

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

www.ct.gov/csc

September 29, 2005

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-052-050912** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 130 Birdseye Road, Farmington, Connecticut.

Dear Attorney Baldwin:

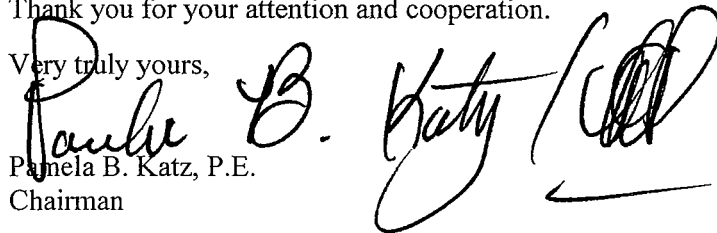
At a public meeting held on September 28, 2005, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated September 12, 2005, and additional power density information dated September 19, 2005, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,


Pamela B. Katz, P.E.
Chairman

PBK/laf

c: The Honorable Bruce A. Chudwick, Chairman Town Council, Town of Farmington
Jeffrey Ollendorf, Town Planner, Town of Farmington
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Thomas F. Flynn III, Nextel Communications, Inc.

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

EM-VER-052-050912

September 12, 2005

Via Hand Delivery

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



Re: **Notice of Exempt Modification**
130 Birdseye Road
Farmington, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") intends to install antennas on the existing 140-foot monopole tower at 130 Birdseye Road in Farmington, Connecticut. The tower is owned and operated by Sprint Sites USA. Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Farmington Town Manager, Kathleen A. Eagen.

The facility consists of a 140-foot self-supporting monopole tower capable of supporting multiple carriers within a fenced site compound. Cellco proposes to install twelve (12) panel-type antennas at the 110-foot level on the tower and a 12' x 30' single-story equipment shelter near the base of the tower within the fenced site compound. (See Tab 1 – Project Plans).

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

1. The proposed modification will not increase the overall height of the existing tower. Cellco's antennas will be mounted with their centerline at the 110-foot level on the 140-foot tower.



Law Offices

BOSTON

HARTFORD

NEW LONDON

STAMFORD

GREENWICH

WHITE PLAINS

NEW YORK CITY

SARASOTA

www.rc.com

HART1-1279209-1

ROBINSON & COLE_{LLP}

S. Derek Phelps
September 12, 2005
Page 2

2. The proposed installation of twelve (12) panel-type antennas and a 12' x 30' equipment shelter will require a minor extension of the fenced site compound. However, the lease area will not need to be expanded.

3. The proposed antenna modification will not increase the noise levels at the facility by six decibels or more.

4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. The cumulative worst-case RF power density calculations for the existing and proposed Cellco antennas would be 11.02% of the FCC standard. A copy of the cumulative power density calculations table is attached behind Tab 2.

Also attached, behind Tab 3, is a structural analysis stating that the tower can support the existing and proposed antennas and associated equipment.

For the foregoing reasons, Cellco respectfully submits that the proposed antenna installation at the Farmington facility tower constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Attachments

cc: Kathleen A. Eagen, Town Manager
Sandy M. Carter



ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

SEP 19 2005
September 19, 2005

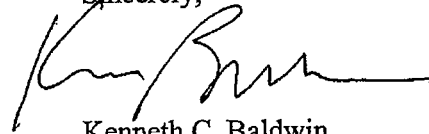
Michael Perrone
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: **EX-VER-052-050912- 130 Birdseye Road, Farmington, CT**

Dear Mr. Perrone:

As requested, enclosed please find the cumulative power density calculations table for the above referenced facility.

Sincerely,



Kenneth C. Baldwin



Law Offices

BOSTON

HARTFORD

NEW LONDON

STAMFORD

GREENWICH

WHITE PLAINS

NEW YORK CITY

SARASOTA

www.rc.com

HART1-1282496-1

General Power Density

Site Name: New Britain 5, CT
 Tower Height: 110 FT

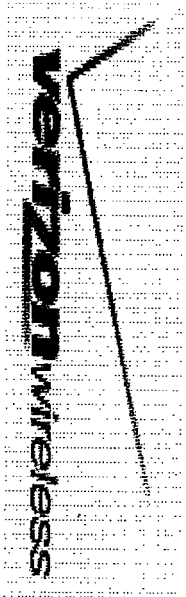
Operator	Operating Frequency (MHz)	Power (watts)	Height (feet)	ERP (mW/cm ²)	Distance (feet)	ERP (mW/cm ²)	ERP (mW/cm ²)	ERP (%)
Verizon	880	200	1800	110	0.0535	0.586	9.13%	
Verizon	1900	200	600	110	0.0178	1	1.78%	
Sprint	1900	122	1342	140	0.0246	1	2.46%	
Nextel	851	100	900	120	0.0225	0.586	3.84%	
Total Percentage of Maximum Permissible Exposure								17.21%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power



General Power Density

Site Name: New Britain 5, CT
 Tower Height: 110 ft rad center

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
Verizon	869	9	200	1800	110	0.0535	0.5793	9.23%
Verizon	1900	3	200	600	110	0.0178	1	1.78%
Total Percentage of Maximum Permissible Exposure								11.02%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
 mW/cm² = milliwatts per square centimeter
 ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



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

SEMAAN ENGINEERING SOLUTIONS

140 ft SUMMIT Monopole Structural Analysis

Prepared for:
Global Signal
301 North Cattlemen Road, Suite 300
Sarasota, FL 34232

Site: 3017655 / CT03XC100
Verizon
Farmington, CT



August 24, 2005

Ms. Laura Rectenwal
Global Signal
301 North Cattlemen Road, Suite 300
Sarasota, FL 34232

Re: Site Number 3017655 / CT03XC100 – Farmington, CT.

Dear Ms. Rectenwal:

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 140 ft SUMMIT Monopole.

Refer to SUMMIT drawing 2933-01 dated November 3, 1997 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 **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 (fastest mile)**. 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:

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
139.0	12	DB980H On a Low Profile Platform	(12) 1-5/8	Sprint
130.0	12	Allgon 7262.02 On a Low Profile Platform	(12) 1-5/8	AT&T
120.0	12	ALP 9212 On a Low Profile Platform	(12) 1-5/8	Nextel
110.0	6	LPD-6513 On a Low Profile Platform	(12) 1-5/8	Verizon
	6	LPA 185063/8CF On Same Platform		

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: 100.0%.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,325.00	2,264.30	97.4
Shear (kips)	25.00	23.11	92.4

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 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

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

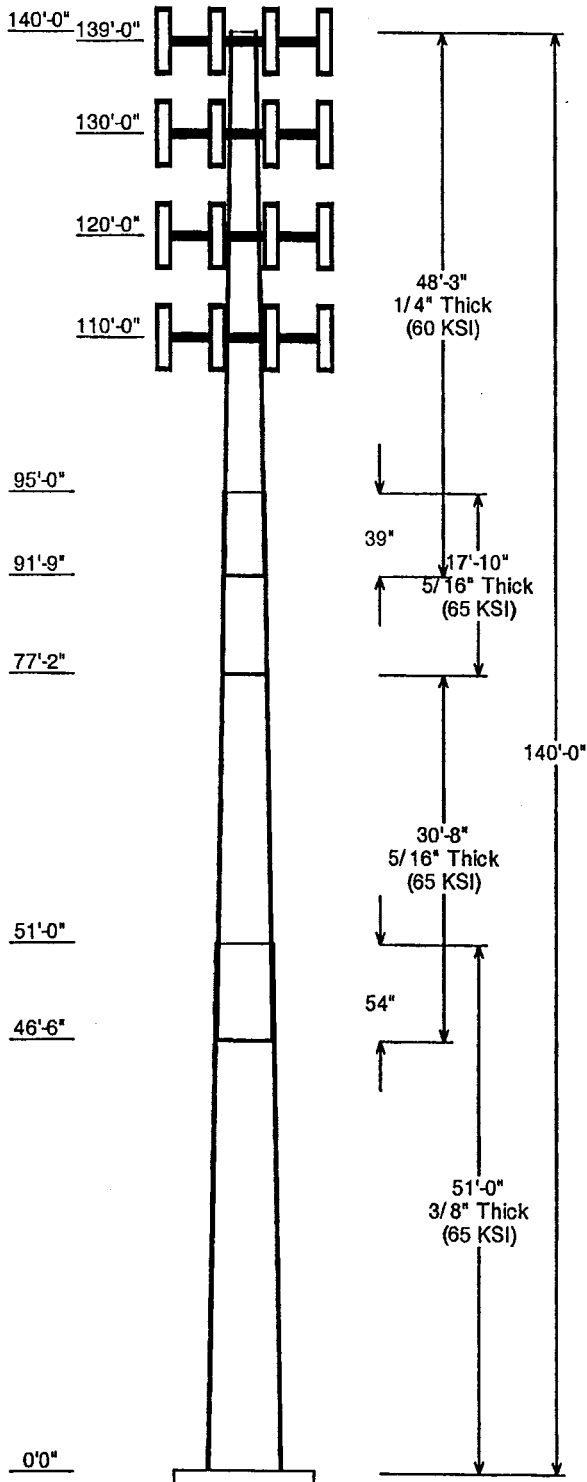
Copyright Semaan Engineering Solutions, Inc

Job Information	
Pole :	CT03XC100
Description :	
Client :	Global Signal
Location :	3017655 - Farmington, CT
Type :	12 Sides
Height :(ft)	140.00
Base Elev (ft):	0.00
Taper:	0.205000 (in/ft)

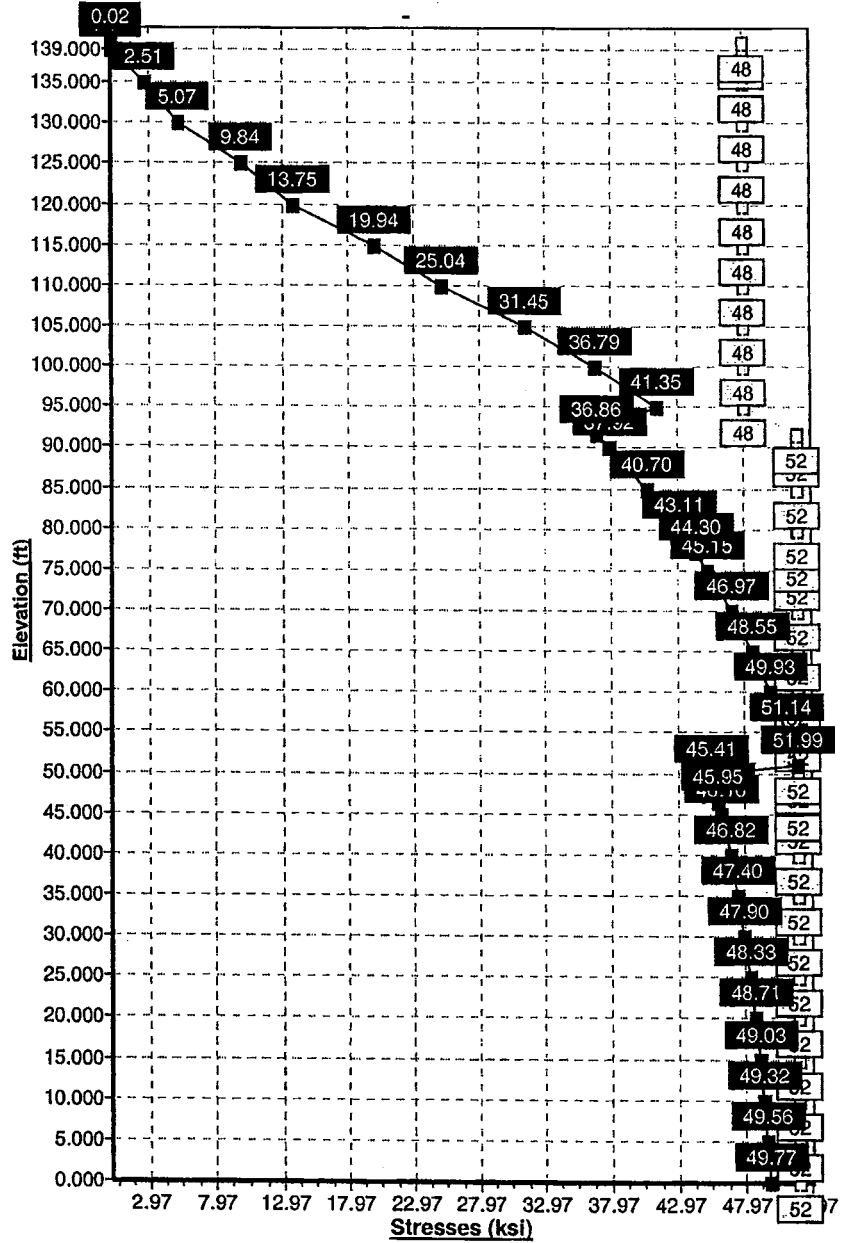
Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom					
1	51.000	33.12	43.58	0.375		0.000	0.205000	65
2	30.667	28.38	34.67	0.313	Slip Joint	54.000	0.205000	65
3	17.833	24.73	28.38	0.313	Butt Joint	0.000	0.205000	65
4	48.250	16.00	25.89	0.250	Slip Joint	39.000	0.205000	60

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
139.000	139.000	12	DB980H
139.000	139.000	1	Low Profile Platform
130.000	130.000	1	Low Profile Platform
130.000	130.000	12	Allgon 7262.02
120.000	120.000	1	Low Profile Platform
120.000	120.000	12	ALP 9212
110.000	110.000	6	LPA 185063/8CF
110.000	110.000	1	Low Profile Platform
110.000	110.000	6	LPD-6513

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
80.00 mph Wind w/ No Ice	2,264.305	23.112	-22.723
69.28 mph Wind w/ 0.50 in Ice	1,893.001	18.750	-28.358

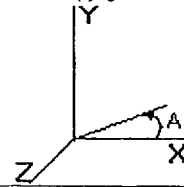


Load Case : No Ice



Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



Shaft Section Properties

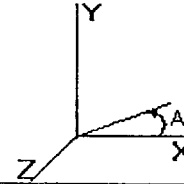
Sect Num	Length (ft)	Thick (in)	Fy (ksl)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top				Taper (in/ft)				
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)		Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio
1	51.000	0.3750	65		0.00	7,958	43.58	0.000	52.17	12429.9	29.00	116.2	33.12	51.00	39.55	5413.7	21.53	88.33	0.20500
2	30.667	0.3125	65	Slip Joint	54.00	3,278	34.67	46.50	34.57	5210.0	27.59	110.9	28.38	77.16	28.25	2841.6	22.20	90.83	0.20500
3	17.833	0.3125	65	Butt Joint	0.00	1,603	28.38	77.16	28.25	2841.6	22.20	90.83	24.73	95.00	24.57	1869.7	19.06	79.14	0.20500
4	48.250	0.2500	60	Slip Joint	39.00	2,736	25.89	91.75	20.65	1733.2	25.61	103.5	16.00	140.0	12.68	401.8	15.01	64.02	0.20500
Shaft Weight						15,575													

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)	X Angle (deg)	Vert Ecc (ft)
139.0	DB980H	12	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
139.0	Low Profile Platform	1	1600.00	24.000	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
130.0	Low Profile Platform	1	1600.00	24.000	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
130.0	Allgon 7262.02	12	12.24	2.960	1.00	21.80	3.400	1.00	0.000	0.00	0.000
120.0	Low Profile Platform	1	1600.00	24.000	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
120.0	ALP 9212	12	27.00	5.460	1.00	48.00	5.990	1.00	0.000	0.00	0.000
110.0	LPA 185063/8CF	6	9.00	2.970	1.00	30.93	3.480	1.00	0.000	0.00	0.000
110.0	Low Profile Platform	1	1600.00	24.000	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
110.0	LPD-6513	6	28.00	6.420	1.00	74.00	7.020	1.00	0.000	0.00	0.000
Totals		52	7200.88			10203.18			Number of Loadings : 9		

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)

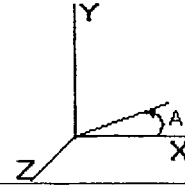


Segment Properties (Max Len : 5 ft)

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		0.3750	43.580	52.170	12,429.9	29.00	116.21	65	52	0.0
5.00		0.3750	42.555	50.932	11,566.0	28.26	113.48	65	52	877.1
10.00		0.3750	41.530	49.694	10,743.1	27.53	110.75	65	52	856.0
15.00		0.3750	40.505	48.457	9,960.3	26.80	108.01	65	52	835.0
20.00		0.3750	39.480	47.219	9,216.4	26.07	105.28	65	52	813.9
25.00		0.3750	38.455	45.981	8,510.5	25.33	102.55	65	52	792.8
30.00		0.3750	37.430	44.744	7,841.6	24.60	99.81	65	52	771.8
35.00		0.3750	36.405	43.506	7,208.7	23.87	97.08	65	52	750.7
40.00		0.3750	35.380	42.268	6,610.8	23.14	94.35	65	52	729.7
45.00		0.3750	34.355	41.030	6,046.9	22.40	91.61	65	52	708.6
46.50	Bot - Section 2	0.3750	34.047	40.659	5,884.2	22.18	90.79	65	52	208.5
50.00		0.3750	33.330	39.793	5,516.0	21.67	88.88	65	52	886.6
51.00	Top - Section 1	0.3125	33.750	33.646	4,801.6	26.79	108.00	65	52	249.8
55.00		0.3125	32.930	32.821	4,456.9	26.09	105.38	65	52	452.3
60.00		0.3125	31.905	31.790	4,049.8	25.21	102.10	65	52	549.6
65.00		0.3125	30.880	30.758	3,668.3	24.33	98.82	65	52	532.1
70.00		0.3125	29.855	29.727	3,311.5	23.45	95.54	65	52	514.5
75.00		0.3125	28.830	28.695	2,978.6	22.58	92.26	65	52	497.0
77.17	Top - Section 2	0.3125	28.385	28.248	2,841.6	22.20	90.83	65	52	209.9
77.17	Bot - Section 3	0.3125	28.385	28.248	2,841.6	22.20	90.83	65	52	
80.00		0.3125	27.805	27.664	2,668.8	21.70	88.98	65	52	269.5
85.00		0.3125	26.780	26.633	2,381.3	20.82	85.70	65	52	461.9
90.00		0.3125	25.755	25.601	2,115.2	19.94	82.42	65	52	444.4
91.75	Bot - Section 4	0.3125	25.396	25.240	2,027.0	19.63	81.27	65	52	151.4
95.00	Top - Section 3	0.2500	25.230	20.109	1,601.6	24.90	100.92	60	48	500.8
100.00		0.2500	24.205	19.284	1,412.4	23.80	96.82	60	48	335.1
105.00		0.2500	23.180	18.458	1,238.7	22.70	92.72	60	48	321.1
110.00		0.2500	22.155	17.633	1,079.9	21.60	88.62	60	48	307.0
115.00		0.2500	21.130	16.808	935.3	20.50	84.52	60	48	293.0
120.00		0.2500	20.105	15.983	804.2	19.40	80.42	60	48	279.0
125.00		0.2500	19.080	15.158	686.0	18.31	76.32	60	48	264.9
130.00		0.2500	18.055	14.333	579.9	17.21	72.22	60	48	250.9
135.00		0.2500	17.030	13.508	485.4	16.11	68.12	60	48	236.8
139.00		0.2500	16.210	12.848	417.7	15.23	64.84	60	48	179.4
140.00		0.2500	16.005	12.683	401.8	15.01	64.02	60	48	43.4
										15,574.5

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



Load Case: No Ice	80 mph - No Ice	26 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	290.53	1.030	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	16.38	27.68	283.70	1.030	5.00	17.945	18.483	511.78	0.00	877.1
10.00		1.00	16.38	27.68	276.86	1.030	5.00	17.518	18.043	499.60	0.00	856.0
15.00		1.00	16.38	27.68	270.03	1.030	5.00	17.090	17.603	487.41	0.00	835.0
20.00		1.00	16.38	27.68	263.20	1.030	5.00	16.663	17.163	475.23	0.00	813.9
25.00		1.00	16.38	27.68	256.36	1.030	5.00	16.236	16.723	463.05	0.00	792.8
30.00		1.00	16.38	27.68	249.53	1.030	5.00	15.809	16.284	450.87	0.00	771.8
35.00		1.01	16.66	28.15	244.75	1.030	5.00	15.382	15.844	446.13	0.00	750.7
40.00		1.05	17.31	29.25	242.44	1.030	5.00	14.955	15.404	450.61	0.00	729.7
45.00		1.09	17.90	30.25	239.41	1.030	5.00	14.528	14.964	452.73	0.00	708.6
46.50	Bot - Section 2	1.10	18.07	30.53	238.38	1.030	1.50	4.275	4.403	134.48	0.00	208.5
50.00		1.12	18.44	31.17	235.79	1.030	3.50	10.008	10.308	321.41	0.00	886.6
51.00	Top - Section 1	1.13	18.55	31.35	235.00	1.030	1.00	2.821	2.906	91.11	0.00	249.8
55.00		1.15	18.95	32.04	236.15	1.030	4.00	11.113	11.447	366.75	0.00	452.3
60.00		1.18	19.43	32.84	231.66	1.030	5.00	13.507	13.912	456.97	0.00	549.6
65.00		1.21	19.88	33.60	226.80	1.030	5.00	13.080	13.472	452.76	0.00	532.1
70.00		1.24	20.31	34.32	221.60	1.030	5.00	12.653	13.033	447.35	0.00	514.5
75.00		1.26	20.71	35.00	216.11	1.030	5.00	12.226	12.593	440.86	0.00	497.0
77.17	Top - Section 2	1.27	20.88	35.29	213.65	1.030	2.17	5.166	5.321	187.81	0.00	209.9
80.00		1.28	21.10	35.66	210.36	1.030	2.83	6.633	6.832	243.62	0.00	269.5
85.00		1.31	21.46	36.28	204.37	1.030	5.00	11.372	11.713	424.98	0.00	461.9
90.00		1.33	21.82	36.88	198.16	1.030	5.00	10.945	11.273	415.76	0.00	444.4
91.75	Bot - Section 4	1.33	21.94	37.08	195.94	1.030	1.75	3.730	3.841	142.46	0.00	151.4
95.00	Top - Section 3	1.35	22.16	37.45	191.75	1.030	3.25	6.923	7.131	267.09	0.00	500.8
100.00		1.37	22.49	38.00	189.06	1.030	5.00	10.299	10.608	403.19	0.00	335.1
105.00		1.39	22.80	38.54	182.32	1.030	5.00	9.872	10.168	391.89	0.00	321.1
110.00	Appertunance(s)	1.41	23.11	39.05	175.42	1.030	5.00	9.445	9.728	379.95	0.00	307.0
115.00		1.42	23.40	39.55	168.37	1.030	5.00	9.018	9.288	367.40	0.00	293.0
120.00	Appertunance(s)	1.44	23.69	40.04	161.18	1.030	5.00	8.591	8.848	354.29	0.00	279.0
125.00		1.46	23.97	40.51	153.85	1.030	5.00	8.163	8.408	340.62	0.00	264.9
130.00	Appertunance(s)	1.48	24.24	40.96	146.41	1.030	5.00	7.736	7.968	326.44	0.00	250.9
135.00		1.49	24.50	41.41	138.84	1.030	5.00	7.309	7.529	311.76	0.00	236.8
139.00	Appertunance(s)	1.50	24.70	41.75	132.71	1.030	4.00	5.540	5.706	238.27	0.00	179.4
140.00		1.51	24.75	41.84	131.16	1.030	1.00	1.342	1.383	57.85	0.00	43.4
				Totals:			140.00			11,802.47	0.00	15,574.5

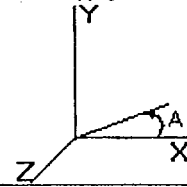
Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)

Copyright Semaan Engineering Solutions, Inc

8/24/2005 4:48:33 PM

Page: 4



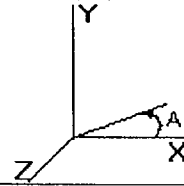
Load Case: No Ice 80 mph - No Ice 26 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

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)
110.00	LPA 185063/BCF	6	23.11	39.05	17.820	1.000	0.000	0.0	0.0	696.00	0.00	0.00	0.00	0.00	54.0
110.00	Low Profile Platform	1	23.11	39.05	24.000	1.000	0.000	0.0	0.0	937.37	0.00	0.00	0.00	0.00	1600.0
110.00	LPD-6513	6	23.11	39.05	38.520	1.000	0.000	0.0	0.0	1504.48	0.00	0.00	0.00	0.00	168.0
120.00	Low Profile Platform	1	23.69	40.04	24.000	1.000	0.000	0.0	0.0	960.97	0.00	0.00	0.00	0.00	1600.0
120.00	ALP 9212	12	23.69	40.04	65.520	1.000	0.000	0.0	0.0	2623.44	0.00	0.00	0.00	0.00	324.0
130.00	Low Profile Platform	1	24.24	40.96	24.000	1.000	0.000	0.0	0.0	983.20	0.00	0.00	0.00	0.00	1600.0
130.00	Aligon 7262.02	12	24.24	40.96	35.520	1.000	0.000	0.0	0.0	1455.13	0.00	0.00	0.00	0.00	146.9
139.00	DB980H	12	24.70	41.75	26.253	0.667	0.000	0.0	0.0	1096.27	0.00	0.00	0.00	0.00	108.0
139.00	Low Profile Platform	1	24.70	41.75	24.000	1.000	0.000	0.0	0.0	1002.18	0.00	0.00	0.00	0.00	1600.0
										11,259.0	0.00				7,200.9

Pole : CT03XC100
 Location : 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



Load Case: No Ice 80 mph - No Ice 26 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

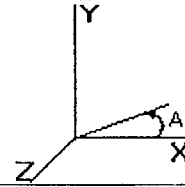
Applied Forces Summary

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	511.78	877.08	0.00	0.00	0.00	0.00
10.00	0.00	0.00	499.60	856.02	0.00	0.00	0.00	0.00
15.00	0.00	0.00	487.41	834.96	0.00	0.00	0.00	0.00
20.00	0.00	0.00	475.23	813.91	0.00	0.00	0.00	0.00
25.00	0.00	0.00	463.05	792.85	0.00	0.00	0.00	0.00
30.00	0.00	0.00	450.87	771.79	0.00	0.00	0.00	0.00
35.00	0.00	0.00	446.13	750.73	0.00	0.00	0.00	0.00
40.00	0.00	0.00	450.61	729.67	0.00	0.00	0.00	0.00
45.00	0.00	0.00	452.73	708.62	0.00	0.00	0.00	0.00
46.50	0.00	0.00	134.48	208.48	0.00	0.00	0.00	0.00
50.00	0.00	0.00	321.41	886.55	0.00	0.00	0.00	0.00
51.00	0.00	0.00	91.11	249.83	0.00	0.00	0.00	0.00
55.00	0.00	0.00	366.75	452.35	0.00	0.00	0.00	0.00
60.00	0.00	0.00	456.97	549.64	0.00	0.00	0.00	0.00
65.00	0.00	0.00	452.76	532.09	0.00	0.00	0.00	0.00
70.00	0.00	0.00	447.35	514.54	0.00	0.00	0.00	0.00
75.00	0.00	0.00	440.86	497.00	0.00	0.00	0.00	0.00
77.17	0.00	0.00	187.81	209.95	0.00	0.00	0.00	0.00
80.00	0.00	0.00	243.62	269.50	0.00	0.00	0.00	0.00
85.00	0.00	0.00	424.98	461.90	0.00	0.00	0.00	0.00
90.00	0.00	0.00	415.76	444.35	0.00	0.00	0.00	0.00
91.75	0.00	0.00	142.46	151.37	0.00	0.00	0.00	0.00
95.00	0.00	0.00	267.09	500.77	0.00	0.00	0.00	0.00
100.00	0.00	0.00	403.19	335.11	0.00	0.00	0.00	0.00
105.00	0.00	0.00	391.89	321.07	0.00	0.00	0.00	0.00
110.00	0.00	0.00	3,517.80	2,129.03	0.00	0.00	0.00	0.00
115.00	0.00	0.00	367.40	292.99	0.00	0.00	0.00	0.00
120.00	0.00	0.00	3,938.69	2,202.95	0.00	0.00	0.00	0.00
125.00	0.00	0.00	340.62	264.91	0.00	0.00	0.00	0.00
130.00	0.00	0.00	2,764.77	1,997.76	0.00	0.00	0.00	0.00
135.00	0.00	0.00	311.76	236.84	0.00	0.00	0.00	0.00
139.00	0.00	0.00	2,336.72	1,887.36	0.00	0.00	0.00	0.00
140.00	0.00	0.00	57.85	43.44	0.00	0.00	0.00	0.00
Totals:			23,061.51	22,775.41	0.00	0.00	0.00	0.00

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)

Copyright Semaan Engineering Solutions, Inc
 8/24/2005 4:48:33 PM
 Page: 6



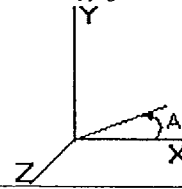
Load Case: No Ice 80 mph - No Ice 26 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

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	23.112	22.723	0.000	0.000	0.000	2,264.305	0.000	0.000	0.000	0.000
5.00	22.696	21.747	0.000	0.000	0.000	2,148.744	-0.135	0.000	0.135	-0.253
10.00	22.285	20.793	0.000	0.000	0.000	2,035.267	-0.537	0.000	0.537	-0.510
15.00	21.880	19.863	0.000	0.000	0.000	1,923.845	-1.212	0.000	1.212	-0.772
20.00	21.481	18.956	0.000	0.000	0.000	1,814.446	-2.163	0.000	2.163	-1.039
25.00	21.089	18.072	0.000	0.000	0.000	1,707.041	-3.396	0.000	3.396	-1.311
30.00	20.703	17.211	0.000	0.000	0.000	1,601.598	-4.917	0.000	4.917	-1.587
35.00	20.315	16.374	0.000	0.000	0.000	1,498.086	-6.730	0.000	6.730	-1.868
40.00	19.918	15.561	0.000	0.000	0.000	1,396.511	-8.839	0.000	8.839	-2.154
45.00	19.486	14.807	0.000	0.000	0.000	1,296.924	-11.249	0.000	11.249	-2.444
46.50	19.486	14.554	0.000	0.000	0.000	1,267.696	-12.032	0.000	12.032	-2.534
50.00	19.051	13.638	0.000	0.000	0.000	1,199.864	-13.967	0.000	13.967	-2.743
51.00	18.983	13.343	0.000	0.000	0.000	1,180.814	-14.548	0.000	14.548	-2.804
55.00	18.659	12.815	0.000	0.000	0.000	1,104.883	-17.000	0.000	17.000	-3.045
60.00	18.244	12.185	0.000	0.000	0.000	1,011.589	-20.368	0.000	20.368	-3.382
65.00	17.828	11.576	0.000	0.000	0.000	920.370	-24.091	0.000	24.091	-3.722
70.00	17.412	10.990	0.000	0.000	0.000	831.230	-28.168	0.000	28.168	-4.061
75.00	16.980	10.456	0.000	0.000	0.000	744.170	-32.600	0.000	32.600	-4.400
77.17	16.807	10.210	0.000	0.000	0.000	707.374	-34.630	0.000	34.630	-4.550
80.00	16.589	9.885	0.000	0.000	0.000	659.759	-37.386	0.000	37.386	-4.744
85.00	16.179	9.370	0.000	0.000	0.000	576.817	-42.526	0.000	42.526	-5.073
90.00	15.758	8.906	0.000	0.000	0.000	495.923	-48.006	0.000	48.006	-5.394
91.75	15.626	8.726	0.000	0.000	0.000	468.349	-50.002	0.000	50.002	-5.507
95.00	15.347	8.187	0.000	0.000	0.000	417.565	-53.816	0.000	53.816	-5.709
100.00	14.952	7.817	0.000	0.000	0.000	340.831	-59.943	0.000	59.943	-5.998
105.00	14.566	7.467	0.000	0.000	0.000	266.070	-66.381	0.000	66.381	-6.303
110.00	10.855	5.701	0.000	0.000	0.000	193.243	-73.116	0.000	73.116	-6.567
115.00	10.475	5.417	0.000	0.000	0.000	138.968	-80.101	0.000	80.101	-6.786
120.00	6.310	3.686	0.000	0.000	0.000	86.595	-87.289	0.000	87.289	-6.958
125.00	5.946	3.454	0.000	0.000	0.000	55.046	-94.628	0.000	94.628	-7.083
130.00	2.956	1.812	0.000	0.000	0.000	25.317	-102.077	0.000	102.077	-7.166
135.00	2.618	1.615	0.000	0.000	0.000	10.535	-109.588	0.000	109.588	-7.210
139.00	0.063	0.036	0.000	0.000	0.000	0.063	-115.620	0.000	115.620	-7.222
140.00	0.058	0.000	0.000	0.000	0.000	0.000	-117.129	0.000	117.129	-7.223

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



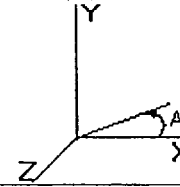
Load Case: No Ice 80 mph - No Ice 26 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.436	0.900	0.000	0.000	0.000	49.313	49.773	52.0	0.957
5.00	0.427	0.905	0.000	0.000	0.000	49.108	49.560	52.0	0.953
10.00	0.418	0.911	0.000	0.000	0.000	48.872	49.315	52.0	0.948
15.00	0.410	0.917	0.000	0.000	0.000	48.597	49.033	52.0	0.943
20.00	0.401	0.924	0.000	0.000	0.000	48.280	48.708	52.0	0.937
25.00	0.393	0.932	0.000	0.000	0.000	47.912	48.332	52.0	0.930
30.00	0.385	0.940	0.000	0.000	0.000	47.487	47.899	52.0	0.921
35.00	0.376	0.949	0.000	0.000	0.000	46.994	47.399	52.0	0.912
40.00	0.368	0.957	0.000	0.000	0.000	46.425	46.823	52.0	0.901
45.00	0.361	0.965	0.000	0.000	0.000	45.770	46.161	52.0	0.888
46.50	0.358	0.968	0.000	0.000	0.000	45.563	45.952	52.0	0.884
50.00	0.343	0.973	0.000	0.000	0.000	45.035	45.409	52.0	0.873
51.00	0.397	1.146	0.000	0.000	0.000	51.556	51.990	52.0	1.000
55.00	0.390	1.155	0.000	0.000	0.000	50.708	51.138	52.0	0.984
60.00	0.383	1.166	0.000	0.000	0.000	49.503	49.928	52.0	0.960
65.00	0.376	1.178	0.000	0.000	0.000	48.126	48.546	52.0	0.934
70.00	0.370	1.190	0.000	0.000	0.000	46.550	46.965	52.0	0.903
75.00	0.364	1.202	0.000	0.000	0.000	44.741	45.154	52.0	0.868
77.17	0.361	1.209	0.000	0.000	0.000	43.893	44.304	52.0	0.852
77.17	0.361	1.209	0.000	0.000	0.000	43.893	44.304	52.0	0.852
80.00	0.357	1.218	0.000	0.000	0.000	42.696	43.105	52.0	0.829
85.00	0.352	1.234	0.000	0.000	0.000	40.294	40.702	52.0	0.783
90.00	0.348	1.251	0.000	0.000	0.000	37.508	37.918	52.0	0.729
91.75	0.346	1.258	0.000	0.000	0.000	36.449	36.859	52.0	0.709
95.00	0.407	1.551	0.000	0.000	0.000	40.860	41.355	48.0	0.862
100.00	0.405	1.575	0.000	0.000	0.000	36.282	36.789	48.0	0.767
105.00	0.405	1.603	0.000	0.000	0.000	30.927	31.454	48.0	0.655
110.00	0.323	1.251	0.000	0.000	0.000	24.625	25.043	48.0	0.522
115.00	0.322	1.266	0.000	0.000	0.000	19.501	19.944	48.0	0.416
120.00	0.231	0.802	0.000	0.000	0.000	13.447	13.748	48.0	0.286
125.00	0.228	0.797	0.000	0.000	0.000	9.510	9.835	48.0	0.205
130.00	0.126	0.419	0.000	0.000	0.000	4.896	5.074	48.0	0.106
135.00	0.120	0.394	0.000	0.000	0.000	2.296	2.510	48.0	0.052
139.00	0.003	0.010	0.000	0.000	0.000	0.015	0.025	48.0	0.001
140.00	0.000	0.009	0.000	0.000	0.000	0.000	0.016	48.0	0.000

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



Load Case: Ice	80 mph - With Ice - Ice Thickness = 0.5 in	25 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	251.60	1.030	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	12.28	20.76	245.68	1.030	5.00	18.361	18.912	392.72	0.00	1,011.9
10.00		1.00	12.28	20.76	239.76	1.030	5.00	17.934	18.472	383.59	0.00	987.6
15.00		1.00	12.28	20.76	233.85	1.030	5.00	17.507	18.032	374.45	0.00	963.3
20.00		1.00	12.28	20.76	227.93	1.030	5.00	17.080	17.592	365.32	0.00	939.1
25.00		1.00	12.28	20.76	222.01	1.030	5.00	16.653	17.153	356.18	0.00	914.8
30.00		1.00	12.28	20.76	216.09	1.030	5.00	16.226	16.713	347.05	0.00	890.5
35.00		1.01	12.49	21.11	211.95	1.030	5.00	15.799	16.273	343.64	0.00	866.3
40.00		1.05	12.98	21.93	209.95	1.030	5.00	15.372	15.833	347.35	0.00	842.0
45.00		1.09	13.42	22.69	207.33	1.030	5.00	14.945	15.393	349.26	0.00	817.7
46.50	Bot - Section 2	1.10	13.55	22.90	206.44	1.030	1.50	4.400	4.532	103.80	0.00	240.9
50.00		1.12	13.83	23.38	204.19	1.030	3.50	10.300	10.609	248.07	0.00	962.1
51.00	Top - Section 1	1.13	13.91	23.51	203.51	1.030	1.00	2.904	2.991	70.35	0.00	271.3
55.00		1.15	14.21	24.02	204.51	1.030	4.00	11.447	11.790	283.30	0.00	536.1
60.00		1.18	14.57	24.63	200.62	1.030	5.00	13.924	14.342	353.28	0.00	651.1
65.00		1.21	14.91	25.20	196.41	1.030	5.00	13.497	13.902	350.37	0.00	630.3
70.00		1.24	15.23	25.74	191.91	1.030	5.00	13.070	13.462	346.54	0.00	609.6
75.00		1.26	15.53	26.25	187.16	1.030	5.00	12.643	13.022	341.89	0.00	588.8
77.17	Top - Section 2	1.27	15.66	26.47	185.02	1.030	2.17	5.347	5.507	145.77	0.00	249.1
80.00		1.28	15.82	26.74	182.17	1.030	2.83	6.869	7.075	189.21	0.00	319.7
85.00		1.31	16.10	27.21	176.98	1.030	5.00	11.788	12.142	330.40	0.00	547.3
90.00		1.33	16.36	27.65	171.61	1.030	5.00	11.361	11.702	323.67	0.00	526.5
91.75	Bot - Section 4	1.33	16.45	27.81	169.68	1.030	1.75	3.875	3.992	111.01	0.00	179.7
95.00	Top - Section 3	1.35	16.62	28.09	166.05	1.030	3.25	7.194	7.410	208.14	0.00	553.1
100.00		1.37	16.86	28.50	163.72	1.030	5.00	10.716	11.037	314.61	0.00	412.5
105.00		1.39	17.10	28.90	157.89	1.030	5.00	10.288	10.597	306.30	0.00	395.2
110.00	Appertunance(s)	1.41	17.33	29.29	151.91	1.030	5.00	9.861	10.157	297.52	0.00	378.0
115.00		1.42	17.55	29.66	145.81	1.030	5.00	9.434	9.717	288.27	0.00	360.7
120.00	Appertunance(s)	1.44	17.76	30.02	139.58	1.030	5.00	9.007	9.277	278.59	0.00	343.5
125.00		1.46	17.97	30.38	133.24	1.030	5.00	8.580	8.837	268.49	0.00	326.2
130.00	Appertunance(s)	1.48	18.17	30.72	126.79	1.030	5.00	8.153	8.398	258.00	0.00	309.0
135.00		1.49	18.37	31.05	120.24	1.030	5.00	7.726	7.958	247.14	0.00	291.7
139.00	Appertunance(s)	1.50	18.53	31.31	114.93	1.030	4.00	5.873	6.049	189.45	0.00	221.2
140.00		1.51	18.56	31.38	113.59	1.030	1.00	1.426	1.468	46.08	0.00	53.8
Totals:							140.00			9,159.78	0.00	18,190.5

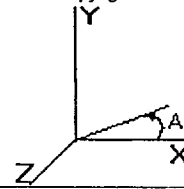
Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)

Copyright Semaan Engineering Solutions, Inc

8/24/2005 4:48:34 PM

Page: 9



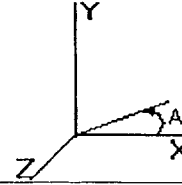
Load Case: Ice	80 mph - With Ice - Ice Thickness = 0.5 in	25 Iterations
Gust Response Factor : 1.69	Effective Wind Speed : 69.28 (mph)	
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

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)
110.00	LPA 185063/8CF	6	17.33	29.29	20.880	1.000	0.000	0.0	0.0	611.60	0.00	0.00	0.00	0.00	185.6
110.00	Low Profile Platform	1	17.33	29.29	27.320	1.000	0.000	0.0	0.0	800.23	0.00	0.00	0.00	0.00	2100.0
110.00	LPD-6513	6	17.33	29.29	42.120	1.000	0.000	0.0	0.0	1233.74	0.00	0.00	0.00	0.00	444.0
120.00	Low Profile Platform	1	17.76	30.02	27.320	1.000	0.000	0.0	0.0	820.37	0.00	0.00	0.00	0.00	2100.0
120.00	ALP 9212	12	17.76	30.02	71.880	1.000	0.000	0.0	0.0	2158.45	0.00	0.00	0.00	0.00	576.0
130.00	Low Profile Platform	1	18.17	30.72	27.320	1.000	0.000	0.0	0.0	839.35	0.00	0.00	0.00	0.00	2100.0
130.00	Allgon 7262.02	12	18.17	30.72	40.800	1.000	0.000	0.0	0.0	1253.50	0.00	0.00	0.00	0.00	261.6
139.00	DB980H	12	18.53	31.31	30.815	0.667	0.000	0.0	0.0	965.03	0.00	0.00	0.00	0.00	336.0
139.00	Low Profile Platform	1	18.53	31.31	27.320	1.000	0.000	0.0	0.0	855.56	0.00	0.00	0.00	0.00	2100.0
										9,537.84	0.00				10,203.2

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



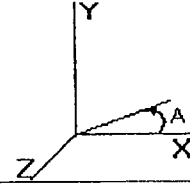
Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 25 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

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	392.72	1,011.87	0.00	0.00	0.00	0.00
10.00	0.00	0.00	383.59	987.60	0.00	0.00	0.00	0.00
15.00	0.00	0.00	374.45	963.33	0.00	0.00	0.00	0.00
20.00	0.00	0.00	365.32	939.07	0.00	0.00	0.00	0.00
25.00	0.00	0.00	356.18	914.80	0.00	0.00	0.00	0.00
30.00	0.00	0.00	347.05	890.53	0.00	0.00	0.00	0.00
35.00	0.00	0.00	343.64	866.27	0.00	0.00	0.00	0.00
40.00	0.00	0.00	347.35	842.00	0.00	0.00	0.00	0.00
45.00	0.00	0.00	349.26	817.73	0.00	0.00	0.00	0.00
46.50	0.00	0.00	103.80	240.92	0.00	0.00	0.00	0.00
50.00	0.00	0.00	248.07	962.06	0.00	0.00	0.00	0.00
51.00	0.00	0.00	70.35	271.27	0.00	0.00	0.00	0.00
55.00	0.00	0.00	283.30	536.07	0.00	0.00	0.00	0.00
60.00	0.00	0.00	353.28	651.08	0.00	0.00	0.00	0.00
65.00	0.00	0.00	350.37	630.33	0.00	0.00	0.00	0.00
70.00	0.00	0.00	346.54	609.57	0.00	0.00	0.00	0.00
75.00	0.00	0.00	341.89	588.81	0.00	0.00	0.00	0.00
77.17	0.00	0.00	145.77	249.14	0.00	0.00	0.00	0.00
80.00	0.00	0.00	189.21	319.71	0.00	0.00	0.00	0.00
85.00	0.00	0.00	330.40	547.30	0.00	0.00	0.00	0.00
90.00	0.00	0.00	323.67	526.54	0.00	0.00	0.00	0.00
91.75	0.00	0.00	111.01	179.74	0.00	0.00	0.00	0.00
95.00	0.00	0.00	208.14	553.13	0.00	0.00	0.00	0.00
100.00	0.00	0.00	314.61	412.46	0.00	0.00	0.00	0.00
105.00	0.00	0.00	306.30	395.20	0.00	0.00	0.00	0.00
110.00	0.00	0.00	2,943.09	3,107.53	0.00	0.00	0.00	0.00
115.00	0.00	0.00	288.27	360.70	0.00	0.00	0.00	0.00
120.00	0.00	0.00	3,257.41	3,019.46	0.00	0.00	0.00	0.00
125.00	0.00	0.00	268.49	326.21	0.00	0.00	0.00	0.00
130.00	0.00	0.00	2,350.85	2,670.56	0.00	0.00	0.00	0.00
135.00	0.00	0.00	247.14	291.71	0.00	0.00	0.00	0.00
139.00	0.00	0.00	2,010.04	2,657.21	0.00	0.00	0.00	0.00
140.00	0.00	0.00	46.08	53.77	0.00	0.00	0.00	0.00
Totals:			18,697.62	28,393.67	0.00	0.00	0.00	0.00

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



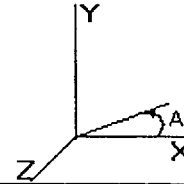
Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 25 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

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	18.750	28.358	0.000	0.000	0.000	1,893.001	0.000	0.000	0.000	0.000
5.00	18.457	27.279	0.000	0.000	0.000	1,799.253	-0.113	0.000	0.113	-0.211
10.00	18.168	26.224	0.000	0.000	0.000	1,706.969	-0.450	0.000	0.450	-0.427
15.00	17.882	25.195	0.000	0.000	0.000	1,616.131	-1.014	0.000	1.014	-0.647
20.00	17.600	24.192	0.000	0.000	0.000	1,526.722	-1.812	0.000	1.812	-0.871
25.00	17.322	23.214	0.000	0.000	0.000	1,438.722	-2.847	0.000	2.847	-1.100
30.00	17.048	22.261	0.000	0.000	0.000	1,352.112	-4.124	0.000	4.124	-1.333
35.00	16.772	21.334	0.000	0.000	0.000	1,266.874	-5.647	0.000	5.647	-1.571
40.00	16.487	20.432	0.000	0.000	0.000	1,183.016	-7.422	0.000	7.422	-1.813
45.00	16.165	19.582	0.000	0.000	0.000	1,100.584	-9.451	0.000	9.451	-2.058
46.50	16.095	19.309	0.000	0.000	0.000	1,076.337	-10.111	0.000	10.111	-2.135
50.00	15.847	18.326	0.000	0.000	0.000	1,020.004	-11.742	0.000	11.742	-2.313
51.00	15.806	18.022	0.000	0.000	0.000	1,004.157	-12.232	0.000	12.232	-2.365
55.00	15.575	17.431	0.000	0.000	0.000	940.934	-14.300	0.000	14.300	-2.569
60.00	15.276	16.721	0.000	0.000	0.000	863.059	-17.145	0.000	17.145	-2.857
65.00	14.975	16.034	0.000	0.000	0.000	786.680	-20.291	0.000	20.291	-3.147
70.00	14.672	15.371	0.000	0.000	0.000	711.808	-23.741	0.000	23.741	-3.437
75.00	14.347	14.753	0.000	0.000	0.000	638.450	-27.495	0.000	27.495	-3.727
77.17	14.223	14.478	0.000	0.000	0.000	607.360	-29.216	0.000	29.216	-3.856
80.00	14.068	14.116	0.000	0.000	0.000	567.067	-31.553	0.000	31.553	-4.023
85.00	13.765	13.527	0.000	0.000	0.000	496.728	-35.916	0.000	35.916	-4.306
90.00	13.444	12.984	0.000	0.000	0.000	427.903	-40.571	0.000	40.571	-4.583
91.75	13.349	12.782	0.000	0.000	0.000	404.378	-42.268	0.000	42.268	-4.681
95.00	13.142	12.199	0.000	0.000	0.000	360.994	-45.512	0.000	45.512	-4.855
100.00	12.846	11.757	0.000	0.000	0.000	295.287	-50.727	0.000	50.727	-5.105
105.00	12.554	11.338	0.000	0.000	0.000	231.060	-56.212	0.000	56.212	-5.370
110.00	9.358	8.492	0.000	0.000	0.000	168.293	-61.955	0.000	61.955	-5.599
115.00	9.059	8.135	0.000	0.000	0.000	121.505	-67.916	0.000	67.916	-5.790
120.00	5.522	5.452	0.000	0.000	0.000	76.209	-74.056	0.000	74.056	-5.940
125.00	5.230	5.147	0.000	0.000	0.000	48.597	-80.328	0.000	80.328	-6.051
130.00	2.611	2.739	0.000	0.000	0.000	22.449	-86.697	0.000	86.697	-6.124
135.00	2.335	2.474	0.000	0.000	0.000	9.393	-93.122	0.000	93.122	-6.163
139.00	0.051	0.048	0.000	0.000	0.000	0.051	-98.283	0.000	98.283	-6.175
140.00	0.046	0.000	0.000	0.000	0.000	0.000	-99.573	0.000	99.573	-6.175

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 25 Iterations

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

Dead Load Factor : 1.00

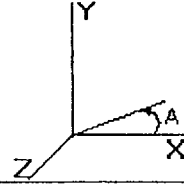
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.544	0.730	0.000	0.000	0.000	41.227	41.789	52.0	0.804
5.00	0.536	0.736	0.000	0.000	0.000	41.121	41.676	52.0	0.802
10.00	0.528	0.743	0.000	0.000	0.000	40.988	41.536	52.0	0.799
15.00	0.520	0.750	0.000	0.000	0.000	40.824	41.365	52.0	0.796
20.00	0.512	0.757	0.000	0.000	0.000	40.624	41.157	52.0	0.792
25.00	0.505	0.765	0.000	0.000	0.000	40.381	40.908	52.0	0.787
30.00	0.498	0.774	0.000	0.000	0.000	40.090	40.609	52.0	0.781
35.00	0.490	0.783	0.000	0.000	0.000	39.741	40.255	52.0	0.774
40.00	0.483	0.793	0.000	0.000	0.000	39.328	39.835	52.0	0.766
45.00	0.477	0.800	0.000	0.000	0.000	38.841	39.342	52.0	0.757
46.50	0.475	0.804	0.000	0.000	0.000	38.686	39.185	52.0	0.754
50.00	0.461	0.809	0.000	0.000	0.000	38.284	38.770	52.0	0.746
51.00	0.536	0.954	0.000	0.000	0.000	43.843	44.409	52.0	0.854
55.00	0.531	0.964	0.000	0.000	0.000	43.184	43.747	52.0	0.841
60.00	0.526	0.976	0.000	0.000	0.000	42.235	42.794	52.0	0.823
65.00	0.521	0.989	0.000	0.000	0.000	41.136	41.692	52.0	0.802
70.00	0.517	1.003	0.000	0.000	0.000	39.862	40.417	52.0	0.777
75.00	0.514	1.016	0.000	0.000	0.000	38.385	38.939	52.0	0.749
77.17	0.513	1.023	0.000	0.000	0.000	37.687	38.241	52.0	0.735
77.17	0.513	1.023	0.000	0.000	0.000	37.687	38.241	52.0	0.735
80.00	0.510	1.033	0.000	0.000	0.000	36.698	37.251	52.0	0.716
85.00	0.508	1.050	0.000	0.000	0.000	34.699	35.254	52.0	0.678
90.00	0.507	1.067	0.000	0.000	0.000	32.363	32.922	52.0	0.633
91.75	0.506	1.075	0.000	0.000	0.000	31.471	32.031	52.0	0.616
95.00	0.607	1.328	0.000	0.000	0.000	35.324	36.005	48.0	0.750
100.00	0.610	1.353	0.000	0.000	0.000	31.434	32.129	48.0	0.669
105.00	0.614	1.382	0.000	0.000	0.000	26.857	27.576	48.0	0.575
110.00	0.482	1.078	0.000	0.000	0.000	21.446	22.007	48.0	0.459
115.00	0.484	1.095	0.000	0.000	0.000	17.051	17.637	48.0	0.367
120.00	0.341	0.702	0.000	0.000	0.000	11.834	12.236	48.0	0.255
125.00	0.340	0.701	0.000	0.000	0.000	8.396	8.820	48.0	0.184
130.00	0.191	0.370	0.000	0.000	0.000	4.341	4.577	48.0	0.095
135.00	0.183	0.351	0.000	0.000	0.000	2.047	2.312	48.0	0.048
139.00	0.004	0.008	0.000	0.000	0.000	0.012	0.021	48.0	0.000
140.00	0.000	0.007	0.000	0.000	0.000	0.000	0.013	48.0	0.000

Pole : CT03XC100
 Location: 3017655 - Farmington, CT
 Height : 140.0 (ft)
 Shape : 12 Sides
 Base Dia : 43.58 (in)
 Taper : 0.205000 (in/ft)

Global Signal
 Base Elev : 0.000 (ft)
 Top Dia : 16.00 (in)



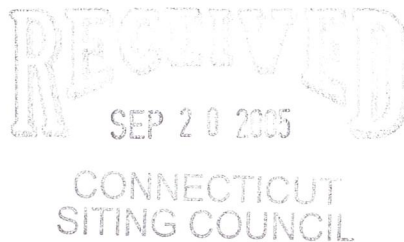
Load Case: No Ice 80 mph - No Ice 26 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

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	23.112	0.000	22.723	0.000	0.000	2,264.305	51.990	52.0	51.000	1.000
Ice	18.750	0.000	28.358	0.000	0.000	1,893.001	44.409	52.0	51.000	0.854

ROBINSON & COLE_{LLP}

KENNETH C. BALDWIN



280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

September 19, 2005

Michael Perrone
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: **EX-VER-052-050912- 130 Birdseye Road, Farmington, CT**

Dear Mr. Perrone:

As requested, enclosed please find the cumulative power density calculations table for the above referenced facility.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ken Baldwin", written over the word "Sincerely,".

Kenneth C. Baldwin



Law Offices

BOSTON

HARTFORD

NEW LONDON

STAMFORD

GREENWICH

WHITE PLAINS

NEW YORK CITY

SARASOTA

www.rc.com

HART1-1282496-1

General Power Density

Site Name: New Britain 5, CT
 Tower Height: 110 FT

Operator	Operating Frequency (MHz)	Number of Trans	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure (mW/cm ²)	Fracton of MPE (%)
Verizon	880	9	200	1800	110	0.0535	0.586	9.13%
Verizon	1900	3	200	600	110	0.0178	1	1.78%
Sprint	1900	11	122	1342	140	0.0246	1	2.46%
Nextel	851	9	100	900	120	0.0225	0.586	3.84%
Total Percentage of Maximum Permissible Exposure								17.21%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
 mW/cm² = milliwatts per square centimeter
 ERP = Effective Radiated Power

