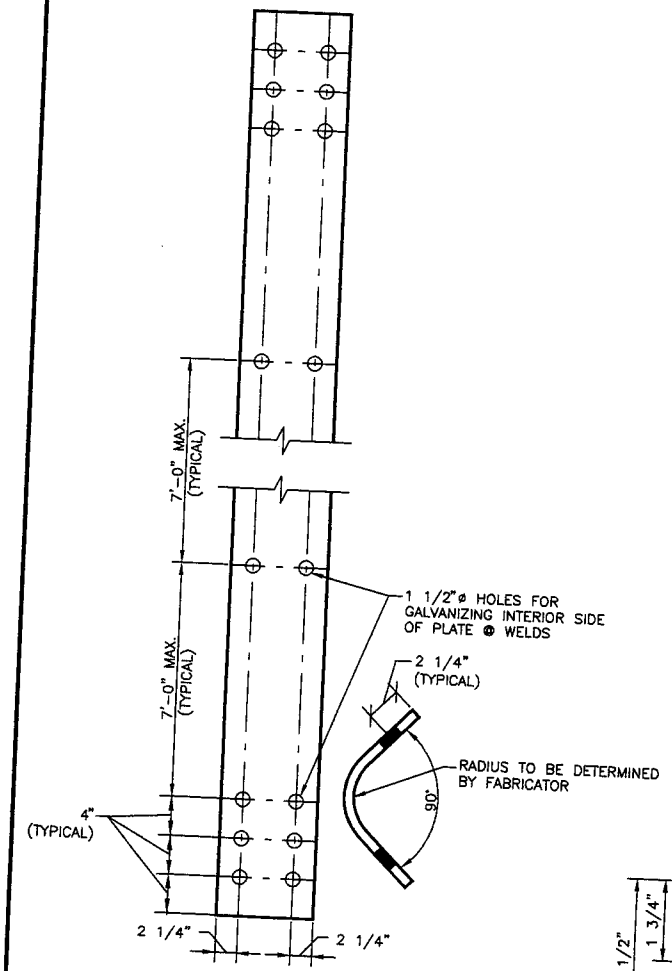
FOR

SBA

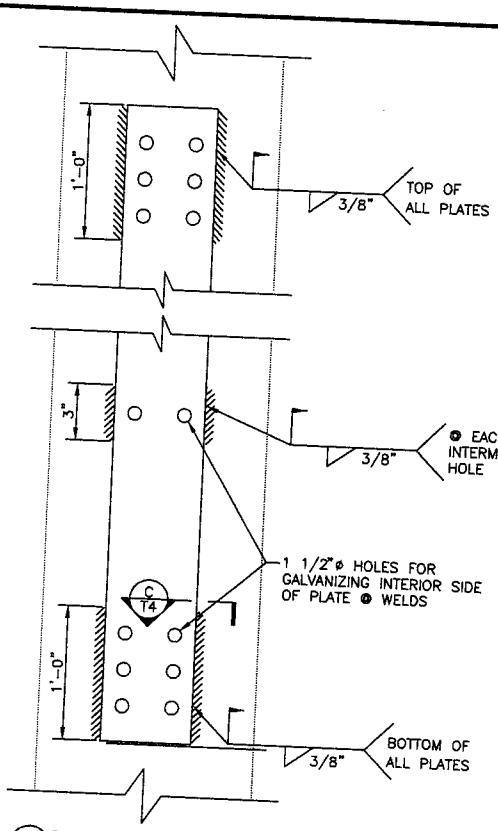
2009 MODIFICATIONS
TOWER REWORK FOR A
155' NUDD M-200 MONOPOLE
SITE: DANIELSON, CT

SBA SITE# CT-00302-S		
DRAFTSPERSON: J. COMBS	DATE 7-16-09	
CHK'D BY: ANP	DATE	
ENGR: CS	DATE	

SHEET 3 OF 4 | B TA2009007021-T3 | SCALE: NONE

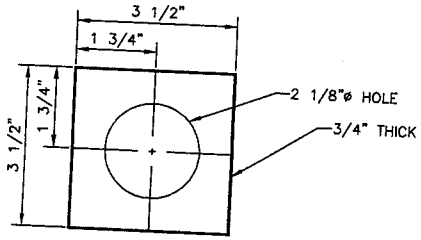


A T4 PART DETAIL
VS-6687 & VS-6688

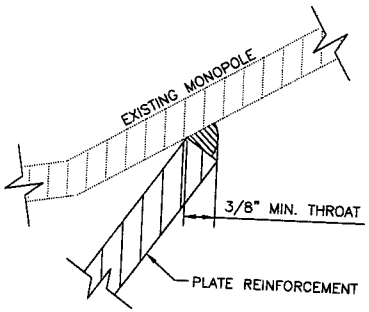


B T4 BENT PLATE WELDING DETAIL

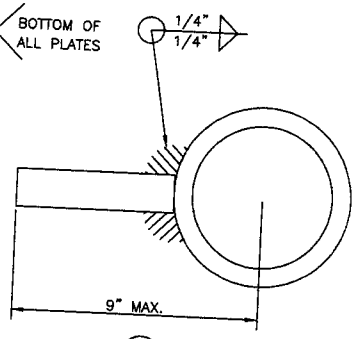
ALL GALVANIZATION MUST BE REMOVED WHERE WELDING OCCURS. COLD GALVANIZATION MUST BE SPRAYED ON ALL EXPOSED PARTS AFTER WELDING.



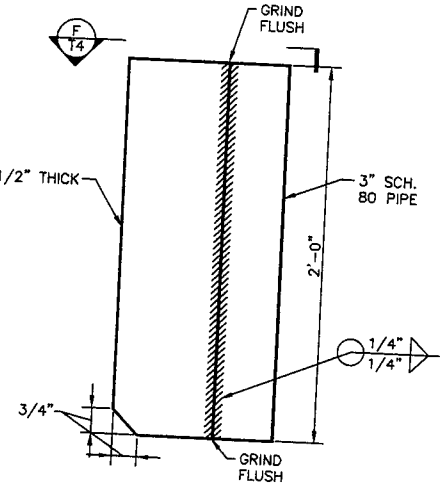
E T4 PART DETAIL
VS-6686



C T4 SECTION



F T4 SECTION



D T4 PART DETAIL
VS-6684

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	7-16-09	JAC

VERTICAL STRUCTURES, INC.
P.O. Box 1496
Richmond, KY 40476
Phone: (859) 624-8360
Fax: (859) 624-8369
Email: engineering@verticalstructures.com

FOR

SBA

2009 MODIFICATIONS
TOWER REWORK FOR A
155' NUDD M-200 MONOPOLE
SITE: DANIELSON, CT

SBA SITE# CT-00302-S			
DRAFTSPERSON: J. COMBS	DATE 7-16-09	SHEET 4 OF 4	B TA2009007021-T4
CHK'D BY: ANP	DATE		
ENGR: CS	DATE		SCALE: NONE

CUDDY & FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Tel 914.761.1300 Fax 914.761.5372
www.cuddyfeder.com

July 2, 2010

BY FIRST CLASS MAIL
Mr. Derek Phelps, Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: MetroPCS
Request for Extension of Time to Construct Exempt Facilities

Dear Mr. Phelps:

We are writing on behalf of our client, MetroPCS, to request an extension of the time to construct various exempt facilities already acknowledged by the Siting Council. We are informed by our client that it has pushed out the construction commencement phase of various sites until early 2011 and anticipates completion of construction by the end of the second quarter in 2011.

The below chart outlines each of the sites MetroPCS is requesting extensions on pursuant to this letter. As you will see from the below, these sites received acknowledgment letters by the Council starting on July 21, 2009. As such and given MetroPCS' anticipated construction start and completion dates, MetroPCS is respectfully requesting an extension to July 30, 2011 to complete each of the facilities listed below.

CSC EM/TS#	Date of CSC Acknowlegement	Address	City/Town
TS-METROPCS-105-090716	September 1, 2009	189 Boston Post Road	Old Lyme
EM-METROPCS-045-090630	July 28, 2009	2 Scott Rd	East Lyme
EM-METROPCS-152-090619	July 27, 2009	607 Mohegan Avenue (a/k/a 35 S. Bartlett Rd.)	Waterford
EM-METROPCS-086-090807	September 16, 2009	71 Moxley Rd	Montville
EM-METROPCS-086-090731	August 28, 2009	57 Cook Rd	Montville
EM-METROPCS-104-090715	August 19, 2009	2 Hinckley Hill Road	Norwich
EM-METROPCS-104-090707	August 14, 2009	39 Maennerchor Ave	Norwich
EM-METROPCS-104-090612	July 21, 2009	202 North Wawecus Hill Rd	Norwich
EM-METROPCS-104-090807	September 16, 2009	50 Clinton Avenue	Norwich
EM-METROPCS-073-090622	July 27, 2009	26 Mell Road (a/d/a 20 Mell Rd)	Lisbon
EM-METROPCS-058-090615	July 23, 2009	181 Norman Rd	Griswold
EM-METROPCS-058-090715	August 26, 2009	131 Bishop Crossing	Griswold

CUDDY & FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Tel 914.761.1300 Fax 914.761.5372
www.cuddyfeder.com

ORIGINAL

July 26, 2011

VIA FEDERAL EXPRESS
Ms. Linda Roberts, Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: MetroPCS
Request for Extension of Time to Construct Exempt Facilities

Dear Ms. Roberts:

We are writing on behalf of our client, MetroPCS, to request a further 1 year extension of time to July 30, 2012 to construct various exempt facilities already acknowledged by the Siting Council. The Council previously granted an extension to July 30, 2011 in the attached correspondence, dated July 19, 2010.

We are informed by our client that at this time, MetroPCS has not slated a launch date for service to this part of the State and is asking for another 1 year extension. MetroPCS does not anticipate commencing construction on these sites until early 2012.

The attached chart outlines each of the sites MetroPCS is requesting extensions on pursuant to this letter. As you will see from the below, these sites received acknowledgment letters by the Council starting on July 21, 2009.

Thank you for your consideration.

Very truly yours,

Christopher B. Fisher

CBF/cs
Enclosures
cc: Kate Rugman, MetroPCS

This extension is granted with the understanding that the Council will be notified should the applicant decide not to proceed with construction.

Sincerely,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Paul M. Formica, First Selectman, Town of East Lyme
Meg Parulis, Planning Director, Town of East Lyme
The Honorable Philip E. Anthony, Jr., First Selectman, Town of Griswold
Carl S. Fontneau, Town Planner, Town of Griswold
The Honorable Robert B. Young, Chairman Town Council, Town of Killingly
Bruce E. Benway, Town Manager, Town of Killingly
Roger Gandolf, Zoning Officer, Town of Killingly
The Honorable Fred B. Allyn, Jr., Mayor, Town of Ledyard
Brian Palaia, Town Planner, Town of Ledyard
The Honorable Thomas W. Sparkman, First Selectman, Town of Lisbon
James D. Rabbit, Town Planner, Town of Lisbon
The Honorable Joseph W. Jaskiewicz, Mayor, Town of Montville
Marcia Viaun, Town Planner, Town of Montville
The Honorable Nicholas H. Mullane, II, First Selectman, Town of North Stonington
Craig Grimord, Senior Planning & Zoning Official, Town of North Stonington
The Honorable Peter A. Nystrom, Mayor, City of Norwich
Alan H. Bergren, City Manager, City of Norwich
Peter Davis, City Planner, City of Norwich
The Honorable Paul E. Sweet, First Selectman, Town of Plainfield
Gloria Rizer, Planning & Zoning Chairman, Town of Plainfield
The Honorable Robert M. Congdon, First Selectman, Town of Preston
Kathy Warzecha, Town Planner, Town of Preston
The Honorable Robert G. Viens, Mayor, Town of Putnam
Gerard Cotnoir, Planning Chairman, Town of Putnam
The Honorable Larry Groh, First Selectman, Town of Thompson
John E. Mahon, Jr., Zoning Enforcement Officer, Town of Thompson
The Honorable Daniel M. Steward, First Selectman, Town of Waterford
Thomas V. Wagner, Planning Director, Town of Waterford

CUDDY& FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Tel 914.761.1300 Fax 914.761.5372
www.cuddyfeder.com

ORIGINAL

RECEIVED
MAY 30 2012
CONNECTICUT SITING COUNCIL

May 29, 2012

VIA FEDERAL EXPRESS
Ms. Linda Roberts, Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: MetroPCS
Request for Extension of Time to Construct Exempt Facilities and
Notification of Construction Completion of Facilities

Dear Ms. Roberts:

We are writing on behalf of our client, MetroPCS, to notify the Council that construction has been completed on several sites identified below with a plus "+" symbol. We are also writing to request a further 1 year extension of time to July 30, 2013 to construct the remaining exempt facilities listed below that were previously acknowledged by the Siting Council. The Council previously granted an extension to July 30, 2012 for these sites in the attached correspondence, dated August 12, 2011. MetroPCS does not anticipate commencing construction on the remaining sites below until early 2013.

CSC Control Number	Site Address	Orig. Date	Ackn.
EM-MetroPCS-045-090630	2 Scott Road, East Lyme	7/28/09	+
EM-MetroPCS-152-090619	607 Mohegan Avenue a/k/a 35 S. Bartlett Road, Waterford	7/27/09	+
EM-MetroPCS-086-090807	71 Moxley Road, Montville	9/16/09	+
EM-MetroPCS-086-090731	57 Cook Road, Montville	8/28/09	+
EM-MetroPCS-104-090715	2 Hinckley Hill Road, Norwich	8/19/09	+
EM-MetroPCS-104-090707	39 Maennerchor Avenue, Norwich	8/14/09	+
EM-MetroPCS-104-090612	202 North Wawecus Hill Road, Norwich	7/21/09	+
EM-MetroPCS-104-090807	50 Clinton Avenue, Norwich	9/16/09	+
EM-MetroPCS-073-090622	26 Mell Road a/k/a 20 Mell Road, Lisbon	7/27/09	
EM-MetroPCS-058-090615	181 Norman Road, Griswold	7/23/09	
EM-MetroPCS-058-090715	131 Bishop Crossing, Griswold	8/26/09	
EM-MetroPCS-109-090612	954 Norwich Road, Plainfield	7/21/09	
EM-MetroPCS-109-090623	388 Norwich Road, Plainfield	7/27/09	
EM-MetroPCS-109-090615A	47-51 Unity Road, Plainfield	7/24/09	
EM-MetroPCS-109-090615B	57 Roper Road, Plainfield	7/24/09	

C&F: 1919290.1