Martin, David C.

From: Mayo, Rachel [rmayo@RC.com]
Sent: Tuesday, July 05, 2011 3:42 PM
To: Martin, David C.
Cc: Baldwin, Kenneth; Mayo, Rachel
Subject: Verizon Wireless-Bayberry Lane, Westport
Attachments: Westport2CT_MPEReport_20110628.pdf

Hi Dave, Ken asked me to forward this over to you. This report is in lieu of the worst-case power density table we submitted in our June 13, 2011 filing. You had contacted us to let us know that you found what appeared to be a type in the Watts ERP column for Verizon's LTE antennas. When we corrected the typo it brought the total worst-case over 100%.

So this report will provide a more accurate depiction.

Please let me know if you would like hard copies of the report for your file.

thank you, Rachel

Rachel A. Mayo
Land Use Analyst

Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
Direct 860-275-8213 | Fax 860-275-8299
rmayo@rc.com | www.rc.com
Bio | Contact Card

Boston Providence Hartford New London
Stamford New York Albany White Plains Sarasota

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C Squared Systems, LLC
65 Dartmouth Drive, Unit A3
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions

Westport 2 CT

180 Bayberry Lane, Westport, CT 06880

June 28, 2011

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modifications to the existing Verizon Wireless antenna arrays at their Westport 2 facility, located at 180 Bayberry Lane in Westport, CT. The site is a monopole which hosts antennas for Verizon Wireless, Sprint PCS, Nextel, AT&T, T-Mobile, and multiple government operators. The coordinates of the monopole are 41-10-17.87 N, 73-19-42.43 W.

Verizon Wireless is proposing the following modifications:

1) Install three 750 MHz LTE panel antennas (one per sector);
2) Replace four of six existing 850 MHz Cellular panel antennas;
3) Remove six existing 1900 MHz PCS panel antennas (two per sector);
4) Install three replacement 1900 MHz PCS panel antennas (one per sector);

This report uses the actual antenna configuration for Verizon Wireless to provide a representation of the resulting % MPE for these modifications.

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 Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

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.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

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, 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. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

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.

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:

$$\text{Power Density} = \left(\frac{1.6^2 \times EIRP}{4\pi \times R^2} \right)$$

Where:

EIRP = Effective Isotropic Radiated Power

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

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna patterns

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. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the finished modifications.

The percent of MPE values presented in this report reflect levels that one may encounter from one sector of a carrier's antennas. Most carriers use 3 sectors per site with azimuths approximately 120 degrees apart, therefore one could not be standing in the main beam of all 3 sectors at the same time. In cases where antenna models are not uniform across all 3 sectors, the antenna model with the highest gain was used for the calculations. This results in a conservative or "worst case" assumption for percent of MPE calculations.

4. Proposed Antenna Inventory

Table 1 below outlines Verizon's proposed antenna configuration for the site. The associated data sheets and antenna patterns for these specific antenna models are included in Attachment C.

Operator	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBd)	Power ERP (Watts)	Antenna Model	Beam Width	Mech Downtilt	Length (feet)	Antenna Centerline Height (feet)
Verizon	850	90	12.0	1426	APL868013-42T0	80	3	4	77
Verizon	750	40	13.4	875	P65-16-XL-2_2	68	3	6	77
Verizon	1900	48	16.4	2095	BXA-185063/8CF	63	0	4	77
Verizon	850	90	12.0	1426	APL868013-42T0	80	3	4	77
Verizon	850	90	14.0	2261	LPA-80080/6CF	80	3	6	77
Verizon	750	40	13.4	875	P65-16-XL-2_2	68	3	6	77
Verizon	1900	48	16.4	2095	BXA-185063/8CF	63	0	4	77
Verizon	850	90	14.0	2261	LPA-80080/6CF	80	3	6	77
Verizon	850	90	12.0	1426	APL868013-42T0	80	3	4	77
Verizon	750	40	13.4	875	P65-16-XL-2_2	68	3	6	77
Verizon	1900	48	16.4	2095	BXA-185063/8CF	63	0	4	77
Verizon	850	90	12.0	1426	APL868013-42T0	80	3	4	77

Table 1: Proposed Antenna Inventory[1]

[1] In the case where antenna models are not uniform across all 3 sectors, the antenna model with the highest gain was used for the calculations.

5. Calculation Results

The calculated power density results are shown in Figure 1 below. Each frequency band and technology is calculated as well as the resulting cumulative percent of MPE. For completeness, the calculations for this analysis range from 0 feet horizontal distance (directly below the antennas) to a value of 3000 feet horizontal distance from the antennas. In addition to the other worst case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antennas were completed using a local maximum off beam antenna gain (within ± 5 degrees of the true mathematical angle) to incorporate a realistic worst case scenario.

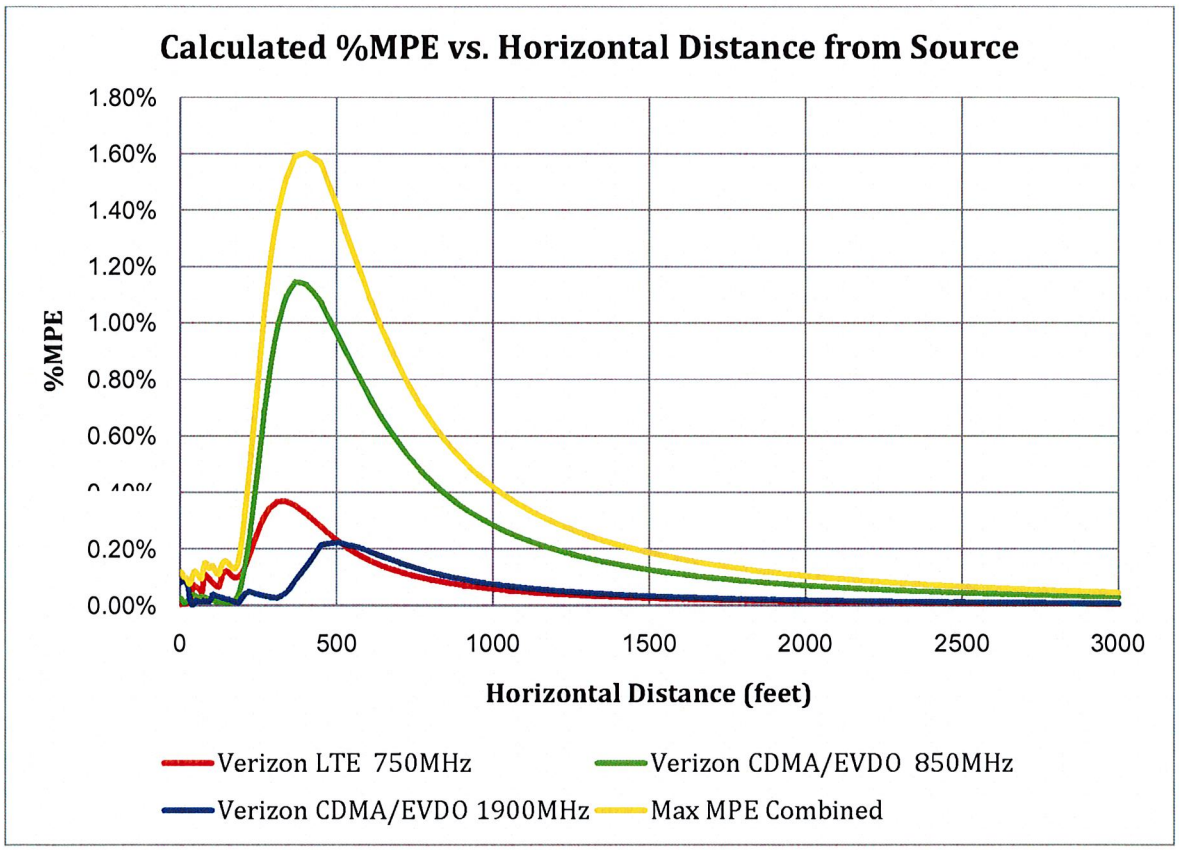


Figure 1: Graph of Percent of MPE vs. Distance

The highest composite percent of MPE was calculated to occur at a horizontal distance of 402 feet from the antennas. Please note that the percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 500' and beyond, one would now be in the main beam of most antenna patterns and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.

Table 2 below lists percent of MPE values for each technology as well as the associated parameters that were included in the calculations. The highest composite percent of MPE value was calculated to occur at a horizontal distance of 402 feet from the antennas (reference Figure 1).

As stated in Section 3, all 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. In addition, 6 feet was subtracted from the height of the antennas for this analysis to account for average human height. As a result, the predicted signal levels are significantly higher than the actual signal levels will be from the finished modifications.

Carrier	Number of Trans.	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm^2)	Limit (mW/cm^2)	%MPE
Verizon CDMA/EVDO 850MHz	9	20	77	402	0.006436	0.567	1.14%
Verizon CDMA/EVDO 1900MHz	3	16	77	402	0.001423	1.000	0.14%
Verizon LTE 750MHz	1	40	77	402	0.001624	0.500	0.32%
						Total	**1.60%**

Table 2: Maximum Percent of Emissions Values[2]

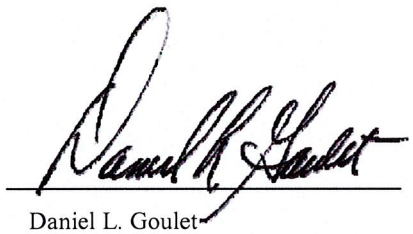
[2] Frequencies listed in Table 2 are representative of the operating band of the particular carrier and are not the carriers' specific operating frequency.

6. Conclusion

The above analysis verifies that emissions from the site will be well below the maximum levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods described above, the maximum composite percent of MPE from the proposed transmit antennas is 1.60% of the FCC limit. This maximum percent of MPE value is calculated to occur 402' away from the site.

7. 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/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel L. Goulet
C Squared Systems, LLC

June 28, 2011
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[3]

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[4]

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

Table 3: FCC Limits for Maximum Permissible Exposure

[3] 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.

[4] 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.

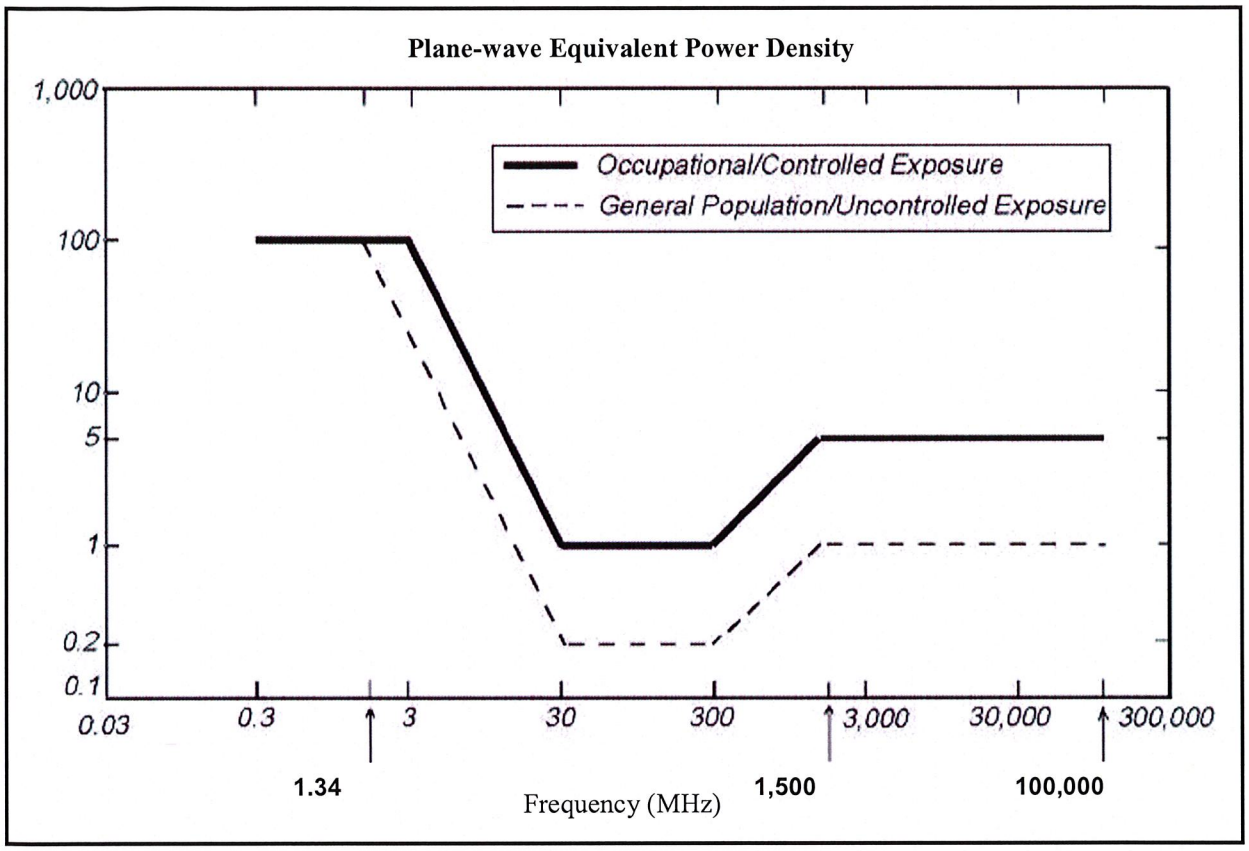
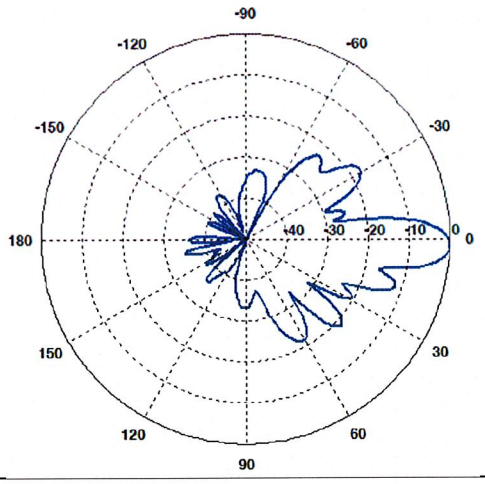


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon's Antenna Model Data Sheets and Electrical Patterns

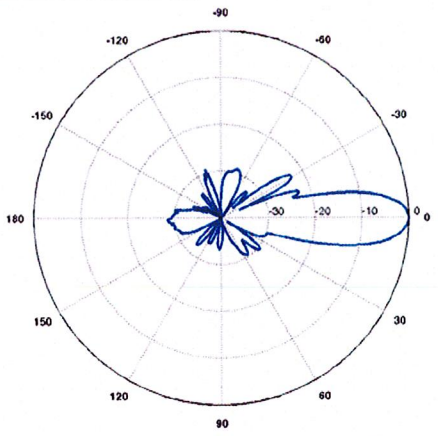
750 MHz

Manufacturer:	Powerwave
Model #:	P65-16-XL-2_2
Frequency Band:	698-806 MHz
Gain:	13.4 dBd
Vertical Beamwidth:	10.5°
Horizontal Beamwidth:	68°
Polarization:	Dual Linear ± 45°
Size L x W x D:	72.0" x 12.0" x 5.0"



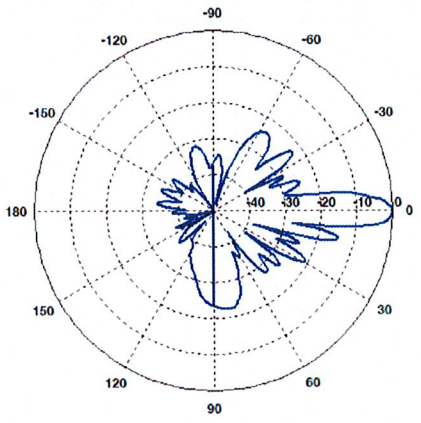
850 MHz

Manufacturer:	Amphenol
Model #:	LPA-80080/6CF
Frequency Band:	806-960 MHz
Gain:	14.0 dBd
Vertical Beamwidth:	10°
Horizontal Beamwidth:	80°
Polarization:	Vertical
Size L x W x D:	71.1" x 10.7" x 9.8"



1900 MHz

Manufacturer:	Amphenol
Model #:	BXA-185063/8CF
Frequency Band:	1850-1990 MHz
Gain:	16.4 dBd
Vertical Beamwidth:	7°
Horizontal Beamwidth:	63°
Polarization:	Slant ± 45°
Size L x W x D:	48.8" x 6.1" x 3.2"



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
www.ct.gov/csc

July 1, 2011

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103

RE: **EM-VER-158-110614** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Bayberry Lane, Westport, Connecticut.

Dear Attorney Baldwin:

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 with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated June 13, 2011. 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. Thank you for your attention and cooperation.

Very truly yours,

LRoberts

Linda Roberts
Executive Director

LR/CDM/laf

c: The Honorable Gordon F. Joseloff, First Selectman, Town of Westport
Laurence Bradley, Director, Planning & Zoning, Town of Westport
American Tower Corporation

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
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E-Mail: siting.council@ct.gov
www.ct.gov/csc

June 15, 2011

The Honorable Gordon F. Joseloff
First Selectman
Town of Westport
Town Hall
110 Myrtle Avenue
Westport, CT 06880

RE: **EM-VER-158-110614** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Bayberry Lane, Westport, Connecticut.

Dear First Selectman Joseloff:

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

If you have any questions or comments regarding this proposal, please call me or inform the Council by June 29, 2011.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts
Executive Director

LR/jbw

Enclosure: Notice of Intent

c: Laurence Bradley, Director, Planning & Zoning, Town of Westport

CSC
CONNECTICUT SITING COUNCIL

ROBINSON & COI

EM-VER-158-110614

KENNETH C. BALDWIN

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kbaldwin@rc.com
Direct (860) 275-8345

ORIGINAL

June 13, 2011

Via Hand Delivery

Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
Bayberry Lane, Westport, Connecticut

Dear Ms. Roberts:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) wireless telecommunications antennas at the 76-foot level on the existing 140-foot tower at the above-referenced address. The tower is owned by American Tower Corporation. The Council approved Cellco's use of the existing tower in 1998. Cellco now intends to modify its installation by replacing seven (7) of its existing antennas with newer model antennas (four (4) model APL-868013-42T0 cellular antennas and three (3) BXA-185063/8CF PCS antennas) all at the same 76-foot level on the tower. Attached behind Tab 1 are the specifications for the proposed replacement antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Gordon F. Joseloff, First Selectman for the Town of Westport. The Town of Westport is the owner of the property on which the tower is located.

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

1. The proposed modifications will not result in any increase in the height of the existing tower. Cellco's antennas will be located at the same 76-foot level on the existing 140-foot tower.

2. The proposed modifications will not involve any modifications to ground-mounted equipment and, therefore, will not require the extension of the site boundaries.

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

4. The operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A worst-case cumulative power density table for Cellco's modified facility is included behind Tab 2.

Also attached is a Structural Analysis Report confirming that the tower and foundation can support Cellco's proposed antennas modification. (See Tab 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

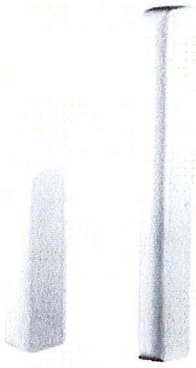
Enclosures
Copy to:
Gordon F. Joseloff, Westport First Selectman
Sandy M. Carter

Product Data Sheet **APL868013-42T0**

Maximizer® Log Periodic Antenna, 806-894, 80deg, 14.1dBi, 1.2m, FET, 0deg

Product Description

The Celwave® Maximizer series is a log periodic dipole array which uses a patented design to achieve a front-to-back ratio of 45 dB, the highest front-to-back ratio in the industry. Maximizers are available to cover ESMR, AMPS, PCS and DCS frequency ranges. They use RFS's patented monolithic CELlite® technology, which eliminates cable and soldered joints to reduce the possibility of inter-modulation products. The CELlite technology assures high reliability and excellent repeatability of electrical characteristics. The cellular Maximizers are available in 65°, 80° and 90° horizontal beamwidths and the PCS/DCS Maximizers are available in 65° and 90° horizontal beamwidths. Patent number 6,133,889.



Features/Benefits

• 45 dB front-to-back ratio reduces co-channel interference.• Monolithic construction reduces IM.• No solder joints, high reliability.• Surface treated components prevent galvanic corrosion.• UV stabilized radome assures long life without radome deterioration due to UV exposure.

Technical Specifications

Electrical Specifications

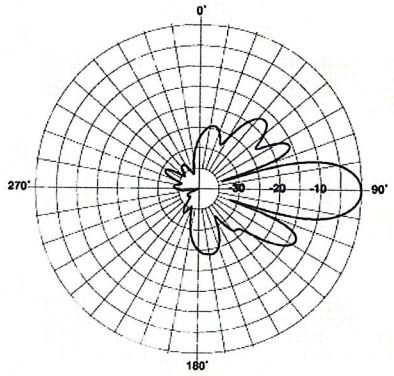
Frequency Range, MHz	806-894
Horizontal Beamwidth, deg	80
Vertical Beamwidth, deg	15
Electrical Downtilt, deg	0
Gain, dBi (dBd)	14.1 (12)
Front-To-Back Ratio, dB	45
Polarization	Vertical
VSWR	< 1.5:1
Impedance, Ohms	50
Maximum Power Input, W	500
Lightning Protection	Direct Ground
Connector Type	7-16 DIN Female

Mechanical Specifications

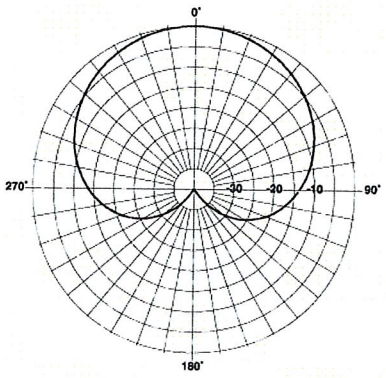
Dimensions - HxWxD, mm (in)	1219 x 152 x 203 (48 x 6 x 8)
Weight w/o Mtg Hardware, kg (lb)	2.8 (6.32)
Survival Wind Speed, km/h (mph)	200 (125)
Rated Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m² (ft²)	0.307 (3.3)
Maximum Thrust @ Rated Wind, N (lbf)	916 (206)
Wind Load - Side @ Rated Wind, N (lbf)	743 (167)
Radome Material	UV Stabilized High Impact ABS
Shipping Weight, kg (lb)	7.9 (17.5)
Packing Dimensions, HxWxD, mm (in)	1270 x 305 x 203 (50 x 12 x 8)

Ordering Information

Mounting Hardware	APM21-3



Vertical Pattern



Horizontal Pattern

Other Documentation

Slant +/- 45° Dual Polarized, Panel 63° / 18.5 dBi

BXA-185063/8CF ___

When ordering replace "___" with connector type.

Mechanical specifications

Length	1238 mm	48.8 in
Width	154 mm	6.1 in
Depth	80 mm	3.2 in
Depth with t-bracket	108 mm	4.3 in
[4] Weight	4.5 kg	10.0 lbs
Wind Area		
Fore/Aft	0.19 m^2	2.1 ft^2
Side	0.10 m^2	1.1 ft^2
Rated Wind Velocity (Safety factor 2.0)	>322 km/hr	>200 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	288 N	65 lbs
Side	170 N	38 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in).

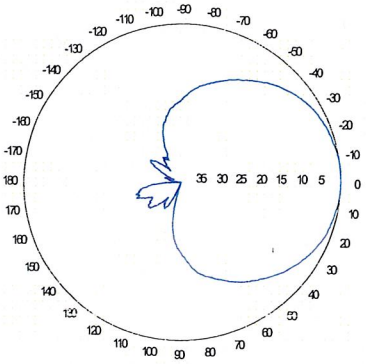
Mounting bracket kit #26799997
Downtilt bracket kit #26799999

The downtilt bracket kit includes the mounting bracket kit.

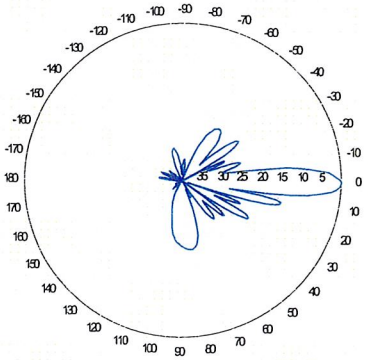
Electrical specifications

	Frequency Range	1850-1990 MHz
	Impedance	50Ω
[3]	Connector(s)	NE or E-DIN 2 ports / center or bottom
[1]	VSWR	≤ 1.4:1
	Polarization	Slant ± 45°
[1]	Isolation Between Ports	< -30 dB
[1]	Gain	18.5 dBi
[2]	Power Rating	250 W
[1]	Half Power Angle	
	H-Plane	63°
	E-Plane	7°
[1]	Electrical Downtilt	0°
[1]	Null Fill	5%
	Lightning Protection	Direct Ground

Radiation pattern[1]



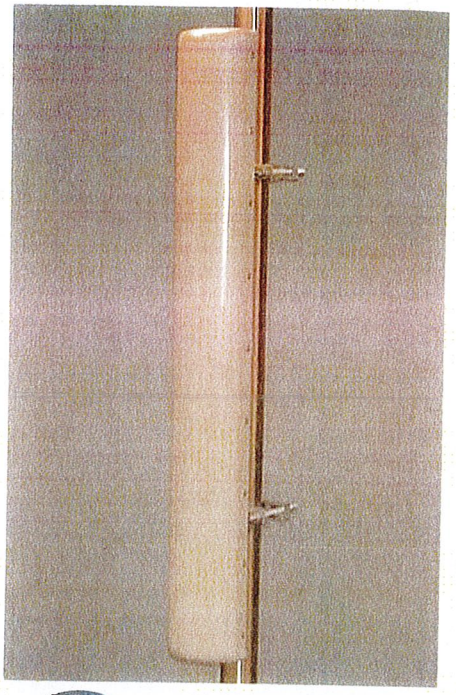
Horizontal



Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band-width and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna can be ordered with center-fed or bottom-fed connectors.

Center-fed: BXA-185063/8CF + (NE or E-DIN)
Bottom-fed: BXA-185063/8BF + (NE or E-DIN)

Patented Dipole Design: U.S. Patent No. 6,597,324 B2

1) Typical values.
2) Power rating limited by connector only.
3) NE indicates an elongated N connector. E-DIN indicates an elongated DIN connector.
4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

CF Denotes a Center-Fed Connector.

1850-1990 MHz

Amphenol Antel, Inc. 1300 Capital Drive Rockford, Illinois 61109 USA Tel. (815) 399-0001
Toll-Free (888) 417-9562 Fax. (815) 399-0156 antel@antelinc.com www.antelinc.com

Amphenol Antel, Inc. The Antenna Technology Company

Revision Date: 7/11/07

Product Data Sheet **FD9R6004/2C-3L**

ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Product Description

The ShareLite FD9R6004 Series of diplexers are designed to enable feeder sharing between systems in the 698-960 MHz range and in the 1710-2200 MHz range. The diplexer is equipped with in-line connector placement so it can be installed in the BTS cabinet or at the tower top. This is especially valuable in crowded sites or when the feeders are not easily accessible. Due to its wideband design, the FD9R6004 Series can accommodate many combining solutions between 698-960 MHz and 1710-2200 MHz systems such as LTE 700 MHz, Cellular 800 MHz with PCS, GSM900 with GSM1800, or GSM900 with UMTS. This diplexer features a highly selective filter. It provides a high level of isolation between ports, while keeping the insertion loss on both paths at an extremely low level. The FD9R6004 diplexers are available with various DC pass options, helpful in configurations with or without the Tower Mount Amplifiers installed.

Features/Benefits

- **LTE ready design**
- **Extremely Low Insertion Loss**
- **High level of Rejection between bands – Protection against interferences**
- **Extremely High Power Handling Capability**
- **Integrated DC block/bypass versions available**
- **Very compact & small size design – Easy installation and reduced tower load**
- **In-line long-neck connectors for easy connection & waterproofing**
- **Exceptional reliability & environmental protection (IP 67)**
- **Equipped with 1 * Breathable Vent – Prevent any humidity inside the product**
- **Mounting hardware for Wall and Pole mount provided (P/N SEM2-1A)**
- **Grounding already provided through the mounting bracket**
- **Kit available for easy dual mount**

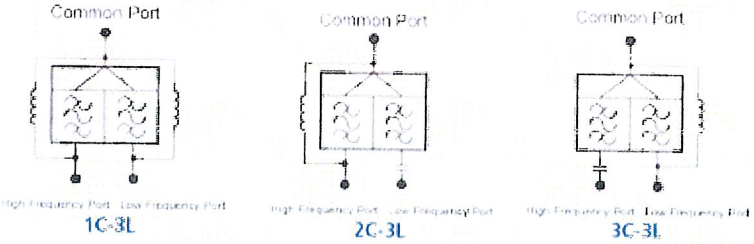
Technical Specifications

Product Type	Diplexer/Cross Band Coupler
Frequency Band, MHz	698-2200
Configuration	Sharelite Single diplexer, outdoor, DC pass in the 1710-2170MHz path, with mounting hardware SEM2-1A
Mounting	Wall Mounting: With 4 screws (maximum 6mm diameter); Pole Mounting: With included clamp set 40-110mm (1.57-4.33)
Frequency Range Low Frequency Path, MHz	698-960
Frequency Range High Frequency Path, MHz	1710-2200
Return Loss All Ports Min/Typ, dB	19/23
Power Handling Continuous, Max, W	1250 at common port; 750 in low frequency path & 500 in high frequency path
Power Handling Peak, Max, W	15000 in low frequency path & 8000 in high frequency path
Impedance, Ohms	50
Insertion Loss 698-960 MHz Path, Typ, dB	0.07
Insertion Loss 1710-2200MHz path, Typ, dB	0.13
Rejection Between Bands Min/Typ, dB	58/64@698-960MHz; 60/70@1710-2200MHz
IMP Level at the COM Port, Typ, dBm	-112 @ 2x43
DC Pass in Low Frequency Path	No
DC Pass in High Frequency Path	Yes
Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Environmental	ETSI 300-019-2-4 Class 4.1E
Ingress Protection	IP 67
Lightning Protection	EN/IEC61000-4-5 Level 4
Connectors	In-line long-neck 7-16-Female
Weight, kg (lb)	1.2 (2.6)
Shipping Weight, kg (lb)	3.2 (7) for 2 * single units in 1 * box, 9.8 (21.6) for 6 * units = 3 * Boxes in 1 * overwrap
Application	LTE 700MHz, GSM900/3G/UMTS, GSM900/GSM1800, Cellular 800/PCS
Dimensions, H x W x D, mm (in)	147 x 164 x 37 (5.8 x 6.5 x 1.5)
Shipping Dimensions, H x W x D, mm (in)	254 x 406 x 82 (10 x 16 x 3.2) for 2 * Single Units in 1 * box, 280 x 406 x 241 (11 x 16 x 9.5) for 6 * units = 3 * Boxes in 1 * overwrap
Volume, L	0.43
Housing	Aluminum

Notes

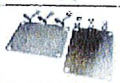
ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Selection Guide Diplexer 698-960 / 1710-2200MHz					
	Model Number	Full DC Pass	DC Pass High Band	DC Pass Low Band	Mounting Hardware Included
Single	FD9R6004/1C-3L				X
	FD9R6004/2C-3L				X
	FD9R6004/3C-3L				X
Dual	KIT-FD9R6004/1C-DL				X
	KIT-FD9R6004/2C-DL				X
	KIT-FD9R6004/3C-DL				X



1C-3L 2C-3L 3C-3L

The FD9R6004 Series is upgradeable to a Dual Diplexer kit by means of 2 diplexers and mounting hardware kits SEM2-1A and SEM2-3

Mounting Hardware and Ground Cable Ordering Information		
Model Number	**Description**	
SEM2-1A	Mounting Hardware, Pole mount ø40-110mm (Included with the Single and Dual Diplexer) Wall Screws M6 (Not included with the product)	
SEM2-3	Assembly kit for 2 pcs of FT9DW/xC-3L (Can be ordered separately but included with the Dual Diplexer Kit)	
CA020-2	Ground Cable, 2m, includes lugs (Optional)	
CA030-2	Ground Cable, 2m, includes lugs (Optional)	
SEM6	Mounting Hardware for 6 Diplexers, Tower Base (Optional)	

	General	Power	Density					
Site Name: Westport 2								
Tower Height: Verizon @ 76ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*T-Mobile	8	194	87	0.0737	1945	1.0000	7.37%	
*T-Mobile	2	776	87	0.0737	2100	1.0000	7.37%	
*Westport Fire Dept			140	0.0011	10.5 GHz	1.0000	0.11%	
*AT&T UMTS	1	500	100	0.0180	880	0.5867	3.06%	
*AT&T UMTS	1	500	100	0.0180	1900	1.0000	1.80%	
*AT&T GSM	7	296	100	0.0745	880	0.5867	12.70%	
*AT&T LTE	1	500	100	0.0180	740	0.4933	3.64%	
*Sprint	11	360.62	130	0.0844	1962.5	1.0000	8.44%	
*Nextel	4	50	120	0.0050	851	0.5673	0.88%	
*FBI	1	238.86	145	0.0041	167.6875	0.2000	2.04%	
*Westport Fire	1	562.34	145	0.0096	460.575	0.3071	3.13%	
*Westport Fire	1	1068.45	145	0.0183	460.625	0.3071	5.95%	
*Westport Fire Low Band	1	50	145	0.0009	46.22	0.2000	0.43%	
*Westport Police	1	1000	145	0.0171	855.712	0.5705	3.00%	
*Westport Police	1	398.11	145	0.0068	866.925	0.5780	1.18%	
*Westport Townwide	1	56.25	145	0.0010	453.775	0.3025	0.32%	
Verizon	**3**	**407**	**76**	**0.0760**	**1970**	**1.0000**	**7.60%**	
Verizon	**9**	**293**	**76**	**0.1642**	**869**	**0.5793**	**28.34%**	
Verizon	**1**	**170**	**76**	**0.0106**	**757**	**0.4973**	**2.13%**	
								99.49%
* Source: Siting Council								

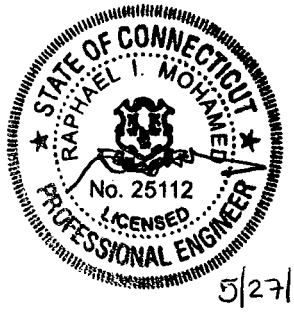
AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**140 ft PennSummit Monopole**
ATC Site Name	:	**WSPT-Westport Rebuild CT, CT**
ATC Site Number	:	**310968**
Proposed Carrier	:	**Verizon**
Carrier Site Name	:	**Westport 2**
Carrier Site Number	:	**N/A**
County	:	**Fairfield**
Eng. Number	:	**47017523**
Date	:	**May 27, 2011***
Usage	:	**99%**
Portholes Required	:	**No**

Submitted by:
Christina Minor
Project Engineer

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



5/27/11

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 140 ft PennSummit Monopole located east of the intersection of Merritt Parkway and Bayberry Lane, Westport, CT 06880, Fairfield County (ATC site #310968). The tower was originally designed and manufactured by PennSummit (PJF Job #29204-0171, dated July 1, 2004).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software.

Basic Wind Speed:	90 mph (Fastest Mile)
Radial Ice:	78 mph (Fastest Mile) w/ ½" ice
Code:	TIA/EIA-222-F / 2003 IBC Criteria per Section 1609.1.1, Exception (5) and Section 3108.4 w/ 2005 CT Supplement and 2009 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
140.0	1	Andrew DB589	Platform w/ Handrails	(1) 1 ¼"	American Messaging
138.0	1	8' Omni (inverted)		(2) 7/8"	US Treasury
	2	8' Omni			
	1	Andrew VHLP2.5-10W		(3) 1 5/8" (1) EW90 (7) 7/8"	Town of Westport
	7	6' Omni			
	1	6' FM Antenna			
	2	8' Omni			
	1	6' Dipole			
131.0	12	Decibel 980F65E-M	Low Profile Platform	(12) 1 5/8"	Sprint Nextel
120.0	12	48" x 8" Panel	Low Profile Platform	(12) 1 ¼"	
100.0	6	Powerwave LGP21401	Low Profile Platform	(12) 1 5/8" (1) 3/8" (1) RG6 (2) 8 AWG 7	AT&T Mobility
	6	Powerwave 7770.00			
	1	Raycap DC6-48-60-18-8F			
	3	Powerwave P65-16-XLH-RR			
	6	Ericsson RRUS 11 (Band 12)			
	6	Powerwave LGP21901			
87.0	3	RFS ATMAA1412D-1A20	Low Profile Platform	(12) 1 5/8"	T-Mobile
	3	Andrew ETW190VS12UB			
	3	RFS APX16DWV-16DWV-S-E-ACU			
76.0	3	Powerwave P65-16-XL-2	Low Profile Platform	(12) 1 5/8"	Verizon
	2	Antel LPA-80080/6CF			

Antenna Loads (continued)

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
76.0	6	RFS FD9R6004/1C-3L	Low Profile Platform	--	Verizon
	4	RFS APL868013-42T0			
	3	Antel BXA-185063/8CF			

Results

The maximum structure usage is: 99%

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,550.0	3,108.0	88
Shear (kips)	35.0	31.1	89

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

The structure's base plate and anchor bolts also have sufficient strength to resist the base reactions from the analysis. Factor of safety exceeding two was noted for the base plate and anchor bolts. Detailed calculation is shown at the end of the analysis.

Conclusion

Based on the analysis results, the structure meets the requirements per TIA/EIA-222-F and 2003 IBC standards with 2005 CT supplement and 2008 CT amendments. 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 919-466-5006.

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:

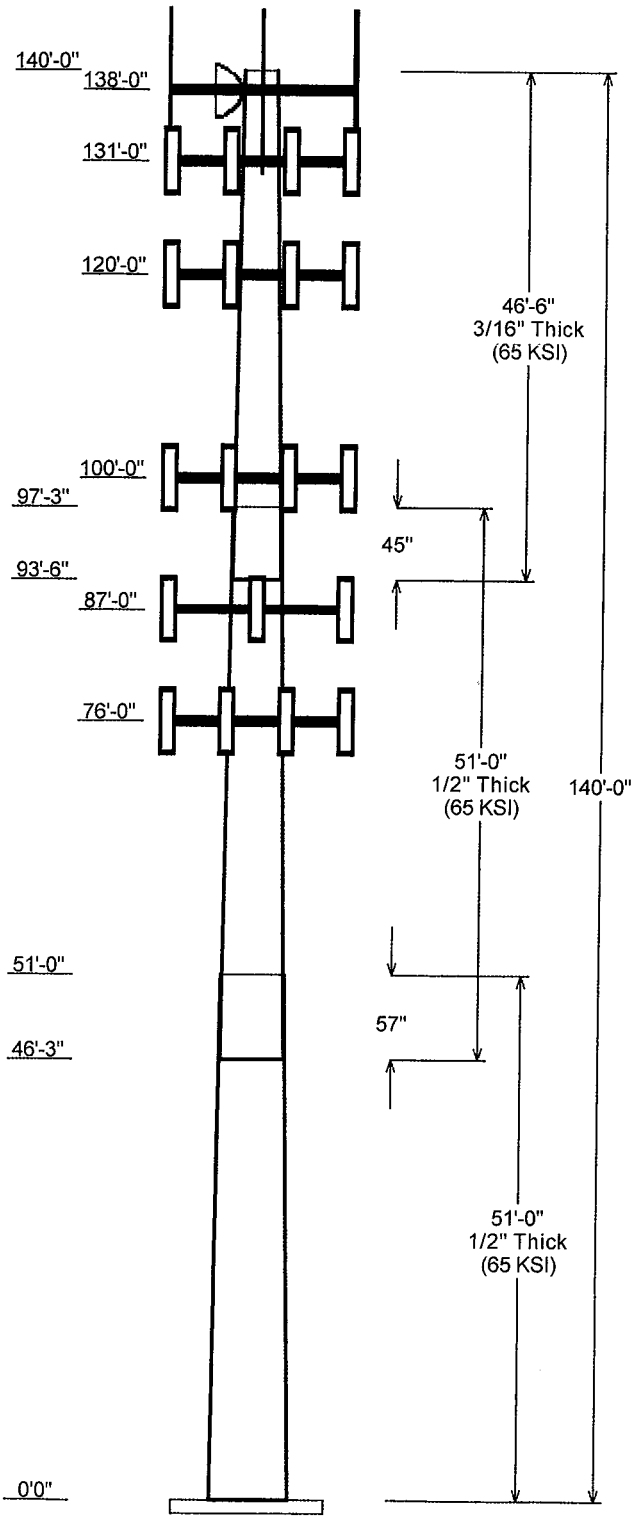
-- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.

-- 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 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.



Job Information

Pole:	310968 Code: TIA/EIA-222 Rev F
Description:	140 ft PennSummit Monopole
Client:	Verizon
Location:	WSPT-Westport Rebuild CT, CT
Shape:	18 Sides Base Elev (ft): 0.00
Height:	140.00 (ft) Taper: 0.200036(in/ft)

Sections Properties

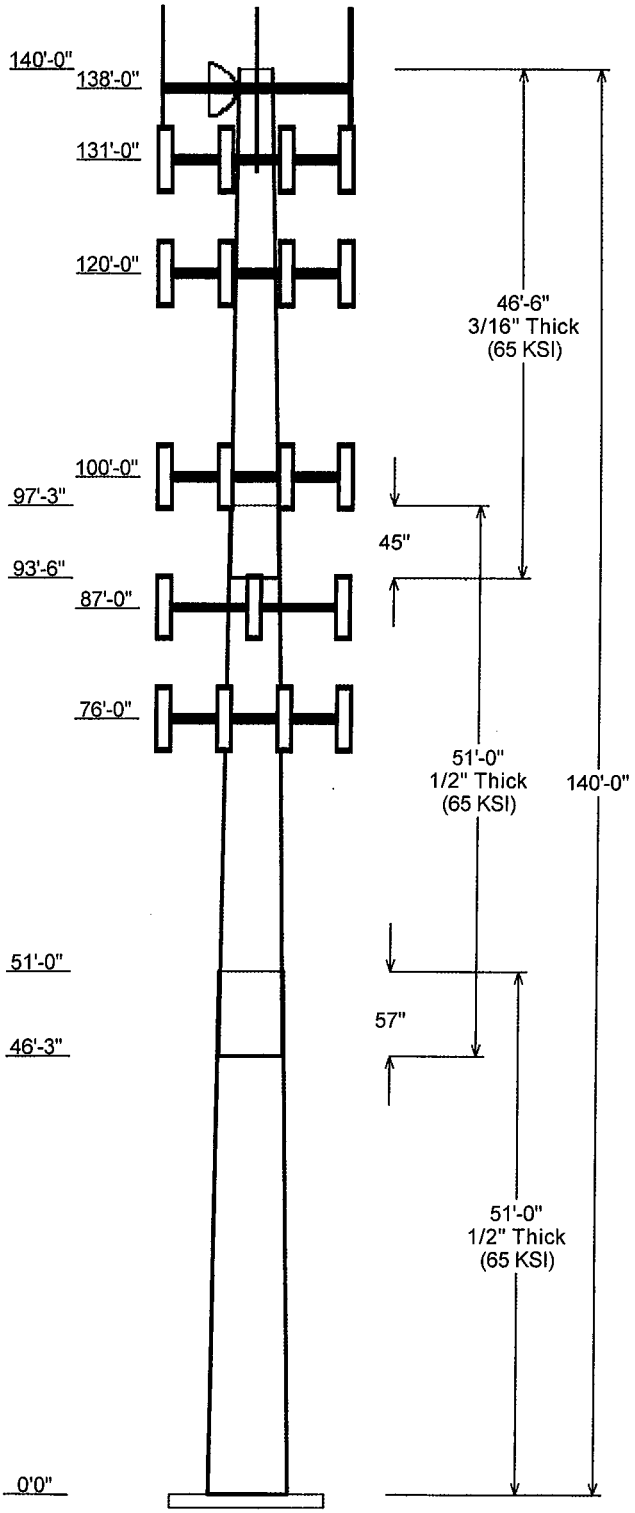
Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	51.000	36.92	47.13	0.500		0.000	0.200036	65
2	51.000	28.67	38.87	0.500	Slip Joint	57.000	0.200036	65
3	46.500	20.50	29.80	0.188	Slip Joint	45.000	0.200036	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
138.000	134.000	1	8' Omni (inverted)
138.000	138.000	1	Andrew VHLP2.5-10W
138.000	144.250	1	Andrew DB589
138.000	138.000	1	Flat Platform w/ Handrails
138.000	138.000	7	6' Omni
138.000	138.000	2	8' Omni
138.000	142.000	2	8' Omni
138.000	142.000	1	6' FM Antenna
138.000	138.000	1	6' Dipole
131.000	131.000	1	Flat Low Profile Platform
131.000	131.000	12	Decibel 980F65E-M
120.000	120.000	1	Flat Low Profile Platform
120.000	120.000	12	48" x 8" Panel
100.000	100.000	6	Powerwave LGP21401
100.000	100.000	6	Powerwave 7770.00
100.000	100.000	1	Raycap DC6-48-60-18-8F
100.000	100.000	3	Powerwave P65-16-XLH-RR
100.000	100.000	6	Ericsson RRUS 11 (Band 12)
100.000	100.000	6	Powerwave LGP21901
100.000	100.000	1	Flat Low Profile Platform
87.000	87.000	3	RFS ATMAA1412D-1A20
87.000	87.000	3	Andrew ETW190VS12UB
87.000	87.000	3	RFS APX16DWV-16DWV-S-E-
87.000	87.000	1	Flat Low Profile Platform
76.000	76.000	6	RFS FD9R6004/1C-3L
76.000	76.000	4	RFS APL868013-42T0
76.000	76.000	3	Antel BXA-185063/8CF
76.000	76.000	2	Antel LPA-80080/6CF
76.000	76.000	3	Powerwave P65-16-XL-2
76.000	76.000	1	Flat Low Profile Platform

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	76.000	1 5/8" Coax	No
0.000	87.000	1 5/8" Coax	No
0.000	100.0	1 5/8" Coax	No
0.000	100.0	3/8" Coax	No
0.000	100.0	8 AWG 7	No
0.000	100.0	RG6	No
0.000	120.0	1 1/4" Coax	No
0.000	131.0	1 5/8" Coax	No
0.000	138.0	1 1/4" Coax	No
0.000	138.0	1 5/8" Coax	No
0.000	138.0	7/8" Coax	No



0.000	138.0	7/8" Coax	No
0.000	138.0	EW90	No

Load Cases

No Ice	90.00 mph Wind with No Ice
Ice	77.94 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

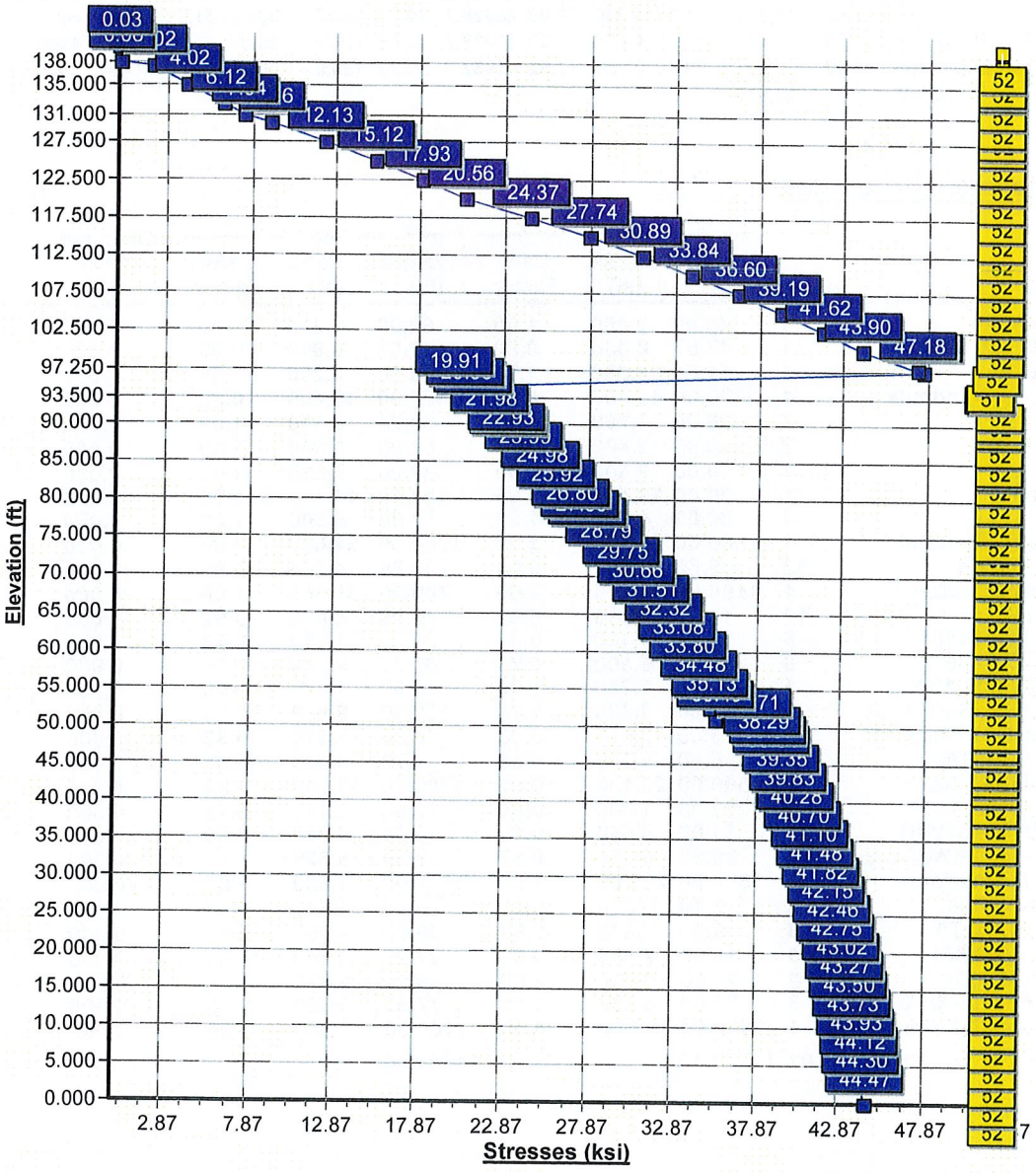
Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	3108.01	31.14	40.23
Ice	2663.48	26.08	46.61
Twist/Sway	960.32	9.61	40.25

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
Twist/Sway	138.00	26.903	1.761

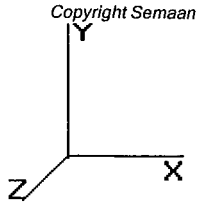
Load Case : No Ice
Max Stress 92.5% at 97.3ft



Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1	51.000	0.5000	65		0.00	11,437	47.13	0.000	74.00	20328.7	14.86	94.26	36.92	51.00	57.81	9692.3	11.26	73.86	0.20004
2	51.000	0.5000	65	Slip Joint	57.00	9,165	38.87	46.25	60.90	11333.7	11.95	77.76	28.67	97.25	44.71	4485.1	8.35	57.35	0.20004
3	46.500	0.1875	65	Slip Joint	45.00	2,351	29.80	93.50	17.62	1952.7	26.26	158.9	20.50	140.0	12.09	630.1	17.52	109.33	0.20004
				Shaft Weight		22,952													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
138.0	8' Omni (inverted)	1	40.00	2.400	1.00	62.00	3.230	1.00	0.000	-4.000
138.0	Andrew VHLP2.5-10W	1	47.60	8.430	0.90	97.03	8.910	0.90	0.000	0.000
138.0	Andrew DB589	1	11.50	1.380	1.00	20.00	2.200	1.00	0.000	6.250
138.0	Flat Platform w/ Handrails	1	2000.00	42.400	0.95	2450.00	48.400	0.95	0.000	0.000
138.0	6' Omni	7	25.00	1.760	1.00	38.24	2.130	1.00	0.000	0.000
138.0	8' Omni	2	40.00	2.400	1.00	62.00	3.230	1.00	0.000	0.000
138.0	8' Omni	2	40.00	2.400	1.00	62.00	3.230	1.00	0.000	4.000
138.0	6' FM Antenna	1	30.00	13.450	0.95	112.70	14.770	0.95	0.000	4.000
138.0	6' Dipole	1	30.00	4.000	1.00	50.00	5.500	1.00	0.000	0.000
131.0	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
131.0	Decibel 980F65E-M	12	9.50	3.750	0.81	29.85	4.320	0.81	0.000	0.000
120.0	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
120.0	48" x 8" Panel	12	14.00	3.610	0.92	40.30	4.080	0.92	0.000	0.000
100.0	Powerwave LGP21401	6	14.10	1.100	0.33	21.26	1.310	0.33	0.000	0.000
100.0	Powerwave 7770.00	6	35.00	5.500	0.75	67.61	6.040	0.75	0.000	0.000
100.0	Raycap DC6-48-60-18-8F	1	31.80	1.280	1.00	49.50	1.460	1.00	0.000	0.000
100.0	Powerwave P65-16-XLH-RR	3	53.00	8.130	0.78	100.20	8.820	0.78	0.000	0.000
100.0	Ericsson RRUS 11 (Band 12)	6	55.00	2.520	0.33	74.30	2.810	0.33	0.000	0.000
100.0	Powerwave LGP21901	6	5.50	0.200	0.33	7.70	0.290	0.33	0.000	0.000
100.0	Flat Low Profile Platform	1	1500.00	26.100	0.95	1700.00	31.600	0.95	0.000	0.000
87.00	RFS ATMAA1412D-1A20	3	13.00	1.000	0.45	20.60	1.190	0.45	0.000	0.000
87.00	Andrew ETW190VS12UB	3	11.00	0.650	0.45	16.30	0.810	0.45	0.000	0.000
87.00	RFS APX16DWV-16DWV-S-E-	3	39.60	6.080	0.67	69.38	6.620	0.67	0.000	0.000
87.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
76.00	RFS FD9R6004/1C-3L	6	3.10	0.370	0.33	5.40	0.500	0.33	0.000	0.000
76.00	RFS APL868013-42T0	4	6.30	3.610	0.88	32.00	4.080	0.88	0.000	0.000
76.00	Antel BXA-185063/8CF	3	10.00	2.960	0.81	27.26	3.440	0.81	0.000	0.000
76.00	Antel LPA-80080/6CF	2	21.00	8.630	0.80	69.26	9.320	0.80	0.000	0.000
76.00	Powerwave P65-16-XL-2	3	33.00	8.130	0.75	77.53	8.820	0.75	0.000	0.000
76.00	Flat Low Profile Platform	1	1500.00	26.100	0.90	1700.00	31.600	0.90	0.000	0.000
	Totals	101	11530.10			14956.64			Number of Loadings :	30

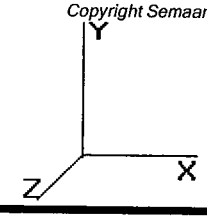
Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
0.00	138.00	(1) 1 1/4" Coax	0.63	0.00	0.00	0.00	N
0.00	138.00	(3) 1 5/8" Coax	2.46	0.00	0.00	0.00	N
0.00	138.00	(7) 7/8" Coax	2.31	0.00	0.00	0.00	N
0.00	138.00	(2) 7/8" Coax	0.66	0.00	0.00	0.00	N
0.00	138.00	(1) EW90	0.32	0.00	0.00	0.00	N
0.00	131.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N

Pole :	310968
Location :	WSPT-Westport Rebuild CT, CT
Height :	140.0 (ft)
Shape :	18 Sides
Base Dia :	47.13 (in)
Top Dia :	20.50 (in)
Taper :	0.200036 (in/ft)

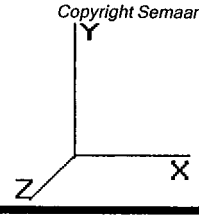
Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



0.00	120.00	(12) 1 1/4" Coax	7.56	0.00	0.00	0.00	N
0.00	100.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	100.00	(1) 3/8" Coax	0.08	0.00	0.00	0.00	N
0.00	100.00	(2) 8 AWG 7	0.98	0.00	0.00	0.00	N
0.00	100.00	(1) RG6	0.03	0.00	0.00	0.00	N
0.00	87.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	76.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
		Total Weight	5,773.45 (lb)		0.00 (lb)		

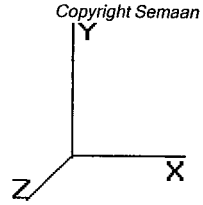
Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		
Height :	140.0 (ft)		
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



Segment Properties (Max Len : 2.ft)

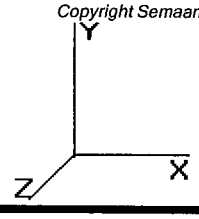
Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.5000	47.130	73.999	20,328.7	14.86	94.26	65	52	0.0
2.50		0.5000	46.630	73.206	19,681.7	14.68	93.26	65	52	626.1
5.00		0.5000	46.130	72.412	19,048.5	14.50	92.26	65	52	619.4
7.50		0.5000	45.630	71.618	18,429.0	14.33	91.26	65	52	612.6
10.00		0.5000	45.130	70.825	17,823.2	14.15	90.26	65	52	605.9
12.50		0.5000	44.630	70.031	17,230.7	13.98	89.26	65	52	599.1
15.00		0.5000	44.129	69.237	16,651.5	13.80	88.26	65	52	592.4
17.50		0.5000	43.629	68.444	16,085.5	13.62	87.26	65	52	585.6
20.00		0.5000	43.129	67.650	15,532.4	13.45	86.26	65	52	578.9
22.50		0.5000	42.629	66.857	14,992.1	13.27	85.26	65	52	572.1
25.00		0.5000	42.129	66.063	14,464.6	13.09	84.26	65	52	565.4
27.50		0.5000	41.629	65.269	13,949.5	12.92	83.26	65	52	558.6
30.00		0.5000	41.129	64.476	13,446.8	12.74	82.26	65	52	551.9
32.50		0.5000	40.629	63.682	12,956.4	12.56	81.26	65	52	545.1
35.00		0.5000	40.129	62.889	12,478.0	12.39	80.26	65	52	538.4
37.50		0.5000	39.629	62.095	12,011.6	12.21	79.26	65	52	531.6
40.00		0.5000	39.129	61.301	11,556.9	12.04	78.26	65	52	524.9
42.50		0.5000	38.628	60.508	11,113.8	11.86	77.26	65	52	518.1
45.00		0.5000	38.128	59.714	10,682.2	11.68	76.26	65	52	511.4
46.25	Bot - Section 2	0.5000	37.878	59.317	10,470.7	11.59	75.76	65	52	253.1
47.50		0.5000	37.628	58.920	10,261.9	11.51	75.26	65	52	509.7
50.00		0.5000	37.128	58.127	9,852.8	11.33	74.26	65	52	1,009.2
51.00	Top - Section 1	0.5000	37.928	59.396	10,512.6	11.61	75.86	65	52	399.9
52.50		0.5000	37.628	58.920	10,261.8	11.51	75.26	65	52	302.0
55.00		0.5000	37.128	58.127	9,852.7	11.33	74.26	65	52	497.9
57.50		0.5000	36.628	57.333	9,454.6	11.15	73.26	65	52	491.1
60.00		0.5000	36.128	56.539	9,067.4	10.98	72.26	65	52	484.4
62.50		0.5000	35.628	55.746	8,690.9	10.80	71.26	65	52	477.6
65.00		0.5000	35.128	54.952	8,325.0	10.62	70.26	65	52	470.9
67.50		0.5000	34.628	54.159	7,969.5	10.45	69.26	65	52	464.1
70.00		0.5000	34.128	53.365	7,624.3	10.27	68.26	65	52	457.3
72.50		0.5000	33.627	52.571	7,289.1	10.10	67.25	65	52	450.6
75.00		0.5000	33.127	51.778	6,964.0	9.92	66.25	65	52	443.8
76.00		0.5000	32.927	51.460	6,836.7	9.85	65.85	65	52	175.6
77.50		0.5000	32.627	50.984	6,648.7	9.74	65.25	65	52	261.4
80.00		0.5000	32.127	50.190	6,343.0	9.57	64.25	65	52	430.3
82.50		0.5000	31.627	49.397	6,046.8	9.39	63.25	65	52	423.6
85.00		0.5000	31.127	48.603	5,760.0	9.21	62.25	65	52	416.8
87.00		0.5000	30.727	47.968	5,537.3	9.07	61.45	65	52	328.6
87.50		0.5000	30.627	47.810	5,482.5	9.04	61.25	65	52	81.5
90.00		0.5000	30.127	47.016	5,214.0	8.86	60.25	65	52	403.3
92.50		0.5000	29.627	46.222	4,954.4	8.68	59.25	65	52	396.6
93.50	Bot - Section 3	0.5000	29.427	45.905	4,853.0	8.61	58.85	65	52	156.7
95.00		0.5000	29.127	45.429	4,703.5	8.51	58.25	65	52	322.6
97.25	Top - Section 2	0.1875	29.052	17.177	1,808.1	25.56	154.94	65	51	477.6
97.50		0.1875	29.002	17.147	1,798.7	25.51	154.67	65	51	14.6
100.0		0.1875	28.501	16.850	1,706.7	25.04	152.01	65	52	144.6
102.5		0.1875	28.001	16.552	1,617.8	24.57	149.34	65	52	142.1
105.0		0.1875	27.501	16.255	1,532.1	24.10	146.67	65	52	139.5
107.5		0.1875	27.001	15.957	1,449.5	23.63	144.01	65	52	137.0
110.0		0.1875	26.501	15.659	1,369.9	23.16	141.34	65	52	134.5
112.5		0.1875	26.001	15.362	1,293.3	22.69	138.67	65	52	131.9
115.0		0.1875	25.501	15.064	1,219.5	22.22	136.00	65	52	129.4
117.5		0.1875	25.001	14.766	1,148.7	21.75	133.34	65	52	126.9
120.0		0.1875	24.501	14.469	1,080.6	21.28	130.67	65	52	124.4
122.5		0.1875	24.001	14.171	1,015.3	20.81	128.00	65	52	121.8
125.0		0.1875	23.501	13.874	952.7	20.34	125.34	65	52	119.3
127.5		0.1875	23.000	13.576	892.7	19.87	122.67	65	52	116.8

Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		5/27/2011 8:42:52 AM
Height :	140.0 (ft)		Page: 4
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



130.0	0.1875	22.500	13.278	835.2	19.40	120.00	65	52	114.2
131.0	0.1875	22.300	13.159	813.0	19.21	118.94	65	52	45.0
132.5	0.1875	22.000	12.981	780.3	18.93	117.33	65	52	66.7
135.0	0.1875	21.500	12.683	727.9	18.46	114.67	65	52	109.2
137.5	0.1875	21.000	12.386	677.8	17.99	112.00	65	52	106.6
138.0	0.1875	20.900	12.326	668.1	17.89	111.47	65	52	21.0
140.0	0.1875	20.500	12.088	630.1	17.52	109.33	65	52	83.1
									22,952.4

Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		
Height :	140.0 (ft)		
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

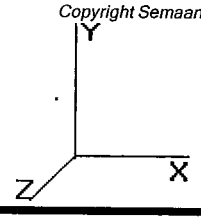
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	20.736	35.04	353.47	0.650	0.00	0.00	0.000	0.00	0.0	0.0	0.0
2.50		0.00	1.00	20.736	35.04	349.72	0.650	0.00	2.50	9.767	6.35	222.5	0.0	626.1
5.00		0.00	1.00	20.736	35.04	345.97	0.650	0.00	2.50	9.662	6.28	220.1	0.0	619.4
7.50		0.00	1.00	20.736	35.04	342.22	0.650	0.00	2.50	9.558	6.21	217.7	0.0	612.6
10.00		0.00	1.00	20.736	35.04	338.47	0.650	0.00	2.50	9.454	6.15	215.4	0.0	605.9
12.50		0.00	1.00	20.736	35.04	334.72	0.650	0.00	2.50	9.350	6.08	213.0	0.0	599.1
15.00		0.00	1.00	20.736	35.04	330.97	0.650	0.00	2.50	9.246	6.01	210.6	0.0	592.4
17.50		0.00	1.00	20.736	35.04	327.22	0.650	0.00	2.50	9.142	5.94	208.2	0.0	585.6
20.00		0.00	1.00	20.736	35.04	323.47	0.650	0.00	2.50	9.037	5.87	205.9	0.0	578.9
22.50		0.00	1.00	20.736	35.04	319.71	0.650	0.00	2.50	8.933	5.81	203.5	0.0	572.1
25.00		0.00	1.00	20.736	35.04	315.96	0.650	0.00	2.50	8.829	5.74	201.1	0.0	565.4
27.50		0.00	1.00	20.736	35.04	312.21	0.650	0.00	2.50	8.725	5.67	198.7	0.0	558.6
30.00		0.00	1.00	20.736	35.04	308.46	0.650	0.00	2.50	8.621	5.60	196.4	0.0	551.9
32.50		0.00	1.00	20.736	35.04	304.71	0.650	0.00	2.50	8.516	5.54	194.0	0.0	545.1
35.00		0.00	1.01	21.088	35.63	303.50	0.650	0.00	2.50	8.412	5.47	194.9	0.0	538.4
37.50		0.00	1.03	21.507	36.34	302.69	0.650	0.00	2.50	8.308	5.40	196.3	0.0	531.6
40.00		0.00	1.05	21.908	37.02	301.64	0.650	0.00	2.50	8.204	5.33	197.4	0.0	524.9
42.50		0.00	1.07	22.290	37.67	300.37	0.650	0.00	2.50	8.100	5.26	198.3	0.0	518.1
45.00		0.00	1.09	22.657	38.29	298.91	0.650	0.00	2.50	7.996	5.20	199.0	0.0	511.4
46.25	Bot - Section 2	0.00	1.10	22.835	38.59	298.12	0.650	0.00	1.25	3.959	2.57	99.3	0.0	253.1
47.50		0.00	1.11	23.010	38.88	297.28	0.650	0.00	1.25	4.037	2.62	102.0	0.0	509.7
50.00		0.00	1.12	23.350	39.46	295.49	0.650	0.00	2.50	7.995	5.20	205.1	0.0	1,009.2
51.00	Top - Section 1	0.00	1.13	23.482	39.68	294.73	0.650	0.00	1.00	3.169	2.06	81.7	0.0	399.9
52.50		0.00	1.14	23.678	40.01	301.56	0.650	0.00	1.50	4.722	3.07	122.8	0.0	302.0
55.00		0.00	1.15	23.994	40.55	299.54	0.650	0.00	2.50	7.787	5.06	205.3	0.0	497.9
57.50		0.00	1.17	24.301	41.06	297.38	0.650	0.00	2.50	7.683	4.99	205.1	0.0	491.1
60.00		0.00	1.18	24.598	41.57	295.11	0.650	0.00	2.50	7.579	4.93	204.8	0.0	484.4
62.50		0.00	1.20	24.887	42.05	292.73	0.650	0.00	2.50	7.475	4.86	204.3	0.0	477.6
65.00		0.00	1.21	25.167	42.53	290.24	0.650	0.00	2.50	7.370	4.79	203.8	0.0	470.9
67.50		0.00	1.22	25.440	42.99	287.66	0.650	0.00	2.50	7.266	4.72	203.1	0.0	464.1
70.00		0.00	1.24	25.706	43.44	284.98	0.650	0.00	2.50	7.162	4.66	202.2	0.0	457.3
72.50		0.00	1.25	25.965	43.88	282.21	0.650	0.00	2.50	7.058	4.59	201.3	0.0	450.6
75.00		0.00	1.26	26.218	44.30	279.37	0.650	0.00	2.50	6.954	4.52	200.3	0.0	443.8
76.00	Appertunance(s)	0.00	1.26	26.317	44.47	278.21	0.650	0.00	1.00	2.752	1.79	79.6	0.0	175.6
77.50		0.00	1.27	26.465	44.72	276.44	0.650	0.00	1.50	4.097	2.66	119.1	0.0	261.4
80.00		0.00	1.28	26.706	45.13	273.44	0.650	0.00	2.50	6.745	4.38	197.9	0.0	430.3
82.50		0.00	1.29	26.942	45.53	270.37	0.650	0.00	2.50	6.641	4.32	196.5	0.0	423.6
85.00		0.00	1.31	27.172	45.92	267.23	0.650	0.00	2.50	6.537	4.25	195.1	0.0	416.8
87.00	Appertunance(s)	0.00	1.31	27.353	46.22	264.68	0.650	0.00	2.00	5.154	3.35	154.9	0.0	328.6
87.50		0.00	1.32	27.398	46.30	264.03	0.650	0.00	0.50	1.278	0.83	38.5	0.0	81.5
90.00		0.00	1.33	27.620	46.67	260.77	0.650	0.00	2.50	6.329	4.11	192.0	0.0	403.3
92.50		0.00	1.34	27.837	47.04	257.44	0.650	0.00	2.50	6.224	4.05	190.3	0.0	396.6
93.50	Bot - Section 3	0.00	1.34	27.922	47.18	256.10	0.650	0.00	1.00	2.461	1.60	75.5	0.0	156.7
95.00		0.00	1.35	28.050	47.40	254.07	0.650	0.00	1.50	3.706	2.41	114.2	0.0	322.6
97.25	Top - Section 2	0.00	1.36	28.238	47.72	250.98	0.650	0.00	2.25	5.489	3.57	170.3	0.0	477.6
97.50		0.00	1.36	28.259	47.75	253.91	0.650	0.00	0.25	0.605	0.39	18.8	0.0	14.6
100.0	Appertunance(s)	0.00	1.37	28.464	48.10	250.44	0.650	0.00	2.50	5.990	3.89	187.3	0.0	144.6
102.5		0.00	1.38	28.665	48.44	246.92	0.650	0.00	2.50	5.886	3.83	185.3	0.0	142.1
105.0		0.00	1.39	28.863	48.77	243.34	0.650	0.00	2.50	5.782	3.76	183.3	0.0	139.5
107.5		0.00	1.40	29.058	49.10	239.72	0.650	0.00	2.50	5.677	3.69	181.2	0.0	137.0
110.0		0.00	1.41	29.250	49.43	236.06	0.650	0.00	2.50	5.573	3.62	179.1	0.0	134.5

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

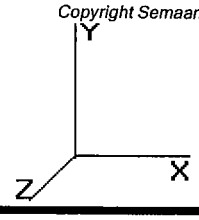
Code: TIA/EIA-222 Rev F
Base Elev : 0.000 (ft)



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5		0.00	1.42	29.438	49.75	232.35	0.650	0.00	2.50	5.469	3.55	176.9	0.0	131.9
115.0		0.00	1.42	29.623	50.06	228.59	0.650	0.00	2.50	5.365	3.49	174.6	0.0	129.4
117.5		0.00	1.43	29.806	50.37	224.80	0.650	0.00	2.50	5.261	3.42	172.2	0.0	126.9
120.0	Appertunance(s)	0.00	1.44	29.986	50.67	220.97	0.650	0.00	2.50	5.156	3.35	169.8	0.0	124.4
122.5		0.00	1.45	30.163	50.97	217.09	0.650	0.00	2.50	5.052	3.28	167.4	0.0	121.8
125.0		0.00	1.46	30.338	51.27	213.19	0.650	0.00	2.50	4.948	3.22	164.9	0.0	119.3
127.5		0.00	1.47	30.510	51.56	209.24	0.650	0.00	2.50	4.844	3.15	162.3	0.0	116.8
130.0		0.00	1.48	30.679	51.84	205.26	0.650	0.00	2.50	4.740	3.08	159.7	0.0	114.2
131.0	Appertunance(s)	0.00	1.48	30.747	51.96	203.66	0.650	0.00	1.00	1.867	1.21	63.0	0.0	45.0
132.5		0.00	1.48	30.847	52.13	201.24	0.650	0.00	1.50	2.769	1.80	93.8	0.0	66.7
135.0		0.00	1.49	31.012	52.41	197.20	0.650	0.00	2.50	4.531	2.95	154.4	0.0	109.2
137.5		0.00	1.50	31.175	52.68	193.11	0.650	0.00	2.50	4.427	2.88	151.6	0.0	106.6
138.0	Appertunance(s)	0.00	1.50	31.207	52.74	192.29	0.650	0.00	0.50	0.873	0.57	29.9	0.0	21.0
140.0		0.00	1.51	31.336	52.95	189.00	0.650	0.00	2.00	3.450	2.24	118.8	0.0	83.1
						Totals:			140.00			10,752.3	0.0	22,952.4



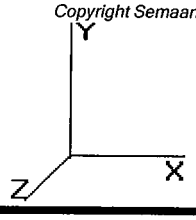
Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
76.00	RFS FD9R6004/1C-3L	6	26.317	44.476	0.33	0.73	0.000	0.000	32.58	0.00	0.00	18.60
76.00	RFS APL868013-42T0	4	26.317	44.476	0.88	12.71	0.000	0.000	565.17	0.00	0.00	25.20
76.00	Antel BXA-185063/8CF	3	26.317	44.476	0.81	7.19	0.000	0.000	319.91	0.00	0.00	30.00
76.00	Antel LPA-80080/6CF	2	26.317	44.476	0.80	13.81	0.000	0.000	614.12	0.00	0.00	42.00
76.00	Powerwave P65-16-	3	26.317	44.476	0.75	18.29	0.000	0.000	813.58	0.00	0.00	99.00
76.00	Flat Low Profile Pla	1	26.317	44.476	0.90	23.49	0.000	0.000	1,044.74	0.00	0.00	1,500.00
87.00	RFS ATMAA1412D-	3	27.353	46.227	0.45	1.35	0.000	0.000	62.41	0.00	0.00	39.00
87.00	Andrew	3	27.353	46.227	0.45	0.88	0.000	0.000	40.56	0.00	0.00	33.00
87.00	RFS APX16DWV-	3	27.353	46.227	0.67	12.22	0.000	0.000	564.94	0.00	0.00	118.80
87.00	Flat Low Profile Pla	1	27.353	46.227	1.00	26.10	0.000	0.000	1,206.53	0.00	0.00	1,500.00
100.0	Powerwave LGP21401	6	28.464	48.104	0.33	2.18	0.000	0.000	104.77	0.00	0.00	84.60
100.0	Powerwave 7770.00	6	28.464	48.104	0.75	24.75	0.000	0.000	1,190.57	0.00	0.00	210.00
100.0	Raycap DC6-48-60-18-	1	28.464	48.104	1.00	1.28	0.000	0.000	61.57	0.00	0.00	31.80
100.0	Powerwave P65-16-	3	28.464	48.104	0.78	19.02	0.000	0.000	915.14	0.00	0.00	159.00
100.0	Ericsson RRUS 11 (Ba	6	28.464	48.104	0.33	4.99	0.000	0.000	240.02	0.00	0.00	330.00
100.0	Powerwave LGP21901	6	28.464	48.104	0.33	0.40	0.000	0.000	19.05	0.00	0.00	33.00
100.0	Flat Low Profile Pla	1	28.464	48.104	0.95	24.80	0.000	0.000	1,192.73	0.00	0.00	1,500.00
120.0	Flat Low Profile Pla	1	29.986	50.676	1.00	26.10	0.000	0.000	1,322.64	0.00	0.00	1,500.00
120.0	48" x 8" Panel	12	29.986	50.676	0.92	39.85	0.000	0.000	2,019.66	0.00	0.00	168.00
131.0	Flat Low Profile Pla	1	30.747	51.962	1.00	26.10	0.000	0.000	1,356.21	0.00	0.00	1,500.00
131.0	Decibel 980F65E-M	12	30.747	51.962	0.81	36.45	0.000	0.000	1,894.01	0.00	0.00	114.00
138.0	8' Omni (inverted)	1	30.946	52.299	1.00	2.40	0.000	-4.000	125.52	0.00	-502.07	40.00
138.0	Andrew VHLP2.5-10W	1	31.207	52.741	0.90	7.59	0.000	0.000	400.14	0.00	0.00	47.60
138.0	Andrew DB589	1	31.605	53.412	1.00	1.38	0.000	6.250	73.71	0.00	460.68	11.50
138.0	Flat Platform w/ Han	1	31.207	52.741	0.95	40.28	0.000	0.000	2,124.38	0.00	0.00	2,000.00
138.0	6' Omni	7	31.207	52.741	1.00	12.32	0.000	0.000	649.73	0.00	0.00	175.00
138.0	8' Omni	2	31.207	52.741	1.00	4.80	0.000	0.000	253.15	0.00	0.00	80.00
138.0	8' Omni	2	31.463	53.173	1.00	4.80	0.000	4.000	255.23	0.00	1,020.92	80.00
138.0	6' FM Antenna	1	31.463	53.173	0.95	12.78	0.000	4.000	679.41	0.00	2,717.65	30.00
138.0	6' Dipole	1	31.207	52.741	1.00	4.00	0.000	0.000	210.96	0.00	0.00	30.00
									20,353.15			11,530.10

Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		
Height :	140.0 (ft)		
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	

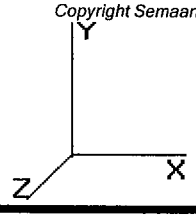


Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
2.50	222.47	762.10	0.00	0.00
5.00	220.10	755.35	0.00	0.00
7.50	217.72	748.60	0.00	0.00
10.00	215.35	741.85	0.00	0.00
12.50	212.98	735.10	0.00	0.00
15.00	210.60	728.35	0.00	0.00
17.50	208.23	721.60	0.00	0.00
20.00	205.86	714.84	0.00	0.00
22.50	203.48	708.09	0.00	0.00
25.00	201.11	701.34	0.00	0.00
27.50	198.74	694.59	0.00	0.00
30.00	196.36	687.84	0.00	0.00
32.50	193.99	681.09	0.00	0.00
35.00	194.87	674.34	0.00	0.00
37.50	196.28	667.59	0.00	0.00
40.00	197.43	660.83	0.00	0.00
42.50	198.33	654.08	0.00	0.00
45.00	199.00	647.33	0.00	0.00
46.25	99.30	321.13	0.00	0.00
47.50	102.04	577.66	0.00	0.00
50.00	205.08	1,145.19	0.00	0.00
51.00	81.75	454.29	0.00	0.00
52.50	122.83	383.54	0.00	0.00
55.00	205.25	633.83	0.00	0.00
57.50	205.09	627.08	0.00	0.00
60.00	204.79	620.32	0.00	0.00
62.50	204.34	613.57	0.00	0.00
65.00	203.76	606.82	0.00	0.00
67.50	203.06	600.07	0.00	0.00
70.00	202.24	593.32	0.00	0.00
72.50	201.31	586.57	0.00	0.00
75.00	200.27	579.82	0.00	0.00
76.00	3,469.67	1,944.84	0.00	0.00
77.50	119.11	328.27	0.00	0.00
80.00	197.88	541.71	0.00	0.00
82.50	196.54	534.96	0.00	0.00
85.00	195.12	528.21	0.00	0.00
87.00	2,029.32	2,108.51	0.00	0.00
87.50	38.47	98.83	0.00	0.00
90.00	192.01	490.11	0.00	0.00
92.50	190.33	483.36	0.00	0.00
93.50	75.47	191.45	0.00	0.00
95.00	114.21	374.65	0.00	0.00
97.25	170.28	555.71	0.00	0.00
97.50	18.77	23.28	0.00	0.00
100.0	3,911.14	2,579.78	0.00	0.00
102.5	185.33	201.52	0.00	0.00
105.0	183.31	198.99	0.00	0.00
107.5	181.22	196.46	0.00	0.00



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

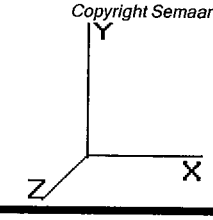
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

110.0		179.07	193.93	0.00	0.00
112.5		176.85	191.40	0.00	0.00
115.0		174.58	188.86	0.00	0.00
117.5		172.24	186.33	0.00	0.00
120.0		3,512.15	1,851.80	0.00	0.00
122.5		167.40	162.37	0.00	0.00
125.0		164.90	159.84	0.00	0.00
127.5		162.34	157.31	0.00	0.00
130.0		159.73	154.77	0.00	0.00
131.0		3,313.27	1,675.20	0.00	0.00
132.5		93.82	76.28	0.00	0.00
135.0		154.37	125.11	0.00	0.00
137.5		151.61	122.58	0.00	0.00
138.0		4,802.16	2,518.31	0.00	3,697.17
140.0		118.76	83.08	0.00	0.00
	Totals:	31,105.45	40,255.94	0.00	3,697.17

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

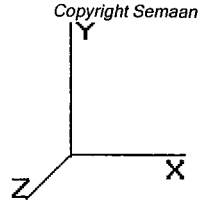


Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-31.144	-40.226	0.000	0.000	0.000	-3,108.013	0.000	0.000	0.000	0.000
2.50	-30.995	-39.406	0.000	0.000	0.000	-3,030.155	-0.029	0.000	0.029	-0.107
5.00	-30.846	-38.593	0.000	0.000	0.000	-2,952.669	-0.115	0.000	0.115	-0.215
7.50	-30.696	-37.787	0.000	0.000	0.000	-2,875.556	-0.257	0.000	0.257	-0.324
10.00	-30.547	-36.988	0.000	0.000	0.000	-2,798.817	-0.456	0.000	0.456	-0.434
12.50	-30.398	-36.196	0.000	0.000	0.000	-2,722.450	-0.713	0.000	0.713	-0.544
15.00	-30.248	-35.411	0.000	0.000	0.000	-2,646.458	-1.028	0.000	1.028	-0.655
17.50	-30.099	-34.634	0.000	0.000	0.000	-2,570.838	-1.401	0.000	1.401	-0.766
20.00	-29.949	-33.863	0.000	0.000	0.000	-2,495.593	-1.833	0.000	1.833	-0.878
22.50	-29.799	-33.100	0.000	0.000	0.000	-2,420.722	-2.323	0.000	2.323	-0.991
25.00	-29.649	-32.344	0.000	0.000	0.000	-2,346.226	-2.873	0.000	2.873	-1.104
27.50	-29.499	-31.595	0.000	0.000	0.000	-2,272.104	-3.481	0.000	3.481	-1.217
30.00	-29.349	-30.853	0.000	0.000	0.000	-2,198.357	-4.150	0.000	4.150	-1.331
32.50	-29.199	-30.119	0.000	0.000	0.000	-2,124.985	-4.878	0.000	4.878	-1.446
35.00	-29.045	-29.391	0.000	0.000	0.000	-2,051.989	-5.666	0.000	5.666	-1.560
37.50	-28.888	-28.672	0.000	0.000	0.000	-1,979.377	-6.514	0.000	6.514	-1.675
40.00	-28.727	-27.960	0.000	0.000	0.000	-1,907.158	-7.422	0.000	7.422	-1.790
42.50	-28.562	-27.255	0.000	0.000	0.000	-1,835.342	-8.391	0.000	8.391	-1.905
45.00	-28.381	-26.572	0.000	0.000	0.000	-1,763.937	-9.419	0.000	9.419	-2.021
46.25	-28.297	-26.226	0.000	0.000	0.000	-1,728.461	-9.956	0.000	9.956	-2.079
47.50	-28.213	-25.610	0.000	0.000	0.000	-1,693.090	-10.509	0.000	10.509	-2.137
50.00	-27.998	-24.434	0.000	0.000	0.000	-1,622.559	-11.659	0.000	11.659	-2.252
51.00	-27.923	-23.955	0.000	0.000	0.000	-1,594.561	-12.135	0.000	12.135	-2.298
52.50	-27.820	-23.534	0.000	0.000	0.000	-1,552.677	-12.869	0.000	12.869	-2.368
55.00	-27.631	-22.859	0.000	0.000	0.000	-1,483.127	-14.137	0.000	14.137	-2.473
57.50	-27.438	-22.192	0.000	0.000	0.000	-1,414.052	-15.459	0.000	15.459	-2.577
60.00	-27.244	-21.533	0.000	0.000	0.000	-1,345.457	-16.837	0.000	16.837	-2.681
62.50	-27.048	-20.881	0.000	0.000	0.000	-1,277.347	-18.268	0.000	18.268	-2.784
65.00	-26.850	-20.238	0.000	0.000	0.000	-1,209.727	-19.753	0.000	19.753	-2.886
67.50	-26.651	-19.603	0.000	0.000	0.000	-1,142.602	-21.291	0.000	21.291	-2.986
70.00	-26.450	-18.976	0.000	0.000	0.000	-1,075.975	-22.881	0.000	22.881	-3.085
72.50	-26.248	-18.357	0.000	0.000	0.000	-1,009.851	-24.522	0.000	24.522	-3.183
75.00	-26.036	-17.759	0.000	0.000	0.000	-944.231	-26.214	0.000	26.214	-3.278
76.00	-22.473	-15.999	0.000	0.000	0.000	-918.196	-26.905	0.000	26.905	-3.316
77.50	-22.356	-15.649	0.000	0.000	0.000	-884.486	-27.955	0.000	27.955	-3.372
80.00	-22.150	-15.085	0.000	0.000	0.000	-828.598	-29.745	0.000	29.745	-3.464
82.50	-21.943	-14.529	0.000	0.000	0.000	-773.225	-31.582	0.000	31.582	-3.554
85.00	-21.734	-13.984	0.000	0.000	0.000	-718.367	-33.466	0.000	33.466	-3.641
87.00	-19.583	-11.996	0.000	0.000	0.000	-674.899	-35.005	0.000	35.005	-3.710
87.50	-19.549	-11.883	0.000	0.000	0.000	-665.107	-35.395	0.000	35.395	-3.727
90.00	-19.341	-11.378	0.000	0.000	0.000	-616.236	-37.368	0.000	37.368	-3.810
92.50	-19.129	-10.890	0.000	0.000	0.000	-567.884	-39.384	0.000	39.384	-3.891
93.50	-19.048	-10.691	0.000	0.000	0.000	-548.755	-40.202	0.000	40.202	-3.923
95.00	-18.919	-10.306	0.000	0.000	0.000	-520.182	-41.441	0.000	41.441	-3.970
97.25	-18.717	-9.752	0.000	0.000	0.000	-477.614	-43.328	0.000	43.328	-4.038
97.50	-18.713	-9.698	0.000	0.000	0.000	-472.935	-43.539	0.000	43.539	-4.046
100.0	-14.648	-7.363	0.000	0.000	0.000	-426.154	-45.705	0.000	45.705	-4.224
102.5	-14.469	-7.134	0.000	0.000	0.000	-389.535	-47.961	0.000	47.961	-4.393
105.0	-14.290	-6.910	0.000	0.000	0.000	-353.363	-50.305	0.000	50.305	-4.557
107.5	-14.111	-6.692	0.000	0.000	0.000	-317.639	-52.731	0.000	52.731	-4.713
110.0	-13.933	-6.479	0.000	0.000	0.000	-282.362	-55.237	0.000	55.237	-4.860



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

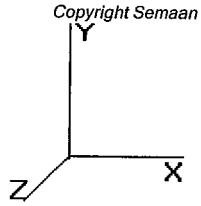
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5	-13.755	-6.272	0.000	0.000	0.000	-247.531	-57.817	0.000	57.817	-4.997
115.0	-13.577	-6.071	0.000	0.000	0.000	-213.145	-60.466	0.000	60.466	-5.124
117.5	-13.399	-5.875	0.000	0.000	0.000	-179.203	-63.178	0.000	63.178	-5.238
120.0	-9.739	-4.340	0.000	0.000	0.000	-145.705	-65.945	0.000	65.945	-5.339
122.5	-9.563	-4.180	0.000	0.000	0.000	-121.359	-68.762	0.000	68.762	-5.427
125.0	-9.388	-4.025	0.000	0.000	0.000	-97.453	-71.621	0.000	71.621	-5.504
127.5	-9.215	-3.875	0.000	0.000	0.000	-73.982	-74.517	0.000	74.517	-5.568
130.0	-9.043	-3.732	0.000	0.000	0.000	-50.944	-77.443	0.000	77.443	-5.617
131.0	-5.583	-2.388	0.000	0.000	0.000	-41.901	-78.620	0.000	78.620	-5.633
132.5	-5.483	-2.319	0.000	0.000	0.000	-33.527	-80.390	0.000	80.390	-5.653
135.0	-5.317	-2.208	0.000	0.000	0.000	-19.821	-83.353	0.000	83.353	-5.677
137.5	-5.155	-2.100	0.000	0.000	0.000	-6.527	-86.326	0.000	86.326	-5.690
138.0	-0.126	-0.071	0.000	0.000	0.000	-0.253	-86.921	0.000	86.921	-5.691
140.0	-0.119	0.000	0.000	0.000	0.000	0.000	-89.301	0.000	89.301	-5.691

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

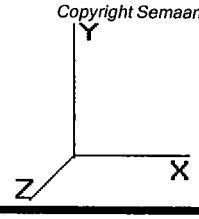
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.54	0.85	0.00	0.00	0.00	43.90	44.47	52.0	0.0	0.856
2.50	0.54	0.85	0.00	0.00	0.00	43.74	44.30	52.0	0.0	0.852
5.00	0.53	0.86	0.00	0.00	0.00	43.56	44.12	52.0	0.0	0.849
7.50	0.53	0.86	0.00	0.00	0.00	43.38	43.93	52.0	0.0	0.845
10.00	0.52	0.87	0.00	0.00	0.00	43.18	43.73	52.0	0.0	0.841
12.50	0.52	0.87	0.00	0.00	0.00	42.96	43.50	52.0	0.0	0.837
15.00	0.51	0.88	0.00	0.00	0.00	42.73	43.27	52.0	0.0	0.832
17.50	0.51	0.89	0.00	0.00	0.00	42.48	43.02	52.0	0.0	0.828
20.00	0.50	0.89	0.00	0.00	0.00	42.22	42.75	52.0	0.0	0.822
22.50	0.50	0.90	0.00	0.00	0.00	41.94	42.46	52.0	0.0	0.817
25.00	0.49	0.90	0.00	0.00	0.00	41.63	42.15	52.0	0.0	0.811
27.50	0.48	0.91	0.00	0.00	0.00	41.31	41.82	52.0	0.0	0.805
30.00	0.48	0.92	0.00	0.00	0.00	40.97	41.48	52.0	0.0	0.798
32.50	0.47	0.92	0.00	0.00	0.00	40.60	41.10	52.0	0.0	0.791
35.00	0.47	0.93	0.00	0.00	0.00	40.21	40.70	52.0	0.0	0.783
37.50	0.46	0.94	0.00	0.00	0.00	39.79	40.28	52.0	0.0	0.775
40.00	0.46	0.94	0.00	0.00	0.00	39.34	39.83	52.0	0.0	0.766
42.50	0.45	0.95	0.00	0.00	0.00	38.87	39.35	52.0	0.0	0.757
45.00	0.44	0.96	0.00	0.00	0.00	38.36	38.84	52.0	0.0	0.747
46.25	0.44	0.96	0.00	0.00	0.00	38.10	38.57	52.0	0.0	0.742
47.50	0.43	0.97	0.00	0.00	0.00	37.82	38.29	52.0	0.0	0.737
50.00	0.42	0.97	0.00	0.00	0.00	37.25	37.71	52.0	0.0	0.726
51.00	0.40	0.95	0.00	0.00	0.00	35.05	35.49	52.0	0.0	0.683
52.50	0.40	0.95	0.00	0.00	0.00	34.69	35.13	52.0	0.0	0.676
55.00	0.39	0.96	0.00	0.00	0.00	34.05	34.48	52.0	0.0	0.663
57.50	0.39	0.96	0.00	0.00	0.00	33.38	33.80	52.0	0.0	0.650
60.00	0.38	0.97	0.00	0.00	0.00	32.66	33.08	52.0	0.0	0.637
62.50	0.37	0.98	0.00	0.00	0.00	31.90	32.32	52.0	0.0	0.622
65.00	0.37	0.98	0.00	0.00	0.00	31.10	31.51	52.0	0.0	0.606
67.50	0.36	0.99	0.00	0.00	0.00	30.25	30.66	52.0	0.0	0.590
70.00	0.36	1.00	0.00	0.00	0.00	29.34	29.75	52.0	0.0	0.572
72.50	0.35	1.01	0.00	0.00	0.00	28.38	28.79	52.0	0.0	0.554
75.00	0.34	1.01	0.00	0.00	0.00	27.37	27.76	52.0	0.0	0.534
76.00	0.31	0.88	0.00	0.00	0.00	26.94	27.30	52.0	0.0	0.525
77.50	0.31	0.88	0.00	0.00	0.00	26.44	26.80	52.0	0.0	0.516
80.00	0.30	0.89	0.00	0.00	0.00	25.57	25.92	52.0	0.0	0.499
82.50	0.29	0.90	0.00	0.00	0.00	24.64	24.98	52.0	0.0	0.481
85.00	0.29	0.90	0.00	0.00	0.00	23.65	23.99	52.0	0.0	0.462
87.00	0.25	0.82	0.00	0.00	0.00	22.82	23.11	52.0	0.0	0.445
87.50	0.25	0.82	0.00	0.00	0.00	22.64	22.93	52.0	0.0	0.441
90.00	0.24	0.83	0.00	0.00	0.00	21.69	21.98	52.0	0.0	0.423
92.50	0.24	0.83	0.00	0.00	0.00	20.69	20.98	52.0	0.0	0.404
93.50	0.23	0.84	0.00	0.00	0.00	20.27	20.56	52.0	0.0	0.395
95.00	0.23	0.84	0.00	0.00	0.00	19.63	19.91	52.0	0.0	0.383
97.25	0.57	2.20	0.00	0.00	0.00	46.76	47.48	51.3	0.0	0.925
97.50	0.57	2.20	0.00	0.00	0.00	46.46	47.18	51.4	0.0	0.918
100.00	0.44	1.75	0.00	0.00	0.00	43.36	43.90	51.8	0.0	0.848
102.50	0.43	1.76	0.00	0.00	0.00	41.08	41.62	52.0	0.0	0.801
105.00	0.43	1.77	0.00	0.00	0.00	38.64	39.19	52.0	0.0	0.754
107.50	0.42	1.78	0.00	0.00	0.00	36.05	36.60	52.0	0.0	0.704
110.00	0.41	1.79	0.00	0.00	0.00	33.28	33.84	52.0	0.0	0.651

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F
Base Elev : 0.000 (ft)



Load Case: No Ice — 90.00 mph Wind with No Ice — 26 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.50	0.41	1.80	0.00	0.00	0.00	30.32	30.89	52.0	0.0	0.594
115.00	0.40	1.82	0.00	0.00	0.00	27.15	27.74	52.0	0.0	0.534
117.50	0.40	1.83	0.00	0.00	0.00	23.76	24.37	52.0	0.0	0.469
120.00	0.30	1.36	0.00	0.00	0.00	20.13	20.56	52.0	0.0	0.396
122.50	0.29	1.36	0.00	0.00	0.00	17.48	17.93	52.0	0.0	0.345
125.00	0.29	1.36	0.00	0.00	0.00	14.65	15.12	52.0	0.0	0.291
127.50	0.29	1.37	0.00	0.00	0.00	11.61	12.13	52.0	0.0	0.233
130.00	0.28	1.37	0.00	0.00	0.00	8.36	8.96	52.0	0.0	0.172
131.00	0.18	0.85	0.00	0.00	0.00	7.00	7.34	52.0	0.0	0.141
132.50	0.18	0.85	0.00	0.00	0.00	5.76	6.12	52.0	0.0	0.118
135.00	0.17	0.84	0.00	0.00	0.00	3.57	4.02	52.0	0.0	0.077
137.50	0.17	0.84	0.00	0.00	0.00	1.23	2.02	52.0	0.0	0.039
138.00	0.01	0.02	0.00	0.00	0.00	0.05	0.06	52.0	0.0	0.001
140.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	52.0	0.0	0.001

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
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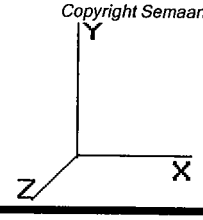
Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



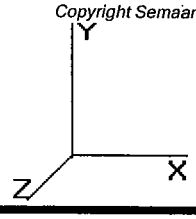
Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	15.551	26.28	306.10	0.650	0.50	0.00	0.000	0.00	0.0	0.0	0.0
2.50		0.00	1.00	15.551	26.28	302.86	0.650	0.50	2.50	9.975	6.48	170.4	72.7	698.8
5.00		0.00	1.00	15.551	26.28	299.61	0.650	0.50	2.50	9.871	6.42	168.6	71.9	691.3
7.50		0.00	1.00	15.551	26.28	296.36	0.650	0.50	2.50	9.767	6.35	166.8	71.2	683.8
10.00		0.00	1.00	15.551	26.28	293.11	0.650	0.50	2.50	9.662	6.28	165.1	70.4	676.3
12.50		0.00	1.00	15.551	26.28	289.86	0.650	0.50	2.50	9.558	6.21	163.3	69.6	668.8
15.00		0.00	1.00	15.551	26.28	286.62	0.650	0.50	2.50	9.454	6.15	161.5	68.9	661.2
17.50		0.00	1.00	15.551	26.28	283.37	0.650	0.50	2.50	9.350	6.08	159.7	68.1	653.7
20.00		0.00	1.00	15.551	26.28	280.12	0.650	0.50	2.50	9.246	6.01	157.9	67.3	646.2
22.50		0.00	1.00	15.551	26.28	276.87	0.650	0.50	2.50	9.142	5.94	156.2	66.5	638.7
25.00		0.00	1.00	15.551	26.28	273.62	0.650	0.50	2.50	9.037	5.87	154.4	65.8	631.1
27.50		0.00	1.00	15.551	26.28	270.38	0.650	0.50	2.50	8.933	5.81	152.6	65.0	623.6
30.00		0.00	1.00	15.551	26.28	267.13	0.650	0.50	2.50	8.829	5.74	150.8	64.2	616.1
32.50		0.00	1.00	15.551	26.28	263.88	0.650	0.50	2.50	8.725	5.67	149.0	63.5	608.6
35.00		0.00	1.01	15.815	26.72	262.83	0.650	0.50	2.50	8.621	5.60	149.8	62.7	601.0
37.50		0.00	1.03	16.130	27.25	262.13	0.650	0.50	2.50	8.516	5.54	150.9	61.9	593.5
40.00		0.00	1.05	16.430	27.76	261.22	0.650	0.50	2.50	8.412	5.47	151.8	61.1	586.0
42.50		0.00	1.07	16.717	28.25	260.12	0.650	0.50	2.50	8.308	5.40	152.6	60.4	578.5
45.00		0.00	1.09	16.992	28.71	258.86	0.650	0.50	2.50	8.204	5.33	153.1	59.6	571.0
46.25	Bot - Section 2	0.00	1.10	17.126	28.94	258.17	0.650	0.50	1.25	4.063	2.64	76.4	29.6	282.8
47.50		0.00	1.11	17.257	29.16	257.44	0.650	0.50	1.25	4.141	2.69	78.5	30.2	539.9
50.00		0.00	1.12	17.511	29.59	255.89	0.650	0.50	2.50	8.204	5.33	157.8	59.6	1,068.8
51.00	Top - Section 1	0.00	1.13	17.611	29.76	255.23	0.650	0.50	1.00	3.252	2.11	62.9	23.7	423.6
52.50		0.00	1.14	17.757	30.01	261.15	0.650	0.50	1.50	4.847	3.15	94.6	35.3	337.2
55.00		0.00	1.15	17.995	30.41	259.40	0.650	0.50	2.50	7.995	5.20	158.0	58.1	555.9
57.50		0.00	1.17	18.225	30.80	257.53	0.650	0.50	2.50	7.891	5.13	158.0	57.3	548.4
60.00		0.00	1.18	18.448	31.17	255.57	0.650	0.50	2.50	7.787	5.06	157.8	56.5	540.9
62.50		0.00	1.20	18.664	31.54	253.50	0.650	0.50	2.50	7.683	4.99	157.5	55.7	533.3
65.00		0.00	1.21	18.874	31.89	251.35	0.650	0.50	2.50	7.579	4.93	157.1	55.0	525.8
67.50		0.00	1.22	19.079	32.24	249.11	0.650	0.50	2.50	7.475	4.86	156.7	54.2	518.3
70.00		0.00	1.24	19.278	32.58	246.79	0.650	0.50	2.50	7.370	4.79	156.1	53.4	510.8
72.50		0.00	1.25	19.473	32.90	244.40	0.650	0.50	2.50	7.266	4.72	155.4	52.7	503.3
75.00		0.00	1.26	19.662	33.22	241.93	0.650	0.50	2.50	7.162	4.66	154.7	51.9	495.7
76.00	Appertunance(s)	0.00	1.26	19.737	33.35	240.93	0.650	0.50	1.00	2.836	1.84	61.5	20.6	196.3
77.50		0.00	1.27	19.847	33.54	239.40	0.650	0.50	1.50	4.222	2.74	92.1	30.7	292.1
80.00		0.00	1.28	20.028	33.84	236.80	0.650	0.50	2.50	6.954	4.52	153.0	50.3	480.7
82.50		0.00	1.29	20.205	34.14	234.14	0.650	0.50	2.50	6.849	4.45	152.0	49.6	473.2
85.00		0.00	1.31	20.378	34.43	231.42	0.650	0.50	2.50	6.745	4.38	151.0	48.8	465.6
87.00	Appertunance(s)	0.00	1.31	20.514	34.66	229.21	0.650	0.50	2.00	5.321	3.46	119.9	38.5	367.2
87.50		0.00	1.32	20.547	34.72	228.65	0.650	0.50	0.50	1.320	0.86	29.8	9.6	91.1
90.00		0.00	1.33	20.714	35.00	225.82	0.650	0.50	2.50	6.537	4.25	148.7	47.3	450.6
92.50		0.00	1.34	20.876	35.28	222.95	0.650	0.50	2.50	6.433	4.18	147.5	46.5	443.1
93.50	Bot - Section 3	0.00	1.34	20.941	35.38	221.78	0.650	0.50	1.00	2.544	1.65	58.5	18.5	175.2
95.00		0.00	1.35	21.036	35.55	220.02	0.650	0.50	1.50	3.831	2.49	88.5	27.8	350.4
97.25	Top - Section 2	0.00	1.36	21.177	35.78	217.35	0.650	0.50	2.25	5.677	3.69	132.1	41.0	518.7
97.50		0.00	1.36	21.193	35.81	219.89	0.650	0.50	0.25	0.626	0.41	14.6	4.6	19.2
100.0	Appertunance(s)	0.00	1.37	21.347	36.07	216.88	0.650	0.50	2.50	6.198	4.03	145.3	44.7	189.4
102.5		0.00	1.38	21.498	36.33	213.83	0.650	0.50	2.50	6.094	3.96	143.9	44.0	186.0
105.0		0.00	1.39	21.646	36.58	210.73	0.650	0.50	2.50	5.990	3.89	142.4	43.2	182.7
107.5		0.00	1.40	21.792	36.82	207.60	0.650	0.50	2.50	5.886	3.83	140.9	42.4	179.4
110.0		0.00	1.41	21.936	37.07	204.42	0.650	0.50	2.50	5.781	3.76	139.3	41.7	176.1

Pole :	310968	Code: TIA/EIA-222 Rev F	Copyright Semaan Engineering Solutions, Inc
Location :	WSPT-Westport Rebuild CT, CT		5/27/2011 8:42:52 AM
Height :	140.0 (ft)		Page: 15
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

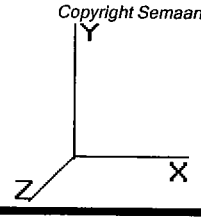
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5		0.00	1.42	22.077	37.31	201.21	0.650	0.50	2.50	5.677	3.69	137.7	40.9	172.8
115.0		0.00	1.42	22.216	37.54	197.96	0.650	0.50	2.50	5.573	3.62	136.0	40.1	169.5
117.5		0.00	1.43	22.353	37.77	194.68	0.650	0.50	2.50	5.469	3.55	134.3	39.3	166.2
120.0	Appertunance(s)	0.00	1.44	22.488	38.00	191.36	0.650	0.50	2.50	5.365	3.49	132.5	38.6	162.9
122.5		0.00	1.45	22.621	38.22	188.00	0.650	0.50	2.50	5.261	3.42	130.7	37.8	159.6
125.0		0.00	1.46	22.752	38.45	184.62	0.650	0.50	2.50	5.156	3.35	128.9	37.0	156.3
127.5		0.00	1.47	22.881	38.66	181.20	0.650	0.50	2.50	5.052	3.28	127.0	36.3	153.0
130.0		0.00	1.48	23.008	38.88	177.75	0.650	0.50	2.50	4.948	3.22	125.1	35.5	149.7
131.0	Appertunance(s)	0.00	1.48	23.059	38.96	176.37	0.650	0.50	1.00	1.950	1.27	49.4	14.1	59.1
132.5		0.00	1.48	23.134	39.09	174.28	0.650	0.50	1.50	2.894	1.88	73.5	20.8	87.5
135.0		0.00	1.49	23.258	39.30	170.77	0.650	0.50	2.50	4.740	3.08	121.1	33.9	143.1
137.5		0.00	1.50	23.380	39.51	167.24	0.650	0.50	2.50	4.635	3.01	119.1	33.2	139.8
138.0	Appertunance(s)	0.00	1.50	23.404	39.55	166.53	0.650	0.50	0.50	0.915	0.59	23.5	6.6	27.6
140.0		0.00	1.51	23.501	39.71	163.67	0.650	0.50	2.00	3.617	2.35	93.4	25.9	109.0
							Totals:		140.00			8,309.3	2,953.7	25,906.1

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



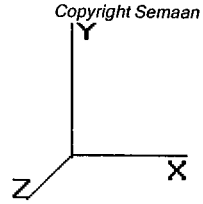
Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
76.00	RFS FD9R6004/1C-3L	6	19.737	33.355	0.33	0.99	0.000	0.000	33.02	0.00	0.00	32.40
76.00	RFS APL868013-42T0	4	19.737	33.355	0.88	14.36	0.000	0.000	479.03	0.00	0.00	128.00
76.00	Antel BXA-185063/8CF	3	19.737	33.355	0.81	8.36	0.000	0.000	278.82	0.00	0.00	81.78
76.00	Antel LPA-80080/6CF	2	19.737	33.355	0.80	14.91	0.000	0.000	497.39	0.00	0.00	138.52
76.00	Powerwave P65-16-	3	19.737	33.355	0.75	19.84	0.000	0.000	661.93	0.00	0.00	232.59
76.00	Flat Low Profile Pla	1	19.737	33.355	0.90	28.44	0.000	0.000	948.62	0.00	0.00	1,700.00
87.00	RFS ATMAA1412D-	3	20.514	34.668	0.45	1.61	0.000	0.000	55.69	0.00	0.00	61.80
87.00	Andrew	3	20.514	34.668	0.45	1.09	0.000	0.000	37.91	0.00	0.00	48.90
87.00	RFS APX16DWV-	3	20.514	34.668	0.67	13.31	0.000	0.000	461.30	0.00	0.00	208.14
87.00	Flat Low Profile Pla	1	20.514	34.668	1.00	31.60	0.000	0.000	1,095.52	0.00	0.00	1,700.00
100.0	Powerwave LGP21401	6	21.347	36.076	0.33	2.59	0.000	0.000	93.57	0.00	0.00	127.56
100.0	Powerwave 7770.00	6	21.347	36.076	0.75	27.18	0.000	0.000	980.54	0.00	0.00	405.66
100.0	Raycap DC6-48-60-18-	1	21.347	36.076	1.00	1.46	0.000	0.000	52.67	0.00	0.00	49.50
100.0	Powerwave P65-16-	3	21.347	36.076	0.78	20.64	0.000	0.000	744.56	0.00	0.00	300.60
100.0	Ericsson RRUS 11 (Ba	6	21.347	36.076	0.33	5.56	0.000	0.000	200.72	0.00	0.00	445.80
100.0	Powerwave LGP21901	6	21.347	36.076	0.33	0.57	0.000	0.000	20.71	0.00	0.00	46.20
100.0	Flat Low Profile Pla	1	21.347	36.076	0.95	30.02	0.000	0.000	1,082.99	0.00	0.00	1,700.00
120.0	Flat Low Profile Pla	1	22.488	38.005	1.00	31.60	0.000	0.000	1,200.95	0.00	0.00	1,700.00
120.0	48" x 8" Panel	12	22.488	38.005	0.92	45.04	0.000	0.000	1,711.85	0.00	0.00	483.59
131.0	Flat Low Profile Pla	1	23.059	38.969	1.00	31.60	0.000	0.000	1,231.42	0.00	0.00	1,700.00
131.0	Decibel 980F65E-M	12	23.059	38.969	0.81	41.99	0.000	0.000	1,636.33	0.00	0.00	358.20
138.0	8' Omni (inverted)	1	23.208	39.222	1.00	3.23	0.000	-4.000	126.69	0.00	-506.75	62.00
138.0	Andrew VHLP2.5-10W	1	23.404	39.553	0.90	8.02	0.000	0.000	317.18	0.00	0.00	97.03
138.0	Andrew DB589	1	23.702	40.057	1.00	2.20	0.000	6.250	88.12	0.00	550.78	20.00
138.0	Flat Platform w/ Han	1	23.404	39.553	0.95	45.98	0.000	0.000	1,818.64	0.00	0.00	2,450.00
138.0	6' Omni	7	23.404	39.553	1.00	14.91	0.000	0.000	589.74	0.00	0.00	267.68
138.0	8' Omni	2	23.404	39.553	1.00	6.46	0.000	0.000	255.51	0.00	0.00	124.00
138.0	8' Omni	2	23.596	39.877	1.00	6.46	0.000	4.000	257.61	0.00	1,030.43	124.00
138.0	6' FM Antenna	1	23.596	39.877	0.95	14.03	0.000	4.000	559.54	0.00	2,238.15	112.70
138.0	6' Dipole	1	23.404	39.553	1.00	5.50	0.000	0.000	217.54	0.00	0.00	50.00
									17,736.11			14,956.64

Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		5/27/2011 8:42:53 AM
Height :	140.0 (ft)		
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
2.50	170.40	834.82	0.00	0.00
5.00	168.62	827.29	0.00	0.00
7.50	166.84	819.77	0.00	0.00
10.00	165.06	812.25	0.00	0.00
12.50	163.28	804.73	0.00	0.00
15.00	161.50	797.20	0.00	0.00
17.50	159.72	789.68	0.00	0.00
20.00	157.94	782.16	0.00	0.00
22.50	156.16	774.64	0.00	0.00
25.00	154.38	767.11	0.00	0.00
27.50	152.60	759.59	0.00	0.00
30.00	150.82	752.07	0.00	0.00
32.50	149.04	744.54	0.00	0.00
35.00	149.76	737.02	0.00	0.00
37.50	150.90	729.50	0.00	0.00
40.00	151.82	721.98	0.00	0.00
42.50	152.56	714.45	0.00	0.00
45.00	153.13	706.93	0.00	0.00
46.25	76.43	350.74	0.00	0.00
47.50	78.50	607.84	0.00	0.00
50.00	157.81	1,204.79	0.00	0.00
51.00	62.92	478.01	0.00	0.00
52.50	94.55	418.83	0.00	0.00
55.00	158.05	691.88	0.00	0.00
57.50	157.98	684.36	0.00	0.00
60.00	157.80	676.84	0.00	0.00
62.50	157.52	669.31	0.00	0.00
65.00	157.13	661.79	0.00	0.00
67.50	156.65	654.27	0.00	0.00
70.00	156.08	646.74	0.00	0.00
72.50	155.43	639.22	0.00	0.00
75.00	154.69	631.70	0.00	0.00
76.00	2,960.29	2,563.96	0.00	0.00
77.50	92.05	358.94	0.00	0.00
80.00	152.98	592.05	0.00	0.00
82.50	152.02	584.53	0.00	0.00
85.00	150.99	577.01	0.00	0.00
87.00	1,770.34	2,475.09	0.00	0.00
87.50	29.79	108.44	0.00	0.00
90.00	148.74	537.36	0.00	0.00
92.50	147.52	529.84	0.00	0.00
93.50	58.52	209.92	0.00	0.00
95.00	88.54	402.42	0.00	0.00
97.25	132.06	596.75	0.00	0.00
97.50	14.56	27.83	0.00	0.00
100.0	3,321.10	3,351.44	0.00	0.00
102.5	143.91	245.50	0.00	0.00
105.0	142.43	242.19	0.00	0.00
107.5	140.90	238.89	0.00	0.00

Pole :	310968
Location :	WSPT-Westport Rebuild CT, CT
Height :	140.0 (ft)
Shape :	18 Sides
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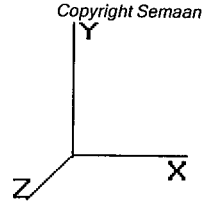
Taper :	0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

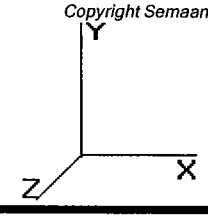
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

110.0		139.31	235.59	0.00	0.00
112.5		137.68	232.28	0.00	0.00
115.0		136.01	228.98	0.00	0.00
117.5		134.29	225.68	0.00	0.00
120.0		3,045.33	2,405.96	0.00	0.00
122.5		130.72	200.17	0.00	0.00
125.0		128.87	196.87	0.00	0.00
127.5		126.98	193.56	0.00	0.00
130.0		125.06	190.26	0.00	0.00
131.0		2,917.14	2,133.47	0.00	0.00
132.5		73.54	97.11	0.00	0.00
135.0		121.09	159.05	0.00	0.00
137.5		119.05	155.75	0.00	0.00
138.0		4,254.08	3,338.23	0.00	3,312.61
140.0		93.37	109.00	0.00	0.00
	Totals:	26,045.37	46,636.17	0.00	3,312.61

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

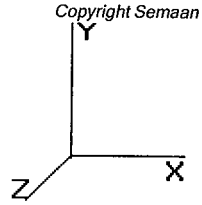
Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-26.082	-46.614	0.000	0.000	0.000	-2,663.479	0.000	0.000	0.000	0.000
2.50	-25.985	-45.738	0.000	0.000	0.000	-2,598.275	-0.025	0.000	0.025	-0.092
5.00	-25.887	-44.869	0.000	0.000	0.000	-2,533.315	-0.098	0.000	0.098	-0.185
7.50	-25.789	-44.008	0.000	0.000	0.000	-2,468.599	-0.220	0.000	0.220	-0.278
10.00	-25.690	-43.154	0.000	0.000	0.000	-2,404.129	-0.391	0.000	0.391	-0.372
12.50	-25.591	-42.308	0.000	0.000	0.000	-2,339.905	-0.612	0.000	0.612	-0.467
15.00	-25.492	-41.470	0.000	0.000	0.000	-2,275.928	-0.882	0.000	0.882	-0.562
17.50	-25.392	-40.640	0.000	0.000	0.000	-2,212.200	-1.202	0.000	1.202	-0.658
20.00	-25.291	-39.817	0.000	0.000	0.000	-2,148.722	-1.573	0.000	1.573	-0.754
22.50	-25.191	-39.002	0.000	0.000	0.000	-2,085.495	-1.994	0.000	1.994	-0.851
25.00	-25.089	-38.195	0.000	0.000	0.000	-2,022.520	-2.466	0.000	2.466	-0.949
27.50	-24.988	-37.395	0.000	0.000	0.000	-1,959.797	-2.990	0.000	2.990	-1.047
30.00	-24.885	-36.603	0.000	0.000	0.000	-1,897.330	-3.564	0.000	3.564	-1.145
32.50	-24.783	-35.819	0.000	0.000	0.000	-1,835.117	-4.191	0.000	4.191	-1.244
35.00	-24.677	-35.043	0.000	0.000	0.000	-1,773.162	-4.869	0.000	4.869	-1.343
37.50	-24.568	-34.275	0.000	0.000	0.000	-1,711.470	-5.599	0.000	5.599	-1.442
40.00	-24.456	-33.515	0.000	0.000	0.000	-1,650.052	-6.381	0.000	6.381	-1.542
42.50	-24.341	-32.763	0.000	0.000	0.000	-1,588.913	-7.215	0.000	7.215	-1.641
45.00	-24.208	-32.029	0.000	0.000	0.000	-1,528.063	-8.101	0.000	8.101	-1.741
46.25	-24.149	-31.659	0.000	0.000	0.000	-1,497.803	-8.564	0.000	8.564	-1.791
47.50	-24.092	-31.023	0.000	0.000	0.000	-1,467.618	-9.040	0.000	9.040	-1.842
50.00	-23.931	-29.795	0.000	0.000	0.000	-1,407.389	-10.031	0.000	10.031	-1.941
51.00	-23.877	-29.298	0.000	0.000	0.000	-1,383.459	-10.442	0.000	10.442	-1.982
52.50	-23.806	-28.851	0.000	0.000	0.000	-1,347.643	-11.075	0.000	11.075	-2.042
55.00	-23.668	-28.128	0.000	0.000	0.000	-1,288.129	-12.168	0.000	12.168	-2.133
57.50	-23.527	-27.413	0.000	0.000	0.000	-1,228.960	-13.310	0.000	13.310	-2.224
60.00	-23.385	-26.707	0.000	0.000	0.000	-1,170.143	-14.499	0.000	14.499	-2.314
62.50	-23.240	-26.008	0.000	0.000	0.000	-1,111.682	-15.734	0.000	15.734	-2.404
65.00	-23.094	-25.318	0.000	0.000	0.000	-1,053.582	-17.017	0.000	17.017	-2.492
67.50	-22.946	-24.637	0.000	0.000	0.000	-995.847	-18.345	0.000	18.345	-2.580
70.00	-22.796	-23.964	0.000	0.000	0.000	-938.483	-19.719	0.000	19.719	-2.666
72.50	-22.645	-23.299	0.000	0.000	0.000	-881.494	-21.138	0.000	21.138	-2.751
75.00	-22.483	-22.653	0.000	0.000	0.000	-824.882	-22.601	0.000	22.601	-2.834
76.00	-19.413	-20.226	0.000	0.000	0.000	-802.399	-23.198	0.000	23.198	-2.868
77.50	-19.326	-19.850	0.000	0.000	0.000	-773.280	-24.107	0.000	24.107	-2.917
80.00	-19.169	-19.240	0.000	0.000	0.000	-724.967	-25.655	0.000	25.655	-2.997
82.50	-19.012	-18.639	0.000	0.000	0.000	-677.045	-27.245	0.000	27.245	-3.076
85.00	-18.851	-18.048	0.000	0.000	0.000	-629.518	-28.876	0.000	28.876	-3.152
87.00	-16.956	-15.664	0.000	0.000	0.000	-591.816	-30.209	0.000	30.209	-3.213
87.50	-16.932	-15.545	0.000	0.000	0.000	-583.338	-30.546	0.000	30.546	-3.228
90.00	-16.772	-14.996	0.000	0.000	0.000	-541.008	-32.256	0.000	32.256	-3.301
92.50	-16.607	-14.461	0.000	0.000	0.000	-499.078	-34.002	0.000	34.002	-3.372
93.50	-16.544	-14.245	0.000	0.000	0.000	-482.472	-34.711	0.000	34.711	-3.400
95.00	-16.444	-13.834	0.000	0.000	0.000	-457.656	-35.786	0.000	35.786	-3.441
97.25	-16.284	-13.237	0.000	0.000	0.000	-420.657	-37.421	0.000	37.421	-3.501
97.50	-16.287	-13.186	0.000	0.000	0.000	-416.586	-37.605	0.000	37.605	-3.508
100.0	-12.790	-10.015	0.000	0.000	0.000	-375.868	-39.484	0.000	39.484	-3.664
102.5	-12.655	-9.747	0.000	0.000	0.000	-343.895	-41.442	0.000	41.442	-3.814
105.0	-12.520	-9.484	0.000	0.000	0.000	-312.258	-43.478	0.000	43.478	-3.958
107.5	-12.384	-9.227	0.000	0.000	0.000	-280.959	-45.587	0.000	45.587	-4.096
110.0	-12.248	-8.975	0.000	0.000	0.000	-249.999	-47.766	0.000	47.766	-4.226

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

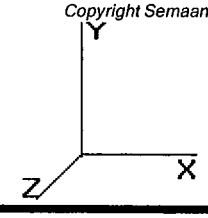
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5	-12.111	-8.729	0.000	0.000	0.000	-219.379	-50.011	0.000	50.011	-4.348
115.0	-11.974	-8.489	0.000	0.000	0.000	-189.101	-52.317	0.000	52.317	-4.461
117.5	-11.836	-8.255	0.000	0.000	0.000	-159.167	-54.679	0.000	54.679	-4.562
120.0	-8.616	-6.089	0.000	0.000	0.000	-129.577	-57.091	0.000	57.091	-4.652
122.5	-8.477	-5.889	0.000	0.000	0.000	-108.036	-59.546	0.000	59.546	-4.730
125.0	-8.339	-5.695	0.000	0.000	0.000	-86.844	-62.040	0.000	62.040	-4.798
127.5	-8.201	-5.505	0.000	0.000	0.000	-65.997	-64.566	0.000	64.566	-4.855
130.0	-8.063	-5.322	0.000	0.000	0.000	-45.495	-67.118	0.000	67.118	-4.899
131.0	-4.975	-3.445	0.000	0.000	0.000	-37.433	-68.145	0.000	68.145	-4.914
132.5	-4.894	-3.353	0.000	0.000	0.000	-29.970	-69.690	0.000	69.690	-4.931
135.0	-4.761	-3.203	0.000	0.000	0.000	-17.735	-72.276	0.000	72.276	-4.953
137.5	-4.629	-3.058	0.000	0.000	0.000	-5.832	-74.871	0.000	74.871	-4.965
138.0	-0.102	-0.100	0.000	0.000	0.000	-0.205	-75.390	0.000	75.390	-4.966
140.0	-0.093	0.000	0.000	0.000	0.000	0.000	-77.467	0.000	77.467	-4.966

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

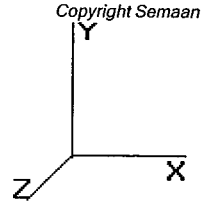
Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.63	0.71	0.00	0.00	0.00	37.62	38.27	52.0	0.0	0.736
2.50	0.62	0.72	0.00	0.00	0.00	37.50	38.15	52.0	0.0	0.734
5.00	0.62	0.72	0.00	0.00	0.00	37.38	38.02	52.0	0.0	0.731
7.50	0.61	0.73	0.00	0.00	0.00	37.24	37.87	52.0	0.0	0.729
10.00	0.61	0.73	0.00	0.00	0.00	37.09	37.72	52.0	0.0	0.726
12.50	0.60	0.74	0.00	0.00	0.00	36.92	37.55	52.0	0.0	0.722
15.00	0.60	0.74	0.00	0.00	0.00	36.75	37.37	52.0	0.0	0.719
17.50	0.59	0.75	0.00	0.00	0.00	36.56	37.17	52.0	0.0	0.715
20.00	0.59	0.75	0.00	0.00	0.00	36.35	36.96	52.0	0.0	0.711
22.50	0.58	0.76	0.00	0.00	0.00	36.13	36.74	52.0	0.0	0.707
25.00	0.58	0.77	0.00	0.00	0.00	35.89	36.49	52.0	0.0	0.702
27.50	0.57	0.77	0.00	0.00	0.00	35.63	36.23	52.0	0.0	0.697
30.00	0.57	0.78	0.00	0.00	0.00	35.36	35.95	52.0	0.0	0.692
32.50	0.56	0.78	0.00	0.00	0.00	35.06	35.65	52.0	0.0	0.686
35.00	0.56	0.79	0.00	0.00	0.00	34.74	35.33	52.0	0.0	0.680
37.50	0.55	0.80	0.00	0.00	0.00	34.40	34.98	52.0	0.0	0.673
40.00	0.55	0.80	0.00	0.00	0.00	34.04	34.61	52.0	0.0	0.666
42.50	0.54	0.81	0.00	0.00	0.00	33.65	34.22	52.0	0.0	0.658
45.00	0.54	0.82	0.00	0.00	0.00	33.23	33.80	52.0	0.0	0.650
46.25	0.53	0.82	0.00	0.00	0.00	33.01	33.58	52.0	0.0	0.646
47.50	0.53	0.82	0.00	0.00	0.00	32.79	33.34	52.0	0.0	0.642
50.00	0.51	0.83	0.00	0.00	0.00	32.31	32.86	52.0	0.0	0.632
51.00	0.49	0.81	0.00	0.00	0.00	30.41	30.94	52.0	0.0	0.595
52.50	0.49	0.81	0.00	0.00	0.00	30.11	30.63	52.0	0.0	0.589
55.00	0.48	0.82	0.00	0.00	0.00	29.57	30.09	52.0	0.0	0.579
57.50	0.48	0.83	0.00	0.00	0.00	29.01	29.52	52.0	0.0	0.568
60.00	0.47	0.83	0.00	0.00	0.00	28.41	28.91	52.0	0.0	0.556
62.50	0.47	0.84	0.00	0.00	0.00	27.77	28.27	52.0	0.0	0.544
65.00	0.46	0.85	0.00	0.00	0.00	27.09	27.59	52.0	0.0	0.531
67.50	0.45	0.85	0.00	0.00	0.00	26.36	26.86	52.0	0.0	0.517
70.00	0.45	0.86	0.00	0.00	0.00	25.59	26.09	52.0	0.0	0.502
72.50	0.44	0.87	0.00	0.00	0.00	24.78	25.26	52.0	0.0	0.486
75.00	0.44	0.88	0.00	0.00	0.00	23.91	24.39	52.0	0.0	0.469
76.00	0.39	0.76	0.00	0.00	0.00	23.55	23.97	52.0	0.0	0.461
77.50	0.39	0.76	0.00	0.00	0.00	23.12	23.55	52.0	0.0	0.453
80.00	0.38	0.77	0.00	0.00	0.00	22.37	22.79	52.0	0.0	0.439
82.50	0.38	0.78	0.00	0.00	0.00	21.57	21.99	52.0	0.0	0.423
85.00	0.37	0.78	0.00	0.00	0.00	20.73	21.14	52.0	0.0	0.407
87.00	0.33	0.71	0.00	0.00	0.00	20.01	20.37	52.0	0.0	0.392
87.50	0.33	0.71	0.00	0.00	0.00	19.85	20.22	52.0	0.0	0.389
90.00	0.32	0.72	0.00	0.00	0.00	19.05	19.40	52.0	0.0	0.373
92.50	0.31	0.72	0.00	0.00	0.00	18.18	18.54	52.0	0.0	0.357
93.50	0.31	0.73	0.00	0.00	0.00	17.82	18.18	52.0	0.0	0.350
95.00	0.30	0.73	0.00	0.00	0.00	17.27	17.62	52.0	0.0	0.339
97.25	0.77	1.91	0.00	0.00	0.00	41.18	42.08	51.3	0.0	0.820
97.50	0.77	1.91	0.00	0.00	0.00	40.92	41.82	51.4	0.0	0.814
100.00	0.59	1.53	0.00	0.00	0.00	38.24	38.93	51.8	0.0	0.752
102.50	0.59	1.54	0.00	0.00	0.00	36.26	36.95	52.0	0.0	0.711
105.00	0.58	1.55	0.00	0.00	0.00	34.15	34.84	52.0	0.0	0.670
107.50	0.58	1.56	0.00	0.00	0.00	31.89	32.58	52.0	0.0	0.627
110.00	0.57	1.58	0.00	0.00	0.00	29.47	30.16	52.0	0.0	0.580

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

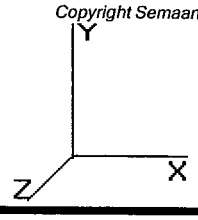


Load Case: Ice — 77.94 mph Wind with Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.50	0.57	1.59	0.00	0.00	0.00	26.87	27.58	52.0	0.0	0.531
115.00	0.56	1.60	0.00	0.00	0.00	24.09	24.81	52.0	0.0	0.477
117.50	0.56	1.62	0.00	0.00	0.00	21.11	21.84	52.0	0.0	0.420
120.00	0.42	1.20	0.00	0.00	0.00	17.90	18.44	52.0	0.0	0.355
122.50	0.42	1.21	0.00	0.00	0.00	15.56	16.11	52.0	0.0	0.310
125.00	0.41	1.21	0.00	0.00	0.00	13.05	13.62	52.0	0.0	0.262
127.50	0.41	1.22	0.00	0.00	0.00	10.36	10.97	52.0	0.0	0.211
130.00	0.40	1.22	0.00	0.00	0.00	7.47	8.15	52.0	0.0	0.157
131.00	0.26	0.76	0.00	0.00	0.00	6.26	6.65	52.0	0.0	0.128
132.50	0.26	0.76	0.00	0.00	0.00	5.15	5.56	52.0	0.0	0.107
135.00	0.25	0.76	0.00	0.00	0.00	3.19	3.68	52.0	0.0	0.071
137.50	0.25	0.75	0.00	0.00	0.00	1.10	1.88	52.0	0.0	0.036
138.00	0.01	0.02	0.00	0.00	0.00	0.04	0.06	52.0	0.0	0.001
140.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	52.0	0.0	0.001

Pole :	310968	Code: TIA/EIA-222 Rev F	
Location :	WSPT-Westport Rebuild CT, CT		
Height :	140.0 (ft)		
Shape :	18 Sides		
Base Dia :	47.13 (in)		
Top Dia :	20.50 (in)		
Taper :	0.200036 (in/ft)	Base Elev : 0.000 (ft)	



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

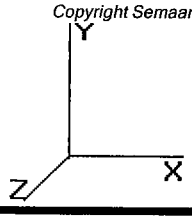
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	6.400	10.81	196.37	0.650	0.00	0.00	0.000	0.00	0.0	0.0	0.0
2.50		0.00	1.00	6.400	10.81	194.29	0.650	0.00	2.50	9.767	6.35	68.7	0.0	626.1
5.00		0.00	1.00	6.400	10.81	192.20	0.650	0.00	2.50	9.662	6.28	67.9	0.0	619.4
7.50		0.00	1.00	6.400	10.81	190.12	0.650	0.00	2.50	9.558	6.21	67.2	0.0	612.6
10.00		0.00	1.00	6.400	10.81	188.04	0.650	0.00	2.50	9.454	6.15	66.5	0.0	605.9
12.50		0.00	1.00	6.400	10.81	185.95	0.650	0.00	2.50	9.350	6.08	65.7	0.0	599.1
15.00		0.00	1.00	6.400	10.81	183.87	0.650	0.00	2.50	9.246	6.01	65.0	0.0	592.4
17.50		0.00	1.00	6.400	10.81	181.78	0.650	0.00	2.50	9.142	5.94	64.3	0.0	585.6
20.00		0.00	1.00	6.400	10.81	179.70	0.650	0.00	2.50	9.037	5.87	63.5	0.0	578.9
22.50		0.00	1.00	6.400	10.81	177.62	0.650	0.00	2.50	8.933	5.81	62.8	0.0	572.1
25.00		0.00	1.00	6.400	10.81	175.53	0.650	0.00	2.50	8.829	5.74	62.1	0.0	565.4
27.50		0.00	1.00	6.400	10.81	173.45	0.650	0.00	2.50	8.725	5.67	61.3	0.0	558.6
30.00		0.00	1.00	6.400	10.81	171.37	0.650	0.00	2.50	8.621	5.60	60.6	0.0	551.9
32.50		0.00	1.00	6.400	10.81	169.28	0.650	0.00	2.50	8.516	5.54	59.9	0.0	545.1
35.00		0.00	1.01	6.509	10.99	168.61	0.650	0.00	2.50	8.412	5.47	60.1	0.0	538.4
37.50		0.00	1.03	6.638	11.21	168.16	0.650	0.00	2.50	8.308	5.40	60.6	0.0	531.6
40.00		0.00	1.05	6.762	11.42	167.57	0.650	0.00	2.50	8.204	5.33	60.9	0.0	524.9
42.50		0.00	1.07	6.880	11.62	166.87	0.650	0.00	2.50	8.100	5.26	61.2	0.0	518.1
45.00		0.00	1.09	6.993	11.81	166.06	0.650	0.00	2.50	7.996	5.20	61.4	0.0	511.4
46.25	Bot - Section 2	0.00	1.10	7.048	11.91	165.62	0.650	0.00	1.25	3.959	2.57	30.6	0.0	253.1
47.50		0.00	1.11	7.102	12.00	165.15	0.650	0.00	1.25	4.037	2.62	31.5	0.0	509.7
50.00		0.00	1.12	7.207	12.17	164.16	0.650	0.00	2.50	7.995	5.20	63.3	0.0	1,009.2
51.00	Top - Section 1	0.00	1.13	7.248	12.24	163.74	0.650	0.00	1.00	3.169	2.06	25.2	0.0	399.9
52.50		0.00	1.14	7.308	12.35	167.53	0.650	0.00	1.50	4.722	3.07	37.9	0.0	302.0
55.00		0.00	1.15	7.406	12.51	166.41	0.650	0.00	2.50	7.787	5.06	63.3	0.0	497.9
57.50		0.00	1.17	7.500	12.67	165.21	0.650	0.00	2.50	7.683	4.99	63.3	0.0	491.1
60.00		0.00	1.18	7.592	12.83	163.95	0.650	0.00	2.50	7.579	4.93	63.2	0.0	484.4
62.50		0.00	1.20	7.681	12.98	162.63	0.650	0.00	2.50	7.475	4.86	63.1	0.0	477.6
65.00		0.00	1.21	7.768	13.12	161.24	0.650	0.00	2.50	7.370	4.79	62.9	0.0	470.9
67.50		0.00	1.22	7.852	13.27	159.81	0.650	0.00	2.50	7.266	4.72	62.7	0.0	464.1
70.00		0.00	1.24	7.934	13.40	158.32	0.650	0.00	2.50	7.162	4.66	62.4	0.0	457.3
72.50		0.00	1.25	8.014	13.54	156.78	0.650	0.00	2.50	7.058	4.59	62.1	0.0	450.6
75.00		0.00	1.26	8.092	13.67	155.20	0.650	0.00	2.50	6.954	4.52	61.8	0.0	443.8
76.00	Appertunance(s)	0.00	1.26	8.123	13.72	154.56	0.650	0.00	1.00	2.752	1.79	24.6	0.0	175.6
77.50		0.00	1.27	8.168	13.80	153.58	0.650	0.00	1.50	4.097	2.66	36.8	0.0	261.4
80.00		0.00	1.28	8.242	13.93	151.91	0.650	0.00	2.50	6.745	4.38	61.1	0.0	430.3
82.50		0.00	1.29	8.315	14.05	150.20	0.650	0.00	2.50	6.641	4.32	60.7	0.0	423.6
85.00		0.00	1.31	8.387	14.17	148.46	0.650	0.00	2.50	6.537	4.25	60.2	0.0	416.8
87.00	Appertunance(s)	0.00	1.31	8.442	14.26	147.04	0.650	0.00	2.00	5.154	3.35	47.8	0.0	328.6
87.50		0.00	1.32	8.456	14.29	146.68	0.650	0.00	0.50	1.278	0.83	11.9	0.0	81.5
90.00		0.00	1.33	8.525	14.40	144.87	0.650	0.00	2.50	6.329	4.11	59.3	0.0	403.3
92.50		0.00	1.34	8.592	14.52	143.02	0.650	0.00	2.50	6.224	4.05	58.7	0.0	396.6
93.50	Bot - Section 3	0.00	1.34	8.618	14.56	142.28	0.650	0.00	1.00	2.461	1.60	23.3	0.0	156.7
95.00		0.00	1.35	8.657	14.63	141.15	0.650	0.00	1.50	3.706	2.41	35.2	0.0	322.6
97.25	Top - Section 2	0.00	1.36	8.715	14.72	139.43	0.650	0.00	2.25	5.489	3.57	52.6	0.0	477.6
97.50		0.00	1.36	8.722	14.74	141.06	0.650	0.00	0.25	0.605	0.39	5.8	0.0	14.6
100.0	Appertunance(s)	0.00	1.37	8.785	14.84	139.13	0.650	0.00	2.50	5.990	3.89	57.8	0.0	144.6
102.5		0.00	1.38	8.847	14.95	137.17	0.650	0.00	2.50	5.886	3.83	57.2	0.0	142.1
105.0		0.00	1.39	8.908	15.05	135.19	0.650	0.00	2.50	5.782	3.76	56.6	0.0	139.5
107.5		0.00	1.40	8.969	15.15	133.18	0.650	0.00	2.50	5.677	3.69	55.9	0.0	137.0
110.0		0.00	1.41	9.028	15.25	131.14	0.650	0.00	2.50	5.573	3.62	55.3	0.0	134.5

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

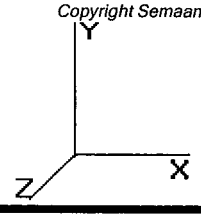
Code: TIA/EIA-222 Rev F
Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5		0.00	1.42	9.086	15.35	129.08	0.650	0.00	2.50	5.469	3.55	54.6	0.0	131.9
115.0		0.00	1.42	9.143	15.45	126.99	0.650	0.00	2.50	5.365	3.49	53.9	0.0	129.4
117.5		0.00	1.43	9.199	15.54	124.89	0.650	0.00	2.50	5.261	3.42	53.2	0.0	126.9
120.0	Appertunance(s)	0.00	1.44	9.255	15.64	122.76	0.650	0.00	2.50	5.156	3.35	52.4	0.0	124.4
122.5		0.00	1.45	9.310	15.73	120.61	0.650	0.00	2.50	5.052	3.28	51.7	0.0	121.8
125.0		0.00	1.46	9.363	15.82	118.43	0.650	0.00	2.50	4.948	3.22	50.9	0.0	119.3
127.5		0.00	1.47	9.417	15.91	116.24	0.650	0.00	2.50	4.844	3.15	50.1	0.0	116.8
130.0		0.00	1.48	9.469	16.00	114.03	0.650	0.00	2.50	4.740	3.08	49.3	0.0	114.2
131.0	Appertunance(s)	0.00	1.48	9.490	16.03	113.14	0.650	0.00	1.00	1.867	1.21	19.5	0.0	45.0
132.5		0.00	1.48	9.521	16.09	111.80	0.650	0.00	1.50	2.769	1.80	29.0	0.0	66.7
135.0		0.00	1.49	9.572	16.17	109.55	0.650	0.00	2.50	4.531	2.95	47.6	0.0	109.2
137.5		0.00	1.50	9.622	16.26	107.28	0.650	0.00	2.50	4.427	2.88	46.8	0.0	106.6
138.0	Appertunance(s)	0.00	1.50	9.632	16.27	106.83	0.650	0.00	0.50	0.873	0.57	9.2	0.0	21.0
140.0		0.00	1.51	9.672	16.34	105.00	0.650	0.00	2.00	3.450	2.24	36.7	0.0	83.1
							Totals:		140.00			3,318.6	0.0	22,952.4

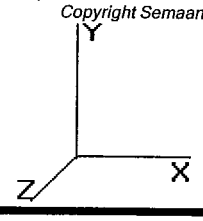


Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
76.00	RFS FD9R6004/1C-3L	6	8.123	13.727	0.33	0.73	0.000	0.000	10.06	0.00	0.00	18.60
76.00	RFS APL868013-42T0	4	8.123	13.727	0.88	12.71	0.000	0.000	174.43	0.00	0.00	25.20
76.00	Antel BXA-185063/8CF	3	8.123	13.727	0.81	7.19	0.000	0.000	98.74	0.00	0.00	30.00
76.00	Antel LPA-80080/6CF	2	8.123	13.727	0.80	13.81	0.000	0.000	189.54	0.00	0.00	42.00
76.00	Powerwave P65-16-	3	8.123	13.727	0.75	18.29	0.000	0.000	251.10	0.00	0.00	99.00
76.00	Flat Low Profile Pla	1	8.123	13.727	0.90	23.49	0.000	0.000	322.45	0.00	0.00	1,500.00
87.00	RFS ATMAA1412D-	3	8.442	14.268	0.45	1.35	0.000	0.000	19.26	0.00	0.00	39.00
87.00	Andrew	3	8.442	14.268	0.45	0.88	0.000	0.000	12.52	0.00	0.00	33.00
87.00	RFS APX16DWV-	3	8.442	14.268	0.67	12.22	0.000	0.000	174.36	0.00	0.00	118.80
87.00	Flat Low Profile Pla	1	8.442	14.268	1.00	26.10	0.000	0.000	372.39	0.00	0.00	1,500.00
100.0	Powerwave LGP21401	6	8.785	14.847	0.33	2.18	0.000	0.000	32.34	0.00	0.00	84.60
100.0	Powerwave 7770.00	6	8.785	14.847	0.75	24.75	0.000	0.000	367.46	0.00	0.00	210.00
100.0	Raycap DC6-48-60-18-	1	8.785	14.847	1.00	1.28	0.000	0.000	19.00	0.00	0.00	31.80
100.0	Powerwave P65-16-	3	8.785	14.847	0.78	19.02	0.000	0.000	282.45	0.00	0.00	159.00
100.0	Ericsson RRUS 11 (Ba	6	8.785	14.847	0.33	4.99	0.000	0.000	74.08	0.00	0.00	330.00
100.0	Powerwave LGP21901	6	8.785	14.847	0.33	0.40	0.000	0.000	5.88	0.00	0.00	33.00
100.0	Flat Low Profile Pla	1	8.785	14.847	0.95	24.80	0.000	0.000	368.13	0.00	0.00	1,500.00
120.0	Flat Low Profile Pla	1	9.255	15.641	1.00	26.10	0.000	0.000	408.22	0.00	0.00	1,500.00
120.0	48" x 8" Panel	12	9.255	15.641	0.92	39.85	0.000	0.000	623.35	0.00	0.00	168.00
131.0	Flat Low Profile Pla	1	9.490	16.038	1.00	26.10	0.000	0.000	418.58	0.00	0.00	1,500.00
131.0	Decibel 980F65E-M	12	9.490	16.038	0.81	36.45	0.000	0.000	584.57	0.00	0.00	114.00
138.0	8' Omni (inverted)	1	9.551	16.142	1.00	2.40	0.000	-4.000	38.74	0.00	-154.96	40.00
138.0	Andrew VHLP2.5-10W	1	9.632	16.278	0.90	7.59	0.000	0.000	123.50	0.00	0.00	47.60
138.0	Andrew DB589	1	9.755	16.485	1.00	1.38	0.000	6.250	22.75	0.00	142.19	11.50
138.0	Flat Platform w/ Han	1	9.632	16.278	0.95	40.28	0.000	0.000	655.67	0.00	0.00	2,000.00
138.0	6' Omni	7	9.632	16.278	1.00	12.32	0.000	0.000	200.53	0.00	0.00	175.00
138.0	8' Omni	2	9.632	16.278	1.00	4.80	0.000	0.000	78.13	0.00	0.00	80.00
138.0	8' Omni	2	9.711	16.411	1.00	4.80	0.000	4.000	78.77	0.00	315.10	80.00
138.0	6' FM Antenna	1	9.711	16.411	0.95	12.78	0.000	4.000	209.69	0.00	838.78	30.00
138.0	6' Dipole	1	9.632	16.278	1.00	4.00	0.000	0.000	65.11	0.00	0.00	30.00
									6,281.84			11,530.10

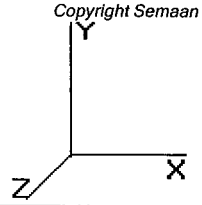


Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
2.50	68.66	762.10	0.00	0.00
5.00	67.93	755.35	0.00	0.00
7.50	67.20	748.60	0.00	0.00
10.00	66.47	741.85	0.00	0.00
12.50	65.73	735.10	0.00	0.00
15.00	65.00	728.35	0.00	0.00
17.50	64.27	721.60	0.00	0.00
20.00	63.54	714.84	0.00	0.00
22.50	62.80	708.09	0.00	0.00
25.00	62.07	701.34	0.00	0.00
27.50	61.34	694.59	0.00	0.00
30.00	60.61	687.84	0.00	0.00
32.50	59.87	681.09	0.00	0.00
35.00	60.14	674.34	0.00	0.00
37.50	60.58	667.59	0.00	0.00
40.00	60.94	660.83	0.00	0.00
42.50	61.21	654.08	0.00	0.00
45.00	61.42	647.33	0.00	0.00
46.25	30.65	321.13	0.00	0.00
47.50	31.49	577.66	0.00	0.00
50.00	63.30	1,145.19	0.00	0.00
51.00	25.23	454.29	0.00	0.00
52.50	37.91	383.54	0.00	0.00
55.00	63.35	633.83	0.00	0.00
57.50	63.30	627.08	0.00	0.00
60.00	63.21	620.32	0.00	0.00
62.50	63.07	613.57	0.00	0.00
65.00	62.89	606.82	0.00	0.00
67.50	62.67	600.07	0.00	0.00
70.00	62.42	593.32	0.00	0.00
72.50	62.13	586.57	0.00	0.00
75.00	61.81	579.82	0.00	0.00
76.00	1,070.88	1,944.84	0.00	0.00
77.50	36.76	328.27	0.00	0.00
80.00	61.07	541.71	0.00	0.00
82.50	60.66	534.96	0.00	0.00
85.00	60.22	528.21	0.00	0.00
87.00	626.33	2,108.51	0.00	0.00
87.50	11.87	98.83	0.00	0.00
90.00	59.26	490.11	0.00	0.00
92.50	58.74	483.36	0.00	0.00
93.50	23.29	191.45	0.00	0.00
95.00	35.25	374.65	0.00	0.00
97.25	52.55	555.71	0.00	0.00
97.50	5.79	23.28	0.00	0.00
100.0	1,207.14	2,579.78	0.00	0.00
102.5	57.20	201.52	0.00	0.00
105.0	56.58	198.99	0.00	0.00
107.5	55.93	196.46	0.00	0.00



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

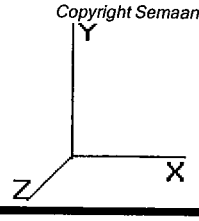
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

110.0		55.27	193.93	0.00	0.00
112.5		54.58	191.40	0.00	0.00
115.0		53.88	188.86	0.00	0.00
117.5		53.16	186.33	0.00	0.00
120.0		1,084.00	1,851.80	0.00	0.00
122.5		51.67	162.37	0.00	0.00
125.0		50.89	159.84	0.00	0.00
127.5		50.11	157.31	0.00	0.00
130.0		49.30	154.77	0.00	0.00
131.0		1,022.61	1,675.20	0.00	0.00
132.5		28.96	76.28	0.00	0.00
135.0		47.64	125.11	0.00	0.00
137.5		46.79	122.58	0.00	0.00
138.0		1,482.15	2,518.31	0.00	1,141.10
140.0		36.65	83.08	0.00	0.00
	Totals:	9,600.45	40,255.94	0.00	1,141.10

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

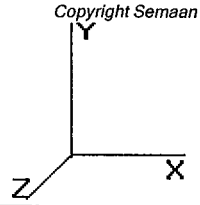


Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-9.612	-40.253	0.000	0.000	0.000	-960.325	0.000	0.000	0.000	0.000
2.50	-9.566	-39.485	0.000	0.000	0.000	-936.296	-0.009	0.000	0.009	-0.033
5.00	-9.520	-38.725	0.000	0.000	0.000	-912.382	-0.035	0.000	0.035	-0.067
7.50	-9.474	-37.970	0.000	0.000	0.000	-888.582	-0.079	0.000	0.079	-0.100
10.00	-9.428	-37.223	0.000	0.000	0.000	-864.898	-0.141	0.000	0.141	-0.134
12.50	-9.382	-36.483	0.000	0.000	0.000	-841.328	-0.220	0.000	0.220	-0.168
15.00	-9.336	-35.749	0.000	0.000	0.000	-817.874	-0.318	0.000	0.318	-0.202
17.50	-9.290	-35.022	0.000	0.000	0.000	-794.534	-0.433	0.000	0.433	-0.237
20.00	-9.244	-34.302	0.000	0.000	0.000	-771.309	-0.566	0.000	0.566	-0.271
22.50	-9.198	-33.589	0.000	0.000	0.000	-748.198	-0.718	0.000	0.718	-0.306
25.00	-9.152	-32.882	0.000	0.000	0.000	-725.203	-0.888	0.000	0.888	-0.341
27.50	-9.106	-32.182	0.000	0.000	0.000	-702.322	-1.076	0.000	1.076	-0.376
30.00	-9.061	-31.489	0.000	0.000	0.000	-679.556	-1.282	0.000	1.282	-0.411
32.50	-9.015	-30.803	0.000	0.000	0.000	-656.905	-1.507	0.000	1.507	-0.447
35.00	-8.968	-30.124	0.000	0.000	0.000	-634.369	-1.751	0.000	1.751	-0.482
37.50	-8.920	-29.451	0.000	0.000	0.000	-611.951	-2.013	0.000	2.013	-0.518
40.00	-8.870	-28.785	0.000	0.000	0.000	-589.652	-2.294	0.000	2.294	-0.553
42.50	-8.820	-28.126	0.000	0.000	0.000	-567.477	-2.593	0.000	2.593	-0.589
45.00	-8.765	-27.476	0.000	0.000	0.000	-545.427	-2.911	0.000	2.911	-0.625
46.25	-8.739	-27.152	0.000	0.000	0.000	-534.472	-3.077	0.000	3.077	-0.643
47.50	-8.713	-26.571	0.000	0.000	0.000	-523.548	-3.248	0.000	3.248	-0.661
50.00	-8.647	-25.423	0.000	0.000	0.000	-501.765	-3.604	0.000	3.604	-0.696
51.00	-8.624	-24.966	0.000	0.000	0.000	-493.118	-3.751	0.000	3.751	-0.710
52.50	-8.593	-24.579	0.000	0.000	0.000	-480.182	-3.978	0.000	3.978	-0.732
55.00	-8.535	-23.941	0.000	0.000	0.000	-458.699	-4.370	0.000	4.370	-0.764
57.50	-8.477	-23.310	0.000	0.000	0.000	-437.361	-4.779	0.000	4.779	-0.797
60.00	-8.417	-22.686	0.000	0.000	0.000	-416.170	-5.205	0.000	5.205	-0.829
62.50	-8.357	-22.069	0.000	0.000	0.000	-395.127	-5.647	0.000	5.647	-0.861
65.00	-8.297	-21.459	0.000	0.000	0.000	-374.234	-6.107	0.000	6.107	-0.892
67.50	-8.236	-20.855	0.000	0.000	0.000	-353.493	-6.582	0.000	6.582	-0.923
70.00	-8.175	-20.259	0.000	0.000	0.000	-332.903	-7.074	0.000	7.074	-0.954
72.50	-8.113	-19.669	0.000	0.000	0.000	-312.467	-7.582	0.000	7.582	-0.984
75.00	-8.048	-19.088	0.000	0.000	0.000	-292.186	-8.105	0.000	8.105	-1.013
76.00	-6.947	-17.160	0.000	0.000	0.000	-284.138	-8.319	0.000	8.319	-1.025
77.50	-6.911	-16.830	0.000	0.000	0.000	-273.718	-8.644	0.000	8.644	-1.043
80.00	-6.848	-16.286	0.000	0.000	0.000	-256.442	-9.197	0.000	9.197	-1.071
82.50	-6.784	-15.749	0.000	0.000	0.000	-239.323	-9.766	0.000	9.766	-1.099
85.00	-6.720	-15.219	0.000	0.000	0.000	-222.362	-10.348	0.000	10.348	-1.126
87.00	-6.055	-13.122	0.000	0.000	0.000	-208.921	-10.825	0.000	10.825	-1.147
87.50	-6.045	-13.022	0.000	0.000	0.000	-205.893	-10.945	0.000	10.945	-1.153
90.00	-5.981	-12.531	0.000	0.000	0.000	-190.781	-11.556	0.000	11.556	-1.178
92.50	-5.916	-12.047	0.000	0.000	0.000	-175.827	-12.179	0.000	12.179	-1.203
93.50	-5.892	-11.855	0.000	0.000	0.000	-169.911	-12.433	0.000	12.433	-1.213
95.00	-5.852	-11.479	0.000	0.000	0.000	-161.074	-12.816	0.000	12.816	-1.228
97.25	-5.790	-10.923	0.000	0.000	0.000	-147.907	-13.400	0.000	13.400	-1.249
97.50	-5.789	-10.897	0.000	0.000	0.000	-146.459	-13.465	0.000	13.465	-1.251
100.0	-4.532	-8.341	0.000	0.000	0.000	-131.987	-14.136	0.000	14.136	-1.306
102.5	-4.478	-8.137	0.000	0.000	0.000	-120.656	-14.834	0.000	14.834	-1.359
105.0	-4.423	-7.935	0.000	0.000	0.000	-109.462	-15.560	0.000	15.560	-1.409
107.5	-4.369	-7.737	0.000	0.000	0.000	-98.404	-16.311	0.000	16.311	-1.458
110.0	-4.314	-7.541	0.000	0.000	0.000	-87.482	-17.087	0.000	17.087	-1.503



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

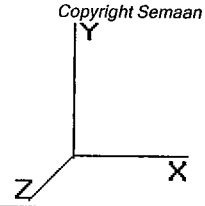
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.5	-4.260	-7.348	0.000	0.000	0.000	-76.696	-17.886	0.000	17.886	-1.546
115.0	-4.206	-7.158	0.000	0.000	0.000	-66.046	-18.706	0.000	18.706	-1.585
117.5	-4.151	-6.971	0.000	0.000	0.000	-55.532	-19.546	0.000	19.546	-1.621
120.0	-3.018	-5.149	0.000	0.000	0.000	-45.154	-20.404	0.000	20.404	-1.652
122.5	-2.963	-4.987	0.000	0.000	0.000	-37.610	-21.276	0.000	21.276	-1.679
125.0	-2.910	-4.828	0.000	0.000	0.000	-30.202	-22.162	0.000	22.162	-1.703
127.5	-2.856	-4.671	0.000	0.000	0.000	-22.928	-23.059	0.000	23.059	-1.723
130.0	-2.803	-4.517	0.000	0.000	0.000	-15.787	-23.966	0.000	23.966	-1.738
131.0	-1.730	-2.874	0.000	0.000	0.000	-12.984	-24.330	0.000	24.330	-1.743
132.5	-1.700	-2.798	0.000	0.000	0.000	-10.388	-24.879	0.000	24.879	-1.749
135.0	-1.648	-2.675	0.000	0.000	0.000	-6.139	-25.797	0.000	25.797	-1.757
137.5	-1.598	-2.553	0.000	0.000	0.000	-2.018	-26.718	0.000	26.718	-1.761
138.0	-0.039	-0.082	0.000	0.000	0.000	-0.078	-26.903	0.000	26.903	-1.761
140.0	-0.037	0.000	0.000	0.000	0.000	0.000	-27.640	0.000	27.640	-1.761

Pole : 310968
Location : WSPT-Westport Rebuild CT, CT
Height : 140.0 (ft)
Shape : 18 Sides
Base Dia : 47.13 (in)
Top Dia : 20.50 (in)
Taper : 0.200036 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

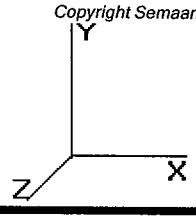


Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

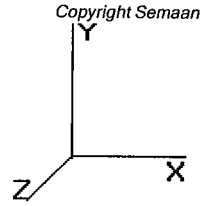
Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.54	0.26	0.00	0.00	0.00	13.56	14.12	52.0	0.0	0.272
2.50	0.54	0.26	0.00	0.00	0.00	13.51	14.06	52.0	0.0	0.271
5.00	0.53	0.26	0.00	0.00	0.00	13.46	14.00	52.0	0.0	0.269
7.50	0.53	0.27	0.00	0.00	0.00	13.40	13.94	52.0	0.0	0.268
10.00	0.53	0.27	0.00	0.00	0.00	13.34	13.88	52.0	0.0	0.267
12.50	0.52	0.27	0.00	0.00	0.00	13.28	13.81	52.0	0.0	0.266
15.00	0.52	0.27	0.00	0.00	0.00	13.21	13.73	52.0	0.0	0.264
17.50	0.51	0.27	0.00	0.00	0.00	13.13	13.65	52.0	0.0	0.263
20.00	0.51	0.28	0.00	0.00	0.00	13.05	13.56	52.0	0.0	0.261
22.50	0.50	0.28	0.00	0.00	0.00	12.96	13.47	52.0	0.0	0.259
25.00	0.50	0.28	0.00	0.00	0.00	12.87	13.38	52.0	0.0	0.257
27.50	0.49	0.28	0.00	0.00	0.00	12.77	13.27	52.0	0.0	0.255
30.00	0.49	0.28	0.00	0.00	0.00	12.66	13.16	52.0	0.0	0.253
32.50	0.48	0.29	0.00	0.00	0.00	12.55	13.04	52.0	0.0	0.251
35.00	0.48	0.29	0.00	0.00	0.00	12.43	12.92	52.0	0.0	0.249
37.50	0.47	0.29	0.00	0.00	0.00	12.30	12.78	52.0	0.0	0.246
40.00	0.47	0.29	0.00	0.00	0.00	12.16	12.64	52.0	0.0	0.243
42.50	0.46	0.29	0.00	0.00	0.00	12.02	12.49	52.0	0.0	0.240
45.00	0.46	0.30	0.00	0.00	0.00	11.86	12.33	52.0	0.0	0.237
46.25	0.46	0.30	0.00	0.00	0.00	11.78	12.25	52.0	0.0	0.236
47.50	0.45	0.30	0.00	0.00	0.00	11.70	12.16	52.0	0.0	0.234
50.00	0.44	0.30	0.00	0.00	0.00	11.52	11.97	52.0	0.0	0.230
51.00	0.42	0.29	0.00	0.00	0.00	10.84	11.27	52.0	0.0	0.217
52.50	0.42	0.29	0.00	0.00	0.00	10.73	11.16	52.0	0.0	0.215
55.00	0.41	0.30	0.00	0.00	0.00	10.53	10.95	52.0	0.0	0.211
57.50	0.41	0.30	0.00	0.00	0.00	10.32	10.74	52.0	0.0	0.207
60.00	0.40	0.30	0.00	0.00	0.00	10.10	10.52	52.0	0.0	0.202
62.50	0.40	0.30	0.00	0.00	0.00	9.87	10.28	52.0	0.0	0.198
65.00	0.39	0.30	0.00	0.00	0.00	9.62	10.03	52.0	0.0	0.193
67.50	0.39	0.31	0.00	0.00	0.00	9.36	9.76	52.0	0.0	0.188
70.00	0.38	0.31	0.00	0.00	0.00	9.08	9.47	52.0	0.0	0.182
72.50	0.37	0.31	0.00	0.00	0.00	8.78	9.17	52.0	0.0	0.176
75.00	0.37	0.31	0.00	0.00	0.00	8.47	8.85	52.0	0.0	0.170
76.00	0.33	0.27	0.00	0.00	0.00	8.34	8.68	52.0	0.0	0.167
77.50	0.33	0.27	0.00	0.00	0.00	8.18	8.53	52.0	0.0	0.164
80.00	0.32	0.27	0.00	0.00	0.00	7.91	8.25	52.0	0.0	0.159
82.50	0.32	0.28	0.00	0.00	0.00	7.63	7.96	52.0	0.0	0.153
85.00	0.31	0.28	0.00	0.00	0.00	7.32	7.65	52.0	0.0	0.147
87.00	0.27	0.25	0.00	0.00	0.00	7.06	7.35	52.0	0.0	0.141
87.50	0.27	0.25	0.00	0.00	0.00	7.01	7.29	52.0	0.0	0.140
90.00	0.27	0.26	0.00	0.00	0.00	6.72	7.00	52.0	0.0	0.135
92.50	0.26	0.26	0.00	0.00	0.00	6.41	6.68	52.0	0.0	0.129
93.50	0.26	0.26	0.00	0.00	0.00	6.28	6.55	52.0	0.0	0.126
95.00	0.25	0.26	0.00	0.00	0.00	6.08	6.35	52.0	0.0	0.122
97.25	0.64	0.68	0.00	0.00	0.00	14.48	15.16	51.3	0.0	0.295
97.50	0.64	0.68	0.00	0.00	0.00	14.39	15.07	51.4	0.0	0.293
100.00	0.50	0.54	0.00	0.00	0.00	13.43	13.96	51.8	0.0	0.270
102.50	0.49	0.55	0.00	0.00	0.00	12.72	13.25	52.0	0.0	0.255
105.00	0.49	0.55	0.00	0.00	0.00	11.97	12.50	52.0	0.0	0.240
107.50	0.48	0.55	0.00	0.00	0.00	11.17	11.69	52.0	0.0	0.225
110.00	0.48	0.56	0.00	0.00	0.00	10.31	10.84	52.0	0.0	0.208



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 25 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

112.50	0.48	0.56	0.00	0.00	0.00	9.39	9.92	52.0	0.0	0.191
115.00	0.48	0.56	0.00	0.00	0.00	8.41	8.94	52.0	0.0	0.172
117.50	0.47	0.57	0.00	0.00	0.00	7.36	7.90	52.0	0.0	0.152
120.00	0.36	0.42	0.00	0.00	0.00	6.24	6.63	52.0	0.0	0.128
122.50	0.35	0.42	0.00	0.00	0.00	5.42	5.81	52.0	0.0	0.112
125.00	0.35	0.42	0.00	0.00	0.00	4.54	4.94	52.0	0.0	0.095
127.50	0.34	0.42	0.00	0.00	0.00	3.60	4.01	52.0	0.0	0.077
130.00	0.34	0.43	0.00	0.00	0.00	2.59	3.02	52.0	0.0	0.058
131.00	0.22	0.27	0.00	0.00	0.00	2.17	2.43	52.0	0.0	0.047
132.50	0.22	0.26	0.00	0.00	0.00	1.78	2.05	52.0	0.0	0.039
135.00	0.21	0.26	0.00	0.00	0.00	1.10	1.39	52.0	0.0	0.027
137.50	0.21	0.26	0.00	0.00	0.00	0.38	0.74	52.0	0.0	0.014
138.00	0.01	0.01	0.00	0.00	0.00	0.01	0.02	52.0	0.0	0.000
140.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	52.0	0.0	0.000



Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	31.1	0.00	40.23	0.00	0.00	3108.01	47.48	51.3	97.25	0.925
Ice	26.1	0.00	46.61	0.00	0.00	2663.48	42.08	51.3	97.25	0.820
Twist/Sway	9.6	0.00	40.25	0.00	0.00	960.32	15.16	51.3	97.25	0.295

Base/Flange Plate	Plate Type	*Baseplate*	
	Pole Diameter	47.13	in
	Pole Thickness	0.5	in
	Plate Length	54	in
	Plate Thickness	3.25	in
	Plate Fy	50	ksi
	Weld Length	0.5	in
	ϕ_s Resistance	1652.86	k-in
	Applied	1085.56	k-in
Stiffeners	#	*0*	

Bolts	#	*16*	
	Bolt Circle	54	in
	(R)adial / (S)quare	S	
	Bolt Gap	6	in
	Diameter	2.25	in
	Hole Diameter	2.75	in
	Type	#18J	
	Fy	75	ksi
	Fu	100	ksi
	ϕ_s Resistance	174.95	k
	Applied	173.97	k
Reinforcement ●	#	*0*	
Extra Bolts O	#	*0*	

Code Rev.	*F*
A.S.I.	1.33
Moment	3108.0 k-ft
Axial	40.2 k

Date	5/19/2011
Engineer	CM
Site #	310968
Carrier	Verizon

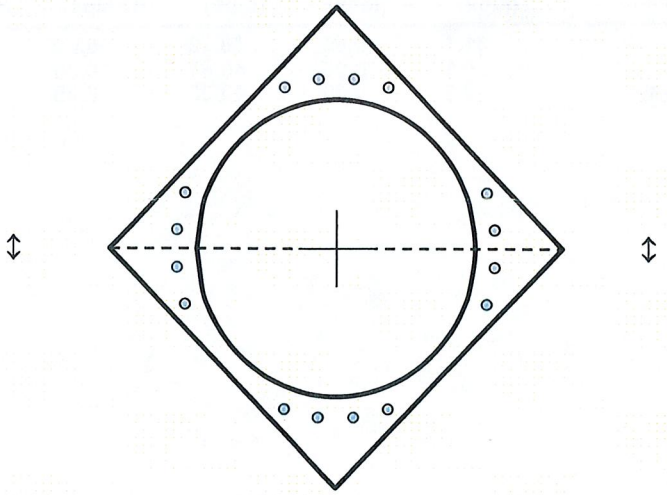
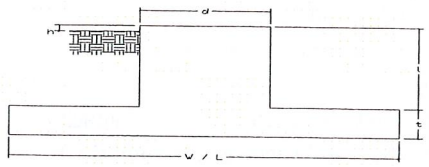


Plate Stress Ratio:
0.66 (Pass)

Bolt Stress Ratio:
0.99 (Pass)

Site Name:	WSPT-Westport Rebuild CT, CT
Site Number:	310968
Engineering Number:	47017523
Engineer:	C. Minor
Date:	05/19/11
Tower Type:	MP

Program Last Updated: *8/30/2010*



Design Loads (Unfactored)

Foundation Mapped:	N	
Compression/Leg:	40.2	k
Uplift/Leg:	0.0	k
Total Shear:	31.1	k
Moment:	3108.0	k-ft
Tower + Appurtenance Weight:	40.2	k
Depth to Base of Foundation:	7.00	ft
Diameter of Pier (d):	6.77	ft
Height of Pier above Ground (h):	0.50	
Width of Pad (W):	23.00	ft
Length of Pad (L):	23.00	ft
Thickness of Pad (t):	4.00	ft
Tower Leg Center to Center:	0.00	ft
Number of Tower Legs:	1.0	(1 if MP or GT)
Tower Center from Mat Center:	0.00	ft
Depth Below Ground Surface to Water Table:	100.00	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil Above Water Table:	115.0	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	65.0	pcf
Friction Angle of Uplift:	31.00	Degrees
Ultimate Coefficient of Shear Friction:	0.34	
Allowable Compressive Bearing Pressure:	10000.0	psf
Ultimate Passive Pressure on Pad Face:	10500.0	psf
Allowable Capacity Increase:	1.00	

Concrete Strength (f'_c):	3000 psi
Pad Tension Steel Depth:	44.00 in
Wind Load Factor:	1.3
ϕ_{Shear}:	0.75
$\phi_{Flexure\ /\ Tension}$:	0.90
$\phi_{Compression}$:	0.65
β:	0.85
Bottom Pad Rebar Size #:	9
# of Bottom Pad Rebar:	25
Pad Bottom Steel Area:	25.00 in^2
Pad Steel F_y:	60000 psi
Top Pad Rebar Size #:	9
# of Top Pad Rebar:	25
Pad Top Steel Area:	25.00 in^2
Pier Rebar Size #:	11
Pier Steel Area (Single Bar):	1.56 in^2
# of Pier Rebar:	40
Pier Steel F_y:	60000 psi
Pier Cage Diameter:	73.2 in
Rebar Strain Limit:	0.008
Steel Elastic Modulus:	29000 ksi
Tie Rebar Size #:	4
Tie Steel Area (Single Bar):	0.20 in^2
Tie Spacing:	6 in
Tie Steel F_y:	60000 psi

Overturning Factor of Safety

Design OTM:	3341.3	k-ft
OTM Resistance:	8628.3	k-ft
OTM Resistance / Design OTM Factor of Safety:	2.58	Result: OK

Soil Bearing Pressure Usage:

Total Weight (Foundation, Soil, Tower):	546.6	k
Net Bearing Pressure:	3049	psf
Allowable Bearing Pressure:	10000	psf
Net Bearing Pressure/Allowable Bearing Pressure:	0.30	Result: OK
Load Direction Controling Design Bearing Pressure:	Diagonal to Pad Edge	

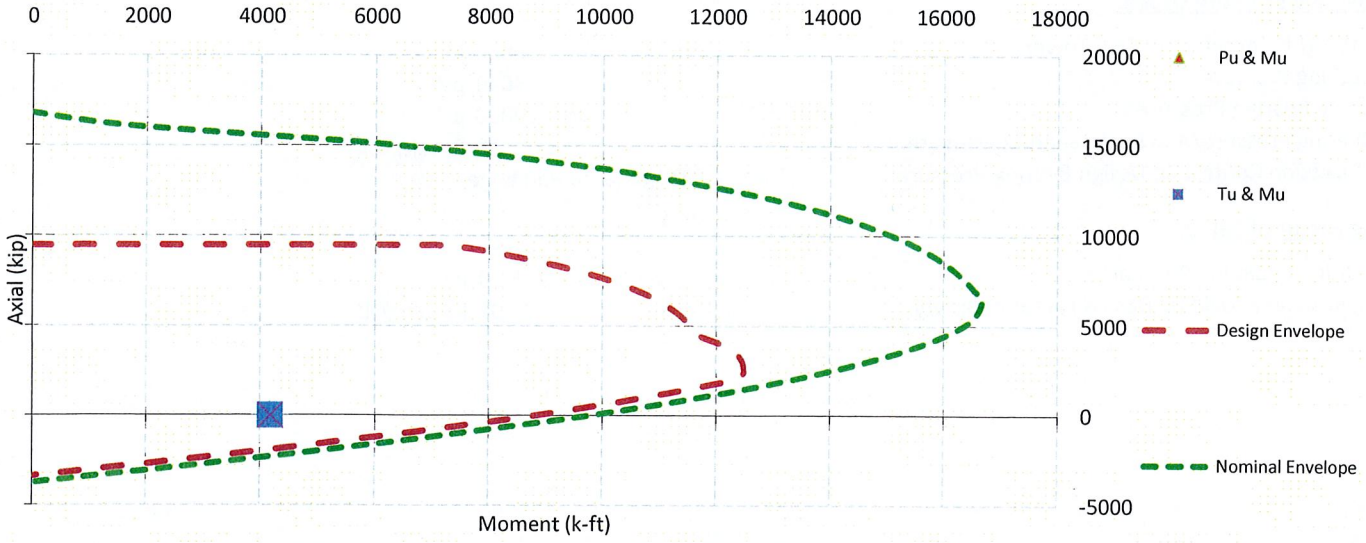
Sliding Factor of Safety

Total Ultimate Sliding Resistance:	1151.8	k
Sliding Resistance/Sliding Design Factor of Safety:	37.04	Result: OK

One Way Shear, Flexual Capacity, and Punching Shear

Factored One Way Shear (V_u):	211.1	k
One Way Shear Capacity (ϕV_c):	799.2	k - ACI11.3.1.1
$V_u / \phi V_c$:	0.26	Result: OK
Load Direction Controling Shear Capacity:	Diagonal to Pad Edge	
Lower Pad Steel Factored Moment (M_u):	1616.8	k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	4848.1	k-ft - ACI10.3
$M_u / \phi M_n$:	0.33	Result: OK
Load Direction Controling Flexural Capacity:	Parallel to Pad Edge	
Upper Steel Pad Factored Moment (M_u):	1105.9	k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	4848.1	k-ft
$M_u / \phi M_n$:	0.23	Result: OK
Lower Pad Flexural Reinforcement Ratio:	0.0021	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0021	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Lower Pad Reinforcement Spacing:	11	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	11	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	0.0	k
Nominal Punching Shear Capacity ($\phi_c V_n$):	2844.6	k - ACI11.12.2.1
$V_u / \phi V_c$:	0.00	Result: OK
Factored Moment in Pier (M_u):	4181.9	k-ft
Pier Moment Capacity (ϕM_n):	10058.4	k-ft
$M_u / \phi M_n$:	0.42	Result: OK
Factored Shear in Pier (V_u):	40.4	k
Pier Shear Capacity (ϕV_n):	427.5	k
$V_u / \phi V_c$:	0.09	Result: OK
Pier Shear Reinforcement Ratio:	0.0004	No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k
Pier Tension Capacity (ϕT_n):	3369.6	k
$T_u / \phi T_n$:	0.00	Result: OK
Factored Compression in Pier (P_u):	52.3	k
Pier Compression Capacity (ϕP_n):	8737.6	k - ACI10.3.6.2
$P_u / \phi P_n$:	0.01	Result: OK
Pier Compression Reinforcement Ratio:	0.012	OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u/\phi_B M_n + T_u/\phi_T T_n$:	0.42	Result: OK

Nominal and Design Moment Capacity and Factored Design Loads



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kbaldwin@rc.com
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November 16, 2011

Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Completion of Construction Activity**
EM-VER-142-100331 – 319 Peter Green Road, Ellington, CT
EM-VER-078-110429 – 230 Clover Mill Road, Mansfield, CT
EM-VER-104-110408 – 2 Hinckley Hill Road, Norwich, CT
EM-VER-158-110614 – Bayberry Road, Westport, CT
EM-VER-110-110907 – 1 Central Square, Plainville, CT

Dear Ms. Roberts:

The purpose of this letter is to notify the Council that construction activity associated with each of the above-referenced facility modifications has been completed. If you have any questions or need any additional information regarding any of these facilities, please do not hesitate to contact me.

Sincerely,

Kenneth C. Baldwin

Copy to:
Sandy M. Carter

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