

XYZ Broadcasting

*1682-Foot Guyed Tower
Hometown, Your State*

*Analysis Report
July X, XXXX*

*Analysis and Report by: Jiantao Yu, P.E.
Checked by: Jean Lecordier, P.E.*

Project No. XX.XXX.XXX





July X, XXXX

Big Broadcasting Corporation
1234 Any Street
Your Town, Your State 12345

Attention: Mr. John Doe

Re: **Structural Analysis of Existing
1682-Foot Guyed Tower
Hometown, Your State
TCI XX.XXX.XXX**

Dear Mr. Doe,

We are pleased to submit our report for the structural analysis of this guyed tower to support the antennas per your request.

The guyed tower **will require upgrades to conform** to the requirements of the ANSI/TIA/EIA-222-F standard using a 120-mph 3-second peak gust wind profile per ASCE 7-02, with the required antenna load.

After the required upgrades are installed, the 1682-foot guyed tower will conform to the requirements of the ANSI/TIA/EIA-222-F standard using a 120-mph 3-second peak gust wind profile per ASCE 7-02, with the required antenna load.

Should you have any questions or wish to discuss any aspect of this report, please do not hesitate to contact TCI.

Sincerely,

Jiantao Yu, P.E.
Senior Project Engineer
Tower Consultants, Inc.

Jean Lecordier, P.E.
Principal
Tower Consultants, Inc.



1. Authorization/Purpose

As authorized, Tower Consultants, Inc. (TCI) has completed a structural analysis of the existing 1682-foot guyed tower located in Hometown, Your State. The analysis was performed per the request by Big Broadcasting Corporation (BBC) to determine the feasibility of the tower to support the proposed Qualcomm and Fox antennas.

2. Tower History

The 1682-foot three sided guyed tower located in Hometown, Your State was originally designed and furnished by Dressor Ideco in accordance with the EIA RS-222-C design standard for a design uniform wind pressure of 65-psf with no ice to support the following equipment:

Elevation (ft)	Equipment	Tx Line
Top	(1) SWR Ch. 55	(1) WR1400
1560	(1) Alan Dick 7 bay FM	(1) 6-1/8"
1506	(1) # 3 platform	(1) 1" cable
1480	(1) 22' whip	(1) 1/2"
1468	(1) Dielectric 36JDS	(1) WR1150
1440	(1) 20' whip	(1) 7/8"
1430	(1) 8' whip	(1) 7/8"
1312	(1) 4 bay dipole	(1) 7/8"
1276	(1) 6' whip	(1) 7/8"
1276	(1) 10' PD whip	(1) 7/8"
1223	(1) 6' whip	(1) 7/8"
1211	(1) 6' whip	(1) 7/8"
1123	(1) 20' whip	(1) 7/8"
1100	(1) 10' whip	(1) 7/8"
1051	(1) 20' whip	(1) 5/8"
1011	(1) # 2 platform	(1) 1" cable
920	(1) FMX-12AC	(1) 3"
735	(1) 8' dish with radome	(1) EW64
700	(1) 10' grid dish	(1) 1-5/8"
670	(1) 8' dish with radome	(1) EW64
594	(1) 6' grid dish	(1) 7/8"
590	(1) # 1 platform	(1) 1" cable
540	(1) FMH-8BE	(1) 3"
500	(1) PR450U	(1) 7/8"
498	(1) Scala yagi	(1) 7/8"
494	(1) 8' grid dish	(1) 1-5/8"



Elevation (ft)	Equipment	Tx Line
494	(1) 6' grid dish	(1) 1-5/8"
480	(1) 4' grid dish	(1) 7/8"
450	(1) 6' grid dish	(1) 1-5/8"
450	(1) 8' grid dish	(1) 1-5/8"
400	(1) Dipole	(1) 7/8"
375	(1) Dipole	(1) 7/8"
355	(1) Dipole	(1) 7/8"
265	(1) 8' whip	(1) 7/8"
225	(1) 8' whip	(1) 7/8"
200	(1) 6' grid dish	(1) 7/8"
180	(1) 8' whip	(1) 7/8"
165	(1) 10' whip	(1) 1-5/8"
155	(1) DB225F	(1) 1/2"
95	(1) DB225F	(1) 1/2"
62	(1) DB230E	(1) 1/2"
0 - Top	(1) Elevator	
0 - Top	Climbing ladder with safety device	
0 - Top	Lighting System	(1) 1-1/2" conduit

Note: This tower was modified by Dressor Ideco in 1989.

From the original Dressor Ideco drawings, TCI used the following material strengths in our analysis:

- Solid leg members 50 ksi yield
- Solid and angle diagonal members 44 ksi yield
- Angle and channel horizontal members 44 ksi yield
- Plate and other members 36 ksi yield
- Bolts A325

3. Conditions Investigated

This analysis was performed to determine the feasibility of the tower to support the loading as listed in the attachment file emailed from Jane Doe of XYZ dated X/XX/XXXX.

a. - Existing Equipment

Elevation (ft)	Equipment	Tx Line
1625	(3) Strobes	(1) 1-1/2" conduit
1530 - 1605	(1) Alan Dick 7-bay FM	(1) 6-1/8" rigid
1505	# 3 platform with boxes	(1) 1" cable
1482	(2) 10' quasi omni antennas	(1) 2-1/4" heliax from # 2 platform
1475	(1) 20' omni	(1) 1-1/4" heliax from # 2 platform
1350 – 1433	(1) Cluster of yagi	(1) 7/8" heliax from # 3 platform
1343	(1) ENG	(1) 7/8" heliax from # 2 platform
1305	(3) Strobes	(1) 1-1/2" conduit
1133	(1) 20' omni	(1) 7/8" heliax from # 2 platform
1035	(1) ENG	(1) 7/8" heliax from # 2 platform
1035	(1) 8' dish	(1) EW63 from # 2 platform
1020	# 2 platform with boxes	(1) 1" cable
1020	(1) 20' quasi omni	(1) 7/8" heliax from # 2 platform
1020	(2) 20' quasi omni antennas	(2) 1/2" heliax from # 2 platform
1020	(1) 20' omni	(1) 1/2" heliax from # 2 platform
1020	(1) 1' dish	(1) RG8 from # 2 platform
1020	(1) Maxrad	(1) RG8 from # 2 platform
996	(1) 8' dish with radome	(1) EW63 from # 2 platform
985	(3) Strobes	(1) 1-1/2" conduit
870 - 975	(1) 12-bay FM	(1) 3" heliax
885 - 953	(1) 6-bay FM	(1) 4" heliax
743	(1) 8' dish with radome	(1) EW63
713	(1) 10' grid dish	(1) 1-5/8" heliax
675	(1) 8' dish with radome	(1) EW63
650	(3) Strobes	(1) 1-1/2" conduit
636	(1) 6' dish	(1) 1/2" heliax from # 1 platform
615	(1) 6' dish with radome	(1) EW63
593	# 1 platform with boxes	(1) 1" cable
593	(1) 10' omni	(1) 1-1/4" heliax
593	(1) 6' omni	(1) 7/8" heliax from # 1 platform
593	(1) 10' omni	(1) 7/8" heliax from # 1 platform
568	(1) 10' exposed dipole quasi omni	(1) 1/2" heliax from # 1 platform
510	(1) 6' grid dish	(1) 7/8" heliax
503	(1) Yagi (unused)	--
500	(1) 8' omni	(1) 1-5/8" heliax
494	(1) 8' grid dish	(1) 1-5/8" heliax
480 - 550	(1) 8-bay FM	(1) 3" heliax
473	(1) 10' quasi omni	(1) 1-1/4" heliax



Elevation (ft)	Equipment	Tx Line
447	(1) Yagi	(1) 7/8" heliax
434	(1) 8' grid dish	(1) 7/8" heliax
427	(1) 4' grid dish	(1) 7/8" heliax
424	(1) 6' grid dish	(1) 1-5/8" heliax
421	(1) Yagi (unused)	(1) 7/8" heliax (unused)
417	(1) 6' grid dish	(1) 7/8" heliax
357	(1) 8' omni	(1) 1-1/4" heliax
325	(3) Strobes	(1) 1-1/2" conduit
220	(1) 8' omni	(1) 1-1/4" heliax
177	(1) 6' grid dish	(1) EW63
170	(1) 12' omni	(1) 3" heliax
147	(1) 20' omni	(1) 1/2" heliax
0 - Top	(1) Elevator	
0 - Top	Climbing ladder with safety device	--

b. – Proposed XYZ equipment

Elevation (ft)	Equipment	Tx Line
1292 – 1330	TLP-24A-230100	(1) 4-1/16" rigid
50	(1) GPS antenna	(1) 3/8"
50	(1) Ku Band antenna	(1) 3/4"

c. - Proposed LMN equipment

Elevation (ft)	Equipment	Tx Line
1200	(1) ENG	(1) 7/8" heliax & (1) 7/8" cable
300	(1) 8' dish	(1) EW63

d. - Proposed GHI equipment

Elevation (ft)	Equipment	Tx Line
1325 - 1375	(1) ERI ALP DTV Ch. 49	(1) 6-1/8" rigid

Condition 1 - Existing plus Proposed Equipment (a., b., c., & d.)

The tower geometry and member sizes were based on the drawings from Dressor Ideco.

4. Loads and Stresses

An analysis was conducted in order to assess the structural performance of the tower per the current design standard ANSI/TIA/EIA 222-F, “Structural Standards for Steel Antenna Towers and Antenna Supporting Structures.” Allowable member stresses and minimum safety factors used to evaluate the adequacy of the structure were in accordance with this standard.

The analysis was performed using a 120-mph 3-second peak gust wind profile per ASCE 7-02 “Minimum Design Loads for Building and Other Structures.”

5. Method of Analysis

A three-dimensional computer model was created using the *ERI Tower Version 3.0.0.17 analysis program (C-Concepts, Inc., 2004)*. ERI Tower is a general-purpose modeling, analysis and design program created specifically for communication towers. The program generates nodes and elements for a finite element analysis (FEA) and determines the pressure coefficients, wind pressures, ice loads and resulting forces on the tower for standard framing types including self-supporting towers, guyed towers and poles.

6. Results

Associated with each loading condition are the tower elevations, member sizes and member stress percentages. The member stress percentage is the ratio of member stress to the allowable stress expressed as a percentage. A stress ratio greater than 100% denotes an overstress. The following member stresses were calculated with the 120-mph 3-second peak gust wind in accordance with ASCE 7-02:

MAXIMUM MEMBER STRESSES

ELEMENT	ELEVATION (FT)	MAXIMUM % ASCE 7-02 (120-mph)
Guy	996.5	105.4**
Leg	1040.8 – 1070.4	111.2**
Diagonal	981.8 – 1011.3	111.0**
Horizontal	981.8 – 1011.3	122.1**

****Member has unacceptable overstresses**

The following table summarizes the maximum foundation reactions:

MAXIMUM FOUNDATION REACTIONS SUMMARY TABLE

FOUNDATION REACTIONS	Dressor Ideco (Original) 65-psf	120-mph 3-second peak gust wind
Base		
Down	2253 kips	2238 kips
Shear	unknown	3.6 kips
Inner Anchor		
Uplift	366.6 kips	327.8 kips
Shear	421.7 kips	382.3 kips
Outer Anchor		
Uplift	457.3 kips	443.2 kips
Shear	411.8 kips	450.1 kips

7. Conclusions and Recommendations

The tower is **overstressed** for **Condition 1** when subjected to the ANSI/TIA/EIA-222-F standard using a 120-mph 3-second peak gust wind profile per ASCE 7-02, with the required antenna load. Upgrades are recommended.

In order to meet the ANSI/TIA/EIA-222-F standard using a 120-mph 3-second peak gust wind profile per ASCE 7-02 for **Condition 1**, we recommend that the following upgrades be performed on the tower:

1. Replace the guy wires and adjust the guy wire tensions at 60 degrees Fahrenheit to the values listed on the following chart:

GUY LEVEL	GUY ANCHOR	EXISTING GUY PROPERTIES			RECOMMENDED GUY PROPERTIES		
		GUY SIZES	GUY TENSION	% OF ULT. TENSION	GUY SIZES	GUY TENSION	% OF ULT. TENSION
8 th (top)	OUTER ANCHOR	1 ³ / ₄ " Ø BS	37.6 kips	10.0%	1 ³ / ₄ " Ø BS	33.8 kips	9.0%
7 th		2 ¹ / ₈ " Ø BS	55.4 kips	10.0%	2 ¹ / ₈ " Ø BS	55.4 kips	10.0%
6 th		1 ¹³ / ₁₆ " Ø BS	40.4 kips	10.0%	1 ¹³ / ₁₆ " Ø BS	40.4 kips	10.0%
5 th		1 ¹¹ / ₁₆ " Ø BS	35.2 kips	10.0%	1³/₄" Ø HSS	51.2 kips	11.9%
4 th	INNER ANCHOR	2" Ø BS	49.0 kips	10.0%	2" Ø BS	49.0 kips	10.0%
3 rd		2 ³ / ₁₆ " Ø BS	58.6 kips	10.0%	2 ³ / ₁₆ " Ø BS	58.6 kips	10.0%
2 nd		1 ¹¹ / ₁₆ " Ø BS	35.2 kips	10.0%	1 ¹¹ / ₁₆ " Ø BS	35.2 kips	10.0%
1 st (bot)		1 ⁷ / ₁₆ " Ø BS	27.0 kips	10.7%	1 ⁷ / ₁₆ " Ø BS	30.2 kips	12.00%

2. Replace the existing diagonal braces with new larger capacity members at the following locations:

996.5' – 1018.7'	3 bays	1-1/2" rod
184.5' – 199.2'	2 bays	1" rod

3. Reinforce the existing horizontal members by adding angle members (L4x3x3/8) in the following locations:

1003.9' – 1018.7'	3 levels
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The following table summarizes the maximum foundation reactions after all the required upgrades state above had been installed:

MAXIMUM FOUNDATION REACTIONS SUMMARY TABLE

FOUNDATION REACTIONS	Dressor Ideco (Original) 65-psf	120-mph 3-second peak gust wind
Base		
Down	2253 kips	2228 kips
Shear	unknown	2.8 kips
Inner Anchor		
Uplift	366.6 kips	320.5 kips
Shear	421.7 kips	380.3 kips
Outer Anchor		
Uplift	457.3 kips	451.6 kips
Shear	411.8 kips	461.8 kips

Since some of these loads are greater than the original design loads, the adequacy of the foundations must be determined before implementing any of the tower modifications.

8. Provisions of Analysis

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions.
3. Correct bolt tightness.
4. No significant deterioration or damage to any component.



Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. Tower Consultants, Inc. assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will Tower Consultants, Inc. have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of Tower Consultants, Inc. if any, pursuant to this Report shall be limited to the total funds actually received by Tower Consultants, Inc. for preparation of this Report.

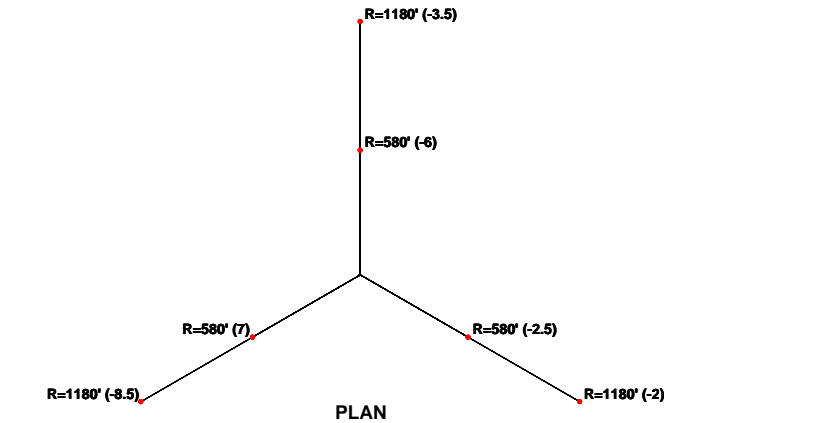
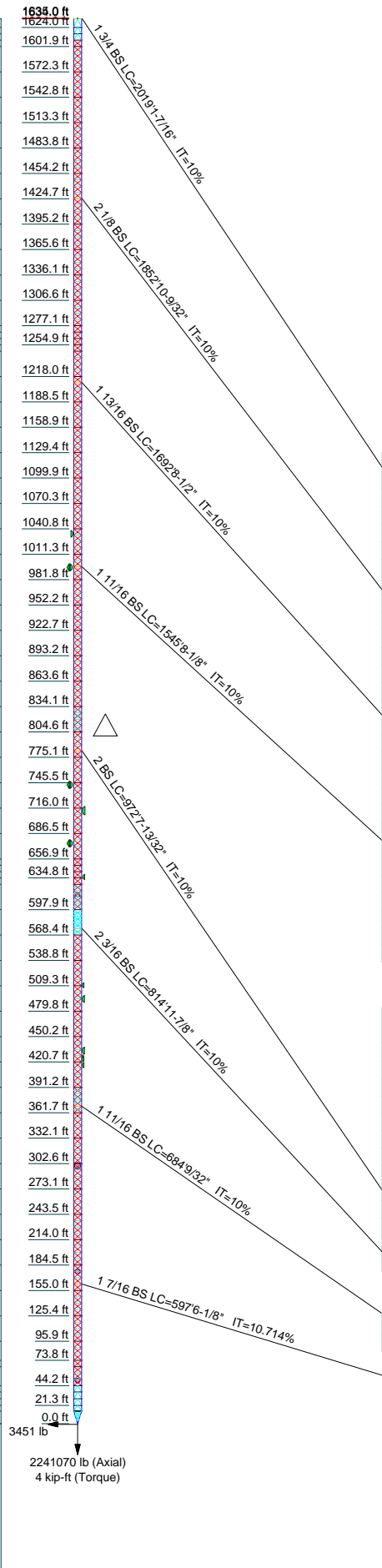
Customer has requested Tower Consultants, Inc. to prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested Tower Consultants, Inc. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of Tower Consultants, Inc., Customer has informed Tower Consultants, Inc. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by Tower Consultants, Inc. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. Tower Consultants, Inc. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

Customer hereby agrees and acknowledges that Tower Consultants, Inc. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than Tower Consultants, Inc. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that Tower Consultants, Inc. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide Tower Consultants, Inc. with a Certificate of Insurance naming Tower Consultants, Inc. as additionally insured.



APPENDIX E-1
TOWER ELEVATION
AND
MEMBER SIZES

Section	T61	T62	T63	T64	T65	T66	T67	T68	T69	T70	T71	T72	T73	T74	T75	T76	T77	T78	T79	T80	T81	T82	T83	T84	T85	T86	T87	T88	T89	T90
Legs	SR 6 3/4																													
Leg Grade	SR 7																													
Diagonals	SR 1 1/2																													
Diagonal Grade	SR 1 1/2																													
Top Girts	SR 1 1/2																													
Bottom Girts	SR 1 1/2																													
Horizontals	SR 1 1/2																													
Sec. Horizontals	SR 1 1/2																													
Top Guy Pull-Offs	SR 1 1/2																													
Face Width (ft)	SR 1 1/2																													
# Panels @ (ft)	SR 1 1/2																													
Weight (lb)	SR 1 1/2																													



APPURTENANCES

TYPE	ELEVATION	TYPE	ELEVATION
(3) Strobe	1625	6' MW STD	636
Alan Dick FM	1605 - 1530	6' MW RAD (Andrew)	615
Elevator Top Sheaves	1600	(2) 10' omni	593
# 3 Platform and boxes	1505	# 1 Platform and boxes	593
(2) 10' quasi omni	1482	6' omni	593
20' omni	1475	10' quasi omni	568
Cluster of yagi	1433 - 1350	8-bay FM	550 - 480
ERI ALP (Entravision)	1375 - 1325	6' MW Grid	510
ENG	1343	Yagi (unused)	503
TLP-24A-230100 (Qualcomm)	1330 - 1292	8' omni	500
(3) Strobe	1305	8' MW Grid	494
ENG (Fox)	1200	10' quasi omni	473
20' omni	1133	Yagi	447
ENG	1035	8' MW Grid	434
8' MW STD (Andrew)	1035	4' MW Grid	427
(3) 20' quasi omni	1020	6' MW Grid	424
20' omni	1020	Yagi (unused)	421
1' dish	1020	6' MW Grid	417
Marax	1020	8' omni	357
# 2 Platform and boxes	1020	(3) Strobe	325
8' MW RAD	996	8' MW STD (Fox)	300
(3) Strobe	985	8' omni	220
12-bay FM	975 - 870	6' MW Grid	177
6-bay FM	953 - 885	12' omni	170
8' MW RAD	743	20' omni	147
10' MW Grid	713	GPS (Qualcomm)	50
8' MW RAD	675	6' MW STD (Qualcomm)	50
(3) Strobe	650	Elevator and Weights	50

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	2L3x3x3/8	O	DC8x18.75
B	SR 1 3/8	P	8x1.5
C	SR 1 1/8	Q	2L3 1/2x3 1/2x1/4x3/8
D	SR 1 1/4	R	2L2x2x1/4x3/8
E	SR 1 1/2	S	4L4x3x1/4x3/8
F	2L3x2 1/2x1/4	T	1 @ 9.98438
G	L3x3x5/16	U	3 @ 7.38281
H	N.A.	V	4 @ 7.38281
I	2L3x2x5/16x3/8	W	3 @ 7.38194
J	DC3x4.1	X	1 @ 7.38281
K	2L3x2x1/4x3/8	Y	1 @ 7.32292
L	2L3x2 1/2x3/8x3/8	Z	2 @ 7.79167
M	2L2 1/2x2x1/4x3/8	A1	1 @ 6.0599
N	2L3x2x3/8x3/8	B1	3 @ 4.75347

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	300W	44 ksi	65 ksi

TOWER DESIGN NOTES

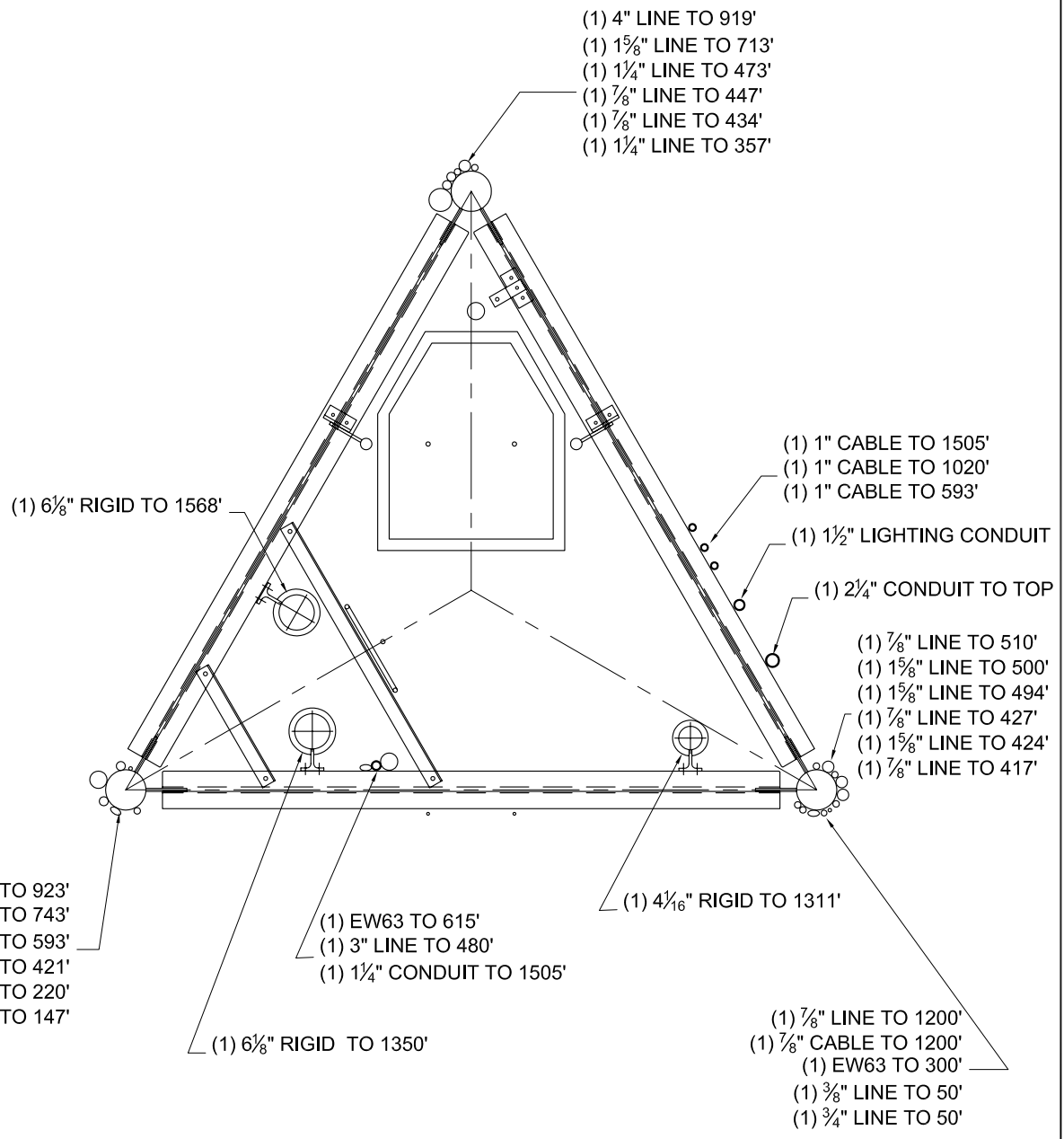
1. Tower designed in accordance with the TIA/EIA-222-F Standard.
2. A 120 mph 3-second peak gust ASCE 7-02 wind profile used.
3. Wind importance factor is 1.00, Exposure C.
4. Deflections are based upon a 50 mph wind.

Tower Consultants, Inc.
19015 36th Avenue West
Lynnwood, WA 98036
Phone: (425) 275-5170
FAX: (425) 771-3160

Job: **XX.XXX.XXX Hometown, YS**
Project: **1682 ft GT 120 mph 3-Second Gust Condition 1**
Client: XYZ Broadcasting Drawn by: Ron App'd:
Code: TIA/EIA-222-F Date: 03/28/06 Scale: NTS
Path: C:\Rons Stuff\Pacific Telecom Information\Analysis\XXXXXXX.dwg Dwg No. E-1



APPENDIX E-2 CROSS SECTION



TOWER
 CONSULTANTS, INC.
 203 HUNTER'S BLIND DRIVE
 COLUMBIA, SC 29212

1682 ft GT 9'-10" Face

THIS DRAWING IS THE PROPERTY OF TOWER CONSULTANTS, INC. AND TRANSMITTED IN CONFIDENCE. ANY REPRODUCTION, USE OR DISCLOSURE, IN WHOLE OR IN PART, OF THE DESIGN AND DETAILS CONTAINED HEREIN IS PROHIBITED WITHOUT THE PRIOR WRITTEN PERMISSION OF TOWER CONSULTANTS, INC.

REV	BY	DATE	REVISION DESCRIPTION	D.CK	DATE	E.CK	DATE

PREPARED BY	J. Yu
CHECKED BY	J. Lecordier
ENGINEER REVIEW	J. Lecordier
PROJECT NUMBER	
DRAWING NUMBER	E-2



APPENDIX E-3
RESULT SUMMARY
120-MPH 3-SECOND PEAK GUST WIND
(CONDITION 1)

ERITower Tower Consultants, Inc. 19015 36th Avenue West Lynnwood, WA 98036 Phone: (425) 275-5170 FAX: (425) 771-3160	Job XX.XXX.XXX Hometown, YS	Page 1 of 7
	Project 1682 ft GT 120 mph 3-Second Gust Condition 1	Date 07:37:21 03/28/06
	Client XYZ Broadcasting	Designed by Ron

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T1	1634 - 1624.02	Leg	4 1/2	4	-99506.60	209378.00	47.5	Pass
		Diagonal	2L3x3x3/8	9	-32703.80	39300.10	83.2	Pass
		Guy A@1634	1 3/4	2254	142500.00	150400.00	94.7	Pass
		Guy B@1634	1 3/4	2253	142382.00	150400.00	94.7	Pass
		Guy C@1634	1 3/4	2252	142335.00	150400.00	94.6	Pass
		Top Guy Pull-Off@1634	4L4x3x1/4x3/8	5	-1.56	93011.90	0.6	Pass
T2	1624.02 - 1616.63	Leg	4 1/2	16	-153159.00	306335.00	50.0	Pass
		Diagonal	2L3x3x3/8	21	-16643.80	56289.10	29.6	Pass
		Top Girt	2L3x2x5/16x3/8	17	13583.90	60239.40	22.5	Pass
T3	1616.63 - 1609.25	Leg	4 1/2	28	-174307.00	306335.00	56.9	Pass
		Diagonal	2L3x3x3/8	33	-16087.20	56289.10	28.6	Pass
		Top Girt	DC3x4.1	29	-8747.08	11921.40	73.4	Pass
T4	1609.25 - 1601.87	Leg	4 1/2	40	-212267.00	306335.00	69.3	Pass
		Diagonal	1 1/4	44	19890.70	32037.90	62.1	Pass
		Top Girt	2L3x2x5/16x3/8	41	-7760.69	27361.00	28.4	Pass
T5	1601.87 - 1572.34	Leg	4 1/2	52	-261460.00	306357.00	85.3	Pass
		Diagonal	1 1/4	83	18023.30	32037.90	56.3	Pass
		Horizontal	2L3x2x5/16x3/8	80	-13427.80	31575.40	42.5	Pass
T6	1572.34 - 1542.81	Top Girt	2L3x2x5/16x3/8	53	-15168.70	27361.00	55.4	Pass
		Leg	4 1/2	91	-272243.00	306357.00	88.9	Pass
		Diagonal	1 1/4	122	8219.85	32037.90	25.7	Pass
T7	1542.81 - 1513.28	Horizontal	2L3x2x1/4x3/8	119	-6053.84	24984.90	24.2	Pass
		Top Girt	2L3x2x1/4x3/8	92	-7742.40	21648.60	35.8	Pass
		Leg	4 1/2	130	-270414.00	306357.00	88.3	Pass
T8	1513.28 - 1483.75	Diagonal	1 1/4	139	11175.40	32037.90	34.9	Pass
		Horizontal	2L3x2x1/4x3/8	142	-8314.38	24984.90	33.3	Pass
		Top Girt	2L3x2x1/4x3/8	133	-4025.59	21648.60	18.6	Pass
T9	1483.75 - 1454.22	Leg	4 1/2	169	-239238.00	306357.00	78.1	Pass
		Diagonal	1 1/4	173	26133.50	32037.90	81.6	Pass
		Horizontal	2L3x2x5/16x3/8	179	-20642.50	31575.40	65.4	Pass
T10	1454.22 - 1424.7	Top Girt	2L3x2x5/16x3/8	172	-9231.51	27361.00	33.7	Pass
		Leg	4 1/2	207	-163662.00	306357.00	53.4	Pass
		Diagonal	1 3/8	212	34540.60	38765.80	89.1	Pass
T11	1424.7 - 1395.17	Horizontal	2L3x2x5/16x3/8	218	-27063.90	31575.40	85.7	Pass
		Top Girt	2L3x2x5/16x3/8	209	-22057.60	27361.00	80.6	Pass
		Leg	4 1/2	246	-197256.00	306357.00	64.4	Pass
T10	1454.22 - 1424.7	Diagonal	1 1/2	251	39002.50	46134.50	84.5	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	257	-30899.40	44310.50	69.7	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	248	-28214.80	44310.50	63.7	Pass
T11	1424.7 - 1395.17	Leg	4 1/2	285	-258777.00	306357.00	84.5	Pass
		Diagonal	1 1/2	319	27526.20	46134.50	59.7	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	315	-21911.20	44310.50	49.4	Pass
		Guy A@1424.7	2 1/8	2257	216448.00	221600.00	97.7	Pass
		Guy B@1424.7	2 1/8	2256	216457.00	221600.00	97.7	Pass
		Guy C@1424.7	2 1/8	2255	217030.00	221600.00	97.9	Pass
Top Guy Pull-	4L4x3x1/4x3/8	287	59305.90	165207.00	35.9	Pass		

ERITower Tower Consultants, Inc. 19015 36th Avenue West Lynnwood, WA 98036 Phone: (425) 275-5170 FAX: (425) 771-3160	Job XX.XXX.XXX Hometown, YS	Page 2 of 7
	Project 1682 ft GT 120 mph 3-Second Gust Condition 1	Date 07:37:21 03/28/06
	Client XYZ Broadcasting	Designed by Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
		Off@1424.7						
T12	1395.17 - 1365.64	Leg	4 1/2	325	-267633.00	306357.00	87.4	Pass
		Diagonal	1 1/2	358	22939.40	46134.50	49.7	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	354	-17971.70	44310.50	40.6	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	327	-19113.30	44310.50	43.1	Pass
T13	1365.64 - 1336.11	Leg	4 1/2	363	-290051.00	306357.00	94.7	Pass
		Diagonal	7/8	397	16521.60	15698.60	105.2	Fail X
		Horizontal	2L2 1/2x2x1/4x3/8	393	-13004.60	17547.10	74.1	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	366	-14277.70	17547.10	81.4	Pass
T14	1336.11 - 1306.58	Leg	4 1/2	402	-297341.00	306357.00	97.1	Pass
		Diagonal	7/8	436	6958.50	15698.60	44.3	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	432	-5006.16	17547.10	28.5	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	405	-6820.17	17547.10	38.9	Pass
T15	1306.58 - 1277.05	Leg	4 1/2	440	-296468.00	306357.00	96.8	Pass
		Diagonal	7/8	448	11306.90	15698.60	72.0	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	453	-8288.95	17547.10	47.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	443	-3442.58	17547.10	19.6	Pass
T16	1277.05 - 1269.67	Leg	4 1/2	480	-296369.00	306335.00	96.7	Pass
		Diagonal	7/8	487	12479.00	15698.60	79.5	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	483	-9499.90	17547.10	54.1	Pass
T17	1269.67 - 1262.29	Leg	4 1/2	492	-298353.00	306335.00	97.4	Pass
		Diagonal	1 1/8	499	14325.80	25950.70	55.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	495	-10706.30	17547.10	61.0	Pass
T18	1262.29 - 1254.9	Leg	4 1/2	504	-300134.00	306335.00	98.0	Pass
		Diagonal	1 1/8	511	15696.20	25950.70	60.5	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	507	-12050.90	17547.10	68.7	Pass
T19	1254.9 - 1247.52	Leg	4 1/2	516	-301728.00	306335.00	98.5	Pass
		Diagonal	1 1/8	523	17086.50	25950.70	65.8	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	519	-13117.90	17547.10	74.8	Pass
T20	1247.52 - 1217.99	Leg	5	528	-307902.00	407942.00	75.5	Pass
		Diagonal	1 3/8	535	23640.10	38765.80	61.0	Pass
		Horizontal	2L3x2x5/16x3/8	540	-18230.20	32537.70	56.0	Pass
		Top Girt	2L3x2x5/16x3/8	531	-14382.00	27361.00	52.6	Pass
T21	1217.99 - 1188.46	Leg	5	567	-388620.00	407942.00	95.3	Pass
		Diagonal	1 3/8	582	36548.20	38765.80	94.3	Pass
		Horizontal	2L3x2x5/16x3/8	578	-28638.90	32537.70	88.0	Pass
		Top Girt	2L3x2x5/16x3/8	570	-18398.30	27600.70	66.7	Pass
		Guy A@1210.61	1 13/16	2260	169752.00	161600.00	105.0	Fail X
		Guy B@1210.61	1 13/16	2259	169596.00	161600.00	104.9	Fail X
		Guy C@1210.61	1 13/16	2258	171774.00	161600.00	106.3	Fail X
		Top Guy Pull-Off@1210.61	4L4x3x1/4x3/8	597	56749.10	165207.00	34.4	Pass
T22	1188.46 - 1158.93	Leg	5	605	-437948.00	407942.00	107.4	Fail X
		Diagonal	1 3/8	639	33063.10	38765.80	85.3	Pass
		Horizontal	2L3x2x5/16x3/8	635	-25747.40	32537.70	79.1	Pass
		Top Girt	2L3x2x5/16x3/8	608	-27120.60	27600.70	98.3	Pass
T23	1158.93 - 1129.41	Leg	5 1/2	644	-516299.00	521440.00	99.0	Pass
		Diagonal	1 3/8	678	25444.20	38765.80	65.6	Pass
		Horizontal	2L3x2x5/16x3/8	674	-19684.90	32823.40	60.0	Pass
		Top Girt	2L3x2x5/16x3/8	647	-21234.90	27600.70	76.9	Pass

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	Project	1682 ft GT 120 mph 3-Second Gust Condition 1	Date	07:37:21 03/28/06
	Client	XYZ Broadcasting	Designed by	Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T24	1129.41 - 1099.88	Leg	5 1/2	683	-566080.00	521440.00	108.6	Fail X
		Diagonal	7/8	717	15907.70	15698.60	101.3	Fail X
		Horizontal	2L2 1/2x2x1/4x3/8	713	-12630.20	18250.80	69.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	686	-14153.50	18250.80	77.5	Pass
T25	1099.88 - 1070.35	Leg	5 1/2	722	-584966.00	521440.00	112.2	Fail X
		Diagonal	7/8	756	8504.92	15698.60	54.2	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	752	-6244.29	18250.80	34.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	725	-7824.52	18250.80	42.9	Pass
T26	1070.35 - 1040.82	Leg	5 1/2	761	-584840.00	521440.00	112.2	Fail X
		Diagonal	7/8	770	11333.80	15698.60	72.2	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	774	-8929.91	18250.80	48.9	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	765	-4456.23	18250.80	24.4	Pass
T27	1040.82 - 1011.29	Leg	5 1/2	800	-565897.00	521440.00	108.5	Fail X
		Diagonal	1 3/8	808	42201.40	38765.80	108.9	Fail X
		Horizontal	2L3x2x5/16x3/8	812	-27056.80	32823.40	82.4	Pass
		Top Girt	2L3x2x5/16x3/8	804	-10978.70	27843.60	39.4	Pass
T28	1011.29 - 981.763	Leg	5 1/2	839	-526049.00	521440.00	100.9	Fail X
		Diagonal	1 3/8	874	43804.90	38765.80	113.0	Fail X
		Horizontal	2L3x2x5/16x3/8	870	-34422.60	32823.40	104.9	Fail X
		Top Girt	2L3x2x5/16x3/8	843	-34624.60	27843.60	124.4	Fail X
		Guy A@996.527	1 11/16	2263	146549.00	140800.00	104.1	Fail X
		Guy B@996.527	1 11/16	2262	146428.00	140800.00	104.0	Fail X
		Guy C@996.527	1 11/16	2261	149768.00	140800.00	106.4	Fail X
		Top Guy Pull-Off@996.527	4L4x3x1/4x3/8	861	56316.50	165207.00	34.1	Pass
T29	981.763 - 952.234	Leg	5 1/2	878	-550205.00	521440.00	105.5	Fail X
		Diagonal	1 3/8	911	10609.00	38765.80	27.4	Pass
		Horizontal	2L3x2x5/16x3/8	908	-7911.94	32823.40	24.1	Pass
		Top Girt	2L3x2x5/16x3/8	881	-9916.43	27843.60	35.6	Pass
T30	952.234 - 922.706	Leg	5 1/2	917	-551720.00	521440.00	105.8	Fail X
		Diagonal	1	928	10413.30	20504.20	50.8	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	931	-7846.41	18250.80	43.0	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	921	-3334.58	18250.80	18.3	Pass
T31	922.706 - 893.177	Leg	5 1/2	956	-536700.00	521440.00	102.9	Fail X
		Diagonal	1	967	19326.50	20504.20	94.3	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	970	-15020.30	18250.80	82.3	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	961	-9684.52	18250.80	53.1	Pass
T32	893.177 - 863.648	Leg	5 1/2	997	-484866.00	521440.00	93.0	Pass
		Diagonal	1 1/8	1001	28619.20	25950.70	110.3	Fail X
		Horizontal	2L3x2x1/4x3/8	1007	-22288.70	25973.00	85.8	Pass
		Top Girt	2L3x2x1/4x3/8	998	-16859.90	22030.60	76.5	Pass
T33	863.648 - 834.12	Leg	5 1/2	1036	-451536.00	521440.00	86.6	Pass
		Diagonal	1 3/8	1040	35358.20	38765.80	91.2	Pass
		Horizontal	2L3x2x5/16x3/8	1046	-27929.90	32823.40	85.1	Pass
		Top Girt	2L3x2x5/16x3/8	1037	-23870.60	27843.60	85.7	Pass
T34	834.12 - 804.591	Leg	5 1/2	1075	-626519.00	624699.00	100.3	Fail X
		Diagonal	1 1/2	1079	41766.80	46134.50	90.5	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	1085	-29421.50	45969.50	64.0	Pass
		Secondary Horizontal	2L2x2x1/4x3/8	1100	-3421.82	9719.92	35.2	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	1076	-27968.60	45969.50	60.8	Pass

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Project	1682 ft GT 120 mph 3-Second Gust Condition 1	Date	07:37:21 03/28/06
Client	XYZ Broadcasting	Designed by	Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T35	804.591 - 775.062	Leg	7	1126	-780214.00	923068.00	84.5	Pass
		Diagonal	1 1/2	1148	45428.30	46134.50	98.5	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	1154	-36274.30	47945.80	75.7	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	1127	-32342.40	46866.90	69.0	Pass
		Guy A @782.445	2	2266	186660.00	196000.00	95.2	Pass
		Guy B @782.445	2	2265	188240.00	196000.00	96.0	Pass
		Guy C @782.445	2	2264	190172.00	196000.00	97.0	Pass
		Top Guy Pull-Off @782.445	4L4x3x1/4x3/8	1137	58204.60	165207.00	35.2	Pass
T36	775.062 - 745.534	Leg	7	1165	-769847.00	927857.00	83.0	Pass
		Diagonal	1 1/2	1197	22144.40	46134.50	48.0	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	1193	-17072.80	47945.80	35.6	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	1166	-14927.00	47945.80	31.1	Pass
T37	745.534 - 716.005	Leg	6 3/4	1204	-714390.00	856516.00	83.4	Pass
		Diagonal	1 1/4	1236	14027.10	32037.90	43.8	Pass
		Horizontal	2L3x2x5/16x3/8	1232	-10547.20	34255.20	30.8	Pass
		Top Girt	2L3x2x5/16x3/8	1205	-12132.00	28591.60	42.4	Pass
T38	716.005 - 686.477	Leg	6 3/4	1243	-701792.00	856482.00	81.9	Pass
		Diagonal	1	1275	6818.22	20504.20	33.3	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	1271	-4461.91	19075.70	23.4	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1244	-6588.83	19075.70	34.5	Pass
T39	686.477 - 656.948	Leg	6 3/4	1282	-747306.00	856520.00	87.2	Pass
		Diagonal	1	1291	13519.60	20504.20	65.9	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	1294	-10403.00	19075.70	54.5	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1284	-4511.91	19075.70	23.7	Pass
T40	656.948 - 649.565	Leg	6 3/4	1321	-763696.00	856519.00	89.2	Pass
		Diagonal	1	1325	15032.60	20504.20	73.3	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1324	-11591.30	19075.70	60.8	Pass
T41	649.565 - 642.182	Leg	6 3/4	1333	-781365.00	856534.00	91.2	Pass
		Diagonal	1	1337	16339.50	20504.20	79.7	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1336	-12558.70	19075.70	65.8	Pass
T42	642.182 - 634.799	Leg	6 3/4	1345	-801564.00	856550.00	93.6	Pass
		Diagonal	1 1/8	1349	18980.60	25950.70	73.1	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1346	-14230.10	19075.70	74.6	Pass
T43	634.799 - 627.417	Leg	6 3/4	1357	-822521.00	856566.00	96.0	Pass
		Diagonal	1 1/8	1361	19926.60	25950.70	76.8	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1358	-15618.10	19075.70	81.9	Pass
T44	627.417 - 597.888	Leg	6 3/4	1369	-923390.00	960306.00	96.2	Pass
		Diagonal	1 1/2	1385	24877.70	46134.50	53.9	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	1379	-15936.80	47766.70	33.4	Pass
		Secondary Horizontal	2L2x2x1/4x3/8	1406	-3294.87	10159.20	32.4	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	1370	-16347.90	47766.70	34.2	Pass
T45	597.888 - 568.359	Leg	7 1/2	1420	-1029820.00	1185810.00	86.8	Pass
		Diagonal	2L3x3x3/8	1449	-31075.70	80723.10	38.5	Pass
		Horizontal	2L3x2 1/2x3/8x3/8	1455	16338.00	77922.70	44.6 (b) 21.0	Pass
		Secondary Horizontal	2L2x2x1/4x3/8	1445	4387.03	36835.10	31.3 (b) 11.9	Pass
		Top Girt	2L3x2 1/2x3/8x3/8	1422	7218.58	77922.70	9.3 13.8 (b)	Pass

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	Project	1682 ft GT 120 mph 3-Second Gust Condition 1	Date	07:37:21 03/28/06
	Client	XYZ Broadcasting	Designed by	Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail	
T46	568.359 - 538.831	Guy A@575.742	2 3/16	2269	174454.00	234400.00	74.4	Pass	
		Guy B@575.742	2 3/16	2268	175916.00	234400.00	75.0	Pass	
		Guy C@575.742	2 3/16	2267	172883.00	234400.00	73.8	Pass	
		Top Guy Pull-Off@575.742	4L4x3x1/4x3/8	1432	55739.70	165207.00	33.7	Pass	
		Leg	7 1/2	1471	-1032570.00	1079080.00	95.7	Pass	
		Diagonal	1 1/2	1493	31666.60	46134.50	68.6	Pass	
		Horizontal	2L3x2 1/2x3/8x3/8	1490	-24867.90	48303.00	51.5	Pass	
		Top Girt	2L3x2 1/2x3/8x3/8	1472	9383.10	77922.70	12.0	Pass	
							18.0 (b)		
							85.8		Pass
T47	538.831 - 509.302	Leg	7 1/2	1510	-923560.00	1077030.00	85.8	Pass	
		Diagonal	1 1/2	1541	26489.70	46134.50	57.4	Pass	
		Horizontal	2L3x2 1/2x3/8x3/8	1538	-20417.70	48303.00	42.3	Pass	
		Top Girt	2L3x2 1/2x3/8x3/8	1511	-21911.30	48303.00	45.4	Pass	
T48	509.302 - 479.773	Leg	6 3/4	1549	-835978.00	856435.00	97.6	Pass	
		Diagonal	1 3/8	1583	18110.80	38765.80	46.7	Pass	
		Horizontal	2L3x2x5/16x3/8	1578	-13863.30	34255.20	40.5	Pass	
T49	479.773 - 450.245	Top Girt	2L3x2x5/16x3/8	1551	-15505.80	28847.70	53.8	Pass	
		Leg	6 3/4	1588	-778603.00	856360.00	90.9	Pass	
		Diagonal	1	1622	10621.90	20504.20	51.8	Pass	
T50	450.245 - 420.716	Horizontal	2L2 1/2x2x1/4x3/8	1617	-8152.06	19075.70	42.7	Pass	
		Top Girt	2L2 1/2x2x1/4x3/8	1590	-9728.42	19075.70	51.0	Pass	
		Leg	6 3/4	1625	-756692.00	856313.00	88.4	Pass	
		Diagonal	1	1632	10014.10	20504.20	48.8	Pass	
T51	420.716 - 391.187	Horizontal	2L2 1/2x2x1/4x3/8	1637	-6875.31	19075.70	36.0	Pass	
		Top Girt	2L2 1/2x2x1/4x3/8	1629	-4918.79	19075.70	25.8	Pass	
		Leg	6 3/4	1664	-800546.00	856356.00	93.5	Pass	
		Diagonal	1 1/8	1671	16231.30	25950.70	62.5	Pass	
T52	391.187 - 361.659	Horizontal	2L3x2x1/4x3/8	1676	-13211.90	27129.40	48.7	Pass	
		Top Girt	2L3x2x1/4x3/8	1667	-9337.22	22522.50	41.5	Pass	
		Leg	6 3/4	1703	-852758.00	929245.00	91.8	Pass	
		Diagonal	1 1/2	1713	29777.20	46134.50	64.5	Pass	
T53	361.659 - 332.13	Horizontal	2L3x2x3/8x3/8	1739	-12382.50	41708.70	29.7	Pass	
		Secondary Horizontal	2L2x2x1/4x3/8	1742	-2796.35	10159.20	27.5	Pass	
		Top Girt	2L3x2x3/8x3/8	1706	-12870.40	34746.60	37.0	Pass	
		Guy A@369.041	1 11/16	2272	101415.00	140800.00	72.0	Pass	
		Guy B@369.041	1 11/16	2271	100467.00	140800.00	71.4	Pass	
		Guy C@369.041	1 11/16	2270	98101.30	140800.00	69.7	Pass	
		Top Guy Pull-Off@369.041	4L4x3x1/4x3/8	1717	38187.50	165207.00	23.1	Pass	
		Leg	6 3/4	1754	-822998.00	856323.00	96.1	Pass	
		Diagonal	1 1/2	1791	33705.60	46134.50	73.1	Pass	
		Horizontal	2L3x2x3/8x3/8	1786	-26556.60	41708.70	63.7	Pass	
T54	332.13 - 302.602	Top Girt	2L3x2x3/8x3/8	1759	-24159.30	34746.60	69.5	Pass	
		Leg	7	1795	-760923.00	925038.00	82.3	Pass	
		Diagonal	1 3/8	1830	27283.80	38765.80	70.4	Pass	
		Horizontal	2L3x2x5/16x3/8	1825	-21178.70	34398.30	61.6	Pass	
T55	302.602 - 273.073	Top Girt	2L3x2x5/16x3/8	1798	-22525.50	28464.90	79.1	Pass	
		Leg	7	1834	-817552.00	925530.00	88.3	Pass	
		Diagonal	1 3/8	1869	18275.70	38765.80	47.1	Pass	
T56	273.073 -	Horizontal	2L3x2x5/16x3/8	1864	-13395.00	34398.30	38.9	Pass	
		Top Girt	2L3x2x5/16x3/8	1837	-16116.50	28591.60	56.4	Pass	
		Leg	7	1873	-840200.00	925651.00	90.8	Pass	

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	Client	XYZ Broadcasting	Designed by	Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
	243.544							
		Diagonal	7/8	1909	10148.90	15698.60	64.6	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	1903	-8091.49	19161.70	42.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1876	-9564.18	19161.70	49.9	Pass
T57	243.544 - 214.016	Leg	7	1912	-839388.00	925624.00	90.7	Pass
		Diagonal	7/8	1919	9683.97	15698.60	61.7	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	1923	-7065.61	19161.70	36.9	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1915	-4311.08	19161.70	22.5	Pass
T58	214.016 - 184.487	Leg	7	1951	-820040.00	925361.00	88.6	Pass
		Diagonal	7/8	1959	14914.50	15698.60	95.0	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	1963	-11691.40	19161.70	61.0	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	1953	-8085.07	19161.70	42.2	Pass
T59	184.487 - 154.958	Leg	7	1990	-771191.00	924780.00	83.4	Pass
		Diagonal	1 1/8	2015	19084.60	25950.70	73.5	Pass
		Horizontal	2L3x2x1/4x3/8	2019	-14882.10	27248.50	54.6	Pass
		Top Girt	2L3x2x1/4x3/8	1992	-12712.70	22622.80	56.2	Pass
		Guy A@162.34	1 7/16	2275	65102.70	100800.00	64.6	Pass
		Guy B@162.34	1 7/16	2274	63775.30	100800.00	63.3	Pass
		Guy C@162.34	1 7/16	2273	63253.60	100800.00	62.8	Pass
		Top Guy Pull-Off@162.34	4L4x3x1/4x3/8	2002	31365.10	165207.00	19.0	Pass
T60	154.958 - 125.43	Leg	7	2029	-805209.00	933389.00	86.3	Pass
		Diagonal	1 1/8	2065	15399.00	25950.70	59.3	Pass
		Horizontal	2L3x2x1/4x3/8	2059	-11526.00	27248.50	42.3	Pass
		Top Girt	2L3x2x1/4x3/8	2032	-10164.60	22622.80	44.9	Pass
T61	125.43 - 95.901	Leg	7	2068	-832297.00	933389.00	89.2	Pass
		Diagonal	7/8	2101	8130.82	15698.60	51.8	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	2097	-6203.72	19161.70	32.4	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	2070	-7406.57	19161.70	38.7	Pass
T62	95.901 - 73.7552	Leg	7	2107	-834828.00	933398.00	89.4	Pass
		Diagonal	7/8	2112	6065.57	15698.60	38.6	Pass
		Horizontal	2L2 1/2x2x1/4x3/8	2117	-4454.96	19161.70	23.2	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	2109	-2656.26	19161.70	13.9	Pass
T63	73.7552 - 66.3724	Leg	7	2137	-830939.00	933362.00	89.0	Pass
		Diagonal	7/8	2142	6830.10	15698.60	43.5	Pass
		Top Girt	2L2 1/2x2x1/4x3/8	2138	-5274.76	19161.70	27.5	Pass
T64	66.3724 - 44.2265	Leg	7	2149	-826753.00	933398.00	88.6	Pass
		Diagonal	1 1/4	2158	9609.44	32037.90	30.0	Pass
		Horizontal	2L3x2x1/4x3/8	2168	-7525.13	27248.50	27.6	Pass
		Top Girt	2L3x2x1/4x3/8	2150	-6614.73	22622.80	29.2	Pass
T65	44.2265 - 36.9036	Leg	7	2179	-808409.00	935835.00	86.4	Pass
		Diagonal	2L3x2 1/2x1/4	2187	-9642.06	39040.60	24.7	Pass
		Top Girt	2L3x2x1/4x3/8	2181	-9418.62	22622.80	41.6	Pass
T66	36.9036 - 29.112	Leg	7	2191	-797267.00	916218.00	87.0	Pass
		Diagonal	2L3x2 1/2x1/4	2199	-9636.46	37058.40	26.0	Pass
		Top Girt	2L3x2x1/4x3/8	2194	-4740.50	22622.80	21.0	Pass
T67	29.112 - 21.3203	Leg	7	2203	-786691.00	916218.00	85.9	Pass
		Diagonal	2L3x2 1/2x1/4	2211	-10627.60	37058.40	28.7	Pass
		Top Girt	2L3x2x1/4x3/8	2206	-6599.76	22622.80	29.2	Pass
T68	21.3203 - 14.7604	Leg	7	2215	-773648.00	985674.00	78.5	Pass

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	Client	XYZ Broadcasting	Designed by	Ron

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T69	14.7604 - 0	Diagonal	2L3x2 1/2x1/4	2226	-10887.10	43910.30	24.8	Pass
							29.6 (b)	
		Top Girt	DC8x18.75	2218	10403.70	250870.00	4.1	Pass
							28.3 (b)	
		Bottom Girt	DC3x4.1	2221	48300.20	58105.90	83.1	Pass
		Leg	7	2230	-820668.00	996016.00	82.4	Pass
		Diagonal	L3x3x5/16	2240	-18325.80	32108.80	57.1	Pass
							69.1 (b)	
		Horizontal	2L3 1/2x3 1/2x1/4x3/8	2236	16703.30	73547.80	22.7	Pass
							45.4 (b)	
		Top Girt	8x1.5	2233	125723.00	313282.00	40.1	Pass
							69.7 (b)	
							Summary	
							Leg (T25)	112.2
					Diagonal (T28)	113.0	Fail X	
					Horizontal (T28)	104.9	Fail X	
					Secondary Horizontal (T34)	35.2	Pass	
					Top Girt (T28)	124.4	Fail X	
					Bottom Girt (T68)	83.1	Pass	
					Guy A (T21)	105.0	Fail X	
					Guy B (T21)	104.9	Fail X	
					Guy C (T28)	106.4	Fail X	
					Top Guy Pull-Off (T11)	35.9	Pass	
					Bolt Checks	108.0	Fail X	
					RATING =	124.4	Fail X	