



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
May 20, 2009

Steven L. Levine
Real Estate Consultant
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-029-090420** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 161 Pinney Street, Colebrook, Connecticut.

Dear Mr. Levine:

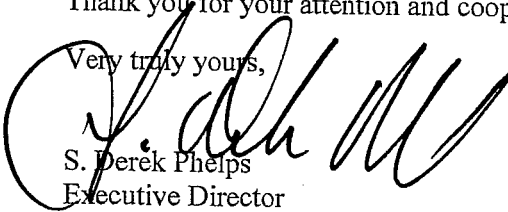
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated April 20, 2009, 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 Thomas D. McKeon, First Selectman, Town of Colebrook
Karl Nilsen, Zoning Enforcement Officer, Town of Colebrook
Crown Castle USA, Inc.

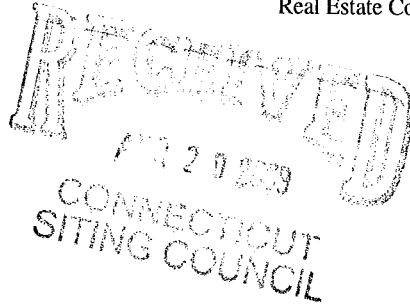


New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

Steven L. Levine
Real Estate Consultant

HAND DELIVERED

April 20, 2009



Honorable Daniel F. Caruso, Chairman,
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing tele-communications facility located at 161 Pinney Street, Colebrook (owner, Crown Castle)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, 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 and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications 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).

1. The height of the overall structure will be unaffected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

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

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Steven L. Levine
Real Estate Consultant

Attachments

**NEW CINGULAR WIRELESS
Equipment Modification**

116 Pinney Street, Colebrook
Site Number 1012
Exempt Modification approved 11/03

Tower Owner/Manager: Crown Castle

Equipment Configuration: Monopole

Current and/or Approved: Up to twelve CSS panel antennas @ 137 ft AGL
Six TMA's and six diplexers @ 137 ft
Up to twelve runs 1 5/8 inch coax cable
Equipment shelter

Planned Modifications: Remove existing antennas, TMA's, and diplexers
Install six Powerwave 7770 antennas (or equivalent) @ 137 ft
Install six TMA's and six diplexers @ 137 ft

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 24.8 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 28.3 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							21.19
AT&T GSM *	137	1900 Band	2	427	0.0164	1.0000	1.64
AT&T GSM *	137	880 - 894	2	296	0.0113	0.5867	1.93
Total							24.8%

* Per CSC records

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							21.19
AT&T UMTS	137	880 - 894	1	500	0.0096	0.5867	1.63
AT&T GSM *	137	1900 Band	2	427	0.0164	1.0000	1.64
AT&T GSM *	137	880 - 894	4	296	0.0227	0.5867	3.87
Total							28.3%

* Per CSC records

Structural information:

The attached structural analysis by Paul J. Ford & Co. (2/11/09; for Verizon's recent upgrades under EM-VER-029-080718) accounts for an AT&T equipment inventory of 12 CSS antennas, 12 TMA's, 3 diplexers, and 12 lines 1 5/8 inch coax. As shown on the attached loading comparison, this *configuration represents both greater weight and greater wind loading* than the proposed new array of 6 Powerwave antennas, 6 TMA's, 6 diplexers, and 12 lines 1 5/8 inch coax. No load-affecting equipment changes have taken place on this tower since the 2/11/09 structural was performed. Accordingly, the 2/11/2009 structural is still valid for assessing the structural impacts of the proposed equipment modifications and demonstrates that there is adequate structural capacity to accommodate the proposed modifications.



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

Steven L. Levine
Real Estate Consultant

April 20, 2009

Honorable Thomas D. McKeon
1st Selectman, Town of Colebrook
Town Hall 562 Colebrook Rd.
Colebrook, CT 06021

Re: Telecommunications Facility – 161 Pinney Street, Colebrook

Dear Mr. McKeon:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System (“UMTS”) capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC (“Cingular”) will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification 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 accompanying letter to the Siting Council fully describes Cingular’s proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council’s procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure

Loading Comparison - 1012 - Colebrook

		<u>QTY</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>	<u>Sail Area</u>	<u>Total Sail Area (sq in)</u>	<u>Total Weight (lbs)</u>
Utilized in 2/09 Structural Analysis									
Antennas	CSS DUO 1417-8686	12	48	14	9	30.8	672	8064	369.6
TMA's	ADC CG1900W850	6	11.7	11.3	2.8	15.4	132.21	793.26	92.4
Diplexers	CSS DBC-750	3	7.9	6.6	1.3	4.9	52.14	156.42	14.7
coax	twelve 1 5/8 inch	12	140			0.8			1344
								9013.68	1820.7

Proposed									
Antennas	Powerwave 7770	6	55	11	5	35	605	3630	210
TMA's	Powerwave LGP 21401	6	14	9	2.7	19	126	756	114
Diplexers	Powerwave LGP 13519	6	4.4	6.3	3	5.3	27.72	166.32	31.8
coax	twelve 1 5/8 inch	12	140			0.8			1344
								4552.32	1699.8

Specs

Antennas									
	CSS DUO 1417-8686		48	14	9	30.8			
	Powerwave 7770		55	11	5	35			
TMA's									
	ADC CG1900W850		11.7	11.3	2.8	15.4			
	Powerwave LGP 21401		14	9	2.7	19			
Diplexers									
	CSS DBC-750		7.9	6.6	1.3	4.9			
	Powerwave LGP 13519		4.4	6.3	3	5.3			
	Powerwave LGP 21903		4.4	6.3	3	5.3			
coax									
	7/8 inch					.34 / ft			
	1 1/4 inch					.69 / ft			
	1 5/8 inch					.8 / ft			



PAUL J. FORD AND COMPANY
 STRUCTURAL ENGINEERS
 250 East Broad Street • Suite 1500 • Columbus, Ohio 43215-3708

February 11, 2009

John Eigenbrode
 Crown Castle International
 9105 Monroe Rd.
 Charlotte, NC 28270
 (704) 321-3816

Subject: Post-Construction Observation Report of Reinforced 148-Ft Monopole

<i>Carrier Designation</i>	Verizon Wireless Co-Locate	
	Carrier Site Number:	N/A
	Carrier Site Name:	Colebrook SW
<i>Crown Castle Designation</i>	Crown Castle BU Number:	876377
	Crown Castle Site Name:	Horton 2 / Fredsall Property
	Crown Castle JDE Job Number:	98242
	Crown Castle Application Number:	55996 Rev#2
<i>Engineering Firm Designation</i>	Paul J. Ford and Company	41708-0177_Record
<i>Site Data</i>	116 Pinney St., Colebrook, Litchfield County, CT	
	Latitude 41° 57' 58.57", Longitude -73° 7' 19.65"	


Dear John Eigenbrode,

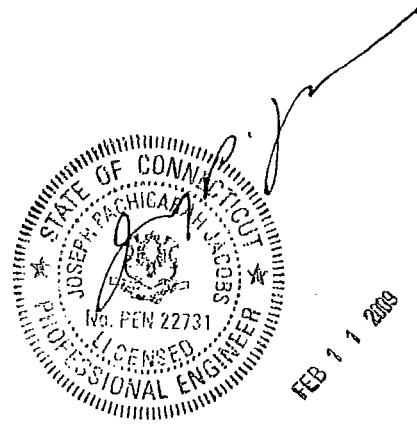
Paul J. Ford and Company is pleased to submit this "Post-Construction Observation Report" for the modifications recently performed on the aforementioned monopole. The purpose of the report is to verify that the pole modifications were installed in accordance with the drawings produced by Paul J. Ford and Company. You will find a copy of the record drawings attached to the post-construction structural analysis report.

The modifications required: Aero shaft and foundation reinforcement. Based on the construction photos, construction observation letter and the redline drawings provided by AeroSolutions LLC, we feel that the modifications were completed in accordance with the design intent indicated on our drawings. All information shown on the Record drawings is based on documentation provided by AeroSolutions LLC.

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and Crown Castle International. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,


 Maria C. Lopez
 Project Engineer *A.P.*
 mclopez@pjfweb.com





PAUL J. FORD AND COMPANY
 STRUCTURAL ENGINEERS
 250 East Broad Street • Suite 1500 • Columbus, Ohio 43215-3708

1012

February 11, 2009

John Eigenbrode
 Crown Castle International
 9105 Monroe Rd.
 Charlotte, NC 28270
 (704) 321-3816

Modified Structure is Adequate
Modified Monopole is Adequate
Modified Foundation is Adequate

Subject: Post-Construction Structural Analysis Report of Existing 148-Ft Monopole with new modifications

Carrier Designation:	Verizon Wireless Co-Locate	
	Carrier Site Number:	N/A
	Carrier Site Name:	Colebrook SW
Crown Castle Designation	Crown Castle BU Number:	876377
	Crown Castle Site Name:	Horton 2 / Fredsall Property
	Crown Castle JDE Job Number:	98242
	Crown Castle Application Number:	55996 Rev#2
Engineering Firm Designation	Paul J. Ford and Company	41708-0177_Record
Site Data	116 Pinney St., Colebrook, Litchfield County, CT	
	Latitude 41° 57' 58.57", Longitude -73° 7' 19.65"	

Dear John Eigenbrode,

Paul J. Ford and Company is pleased to submit this "Post-Construction Structural Analysis Report" to determine the structural adequacy of the above reinforced monopole. This analysis has been performed in accordance with the Crown Castle Structural "Statement of Work", the terms of the Purchase Order, and the TIA/EIA-222-F Standard for the following Basic Wind Speeds: 80 mph without ice, 69 mph with 0.5" radial ice, and 50 mph (Operational) without ice.

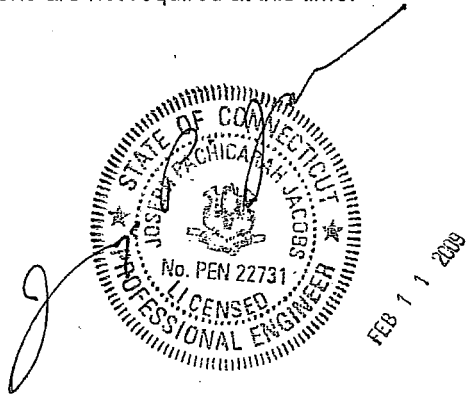
The monopole was analyzed with the addition of the proposed antenna loading shown in the table below combined with the existing and reserved loading on the structure:

Elevation - ft	Count	Antenna Description
127	6	Antel LPA-80080/6CF w/mount pipe
	6	Antel LPA-185080/12CFx2 w/ Mount Pipe
126	1	14' LP Platform

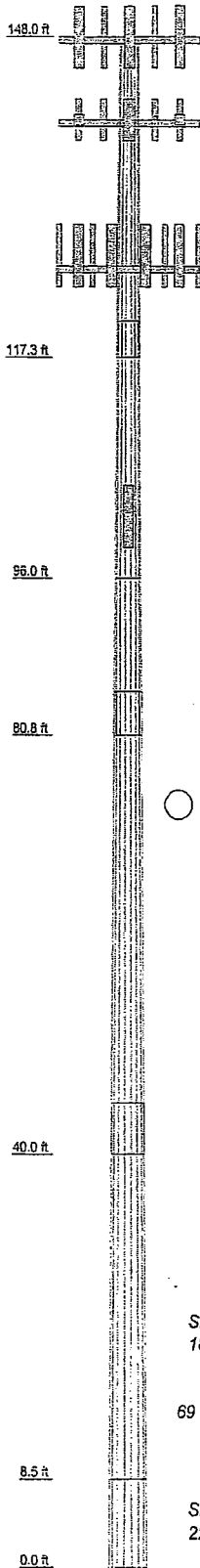
The modifications to the monopole shaft and foundation are now complete. Based on our analysis, we have determined that with completed modifications the monopole and foundation will have sufficient capacity to support the existing, reserved, and proposed loading. Additional modifications are not required at this time.

Respectfully submitted,


 Maria C. Lopez
 Project Engineer
 mclopez@pjfweb.com



Section	1	2	3	4	5	6
Length (ft)	30.75	24.75	15.25	45.00	30.50	0.50
Number of Slides	18	18	18	18	10	18
Thickness (in)	0.1875	0.2500	0.4271	0.4289	0.4753	0.4340
Lap Splice (ft)	3.50		4.25		5.00	
Top Dia (in)	22.0000	26.2571	30.4640	31.4795	37.7899	44.2750
Bot Dia (in)	27.2270	30.4640	33.0560	39.4830	44.2750	45.7200
Grade		A607-60		A500M-50		
Weight (K)	1.5	1.9	2.2	7.3	6.8	1.8



DESIGNED APPURTENANCE LOADING

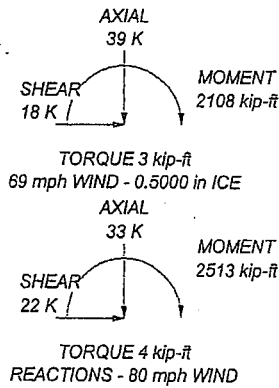
TYPE	ELEVATION	TYPE	ELEVATION
(3) FV65-14-00NA2 w/Mount Pipe (MLA)	148	DUO1417-8686 w/Mount Pipe (R)	140
(3) FV65-14-00NA2 w/Mount Pipe (MLA)	148	DUO1417-8686 w/Mount Pipe (R)	140
(3) FV65-14-00NA2 w/Mount Pipe (MLA)	148	DUO1417-8686 w/Mount Pipe (R)	140
(3) FV65-14-00NA2 w/Mount Pipe (MLA)	148	14' T-Arm Mounts (3) (E)	140
14' LP Platform (E)	148	(2) Antel LPA-80080/6CF w/mount pipe (P)	127
(3) DUO1417-8686 w/Mount Pipe (E)	140	(2) Antel LPA-80080/6CF w/mount pipe (P)	127
(3) DUO1417-8686 w/Mount Pipe (E)	140	(2) Antel LPA-80080/6CF w/mount pipe (P)	127
(3) DUO1417-8686 w/Mount Pipe (E)	140	(2) Antel LPA-80080/6CF w/mount pipe (P)	127
CSS DBC-750 (E)	140	(2) Antel LPA-185080/12CFx2 w/ Mount Pipe (P)	127
CSS DBC-750 (E)	140	(2) Antel LPA-185080/12CFx2 w/ Mount Pipe (P)	127
CSS DBC-750 (E)	140	(2) Antel LPA-185080/12CFx2 w/ Mount Pipe (P)	127
(2) ADC DD1900 Full Band Masthead (E)	140	(2) Antel LPA-185080/12CFx2 w/ Mount Pipe (P)	127
(2) ADC DD1900 Full Band Masthead (E)	140	14' LP Platform (P)	126
(2) ADC DD1900 Full Band Masthead (E)	140	KS24019-L112A (E)	102
(2) ADC DD1900 Full Band Masthead (E)	140	MTS 24' Stand-Off Bracket (1) (E)	100


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A500M-58	58 ksi	70 ksi

TOWER DESIGN NOTES

1. Tower is located in Litchfield County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 95.2%



 <p>Paul J Ford and Company 250 E. Broad Street Suite 1500 Columbus, Ohio 43215 Phone: 614.221.6679 FAX: 614.448.4105</p>	Job: Ex. 148' Pole; Horton 2 / Fredsall Property, Colebrook, CT
	Project: PJF #41708-0177 / BU #876377
	Client: Crown Castle International Drawn by: Maria C. Lopez App'd:
	Code: TIA/EIA-222-F Date: 02/11/09 Scale: NTS
	Path: Dwg No. E-1

INTRODUCTION

At the request of Crown Castle International, Paul J. Ford and Company has analyzed the reinforced monopole at the Horton 2 / Fredsall Property site located in Colebrook, Litchfield County, CT. This structural analysis has been performed in accordance with the TIA/EIA-222-F-1996 Standard, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures" to determine if the monopole structure has adequate capacity to support the existing, reserved, and proposed antenna loading.

ANALYSIS CRITERIA

The reinforced monopole has been analyzed for the antenna and coax loading listed in Tables 1A, 1B, 2A, and 2B below. The monopole has been analyzed in accordance with the TIA/EIA-222-F-1996 Standard for the following fastest-mile Basic Wind Speeds: 80 mph without ice, 69 with 0.5" radial ice, and 50 mph without ice as recommended for Litchfield County, CT.

Table 1A - Proposed Antenna Information

Elevation - ft.	Count	Antenna Description	Status
127	6	Antel LPA-80080/6CF w/mount pipe	Proposed
	6	Antel LPA-185080/12CFx2 w/ Mount Pipe	Proposed
126	1	14' LP Platform	Proposed

Table 1B - Proposed Cable Information

Elevation - ft.	Count	Cable Description	Location	Status
126 - 0	12	LDF7-50A (1-5/8 FOAM)	Internal	Proposed

Table 2A - Existing and Reserved Antenna Information

Elevation - ft.	Count	Antenna Description	Status
148*	9	FV65-14-00NA2 w/Mount Pipe	MLA
	1	Generic 12' LP Platform	Existing
140	9	DUO1417-8686 w/Mount Pipe	Existing
	3	CSS DBC-750	Existing
	6	ADC DD1900 Full Band Masthead	Existing
	3	DUO1417-8686 w/Mount Pipe	Reserved
	3	12' T-Arm Mounts	Existing
127	3	7221 w/Mount Pipe	To be removed
126	3	.3' side arms	
117	12	Antel LPA-185063/12CF w/ Mount Pipe	To be removed
	6	TMA	
	1	Generic 12' LP Platform	
102	1	KS24019-L112A	Existing
100	1	MTS 24" Stand-Off Bracket (1)	Existing

* MLA antenna loading controls design. Existing antenna loading consists of (6) DB980H90E-M.

Table 2B - Existing and Reserved Cable Information

Elevation - ft.	Count	Cable Description	Location	Status
147 - 0*	9	1-5/8	Internal	MLA
140 - 0	9	1-5/8	Internal	Existing
	3	1-5/8	Internal	Reserved
126 - 0	6	1-5/8	Internal	To be removed
117 - 0	12	1-5/8	Internal	removed
100 - 0	1	1/2	Internal	Existing
8 - 0	1	1/2	Internal	Existing

* MLA coax loading controls design. Existing coax loading consists of (6) 1-5/8".

Information for the existing monopole and foundation is based on the available drawings, documents, and/or information listed in Table 3 below.

Table 3 - Reference Documents Provided

Document	Source	Reference	Remarks
Proposed Antenna Loading	Crown Castle	BU#876377	
Existing Antenna Loading	Crown Castle	BU#876377	
Original Tower Drawings	Crown Castle	1883532	Summit/PJF, 11163/29200-1364, 09/11/00
Foundation Drawings	Crown Castle	1629428	Summit/PJF, 11163/29200-1364, 09/11/00
Geotechnical Report	Crown Castle	1532992	SEA Consultants, 99674.03-A, 09/05/00
Structural Analysis	Crown Castle		PJF, 37508-0010 BP-R1, 07/24/08

ANALYSIS PROCEDURE

ANALYSIS METHODS

RISA Tower (Version 5.3.1.0), a commercially available software program, was used to create a three-dimensional model of the monopole and calculate member stresses for various dead, live, wind, and ice load cases. The analysis was performed in accordance with the TIA/EIA-222-F Standard. Selected output from the analysis is included in Appendix A.

ASSUMPTIONS

1. Monopole was fabricated and installed in accordance with the manufacturer's specifications.
2. Monopole has been properly maintained in accordance with manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1A, 1B, 2A, and 2B and the referenced drawings.

If any of the above assumptions are not valid or have been made in error, then the results of this analysis may be affected. In that case, please notify Paul J. Ford and Company immediately so that we can review any new and/or modified information and determine its affect on the analysis results regarding the structural adequacy of the monopole and foundation.

ANALYSIS RESULTS

The specified modifications to the existing monopole structure and foundation are now complete; our structural analysis indicates that the reinforced monopole and foundation will have sufficient capacity to adequately support the existing, reserved, and proposed loading.

Table 4 - Component Stresses vs. Capacity (for Reinforced Condition)

Notes	Component	Elevation ft	% Capacity	Pass / Fail
Risa Tower Analysis Summary:				
	L1	148 - 117.25	61.6	Pass
	L2	117.25 - 96	88.8	Pass
Reinforced	L3	96 - 80.75	62.5	Pass
Reinforced	L4	80.75 - 40	83.7	Pass
Reinforced	L5	40 - 8.5	95.2	Pass
Reinforced	L6	8.5 - 0	94.6	Pass
Additional Components:				
	Base Plate	0 - 0	59.6	Pass
	Anchor Rods	0 - 0	97.8	Pass
Reinforced	Foundation (Soil) - PJF Pole	0 - 0	97	Pass
Structural Rating (maximum capacity of all components) =			97.8	