



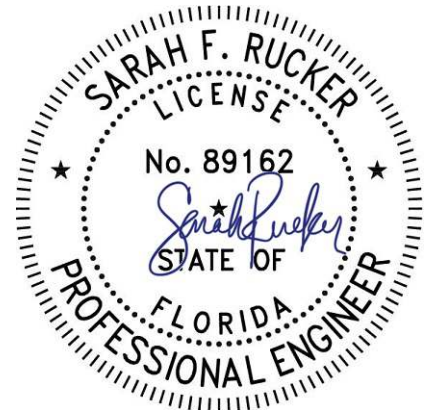
Structural Analysis Report

Structure : 245 ft Guyed Tower
ATC Asset Name : Lacrosse FL 6
ATC Asset Number : 303048
Engineering Number : 14863653_C3_03
Proposed Carrier : T-MOBILE
Carrier Site Name : 9JK0174A
Carrier Site Number : 9JK0174A
Site Location : 183 Southeast Waterleaf Drive
Lake City, FL 32024-0001
29.9515° N, 82.5707° W
County : Columbia
Date : July 5, 2024
Max Usage : 54%
Analysis Result : Pass

Created By:

Zachary S. Blackford
Structural Engineer I

A handwritten signature in black ink that reads 'Zachary Blackford'.



This item has been electronically signed and sealed by Sarah F. Rucker, PE on the date shown using a digital signature.

Printed copies are not considered signed and sealed and the signature must be verified on any electronic copies.

Sarah
Rucker

Digitally signed by
Sarah Rucker
Date: 2024.07.08
09:17:37 -04'00'

COA: 9053

Table of Contents

Introduction	3
Supporting Documents	3
Analysis	3
Conclusion	3
Structure Usages	4
Maximum Reactions	4
Tower Loading	5
Standard Conditions	Attached
Calculations	Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 245 ft Guyed tower to reflect the change in loading by T-MOBILE.

Supporting Documents

Tower:	FWT/PJF Job #1956296-R, dated June 27, 1996
Foundation:	FWT/PJF Job #1956296, dated July 8, 1996
Geotechnical:	United Consulting Group Job #940648-01-05, dated June 8, 1994
Modification:	MEI Job #01-0140M, dated March 28, 2001 ATC Job #25968632, dated March 20, 2006

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	121 mph (3-second gust)
Basic Wind Speed w/ Ice:	No Ice Considered
Code(s):	ANSI/TIA-222-H / 2021 IBC / 8th ED (2023) Florida Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.08$, $S_i = 0.05$
Site Class:	D - Stiff Soil - Default

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact Engineering@americantower.com. Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.

Structure Usages

Structural Component	Usage	Control	Location	Result
Leg	51.9%	Member X	Section 12	Pass
Diagonal	42.0%	Member	Section 9	Pass
Horizontal	28.4%	Member Z	Section 12	Pass
Torque Arm	10.6%	Tension	Elevation 180 ft	Pass
Cable	53.0%	Tension	Elevation 180 ft	Pass
Serviceability Usage	7.2%	Rotation	Elevation 192 ft	Pass
Foundation	50.1%	Shear	Anchor 1	Pass
Foundation	47.3%	Uplift	Anchor 1	Pass
Foundation	54.1%	Axial	Base	Pass
Foundation	30.6%	Shear	Base	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Uplift (k)	Shear (k)
Guyed – Pivot Base	-	90.6	-	1.6
Guyed Anchor - A1	-	-	34.5	43.9

**Reactions shown are maximum overall and not limited by Load Case*

Foundation usages were calculated by comparing the maximum reactions from this analysis to the reactions from the original design drawings, factored by 1.35 per ANSI/TIA-222-H, Section 15.6.2

T-MOBILE Final Loading

Elev (ft)	Qty	Equipment	Lines
193.0	1	Commscope VHLP4-11W/A	(2) 1.99" (50.7mm) Hybrid (2) 1/2" Coax (2) 2.25" (57.2mm) Hybrid
	2	Ceragon FibeAir IP-20D-HP	
	3	Commscope FFV4-65C-R3-V1	
	3	Ericsson 4424 B25	
	3	Ericsson RRUS 4415 B25	
	3	Ericsson Radio 4449 B12,B71 (75 lbs)	
191.0	3	Sector Frames	-

Install proposed lines alongside existing T-MOBILE lines.

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
245.0	1	Platform w/ Handrails	-	SPRINT NEXTEL
204.0	2	Raycap RCMDC-6627-PF-48	(10) 1 5/8" Coax (2) 1 5/8" Hybriflex	ALLTEL COMMUNICATIONS, LLC
	3	Commscope TD-850B-LTE78-43		
	3	Ericsson 8843 Rev 2		
	3	Ericsson AIR 6449 B77D/ C-Band		
	3	Ericsson Radio 4449 - B13&B5		
	3	Light Sector Frame		
	6	Commscope NHH-85C-R2B		
170.0	1	Stand-Off	-	-
150.0	1	Stand-Off	-	-

(If table breaks across pages, please see previous page for data in merged cells)



Standard Conditions

All engineering services performed by ATC Tower Services, LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of ATC Tower Services, LLC

It is the responsibility of the client to ensure that the information provided to ATC Tower Services, LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and ATC Tower Services, LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

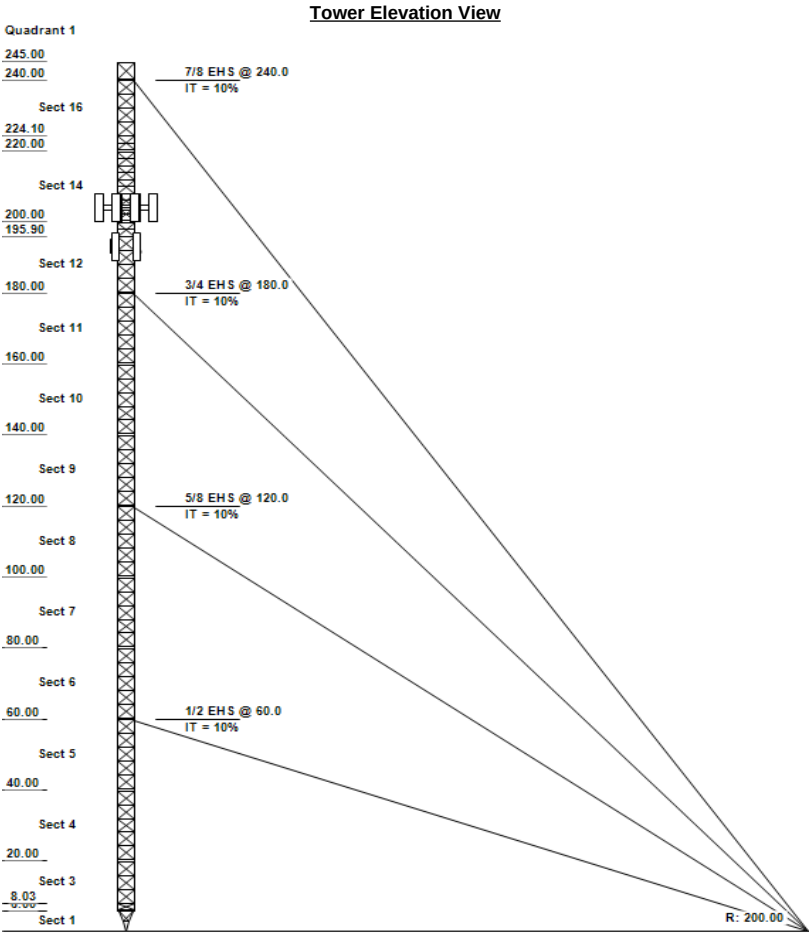
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services, LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ASSET: Lacrosse FL 6, 303048
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653

ANALYSIS PARAMETERS					
Design Wind:	121 mph	Ice Wind:	30 mph w/ 0.00" ice	Service Wind:	60 mph
Risk Category:	II	Exposure:	C	S _s : 0.081	S _i : 0.048
Topo Factor:	Method 1	Topo Feature:		Topo Category:	1
Structure Height:	245 ft	Base Elevation:	0 ft	Shape:	Triangle
Base Width:	4.00 ft	Top Width:	4.00 ft	Base Type:	Pivot

TOWER SECTION PROPERTIES						
Section	Leg Members		Diagonal Members		Horizontal Members	
1	SOL 50 ksi 2" SOLID		PL 36 ksi PL 2 x 0.25"		SAE 36 ksi 2.5X2.5X0.25	
2 - 13	SOL 50 ksi 2" SOLID		SOL 36 ksi 5/8" SOLID		SAU 36 ksi 2X1.5X0.1875	
14 - 17	SOL 50 ksi 2" SOLID		SOL 36 ksi 3/4" SOLID		SAU 36 ksi 2X1.5X0.1875	



SECONDARY BRACING MEMBERS						
Section	Sub Diagonal 1		Sub Diagonal 2		Sub Diagonal 3	
13 - 15	-		-		-	
Section	Sub Horizontal 1		Sub Horizontal 2		Sub Horizontal 3	
13 - 15	S1 1/4" SOLID		-		-	

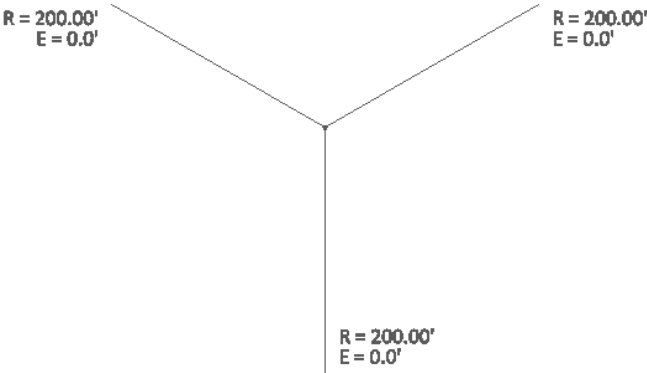
DISCRETE APPURTENANCE		LINEAR APPURTENANCE	
Elev (ft)	Description	Elev (ft)	Description
245.0	(1) Flat Platform w/ Handrails	245.0	(1) Climbing Ladder
204.0	(3) Ericsson Radio 4449 - B13&B5	204.0	(2) 1 5/8" Hybriflex
204.0	(3) Ericsson 8843 Rev 2	204.0	(10) 1 5/8" Coax
204.0	(3) Ericsson AIR 6449 B77D/ C-Band	193.0	(2) 1/2" Coax
204.0	(3) Generic Flat Light Sector Frame	193.0	(2) 1.99" (50.7mm) Hybrid
204.0	(3) Commscope TD-850B-LTE78-43	193.0	(2) 2.25" (57.2mm) Hybrid
204.0	(6) Commscope NHH-85C-R2B		
204.0	(2) Raycap RCMDC-6627-PF-48		
193.0	(2) Ceragon FibeAir IP-20D-HP		
193.0	(1) Commscope VHLP4-11W/A		
193.0	(3) Ericsson RRUS 4415 B25		
193.0	(3) Ericsson 4424 B25		
193.0	(3) Ericsson Radio 4449 B12,B71 (75 lbs)		
193.0	(3) Commscope FFV4-65C-R3-V1		
191.0	(3) Round Sector Frames		
170.0	(1) Generic Flat Stand-Off		
150.0	(1) Generic Flat Stand-Off		

GUY ANCHOR REACTIONS				
Radius (ft)	Drop (ft)	Azimuth (°)	Uplift (k)	Shear (k)
200.0	0.00	0	34.42	43.87
200.0	0.00	120	34.46	43.92
200.0	0.00	240	34.46	43.92

BASE REACTIONS

Axial (k): 90.59
Shear (k): 1.61

Tower Plan View



ANALYSIS PARAMETERS			
Location:	Columbia County, FL	Height:	245 ft
Type and Shape:	Guyed, Triangle	Base Elevation:	0.00 ft
Manufacturer:	Undetermined	Bottom Face Width:	4.00 ft
Kd	0.85	Top Face Width:	4.00 ft
Ke:	0.99		

ICE & WIND PARAMETERS			
Exposure Category:	C	Design Wind Speed Without Ice:	121 mph
Risk Category:	II	Design Wind Speed with Ice:	30 mph
Topographic Factor Procedure:	Method 1	Operational Windspeed:	60 mph
Topographic Category:	1	Design Ice Thickness:	0.00 in
Crest Height:	0 ft	HMSL:	153 ft

SEISMIC PARAMETERS					
Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):		0.76	
T _L (sec):	8	P:	1.3	C _s :	0.030
S _{ds} :	0.086	S _{d1} :	0.077	C _{s, Max} :	0.034
S _s :	0.081	S ₁ :	0.048	C _{s, Min} :	0.030
F _a :	1.600	F _v :	2.400		

LOAD CASES	
1.2D + 1.0W Normal	1.2D + 1.0W Normal - 121 mph Wind with No Ice
1.2D + 1.0W 60°	1.2D + 1.0W 60° - 121 mph Wind with No Ice
1.2D + 1.0W 90°	1.2D + 1.0W 90° - 121 mph Wind with No Ice
1.2D + 1.0W 120°	1.2D + 1.0W 120° - 121 mph Wind with No Ice
1.2D + 1.0W 180°	1.2D + 1.0W 180° - 121 mph Wind with No Ice
1.2D + 1.0W 210°	1.2D + 1.0W 210° - 121 mph Wind with No Ice
1.2D + 1.0W 240°	1.2D + 1.0W 240° - 121 mph Wind with No Ice
1.2D + 1.0W 300°	1.2D + 1.0W 300° - 121 mph Wind with No Ice
1.2D + 1.0W 330°	1.2D + 1.0W 330° - 121 mph Wind with No Ice
1.2D + 1.0Di + 1.0Wi Normal	1.2D + 1.0Di + 1.0Wi Normal - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 60°	1.2D + 1.0Di + 1.0Wi 60° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 90°	1.2D + 1.0Di + 1.0Wi 90° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 120°	1.2D + 1.0Di + 1.0Wi 120° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 180°	1.2D + 1.0Di + 1.0Wi 180° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 210°	1.2D + 1.0Di + 1.0Wi 210° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 240°	1.2D + 1.0Di + 1.0Wi 240° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 300°	1.2D + 1.0Di + 1.0Wi 300° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Di + 1.0Wi 330°	1.2D + 1.0Di + 1.0Wi 330° - 30 mph Wind with 0" Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	1.2D + 1.0Ev + 1.0Eh Normal - Seismic
1.2D + 1.0Ev + 1.0Eh 60°	1.2D + 1.0Ev + 1.0Eh 60° - Seismic
1.2D + 1.0Ev + 1.0Eh 90°	1.2D + 1.0Ev + 1.0Eh 90° - Seismic
1.2D + 1.0Ev + 1.0Eh 120°	1.2D + 1.0Ev + 1.0Eh 120° - Seismic
1.2D + 1.0Ev + 1.0Eh 180°	1.2D + 1.0Ev + 1.0Eh 180° - Seismic
1.2D + 1.0Ev + 1.0Eh 210°	1.2D + 1.0Ev + 1.0Eh 210° - Seismic
1.2D + 1.0Ev + 1.0Eh 240°	1.2D + 1.0Ev + 1.0Eh 240° - Seismic
1.2D + 1.0Ev + 1.0Eh 300°	1.2D + 1.0Ev + 1.0Eh 300° - Seismic
1.2D + 1.0Ev + 1.0Eh 330°	1.2D + 1.0Ev + 1.0Eh 330° - Seismic

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

LOAD CASES	
1.0D + 1.0W Service Normal	1.0D + 1.0W Service Normal - 60 mph Wind with No Ice
1.0D + 1.0W Service 60°	1.0D + 1.0W Service 60° - 60 mph Wind with No Ice
1.0D + 1.0W Service 90°	1.0D + 1.0W Service 90° - 60 mph Wind with No Ice
1.0D + 1.0W Service 120°	1.0D + 1.0W Service 120° - 60 mph Wind with No Ice
1.0D + 1.0W Service 180°	1.0D + 1.0W Service 180° - 60 mph Wind with No Ice
1.0D + 1.0W Service 210°	1.0D + 1.0W Service 210° - 60 mph Wind with No Ice
1.0D + 1.0W Service 240°	1.0D + 1.0W Service 240° - 60 mph Wind with No Ice
1.0D + 1.0W Service 300°	1.0D + 1.0W Service 300° - 60 mph Wind with No Ice
1.0D + 1.0W Service 330°	1.0D + 1.0W Service 330° - 60 mph Wind with No Ice

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

TOWER LOADING – DISCRETE APPURTENANCE

Discrete Appurtenance Properties for LC: **1.2D + 1.0W**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
245.0	Flat Platform w/ Handrails	1	2000	42.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	48.42	1745	2400
204.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	46.59	78	252
204.0	Ericsson 8843 Rev 2	3	75	1.6	1.3	13.2	11.1	0.80	0.50	0.0	0.00	46.59	78	270
204.0	Commscope TD-850B-LTE78-43	3	53	2.0	1.3	15.3	6.4	0.80	0.50	0.0	0.00	46.59	93	191
204.0	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.67	0.0	0.00	46.59	257	294
204.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	46.59	203	77
204.0	Commscope NHH-85C-R2B	6	51	11.4	8.0	11.9	7.1	0.80	0.67	0.0	0.00	46.59	1451	366
204.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	46.59	1196	1440
193.0	Ceragon FibeAir IP-20D-HP	2	27	1.2	1.0	11.3	4.2	0.80	0.50	0.0	0.00	46.05	37	64
193.0	Ericsson Radio 4449 B12,B71 (7	3	75	1.6	1.3	13.2	10.4	0.80	0.50	0.0	0.00	46.05	78	270
193.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	46.05	87	166
193.0	Ericsson 4424 B25	3	86	2.1	1.4	14.4	11.3	0.80	0.67	0.0	0.00	46.05	129	310
193.0	Commscope VHLP4-11W/A	1	71	17.8	4.2	50.8	29.5	0.80	1.00	0.0	0.00	46.05	556	85
193.0	Commscope FFV4-65C-R3-V1	3	132	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	46.05	1250	474
191.0	Round Sector Frames	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	45.95	949	1080
170.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	44.84	240	225
150.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	43.67	234	225
Totals		44	6,823	356.3									8,661	8,188

Discrete Appurtenance Properties for LC: **1.2D + 1.0Di + 1.0Wi**

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
245.0	Flat Platform w/ Handrails	1	2000	42.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	2.98	107	2400
204.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	2.86	5	252
204.0	Ericsson 8843 Rev 2	3	75	1.6	1.3	13.2	11.1	0.80	0.50	0.0	0.00	2.86	5	270
204.0	Commscope TD-850B-LTE78-43	3	53	2.0	1.3	15.3	6.4	0.80	0.50	0.0	0.00	2.86	6	191
204.0	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.67	0.0	0.00	2.86	16	294
204.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	2.86	12	77
204.0	Commscope NHH-85C-R2B	6	51	11.4	8.0	11.9	7.1	0.80	0.67	0.0	0.00	2.86	89	366
204.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	2.86	74	1440
193.0	Ceragon FibeAir IP-20D-HP	2	26	1.2	1.0	11.3	4.2	0.80	0.50	0.0	0.00	2.83	2	64
193.0	Ericsson Radio 4449 B12,B71 (7	3	75	1.6	1.3	13.2	10.4	0.80	0.50	0.0	0.00	2.83	5	270
193.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	2.83	5	166
193.0	Ericsson 4424 B25	3	86	2.1	1.4	14.4	11.3	0.80	0.67	0.0	0.00	2.83	8	310
193.0	Commscope VHLP4-11W/A	1	70	17.8	4.2	50.8	29.5	0.80	1.00	0.0	0.00	2.83	34	85
193.0	Commscope FFV4-65C-R3-V1	3	132	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	2.83	77	474
191.0	Round Sector Frames	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	2.82	58	1080
170.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	2.76	15	225
150.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	2.68	14	225
Totals		44	6,823	356.3									532	8,188

Discrete Appurtenance Properties for LC: **1.0D + 1.0W Service**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
245.0	Flat Platform w/ Handrails	1	2000	42.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	11.91	429	2000
204.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	11.46	19	210
204.0	Ericsson 8843 Rev 2	3	75	1.6	1.3	13.2	11.1	0.80	0.50	0.0	0.00	11.46	19	225
204.0	Commscope TD-850B-LTE78-43	3	53	2.0	1.3	15.3	6.4	0.80	0.50	0.0	0.00	11.46	23	159
204.0	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.67	0.0	0.00	11.46	63	245
204.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	11.46	50	64
204.0	Commscope NHH-85C-R2B	6	51	11.4	8.0	11.9	7.1	0.80	0.67	0.0	0.00	11.46	357	305
204.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	11.46	294	1200
193.0	Ceragon FibeAir IP-20D-HP	2	27	1.2	1.0	11.3	4.2	0.80	0.50	0.0	0.00	11.32	9	53
193.0	Ericsson Radio 4449 B12,B71 (7	3	75	1.6	1.3	13.2	10.4	0.80	0.50	0.0	0.00	11.32	19	225
193.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	11.32	21	138
193.0	Ericsson 4424 B25	3	86	2.1	1.4	14.4	11.3	0.80	0.67	0.0	0.00	11.32	32	258
193.0	Commscope VHLP4-11W/A	1	71	17.8	4.2	50.8	29.5	0.80	1.00	0.0	0.00	11.32	137	70
193.0	Commscope FFV4-65C-R3-V1	3	132	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	11.32	307	395
191.0	Round Sector Frames	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	11.30	233	900
170.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	11.02	59	188
150.0	Generic Flat Stand-Off	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	10.74	58	188
Totals		44	6,823	356.3									2,130	6,823

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

TOWER LOADING – LINEAR APPURTENANCE

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	% In Wind	Spread On Faces	Bundling	Cluster Dia (in)	Out of Zone	Spacing (in)	Orient. Factor	K _a Override
5.0	245.0	Climbing Ladder	1	1.50	6.90	100	2	Individual	0.00	N	1.00	1.00	0.00
5.0	204.0	1 5/8" Coax	10	1.98	0.82	33	3	Block	0.00	N	1.00	1.00	0.00
5.0	204.0	1 5/8" Hybriflex	2	1.98	1.30	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	193.0	1.99" (50.7mm) Hybrid	2	1.99	1.90	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	193.0	2.25" (57.2mm) Hybrid	2	2.25	3.15	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	193.0	1/2" Coax	2	0.63	0.15	100	2	Individual	0.00	N	1.00	1.00	0.00

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

SECTION FORCES

1.2D + 1.0W Normal Gust Response Factor (Gh): 0.85
121 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	292	31	323
16	232	47.87	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	892	97	989
15	222	47.43	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	277	25	302
14	210	46.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	1134	288	1422
13	198	46.30	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	377	0	210	195	404
12	188	45.80	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1433	0	800	1043	1842
11	170	44.84	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	1056	1365	2421
10	150	43.67	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	942	1330	2272
9	130	42.38	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	914	1290	2204
8	110	40.91	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	964	1246	2209
7	90	39.22	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	846	1194	2040
6	70	37.20	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	802	1133	1935
5	50	34.65	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	816	1055	1871
4	30	31.12	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	671	948	1619
3	14	26.93	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	327	491	818
2	7	26.93	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	105	83	188
1	3	26.93	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	186	108	294
Totals															22,201	0	23,154	

1.2D + 1.0W 60° Gust Response Factor (Gh): 0.85
121 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	264	31	295
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	815	97	912
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	251	25	276
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	1054	288	1342
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	196	195	391
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	732	1043	1774
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	957	1365	2322
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	864	1330	2194
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	839	1290	2129
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	873	1246	2119
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	776	1194	1970
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	736	1133	1869
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	740	1055	1795
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	616	948	1563
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	303	491	794
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	91	83	174
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	162	108	270
Totals															22,201	0	22,187	

1.2D + 1.0W 90° Gust Response Factor (Gh): 0.85
121 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	271	31	302
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	834	97	931
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	257	25	282
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	1074	288	1362
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	200	195	394
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	749	1043	1791
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	982	1365	2347
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	884	1330	2213
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	857	1290	2148
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	896	1246	2141
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	794	1194	1988
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	753	1133	1885
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	759	1055	1814
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	630	948	1577
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	309	491	800
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	94	83	178
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	168	108	276
Totals															22,201	0	22,429	

1.2D + 1.0W 120° Gust Response Factor (Gh): 0.85
121 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	292	31	323
16	232	47.87	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	892	97	989
15	222	47.43	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	277	25	302
14	210	46.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	1134	288	1422
13	198	46.30	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	377	0	210	195	404

SECTION FORCES																		
1.2D + 1.0W 120°																		
Gust Response Factor (Gh):										0.85								
121 mph Wind with No Ice										Wind Importance Factor (Iw): 1.00								
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
12	188	45.80	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1433	0	800	1043	1842
11	170	44.84	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	1056	1365	2421
10	150	43.67	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	942	1330	2272
9	130	42.38	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	914	1290	2204
8	110	40.91	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	964	1246	2209
7	90	39.22	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	846	1194	2040
6	70	37.20	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	802	1133	1935
5	50	34.65	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	816	1055	1871
4	30	31.12	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	671	948	1619
3	14	26.93	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	327	491	818
2	7	26.93	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	105	83	188
1	3	26.93	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	186	108	294
Totals														22,201	0			23,154
1.2D + 1.0W 180°																		
Gust Response Factor (Gh):										0.85								
121 mph Wind with No Ice										Wind Importance Factor (Iw): 1.00								
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	264	31	295
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	815	97	912
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	251	25	276
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	1054	288	1342
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	196	195	391
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	732	1043	1774
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	957	1365	2322
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	864	1330	2194
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	839	1290	2129
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	873	1246	2119
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	776	1194	1970
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	736	1133	1869
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	740	1055	1795
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	616	948	1563
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	303	491	794
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	91	83	174
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	162	108	270
Totals														22,201	0			22,187
1.2D + 1.0W 210°																		
Gust Response Factor (Gh):										0.85								
121 mph Wind with No Ice										Wind Importance Factor (Iw): 1.00								
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	271	31	302
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	834	97	931
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	257	25	282
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	1074	288	1362
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	200	195	394
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	749	1043	1791
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	982	1365	2347
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	884	1330	2213
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	857	1290	2148
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	896	1246	2141
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	794	1194	1988
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	753	1133	1885
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	759	1055	1814
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	630	948	1577
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	309	491	800
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	94	83	178
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	168	108	276
Totals														22,201	0			22,429
1.2D + 1.0W 240°																		
Gust Response Factor (Gh):										0.85								
121 mph Wind with No Ice										Wind Importance Factor (Iw): 1.00								
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	292	31	323
16	232	47.87	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	892	97	989
15	222	47.43	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	277	25	302
14	210	46.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	1134	288	1422
13	198	46.30	0.639	2														

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

SECTION FORCES

1.2D + 1.0W 240°

Gust Response Factor (Gh): 0.85

121 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
7	90	39.22	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	846	1194	2040
6	70	37.20	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	802	1133	1935
5	50	34.65	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	816	1055	1871
4	30	31.12	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	671	948	1619
3	14	26.93	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	327	491	818
2	7	26.93	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	105	83	188
1	3	26.93	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	186	108	294
Totals															22,201	0		23,154

1.2D + 1.0W 300°

Gust Response Factor (Gh): 0.85

121 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	264	31	295
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	815	97	912
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	251	25	276
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	1054	288	1342
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	196	195	391
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	732	1043	1774
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	957	1365	2322
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	864	1330	2194
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	839	1290	2129
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	873	1246	2119
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	776	1194	1970
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	736	1133	1869
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	740	1055	1795
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	616	948	1563
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	303	491	794
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	91	83	174
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	162	108	270
Totals															22,201	0		22,187

1.2D + 1.0W 330°

Gust Response Factor (Gh): 0.85

121 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	48.32	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	271	31	302
16	232	47.87	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	834	97	931
15	222	47.43	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	257	25	282
14	210	46.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	1074	288	1362
13	198	46.30	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	200	195	394
12	188	45.80	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	749	1043	1791
11	170	44.84	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	982	1365	2347
10	150	43.67	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	884	1330	2213
9	130	42.38	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	857	1290	2148
8	110	40.91	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	896	1246	2141
7	90	39.22	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	794	1194	1988
6	70	37.20	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	753	1133	1885
5	50	34.65	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	759	1055	1814
4	30	31.12	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	630	948	1577
3	14	26.93	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	309	491	800
2	7	26.93	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	94	83	178
1	3	26.93	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	168	108	276
Totals															22,201	0		22,429

1.2D + 1.0Di + 1.0Wi Normal

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	18	2	20
16	232	2.94	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	55	6	61
15	222	2.92	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	17	2	19
14	210	2.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	70	19	88
13	198	2.85	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	377	0	13	13	26
12	188	2.82	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1433	0	49	75	124
11	170	2.76	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	65	99	163
10	150	2.68	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	58	97	155
9	130	2.60	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	56	94	150
8	110	2.51	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	59	90	149
7	90	2.41	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	52	87	139
6	70	2.29	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	49	82	132
5	50	2.13	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	50	76	126
4	30	1.91	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	41	69	110
3	14	1.66	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	20	36	56

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

SECTION FORCES																		
1.2D + 1.0Di + 1.0Wi Normal						Gust Response Factor (Gh):				0.85								
30 mph Wind with 0" Radial Ice						Wind Importance Factor (Iw):				1.00								
										Ice Dead Load Factor:				1.00				
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _t	D _t	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
2	7	1.66	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	6	6	12
1	3	1.66	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	11	7	18
Totals														22,201	0	1,548		
1.2D + 1.0Di + 1.0Wi 60°						Gust Response Factor (Gh):				0.85								
30 mph Wind with 0" Radial Ice						Wind Importance Factor (Iw):				1.00								
										Ice Dead Load Factor:				1.00				
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _t	D _t	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	16	2	18
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	50	6	56
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	15	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	65	19	83
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	12	13	25
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	45	75	120
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	59	99	157
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	53	97	150
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	52	94	145
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	54	90	144
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	48	87	135
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	45	82	128
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	45	76	122
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	38	69	107
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	19	36	54
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	10	7	17
Totals														22,201	0	1,489		
1.2D + 1.0Di + 1.0Wi 90°						Gust Response Factor (Gh):				0.85								
30 mph Wind with 0" Radial Ice						Wind Importance Factor (Iw):				1.00								
										Ice Dead Load Factor:				1.00				
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _t	D _t	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	17	2	19
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	51	6	57
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	16	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	66	19	85
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	12	13	25
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	46	75	121
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	60	99	159
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	54	97	151
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	53	94	147
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	55	90	145
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	49	87	136
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	46	82	129
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	47	76	123
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	39	69	108
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	19	36	55
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	10	7	17
Totals														22,201	0	1,504		
1.2D + 1.0Di + 1.0Wi 120°						Gust Response Factor (Gh):				0.85								
30 mph Wind with 0" Radial Ice						Wind Importance Factor (Iw):				1.00								
										Ice Dead Load Factor:				1.00				
Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _t	D _t	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	18	2	20
16	232	2.94	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	55	6	61
15	222	2.92	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	17	2	19
14	210	2.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	70	19	88
13	198	2.85	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	377	0	13	13	26
12	188	2.82	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1433	0	49	75	124
11	170	2.76	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	65	99	163
10	150	2.68	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	58	97	155
9	130	2.60	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	56	94	150
8	110	2.51	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	59	90	149
7	90	2.41	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	52	87	139
6	70	2.29	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	49	82	132
5	50	2.13	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	50	76	126
4	30	1.91	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	41	69	110
3	14	1.66	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	20	36	56
2	7	1.66	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	6	6	12
1	3	1.66	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	11	7	18
Totals														22,201	0	1,548		

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 180°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	16	2	18
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	50	6	56
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	15	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	65	19	83
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	12	13	25
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	45	75	120
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	59	99	157
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	53	97	150
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	52	94	145
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	54	90	144
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	48	87	135
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	45	82	128
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	45	76	122
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	38	69	107
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	19	36	54
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	10	7	17
Totals															22,201	0		1,489

1.2D + 1.0Di + 1.0Wi 210°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	17	2	19
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	51	6	57
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	16	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	66	19	85
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	12	13	25
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	46	75	121
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	60	99	159
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	54	97	151
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	53	94	147
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	55	90	145
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	49	87	136
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	46	82	129
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	47	76	123
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	39	69	108
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	19	36	55
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	10	7	17
Totals															22,201	0		1,504

1.2D + 1.0Di + 1.0Wi 240°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	360	0	18	2	20
16	232	2.94	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	1178	0	55	6	61
15	222	2.92	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	373	0	17	2	19
14	210	2.88	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1773	0	70	19	88
13	198	2.85	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	377	0	13	13	26
12	188	2.82	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1433	0	49	75	124
11	170	2.76	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	65	99	163
10	150	2.68	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	58	97	155
9	130	2.60	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	56	94	150
8	110	2.51	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	59	90	149
7	90	2.41	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	52	87	139
6	70	2.29	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	49	82	132
5	50	2.13	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1908	0	50	76	126
4	30	1.91	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1837	0	41	69	110
3	14	1.66	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	1082	0	20	36	56
2	7	1.66	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	241	0	6	6	12
1	3	1.66	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	478	0	11	7	18
Totals															22,201	0		1,548

1.2D + 1.0Di + 1.0Wi 300°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	360	0	16	2	18
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	1178	0	50	6	56
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	373	0	15	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1773	0	65	19	83
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	377	0	12	13	25

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 300°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1433	0	45	75	120
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	59	99	157
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	53	97	150
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	52	94	145
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	54	90	144
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	48	87	135
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	45	82	128
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1908	0	45	76	122
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1837	0	38	69	107
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	1082	0	19	36	54
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	478	0	10	7	17
Totals															22,201	0		1,489

1.2D + 1.0Di + 1.0Wi 330°

Gust Response Factor (Gh): 0.85

30 mph Wind with 0" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	2.97	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	360	0	17	2	19
16	232	2.94	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	1178	0	51	6	57
15	222	2.92	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	373	0	16	2	17
14	210	2.88	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1773	0	66	19	85
13	198	2.85	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	377	0	12	13	25
12	188	2.82	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1433	0	46	75	121
11	170	2.76	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	60	99	159
10	150	2.68	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	54	97	151
9	130	2.60	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	53	94	147
8	110	2.51	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	55	90	145
7	90	2.41	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	49	87	136
6	70	2.29	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	46	82	129
5	50	2.13	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1908	0	47	76	123
4	30	1.91	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1837	0	39	69	108
3	14	1.66	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	1082	0	19	36	55
2	7	1.66	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	241	0	6	6	11
1	3	1.66	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	478	0	10	7	17
Totals															22,201	0		1,504

1.0D + 1.0W Service Normal

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	300	0	72	8	79
16	232	11.77	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	982	0	219	24	243
15	222	11.66	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	311	0	68	6	74
14	210	11.53	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1477	0	279	71	350
13	198	11.38	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	314	0	52	48	99
12	188	11.26	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1194	0	197	256	453
11	170	11.02	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	260	336	595
10	150	10.74	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	232	327	559
9	130	10.42	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	225	317	542
8	110	10.06	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	237	306	543
7	90	9.64	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	208	294	502
6	70	9.15	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	197	278	476
5	50	8.52	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	201	259	460
4	30	7.65	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	165	233	398
3	14	6.62	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	901	0	80	121	201
2	7	6.62	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	200	0	26	20	46
1	3	6.62	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	398	0	46	27	72
Totals															18,501	0		5,693

1.0D + 1.0W Service 60°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	300	0	65	8	72
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	982	0	200	24	224
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	311	0	62	6	68
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1477	0	259	71	330
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	314	0	48	48	96
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1194	0	180	256	436
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	235	336	571
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	212	327	539
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	206	317	523
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	215	306	521

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

SECTION FORCES

1.0D + 1.0W Service 60°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	191	294	484
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	181	278	459
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	182	259	441
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	151	233	384
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	901	0	74	121	195
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	200	0	22	20	43
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	398	0	40	27	66
Totals															18,501	0		5,456

1.0D + 1.0W Service 90°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	300	0	67	8	74
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	982	0	205	24	229
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	311	0	63	6	69
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1477	0	264	71	335
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	314	0	49	48	97
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1194	0	184	256	440
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	241	336	577
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	217	327	544
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	211	317	528
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	220	306	527
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	195	294	489
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	185	278	464
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	187	259	446
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	155	233	388
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	901	0	76	121	197
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	200	0	23	20	44
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	398	0	41	27	68
Totals															18,501	0		5,515

1.0D + 1.0W Service 120°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	300	0	72	8	79
16	232	11.77	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	982	0	219	24	243
15	222	11.66	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	311	0	68	6	74
14	210	11.53	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1477	0	279	71	350
13	198	11.38	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	314	0	52	48	99
12	188	11.26	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1194	0	197	256	453
11	170	11.02	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	260	336	595
10	150	10.74	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	232	327	559
9	130	10.42	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	225	317	542
8	110	10.06	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	237	306	543
7	90	9.64	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	208	294	502
6	70	9.15	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	197	278	476
5	50	8.52	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	201	259	460
4	30	7.65	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	165	233	398
3	14	6.62	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	901	0	80	121	201
2	7	6.62	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	200	0	26	20	46
1	3	6.62	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	398	0	46	27	72
Totals															18,501	0		5,693

1.0D + 1.0W Service 180°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	300	0	65	8	72
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	982	0	200	24	224
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	311	0	62	6	68
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1477	0	259	71	330
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	314	0	48	48	96
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1194	0	180	256	436
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	235	336	571
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	212	327	539
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	206	317	523
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	215	306	521
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	191	294	484
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	181	278	459
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	182	259	441
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	151	233	384
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	901	0	74	121	195

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

SECTION FORCES

1.0D + 1.0W Service 180°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	200	0	22	20	43
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	398	0	40	27	66
Totals														18,501	0			5,456

1.0D + 1.0W Service 210°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	300	0	67	8	74
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	982	0	205	24	229
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	311	0	63	6	69
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1477	0	264	71	335
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	314	0	49	48	97
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1194	0	184	256	440
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	241	336	577
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	217	327	544
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	211	317	528
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	220	306	527
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	195	294	489
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	185	278	464
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	187	259	446
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	155	233	388
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	901	0	76	121	197
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	200	0	23	20	44
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	398	0	41	27	68
Totals														18,501	0			5,515

1.0D + 1.0W Service 240°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	1.00	1.00	0.0	2.66	7.11	0.00	300	0	72	8	79
16	232	11.77	3.556	8.012	0.00	0.175	2.68	1.00	1.00	0.0	8.17	21.93	0.00	982	0	219	24	243
15	222	11.66	1.278	2.454	0.00	0.218	2.54	1.00	1.00	0.0	2.71	6.87	0.00	311	0	68	6	74
14	210	11.53	3.833	12.133	0.00	0.192	2.62	1.00	1.00	0.0	10.85	28.46	0.00	1477	0	279	71	350
13	198	11.38	0.639	2.342	0.00	0.174	2.68	1.00	1.00	0.0	1.99	5.33	0.00	314	0	52	48	99
12	188	11.26	3.194	7.560	0.00	0.162	2.73	1.00	1.00	0.0	7.54	20.55	0.00	1194	0	197	256	453
11	170	11.02	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	260	336	595
10	150	10.74	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	232	327	559
9	130	10.42	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	225	317	542
8	110	10.06	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	237	306	543
7	90	9.64	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	208	294	502
6	70	9.15	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	197	278	476
5	50	8.52	4.833	9.486	0.00	0.172	2.69	1.00	1.00	0.0	10.29	27.71	0.00	1590	0	201	259	460
4	30	7.65	3.833	9.486	0.00	0.160	2.74	1.00	1.00	0.0	9.28	25.38	0.00	1531	0	165	233	398
3	14	6.62	1.917	5.682	0.00	0.152	2.76	1.00	1.00	0.0	5.17	14.29	0.00	901	0	80	121	201
2	7	6.62	1.278	1.116	0.00	0.283	2.34	1.00	1.00	0.0	1.95	4.57	0.00	200	0	26	20	46
1	3	6.62	2.430	2.143	0.00	0.352	2.17	1.00	1.00	0.0	3.75	8.13	0.00	398	0	46	27	72
Totals														18,501	0			5,693

1.0D + 1.0W Service 300°

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.80	1.00	0.0	2.40	6.43	0.00	300	0	65	8	72
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.80	1.00	0.0	7.46	20.02	0.00	982	0	200	24	224
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.80	1.00	0.0	2.45	6.22	0.00	311	0	62	6	68
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.80	1.00	0.0	10.08	26.45	0.00	1477	0	259	71	330
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.80	1.00	0.0	1.86	4.98	0.00	314	0	48	48	96
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.80	1.00	0.0	6.90	18.80	0.00	1194	0	180	256	436
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	235	336	571
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	212	327	539
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	206	317	523
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	215	306	521
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	191	294	484
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	181	278	459
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.80	1.00	0.0	9.32	25.11	0.00	1590	0	182	259	441
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.80	1.00	0.0	8.51	23.28	0.00	1531	0	151	233	384
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.80	1.00	0.0	4.79	13.23	0.00	901	0	74	121	195
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.80	1.00	0.0	1.69	3.97	0.00	200	0	22	20	43
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.80	1.00	0.0	3.27	7.08	0.00	398	0	40	27	66
Totals														18,501	0			5,456

SECTION FORCES																		
1.0D + 1.0W Service 330°					Gust Response Factor (Gh):					0.85								
60 mph Wind with No Ice					Wind Importance Factor (Iw):					1.00								
Section #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	242	11.88	1.278	2.394	0.00	0.176	2.68	0.85	1.00	0.0	2.46	6.60	0.00	300	0	67	8	74
16	232	11.77	3.556	8.012	0.00	0.175	2.68	0.85	1.00	0.0	7.64	20.50	0.00	982	0	205	24	229
15	222	11.66	1.278	2.454	0.00	0.218	2.54	0.85	1.00	0.0	2.52	6.38	0.00	311	0	63	6	69
14	210	11.53	3.833	12.133	0.00	0.192	2.62	0.85	1.00	0.0	10.27	26.95	0.00	1477	0	264	71	335
13	198	11.38	0.639	2.342	0.00	0.174	2.68	0.85	1.00	0.0	1.89	5.07	0.00	314	0	49	48	97
12	188	11.26	3.194	7.560	0.00	0.162	2.73	0.85	1.00	0.0	7.06	19.24	0.00	1194	0	184	256	440
11	170	11.02	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	241	336	577
10	150	10.74	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	217	327	544
9	130	10.42	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	211	317	528
8	110	10.06	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	220	306	527
7	90	9.64	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	195	294	489
6	70	9.15	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	185	278	464
5	50	8.52	4.833	9.486	0.00	0.172	2.69	0.85	1.00	0.0	9.57	25.76	0.00	1590	0	187	259	446
4	30	7.65	3.833	9.486	0.00	0.160	2.74	0.85	1.00	0.0	8.70	23.80	0.00	1531	0	155	233	388
3	14	6.62	1.917	5.682	0.00	0.152	2.76	0.85	1.00	0.0	4.89	13.50	0.00	901	0	76	121	197
2	7	6.62	1.278	1.116	0.00	0.283	2.34	0.85	1.00	0.0	1.76	4.12	0.00	200	0	23	20	44
1	3	6.62	2.430	2.143	0.00	0.352	2.17	0.85	1.00	0.0	3.39	7.34	0.00	398	0	41	27	68
Totals														18,501	0	5,515		

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

EQUIVALENT LATERAL FORCE METHOD

Spectral Response Acceleration for Short Period (S_s):	0.08
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L – Seconds):	8
Importance Factor (I_e):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.09
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.08
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s :	0.03
Lower Limit C_s :	0.03
Period based on Rayleigh Method (sec):	0.76
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.13
Total Unfactored Dead Load:	25.32 k
Seismic Base Shear (E):	0.99 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_2 (lb-ft)	C_v	Horizontal Force (lb)	Vertical Force (lb)
17	242.50	300	148,192	0.021	21	365
16	232.05	982	461,909	0.065	64	1,195
15	222.05	311	139,062	0.020	19	378
14	210.00	1,477	620,891	0.087	86	1,798
13	197.95	314	123,548	0.017	17	383
12	187.95	1,194	442,620	0.062	61	1,453
11	170.00	1,590	526,173	0.074	73	1,935
10	150.00	1,531	439,895	0.062	61	1,863
9	130.00	1,531	374,229	0.052	52	1,863
8	110.00	1,590	321,768	0.045	45	1,935
7	90.00	1,531	247,011	0.035	34	1,863
6	70.00	1,531	185,956	0.026	26	1,863
5	50.00	1,590	132,036	0.018	18	1,935
4	30.00	1,531	71,399	0.010	10	1,863
3	14.02	901	17,794	0.002	2	1,097
2	7.02	200	1,811	0.000	0	244
1	3.00	398	1,378	0.000	0	485
Flat Platform w/ Handrails	245.00	2,000	1,000,409	0.140	139	2,435
Ericsson Radio 4449 - B13&B5	204.00	210	85,411	0.012	12	256
Ericsson 8843 Rev 2	204.00	225	91,511	0.013	13	274
Commscope TD-850B-LTE78-43	204.00	159	64,668	0.009	9	194
Ericsson AIR 6449 B77D/ C-Band	204.00	245	99,564	0.014	14	298
Raycap RCMDC-6627-PF-48	204.00	64	26,030	0.004	4	78
Commscope NHH-85C-R2B	204.00	305	124,211	0.017	17	372
Generic Flat Light Sector Frame	204.00	1,200	488,060	0.068	68	1,461
Ceragon FibeAir IP-20D-HP	193.00	53	20,248	0.003	3	65
Ericsson Radio 4449 B12,B71 (75 lbs)	193.00	225	85,956	0.012	12	274
Ericsson RRUS 4415 B25	193.00	138	52,720	0.007	7	168
Ericsson 4424 B25	193.00	258	98,563	0.014	14	314
Commscope VHLP4-11W/A	193.00	70	26,933	0.004	4	86
Commscope FFV4-65C-R3-V1	193.00	395	151,054	0.021	21	481
Round Sector Frames	191.00	900	339,803	0.048	47	1,096
Generic Flat Stand-Off	170.00	188	62,064	0.009	9	228
Generic Flat Stand-Off	150.00	188	53,880	0.008	7	228
Totals		25,324	7,126,760	1.000	988	30,827

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

FORCE/STRESS SUMMARY

Section 1 – 0.0' to 6.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			KL/R	F'y (ksi)	Φc Pn (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls
	X			Y	Z	ΦRnv (kip)				ΦRn (kip)					
L SOL - 2" SOLID	-35.43	1.2D + 1.0W 90°	3.068	100	100	100	73.64	50.00	95.10	0.00	0.00	0	0	37.3	Member X
H SAE - 2.5X2.5X0.25	-0.07	1.2D + 1.0W N	1.909	100	100	100	30.33	36.00	41.60	0.00	0.00	0	0	0.2	Member Z
D PL - PL 2 x 0.25"	-0.11	1.2D + 1.0W 60°	4.087	50	50	50	305.67	36.00	1.53	0.00	0.00	0	0	0	Member Y
Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls			
H SAE - 2.5X2.5X0.25	3.92	1.2D + 1.0W 120°	36.0	58	38.56	0.00	0.00	0.00	0	0	10.2	Member			
D PL - PL 2 x 0.25"	0.00	1.2D + 1.0W N	36.0	58	16.20	0.00	0.00	0.00	0	0	0	Member			
Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type									

Section 2 – 6.0' to 8.03'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			KL/R	F _y (ksi)	Φ _c P _n (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls
				ΦR _{nv} (kip)	ΦR _n (kip)										
L SOL - 2" SOLID	-33.52	1.2D + 1.0W 90°	1.76	100	100	100	42.24	50.00	124.08	0.00	0.00	0	0	27	Member X
H SAU - 2X1.5X0.1875	-0.63	1.2D + 1.0W 210°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	4	Member Z
D SOL - 5/8" SOLID	-0.42	1.2D + 1.0W N	4.37	50	50	50	151.27	36.00	3.03	0.00	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
H SAU - 2X1.5X0.1875	3.16	1.2D + 1.0W 240°	36.0	58	20.09	0.00	0.00	0.00	0	0	15.7	Member			
D SOL - 5/8" SOLID	0.92	1.2D + 1.0W 120°	36.0	58	9.94	0.00	0.00	0.00	0	0	9.3	Member			
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type									

Section 3 – 8.0' to 20.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls	
	X			Y	Z	Φ _{R_{nv}} (kip)			Φ _{R_n} (kip)						
L SOL - 2" SOLID	-36.39	1.2D + 1.0W 60°	3.898	100	100	100	93.55	50.00	74.55	0.00	0.00	0	0	48.8	Member X
D SOL - 5/8" SOLID	-1.80	1.2D + 1.0W N	5.585	50	50	50	193.33	36.00	1.85	0.00	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
H SAU - 2X1.5X0.1875	1.71	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	8.5	Member			
D SOL - 5/8" SOLID	1.53	1.2D + 1.0W 210°	36.0	58	9.94	0.00	0.00	0.00	0	0	15.4	Member			
Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type									

Section 4 – 20.0' to 40.00'

	Pu	Load Case	Len (ft)	Bracing %			F'y (ksi)	Φ _c P _n (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls	
	(kip)			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)										
Member Compression				X	Y	Z	KL/R								
L SOL - 2" SOLID	-38.14	1.2D + 1.0W 60°	3.891	100	100	100	93.38	50.00	74.73	0.00	0.00	0	0	51	Member
D SOL - 5/8" SOLID	-1.29	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0.00	0	0	0	Member
Member Tension	Pu	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)	Blk Shear	# Bolt	# Hole	Use %	Controls			
	(kip)							Φ _t P _n (kip)							
H SAU - 2X1.5X0.1875	1.81	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	9	Member			
Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type									

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

FORCE/STRESS SUMMARY

Section 5 – 40.0' to 60.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n	Shear	Bear	# Bolt	# Hole	Use %	Controls
	X			Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)				
L SOL - 2" SOLID	-36.55	1.2D + 1.0W 60°	3.891	100	100	100	93.38	50.00	74.73	0.00	0	0	48.9	Member X
H SAU - 2X1.5X0.1875	-1.36	1.2D + 1.0W 90°	4	100	100	100	96.89	36.00	15.73	0.00	0	0	8.6	Member Z
D SOL - 5/8" SOLID	-0.50	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls		
	Φ _{R_{nv}} (kip)					Φ _{R_n} (kip)	Φ _t P _n (kip)							
H SAU - 2X1.5X0.1875	1.73	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	8.6	Member		
D SOL - 5/8" SOLID	1.98	1.2D + 1.0W 90°	36.0	58	9.94	0.00	0.00	0.00	0	0	19.9	Member		
Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type								

Section 6 – 60.0' to 80.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Φc Pn (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls
	X			Y	Z	KL/R			ΦRnv (kip)	ΦRn (kip)				
L SOL - 2" SOLID	-32.09	1.2D + 1.0W 90°	3.891	100	100	100	93.38	50.00	74.73	0.00	0	0	43	Member X
H SAU - 2X1.5X0.1875	-1.33	1.2D + 1.0W 210°	4	100	100	100	96.89	36.00	15.73	0.00	0	0	8.5	Member Z
D SOL - 5/8" SOLID	-1.84	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls		
	ΦRnv (kip)					ΦRn (kip)	Φt Pn (kip)							
H SAU - 2X1.5X0.1875	1.60	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	8	Member		
D SOL - 5/8" SOLID	1.97	1.2D + 1.0W 210°	36.0	58	9.94	0.00	0.00	0.00	0	0	19.8	Member		
Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type								

Section 7 – 80.0' to 100.0'

Member Compression	Pu	Load Case	Len (ft)	Bracing %			F'y (ksi)	Φc Pn (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls	
	(kip)			KL/R	ΦRnv (kip)	ΦRn (kip)									
L SOL - 2" SOLID	-32.32	1.2D + 1.0W 90°	3.891	100	100	100	93.38	50.00	74.73	0.00	0.00	0	0	43.3	Member X
D SOL - 5/8" SOLID	-0.95	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0.00	0	0	0	Member X
Member Tension	Pu	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls			
	(kip)					ΦRnv (kip)	ΦRn (kip)	Φt Pn (kip)							
H SAU - 2X1.5X0.1875	1.66	1.2D + 1.0W 240°	36.0	58	20.09	0.00	0.00	0.00	0	0	8.3	Member			
Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type									

Section 8 – 100.0' to 120.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n	Shear	Bear	# Bolt	# Hole	Use %	Controls
	X			Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)				
L SOL - 2" SOLID	-30.62	1.2D + 1.0W N	3.891	100	100	100	93.38	50.00	74.73	0.00	0	0	41	Member X
H SAU - 2X1.5X0.1875	-2.02	1.2D + 1.0W 90°	4	100	100	100	96.89	36.00	15.73	0.00	0	0	12.9	Member Z
D SOL - 5/8" SOLID	-0.03	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls		
	Φ _{R_{nv}} (kip)					Φ _{R_n} (kip)	Φ _t P _n (kip)							
H SAU - 2X1.5X0.1875	1.50	1.2D + 1.0W 240°	36.0	58	20.09	0.00	0.00	0.00	0	0	7.5	Member		
D SOL - 5/8" SOLID	2.90	1.2D + 1.0W 90°	36.0	58	9.94	0.00	0.00	0.00	0	0	29.2	Member		
Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type								

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

FORCE/STRESS SUMMARY

Section 9 – 120.0' to 140.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			KL/R	F _y (ksi)	Φ _c P _n	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
	X			Y	Z										
L SOL - 2" SOLID	-30.17	1.2D + 1.0W N	3.891	100	100	100	93.38	50.00	74.73	0.00	0.00	0	0	40.4	Member X
H SAU - 2X1.5X0.1875	-2.92	1.2D + 1.0W 330°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	18.6	Member Z
D SOL - 5/8" SOLID	-0.64	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
H SAU - 2X1.5X0.1875	1.36	1.2D + 1.0W 240°	36.0	58	20.09	0.00	0.00	0.00	0	0	6.8	Member			
D SOL - 5/8" SOLID	4.18	1.2D + 1.0W 210°	36.0	58	9.94	0.00	0.00	0.00	0	0	42.1	Member			
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type									

Section 10 – 140.0' to 160.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Φc Pn (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls	
	X			Y	Z	ΦRnv (kip)			ΦRn (kip)						
L SOL - 2" SOLID	-33.03	1.2D + 1.0W 90°	3.891	100	100	100	93.38	50.00	74.73	0.00	0.00	0	0	44.2	Member X
H SAU - 2X1.5X0.1875	-0.87	1.2D + 1.0W 330°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	5.5	Member Z
D SOL - 5/8" SOLID	-1.67	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0.00	0	0	0	Member X
Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear	# Bolt	# Hole	Use %	Controls			
	Φt Pn (kip)														
L SOL - 2" SOLID	3.54	1.2D + 1.0W 240°	50.0	65	141.37	0.00	0.00		0	0	2.5	Member			
H SAU - 2X1.5X0.1875	1.61	1.2D + 1.0W 240°	36.0	58	20.09	0.00	0.00	0.00	0	0	8	Member			
D SOL - 5/8" SOLID	2.35	1.2D + 1.0W 330°	36.0	58	9.94	0.00	0.00	0.00	0	0	23.7	Member			
Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type									

Section 11 – 160.0' to 180.00'

Member Compression	P _u (kip)	Load Case	Len (ft)	Bracing %			K _L /R	F _y (ksi)	Φ _c P _n	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
	X			Y	Z										
L SOL - 2" SOLID	-32.93	1.2D + 1.0W 90°	3.891	100	100	100	93.38	50.00	74.73	0.00	0.00	0	0	44.1	Member X
D SOL - 5/8" SOLID	-0.41	1.2D + 1.0W N	5.58	50	50	50	193.16	36.00	1.86	0.00	0.00	0	0	0	Member X
Member Tension	P _u (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
L SOL - 2" SOLID	4.10	1.2D + 1.0W 240°	50.0	65	141.37	0.00	0.00		0	0	2.9	Member			
H SAU - 2X1.5X0.1875	1.76	1.2D + 1.0W 90°	36.0	58	20.09	0.00	0.00	0.00	0	0	8.8	Member			
D SOL - 5/8" SOLID	0.44	1.2D + 1.0W 90°	36.0	58	9.94	0.00	0.00	0.00	0	0	4.5	Member			
Max Splice Forces	P _u (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type									

Section 12 – 180.0' to 195.90'

	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Member Compression				X	Y	Z	KL/R							
L SOL - 2" SOLID	-38.61	1.2D + 1.0W 60°	3.907	100	100	100	93.76	50.00	74.34	0.00	0	0	51.9	Member X
H SAU - 2X1.5X0.1875	-4.46	1.2D + 1.0W 330°	4	100	100	100	96.89	36.00	15.73	0.00	0	0	28.4	Member Z
D SOL - 5/8" SOLID	-0.73	1.2D + 1.0W N	5.591	50	50	50	193.54	36.00	1.85	0.00	0	0	0	Member X

CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H

PROJECT: 14863653 C3 03

FORCE/STRESS SUMMARY

Section 13 – 195.9' to 200.00'

	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls	
Member Compression				X	Y	Z	KL/R								
L SOL - 2" SOLID	-38.87	1.2D + 1.0W 60°	3.827	50	50	50	45.92	50.00	121.17	0.00	0.00	0	0	32.1	Member X
H SAU - 2X1.5X0.1875	-0.40	1.2D + 1.0W 60°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	2.6	Member Z
D SOL - 5/8" SOLID	-0.86	1.2D + 1.0W N	5.536	50	50	50	191.62	36.00	1.89	0.00	0.00	0	0	0	Member X
	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
Member Tension															
L SOL - 2" SOLID	25.67	1.2D + 1.0W 120°	50.0	65	141.37	0.00	0.00		0	0	18.2	Member			
H SAU - 2X1.5X0.1875	1.01	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	5	Member			
D SOL - 5/8" SOLID	0.80	1.2D + 1.0W 120°	36.0	58	19.88	0.00	0.00	0.00	0	0	4	User Input			
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type									

Section 14 – 200.0' to 220.00'

														Shear	Bear		
	Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Φ _c P _n (kip)	ΦR _{nv} (kip)	ΦR _n (kip)	# Bolt	# Hole	Use %	Controls			
Member Compression				X	Y	Z	KL/R										
L SOL - 2" SOLID	-41.02	1.2D + 1.0W 60°	3.891	50	50	50	46.69	50.00	120.54	0.00	0.00	0	0	34	Member X		
H SAU - 2X1.5X0.1875	-0.92	1.2D + 1.0W 60°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	5.8	Member Z		
D SOL - 3/4" SOLID	-0.65	1.2D + 1.0W N	5.58	50	50	50	160.71	36.00	3.86	0.00	0.00	0	0	0	Member X		
														Blk Shear			
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls					
L SOL - 2" SOLID	27.19	1.2D + 1.0W 120°	50.0	65	141.37	0.00	0.00		0	0	19.2	Member					
H SAU - 2X1.5X0.1875	2.51	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	12.5	Member					
D SOL - 3/4" SOLID	1.28	1.2D + 1.0W 120°	36.0	58	14.31	0.00	0.00	0.00	0	0	9	Member					
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type											

Section 15 – 220.0' to 224.10'

Member Compression										Shear	Bear				
	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	ΦR _{nv} (kip)	ΦR _n (kip)	# Bolt	# Hole	Use %	Controls	
				X	Y	Z	KL/R								
L SOL - 2" SOLID	-29.34	1.2D + 1.0W 60°	3.827	50	50	50	45.92	50.00	121.17	0.00	0.00	0	24.2	Member X	
H SAU - 2X1.5X0.1875	-0.43	1.2D + 1.0W 60°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	2.7	Member Z	
D SOL - 3/4" SOLID	-0.94	1.2D + 1.0W N	5.536	50	50	50	159.43	36.00	3.93	0.00	0.00	0	0	Member X	
Member Tension										Blk Shear	#	#	Use %	Controls	
	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)		Bolt	Hole				
L SOL - 2" SOLID	16.62	1.2D + 1.0W 120°	50.0	65	141.37	0.00	0.00			0	0	11.8	Member		
H SAU - 2X1.5X0.1875	1.27	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00		0	0	6.3	Member		
D SOL - 3/4" SOLID	1.42	1.2D + 1.0W 120°	36.0	58	14.31	0.00	0.00	0.00		0	0	9.9	Member		
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Nom Bolts	Bolt Type									

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

FORCE/STRESS SUMMARY

Section 16 – 224.1' to 240.00'

														Shear	Bear				
														ΦR_{nv}	ΦR_n	#	#	Use	Controls
														(kip)	(kip)	Bolt	Hole	%	
Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			KL/R	F _y (ksi)	$\Phi_c P_n$ (kip)										
				X	Y	Z													
L SOL - 2" SOLID	-25.88	1.2D + 1.0W 60°	3.907	100	100	100	93.76	50.00	74.34	0.00	0.00	0	0	34.8	Member X				
D SOL - 3/4" SOLID	-0.84	1.2D + 1.0W N	5.591	50	50	50	161.03	36.00	3.85	0.00	0.00	0	0	0	Member X				
														Blk Shear					
														$\Phi_t P_n$					
														(kip)		#	#	Use	Controls
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	$\Phi_c P_n$ (kip)		Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)											
L SOL - 2" SOLID	10.68	1.2D + 1.0W 120°	50.0	65	141.37		0.00	0.00					0		7.6				
H SAU - 2X1.5X0.1875	1.19	1.2D + 1.0W 120°	36.0	58	20.09		0.00	0.00	0.00		0		0		5.9				
D SOL - 3/4" SOLID	1.61	1.2D + 1.0W 330°	36.0	58	14.31		0.00	0.00	0.00		0		0		11.2				
														ΦR_{nt}	Use	Num			
														(kip)	%	Bolts	Bolt Type		
Max Splice Forces	Pu (kip)	Load Case																	

Section 17 – 240.0' to 245.00'

															Shear	Bear
															ΦR_{nv}	ΦR_n
															#	#
															Bolt	Hole
															Use	Controls
															%	
Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			KL/R	F _y (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	# Bolt	# Hole	Use %	Controls	
L SOL - 2" SOLID	-2.15	1.2D + 1.0W 240°	4.454	100	Y	Z	106.90	50.00	61.31	0.00	0.00	0	0	3.5	Member X	
H SAU - 2X1.5X0.1875	-0.32	1.2D + 1.0W 300°	4	100	100	100	96.89	36.00	15.73	0.00	0.00	0	0	2.1	Member Z	
D SOL - 3/4" SOLID	-0.92	1.2D + 1.0W N	5.987	50	50	50	172.41	36.00	3.36	0.00	0.00	0	0	0	Member X	
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls				
L SOL - 2" SOLID	1.70	1.2D + 1.0W 300°	50.0	65	141.37	0.00	0.00		0	0	1.2	Member X				
H SAU - 2X1.5X0.1875	0.88	1.2D + 1.0W 120°	36.0	58	20.09	0.00	0.00	0.00	0	0	4.4	Member Z				
D SOL - 3/4" SOLID	1.03	1.2D + 1.0W 90°	36.0	58	14.31	0.00	0.00	0.00	0	0	7.2	Member X				
Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type										

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W Normal	60.00	1/2 EHS	A1	24	16.14	0.43	3
		1/2 EHS	A1b	24a	16.14	6.09	38
		1/2 EHS	A1a	24b	16.14	6.09	38
	120.00	5/8 EHS	A1	45	25.44	0.2	1
		5/8 EHS	A1b	45a	25.44	10.87	43
		5/8 EHS	A1a	45b	25.44	10.87	43
	180.00	3/4 EHS	A1	66	34.98	0.62	2
		3/4 EHS	A1b	66a	34.98	14.35	41
		3/4 EHS	A1a	66b	34.98	14.35	41
	240.00	7/8 EHS	A1	87	47.82	2.51	5
		7/8 EHS	A1b	87a	47.82	14.56	30
		7/8 EHS	A1a	87b	47.82	14.56	30
1.2D + 1.0W 60°	60.00	1/2 EHS	A1	24	16.14	2.03	13
		1/2 EHS	A1b	24a	16.14	2.03	13
		1/2 EHS	A1a	24b	16.14	7.28	45
	120.00	5/8 EHS	A1	45	25.44	2.92	11
		5/8 EHS	A1b	45a	25.44	2.91	11
		5/8 EHS	A1a	45b	25.44	13.26	52
	180.00	3/4 EHS	A1	66	34.98	4.26	12
		3/4 EHS	A1b	66a	34.98	4.26	12
		3/4 EHS	A1a	66b	34.98	18.66	53
	240.00	7/8 EHS	A1	87	47.82	7.26	15
		7/8 EHS	A1b	87a	47.82	7.27	15
		7/8 EHS	A1a	87b	47.82	18.33	38
1.2D + 1.0W 90°	60.00	1/2 EHS	A1	24	16.14	4.09	25
		1/2 EHS	A1b	24a	16.14	0.67	4
		1/2 EHS	A1a	24b	16.14	7.03	44
	120.00	5/8 EHS	A1	45	25.44	6.87	27
		5/8 EHS	A1b	45a	25.44	0.91	4
		5/8 EHS	A1a	45b	25.44	12.93	51
	180.00	3/4 EHS	A1	66	34.98	9.13	26
		3/4 EHS	A1b	66a	34.98	1.67	5
		3/4 EHS	A1a	66b	34.98	17.72	51
	240.00	7/8 EHS	A1	87	47.82	11.1	23
		7/8 EHS	A1b	87a	47.82	4.01	8
		7/8 EHS	A1a	87b	47.82	17.35	36
1.2D + 1.0W 120°	60.00	1/2 EHS	A1	24	16.14	6.1	38
		1/2 EHS	A1b	24a	16.14	0.43	3
		1/2 EHS	A1a	24b	16.14	6.11	38
	120.00	5/8 EHS	A1	45	25.44	10.9	43
		5/8 EHS	A1b	45a	25.44	0.2	1
		5/8 EHS	A1a	45b	25.44	10.89	43
	180.00	3/4 EHS	A1	66	34.98	14.38	41
		3/4 EHS	A1b	66a	34.98	0.62	2
		3/4 EHS	A1a	66b	34.98	14.37	41
	240.00	7/8 EHS	A1	87	47.82	14.56	30
		7/8 EHS	A1b	87a	47.82	2.51	5
		7/8 EHS	A1a	87b	47.82	14.58	30
1.2D + 1.0W 180°	60.00	1/2 EHS	A1	24	16.14	7.27	45
		1/2 EHS	A1b	24a	16.14	2.03	13
		1/2 EHS	A1a	24b	16.14	2.03	13
	120.00	5/8 EHS	A1	45	25.44	13.24	52
		5/8 EHS	A1b	45a	25.44	2.92	11
		5/8 EHS	A1a	45b	25.44	2.92	11
	180.00	3/4 EHS	A1	66	34.98	18.63	53
		3/4 EHS	A1b	66a	34.98	4.27	12
		3/4 EHS	A1a	66b	34.98	4.27	12
	240.00	7/8 EHS	A1	87	47.82	18.32	38
		7/8 EHS	A1b	87a	47.82	7.27	15

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W 210°	60.00	7/8 EHS	A1a	87b	47.82	7.27	15
		1/2 EHS	A1	24	16.14	7.02	44
		1/2 EHS	A1b	24a	16.14	4.09	25
	120.00	1/2 EHS	A1a	24b	16.14	0.67	4
		5/8 EHS	A1	45	25.44	12.92	51
		5/8 EHS	A1b	45a	25.44	6.86	27
	180.00	5/8 EHS	A1a	45b	25.44	0.91	4
		3/4 EHS	A1	66	34.98	17.74	51
		3/4 EHS	A1b	66a	34.98	9.13	26
	240.00	3/4 EHS	A1a	66b	34.98	1.66	5
		7/8 EHS	A1	87	47.82	17.33	36
		7/8 EHS	A1b	87a	47.82	11.1	23
	240.00	7/8 EHS	A1a	87b	47.82	4.01	8
		1/2 EHS	A1	24	16.14	6.1	38
		1/2 EHS	A1b	24a	16.14	6.11	38
1.2D + 1.0W 240°	60.00	1/2 EHS	A1a	24b	16.14	0.43	3
		5/8 EHS	A1	45	25.44	10.9	43
		5/8 EHS	A1b	45a	25.44	10.89	43
	120.00	5/8 EHS	A1a	45b	25.44	0.2	1
		3/4 EHS	A1	66	34.98	14.38	41
		3/4 EHS	A1b	66a	34.98	14.37	41
	180.00	3/4 EHS	A1a	66b	34.98	0.62	2
		7/8 EHS	A1	87	47.82	14.56	30
		7/8 EHS	A1b	87a	47.82	14.57	30
	240.00	7/8 EHS	A1a	87b	47.82	2.51	5
		1/2 EHS	A1	24	16.14	2.03	13
		1/2 EHS	A1b	24a	16.14	7.28	45
	120.00	1/2 EHS	A1a	24b	16.14	2.03	13
		5/8 EHS	A1	45	25.44	2.92	11
		5/8 EHS	A1b	45a	25.44	13.26	52
1.2D + 1.0W 300°	60.00	5/8 EHS	A1a	45b	25.44	2.91	11
		3/4 EHS	A1	66	34.98	4.26	12
		3/4 EHS	A1b	66a	34.98	18.66	53
	120.00	3/4 EHS	A1a	66b	34.98	4.26	12
		7/8 EHS	A1	87	47.82	7.26	15
		7/8 EHS	A1b	87a	47.82	18.33	38
	180.00	7/8 EHS	A1a	87b	47.82	7.27	15
		1/2 EHS	A1	24	16.14	0.67	4
		1/2 EHS	A1b	24a	16.14	7.02	44
	240.00	1/2 EHS	A1a	24b	16.14	4.09	25
		5/8 EHS	A1	45	25.44	0.91	4
		5/8 EHS	A1b	45a	25.44	12.92	51
	120.00	5/8 EHS	A1a	45b	25.44	6.86	27
		3/4 EHS	A1	66	34.98	1.66	5
		3/4 EHS	A1b	66a	34.98	17.74	51
1.2D + 1.0W 330°	60.00	3/4 EHS	A1a	66b	34.98	9.12	26
		7/8 EHS	A1	87	47.82	4	8
		7/8 EHS	A1b	87a	47.82	17.33	36
	120.00	7/8 EHS	A1a	87b	47.82	11.11	23
		1/2 EHS	A1	24	16.14	2.99	19
		1/2 EHS	A1b	24a	16.14	3.34	21
	180.00	1/2 EHS	A1a	24b	16.14	3.34	21
		5/8 EHS	A1	45	25.44	4.28	17
		5/8 EHS	A1b	45a	25.44	4.94	19
	240.00	5/8 EHS	A1a	45b	25.44	4.94	19
		3/4 EHS	A1	66	34.98	5.47	16
		3/4 EHS	A1b	66a	34.98	6.36	18
	240.00	3/4 EHS	A1a	66b	34.98	6.36	18
		7/8 EHS	A1	87	47.82	7.53	16
		1/2 EHS	A1	24	16.14	2.99	19
1.2D + 1.0Di + 1.0Wi Normal	60.00	1/2 EHS	A1b	24a	16.14	3.34	21
		1/2 EHS	A1a	24b	16.14	3.34	21
		5/8 EHS	A1	45	25.44	4.28	17
	120.00	5/8 EHS	A1b	45a	25.44	4.94	19
		5/8 EHS	A1a	45b	25.44	4.94	19
		3/4 EHS	A1	66	34.98	5.47	16
	180.00	3/4 EHS	A1b	66a	34.98	6.36	18
		3/4 EHS	A1a	66b	34.98	6.36	18
		7/8 EHS	A1	87	47.82	7.53	16
	240.00	7/8 EHS	A1b	87a	47.82	17.33	36
		7/8 EHS	A1a	87b	47.82	11.11	23
		1/2 EHS	A1	24	16.14	2.99	19
	120.00	1/2 EHS	A1b	24a	16.14	3.34	21
		1/2 EHS	A1a	24b	16.14	3.34	21
		5/8 EHS	A1	45	25.44	4.28	17

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0Di + 1.0Wi 60°	60.00	7/8 EHS	A1b	87a	47.82	8.2	17
		7/8 EHS	A1a	87b	47.82	8.2	17
		1/2 EHS	A1	24	16.14	3.11	19
	120.00	1/2 EHS	A1b	24a	16.14	3.11	19
		1/2 EHS	A1a	24b	16.14	3.43	21
		5/8 EHS	A1	45	25.44	4.5	18
	180.00	5/8 EHS	A1b	45a	25.44	4.5	18
		5/8 EHS	A1a	45b	25.44	5.11	20
		3/4 EHS	A1	66	34.98	5.76	16
	240.00	3/4 EHS	A1b	66a	34.98	5.76	16
		3/4 EHS	A1a	66b	34.98	6.61	19
		7/8 EHS	A1	87	47.82	7.74	16
	240.00	7/8 EHS	A1b	87a	47.82	7.75	16
		7/8 EHS	A1a	87b	47.82	8.38	18
1.2D + 1.0Di + 1.0Wi 90°	60.00	1/2 EHS	A1	24	16.14	3.22	20
		1/2 EHS	A1b	24a	16.14	3.02	19
		1/2 EHS	A1a	24b	16.14	3.41	21
	120.00	5/8 EHS	A1	45	25.44	4.71	19
		5/8 EHS	A1b	45a	25.44	4.34	17
		5/8 EHS	A1a	45b	25.44	5.08	20
	180.00	3/4 EHS	A1	66	34.98	6.06	17
		3/4 EHS	A1b	66a	34.98	5.55	16
		3/4 EHS	A1a	66b	34.98	6.56	19
	240.00	7/8 EHS	A1	87	47.82	7.96	17
		7/8 EHS	A1b	87a	47.82	7.59	16
		7/8 EHS	A1a	87b	47.82	8.35	17
1.2D + 1.0Di + 1.0Wi 120°	60.00	1/2 EHS	A1	24	16.14	3.34	21
		1/2 EHS	A1b	24a	16.14	2.99	19
		1/2 EHS	A1a	24b	16.14	3.34	21
	120.00	5/8 EHS	A1	45	25.44	4.94	19
		5/8 EHS	A1b	45a	25.44	4.28	17
		5/8 EHS	A1a	45b	25.44	4.94	19
	180.00	3/4 EHS	A1	66	34.98	6.36	18
		3/4 EHS	A1b	66a	34.98	5.47	16
		3/4 EHS	A1a	66b	34.98	6.36	18
	240.00	7/8 EHS	A1	87	47.82	8.2	17
		7/8 EHS	A1b	87a	47.82	7.53	16
		7/8 EHS	A1a	87b	47.82	8.2	17
1.2D + 1.0Di + 1.0Wi 180°	60.00	1/2 EHS	A1	24	16.14	3.44	21
		1/2 EHS	A1b	24a	16.14	3.1	19
		1/2 EHS	A1a	24b	16.14	3.1	19
	120.00	5/8 EHS	A1	45	25.44	5.13	20
		5/8 EHS	A1b	45a	25.44	4.49	18
		5/8 EHS	A1a	45b	25.44	4.49	18
	180.00	3/4 EHS	A1	66	34.98	6.63	19
		3/4 EHS	A1b	66a	34.98	5.75	16
		3/4 EHS	A1a	66b	34.98	5.75	16
	240.00	7/8 EHS	A1	87	47.82	8.39	18
		7/8 EHS	A1b	87a	47.82	7.74	16
		7/8 EHS	A1a	87b	47.82	7.74	16
1.2D + 1.0Di + 1.0Wi 210°	60.00	1/2 EHS	A1	24	16.14	3.4	21
		1/2 EHS	A1b	24a	16.14	3.22	20
		1/2 EHS	A1a	24b	16.14	3.03	19
	120.00	5/8 EHS	A1	45	25.44	5.07	20
		5/8 EHS	A1b	45a	25.44	4.71	19
		5/8 EHS	A1a	45b	25.44	4.36	17
	180.00	3/4 EHS	A1	66	34.98	6.55	19
		3/4 EHS	A1b	66a	34.98	6.06	17
		3/4 EHS	A1a	66b	34.98	5.56	16

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0Di + 1.0Wi 240°	240.00	7/8 EHS	A1	87	47.82	8.33	17
		7/8 EHS	A1b	87a	47.82	7.97	17
		7/8 EHS	A1a	87b	47.82	7.6	16
	60.00	1/2 EHS	A1	24	16.14	3.34	21
		1/2 EHS	A1b	24a	16.14	3.34	21
		1/2 EHS	A1a	24b	16.14	2.99	19
	120.00	5/8 EHS	A1	45	25.44	4.94	19
		5/8 EHS	A1b	45a	25.44	4.94	19
		5/8 EHS	A1a	45b	25.44	4.28	17
	180.00	3/4 EHS	A1	66	34.98	6.36	18
		3/4 EHS	A1b	66a	34.98	6.36	18
		3/4 EHS	A1a	66b	34.98	5.47	16
1.2D + 1.0Di + 1.0Wi 300°	240.00	7/8 EHS	A1	87	47.82	8.2	17
		7/8 EHS	A1b	87a	47.82	8.2	17
		7/8 EHS	A1a	87b	47.82	7.53	16
	60.00	1/2 EHS	A1	24	16.14	3.11	19
		1/2 EHS	A1b	24a	16.14	3.43	21
		1/2 EHS	A1a	24b	16.14	3.11	19
	120.00	5/8 EHS	A1	45	25.44	4.5	18
		5/8 EHS	A1b	45a	25.44	5.11	20
		5/8 EHS	A1a	45b	25.44	4.5	18
	180.00	3/4 EHS	A1	66	34.98	5.76	16
		3/4 EHS	A1b	66a	34.98	6.61	19
		3/4 EHS	A1a	66b	34.98	5.76	16
1.2D + 1.0Di + 1.0Wi 330°	240.00	7/8 EHS	A1	87	47.82	7.74	16
		7/8 EHS	A1b	87a	47.82	8.38	18
		7/8 EHS	A1a	87b	47.82	7.75	16
	60.00	1/2 EHS	A1	24	16.14	3.03	19
		1/2 EHS	A1b	24a	16.14	3.4	21
		1/2 EHS	A1a	24b	16.14	3.22	20
	120.00	5/8 EHS	A1	45	25.44	4.36	17
		5/8 EHS	A1b	45a	25.44	5.07	20
		5/8 EHS	A1a	45b	25.44	4.71	19
	180.00	3/4 EHS	A1	66	34.98	5.56	16
		3/4 EHS	A1b	66a	34.98	6.55	19
		3/4 EHS	A1a	66b	34.98	6.06	17
1.2D + 1.0Ev + 1.0Eh Normal	240.00	7/8 EHS	A1	87	47.82	7.59	16
		7/8 EHS	A1b	87a	47.82	8.34	17
		7/8 EHS	A1a	87b	47.82	7.97	17
	60.00	1/2 EHS	A1	24	16.14	2.61	16
		1/2 EHS	A1b	24a	16.14	2.66	16
		1/2 EHS	A1a	24b	16.14	2.66	16
	120.00	5/8 EHS	A1	45	25.44	3.87	15
		5/8 EHS	A1b	45a	25.44	4.07	16
		5/8 EHS	A1a	45b	25.44	4.07	16
	180.00	3/4 EHS	A1	66	34.98	5.04	14
		3/4 EHS	A1b	66a	34.98	5.48	16
		3/4 EHS	A1a	66b	34.98	5.48	16
1.2D + 1.0Ev + 1.0Eh 60°	240.00	7/8 EHS	A1	87	47.82	6.89	14
		7/8 EHS	A1b	87a	47.82	7.41	16
		7/8 EHS	A1a	87b	47.82	7.41	16
	60.00	1/2 EHS	A1	24	16.14	2.63	16
		1/2 EHS	A1b	24a	16.14	2.63	16
		1/2 EHS	A1a	24b	16.14	2.68	17
	120.00	5/8 EHS	A1	45	25.44	3.94	15
		5/8 EHS	A1b	45a	25.44	3.94	15
		5/8 EHS	A1a	45b	25.44	4.14	16
	180.00	3/4 EHS	A1	66	34.98	5.19	15
		3/4 EHS	A1b	66a	34.98	5.19	15
		3/4 EHS	A1a	66a	34.98	5.19	15

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0Ev + 1.0Eh 90°	240.00	3/4 EHS	A1a	66b	34.98	5.63	16
		7/8 EHS	A1	87	47.82	7.07	15
		7/8 EHS	A1b	87a	47.82	7.07	15
	60.00	7/8 EHS	A1a	87b	47.82	7.59	16
		1/2 EHS	A1	24	16.14	2.64	16
		1/2 EHS	A1b	24a	16.14	2.61	16
	120.00	1/2 EHS	A1a	24b	16.14	2.67	17
		5/8 EHS	A1	45	25.44	4	16
		5/8 EHS	A1b	45a	25.44	3.89	15
	180.00	5/8 EHS	A1a	45b	25.44	4.12	16
		3/4 EHS	A1	66	34.98	5.33	15
		3/4 EHS	A1b	66a	34.98	5.08	15
1.2D + 1.0Ev + 1.0Eh 120°	240.00	3/4 EHS	A1a	66b	34.98	5.59	16
		7/8 EHS	A1	87	47.82	7.24	15
		7/8 EHS	A1b	87a	47.82	6.94	15
	60.00	7/8 EHS	A1a	87b	47.82	7.54	16
		1/2 EHS	A1	24	16.14	2.66	16
		1/2 EHS	A1b	24a	16.14	2.61	16
	120.00	1/2 EHS	A1a	24b	16.14	2.66	16
		5/8 EHS	A1	45	25.44	4.07	16
		5/8 EHS	A1b	45a	25.44	3.87	15
	180.00	5/8 EHS	A1a	45b	25.44	4.07	16
		3/4 EHS	A1	66	34.98	5.48	16
		3/4 EHS	A1b	66a	34.98	5.04	14
1.2D + 1.0Ev + 1.0Eh 180°	240.00	3/4 EHS	A1a	66b	34.98	5.48	16
		7/8 EHS	A1	87	47.82	7.41	16
		7/8 EHS	A1b	87a	47.82	6.89	14
	60.00	7/8 EHS	A1a	87b	47.82	7.41	16
		1/2 EHS	A1	24	16.14	2.68	17
		1/2 EHS	A1b	24a	16.14	2.63	16
	120.00	1/2 EHS	A1a	24b	16.14	2.63	16
		5/8 EHS	A1	45	25.44	4.14	16
		5/8 EHS	A1b	45a	25.44	3.94	15
	180.00	5/8 EHS	A1a	45b	25.44	3.94	15
		3/4 EHS	A1	66	34.98	5.63	16
		3/4 EHS	A1b	66a	34.98	5.19	15
1.2D + 1.0Ev + 1.0Eh 210°	240.00	3/4 EHS	A1a	66b	34.98	5.19	15
		7/8 EHS	A1	87	47.82	7.59	16
		7/8 EHS	A1b	87a	47.82	7.07	15
	60.00	7/8 EHS	A1a	87b	47.82	7.07	15
		1/2 EHS	A1	24	16.14	2.67	17
		1/2 EHS	A1b	24a	16.14	2.64	16
	120.00	1/2 EHS	A1a	24b	16.14	2.61	16
		5/8 EHS	A1	45	25.44	4.12	16
		5/8 EHS	A1b	45a	25.44	4	16
	180.00	5/8 EHS	A1a	45b	25.44	3.89	15
		3/4 EHS	A1	66	34.98	5.59	16
		3/4 EHS	A1b	66a	34.98	5.33	15
1.2D + 1.0Ev + 1.0Eh 240°	240.00	3/4 EHS	A1a	66b	34.98	5.08	15
		7/8 EHS	A1	87	47.82	7.54	16
		7/8 EHS	A1b	87a	47.82	7.24	15
	60.00	7/8 EHS	A1a	87b	47.82	6.94	15
		1/2 EHS	A1	24	16.14	2.66	16
		1/2 EHS	A1b	24a	16.14	2.66	16
	120.00	1/2 EHS	A1a	24b	16.14	2.61	16
		5/8 EHS	A1	45	25.44	4.07	16
		5/8 EHS	A1b	45a	25.44	4.07	16
	180.00	5/8 EHS	A1a	45b	25.44	3.87	15
		3/4 EHS	A1	66	34.98	5.48	16
		3/4 EHS	A1b	66a	34.98	5.33	15

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0Ev + 1.0Eh 300°	240.00	3/4 EHS	A1b	66a	34.98	5.48	16
		3/4 EHS	A1a	66b	34.98	5.04	14
		7/8 EHS	A1	87	47.82	7.41	16
		7/8 EHS	A1b	87a	47.82	7.41	16
		7/8 EHS	A1a	87b	47.82	6.89	14
	60.00	1/2 EHS	A1	24	16.14	2.63	16
		1/2 EHS	A1b	24a	16.14	2.68	17
		1/2 EHS	A1a	24b	16.14	2.63	16
		5/8 EHS	A1	45	25.44	3.94	15
		5/8 EHS	A1b	45a	25.44	4.14	16
	120.00	5/8 EHS	A1a	45b	25.44	3.94	15
		3/4 EHS	A1	66	34.98	5.19	15
		3/4 EHS	A1b	66a	34.98	5.63	16
		3/4 EHS	A1a	66b	34.98	5.19	15
		7/8 EHS	A1	87	47.82	7.07	15
1.2D + 1.0Ev + 1.0Eh 330°	240.00	7/8 EHS	A1b	87a	47.82	7.59	16
		7/8 EHS	A1a	87b	47.82	7.07	15
		1/2 EHS	A1	24	16.14	2.61	16
		1/2 EHS	A1b	24a	16.14	2.67	17
		1/2 EHS	A1a	24b	16.14	2.64	16
	120.00	5/8 EHS	A1	45	25.44	3.89	15
		5/8 EHS	A1b	45a	25.44	4.12	16
		5/8 EHS	A1a	45b	25.44	4	16
		3/4 EHS	A1	66	34.98	5.08	15
		3/4 EHS	A1b	66a	34.98	5.59	16
	180.00	3/4 EHS	A1a	66b	34.98	5.33	15
		7/8 EHS	A1	87	47.82	6.94	15
		7/8 EHS	A1b	87a	47.82	7.54	16
		7/8 EHS	A1a	87b	47.82	7.24	15
		1/2 EHS	A1	24	16.14	1.84	11
1.0D + 1.0W Service Normal	240.00	1/2 EHS	A1b	24a	16.14	3.15	20
		1/2 EHS	A1a	24b	16.14	3.15	20
		5/8 EHS	A1	45	25.44	2.46	10
		5/8 EHS	A1b	45a	25.44	4.99	20
		5/8 EHS	A1a	45b	25.44	4.99	20
	180.00	3/4 EHS	A1	66	34.98	3.15	9
		3/4 EHS	A1b	66a	34.98	6.7	19
		3/4 EHS	A1a	66b	34.98	6.7	19
		7/8 EHS	A1	87	47.82	5.62	12
		7/8 EHS	A1b	87a	47.82	8.4	18
	60.00	7/8 EHS	A1a	87b	47.82	8.4	18
		1/2 EHS	A1	24	16.14	2.28	14
		1/2 EHS	A1b	24a	16.14	2.27	14
		1/2 EHS	A1a	24b	16.14	3.54	22
		5/8 EHS	A1	45	25.44	3.28	13
1.0D + 1.0W Service 60°	120.00	5/8 EHS	A1b	45a	25.44	3.28	13
		5/8 EHS	A1a	45b	25.44	5.8	23
		3/4 EHS	A1	66	34.98	4.36	12
		3/4 EHS	A1b	66a	34.98	4.36	12
		3/4 EHS	A1a	66b	34.98	7.88	23
	240.00	7/8 EHS	A1	87	47.82	6.58	14
		7/8 EHS	A1b	87a	47.82	6.58	14
		7/8 EHS	A1a	87b	47.82	9.3	19
		1/2 EHS	A1	24	16.14	2.71	17
		1/2 EHS	A1b	24a	16.14	1.95	12
1.0D + 1.0W Service 90°	60.00	1/2 EHS	A1a	24b	16.14	3.45	21
		5/8 EHS	A1	45	25.44	4.12	16
		5/8 EHS	A1b	45a	25.44	2.66	10
		5/8 EHS	A1a	45b	25.44	5.59	22
		5/8 EHS	A1a	45b	25.44	5.59	22

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.0D + 1.0W Service 120°	180.00	3/4 EHS	A1	66	34.98	5.51	16
		3/4 EHS	A1b	66a	34.98	3.47	10
		3/4 EHS	A1a	66b	34.98	7.57	22
	240.00	7/8 EHS	A1	87	47.82	7.49	16
		7/8 EHS	A1b	87a	47.82	5.89	12
		7/8 EHS	A1a	87b	47.82	9.07	19
	60.00	1/2 EHS	A1	24	16.14	3.16	20
		1/2 EHS	A1b	24a	16.14	1.83	11
		1/2 EHS	A1a	24b	16.14	3.16	20
	120.00	5/8 EHS	A1	45	25.44	5	20
		5/8 EHS	A1b	45a	25.44	2.44	10
		5/8 EHS	A1a	45b	25.44	5	20
	180.00	3/4 EHS	A1	66	34.98	6.71	19
		3/4 EHS	A1b	66a	34.98	3.13	9
		3/4 EHS	A1a	66b	34.98	6.71	19
	240.00	7/8 EHS	A1	87	47.82	8.41	18
		7/8 EHS	A1b	87a	47.82	5.62	12
		7/8 EHS	A1a	87b	47.82	8.41	18
1.0D + 1.0W Service 180°	60.00	1/2 EHS	A1	24	16.14	3.53	22
		1/2 EHS	A1b	24a	16.14	2.28	14
		1/2 EHS	A1a	24b	16.14	2.28	14
	120.00	5/8 EHS	A1	45	25.44	5.78	23
		5/8 EHS	A1b	45a	25.44	3.29	13
		5/8 EHS	A1a	45b	25.44	3.29	13
	180.00	3/4 EHS	A1	66	34.98	7.86	22
		3/4 EHS	A1b	66a	34.98	4.37	12
		3/4 EHS	A1a	66b	34.98	4.37	12
	240.00	7/8 EHS	A1	87	47.82	9.28	19
		7/8 EHS	A1b	87a	47.82	6.59	14
		7/8 EHS	A1a	87b	47.82	6.59	14
1.0D + 1.0W Service 210°	60.00	1/2 EHS	A1	24	16.14	3.43	21
		1/2 EHS	A1b	24a	16.14	2.71	17
		1/2 EHS	A1a	24b	16.14	1.96	12
	120.00	5/8 EHS	A1	45	25.44	5.57	22
		5/8 EHS	A1b	45a	25.44	4.11	16
		5/8 EHS	A1a	45b	25.44	2.69	11
	180.00	3/4 EHS	A1	66	34.98	7.54	22
		3/4 EHS	A1b	66a	34.98	5.51	16
		3/4 EHS	A1a	66b	34.98	3.5	10
	240.00	7/8 EHS	A1	87	47.82	9.05	19
		7/8 EHS	A1b	87a	47.82	7.49	16
		7/8 EHS	A1a	87b	47.82	5.91	12
1.0D + 1.0W Service 240°	60.00	1/2 EHS	A1	24	16.14	3.16	20
		1/2 EHS	A1b	24a	16.14	3.16	20
		1/2 EHS	A1a	24b	16.14	1.83	11
	120.00	5/8 EHS	A1	45	25.44	5	20
		5/8 EHS	A1b	45a	25.44	5	20
		5/8 EHS	A1a	45b	25.44	2.44	10
	180.00	3/4 EHS	A1	66	34.98	6.71	19
		3/4 EHS	A1b	66a	34.98	6.71	19
		3/4 EHS	A1a	66b	34.98	3.13	9
	240.00	7/8 EHS	A1	87	47.82	8.41	18
		7/8 EHS	A1b	87a	47.82	8.41	18
		7/8 EHS	A1a	87b	47.82	5.62	12
1.0D + 1.0W Service 300°	60.00	1/2 EHS	A1	24	16.14	2.28	14
		1/2 EHS	A1b	24a	16.14	3.54	22
		1/2 EHS	A1a	24b	16.14	2.27	14
	120.00	5/8 EHS	A1	45	25.44	3.28	13
		5/8 EHS	A1b	45a	25.44	5.8	23
		5/8 EHS	A1a	45a	25.44	5.8	23

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED CABLE FORCES							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
	180.00	5/8 EHS	A1a	45b	25.44	3.28	13
		3/4 EHS	A1	66	34.98	4.36	12
		3/4 EHS	A1b	66a	34.98	7.88	23
		3/4 EHS	A1a	66b	34.98	4.36	12
	240.00	7/8 EHS	A1	87	47.82	6.58	14
		7/8 EHS	A1b	87a	47.82	9.3	19
		7/8 EHS	A1a	87b	47.82	6.58	14
		1/2 EHS	A1	24	16.14	1.96	12
	60.00	1/2 EHS	A1b	24a	16.14	3.43	21
		1/2 EHS	A1a	24b	16.14	2.71	17
		5/8 EHS	A1	45	25.44	2.69	11
		5/8 EHS	A1b	45a	25.44	5.57	22
1.0D + 1.0W Service 330°	120.00	5/8 EHS	A1a	45b	25.44	4.11	16
		3/4 EHS	A1	66	34.98	3.5	10
		3/4 EHS	A1b	66a	34.98	7.54	22
		3/4 EHS	A1a	66b	34.98	5.51	16
	180.00	7/8 EHS	A1	87	47.82	5.91	12
		7/8 EHS	A1b	87a	47.82	9.05	19
		7/8 EHS	A1a	87b	47.82	7.49	16
	240.00	7/8 EHS	A1a	87b	47.82	7.49	16
		7/8 EHS	A1b	87a	47.82	9.05	19
		7/8 EHS	A1	87	47.82	5.91	12
		3/4 EHS	A1a	66b	34.98	5.51	16
		3/4 EHS	A1b	66a	34.98	7.54	22

MAXIMUM CABLE FORCES SUMMARY							
Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W 60°	60.00	1/2 EHS	A1a	24b	16.14	7.28	45
1.2D + 1.0W 60°	120.00	5/8 EHS	A1a	45b	25.44	13.26	52
1.2D + 1.0W 60°	180.00	3/4 EHS	A1a	66b	34.98	18.66	53
1.2D + 1.0W 60°	240.00	7/8 EHS	A1a	87b	47.82	18.33	38

MAXIMUM TORQUE ARM STRESS SUMMARY					
Load Case	Elevation (ft)	Member	Type	Compression (%)	Tension (%)
1.2D + 1.0W 240°	60.00	3X3X0.25	Horiz	0	6.6
1.2D + 1.0W 240°	120.00	3X3X0.25	Horiz	0	9.3
1.2D + 1.0W 240°	180.00	3X3X0.25	Horiz	0	10.6
1.2D + 1.0W 120°	240.00	3X3X0.25	Horiz	0	8.2

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

DEFLECTIONS AND ROTATIONS					
Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	151.95	0.1037	0.0002	0.0241	0.0241
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	171.95	0.1083	-0.0036	0.0059	0.0068
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	191.99	0.1096	-0.0081	0.0063	0.0103
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	204.16	0.106	-0.0070	0.0380	0.0387
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	245.00	0.06	-0.0036	0.0605	0.0606
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	151.95	0.1116	-0.0650	0.0282	0.0708
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	171.95	0.1179	-0.0722	0.0085	0.0727
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	191.99	0.1209	-0.0807	0.0016	0.0807
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	204.16	0.1182	-0.0791	0.0330	0.0854
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	245.00	0.0746	-0.0747	0.0570	0.0937
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	151.95	0.1065	-0.0565	0.0197	0.0599
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	171.95	0.1094	-0.0636	0.0037	0.0636
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	191.99	0.1085	-0.0719	0.0110	0.0727
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	204.16	0.1032	-0.0704	0.0455	0.0835
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	245.00	0.0498	-0.0661	0.0659	0.0933
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	151.95	0.1038	0.0031	0.0240	0.0242
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	171.95	0.1083	-0.0003	0.0057	0.0057
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	191.99	0.1095	-0.0044	0.0066	0.0078
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	204.16	0.1058	-0.0034	0.0383	0.0385
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	245.00	0.0597	0.0003	0.0606	0.0606
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	151.95	0.1082	0.0019	0.0275	0.0275
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	171.95	0.1142	0.0022	0.0079	0.0082
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	191.99	0.1169	0.0027	0.0013	0.003
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	204.16	0.1143	0.0029	0.0327	0.0328
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	245.00	0.0712	0.0023	0.0563	0.0563
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	151.95	0.1065	0.0584	0.0197	0.0616
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	171.95	0.1094	0.0657	0.0037	0.0657
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	191.99	0.1086	0.0743	0.0109	0.075
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	204.16	0.1033	0.0727	0.0454	0.0854
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	245.00	0.0499	0.0683	0.0659	0.0948
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	151.95	0.1165	0.2725	0.0245	0.2736
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	171.95	0.1213	0.2784	0.0062	0.2784
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	191.99	0.1227	0.2865	0.0072	0.2866
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	204.16	0.1188	0.2841	0.0389	0.2866
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	245.00	0.0716	0.2768	0.0619	0.2832
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	151.95	0.1115	0.0629	0.0282	0.0689
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	171.95	0.1178	0.0698	0.0085	0.0704
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	191.99	0.1208	0.0781	0.0017	0.0781
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	204.16	0.1181	0.0766	0.0329	0.083
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	245.00	0.0745	0.0723	0.0569	0.0918
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	151.95	0.1034	-0.0019	0.0192	0.0193
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	171.95	0.1061	-0.0022	0.0026	0.0033
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	191.99	0.1051	-0.0027	0.0101	0.0104
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	204.16	0.1	-0.0030	0.0447	0.0448
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	245.00	0.0473	-0.0022	0.0650	0.0651
1.2D + 1.0Ev + 1.0Eh 330° Seismic	151.95	0.0123	0.0000	0.0090	0.009
1.2D + 1.0Ev + 1.0Eh 330° Seismic	171.95	0.0152	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 330° Seismic	191.99	0.0181	0.0001	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 330° Seismic	204.16	0.0195	0.0001	0.0039	0.0039
1.2D + 1.0Ev + 1.0Eh 330° Seismic	245.00	0.0191	0.0001	0.0041	0.0041
1.2D + 1.0Ev + 1.0Eh 300° Seismic	151.95	0.0122	0.0000	0.0089	0.0089
1.2D + 1.0Ev + 1.0Eh 300° Seismic	171.95	0.0151	0.0000	0.0080	0.008
1.2D + 1.0Ev + 1.0Eh 300° Seismic	191.99	0.018	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 300° Seismic	204.16	0.0194	0.0001	0.0038	0.0038
1.2D + 1.0Ev + 1.0Eh 300° Seismic	245.00	0.019	0.0000	0.0042	0.0042
1.2D + 1.0Ev + 1.0Eh 240° Seismic	151.95	0.0123	0.0000	0.0091	0.0091
1.2D + 1.0Ev + 1.0Eh 240° Seismic	171.95	0.0153	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 240° Seismic	191.99	0.0182	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 240° Seismic	204.16	0.0196	0.0001	0.0039	0.0039

ASSET: 303048, Lacrosse FL 6

CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H

PROJECT: 14863653_C3_03

DEFLECTIONS AND ROTATIONS					
Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh 240° Seismic	245.00	0.0192	0.0000	0.0040	0.004
1.2D + 1.0Ev + 1.0Eh 210° Seismic	151.95	0.0123	0.0000	0.0090	0.009
1.2D + 1.0Ev + 1.0Eh 210° Seismic	171.95	0.0152	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 210° Seismic	191.99	0.0181	0.0001	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 210° Seismic	204.16	0.0195	0.0001	0.0039	0.0039
1.2D + 1.0Ev + 1.0Eh 210° Seismic	245.00	0.0191	0.0001	0.0041	0.0041
1.2D + 1.0Ev + 1.0Eh 180° Seismic	151.95	0.0122	0.0000	0.0089	0.0089
1.2D + 1.0Ev + 1.0Eh 180° Seismic	171.95	0.0151	0.0000	0.0080	0.008
1.2D + 1.0Ev + 1.0Eh 180° Seismic	191.99	0.018	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 180° Seismic	204.16	0.0194	0.0001	0.0038	0.0038
1.2D + 1.0Ev + 1.0Eh 180° Seismic	245.00	0.019	0.0000	0.0042	0.0042
1.2D + 1.0Ev + 1.0Eh 120° Seismic	151.95	0.0123	0.0000	0.0091	0.0091
1.2D + 1.0Ev + 1.0Eh 120° Seismic	171.95	0.0153	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 120° Seismic	191.99	0.0182	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 120° Seismic	204.16	0.0196	0.0001	0.0039	0.0039
1.2D + 1.0Ev + 1.0Eh 120° Seismic	245.00	0.0192	0.0000	0.0040	0.004
1.2D + 1.0Ev + 1.0Eh 90° Seismic	151.95	0.0123	0.0000	0.0090	0.009
1.2D + 1.0Ev + 1.0Eh 90° Seismic	171.95	0.0152	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 90° Seismic	191.99	0.0181	0.0001	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh 90° Seismic	204.16	0.0195	0.0001	0.0039	0.0039
1.2D + 1.0Ev + 1.0Eh 90° Seismic	245.00	0.0191	0.0001	0.0041	0.0041
1.2D + 1.0Ev + 1.0Eh 60° Seismic	151.95	0.0122	0.0000	0.0089	0.0089
1.2D + 1.0Ev + 1.0Eh 60° Seismic	171.95	0.0151	0.0000	0.0080	0.008
1.2D + 1.0Ev + 1.0Eh 60° Seismic	191.99	0.018	0.0000	0.0081	0.0081
1.2D + 1.0Ev + 1.0Eh 60° Seismic	204.16	0.0194	0.0001	0.0038	0.0038
1.2D + 1.0Ev + 1.0Eh 60° Seismic	245.00	0.019	0.0000	0.0042	0.0042
1.2D + 1.0Ev + 1.0Eh Normal Seismic	151.95	0.0123	0.0000	0.0091	0.0091
1.2D + 1.0Ev + 1.0Eh Normal Seismic	171.95	0.0153	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh Normal Seismic	191.99	0.0182	0.0000	0.0082	0.0082
1.2D + 1.0Ev + 1.0Eh Normal Seismic	204.16	0.0196	0.0001	0.0039	0.0039
1.2D + 1.0Ev + 1.0Eh Normal Seismic	245.00	0.0192	0.0000	0.0040	0.004
1.2D + 1.0Di + 1.0Wi 330° 30 mph Wind with 0" Radial Ice	151.95	0.0242	-0.0003	0.0055	0.0055
1.2D + 1.0Di + 1.0Wi 330° 30 mph Wind with 0" Radial Ice	171.95	0.0252	-0.0010	0.0009	0.0014
1.2D + 1.0Di + 1.0Wi 330° 30 mph Wind with 0" Radial Ice	191.99	0.0255	-0.0021	0.0011	0.0023
1.2D + 1.0Di + 1.0Wi 330° 30 mph Wind with 0" Radial Ice	204.16	0.0246	-0.0018	0.0091	0.0093
1.2D + 1.0Di + 1.0Wi 330° 30 mph Wind with 0" Radial Ice	245.00	0.0134	-0.0009	0.0171	0.0171
1.2D + 1.0Di + 1.0Wi 300° 30 mph Wind with 0" Radial Ice	151.95	0.0244	-0.0073	0.0057	0.0093
1.2D + 1.0Di + 1.0Wi 300° 30 mph Wind with 0" Radial Ice	171.95	0.0255	-0.0090	0.0012	0.0091
1.2D + 1.0Di + 1.0Wi 300° 30 mph Wind with 0" Radial Ice	191.99	0.0258	-0.0110	0.0011	0.0111
1.2D + 1.0Di + 1.0Wi 300° 30 mph Wind with 0" Radial Ice	204.16	0.0249	-0.0106	0.0089	0.0137
1.2D + 1.0Di + 1.0Wi 300° 30 mph Wind with 0" Radial Ice	245.00	0.0139	-0.0095	0.0174	0.0198
1.2D + 1.0Di + 1.0Wi 240° 30 mph Wind with 0" Radial Ice	151.95	0.026	-0.0083	0.0054	0.0098
1.2D + 1.0Di + 1.0Wi 240° 30 mph Wind with 0" Radial Ice	171.95	0.0269	-0.0100	0.0005	0.01
1.2D + 1.0Di + 1.0Wi 240° 30 mph Wind with 0" Radial Ice	191.99	0.0269	-0.0120	0.0019	0.0121
1.2D + 1.0Di + 1.0Wi 240° 30 mph Wind with 0" Radial Ice	204.16	0.0258	-0.0116	0.0101	0.0153
1.2D + 1.0Di + 1.0Wi 240° 30 mph Wind with 0" Radial Ice	245.00	0.0137	-0.0105	0.0167	0.0197
1.2D + 1.0Di + 1.0Wi 210° 30 mph Wind with 0" Radial Ice	151.95	0.0243	0.0002	0.0055	0.0055
1.2D + 1.0Di + 1.0Wi 210° 30 mph Wind with 0" Radial Ice	171.95	0.0253	-0.0005	0.0007	0.0009
1.2D + 1.0Di + 1.0Wi 210° 30 mph Wind with 0" Radial Ice	191.99	0.0255	-0.0015	0.0016	0.0021
1.2D + 1.0Di + 1.0Wi 210° 30 mph Wind with 0" Radial Ice	204.16	0.0245	-0.0012	0.0094	0.0095
1.2D + 1.0Di + 1.0Wi 210° 30 mph Wind with 0" Radial Ice	245.00	0.0132	-0.0003	0.0172	0.0172
1.2D + 1.0Di + 1.0Wi 180° 30 mph Wind with 0" Radial Ice	151.95	0.0256	0.0003	0.0056	0.0057
1.2D + 1.0Di + 1.0Wi 180° 30 mph Wind with 0" Radial Ice	171.95	0.0266	0.0004	0.0007	0.0008
1.2D + 1.0Di + 1.0Wi 180° 30 mph Wind with 0" Radial Ice	191.99	0.0267	0.0005	0.0015	0.0016
1.2D + 1.0Di + 1.0Wi 180° 30 mph Wind with 0" Radial Ice	204.16	0.0258	0.0006	0.0095	0.0095
1.2D + 1.0Di + 1.0Wi 180° 30 mph Wind with 0" Radial Ice	245.00	0.0143	0.0004	0.0181	0.0181
1.2D + 1.0Di + 1.0Wi 120° 30 mph Wind with 0" Radial Ice	151.95	0.0259	0.0085	0.0054	0.01
1.2D + 1.0Di + 1.0Wi 120° 30 mph Wind with 0" Radial Ice	171.95	0.0269	0.0103	0.0005	0.0103
1.2D + 1.0Di + 1.0Wi 120° 30 mph Wind with 0" Radial Ice	191.99	0.027	0.0124	0.0018	0.0125

ASSET: 303048, Lacrosse FL 6

CODE: ANSI/TIA-222-H

CUSTOMER: T-MOBILE

PROJECT: 14863653_C3_03

DEFLECTIONS AND ROTATIONS					
Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 120° 30 mph Wind with 0" Radial Ice	204.16	0.0259	0.0119	0.0100	0.0155
1.2D + 1.0Di + 1.0Wi 120° 30 mph Wind with 0" Radial Ice	245.00	0.0138	0.0109	0.0166	0.0199
1.2D + 1.0Di + 1.0Wi 90° 30 mph Wind with 0" Radial Ice	151.95	0.0256	0.0145	0.0056	0.0156
1.2D + 1.0Di + 1.0Wi 90° 30 mph Wind with 0" Radial Ice	171.95	0.0267	0.0168	0.0010	0.0168
1.2D + 1.0Di + 1.0Wi 90° 30 mph Wind with 0" Radial Ice	191.99	0.0269	0.0193	0.0015	0.0194
1.2D + 1.0Di + 1.0Wi 90° 30 mph Wind with 0" Radial Ice	204.16	0.0259	0.0189	0.0095	0.021
1.2D + 1.0Di + 1.0Wi 90° 30 mph Wind with 0" Radial Ice	245.00	0.0142	0.0179	0.0177	0.0251
1.2D + 1.0Di + 1.0Wi 60° 30 mph Wind with 0" Radial Ice	151.95	0.0244	0.0071	0.0057	0.0091
1.2D + 1.0Di + 1.0Wi 60° 30 mph Wind with 0" Radial Ice	171.95	0.0254	0.0087	0.0012	0.0088
1.2D + 1.0Di + 1.0Wi 60° 30 mph Wind with 0" Radial Ice	191.99	0.0258	0.0107	0.0010	0.0107
1.2D + 1.0Di + 1.0Wi 60° 30 mph Wind with 0" Radial Ice	204.16	0.0249	0.0102	0.0088	0.0134
1.2D + 1.0Di + 1.0Wi 60° 30 mph Wind with 0" Radial Ice	245.00	0.014	0.0092	0.0174	0.0196
1.2D + 1.0Di + 1.0Wi Normal 30 mph Wind with 0" Radial Ice	151.95	0.0255	-0.0003	0.0054	0.0054
1.2D + 1.0Di + 1.0Wi Normal 30 mph Wind with 0" Radial Ice	171.95	0.0264	-0.0004	0.0005	0.0006
1.2D + 1.0Di + 1.0Wi Normal 30 mph Wind with 0" Radial Ice	191.99	0.0265	-0.0005	0.0014	0.0015
1.2D + 1.0Di + 1.0Wi Normal 30 mph Wind with 0" Radial Ice	204.16	0.0255	-0.0006	0.0097	0.0097
1.2D + 1.0Di + 1.0Wi Normal 30 mph Wind with 0" Radial Ice	245.00	0.0136	-0.0004	0.0165	0.0165
1.2D + 1.0W 330° 121 mph Wind with No Ice	151.95	0.6911	-0.0111	0.1523	0.1527
1.2D + 1.0W 330° 121 mph Wind with No Ice	171.95	0.7235	-0.0182	0.0481	0.0514
1.2D + 1.0W 330° 121 mph Wind with No Ice	191.99	0.7422	-0.0893	0.0675	0.1078
1.2D + 1.0W 330° 121 mph Wind with No Ice	204.16	0.7228	-0.0844	0.1800	0.1987
1.2D + 1.0W 330° 121 mph Wind with No Ice	245.00	0.504	-0.0660	0.2811	0.2885
1.2D + 1.0W 300° 121 mph Wind with No Ice	151.95	0.5869	-0.4349	0.1505	0.4602
1.2D + 1.0W 300° 121 mph Wind with No Ice	171.95	0.6243	-0.4537	0.0673	0.4587
1.2D + 1.0W 300° 121 mph Wind with No Ice	191.99	0.6611	-0.4988	0.0889	0.5063
1.2D + 1.0W 300° 121 mph Wind with No Ice	204.16	0.6582	-0.4882	0.1086	0.4994
1.2D + 1.0W 300° 121 mph Wind with No Ice	245.00	0.4973	-0.4626	0.1986	0.5022
1.2D + 1.0W 240° 121 mph Wind with No Ice	151.95	0.7972	-0.3979	0.1381	0.4212
1.2D + 1.0W 240° 121 mph Wind with No Ice	171.95	0.8217	-0.4175	0.0066	0.4175
1.2D + 1.0W 240° 121 mph Wind with No Ice	191.99	0.8263	-0.4652	0.0589	0.4685
1.2D + 1.0W 240° 121 mph Wind with No Ice	204.16	0.7949	-0.4550	0.2351	0.5114
1.2D + 1.0W 240° 121 mph Wind with No Ice	245.00	0.5231	-0.4305	0.3487	0.5536
1.2D + 1.0W 210° 121 mph Wind with No Ice	151.95	0.6928	0.0261	0.1521	0.1539
1.2D + 1.0W 210° 121 mph Wind with No Ice	171.95	0.7246	0.0193	0.0480	0.0508
1.2D + 1.0W 210° 121 mph Wind with No Ice	191.99	0.7419	-0.0542	0.0685	0.0836
1.2D + 1.0W 210° 121 mph Wind with No Ice	204.16	0.7222	-0.0495	0.1811	0.1876
1.2D + 1.0W 210° 121 mph Wind with No Ice	245.00	0.503	-0.0328	0.2820	0.2838
1.2D + 1.0W 180° 121 mph Wind with No Ice	151.95	0.57	0.0101	0.1490	0.1493
1.2D + 1.0W 180° 121 mph Wind with No Ice	171.95	0.6071	0.0108	0.0675	0.0682
1.2D + 1.0W 180° 121 mph Wind with No Ice	191.99	0.6429	0.0150	0.0889	0.0901
1.2D + 1.0W 180° 121 mph Wind with No Ice	204.16	0.6404	0.0144	0.1080	0.1085
1.2D + 1.0W 180° 121 mph Wind with No Ice	245.00	0.4809	0.0117	0.1977	0.198
1.2D + 1.0W 120° 121 mph Wind with No Ice	151.95	0.7976	0.4106	0.1382	0.4332
1.2D + 1.0W 120° 121 mph Wind with No Ice	171.95	0.8221	0.4309	0.0068	0.4309
1.2D + 1.0W 120° 121 mph Wind with No Ice	191.99	0.8269	0.4801	0.0588	0.4832
1.2D + 1.0W 120° 121 mph Wind with No Ice	204.16	0.7955	0.4695	0.2350	0.5244
1.2D + 1.0W 120° 121 mph Wind with No Ice	245.00	0.5237	0.4444	0.3486	0.5644
1.2D + 1.0W 90° 121 mph Wind with No Ice	151.95	0.7181	0.6930	0.1545	0.71
1.2D + 1.0W 90° 121 mph Wind with No Ice	171.95	0.7513	0.7184	0.0517	0.7202
1.2D + 1.0W 90° 121 mph Wind with No Ice	191.99	0.7724	0.7919	0.0727	0.7953
1.2D + 1.0W 90° 121 mph Wind with No Ice	204.16	0.7531	0.7845	0.1814	0.8048
1.2D + 1.0W 90° 121 mph Wind with No Ice	245.00	0.5333	0.7570	0.2835	0.8073
1.2D + 1.0W 60° 121 mph Wind with No Ice	151.95	0.5863	0.4199	0.1505	0.446
1.2D + 1.0W 60° 121 mph Wind with No Ice	171.95	0.6237	0.4381	0.0673	0.4433
1.2D + 1.0W 60° 121 mph Wind with No Ice	191.99	0.6606	0.4818	0.0890	0.4895
1.2D + 1.0W 60° 121 mph Wind with No Ice	204.16	0.6577	0.4716	0.1085	0.4831
1.2D + 1.0W 60° 121 mph Wind with No Ice	245.00	0.4968	0.4467	0.1986	0.4877
1.2D + 1.0W Normal 121 mph Wind with No Ice	151.95	0.7807	-0.0123	0.1361	0.1367
1.2D + 1.0W Normal 121 mph Wind with No Ice	171.95	0.8046	-0.0132	0.0047	0.014

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DEFLECTIONS AND ROTATIONS					
Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W Normal 121 mph Wind with No Ice	191.99	0.808	-0.0189	0.0563	0.0593
1.2D + 1.0W Normal 121 mph Wind with No Ice	204.16	0.7772	-0.0166	0.2338	0.2341
1.2D + 1.0W Normal 121 mph Wind with No Ice	245.00	0.5071	-0.0126	0.3471	0.3474

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					FX* (kip)	FY* (kip)	FZ* (kip)
1.2D + 1.0W Normal	0.00	0.00		1	0.00	90.51	-1.61
	200.00	0.00	0	A1	0.00	-2.17	1.98
	200.00	0.00	240	A1a	-29.76	-27.20	-18.47
	200.00	0.00	120	A1b	29.76	-27.20	-18.47
1.2D + 1.0W 60°	0.00	0.00		1	-1.40	87.86	-0.81
	200.00	0.00	0	A1	-1.05	-10.05	11.67
	200.00	0.00	240	A1a	-38.03	-34.46	-21.96
	200.00	0.00	120	A1b	9.58	-10.05	-6.73
1.2D + 1.0W 90°	0.00	0.00		1	-1.55	89.56	-0.09
	200.00	0.00	0	A1	-1.34	-18.65	23.33
	200.00	0.00	240	A1a	-36.70	-32.83	-20.56
	200.00	0.00	120	A1b	3.69	-4.46	-2.68
1.2D + 1.0W 120°	0.00	0.00		1	-1.39	90.59	0.81
	200.00	0.00	0	A1	-1.12	-27.24	35.06
	200.00	0.00	240	A1a	-30.92	-27.24	-16.57
	200.00	0.00	120	A1b	1.71	-2.17	-0.99
1.2D + 1.0W 180°	0.00	0.00		1	0.00	87.83	1.60
	200.00	0.00	0	A1	0.00	-34.42	43.87
	200.00	0.00	240	A1a	-10.63	-10.05	-4.93
	200.00	0.00	120	A1b	10.63	-10.05	-4.93
1.2D + 1.0W 210°	0.00	0.00		1	0.70	89.56	1.38
	200.00	0.00	0	A1	0.55	-32.83	42.06
	200.00	0.00	240	A1a	-4.17	-4.46	-1.85
	200.00	0.00	120	A1b	20.86	-18.65	-10.50
1.2D + 1.0W 240°	0.00	0.00		1	1.39	90.59	0.81
	200.00	0.00	0	A1	1.12	-27.24	35.06
	200.00	0.00	240	A1a	-1.71	-2.17	-0.99
	200.00	0.00	120	A1b	30.92	-27.24	-16.57
1.2D + 1.0W 300°	0.00	0.00		1	1.40	87.86	-0.81
	200.00	0.00	0	A1	1.05	-10.05	11.67
	200.00	0.00	240	A1a	-9.58	-10.05	-6.73
	200.00	0.00	120	A1b	38.03	-34.46	-21.96
1.2D + 1.0W 330°	0.00	0.00		1	0.85	89.55	-1.30
	200.00	0.00	0	A1	0.48	-4.46	4.54
	200.00	0.00	240	A1a	-19.52	-18.65	-12.82
	200.00	0.00	120	A1b	36.14	-32.83	-21.50
1.2D + 1.0Di + 1.0Wi Normal	0.00	0.00		1	0.00	72.11	-0.12
	200.00	0.00	0	A1	0.00	-11.81	15.07
	200.00	0.00	240	A1a	-14.77	-13.33	-8.60
	200.00	0.00	120	A1b	14.77	-13.33	-8.60
1.2D + 1.0Di + 1.0Wi 60°	0.00	0.00		1	-0.10	71.98	-0.06
	200.00	0.00	0	A1	-0.06	-12.32	15.74
	200.00	0.00	240	A1a	-15.27	-13.75	-8.82
	200.00	0.00	120	A1b	13.60	-12.32	-7.92
1.2D + 1.0Di + 1.0Wi 90°	0.00	0.00		1	-0.12	72.04	0.00
	200.00	0.00	0	A1	-0.08	-12.81	16.39
	200.00	0.00	240	A1a	-15.20	-13.67	-8.74
	200.00	0.00	120	A1b	13.19	-11.95	-7.65
1.2D + 1.0Di + 1.0Wi 120°	0.00	0.00		1	-0.11	72.11	0.06
	200.00	0.00	0	A1	-0.06	-13.33	17.09
	200.00	0.00	240	A1a	-14.83	-13.33	-8.49
	200.00	0.00	120	A1b	13.05	-11.81	-7.54
1.2D + 1.0Di + 1.0Wi 180°	0.00	0.00		1	0.00	71.98	0.12
	200.00	0.00	0	A1	0.00	-13.78	17.68
	200.00	0.00	240	A1a	-13.64	-12.30	-7.80
	200.00	0.00	120	A1b	13.64	-12.30	-7.80
1.2D + 1.0Di + 1.0Wi 210°	0.00	0.00		1	0.06	72.04	0.10
	200.00	0.00	0	A1	0.03	-13.64	17.50
	200.00	0.00	240	A1a	-13.25	-11.98	-7.62

ASSET: 303048, Lacrosse FL 6
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
PROJECT: 14863653_C3_03

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					FX* (kip)	FY* (kip)	FZ* (kip)
1.2D + 1.0Di + 1.0Wi 240°	200.00	0.00	120	A1b	14.24	-12.81	-8.13
	0.00	0.00		1	0.11	72.11	0.06
	200.00	0.00	0	A1	0.06	-13.33	17.09
	200.00	0.00	240	A1a	-13.05	-11.81	-7.54
	200.00	0.00	120	A1b	14.83	-13.33	-8.49
1.2D + 1.0Di + 1.0Wi 300°	0.00	0.00		1	0.10	71.98	-0.06
	200.00	0.00	0	A1	0.06	-12.32	15.74
	200.00	0.00	240	A1a	-13.60	-12.32	-7.92
	200.00	0.00	120	A1b	15.27	-13.75	-8.82
	0.00	0.00		1	0.06	72.04	-0.10
1.2D + 1.0Di + 1.0Wi 330°	200.00	0.00	0	A1	0.03	-11.98	15.29
	200.00	0.00	240	A1a	-14.16	-12.81	-8.27
	200.00	0.00	120	A1b	15.14	-13.64	-8.77
	0.00	0.00		1	0.00	67.75	0.01
	200.00	0.00	0	A1	0.00	-10.69	13.66
1.2D + 1.0Ev + 1.0Eh Normal	200.00	0.00	240	A1a	-12.59	-11.50	-7.27
	200.00	0.00	120	A1b	12.59	-11.50	-7.27
	0.00	0.00		1	0.01	67.75	0.00
	200.00	0.00	0	A1	0.00	-10.96	13.95
	200.00	0.00	240	A1a	-12.84	-11.78	-7.42
1.2D + 1.0Ev + 1.0Eh 60°	200.00	0.00	120	A1b	12.08	-10.96	-6.97
	0.00	0.00		1	0.01	67.75	0.00
	200.00	0.00	0	A1	0.00	-11.23	14.24
	200.00	0.00	240	A1a	-12.78	-11.71	-7.38
	200.00	0.00	120	A1b	11.89	-10.76	-6.87
1.2D + 1.0Ev + 1.0Eh 90°	0.00	0.00		1	0.01	67.75	0.00
	200.00	0.00	0	A1	0.00	-11.50	14.54
	200.00	0.00	240	A1a	-12.59	-11.50	-7.27
	200.00	0.00	120	A1b	11.83	-10.69	-6.83
	0.00	0.00		1	0.00	67.75	-0.01
1.2D + 1.0Ev + 1.0Eh 120°	200.00	0.00	0	A1	0.00	-11.78	14.83
	200.00	0.00	240	A1a	-12.08	-10.96	-6.97
	200.00	0.00	120	A1b	12.08	-10.96	-6.97
	0.00	0.00		1	0.00	67.75	-0.01
	200.00	0.00	0	A1	0.00	-11.71	14.75
1.2D + 1.0Ev + 1.0Eh 180°	200.00	0.00	240	A1a	-11.90	-10.76	-6.87
	200.00	0.00	120	A1b	12.33	-11.23	-7.12
	0.00	0.00		1	-0.01	67.75	0.00
	200.00	0.00	0	A1	0.00	-11.50	14.54
	200.00	0.00	240	A1a	-11.83	-10.69	-6.83
1.2D + 1.0Ev + 1.0Eh 240°	200.00	0.00	120	A1b	12.59	-11.50	-7.27
	0.00	0.00		1	-0.01	67.75	0.00
	200.00	0.00	0	A1	0.00	-10.96	13.95
	200.00	0.00	240	A1a	-12.08	-10.96	-6.97
	200.00	0.00	120	A1b	12.84	-11.78	-7.42
1.2D + 1.0Ev + 1.0Eh 300°	0.00	0.00		1	0.00	67.75	0.01
	200.00	0.00	0	A1	0.00	-10.76	13.73
	200.00	0.00	240	A1a	-12.33	-11.23	-7.12
	200.00	0.00	120	A1b	12.78	-11.71	-7.38
	0.00	0.00		1	0.00	63.49	-0.46
1.0D + 1.0W Service Normal	200.00	0.00	0	A1	0.00	-7.57	9.41
	200.00	0.00	240	A1a	-14.93	-13.64	-8.91
	200.00	0.00	120	A1b	14.93	-13.64	-8.91
	0.00	0.00		1	-0.38	63.41	-0.22
	200.00	0.00	0	A1	-0.26	-9.65	12.07
1.0D + 1.0W Service 60°	200.00	0.00	240	A1a	-17.26	-15.63	-9.96
	200.00	0.00	120	A1b	10.32	-9.65	-6.25
	0.00	0.00		1	-0.44	63.42	0.00
	200.00	0.00	0	A1	-0.32	-11.62	14.69

DETAILED REACTIONS							
Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					FX* (kip)	FY* (kip)	FZ* (kip)
1.0D + 1.0W Service 120°	200.00	0.00	240	A1a	-16.76	-15.10	-9.54
	200.00	0.00	120	A1b	8.69	-8.14	-5.16
	0.00	0.00		1	-0.40	63.49	0.23
	200.00	0.00	0	A1	-0.26	-13.65	17.41
	200.00	0.00	240	A1a	-15.20	-13.65	-8.48
1.0D + 1.0W Service 180°	200.00	0.00	120	A1b	8.12	-7.55	-4.69
	0.00	0.00		1	0.00	63.40	0.44
	200.00	0.00	0	A1	0.00	-15.58	19.87
	200.00	0.00	240	A1a	-10.60	-9.67	-5.82
	200.00	0.00	120	A1b	10.60	-9.67	-5.82
1.0D + 1.0W Service 210°	0.00	0.00		1	0.22	63.41	0.38
	200.00	0.00	0	A1	0.12	-15.05	19.21
	200.00	0.00	240	A1a	-8.86	-8.18	-4.98
	200.00	0.00	120	A1b	12.88	-11.62	-7.07
	0.00	0.00		1	0.40	63.49	0.23
1.0D + 1.0W Service 240°	200.00	0.00	0	A1	0.26	-13.65	17.41
	200.00	0.00	240	A1a	-8.12	-7.55	-4.69
	200.00	0.00	120	A1b	15.20	-13.65	-8.48
	0.00	0.00		1	0.38	63.41	-0.22
	200.00	0.00	0	A1	0.26	-9.65	12.07
1.0D + 1.0W Service 300°	200.00	0.00	240	A1a	-10.32	-9.65	-6.25
	200.00	0.00	120	A1b	17.26	-15.63	-9.96
	0.00	0.00		1	0.22	63.41	-0.38
	200.00	0.00	0	A1	0.12	-8.18	10.17
	200.00	0.00	240	A1a	-12.56	-11.62	-7.62
1.0D + 1.0W Service 330°	200.00	0.00	120	A1b	16.58	-15.05	-9.71

MAXIMUM GUY ANCHOR REACTIONS				
Radius (ft)	Drop (ft)	Azimuth (deg)	Uplift (kip)	Shear (kip)
200.00	0.00	0	34.42	43.87
200.00	0.00	120	34.46	43.92
200.00	0.00	240	34.46	43.92

MAXIMUM REACTIONS SUMMARY		
Base / Anchor Group	Vertical Load <i>(Compression for Base; Uplift for Anchor)</i>	Horizontal Shear
Guyed – Pivot Base	90.59 (kip)	1.61 (kip)
Guyed Anchor - A1	34.46 (kip)	43.92 (kip)