

# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso

Chairman

February 16, 2007

Thomas J. Regan, Esq.  
Brown Rudnick Berlack Israels LLP  
CityPlace I, 185 Asylum Street  
Hartford, CT 06103

RE: **TS-SPRINT-NEXTEL-132-061208** - Sprint Nextel Corporation request for an order to approve tower sharing at an existing telecommunications facility located at 300 Governor's Highway, South Windsor, Connecticut.

Dear Attorney Regan:

At a public meeting held February 6, 2007, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. 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. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction. Please be advised that the validity of this action shall expire one year from the date of this letter.

The proposed shared use is to be implemented as specified in your letter dated December 8, 2006, including the placement of all necessary equipment and shelters within the tower compound.

Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in black ink, appearing to read "Daniel F. Caruso". It is written in a cursive style with a long horizontal line extending from the end of the signature.

Daniel F. Caruso  
Chairman

DFC/MP/laf

- c: The Honorable Matthew Streeter, Mayor, Town of South Windsor
- Marcia Banach, Director of Planning, Town of South Windsor
- Christine Farrell, T-Mobile
- Michele G. Briggs, New Cingular Wireless PCS, LLC
- Christopher B. Fisher, Esq., Cuddy & Feder LLP

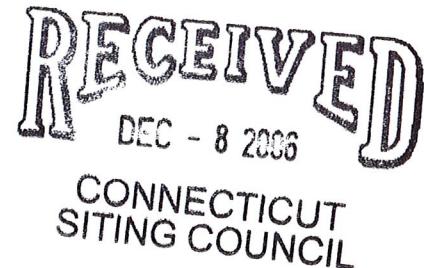
THOMAS J. REGAN  
 direct dial: (860) 509-6522  
 tregan@brownrudnick.com

**VIA HAND DELIVERY**

CityPlace I  
 185 Asylum  
 Street  
 Hartford  
 Connecticut  
 06103  
 tel 860.509.6500  
 fax 860.509.6501

December 8, 2006

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

**RE: Sprint Nextel's Tower Sharing Application / South Windsor**

Dear Mr. Phelps:

Enclosed for filing are an original and 25 copies of Sprint Nextel Corporation's Tower Sharing Application for the T-Mobile tower located at 300 Governor's Highway in South Windsor. An electronic copy of this filing has been e-mailed to Ms. Fontaine and Ms. Mulcahy. Please do not hesitate to contact me with any questions.

Very truly yours,

**BROWN RUDNICK BERLACK ISRAELS LLP**

By:   
 Thomas J. Regan

Enclosures

# 40237764 v1 - MERCIECM - 080563/3238

## **CONNECTICUT SITING COUNCIL**

In re:

Request of Sprint Nextel Corporation for the :  
Approval of the Shared Use of the Existing :  
Tower Located at 300 Governor's Highway, :  
South Windsor, Connecticut. : December 8, 2006

### **TOWER SHARING PROPOSAL**

Sprint Nextel Corporation (“Sprint”) proposes herein to share an existing telecommunications tower (the “Tower”) and associated compound located at 300 Governor’s Highway in South Windsor, Connecticut (the “Facility”). Pursuant to Connecticut General Statutes §16-50aa (the “Statute”), Sprint requests a finding from the Connecticut Siting Council (the “Council”) that the shared use of this Facility is technically, legally, environmentally and economically feasible, will meet public safety concerns, will avoid the unnecessary proliferation of towers and is in the public interest. Sprint further requests an order approving the proposed shared use of this Facility.

The purpose of this request is to use an existing telecommunications tower within South Windsor to meet Sprint’s CDMA and iDEN network coverage needs in that area and to avoid the construction of an additional tower in South Windsor.

#### **A. The Facility**

The Facility is located at 300 Governor’s Highway in South Windsor, Connecticut. Electron Technologies Corporation owns the property and T-Mobile owns the Tower. The existing tower is a 169’ monopole with T-Mobile’s antenna centerline at 169’ and Cingular’s

antenna centerline at 162'. Both T-Mobile and Cingular have equipment shelters at the base of the monopole within the existing 50' x 50' compound. A site plan is attached under Tab 1.

**B. Proposed Project**

Sprint will install its three flush mount, dual band antennas on the monopole with a centerline at 152'. Sprint's base station equipment will be located in the southeast corner of the compound inside a 12' x 20' equipment shed. No increase in the size of the compound is necessary for the addition of Sprint's equipment. Sprint will also add stairs to the northeast side of the grid platform at the base of the monopole.

**C. Technical Feasibility**

Consistent with the requirements of the Statute, it is technically feasible for Sprint to collocate at this Facility. The Tower has been designed to carry the loads resulting from the collocation of Sprint's antennas and equipment at the ANSI/TIA/EIA minimum recommended standards. Attached as Tab 2 is a report from Semaan Engineering Solutions dated September 12, 2006 with additional information on the structural integrity of the Tower.

**D. Legal Feasibility**

The Council has the authority, pursuant to the Statute, to issue an order approving the shared use of this Tower. By issuing an order approving Sprint's use of the Tower, Sprint will be able to proceed with obtaining a building permit for its proposed installation on the tower. Therefore, consistent with the Statute, Sprint's proposal is legally feasible.

#### E. Economic Feasibility

Sprint is a wireless telecommunications provider licensed by the Federal Communications Commission in many major United States trading areas, including Connecticut. Sprint has entered into a lease with T-Mobile for the purpose of locating Sprint's antennas and associated equipment at the Facility to provide wireless telecommunications service to this area of South Windsor. Therefore, the shared use of this Facility is economically feasible.

#### F. Environmental Feasibility

Pursuant to the Statute, the proposal will be environmentally feasible for the following reasons:

- The overall impact on the Town of South Windsor will be decreased with the sharing of a single tower versus the proliferation of towers in this area.
- The proposal will not increase the height of the tower.
- The proposal will have an insignificant visual impact with the addition of Sprint's flush mount antennas and will not significantly alter the physical characteristics of the Facility.
- There will be no increased impact on any wetlands or water resources.
- There will be no increased impact on air quality because no air pollutants will be generated during the normal operation of the Facility.

- There will only be a brief, slight increase in noise pollution during the attachment of the antennas.
- During construction, the proposed project will generate a small amount of traffic as workers arrive and depart and materials are delivered. Upon completion, traffic will be limited to an average of one monthly maintenance/inspection visit.

#### G. Public Safety Concerns / Benefits

There will be no adverse impact to the health and safety of the surrounding community or the workers at the Facility due to the addition of Sprint's antennas to Tower. The total radio frequency exposure measured at the Facility will be well below the National Council on Radiation Protection and Measurements' (NCRP) standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis for Sprint's, T-Mobile's and Cingular's antennas, measured at the base of the Tower, indicates that, cumulatively, the antennas will emit 48.02 % of the NCRP's standard for maximum permissible exposure (see Tab 3). The cumulative power density indicates that the radio-frequency energy at the Facility will never be greater than 48.02 % of the maximum permissible exposure as mandated by the FCC even with extremely conservative assumptions.

Moreover, Sprint expects to enhance the safety of the South Windsor community by improving the wireless communications of local residents and travelers throughout the area. Currently, Sprint is unable to provide an acceptable level of service on both its iDEN and CDMA networks along Route 5 from the intersection of Route 194 to the intersection of Bidwell Road.

Sprint also has an area of weak coverage on Route 30 from Route 196 to the merge with Governor's Highway.

Conclusion

For the reasons stated above, the attachment of Sprint's antennas to this monopole would meet all the requirements set forth in the Statute. This proposal is technically, legally, environmentally and economically feasible and meets all public safety concerns. Therefore, Sprint respectfully requests that the Council approve this request for the shared use of the T-Mobile Tower located at 300 Governor's Highway in South Windsor, Connecticut.

Sprint Nextel Corporation,

By:   
\_\_\_\_\_  
Thomas J. Regan  
Brown Rudnick Berlack Israels LLP  
185 Asylum Street, CityPlace I  
Hartford, CT 06103-3402  
Phone - (860) 509-6522  
Fax - (860) 509-6501

# 40237753 v1 - MERCIECM - 080563/3238

# **CASCADE NO. CT60XC014**

# **GOVERNOR'S HIGHWAY**



## SITE INFORMATION

OWNER:	ELECTRON TECHNOLOGIES CORPORATION 300 GOVERNORS HIGHWAY SOUTH WINDSOR, CT. 06074
SPRINT SITE I.D.#:	CT60XC014
APPLICANT:	SPRINT 6580 SPRINT PARKWAY OVERLAND PARK, KS 66251-5110
SITE ADDRESS:	300 GOVERNORS HIGHWAY SOUTH WINDSOR, CT. 06074
COUNTY:	HARTFORD
LATITUDE:	42° 09' 45.65" N
LONGITUDE:	72° 36' 30.31" W
ZONING CLASSIFICATION:	INDUSTRIAL
JURISDICTION:	TOWN OF SOUTH WINDSOR
POWER COMPANY:	CL&P
TELEPHONE COMPANY:	AT&T
ENGINEER:	TECTONIC ENGINEERING & SURVEYING CONSULTANTS P.C. PHONE: (845) 567-6656 FAX: (845) 567-8703

IF USING 11"X17" PLOT, DRAWINGS  
WILL BE HALF SCALE

## **CONTACT INFORMATION**

ENGINEER: TECTONIC ENGINEERING &  
SURVEYING CONSULTANTS P.C.  
955 LITTLE BRITAIN ROAD  
NEW WINDSOR, NY. 12553

CONTACT: GREG LAHEY

PHONE: (845) 567-6656 (EXT.113)

DRIVING DIRECTIONS

DIRECTIONS FROM SPRINT RF MARKET OFFICE

START OUT GOING WEST ON BARNES INDUSTRIAL RD S TOWARD N MAIN ST EXT. TURN RIGHT ONTO N MAIN ST EXT. TURN LEFT ONTO IVES RD. TURN RIGHT ONTO N COLONY RD/US-5. MERGE ONTO CT-15N/ WILBUR CROSS PKWY TOWARD HARTFORD. MERGE ONTO I-91N VIA EXIT 68N-E TOWARD CT-66 E/ HARTFORD/ MIDDLETON. MERGE ONTO US-5N/CT-15N/ WILBUR CROSS HWY VIA EXIT 29 TOWARD I-84/ EAST HARTFORD/ BOSTON. TAKE THE MAIN STREET/ US-5N EXIT-90. TURN LEFT ONTO MAIN ST/US-5N. CONTINUE TO FOLLOW US-5N. TURN RIGHT ONTO GOVERNORS HWY. END AT 300 GOVERNORS HWY.

## APPROVALS

SPRINT REPRESENTATIVE: \_\_\_\_\_  
SPRINT RF ENGINEER: \_\_\_\_\_  
SITE OWNER: \_\_\_\_\_

## DRAWING INDEX

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



**UNDERGROUND  
SERVICE ALERT**  
**CALL TOLL FREE**  
**1-888-DIG-SAFE**

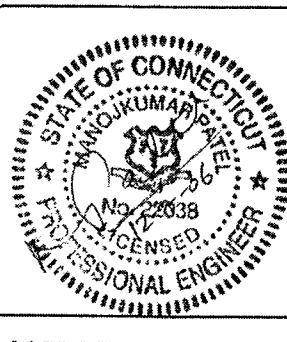
THREE WORKING DAYS BEFORE YOU DIG

# TECTONIC

- PLANNING  
ENGINEERING  
SURVEYING  
CONSTRUCTION MANAGEMENT**

**TECTONIC Engineering & Surveying Consultants P.C.**  
55 Little Britain Road  
New Windsor, NY 12553  
Phone: (845) 567-6556  
Fax: (845) 567-8703  
[www.tectonicengineering.com](http://www.tectonicengineering.com)

PROJECT NO:	2080.CT014
DRAWN BY:	VG
CHECKED BY:	GL



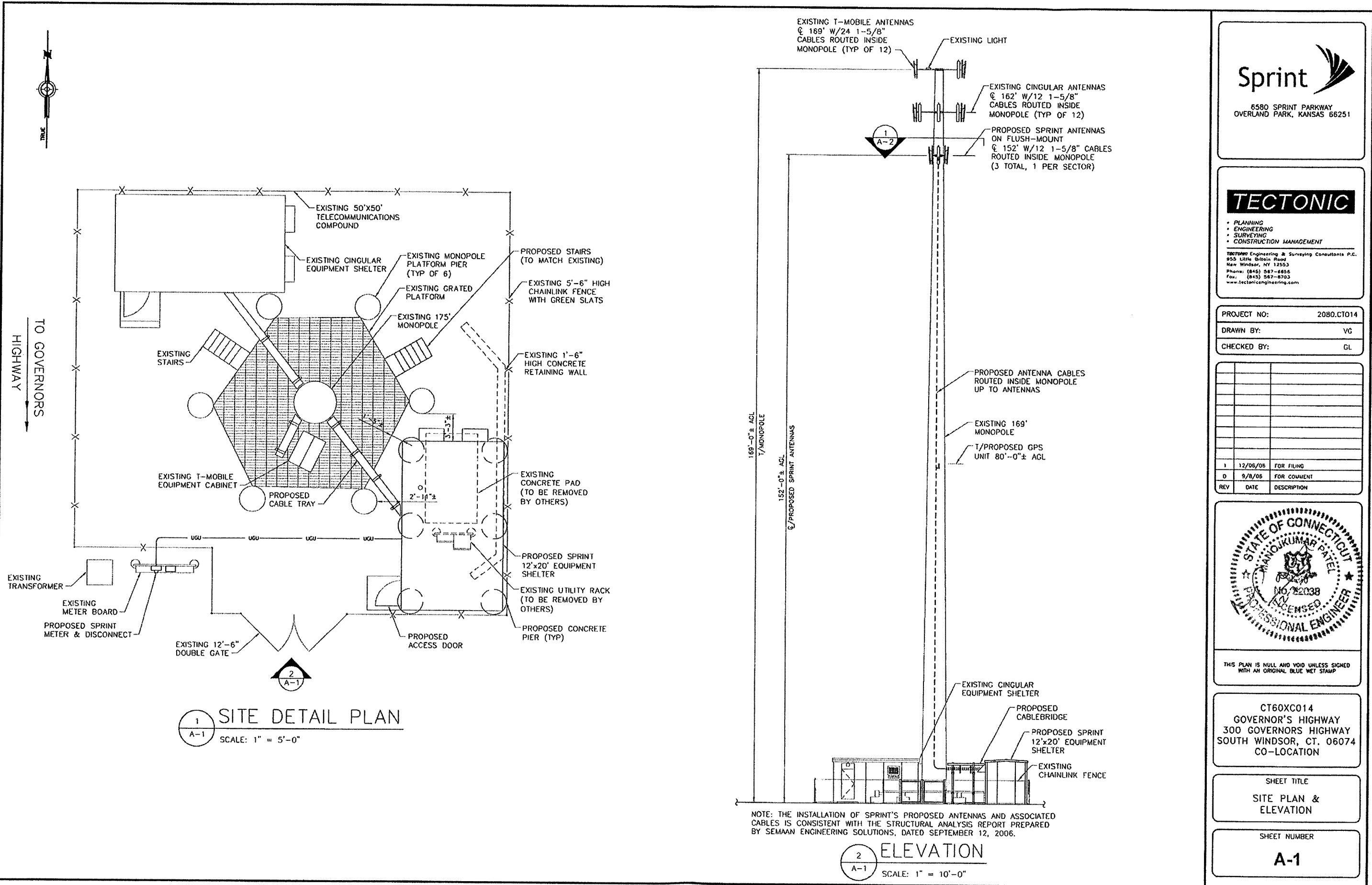
THIS PLAN IS NULL AND VOID UNLESS SIGNED  
WITH AN ORIGINAL BLUE WET STAMP

CT60XC014  
GOVERNOR'S HIGHWAY  
300 GOVERNORS HIGHWAY  
SOUTH WINDSOR, CT. 06074  
CO-LOCATION

SHEET TITLE

SHEET NUMBER

T 1





1079 N. 204<sup>th</sup> Avenue  
Elkhorn, NE 68022  
Ph: 402-289-1888  
Fax: 402-289-1861

## SEMAAN ENGINEERING SOLUTIONS

### 169 ft EEI Monopole Structural Analysis

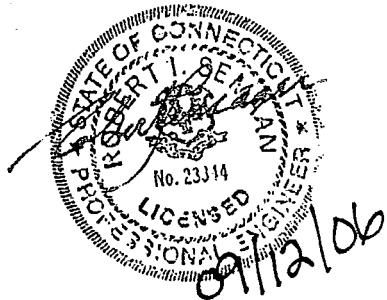
**APPROVED**

- 9/30/06

*[Signature]*  
T-Mobile Site Marketing

Prepared for:  
T-Mobile USA  
12920 SE 38th Street  
Bellevue, WA 98006

**Site: CT11279D / South Windsor - RT5 / Sprint  
South Windsor, CT**



**September 12, 2006**

Mr. Andrew Tung  
T-Mobile USA  
12920 SE 38th Street  
Bellevue, WA 98006

**Re: Site Number CT11279D – South Windsor - RT5, South Windsor, CT.**

Dear Mr. Tung:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the TIA/EIA-222 Rev F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

**Description of Structure:**

The structure is a 169 ft EEI Monopole.

Refer to EEI job #99-1371 Rev. 1 dated January 31, 20 for a detailed description of the structure.

**Method of analysis:**

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with **TIA/EIA-222 Rev F and local building codes for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed**. This wind speed is equivalent to a 100 mph 3-second gust per the IBC 2003. This is in conformance with the IBC 2003: Section 1609.1.1, Exception (5) and Section 3108.4. Wind is applied to the structure, accessories and antennas.

### Structure loading:

The following loads were used in the tower analysis:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
169.0	12	RR65-19-00XP	EEI Low Profile platform	(24) 1 5/8	T-Mobile
	12	S20045A1 LNA			
162.0	12	DUO4-8670	Low Profile platform	(12) 1 5/8	Cingular
	6	DD1900 TMA			
	3	CSS DBC-750			
122.0	1	HP MW Dish, 4' Dia.	Dish Mount	(1) 1-5/8	T-Mobile

### Proposed Loads:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
152.0	3	AP15/18-880/1940/065D/ADT/XP	Flush Mount	(15) 1 5/8	Sprint

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All transmission lines are assumed running inside of pole shaft.

### Results of Analysis:

Refer to the attached Computer Summary sheets for detailed analysis results.

### **Structure:**

The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 101.9%; which is within acceptable engineering tolerances.

### **Foundation:**

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,577.60	2,533.57	98.3
Shear (kips)	20.00	19.76	98.8

The analysis reactions are less than the design reactions therefore no foundation modifications are required.

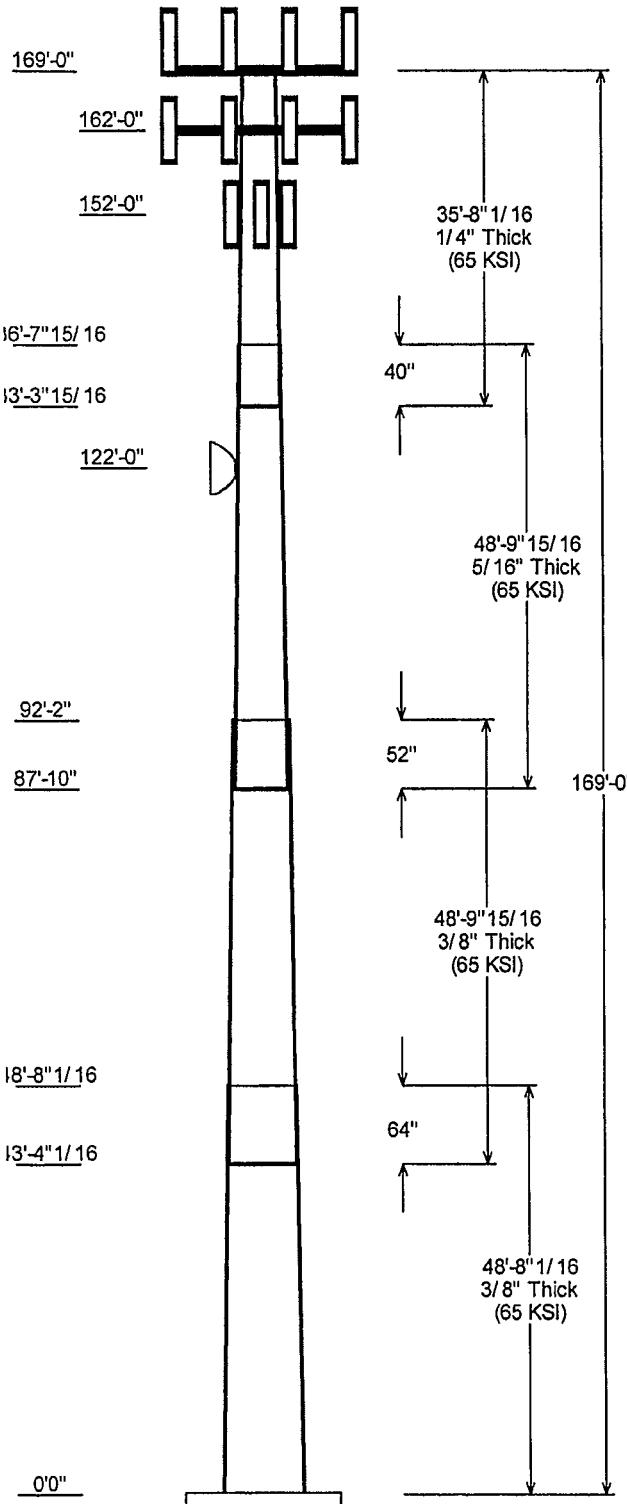
### Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the TIA/EIA-222 Rev F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed. This wind speed is equivalent to a 100 mph 3-second gust.

**SEMAAN ENGINEERING SOLUTIONS**

1079 N.204<sup>th</sup> Avenue  
Elkhorn, NE 68022  
Phone: 402-289-1888  
Fax: 402-289-1861

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**Job Information**

Pole : CT11279D	Code: TIA/EIA-222 Rev F
<b>Description :</b>	
Client:	T-Mobile USA-WA
Location :	South Windsor - RT5, South Windsor, CT
Shape :	18 Sides
Base Elev (ft):	4.00
Height : 169.00 (ft)	Taper: 0.188610(in/ft)

**Sections Properties**

Shaft Section	Length (ft)	Diameter (in) Accross Flats	Thick Top Bottom	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade	
1	48.670	36.320	45.500	0.375	0.000	0.188610	65	
2	48.830	28.866	38.076	0.375	Slip Joint	64.000	0.188610	65
3	48.830	21.099	30.309	0.313	Slip Joint	52.000	0.188610	65
4	35.670	15.500	22.228	0.250	Slip Joint	40.000	0.188610	65

**Discrete Appurtenance**

Attach Elev (ft)	Force Elev (ft)	Qty	Description
169.000	172.500	1	Beacon
169.000	172.500	12	S20045A1 LNA
169.000	172.500	12	RR65-19-00XP
169.000	169.000	1	EEI Low Profile platform
162.000	162.000	3	CSS DBC-750
162.000	162.000	6	DD1900 TMA
162.000	162.000	1	Low Profile platform
162.000	162.000	12	DUO4-8670
152.000	152.000	3	AP15/18-880/1940/065D/ADT/XP
122.000	122.000	1	HP MW Dish, 4' Dia.

**Linear Appurtenance**

Elev (ft) From	To	Description	Exposed To Wind
0.000	80.000	1/2" Coax	Yes
0.000	152.00	1 5/8 Coax	No
0.000	152.00	1 5/8 Coax	No
0.000	162.00	1 5/8 Coax	No
0.000	169.00	1 5/8 Coax	No
0.000	169.00	1 5/8 Coax	No

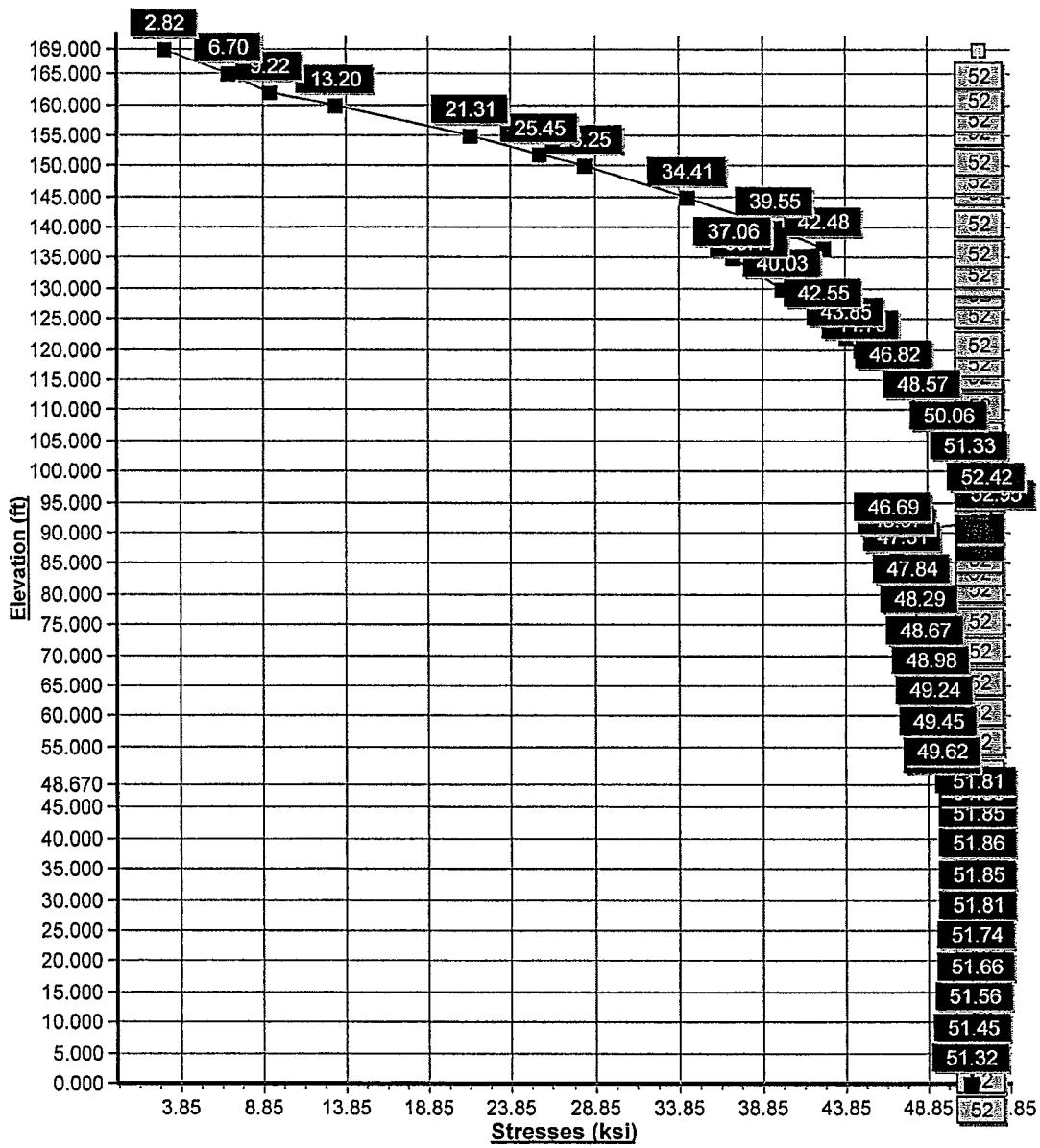
**Load Cases**

No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice

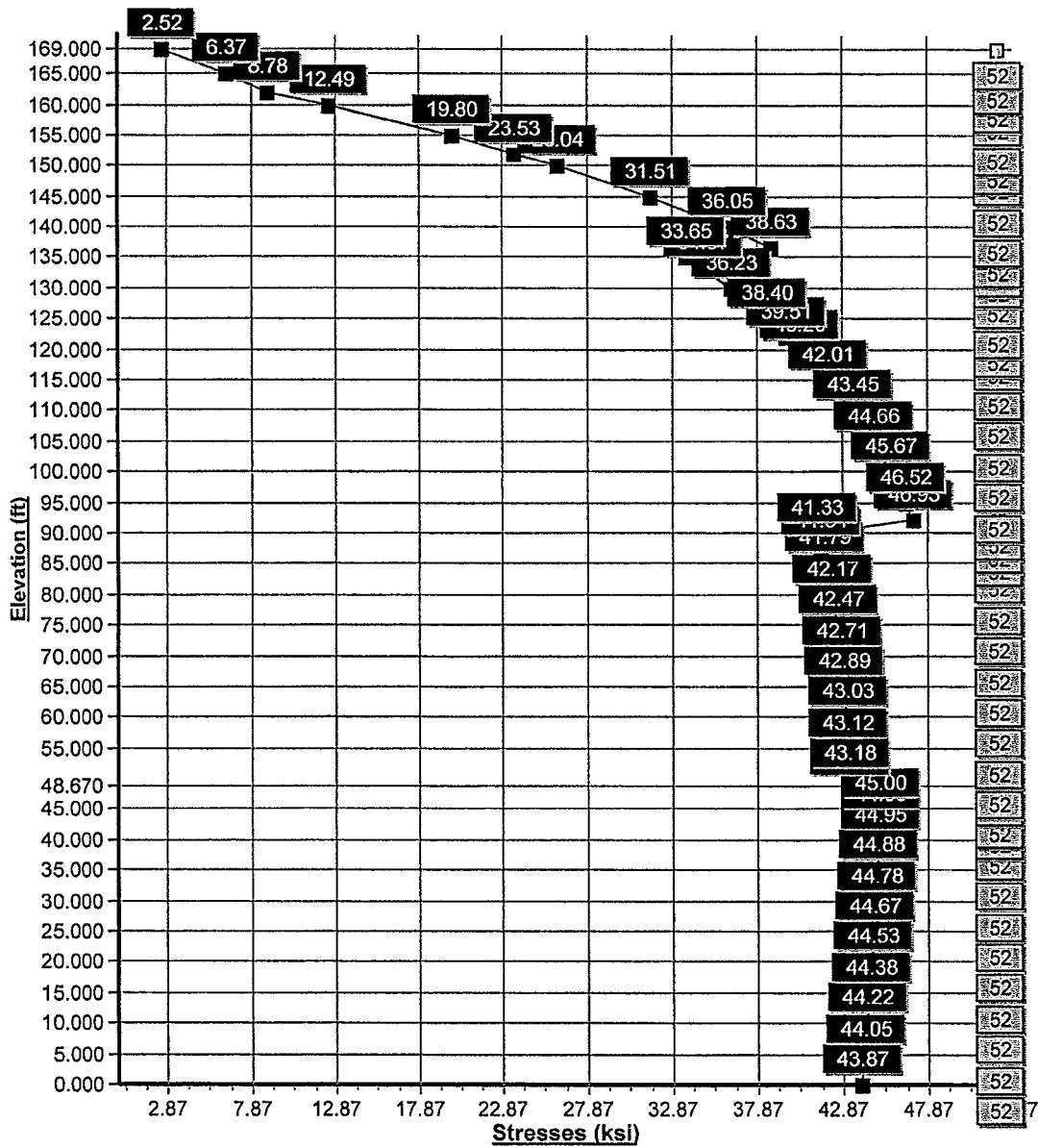
**Reactions**

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2533.57	19.76	25.61
Ice	2156.40	16.09	31.78

**Load Case : No Ice**  
**Max Stress 101.9% at 92.2ft**



**Load Case : Ice**  
**Max Stress 90.3% at 92.2ft**



Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

Code: TIA/EIA-222 Rev F

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Page: 1

Base Elev : 4.000 (ft)

Z / X

### Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top				Taper (in/ft)				
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)					
1	48.670	0.3750	65		0.00	7,990	45.50	0.000	53.71	13817.4	19.98	121.33	36.320	48.67	42.78	6984.0	15.67	96.85	0.18861
2	48.830	0.3750	65	Slip Joint	64.00	6,545	38.07	43.33	44.87	8058.3	16.49	101.54	28.866	92.16	33.91	3477.9	12.16	76.98	0.18861
3	48.830	0.3125	65	Slip Joint	52.00	4,185	30.30	87.83	29.75	3382.2	15.69	96.99	21.099	136.6	20.62	1125.5	10.49	67.52	0.18861
4	35.670	0.2500	65	Slip Joint	40.00	1,793	22.22	133.3	17.44	1064.2	14.27	88.91	15.500	169.0	12.10	355.5	9.52	62.00	0.18861
Shaft Weight						20,512													

### Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
169.00	Beacon	1	200.00	5.000	1.00	400.00	7.500	1.00	0.000	3.500
169.00	S20045A1 LNA	12	9.92	0.762	1.00	15.03	0.953	1.00	0.000	3.500
169.00	RR65-19-00XP	12	23.00	6.000	0.67	52.00	6.850	0.67	0.000	3.500
169.00	EEI Low Profile platform	1	1500.00	22.500	1.00	2250.00	28.200	1.00	0.000	0.000
162.00	CSS DBC-750	3	5.00	0.544	0.67	7.85	0.700	0.67	0.000	0.000
162.00	DD1900 TMA	6	26.00	1.390	0.67	35.50	1.633	0.67	0.000	0.000
162.00	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
162.00	DUO4-8670	12	30.80	6.533	1.00	73.00	7.150	1.00	0.000	0.000
152.00	AP15/18-	3	62.00	7.610	0.77	106.20	8.390	0.77	0.000	0.000
122.00	HP MW Dish, 4' Dia.	1	170.00	15.860	1.00	280.00	16.520	1.00	0.000	0.000
Totals		52	4291.64			7265.51			Number of Loadings : 10	

### Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	— No Ice —			— Ice —		
			Weight (lb/ft)	CaAa (sf/ft)		Weight (lb/ft)	CaAa (sf/ft)	
0.00	169.00	(12) 1 5/8 Coax	1.04	0.00		0.00	0.00	N
0.00	169.00	(12) 1 5/8 Coax	1.04	0.00		0.00	0.00	N
0.00	162.00	(12) 1 5/8 Coax	1.04	0.00		0.00	0.00	N
0.00	152.00	(6) 1 5/8 Coax	1.04	0.00		0.00	0.00	N
0.00	152.00	(9) 1 5/8 Coax	1.04	0.00		0.00	0.00	N
0.00	80.00	(1) 1/2" Coax	0.16	0.00		0.00	0.00	Y
Total Weight			848.95 (lb)			0.00 (lb)		

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

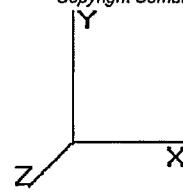
Code: TIA/EIA-222 Rev F

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Page: 2

Base Elev : 4.000 (ft)



**Segment Properties** (Max Len : 5 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		0.3750	45.500	53.708	13,817.4	19.98	121.33	65	52	0.0
5.00		0.3750	44.557	52.586	12,969.1	19.54	118.82	65	52	904.2
10.00		0.3750	43.614	51.463	12,156.2	19.10	116.30	65	52	885.1
15.00		0.3750	42.671	50.341	11,378.1	18.65	113.79	65	52	866.0
20.00		0.3750	41.728	49.218	10,633.8	18.21	111.27	65	52	846.9
25.00		0.3750	40.785	48.096	9,922.8	17.77	108.76	65	52	827.8
30.00		0.3750	39.842	46.974	9,244.2	17.32	106.24	65	52	808.8
35.00		0.3750	38.899	45.851	8,597.2	16.88	103.73	65	52	789.7
40.00		0.3750	37.956	44.729	7,981.2	16.44	101.21	65	52	770.6
43.34	Bot - Section 2	0.3750	37.326	43.980	7,586.9	16.14	99.54	65	52	503.6
45.00		0.3750	37.013	43.606	7,395.3	15.99	98.70	65	52	500.8
48.67	Top - Section 1	0.3750	37.070	43.675	7,430.3	16.02	98.85	65	52	1,090.0
50.00		0.3750	36.819	43.377	7,279.0	15.90	98.19	65	52	197.0
55.00		0.3750	35.876	42.254	6,728.4	15.46	95.67	65	52	728.5
60.00		0.3750	34.933	41.132	6,206.4	15.02	93.16	65	52	709.4
65.00		0.3750	33.990	40.009	5,712.0	14.57	90.64	65	52	690.3
70.00		0.3750	33.047	38.887	5,244.6	14.13	88.13	65	52	671.2
75.00		0.3750	32.104	37.764	4,803.5	13.68	85.61	65	52	652.1
80.00		0.3750	31.161	36.642	4,387.8	13.24	83.10	65	52	633.0
85.00		0.3750	30.218	35.520	3,996.8	12.80	80.58	65	52	613.9
87.83	Bot - Section 3	0.3750	29.684	34.884	3,785.9	12.55	79.16	65	52	339.4
90.00		0.3750	29.275	34.397	3,629.7	12.35	78.07	65	52	473.3
92.17	Top - Section 2	0.3125	29.491	28.941	3,113.2	15.23	94.37	65	52	466.7
95.00		0.3125	28.957	28.411	2,945.2	14.93	92.66	65	52	276.5
100.00		0.3125	28.014	27.475	2,663.8	14.40	89.64	65	52	475.4
105.00		0.3125	27.071	26.540	2,400.9	13.86	86.63	65	52	459.5
110.00		0.3125	26.128	25.605	2,155.9	13.33	83.61	65	52	443.6
115.00		0.3125	25.185	24.669	1,928.2	12.80	80.59	65	52	427.7
120.00		0.3125	24.242	23.734	1,717.1	12.27	77.57	65	52	411.8
122.00		0.3125	23.865	23.360	1,637.1	12.05	76.37	65	52	160.3
125.00		0.3125	23.299	22.799	1,521.9	11.74	74.56	65	52	235.6
130.00		0.3125	22.356	21.863	1,342.2	11.20	71.54	65	52	379.9
133.33	Bot - Section 4	0.3125	21.728	21.240	1,230.7	10.85	69.53	65	52	244.2
135.00		0.3125	21.413	20.928	1,177.2	10.67	68.52	65	52	218.2
136.66	Top - Section 3	0.2500	21.599	16.940	975.5	13.82	86.40	65	52	214.1
140.00		0.2500	20.970	16.440	891.7	13.38	83.88	65	52	189.5
145.00		0.2500	20.027	15.692	775.4	12.71	80.11	65	52	273.3
150.00		0.2500	19.084	14.944	669.7	12.05	76.33	65	52	260.6
152.00		0.2500	18.706	14.645	630.3	11.78	74.83	65	52	100.7
155.00		0.2500	18.140	14.196	574.0	11.38	72.56	65	52	147.2
160.00		0.2500	17.197	13.447	488.0	10.72	68.79	65	52	235.2
162.00		0.2500	16.820	13.148	456.1	10.45	67.28	65	52	90.5
165.00		0.2500	16.254	12.699	411.0	10.05	65.02	65	52	131.9
169.00		0.2500	15.500	12.100	355.5	9.52	62.00	65	52	168.8

20,512.5

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

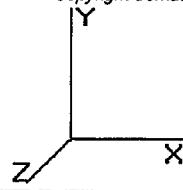
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Page: 3

Base Elev : 4.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

30 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	Wind	Dead	Tot Dead	
								Thick (in)	Tributary (ft)	Force X (lb)	Load Ice (lb)	Load (lb)
								Aa (sf)	CfAa (sf)			
	0.00		0.00	1.00	16.384	27.689	303.33	0.650	0.000	0.00	0.00	0.0
	5.00		0.00	1.00	16.384	27.689	297.04	0.650	0.000	5.00	18.762	12.20
	10.00		0.00	1.00	16.384	27.689	290.75	0.650	0.000	5.00	18.369	11.94
	15.00		0.00	1.00	16.384	27.689	284.47	0.650	0.000	5.00	17.976	11.68
	20.00		0.00	1.00	16.384	27.689	278.18	0.650	0.000	5.00	17.583	11.43
	25.00		0.00	1.00	16.384	27.689	271.89	0.650	0.000	5.00	17.190	11.17
	30.00		0.00	1.00	16.524	27.926	266.74	0.650	0.000	5.00	16.797	10.92
	35.00		0.00	1.04	17.185	29.043	265.58	0.650	0.000	5.00	16.404	10.66
	40.00		0.00	1.08	17.788	30.061	263.65	0.650	0.000	5.00	16.011	10.41
43.34	Bot - Section 2		0.00	1.10	18.163	30.695	262.00	0.650	0.000	3.34	10.466	6.80
45.00			0.00	1.12	18.343	31.000	261.08	0.650	0.000	1.66	5.256	3.42
48.67	Top - Section 1		0.00	1.14	18.726	31.646	258.86	0.650	0.000	3.67	11.443	7.44
50.00			0.00	1.15	18.859	31.872	263.35	0.650	0.000	1.33	4.095	2.66
55.00			0.00	1.18	19.343	32.689	259.87	0.650	0.000	5.00	15.145	9.84
60.00			0.00	1.20	19.797	33.458	256.00	0.650	0.000	5.00	14.752	9.59
65.00			0.00	1.23	20.228	34.185	251.78	0.650	0.000	5.00	14.359	9.33
70.00			0.00	1.26	20.636	34.875	247.25	0.650	0.000	5.00	13.966	9.08
75.00			0.00	1.28	21.025	35.532	242.45	0.650	0.000	5.00	13.573	8.82
80.00			0.00	1.30	21.397	36.161	237.40	0.650	0.000	5.00	13.180	8.57
85.00			0.00	1.32	21.753	36.763	232.13	0.650	0.000	5.00	12.787	8.31
87.83	Bot - Section 3		0.00	1.34	21.949	37.094	229.04	0.650	0.000	2.83	7.072	4.60
90.00			0.00	1.34	22.096	37.342	226.64	0.650	0.000	2.17	5.436	3.53
92.17	Top - Section 2		0.00	1.35	22.240	37.586	224.21	0.650	0.000	2.17	5.361	3.48
95.00			0.00	1.36	22.425	37.899	225.85	0.650	0.000	2.83	6.900	4.49
100.0			0.00	1.38	22.743	38.436	220.04	0.650	0.000	5.00	11.869	7.71
105.0			0.00	1.40	23.051	38.955	214.06	0.650	0.000	5.00	11.476	7.46
110.0			0.00	1.42	23.348	39.458	207.93	0.650	0.000	5.00	11.083	7.20
115.0			0.00	1.44	23.636	39.945	201.66	0.650	0.000	5.00	10.690	6.95
120.0			0.00	1.46	23.915	40.417	195.25	0.650	0.000	5.00	10.297	6.69
122.0	Appertunance(s)		0.00	1.46	24.025	40.602	192.65	0.650	0.000	2.00	4.009	2.61
125.0			0.00	1.47	24.187	40.876	188.72	0.650	0.000	3.00	5.895	3.83
130.0			0.00	1.49	24.451	41.323	182.07	0.650	0.000	5.00	9.511	6.18
133.3	Bot - Section 4		0.00	1.50	24.623	41.614	177.57	0.650	0.000	3.33	6.116	3.98
135.0			0.00	1.50	24.709	41.758	175.30	0.650	0.000	1.67	3.072	2.00
136.6	Top - Section 3		0.00	1.51	24.793	41.900	173.03	0.650	0.000	1.66	3.015	1.96
140.0			0.00	1.52	24.959	42.181	172.54	0.650	0.000	3.34	5.919	3.85
145.0			0.00	1.53	25.204	42.595	165.59	0.650	0.000	5.00	8.541	5.55
150.0			0.00	1.55	25.443	42.998	158.54	0.650	0.000	5.00	8.148	5.30
152.0	Appertunance(s)		0.00	1.55	25.537	43.157	155.69	0.650	0.000	2.00	3.149	2.05
155.0			0.00	1.56	25.676	43.393	151.39	0.650	0.000	3.00	4.606	2.99
160.0			0.00	1.58	25.904	43.778	144.16	0.650	0.000	5.00	7.362	4.79
162.0	Appertunance(s)		0.00	1.58	25.994	43.930	141.24	0.650	0.000	2.00	2.835	1.84
165.0			0.00	1.59	26.128	44.155	136.84	0.650	0.000	3.00	4.134	2.69
169.0	Appertunance(s)		0.00	1.60	26.303	44.452	130.92	0.650	0.000	4.00	5.292	3.44
								Totals:	169.00		9,665.6	0.0
											20,512.5	

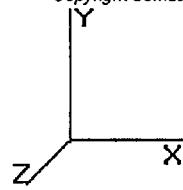
Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

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Base Elev : 4.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

30 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)
122.0	HP MW Dish, 4' Dia.	1	24.025	40.602	1.000	15.86	0.000	0.000	643.95	0.00	0.00	170.00
152.0	AP15/18-880/1940/065	3	25.537	43.157	0.770	17.58	0.000	0.000	758.66	0.00	0.00	186.00
162.0	CSS DBC-750	3	25.994	43.930	0.667	1.09	0.000	0.000	47.82	0.00	0.00	15.00
162.0	DD1900 TMA	6	25.994	43.930	0.667	5.56	0.000	0.000	244.37	0.00	0.00	156.00
162.0	Low Profile platform	1	25.994	43.930	1.000	25.55	0.000	0.000	1,122.41	0.00	0.00	1,300.00
162.0	DUO4-8670	12	25.994	43.930	1.000	78.40	0.000	0.000	3,443.94	0.00	0.00	369.60
169.0	Beacon	1	26.454	44.707	1.000	5.00	0.000	3.500	223.53	0.00	782.37	200.00
169.0	S20045A1 LNA	12	26.454	44.707	1.000	9.14	0.000	3.500	408.80	0.00	1,430.79	119.04
169.0	RR65-19-00XP	12	26.454	44.707	0.667	48.02	0.000	3.500	2,146.99	0.00	7,514.48	276.00
169.0	EEI Low Profile plat	1	26.303	44.452	1.000	22.50	0.000	0.000	1,000.16	0.00	0.00	1,500.00
10,040.65												4,291.64

Pole : CT11279D  
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Base Elev : 4.000 (ft)



**Load Case:** No Ice

80.00 mph Wind with No Ice

30 Iterations

Gust Response Factor 1.69

Dead Load Factor: 1.00

Wind Load Factor : 1.00

### Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	F X (lb)	Dead Load (lb)
5.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.384	0.00	0.80
10.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.384	0.00	0.80
15.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.384	0.00	0.80
20.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.384	0.00	0.80
25.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.384	0.00	0.80
30.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	16.524	0.00	0.80
35.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	17.185	0.00	0.80
40.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	17.788	0.00	0.80
43.34	(1) 1/2" Coax	Yes	3.34	0.16	0.00	18.163	0.00	0.53
45.00	(1) 1/2" Coax	Yes	1.66	0.16	0.00	18.343	0.00	0.27
48.67	(1) 1/2" Coax	Yes	3.67	0.16	0.00	18.726	0.00	0.59
50.00	(1) 1/2" Coax	Yes	1.33	0.16	0.00	18.859	0.00	0.21
55.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	19.343	0.00	0.80
60.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	19.797	0.00	0.80
65.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	20.228	0.00	0.80
70.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	20.636	0.00	0.80
75.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	21.025	0.00	0.80
80.00	(1) 1/2" Coax	Yes	5.00	0.16	0.00	21.397	0.00	0.80
Totals:							0.00	12.79

Pole : CT11279D  
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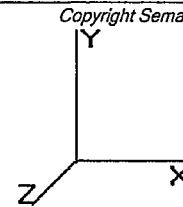
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Base Elev : 4.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

30 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
5.00	337.67	931.03	0.00	0.00
10.00	330.60	911.94	0.00	0.00
15.00	323.53	892.84	0.00	0.00
20.00	316.46	873.74	0.00	0.00
25.00	309.38	854.65	0.00	0.00
30.00	304.90	835.55	0.00	0.00
35.00	309.67	816.45	0.00	0.00
40.00	312.86	797.36	0.00	0.00
43.34	208.82	521.48	0.00	0.00
45.00	105.91	509.70	0.00	0.00
48.67	235.39	1,109.66	0.00	0.00
50.00	84.83	204.11	0.00	0.00
55.00	321.80	755.25	0.00	0.00
60.00	320.82	736.16	0.00	0.00
65.00	319.06	717.06	0.00	0.00
70.00	316.59	697.96	0.00	0.00
75.00	313.49	678.87	0.00	0.00
80.00	309.80	659.77	0.00	0.00
85.00	305.57	639.87	0.00	0.00
87.83	170.50	354.11	0.00	0.00
90.00	131.94	484.53	0.00	0.00
92.17	130.99	477.92	0.00	0.00
95.00	169.99	291.21	0.00	0.00
100.0	296.53	501.42	0.00	0.00
105.0	290.58	485.51	0.00	0.00
110.0	284.25	469.59	0.00	0.00
115.0	277.56	453.68	0.00	0.00
120.0	270.52	437.77	0.00	0.00
122.0	749.75	340.65	0.00	0.00
125.0	156.64	251.20	0.00	0.00
130.0	255.47	405.94	0.00	0.00
133.3	165.44	261.51	0.00	0.00
135.0	83.38	226.91	0.00	0.00
136.6	82.12	222.78	0.00	0.00
140.0	162.27	206.86	0.00	0.00
145.0	236.47	299.35	0.00	0.00
150.0	227.73	286.62	0.00	0.00
152.0	847.00	297.08	0.00	0.00
155.0	129.91	156.56	0.00	0.00
160.0	209.49	250.76	0.00	0.00
162.0	4,939.50	1,937.34	0.00	0.00
165.0	118.66	138.17	0.00	0.00
169.0	3,932.40	2,272.13	0.00	9,727.64
<b>Totals:</b>	<b>19,706.24</b>	<b>25,653.06</b>	<b>0.00</b>	<b>9,727.64</b>

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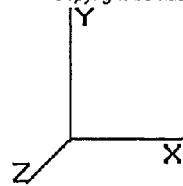
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Base Elev : 4.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

30 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	-19.763	-25.608	0.000	0.000	0.000	-2,533.568	0.000	0.000	0.000	0.000
5.00	-19.535	-24.590	0.000	0.000	0.000	-2,434.753	-0.136	0.000	0.136	-0.256
10.00	-19.307	-23.591	0.000	0.000	0.000	-2,337.080	-0.544	0.000	0.544	-0.517
15.00	-19.081	-22.612	0.000	0.000	0.000	-2,240.545	-1.228	0.000	1.228	-0.785
20.00	-18.855	-21.653	0.000	0.000	0.000	-2,145.143	-2.197	0.000	2.197	-1.059
25.00	-18.631	-20.712	0.000	0.000	0.000	-2,050.868	-3.456	0.000	3.456	-1.340
30.00	-18.405	-19.792	0.000	0.000	0.000	-1,957.714	-5.012	0.000	5.012	-1.627
35.00	-18.169	-18.891	0.000	0.000	0.000	-1,865.689	-6.873	0.000	6.873	-1.922
40.00	-17.907	-18.027	0.000	0.000	0.000	-1,774.847	-9.045	0.000	9.045	-2.223
43.34	-17.725	-17.466	0.000	0.000	0.000	-1,715.097	-10.672	0.000	10.672	-2.430
45.00	-17.648	-16.909	0.000	0.000	0.000	-1,685.614	-11.538	0.000	11.538	-2.536
48.67	-17.405	-15.763	0.000	0.000	0.000	-1,620.848	-13.578	0.000	13.578	-2.770
50.00	-17.364	-15.504	0.000	0.000	0.000	-1,597.700	-14.362	0.000	14.362	-2.857
55.00	-17.082	-14.675	0.000	0.000	0.000	-1,510.882	-17.514	0.000	17.514	-3.161
60.00	-16.795	-13.867	0.000	0.000	0.000	-1,425.476	-20.988	0.000	20.988	-3.471
65.00	-16.505	-13.079	0.000	0.000	0.000	-1,341.502	-24.790	0.000	24.790	-3.788
70.00	-16.211	-12.312	0.000	0.000	0.000	-1,258.981	-28.927	0.000	28.927	-4.112
75.00	-15.916	-11.566	0.000	0.000	0.000	-1,177.926	-33.405	0.000	33.405	-4.443
80.00	-15.618	-10.841	0.000	0.000	0.000	-1,098.349	-38.232	0.000	38.232	-4.780
85.00	-15.307	-10.158	0.000	0.000	0.000	-1,020.258	-43.415	0.000	43.415	-5.123
87.83	-15.135	-9.773	0.000	0.000	0.000	-976.890	-46.512	0.000	46.512	-5.324
90.00	-14.984	-9.262	0.000	0.000	0.000	-944.096	-48.961	0.000	48.961	-5.481
92.17	-14.835	-8.752	0.000	0.000	0.000	-911.633	-51.481	0.000	51.481	-5.638
95.00	-14.682	-8.401	0.000	0.000	0.000	-869.599	-54.884	0.000	54.884	-5.845
100.0	-14.390	-7.832	0.000	0.000	0.000	-796.189	-61.208	0.000	61.208	-6.247
105.0	-14.099	-7.282	0.000	0.000	0.000	-724.240	-67.954	0.000	67.954	-6.653
110.0	-13.809	-6.752	0.000	0.000	0.000	-653.746	-75.123	0.000	75.123	-7.061
115.0	-13.521	-6.241	0.000	0.000	0.000	-584.701	-82.718	0.000	82.718	-7.470
120.0	-13.223	-5.778	0.000	0.000	0.000	-517.096	-90.735	0.000	90.735	-7.876
122.0	-12.454	-5.499	0.000	0.000	0.000	-490.650	-94.060	0.000	94.060	-8.043
125.0	-12.292	-5.203	0.000	0.000	0.000	-453.290	-99.176	0.000	99.176	-8.289
130.0	-12.007	-4.771	0.000	0.000	0.000	-391.828	-108.038	0.000	108.038	-8.684
133.3	-11.819	-4.498	0.000	0.000	0.000	-351.846	-114.165	0.000	114.165	-8.947
135.0	-11.711	-4.260	0.000	0.000	0.000	-332.106	-117.305	0.000	117.305	-9.079
136.6	-11.608	-4.015	0.000	0.000	0.000	-312.629	-120.478	0.000	120.478	-9.208
140.0	-11.436	-3.772	0.000	0.000	0.000	-273.895	-126.974	0.000	126.974	-9.456
145.0	-11.175	-3.445	0.000	0.000	0.000	-216.716	-137.044	0.000	137.044	-9.847
150.0	-10.914	-3.158	0.000	0.000	0.000	-160.840	-147.495	0.000	147.495	-10.193
152.0	-10.035	-2.991	0.000	0.000	0.000	-139.013	-151.770	0.000	151.770	-10.321
155.0	-9.889	-2.827	0.000	0.000	0.000	-108.907	-158.276	0.000	158.276	-10.489
160.0	-9.643	-2.598	0.000	0.000	0.000	-59.463	-169.319	0.000	169.319	-10.697
162.0	-4.431	-1.609	0.000	0.000	0.000	-40.178	-173.787	0.000	173.787	-10.755
165.0	-4.290	-1.491	0.000	0.000	0.000	-26.886	-180.527	0.000	180.527	-10.818
169.0	-3.932	0.000	0.000	0.000	0.000	-9.728	-189.561	0.000	189.561	-10.869

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
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 Taper : 0.188610 (in/ft)

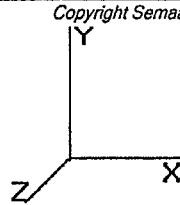
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Base Elev : 4.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

30 Iterations

Gust Response Factor 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

### Calculated Stresses

Seg Elev (ft)	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Applied Stresses	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)	Stress Ratio
0.00	0.48	0.74	0.00	0.00	0.00	50.83		51.32	52.0	0.0 0.987
5.00	0.47	0.75	0.00	0.00	0.00	50.96		51.45	52.0	0.0 0.990
10.00	0.46	0.76	0.00	0.00	0.00	51.09		51.56	52.0	0.0 0.992
15.00	0.45	0.76	0.00	0.00	0.00	51.19		51.66	52.0	0.0 0.994
20.00	0.44	0.77	0.00	0.00	0.00	51.29		51.74	52.0	0.0 0.995
25.00	0.43	0.78	0.00	0.00	0.00	51.36		51.81	52.0	0.0 0.997
30.00	0.42	0.79	0.00	0.00	0.00	51.41		51.85	52.0	0.0 0.997
35.00	0.41	0.80	0.00	0.00	0.00	51.43		51.86	52.0	0.0 0.998
40.00	0.40	0.81	0.00	0.00	0.00	51.42		51.85	52.0	0.0 0.997
43.34	0.40	0.81	0.00	0.00	0.00	51.41		51.83	52.0	0.0 0.997
45.00	0.39	0.82	0.00	0.00	0.00	51.40		51.81	52.0	0.0 0.997
48.67	0.36	0.80	0.00	0.00	0.00	49.27		49.65	52.0	0.0 0.955
50.00	0.36	0.81	0.00	0.00	0.00	49.24		49.62	52.0	0.0 0.955
55.00	0.35	0.81	0.00	0.00	0.00	49.08		49.45	52.0	0.0 0.951
60.00	0.34	0.82	0.00	0.00	0.00	48.88		49.24	52.0	0.0 0.947
65.00	0.33	0.83	0.00	0.00	0.00	48.64		48.98	52.0	0.0 0.942
70.00	0.32	0.84	0.00	0.00	0.00	48.33		48.67	52.0	0.0 0.936
75.00	0.31	0.85	0.00	0.00	0.00	47.97		48.29	52.0	0.0 0.929
80.00	0.30	0.86	0.00	0.00	0.00	47.52		47.84	52.0	0.0 0.920
85.00	0.29	0.87	0.00	0.00	0.00	47.00		47.31	52.0	0.0 0.910
87.83	0.28	0.87	0.00	0.00	0.00	46.67		46.97	52.0	0.0 0.904
90.00	0.27	0.88	0.00	0.00	0.00	46.39		46.69	52.0	0.0 0.898
92.17	0.30	1.03	0.00	0.00	0.00	52.62		52.95	52.0	0.0 1.019
95.00	0.30	1.04	0.00	0.00	0.00	52.09		52.42	52.0	0.0 1.008
100.00	0.29	1.06	0.00	0.00	0.00	51.01		51.33	52.0	0.0 0.988
105.00	0.27	1.07	0.00	0.00	0.00	49.75		50.06	52.0	0.0 0.963
110.00	0.26	1.09	0.00	0.00	0.00	48.27		48.57	52.0	0.0 0.934
115.00	0.25	1.10	0.00	0.00	0.00	46.53		46.82	52.0	0.0 0.901
120.00	0.24	1.12	0.00	0.00	0.00	44.48		44.76	52.0	0.0 0.861
122.00	0.24	1.07	0.00	0.00	0.00	43.58		43.85	52.0	0.0 0.844
125.00	0.23	1.09	0.00	0.00	0.00	42.28		42.55	52.0	0.0 0.819
130.00	0.22	1.11	0.00	0.00	0.00	39.76		40.03	52.0	0.0 0.770
133.33	0.21	1.12	0.00	0.00	0.00	37.84		38.11	52.0	0.0 0.733
135.00	0.20	1.13	0.00	0.00	0.00	36.80		37.06	52.0	0.0 0.713
136.66	0.24	1.38	0.00	0.00	0.00	42.17		42.48	52.0	0.0 0.817
140.00	0.23	1.40	0.00	0.00	0.00	39.24		39.55	52.0	0.0 0.761
145.00	0.22	1.44	0.00	0.00	0.00	34.10		34.41	52.0	0.0 0.662
150.00	0.21	1.47	0.00	0.00	0.00	27.92		28.25	52.0	0.0 0.544
152.00	0.20	1.38	0.00	0.00	0.00	25.14		25.45	52.0	0.0 0.490
155.00	0.20	1.40	0.00	0.00	0.00	20.97		21.31	52.0	0.0 0.410
160.00	0.19	1.45	0.00	0.00	0.00	12.77		13.20	52.0	0.0 0.254
162.00	0.12	0.68	0.00	0.00	0.00	9.03		9.22	52.0	0.0 0.177
165.00	0.12	0.68	0.00	0.00	0.00	6.48		6.70	52.0	0.0 0.129
169.00	0.00	0.65	0.00	0.00	0.00	2.58		2.82	52.0	0.0 0.054

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

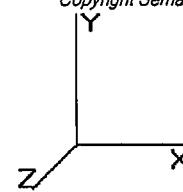
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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 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 (psf)	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice			Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
							Thick (in)	Tributary (ft)	Aa (sf)			
0.00		0.00	1.00	12.287	20.766	262.68	0.650	0.500	0.00	0.000	0.00	0.0
5.00		0.00	1.00	12.287	20.766	257.24	0.650	0.500	5.00	19.179	12.47	258.9
10.00		0.00	1.00	12.287	20.766	251.79	0.650	0.500	5.00	18.786	12.21	253.6
15.00		0.00	1.00	12.287	20.766	246.35	0.650	0.500	5.00	18.393	11.96	248.3
20.00		0.00	1.00	12.287	20.766	240.90	0.650	0.500	5.00	18.000	11.70	243.0
25.00		0.00	1.00	12.287	20.766	235.46	0.650	0.500	5.00	17.607	11.44	237.6
30.00		0.00	1.00	12.393	20.943	231.00	0.650	0.500	5.00	17.214	11.19	234.3
35.00		0.00	1.04	12.888	21.781	229.99	0.650	0.500	5.00	16.821	10.93	238.1
40.00		0.00	1.08	13.340	22.544	228.32	0.650	0.500	5.00	16.428	10.68	240.7
43.34	Bot - Section 2	0.00	1.10	13.621	23.020	226.89	0.650	0.500	3.34	10.744	6.98	160.8
45.00		0.00	1.12	13.756	23.248	226.10	0.650	0.500	1.66	5.395	3.51	81.5
48.67	Top - Section 1	0.00	1.14	14.043	23.733	224.17	0.650	0.500	3.67	11.749	7.64	181.2
50.00		0.00	1.15	14.144	23.903	228.06	0.650	0.500	1.33	4.206	2.73	65.3
55.00		0.00	1.18	14.506	24.515	225.05	0.650	0.500	5.00	15.562	10.12	248.0
60.00		0.00	1.20	14.847	25.092	221.69	0.650	0.500	5.00	15.169	9.86	247.4
65.00		0.00	1.23	15.170	25.637	218.04	0.650	0.500	5.00	14.776	9.60	246.2
70.00		0.00	1.26	15.476	26.155	214.12	0.650	0.500	5.00	14.383	9.35	244.5
75.00		0.00	1.28	15.768	26.648	209.96	0.650	0.500	5.00	13.990	9.09	242.3
80.00		0.00	1.30	16.047	27.119	205.59	0.650	0.500	5.00	13.597	8.84	239.7
85.00		0.00	1.32	16.314	27.571	201.02	0.650	0.500	5.00	13.204	8.58	236.6
87.83	Bot - Section 3	0.00	1.34	16.461	27.819	198.35	0.650	0.500	2.83	7.308	4.75	132.1
90.00		0.00	1.34	16.571	28.005	196.27	0.650	0.500	2.17	5.616	3.65	102.2
92.17	Top - Section 2	0.00	1.35	16.679	28.188	194.16	0.650	0.500	2.17	5.542	3.60	101.5
95.00		0.00	1.36	16.818	28.423	195.58	0.650	0.500	2.83	7.137	4.64	131.8
100.0		0.00	1.38	17.056	28.825	190.55	0.650	0.500	5.00	12.286	7.99	230.2
105.0		0.00	1.40	17.287	29.215	185.37	0.650	0.500	5.00	11.893	7.73	225.8
110.0		0.00	1.42	17.510	29.592	180.07	0.650	0.500	5.00	11.500	7.47	221.2
115.0		0.00	1.44	17.726	29.957	174.63	0.650	0.500	5.00	11.107	7.22	216.3
120.0		0.00	1.46	17.936	30.311	169.09	0.650	0.500	5.00	10.714	6.96	211.1
122.0	Appertunance(s)	0.00	1.46	18.018	30.450	166.84	0.650	0.500	2.00	4.176	2.71	82.6
125.0		0.00	1.47	18.139	30.655	163.43	0.650	0.500	3.00	6.145	3.99	122.5
130.0		0.00	1.49	18.337	30.990	157.67	0.650	0.500	5.00	9.928	6.45	200.0
133.3	Bot - Section 4	0.00	1.50	18.466	31.208	153.78	0.650	0.500	3.33	6.394	4.16	129.7
135.0		0.00	1.50	18.530	31.316	151.81	0.650	0.500	1.67	3.211	2.09	65.4
136.6	Top - Section 3	0.00	1.51	18.593	31.423	149.84	0.650	0.500	1.66	3.154	2.05	64.4
140.0		0.00	1.52	18.718	31.634	149.42	0.650	0.500	3.34	6.197	4.03	127.4
145.0		0.00	1.53	18.902	31.944	143.40	0.650	0.500	5.00	8.958	5.82	186.0
150.0		0.00	1.55	19.081	32.247	137.29	0.650	0.500	5.00	8.565	5.57	179.5
152.0	Appertunance(s)	0.00	1.55	19.151	32.366	134.83	0.650	0.500	2.00	3.316	2.16	69.8
155.0		0.00	1.56	19.256	32.543	131.10	0.650	0.500	3.00	4.856	3.16	102.7
160.0		0.00	1.58	19.427	32.832	124.84	0.650	0.500	5.00	7.779	5.06	166.0
162.0	Appertunance(s)	0.00	1.58	19.494	32.946	122.31	0.650	0.500	2.00	3.001	1.95	64.3
165.0		0.00	1.59	19.594	33.115	118.50	0.650	0.500	3.00	4.384	2.85	94.4
169.0	Appertunance(s)	0.00	1.60	19.726	33.337	113.38	0.650	0.500	4.00	5.626	3.66	121.9
Totals:							169.00			7,497.0	3,193.0	23,705.5

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 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)
122.0	HP MW Dish, 4' Dia.	1	18.018	30.450	1.000	16.52	0.000	0.000	503.03	0.00	0.00	280.00
152.0	AP15/18-880/1940/065	3	19.151	32.366	0.770	19.38	0.000	0.000	627.28	0.00	0.00	318.60
162.0	CSS DBC-750	3	19.494	32.946	0.667	1.40	0.000	0.000	46.15	0.00	0.00	23.55
162.0	DD1900 TMA	6	19.494	32.946	0.667	6.54	0.000	0.000	215.31	0.00	0.00	213.00
162.0	Low Profile platform	1	19.494	32.946	1.000	27.32	0.000	0.000	900.07	0.00	0.00	2,100.00
162.0	DUO4-8670	12	19.494	32.946	1.000	85.80	0.000	0.000	2,826.74	0.00	0.00	876.00
169.0	Beacon	1	19.839	33.528	1.000	7.50	0.000	3.500	251.46	0.00	880.11	400.00
169.0	S20045A1 LNA	12	19.839	33.528	1.000	11.44	0.000	3.500	383.43	0.00	1,341.99	180.36
169.0	RR65-19-00XP	12	19.839	33.528	0.667	54.83	0.000	3.500	1,838.26	0.00	6,433.90	624.00
169.0	EEI Low Profile plat	1	19.726	33.337	1.000	28.20	0.000	0.000	940.09	0.00	0.00	2,250.00
									8,531.81			7,265.51

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 Iterations

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

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	F X (lb)	Dead Load (lb)
5.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.287	0.00	0.00
10.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.287	0.00	0.00
15.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.287	0.00	0.00
20.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.287	0.00	0.00
25.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.287	0.00	0.00
30.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.393	0.00	0.00
35.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	12.888	0.00	0.00
40.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	13.340	0.00	0.00
43.34	(1) 1/2" Coax	Yes	3.34	0.00	0.00	13.621	0.00	0.00
45.00	(1) 1/2" Coax	Yes	1.66	0.00	0.00	13.756	0.00	0.00
48.67	(1) 1/2" Coax	Yes	3.67	0.00	0.00	14.043	0.00	0.00
50.00	(1) 1/2" Coax	Yes	1.33	0.00	0.00	14.144	0.00	0.00
55.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	14.506	0.00	0.00
60.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	14.847	0.00	0.00
65.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	15.170	0.00	0.00
70.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	15.476	0.00	0.00
75.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	15.768	0.00	0.00
80.00	(1) 1/2" Coax	Yes	5.00	0.00	0.00	16.047	0.00	0.00
Totals:							0.00	0.00

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 45.500 (in)  
 Top Dia : 15.500 (in)  
 Taper : 0.188610 (in/ft)

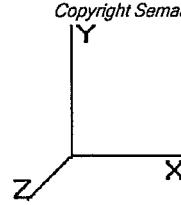
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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 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
5.00	258.86	1,069.27	0.00	0.00
10.00	253.56	1,047.26	0.00	0.00
15.00	248.26	1,025.25	0.00	0.00
20.00	242.95	1,003.25	0.00	0.00
25.00	237.65	981.24	0.00	0.00
30.00	234.34	959.23	0.00	0.00
35.00	238.14	937.23	0.00	0.00
40.00	240.73	915.22	0.00	0.00
43.34	160.77	598.84	0.00	0.00
45.00	81.52	548.71	0.00	0.00
48.67	181.25	1,194.16	0.00	0.00
50.00	65.34	234.53	0.00	0.00
55.00	247.98	866.70	0.00	0.00
60.00	247.40	844.70	0.00	0.00
65.00	246.22	822.69	0.00	0.00
70.00	244.52	800.68	0.00	0.00
75.00	242.32	778.68	0.00	0.00
80.00	239.68	756.67	0.00	0.00
85.00	236.63	734.66	0.00	0.00
87.83	132.14	406.88	0.00	0.00
90.00	102.23	525.19	0.00	0.00
92.17	101.54	518.02	0.00	0.00
95.00	131.85	342.72	0.00	0.00
100.0	230.19	589.41	0.00	0.00
105.0	225.84	570.58	0.00	0.00
110.0	221.19	551.76	0.00	0.00
115.0	216.27	532.94	0.00	0.00
120.0	211.09	514.11	0.00	0.00
122.0	585.68	480.72	0.00	0.00
125.0	122.45	295.26	0.00	0.00
130.0	199.99	476.46	0.00	0.00
133.3	129.70	307.19	0.00	0.00
135.0	65.36	250.01	0.00	0.00
136.6	64.42	245.46	0.00	0.00
140.0	127.42	251.07	0.00	0.00
145.0	185.99	362.69	0.00	0.00
150.0	179.52	347.05	0.00	0.00
152.0	697.04	453.39	0.00	0.00
155.0	102.71	191.08	0.00	0.00
160.0	166.00	305.37	0.00	0.00
162.0	4,052.54	3,330.67	0.00	0.00
165.0	94.37	169.19	0.00	0.00
169.0	3,535.14	3,670.95	0.00	8,656.00
Totals:	16,028.77	31,807.13	0.00	8,656.00

Pole : CT11279D  
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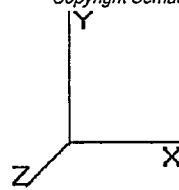
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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 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	-16.089	-31.776	0.000	0.000	0.000	-2,156.397	0.000	0.000	0.000	0.000
5.00	-15.946	-30.646	0.000	0.000	0.000	-2,075.954	-0.116	0.000	0.116	-0.218
10.00	-15.803	-29.538	0.000	0.000	0.000	-1,996.224	-0.463	0.000	0.463	-0.441
15.00	-15.661	-28.452	0.000	0.000	0.000	-1,917.208	-1.047	0.000	1.047	-0.670
20.00	-15.518	-27.388	0.000	0.000	0.000	-1,838.907	-1.874	0.000	1.874	-0.905
25.00	-15.375	-26.346	0.000	0.000	0.000	-1,761.321	-2.950	0.000	2.950	-1.146
30.00	-15.230	-25.326	0.000	0.000	0.000	-1,684.449	-4.281	0.000	4.281	-1.393
35.00	-15.076	-24.328	0.000	0.000	0.000	-1,608.301	-5.874	0.000	5.874	-1.646
40.00	-14.897	-23.364	0.000	0.000	0.000	-1,532.921	-7.736	0.000	7.736	-1.906
43.34	-14.769	-22.736	0.000	0.000	0.000	-1,483.217	-9.132	0.000	9.132	-2.085
45.00	-14.724	-22.153	0.000	0.000	0.000	-1,458.653	-9.875	0.000	9.875	-2.177
48.67	-14.546	-20.932	0.000	0.000	0.000	-1,404.617	-11.627	0.000	11.627	-2.379
50.00	-14.532	-20.658	0.000	0.000	0.000	-1,385.272	-12.300	0.000	12.300	-2.455
55.00	-14.338	-19.736	0.000	0.000	0.000	-1,312.611	-15.011	0.000	15.011	-2.718
60.00	-14.138	-18.838	0.000	0.000	0.000	-1,240.925	-18.000	0.000	18.000	-2.988
65.00	-13.935	-17.962	0.000	0.000	0.000	-1,170.235	-21.275	0.000	21.275	-3.265
70.00	-13.729	-17.109	0.000	0.000	0.000	-1,100.559	-24.843	0.000	24.843	-3.547
75.00	-13.521	-16.279	0.000	0.000	0.000	-1,031.913	-28.710	0.000	28.710	-3.837
80.00	-13.310	-15.471	0.000	0.000	0.000	-964.311	-32.882	0.000	32.882	-4.132
85.00	-13.080	-14.702	0.000	0.000	0.000	-897.763	-37.366	0.000	37.366	-4.434
87.83	-12.956	-14.271	0.000	0.000	0.000	-860.705	-40.049	0.000	40.049	-4.611
90.00	-12.844	-13.725	0.000	0.000	0.000	-832.633	-42.171	0.000	42.171	-4.749
92.17	-12.737	-13.182	0.000	0.000	0.000	-804.806	-44.356	0.000	44.356	-4.888
95.00	-12.636	-12.792	0.000	0.000	0.000	-768.718	-47.308	0.000	47.308	-5.071
100.0	-12.429	-12.149	0.000	0.000	0.000	-705.538	-52.801	0.000	52.801	-5.427
105.0	-12.222	-11.526	0.000	0.000	0.000	-643.393	-58.668	0.000	58.668	-5.787
110.0	-12.014	-10.924	0.000	0.000	0.000	-582.286	-64.912	0.000	64.912	-6.150
115.0	-11.806	-10.344	0.000	0.000	0.000	-522.216	-71.535	0.000	71.535	-6.514
120.0	-11.580	-9.806	0.000	0.000	0.000	-463.186	-78.536	0.000	78.536	-6.878
122.0	-10.971	-9.365	0.000	0.000	0.000	-440.026	-81.443	0.000	81.443	-7.027
125.0	-10.859	-9.032	0.000	0.000	0.000	-407.113	-85.918	0.000	85.918	-7.248
130.0	-10.643	-8.531	0.000	0.000	0.000	-352.819	-93.679	0.000	93.679	-7.603
133.3	-10.499	-8.212	0.000	0.000	0.000	-317.381	-99.050	0.000	99.050	-7.840
135.0	-10.416	-7.951	0.000	0.000	0.000	-299.846	-101.806	0.000	101.806	-7.959
136.6	-10.341	-7.686	0.000	0.000	0.000	-282.524	-104.590	0.000	104.590	-8.076
140.0	-10.217	-7.404	0.000	0.000	0.000	-248.018	-110.296	0.000	110.296	-8.300
145.0	-10.021	-7.014	0.000	0.000	0.000	-196.932	-119.151	0.000	119.151	-8.655
150.0	-9.815	-6.662	0.000	0.000	0.000	-146.827	-128.353	0.000	128.353	-8.970
152.0	-9.071	-6.302	0.000	0.000	0.000	-127.197	-132.121	0.000	132.121	-9.087
155.0	-8.958	-6.102	0.000	0.000	0.000	-99.986	-137.857	0.000	137.857	-9.240
160.0	-8.756	-5.810	0.000	0.000	0.000	-55.197	-147.603	0.000	147.603	-9.433
162.0	-4.214	-3.187	0.000	0.000	0.000	-37.685	-151.549	0.000	151.549	-9.487
165.0	-4.096	-3.032	0.000	0.000	0.000	-25.041	-157.503	0.000	157.503	-9.545
169.0	-3.535	0.000	0.000	0.000	0.000	-8.656	-165.486	0.000	165.486	-9.592

Pole : CT11279D  
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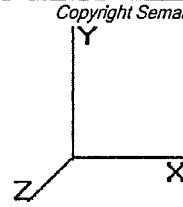
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Base Elev : 4.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

30 Iterations

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

Calculated Stresses

Seg Elev (ft)	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Applied Stresses	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)	Stress Ratio
0.00	0.59	0.60	0.00	0.00	0.00	43.26		43.87	52.0	0.0 0.844
5.00	0.58	0.61	0.00	0.00	0.00	43.45		44.05	52.0	0.0 0.847
10.00	0.57	0.62	0.00	0.00	0.00	43.63		44.22	52.0	0.0 0.851
15.00	0.57	0.63	0.00	0.00	0.00	43.81		44.38	52.0	0.0 0.854
20.00	0.56	0.64	0.00	0.00	0.00	43.96		44.53	52.0	0.0 0.857
25.00	0.55	0.64	0.00	0.00	0.00	44.11		44.67	52.0	0.0 0.859
30.00	0.54	0.65	0.00	0.00	0.00	44.23		44.78	52.0	0.0 0.862
35.00	0.53	0.66	0.00	0.00	0.00	44.33		44.88	52.0	0.0 0.863
40.00	0.52	0.67	0.00	0.00	0.00	44.41		44.95	52.0	0.0 0.865
43.34	0.52	0.68	0.00	0.00	0.00	44.46		44.99	52.0	0.0 0.866
45.00	0.51	0.68	0.00	0.00	0.00	44.48		45.00	52.0	0.0 0.866
48.67	0.48	0.67	0.00	0.00	0.00	42.69		43.19	52.0	0.0 0.831
50.00	0.48	0.68	0.00	0.00	0.00	42.69		43.18	52.0	0.0 0.831
55.00	0.47	0.68	0.00	0.00	0.00	42.64		43.12	52.0	0.0 0.830
60.00	0.46	0.69	0.00	0.00	0.00	42.55		43.03	52.0	0.0 0.828
65.00	0.45	0.70	0.00	0.00	0.00	42.43		42.89	52.0	0.0 0.825
70.00	0.44	0.71	0.00	0.00	0.00	42.25		42.71	52.0	0.0 0.822
75.00	0.43	0.72	0.00	0.00	0.00	42.02		42.47	52.0	0.0 0.817
80.00	0.42	0.73	0.00	0.00	0.00	41.72		42.17	52.0	0.0 0.811
85.00	0.41	0.74	0.00	0.00	0.00	41.35		41.79	52.0	0.0 0.804
87.83	0.41	0.75	0.00	0.00	0.00	41.12		41.54	52.0	0.0 0.799
90.00	0.40	0.75	0.00	0.00	0.00	40.91		41.33	52.0	0.0 0.795
92.17	0.46	0.89	0.00	0.00	0.00	46.45		46.93	52.0	0.0 0.903
95.00	0.45	0.90	0.00	0.00	0.00	46.05		46.52	52.0	0.0 0.895
100.00	0.44	0.91	0.00	0.00	0.00	45.21		45.67	52.0	0.0 0.879
105.00	0.43	0.93	0.00	0.00	0.00	44.20		44.66	52.0	0.0 0.859
110.00	0.43	0.95	0.00	0.00	0.00	42.99		43.45	52.0	0.0 0.836
115.00	0.42	0.96	0.00	0.00	0.00	41.56		42.01	52.0	0.0 0.808
120.00	0.41	0.98	0.00	0.00	0.00	39.84		40.29	52.0	0.0 0.775
122.00	0.40	0.95	0.00	0.00	0.00	39.08		39.51	52.0	0.0 0.760
125.00	0.40	0.96	0.00	0.00	0.00	37.97		38.40	52.0	0.0 0.739
130.00	0.39	0.98	0.00	0.00	0.00	35.80		36.23	52.0	0.0 0.697
133.33	0.39	1.00	0.00	0.00	0.00	34.14		34.57	52.0	0.0 0.665
135.00	0.38	1.00	0.00	0.00	0.00	33.23		33.65	52.0	0.0 0.647
136.66	0.45	1.23	0.00	0.00	0.00	38.11		38.63	52.0	0.0 0.743
140.00	0.45	1.25	0.00	0.00	0.00	35.53		36.05	52.0	0.0 0.694
145.00	0.45	1.29	0.00	0.00	0.00	30.99		31.51	52.0	0.0 0.606
150.00	0.45	1.32	0.00	0.00	0.00	25.49		26.04	52.0	0.0 0.501
152.00	0.43	1.25	0.00	0.00	0.00	23.00		23.53	52.0	0.0 0.453
155.00	0.43	1.27	0.00	0.00	0.00	19.25		19.80	52.0	0.0 0.381
160.00	0.43	1.31	0.00	0.00	0.00	11.85		12.49	52.0	0.0 0.240
162.00	0.24	0.65	0.00	0.00	0.00	8.47		8.78	52.0	0.0 0.169
165.00	0.24	0.65	0.00	0.00	0.00	6.03		6.37	52.0	0.0 0.123
169.00	0.00	0.59	0.00	0.00	0.00	2.30		2.52	52.0	0.0 0.048

Pole : CT11279D  
 Location : South Windsor - RT5, South Windsor, CT  
 Height : 169.0 (ft)  
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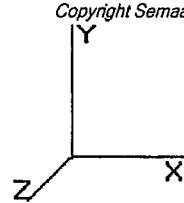
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Base Elev : 4.000 (ft)



## Analysis Summary

Load Case	Reactions						Max Stresses			
	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	19.8	0.00	25.61	0.00	0.00	2533.57	52.95	52.0	92.17	1.019
Ice	16.1	0.00	31.78	0.00	0.00	2156.40	46.93	52.0	92.17	0.903

**Cumulative Power Density Analysis of Sprint PCS & Other Co-location Antennas**  
**300 Governor's Hwy, South Windsor, CT 06074**

Operator	Operating Frequency (MHz)	Number of Channels	Watts Per Channel	Distance to Target (ft)	Calculated Power Density (mW/cm <sup>2</sup> )	Maximum Permissible Exposure (mW/cm <sup>2</sup> )	Fraction of MPE
T-Mobile <sup>1</sup>	1930	8	116	172	0.0113	1.0000	1.13%
Verizon <sup>1</sup>							35.17%
Cingular GSM <sup>1</sup>	880	2	296	162	0.0081	0.5867	1.38%
Cingular GSM <sup>1</sup>	1930	2	427	162	0.0117	1.0000	1.17%
Sprint-Nextel							
IDEN	851	12	100	152	0.0203	0.5673	3.57%
CDMA	1962.5	11	301	152	0.0560	1.0000	5.60%
Total Percentage of Maximum Permissible Exposure							48.02%

<sup>1</sup>Information taken from the Power Density Information prepared by Omnipoint & Nextel Requirements set forth in OET Bulletin 65, Based on ICRP Report No. 36 and ANSI/IEEE CS5, 1992.