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

ORIGINAL

September 20, 2011

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

Re: **Notice of Completion of Construction Activity**
EM-VER-088-100105 – 585 South Main Street, Naugatuck, Connecticut
EM-VER-013-110408 – 131 Gifford Lane, Bozrah, Connecticut
EM-VER-059-110415 – 68 Groton Long Point, Groton, Connecticut EM-VER-152-110613 – 45 Fargo Road, Waterford, Connecticut
EM-VER-137-110415 – 86 Volunteer Road, Stonington, Connecticut
EM-VER-047-110126 – 15 Chamberlain Road, East Windsor, Connecticut
EM-VER-006-100107 – 60 Rice Lane, Beacon Falls, Connecticut
EM-VER-008-100127 – 719 Amity Road, Bethany, Connecticut

Dear Ms. Roberts:

The purpose of this letter is to notify the Council that construction activity associated with the above-referenced facility modifications have been completed.

If you have any questions or need any additional information regarding any of these facilities, please do not hesitate to contact me.

Sincerely,

Kenneth C. Baldwin

Copy to:
Sandy M. Carter

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

March 2, 2010

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

RE: **EM-VER-008-100127** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 761 Amity Road, Bethany, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated January 27, 2010, 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,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Derrylyn Gorski, First Selectman, Town of Bethany
Robert H. Brinton, Zoning Enforcement Officer, Town of Bethany
Christopher B. Fisher, Esq., Cuddy & Feder LLP

G:\EM\BAM-VERIZON\BETHANY\dc021710AmityRd.DOC

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

January 29, 2010

The Honorable Derrylyn Gorski
First Selectman
Town of Bethany
Town Hall
40 Peck Road
Bethany, CT 06524-3338

RE: **EM-VER-008-100127** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 761 Amity Road, Bethany, Connecticut.

Dear First Selectman Gorski:

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

If you have any questions or comments regarding this proposal, please call me or inform the Council by February 12, 2010.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jbw

Enclosure: Notice of Intent

c: Robert H. Brinton, Zoning Enforcement Officer, Town of Bethany

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

EM-VER-008-100127

ORIGINAL

January 27, 2010

Via Hand Delivery

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

Re: **Notice of Exempt Modification**
761 Amity Road, Bethany, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") intends to install antennas on an existing 150-foot self-supporting monopole tower owned by AT&T at 761 Amity Road in Bethany, Connecticut. 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 Derrylyn Gorski, the Town's First Selectman. The Town of Bethany is the owner of the property on which the tower is located.

The facility consists of a 150-foot self-supporting monopole tower capable of supporting multiple carriers within a fenced compound at 761 Amity Road in Bethany. The tower is currently shared by AT&T with antennas located at the 151-foot level and Sprint Nextel with antennas located at the 130-foot level on the tower. Cellco intends to install three (3) DB854DG65ESX cellular antennas; three (3) MG D3-800T0 PCS antennas; and three (3) P65-15-XL-2 LTE (700MHz) antennas at the 140-foot level on the tower. Equipment associated with Cellco's antennas and a propane-fueled back-up generator will be located in a 12' x 30' shelter located on the ground adjacent to the tower. Cellco will also install a 1000 gallon propane tank on a concrete pad within the fenced compound. Attached behind Tab 1 are Project Plans for the proposed Cellco facility.

The planned modifications to the Bethany 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 140-foot level on the 150-foot tower.

2. The proposed installation of the associated equipment shelter will not require an extension of the fenced compound or lease area.

3. The proposed installation 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 worst-case RF power density calculations for existing and Cellco antennas would be 26.8% of the FCC standard. A cumulative power density calculations table is included behind Tab 2.

Included behind Tab 3, is a Structural Analysis Report confirming that the tower and foundation can support the existing and Cellco antennas and associated equipment.

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

Sincerely,

Kenneth C. Baldwin

Attachments
Copy to:
Derrylyn Gorski, Bethany First Selectman
Sandy M. Carter

Cellco Partnership

d.b.a. verizon wireless

WIRELESS COMMUNICATIONS FACILITY

BETHANY NORTH, CT
761 AMITY ROAD
BETHANY, CT 06524

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 761 AMITY ROAD, BETHANY, CT 06524

1.	Depart E River Dr	
2.	Take ramp left for I-84 East toward Boston	0.3 mi
3.	At exit 55, take ramp right for SR-2 / Veterans of Foreign Wars Memorial Hwy East toward Norwich / New London	3.4 mi
4.	At exit 5D, take ramp right for SR-3 South toward Glastonbury / Wethersfield	2.7 mi
5.	Take ramp left for I-91 South toward New Haven	13.5 mi
6.	At exit 18, take ramp right for I-691 West toward Meriden / Waterbury	6.8 mi
7.	At exit 3, take ramp right for Ct-10 toward Milldale / Cheshire	0.3 mi
8.	Turn left onto SR-10 / Highland Ave	5.4 mi
9.	Turn right onto SR-42 / N Brooksvale Rd	1.8 mi
10.	Turn right to stay on SR-42 / Bethany Mountain Rd	3.4 mi
11.	Turn left to stay on SR-42 / SR-63 / Amity Rd / Litchfield Tpke	1.1 mi
12.	Arrive at 761 Amity Road, Bethany, Connecticut 06524	

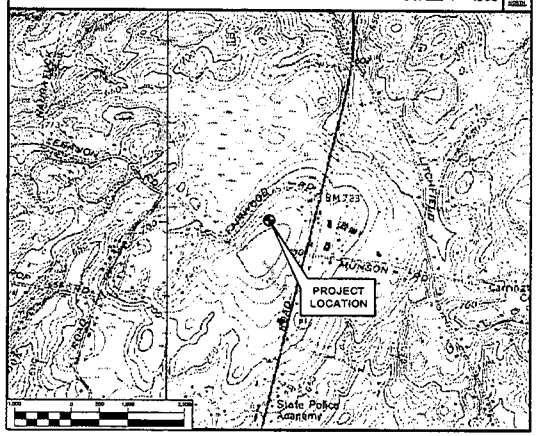
GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

PROJECT SCOPE

1. THE PROPOSED SCOPE OF WORK GENERALLY INCLUDES THE INSTALLATION OF A 12'x30' PREFABRICATED WIRELESS EQUIPMENT SHELTER ON A CONCRETE FOUNDATION AND A 1,000 GALLON PROPANE TANK ON A CONCRETE PAD, LOCATED WITHIN THE EXISTING WIRELESS COMMUNICATIONS LEASE AREA.
2. A TOTAL OF NINE (9) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED ON AN EXISTING ±150' TALL MONOPOLE TOWER AT A CENTERLINE ELEVATION OF ±140' ABOVE THE TOWER BASE.
3. ELECTRIC AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND TO THE PROPOSED EQUIPMENT SHELTER FROM AN EXISTING UTILITY BACKBOARD LOCATED WITHIN THE FENCED COMPOUND.

VICINITY MAP — SCALE: 1" = 1000'



PROJECT SUMMARY

SITE NAME:	BETHANY NORTH, CT
SITE ADDRESS:	761 AMITY ROAD BETHANY, CT 06524
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONTACT PERSON:	SANDY CARTER CELLCO PARTNERSHIP (860) 803-8219
TOWER COORDINATES:	LATITUDE 41°-26'-33" LONGITUDE 72°-59'-35" COORDINATES ARE BASED ON CONNECTICUT SITING COUNCIL DATABASE.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	00
C-1	COMPOUND PLAN AND ELEVATION	00

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
00	1/27/10	DEB	DMD	ISSUED FOR CSC
A	1/27/10	DEB	DMD	ISSUED FOR CSC-CLIENT REVIEW

DESIGNED BY: CFC
DRAWN BY: DEB
CHK'D BY: DMD

Cellco Partnership d.b.a. verizon wireless

NATCOMM
T: 203.488.0580
F: 203.488.8587
W: natcomm.com
83-2 N. Frontage Rd.
Bristol, CT 06010

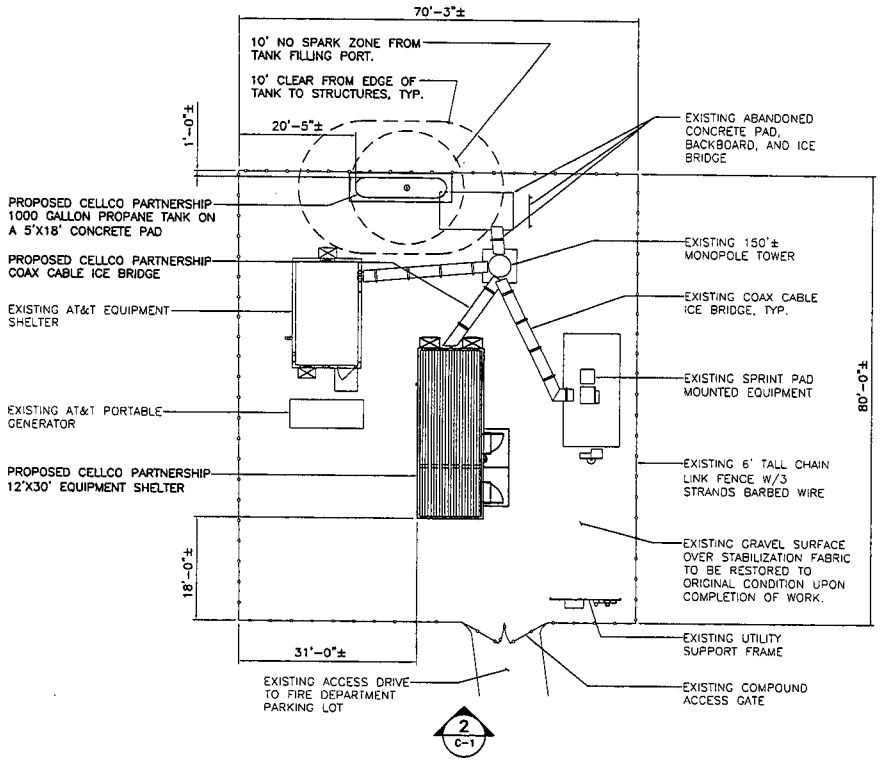
VERIZON WIRELESS
WIRELESS COMMUNICATIONS FACILITY
BETHANY NORTH, CT
761 AMITY ROAD
BETHANY, CT 06524

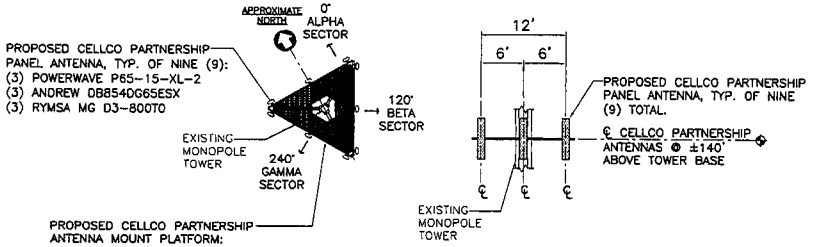
DATE: 11/12/09
SCALE: AS NOTED
JOB NO. 08089

TITLE SHEET

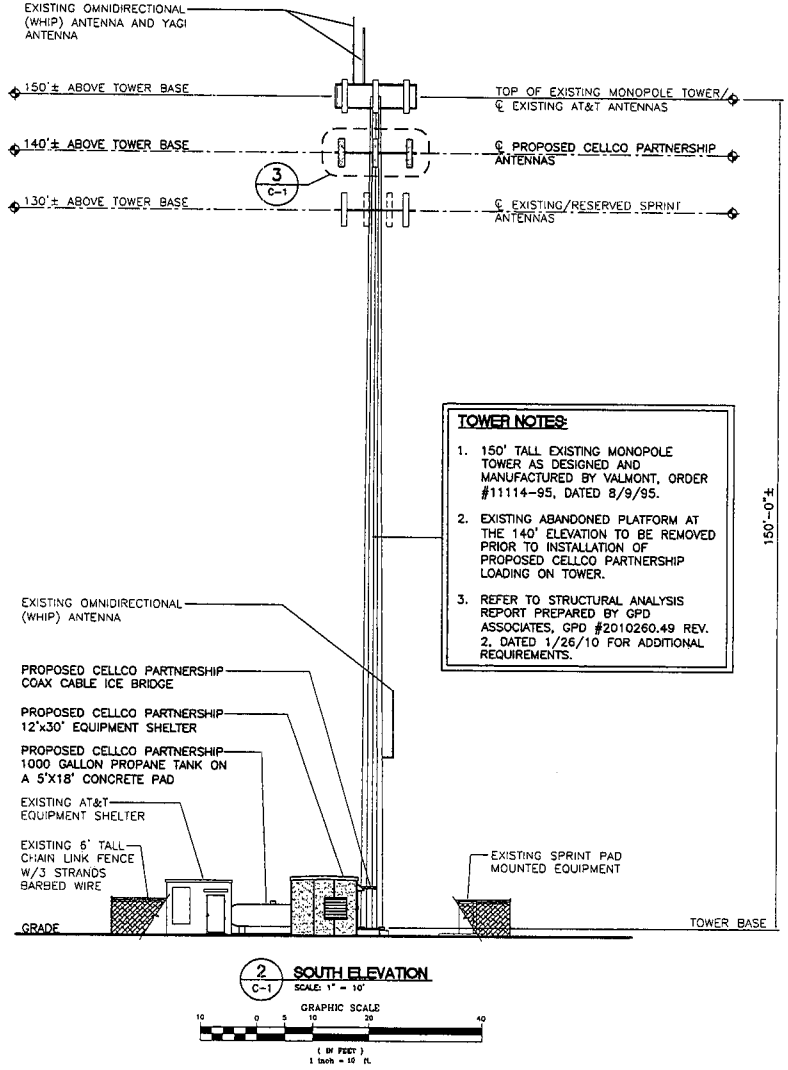
T-1

Sheet No. 1 of 2





3 C-1 ANTENNA MOUNTING CONFIGURATION
NOT TO SCALE



TOWER NOTES:

1. 150' TALL EXISTING MONOPOLE TOWER AS DESIGNED AND MANUFACTURED BY VALMONT, ORDER #11114-95, DATED 8/9/95.
2. EXISTING ABANDONED PLATFORM AT THE 140' ELEVATION TO BE REMOVED PRIOR TO INSTALLATION OF PROPOSED CELLCO PARTNERSHIP LOADING ON TOWER.
3. REFER TO STRUCTURAL ANALYSIS REPORT PREPARED BY GPD ASSOCIATES, GPD #2010260.49 REV. 2, DATED 1/26/10 FOR ADDITIONAL REQUIREMENTS.

2 C-1 SOUTH ELEVATION
SCALE: 1" = 10'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

REV	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
00	1/27/10	DEB	DMD	ISSUED FOR CSC
A	1/27/10	DEB	DMD	ISSUED FOR CSC-CLIENT REVIEW

DESIGNED BY: CFC
DRAWN BY: DEB
CHK'D BY: DMD

Cellco Partnership d/b/a Verizon wireless

NAT.COMM
NATIONAL COMMUNICATIONS
Ph: 203.488.0580
Fx: 203.488.8587
W: nat-comm.com
63-2 N. Branford Rd.
Branford, CT 06405

VERIZON WIRELESS
WIRELESS COMMUNICATIONS FACILITY
BETHANY NORTH, CT
761 AMITY ROAD
BETHANY, CT 06524

DATE: 11/12/09
SCALE: AS NOTED
JOB NO. 08089

COMPOUND PLAN AND ELEVATION

C-1

Sheet No. 2 of 2

	General	Power	Density					
Site Name: Bethany N								
Tower Height: Verizon @ 140								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*Sprint	11	357.77	130	0.0837	1962.5	1.0000	8.37%	
*VoiceStream			140	0.007424	1930	1.0000	0.74%	
*Beth Fire Dept			160	0.000844	33.54	0.2	0.42%	
*Beth Hwy Dept			160	0.001406	155.835	0.2	0.70%	
*Cingular UMTS	1	500	151	0.0079	880	0.5867	1.34%	
*Cingular GSM	2	296	151	0.0093	880	0.5867	1.59%	
*Cingular GSM	2	427	151	0.0135	1900	1.0000	1.35%	
Verizon	**3**	**416**	**140**	**0.0229**	**1970**	**1.0000**	**2.29%**	
Verizon	**9**	**289**	**140**	**0.0477**	**869**	**0.5793**	**8.23%**	
Verizon	**1**	**486**	**140**	**0.0089**	**757**	**0.4973**	**1.79%**	
								26.8%
* Source: Siting Council								

at&t
Glynn Walker
AT&T Mobility
5405 Windward Pkwy
Alpharetta, GA 30004
(770) 708-6122

GPD ASSOCIATES
Kevin Clements
520 South Main St., Suite 2531
Akron, OH 44311
(330) 572-2195
kclements@gpdgroup.com

GPD# 2010260.49 Rev. 2
January 26, 2010

REVISED STRUCTURAL ANALYSIS REPORT

AT&T DESIGNATION:	**Site USID:**	**61186**
	Site FA:	**10035070**
	Site Name:	**BETHANY**
VERIZON DESIGNATION:	**Site Name:**	**Bethany North, CT**
	Site Number:	**2008299882**
ANALYSIS CRITERIA:	**Codes:**	**TIA/EIA-222-F & 2003 IBC** **85-mph with 0" ice** **74-mph with 1/2" ice**
SITE DATA:		**719 Amity Rd., Bethany, CT 06524, New Haven County** **Latitude 41° 26' 33.864"N, Longitude 72° 59' 32.891"W** **150' Valmont Monopole**

Mr. Walker,

GPD is pleased to submit this Revised Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the addition of the following proposed loading configuration:

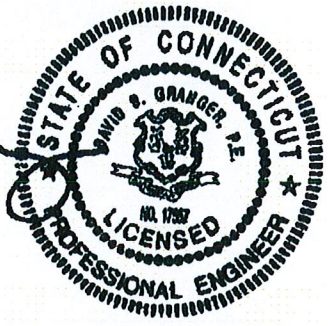
Elev. 140' (3) Powerwave P65-15-XL-2 Antennas on proposed Andrew MC-PK12S-B Platform w/ (6) 1-5/8" internal coax
(3) Andrew DB854DG65ESX Antennas on the same platform w/ (6) 1-5/8" internal coax
(3) Rymsa MG D3-800T0 Antennas on the same platform

Based on our analysis we have determined the design of the **tower and its foundation is sufficient** for the proposed, existing, and reserved loadings as referenced in Appendix A.

We at GPD appreciate the opportunity of providing our continuing professional services to you and AT&T. If you have any questions please do not hesitate to call.

Respectfully submitted,

David B. Granger, P.E.
Connecticut #: 17557



SUMMARY & RESULTS

The purpose of this analysis was to verify that the existing structure is capable of carrying the proposed loading configuration as specified by Verizon to AT&T. This report was commissioned by Mr. Glynn Walker of AT&T.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Monopole	95.9%	Pass
Base Plate	51.8%	Pass
Anchor Bolts	90.6%	Pass
Foundation	84.4%	Pass

ANALYSIS METHOD

RISA Tower (Version 5.3.1.0), a commercially available software program, was used to create a three-dimensional model of the tower and calculate primary member stresses for various dead, live, wind, and ice load cases. Selected output from the analysis is included in Appendix B. The following table details the information provided to complete this structural analysis. This analysis is solely based on this information and being provided without the benefit of a site visit.

DOCUMENTS PROVIDED

Document	Remarks	Source
Preliminary Tower Summary	Verizon Co-location document	Siterra
Site Lease Application	Verizon Application, dated 1/25/10	Siterra
Original Tower Drawings	Valmont Order #: 11114-95, dated 8/9/95	Siterra
Previous Analysis	GPD Job #: 2008263.97, dated 8/14/08	Siterra
Previous Analysis	GPD Job #: 2009285.09, dated 11/6/09	Siterra

ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the monopole. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The monopole shaft sizes and shape are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The antenna configuration is as supplied and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements
3. Some assumptions are made regarding antennas and mount sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type and industry practice.
4. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
5. The soil parameters are as per data supplied or as assumed and stated in the calculations. If no data is available, the foundation system is not verified.
6. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
7. All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report.
8. All existing loading was obtained from the previous analysis by GPD Job #: 2009285.09, dated 11/6/09 and the provided preliminary tower summary and is assumed to be accurate.
9. Tower Mounted Amplifiers are assumed to be installed behind antennas.
10. All proposed coax is assumed to be internal to the monopole.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and GPD Associates should be allowed to review any new information to determine its effect on the structural integrity of the tower.

DISCLAIMER OF WARRANTIES

GPD ASSOCIATES has not performed a site visit to the tower to verify the member sizes or antenna/coax loading. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD ASSOCIATES in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. All tower components have been assumed to only resist dead loads when no other loads are applied. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

GPD ASSOCIATES does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD ASSOCIATES provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD ASSOCIATES, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc. have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

GPD ASSOCIATES makes no warranties, expressed and/or implied in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD ASSOCIATES will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD ASSOCIATES pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

Tower Analysis Summary Form

Tower Analysis Summary Form

General Info

Site Name	BETHANY
Site Number	61186
FA Number	10035070
Date of Analysis	1/26/2010
Company Performing Analysis	GPD

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

Tower Info	Description	Date
Tower Type (G, SST, MP)	MP	
Tower Height (top of steel AGL)	150'	
Tower Manufacturer	Valmont	
Tower Model	n/a	
Manufacturer Drawings	Valmont Order #: 11114-95	8/9/1995
Foundation Design	n/a	
Geotech Report	n/a	
Tower Mapping	n/a	
Previous Structural Analysis	GPD Job #: 2008263.97	8/14/2008
Previous Structural Analysis	GPD Job #: 2009285.09	11/6/2009
Modification Drawings	n/a	

Design Parameters

Design Code Used	TIA/EIA-222-F
Location of Tower (County, State)	New Haven, Connecticut
Basic Wind Speed (mph)	85-fastest
Ice Thickness (in)	0.5
Structure Classification (I, II, III)	
Exposure Category (B, C, D)	
Topographic Category (1 to 5)	

Analysis Results (% Maximum Usage)

Existing/Reserved + Future + Proposed Condition	
Tower	95.9%
Foundation	84.4%
Guy Wire	n/a

Steel Yield Strength (ksi)

Pole	65
Base Plate	60
Anchor Rods	75

Existing / Reserved Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Internal/External
AT&T Mobility	151	151	6	Panel	Kathrein	800-10121		1	Unknown	13' Platform w/ rails	12	Unknown	1-1/4"	Internal
AT&T Mobility	151	151	6	TMA	ADC	CG-1900W850				behind antennas				
City	150	156	1	Omni	Unknown	12'x3" Omni		1		pipe mount	1	Unknown	1-1/4"	Internal
City	150	155	1	Yagi	Unknown	10' Yagi		1		pipe mount	1	Unknown	1-1/4"	Internal
Unknown	140	140												
								1	Unknown	13' Platform w/ rails				
Sprint	130	130	12	Panel	Decibel	DB980F90E-M								
								3	Unknown	12' T-Arms	12	Unknown	1-5/8"	Internal
AT&T Mobility	31	37	1	Omni	Unknown	12'x3" Omni		1	Unknown	2' Standoff	1	Unknown	1/2"	Internal

Note: Existing abandoned platform at 140' shall be removed prior to the installation of the proposed loading.

Proposed Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Internal/External
Verizon	140	140	3	Panel	Powerwave	P65-15-XL-2	0	1	Andrew	MC-PK12S-B 12"-6" LP Platform	6	LDF7-50A	1-5/8"	Internal
Verizon	140	140	3	Panel	Andrew	DB854DG65ESX	120			on same mount	6	LDF7-50A	1-5/8"	Internal
Verizon	140	140	3	Panel	Rymsa	MG D3-800T0	240			on same mount				

Note: Existing abandoned platform at 140' shall be removed prior to the installation of the proposed loading.

Future Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Internal/External
AT&T Mobility	151	151	3	Panel	Kathrein	800-10121				on existing mount				

Note: Future loading is in addition to the existing loading at the same elevation.

APPENDIX B

RISA Tower Output File

Tower Input Data

There is a pole section.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 50 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
LDF6-50A (1-1/4 FOAM)	C	No	Inside Pole	150.00 - 8.00	14	No Ice	0.00	0.66
						1/2" Ice	0.00	0.66
LDF7-50A (1-5/8 FOAM)	B	No	Inside Pole	140.00 - 8.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	A	No	Inside Pole	130.00 - 8.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF4P-50A (1/2 FOAM)	A	No	Inside Pole	31.00 - 8.00	1	No Ice	0.00	0.15
						1/2" Ice	0.00	0.15

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
2'-0" - STANDOFF	A	None		0.0000	31.00	No Ice	1.36	1.36	0.02
						1/2" Ice	2.45	2.45	0.04
12' x 3" Omni	A	From Leg	2.00 0.00 6.00	0.0000	31.00	No Ice	3.60	3.60	0.05
						1/2" Ice	4.83	4.83	0.08
12' T-arms (3)	A	None		0.0000	130.00	No Ice	14.10	14.10	1.00
						1/2" Ice	16.00	16.00	1.20
(4) DB980F90E-M	A	From Centroid-Leg	4.00 0.00 0.00	0.0000	130.00	No Ice	3.90	2.29	0.01
						1/2" Ice	4.28	2.65	0.03
(4) DB980F90E-M	B	From	4.00	0.0000	130.00	No Ice	3.90	2.29	0.01

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
		Centroid-Le g	0.00 0.00			1/2" Ice	4.28	2.65	0.03
(4) DB980F90E-M	C	From Centroid-Le g	4.00 0.00 0.00	0.0000	130.00	No Ice 1/2" Ice	3.90 4.28	2.29 2.65	0.01 0.03
Valmont 13' Platform w/ Rails (GPD)	A	None		0.0000	150.00	No Ice 1/2" Ice	35.90 40.50	35.90 40.50	1.34 3.00
(2) 800 10121	A	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
(2) 800 10121	B	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
(2) 800 10121	C	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	A	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	0.00 0.00	0.31 0.41	0.02 0.02
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	B	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	0.00 0.00	0.31 0.41	0.02 0.02
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	C	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	0.00 0.00	0.31 0.41	0.02 0.02
12' x 3" Omni	A	From Centroid-Le g	4.00 0.00 6.00	0.0000	150.00	No Ice 1/2" Ice	3.60 4.83	3.60 4.83	0.05 0.08
10' Yagi	A	From Centroid-Le g	4.00 0.00 5.00	0.0000	150.00	No Ice 1/2" Ice	2.00 3.02	2.00 3.02	0.05 0.07
800 10121	A	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
800 10121	B	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
800 10121	C	From Centroid-Le g	4.00 0.00 1.00	0.0000	150.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
Andrew 12'-6" Platform (MTS MC-PK12S-B)	C	None		0.0000	140.00	No Ice 1/2" Ice	8.75 11.30	8.75 11.30	1.12 1.46
(3) MG D3-800T0	C	From Centroid-Le g	4.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice	3.33 3.67	2.14 2.46	0.02 0.03
(3) P65-15-XL-2	A	From Centroid-Le g	4.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice	5.60 5.99	2.48 2.78	0.01 0.04
(3) DB854DG65ESX	B	From Centroid-Le g	4.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice	5.88 6.28	2.75 3.06	0.02 0.05

Critical Deflections and Radius of Curvature - Service Wind

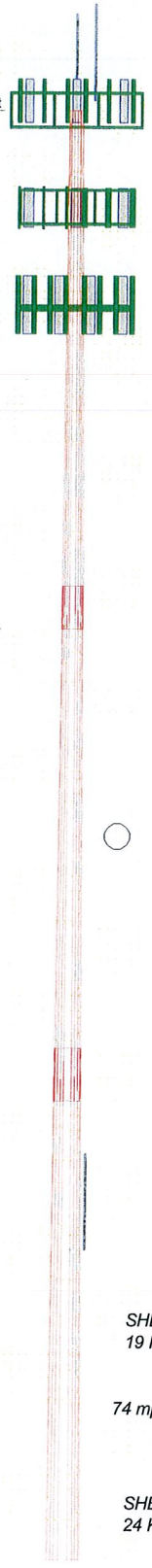
Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	Valmont 13' Platform w/ Rails (GPD)	38	45.705	2.7911	0.0108	21889
140.00	Andrew 12'-6" Platform (MTS MC-PK12S-B)	38	40.066	2.6462	0.0089	10944
130.00	12' T-arms (3)	38	34.537	2.4950	0.0071	5471
31.00	2'-0" - STANDOFF	38	2.246	0.8096	0.0009	4202

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
L1	150 - 96.5834	Pole	TP27.61x17.61x0.2188	1	-6.80	968.44	91.6	Pass
L2	96.5834 - 47.5	Pole	TP36.34x26.3457x0.3125	2	-13.90	1830.92	95.9	Pass
L3	47.5 - 0	Pole	TP44.6x34.6875x0.375	3	-25.34	2776.20	95.2	Pass
							Summary	
						Pole (L2)	95.9	Pass
						RATING =	**95.9**	**Pass**

APPENDIX C

Tower Elevation Drawing



Section	1	2	3
Length (ft)	53.42	53.50	53.00
Number of Sides	12	12	12
Thickness (in)	0.2188	0.3125	0.3750
Lap Splice (ft)	4.42	5.50	
Top Dia (in)	17.6100	26.3457	34.6875
Bot Dia (in)	27.6100	36.3400	44.6000
Grade		A572-65	
Weight (K)	2.9	5.7	8.6

17.1

AXIAL 31 K
SHEAR 19 K
MOMENT 1959 kip-ft
TORQUE 2 kip-ft
74 mph WIND - 0.5000 in ICE

AXIAL 25 K
SHEAR 24 K
MOMENT 2357 kip-ft
TORQUE 2 kip-ft
REACTIONS - 85 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Valmont 13' Platform w/ Rails (GPD)	150	800 10121	150
(2) 800 10121	150	800 10121	150
(2) 800 10121	150	Andrew 12'-6" Platform (MTS MC-PK12S-B)	140
(2) 800 10121	150		
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	150	(3) MG D3-800T0	140
		(3) P65-15-XL-2	140
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	150	(3) DB854DG65ESX	140
		(4) DB980F90E-M	130
(2) ClearGain DD1900 w/800 Bypass Masthead Unit	150	(4) DB980F90E-M	130
		12' T-arms (3)	130
12' x 3" Omni	150	(4) DB980F90E-M	130
10' Yagi	150	2'-0" - STANDOFF	31
800 10121	150	12' x 3" Omni	31

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

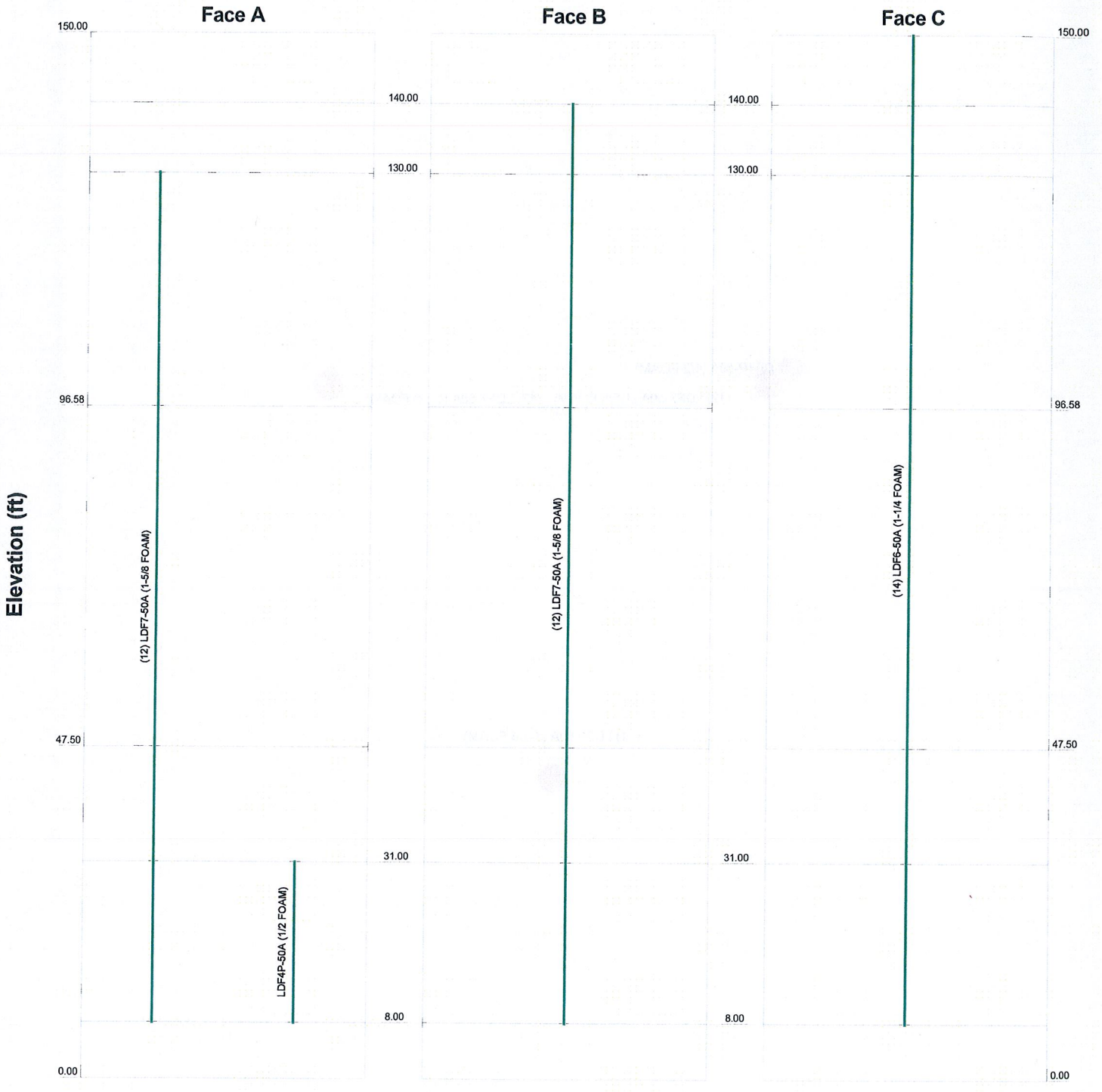
1. Tower is located in New Haven County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 95.9%

GPD GROUP
Consulting Engineers
GPD Associates
520 South Main Street, Suite 2531
Akron, OH 44311
Phone: (330) 572-2286
FAX: (330) 572-2102

Job: 61186 BETHANY			
Project: 2010260.49 Rev. 2			
Client: AT&T Mobility	Drawn by: sleduc	App'd:	
Code: TIA/EIA-222-F	Date: 01/26/10	Scale: NTS	
Path: N:\2010\2010260\49\RISA\Bethany.eri		Dwg No. E-1	

Feedline Distribution Chart
0' - 150'

Round | Flat | App In Face | App Out Face | Truss Leg



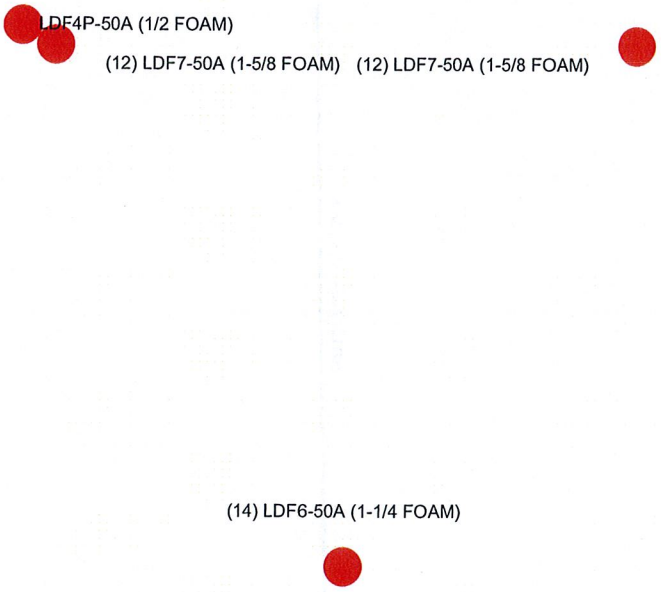
GPD GROUP
Consulting Engineers

GPD Associates
520 South Main Street, Suite 2531
Akron, OH 44311
Phone: (330) 572-2286
FAX: (330) 572-2102

Job: ***61186 BETHANY***			
Project: ***2010260.49 Rev. 2***			
Client: AT&T Mobility	Drawn by: sleduc	App'd:	
Code: TIA/EIA-222-F	Date: 01/26/10	Scale: NTS	
Path: N:\2010\2010260\49\RISA\Bethany.eri		Dwg No. E-7	

Feedline Plan

Round _____ Flat _____ App In Face App Out Face



GPD GROUP
Consulting Engineers

GPD Associates
520 South Main Street, Suite 2531
Akron, OH 44311
Phone: (330) 572-2286
FAX: (330) 572-2102

Job: ***61186 BETHANY***			
Project: ***2010260.49 Rev. 2***			
Client: AT&T Mobility	Drawn by: sleduc	App'd:	
Code: TIA/EIA-222-F	Date: 01/26/10	Scale: NTS	
Path: N:\2010\2010260\49\RISA\Bethany.eri		Dwg No. E-7	

APPENDIX D

Base Plate & Anchor Rod Analysis

GPD ASSOCIATES

Anchor Rod and Base Plate Stresses
61186 BETHANY
2010260.49 Rev. 2

Overturning Moment =	2357.00	k*ft
Axial Force =	25.00	k
Shear Force =	24.00	k

Anchor Rods		
Number of Rods =	12	
Type =	Upset Rod	
Rod Yield Strength (Fy) =	75	ksi
ASIF =	1.333	
Rod Circle =	52.68	in
Rod Diameter =	2.25	in
Net Tensile Area =	3.25	in^2
Max Tension on Rod =	176.72	kips
Max Compression on Rod =	180.89	kips
Allow. Rod Force =	195.00	kips
Anchor Rod Capacity =	90.6%	OK

Base Plate		
Location =	External	
Plate Strength (F_y) =	60	ksi
Outside Diameter =	58.67	in
Plate Thickness =	2.75	in
wcalc =	28.04	in
wmax =	41.13	in
w =	28.04	in
S =	35.34	in^3
fb =	31.09	ksi
Fb =	60	ksi
Base Plate Capacity =	51.8%	OK

Stiffeners		
Configuration =	None	

Pole		
Pole Diameter =	44.6	in
Number of Sides =	12	
Thickness =	0.375	in
Pole Yield Strength =	65	ksi

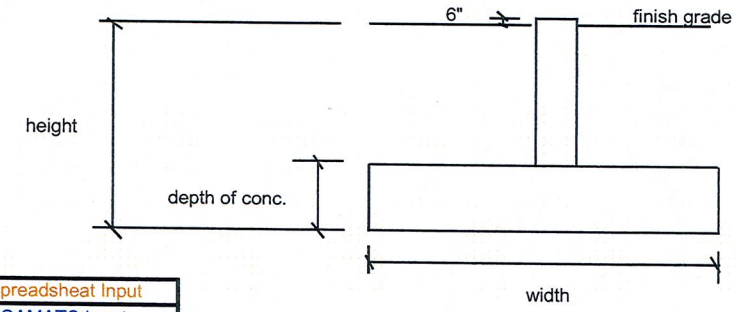
APPENDIX E

Foundation Analysis

PAD DESIGN - Monopole
2010260.49 Rev. 2

TOWER REACTIONS

total overturning moment =	2357	Kip-ft
total shear =	24	Kip
axial =	25	Kip
ground water table =	Below	ft



Spreadsheat Input
PCAMATS Input

PAD DIMENSIONS

width =	21	ft
height =	7.75	ft
depth of conc =	4	ft
γ_{soil} =	0.100	kcf
γ_{conc} =	0.150	kcf

Mr =	5141.44	k-ft
Mot =	2555	k-ft
P =	454.975	k
w_{wedge}	8.52	k
Allowable Bearing =	4	ksf

F.S. $_{OVERTURNING}$ = 2.0123042 ok > 1.5

F.S. $_{OVERTURNING}$ / F.S. $_{ALLOWABLE}$ = 74.5%

LOAD PERPENDICULAR TO PAD

Q_{MAX} = P/A+M/S= 2.68701814
Q_{MIN} = P/A-M/S= -0.62363946

width/6	M/P	
3.50	5.62	NG (width/6 < M/P), use Qmax

IF M/P>width/6

Qmax = 2.957 ksf
Qmin = 0.000 ksf

Q_{MAX}/Q_{ALL} = 73.9% OK

LOAD AT 45 DEGREES TO PAD

Q_{MAX} = P/A+M/S= 3.37673847
Q_{MIN} = P/A-M/S= -1.31335979

Verify max pressure in PCAMATS for this load case

Mx =	1806.658	
My =	1806.658	
e_X =	3.971	
ey =	3.971	
e_X/W =	0.189	NG (e/W > 1/6) use Qmax
e_Y/W =	0.189	NG (e/W > 1/6) use Qmax

IF e/W > 1/6

Q_{ALL} =	767.33	kips
Q_{MAX} =	647.76	kips
Q_{MAX}/Q_{ALL} =	84.4%	OK

B_1 =	19.59	ft
L_1 =	19.59	ft

Foundation Capacity:	**84.4%**	**OK**