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

October 5, 2005

The Honorable Patricia A. Murphy
Mayor
Town of New Milford
10 Main Street
New Milford, CT 06776

RE: **EM-CING-096-051005** – New Cingular Wireless PCS, LLC. notice of intent to modify an existing telecommunications facility located at 399 Chestnut Land Road, New Milford, Connecticut.

Dear Mayor Murphy:

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 October 19, 2005 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by October 17, 2005.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/ap

Enclosure: Notice of Intent

G:\EM\CINGULAR\NEWMILFO\Murphy.DOC

CSC
CONNECTICUT SITING COUNCIL

New Cingular Wireless PCS, LLC
500 Enterprise Drive Rocky Hill,
Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

October 5, 2005

EM-CING-096-051005

Ms. Pam Katz, Chairman, and
Members of the Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Notice of Exempt Modification – Existing Global Signal Telecommunications Tower Facility at 399 Chestnut Land Road, New Milford, Connecticut

Dear Chairman Katz and Members of the Council:

New Cingular Wireless PCS, LLC ("Cingular") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower off Chestnut Land Road in New Milford, Connecticut. Please accept this letter as notification to the Council, pursuant to R.C.S.A. Section 16-50j-73, of construction which 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 Mayor of New Milford.

Existing Facility

The New Milford facility is located at 399 Chestnut Land Road (CT Rte 109), which lies between New Milford and Washington Depot, approximately 3 miles northeast of the fork of US Hwy 202 and Rte 109. Tower coordinates (NAD 83) are N 41° 37' 55" and W 73° 22' 03".

The facility is controlled and operated by Global Signal Acquisitions II LLC ("Global"), 301 N. Cattlemen Road, Sarasota Florida 34222. Global leases the land from Howard Kimberly of New Milford.

The New Milford facility was initially approved by the Council on May 20, 2003 in Docket 233 under an application by Sprint PCS, which has since leased the entire site to Global for management. AT&T Wireless co-located on the tower as an intervenor. As a condition of federal approvals for the merger between AT&T Wireless and Cingular, however, the AT&T installation has been divested, and the AT&T antennas and equipment at the site are now owned and operated by Alltel. Cingular, therefore, must now co-locate separately on this tower to maintain wireless coverage in the New Milford area.

~ ORIGINAL ~

The tower facility consists of an approximately 160'-foot monopole within a roughly 60' x 60' compound surrounded by a chain link fence. Sprint and Alltel operate wireless communications equipment at the facility, and Verizon has also been approved by Global Signal to collocate at the 140 foot level of the tower.

Proposed Modifications

Cingular operates under licenses issued by the Federal Communications Commission ("FCC") to provide cellular and PCS mobile telephone service in Litchfield County, which includes the area to be served by Cingular's proposed installation.

Attached to this Notice are a site location map, a site plan, tower profile, and a structural analysis report that shows the tower is structurally capable of supporting the proposed Cingular telecommunications equipment.

As shown on the attached drawings and as further described below, Cingular proposes to install up to three flush-mounted 55"-high Powerwave 7770.00-panel antennas, or their functional equivalents, at a centerline height of approximately 130 feet above ground level. Cingular also proposes to place an 11½ ' x 20' prefabricated concrete equipment building in the existing compound at the base of the tower.

Statutory Considerations

The changes to the New Milford 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 Global and within the existing fence.

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 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 *	160	1962.5	11	291	0.0450	1.0000	4.50
Alltel *	150	1945 - 50 1965 - 70	4	250	0.0160	1.0000	1.60
Cingular	130	880 - 894	6	296	0.0378	0.5867	6.44
Cingular	130	1930 - 1935	3	427	0.0273	1.0000	2.73
Total							**15.26%**

* Power density parameters from Siting Council records in Docket 233.

† 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 15.3 % of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the tower facility would thus be within applicable standards.

For the foregoing reasons, Cingular respectfully submits that proposed changes at the New Milford site constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 or Christopher Fisher, Esq. at (914) 761-1300 with questions concerning this notice. Thank you for your consideration in this matter.

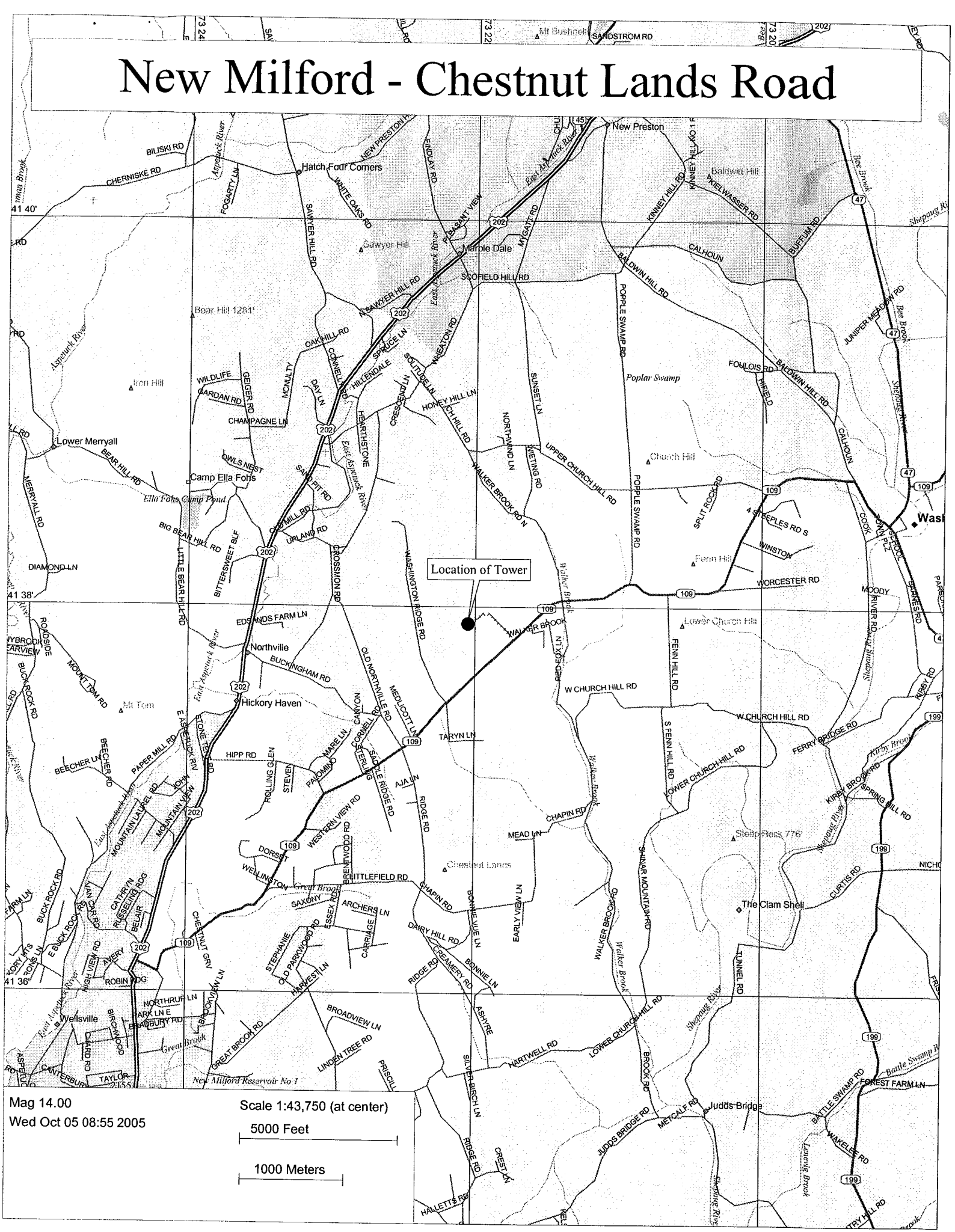
Respectfully yours,

Steven Levine
Real Estate Consultant

Enclosures

cc: Honorable Patricia A. Murphy, Mayor, Town of New Milford
Michele G. Briggs, Manager of Real Estate
Christopher B. Fisher, Esq.

New Milford - Chestnut Lands Road



RAD. CENTER: 130 FT. (AGL)

10 0 10

(SCALE IN FEET)

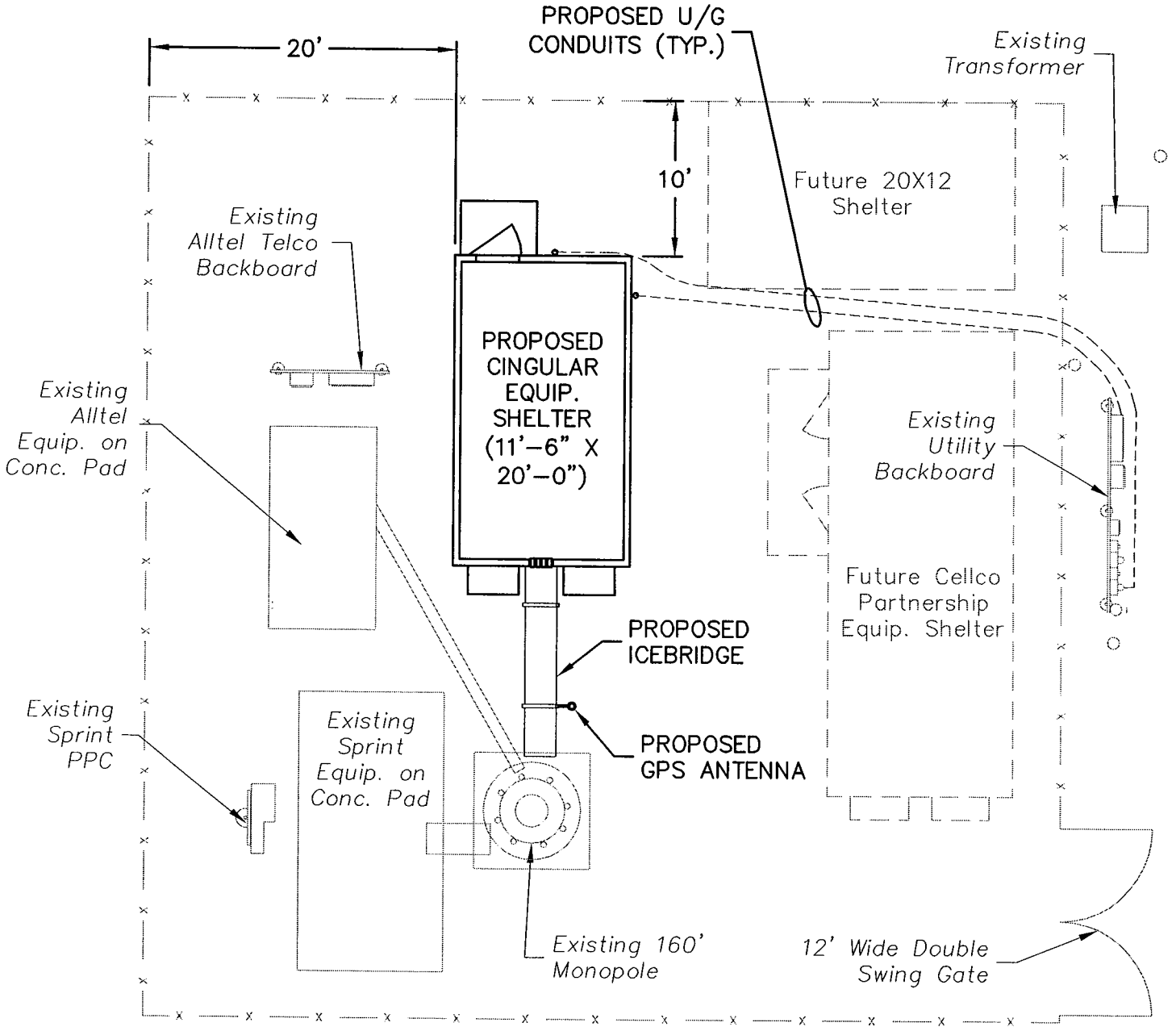


EXHIBIT 1A
PLAN VIEW

DESIGN EXHIBIT

NORTH

SITE NAME: KIMBERLY PROPERTY

ADDRESS: 399 CHESTNUT LAND ROAD
NEW MILFORD, CT 06776

DRAWN: AMC | CHECKED: GMP | SCALE: 1"=10'

MGI #: 17206
TASK #: 1296
DATE: 9/27/05

THIS DRAWING AND ALL DATA CONTAINED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. NOT INTENDED FOR DESIGN OR CONSTRUCTION USE. ALL DATA SHOULD BE VERIFIED

Maguire Group Inc.
Architects Engineers Planners
One Court Street
New Britain, Connecticut 06051

cingular WIRELESS

RAD. CENTER: 130 FT. (AGL)

30 0 30

(SCALE IN FEET)

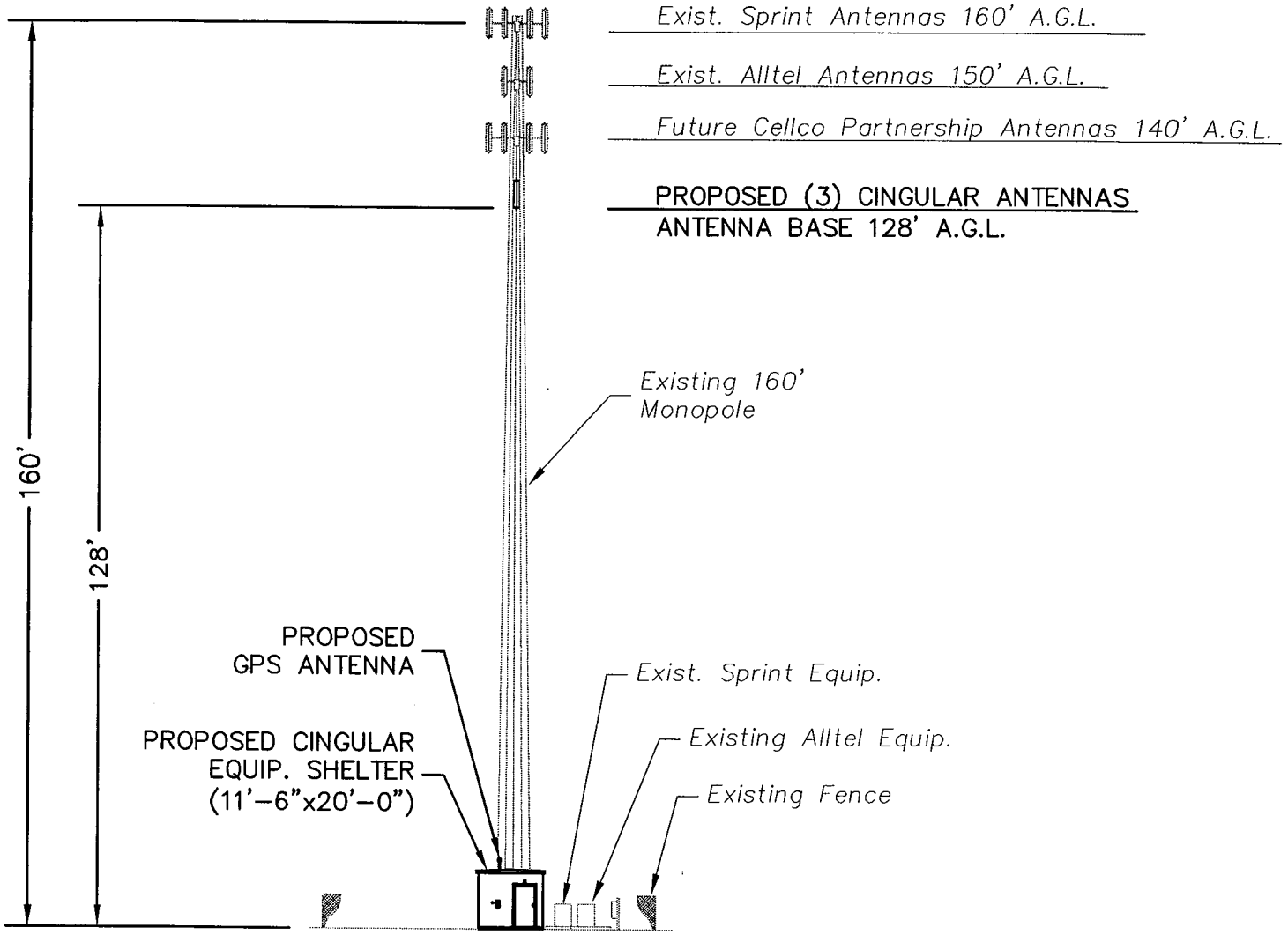


EXHIBIT 1B
WEST ELEVATION

DESIGN EXHIBIT	NORTH	SITE NAME: KIMBERLY PROPERTY	
		ADDRESS: 399 CHESTNUT LAND ROAD NEW MILFORD, CT 06776	MGI #: 17206
		DRAWN: AMC | CHECKED: GMP | SCALE: 1"=30'	TASK #: 1296
			DATE: 9/27/05

Maguire Group Inc.
Architects Engineers Planners
One Court Street
New Britain, Connecticut 06051

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cingular WIRELESS

3017717
503191-A

Structural Analysis Report

Existing 160' Tapered Monopole

Manufacturer is Engineering Endeavors Incorporated

Located in Litchfield County, CT

For

Cingular Wireless

(3017717)

Prepared by:

BCI Wireless LLC
Bradley Cook, P.Eng.

Reviewed by:

Global Signal Services LLC
Michael T. De Boer, P.E.
Senior Engineer

September 13, 2005

Global Signal Services LLC
3017717
September 13, 2005

INTRODUCTION

The objective of this analysis is to determine if the existing tower design is in conformance with the ANSI/TIA/EIA-222-F 1996 standard and the IBC 2003 Code requirements for the existing and proposed antenna loading. The existing tower is a 160' tapered monopole located in Litchfield County, CT. The original monopole manufacturer is Engineering Endeavors Inc., Mentor, OH. The analysis request was by **Cingular Wireless.**

The monopole program used in the analysis was written by Guymast, Inc. This program is one of the most widely accepted programs in the communications industry. The wind speed used for this analysis was 80 mph wind speed (fastest mile, 100 mph 3-sec gust) and 69.3 mph with ½" solid radial ice. The monopole, for the purpose of this analysis, is considered to be in good condition with no defects. Section sizes used in the analysis were obtained from original monopole drawings by EEI dated 06/24/03. The monopole sections are 65 ksi steel.

ANTENNA LOADING INFORMATION

EXISTING ANTENNA LOADING

- (12) DB980F65 Cellular panels at 160' with (12) 1-5/8" lines
- (6) Allgon 7750 Cellular panels at 150' with (12) 1-5/8" lines
- (12) DB950F85E-M Cellular panels at 140' with (12) 1-5/8" lines

PROPOSED ANTENNAS

- (3) Powerwave 7750 Cellular panels with (6) TMAs on a Low Profile Platform at 128' with (6) 1-5/8" lines

Note: Transmission lines are considered to be installed outside the monopole, banded in one (1) single row tight to the monopole to minimize wind loading.

Global Signal Services LLC
3017717
September 13, 2005

RESULTS

The existing 160' tapered monopole located in Litchfield County, CT was analyzed with an 80 mph wind speed (fastest mile, 100 mph 3-sec gust) and a 69.3 mph wind speed with ½" solid radial ice per the EIA-222-F 1996 standard and IBC 2003 Code. The monopole was found to be structurally acceptable with the proposed antenna loading.

The monopole foundation was also reviewed and was found to be structurally acceptable with the proposed antenna loading.

Allowable stresses have been increased by 1/3 for wind loading conditions.

CONCLUSION

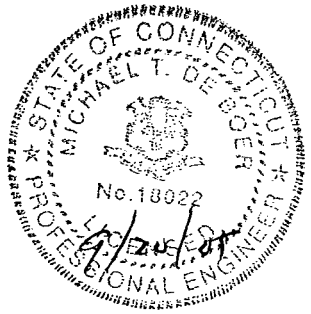
The existing 160' tapered monopole located in Litchfield County, CT was analyzed with an 80 mph wind speed (fastest mile, 100 mph 3-sec gust) and a 69.3 mph wind speed with ½" solid radial ice per the EIA-222-F 1996 standard and IBC 2003 Code. No modification is required with the proposed antenna loading.

If any other changes are proposed, another structural analysis should be performed to assure the monopole is in compliance with the current codes and standards.

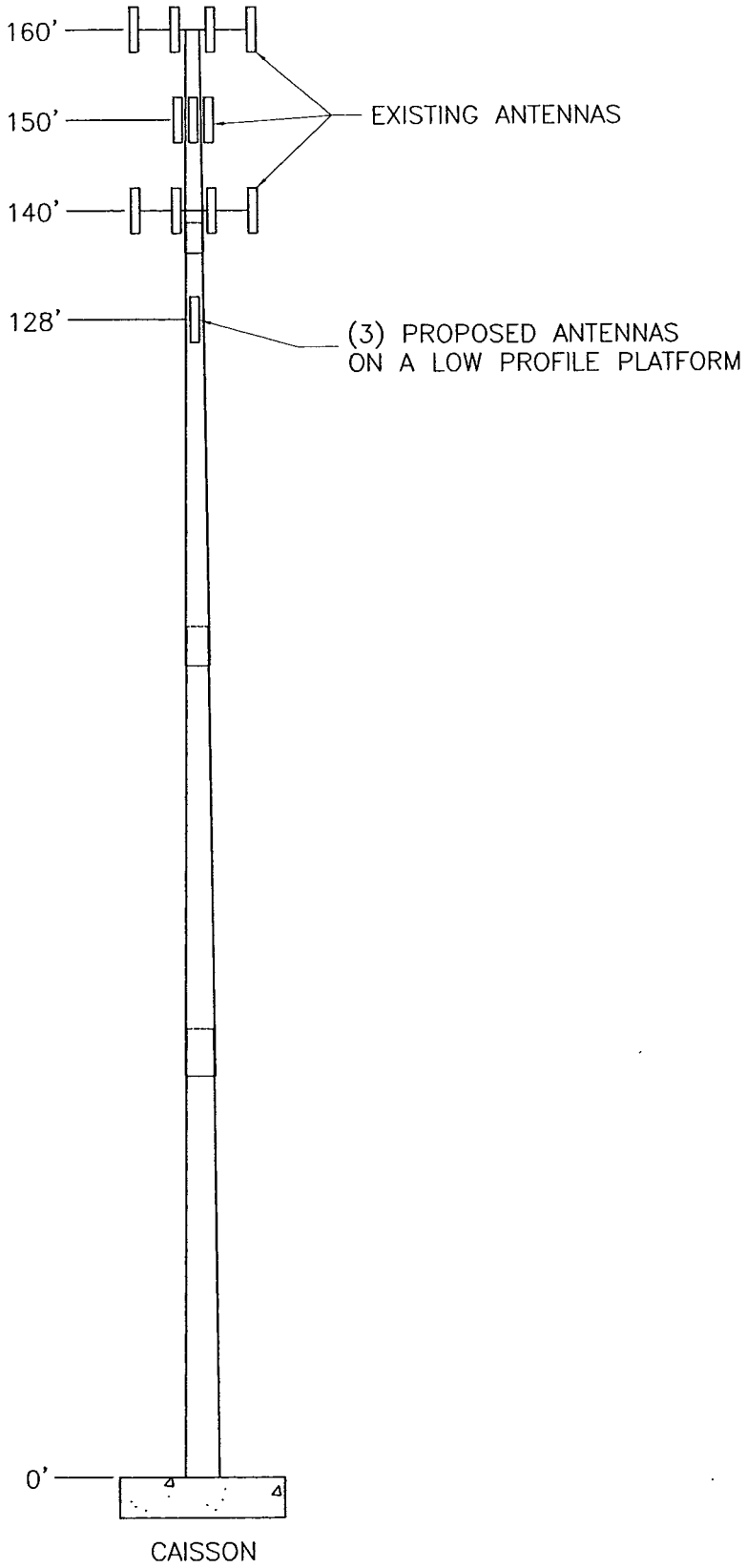
Should any further questions arise, please contact the Global Signal Services LLC Engineering Department at 941-364-8886.

Global Signal Services LLC

Michael T. De Boer, P.E.
Senior Engineer



TOWER #: 3017717



ANALYSIS DATE 9/13/2005	LEASE# 4077751	DWG. TITLE MONOPOLE PROFILE LITCHFIELD COUNTY, CT
VERIFIED BY M. DEBOER	LEGACY NUMBER CT33XC606	
	DRAFTED BY BPS	SHEET: 1 OF 1

global signal℠
Meeting needs. Exceeding expectations.

New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

October 5, 2005

Honorable Patricia A. Murphy
Mayor, Town of New Milford
Town Hall, 10 Main Street
New Milford, Connecticut 06776

Re: Notice of Exempt Modification – Existing Global Signal Telecommunications Tower Facility at 399 Chestnut Land Road, New Milford, Connecticut

Dear Mayor Murphy:

New Cingular Wireless PCS, LLC ("Cingular") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at 399 Chestnut Land Road in New Milford, Connecticut.

The facility is controlled and operated by Global Signal Acquisitions II LLC ("Global"), 301 N. Cattlemen Road, Sarasota Florida 34222. Global leases the land from Howard Kimberly of New Milford.

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 New Milford under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The attached letter fully sets forth the Cingular 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,

Steven Levine
Real Estate Consultant

Enclosure

3017717
503191-A

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Located in Litchfield County, CT

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3017717
September 13, 2005

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Global Signal Services LLC
3017717
September 13, 2005

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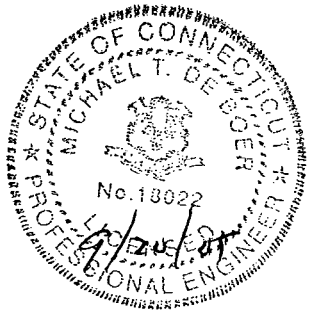
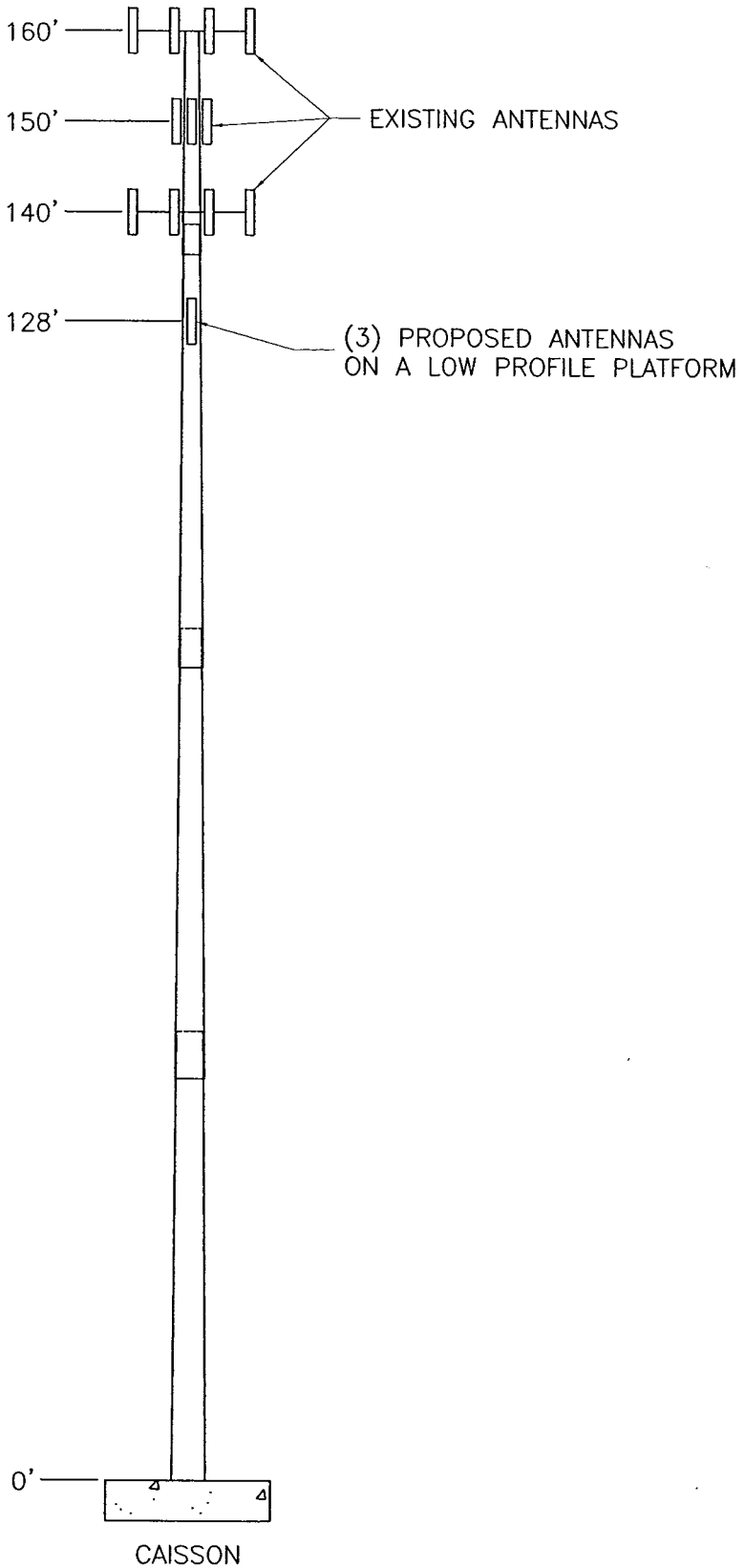


TOWER #: 3017717



ANALYSIS DATE 9/13/2005	LEASE# 4077751	DWG. TITLE MONOPOLE PROFILE LITCHFIELD COUNTY, CT
VERIFIED BY M. DEBOER	LEGACY NUMBER CT33XC606	
	DRAFTED BY BPS	SHEET: 1 OF 1

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STANDARD EIA-222F IMPERIAL UNITS

INPUT INFORMATION

Project Name	New Milford/Kimberly
Job Number	3017717
Client	Global
Engineer	BC
County	

Analysis Parameters	
Basic Wind Speed (mph)	80.00
Radial Ice (in)	0.50
Height (ft)	160.00
Number of Sides	18
Yield Strength (ksi)	65.00
Allowable Stress factor	1.33
Operational Wind (mph)	50.00

Possible Number of Sides
0 - Round
8 - 8 Sided
12 - 12 Sided
16 - 16 Sided

Face Widths (in)	
Top	18.000
Bottom	45.000

Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Top O.D. (in.)	Bott. O.D. (in.)	Rad. / t (in/in)	Thickness (in.)	Dist. Area Appurtenance Bare (ft^2/ft)	Dist. Area Appurtenance Iced (ft^2/ft)
TOP	>>>							
A	160.00	138.67	18.00	21.60		3/16	0.1	0.2
A	138.67	136.50	21.60	21.97		1/4	0.1	0.2
A	136.50	127.50	21.97	23.48		1/4	0.1	0.2
A	127.50	118.50	23.48	25.00		1/4	0.4	0.5
BB	118.50	109.50	25.00	26.52		1/4	0.4	0.5
B	109.50	100.50	26.52	28.04		1/4	0.4	0.5
B	100.50	94.17	28.04	29.11		1/4	0.4	0.5
B	94.17	91.50	29.11	29.56		5/16	0.4	0.5
B	91.50	82.50	29.56	31.08		5/16	0.4	0.5
CC	82.50	73.50	31.08	32.60		5/16	0.4	0.5
C	73.50	64.50	32.60	34.12		5/16	0.4	0.5
C	64.50	55.50	34.12	35.63		5/16	0.4	0.5
C	55.50	49.63	35.63	36.62		5/16	0.4	0.5
B	49.63	46.50	36.62	37.15		3/8	0.4	0.5
CC	46.50	37.50	37.15	38.67		3/8	0.4	0.5
C	37.50	28.50	38.67	40.19		3/8	0.4	0.5
C	28.50	19.50	40.19	41.71		3/8	0.4	0.5
C	19.50	10.50	41.71	43.23		3/8	0.4	0.5
C	10.50	1.50	43.23	44.75		3/8	0.4	0.5
C	1.50	0.00	44.75	45.00		3/8	0.4	0.5

Individual Appurtenances Table

	Elev (ft)	Area Appurt. C_AA_A Bare (ft^2)	Area Appurt. C_AA_A Iced (ft^2)	Weight Appurt. Bare (kip)	Weight Appurt. Iced (kip)	Description	
Sprint	160.00	25.50	28.00	1.200	1.800	LP Platform	1
	160.00	28.20	33.00	0.600	0.900	(12) DB980F65	0.67
ATT	150.00	25.50	9.00	0.300	0.450	LP Platform	0.67
	150.00	21.20	19.80	0.150	0.300	(6) Allgon 7250	0.9
	150.00	3.00	4.00	0.050	0.100	(6) TMA's	1
Verizon	140.00	25.50	28.00	1.200	1.800	LP Platform	1
	140.00	28.20	20.30	0.600	0.900	(12) LPA 185063	0.9
Cingular	**128.00**	**25.50**	**28.00**	**1.200**	**1.800**	**LP Platform**	1
	128.00	**16.50**	**12.70**	**0.100**	**0.150**	**(3) Powerwave 7770**	1
	128.00	**3.00**	**4.00**	**0.050**	**0.100**	**(6) TMA's**	1

STANDARD EIA-222F IMPERIAL UNITS

ANALYSIS SUMMARY

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Basic Wind Speed (mph)	80.00
Radial Ice (in)	0.50
Height (ft)	160.00
Number of Sides	18
Yield Strength (ksi)	65.00
Allowable Stress factor	1.33
Operational Wind (mph)	50.00

Possible Number of Sides
0 - Round
8 - 8 Sided
12 - 12 Sided
16 - 16 Sided

POLE STRESSES AND DEFLECTIONS

Pole Section	Top Elev.	Bott. Elev.	Bare						Iced					
			Working Stress @Bot.				Operational @Top		Working Stress @Bot.				Operational @Top	
			Dead Load	Shear	Moment	Stress	Tilt	Defl.	Dead Load	Shear	Moment	Stress	Tilt	Defl.
	(ft)	(ft)	(kip)	(kip)	(kip ft)	Ratio	(deg)	(ft)	(kip)	(kip)	(kip ft)	Ratio	(deg)	(ft)
TOP	>>>>>>>>>>>>>>>>		0.00	0.00	0.0	0.00			0.00	0.00	0.0	0.00		
A	160.00	138.67	4.95	7.74	94.5	0.33	2.87	4.27	7.37	5.41	72.7	0.26	2.10	3.12
A	138.67	136.50	5.08	7.85	112.7	0.29	2.69	3.22	7.53	5.50	85.9	0.22	1.96	2.36
A	136.50	127.50	6.98	10.16	192.7	0.43	2.67	3.12	10.26	7.26	144.7	0.33	1.95	2.28
A	127.50	118.50	7.56	10.74	294.0	0.57	2.55	2.71	10.98	7.72	219.9	0.43	1.86	1.98
BB	118.50	109.50	8.19	11.32	400.6	0.69	2.39	2.32	11.75	8.20	299.2	0.52	1.74	1.70
B	109.50	100.50	8.85	11.93	512.3	0.79	2.19	1.96	12.56	8.68	382.6	0.59	1.60	1.44
B	100.50	94.17	9.33	12.36	594.1	0.85	1.98	1.63	13.17	9.03	443.7	0.64	1.45	1.20
B	94.17	91.50	9.60	12.54	629.4	0.70	1.82	1.42	13.48	9.17	470.1	0.53	1.33	1.04
B	91.50	82.50	10.51	13.17	751.8	0.76	1.77	1.34	14.57	9.67	561.8	0.57	1.29	0.98
CC	82.50	73.50	11.47	13.80	879.7	0.80	1.58	1.08	15.71	10.17	657.7	0.60	1.16	0.79
C	73.50	64.50	12.48	14.43	1013.0	0.84	1.39	0.84	16.91	10.68	757.7	0.63	1.02	0.62
C	64.50	55.50	13.54	15.07	1151.5	0.88	1.19	0.64	18.16	11.18	861.7	0.66	0.87	0.47
C	55.50	49.63	14.25	15.48	1244.6	0.90	1.00	0.47	19.01	11.51	931.7	0.67	0.73	0.34
B	49.63	46.50	14.72	15.70	1295.1	0.76	0.87	0.37	19.54	11.68	969.6	0.57	0.64	0.27
CC	46.50	37.50	16.09	16.32	1443.7	0.78	0.81	0.33	21.13	12.16	1081.3	0.59	0.60	0.24
C	37.50	28.50	17.52	16.91	1597.1	0.80	0.65	0.21	22.79	12.63	1196.6	0.60	0.48	0.16
C	28.50	19.50	19.01	17.53	1755.1	0.81	0.49	0.12	24.50	13.12	1315.4	0.61	0.36	0.09
C	19.50	10.50	20.55	18.17	1917.8	0.83	0.33	0.06	26.29	13.62	1437.7	0.62	0.25	0.04
C	10.50	1.50	22.15	18.83	2085.2	0.84	0.18	0.02	28.13	14.14	1563.4	0.63	0.13	0.01
C	1.50	0.00	22.42	18.94	2113.5	0.84	0.03	0.00	28.45	14.22	1584.7	0.63	0.02	0.00

INDIVIDUAL APPURTENANCES ROTATION

Elev. (ft)	Description	Tilt Bare (deg)	Tilt Iced (deg)
160.00	LP Platform	7.353	5.365
160.00	(12) DB980F65	7.353	5.365
150.00	LP Platform	7.139	5.206
150.00	(6) Allgon 7250	7.139	5.206
150.00	(6) TMA's	7.139	5.206
140.00	LP Platform	6.925	5.047
140.00	(12) LPA 185063	6.925	5.047
128.00	LP Platform	6.539	4.764
128.00	(3) Powerwave 7770	6.539	4.764
128.00	(6) TMA's	6.539	4.764

CALCULATION OF SECTION PROPERTIES AND CAPACITIES

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Thickness (in)	Bend Radius (in)	r Ratio Bare	r Ratio Iced	w (in)	TOP ELEVATION O. D. (in)	TOP ELEVATION Mean Width (in)	TOP ELEVATION Area (in^2)	TOP ELEVATION Inertia (in^4)	BOTTOM ELEVATION O. D. (in)	BOTTOM ELEVATION Mean Width (in)	BOTTOM ELEVATION Area (in^2)	BOTTOM ELEVATION Inertia (in^4)	S (in^3)	(Fy)$^{1/2}$ w/t	Allowable F_B (ksi)
TOP	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>																	
A	160.00	138.67	3/16	0.000	0.019	0.066	3.87	18.00	17.81	10.65	427.1	21.60	21.41	12.81	741.8	67.6	166.2	51.87
A	138.67	136.50	1/4	0.000	0.023	0.066	4.24	21.60	21.35	17.03	980.4	21.97	21.72	17.32	1031.7	92.5	136.6	51.87
A	136.50	127.50	1/4	0.000	0.022	0.063	4.42	21.97	21.72	17.32	1031.7	23.48	23.23	18.53	1263.7	106.0	142.6	51.87
A	127.50	118.50	1/4	0.000	0.021	0.059	4.73	23.48	23.23	18.53	1263.7	25.00	24.75	19.74	1528.0	120.4	152.4	51.87
BB	118.50	109.50	1/4	0.000	0.019	0.056	5.03	25.00	24.75	19.74	1528.0	26.52	26.27	20.95	1826.9	135.7	162.1	51.87
B	109.50	100.50	1/4	0.000	0.018	0.053	5.33	26.52	26.27	20.95	1826.9	28.04	27.79	22.16	2162.4	151.9	171.9	51.87
B	100.50	94.17	1/4	0.000	0.017	0.051	5.59	28.04	27.79	22.16	2162.4	29.11	28.86	23.01	2421.5	163.8	180.2	51.87
B	94.17	91.50	5/16	0.000	0.021	0.054	5.71	29.11	28.8	28.71	3007.2	29.56	29.25	29.16	3150.6	209.9	147.4	51.87
B	91.50	82.50	5/16	0.000	0.021	0.052	5.91	29.56	29.25	29.16	3150.6	31.08	30.77	30.67	3667.3	232.4	152.4	51.87
CC	82.50	73.50	5/16	0.000	0.020	0.049	6.21	31.08	30.77	30.67	3667.3	32.60	32.28	32.18	4237.7	256.1	160.2	51.87
C	73.50	64.50	5/16	0.000	0.019	0.047	6.51	32.60	32.28	32.18	4237.7	34.12	33.80	33.70	4864.4	280.8	168.0	51.87
C	64.50	55.50	5/16	0.000	0.018	0.045	6.82	34.12	33.8	33.70	4864.4	35.63	35.32	35.21	5549.9	306.8	175.8	51.87
C	55.50	49.63	5/16	0.000	0.017	0.044	7.07	35.63	35.32	35.21	5549.9	36.62	36.31	36.20	6030.1	324.3	182.3	51.87
B	49.63	46.50	3/8	0.000	0.020	0.046	7.19	36.62	36.25	43.36	7198.8	37.15	36.78	44.00	7518.0	398.6	154.6	51.87
CC	46.50	37.50	3/8	0.000	0.020	0.045	7.40	37.15	36.78	44.00	7518.0	38.67	38.30	45.81	8488.4	432.3	159.0	51.87
C	37.50	28.50	3/8	0.000	0.019	0.043	7.70	38.67	38.3	45.81	8488.4	40.19	39.82	47.63	9538.9	467.5	165.5	51.87
C	28.50	19.50	3/8	0.000	0.018	0.042	8.00	40.19	39.82	47.63	9538.9	41.71	41.33	49.45	10672.6	504.0	172.0	51.87
C	19.50	10.50	3/8	0.000	0.018	0.040	8.30	41.71	41.33	49.45	10672.6	43.23	42.85	51.26	11892.8	541.9	178.5	51.87
C	10.50	1.50	3/8	0.000	0.017	0.039	8.60	43.23	42.85	51.26	11892.8	44.75	44.37	53.08	13202.6	581.1	185.0	51.87
C	1.50	0.00	3/8	0.000	0.017	0.038	8.78	44.75	44.37	53.08	13202.6	45.00	44.63	53.38	13429.8	587.8	188.8	51.87

BARE WIND LOAD FOR POLE + DIST. APPURTENANCES

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Mid-section Height (ft)	Section Length (ft)	Avg. O.D. (in)	Dist. Area Appurtenance (ft^2/ft)	Total Wind Area (ft^2)	r Ratio	Kz (ft)	q_z (lb/ft^2)	C (mph ft)	Force Coeff. Cf	Horz. Force (kip)	Shear (kip)	Moment (kip ft)
TOP	>>													0.00	0.0
A	160.00	138.67	149.34	21.33	19.80	0.10	37.33	0.019	1.54	25.22	164	**0.650**	1.034	1.03	11.0
A	138.67	136.50	137.59	2.17	21.78	0.10	4.16	0.023	1.50	24.64	178	**0.650**	0.112	1.15	13.4
A	136.50	127.50	132.00	9.00	22.73	0.10	17.94	0.022	1.49	24.35	185	**0.650**	0.480	1.63	25.9
A	127.50	118.50	123.00	9.00	24.24	0.40	21.78	0.021	1.46	23.86	195	**0.650**	0.571	2.20	43.1
BB	118.50	109.50	114.00	9.00	25.76	0.40	22.92	0.019	1.43	23.35	205	**0.650**	0.588	2.79	65.5
B	109.50	100.50	105.00	9.00	27.28	0.40	24.06	0.018	1.39	22.81	215	**0.650**	0.603	3.39	93.3
B	100.50	94.17	97.34	6.33	28.57	0.40	17.61	0.017	1.36	22.32	222	**0.650**	0.432	3.82	116.1
B	94.17	91.50	92.84	2.67	29.33	0.40	7.59	0.021	1.34	22.02	227	**0.650**	0.184	4.00	126.5
B	91.50	82.50	87.00	9.00	30.32	0.40	26.34	0.021	1.32	21.61	232	**0.650**	0.625	4.63	165.4
CC	82.50	73.50	78.00	9.00	31.84	0.40	27.48	0.020	1.28	20.95	240	**0.650**	0.632	5.26	209.9
C	73.50	64.50	69.00	9.00	33.36	0.40	28.62	0.019	1.23	20.23	247	**0.650**	0.636	5.90	260.1
C	64.50	55.50	60.00	9.00	34.88	0.40	29.76	0.018	1.19	19.44	253	**0.650**	0.635	6.53	316.0
C	55.50	49.63	52.57	5.87	36.13	0.40	20.02	0.017	1.14	18.71	257	**0.650**	0.412	6.94	355.6
B	49.63	46.50	48.07	3.13	36.89	0.40	10.87	0.020	1.11	18.24	259	**0.650**	0.218	7.16	377.7
CC	46.50	37.50	42.00	9.00	37.91	0.40	32.03	0.020	1.07	17.55	262	**0.650**	0.618	7.78	444.9
C	37.50	28.50	33.00	9.00	39.43	0.40	33.17	0.019	1.00	16.38	263	**0.650**	0.597	8.38	517.6
C	28.50	19.50	24.00	9.00	40.95	0.40	34.31	0.018	1.00	16.38	273	**0.650**	0.618	8.99	595.8
C	19.50	10.50	15.00	9.00	42.47	0.40	35.45	0.018	1.00	16.38	283	**0.650**	0.638	9.63	679.6
C	10.50	1.50	6.00	9.00	43.99	0.40	36.59	0.017	1.00	16.38	293	**0.650**	0.659	10.29	769.2
C	1.50	0.00	0.75	1.50	44.87	0.40	6.21	0.017	1.00	16.38	299	**0.650**	0.112	10.40	784.8

ICED WIND LOAD FOR POLE + DIST. APPURTENANCES

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Mid-section Height (ft)	Section Length (ft)	Avg. O.D. (in)	Dist. Area Appurtenance (ft^2/ft)	Total Wind Area (ft^2)	r Ratio	Kz (ft)	q_z (lb/ft^2)	C (mph ft)	Force Coeff. Cf	Horz. Force (kip)	Shear (kip)	Moment (kip ft)
TOP	>>>													0.00	0.0
A	160.00	138.67	149.34	21.33	20.80	0.20	41.24	0.066	1.54	25.22	172	**0.650**	0.857	0.86	9.1
A	138.67	136.50	137.59	2.17	22.78	0.20	4.55	0.066	1.50	24.64	186	**0.650**	0.092	0.95	11.1
A	136.50	127.50	132.00	9.00	23.73	0.20	19.59	0.063	1.49	24.35	193	**0.650**	0.393	1.34	21.4
A	127.50	118.50	123.00	9.00	25.24	0.50	23.43	0.059	1.46	23.86	203	**0.650**	0.461	1.80	35.6
BB	118.50	109.50	114.00	9.00	26.76	0.50	24.57	0.056	1.43	23.35	213	**0.650**	0.473	2.28	53.9
B	109.50	100.50	105.00	9.00	28.28	0.50	25.71	0.053	1.39	22.81	222	**0.650**	0.483	2.76	76.6
B	100.50	94.17	97.34	6.33	29.57	0.50	18.77	0.051	1.36	22.32	230	**0.650**	0.345	3.10	95.1
B	94.17	91.50	92.84	2.67	30.33	0.50	8.08	0.054	1.34	22.02	234	**0.650**	0.147	3.25	103.6
B	91.50	82.50	87.00	9.00	31.32	0.50	27.99	0.052	1.32	21.61	240	**0.650**	0.498	3.75	135.1
CC	82.50	73.50	78.00	9.00	32.84	0.50	29.13	0.049	1.28	20.95	248	**0.650**	0.503	4.25	171.1
C	73.50	64.50	69.00	9.00	34.36	0.50	30.27	0.047	1.23	20.23	254	**0.650**	0.504	4.76	211.6
C	64.50	55.50	60.00	9.00	35.88	0.50	31.41	0.045	1.19	19.44	260	**0.650**	0.503	5.26	256.7
C	55.50	49.63	52.57	5.87	37.13	0.50	21.10	0.044	1.14	18.71	265	**0.650**	0.325	5.58	288.5
B	49.63	46.50	48.07	3.13	37.89	0.50	11.45	0.046	1.11	18.24	267	**0.650**	0.172	5.76	306.3
CC	46.50	37.50	42.00	9.00	38.91	0.50	33.68	0.045	1.07	17.55	269	**0.650**	0.487	6.24	360.3
C	37.50	28.50	33.00	9.00	40.43	0.50	34.82	0.043	1.00	16.38	270	**0.650**	0.470	6.71	418.6
C	28.50	19.50	24.00	9.00	41.95	0.50	35.96	0.042	1.00	16.38	280	**0.650**	0.485	7.20	481.2
C	19.50	10.50	15.00	9.00	43.47	0.50	37.10	0.040	1.00	16.38	290	**0.650**	0.501	7.70	548.2
C	10.50	1.50	6.00	9.00	44.99	0.50	38.24	0.039	1.00	16.38	300	**0.650**	0.516	8.22	619.8
C	1.50	0.00	0.75	1.50	45.87	0.50	6.48	0.038	1.00	16.38	306	**0.650**	0.088	8.30	632.2

WIND LOAD FOR INDIVIDUAL APPURTENANCES

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Force Calculation

Elev	Bare			Iced		
	q_z	C_AA_A	Horz. Force	q_z	C_AA_A	Horz. Force
(ft)	(lb/ft^2)	(ft^2)	(kip)	(lb/ft^2)	(ft^2)	(kip)
160.00	25.72	25.50	1.11	25.72	28.00	0.91
160.00	25.72	28.20	1.23	25.72	33.00	1.08
150.00	25.25	25.50	1.09	25.25	9.00	0.29
150.00	25.25	21.20	0.90	25.25	19.80	0.63
150.00	25.25	3.00	0.13	25.25	4.00	0.13
140.00	24.76	25.50	1.07	24.76	28.00	0.88
140.00	24.76	28.20	1.18	24.76	20.30	0.64
128.00	24.13	25.50	1.04	24.13	28.00	0.86
128.00	24.13	16.50	0.67	24.13	12.70	0.39
128.00	24.13	3.00	0.12	24.13	4.00	0.12

Shear and Moment

Pole Section	Top Elev.	Bott. Elev.	Bare				Iced			
			Eq. Force	Eq. Elev.	Shear	Moment	Eq. Force	Eq. Elev.	Shear	Moment
	(ft)	(ft)	(kip)	(ft)	(kip)	(kip ft)	(kip)	(ft)	(kip)	(kip ft)
TOP	>>>>>>>>>>>>>>>>>				0.00	0.0			0.00	0.0
A	160.00	138.67	6.702	150.13	6.70	76.8	4.554	151.04	4.55	56.3
A	138.67	136.50			6.70	91.4			4.55	66.2
A	136.50	127.50	1.835	128.00	8.54	152.6	1.367	128.00	5.92	107.9
A	127.50	118.50			8.54	229.4			5.92	161.2
BB	118.50	109.50			8.54	306.3			5.92	214.5
B	109.50	100.50			8.54	383.1			5.92	267.8
B	100.50	94.17			8.54	437.2			5.92	305.3
B	94.17	91.50			8.54	460.0			5.92	321.1
B	91.50	82.50			8.54	536.8			5.92	374.4
CC	82.50	73.50			8.54	613.6			5.92	427.7
C	73.50	64.50			8.54	690.5			5.92	481.0
C	64.50	55.50			8.54	767.3			5.92	534.3
C	55.50	49.63			8.54	817.4			5.92	569.0
B	49.63	46.50			8.54	844.1			5.92	587.5
CC	46.50	37.50			8.54	921.0			5.92	640.8
C	37.50	28.50			8.54	997.8			5.92	694.1
C	28.50	19.50			8.54	1074.7			5.92	747.4
C	19.50	10.50			8.54	1151.5			5.92	800.7
C	10.50	1.50			8.54	1228.3			5.92	854.0
C	1.50	0.00			8.54	1241.2			5.92	862.9

CALCULATION OF BARE AND ICED POLE WEIGHT

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

Pole Section	Top Elev.	Bott. Elev.	Sec. Length	Avg. Mean Width	Thickness	Avg. Area	Pole Sec. Weight	Bare			Iced					
								App. Weight	Total Weight	Accum. Weight	Avg. Ice Area	Ice Weight	Pole Sec. Weight	App. Weight	Total Weight	Accum. Weight
	(ft)	(ft)	(ft)	(in)	(in)	(in^2)	(kip)	(kip)	(kip)	(kip)	(in^2)	(kip)	(kip)	(kip)	(kip)	(kip)
TOP	>>>							0.000	0.00	0.00				0.000	0.00	0.00
A	160.00	138.67	21.33	19.61	3/16	11.73	0.851	4.100	4.95	4.95	32.38	0.269	0.851	6.250	7.37	7.37
A	138.67	136.50	2.17	21.53	1/4	17.17	0.127	0.000	0.13	5.08	35.54	0.030	0.127	0.000	0.16	7.53
A	136.50	127.50	9.00	22.48	1/4	17.92	0.549	1.350	1.90	6.98	37.04	0.130	0.549	2.050	2.73	10.26
A	127.50	118.50	9.00	23.99	1/4	19.14	0.586	0.000	0.59	7.56	39.47	0.138	0.586	0.000	0.72	10.98
BB	118.50	109.50	9.00	25.51	1/4	20.35	0.623	0.000	0.62	8.19	41.89	0.147	0.623	0.000	0.77	11.75
B	109.50	100.50	9.00	27.03	1/4	21.56	0.660	0.000	0.66	8.85	44.31	0.155	0.660	0.000	0.82	12.56
B	100.50	94.17	6.33	28.32	1/4	22.59	0.487	0.000	0.49	9.33	46.37	0.114	0.487	0.000	0.60	13.17
B	94.17	91.50	2.67	29.02	5/16	28.93	0.263	0.000	0.26	9.60	47.59	0.049	0.263	0.000	0.31	13.48
B	91.50	82.50	9.00	30.01	5/16	29.91	0.916	0.000	0.92	10.51	49.16	0.172	0.916	0.000	1.09	14.57
CC	82.50	73.50	9.00	31.53	5/16	31.43	0.962	0.000	0.96	11.47	51.58	0.181	0.962	0.000	1.14	15.71
C	73.50	64.50	9.00	33.04	5/16	32.94	1.009	0.000	1.01	12.48	54.00	0.189	1.009	0.000	1.20	16.91
C	64.50	55.50	9.00	34.56	5/16	34.45	1.055	0.000	1.06	13.54	56.42	0.197	1.055	0.000	1.25	18.16
C	55.50	49.63	5.87	35.82	5/16	35.71	0.713	0.000	0.71	14.25	58.42	0.133	0.713	0.000	0.85	19.01
B	49.63	46.50	3.13	36.51	3/8	43.68	0.465	0.000	0.47	14.72	59.64	0.073	0.465	0.000	0.54	19.54
CC	46.50	37.50	9.00	37.54	3/8	44.90	1.375	0.000	1.38	16.09	61.27	0.214	1.375	0.000	1.59	21.13
C	37.50	28.50	9.00	39.06	3/8	46.72	1.431	0.000	1.43	17.52	63.69	0.223	1.431	0.000	1.65	22.79
C	28.50	19.50	9.00	40.58	3/8	48.54	1.486	0.000	1.49	19.01	66.11	0.231	1.486	0.000	1.72	24.50
C	19.50	10.50	9.00	42.09	3/8	50.35	1.542	0.000	1.54	20.55	68.54	0.240	1.542	0.000	1.78	26.29
C	10.50	1.50	9.00	43.61	3/8	52.17	1.598	0.000	1.60	22.15	70.96	0.248	1.598	0.000	1.85	28.13
C	1.50	0.00	1.50	44.50	3/8	53.23	0.272	0.000	0.27	22.42	72.37	0.042	0.272	0.000	0.31	28.45

CALCULATION OF DEFLECTIONS AND SECONDARY MOMENTS (BARE POLE)

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

							Working Stress							Operational	
Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Section Length (ft)	Moment (kip ft)	Inertia at Top of Sec. (in^4)	Inertia at Bot. of Sec. (in^4)	Avg. Moment (kip ft)	Inc. Tilt (deg)	Total Tilt (deg)	Tot. Defl. @top (ft)	Total Weight (kip)	Accum. Weight (kip)	M_2 (kip ft)	Total Tilt @top (ft)	Total Defl. @top (ft)
TOP	>>>>>>>>>>>>>>>>>>>>>>>>			0.0	0.0	0.0					0.000	0.000			
A	160.00	138.67	21.33	87.8	427.1	741.8	43.9	0.456	**7.35**	**10.93**	4.951	4.951	**6.637**	**2.87**	**4.27**
A	138.67	136.50	2.17	104.8	980.4	1031.7	96.3	0.059	**6.90**	**8.25**	0.127	5.078	**7.941**	**2.69**	**3.22**
A	136.50	127.50	9.00	178.5	1031.7	1263.7	141.6	0.316	**6.84**	**7.99**	1.899	6.977	**14.279**	**2.67**	**3.12**
A	127.50	118.50	9.00	272.5	1263.7	1528.0	225.5	0.414	**6.52**	**6.94**	0.586	7.563	**21.507**	**2.55**	**2.71**
BB	118.50	109.50	9.00	371.8	1528.0	1826.9	322.1	0.492	**6.11**	**5.95**	0.623	8.186	**28.774**	**2.39**	**2.32**
B	109.50	100.50	9.00	476.4	1826.9	2162.4	424.1	0.544	**5.62**	**5.02**	0.660	8.846	**35.938**	**2.19**	**1.96**
B	100.50	94.17	6.33	553.3	2162.4	2421.5	514.8	0.405	**5.07**	**4.18**	0.487	9.333	**40.833**	**1.98**	**1.63**
B	94.17	91.50	2.67	586.5	3007.2	3150.6	569.9	0.141	**4.67**	**3.64**	0.263	9.596	**42.861**	**1.82**	**1.42**
B	91.50	82.50	9.00	702.2	3150.6	3667.3	644.3	0.484	**4.53**	**3.43**	0.916	10.512	**49.639**	**1.77**	**1.34**
CC	82.50	73.50	9.00	823.5	3667.3	4237.7	762.8	0.494	**4.04**	**2.76**	0.962	11.474	**56.205**	**1.58**	**1.08**
C	73.50	64.50	9.00	950.6	4237.7	4864.4	887.0	0.499	**3.55**	**2.16**	1.009	12.483	**62.424**	**1.39**	**0.84**
C	64.50	55.50	9.00	1083.3	4864.4	5549.9	1017.0	0.500	**3.05**	**1.64**	1.055	13.538	**68.157**	**1.19**	**0.64**
C	55.50	49.63	5.87	1173.0	5549.9	6030.1	1128.2	0.325	**2.55**	**1.20**	0.713	14.252	**71.558**	**1.00**	**0.47**
B	49.63	46.50	3.13	1221.8	7198.8	7518.0	1197.4	0.145	**2.22**	**0.95**	0.465	14.717	**73.261**	**0.87**	**0.37**
CC	46.50	37.50	9.00	1365.9	7518.0	8488.4	1293.8	0.414	**2.08**	**0.84**	1.375	16.092	**77.800**	**0.81**	**0.33**
C	37.50	28.50	9.00	1515.4	8488.4	9538.9	1440.7	0.409	**1.67**	**0.54**	1.431	17.523	**81.666**	**0.65**	**0.21**
C	28.50	19.50	9.00	1670.4	9538.9	10672.6	1592.9	0.404	**1.26**	**0.31**	1.486	19.009	**84.700**	**0.49**	**0.12**
C	19.50	10.50	9.00	1831.1	10672.6	11892.8	1750.8	0.397	**0.85**	**0.15**	1.542	20.551	**86.741**	**0.33**	**0.06**
C	10.50	1.50	9.00	1997.6	11892.8	13202.6	1914.3	0.391	**0.46**	**0.04**	1.598	22.149	**87.622**	**0.18**	**0.02**
C	1.50	0.00	1.50	2025.9	13202.6	13429.8	2011.7	0.064	**0.06**	**0.00**	0.272	22.421	**87.640**	**0.03**	**0.00**

CALCULATION OF DEFLECTIONS AND SECONDARY MOMENTS (ICED POLE)

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

							Wokring Stress							Operational	
Pole Section	Top Elev. (ft)	Bott. Elev. (ft)	Section Length (ft)	Moment (kip ft)	Inertia at Top of Sec. (in^4)	Inertia at Bot. of Sec. (in^4)	Avg. Moment (kip ft)	Inc. Tilt (deg)	Total Tilt (deg)	Tot. Defl. @top (ft)	Total Weight (kip)	Accum. Weight (kip)	M_2 (kip ft)	Total Tilt @top (ft)	Total Defl. @top (ft)
TOP	>>>>>>>>>>>>>>>>>>>>>>>>			0.0	0.0	0.0					0.000	0.000			
A	160.00	138.67	21.33	65.5	427.1	741.8	32.7	0.340	**5.37**	**7.99**	7.370	7.370	**7.205**	**2.10**	**3.12**
A	138.67	136.50	2.17	77.3	980.4	1031.7	71.4	0.044	**5.03**	**6.03**	0.157	7.527	**8.617**	**1.96**	**2.36**
A	136.50	127.50	9.00	129.3	1031.7	1263.7	103.3	0.230	**4.98**	**5.84**	2.729	10.255	**15.427**	**1.95**	**2.28**
A	127.50	118.50	9.00	196.7	1263.7	1528.0	163.0	0.299	**4.75**	**5.08**	0.724	10.979	**23.119**	**1.86**	**1.98**
BB	118.50	109.50	9.00	268.4	1528.0	1826.9	232.6	0.355	**4.45**	**4.35**	0.770	11.749	**30.766**	**1.74**	**1.70**
B	109.50	100.50	9.00	344.3	1826.9	2162.4	306.4	0.393	**4.10**	**3.68**	0.815	12.564	**38.230**	**1.60**	**1.44**
B	100.50	94.17	6.33	400.4	2162.4	2421.5	372.4	0.293	**3.70**	**3.07**	0.601	13.165	**43.292**	**1.45**	**1.20**
B	94.17	91.50	2.67	424.7	3007.2	3150.6	412.5	0.102	**3.41**	**2.67**	0.312	13.477	**45.378**	**1.33**	**1.04**
B	91.50	82.50	9.00	509.5	3150.6	3667.3	467.1	0.351	**3.31**	**2.52**	1.088	14.566	**52.293**	**1.29**	**0.98**
CC	82.50	73.50	9.00	598.8	3667.3	4237.7	554.1	0.359	**2.96**	**2.02**	1.143	15.709	**58.913**	**1.16**	**0.79**
C	73.50	64.50	9.00	692.6	4237.7	4864.4	645.7	0.363	**2.60**	**1.59**	1.198	16.906	**65.118**	**1.02**	**0.62**
C	64.50	55.50	9.00	791.0	4864.4	5549.9	741.8	0.365	**2.24**	**1.20**	1.253	18.159	**70.787**	**0.87**	**0.47**
C	55.50	49.63	5.87	857.5	5549.9	6030.1	824.2	0.238	**1.87**	**0.88**	0.847	19.006	**74.127**	**0.73**	**0.34**
B	49.63	46.50	3.13	893.8	7198.8	7518.0	875.7	0.106	**1.63**	**0.70**	0.538	19.543	**75.792**	**0.64**	**0.27**
CC	46.50	37.50	9.00	1001.1	7518.0	8488.4	947.5	0.303	**1.53**	**0.62**	1.590	21.133	**80.199**	**0.60**	**0.24**
C	37.50	28.50	9.00	1112.7	8488.4	9538.9	1056.9	0.300	**1.22**	**0.40**	1.654	22.787	**83.915**	**0.48**	**0.16**
C	28.50	19.50	9.00	1228.6	9538.9	10672.6	1170.7	0.297	**0.92**	**0.23**	1.718	24.505	**86.808**	**0.36**	**0.09**
C	19.50	10.50	9.00	1348.9	10672.6	11892.8	1288.8	0.292	**0.63**	**0.11**	1.782	26.287	**88.739**	**0.25**	**0.04**
C	10.50	1.50	9.00	1473.9	11892.8	13202.6	1411.4	0.288	**0.34**	**0.03**	1.846	28.133	**89.567**	**0.13**	**0.01**
C	1.50	0.00	1.50	1495.1	13202.6	13429.8	1484.5	0.048	**0.05**	**0.00**	0.314	28.447	**89.585**	**0.02**	**0.00**

SA_3017717_New Milford
STRESS_RATIO_CAL

9/20/2005

SUMMARY OF INTERNAL FORCES AND CAPACITIES

Project Name	New Milford/Kimberly
Job Number	3017717
Title	Global
Designer	BC

					Bare										Iced									
Pole Section	Top Elev.	Bott. Elev.	Area	S	Dead Load	Shear	Moment	M_2	M_{TOTAL}	f_a	f_b	f_{TOTAL}	F_B	Stress Ratio	Dead Load	Shear	Moment	M_2	M_{TOTAL}	f_a	f_b	f_{TOTAL}	F_B	Stress Ratio
	(ft)	(ft)	(in^2)	(in^3)	(kip)	(kip)	(kip ft)	(kip ft)	(kip ft)	(ksi)	(ksi)	(ksi)	(ksi)		(kip)	(kip)	(kip ft)	(kip ft)	(kip ft)	(ksi)	(ksi)	(ksi)	(ksi)	
TOP	>>>>>>>>>>>>>>>>		10.65	47.95	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	51.87	**0.000**	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	51.87	**0.000**
A	160.00	138.67	11.73	67.64	4.95	7.74	87.8	6.64	94.5	0.42	16.76	17.18	51.87	**0.331**	7.37	5.41	65.47	7.21	72.7	0.63	12.89	13.52	51.87	**0.261**
A	138.67	136.50	17.17	92.51	5.08	7.85	104.8	7.94	112.7	0.30	14.62	14.91	51.87	**0.288**	7.53	5.50	77.31	8.62	85.9	0.44	11.15	11.58	51.87	**0.223**
A	136.50	127.50	17.92	105.98	6.98	10.16	178.5	14.28	192.7	0.39	21.82	22.21	51.87	**0.428**	10.26	7.26	129.30	15.43	144.7	0.57	16.39	16.96	51.87	**0.327**
A	127.50	118.50	19.14	120.37	7.56	10.74	272.5	21.51	294.0	0.40	29.31	29.71	51.87	**0.573**	10.98	7.72	196.75	23.12	219.9	0.57	21.92	22.49	51.87	**0.434**
BB	118.50	109.50	20.35	135.67	8.19	11.32	371.8	28.77	400.6	0.40	35.43	35.83	51.87	**0.691**	11.75	8.20	268.39	30.77	299.2	0.58	26.46	27.04	51.87	**0.521**
B	109.50	100.50	21.56	151.89	8.85	11.93	476.4	35.94	512.3	0.41	40.48	40.89	51.87	**0.788**	12.56	8.68	344.34	38.23	382.6	0.58	30.22	30.81	51.87	**0.594**
B	100.50	94.17	22.59	163.85	9.33	12.36	553.3	40.83	594.1	0.41	43.51	43.92	51.87	**0.847**	13.17	9.03	400.38	43.29	443.7	0.58	32.49	33.08	51.87	**0.638**
B	94.17	91.50	28.93	209.93	9.60	12.54	586.5	42.86	629.4	0.33	35.97	36.31	51.87	**0.700**	13.48	9.17	424.68	45.38	470.1	0.47	26.87	27.33	51.87	**0.527**
B	91.50	82.50	29.91	232.42	10.51	13.17	702.2	49.64	751.8	0.35	38.82	39.17	51.87	**0.755**	14.57	9.67	509.47	52.29	561.8	0.49	29.00	29.49	51.87	**0.569**
CC	82.50	73.50	31.43	256.06	11.47	13.80	823.5	56.21	879.7	0.37	41.23	41.59	51.87	**0.802**	15.71	10.17	598.76	58.91	657.7	0.50	30.82	31.32	51.87	**0.604**
C	73.50	64.50	32.94	280.84	12.48	14.43	950.6	62.42	1013.0	0.38	43.28	43.66	51.87	**0.842**	16.91	10.68	692.59	65.12	757.7	0.51	32.38	32.89	51.87	**0.634**
C	64.50	55.50	34.45	306.76	13.54	15.07	1083.3	68.16	1151.5	0.39	45.04	45.44	51.87	**0.876**	18.16	11.18	790.95	70.79	861.7	0.53	33.71	34.24	51.87	**0.660**
C	55.50	49.63	35.71	324.28	14.25	15.48	1173.0	71.56	1244.6	0.40	46.05	46.45	51.87	**0.896**	19.01	11.51	857.54	74.13	931.7	0.53	34.48	35.01	51.87	**0.675**
B	49.63	46.50	43.68	398.56	14.72	15.70	1221.8	73.26	1295.1	0.34	38.99	39.33	51.87	**0.758**	19.54	11.68	893.82	75.79	969.6	0.45	29.19	29.64	51.87	**0.571**
CC	46.50	37.50	44.90	432.33	16.09	16.32	1365.9	77.80	1443.7	0.36	40.07	40.43	51.87	**0.779**	21.13	12.16	1001.11	80.20	1081.3	0.47	30.01	30.48	51.87	**0.588**
C	37.50	28.50	46.72	467.47	17.52	16.91	1515.4	81.67	1597.1	0.38	41.00	41.37	51.87	**0.798**	22.79	12.63	1112.71	83.92	1196.6	0.49	30.72	31.21	51.87	**0.602**
C	28.50	19.50	48.54	503.99	19.01	17.53	1670.4	84.70	1755.1	0.39	41.79	42.18	51.87	**0.813**	24.50	13.12	1228.61	86.81	1315.4	0.50	31.32	31.83	51.87	**0.614**
C	19.50	10.50	50.35	541.87	20.55	18.17	1831.1	86.74	1917.8	0.41	42.47	42.88	51.87	**0.827**	26.29	13.62	1348.95	88.74	1437.7	0.52	31.84	32.36	51.87	**0.624**
C	10.50	1.50	52.17	581.14	22.15	18.83	1997.6	87.62	2085.2	0.42	43.06	43.48	51.87	**0.838**	28.13	14.14	1473.86	89.57	1563.4	0.54	32.28	32.82	51.87	**0.633**
C	1.50	0.00	53.23	587.81	22.42	18.94	2025.9	87.64	2113.5	0.42	43.15	43.57	51.87	**0.840**	28.45	14.22	1495.13	89.58	1584.7	0.53	32.35	32.89	51.87	**0.634**

Site Number:	3017717
Site Name:	New Milford/Kimberl

USD Factor [a]: 1.33

INPUT PARAMETERS

		Units
Anchor Bolt Properties:		
Ultimate Tensile Strength of Anchor Bolts:	100.00	ksi
Yield Strength of Anchor Bolts:	75.00	ksi
Diameter of Anchor Bolts:	2.250	in
Diameter of Anchor Bolt Holes (if known):b		in
Total # of Anchor Bolts:	12	
Diameter of Anchor Bolt Circle:	54.00	in
Distance Between Anchor Bolt Holes (C/C, if known): c	0.00	in
Consider Leveling Nuts (Y/N):	n	
Monopole Properties:		
Weld Length Along Base Plate:	0.500	in
Monopole Diameter (F/F):	45.000	in

		Units
Base Plate Properties:		
Plate Yield Strength:	60.00	ksi
Plate Diameter or Plate Length:	60.00	in
Plate Thickness:	2.00	in
Arrangement of Anchor Bolts (R/S): d	r	
Applied Loads:		
Moment:	2113.54	k-ft
Axial Download:	22.42	k

OUTPUT CAPACITIES

		Units	Limits	Stress Ratio
Required Anchor Bolt Force:				
Applied Anchor Bolt Tension or Compression:	154.69	k	OK	0.794
Allowable Anchor Bolt Force:				
Anchor Bolt Capacity [Considering Yield Strength & Effective Area]:	194.86	k		0.794
Anchor Bolt Capacity [Considering Ultimate Strength & Gross Area]:	174.95	k		0.884
Required Base Plate Bending Moment:				
Applied Base Plate Bending Moment:	425.40	k-in	OK	0.768
Base Plate Moment Capacity:				
Allowable Base Plate Bending Moment:	554.26	k-in		

General Notes:

a AISC, Allowable Stress Design, 9th Edition, p. 5-30, Chapter A, Section A5 & TIA/EIA-222-F Section 3.1.1.1.

b If no value is entered a quantity equal to the anchor bolt diameter plus 1/4" is assumed.

c Center-to-center; if no value is entered a quantity equal to the anchor bolt diameter multiplied by 8/3 is assumed.

d For arrangement of anchor bolts, an "R" signifies a pattern that is symmetrically round whereas an "S" signifies anchor bolts located on the base plate corners.