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@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

November 21, 2003

Michele G. Briggs, Manager of Real Estate
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-007-031112** - Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at 1684 Chamberlain Highway, Berlin, Connecticut.

Dear Ms. Briggs:

At a public meeting held on November 20, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated November 12, 2003. 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. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable Paul C. Argazzi, Mayor, Town of Berlin
Brian J. Miller, Town Planner, Town of Berlin
Thomas J. Regan, Esq., Brown, Rudnick, Berlack Israels
Christopher B. Fisher, Esq., Cuddy & Feder LLP
Sandy M. Carter, Verizon Wireless
Thomas F. Flynn III, Nextel Communications, Inc.
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
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Web Site: www.state.ct.us/csc/index.htm

November 12, 2003

Honorable Paul C. Argazzi
Mayor
Town of Berlin
240 Kensington Road
Kensington, CT 06037

RE: **EM-CING-007-031112** - Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at 1684 Chamberlain Highway, Berlin, Connecticut.

Dear Mr. Argazzi:

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.

The Council will consider this item at the next meeting scheduled for November, 20, 2003 at 1:30 p.m. in Hearing Room 1, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/AMB

Enclosure: Notice of Intent

c: Brian J. Miller, Town Planner, Town of Berlin

EM-CING-007-031112

Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7700
Fax: (860) 513-7190

Michele G. Briggs
Manager of Real Estate

November 12, 2003

Ms. Pam Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: **Notice of Exempt Modification – Existing Sprint Telecommunications Tower Facility at 1684 Chamberlain Highway, Berlin, Connecticut**

Dear Chairman Katz:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower off Chamberlain Highway in Berlin, Connecticut.

The Sprint Berlin facility is located in a fruit orchard at 1684 Chamberlain Highway, approximately 4 miles south of CT Rte 372 and 2 miles west of US Highway 5. Tower coordinates (NAD 83) are N 41° 35' 23" and W 72° 48' 19". The facility is owned and operated by Sprint Sites USA ("Sprint"), with offices at 535 E. Crescent Avenue, Ramsey, NJ 07446. Sprint leases the land from Lawrence J. Laviana and Nellie C. Laviana of Berlin.

Please accept this letter as notification to the Council, pursuant to R.C.S.A. Section 16-50j-73, of construction that constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the Town Manager of Berlin.

SBMS, the local component of the nationwide Cingular Wireless network, is licensed by the Federal Communications Commission ("FCC") to provide cellular mobile telephone service in the Hartford, CT Metropolitan Statistical Area, which includes the area to be served by SBMS' proposed installation. The public need for cellular service has been predetermined by the FCC.

Sprint has agreed to plans put forth by SBMS pursuant to mutually acceptable terms and conditions and has also authorized SBMS to obtain necessary government approvals. Attached to this Notice are a site location map, a proposed site plan, the proposed tower profile, and a structural analysis report that shows the tower is structurally capable of supporting the proposed SBMS telecommunications equipment.

The Sprint facility was approved by local zoning authorities on March 23, 2000, which was prior to the November 2000 Covello decision concerning Council and Town jurisdiction for tower siting. The tower came under Council jurisdiction with Nextel's application to co-locate in EM-NEXTEL-007-001215, which was approved on January 11, 2001.

The Chamberlain Highway facility consists of a 126-foot monopole within a 50' x 50' square compound surrounded by 6-ft high chain link fence. Sprint operates its own antennas and telecommunications equipment at the site, and it has also leased tower and ground space to AT&T, Verizon, Nextel, and T-Mobile. These carriers' positions on the tower and in the compound are depicted on the attached exhibits. The Town of Berlin also operates communications equipment on the tower.

As shown on the attached drawings and as further described below, SBMS proposes to install three EMS MB96RR9002 panel antennas, approximately 8 feet in height. These antennas will be strap-mounted directly to the tower with the center of radiation approximately 65 feet above ground level. SBMS also proposes to place outdoor equipment cabinets on a 10' x 10' concrete slab at the base of the tower. All work will be done inside the existing fenced compound.

With the "GSM-only" configuration, SBMS will broadcast up to:

- 2 channels, 296 Watts ERP, 880 – 894 MHz; and
- 2 channels, 427 Watts ERP, 1930 – 1935 MHz.

Statutory Considerations

The changes to the Berlin tower facility do not constitute a modification as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2) because they will not result in any substantial adverse environmental effect.

1. The height of the overall structure will be unaffected.

2. The proposed changes will not affect the property boundaries. All new construction will take place on property leased by Sprint and within the existing fenced compound.

3. The proposed additions will not increase the noise level at the existing facility by six decibels or more.

4. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the FCC. The "worst-case" exposure calculation in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the tower in relation to the operation of the currently proposed antenna array is as

follows:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density† (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Sprint *	125	1950	11	122	0.0309	1.0000	3.09
Nextel *	115	850	9	100	0.0245	0.5666	4.32
T-Mobile *	105	1930	8	122	0.0318	1.0000	3.18
Verizon *	95	890	19	100	0.0757	0.5933	12.76
Town of Berlin *	85	2400	2	5	0.0005	1.0000	0.05
AT&T *	75	D: 1945 E: 1985	12	250	0.1918	1.0000	19.18
Cingular GSM	65	880 - 894	2	296	0.0504	0.5867	8.59
Cingular GSM	65	1930 - 1935	2	427	0.0727	1.0000	7.27
Total							**58.43%**

* Power density parameters taken from the file for AT&T's application to the Council in EM-AT&T-007-020626, including a letter in this file from Robinson & Cole dated 12/6/2001 (TS-VER-007-011203). The letter provides reasonable power density parameters for the commercial carriers at the Berlin facility, and was apparently relied upon by the Council in TS-VER-007-011203 and EM-AT&T-007-020626.

† Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 (i.e., the square of 1.6) as described in FCC OET Bulletin No. 65.

As the table demonstrates, the cumulative "worst-case" exposure would be approximately 58.4 % of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from SBMS' use of the tower facility would thus be within applicable standards.

For the foregoing reasons, SBMS respectfully submits that proposed changes to implement expanded shared use at the Berlin site constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7700 with questions concerning this application. Thank you for your consideration in this matter.

Respectfully yours,

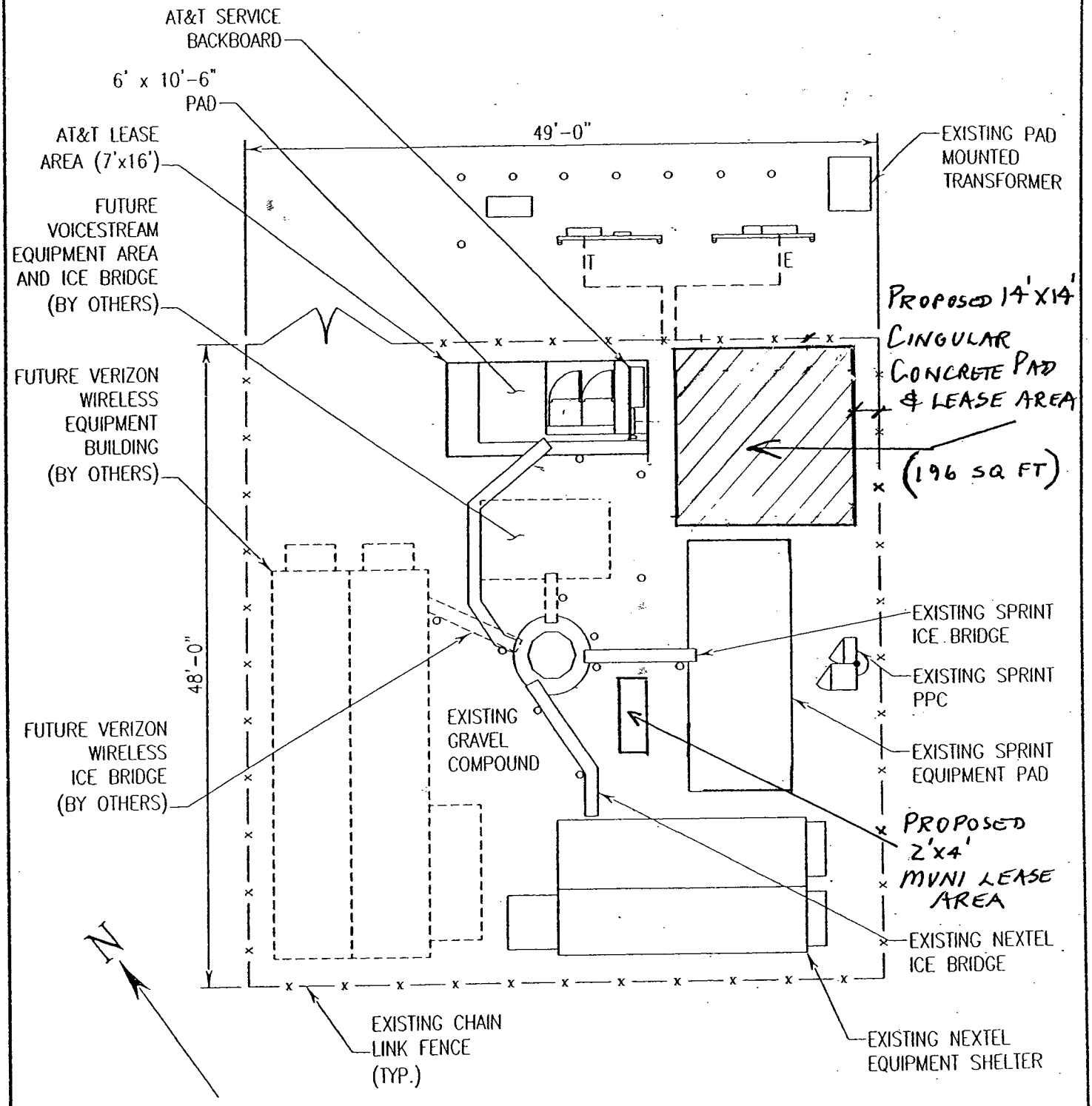
Michele G. Briggs /SLL

Michele G. Briggs
Manager of Real Estate

Enclosures

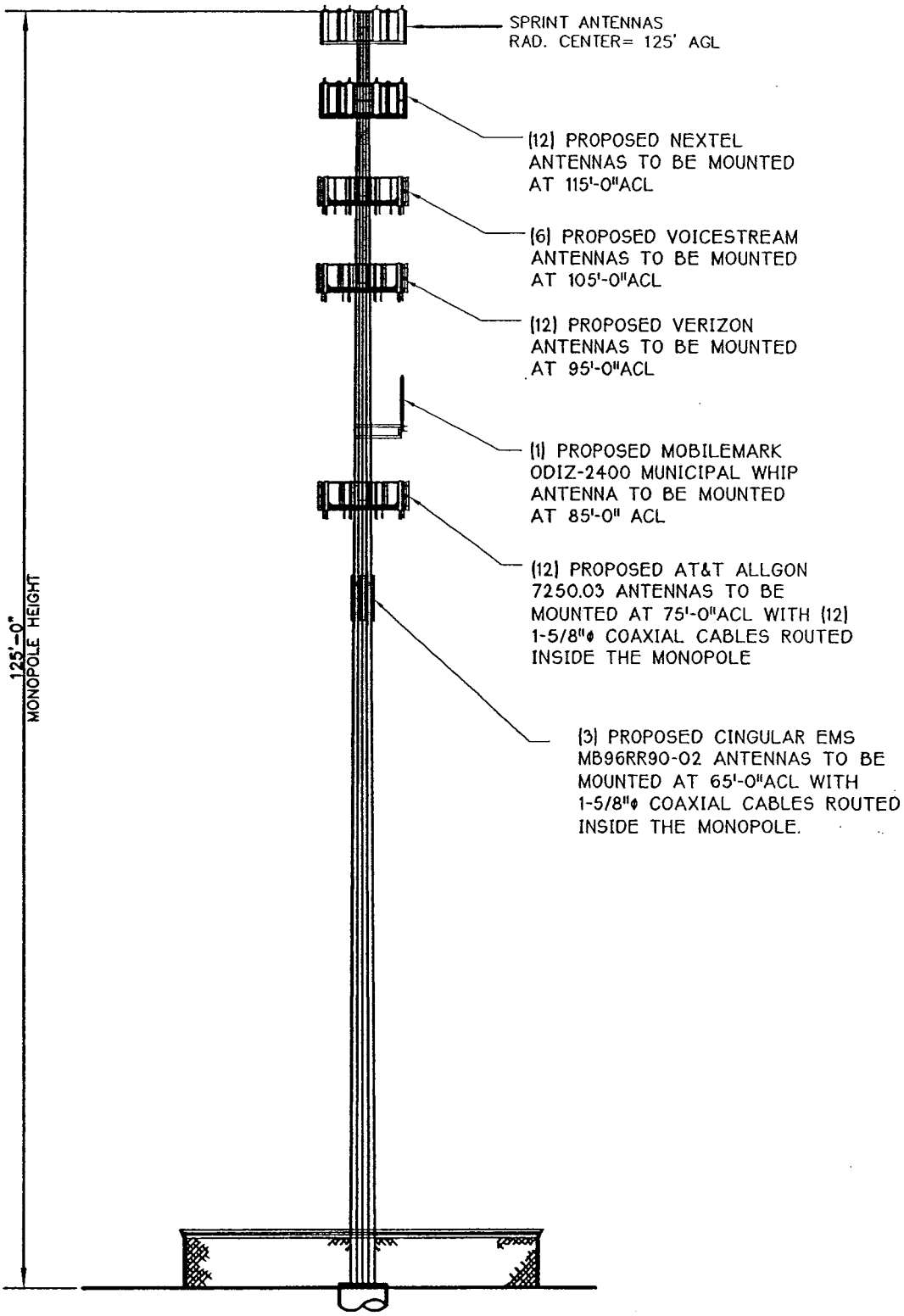
cc: Honorable Bonnie L. Therrien, Town Manager, Town of Berlin

Berlin - Sprint



Scale: 1 inch equals approximately 11 feet

Project Address: 1684 CHAMBERLAIN HIGHWAY, BERLIN, CT Cascade No: CT33XC536-06	Client: CINGULAR WIRELESS Sprint Sites USA		Approved By IMP ENGINEER: R/O DATE: 9/22/03 Approved By IMP MANAGER: DATE: Approved By SSUSA DIRECTOR: DATE:
Exhibit No	Drawing Name: COMPOUND LAYOUT	IMP MANAGER: MJONES IMP ENGINEER: RVO Date: 9-22-03	Approved By CLIENT:



ELEVATION

Scale: 1 inch equals approximately 16 feet

Project: **BERLIN/LAVIANA ORCHARD** Address: 1684 CHAMBERLAIN HIGHWAY KENSINGTON, CT Cascade No.: CT03XC536-05	Client: cingular WIRELESS Sprint Sites USA		Approved By: IMP ENGINEER:_____ DATE:_____ Approved By: IMP MANAGER:_____ DATE:_____ Approved By: SSUSA DIRECTOR:_____ DATE:_____ Approved By: CLIENT:_____ DATE:_____
Exhibit No.	Drawing Name: KENSINGTON	IMP. MANAGER: / IMP. ENGINEER:	Date: 9/9/03

1047 N. 204th Avenue
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

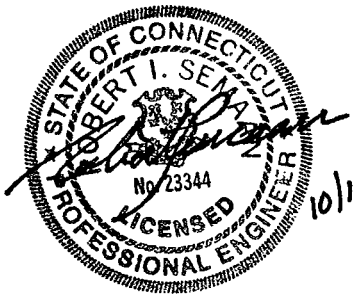
SEMAAN ENGINEERING SOLUTIONS

123 ft SUMMIT Monopole
Structural Analysis

OK
P/O 10/20/03

Prepared for:
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Site: CT33XC536-06 - Cingular
1684 Chaimberline Hwy.
Berlin, CT



10/10/03

October 10, 2003

Ms. Kim Cordes
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Re: Site Number CT33XC536 – 1684 Chaimberline Hwy, Berlin, CT.

Dear Ms. Cordes:

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 EIA/TIA-222-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 123 ft SUMMIT Monopole.

Refer to SUMMIT drawing job # 10083 dated June 6, 2000 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. The analysis was performed in conformance with **EIA/TIA-222-F and local building codes for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.** Wind is applied to the structure, accessories and antennas.

Structure loading:
Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
123.0	6	DB980H65E Mounted On a Low Profile platform	(6) 1-5/8	Sprint
123.0	6	DB980H90E Mounted On the same Low Profile platform	(6) 1-5/8	Sprint
115.0	9	DB844H90E Mounted On a Low Profile platform	(9) 1-5/8	Nextel
105.0	6	RR90-17-00DP Mounted On a Low Profile platform	(12) 1-5/8	VoiceStream
95.0	12	DB844H80 Mounted On a Low Profile platform	(12) 1-5/8	Verizon
85.0	1	OD12-2400 Mounted On a Standoff	(1) 7/8	Municipality
75.0	6	Allgon 7250 Mounted On (3) Standoffs	(12) 1-5/8	AT&T
65.0	**3**	**MB96RR90-02 strap mounted**	**(12) 1-5/8**	**Cingular**

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: 104.2%. The 4.2% overstress is within allowable engineering tolerances.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	1,472.00	1,523.28	103.5
Shear (kips)	16.50	17.00	103.0

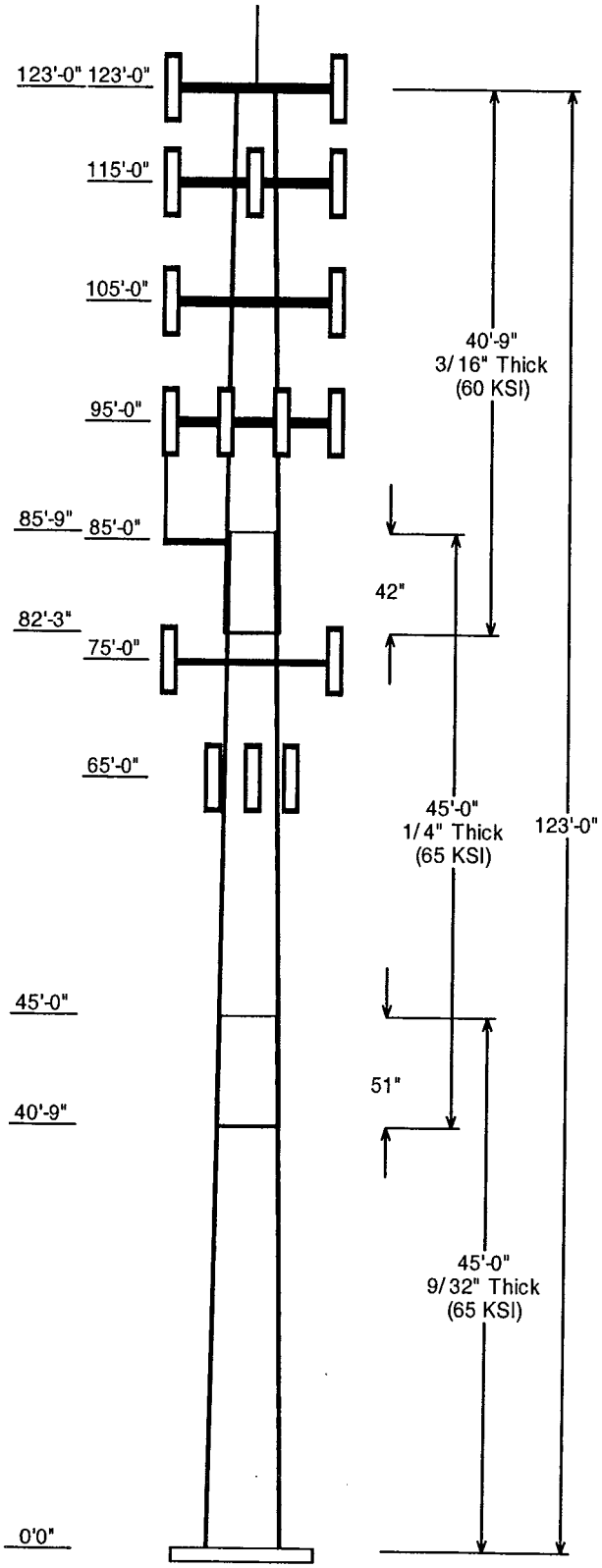
The reactions calculated from the analysis slightly exceed the ones indicated on the original structural design. However, the excess amount is within acceptable engineering tolerances.

Review and Recommendations:
Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.

SEMAAN ENGINEERING SOLUTIONS
1047 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Job Information

Pole :	CT33XC536
Description :	
Client :	Sprint Sites USA - NJ
Location :	1684 Chaimberline Hwy, Berlin, CT
Type :	18 Sides Base Elev (ft): 0.00
Height :(ft)	123.00 Taper: 0.150041 (in/ft)



Sections Properties

Shaft Section	Length (ft)	Diameter (in) Across Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.000	32.82	39.58	0.281		0.000	0.150041	65
2	45.000	27.21	33.96	0.250	Slip Joint	51.000	0.150041	65
3	40.750	22.00	28.11	0.188	Slip Joint	42.000	0.150041	60

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description
123.000	123.000	Platform	1	Low Profile platform
123.000	123.000	Panel	6	DB980H90E
123.000	123.000	Panel	6	DB980H65E
123.000	126.500	Lightning	1	Lightning Rod
115.000	115.000	Platform	1	Low Profile platform
115.000	115.000	Panel	9	DB844H90E
105.000	105.000	Panel	6	RR90-17-00DP
105.000	105.000	Platform	1	Low Profile platform
95.000	95.000	Platform	1	Low Profile platform
95.000	95.000	Panel	12	DB844H80
85.000	85.000	Straight	1	Standoff
85.000	86.667	Whip	1	OD12-2400
75.000	75.000	Straight	3	Standoffs
75.000	75.000	Panel	6	Allgon 7250
65.000	65.000	Panel	3	MB96RR90-02 flush mounted

Load Cases / Deflections

Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice	No Ice Wind Speed = 80.00 mph w/ No Ice		
	123.000	85.70	-5.425
	115.000	76.63	-5.400
	105.000	65.44	-5.275
	95.000	54.65	-5.023
	85.000	44.49	-4.679
	75.000	35.10	-4.278
	65.000	26.62	-3.806
Ice	Ice Wind Speed = 69.28 mph w/ Ice 0.50 in Thick		
	123.000	73.37	-4.657
	115.000	65.59	-4.635
	105.000	55.98	-4.526
	95.000	46.72	-4.307
	85.000	38.01	-4.009
	75.000	29.96	-3.663
	65.000	22.71	-3.256

Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	1,523.278	17.003	-17.193
Ice	1,290.114	13.983	-24.202

Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7700
Fax: (860) 513-7190

Michele G. Briggs
Manager of Real Estate

November 12, 2003

Honorable Bonnie L. Therrien
Town Manager, Town of Berlin
Town Hall, 240 Kensington Rd.
Berlin, Connecticut 06037

Re: Notice of Exempt Modification – Existing Sprint Telecommunications Tower Facility at 1684 Chamberlain Highway, Berlin, Connecticut

Dear Ms. Therrien:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at 1684 Chamberlain Highway in Berlin, Connecticut.

The facility is owned and operated by Sprint Sites USA ("Sprint"), with offices at 535 E. Crescent Avenue, Ramsey, NJ 07446. Sprint leases the land from Lawrence J. Laviana and Nellie C. Laviana of Berlin.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Berlin under Section 16-50j-73 of construction that constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The attached letter fully sets forth the SBMS proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the undersigned or Mr. Derek Phelps, Executive Director of the Connecticut Siting Council, at (860) 827-2935.

Sincerely,

Michele D. Briggs/SLL

Michele G. Briggs
Manager of Real Estate

Enclosure

1047 N. 204th Avenue
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

EM-CING-007-031112

123 ft SUMMIT Monopole
Structural Analysis

OK
P/O
10/20/03

RECEIVED
NOV 12 2003
CONNECTICUT
SITING COUNCIL

Prepared for:
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Site: CT33XC536-06 - Cingular
1684 Chaimberline Hwy.
Berlin, CT

STATE OF CONNECTICUT
ROBERT I. SEMAAN
No. 23344
LICENSED
PROFESSIONAL ENGINEER

10/10/03

October 10, 2003

Ms. Kim Cordes
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Re: Site Number CT33XC536 – 1684 Chaimberline Hwy, Berlin, CT.

Dear Ms. Cordes:

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 EIA/TIA-222-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 123 ft SUMMIT Monopole.

Refer to SUMMIT drawing job # 10083 dated June 6, 2000 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. The analysis was performed in conformance with **EIA/TIA-222-F and local building codes for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.** Wind is applied to the structure, accessories and antennas.

Structure loading:
Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

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115.0	9	DB844H90E Mounted On a Low Profile platform	(9) 1-5/8	Nextel
105.0	6	RR90-17-00DP Mounted On a Low Profile platform	(12) 1-5/8	VoiceStream
95.0	12	DB844H80 Mounted On a Low Profile platform	(12) 1-5/8	Verizon
85.0	1	OD12-2400 Mounted On a Standoff	(1) 7/8	Municipality
75.0	6	Allgon 7250 Mounted On (3) Standoffs	(12) 1-5/8	AT&T
65.0	**3**	**MB96RR90-02 strap mounted**	**(12) 1-5/8**	**Cingular**

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.

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The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 104.2%. The 4.2% overstress is within allowable engineering tolerances.

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Moment (ft-kips)	1,472.00	1,523.28	103.5
Shear (kips)	16.50	17.00	103.0

The reactions calculated from the analysis slightly exceed the ones indicated on the original structural design. However, the excess amount is within acceptable engineering tolerances.

Review and Recommendations:
Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.

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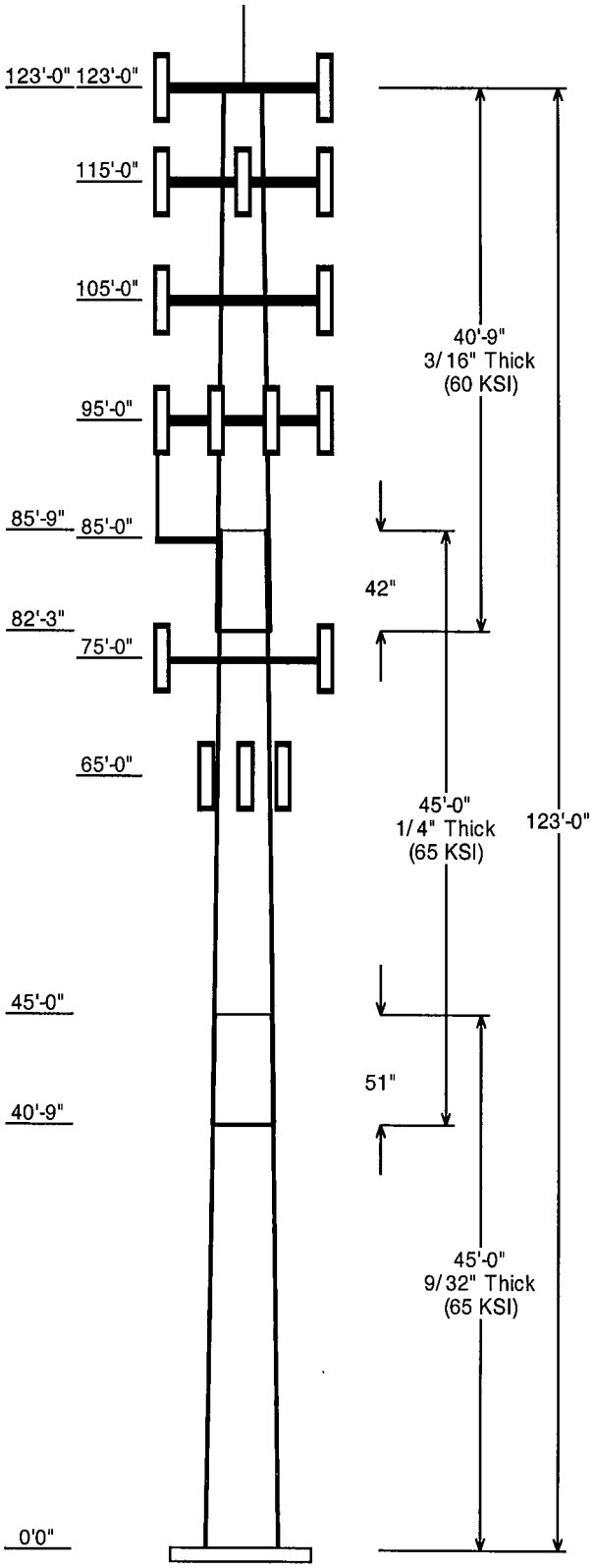

Job Information

Pole :	CT33XC536
Description :	
Client :	Sprint Sites USA - NJ
Location :	1684 Chaimberline Hwy, Berlin, CT
Type :	18 Sides Base Elev (ft): 0.00
Height :(ft)	123.00 Taper: 0.150041 (in/ft)

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Across Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.000	32.82	39.58	0.281		0.000	0.150041	65
2	45.000	27.21	33.96	0.250	Slip Joint	51.000	0.150041	65
3	40.750	22.00	28.11	0.188	Slip Joint	42.000	0.150041	60

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123.000	123.000	Panel	6	DB980H65E
123.000	126.500	Lightning	1	Lightning Rod
115.000	115.000	Platform	1	Low Profile platform
115.000	115.000	Panel	9	DB844H90E
105.000	105.000	Panel	6	RR90-17-00DP
105.000	105.000	Platform	1	Low Profile platform
95.000	95.000	Platform	1	Low Profile platform
95.000	95.000	Panel	12	DB844H80
85.000	85.000	Straight	1	Standoff
85.000	86.667	Whip	1	OD12-2400
75.000	75.000	Straight	3	Standoffs
75.000	75.000	Panel	6	Allgon 7250
65.000	65.000	Panel	3	MB96RR90-02 flush mounted

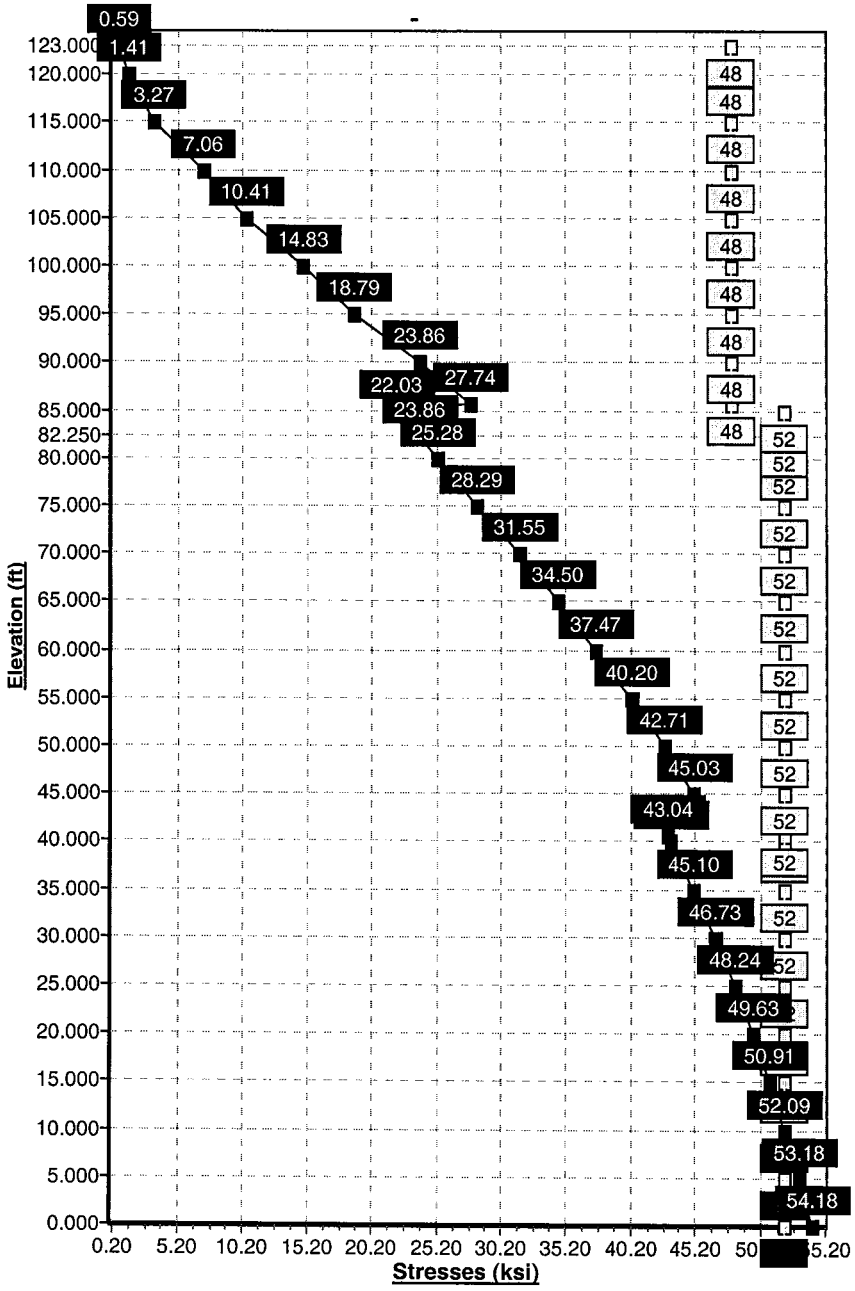
Load Cases / Deflections

Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice	No Ice Wind Speed = 80.00 mph w/ No Ice		
	123.000	85.70	-5.425
	115.000	76.63	-5.400
	105.000	65.44	-5.275
	95.000	54.65	-5.023
	85.000	44.49	-4.679
	75.000	35.10	-4.278
	65.000	26.62	-3.806
Ice	Ice Wind Speed = 69.28 mph w/ Ice 0.50 in Thick		
	123.000	73.37	-4.657
	115.000	65.59	-4.635
	105.000	55.98	-4.526
	95.000	46.72	-4.307
	85.000	38.01	-4.009
	75.000	29.96	-3.663
	65.000	22.71	-3.256

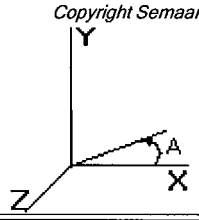
Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	1,523.278	17.003	-17.193
Ice	1,290.114	13.983	-24.202

Load Case : No Ice



Pole :	CT33XC536	Sprint Sites USA - NJ	
Location:	1684 Chaimberline Hwy, Berlin, CT		
Height :	123.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	18 Sides		
Base Dia :	39.58 (in)	Top Dia : 22.00 (in)	
Taper :	0.150041 (in/ft)		



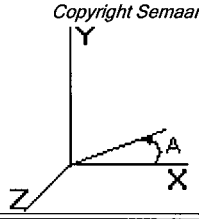
Shaft Section Properties

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	45.000	0.2813	65		0.00	4,910	39.58	0.000	35.08	6844.8	23.40	140.7	32.82	45.00	29.05	3888.2	19.17	116.72	0.15004
2	45.000	0.2500	65	Slip Joint	51.00	3,686	33.96	40.75	26.75	3842.2	22.55	135.8	27.21	85.75	21.39	1965.3	17.78	108.85	0.15004
3	40.750	0.1875	60	Slip Joint	42.00	2,052	28.11	82.25	16.62	1637.5	25.03	149.9	22.00	123.0	12.98	780.3	19.28	117.33	0.15004
				Shaft Weight		10,649													

Discrete Appurtenance Properties

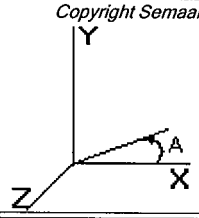
Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
123.0	Low Profile platform	1	1300.00	23.080	1.00	2100.00	24.560	1.00	0.000	0.00	0.000
123.0	DB980H90E	6	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
123.0	DB980H65E	6	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
123.0	Lightning Rod	1	35.00	1.050	1.00	44.00	1.730	1.00	0.000	0.00	3.500
115.0	Low Profile platform	1	1300.00	23.080	1.00	2100.00	24.560	1.00	0.000	0.00	0.000
115.0	DB844H90E	9	10.00	3.960	1.00	35.00	4.520	1.00	0.000	0.00	0.000
105.0	RR90-17-00DP	6	12.00	5.230	0.67	35.00	5.800	0.67	0.000	0.00	0.000
105.0	Low Profile platform	1	1300.00	23.080	1.00	2100.00	24.560	1.00	0.000	0.00	0.000
95.00	Low Profile platform	1	1300.00	23.080	1.00	2100.00	24.560	1.00	0.000	0.00	0.000
95.00	DB844H80	12	10.00	2.900	1.00	37.00	3.400	1.00	0.000	0.00	0.000
85.00	Standoff	1	40.00	2.630	1.00	63.00	4.340	1.00	0.000	0.00	0.000
85.00	OD12-2400	1	2.00	0.390	1.00	5.50	0.660	1.00	0.000	0.00	1.667
75.00	Standoffs	3	242.00	8.190	0.67	301.00	11.130	0.67	0.000	0.00	0.000
75.00	Allgon 7250	6	16.00	4.300	0.67	36.00	5.000	0.67	0.000	0.00	0.000
65.00	MB96RR90-02 flush mounted	3	34.00	11.470	0.67	100.00	12.400	0.67	0.000	0.00	0.000
	Totals	58	6591.00			11236.50			Number of Loadings :		15

Pole :	CT33XC536	Sprint Sites USA - NJ	
Location:	1684 Chaimberline Hwy, Berlin, CT		
Height :	123.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	18 Sides		
Base Dia :	39.58 (in)	Top Dia : 22.00 (in)	
Taper :	0.150041 (in/ft)		



Segment Properties (Max Len : 5 ft)

Seg Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.2813	39.580	35.080	6,844.8	23.40	140.73	65	52	0.0
5.00		0.2813	38.829	34.410	6,460.3	22.93	138.06	65	52	591.1
10.00		0.2813	38.079	33.741	6,090.4	22.46	135.39	65	52	579.8
15.00		0.2813	37.329	33.071	5,734.9	21.99	132.73	65	52	568.4
20.00		0.2813	36.579	32.401	5,393.5	21.52	130.06	65	52	557.0
25.00		0.2813	35.829	31.732	5,066.0	21.05	127.39	65	52	545.6
30.00		0.2813	35.078	31.062	4,751.9	20.58	124.72	65	52	534.2
35.00		0.2813	34.328	30.392	4,451.2	20.11	122.06	65	52	522.8
40.00		0.2813	33.578	29.723	4,163.4	19.64	119.39	65	52	511.4
40.75	Bot - Section 2	0.2813	33.466	29.622	4,121.3	19.57	118.99	65	52	75.7
45.00	Top - Section 1	0.2500	33.328	26.246	3,628.2	22.10	133.31	65	52	807.5
50.00		0.2500	32.578	25.651	3,386.9	21.57	130.31	65	52	441.5
55.00		0.2500	31.827	25.056	3,156.6	21.04	127.31	65	52	431.4
60.00		0.2500	31.077	24.461	2,936.9	20.51	124.31	65	52	421.2
65.00		0.2500	30.327	23.865	2,727.7	19.98	121.31	65	52	411.1
70.00		0.2500	29.577	23.270	2,528.6	19.45	118.31	65	52	401.0
75.00		0.2500	28.827	22.675	2,339.5	18.92	115.31	65	52	390.8
80.00		0.2500	28.076	22.079	2,160.0	18.39	112.31	65	52	380.7
82.25	Bot - Section 3	0.2500	27.739	21.812	2,082.3	18.15	110.96	65	52	168.0
85.00		0.2500	27.326	21.484	1,990.0	17.86	109.30	65	52	356.9
85.75	Top - Section 2	0.1875	27.589	16.307	1,546.9	24.53	147.14	60	48	96.4
90.00		0.1875	26.951	15.927	1,441.4	23.93	143.74	60	48	233.1
95.00		0.1875	26.201	15.481	1,323.5	23.23	139.74	60	48	267.2
100.00		0.1875	25.451	15.034	1,212.3	22.52	135.74	60	48	259.6
105.00		0.1875	24.700	14.588	1,107.5	21.82	131.74	60	48	252.0
110.00		0.1875	23.950	14.141	1,008.9	21.11	127.73	60	48	244.4
115.00		0.1875	23.200	13.695	916.3	20.41	123.73	60	48	236.8
120.00		0.1875	22.450	13.248	829.6	19.70	119.73	60	48	229.2
123.00		0.1875	22.000	12.980	780.3	19.28	117.33	60	48	133.9
										10,648.6



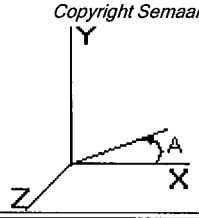
Load Case: No Ice 80 mph - No Ice 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	16.38	27.68	263.86	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	16.38	27.68	258.86	0.650	5.00	16.335	10.618	294.00	0.00	591.1
10.00		1.00	16.38	27.68	253.86	0.650	5.00	16.023	10.415	288.37	0.00	579.8
15.00		1.00	16.38	27.68	248.86	0.650	5.00	15.710	10.212	282.75	0.00	568.4
20.00		1.00	16.38	27.68	243.86	0.650	5.00	15.397	10.008	277.12	0.00	557.0
25.00		1.00	16.38	27.68	238.86	0.650	5.00	15.085	9.805	271.50	0.00	545.6
30.00		1.00	16.38	27.68	233.86	0.650	5.00	14.772	9.602	265.87	0.00	534.2
35.00		1.01	16.66	28.15	230.79	0.650	5.00	14.460	9.399	264.66	0.00	522.8
40.00		1.05	17.31	29.25	230.09	0.650	5.00	14.147	9.196	269.00	0.00	511.4
40.75	Bot - Section 2	1.06	17.40	29.40	229.93	0.650	0.75	2.095	1.362	40.05	0.00	75.7
45.00	Top - Section 1	1.09	17.90	30.25	228.77	0.650	4.25	11.917	7.746	234.34	0.00	807.5
50.00		1.12	18.44	31.17	230.47	0.650	5.00	13.730	8.925	278.27	0.00	441.5
55.00		1.15	18.95	32.04	228.25	0.650	5.00	13.418	8.722	279.44	0.00	431.4
60.00		1.18	19.43	32.84	225.65	0.650	5.00	13.105	8.518	279.80	0.00	421.2
65.00	Appertunance(s)	1.21	19.88	33.60	222.74	0.650	5.00	12.793	8.315	279.44	0.00	411.1
70.00		1.24	20.31	34.32	219.54	0.650	5.00	12.480	8.112	278.45	0.00	401.0
75.00	Appertunance(s)	1.26	20.71	35.00	216.09	0.650	5.00	12.167	7.909	276.88	0.00	390.8
80.00		1.28	21.10	35.66	212.42	0.650	5.00	11.855	7.706	274.79	0.00	380.7
82.25	Bot - Section 3	1.29	21.26	35.94	210.70	0.650	2.25	5.233	3.401	122.25	0.00	168.0
85.00	Appertunance(s)	1.31	21.46	36.28	208.54	0.650	2.75	6.395	4.157	150.83	0.00	356.9
85.75	Top - Section 2	1.31	21.52	36.37	207.94	0.650	0.75	1.728	1.123	40.85	0.00	96.4
90.00		1.33	21.82	36.88	207.36	0.650	4.25	9.658	6.278	231.53	0.00	233.1
95.00	Appertunance(s)	1.35	22.16	37.45	203.15	0.650	5.00	11.073	7.198	269.59	0.00	267.2
100.00		1.37	22.49	38.00	198.79	0.650	5.00	10.761	6.994	265.84	0.00	259.6
105.00	Appertunance(s)	1.39	22.80	38.54	194.28	0.650	5.00	10.448	6.791	261.75	0.00	252.0
110.00		1.41	23.11	39.05	189.63	0.650	5.00	10.136	6.588	257.31	0.00	244.4
115.00	Appertunance(s)	1.42	23.40	39.55	184.86	0.650	5.00	9.823	6.385	252.56	0.00	236.8
120.00		1.44	23.69	40.04	179.98	0.650	5.00	9.510	6.182	247.52	0.00	229.2
123.00	Appertunance(s)	1.45	23.86	40.32	176.99	0.650	3.00	5.556	3.612	145.63	0.00	133.9
					Totals:		123.00			6,680.38	0.00	10,648.6

Pole : CT33XC536 Sprint Sites USA - NJ
Location: 1684 Chaimberline Hwy, Berlin, CT
Height : 123.0 (ft) Base Elev : 0.000 (ft)
Shape : 18 Sides
Base Dia : 39.58 (in) Top Dia : 22.00 (in)
Taper : 0.150041 (in/ft)



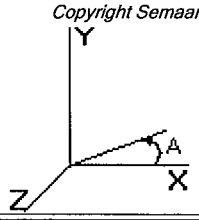
Load Case: No Ice 80 mph - No Ice 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
65.00	MB96RR90-02 flush	3	19.88	33.60	22.951	0.667	0.000	0.0	0.0	771.31	0.00	0.00	0.00	0.00	102.0
75.00	Standoffs	3	20.71	35.00	16.388	0.667	0.000	0.0	0.0	573.73	0.00	0.00	0.00	0.00	726.0
75.00	Allgon 7250	6	20.71	35.00	17.209	0.667	0.000	0.0	0.0	602.45	0.00	0.00	0.00	0.00	96.0
85.00	Standoff	1	21.46	36.28	2.630	1.000	0.000	0.0	0.0	95.43	0.00	0.00	0.00	0.00	40.0
85.00	OD12-2400	1	21.58	36.48	0.390	1.000	0.000	1.7	0.0	14.23	0.00	0.00	0.00	23.71	2.0
95.00	Low Profile platform	1	22.16	37.45	23.080	1.000	0.000	0.0	0.0	864.46	0.00	0.00	0.00	0.00	1300.0
95.00	DB844H80	12	22.16	37.45	34.800	1.000	0.000	0.0	0.0	1303.43	0.00	0.00	0.00	0.00	120.0
105.00	RR90-17-00DP	6	22.80	38.54	20.930	0.667	0.000	0.0	0.0	806.69	0.00	0.00	0.00	0.00	72.0
105.00	Low Profile platform	1	22.80	38.54	23.080	1.000	0.000	0.0	0.0	889.53	0.00	0.00	0.00	0.00	1300.0
115.00	Low Profile platform	1	23.40	39.55	23.080	1.000	0.000	0.0	0.0	912.96	0.00	0.00	0.00	0.00	1300.0
115.00	DB844H90E	9	23.40	39.55	35.640	1.000	0.000	0.0	0.0	1409.79	0.00	0.00	0.00	0.00	90.0
123.00	Low Profile platform	1	23.86	40.32	23.080	1.000	0.000	0.0	0.0	930.67	0.00	0.00	0.00	0.00	1300.0
123.00	DB980H90E	6	23.86	40.32	13.127	0.667	0.000	0.0	0.0	529.31	0.00	0.00	0.00	0.00	54.0
123.00	DB980H65E	6	23.86	40.32	13.127	0.667	0.000	0.0	0.0	529.31	0.00	0.00	0.00	0.00	54.0
123.00	Lightning Rod	1	24.05	40.64	1.050	1.000	0.000	3.5	0.0	42.68	0.00	0.00	0.00	149.38	35.0
										10,275.9	0.00				6,591.0

Pole :	CT33XC536	Sprint Sites USA - NJ	
Location:	1684 Chaimberline Hwy, Berlin, CT		
Height :	123.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	18 Sides		
Base Dia :	39.58 (in)	Top Dia : 22.00 (in)	
Taper :	0.150041 (in/ft)		



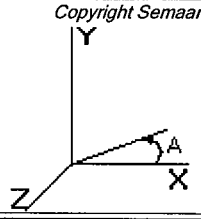
Load Case: No Ice — 80 mph - No Ice — 24 Iterations

Gust Response Factor : 1.69 — Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	294.00	591.15	0.00	0.00	0.00	0.00
10.00	0.00	0.00	288.37	579.76	0.00	0.00	0.00	0.00
15.00	0.00	0.00	282.75	568.36	0.00	0.00	0.00	0.00
20.00	0.00	0.00	277.12	556.97	0.00	0.00	0.00	0.00
25.00	0.00	0.00	271.50	545.57	0.00	0.00	0.00	0.00
30.00	0.00	0.00	265.87	534.18	0.00	0.00	0.00	0.00
35.00	0.00	0.00	264.66	522.79	0.00	0.00	0.00	0.00
40.00	0.00	0.00	269.00	511.39	0.00	0.00	0.00	0.00
40.75	0.00	0.00	40.05	75.73	0.00	0.00	0.00	0.00
45.00	0.00	0.00	234.34	807.50	0.00	0.00	0.00	0.00
50.00	0.00	0.00	278.27	441.49	0.00	0.00	0.00	0.00
55.00	0.00	0.00	279.44	431.36	0.00	0.00	0.00	0.00
60.00	0.00	0.00	279.80	421.23	0.00	0.00	0.00	0.00
65.00	0.00	0.00	1,050.76	513.10	0.00	0.00	0.00	0.00
70.00	0.00	0.00	278.45	400.98	0.00	0.00	0.00	0.00
75.00	0.00	0.00	1,453.06	1,212.85	0.00	0.00	0.00	0.00
80.00	0.00	0.00	274.79	380.72	0.00	0.00	0.00	0.00
82.25	0.00	0.00	122.25	168.02	0.00	0.00	0.00	0.00
85.00	0.00	0.00	260.49	398.94	0.00	0.00	0.00	23.71
85.75	0.00	0.00	40.85	96.42	0.00	0.00	0.00	0.00
90.00	0.00	0.00	231.53	233.08	0.00	0.00	0.00	0.00
95.00	0.00	0.00	2,437.48	1,687.18	0.00	0.00	0.00	0.00
100.00	0.00	0.00	265.84	259.59	0.00	0.00	0.00	0.00
105.00	0.00	0.00	1,957.97	1,623.99	0.00	0.00	0.00	0.00
110.00	0.00	0.00	257.31	244.40	0.00	0.00	0.00	0.00
115.00	0.00	0.00	2,575.31	1,626.80	0.00	0.00	0.00	0.00
120.00	0.00	0.00	247.52	229.20	0.00	0.00	0.00	0.00
123.00	0.00	0.00	2,177.60	1,576.88	0.00	0.00	0.00	149.38
	Totals:		16,956.37	17,239.63	0.00	0.00	0.00	173.10

Pole :	CT33XC536	Sprint Sites USA - NJ	
Location:	1684 Chaimberline Hwy, Berlin, CT		
Height :	123.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	18 Sides		
Base Dia :	39.58 (in)	Top Dia : 22.00 (in)	
Taper :	0.150041 (in/ft)		



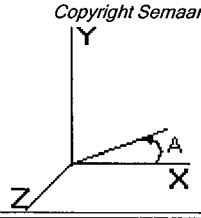
Load Case: No Ice — 80 mph - No Ice — 24 Iterations

Gust Response Factor : 1.69 — Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated 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	17.003	17.193	0.000	0.000	0.000	1,523.278	0.000	0.000	0.000	0.000
5.00	16.796	16.513	0.000	0.000	0.000	1,438.266	-0.165	0.000	0.165	-0.308
10.00	16.588	15.847	0.000	0.000	0.000	1,354.288	-0.652	0.000	0.652	-0.615
15.00	16.379	15.195	0.000	0.000	0.000	1,271.349	-1.460	0.000	1.460	-0.922
20.00	16.169	14.558	0.000	0.000	0.000	1,189.455	-2.589	0.000	2.589	-1.227
25.00	15.958	13.935	0.000	0.000	0.000	1,108.611	-4.036	0.000	4.036	-1.530
30.00	15.746	13.327	0.000	0.000	0.000	1,028.822	-5.799	0.000	5.799	-1.830
35.00	15.529	12.734	0.000	0.000	0.000	950.092	-7.875	0.000	7.875	-2.126
40.00	15.275	12.190	0.000	0.000	0.000	872.447	-10.258	0.000	10.258	-2.418
40.75	15.263	12.077	0.000	0.000	0.000	860.991	-10.641	0.000	10.641	-2.462
45.00	15.044	11.213	0.000	0.000	0.000	796.125	-12.943	0.000	12.943	-2.705
50.00	14.797	10.713	0.000	0.000	0.000	720.908	-15.924	0.000	15.924	-2.983
55.00	14.545	10.226	0.000	0.000	0.000	646.925	-19.202	0.000	19.202	-3.270
60.00	14.286	9.755	0.000	0.000	0.000	574.203	-22.773	0.000	22.773	-3.545
65.00	13.246	9.252	0.000	0.000	0.000	502.774	-26.625	0.000	26.625	-3.806
70.00	12.977	8.818	0.000	0.000	0.000	436.548	-30.740	0.000	30.740	-4.051
75.00	11.469	7.670	0.000	0.000	0.000	371.665	-35.103	0.000	35.103	-4.278
80.00	11.184	7.283	0.000	0.000	0.000	314.323	-39.693	0.000	39.693	-4.487
82.25	11.061	7.107	0.000	0.000	0.000	289.159	-41.827	0.000	41.827	-4.576
85.00	10.777	6.718	0.000	0.000	0.000	258.717	-44.491	0.000	44.491	-4.679
85.75	10.738	6.609	0.000	0.000	0.000	250.635	-45.228	0.000	45.228	-4.706
90.00	10.506	6.367	0.000	0.000	0.000	204.998	-49.478	0.000	49.478	-4.846
95.00	7.946	4.874	0.000	0.000	0.000	152.469	-54.646	0.000	54.646	-5.023
100.00	7.668	4.622	0.000	0.000	0.000	112.741	-59.980	0.000	59.980	-5.165
105.00	5.576	3.174	0.000	0.000	0.000	74.400	-65.445	0.000	65.445	-5.275
110.00	5.300	2.949	0.000	0.000	0.000	46.522	-71.006	0.000	71.006	-5.353
115.00	2.584	1.569	0.000	0.000	0.000	20.022	-76.633	0.000	76.633	-5.400
120.00	2.317	1.364	0.000	0.000	0.000	7.100	-82.293	0.000	82.293	-5.421
123.00	2.178	0.000	0.000	0.000	0.000	0.149	-85.696	0.000	85.696	-5.425

Pole :	CT33XC536	Sprint Sites USA - NJ	
Location:	1684 Chaimberline Hwy, Berlin, CT		
Height :	123.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	18 Sides		
Base Dia :	39.58 (in)	Top Dia : 22.00 (in)	
Taper :	0.150041 (in/ft)		

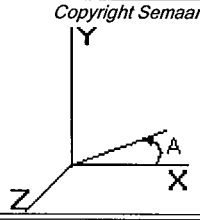


Load Case: No Ice — 80 mph - No Ice — 24 Iterations

Gust Response Factor : 1.69 — Effective Wind Speed : 80.00 (mph)
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	0.490	0.977	0.000	0.000	0.000	53.665	54.181	52.0	1.042
5.00	0.480	0.984	0.000	0.000	0.000	52.668	53.176	52.0	1.023
10.00	0.470	0.991	0.000	0.000	0.000	51.589	52.087	52.0	1.002
15.00	0.459	0.998	0.000	0.000	0.000	50.418	50.907	52.0	0.979
20.00	0.449	1.006	0.000	0.000	0.000	49.148	49.628	52.0	0.955
25.00	0.439	1.014	0.000	0.000	0.000	47.769	48.240	52.0	0.928
30.00	0.429	1.022	0.000	0.000	0.000	46.271	46.734	52.0	0.899
35.00	0.419	1.030	0.000	0.000	0.000	44.642	45.096	52.0	0.868
40.00	0.410	1.036	0.000	0.000	0.000	42.870	43.317	52.0	0.833
40.75	0.408	1.038	0.000	0.000	0.000	42.595	43.041	52.0	0.828
45.00	0.427	1.155	0.000	0.000	0.000	44.555	45.026	52.0	0.866
50.00	0.418	1.163	0.000	0.000	0.000	42.247	42.712	52.0	0.822
55.00	0.408	1.170	0.000	0.000	0.000	39.741	40.200	52.0	0.773
60.00	0.399	1.177	0.000	0.000	0.000	37.019	37.473	52.0	0.721
65.00	0.388	1.119	0.000	0.000	0.000	34.058	34.500	52.0	0.664
70.00	0.379	1.124	0.000	0.000	0.000	31.110	31.549	52.0	0.607
75.00	0.338	1.019	0.000	0.000	0.000	27.902	28.295	52.0	0.544
80.00	0.330	1.021	0.000	0.000	0.000	24.892	25.284	52.0	0.486
82.25	0.326	1.022	0.000	0.000	0.000	23.468	23.859	52.0	0.459
85.00	0.313	1.011	0.000	0.000	0.000	21.645	22.027	52.0	0.424
85.75	0.405	1.327	0.000	0.000	0.000	27.234	27.735	48.0	0.578
90.00	0.400	1.329	0.000	0.000	0.000	23.353	23.864	48.0	0.497
95.00	0.315	1.034	0.000	0.000	0.000	18.389	18.790	48.0	0.392
100.00	0.307	1.028	0.000	0.000	0.000	14.420	14.835	48.0	0.309
105.00	0.218	0.770	0.000	0.000	0.000	10.110	10.413	48.0	0.217
110.00	0.209	0.755	0.000	0.000	0.000	6.729	7.060	48.0	0.147
115.00	0.115	0.380	0.000	0.000	0.000	3.089	3.270	48.0	0.068
120.00	0.103	0.352	0.000	0.000	0.000	1.171	1.412	48.0	0.029
123.00	0.000	0.338	0.000	0.000	0.000	0.026	0.586	48.0	0.012



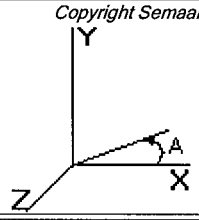
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	12.28	20.76	228.51	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	12.28	20.76	224.18	0.650	5.00	16.752	10.889	226.11	0.00	712.5
10.00		1.00	12.28	20.76	219.84	0.650	5.00	16.439	10.686	221.89	0.00	698.8
15.00		1.00	12.28	20.76	215.51	0.650	5.00	16.127	10.482	217.67	0.00	685.1
20.00		1.00	12.28	20.76	211.18	0.650	5.00	15.814	10.279	213.45	0.00	671.4
25.00		1.00	12.28	20.76	206.85	0.650	5.00	15.502	10.076	209.23	0.00	657.7
30.00		1.00	12.28	20.76	202.52	0.650	5.00	15.189	9.873	205.01	0.00	644.0
35.00		1.01	12.49	21.11	199.86	0.650	5.00	14.876	9.670	204.20	0.00	630.3
40.00		1.05	12.98	21.93	199.26	0.650	5.00	14.564	9.466	207.68	0.00	616.5
40.75	Bot - Section 2	1.06	13.05	22.05	199.12	0.650	0.75	2.158	1.402	30.93	0.00	91.4
45.00	Top - Section 1	1.09	13.42	22.69	198.11	0.650	4.25	12.271	7.976	180.97	0.00	896.2
50.00		1.12	13.83	23.38	199.58	0.650	5.00	14.147	9.196	215.02	0.00	543.6
55.00		1.15	14.21	24.02	197.66	0.650	5.00	13.834	8.992	216.07	0.00	531.1
60.00		1.18	14.57	24.63	195.42	0.650	5.00	13.522	8.789	216.51	0.00	518.7
65.00	Appertunance(s)	1.21	14.91	25.20	192.89	0.650	5.00	13.209	8.586	216.39	0.00	506.2
70.00		1.24	15.23	25.74	190.12	0.650	5.00	12.897	8.383	215.80	0.00	493.8
75.00	Appertunance(s)	1.26	15.53	26.25	187.14	0.650	5.00	12.584	8.180	214.76	0.00	481.3
80.00		1.28	15.82	26.74	183.95	0.650	5.00	12.271	7.976	213.32	0.00	468.9
82.25	Bot - Section 3	1.29	15.95	26.95	182.46	0.650	2.25	5.420	3.523	94.97	0.00	207.2
85.00	Appertunance(s)	1.31	16.10	27.21	180.60	0.650	2.75	6.625	4.306	117.17	0.00	404.8
85.75	Top - Section 2	1.31	16.14	27.27	180.08	0.650	0.75	1.790	1.164	31.75	0.00	109.4
90.00		1.33	16.36	27.65	179.58	0.650	4.25	10.012	6.508	180.00	0.00	305.1
95.00	Appertunance(s)	1.35	16.62	28.09	175.93	0.650	5.00	11.490	7.468	209.79	0.00	349.6
100.00		1.37	16.86	28.50	172.15	0.650	5.00	11.177	7.265	207.09	0.00	339.7
105.00	Appertunance(s)	1.39	17.10	28.90	168.24	0.650	5.00	10.865	7.062	204.13	0.00	329.8
110.00		1.41	17.33	29.29	164.22	0.650	5.00	10.552	6.859	200.91	0.00	319.8
115.00	Appertunance(s)	1.42	17.55	29.66	160.09	0.650	5.00	10.240	6.656	197.45	0.00	309.9
120.00		1.44	17.76	30.02	155.86	0.650	5.00	9.927	6.453	193.76	0.00	300.0
123.00	Appertunance(s)	1.45	17.89	30.24	153.27	0.650	3.00	5.806	3.774	114.13	0.00	175.5
					Totals:		123.00			5,176.17	0.00	12,998.4

Pole : CT33XC536 Sprint Sites USA - NJ
Location: 1684 Chaimberline Hwy, Berlin, CT
Height : 123.0 (ft) Base Elev : 0.000 (ft)
Shape : 18 Sides
Base Dia : 39.58 (in) Top Dia : 22.00 (in)
Taper : 0.150041 (in/ft)



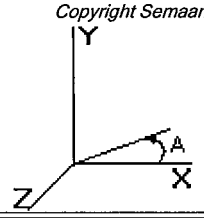
Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
65.00	MB96RR90-02 flush	3	14.91	25.20	24.812	0.667	0.000	0.0	0.0	625.35	0.00	0.00	0.00	0.00	300.0
75.00	Standoffs	3	15.53	26.25	22.271	0.667	0.000	0.0	0.0	584.73	0.00	0.00	0.00	0.00	903.0
75.00	Allgon 7250	6	15.53	26.25	20.010	0.667	0.000	0.0	0.0	525.36	0.00	0.00	0.00	0.00	216.0
85.00	Standoff	1	16.10	27.21	4.340	1.000	0.000	0.0	0.0	118.10	0.00	0.00	0.00	0.00	63.0
85.00	OD12-2400	1	16.19	27.36	0.660	1.000	0.000	1.7	0.0	18.06	0.00	0.00	0.00	30.10	5.5
95.00	Low Profile platform	1	16.62	28.09	24.560	1.000	0.000	0.0	0.0	689.88	0.00	0.00	0.00	0.00	2100.0
95.00	DB844H80	12	16.62	28.09	40.800	1.000	0.000	0.0	0.0	1146.05	0.00	0.00	0.00	0.00	444.0
105.00	RR90-17-00DP	6	17.10	28.90	23.212	0.667	0.000	0.0	0.0	670.92	0.00	0.00	0.00	0.00	210.0
105.00	Low Profile platform	1	17.10	28.90	24.560	1.000	0.000	0.0	0.0	709.89	0.00	0.00	0.00	0.00	2100.0
115.00	Low Profile platform	1	17.55	29.66	24.560	1.000	0.000	0.0	0.0	728.58	0.00	0.00	0.00	0.00	2100.0
115.00	DB844H90E	9	17.55	29.66	40.680	1.000	0.000	0.0	0.0	1206.79	0.00	0.00	0.00	0.00	315.0
123.00	Low Profile platform	1	17.89	30.24	24.560	1.000	0.000	0.0	0.0	742.72	0.00	0.00	0.00	0.00	2100.0
123.00	DB980H90E	6	17.89	30.24	15.408	0.667	0.000	0.0	0.0	465.95	0.00	0.00	0.00	0.00	168.0
123.00	DB980H65E	6	17.89	30.24	15.408	0.667	0.000	0.0	0.0	465.95	0.00	0.00	0.00	0.00	168.0
123.00	Lightning Rod	1	18.03	30.48	1.730	1.000	0.000	3.5	0.0	52.74	0.00	0.00	0.00	184.58	44.0
										8,751.06	0.00				11,236.5

Pole : CT33XC536 Sprint Sites USA - NJ
Location: 1684 Chaimberline Hwy, Berlin, CT
Height : 123.0 (ft) Base Elev : 0.000 (ft)
Shape : 18 Sides
Base Dia : 39.58 (in) Top Dia : 22.00 (in)
Taper : 0.150041 (in/ft)



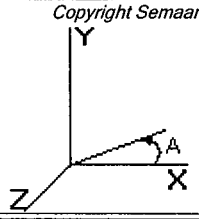
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	226.11	712.51	0.00	0.00	0.00	0.00
10.00	0.00	0.00	221.89	698.80	0.00	0.00	0.00	0.00
15.00	0.00	0.00	217.67	685.09	0.00	0.00	0.00	0.00
20.00	0.00	0.00	213.45	671.38	0.00	0.00	0.00	0.00
25.00	0.00	0.00	209.23	657.67	0.00	0.00	0.00	0.00
30.00	0.00	0.00	205.01	643.97	0.00	0.00	0.00	0.00
35.00	0.00	0.00	204.20	630.26	0.00	0.00	0.00	0.00
40.00	0.00	0.00	207.68	616.55	0.00	0.00	0.00	0.00
40.75	0.00	0.00	30.93	91.45	0.00	0.00	0.00	0.00
45.00	0.00	0.00	180.97	896.23	0.00	0.00	0.00	0.00
50.00	0.00	0.00	215.02	543.56	0.00	0.00	0.00	0.00
55.00	0.00	0.00	216.07	531.11	0.00	0.00	0.00	0.00
60.00	0.00	0.00	216.51	518.67	0.00	0.00	0.00	0.00
65.00	0.00	0.00	841.75	806.23	0.00	0.00	0.00	0.00
70.00	0.00	0.00	215.80	493.79	0.00	0.00	0.00	0.00
75.00	0.00	0.00	1,324.85	1,600.34	0.00	0.00	0.00	0.00
80.00	0.00	0.00	213.32	468.90	0.00	0.00	0.00	0.00
82.25	0.00	0.00	94.97	207.23	0.00	0.00	0.00	0.00
85.00	0.00	0.00	253.33	473.30	0.00	0.00	0.00	30.10
85.75	0.00	0.00	31.75	109.42	0.00	0.00	0.00	0.00
90.00	0.00	0.00	180.00	305.08	0.00	0.00	0.00	0.00
95.00	0.00	0.00	2,045.72	2,893.57	0.00	0.00	0.00	0.00
100.00	0.00	0.00	207.09	339.66	0.00	0.00	0.00	0.00
105.00	0.00	0.00	1,584.93	2,639.75	0.00	0.00	0.00	0.00
110.00	0.00	0.00	200.91	319.84	0.00	0.00	0.00	0.00
115.00	0.00	0.00	2,132.82	2,724.93	0.00	0.00	0.00	0.00
120.00	0.00	0.00	193.76	300.02	0.00	0.00	0.00	0.00
123.00	0.00	0.00	1,841.48	2,655.53	0.00	0.00	0.00	184.58
		Totals:	13,927.23	24,234.86	0.00	0.00	0.00	214.68

Pole : CT33XC536 Sprint Sites USA - NJ
Location: 1684 Chaimberline Hwy, Berlin, CT
Height : 123.0 (ft) Base Elev : 0.000 (ft)
Shape : 18 Sides
Base Dia : 39.58 (in) Top Dia : 22.00 (in)
Taper : 0.150041 (in/ft)



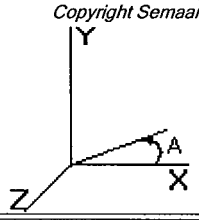
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated 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	13.983	24.202	0.000	0.000	0.000	1,290.114	0.000	0.000	0.000	0.000
5.00	13.862	23.427	0.000	0.000	0.000	1,220.203	-0.139	0.000	0.139	-0.261
10.00	13.738	22.668	0.000	0.000	0.000	1,150.896	-0.552	0.000	0.552	-0.522
15.00	13.613	21.924	0.000	0.000	0.000	1,082.206	-1.238	0.000	1.238	-0.783
20.00	13.485	21.195	0.000	0.000	0.000	1,014.144	-2.197	0.000	2.197	-1.043
25.00	13.354	20.482	0.000	0.000	0.000	946.722	-3.428	0.000	3.428	-1.301
30.00	13.221	19.785	0.000	0.000	0.000	879.952	-4.928	0.000	4.928	-1.558
35.00	13.083	19.103	0.000	0.000	0.000	813.847	-6.695	0.000	6.695	-1.811
40.00	12.900	18.462	0.000	0.000	0.000	748.435	-8.726	0.000	8.726	-2.061
40.75	12.906	18.344	0.000	0.000	0.000	738.760	-9.053	0.000	9.053	-2.099
45.00	12.759	17.406	0.000	0.000	0.000	683.911	-11.016	0.000	11.016	-2.308
50.00	12.593	16.818	0.000	0.000	0.000	620.118	-13.561	0.000	13.561	-2.546
55.00	12.421	16.245	0.000	0.000	0.000	557.157	-16.360	0.000	16.360	-2.793
60.00	12.242	15.689	0.000	0.000	0.000	495.055	-19.412	0.000	19.412	-3.031
65.00	11.414	14.887	0.000	0.000	0.000	433.848	-22.707	0.000	22.707	-3.256
70.00	11.220	14.367	0.000	0.000	0.000	376.782	-26.229	0.000	26.229	-3.467
75.00	9.841	12.820	0.000	0.000	0.000	320.681	-29.965	0.000	29.965	-3.663
80.00	9.624	12.345	0.000	0.000	0.000	271.479	-33.896	0.000	33.896	-3.843
82.25	9.533	12.131	0.000	0.000	0.000	249.825	-35.725	0.000	35.725	-3.920
85.00	9.259	11.667	0.000	0.000	0.000	223.579	-38.008	0.000	38.008	-4.009
85.75	9.235	11.548	0.000	0.000	0.000	216.634	-38.640	0.000	38.640	-4.033
90.00	9.061	11.235	0.000	0.000	0.000	177.387	-42.284	0.000	42.284	-4.154
95.00	6.827	8.484	0.000	0.000	0.000	132.084	-46.716	0.000	46.716	-4.307
100.00	6.611	8.148	0.000	0.000	0.000	97.948	-51.291	0.000	51.291	-4.430
105.00	4.832	5.634	0.000	0.000	0.000	64.895	-55.981	0.000	55.981	-4.526
110.00	4.612	5.326	0.000	0.000	0.000	40.734	-60.755	0.000	60.755	-4.594
115.00	2.268	2.781	0.000	0.000	0.000	17.676	-65.586	0.000	65.586	-4.635
120.00	2.051	2.497	0.000	0.000	0.000	6.337	-70.447	0.000	70.447	-4.654
123.00	1.841	0.000	0.000	0.000	0.000	0.185	-73.369	0.000	73.369	-4.657

Pole : CT33XC536 Sprint Sites USA - NJ
Location: 1684 Chaimberline Hwy, Berlin, CT
Height : 123.0 (ft) Base Elev : 0.000 (ft)
Shape : 18 Sides
Base Dia : 39.58 (in) Top Dia : 22.00 (in)
Taper : 0.150041 (in/ft)



Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
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	0.690	0.803	0.000	0.000	0.000	45.450	46.161	52.0	0.888
5.00	0.681	0.812	0.000	0.000	0.000	44.683	45.386	52.0	0.873
10.00	0.672	0.821	0.000	0.000	0.000	43.841	44.535	52.0	0.857
15.00	0.663	0.830	0.000	0.000	0.000	42.917	43.604	52.0	0.839
20.00	0.654	0.839	0.000	0.000	0.000	41.904	42.583	52.0	0.819
25.00	0.645	0.848	0.000	0.000	0.000	40.794	41.465	52.0	0.798
30.00	0.637	0.858	0.000	0.000	0.000	39.576	40.240	52.0	0.774
35.00	0.629	0.868	0.000	0.000	0.000	38.240	38.898	52.0	0.748
40.00	0.621	0.875	0.000	0.000	0.000	36.776	37.428	52.0	0.720
40.75	0.619	0.878	0.000	0.000	0.000	36.548	37.199	52.0	0.716
45.00	0.663	0.980	0.000	0.000	0.000	38.275	38.975	52.0	0.750
50.00	0.656	0.989	0.000	0.000	0.000	36.340	37.035	52.0	0.713
55.00	0.648	0.999	0.000	0.000	0.000	34.227	34.918	52.0	0.672
60.00	0.641	1.009	0.000	0.000	0.000	31.916	32.604	52.0	0.627
65.00	0.624	0.964	0.000	0.000	0.000	29.389	30.059	52.0	0.578
70.00	0.617	0.972	0.000	0.000	0.000	26.851	27.520	52.0	0.529
75.00	0.565	0.875	0.000	0.000	0.000	24.074	24.686	52.0	0.475
80.00	0.559	0.879	0.000	0.000	0.000	21.499	22.111	52.0	0.425
82.25	0.556	0.881	0.000	0.000	0.000	20.275	20.887	52.0	0.402
85.00	0.543	0.869	0.000	0.000	0.000	18.705	19.307	52.0	0.371
85.75	0.708	1.141	0.000	0.000	0.000	23.540	24.329	48.0	0.507
90.00	0.705	1.147	0.000	0.000	0.000	20.208	21.007	48.0	0.438
95.00	0.548	0.889	0.000	0.000	0.000	15.931	16.550	48.0	0.345
100.00	0.542	0.886	0.000	0.000	0.000	12.528	13.160	48.0	0.274
105.00	0.386	0.668	0.000	0.000	0.000	8.818	9.277	48.0	0.193
110.00	0.377	0.657	0.000	0.000	0.000	5.892	6.371	48.0	0.133
115.00	0.203	0.334	0.000	0.000	0.000	2.727	2.986	48.0	0.062
120.00	0.188	0.312	0.000	0.000	0.000	1.045	1.347	48.0	0.028
123.00	0.000	0.286	0.000	0.000	0.000	0.032	0.496	48.0	0.010

Pole : CT33XC536 Sprint Sites USA - NJ
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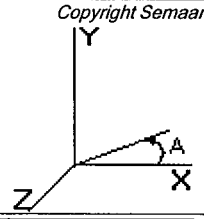

Load Case: No Ice 80 mph - No Ice 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

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	17.003	0.000	17.193	0.000	0.000	1,523.278	54.181	52.0	0.000	1.042
Ice	13.983	0.000	24.202	0.000	0.000	1,290.114	46.161	52.0	0.000	0.888