



# 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](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

Daniel F. Caruso  
Chairman

June 16, 2009

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

RE: **EM-CING-067-090511** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 66 Wall Street, Hebron, Connecticut.

Dear Mr. Levine:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated May 8, 2009, 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,

S. Derek Phelps  
Executive Director

SDP/MP/laf

c: The Honorable Karen Strid, Chairman Board Of Selectmen, Town of Hebron  
Jared Clark, Town Manager, Town of Hebron  
Michael O'Leary, Town Planner, Town of Hebron  
SBA Network Services

EM-CING-067-090511

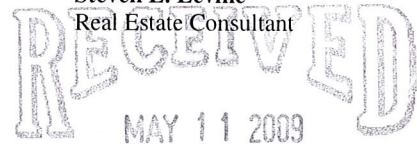


New Cingular Wireless PCS, LLC  
500 Enterprise Drive  
Rocky Hill, Connecticut 06067-3900  
Phone: (860) 513-7636  
Fax: (860) 513-7190

Steven L. Levine  
Real Estate Consultant

HAND DELIVERED

ORIGINAL



May 8, 2009

CONNECTICUT  
SITING COUNCIL

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 66 Wall Street, Hebron (owner, SBA)

**REVISION of EM-CING-067-090114**

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 ("AT&T") 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 AT&T'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.
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 or more 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, New 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

**NEW CINGULAR WIRELESS  
Equipment Modification  
REVISION of EM-CING-067-090114**

66 Wall Street, Hebron  
Site Number 5865  
Former AT&T cell site  
Exempt Modification approved 5/02 and 3/09

**Tower Owner/Manager:** SBA

**Equipment Configuration:** Flagpole

**Current and/or Approved:** Three Powerwave 7770 antennas (or equivalent) @ 116 ft  
Six TMA's @ 116 ft  
Six runs 7/8 inch coax  
24-inch diameter radomes from 110 to 150 ft  
Concrete pad with outdoor equipment cabinets

**Planned Modifications:** Increase radome diameter to 36-inches at 110-120 ft AGL

Rationale: Insufficient space remains in the existing 24" radome to install AT&T's approved antennas and TMA's. In theory, the 24" radome should have worked with AT&T's approved equipment. However, upon opening the radome it was discovered that third-party coax passing through the 110-120 ft interval occupied by AT&T took up more space than expected. This in turn, precluded installation of the new AT&T equipment. We propose the larger 36" radome to accommodate AT&T's volumetric requirements.

**Power Density:** The proposed modifications will not affect RF emission calculations

**Structural information:**

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed radome replacement. (PiRod Engineering, 4/28/09)



**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

May 8, 2009

Jared S. A. Clark, Town Manager  
Town of Hebron  
Town Office Bldg., 15 Gilead Street  
Hebron, CT 06248

Re: Telecommunications Facility – 66 Wall Street

Dear Mr. Clark:

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 (“AT&T”) 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 AT&T’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 AT&T’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

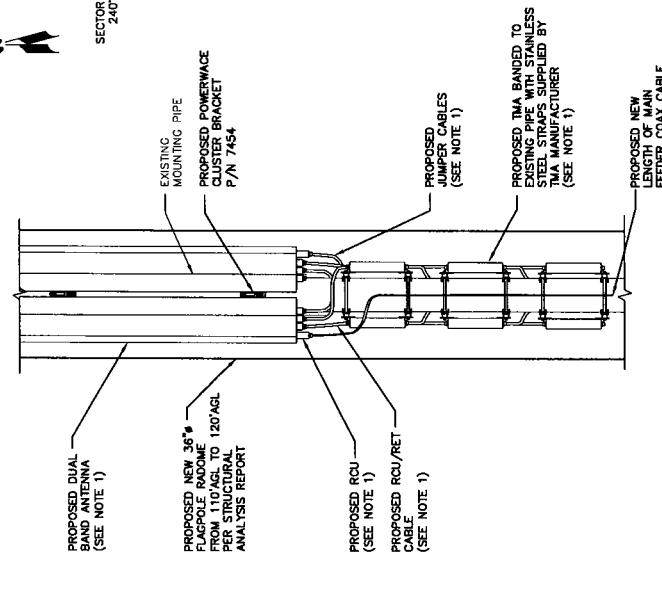
Enclosure

RF TABLE

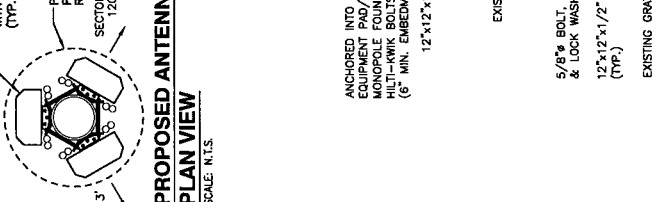
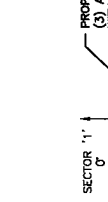
SECTOR	SECTOR NAME	ANTENNA MAKE & MODEL	ANTENNA COUNT	MECHANICAL DOWNLIT	RAZ CENTER	AZIMUTH	TMA COUNT	DIPLEXER COUNT	# OF COAX CABLES
1	ALPHA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	0*	115±	0*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 PROPOSED 2 EXISTING
2	BETA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	0*	115±	120*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 PROPOSED 2 EXISTING
3	GAMMA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	0*	115±	240*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 PROPOSED 2 EXISTING

NOTE: \* REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

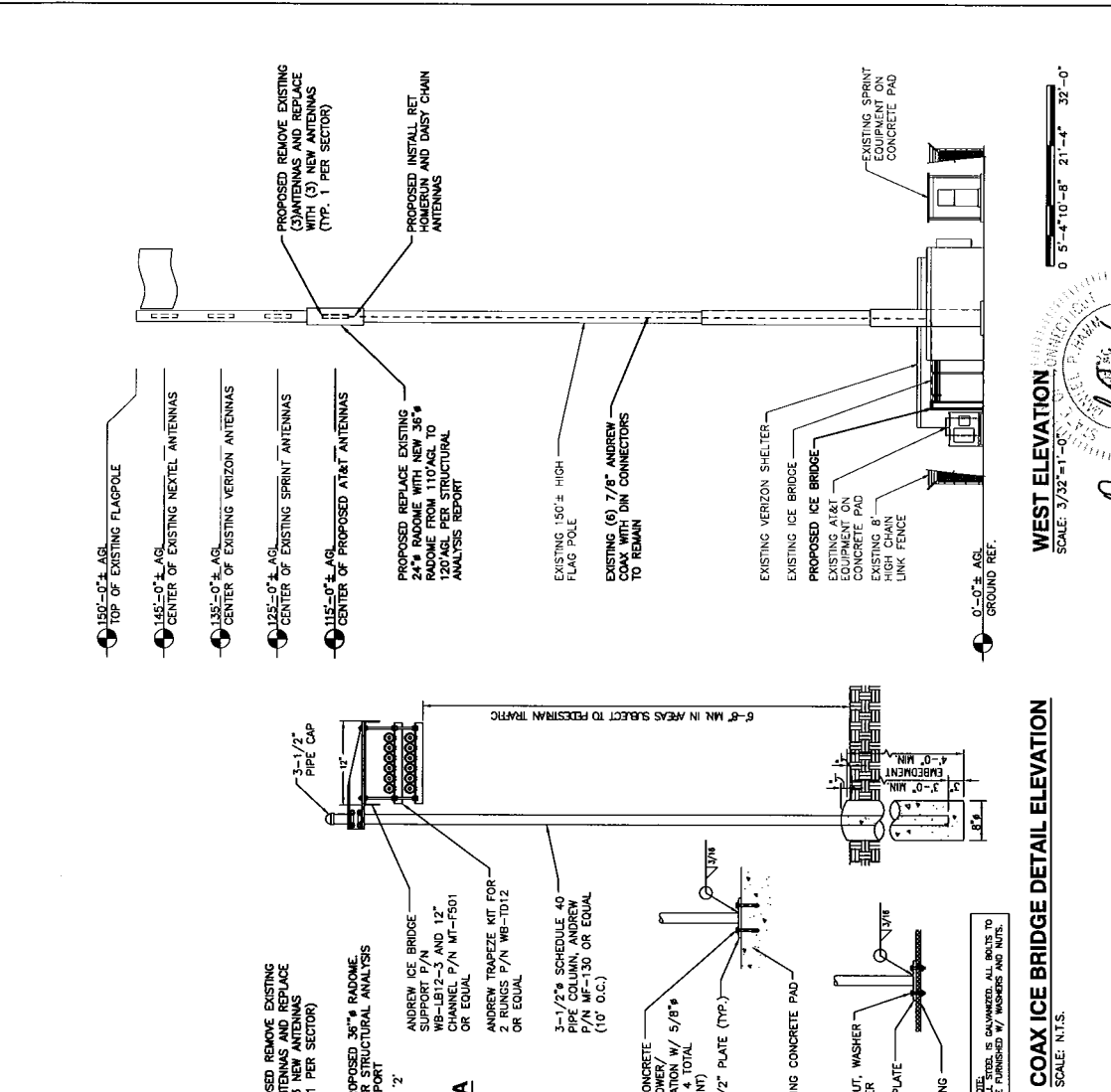
NOTE: SEE FLAGPOLE STRUCTURAL REANALYSIS REPORT BY WILLIAM R. HEDDEN III P.E. DATED: 04-28-2009



NOTES:  
1. REFER TO RF COUNTS & SECTORS SCHEMATICS FOR QUANTITY REQUIRED PER SECTOR



NOTES:  
1. ALL BOLTS IS CALUMKARD. ALL BOLTS TO BE FURNISHED W/ WASHERS AND NUTS.



at&t

SITE NUMBER: 5865  
SITE NAME: HERBON EAST  
66 WALL STREET  
HERBON, CT 06248  
TOLLAND COUNTY

22 KEEMAVON DRIVE  
SALEN, NH 03079

500 ENTERPRISE DRIVE, SUITE 3A  
ROCKY HILL, CT 06067

ANTENNA LAYOUT AND ELEVATION

DATE: 02/24/08  
ISSUED FOR CONSTRUCTION  
BY: ECH/MPH

DATE: 01/22/08  
REVISIONS

SCALE: AS SHOWN

DESIGNED BY: DC  
DRAWN BY: AP

JOB NUMBER: 5865.01  
DRAWING NUMBER: A-2

PROJECT: 1

# 5865

# Tower Reanalysis Report

Proposal PR-2009-04-024

April 28, 2009

FP 36 x 150' Tower  
Hebron, CT  
Central Hebron  
PiRod Engineering File A-117319

Prepared for  
SBA Properties  
Attn: Mark Luther  
723 Highland Ave  
Clarks Green, PA 18411

Authorization Provided by

Same

**This document does not constitute a construction document. All modifications and/or installations of structural members and/or appurtenances shall be completed under the direction of a person qualified to conduct and/or direct the installation procedures in accordance with state, local and national rules.**

<http://plystrweb1/reanalysis/Report/117/117319 PR200904024.docx>

## Tower Reanalysis Report Proposal PR-2009-04-024

Model: FP 36 x 150' Tower  
Site: Hebron, CT  
PiRod Engineering File A-117319

Tower Contact Person:

Ken Durnil  
Engineering Technician  
e-mail: ken.durnil@valmont.com  
telephone extension: 5301

Completed under the Supervision and Approval by  
William R. Heiden III, P.E.  
Engineering Group Leader  
e-mail: William.Heiden@valmont.com  
telephone extension: 5243



APR 28 2009

William R. Heiden III, CT Professional Engineer # 23038



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## 1.0 EXECUTIVE SUMMARY

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This reanalysis was performed by PiRod to determine if the structure is capable of accommodating loading that is different than previous design specifications. This engineering report gives details how the loading changes affect the tower, specifies feasible modifications, and proposes modification materials. PiRod's engineering study concludes that the tower does comply, see 6.0 for details.

## 2.0 ASSUMPTIONS

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**This engineering study is based on the theoretical capacity of the structure. It is not a condition assessment of the tower.** This report is being provided by PiRod without the benefit of an inspection by PiRod personnel and is based on information supplied by the customer to PiRod. PiRod has made no independent determination, nor is required to, of the accuracy of the information provided. Therefore, unless specifically informed to the contrary by the customer in writing, PiRod assumes the following:

1. The subsoil characteristics exist as stated on the tower drawing or stated elsewhere in this report;
2. The tower is erected and maintained in accordance with the manufacturer's plans and specifications and is plumb;
3. There is no damage, natural or manmade, to the structure, either gradual or sudden;
4. All connections and guy cables are properly installed;
5. The information concerning the components, existing and proposed, is accurate; and
6. There are no modifications to the tower itself; except as may be disclosed elsewhere in this report.

PiRod recommends that qualified personnel assess the physical condition of the tower, preferably under the direction of a licensed professional engineer. Following is a list of the general areas that PiRod recommends to be inspected.

<u>Tower Structure</u>	<u>Guyed Towers</u>	<u>Foundations</u>	<u>Appurtenances</u>
Tower Sections	Guy Cables	Cracking	Antennas
Bolted Connections	Turnbuckles	Drainage	Mounts
Welded Connections	Preforms	Spalling	Transmission Lines
Plumbness	Guy Lugs	Anchor Bolts	Line Brackets
Corrosion	Thimbles	Settling	Cable Hangers
Linearity	Torque Arms	Grounding	Lighting
Galvanization	Ice Clips	Grout	
Paint	Guy Tensions	Subsoil	
	Anchor Rods	Characteristics	
	Shackles	Erosion	
	Insulators		

### 3.0 TOWER HISTORY

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Date of Origination: July 19, 2000  
PiRod Model: FP 36 x 150' Tower  
Sold to: SBA, Inc

ORIGINAL DESIGN CRITERIA				
Code/Standard	Wind Loading	Radial Ice	Wind Load Reduction Used	Allowable Stress Increase Used
TIA/EIA-222-EIA-TIA-222-F	85 mph fastest mile	no	none	yes
TIA/EIA-222-EIA-TIA-222-F	85 mph fastest mile	½" solid	25%	yes

For the structural analysis, the tower and foundation are assumed to exist as shown on the enclosed tower drawing, which is PiRod's latest revision.

### 4.0 CURRENT WIND LOAD REQUIREMENT

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The TIA/EIA Standard is currently at version F for New London County. We have taken the opportunity to reanalyze this structure using the following wind speed and ice load conditions:

Code/Standard	Wind Loading	Radial Ice	Wind Load Reduction Used <sup>(1)</sup>	Allowable Stress Increase Used <sup>(2)</sup>
TIA/EIA-222-F	85 mph fastest mile	no	none	yes
TIA/EIA-222-F	85 mph fastest mile	0.5"	25%	yes

(1) The wind load reduction is permitted by the TIA/EIA-222-F Standard section 2.3.16 and most other codes to account for the minimal chance that the maximum wind speed will occur simultaneously with the ice load.

(2). The allowable stress increase is permitted by the TIA/EIA-222-F Standard and most other codes in accordance with the AISC-ASD Manual of Steel Construction.

Note: Some localities stipulate wind load requirements that are different from that required by the TIA/EIA Standard. Please check with your local building department and verify the required wind load.

## 5.0 ANTENNA LOADING

The tower analysis uses the following antenna loading, which was provided on 04/15/2009.

HEIGHT (FT)	ANTENNAS		ASSUMED CAAC (SQ.FT.)	MOUNTS		LINES		
	#	MODEL		#	MODEL	#	SIZE	BRACKET
Existing (and Proposed) Loading								
145'	6	RR90-12-xxxA2 EMS			Custom to Spine	6	7/8"	
135'	3	ADFD0820-656A-xdm Andrew			Custom to Spine	9	7/8"	
125'	3	RR90-17 EMS			Custom to Spine	6	7/8"	
115'	3	Powerwave 7770			Custom to Spine	6	1-5/8"	
	6	Powerwave LGP21401						

Customer is requesting 36" radomes.

These antennas, mounts, and lines represent our understanding of the antenna loading required. Please contact us if any discrepancies are evident. If different antennas, mounts, or lines are installed on this structure, this analysis is invalid. If the lines are mounted on PiRod Double-T, Extended Double-T or Expandable Double-T, they are assumed to be mounted inside the tower and the transmission lines are mounted in a back to back configuration. If any of these brackets cannot be placed inside concerning physical fit, alternatively they can be installed outside the tower, but all the brackets need to be swung back as close as possible to one of the tower faces, to minimize the torque.

\* An asterisk indicates that we were not provided with a value for the effective projected area ( $C_{A/C}$ ), and that the area has been assumed based on any information that was made available. The actual effective projected area for each antenna must be confirmed to be equal to the assumed area listed above. If it is determined that the area is different than that stated for any of the above items, this analysis is invalid.

## 6.0 RESULTS

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With the antennas listed in section 5.0, the following modifications are required for the tower to comply with the indicated code and TIA/EIA Standard listed in section 4.0.

**Drawings reflecting the reanalysis results may be ordered.  
Please contact Robyn Hammonds at 877-467-4763 Ext. 5330 to place this order.**

### 6.1 Tower Results

The tower complies when changing to a 36" radome at the 110'-120' level only. Changing all radomes above that level to 36" overstresses the pole.

### 6.2 Foundation Results

The foundation analysis is based on the soil report by Jaworski Geotech, Inc, dated June 29, 2000, file #00431G.

The foundation complies without modifications.

These modifications outline the scope of work only and are not intended to imply sequence of work or construction procedures. Once the above modifications have been installed, the structure will comply with the indicated code and TIA/EIA Standard.

## 7.0 LIST OF APPENDICES

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Reanalysis Parts Pricing Proposal  
Main Tower Drawing, latest revision 150464-B

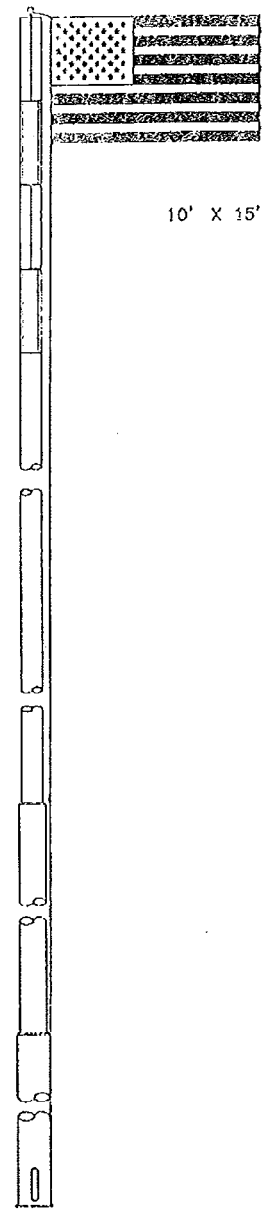
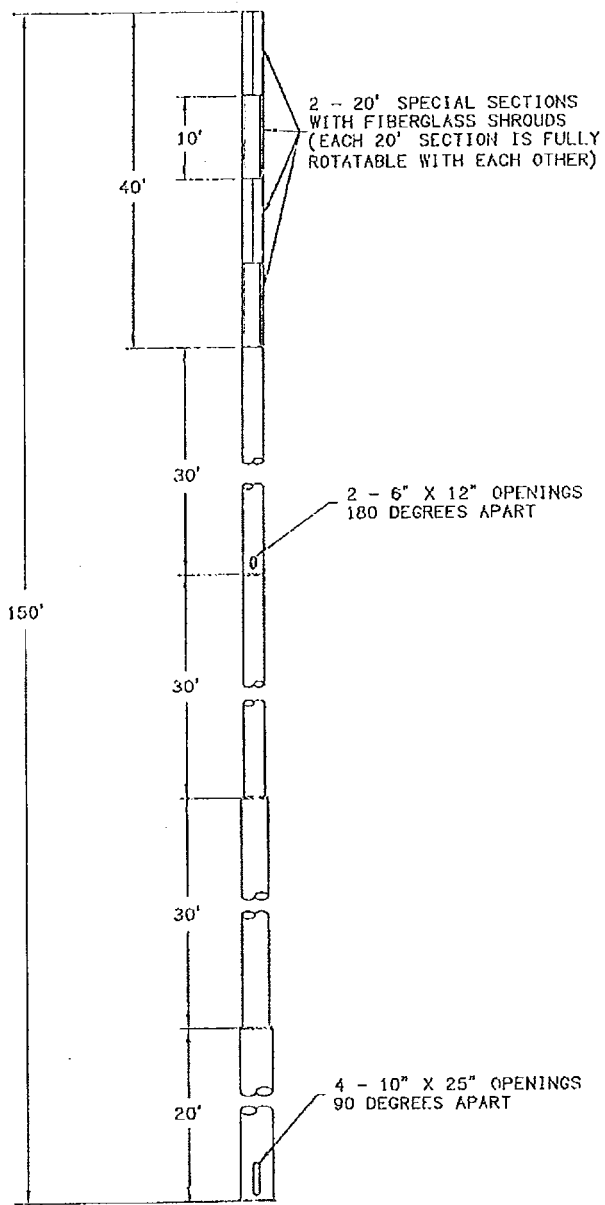
Note: The tower drawing included with this report is PiRod's latest revision and depicts the tower as we understand it to currently exist with the exceptions listed in Section 3.0. It has not been updated to show the existing or proposed antenna loading or any modifications required as a result of this analysis.

## 8.0 DISCLAIMER

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1. The information and conclusions contained in this Report were determined by the application of the then current "state of the art" engineering and analysis procedures and formulae, and Valmont Structures<sup>(1)</sup> assumes no obligation to revise any of the information or conclusions contained in this Report in the event such engineering and analysis procedures and formulae are hereafter modified or revised.
2. In no event shall Valmont Structures be liable for any incidental, consequential, indirect, special or punitive damages (including without limitation lost profits) arising out of any claim associated with the use of this report (whether for breach of contract, tort, negligence or other form of action), irrespective of whether Valmont Structures has been advised of the possibility of any such loss or damage. In no event shall Valmont Structures' total, cumulative liability to the customer exceed the amount paid by customer for the preparation of this report.
3. Valmont Structures shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than Valmont Structures personnel, including but not limited to, any services rendered by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer for the quality of work performed by them.
4. Valmont Structures makes no warranties, expressed or implied, in connection with this Report as to any other matter whatsoever, and in particular, any and all warranties of merchantability or fitness for a particular purpose are hereby expressly disclaimed. Valmont Structures further expressly disclaims any liability arising from material, fabrication, and erection deficiencies. This Report is being provided by Valmont Structures without the benefit of an inspection by Valmont Structures personnel and is based solely on information supplied by the Customer to Valmont Structures. Valmont Structures has made no independent determination, nor is it required to do so, of the accuracy of the information provided by Customer. Therefore, unless specifically informed to the contrary by the Customer in writing, the following assumptions apply to the Report:
  - A. The subsoil characteristics exist as stated on the tower drawing or stated elsewhere in this report;
  - B. The tower is erected and maintained in accordance with the manufacturer's plans and specifications and is plumb;
  - C. There is no damage, natural or manmade, to the structure, either gradual or sudden;
  - D. All connections are properly installed;
  - E. The information concerning the components, existing and proposed, is accurate; and
  - F. There are no modifications to the tower itself, except as may be disclosed elsewhere in this report. Examples include but are not limited to replacement or strengthening of bracing members, reinforcing vertical members in any manner, adding additional bracing, or extending tower.
6. All representations and recommendations and conclusions are based upon the information contained and set forth herein. If Customer is aware of any information which is contrary to that which is contained herein, or if Customer is aware of any defects arising from the original design, material, fabrication, and erection deficiencies Customer must disregard this Report and immediately contact Valmont Structures.

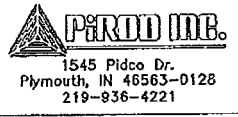
<sup>(1)</sup> Valmont Structures is the Structures Division of Valmont Industries, Inc., and performs engineering services under the engineering corporation name PiRod, Inc.



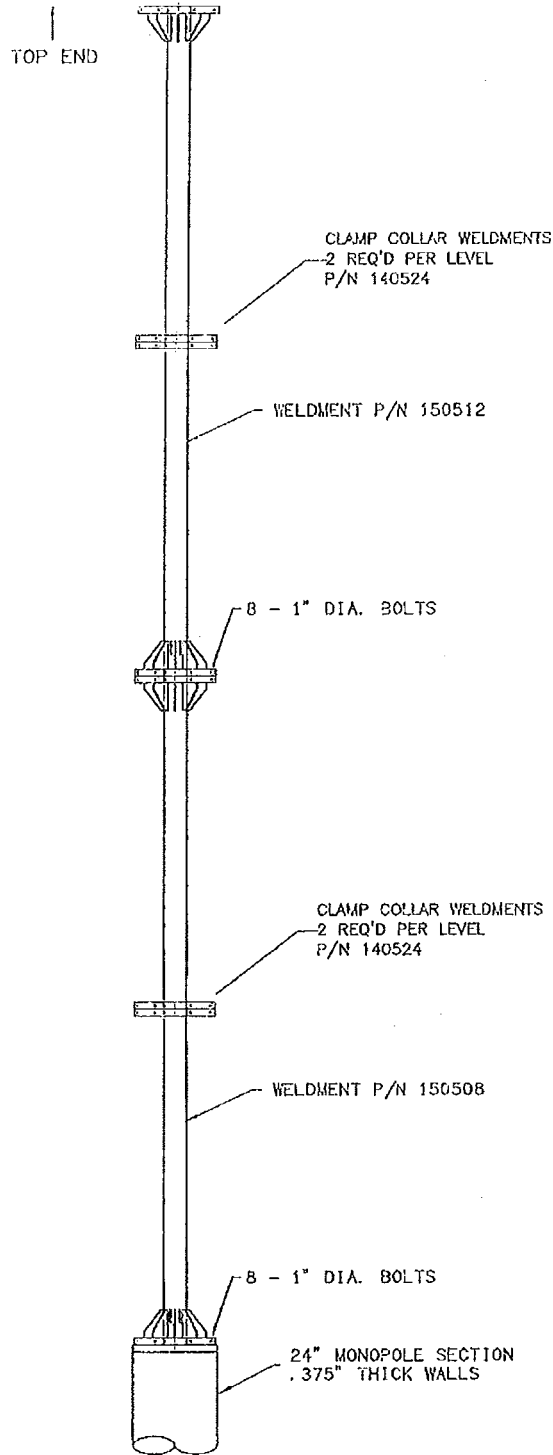
10' X 15' FLAG (MAX)

*Drawings for reference only.  
Reanalysis results are NOT reflected.  
Updated drawings may be ordered.*

					SBA, INC. NEW LONDON COUNTY, CT FP36 X 150' ASSEMBLY DRAWING	
C	RENUMBERED PAGES	YJK	07/19/2000	APPROVED/ENG.	TJK	7/19/2000
B	ADDED FOUNDATION	TJK	07/19/2000	APPROVED/FOUND.	N/A	
A	ADDED PAGES - AUTOCAD EDITS	KWD	07/17/2000	COPYRIGHT 2009		
REV	DESCRIPTION OF REVISIONS	INI	DATE	DRAWN BY	KWD	
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					PAGE 1 OF 10	







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				APPROVED/FOUND.	N/A
				COPYRIGHT 2009	
				DRAWN BY	KED
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				DRAWING NO.	150464-B
				PAGE	2 of 10

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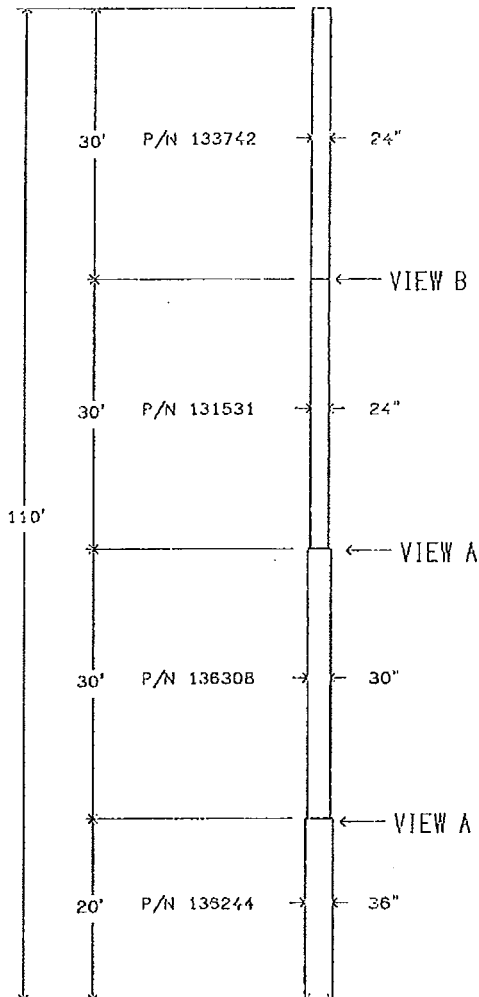
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Printed from 150464\_028A.DWG \* 07/17/2000 16:35 @ 04/20/2009 08:40 ARCHIVE

MONOPOLE SECTION DATA

(ALL BOLTS ARE FOR BOTTOM OF SECTION)

SECTION					CONNECT BOLT			PILOT BOLT	
LENGTH	PART #	SIZE	WALL	WT. *	DIAM	LENGTH	#	DIAM	LENGTH
30'	133742	24"	0.375"	3228#	1"	4-1/2"	16		
30'	131531	24"	0.375"	3230#	1"	4-1/2"	17	1"	5"
30'	136308	30"	0.375"	4021#	1"	4-1/2"	21	1"	5"
20'	136244	36"	0.375"	3210#					

\*THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.



ALL CONNECTIONS ARE A-325 BOLTS SEE TABLE ABOVE FOR SIZE & QTY.



TYPICAL FLUSH FLANGE CONNECTION  
VIEW B

ALL CONNECTIONS ARE A-325 BOLTS SEE TABLE ABOVE FOR SIZE & QTY.



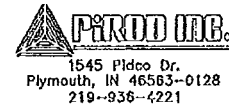
TYPICAL FLUSH FLANGE CONNECTION  
VIEW A

SEE PAGE 4 OF THIS DRAWING FOR OPENING INFORMATION.

SEE PAGE 5 OF THIS DRAWING FOR CONNECTION BOLT TIGHTENING SPECIFICATIONS.

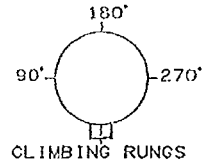
SEE PAGE 10 OF THIS DRAWING FOR BASE SECTION INSTALL.

				SBA, INC. NEW LONDON COUNTY, CT FP36 X 150' ASSEMBLY DRAWING		
APPROVED/ENG.		TJK	7/19/2000			
APPROVED/FOUND.		N/A				
COPYRIGHT 2009						
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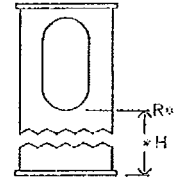


OPENINGS & BRACKETS WELDED TO POLE

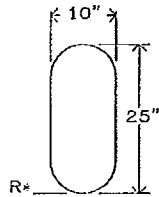
HEIGHT ±H	TYP	DESCRIPTION	ANGL	ASSEMBLY DRAWING#
80' -6"	SP	12" x 6" W OVAL PORTHOLE	90°	
80' -6"	SP	12" x 6" W OVAL PORTHOLE	270°	
74'	9	4" X 6" PORTHOLE EXITING UP	180°	
9'	SP	CLEAT ATTACHMENT	90°	
9' -10"	8	TRANS. LINE BRIDGE ATTACH BRACKET	0°	
9' -10"	8	TRANS. LINE BRIDGE ATTACH BRACKET	90°	
9' -10"	8	TRANS. LINE BRIDGE ATTACH BRACKET	180°	
9' -10"	8	TRANS. LINE BRIDGE ATTACH BRACKET	270°	
7' -4"	2	10" X 25" OVAL PORTHOLE	0°	
7' -4"	2	10" X 25" OVAL PORTHOLE	90°	
7' -4"	2	10" X 25" OVAL PORTHOLE	180°	
7' -4"	2	10" X 25" OVAL PORTHOLE	270°	
6' -9"	7	GROUNDING PLATE	0°	
6' -9"	7	GROUNDING PLATE	90°	
6' -9"	7	GROUNDING PLATE	180°	
6' -9"	7	GROUNDING PLATE	270°	
1'	18	GROUNDING ANGLES (3)	SEE>	131093-B



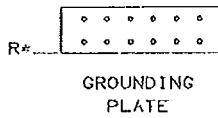
THE ANGLE TO THE OPENING IS MEASURED CLOCKWISE FROM THE CENTER-LINE OF THE CLIMBING RUNGS WHEN LOOKING DOWN.



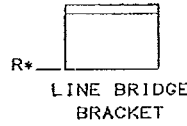
\* THE HEIGHT IN THE TABLE IS THE DISTANCE FROM THE BASE OF THE BOTTOM SECTION OF THE POLE TO THE OPENING REFERENCE (R\*) AS SHOWN ON PAGE 4 OF THIS DRAWING.



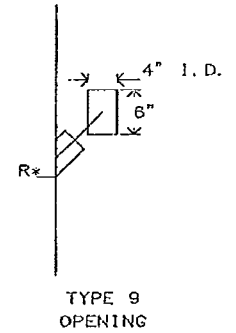
TYPE 2  
OPENING



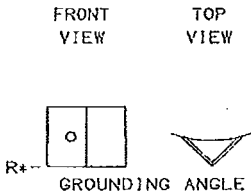
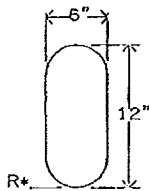
GROUNDING  
PLATE



LINE BRIDGE  
BRACKET



TYPE 9  
OPENING




GROUNDING ANGLE

				SBA, INC. NEW LONDON COUNTY, CT FP36 X 150' OPENINGS	
C	RENUMBERED PAGES	TJK	07/19/2000	APPROVED/ENG.	TJK 7/19/2000
B	ADDED FOUNDATION	TJK	07/19/2000	APPROVED/FOUND.	N/A
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**GENERAL NOTES**

1. TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 85 MPH BASIC WIND SPEED WITH NO ICE.  
TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 85 MPH BASIC WIND SPEED WITH 0.50" RADIAL ICE WITH LOAD DUE TO WIND REDUCED BY 25% WHEN CONSIDERED SIMULTANEOUSLY WITH ICE.
2. MATERIAL: (A) SOLID RODS CONFORM TO ASTM A-572 GRADE 50 REQUIREMENTS.  
(B) ANGLES CONFORM TO ASTM A-36 REQUIREMENTS.  
(C) PIPE CONFORMS TO ASTM A-53 TYPE E, GRADE B REQUIREMENTS. (MIN YIELD STRENGTH=42 KSI)  
(D) ALL STEEL PLATES CONFORM TO ASTM A-36 REQUIREMENTS.  
(E) ANCHOR BOLTS CONFORM TO ASTM A-687 REQUIREMENTS.
3. BASE REACTIONS PER EIA/TIA-222-F FOR 85 MPH BASIC WIND SPEED WITH NO ICE.  
TOTAL WEIGHT= 18.4 KIPS.  
MOMENT= 668.7 KIP-FT.  
MAXIMUM SHEAR= 7.8 KIPS TOTAL.
4. BASE REACTIONS PER EIA/TIA-222-F FOR 85 MPH BASIC WIND SPEED WITH 0.50" RADIAL ICE:  
TOTAL WEIGHT= 20.9 KIPS.  
MOMENT= 526.9 KIP-FT.  
MAXIMUM SHEAR= 6.1 KIPS TOTAL.
5. FINISH: HOT DIPPED GALVANIZED AFTER FABRICATION.
6. ANTENNAS: 145' CENTERLINE (3) DUAL ANTENNAS MOUNTED INSIDE A FIBERGLASS SHROUD USING 7/8" LINES.  
135' CENTERLINE (3) DUAL ANTENNAS MOUNTED INSIDE A FIBERGLASS SHROUD USING 7/8" LINES.  
125' CENTERLINE (3) DUAL ANTENNAS MOUNTED INSIDE A FIBERGLASS SHROUD USING 7/8" LINES.  
115' CENTERLINE (3) DUAL ANTENNAS MOUNTED INSIDE A FIBERGLASS SHROUD USING 7/8" LINES.  
75' (1) GPS ANTENNA USING 1-5/8" LINE.
7. INSTALL BASE SECTION WITH MINIMUM OF 2" CLEARANCE ABOVE CONCRETE. SEE BASE SECTION PLACEMENT PAGE OF THIS DRAWING FOR MORE INFORMATION.
8. MIN. WELDS 5/16" UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS SPECIFICATIONS.
9. ALL BOLTS MUST BE IN PLACE WITH JAM NUTS PRIOR TO ERECTION OF THE STRUCTURE. ALL BOLTS AND NUTS MUST BE IN PLACE AND TIGHTENED BEFORE THE ADJOINING SECTION(S) ARE PLACED.
10. ALL STRUCTURAL BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION AS DEFINED BY AISC SPECIFICATION UNLESS OTHERWISE NOTED. A MORE QUANTITATIVE ALTERNATIVE APPROACH TO ACHIEVING A SNUG TIGHT CONDITION IS TO TIGHTEN USING THE TORQUE VALUES FROM DRAWING 123107-A.
11. EIA GROUNDING FOR TOWER.
12. FLAGPOLE TO BE PAINTED WHITE.

				SBA, INC. NEW LONDON COUNTY, CT FP36 X 150' NOTES			
C	RENUMBERED PAGES	TJK	07/19/2000	APPROVED/ENG.	TJK	7/19/2000	 1545 Pidco Dr. Plymouth, IN 46563-0128 219-935-4221
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### FOUNDATION NOTES

1. SOIL AS PER REPORT BY JAWORSKI GEOTECH., INC., DATED 6/29/00, (FILE #004316)
2. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR NOT PERMITTED.
3. A COLD JOINT IS PERMISSIBLE UPON CONSULTATION WITH PIROD. ALL COLD JOINTS SHALL BE COATED WITH BONDING AGENTS PRIOR TO SECOND POUR.
4. ALL FILL SHOULD BE PLACED IN LOOSE LEVEL LIFTS OF NO MORE THAN 8" THICK. FILL MATERIALS SHOULD BE CLEAN AND FREE OF ORGANIC AND FROZEN MATERIALS OR ANY OTHER DELETERIOUS METATERIALS. COMPACT FILL TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557.
5. GROUTING OF MONOPOLE BASE IS OPTIONAL. IF GROUT IS USED, DRAINAGE MUST BE PROVIDED FROM THE INTERIOR OF THE POLE. REFER TO DRAWING # 118492-B FOR BASE SECTION INSTALLATION.
6. BENDING, STRAIGHTENING OR REALIGNING (HOT OR COLD) OF THE ANCHOR BOLTS BY ANY METHOD IS PROHIBITED.
7. CROWN TOP OF FOUNDATION FOR PROPER DRAINAGE.
8. INSTALL BASE SECTION WITH MINIMUM OF 2" CLEARANCE ABOVE CONCRETE. SEE PAGE 10 OF THIS DRAWING FOR MORE INFORMATION.
9. IT IS RECOMMENDED THAT THE FOUNDATION BEAR DIRECTLY ON A MINIMUM 12" THICK LAYER OF CRUSHED STONE PLACED DIRECTLY ABOVE THE TILL. THE CRUSHED STONE LAYER SHOULD BE UNDERLAIN BY A GEOTEXTILE SEPARATION FABRIC. A SUMP PUMP OR OTHER DEWATERING SYSTEM MAY BE REQUIRED TO LOWER THE WATER TABLE TO FACILITATE THE INSTALLATION OF THE FOUNDATION. REFER TO THE SOIL REPORT(PAGES 3 & 4), FOR EARTHWORK AND CONSTRUCTION RECOMMENDATIONS.

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