

EM-POCKET-014-081029

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ORIGINAL

October 28, 2008

Via Federal Express

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

RECEIVED
OCT 29 2008

CONNECTICUT
SITING COUNCIL

**Re: Notice of Exempt Modification
American Tower Corporation Telecommunications Facility
4 Beaver Road, Branford, Connecticut**

Dear Mr. Phelps:

Youghiogheny Communications-Northeast, LLC, doing business as Pocket Communications ("Pocket"), intends to install antennas and appurtenant equipment at the existing 125 foot lattice tower facility owned by American Tower Corporation and located at 4 Beaver Road, Branford, Connecticut ("Facility"). Pocket Communications provides prepaid, flat rate wireless voice and data services to more than a quarter of a million subscribers. Pocket is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation. This installation constitutes an exempt modification pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes Section 16-50g et seq. (PUESA), and Section 16-50j-72(b)(2) of the Regulations of the Connecticut State Agencies adopted pursuant to PUESA. In accordance with R.C.S.A. Section 16-50j-73, a copy of this notice has been sent to Anthony DaRos, First Selectman, Town of Branford.

The existing Facility consists of a 125-foot self-supporting lattice tower capable of supporting multiple carriers within a fenced compound. The coordinates for the Facility are **Lat: 41°-16'-45" and Long: 72°-50'-34"**. The tower is located in the southern portion of Branford, just north of West Main Street, approximately 270 feet west of Beaver Road and roughly 1,800 feet south of Interstate 95 (see Site Map, attached as Exhibit A). The tower currently supports AT&T antennas at the one hundred thirteen foot (113') level centerline AGL (above ground level), and Sprint Nextel antennas at the one hundred twenty four foot level (124') AGL. Pocket proposes to install three APXV18-206517-C flush mount antennas on the tower at the one hundred six foot centerline (106') AGL, and a Nortel CDMA Micro BTS 3231 cabinet, mounted on an "H-Frame," contained within a six foot by six foot (6'-0" x 6'-0") lease area. A small GPS antenna will be mounted to the H-Frame. An ice bridge which will run from the lease area to the tower. Utilities will be run via a proposed underground conduit from an existing utility

Page 2

backboard, within the compound (See Design Drawings and Equipment Specifications, attached as Exhibits B and C respectively).

For the following reasons, the proposed modifications to the Beaver Road Facility meet the exempt modification criteria set forth in R.C.S.A. Section 16-50j-72(b)(2):

1. The proposed modification will not increase the height of the tower as Pocket's antennas will be installed at a center line height of approximately 106 feet.
2. The installation of Pocket's equipment and shelter will not require an extension of the site boundaries.
3. The proposed modifications will not increase the noise levels at the existing Facility by six decibels or more.
4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. The worst-case RF power density calculations for the proposed Pocket antennas would be 41.91% of the FCC standard (see general power density calculations table, attached as Exhibit D).

Also attached, Exhibit E, is a structural analysis confirming that the tower can support the existing and proposed antennas and associated equipment.

For the foregoing reasons, Pocket respectfully submits that the proposed antenna installation and equipment at the Branford Facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72(b)(2)

Respectfully Submitted,



Carrie L. Larson

cc: Anthony DaRos, First Selectman
Vera R. Tipping, underlying property owner

Exhibit A

Site Map

Pocket Site NHCT0329A

4 Beaver Road

Branford, Connecticut

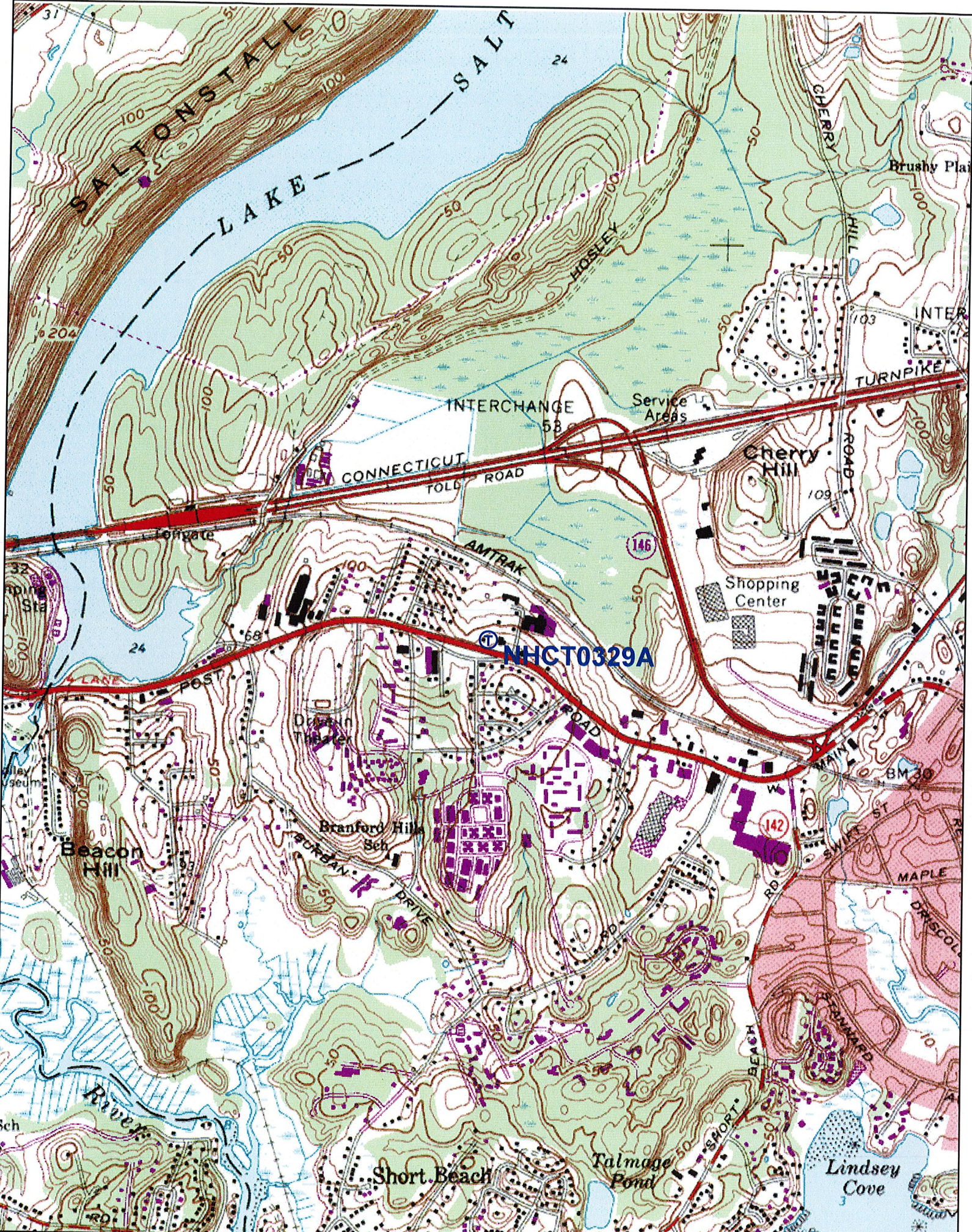


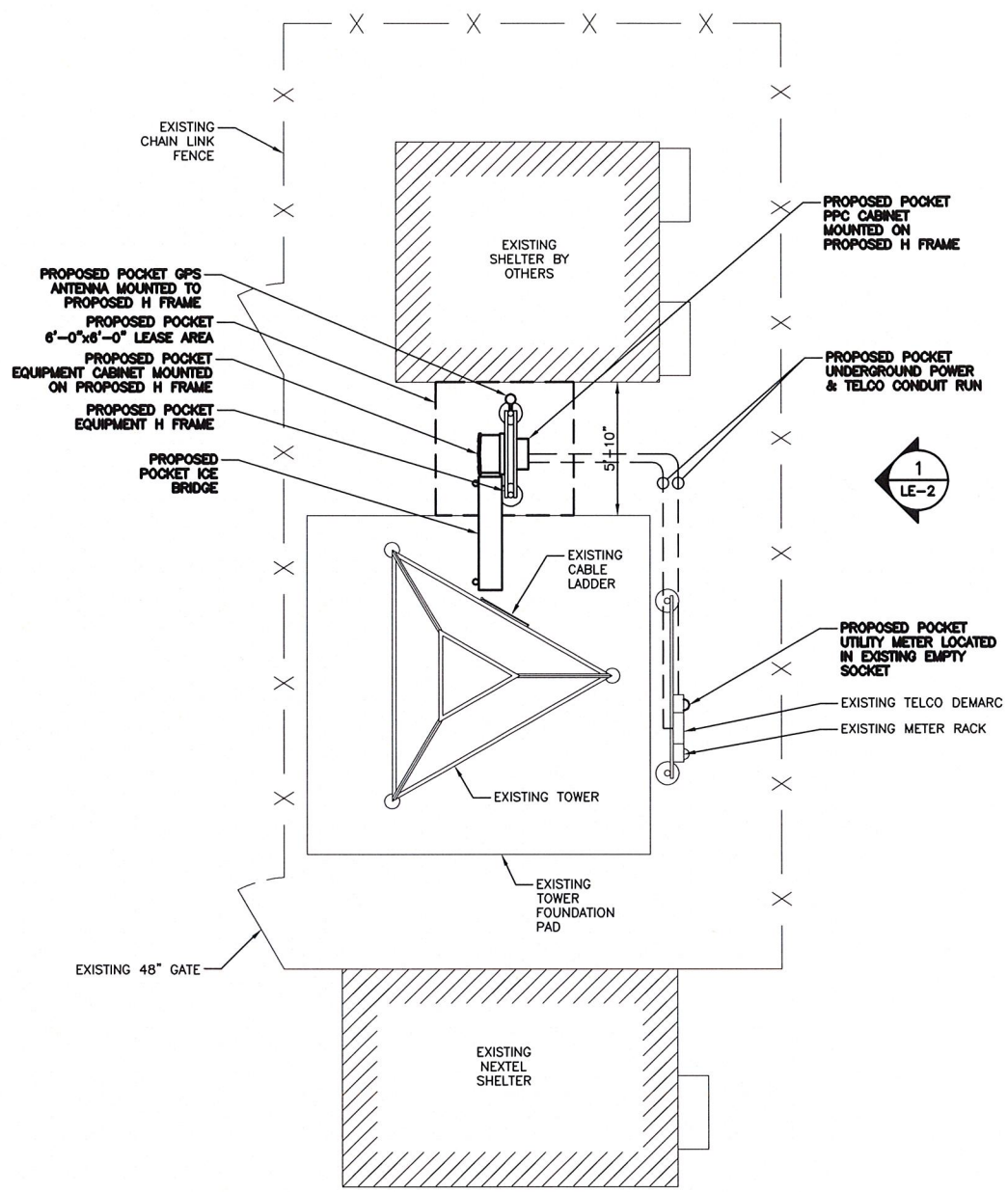
Exhibit B

Design Drawings

Pocket Site NHCT0329A

4 Beaver Road

Branford, Connecticut



COMPOUND PLAN 1
SCALE: N.T.S.

APPROVALS	
SITE OWNER _____	DATE _____
CONSTRUCTION MANAGER _____	DATE _____
R.F. ENGINEER _____	DATE _____
SITE ACQUISITION _____	DATE _____

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE RECORDS AND ALLOW THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION OF THE PROJECT. ALL CONSTRUCTION SHALL BE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR REVISIONS THEY MAY IMPOSE.

MIXTON

50 Eastman St.
South Easton, MA 02375
Phone: (508) 936-6363
Fax: (508) 936-6360

BAY STATE DESIGN

Bay State Design
Associates, Inc.
Architects • Engineers

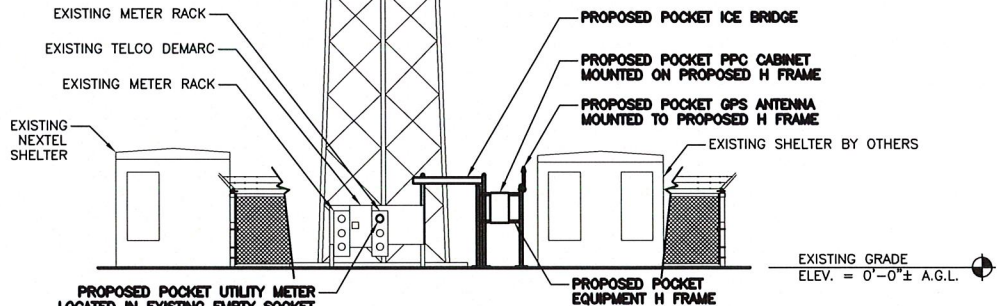
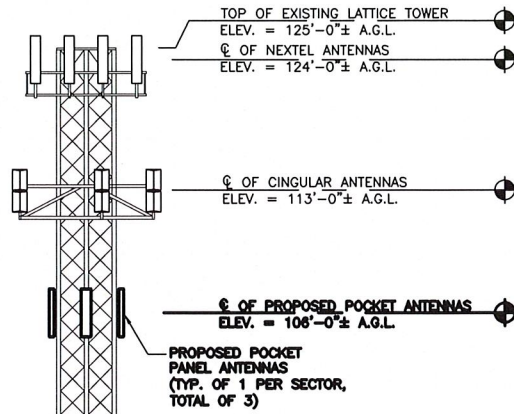
70 Tower Office Park
Woburn, MA 01801
Phone: 781-932-2467
Fax: 781-932-9771

PREPARED FOR:

Pocket Communications
P.O. Box 5936
San Antonio, TX 78201

SITE NUMBER: ATC 302536	DRAWN BY: DM
SITE NAME: NH-329A BRANFORD, CT	CHECKED BY: JP
SITE ADDRESS: 4 BEAVER RD. BRANFORD, CT 06405	DATE: 09/08/08

PROJECT NUMBER: 2882.054	SHEET: LE-1
------------------------------------	-----------------------



ELEVATION

SCALE: N.T.S.

1

APPROVALS	
SITE OWNER	DATE
CONSTRUCTION MANAGER	DATE
R.F. ENGINEER	DATE
SITE ACQUISITION	DATE

WE ASK YOU TO APPROVE AND ACCEPT THESE REQUIREMENTS AND ALLOW THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION OF THIS PROJECT. ALL COMMUNICATIONS CONCERNING THIS PROJECT SHOULD BE DIRECTED TO THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS MUST BE APPROVED.

MIXTON
50 Eastman St.
South Easton, MA 02375
Phone: (508) 836-5393
Fax: (508) 836-6365

BAY STATE DESIGN
Bay State Design
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Architects • Engineers
70 Tower Office Park
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Phone: 781-932-2467
Fax: 781-932-9771

PREPARED FOR:



Pocket Communications
P.O. Box 5936
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SITE NUMBER:
ATC 302536

SITE NAME:
**NH-329A
BRANFORD, CT**

SITE ADDRESS:
**4 BEAVER RD.
BRANFORD, CT 06405**

DRAWN BY:
DM

CHECKED BY:
JP

DATE:
09/08/08

PROJECT NUMBER:
2882.054

SHEET:
LE-2

Exhibit C

Equipment Specifications

Pocket Site NHCT0329A

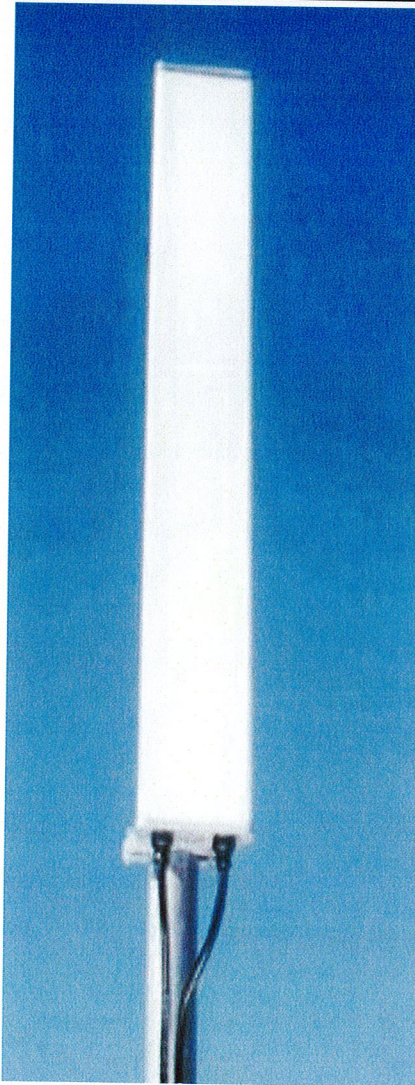
4 Beaver Road

Branford, Connecticut



Product Description

This variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features null fill and a wide downtilt range with optional remote tilt.

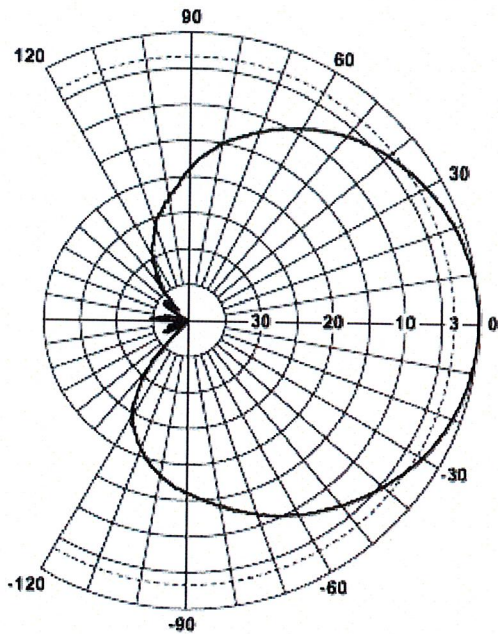
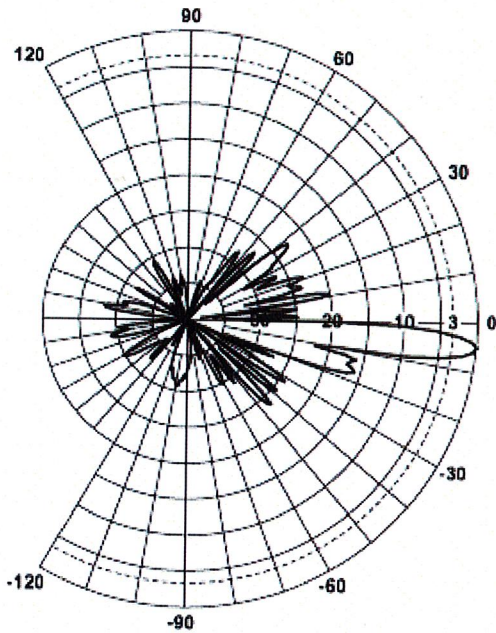


Features/Benefits

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (Typically <-20dB).
- Optional remote tilt - can be retrofitted.
- Broadband design.
- Dual polarization.
- Low profile for low visual impact.

Technical Features

Frequency Band	3G/UMTS (Single, Broad, Dual and Triple-Band)
Horizontal Pattern	Directional
Antenna Type	Panel Dual Polarized
Electrical Down Tilt Option	Variable

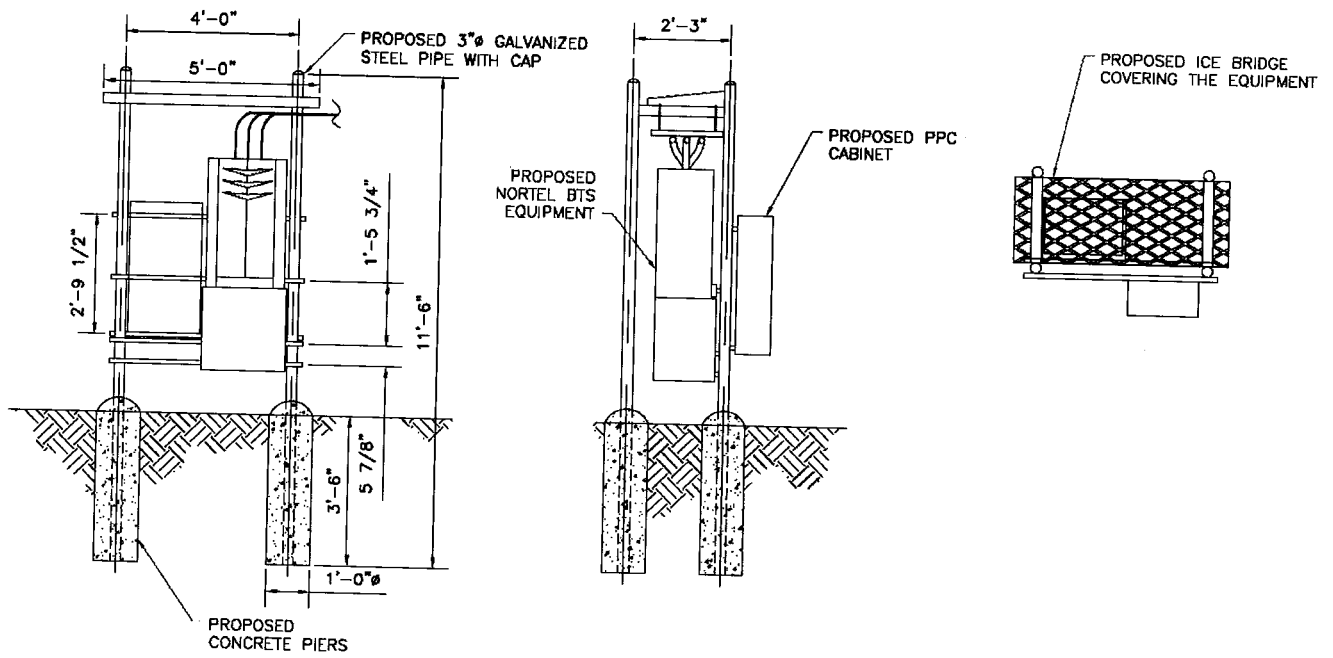




Gain, dBi (dBd)	18.8 (16.7) , 19.0 (16.9)
Frequency Range, MHz	1710-1900, 1900-2170
Connector Type	(2) 7-16 DIN Female
Connector Location	Bottom
Mount Type	Downtilt
Electrical Downtilt, deg	0-10
Horizontal Beamwidth, deg	67 , 63
Mounting Hardware	APM40-2
Rated Wind Speed, km/h (mph)	160 (100)
VSWR	< 1.5:1
Vertical Beamwidth, deg	5.0 , 4.6
Upper Sidelobe Suppression, dB	>17 , >18 all (Typically >20)
Polarization	Dual pol +/-45°
Front-To-Back Ratio, dB	>30
Maximum Power Input, W	300
Isolation between Ports, dB	>30
Lightning Protection	Direct Ground
3rd Order IMP @ 2 x 43 dBm, dBc	>150
7th Order IMP @ 2x46 dBm, dBc	>170
Impedance, Ohms	50
Overall Length, m (ft)	1.85 (6.06)
Mounting Hardware Weight, kg (lb)	3.4 (7.5)
Dimensions - HxWxD, mm (in)	1850 x 175 x 80 (72.0 x 6.8 x 3.15)
Weight w/o Mtg Hardware, kg (lb)	12 (26.4)
Weight w/ Mtg Hardware, kg (lb)	14.8 (32.5)
Radiating Element Material	Brass
Radome Color	Light Grey RAL7035
Radome Material	Fiberglass
Mounting Hardware Material	Diecasted Aluminum
Reflector Material	Aluminum
Max Wind Loading Area, m ² (ft ²)	0.31 (3.3)
Survival Wind Speed, km/h (mph)	200 (125)
Maximum Thrust @ Rated Wind, N (lbf)	558 (125)
Front Thrust @ Rated Wind, N (lbf)	558 (125)
Shipping Weight, kg (lb)	18.3 (39.8)
Packing Dimensions, HxWxD, mm (in)	2021 x 260 x 200 (79.5 x 10.2 x 7.8)
Packing Dimensions - HxWxD, m (ft)	2.0 x 0.26 x 0.2 (6.6 x 0.85 x 0.65)

Notes

For additional mounting information please click "External Document Link" below.



Pocket/Youghiogheny Communications - Northeast, LLC
 Rack Detail



CDMA BTS 3231 AWS 1.7/2.1 GHz (Outdoor/Indoor)

to transport to hard to reach locations such as the top of a high rise building.

CDMA BTS 3231

Industry's Highest Capacity AWS Micro BTS

The CDMA BTS 3231 is the latest extension to Nortel Networks BTS (Base Transceiver Station) portfolio providing the ideal solution for urban, sub-urban and rural deployments. The CDMA BTS 3231 is a 3-carrier, 3-sector outdoor/indoor BTS operating at the AWS band of 1.7/2.1 GHz supporting IS-95, 1XRTT and 1xEV-DO simultaneously. BTS 3231 provides flexible deployments solutions including floor, rack, and wall mount options. The power consumption of BTS3231 is industry leading consuming only 630W for 3C3S. The BTS 3231 is also very light at 240lbs making it easy

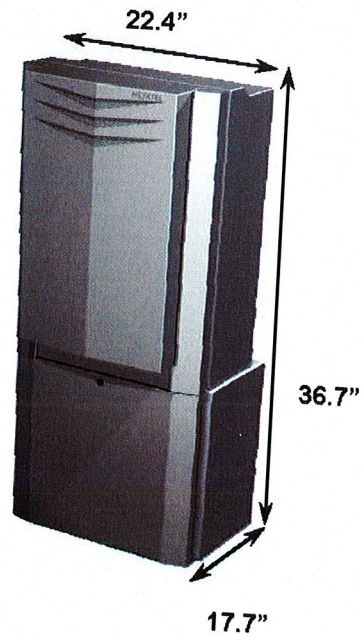


Exhibit D

Power Density Calculations

Pocket Site NHCT0329A

4 Beaver Road

Branford, Connecticut



C Squared Systems, LLC
920 Candia Road
Manchester, NH 03109
Phone: (603) 657 9702
E-mail:
support@csquaredsystems.com

Calculated Radio Frequency Emissions



NHCT0329A

4 Beaver Rd, Branford, CT

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed Pocket antennas to be installed on the existing tower at 4 Beaver Rd, Branford, CT.

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are much more conservative (higher) than the actual signal levels will be from the finished installation.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (mW/cm^2). The number of mW/cm^2 emitted is called the power density. The general population exposure limit for the cellular band is $0.567\text{-}0.593 \text{ mW}/\text{cm}^2$, and the general population exposure limit for the PCS/AWS band is $1.0 \text{ mW}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

The FCC general population / uncontrolled limits set the maximum exposure to which most people may be subjected. General population / uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Higher exposure limits are permitted under the occupational / controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure (through training), and they must be able to exercise control over their exposure. General population / uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals.”

The FCC describes exposure to radio frequency (RF) energy in terms of percentage of maximum permissible exposure (MPE) with 100% being the maximum allowed. Rather than the FCC presenting the user specification in terms of complex power density figures over a specified surface area, this MPE measure is particularly useful, and even more so when considering that power density limits actually vary by frequency because of the different absorptive properties of the human body at different frequencies.

MPE limits are specified as time-averaged exposure limits. This means that exposure can be averaged over 30 minutes for general population / uncontrolled exposure (or 6 minutes for occupational / controlled exposure). However, for the case of exposure of the general public, time averaging is usually not applied because of uncertainties over exact exposure conditions and difficulty in controlling time of exposure. Therefore, the typical conservative approach is to assume that any RF exposure to the general public will be continuous.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population / uncontrolled exposure and for occupational / controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include limits for Maximum Permissible Exposure (MPE) for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit. As shown in these excerpts, each frequency band has different exposure limits, requiring power density to be reported as a percent of Maximum Permissible Exposure (MPE) when dealing with carriers transmitting in different frequency bands.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{\text{EIRP}}{\pi \times R^2} \right) \times \text{Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{H^2 + V^2}$

H = Horizontal Distance from antenna

V = Vertical Distance from bottom of antenna

Off Beam Loss is determined by the selected antenna patterns

4. Calculation Results

Table 1 below outlines the power density information for the site. All information for carriers other than Pocket was obtained from current CSC database.

Carrier	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Antenna Height (Feet)	Operating Frequency (MHz)	Total ERP (Watts)	Power Density (mw/cm ²)	Limit	%MPE
Sprint Nextel	9	100	125	851	900	0.0357	0.5673	6.29%
AT&T TDMA	16	100	113	880	1,600	0.0785	0.5867	13.39%
AT&T GSM	2	296	113	880	592	0.0291	0.5867	4.95%
AT&t GSM	2	427	113	1,930	854	0.0419	1.0000	4.19%
AT&tT UMTS	1	500	113	1,935	500	0.0245	1.0000	2.45%
Pocket	3	631	106	2130-2133.75	1,893	0.1064	1.0000	10.64%
							Total	41.91%

Table 1: Proposed Carrier Information

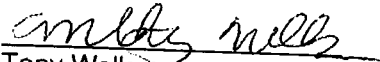
5. Conclusion

The above analysis verifies that emissions from the proposed site will be well below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is well below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at the base of the tower is 41.91% of the FCC limit.

As noted in the introduction, obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished installation.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.


Tony Wells
C Squared Systems

October 20, 2008
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

Attachment B: FCC Limits For Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

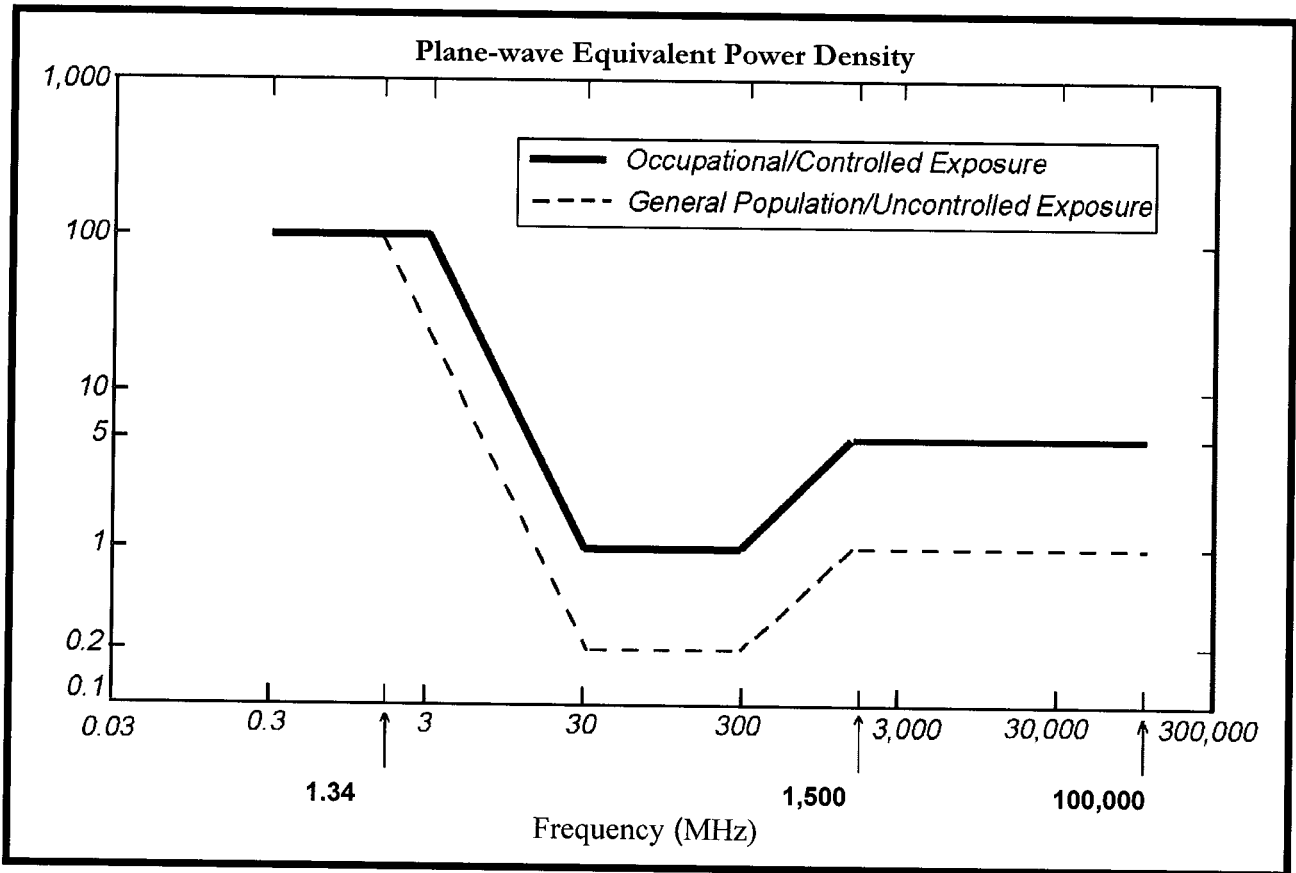
(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

NOTE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.



• FCC Limits for Maximum Permissible Exposure (MPE)

Exhibit E

Structural Analysis

Pocket Site NHCT0329A

4 Beaver Road

Branford, Connecticut



AMERICAN TOWER

Structural Analysis Report

Structure : 125 ft Rohn Self Supported Tower
ATC Site Name : Cherry Hill-branford, CT
ATC Site Number : 302536
Proposed Carrier : Youghiogheny
Carrier Site Name : NHCT0329A
Carrier Site Number : NHCT0329A
County : New Haven
Engineering Number : 42355323
Date : September 3, 2008
Usage : 90% Legs, 103% Diagonals,
23% Horizontals

Submitted by:
Christopher L. Jolly, E.I.
Design Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112



10-15-08

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 125 ft Rohn Self Supported Tower located at 4 Beaver Road, Branford, Connecticut, 06405, New Haven County (ATC Site No. 302536). The tower was originally designed and manufactured by Rohn (Drawing No. A932277, dated November 11, 1993).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 110.0 mph (3-Second Gust)
 Radial Ice: 50.0 mph (3-Second Gust) w/ 1.25" ice
 Code: ANSI/TIA-222-G / 2003 International Building Code with 2005 CT Supplements and 2008 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
125.0	12	Decibel DB844H90E-XY	(3) Flat Light Sector Frame	(12) 7/8"	Sprint Nextel
115.0	6	ADC DD1900	(3) Flat Light Sector Frame	--	AT&T Mobility
	6	Powerwave LGP2140X		--	
	9	Allgon 7770.00		(12) 1 5/8"	
31.3	1	Nokia CS72187.01	Leg	(1) 1/2"	

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
106.0	3	RFS APXV18-206517-C	Leg	(6) 1 5/8"	Youghiogheny

Double stack proposed coax on empty tower face.

Results

The maximum structure usage is: 103% (Acceptable Overstress)

Leg Forces	Original Design Reactions	Modified Design Reactions *	Current Analysis Reactions	% Of Design
Uplift (Kips)	154.9	209.1	178.4	85
Axial (Kips)	169.1	228.3	195.3	86
Shear (Kips)	18.3	24.7	22.7	92

(*) The original design reactions have been multiplied by 1.35 per ANSI/TIA-222-G

The structure base reactions resulting from this analysis are acceptable when compared to the reactions shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure meets the requirements per ANSI/TIA-222-G and 2003 IBC with 2005 CT Supplements and 2008 CT Amendments standards. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-465-6545.

Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

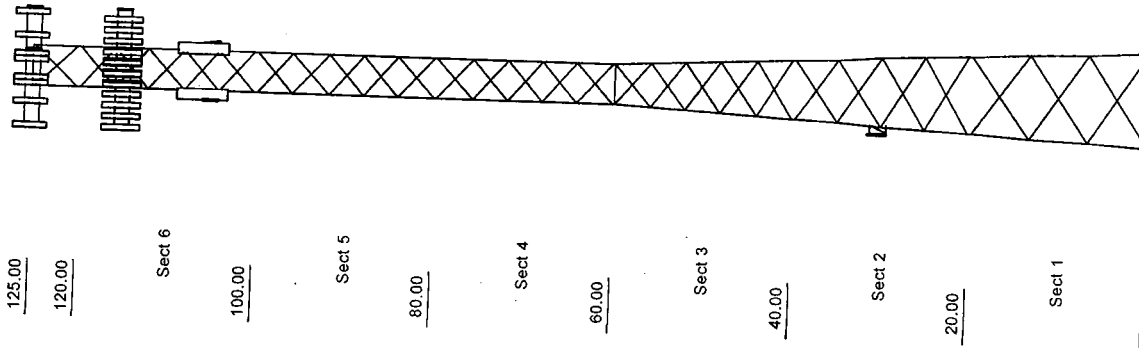
It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

Copyright Semaan Engineering Solutions, Inc

Loads: 110 mph no ice
50 mph w/ 1" x 1/4 radial ice
60 mph Serviceability



Uplift 178.33 k
Vert 195.29 k
Moment 1,761.98 ft-k
Total Down 18.07 k
Horiz 14.76 k
Total Shear 22.67 k

Job Information	
Tower : 302536	Location : Cherry Hill-branford, CT
Code : ANS/ITIA-222 Rev G	Shape : Triangle
Client : Youghiogheny	Base Width : 10.75 ft
	Top Width : 4.56 ft

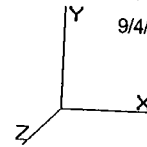
Sections Properties			
Section	Leg Members	Diagonal Members	Horizontal Members
1	PSP 50ksi	ROHN 5 EH	SAE 36ksi 1.75X1.75X0.125
2	PSP 50ksi	ROHN 5 EH	SAE 36ksi 1.5X1.5X0.1875
3	PX 50ksi	4" DIA PIPE	SAE 36ksi 1.5X1.5X0.1875
4	PX 50ksi	4" DIA PIPE	SAE 36ksi 2X2X0.25
5	PX 50ksi	3" DIA PIPE	SAE 36ksi 1.5X1.5X0.1875
6	PST 50ksi	2-1/2" DIA PIPE	SAE 36ksi 1.5X1.5X0.1875
7	PST 50ksi	2-1/2" DIA PIPE	SAE 36ksi 1.5X1.5X0.125

Discrete Appurtenance		
Elev (ft)	Type	Qty Description
125.00	Mounting Frame	3 Flat Light Sector Frame
125.00	Panel	12 Decibel D6844H90E-XY
115.00	Mounting Frame	3 Flat Light Sector Frame
115.00	Panel	9 Alligon 7770.00
115.00	Panel	6 Powerwave LGP2140X
106.00	Panel	6 ADC DD1900
31.30	Whip	3 RFS APXV18-206517-C
		1 Nokia CS72187.01

Linear Appurtenance			
Elev (ft)	From	To	Qty Description
0.000	125.00	1	Wave Guide
0.000	125.00	12	7/8" Coax
0.000	115.00	1	Wave Guide
0.000	115.00	12	1 5/8" Coax
0.000	106.00	1	Wave Guide
0.000	106.00	6	1 5/8" Coax
0.000	31.300	1	1/2" Coax

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

LoadCase 1.2D + 1.6W Normal - Pat1

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

110.00 mph Normal to Face with No Ice - Pattern 1

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	1.00	1.00	0.00	3.48	6.28	0.00	242.0	0.0	344.53	169.65	514.18
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	1.00	1.00	0.00	12.72	58.80	0.00	1,411.0	0.0	1,240.90	1,529.1	2,770.09
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	1.00	1.00	0.00	13.93	77.97	0.00	2,013.4	0.0	1,254.75	1,894.8	3,149.60
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	1.00	1.00	0.00	16.63	77.97	0.00	2,661.6	0.0	1,306.76	1,763.5	3,070.32
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	1.00	1.00	0.00	15.41	77.97	0.00	2,432.5	0.0	1,168.29	1,601.9	2,770.20
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	1.00	1.00	0.00	16.56	78.56	0.00	2,858.0	0.0	1,128.59	1,395.0	2,523.68
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	1.00	1.00	0.00	17.47	79.02	0.00	2,749.1	0.0	1,232.31	1,402.1	2,634.47
														14,367.6	0.0	17,432.55		

LoadCase 1.2D + 1.6W Normal - Pat2

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

110.00 mph Normal to Face with No Ice - Pattern 2

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	15.17	2.11	2.40	0.00	0.19	2.64	1.00	1.00	0.00	3.48	6.28	0.00	242.0	0.0	189.49	93.31	282.80
6	110.0	14.71	7.25	9.58	0.00	0.17	2.68	1.00	1.00	0.00	12.72	58.80	0.00	1,411.0	0.0	682.50	841.05	1,523.55
5	90.00	13.89	7.24	11.67	0.00	0.19	2.62	1.00	1.00	0.00	13.93	77.97	0.00	2,013.4	0.0	690.11	1,042.1	1,732.28
4	70.00	12.92	9.56	15.00	0.00	0.24	2.46	1.00	1.00	0.00	16.63	77.97	0.00	2,661.6	0.0	718.72	969.96	1,688.68
3	50.00	11.74	8.75	15.03	0.00	0.20	2.61	1.00	1.00	0.00	15.41	77.97	0.00	2,432.5	0.0	642.56	881.05	1,523.61
2	30.00	10.15	8.73	18.36	0.00	0.17	2.72	1.00	1.00	0.00	16.56	78.56	0.00	2,858.0	0.0	620.72	767.30	1,388.02
1	10.00	10.14	9.88	18.36	0.00	0.14	2.81	1.00	1.00	0.00	17.47	79.02	0.00	2,749.1	0.0	677.77	771.19	1,448.96
														14,367.6	0.0	9,587.90		

LoadCase 1.2D + 1.6W Normal - Pat3

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

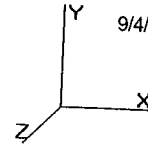
110.00 mph Normal to Face with No Ice - Pattern 3

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	1.00	1.00	0.00	3.48	6.28	0.00	242.0	0.0	344.53	169.65	514.18
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	1.00	1.00	0.00	12.72	58.80	0.00	1,411.0	0.0	1,240.90	1,529.1	2,770.09
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	1.00	1.00	0.00	13.93	77.97	0.00	2,013.4	0.0	1,254.75	1,894.8	3,149.60
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	1.00	1.00	0.00	16.63	77.97	0.00	2,661.6	0.0	1,306.76	1,763.5	3,070.32
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	1.00	1.00	0.00	15.41	77.97	0.00	2,432.5	0.0	1,168.29	1,601.9	2,770.20
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	1.00	1.00	0.00	16.56	78.56	0.00	2,858.0	0.0	1,128.59	1,395.0	2,523.68
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	1.00	1.00	0.00	17.47	79.02	0.00	2,749.1	0.0	1,232.31	1,402.1	2,634.47

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

14,367.6 0.0 17,432.55

LoadCase 1.2D + 1.6W 60 deg - Pat1

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

110.00 mph 60 deg with No Ice - Pattern 1

Wind Importance Factor : 1.00

Seq	Wind Sect Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.80	1.00	0.00	3.06	6.28	0.00	242.0	0.0	302.75	169.65	472.40
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.80	1.00	0.00	11.27	58.80	0.00	1,411.0	0.0	1,099.42	1,529.1	2,628.60
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.80	1.00	0.00	12.48	77.97	0.00	2,013.4	0.0	1,124.28	1,894.8	3,019.14
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.80	1.00	0.00	14.72	77.97	0.00	2,661.6	0.0	1,156.53	1,763.5	2,920.10
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.80	1.00	0.00	13.66	77.97	0.00	2,432.5	0.0	1,035.59	1,601.9	2,637.51
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.80	1.00	0.00	14.81	78.56	0.00	2,858.0	0.0	1,009.64	1,395.0	2,404.73
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.80	1.00	0.00	15.49	79.02	0.00	2,749.1	0.0	1,092.84	1,402.1	2,495.00
																14,367.6	0.0	17,432.55

LoadCase 1.2D + 1.6W 60 deg - Pat2

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

110.00 mph 60 deg with No Ice - Pattern 2

Wind Importance Factor : 1.00

Seq	Wind Sect Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
0	7	122.5	15.17	2.11	2.40	0.00	0.19	2.64	0.80	1.00	0.00	3.06	6.28	0.00	242.0	0.0	166.51	93.31	259.82
0	6	110.0	14.71	7.25	9.58	0.00	0.17	2.68	0.80	1.00	0.00	11.27	58.80	0.00	1,411.0	0.0	604.68	841.05	1,445.73
0	5	90.00	13.89	7.24	11.67	0.00	0.19	2.62	0.80	1.00	0.00	12.48	77.97	0.00	2,013.4	0.0	618.36	1,042.1	1,660.52
0	4	70.00	12.92	9.56	15.00	0.00	0.24	2.46	0.80	1.00	0.00	14.72	77.97	0.00	2,661.6	0.0	636.09	969.96	1,606.05
0	3	50.00	11.74	8.75	15.03	0.00	0.20	2.61	0.80	1.00	0.00	13.66	77.97	0.00	2,432.5	0.0	569.57	881.05	1,450.63
0	2	30.00	10.15	8.73	18.36	0.00	0.17	2.72	0.80	1.00	0.00	14.81	78.56	0.00	2,858.0	0.0	555.30	767.30	1,322.60
0	1	10.00	10.14	9.88	18.36	0.00	0.14	2.81	0.80	1.00	0.00	15.49	79.02	0.00	2,749.1	0.0	601.06	771.19	1,372.25
																14,367.6	0.0	9,117.61	

LoadCase 1.2D + 1.6W 60 deg - Pat3

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

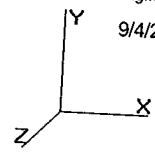
110.00 mph 60 deg with No Ice - Pattern 3

Wind Importance Factor : 1.00

Seq	Wind Sect Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.80	1.00	0.00	3.06	6.28	0.00	242.0	0.0	302.75	169.65	472.40
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.80	1.00	0.00	11.27	58.80	0.00	1,411.0	0.0	1,099.42	1,529.1	2,628.60
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.80	1.00	0.00	12.48	77.97	0.00	2,013.4	0.0	1,124.28	1,894.8	3,019.14
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.80	1.00	0.00	14.72	77.97	0.00	2,661.6	0.0	1,156.53	1,763.5	2,920.10

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	13.66	77.97	0.00	2,432.5	0.0	1,035.59	1,601.9	2,637.51
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	14.81	78.56	0.00	2,858.0	0.0	1,009.64	1,395.0	2,404.73
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	15.49	79.02	0.00	2,749.1	0.0	1,092.84	1,402.1	2,495.00
														14,367.6	0.0			
																16,577.47		

LoadCase 1.2D + 1.6W 90 deg - Pat1

110.00 mph 90 deg with No Ice - Pattern 1

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.85	1.00	0.00	3.17	6.28	0.00	242.0	0.0	313.20	169.65	482.84
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.85	1.00	0.00	11.63	58.80	0.00	1,411.0	0.0	1,134.79	1,529.1	2,663.97
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.85	1.00	0.00	12.84	77.97	0.00	2,013.4	0.0	1,156.90	1,894.8	3,051.75
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.85	1.00	0.00	15.20	77.97	0.00	2,661.6	0.0	1,194.09	1,763.5	2,957.65
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	14.10	77.97	0.00	2,432.5	0.0	1,068.76	1,601.9	2,670.68
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	15.25	78.56	0.00	2,858.0	0.0	1,039.37	1,395.0	2,434.47
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	15.98	79.02	0.00	2,749.1	0.0	1,127.71	1,402.1	2,529.86
														14,367.6	0.0			
																16,791.24		

LoadCase 1.2D + 1.6W 90 deg - Pat2

110.00 mph 90 deg with No Ice - Pattern 2

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
0	7	122.5	15.17	2.11	2.40	0.00	0.19	2.64	0.85	1.00	0.00	3.17	6.28	0.00	242.0	0.0	172.26	93.31	265.56
0	6	110.0	14.71	7.25	9.58	0.00	0.17	2.68	0.85	1.00	0.00	11.63	58.80	0.00	1,411.0	0.0	624.13	841.05	1,465.19
0	5	90.00	13.89	7.24	11.67	0.00	0.19	2.62	0.85	1.00	0.00	12.84	77.97	0.00	2,013.4	0.0	636.30	1,042.1	1,678.46
0	4	70.00	12.92	9.56	15.00	0.00	0.24	2.46	0.85	1.00	0.00	15.20	77.97	0.00	2,661.6	0.0	656.75	969.96	1,626.71
0	3	50.00	11.74	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	14.10	77.97	0.00	2,432.5	0.0	587.82	881.05	1,468.87
0	2	30.00	10.15	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	15.25	78.56	0.00	2,858.0	0.0	571.66	767.30	1,338.96
0	1	10.00	10.14	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	15.98	79.02	0.00	2,749.1	0.0	620.24	771.19	1,391.43
														14,367.6	0.0				
																9,235.18			

LoadCase 1.2D + 1.6W 90 deg - Pat3

110.00 mph 90 deg with No Ice - Pattern 3

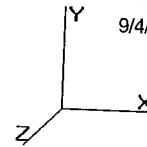
Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.85	1.00	0.00	3.17	6.28	0.00	242.0	0.0	313.20	169.65	482.84

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.85	1.00	0.00	11.63	58.80	0.00	1,411.0	0.0	1,134.79	1,529.1	2,663.97
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.85	1.00	0.00	12.84	77.97	0.00	2,013.4	0.0	1,156.90	1,894.8	3,051.75
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.85	1.00	0.00	15.20	77.97	0.00	2,661.6	0.0	1,194.09	1,763.5	2,957.65
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	14.10	77.97	0.00	2,432.5	0.0	1,068.76	1,601.9	2,670.68
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	15.25	78.56	0.00	2,858.0	0.0	1,039.37	1,395.0	2,434.47
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	15.98	79.02	0.00	2,749.1	0.0	1,127.71	1,402.1	2,529.86
														14,367.6	0.0			

LoadCase 0.9D + 1.6W Normal

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

110.00 mph Normal to Face with No Ice (Reduced DL)

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	1.00	1.00	0.00	3.48	6.28	0.00	181.5	0.0	344.53	169.65	514.18
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	1.00	1.00	0.00	12.72	58.80	0.00	1,058.3	0.0	1,240.90	1,529.1	2,770.09
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	1.00	1.00	0.00	13.93	77.97	0.00	1,510.1	0.0	1,254.75	1,894.8	3,149.60
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	1.00	1.00	0.00	16.63	77.97	0.00	1,996.2	0.0	1,306.76	1,763.5	3,070.32
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	1.00	1.00	0.00	15.41	77.97	0.00	1,824.4	0.0	1,168.29	1,601.9	2,770.20
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	1.00	1.00	0.00	16.56	78.56	0.00	2,143.5	0.0	1,128.59	1,395.0	2,523.68
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	1.00	1.00	0.00	17.47	79.02	0.00	2,061.8	0.0	1,232.31	1,402.1	2,634.47
														10,775.7	0.0			

LoadCase 0.9D + 1.6W 60 deg

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

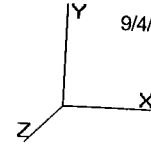
110.00 mph 60 deg with No Ice (Reduced DL)

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.80	1.00	0.00	3.06	6.28	0.00	181.5	0.0	302.75	169.65	472.40
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.80	1.00	0.00	11.27	58.80	0.00	1,058.3	0.0	1,099.42	1,529.1	2,628.60
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.80	1.00	0.00	12.48	77.97	0.00	1,510.1	0.0	1,124.28	1,894.8	3,019.14
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.80	1.00	0.00	14.72	77.97	0.00	1,996.2	0.0	1,156.53	1,763.5	2,920.10
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.80	1.00	0.00	13.66	77.97	0.00	1,824.4	0.0	1,035.59	1,601.9	2,637.51
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.80	1.00	0.00	14.81	78.56	0.00	2,143.5	0.0	1,009.64	1,395.0	2,404.73
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.80	1.00	0.00	15.49	79.02	0.00	2,061.8	0.0	1,092.84	1,402.1	2,495.00
														10,775.7	0.0			

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class: II
 Exposure: B
 Topo: 1

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Section Forces

LoadCase 0.9D + 1.6W 90 deg

Gust Response Factor: 0.85
 Dead Load Factor: 0.90
 Wind Load Factor: 1.60

110.00 mph 90 deg with No Ice (Reduced DL)

Wind Importance Factor: 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
7	122.5	27.57	2.11	2.40	0.00	0.19	2.64	0.85	1.00	0.00	3.17	6.28	0.00	181.5	0.0	313.20	169.65	482.84	
6	110.0	26.74	7.25	9.58	0.00	0.17	2.68	0.85	1.00	0.00	11.63	58.80	0.00	1,058.3	0.0	1,134.79	1,529.1	2,663.97	
5	90.00	25.25	7.24	11.67	0.00	0.19	2.62	0.85	1.00	0.00	12.84	77.97	0.00	1,510.1	0.0	1,156.90	1,894.8	3,051.75	
4	70.00	23.50	9.56	15.00	0.00	0.24	2.46	0.85	1.00	0.00	15.20	77.97	0.00	1,996.2	0.0	1,194.09	1,763.5	2,957.65	
3	50.00	21.34	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	14.10	77.97	0.00	1,824.4	0.0	1,068.76	1,601.9	2,670.68	
2	30.00	18.45	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	15.25	78.56	0.00	2,143.5	0.0	1,039.37	1,395.0	2,434.47	
1	10.00	18.43	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	15.98	79.02	0.00	2,061.8	0.0	1,127.71	1,402.1	2,529.86	
															10,775.7	0.0			16,791.24

LoadCase 1.2D + 1.0Di + 1.0Wi Normal

Gust Response Factor: 0.85
 Dead Load Factor: 1.20
 Wind Load Factor: 1.00

50.00 mph Normal with 1.25 in Radial Ice

Ice Dead Load Factor: 1.00

Wind Importance Factor: 1.00
 Ice Importance Factor: 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
7	122.5	5.70	2.11	15.51	13.12	0.67	1.78	1.00	1.00	2.85	14.35	6.28	30.88	2,134.2	1,892.3	123.51	71.68	195.19	
6	110.0	5.52	7.25	56.77	47.18	0.60	1.80	1.00	1.00	2.82	49.64	63.80	132.06	9,848.8	8,437.8	419.86	452.45	872.31	
5	90.00	5.22	7.24	58.11	46.45	0.61	1.80	1.00	1.00	2.76	50.68	89.89	138.19	11,407.1	9,393.7	404.61	495.73	900.34	
4	70.00	4.86	9.56	60.42	45.42	0.64	1.79	1.00	1.00	2.70	55.91	89.43	134.76	12,297.9	9,636.3	412.10	419.06	831.16	
3	50.00	4.41	8.75	64.63	49.60	0.56	1.83	1.00	1.00	2.61	55.33	88.84	130.30	11,678.7	9,246.2	379.95	447.54	827.49	
2	30.00	3.81	8.73	65.22	46.86	0.43	2.01	1.00	1.00	2.48	51.07	88.57	128.48	11,699.7	8,841.7	332.47	500.07	832.54	
1	10.00	3.81	9.88	59.26	40.89	0.33	2.23	1.00	1.00	2.22	45.90	87.31	118.33	10,460.5	7,711.5	330.86	539.10	869.95	
															69,527.1	55,159.4			5,328.99

LoadCase 1.2D + 1.0Di + 1.0Wi 60 deg

Gust Response Factor: 0.85
 Dead Load Factor: 1.20
 Wind Load Factor: 1.00

50.00 mph 60 deg with 1.25 in Radial Ice

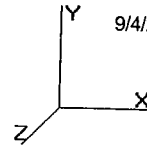
Ice Dead Load Factor: 1.00

Wind Importance Factor: 1.00
 Ice Importance Factor: 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	5.70	2.11	15.51	13.12	0.67	1.78	0.80	1.00	2.85	13.93	6.28	30.88	2,134.2	1,892.3	119.88	71.68	191.56
6	110.0	5.52	7.25	56.77	47.18	0.60	1.80	0.80	1.00	2.82	48.19	63.80	132.06	9,848.8	8,437.8	407.60	452.45	860.05
5	90.00	5.22	7.24	58.11	46.45	0.61	1.80	0.80	1.00	2.76	49.23	89.89	138.19	11,407.1	9,393.7	393.05	495.73	888.78
4	70.00	4.86	9.56	60.42	45.42	0.64	1.79	0.80	1.00	2.70	54.00	89.43	134.76	12,297.9	9,636.3	398.00	419.06	817.06
3	50.00	4.41	8.75	64.63	49.60	0.56	1.83	0.80	1.00	2.61	53.58	88.84	130.30	11,678.7	9,246.2	367.93	447.54	815.47
2	30.00	3.81	8.73	65.22	46.86	0.43	2.01	0.80	1.00	2.48	49.32	88.57	128.48	11,699.7	8,841.7	321.11	500.07	821.18
1	10.00	3.81	9.88	59.26	40.89	0.33	2.23	0.80	1.00	2.22	43.92	87.31	118.33	10,460.5	7,711.5	316.61	539.10	855.70

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

69,527.1 55,159.4 5,249.80

LoadCase 1.2D + 1.0Di + 1.0Wi 90 deg

50.00 mph 90 deg with 1.25 in Radial Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
7	122.5	5.70	2.11	15.51	13.12	0.67	1.78	0.85	1.00	2.85	14.03	6.28	30.88	2,134.2	1,892.3	120.78	71.68	192.47	
6	110.0	5.52	7.25	56.77	47.18	0.60	1.80	0.85	1.00	2.82	48.56	63.80	132.06	9,848.8	8,437.8	410.66	452.45	863.12	
5	90.00	5.22	7.24	58.11	46.45	0.61	1.80	0.85	1.00	2.76	49.60	89.89	138.19	11,407.1	9,393.7	395.94	495.73	891.67	
4	70.00	4.86	9.56	60.42	45.42	0.64	1.79	0.85	1.00	2.70	54.48	89.43	134.76	12,297.9	9,636.3	401.53	419.06	820.59	
3	50.00	4.41	8.75	64.63	49.60	0.56	1.83	0.85	1.00	2.61	54.01	88.84	130.30	11,678.7	9,246.2	370.94	447.54	818.47	
2	30.00	3.81	8.73	65.22	46.86	0.43	2.01	0.85	1.00	2.48	49.76	88.57	128.48	11,699.7	8,841.7	323.95	500.07	824.02	
1	10.00	3.81	9.88	59.26	40.89	0.33	2.23	0.85	1.00	2.22	44.41	87.31	118.33	10,460.5	7,711.5	320.17	539.10	859.26	
															69,527.1	55,159.4			5,269.60

LoadCase 1.0D + 1.0W Service Normal

Serviceability - 60.00 Wind Normal

Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
7	122.5	8.20	2.11	2.40	0.00	0.19	2.64	1.00	1.00	0.00	3.48	6.28	0.00	201.7	0.0	64.07	31.55	95.61	
6	110.0	7.96	7.25	9.58	0.00	0.17	2.68	1.00	1.00	0.00	12.72	58.80	0.00	1,175.8	0.0	230.75	284.35	515.10	
5	90.00	7.51	7.24	11.67	0.00	0.19	2.62	1.00	1.00	0.00	13.93	77.97	0.00	1,677.9	0.0	233.32	352.35	585.67	
4	70.00	6.99	9.56	15.00	0.00	0.24	2.46	1.00	1.00	0.00	18.31	77.97	0.00	2,218.0	0.0	267.51	327.94	595.44	
3	50.00	6.35	8.75	15.03	0.00	0.20	2.61	1.00	1.00	0.00	17.37	77.97	0.00	2,027.1	0.0	244.91	297.88	542.79	
2	30.00	5.49	8.73	18.36	0.00	0.17	2.72	1.00	1.00	0.00	19.18	78.56	0.00	2,381.7	0.0	243.09	259.42	502.51	
1	10.00	5.48	9.88	18.36	0.00	0.14	2.81	1.00	1.00	0.00	20.29	79.02	0.00	2,290.9	0.0	266.15	260.73	526.88	
															11,973.0	0.0			3,364.01

LoadCase 1.0D + 1.0W Service 60 deg

Serviceability - 60.00 Wind 60 deg

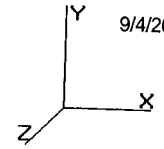
Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	8.20	2.11	2.40	0.00	0.19	2.64	0.80	1.00	0.00	3.06	6.28	0.00	201.7	0.0	56.30	31.55	87.84
6	110.0	7.96	7.25	9.58	0.00	0.17	2.68	0.80	1.00	0.00	11.27	58.80	0.00	1,175.8	0.0	204.44	284.35	488.79
5	90.00	7.51	7.24	11.67	0.00	0.19	2.62	0.80	1.00	0.00	12.48	77.97	0.00	1,677.9	0.0	209.06	352.35	561.41
4	70.00	6.99	9.56	15.00	0.00	0.24	2.46	0.80	1.00	0.00	16.40	77.97	0.00	2,218.0	0.0	239.57	327.94	567.51

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class: II
 Exposure: B
 Topo: 1

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Section Forces

3	50.00	6.35	8.75	15.03	0.00	0.20	2.61	0.80	1.00	0.00	15.62	77.97	0.00	2,027.1	0.0	220.24	297.88	518.12
2	30.00	5.49	8.73	18.36	0.00	0.17	2.72	0.80	1.00	0.00	17.43	78.56	0.00	2,381.7	0.0	220.97	259.42	480.39
1	10.00	5.48	9.88	18.36	0.00	0.14	2.81	0.80	1.00	0.00	18.31	79.02	0.00	2,290.9	0.0	240.22	260.73	500.95
														11,973.0	0.0	3,205.00		

LoadCase 1.0D + 1.0W Service 90 deg

Serviceability - 60.00 Wind 90 deg

Gust Response Factor: 0.85
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

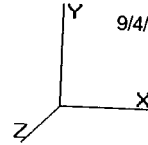
Wind Importance Factor: 1.00

Wind Sect Seq	Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
7	122.5	8.20	2.11	2.40	0.00	0.19	2.64	0.85	1.00	0.00	3.17	6.28	0.00	201.7	0.0	58.24	31.55	89.79
6	110.0	7.96	7.25	9.58	0.00	0.17	2.68	0.85	1.00	0.00	11.63	58.80	0.00	1,175.8	0.0	211.01	284.35	495.37
5	90.00	7.51	7.24	11.67	0.00	0.19	2.62	0.85	1.00	0.00	12.84	77.97	0.00	1,677.9	0.0	215.13	352.35	567.47
4	70.00	6.99	9.56	15.00	0.00	0.24	2.46	0.85	1.00	0.00	16.88	77.97	0.00	2,218.0	0.0	246.56	327.94	574.49
3	50.00	6.35	8.75	15.03	0.00	0.20	2.61	0.85	1.00	0.00	16.06	77.97	0.00	2,027.1	0.0	226.41	297.88	524.28
2	30.00	5.49	8.73	18.36	0.00	0.17	2.72	0.85	1.00	0.00	17.87	78.56	0.00	2,381.7	0.0	226.50	259.42	485.92
1	10.00	5.48	9.88	18.36	0.00	0.14	2.81	0.85	1.00	0.00	18.80	79.02	0.00	2,290.9	0.0	246.70	260.73	507.43
														11,973.0	0.0	3,244.75		

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Tower Loading

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (ft)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
125.0	Flat Light Sector Frame	3	400.00	17.900	892.54	42.594	0.000	0.000	0.000	0.75	0.75	0.000
125.0	Decibel DB844H90E-XY	12	14.00	3.061	224.02	4.552	4.000	6.500	8.000	0.80	1.11	0.000
115.0	Flat Light Sector Frame	3	400.00	17.900	887.27	42.330	0.000	0.000	0.000	0.75	0.75	0.000
115.0	Allgon 7770.00	9	35.00	5.880	284.73	7.285	4.580	11.00	5.000	0.80	0.75	0.000
115.0	Powerwave LGP2140X	6	14.10	1.290	82.35	1.906	1.200	9.200	2.600	0.80	0.50	0.000
115.0	ADC DD1900	6	12.10	1.280	79.56	1.875	0.967	11.30	2.700	0.80	0.50	0.000
106.0	RFS APXV18-206517-C	3	15.00	5.170	240.13	7.235	6.000	6.800	3.150	0.80	0.79	0.000
31.30	Nokia CS72187.01	1	1.00	0.060	11.71	0.274	0.375	1.000	1.000	1.00	1.00	0.000
Totals		43	3086.20		12293.79							

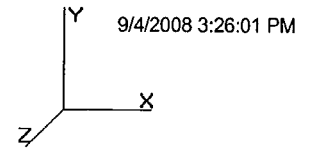
Number of Appurtenances : 8

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	125.0	7/8" Coax	12	1.09	0.33	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	125.0	Wave Guide	1	2.00	6.00	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	115.0	1 5/8" Coax	12	1.98	0.82	58	2	Block	0.00	N	1.00	1.00	0.00
0.00	115.0	Wave Guide	1	0.00	6.00	0	2	Individual	0.00	N	1.00	1.00	0.00
0.00	106.0	1 5/8" Coax	6	1.98	0.82	50	Lin App	Block	0.00	N	1.00	0.72	0.00
0.00	106.0	Wave Guide	1	0.00	6.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
0.00	31.30	1/2" Coax	1	0.63	0.15	0	Lin App	Individual	0.00	N	1.00	1.00	0.00

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 1 9N39 Bot Elev (ft): 0.00 Height (ft): 20.000

Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 5 EH	-192.88	1.2D + 1.6W	6.57	100	100	100	42.8	50.0	240.45	0	0	0.00	0.00	80 Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 1.75X1.75X0.12	-2.27	1.2D + 1.6W	12.30	49	49	49	208.4	36.0	2.18	1	1	7.95	6.96	103 Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PSP - ROHN 5 EH	178.99	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	65	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 1.75X1.75X0.12	2.08	1.2D + 1.6W 90	36	58	11.15	1	1	0.00	6.96	18	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		167.17	0.9D + 1.6W 60	0.00	0	0	
Top Compression		182.04	1.2D + 1.6W	0.00	0		
Bot Tension		178.99	0.9D + 1.6W 60	242.28	74	4	1" A354-BC
Bot Compression		195.65	1.2D + 1.6W	0.00	0		

Section: 2 8N199 Bot Elev (ft): 20.00 Height (ft): 20.000

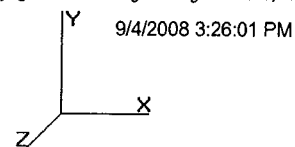
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 5 EH	-179.92	1.2D + 1.6W	4.92	100	100	100	32.1	50.0	254.97	0	0	0.00	0.00	70 Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 1.5X1.5X0.1875	-1.88	1.2D + 1.6W 90	9.810	50	50	50	200.9	36.0	2.97	1	1	7.95	10.44	63 Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PSP - ROHN 5 EH	166.45	1.2D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	60	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 1.5X1.5X0.1875	1.71	1.2D + 1.6W 90	36	58	13.47	1	1	0.00	10.44	12	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		155.52	0.9D + 1.6W 60	0.00	0	0	
Top Compression		168.03	1.2D + 1.6W	0.00	0		
Bot Tension		167.17	0.9D + 1.6W 60	218.08	77	4	1 A325
Bot Compression		182.04	1.2D + 1.6W	0.00	0		

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 3 7N344 Bot Elev (ft): 40.00 Height (ft): 20.000

Max Compression Member	Force	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
	(kip)		Load Case	X	Y								
LEG PX - 4" DIA PIPE	-166.64	3.94	100	100	100	31.9	50.0	184.18	0	0	0.00	0.00	90 Member X
HORIZ SAE - 1.5X1.5X0.125	-0.38	4.677	100	100	100	189.6	36.0	2.26	1	1	7.95	6.96	16 Member Z
DIAG SAE - 1.5X1.5X0.1875	-1.59	6.283	50	50	50	128.7	36.0	7.18	1	1	7.95	10.44	22 Member Z

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	155.11	1.2D + 1.6W 60	50	65	198.45	0	0	0.00	0.00	78	Member
HORIZ SAE - 1.5X1.5X0.125	0.30	1.2D + 1.6W 60	36	58	9.20	1	1	0.00	6.96	3	Member
DIAG SAE - 1.5X1.5X0.1875	1.57	1.2D + 1.6W 90	36	58	13.47	1	1	0.00	10.44	11	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	147.45	0.9D + 1.6W 60	0.00	0	0	
Top Compression	157.85	1.2D + 1.6W	0.00	0		
Bot Tension	155.52	0.9D + 1.6W 60	218.08	71	4	1 A325
Bot Compression	168.03	1.2D + 1.6W	0.00	0		

Section: 4 6N166 Bot Elev (ft): 60.00 Height (ft): 20.000

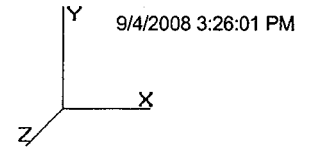
Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
			X	Y	Z									
LEG PX - 4" DIA PIPE	-148.73	1.2D + 1.6W	3.93	100	100	100	31.9	50.0	184.23	0	0	0.00	0.00	80 Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 2X2X0.25	-6.71	1.2D + 1.6W	6.111	50	50	50	100.3	36.0	17.93	1	1	7.95	13.92	84 Bolt Shear

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	147.08	1.2D + 1.6W 60	50	65	198.45	0	0	0.00	0.00	74	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2X2X0.25	6.19	1.2D + 1.6W 60	36	58	25.57	1	1	0.00	13.92	24	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	83.41	0.9D + 1.6W 60	0.00	0	0	
Top Compression	90.00	1.2D + 1.6W	0.00	0		
Bot Tension	147.45	0.9D + 1.6W 60	166.24	89	4	7/8 A325
Bot Compression	157.85	1.2D + 1.6W	0.00	0		

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class: II
 Exposure: B
 Topo: 1

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Force/Stress Summary

Section: 5 6N309 Bot Elev (ft): 80.00 Height (ft): 20.000

		Force	Len	Bracing %			F'y	phi	Shear	Bear			Use	
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Cap (kip)	Cap (kip)	phiRnv	phiRn	%	Controls
Max Compression Member	Load Case							Num Bolts	Num Holes					
LEG PX - 3" DIA PIPE	1.2D + 1.6W	-84.10	3.93	100	100	100	41.4	50.0	119.89	0	0	0.00	0.00	70 Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 1.5X1.5X0.1875	1.2D + 1.6W 90	-4.91	6.105	50	50	50	125.0	36.0	7.54	1	1	7.95	10.44	65 Member Z

Max Tension Member	Load Case	Force (kip)	Fy (ksi)	Fu (ksi)	phi	Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	1.2D + 1.6W 60	83.27	50	65	135.90	0	0	0	0.00	0.00	61	Member
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0	
DIAG SAE - 1.5X1.5X0.1875	1.2D + 1.6W 90	4.79	36	58	13.47	1	1	0.00	0.00	10.44	35	Member

Max Splice Forces	Load Case	Force (kip)	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.9D + 1.6W 60	34.52	0.00	0	0	
Top Compression	1.2D + 1.6W	38.45	0.00	0		
Bot Tension	0.9D + 1.6W 60	83.41	166.24	50	4	7/8 A325
Bot Compression	1.2D + 1.6W	90.00	0.00	0		

Section: 6 6N30 Bot Elev (ft): 100.0 Height (ft): 20.000

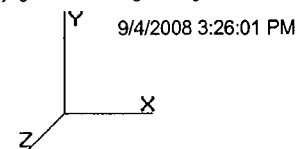
		Force	Len	Bracing %			F'y	phi	Shear	Bear			Use	
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Cap (kip)	Cap (kip)	phiRnv	phiRn	%	Controls
Max Compression Member	Load Case							Num Bolts	Num Holes					
LEG PST - 2-1/2" DIA PIP	1.2D + 1.6W	-34.00	3.93	100	100	100	49.8	50.0	63.94	0	0	0.00	0.00	53 Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 1.5X1.5X0.1875	1.2D + 1.6W 90	-3.68	6.052	50	50	50	123.9	36.0	7.65	1	1	7.95	10.44	48 Member Z

Max Tension Member	Load Case	Force (kip)	Fy (ksi)	Fu (ksi)	phi	Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	0.9D + 1.6W 60	34.59	50	65	76.68	0	0	0	0.00	0.00	45	Member
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0	
DIAG SAE - 1.5X1.5X0.1875	1.2D + 1.6W 90	3.65	36	58	13.47	1	1	0.00	0.00	10.44	27	Member

Max Splice Forces	Load Case	Force (kip)	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.9D + 1.6W 60	2.95	0.00	0	0	
Top Compression	1.2D + 1.6W	4.16	0.00	0		
Bot Tension	0.9D + 1.6W 60	34.52	120.39	29	4	3/4 A325
Bot Compression	1.2D + 1.6W	38.45	0.00	0		

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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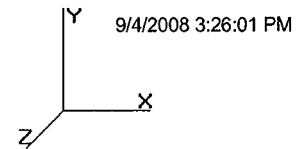


Force/Stress Summary

Section: 7		6N285		Bot Elev (ft): 120.0		Height (ft): 5.000									
		Force		Len	Bracing %			Fy	phi	Num	Num	Shear Bear		Use	
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	% Controls
LEG	PST - 2-1/2" DIA PIP	-4.09	1.2D + 1.6W	0.17	100	100	100	2.1	50.0	76.66	0	0	0.00	0.00	5 Member X
HORIZ	SAE - 1.5X1.5X0.125	-0.55	1.2D + 1.6W 60	4.563	100	100	100	185.0	36.0	2.38	1	1	7.95	6.96	23 Member Z
DIAG	SAE - 1.5X1.5X0.125	-1.41	1.2D + 1.6W 90	6.527	50	50	50	132.3	36.0	4.64	1	1	7.95	6.96	30 Member Z
Max Tension Member		Force		Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use			
		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	Cap	(kip)	Cap	(kip)	%	Controls	
LEG	PST - 2-1/2" DIA PIP	2.86	1.2D + 1.6W 60	50	65	76.68	0	0	0.00	0.00	3	Member			
HORIZ	SAE - 1.5X1.5X0.125	0.57	1.2D + 1.6W	36	58	9.20	1	1	0.00	6.96	6	Member			
DIAG	SAE - 1.5X1.5X0.125	1.39	1.2D + 1.6W 90	36	58	9.20	1	1	0.00	6.96	15	Member			
Max Splice Forces		Force		Capacity	Use	Num									
		(kip)	Load Case	(kip)	%	Bolts	Bolt Type								
Top Tension		0.00		0.00	0	0									
Top Compression		2.01	1.2D + 1.0Di +	0.00	0										
Bot Tension		2.95	0.9D + 1.6W 60	81.36	4	4 5/8 A325									
Bot Compression		4.16	1.2D + 1.6W	0.00	0										

Site Number: 302536
 Location: Cherry Hill-branford, CT
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 Struct Class : II
 Exposure : B
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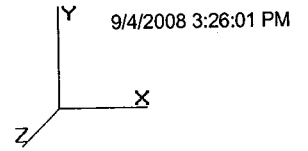


Support Forces Summary

Load Case	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.0D + 1.0W Service 90 deg	1b	-1.75	-24.82	-0.94	
	1a	-2.31	34.86	1.26	
	1	-0.13	5.02	-0.32	
1.0D + 1.0W Service 60 deg	1b	-2.01	-29.16	-1.16	
	1a	-1.47	22.11	0.73	
	1	-0.11	22.11	-1.64	
1.0D + 1.0W Service Normal	1b	-0.85	-12.62	-0.62	
	1a	0.85	-12.62	-0.62	
	1	0.00	40.30	-3.05	
1.2D + 1.0Di + 1.0Wi 90 deg	1b	-2.07	-14.34	-1.06	
	1a	-3.77	68.86	2.05	
	1	-0.22	27.26	-0.99	
1.2D + 1.0Di + 1.0Wi 60 deg	1b	-2.45	-20.59	-1.41	
	1a	-2.60	51.18	1.28	
	1	-0.19	51.18	-2.89	
1.2D + 1.0Di + 1.0Wi Normal	1b	-0.72	3.04	-0.64	
	1a	0.72	3.04	-0.64	
	1	0.00	75.70	-4.84	
0.9D + 1.6W 90 deg	1b	-10.54	-155.17	-5.71	
	1a	-10.88	164.20	5.96	
	1	-0.61	4.53	-0.26	
0.9D + 1.6W 60 deg	1b	-11.91	-178.39	-6.88	
	1a	-6.49	95.97	3.19	
	1	-0.48	95.97	-7.22	
0.9D + 1.6W Normal	1b	-5.76	-89.91	-4.01	
	1a	5.76	-89.91	-4.01	
	1	0.00	193.38	-14.66	
1.2D + 1.6W 90 deg - Pat3	1b	-10.46	-154.00	-5.66	
	1a	-10.96	166.04	6.02	
	1	-0.60	6.03	-0.36	
1.2D + 1.6W 90 deg - Pat2	1b	-6.85	-108.38	-3.84	
	1a	-7.45	120.42	4.21	
	1	-0.17	6.03	-0.37	
1.2D + 1.6W 90 deg - Pat1	1b	-10.46	-154.00	-5.66	
	1a	-10.96	166.04	6.02	
	1	-0.60	6.03	-0.36	
1.2D + 1.6W 60 deg - Pat3	1b	-11.83	-177.27	-6.83	
	1a	-6.58	97.67	3.24	
	1	-0.48	97.67	-7.32	
1.2D + 1.6W 60 deg - Pat2	1b	-7.84	-125.25	-4.53	
	1a	-4.45	71.66	2.42	
	1	-0.13	71.66	-5.07	

Site Number: 302536
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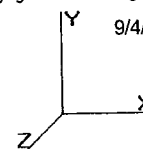
1.2D + 1.6W 60 deg - Pat1	1b	-11.83	-177.27	-6.83
	1a	-6.58	97.67	3.24
	1	-0.48	97.67	-7.32
1.2D + 1.6W Normal - Pat3	1b	-5.69	-88.61	-3.95
	1a	5.69	-88.61	-3.95
	1	0.00	195.29	-14.76
1.2D + 1.6W Normal - Pat2	1b	-3.79	-61.26	-2.39
	1a	3.79	-61.26	-2.39
	1	0.00	140.58	-10.03
1.2D + 1.6W Normal - Pat1	1b	-5.69	-88.61	-3.95
	1a	5.69	-88.61	-3.95
	1	0.00	195.29	-14.76

Max Uplift: 178.39 (kip)
 Max Down: 195.29 (kip)
 Max Shear: 14.76 (kip)

Moment: 1,761.98 (ft-kip) 1.2D + 1.6W Normal - Pat1
 Total Down: 18.07 (kip)
 Total Shear: 22.67 (kip)

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
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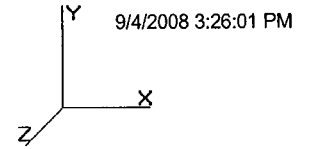
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Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
Serviceability - 60.00 Wind 60 deg	30.00	0.0166	0.0023	0.0605
	104.10	0.2560	0.0055	0.2976
	115.90	0.3196	0.0050	0.3130
	125.00	0.3697	0.0048	0.3225
Serviceability - 60.00 Wind 90 deg	30.00	0.0168	0.0014	0.0609
	104.10	0.2578	0.0032	0.3005
	115.90	0.3218	0.0029	0.3158
	125.00	0.3722	0.0028	0.3240
Serviceability - 60.00 Wind Normal	30.00	0.0173	0.0024	0.0624
	104.10	0.2633	0.0056	0.3053
	115.90	0.3284	0.0051	0.3214
	125.00	0.3797	0.0049	0.3288
110.00 mph 60 deg with No Ice (Reduced DL)	30.00	0.0890	0.0140	0.3246
	104.10	1.3834	0.0387	1.6112
	115.90	1.7271	0.0387	1.6959
	125.00	1.9985	0.0388	1.7396
110.00 mph 60 deg with No Ice - Pattern 1	30.00	0.0892	0.0141	0.3253
	104.10	1.3880	0.0388	1.6172
	115.90	1.7330	0.0388	1.7023
	125.00	2.0054	0.0390	1.7468
110.00 mph 60 deg with No Ice - Pattern 2	30.00	0.0626	0.0092	0.2346
	104.10	1.0534	0.0265	1.2697
	115.90	1.3252	0.0265	1.3435
	125.00	1.5406	0.0265	1.3898
110.00 mph 60 deg with No Ice - Pattern 3	30.00	0.0892	0.0141	0.3253
	104.10	1.3880	0.0388	1.6172
	115.90	1.7330	0.0388	1.7023
	125.00	2.0054	0.0390	1.7468
110.00 mph 90 deg with No Ice (Reduced DL)	30.00	0.0893	0.0085	0.3267
	104.10	1.3918	0.0234	1.6259
	115.90	1.7378	0.0234	1.7087
	125.00	2.0106	0.0236	1.7475
110.00 mph 90 deg with No Ice - Pattern 1	30.00	0.0895	0.0085	0.3275
	104.10	1.3963	0.0234	1.6320
	115.90	1.7437	0.0235	1.7153
	125.00	2.0176	0.0237	1.7546
110.00 mph 90 deg with No Ice - Pattern 2	30.00	0.0626	0.0056	0.2358
	104.10	1.0578	0.0159	1.2797
	115.90	1.3311	0.0160	1.3515
	125.00	1.5473	0.0161	1.3933
110.00 mph 90 deg with No Ice - Pattern 3	30.00	0.0895	0.0085	0.3275
	104.10	1.3963	0.0234	1.6320
	115.90	1.7437	0.0235	1.7153
	125.00	2.0176	0.0237	1.7546
110.00 mph Normal to Face with No Ice (Reduced)	30.00	0.0918	0.0131	0.3345
	104.10	1.4190	0.0362	1.6505
	115.90	1.7722	0.0360	1.7370
	125.00	2.0499	0.0357	1.7776

Site Number: 302536
 Location: Cherry Hill-branford, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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110.00 mph Normal to Face with No Ice - Pattern 1	30.00	0.0920	0.0132	0.3353
	104.10	1.4237	0.0363	1.6568
	115.90	1.7782	0.0361	1.7437
	125.00	2.0570	0.0358	1.7840
110.00 mph Normal to Face with No Ice - Pattern 2	30.00	0.0642	0.0086	0.2401
	104.10	1.0726	0.0250	1.2913
	115.90	1.3501	0.0248	1.3664
	125.00	1.5689	0.0245	1.4086
110.00 mph Normal to Face with No Ice - Pattern 3	30.00	0.0920	0.0132	0.3353
	104.10	1.4237	0.0363	1.6568
	115.90	1.7782	0.0361	1.7437
	125.00	2.0570	0.0358	1.7840
50.00 mph 60 deg with 1.25 in Radial Ice	30.00	0.0242	0.0036	0.0845
	104.10	0.3487	0.0091	0.3964
	115.90	0.4334	0.0088	0.4163
	125.00	0.4999	0.0086	0.4286
50.00 mph 90 deg with 1.25 in Radial Ice	30.00	0.0241	0.0021	0.0847
	104.10	0.3499	0.0055	0.3994
	115.90	0.4348	0.0053	0.4184
	125.00	0.5016	0.0053	0.4290
50.00 mph Normal with 1.25 in Radial Ice	30.00	0.0238	0.0036	0.0852
	104.10	0.3523	0.0092	0.4017
	115.90	0.4380	0.0090	0.4218
	125.00	0.5052	0.0089	0.4293
	125.00	0.0000	0.0000	0.0000