

JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport

WRITER'S DIRECT DIAL: (203) 337-4157

E-Mail Address: jkohler@cohenandwolf.com

March 13, 2015

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

**Re: Notice of Exempt Modification
Red Wolf Broadcasting Corp./ T-Mobile equipment upgrade
Site ID CTNL058A
889A Colonel Ledyard Highway, Ledyard**

Dear Attorney Bachman:

This office represents T-Mobile Northeast LLC ("T-Mobile") and has been retained to file exempt modification filings with the Connecticut Siting Council on its behalf.

In this case Red Wolf Broadcasting Corporation owns the existing guyed telecommunications tower and related facility at 889A Colonel Ledyard Highway, Ledyard Connecticut (Latitude: 41.46194444/ Longitude: -72.0236111). T-Mobile intends to add three (3) antennas and three (3) RRUs (remote radio units) and related equipment at this existing telecommunications facility in Ledyard ("Ledyard Facility"). Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Mayor John Rodolico and the property owner, Red Wolf Broadcasting Corporation.

The existing Ledyard Facility consists of a 347 foot tall guyed tower.¹ T-Mobile plans to add three (3) antennas and three (3) RRUs all to be mounted to a proposed sector frame, which will replace the existing frame. T-Mobile's existing antennas will be relocated to the sector frame as well. All of these modifications will take place at a centerline of 185 feet. T-Mobile will also add stabilizer arms at this centerline. (See the plans revised to March 11, 2015 attached hereto as Exhibit A). Spare fiber will be used for this installation. The existing Ledyard Facility is structurally capable of supporting T-Mobile's proposed modifications, as indicated in the structural analysis dated February 19, 2015 and attached hereto as Exhibit B.

¹ While the online docket for the Connecticut Siting Council does not provide a docket or petition number for the approval of this structure, it does reference this structure in connection with notices of intent, the most recent captioned EM-T-MOBILE-072-140312.

March 13, 2015
Site ID CTNL058A
Page 2

The planned modifications to the Ledyard Facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1 . The proposed modification will not increase the height of the tower. T-Mobile's antennas and equipment will be installed at a centerline of 185 feet, merely modifying equipment located at the same 185 elevation. The enclosed tower drawing (Sheet LE-2) confirms that the proposed modification will not increase the height of the tower.

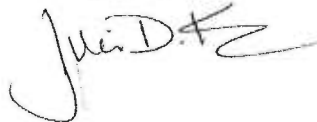
2 . The proposed modifications will not require an extension of the site boundaries or lease area. T-Mobile's does not propose any changes to the compound area.

3 . The proposed modification to the Ledyard Facility will not increase the noise levels at the existing facility by six decibels or more.

4 . The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the base of the tower, to a level at or above the applicable standard. According to a Radio Frequency Emissions Analysis Report prepared by EBI dated March 12, 2015, T-Mobile's operations would add 3.77% of the FCC Standard. Therefore, the calculated "worst case" power density for the planned combined operation at the site including all of the proposed antennas would be 34.17% of the FCC Standard as calculated for a mixed frequency site as evidenced by the engineering exhibit attached hereto as Exhibit C.

For the foregoing reasons, T-Mobile respectfully submits that the proposed additional antennas and equipment at the Ledyard Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Upon acknowledgement by the Council of this proposed exempt modification, T-Mobile shall commence construction approximately sixty days from the date of the Council's notice of acknowledgement.

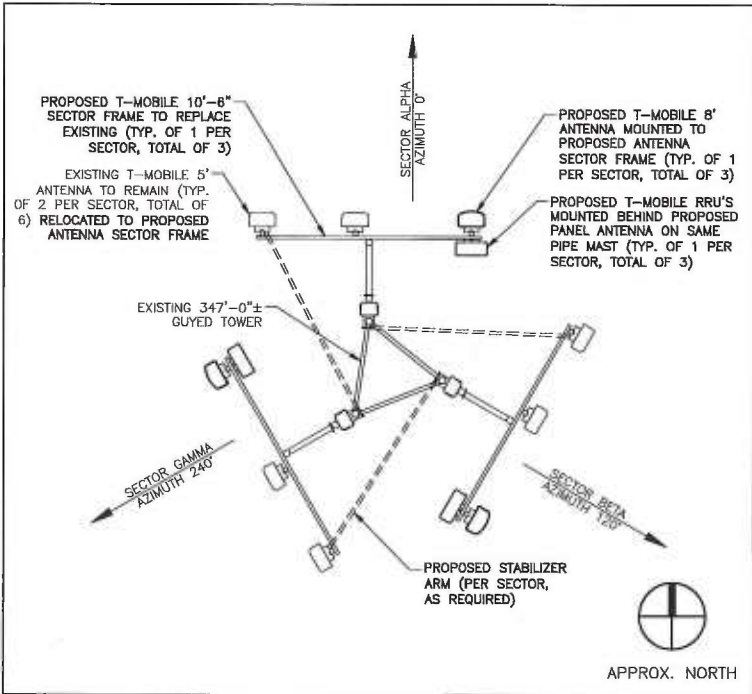
Sincerely,



Julie D. Kohler, Esq.

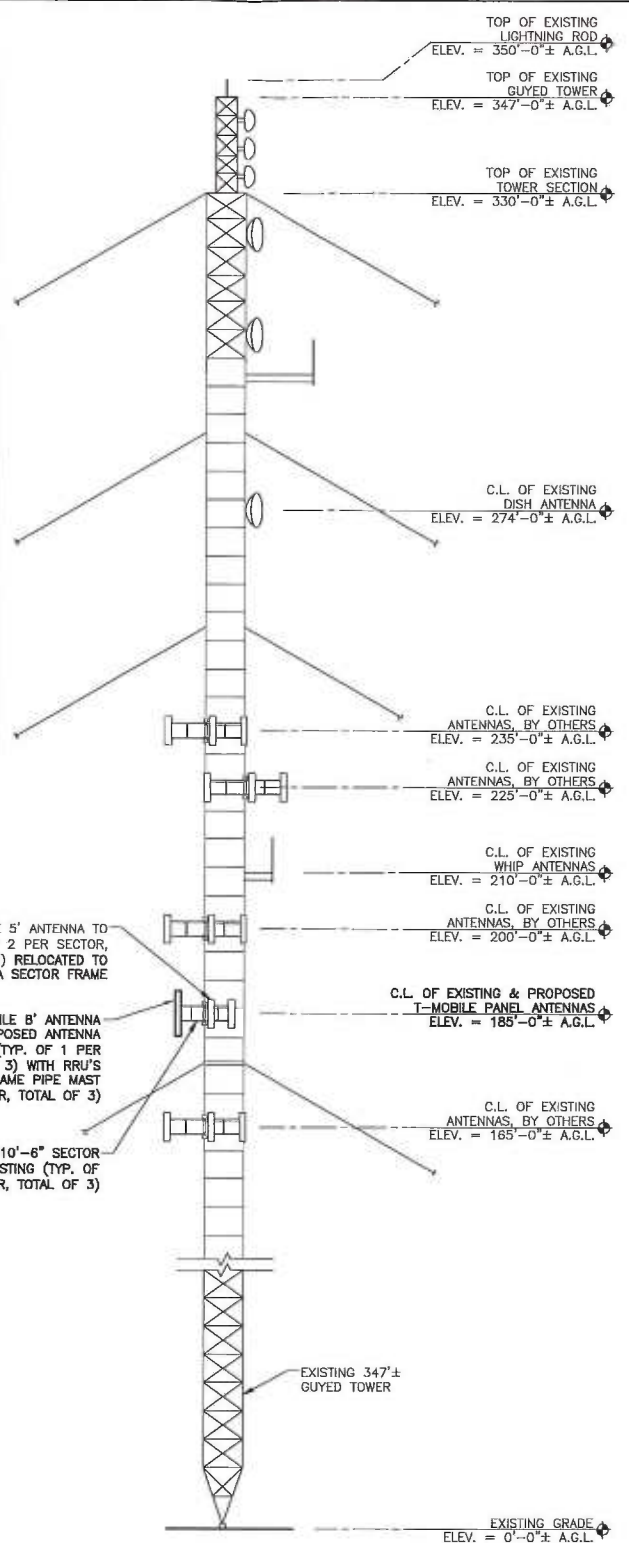
cc: Mayor John Rodolico
Red Wolf Broadcasting Corporation
Jamie Ford, EBI Consulting

EXHIBIT A



ANTENNA CONFIGURATION

NTS



EXISTING T-MOBILE 5' ANTENNA TO REMAIN (TYP. OF 2 PER SECTOR, TOTAL OF 6) RELOCATED TO PROPOSED ANTENNA SECTOR FRAME

PROPOSED T-MOBILE 8' ANTENNA MOUNTED TO PROPOSED ANTENNA SECTOR FRAME (TYP. OF 1 PER SECTOR, TOTAL OF 3) WITH RRU'S MOUNTED BEHIND ON SAME PIPE MAST (TYP. OF 1 PER SECTOR, TOTAL OF 3)

PROPOSED T-MOBILE 10'-6" SECTOR FRAME TO REPLACE EXISTING (TYP. OF 1 PER SECTOR, TOTAL OF 3)

CONFIGURATION
702CU

TOWER ELEVATION

SCALE: 1/32" = 1'-0"

NOTE:
ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE STRUCTURAL AND RF ENGINEERS.

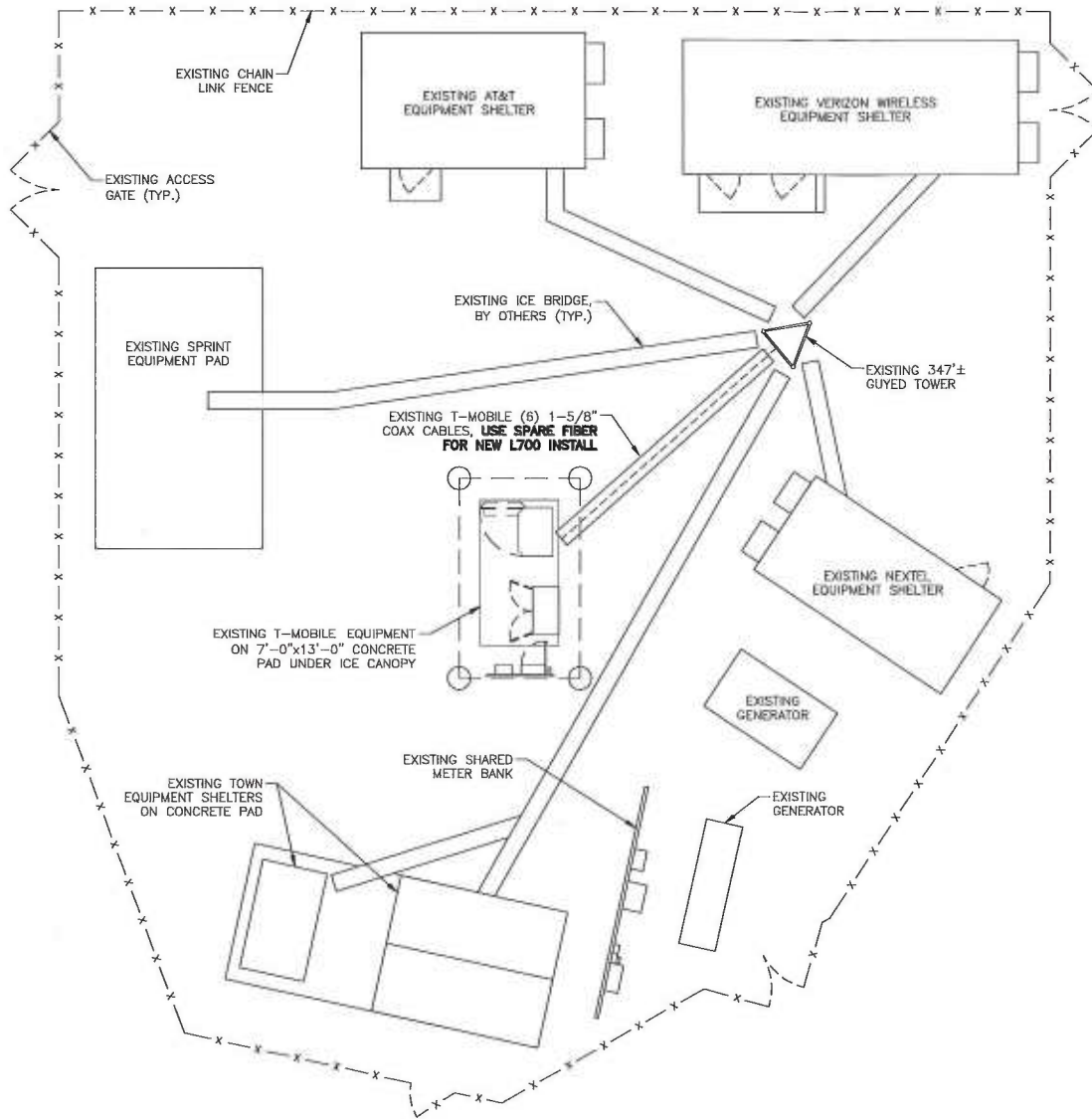
PREPARED BY:
EBI Consulting
environmental | engineering | due diligence
21 B Street | Burlington, MA 01803
Tel: (781) 273-2500 | Fax: (781) 273-3311
www.ebiconsulting.com
EBI JOB NO.:
8115000130

CLIENT:
T-Mobile Northeast, LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
860.692.7100

SITE INFO:
CTNL058A
NL058/REDWOLF_ET
889A COLONEL LEDYARD HIGHWAY
LEDYARD, CT 06339

SUBMITTALS			
NO.	DATE	DESCRIPTION	BY
A	03/11/15	FOR REVIEW	AC

DRAWN BY: AC
SHEET NO: **LE-2**
CHECKED BY: BB
DATE: 02/24/15



CONFIGURATION
702CU



NOTE:
 ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE STRUCTURAL AND RF ENGINEERS.

COMPOUND PLAN

SCALE: 1/16" = 1'-0"

PREPARED BY:

 21 B Street | Burlington, MA 01803
 Tel: (781) 273-2500 | Fax: (781) 273-3311
 www.ebiconsulting.com
 EBI JOB NO.:
 8115000130

CLIENT:
T-Mobile Northeast, LLC
 35 GRIFFIN ROAD SOUTH
 BLOOMFIELD, CT 06002
 860.692.7100

SITE INFO:
CTNL058A
NL058/REDWOLF_ET
 889A COLONEL LEDYARD HIGHWAY
 LEDYARD, CT 06339

SUBMITTALS			
NO.	DATE	DESCRIPTION	BY
A	03/11/15	FOR REVIEW	AC

DRAWN BY:
 AC
 CHECKED BY:
 BB
 DATE:
 02/24/15

SHEET NO:
LE-1

EXHIBIT B

STRUCTURAL ANALYSIS REPORT

February 19, 2015

T-Mobile, USA
35 Griffin Rd
South Bloomfield, CT 06002
Attention: Mark Richard

Subject: 700MHz Upgrade Project
Site #: CT LN 058 A
EBI Reference #: 81150130
Site Name: NL058 / Red Wolf. ET
Address: 889A Colonel Ledyard Highway, Ledyard, CT 06339

Dear Mr. Richard:

In accordance with your request, EBI Consulting's structural engineers have reviewed the available documentation for the above site in order to assess its capability for supporting the structural loads from the proposed antennas, remote radio units, coaxial cables, and related equipment. This analysis is in accordance with the following design codes governing this project:

- International Building Code, 2003 with CT 2005, 2009, 2011, and 2013 amendments
- ASCE 7-05
- AISC Steel Construction Manual, 13th Edition
- ANSI/TIA-222-F

The following sources of information were considered in preparing this analysis:

- Photographs taken by EBI personnel on a site visit on January 21, 2015
- T-Mobile Structural analysis report prepared by Atlantis Group, dated February 26, 2014
- AT&T Structural analysis report prepared by Hudson Design Group, dated October 01, 2012
- T-Mobile Structural analysis report prepared by Paul J. Ford and Company, dated March 17, 2007
- Construction drawings prepared by PiRod Inc., dated December 05, 2000

The tower was analyzed for a wind speed of 85 mph without ice and with 1/2" radial ice at a reduced wind speed of 74 mph.

Three Commscope LNX 6515DS-VTM (96.4"x11.9"x7.1") antennas are proposed to be added on proposed mast pipes, mounted to proposed 10' sector frames at a centerline elevation of approximately 185'-0". Additionally, three RRUS11 B12 remote radio units are proposed to be installed behind the proposed antennas on the same mast pipes.

Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
183.3	185.0	3	Commscope	LNx-1615DS-VTM W/ Mast Pipe	None	
		3	Ericsson	RRUS11-B12		
	183.3	3	-	PiRod 10' PCS Frame (1)		

Table 2 - Existing and Reserved Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
347.0	349.0	1	-	Lightning Rod	1	3/4" conduit
	347.0	1	-	Flash Beacon Lighting		
345.0	345.0	1	-	LP-3E-Radomes	1	1-5/8"
340.0	340.0	1	-	LP-3E-Radomes	1	1-5/8"
335.0	335.0	1	-	LP-3E-Radomes	1	1-5/8"
325.0	325.0	1	-	10' Grid Dish	1	1-5/8"
314.0	314.0	1	-	LP-2E-Radomes	1	1-1/4"
308.0	308.0	1	-	LP-2E-Radomes		
298.0	301.0	1	-	PD220	1	2-1/4"
	298.0	1	-	3' Side Mount Standoff		
295.0	295.0	3	-	DB810KE-Y	3	1-1/4"
		2	-	PiRod 10' Box Arm		
277.0	277.0	1	-	Box 14"x10" dia.	None	
273.5	273.5	1	-	2' Side Mount Standoff	1	1/2"
	273.0	1	-	6' Dish		
263.3	271.5	1	-	PD1167	1	1-1/4"
	263.3	1	-	PiRod 5' Side Mount Standoff		
251.4	258.5	1	-	15' Omni	1	1-1/4"
	251.4	1	-	PiRod 5' Side Mount Standoff		
250.3	250.3	1	-	6' Grid Dish	None	

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
236.7	237.3	12	-	4' Panel Antenna W/ Mast Pipe	12	1-5/8"
	236.7	3	-	PiRod 15' T-Frame Sector Mount (1)		
225.8	226.0	6	-	DB980H90E-M w/Mount Pipe	6	1-5/8"
	225.8	3	-	PiRod 12' T-Frame Sector Mount (1)		
204.5	210.5	1	-	Kreco CO-41A	1	7/8"
	204.5	1	-	PiRod 6' Side Mount Standoff		
203.8	207.0	1	-	8' Omni	1	1/2"
	203.8	1	-	PiRod 4' Side Mount Standoff		
199.0	200.0	6	-	Ericsson RRU	12	1-5/8"
		3	-	General TMA		
		2	-	KMW AM-X-CD-14-65-00T-RET W Mast Pipe		
		3	-	Powerwave 7770 W/ Mast Pipe		
		4	-	Powerwave P65-17-XLH-RR W/ Mast Pipe		
		1	-	Surge Arrestor (DC6-48-60-18-8F) W/ Mast Pipe		
	199.0	3	-	PiRod 10' PCS Frame (1)		
183.3	185.0	3	Ericsson	AIR21 B2A/B4P W/ Mast Pipe	12	1-5/8"
		3	Ericsson	AIR21 B4A/B2P W/ Mast Pipe		
		3	-	dd B4 TMA		
	183.3	3	-	1' Side Mount Standoff*	1	1-5/8" hybrid
171.0	171.0	3	-	Mid Beacon	1	3/4" conduit

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
166.5	167.5	3	-	BXA-171085-12CF W/ Mast Pipe	12	1-5/8"
		3	-	BXA-70063-6CF W/ Mast Pipe		
		4	-	LPA-80063-4CF W/ Mast Pipe		
		2	-	LPA-80080-4CF W/ Mast Pipe		
	166.5	3	-	PiRod 12' T-Frame Sector Mount (1)		
148.8	148.8	1	-	PiRod 4' Side Mount Standoff	1	1/2"
	147.9	1	-	15' Dipole		
137.5	147.0	1	-	20' Omni	1	7/8"
	137.5	1	-	PiRod 3.5' Side Mount Standoff		
128.8	128.8	1	-	6' Dish	1	1-5/8"
111.3	111.4	1	-	1.5' Grid Dish	1	1-5/8"
	111.3	1	-	3' Side Mount Standoff		
89.5	89.5	1	-	Box 7"x5"x4.5"	1	3/4" conduit
88.5	88.5	1	-	1.5' Grid Dish	1	7/8"
78.8	78.8	1	-	2.5' Side Mount Standoff	1	1-1/4"
		1	-	Shively Radome		
70.0	70.0	1	-	2.5' Side Mount Standoff	1	1-1/4"
		1	-	Shively Radome		
61.4	61.4	1	-	2.5' Side Mount Standoff	1	1-1/4"
		1	-	Shively Radome		
54.3	54.3	1	-	2.5' Side Mount Standoff	1	1-1/4"

Note: * Existing antennas / mounts to be removed

Summary of Results: (Refer to attached TNX Tower Analysis for detailed analysis results)

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
L1	347 - 330	Latticed Pole Leg	1 1/4	3	-15538.50	24671.06	63.0	Pass
		Latticed Pole Diagonal	1/2	24	-1112.25	2460.32	45.2	Pass
		Latticed Pole Top Girt	3/4	6	-8.33	6106.81	0.1	Pass
		Latticed Pole Mid Girt	3/4	12	66.90	14133.64	0.5	Pass
		Guy A@330.083	11/16	1164	24242.50	29000.00	83.6	Pass
		Guy B@330.083	11/16	1163	21077.90	29000.00	72.7	Pass
		Guy C@330.083	11/16	1162	20484.10	29000.00	70.6	Pass
		Top Guy Pull-Off@330.083	1 1/4	7	7188.84	39260.05	18.3	Pass
T1	330 - 320	Leg	2 1/4	63	-20838.00	128508.66	16.2	Pass
		Diagonal	7/8	69	-2051.50	9964.59	20.6	Pass
		Horizontal	7/8	81	-234.62	3504.96	6.7	Pass
		Bottom Girt	1	67	-281.37	5979.30	4.7	Pass
T2	320 - 300	Leg	2 1/4	97	-21631.90	128508.66	16.8	Pass
		Diagonal	7/8	155	-1978.13	9964.59	19.9	Pass
		Horizontal	7/8	113	448.28	24046.79	1.9	Pass
		Top Girt	1	99	-281.07	5979.30	4.7	Pass
		Bottom Girt	1	102	-100.38	5979.30	1.7	Pass
T3	300 - 280	Mid Girt	1	104	375.70	31408.01	1.2	Pass
		Leg	2 1/4	161	-20912.10	128508.66	16.3	Pass
		Diagonal	7/8	177	-2981.46	9964.59	29.9	Pass
		Horizontal	7/8	179	524.61	24046.79	2.2	Pass
		Top Girt	1	164	-129.49	5979.30	2.2	Pass
T4	280 - 260	Bottom Girt	1	169	-581.05	5979.30	9.7	Pass
		Mid Girt	1	170	347.10	31408.01	1.1	Pass
		Leg	2 1/4	227	-38782.50	128508.66	30.2	Pass
		Diagonal	7/8	242	-4024.71	9964.59	40.4	Pass
		Horizontal	7/8	272	-438.48	3504.96	12.5	Pass
		Top Girt	1	232	-558.26	5979.30	9.3	Pass
		Bottom Girt	1	234	-945.34	5979.30	15.8	Pass
		Guy A@270	13/16	1167	32648.70	40000.00	81.6	Pass
		Guy B@270	13/16	1166	29277.80	40000.00	73.2	Pass
		Guy C@270	13/16	1165	28734.50	40000.00	71.8	Pass
T5	260 - 240	Top Guy Pull-Off@270	1 1/4	238	7583.01	49075.06	15.5	Pass
		Leg	2 1/4	293	-58294.70	128508.66	45.4	Pass
		Diagonal	7/8	353	-4082.67	9964.59	41.0	Pass
		Horizontal	7/8	352	1112.62	24046.79	4.6	Pass
		Top Girt	1	297	-791.57	5979.30	13.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T6	240 - 220	Bottom Girt	1	300	-599.64	5979.30	10.0	Pass
		Mid Girt	1	302	959.10	31408.01	3.1	Pass
		Leg	2 1/4	359	-61512.00	128508.66	47.9	Pass
		Diagonal	7/8	375	-4311.69	9964.59	43.3	Pass
		Horizontal	7/8	418	-395.05	3504.96	11.3	Pass
T7	220 - 200	Top Girt	1	363	-523.00	5979.30	8.7	Pass
		Bottom Girt	1	367	-732.33	5979.30	12.2	Pass
		Mid Girt	1	368	944.66	31408.01	3.0	Pass
		Leg	2 1/2	425	-54655.80	163067.22	33.5	Pass
		Diagonal	1	441	-5564.55	16472.28	33.8	Pass
T8	200 - 180	Horizontal	7/8	443	972.27	24046.79	4.0	Pass
		Top Girt	1 1/4	430	-932.58	14725.12	6.3	Pass
		Bottom Girt	1 1/4	433	-1420.26	14725.12	9.6	Pass
		Mid Girt	1 1/4	434	787.55	49075.06	1.6	Pass
		Leg	2 3/4	493	-123486.00	201465.61	61.3	Pass
T9	180 - 160	Diagonal	1 1/4	507	-10057.40	28461.95	35.3	Pass
		Horizontal	7/8	516	-305.80	3566.45	8.6	Pass
		Top Girt	1 1/2	496	-1658.72	30801.10	5.4	Pass
		Bottom Girt	1 1/2	499	-5151.46	30801.10	16.7	Pass
		Mid Girt	1 1/2	500	1460.67	70668.19	2.1	Pass
		Leg	2 3/4	559	-139522.00	202895.92	68.8	Pass
		Diagonal	1 1/4	596	-5607.76	28461.95	19.7	Pass
		Horizontal	7/8	575	1881.67	24046.79	7.8	Pass
		Bottom Girt	1 1/2	563	1366.11	70668.19	1.9	Pass
		Mid Girt	1 1/2	567	2126.23	70668.19	3.0	Pass
		Guy A@176	7/8	1183	29468.30	46000.00	64.1	Pass
		Guy B@176	7/8	1177	27904.90	46000.00	60.7	Pass
		Guy C@176	7/8	1168	27451.70	46000.00	59.7	Pass
T10	160 - 140	Top Guy Pull-Off@176	1 1/2	560	-8374.57	30801.10	27.2	Pass
		Bottom Guy Pull-Off@176	1 1/4	1175	-6135.26	14854.02	41.3	Pass
		Torque Arm Top@176	2L3x3x5/16	1171	28694.70	102214.44	28.1	Pass
		Torque Arm Bottom@176	2L3x3x5/16	1187	-28025.10	52073.78	53.8	Pass
		Leg	2 3/4	625	-103341.00	202895.92	50.9	Pass
		Diagonal	1	684	-2977.86	16569.46	18.0	Pass
		Horizontal	7/8	641	1357.47	24046.79	5.6	Pass
T11	140 - 120	Top Girt	1 1/4	628	-553.61	14854.02	3.7	Pass
		Bottom Girt	1 1/4	629	814.46	49075.06	1.7	Pass
		Mid Girt	1 1/4	632	1342.82	49075.06	2.7	Pass
		Leg	2 3/4	690	-95021.70	202895.92	46.8	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T12	120 - 100	Diagonal	1	749	-1989.32	16569.46	12.0	Pass
		Horizontal	7/8	707	1309.64	24046.79	5.4	Pass
		Top Girt	1 1/4	692	1007.47	49075.06	2.1	Pass
		Bottom Girt	1 1/4	695	1080.03	49075.06	2.2	Pass
		Mid Girt	1 1/4	698	1330.82	49075.06	2.7	Pass
		Leg	2 3/4	755	-113114.00	202895.92	55.7	Pass
		Diagonal	1	774	-2457.09	16569.46	14.8	Pass
		Horizontal	7/8	814	1429.55	24046.79	5.9	Pass
		Top Girt	1 1/4	758	768.45	49075.06	1.6	Pass
		T13	100 - 80	Mid Girt	1 1/4	764	1471.47	49075.06
Guy A@100.5	7/8			1190	23106.20	46000.00	50.2	Pass
Guy B@100.5	7/8			1189	22624.20	46000.00	49.2	Pass
Guy C@100.5	7/8			1188	21994.80	46000.00	47.8	Pass
Top Guy Pull-Off@100.5	1 1/4			762	9395.17	49075.06	19.1	Pass
Leg	2 3/4			821	-113114.00	197256.00	57.3	Pass
T14	80 - 60	Diagonal	1	881	-4688.11	16569.46	28.3	Pass
		Horizontal	7/8	839	1586.43	24046.79	6.6	Pass
		Top Girt	1 1/4	824	2162.69	49075.06	4.4	Pass
		Bottom Girt	1 1/4	827	1638.31	49075.06	3.3	Pass
		Mid Girt	1 1/4	830	1491.59	49075.06	3.0	Pass
T15	60 - 40	Leg	2 3/4	888	-94064.80	195488.44	48.1	Pass
		Diagonal	1	947	-3531.59	16569.46	21.3	Pass
		Horizontal	7/8	946	1609.84	24046.79	6.7	Pass
		Top Girt	1 1/4	892	-526.82	14854.02	3.5	Pass
		Bottom Girt	1 1/4	893	1316.23	49075.06	2.7	Pass
T16	40 - 20	Mid Girt	1 1/4	896	1489.48	49075.06	3.0	Pass
		Leg	2 3/4	955	-100452.00	195711.05	51.3	Pass
		Diagonal	1	1013	-1986.97	16569.46	12.0	Pass
		Horizontal	7/8	1012	1661.97	24046.79	6.9	Pass
		Top Girt	1 1/4	956	1029.67	49075.06	2.1	Pass
T17	20 - 12	Bottom Girt	1 1/4	959	975.61	49075.06	2.0	Pass
		Mid Girt	1 1/4	962	1633.53	49075.06	3.3	Pass
		Leg	2 3/4	1021	-100716.00	195673.73	51.5	Pass
T18	12 - 7	Diagonal	1	1031	-2134.37	16569.46	12.9	Pass
		Horizontal	7/8	1037	1721.16	24046.79	7.2	Pass
		Top Girt	1 1/4	1022	973.80	49075.06	2.0	Pass
T19	7 - 0	Bottom Girt	1 1/4	1025	1091.20	49075.06	2.2	Pass
		Mid Girt	1 1/4	1028	1667.66	49075.06	3.4	Pass
		Leg	2 3/4	1087	-97101.20	195472.44	49.7	Pass
		Diagonal	1	1105	-2252.72	16640.64	13.5	Pass
		Horizontal	7/8	1104	1171.97	18039.60	6.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
		Top Girt	1 1/4	1088	1297.28	49075.06	2.6	Pass
		Leg	2 3/4	1113	-69712.10	144174.00	48.4	Pass
		Diagonal	1 1/4	1124	-1999.52	29610.19	6.8	Pass
		Horizontal	6x3/4	1114	5310.70	129567.59	4.1	Pass
		Leg	2 3/4	1134	-75702.10	144174.00	52.5	Pass
		Diagonal	1 1/4	1146	-14119.60	24392.17	57.9	Pass
		Secondary Horizontal	3/4	1161	-1389.10	5681.82	24.4	Pass
		Top Girt	6x3/4	1136	16148.20	97200.00	16.6	Pass
		Bottom Girt	6x3/4	1139	7187.54	97200.00	7.4	Pass
		Mid Girt	6x3/4	1142	6232.60	97200.00	6.4	Pass
Summary								
		Latticed Pole					63.0	Pass
		Leg (L1)						
		Latticed Pole					45.2	Pass
		Diagonal (L1)						
		Latticed Pole					0.1	Pass
		Top Girt (L1)						
		Latticed Pole					0.5	Pass
		Mid Girt (L1)						
		Leg (T9)					68.8	Pass
		Diagonal (T19)					57.9	Pass
		Horizontal (T4)					12.5	Pass
		Secondary Horizontal (T19)					24.4	Pass
		Top Girt (T19)					16.6	Pass
		Bottom Girt (T8)					16.7	Pass
		Mid Girt (T19)					6.4	Pass
		Guy A (L1)					83.6	Pass
		Guy B (T4)					73.2	Pass
		Guy C (T4)					71.8	Pass
		Top Guy Pull-Off (T9)					27.2	Pass
		Bottom Guy Pull-Off (T9)					41.3	Pass
		Torque Arm					28.1	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
						Top (T9)		
						Torque Arm	53.8	Pass
						Bottom (T9)		
						Bolt Checks	51.4	Pass
						RATING =	83.6	Pass

The maximum stress under the proposed conditions and configurations is **83.6%** of the tower capacity, governed by guy A (L1), and is considered **adequate**.

Foundation:

The foundation reactions are summarized below:

Load	Allowable Loading (TIA-222 Rev F)	Current analysis loads (TIA 222 Rev F)	% Capacity
Base Compression (kips)	381.9	262.7	69%
Base Shear (kips)	11.9	3.0	25%
Guy Anchor Horizontal (kips)	125.1	94.8	76%
Guy Anchor Uplift (kips)	118.9	95.4	80%

The original design drawings (By PiRod Inc. dated 12/05/2000) made available to EBI Consulting for comparing the current reactions with the allowable tower reaction. It can be seen that the current reactions are smaller than the allowable tower reactions and it was determined that the existing tower and guy anchor foundations all are structurally adequate for supporting the tower and guy wires under the proposed loading configuration.

Limitations and Assumptions:

The report is based on the following:

1. Tower is properly installed and maintained.
2. All members are as specified in the original design documents and are in good condition.
3. All required members are in place.
4. All bolts are in place and are tightly fastened.
5. Tower is in plumb condition.
6. All member protective coatings are in good condition.
7. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
8. Modifications listed in the previous report have been installed.

EBI is not responsible for any modifications completed prior to or hereafter in which EBI is not or was not directly involved. Modifications include but are not limited to:

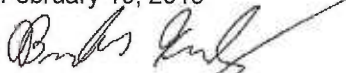
- A. Adding antennas
- B. Removing / replacing antennas
- C. Adding coaxial cables

EBI hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact EBI. EBI disclaims all liability for representation, recommendation, or conclusion not expressly stated herein.

THE CONCLUSION OF THE TOWER STRUCTURAL ANALYSIS IS THAT THE TOWER IS AT 83.6% CAPACITY FOR THE PROPOSED AND EXISTING LOADING AND IS CONSIDERED ADEQUATE.

Please feel free to contact our office should you have any questions.

Sincerely yours,
EBI Consulting
February 19, 2015



Brandon Kelsey, E.I.T.



Maribel Dentinger, P.E.
Professional Engineer



Attachment: Photograph Log, Calculations

PHOTOGRAPH LOG

Photo 1:
Existing guy tower.



Photo 2:
T-Mobile existing antennas.



Photo 3:

Existing guy tower base.



STRUCTURAL DESIGN PARAMETERS

BUILDING CODE:	2003 IBC WITH CT 2005, 2009, 2011, and 2013 AMENDMENTS ASCE7-05 TIA- 222-F
OCCUPANCY CATEGORY:	II
WIND LOADS:	
BASIC WIND SPEED (fastest mile), V:	85 MPH (Tia 222 Rev F)
IMPORTANCE FACTOR, I:	1.0
ICE LOADS:	
ICE THICKNESS	0.5 INCH
BASIC WIND SPEED WITH ICE, VI	74 MPH

APPENDIX A

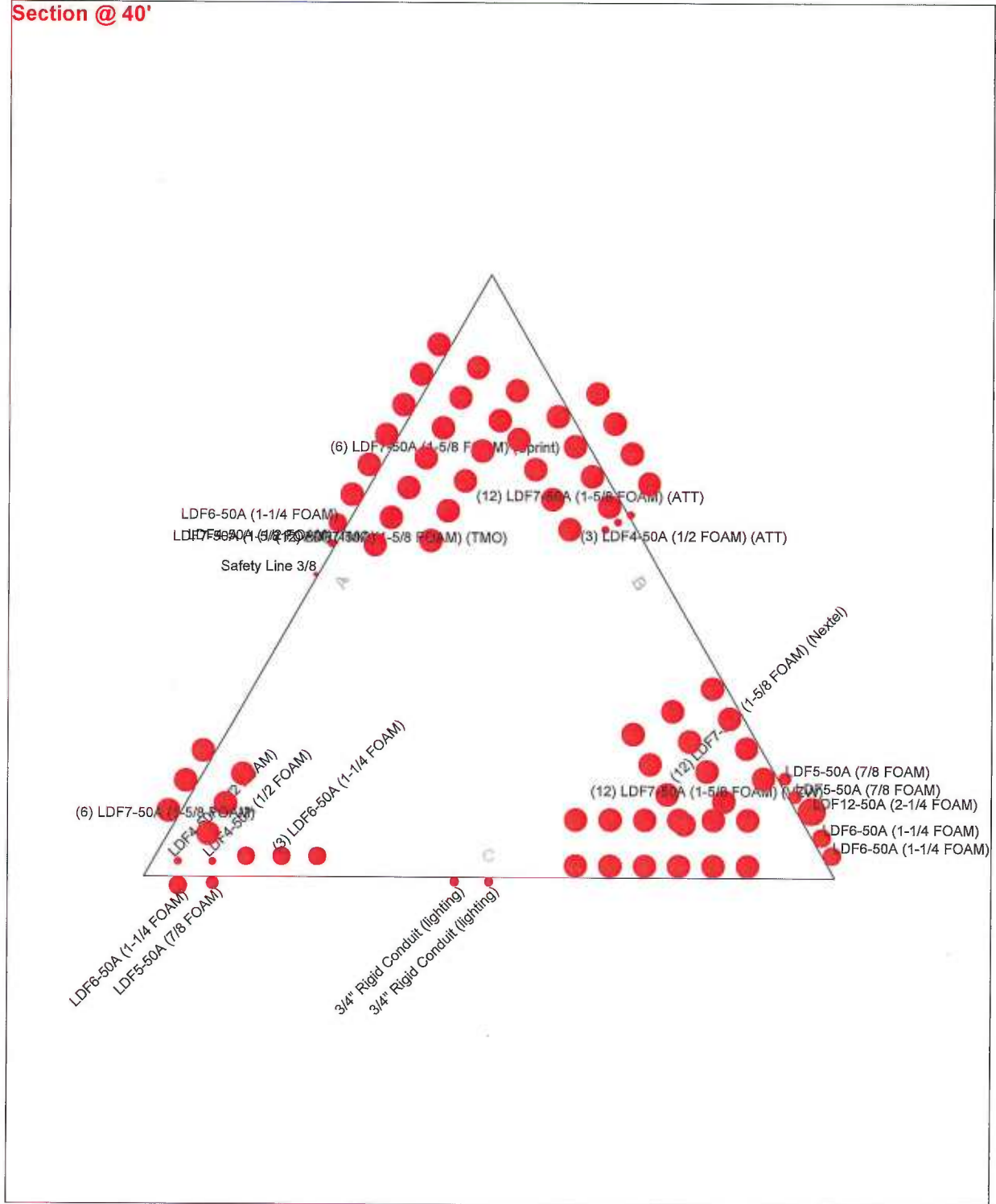
TNX Tower Results

Feed Line Plan

40'

Round _____ Flat _____ App In Face _____ App Out Face _____

Section @ 40'



EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job: CTLN058A		
	Project: 81150130		
	Client: T-Mobile	Drawn by: Brandon Kelsey	App'd:
	Code: TIA/EIA-222-F	Date: 02/24/15	Scale: NTS
	Path:	Dwg No.: E-7	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	1 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Tower Input Data

The main tower is a 3x guyed tower with an overall height of 347.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 5.00 ft at the top and tapered at the base.

An index plate is provided at the 3 sided -tower connection.

There is a 3 sided latticed pole with a face width of 2.50 ft.

This tower is designed using the TIA/EIA-222-F standard.

The following design criteria apply:

Tower is located in New London County, Connecticut.

Basic wind speed of 85 mph.

Nominal ice thickness of 0.5000 in.

Ice density of 56 pcf.

A wind speed of 74 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

Weld together tower sections have flange connections..

Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications..

Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards..

Welds are fabricated with ER-70S-6 electrodes..

Pressures are calculated at each section.

Stress ratio used in latticed pole member design is 1.0664.

Safety factor used in guy design is 2.

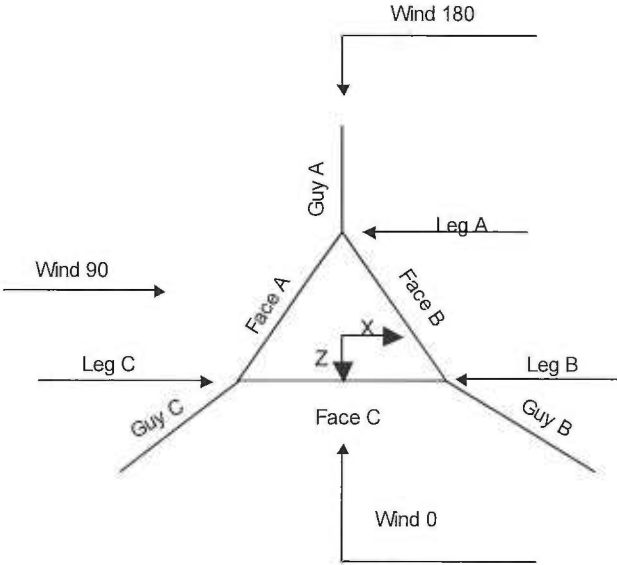
Stress ratio used in tower member design is 1.333.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

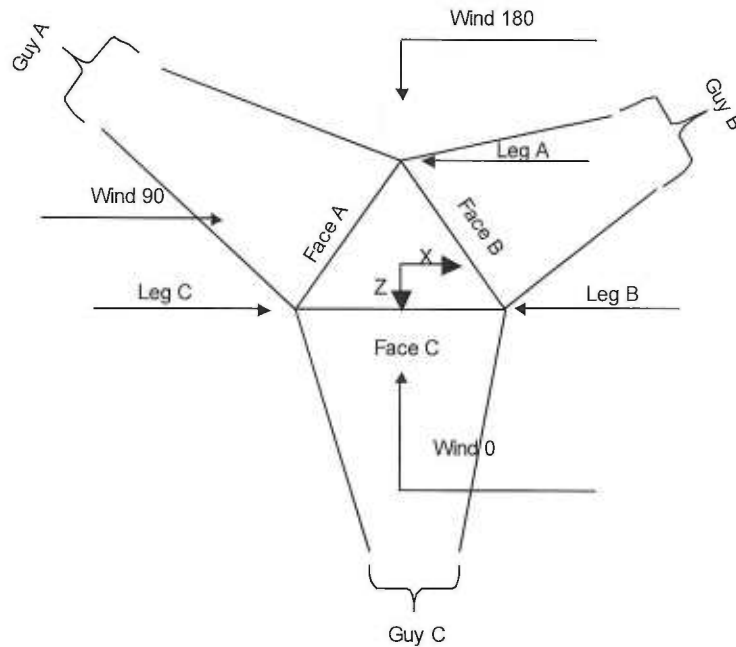
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) Add IBC .6D+W Combination | <ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area √ Use Clear Spans For KL/r √ Retension Guys To Initial Tension Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. √ Autocalc Torque Arm Areas √ SR Members Have Cut Ends Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Use TIA-222-G Tension Splice Capacity Exemption | <ul style="list-style-type: none"> Treat Feedline Bundles As Cylinder Use ASCE 10 X-Brace Ly Rules √ Calculate Redundant Bracing Forces Ignore Redundant Members in FEA √ SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feedline Torque √ Include Angle Block Shear Check <li style="text-align: center;">Poles Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets |
|--|--|---|

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 2 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey



Corner & Starmount Guyed Tower

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 3 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey



Face Guyed

3 Sided Latticed Pole Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
L1	347.00-330.00			2.50	1	17.00

3 Sided Latticed Pole Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
L1	347.00-330.00	2.10	X Brace	No	No	1.0000	1.0000

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	5 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

3 Sided Latticed Pole Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
L1 347.00-330.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

3 Sided Latticed Pole Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
				Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
L1 347.00-330.00	Flange	1.2500 A325N	3	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	330.00-320.00			5.00	1	10.00
T2	320.00-300.00			5.00	1	20.00
T3	300.00-280.00			5.00	1	20.00
T4	280.00-260.00			5.00	1	20.00
T5	260.00-240.00			5.00	1	20.00
T6	240.00-220.00			5.00	1	20.00
T7	220.00-200.00			5.00	1	20.00
T8	200.00-180.00			5.00	1	20.00
T9	180.00-160.00			5.00	1	20.00
T10	160.00-140.00			5.00	1	20.00
T11	140.00-120.00			5.00	1	20.00
T12	120.00-100.00			5.00	1	20.00
T13	100.00-80.00			5.00	1	20.00
T14	80.00-60.00			5.00	1	20.00
T15	60.00-40.00			5.00	1	20.00
T16	40.00-20.00			5.00	1	20.00
T17	20.00-12.00			5.00	1	8.00
T18	12.00-7.00			5.00	1	5.00
T19	7.00-0.00			5.00	1	7.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 6 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	330.00-320.00	2.38	X Brace	No	Steps	0.0000	6.0000
T2	320.00-300.00	2.38	X Brace	No	Steps	6.0000	6.0000
T3	300.00-280.00	2.38	X Brace	No	Steps	6.0000	6.0000
T4	280.00-260.00	2.38	X Brace	No	Steps	6.0000	6.0000
T5	260.00-240.00	2.38	X Brace	No	Steps	6.0000	6.0000
T6	240.00-220.00	2.38	X Brace	No	Steps	6.0000	6.0000
T7	220.00-200.00	2.38	X Brace	No	Steps	6.0000	6.0000
T8	200.00-180.00	2.38	X Brace	No	Steps	6.0000	6.0000
T9	180.00-160.00	2.38	X Brace	No	Steps	6.0000	6.0000
T10	160.00-140.00	2.38	X Brace	No	Steps	6.0000	6.0000
T11	140.00-120.00	2.38	X Brace	No	Steps	6.0000	6.0000
T12	120.00-100.00	2.38	X Brace	No	Steps	6.0000	6.0000
T13	100.00-80.00	2.38	X Brace	No	Steps	6.0000	6.0000
T14	80.00-60.00	2.38	X Brace	No	Steps	6.0000	6.0000
T15	60.00-40.00	2.38	X Brace	No	Steps	6.0000	6.0000
T16	40.00-20.00	2.38	X Brace	No	Steps	6.0000	6.0000
T17	20.00-12.00	2.33	X Brace	No	Steps	6.0000	6.0000
T18	12.00-7.00	2.00	Diamond	No	Yes	6.0000	6.0000
T19	7.00-0.00	2.96	X Brace	No	Yes	1.0000	12.0000

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 330.00-320.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T2 320.00-300.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T3 300.00-280.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 280.00-260.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T5 260.00-240.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T6 240.00-220.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T7 220.00-200.00	Solid Round	2 1/2	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T8 200.00-180.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T9 180.00-160.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T10 160.00-140.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T11 140.00-120.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T12 120.00-100.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T13 100.00-80.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	7 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T14 80.00-60.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T15 60.00-40.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T16 40.00-20.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T17 20.00-12.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T18 12.00-7.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T19 7.00-0.00	Solid Round	2 3/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 330.00-320.00	Solid Round		A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T2 320.00-300.00	Solid Round	1	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T3 300.00-280.00	Solid Round	1	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T4 280.00-260.00	Solid Round	1	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T5 260.00-240.00	Solid Round	1	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T6 240.00-220.00	Solid Round	1	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T7 220.00-200.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T8 200.00-180.00	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	1 1/2	A572-50 (50 ksi)
T9 180.00-160.00	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	1 1/2	A572-50 (50 ksi)
T10 160.00-140.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T11 140.00-120.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T12 120.00-100.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T13 100.00-80.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T14 80.00-60.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T15 60.00-40.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T16 40.00-20.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	1 1/4	A572-50 (50 ksi)
T17 20.00-12.00	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round		A36 (36 ksi)
T19 7.00-0.00	Flat Bar	6x3/4	A36 (36 ksi)	Flat Bar	6x3/4	A36 (36 ksi)

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	8 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1 330.00-320.00	None	Solid Round		A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T2 320.00-300.00	1	Solid Round	1	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T3 300.00-280.00	1	Solid Round	1	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 280.00-260.00	1	Solid Round	1	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T5 260.00-240.00	1	Solid Round	1	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T6 240.00-220.00	1	Solid Round	1	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T7 220.00-200.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T8 200.00-180.00	1	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T9 180.00-160.00	1	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T10 160.00-140.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T11 140.00-120.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T12 120.00-100.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T13 100.00-80.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T14 80.00-60.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T15 60.00-40.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T16 40.00-20.00	1	Solid Round	1 1/4	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T17 20.00-12.00	None	Solid Round		A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T18 12.00-7.00	None	Solid Round		A572-50 (50 ksi)	Flat Bar	6x3/4	A36 (36 ksi)
T19 7.00-0.00	1	Flat Bar	6x3/4	A36 (36 ksi)	Solid Round		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T19 7.00-0.00	Solid Round	3/4	A572-50 (50 ksi)	Solid Round		A572-50 (50 ksi)

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 11 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T4	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
280.00-260.00														
T5	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
260.00-240.00														
T6	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
240.00-220.00														
T7	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
220.00-200.00														
T8	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
200.00-180.00														
T9	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
180.00-160.00														
T10	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
160.00-140.00														
T11	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
140.00-120.00														
T12	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
120.00-100.00														
T13	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
100.00-80.00														
T14	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
80.00-60.00														
T15	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
60.00-40.00														
T16	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
40.00-20.00														
T17	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
20.00-12.00														
T18	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
12.00-7.00														
T19	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
7.00-0.00														

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1	Sleeve DS	0.7500	5	0.6250	0	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
330.00-320.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T2	Sleeve DS	0.7500	5	0.6250	0	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
320.00-300.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T3	Sleeve DS	0.7500	5	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
300.00-280.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T4	Sleeve DS	0.7500	5	0.5000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
280.00-260.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T5	Sleeve DS	0.7500	5	0.5000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
260.00-240.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T6	Sleeve DS	0.7500	5	0.5000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
240.00-220.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	
T7	Sleeve DS	0.7500	5	0.5000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
220.00-200.00		A325X		A325X		A325N		A325N		A325N		A325N		A325N	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	13 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
330.083	Corner						
270	Corner						
176	Torque Arm	16.00	20.0000	Wing	A36 (36 ksi)	Double Angle	2L3x3x5/16
100.5	Corner						

Guy Data (cont'd)

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
330.08	A572-50 (50 ksi)	Solid Round			No	A572-50 (50 ksi)	Solid Round	1 1/4
270.00	A572-50 (50 ksi)	Solid Round			No	A572-50 (50 ksi)	Solid Round	1 1/4
176.00	A572-50 (50 ksi)	Solid Round			No	A572-50 (50 ksi)	Solid Round	1 1/2 1 1/4
100.50	A572-50 (50 ksi)	Solid Round			No	A572-50 (50 ksi)	Solid Round	1 1/4

Guy Data (cont'd)

Guy Elevation ft	Cable Weight A lb	Cable Weight B lb	Cable Weight C lb	Cable Weight D lb	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
330.083	415.82	395.73	382.58		14.62	13.27	12.42	
270	513.21	486.63	469.39		6.6 sec/pulse 11.55	6.3 sec/pulse 10.41	6.1 sec/pulse 9.70	
176	478.52	452.78	436.67		5.9 sec/pulse 7.60	5.6 sec/pulse 6.82	5.4 sec/pulse 6.35	
100.5	406.69	388.33	377.79		4.8 sec/pulse 5.53	4.5 sec/pulse 5.05	4.4 sec/pulse 4.79	
					4.1 sec/pulse	3.9 sec/pulse	3.8 sec/pulse	

Guy Data (cont'd)

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm		Pull Off		Diagonal	
			K _x	K _y	K _x	K _y	K _x	K _y
330.083	No	No			1	1	1	1
270	No	No			1	1	1	1
176	No	Yes	1	1	1	1	1	1
100.5	No	No			1	1	1	1

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 14 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Guy Data (cont'd)

Guy Elevation ft	Torque-Arm				Pull Off				Diagonal			
	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	U
330.083	0.7500 A325N	8	0.0000	1	0.5000 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
270	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
176	0.7500 A325N	4	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
100.5	0.0000 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q _z psf	q _z Ice psf	Ice Thickness in
330.083	A	150.54	29	21	0.5000
	B	162.54	29	22	0.5000
	C	170.54	30	22	0.5000
270	A	120.50	27	20	0.5000
	B	132.50	28	21	0.5000
	C	140.50	28	21	0.5000
176	A	73.50	23	17	0.5000
	B	85.50	24	18	0.5000
	C	93.50	25	19	0.5000
100.5	A	35.75	19	14	0.5000
	B	47.75	21	15	0.5000
	C	55.75	21	16	0.5000

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
3/4" Rigid Conduit (lighting)	C	Yes	Ar (CfAe)	170.30 - 347.00	0.0000	0	1	1	0.7500	0.7500		0.70
LDF7-50A (1-5/8 FOAM)	A	Yes	Ar (CfAe)	340.00 - 345.00	-1.0000	-0.35	1	1	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	A	Yes	Ar (CfAe)	335.00 - 340.00	-1.0000	-0.35	2	2	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	A	Yes	Ar (CfAe)	325.00 - 335.00	-1.0000	-0.35	3	3	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	A	Yes	Ar (CfAe)	128.50 - 325.00	-2.0000	-0.35	4	3	1.9800	1.9800		0.82
LDF6-50A (1-1/4 FOAM)	B	Yes	Ar (CfAe)	6.00 - 314.00	0.0000	0.47	1	1	1.5500	1.5500		0.66
LDF12-50A (2-1/4 FOAM)	B	Yes	Ar (CfAe)	6.00 - 298.00	0.0000	0.4	1	1	2.3500	2.3500		1.22
LDF6-50A	C	Yes	Ar (CfAe)	6.00 - 295.00	-1.0000	0.3	3	3	1.5500	1.5500		0.66

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	15 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
(1-1/4 FOAM) LDF4-50A	A	Yes	Ar (CfAe)	6.00 - 273.00	0.0000	0.05	1	1	0.6300	0.6300		0.15
(1/2 FOAM) LDF6-50A	C	Yes	Ar (CfAe)	6.00 - 263.30	0.0000	0.45	1	1	1.5500	1.5500		0.66
(1-1/4 FOAM) LDF6-50A	A	Yes	Ar (CfAe)	6.00 - 251.40	0.0000	0.08	1	1	1.5500	1.5500		0.66
(1-1/4 FOAM) LDF7-50A	C	Yes	Ar (CfAe)	6.00 - 236.70	-4.0000	-0.25	12	6	1.0000	1.9800		0.82
(1-5/8 FOAM) (Nextel) LDF7-50A	A	Yes	Ar (CfAe)	6.00 - 225.80	-6.0000	0.35	6	2	1.0000	1.9800		0.82
(1-5/8 FOAM) (Sprint) LDF5-50A	C	Yes	Ar (CfAe)	6.00 - 204.50	0.0000	0.4	1	1	1.0900	1.0900		0.33
(7/8 FOAM) LDF4-50A	C	Yes	Ar (CfAe)	6.00 - 203.80	-1.0000	0.45	1	1	0.6300	0.6300		0.15
(1/2 FOAM) LDF7-50A	B	Yes	Ar (CfAe)	6.00 - 200.00	-4.0000	-0.2	12	4	1.0000	1.9800		0.82
(1-5/8 FOAM) (ATT) LDF4-50A	B	Yes	Ar (CfAe)	6.00 - 200.00	-2.0000	-0.1	3	1	0.6300	0.6300		0.15
(1/2 FOAM) (ATT) LDF7-50A	A	Yes	Ar (CfAe)	6.00 - 183.30	-6.0000	0.2	12	4	1.0000	1.9800		0.82
(1-5/8 FOAM) (TMO) LDF7-50A	A	Yes	Ar (CfAe)	6.00 - 183.30	-2.0000	0.08	1	1	1.0000	1.9800		0.82
(1-5/8 FOAM) (TMO) 3/4" Rigid Conduit (lighting)	C	Yes	Ar (CfAe)	6.00 - 170.30	0.0000	0	1	1	0.7500	0.7500		0.70
LDF7-50A	B	Yes	Ar (CfAe)	6.00 - 166.50	-8.0000	0.25	12	4	1.0000	1.9800		0.82
(1-5/8 FOAM) (VZW) LDF4-50A	C	Yes	Ar (CfAe)	6.00 - 148.80	-1.0000	0.4	1	1	0.6300	0.6300		0.15
(1/2 FOAM) LDF5-50A	B	Yes	Ar (CfAe)	6.00 - 137.50	0.0000	0.37	1	1	1.0900	1.0900		0.33
(7/8 FOAM) LDF7-50A	A	Yes	Ar (CfAe)	114.60 - 128.50	-2.0000	-0.35	5	3	1.9800	1.9800		0.82
(1-5/8 FOAM) LDF7-50A	A	Yes	Ar (CfAe)	6.00 - 114.60	-2.0000	-0.35	6	3	1.0000	1.9800		0.82
(1-5/8 FOAM) 3/4" Rigid Conduit (lighting)	C	Yes	Ar (CfAe)	6.00 - 89.50	0.0000	0.05	1	1	0.7500	0.7500		0.70
LDF5-50A	B	Yes	Ar (CfAe)	6.00 - 88.50	0.0000	0.34	1	1	1.0900	1.0900		0.33
(7/8 FOAM) LDF6-50A	B	Yes	Ar (CfAe)	6.00 - 78.00	0.0000	0.44	1	1	1.5500	1.5500		0.66
(1-1/4 FOAM) Safety Line 3/8	A	Yes	Ar (CfAe)	0.00 - 347.00	0.0000	0	1	1	0.3750	0.3750		0.22

Feed Line/Linear Appurtenances Section Areas

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	Page
	Project	Date
	Client	Designed by
	CTLN058A	16 of 77
	81150130	13:46:17 02/24/15
	T-Mobile	Brandon Kelsey

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight lb
L1	347.00-330.00	A	5.481	0.000	0.000	0.000	28.34
		B	0.000	0.000	0.000	0.000	0.00
		C	1.063	0.000	0.000	0.000	11.90
T1	330.00-320.00	A	5.263	0.000	0.000	0.000	30.90
		B	0.000	0.000	0.000	0.000	0.00
		C	0.625	0.000	0.000	0.000	7.00
T2	320.00-300.00	A	10.525	0.000	0.000	0.000	70.00
		B	1.808	0.000	0.000	0.000	9.24
		C	1.250	0.000	0.000	0.000	14.00
T3	300.00-280.00	A	10.525	0.000	0.000	0.000	70.00
		B	6.108	0.000	0.000	0.000	35.16
		C	7.063	0.000	0.000	0.000	43.70
T4	280.00-260.00	A	11.208	0.000	0.000	0.000	71.95
		B	6.500	0.000	0.000	0.000	37.60
		C	9.426	0.000	0.000	0.000	55.78
T5	260.00-240.00	A	13.047	0.000	0.000	0.000	80.52
		B	6.500	0.000	0.000	0.000	37.60
		C	11.583	0.000	0.000	0.000	66.80
T6	240.00-220.00	A	16.072	0.000	0.000	0.000	114.74
		B	6.500	0.000	0.000	0.000	37.60
		C	28.116	0.000	0.000	0.000	231.13
T7	220.00-200.00	A	20.758	0.000	0.000	0.000	184.60
		B	6.500	0.000	0.000	0.000	37.60
		C	31.992	0.000	0.000	0.000	265.65
T8	200.00-180.00	A	23.481	0.000	0.000	0.000	219.78
		B	20.750	0.000	0.000	0.000	243.40
		C	34.250	0.000	0.000	0.000	273.20
T9	180.00-160.00	A	37.258	0.000	0.000	0.000	397.80
		B	25.040	0.000	0.000	0.000	307.36
		C	34.250	0.000	0.000	0.000	273.20
T10	160.00-140.00	A	37.258	0.000	0.000	0.000	397.80
		B	33.950	0.000	0.000	0.000	440.20
		C	34.712	0.000	0.000	0.000	274.52
T11	140.00-120.00	A	37.258	0.000	0.000	0.000	404.77
		B	35.540	0.000	0.000	0.000	445.98
		C	35.300	0.000	0.000	0.000	276.20
T12	120.00-100.00	A	37.258	0.000	0.000	0.000	426.17
		B	35.767	0.000	0.000	0.000	446.80
		C	35.300	0.000	0.000	0.000	276.20
T13	100.00-80.00	A	37.258	0.000	0.000	0.000	430.60
		B	36.539	0.000	0.000	0.000	449.61
		C	35.894	0.000	0.000	0.000	282.85
T14	80.00-60.00	A	37.258	0.000	0.000	0.000	430.60
		B	39.908	0.000	0.000	0.000	465.28
		C	36.550	0.000	0.000	0.000	290.20
T15	60.00-40.00	A	37.258	0.000	0.000	0.000	430.60
		B	40.167	0.000	0.000	0.000	466.60
		C	36.550	0.000	0.000	0.000	290.20
T16	40.00-20.00	A	37.258	0.000	0.000	0.000	430.60
		B	40.167	0.000	0.000	0.000	466.60
		C	36.550	0.000	0.000	0.000	290.20
T17	20.00-12.00	A	14.903	0.000	0.000	0.000	172.24
		B	16.067	0.000	0.000	0.000	186.64
		C	14.620	0.000	0.000	0.000	116.08
T18	12.00-7.00	A	9.315	0.000	0.000	0.000	107.65
		B	10.042	0.000	0.000	0.000	116.65
		C	9.137	0.000	0.000	0.000	72.55
T19	7.00-0.00	A	2.050	0.000	0.000	0.000	22.85
		B	2.008	0.000	0.000	0.000	23.33
		C	1.828	0.000	0.000	0.000	14.51

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 17 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight lb
L1	347.00-330.00	A	0.500	9.398	0.000	0.000	0.000	82.87
		B		0.000	0.000	0.000	0.000	0.00
		C		2.479	0.000	0.000	0.000	24.88
T1	330.00-320.00	A	0.500	8.596	0.000	0.000	0.000	89.27
		B		0.000	0.000	0.000	0.000	0.00
		C		1.458	0.000	0.000	0.000	14.64
T2	320.00-300.00	A	0.500	17.192	0.000	0.000	0.000	201.89
		B		2.975	0.000	0.000	0.000	26.77
		C		2.917	0.000	0.000	0.000	29.27
T3	300.00-280.00	A	0.500	17.192	0.000	0.000	0.000	201.89
		B		9.275	0.000	0.000	0.000	91.54
		C		12.479	0.000	0.000	0.000	115.32
T4	280.00-260.00	A	0.500	18.958	0.000	0.000	0.000	212.81
		B		9.833	0.000	0.000	0.000	97.46
		C		16.368	0.000	0.000	0.000	150.32
T5	260.00-240.00	A	0.500	22.331	0.000	0.000	0.000	240.49
		B		9.833	0.000	0.000	0.000	97.46
		C		19.917	0.000	0.000	0.000	182.25
T6	240.00-220.00	A	0.500	25.599	1.440	0.000	0.000	351.09
		B		9.833	0.000	0.000	0.000	97.46
		C		24.064	20.736	0.000	0.000	773.94
T7	220.00-200.00	A	0.500	29.125	4.967	0.000	0.000	581.60
		B		9.833	0.000	0.000	0.000	97.46
		C		26.183	24.833	0.000	0.000	899.91
T8	200.00-180.00	A	0.500	30.764	7.425	0.000	0.000	703.78
		B		17.517	14.900	0.000	0.000	841.67
		C		31.083	24.833	0.000	0.000	933.70
T9	180.00-160.00	A	0.500	39.058	19.867	0.000	0.000	1322.09
		B		19.131	19.743	0.000	0.000	1067.15
		C		31.083	24.833	0.000	0.000	933.70
T10	160.00-140.00	A	0.500	39.058	19.867	0.000	0.000	1322.09
		B		22.483	29.800	0.000	0.000	1535.46
		C		32.279	24.833	0.000	0.000	941.09
T11	140.00-120.00	A	0.500	39.058	19.867	0.000	0.000	1341.93
		B		25.531	29.800	0.000	0.000	1558.23
		C		33.800	24.833	0.000	0.000	950.50
T12	120.00-100.00	A	0.500	31.807	27.118	0.000	0.000	1446.16
		B		25.967	29.800	0.000	0.000	1561.49
		C		33.800	24.833	0.000	0.000	950.50
T13	100.00-80.00	A	0.500	29.125	29.800	0.000	0.000	1474.77
		B		27.447	29.800	0.000	0.000	1572.55
		C		35.185	24.833	0.000	0.000	964.41
T14	80.00-60.00	A	0.500	29.125	29.800	0.000	0.000	1474.77
		B		33.275	29.800	0.000	0.000	1621.93
		C		36.717	24.833	0.000	0.000	979.77
T15	60.00-40.00	A	0.500	29.125	29.800	0.000	0.000	1474.77
		B		33.700	29.800	0.000	0.000	1625.76
		C		36.717	24.833	0.000	0.000	979.77
T16	40.00-20.00	A	0.500	29.125	29.800	0.000	0.000	1474.77
		B		33.700	29.800	0.000	0.000	1625.76
		C		36.717	24.833	0.000	0.000	979.77
T17	20.00-12.00	A	0.500	11.650	11.920	0.000	0.000	589.91
		B		13.480	11.920	0.000	0.000	650.30
		C		14.687	9.933	0.000	0.000	391.91
T18	12.00-7.00	A	0.500	7.281	7.450	0.000	0.000	368.69

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 18 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
T19	7.00-0.00	B	0.500	8.425	7.450	0.000	0.000	406.44
		C		9.179	6.208	0.000	0.000	244.94
		A		2.144	1.490	0.000	0.000	78.27
		B		1.685	1.490	0.000	0.000	81.29
		C		1.836	1.242	0.000	0.000	48.99

Feed Line Shielding

Section	Elevation ft	Face	A_R ft ²	A_R Ice ft ²	A_F ft ²	A_F Ice ft ²
L1	347.00-330.00	A	0.355	1.710	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.069	0.451	0.000	0.000
T1	330.00-320.00	A	0.384	1.333	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.064	0.317	0.000	0.000
T2	320.00-300.00	A	0.811	2.809	0.000	0.000
		B	0.139	0.486	0.000	0.000
		C	0.124	0.613	0.000	0.000
T3	300.00-280.00	A	0.811	2.809	0.000	0.000
		B	0.471	1.515	0.000	0.000
		C	0.699	2.624	0.000	0.000
T4	280.00-260.00	A	0.876	3.117	0.000	0.000
		B	0.508	1.617	0.000	0.000
		C	0.943	3.459	0.000	0.000
T5	260.00-240.00	A	1.006	3.649	0.000	0.000
		B	0.501	1.607	0.000	0.000
		C	1.146	4.188	0.000	0.000
T6	240.00-220.00	A	1.239	4.418	0.000	0.000
		B	0.501	1.607	0.000	0.000
		C	2.782	9.420	0.000	0.000
T7	220.00-200.00	A	1.856	5.991	0.000	0.000
		B	0.581	1.728	0.000	0.000
		C	3.561	11.357	0.000	0.000
T8	200.00-180.00	A	2.607	7.535	0.000	0.000
		B	2.303	6.396	0.000	0.000
		C	4.551	13.654	0.000	0.000
T9	180.00-160.00	A	4.330	12.179	0.000	0.000
		B	2.910	8.035	0.000	0.000
		C	4.605	13.741	0.000	0.000
T10	160.00-140.00	A	3.332	10.355	0.000	0.000
		B	3.036	9.188	0.000	0.000
		C	3.864	12.714	0.000	0.000
T11	140.00-120.00	A	3.332	10.355	0.000	0.000
		B	3.178	9.724	0.000	0.000
		C	3.929	13.052	0.000	0.000
T12	120.00-100.00	A	3.332	10.355	0.000	0.000
		B	3.199	9.800	0.000	0.000
		C	3.929	13.052	0.000	0.000
T13	100.00-80.00	A	3.332	10.355	0.000	0.000
		B	3.268	10.060	0.000	0.000
		C	3.995	13.361	0.000	0.000
T14	80.00-60.00	A	3.332	10.355	0.000	0.000
		B	3.569	11.085	0.000	0.000
		C	4.068	13.702	0.000	0.000
T15	60.00-40.00	A	3.332	10.355	0.000	0.000

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 19 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section	Elevation	Face	A_R	$A_{R_{Ice}}$	A_F	$A_{F_{Ice}}$
	ft		ft ²	ft ²	ft ²	ft ²
T16	40.00-20.00	B	3.592	11.159	0.000	0.000
		C	4.068	13.702	0.000	0.000
		A	3.332	10.355	0.000	0.000
		B	3.592	11.159	0.000	0.000
T17	20.00-12.00	C	4.068	13.702	0.000	0.000
		A	1.222	3.804	0.000	0.000
		B	1.317	4.099	0.000	0.000
T18	12.00-7.00	C	1.465	4.935	0.000	0.000
		A	0.497	1.906	0.233	0.368
		B	0.536	2.054	0.251	0.397
T19	7.00-0.00	C	0.488	1.991	0.228	0.385
		A	0.227	0.889	0.055	0.097
		B	0.222	0.777	0.054	0.085
		C	0.202	0.753	0.049	0.082

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X_{Ice}	CP_Z_{Ice}
	ft	in	in	in	in
L1	347.00-330.00	-2.2249	1.3562	-1.5548	0.9078
T1	330.00-320.00	-4.0339	1.9061	-3.3373	1.5266
T2	320.00-300.00	-3.1001	2.2266	-2.5341	1.8119
T3	300.00-280.00	-2.4190	3.8226	-2.1374	3.1810
T4	280.00-260.00	-2.8622	4.0694	-2.5972	3.3489
T5	260.00-240.00	-3.7352	4.0691	-3.3855	3.3284
T6	240.00-220.00	-0.8049	4.9604	-1.4555	3.9839
T7	220.00-200.00	-0.4888	3.7521	-1.2135	3.5685
T8	200.00-180.00	-0.0887	1.1694	-0.9962	1.8652
T9	180.00-160.00	-0.1979	-0.1293	-1.0114	0.9116
T10	160.00-140.00	0.7111	0.2709	-0.4798	1.1475
T11	140.00-120.00	0.8715	0.4196	-0.3068	1.3222
T12	120.00-100.00	0.9062	0.4330	0.1189	1.1796
T13	100.00-80.00	1.0057	0.5298	0.3782	1.2373
T14	80.00-60.00	1.5130	0.8207	0.9082	1.5349
T15	60.00-40.00	1.5537	0.8400	0.9489	1.5528
T16	40.00-20.00	1.5537	0.8400	0.9489	1.5528
T17	20.00-12.00	1.5810	0.8687	0.9708	1.6147
T18	12.00-7.00	1.6031	0.9479	0.9675	1.7953
T19	7.00-0.00	0.4005	0.2377	0.0970	0.4177

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	$C_{AA_{Front}}$	$C_{AA_{Side}}$	Weight	
			ft	°	ft	ft ²	ft ²	lb	
Lightning Rod	C	From Leg	0.00	0.0000	347.00	No Ice	0.75	0.75	10.00
			0.00			1/2" Ice	1.25	1.25	40.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	20 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	Ice No Ice 1/2" Ice	C _{AA} _{Front} ft ²	C _{AA} _{Side} ft ²	Weight lb
Flash Beacon Lighting	C	None	2.00	0.0000	347.00	No Ice 1/2" Ice	2.70 3.10	2.70 3.10	50.00 70.00
LP-3E-Radomes	A	From Face	1.00 0.00 0.00	0.0000	345.00	No Ice 1/2" Ice	5.95 7.52	5.95 7.52	110.00 180.00
LP-3E-Radomes	A	From Face	1.00 0.00 0.00	0.0000	340.00	No Ice 1/2" Ice	5.95 7.52	5.95 7.52	110.00 180.00
LP-3E-Radomes	A	From Face	1.00 0.00 0.00	0.0000	335.00	No Ice 1/2" Ice	5.95 7.52	5.95 7.52	110.00 180.00
LP-2E-Radomes	B	From Leg	1.00 0.00 0.00	0.0000	314.00	No Ice 1/2" Ice	5.71 7.45	5.71 7.45	110.00 180.00
LP-2E-Radomes	B	From Leg	1.00 0.00 0.00	0.0000	308.00	No Ice 1/2" Ice	5.71 7.45	5.71 7.45	110.00 180.00
PD220	B	From Leg	3.00 0.00 3.00	0.0000	298.00	No Ice 1/2" Ice	3.56 7.13	3.56 7.13	23.00 46.00
3' Side Mount Standoff	B	From Leg	1.50 0.00 0.00	0.0000	298.00	No Ice 1/2" Ice	1.90 3.30	1.90 3.30	40.00 70.00
DB810KE-Y	A	From Face	10.00 0.00 0.00	0.0000	295.00	No Ice 1/2" Ice	4.89 6.55	4.89 6.55	35.00 70.26
DB810KE-Y	A	From Face	10.00 0.00 0.00	0.0000	295.00	No Ice 1/2" Ice	4.89 6.55	4.89 6.55	35.00 70.26
DB810KE-Y	C	From Face	10.00 0.00 0.00	0.0000	295.00	No Ice 1/2" Ice	4.89 6.55	4.89 6.55	35.00 70.26
PiRod 10' Box Arm	A	From Face	5.00 0.00 0.00	0.0000	295.00	No Ice 1/2" Ice	5.00 10.00	5.00 10.00	250.00 300.00
PiRod 10' Box Arm	C	From Face	5.00 0.00 0.00	0.0000	295.00	No Ice 1/2" Ice	5.00 10.00	5.00 10.00	250.00 300.00
Box 14"x10" dia.	A	From Leg	1.00 0.00 0.00	0.0000	277.00	No Ice 1/2" Ice	0.78 0.92	0.78 0.92	10.00 20.56
2' Side Mount Standoff	A	From Leg	1.00 0.00 0.00	0.0000	273.50	No Ice 1/2" Ice	1.00 1.50	1.00 1.50	30.00 50.00
PD1167	C	From Leg	5.00 0.00 8.20	0.0000	263.30	No Ice 1/2" Ice	2.03 3.39	2.03 3.39	8.00 13.00
PiRod 5' Side Mount Standoff	C	From Leg	2.50 0.00 0.00	0.0000	263.30	No Ice 1/2" Ice	3.85 5.20	3.85 5.20	60.00 110.00
2-1/2"x15' Omni Antenna	A	From Leg	5.00 0.00 7.10	0.0000	251.40	No Ice 1/2" Ice	3.75 5.28	3.75 5.28	30.00 57.00
PiRod 5' Side Mount Standoff	A	From Leg	2.50 0.00 0.00	0.0000	251.40	No Ice 1/2" Ice	3.85 5.20	3.85 5.20	60.00 110.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	21 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb	
(4) 4'x6.25"x8.25" Panel Antenna W/ Mast Pipe (Nextel)	A	From Leg	5.00 0.00 0.60	0.0000	236.70	No Ice 1/2" Ice	3.30 3.69	5.15 5.83	48.25 86.70
(4) 4'x6.25"x8.25" Panel Antenna W/ Mast Pipe (Nextel)	B	From Leg	5.00 0.00 0.60	0.0000	236.70	No Ice 1/2" Ice	3.30 3.69	5.15 5.83	48.25 86.70
(4) 4'x6.25"x8.25" Panel Antenna W/ Mast Pipe (Nextel)	C	From Leg	5.00 0.00 0.60	0.0000	236.70	No Ice 1/2" Ice	3.30 3.69	5.15 5.83	48.25 86.70
PiRod 15' T-Frame Sector Mount (1) (Nextel)	A	From Leg	2.50 0.00 0.00	0.0000	236.70	No Ice 1/2" Ice	15.00 20.60	15.00 20.60	500.00 650.00
PiRod 15' T-Frame Sector Mount (1) (Nextel)	B	From Leg	2.50 0.00 0.00	0.0000	236.70	No Ice 1/2" Ice	15.00 20.60	15.00 20.60	500.00 650.00
PiRod 15' T-Frame Sector Mount (1) (Nextel)	C	From Leg	2.50 0.00 0.00	0.0000	236.70	No Ice 1/2" Ice	15.00 20.60	15.00 20.60	500.00 650.00
(2) DB980H90E-M w/Mount Pipe (Sprint)	A	From Leg	3.50 0.00 0.20	0.0000	225.80	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 72.67
(2) DB980H90E-M w/Mount Pipe (Sprint)	B	From Leg	3.50 0.00 0.20	0.0000	225.80	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 72.67
(2) DB980H90E-M w/Mount Pipe (Sprint)	C	From Leg	3.50 0.00 0.20	0.0000	225.80	No Ice 1/2" Ice	4.27 4.86	3.86 4.95	34.05 72.67
PiRod 12' T-Frame Sector Mount (1) (Sprint)	A	From Leg	2.00 0.00 0.00	0.0000	225.80	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	465.00 600.00
PiRod 12' T-Frame Sector Mount (1) (Sprint)	B	From Leg	2.00 0.00 0.00	0.0000	225.80	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	465.00 600.00
PiRod 12' T-Frame Sector Mount (1) (Sprint)	C	From Leg	2.00 0.00 0.00	0.0000	225.80	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	465.00 600.00
Kreco CO-41A	B	From Leg	6.00 0.00 6.00	0.0000	204.50	No Ice 1/2" Ice	2.58 3.65	2.58 3.65	20.00 30.00
PiRod 6' Side Mount Standoff	B	From Leg	3.00 0.00 0.00	0.0000	204.50	No Ice 1/2" Ice	4.97 6.12	4.97 6.12	70.00 130.00
2"x8' Omni Antenna	A	From Face	4.00 0.00 3.20	0.0000	203.80	No Ice 1/2" Ice	1.60 2.42	1.60 2.42	35.00 47.45
PiRod 4' Side Mount Standoff	A	From Face	2.00 0.00 0.00	0.0000	203.80	No Ice 1/2" Ice	2.72 4.91	2.72 4.91	50.00 89.00
Powerwave 7770 W/ Mast Pipe (ATT)	A	From Leg	3.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice	6.02 6.47	4.10 4.75	57.25 101.14
Powerwave 7770 W/ Mast Pipe (ATT)	B	From Leg	3.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice	6.02 6.47	4.10 4.75	57.25 101.14
Powerwave 7770 W/ Mast Pipe (ATT)	C	From Leg	3.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice	6.02 6.47	4.10 4.75	57.25 101.14

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	22 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets:	Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz Lateral					
			ft	°	ft	ft ²	ft ²	lb
General TMA (ATT)	A	From Leg	2.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 0.80	0.68 0.45 0.56	13.20 18.38
General TMA (ATT)	B	From Leg	2.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 0.80	0.68 0.45 0.56	13.20 18.38
General TMA (ATT)	C	From Leg	2.50 -4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 0.80	0.68 0.45 0.56	13.20 18.38
KMW AM-X-CD-14-65-00T-RET W Mast Pipe (ATT)	A	From Leg	3.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 6.20	5.74 6.20	54.65 97.85
Powerwave P65-17-XLH-RR W/ Mast Pipe (ATT)	B	From Leg	3.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 12.47	11.75 9.39 10.90	122.11 209.23
Powerwave P65-17-XLH-RR W/ Mast Pipe (ATT)	C	From Leg	3.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 12.47	11.75 9.39 10.90	122.11 209.23
Ericsson RRU (ATT)	A	From Leg	2.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
Ericsson RRU (ATT)	B	From Leg	2.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
Ericsson RRU (ATT)	C	From Leg	2.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
KMW AM-X-CD-14-65-00T-RET W Mast Pipe (ATT)	A	From Leg	3.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 6.20	5.74 6.20	54.65 97.85
Powerwave P65-17-XLH-RR W/ Mast Pipe (ATT)	B	From Leg	3.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 12.47	11.75 9.39 10.90	122.11 209.23
Powerwave P65-17-XLH-RR W/ Mast Pipe (ATT)	C	From Leg	3.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 12.47	11.75 9.39 10.90	122.11 209.23
Ericsson RRU (ATT)	A	From Leg	2.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
Ericsson RRU (ATT)	B	From Leg	2.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
Ericsson RRU (ATT)	C	From Leg	2.50 4.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.26	2.07 1.08 1.23	44.00 58.64
Surge Arrestor (DC6-48-60-18-8F) W/ Mast Pipe (ATT)	A	From Leg	0.50 0.00 1.00	0.0000	199.00	No Ice 1/2" Ice 2.95	2.45 2.45	38.25 64.62
Pirot 10' PCS Frame (1) (ATT)	A	From Leg	2.00 0.00 0.00	0.0000	199.00	No Ice 1/2" Ice 13.20	9.00 9.00	250.00 350.00
Pirot 10' PCS Frame (1) (ATT)	B	From Leg	2.00 0.00 0.00	0.0000	199.00	No Ice 1/2" Ice 13.20	9.00 9.00	250.00 350.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	23 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb	
Pirod 10' PCS Frame (1) (ATT)	C	From Leg	2.00 0.00 0.00	0.0000	199.00	No Ice 1/2" Ice	9.00 13.20	9.00 13.20	250.00 350.00
AIR21 B2A/B4P W/ Mast Pipe (TMO)	A	From Leg	3.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
AIR21 B2A/B4P W/ Mast Pipe (TMO)	B	From Leg	3.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
AIR21 B2A/B4P W/ Mast Pipe (TMO)	C	From Leg	3.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
dd B4 TMA (TMO)	A	From Leg	2.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	0.78 0.90	0.21 0.30	30.00 34.56
dd B4 TMA (TMO)	B	From Leg	2.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	0.78 0.90	0.21 0.30	30.00 34.56
dd B4 TMA (TMO)	C	From Leg	2.50 -4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	0.78 0.90	0.21 0.30	30.00 34.56
LNX-1615DS-VTM W/ Mast Pipe (TMO)	A	From Leg	3.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	11.45 12.06	10.00 11.42	90.00 181.00
LNX-1615DS-VTM W/ Mast Pipe (TMO)	B	From Leg	3.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	11.45 12.06	10.00 11.42	90.00 181.00
LNX-1615DS-VTM W/ Mast Pipe (TMO)	C	From Leg	3.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	11.45 12.06	10.00 11.42	90.00 181.00
RRUS11-B12 (TMO)	A	From Leg	2.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	3.26 3.50	1.38 1.56	66.00 86.87
RRUS11-B12 (TMO)	B	From Leg	2.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	3.26 3.50	1.38 1.56	66.00 86.87
RRUS11-B12 (TMO)	C	From Leg	2.50 0.00 1.70	0.0000	183.30	No Ice 1/2" Ice	3.26 3.50	1.38 1.56	66.00 86.87
AIR21 B4A/B2P W/ Mast Pipe (TMO)	A	From Leg	3.50 4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
AIR21 B4A/B2P W/ Mast Pipe (TMO)	B	From Leg	3.50 4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
AIR21 B4A/B2P W/ Mast Pipe (TMO)	C	From Leg	3.50 4.00 1.70	0.0000	183.30	No Ice 1/2" Ice	6.82 7.35	5.95 6.72	142.74 202.47
Pirod 10' PCS Frame (1) (TMO)	A	From Leg	2.00 0.00 0.00	0.0000	183.30	No Ice 1/2" Ice	9.00 13.20	9.00 13.20	250.00 350.00
Pirod 10' PCS Frame (1) (TMO)	B	From Leg	2.00 0.00 0.00	0.0000	183.30	No Ice 1/2" Ice	9.00 13.20	9.00 13.20	250.00 350.00
Pirod 10' PCS Frame (1) (TMO)	C	From Leg	2.00 0.00 0.00	0.0000	183.30	No Ice 1/2" Ice	9.00 13.20	9.00 13.20	250.00 350.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	24 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A ₁ Front	C _A A ₁ Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	lb	
Mid Beacon	A	From Leg	1.00	0.0000	171.00	No Ice	1.90	1.90	60.00	
			0.00				1/2" Ice	2.75	2.75	95.00
			0.00							
Mid Beacon	B	From Leg	1.00	0.0000	171.00	No Ice	1.90	1.90	60.00	
			0.00				1/2" Ice	2.75	2.75	95.00
			0.00							
Mid Beacon	C	From Leg	1.00	0.0000	171.00	No Ice	1.90	1.90	60.00	
			0.00				1/2" Ice	2.75	2.75	95.00
			0.00							
LPA-80080-4CF W/ Mast Pipe (VZW)	A	From Leg	3.50	0.0000	166.50	No Ice	3.21	7.78	71.74	
			-6.00				1/2" Ice	3.64	8.54	123.59
			1.00							
LPA-80063-4CF W/ Mast Pipe (VZW)	B	From Leg	3.50	0.0000	166.50	No Ice	6.67	8.73	84.74	
			-6.00				1/2" Ice	7.19	9.50	156.09
			1.00							
LPA-80063-4CF W/ Mast Pipe (VZW)	C	From Leg	3.50	0.0000	166.50	No Ice	6.67	8.73	84.74	
			-6.00				1/2" Ice	7.19	9.50	156.09
			1.00							
BXA-70063-6CF W/ Mast Pipe (VZW)	A	From Leg	3.50	0.0000	166.50	No Ice	7.76	5.88	52.00	
			-2.00				1/2" Ice	8.30	6.68	113.00
			1.00							
BXA-70063-6CF W/ Mast Pipe (VZW)	B	From Leg	3.50	0.0000	166.50	No Ice	7.76	5.88	52.00	
			-2.00				1/2" Ice	8.30	6.68	113.00
			1.00							
BXA-70063-6CF W/ Mast Pipe (VZW)	C	From Leg	3.50	0.0000	166.50	No Ice	7.76	5.88	52.00	
			-2.00				1/2" Ice	8.30	6.68	113.00
			1.00							
BXA-171085-12CF W/ Mast Pipe (VZW)	A	From Leg	3.50	0.0000	166.50	No Ice	3.50	3.88	70.74	
			2.00				1/2" Ice	3.94	4.55	108.25
			1.00							
BXA-171085-12CF W/ Mast Pipe (VZW)	B	From Leg	3.50	0.0000	166.50	No Ice	3.50	3.88	70.74	
			2.00				1/2" Ice	3.94	4.55	108.25
			1.00							
BXA-171085-12CF W/ Mast Pipe (VZW)	C	From Leg	3.50	0.0000	166.50	No Ice	3.50	3.88	70.74	
			2.00				1/2" Ice	3.94	4.55	108.25
			1.00							
LPA-80080-4CF W/ Mast Pipe (VZW)	A	From Leg	3.50	0.0000	166.50	No Ice	3.21	7.78	71.74	
			6.00				1/2" Ice	3.64	8.54	123.59
			1.00							
LPA-80063-4CF W/ Mast Pipe (VZW)	B	From Leg	3.50	0.0000	166.50	No Ice	6.67	8.73	84.74	
			6.00				1/2" Ice	7.19	9.50	156.09
			1.00							
LPA-80063-4CF W/ Mast Pipe (VZW)	C	From Leg	3.50	0.0000	166.50	No Ice	6.67	8.73	84.74	
			6.00				1/2" Ice	7.19	9.50	156.09
			1.00							
Pirod 12' T-Frame Sector Mount (1) (VZW)	A	From Leg	2.00	0.0000	166.50	No Ice	13.60	13.60	465.00	
			0.00				1/2" Ice	18.40	18.40	600.00
			0.00							
Pirod 12' T-Frame Sector Mount (1) (VZW)	B	From Leg	2.00	0.0000	166.50	No Ice	13.60	13.60	465.00	
			0.00				1/2" Ice	18.40	18.40	600.00
			0.00							
Pirod 12' T-Frame Sector Mount (1) (VZW)	C	From Leg	2.00	0.0000	166.50	No Ice	13.60	13.60	465.00	
			0.00				1/2" Ice	18.40	18.40	600.00
			0.00							
15' Dipole	A	From Leg	4.00	0.0000	148.80	No Ice	6.00	6.00	40.00	
			0.00				1/2" Ice	7.54	7.54	81.87
			-0.90							

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 25 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb	
PiRod 4' Side Mount Standoff	A	From Leg	2.00 0.00 0.00	0.0000	148.80	No Ice 1/2" Ice	2.72 4.91	2.72 4.91	50.00 89.00
3"x20' Omni Antenna	B	From Leg	3.50 0.00 9.50	0.0000	137.50	No Ice 1/2" Ice	6.00 8.03	6.00 8.03	50.00 93.17
PiRod 3.5' Side Mount Standoff	B	From Leg	2.00 0.00 0.00	0.0000	137.50	No Ice 1/2" Ice	2.50 4.50	2.50 4.50	45.00 80.00
3' Side Mount Standoff	C	From Leg	1.50 0.00 0.00	0.0000	111.30	No Ice 1/2" Ice	1.90 3.30	1.90 3.30	40.00 70.00
Box 7"x5"x4.5"	C	From Leg	0.00 0.00 0.00	0.0000	89.50	No Ice 1/2" Ice	0.34 0.42	0.31 0.39	10.00 13.45
Shively Radome	B	From Leg	2.50 0.00 0.00	0.0000	78.80	No Ice 1/2" Ice	6.17 6.55	6.17 6.55	115.00 192.88
2.5' Side Mount Standoff	B	From Leg	1.50 0.00 0.00	0.0000	78.80	No Ice 1/2" Ice	1.50 2.20	1.50 2.20	35.00 60.00
Shively Radome	B	From Leg	2.50 0.00 0.00	0.0000	70.00	No Ice 1/2" Ice	6.17 6.55	6.17 6.55	115.00 192.88
2.5' Side Mount Standoff	B	From Leg	1.50 0.00 0.00	0.0000	70.00	No Ice 1/2" Ice	1.50 2.20	1.50 2.20	35.00 60.00
Shively Radome	B	From Leg	2.50 0.00 0.00	0.0000	61.40	No Ice 1/2" Ice	6.17 6.55	6.17 6.55	115.00 192.88
2.5' Side Mount Standoff	B	From Leg	1.50 0.00 0.00	0.0000	61.40	No Ice 1/2" Ice	1.50 2.20	1.50 2.20	35.00 60.00
2.5' Side Mount Standoff	B	From Leg	1.50 0.00 0.00	0.0000	54.30	No Ice 1/2" Ice	1.50 2.20	1.50 2.20	35.00 60.00

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft ²	Weight lb	
10' Grid Dish	A	Grid	From Leg	1.00 0.00 0.00	0.0000		325.00	10.00	No Ice 1/2" Ice	78.50 79.81	418.00 827.71
6' Dish	A	Paraboloid w/o Radome	From Leg	2.00 0.00 -0.50	0.0000		273.50	6.00	No Ice 1/2" Ice	28.30 29.05	90.00 239.13
6' Grid Dish	A	Grid	From	1.00	0.0000		250.30	6.00	No Ice	28.30	198.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 26 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight
				ft	°	°	ft	ft	ft ²	lb
			Leg	0.00					1/2" Ice	347.13
6' Dish	B	Paraboloid w/o Radome	From Face	1.00	0.0000		128.80	6.00	No Ice	112.00
				0.00					1/2" Ice	261.13
1.5' Grid Dish	B	Grid	From Leg	3.00	0.0000		111.30	1.33	No Ice	13.00
				0.00					1/2" Ice	21.09
1.5' Grid Dish	B	Grid	From Leg	1.00	0.0000		88.50	1.33	No Ice	13.00
				0.00					1/2" Ice	21.09
				0.00						

Tower Pressures - No Ice

$G_H = 1.079$ (base tower), 1.079 (upper structure)

Section Elevation	z	K _Z	q _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _{A A} In Face	C _{A A} Out Face
ft	ft		psf	ft ²	e	ft ²	ft ²	ft ²		ft ²	ft ²
L1 347.00-330.00	338.50	1.945	36	44.271	A	0.000	11.305	3.542	31.33	0.000	0.000
					B	0.000	6.178		57.32	0.000	0.000
					C	0.000	7.172		49.38	0.000	0.000
T1 330.00-320.00	325.00	1.922	36	51.875	A	0.000	12.138	3.750	30.90	0.000	0.000
					B	0.000	7.259		51.66	0.000	0.000
					C	0.000	9.224		40.66	0.000	0.000
T2 320.00-300.00	310.00	1.897	35	103.750	A	0.000	24.633	7.500	30.45	0.000	0.000
					B	0.000	16.588		45.21	0.000	0.000
					C	0.000	18.151		41.32	0.000	0.000
T3 300.00-280.00	290.00	1.861	34	103.750	A	0.000	24.633	7.500	30.45	0.000	0.000
					B	0.000	20.556		36.48	0.000	0.000
					C	0.000	23.388		32.07	0.000	0.000
T4 280.00-260.00	270.00	1.823	34	103.750	A	0.000	25.351	7.500	29.58	0.000	0.000
					B	0.000	21.011		35.69	0.000	0.000
					C	0.000	25.608		29.29	0.000	0.000
T5 260.00-240.00	250.00	1.783	33	103.750	A	0.000	26.961	7.500	27.82	0.000	0.000
					B	0.000	20.918		35.85	0.000	0.000
					C	0.000	27.461		27.31	0.000	0.000
T6 240.00-220.00	230.00	1.741	32	103.750	A	0.000	29.752	7.500	25.21	0.000	0.000
					B	0.000	20.918		35.85	0.000	0.000
					C	0.000	42.358		17.71	0.000	0.000
T7 220.00-200.00	210.00	1.697	31	104.167	A	0.000	35.806	8.333	23.27	0.000	0.000
					B	0.000	22.822		36.51	0.000	0.000
					C	0.000	47.431		17.57	0.000	0.000
T8 200.00-180.00	190.00	1.649	30	104.583	A	0.000	40.633	9.167	22.56	0.000	0.000
					B	0.000	38.205		23.99	0.000	0.000
					C	0.000	51.545		17.78	0.000	0.000
T9 180.00-160.00	170.00	1.597	30	104.583	A	0.000	53.184	9.167	17.24	0.000	0.000
					B	0.000	42.385		21.63	0.000	0.000
					C	0.000	51.640		17.75	0.000	0.000
T10 160.00-140.00	150.00	1.541	29	104.583	A	0.000	51.626	9.167	17.76	0.000	0.000
					B	0.000	48.614		18.86	0.000	0.000
					C	0.000	50.635		18.10	0.000	0.000
T11 140.00-120.00	130.00	1.48	27	104.583	A	0.000	51.626	9.167	17.76	0.000	0.000
					B	0.000	50.061		18.31	0.000	0.000

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 27 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation ft	z ft	K _Z	q _z psf	A _G ft ²	F a c e ft ²	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
T12 120.00-100.00	110.00	1.411	26	104.583	C	0.000	51.158	9.167	17.92	0.000	0.000
					A	0.000	51.626		17.76	0.000	0.000
					B	0.000	50.268		18.24	0.000	0.000
T13 100.00-80.00	90.00	1.332	25	104.583	C	0.000	51.158	9.167	17.92	0.000	0.000
					A	0.000	51.626		17.76	0.000	0.000
					B	0.000	50.971		17.98	0.000	0.000
T14 80.00-60.00	70.00	1.24	23	104.583	C	0.000	51.686	9.167	17.74	0.000	0.000
					A	0.000	51.626		17.76	0.000	0.000
					B	0.000	54.039		16.96	0.000	0.000
T15 60.00-40.00	50.00	1.126	21	104.583	C	0.000	52.269	9.167	17.54	0.000	0.000
					A	0.000	51.626		17.76	0.000	0.000
					B	0.000	54.274		16.89	0.000	0.000
T16 40.00-20.00	30.00	1	18	104.583	C	0.000	52.269	9.167	17.54	0.000	0.000
					A	0.000	51.626		17.76	0.000	0.000
					B	0.000	54.274		16.89	0.000	0.000
T17 20.00-12.00	16.00	1	18	41.833	C	0.000	20.647	3.667	17.76	0.000	0.000
					A	0.000	20.477		17.91	0.000	0.000
					B	0.000	21.545		17.02	0.000	0.000
T18 12.00-7.00	9.50	1	18	26.146	C	0.000	20.647	3.667	17.76	0.000	0.000
					A	0.363	12.382		17.98	0.000	0.000
					B	0.345	13.070		17.08	0.000	0.000
T19 7.00-0.00	3.50	1	18	19.203	C	0.368	12.214	3.470	18.21	0.000	0.000
					A	0.432	7.167		45.67	0.000	0.000
					B	0.433	7.129		45.89	0.000	0.000
					C	0.438	6.968		46.86	0.000	0.000

Tower Pressure - With Ice

$G_H = 1.079$ (base tower), 1.079 (upper structure)

Section Elevation ft	z ft	K _Z	q _z psf	t _z in	A _G ft ²	F a c e ft ²	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
L1 347.00-330.00	338.50	1.945	27	0.5000	45.688	A	0.000	21.474	6.375	29.69	0.000	0.000
						B	0.000	13.786		46.24	0.000	0.000
						C	0.000	15.814		40.31	0.000	0.000
T1 330.00-320.00	325.00	1.922	27	0.5000	52.708	A	0.000	20.142	5.417	26.89	0.000	0.000
						B	0.000	12.879		42.06	0.000	0.000
						C	0.000	17.027		31.81	0.000	0.000
T2 320.00-300.00	310.00	1.897	26	0.5000	105.417	A	0.000	40.942	10.833	26.46	0.000	0.000
						B	0.000	29.048		37.29	0.000	0.000
						C	0.000	33.374		32.46	0.000	0.000
T3 300.00-280.00	290.00	1.861	26	0.5000	105.417	A	0.000	40.942	10.833	26.46	0.000	0.000
						B	0.000	34.319		31.57	0.000	0.000
						C	0.000	40.926		26.47	0.000	0.000
T4 280.00-260.00	270.00	1.823	25	0.5000	105.417	A	0.000	42.500	10.833	25.49	0.000	0.000
						B	0.000	34.876		31.06	0.000	0.000
						C	0.000	44.080		24.58	0.000	0.000
T5 260.00-240.00	250.00	1.783	25	0.5000	105.417	A	0.000	45.241	10.833	23.95	0.000	0.000
						B	0.000	34.786		31.14	0.000	0.000
						C	0.000	46.800		23.15	0.000	0.000
T6 240.00-220.00	230.00	1.741	24	0.5000	105.417	A	1.440	47.740	10.833	22.03	0.000	0.000
						B	0.000	34.786		31.14	0.000	0.000
						C	20.736	45.715		16.30	0.000	0.000
T7	210.00	1.697	24	0.5000	105.833	A	4.967	51.642	11.667	20.61	0.000	0.000

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	28 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section Elevation	z	K _Z	q _z	t _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face	C _A A _A Out Face
ft	ft		psf	in	ft ²	e	ft ²	ft ²	ft ²		ft ²	ft ²
220.00-200.00						B	0.000	36.613		31.86	0.000	0.000
						C	24.833	47.827		16.06	0.000	0.000
T8	190.00	1.649	23	0.5000	106.250	A	7.425	54.556	12.500	20.17	0.000	0.000
200.00-180.00						B	14.900	42.447		21.80	0.000	0.000
						C	24.833	53.229		16.01	0.000	0.000
T9	170.00	1.597	22	0.5000	106.250	A	19.867	59.101	12.500	15.83	0.000	0.000
180.00-160.00						B	19.743	43.318		19.82	0.000	0.000
						C	24.833	53.290		16.00	0.000	0.000
T10	150.00	1.541	21	0.5000	106.250	A	19.867	57.971	12.500	16.06	0.000	0.000
160.00-140.00						B	29.800	42.563		17.27	0.000	0.000
						C	24.833	53.306		16.00	0.000	0.000
T11	130.00	1.48	21	0.5000	106.250	A	19.867	57.971	12.500	16.06	0.000	0.000
140.00-120.00						B	29.800	45.076		16.69	0.000	0.000
						C	24.833	54.488		15.76	0.000	0.000
T12	110.00	1.411	20	0.5000	106.250	A	27.118	50.720	12.500	16.06	0.000	0.000
120.00-100.00						B	29.800	45.435		16.61	0.000	0.000
						C	24.833	54.488		15.76	0.000	0.000
T13	90.00	1.332	18	0.5000	106.250	A	29.800	48.038	12.500	16.06	0.000	0.000
100.00-80.00						B	29.800	46.655		16.35	0.000	0.000
						C	24.833	55.565		15.55	0.000	0.000
T14	80.00-60.00	70.00	1.24	17	0.5000	106.250	A	29.800	48.038	12.500	16.06	0.000
						B	29.800	51.459		15.38	0.000	0.000
						C	24.833	56.756		15.32	0.000	0.000
T15	60.00-40.00	50.00	1.126	16	0.5000	106.250	A	29.800	48.038	12.500	16.06	0.000
						B	29.800	51.809		15.32	0.000	0.000
						C	24.833	56.756		15.32	0.000	0.000
T16	40.00-20.00	30.00	1	14	0.5000	106.250	A	29.800	48.038	12.500	16.06	0.000
						B	29.800	51.809		15.32	0.000	0.000
						C	24.833	56.756		15.32	0.000	0.000
T17	20.00-12.00	16.00	1	14	0.5000	42.500	A	11.920	19.006	5.000	16.17	0.000
						B	11.920	20.540		15.40	0.000	0.000
						C	9.933	22.402		15.46	0.000	0.000
T18	12.00-7.00	9.50	1	14	0.5000	26.563	A	7.678	11.587	3.125	16.22	0.000
						B	7.649	12.582		15.45	0.000	0.000
						C	6.420	13.400		15.77	0.000	0.000
T19	7.00-0.00	3.50	1	14	0.5000	19.823	A	1.880	10.151	4.732	39.34	0.000
						B	1.892	9.804		40.46	0.000	0.000
						C	1.646	9.979		40.71	0.000	0.000

Tower Pressure - Service

$G_H = 1.079$ (base tower), 1.079 (upper structure)

Section Elevation	z	K _Z	q _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face	C _A A _A Out Face
ft	ft		psf	ft ²	e	ft ²	ft ²	ft ²		ft ²	ft ²
L1	338.50	1.945	18	44.271	A	0.000	11.305	3.542	31.33	0.000	0.000
347.00-330.00					B	0.000	6.178		57.32	0.000	0.000
					C	0.000	7.172		49.38	0.000	0.000
T1	325.00	1.922	18	51.875	A	0.000	12.138	3.750	30.90	0.000	0.000
330.00-320.00					B	0.000	7.259		51.66	0.000	0.000
					C	0.000	9.224		40.66	0.000	0.000
T2	310.00	1.897	17	103.750	A	0.000	24.633	7.500	30.45	0.000	0.000
320.00-300.00					B	0.000	16.588		45.21	0.000	0.000

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 29 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	z	K _z	q _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face	C _A A _A Out Face	
ft	ft		psf	ft ²		ft ²	ft ²	ft ²		ft ²	ft ²	
T3 300.00-280.00	290.00	1.861	17	103.750	C	0.000	18.151	7.500	41.32	0.000	0.000	
					A	0.000	24.633			30.45	0.000	0.000
					B	0.000	20.556			36.48	0.000	0.000
T4 280.00-260.00	270.00	1.823	17	103.750	C	0.000	23.388	7.500	32.07	0.000	0.000	
					A	0.000	25.351			29.58	0.000	0.000
					B	0.000	21.011			35.69	0.000	0.000
T5 260.00-240.00	250.00	1.783	16	103.750	C	0.000	25.608	7.500	29.29	0.000	0.000	
					A	0.000	26.961			27.82	0.000	0.000
					B	0.000	20.918			35.85	0.000	0.000
T6 240.00-220.00	230.00	1.741	16	103.750	C	0.000	27.461	7.500	25.21	0.000	0.000	
					A	0.000	29.752			25.21	0.000	0.000
					B	0.000	20.918			35.85	0.000	0.000
T7 220.00-200.00	210.00	1.697	16	104.167	C	0.000	42.358	8.333	17.71	0.000	0.000	
					A	0.000	35.806			23.27	0.000	0.000
					B	0.000	22.822			36.51	0.000	0.000
T8 200.00-180.00	190.00	1.649	15	104.583	C	0.000	47.431	9.167	17.57	0.000	0.000	
					A	0.000	40.633			22.56	0.000	0.000
					B	0.000	38.205			23.99	0.000	0.000
T9 180.00-160.00	170.00	1.597	15	104.583	C	0.000	51.545	9.167	17.78	0.000	0.000	
					A	0.000	53.184			17.24	0.000	0.000
					B	0.000	42.385			21.63	0.000	0.000
T10 160.00-140.00	150.00	1.541	14	104.583	C	0.000	51.640	9.167	17.75	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	48.614			18.86	0.000	0.000
T11 140.00-120.00	130.00	1.48	14	104.583	C	0.000	50.635	9.167	18.10	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	50.061			18.31	0.000	0.000
T12 120.00-100.00	110.00	1.411	13	104.583	C	0.000	51.158	9.167	17.92	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	50.268			18.24	0.000	0.000
T13 100.00-80.00	90.00	1.332	12	104.583	C	0.000	51.158	9.167	17.92	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	50.971			17.98	0.000	0.000
T14 80.00-60.00	70.00	1.24	11	104.583	C	0.000	51.686	9.167	17.74	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	54.039			16.96	0.000	0.000
T15 60.00-40.00	50.00	1.126	10	104.583	C	0.000	52.269	9.167	17.54	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	54.274			16.89	0.000	0.000
T16 40.00-20.00	30.00	1	9	104.583	C	0.000	52.269	9.167	17.54	0.000	0.000	
					A	0.000	51.626			17.76	0.000	0.000
					B	0.000	54.274			16.89	0.000	0.000
T17 20.00-12.00	16.00	1	9	41.833	C	0.000	52.269	3.667	17.54	0.000	0.000	
					A	0.000	20.477			17.91	0.000	0.000
					B	0.000	21.545			17.02	0.000	0.000
T18 12.00-7.00	9.50	1	9	26.146	C	0.000	20.647	2.292	17.76	0.000	0.000	
					A	0.363	12.382			17.98	0.000	0.000
					B	0.345	13.070			17.08	0.000	0.000
T19 7.00-0.00	3.50	1	9	19.203	C	0.368	12.214	3.470	18.21	0.000	0.000	
					A	0.432	7.167			45.67	0.000	0.000
					B	0.433	7.129			45.89	0.000	0.000
					C	0.438	6.968		46.86	0.000	0.000	

Tower Forces - No Ice - Wind Normal To Face

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	30 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	1	1	6.820	640.78	37.69	A
			B	0.14	2.81	0.58	1	1	3.583			
			C	0.162	2.728	0.583	1	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	1	1	7.257	692.09	69.21	A
			B	0.14	2.809	0.58	1	1	4.210			
			C	0.178	2.672	0.586	1	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	1	1	14.749	1381.69	69.08	A
			B	0.16	2.735	0.583	1	1	9.671			
			C	0.175	2.682	0.586	1	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	1	1	14.749	1355.61	67.78	A
			B	0.198	2.602	0.59	1	1	12.129			
			C	0.225	2.513	0.596	1	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	1	1	15.222	1370.10	68.51	C
			B	0.203	2.588	0.591	1	1	12.416			
			C	0.247	2.447	0.601	1	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	1	1	16.296	1417.13	70.86	C
			B	0.202	2.591	0.591	1	1	12.357			
			C	0.265	2.394	0.606	1	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	1	1	18.207	1974.21	98.71	C
			B	0.202	2.591	0.591	1	1	12.357			
			C	0.408	2.048	0.655	1	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	1	1	22.567	2132.00	106.60	C
			B	0.219	2.533	0.594	1	1	13.568			
			C	0.455	1.965	0.676	1	1	32.051			
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	1	1	26.289	2246.88	112.34	C
			B	0.365	2.137	0.638	1	1	24.377			
			C	0.493	1.909	0.694	1	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	1	1	37.329	2247.57	112.38	A
			TA	0.405	2.054	0.654	1	1	27.710			
		1294.07	C	0.494	1.908	0.694	1	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	1	1	35.843	2103.49	105.17	A
			B	0.465	1.95	0.68	1	1	33.067			
			C	0.484	1.921	0.69	1	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	1	1	35.843	2019.22	100.96	A
			B	0.479	1.929	0.687	1	1	34.385			
			C	0.489	1.914	0.692	1	1	35.403			
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	1	1	35.843	1925.11	96.26	A
			B	0.481	1.926	0.688	1	1	34.575			
			C	0.489	1.914	0.692	1	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	1	1	35.843	1819.96	91.00	C
			B	0.487	1.917	0.691	1	1	35.228			
			C	0.494	1.908	0.695	1	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	1	1	35.843	1773.74	88.69	B
			B	0.517	1.879	0.706	1	1	38.160			
			C	0.5	1.9	0.697	1	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	1	1	35.843	1618.61	80.93	B
			B	0.519	1.877	0.707	1	1	38.391			
			C	0.5	1.9	0.697	1	1	36.452			
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	1	1	35.843	1437.42	71.87	B
			B	0.519	1.877	0.707	1	1	38.391			
			C	0.5	1.9	0.697	1	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	1	1	14.174	570.35	71.29	B
			B	0.515	1.881	0.705	1	1	15.195			
			C	0.494	1.909	0.694	1	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	1	1	8.922	358.91	71.78	B
			B	0.513	1.884	0.704	1	1	9.550			
			C	0.481	1.926	0.688	1	1	8.773			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	1	1	5.090	210.46	30.07	A
			B	0.394	2.076	0.649	1	1	5.061			
			C	0.386	2.093	0.646	1	1	4.939			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 31 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
Sum Weight:	12201.62	35496.94								29295.35		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	0.8	1	6.820	640.78	37.69	A
			B	0.14	2.81	0.58	0.8	1	3.583			
			C	0.162	2.728	0.583	0.8	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	0.8	1	7.257	692.09	69.21	A
			B	0.14	2.809	0.58	0.8	1	4.210			
			C	0.178	2.672	0.586	0.8	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	0.8	1	14.749	1381.69	69.08	A
			B	0.16	2.735	0.583	0.8	1	9.671			
			C	0.175	2.682	0.586	0.8	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	0.8	1	14.749	1355.61	67.78	A
			B	0.198	2.602	0.59	0.8	1	12.129			
			C	0.225	2.513	0.596	0.8	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	0.8	1	15.222	1370.10	68.51	C
			B	0.203	2.588	0.591	0.8	1	12.416			
			C	0.247	2.447	0.601	0.8	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	0.8	1	16.296	1417.13	70.86	C
			B	0.202	2.591	0.591	0.8	1	12.357			
			C	0.265	2.394	0.606	0.8	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	0.8	1	18.207	1974.21	98.71	C
			B	0.202	2.591	0.591	0.8	1	12.357			
			C	0.408	2.048	0.655	0.8	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	0.8	1	22.567	2132.00	106.60	C
			B	0.219	2.533	0.594	0.8	1	13.568			
			C	0.455	1.965	0.676	0.8	1	32.051			
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	0.8	1	26.289	2246.88	112.34	C
			B	0.365	2.137	0.638	0.8	1	24.377			
			C	0.493	1.909	0.694	0.8	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	0.8	1	37.329	2247.57	112.38	A
		TA	B	0.405	2.054	0.654	0.8	1	27.710			
		1294.07	C	0.494	1.908	0.694	0.8	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	2103.49	105.17	A
			B	0.465	1.95	0.68	0.8	1	33.067			
			C	0.484	1.921	0.69	0.8	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	2019.22	100.96	A
			B	0.479	1.929	0.687	0.8	1	34.385			
			C	0.489	1.914	0.692	0.8	1	35.403			
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1925.11	96.26	A
			B	0.481	1.926	0.688	0.8	1	34.575			
			C	0.489	1.914	0.692	0.8	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1819.96	91.00	C
			B	0.487	1.917	0.691	0.8	1	35.228			
			C	0.494	1.908	0.695	0.8	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1773.74	88.69	B
			B	0.517	1.879	0.706	0.8	1	38.160			
			C	0.5	1.9	0.697	0.8	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1618.61	80.93	B
			B	0.519	1.877	0.707	0.8	1	38.391			
			C	0.5	1.9	0.697	0.8	1	36.452			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	32 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1437.42	71.87	B
			B	0.519	1.877	0.707	0.8	1	38.391			
			C	0.5	1.9	0.697	0.8	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	0.8	1	14.174	570.35	71.29	B
			B	0.515	1.881	0.705	0.8	1	15.195			
			C	0.494	1.909	0.694	0.8	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	0.8	1	8.849	356.31	71.26	B
			B	0.513	1.884	0.704	0.8	1	9.481			
			C	0.481	1.926	0.688	0.8	1	8.699			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	0.8	1	5.003	206.89	29.56	A
			B	0.394	2.076	0.649	0.8	1	4.974			
			C	0.386	2.093	0.646	0.8	1	4.851			
Sum Weight:	12201.62	35496.94								29289.18		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	0.85	1	6.820	640.78	37.69	A
			B	0.14	2.81	0.58	0.85	1	3.583			
			C	0.162	2.728	0.583	0.85	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	0.85	1	7.257	692.09	69.21	A
			B	0.14	2.809	0.58	0.85	1	4.210			
			C	0.178	2.672	0.586	0.85	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	0.85	1	14.749	1381.69	69.08	A
			B	0.16	2.735	0.583	0.85	1	9.671			
			C	0.175	2.682	0.586	0.85	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	0.85	1	14.749	1355.61	67.78	A
			B	0.198	2.602	0.59	0.85	1	12.129			
			C	0.225	2.513	0.596	0.85	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	0.85	1	15.222	1370.10	68.51	C
			B	0.203	2.588	0.591	0.85	1	12.416			
			C	0.247	2.447	0.601	0.85	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	0.85	1	16.296	1417.13	70.86	C
			B	0.202	2.591	0.591	0.85	1	12.357			
			C	0.265	2.394	0.606	0.85	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	0.85	1	18.207	1974.21	98.71	C
			B	0.202	2.591	0.591	0.85	1	12.357			
			C	0.408	2.048	0.655	0.85	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	0.85	1	22.567	2132.00	106.60	C
			B	0.219	2.533	0.594	0.85	1	13.568			
			C	0.455	1.965	0.676	0.85	1	32.051			
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	0.85	1	26.289	2246.88	112.34	C
			B	0.365	2.137	0.638	0.85	1	24.377			
			C	0.493	1.909	0.694	0.85	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	0.85	1	37.329	2247.57	112.38	A
			TA	0.405	2.054	0.654	0.85	1	27.710			
			C	0.494	1.908	0.694	0.85	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	2103.49	105.17	A
			B	0.465	1.95	0.68	0.85	1	33.067			
			C	0.484	1.921	0.69	0.85	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	2019.22	100.96	A
			B	0.479	1.929	0.687	0.85	1	34.385			
			C	0.489	1.914	0.692	0.85	1	35.403			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	33 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb	e						ft ²	lb	plf	
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1925.11	96.26	A
			B	0.481	1.926	0.688	0.85	1	34.575			
			C	0.489	1.914	0.692	0.85	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1819.96	91.00	C
			B	0.487	1.917	0.691	0.85	1	35.228			
			C	0.494	1.908	0.695	0.85	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1773.74	88.69	B
			B	0.517	1.879	0.706	0.85	1	38.160			
			C	0.5	1.9	0.697	0.85	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1618.61	80.93	B
			B	0.519	1.877	0.707	0.85	1	38.391			
			C	0.5	1.9	0.697	0.85	1	36.452			
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1437.42	71.87	B
			B	0.519	1.877	0.707	0.85	1	38.391			
			C	0.5	1.9	0.697	0.85	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	0.85	1	14.174	570.35	71.29	B
			B	0.515	1.881	0.705	0.85	1	15.195			
			C	0.494	1.909	0.694	0.85	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	0.85	1	8.867	356.96	71.39	B
			B	0.513	1.884	0.704	0.85	1	9.499			
			C	0.481	1.926	0.688	0.85	1	8.718			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	0.85	1	5.025	207.78	29.68	A
			B	0.394	2.076	0.649	0.85	1	4.996			
			C	0.386	2.093	0.646	0.85	1	4.873			
Sum Weight:	12201.62	35496.94								29290.72		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb	e						ft ²	lb	plf	
L1 347.00-330.00	107.76	541.44	A	0.47	1.942	0.683	1	1	14.660	828.51	48.74	A
			B	0.302	2.291	0.616	1	1	8.498			
			C	0.346	2.181	0.631	1	1	9.980			
T1 330.00-320.00	103.90	951.26	A	0.382	2.1	0.644	1	1	12.981	784.30	78.43	A
			B	0.244	2.455	0.6	1	1	7.733			
			C	0.323	2.236	0.623	1	1	10.612			
T2 320.00-300.00	257.93	1927.50	A	0.388	2.087	0.647	1	1	26.487	1569.10	78.45	A
			B	0.276	2.363	0.609	1	1	17.682			
			C	0.317	2.253	0.621	1	1	20.729			
T3 300.00-280.00	408.75	1927.50	A	0.388	2.087	0.647	1	1	26.487	1539.48	76.97	A
			B	0.326	2.23	0.624	1	1	21.417			
			C	0.388	2.088	0.647	1	1	26.474			
T4 280.00-260.00	460.59	1952.34	A	0.403	2.058	0.653	1	1	27.748	1608.53	80.43	C
			B	0.331	2.217	0.626	1	1	21.826			
			C	0.418	2.029	0.659	1	1	29.057			
T5 260.00-240.00	520.21	1927.50	A	0.429	2.009	0.664	1	1	30.037	1661.16	83.06	C
			B	0.33	2.219	0.626	1	1	21.760			
			C	0.444	1.984	0.671	1	1	31.380			
T6 240.00-220.00	1222.50	1927.50	A	0.467	1.947	0.681	1	1	33.951	2612.44	130.62	C
			B	0.33	2.219	0.626	1	1	21.760			
			C	0.63	1.788	0.773	1	1	56.058			
T7 220.00-200.00	1578.98	2388.32	A	0.535	1.859	0.716	1	1	41.938	2867.31	143.37	C
			B	0.346	2.181	0.631	1	1	23.104			
			C	0.687	1.776	0.81	1	1	63.592			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	Page
	Project	Date
	Client	Designed by
	CTLN058A	34 of 77
	81150130	13:46:17 02/24/15
	T-Mobile	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
T8 200.00-180.00	2479.15	3137.50	A	0.583	1.815	0.744	1	1	47.990	3070.69	153.53	C
			B	0.54	1.854	0.719	1	1	45.401			
			C	0.735	1.782	0.845	1	1	69.827			
T9 180.00-160.00	3322.94	3201.74	A	0.743	1.785	0.852	1	1	70.204	2995.32	149.77	A
			TA	0.594	1.808	0.75	1	1	52.215			
			C	0.735	1.782	0.846	1	1	69.902			
T10 160.00-140.00	3798.64	2607.94	A	0.733	1.782	0.844	1	1	68.778	2874.36	143.72	C
			B	0.681	1.776	0.807	1	1	64.130			
			C	0.735	1.782	0.846	1	1	69.921			
T11 140.00-120.00	3850.67	2607.94	A	0.733	1.782	0.844	1	1	68.778	2822.73	141.14	C
			B	0.705	1.776	0.823	1	1	66.910			
			C	0.747	1.786	0.854	1	1	71.380			
T12 120.00-100.00	3958.15	2607.94	A	0.733	1.782	0.844	1	1	69.911	2691.17	134.56	C
			B	0.708	1.777	0.826	1	1	67.316			
			C	0.747	1.786	0.854	1	1	71.380			
T13 100.00-80.00	4011.73	2607.94	A	0.733	1.782	0.844	1	1	70.330	2595.38	129.77	C
			B	0.72	1.778	0.834	1	1	68.713			
			C	0.757	1.79	0.862	1	1	72.732			
T14 80.00-60.00	4076.48	2607.94	A	0.733	1.782	0.844	1	1	70.330	2478.95	123.95	B
			B	0.765	1.794	0.868	1	1	74.481			
			C	0.768	1.796	0.871	1	1	74.252			
T15 60.00-40.00	4080.30	2607.94	A	0.733	1.782	0.844	1	1	70.330	2267.10	113.35	B
			B	0.768	1.796	0.871	1	1	74.919			
			C	0.768	1.796	0.871	1	1	74.252			
T16 40.00-20.00	4080.30	2607.94	A	0.733	1.782	0.844	1	1	70.330	2013.31	100.67	B
			B	0.768	1.796	0.871	1	1	74.919			
			C	0.768	1.796	0.871	1	1	74.252			
T17 20.00-12.00	1632.12	996.68	A	0.728	1.78	0.84	1	1	27.885	798.20	99.78	B
			B	0.764	1.794	0.868	1	1	29.739			
			C	0.761	1.792	0.865	1	1	29.316			
T18 12.00-7.00	1020.08	1081.74	A	0.725	1.78	0.838	1	1	17.391	497.45	99.49	B
			B	0.762	1.793	0.866	1	1	18.544			
			C	0.746	1.786	0.854	1	1	17.862			
T19 7.00-0.00	208.54	1265.66	A	0.607	1.8	0.758	1	1	9.573	257.83	36.83	A
			B	0.59	1.811	0.748	1	1	9.221			
			C	0.586	1.813	0.745	1	1	9.085			
Sum Weight:	41179.71	43200.33								38833.31		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	107.76	541.44	A	0.47	1.942	0.683	0.8	1	14.660	828.51	48.74	A
			B	0.302	2.291	0.616	0.8	1	8.498			
			C	0.346	2.181	0.631	0.8	1	9.980			
T1 330.00-320.00	103.90	951.26	A	0.382	2.1	0.644	0.8	1	12.981	784.30	78.43	A
			B	0.244	2.455	0.6	0.8	1	7.733			
			C	0.323	2.236	0.623	0.8	1	10.612			
T2 320.00-300.00	257.93	1927.50	A	0.388	2.087	0.647	0.8	1	26.487	1569.10	78.45	A
			B	0.276	2.363	0.609	0.8	1	17.682			
			C	0.317	2.253	0.621	0.8	1	20.729			
T3 300.00-280.00	408.75	1927.50	A	0.388	2.087	0.647	0.8	1	26.487	1539.48	76.97	A
			B	0.326	2.23	0.624	0.8	1	21.417			
			C	0.388	2.088	0.647	0.8	1	26.474			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	Page
	Project	Date
	Client	Designed by
	CTLN058A	35 of 77
	81150130	13:46:17 02/24/15
	T-Mobile	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
T4 280.00-260.00	460.59	1952.34	A	0.403	2.058	0.653	0.8	1	27.748	1608.53	80.43	C
			B	0.331	2.217	0.626	0.8	1	21.826			
			C	0.418	2.029	0.659	0.8	1	29.057			
T5 260.00-240.00	520.21	1927.50	A	0.429	2.009	0.664	0.8	1	30.037	1661.16	83.06	C
			B	0.33	2.219	0.626	0.8	1	21.760			
			C	0.444	1.984	0.671	0.8	1	31.380			
T6 240.00-220.00	1222.50	1927.50	A	0.467	1.947	0.681	0.8	1	33.663	2419.17	120.96	C
			B	0.33	2.219	0.626	0.8	1	21.760			
			C	0.63	1.788	0.773	0.8	1	51.911			
T7 220.00-200.00	1578.98	2388.32	A	0.535	1.859	0.716	0.8	1	40.944	2643.37	132.17	C
			B	0.346	2.181	0.631	0.8	1	23.104			
			C	0.687	1.776	0.81	0.8	1	58.625			
T8 200.00-180.00	2479.15	3137.50	A	0.583	1.815	0.744	0.8	1	46.505	2852.28	142.61	C
			B	0.54	1.854	0.719	0.8	1	42.421			
			C	0.735	1.782	0.845	0.8	1	64.860			
T9 180.00-160.00	3322.94	3201.74	A	0.743	1.785	0.852	0.8	1	66.230	2825.79	141.29	A
		TA	B	0.594	1.808	0.75	0.8	1	48.267			
		1718.09	C	0.735	1.782	0.846	0.8	1	64.936			
T10 160.00-140.00	3798.64	2607.94	A	0.733	1.782	0.844	0.8	1	64.804	2670.18	133.51	C
			B	0.681	1.776	0.807	0.8	1	58.170			
			C	0.735	1.782	0.846	0.8	1	64.954			
T11 140.00-120.00	3850.67	2607.94	A	0.733	1.782	0.844	0.8	1	64.804	2626.32	131.32	C
			B	0.705	1.776	0.823	0.8	1	60.950			
			C	0.747	1.786	0.854	0.8	1	66.413			
T12 120.00-100.00	3958.15	2607.94	A	0.733	1.782	0.844	0.8	1	64.487	2503.91	125.20	C
			B	0.708	1.777	0.826	0.8	1	61.356			
			C	0.747	1.786	0.854	0.8	1	66.413			
T13 100.00-80.00	4011.73	2607.94	A	0.733	1.782	0.844	0.8	1	64.370	2418.15	120.91	C
			B	0.72	1.778	0.834	0.8	1	62.753			
			C	0.757	1.79	0.862	0.8	1	67.765			
T14 80.00-60.00	4076.48	2607.94	A	0.733	1.782	0.844	0.8	1	64.370	2308.06	115.40	C
			B	0.765	1.794	0.868	0.8	1	68.521			
			C	0.768	1.796	0.871	0.8	1	69.286			
T15 60.00-40.00	4080.30	2607.94	A	0.733	1.782	0.844	0.8	1	64.370	2096.51	104.83	C
			B	0.768	1.796	0.871	0.8	1	68.959			
			C	0.768	1.796	0.871	0.8	1	69.286			
T16 40.00-20.00	4080.30	2607.94	A	0.733	1.782	0.844	0.8	1	64.370	1861.82	93.09	C
			B	0.768	1.796	0.871	0.8	1	68.959			
			C	0.768	1.796	0.871	0.8	1	69.286			
T17 20.00-12.00	1632.12	996.68	A	0.728	1.78	0.84	0.8	1	25.501	734.21	91.78	B
			B	0.764	1.794	0.868	0.8	1	27.355			
			C	0.761	1.792	0.865	0.8	1	27.329			
T18 12.00-7.00	1020.08	1081.74	A	0.725	1.78	0.838	0.8	1	15.855	456.41	91.28	B
			B	0.762	1.793	0.866	0.8	1	17.014			
			C	0.746	1.786	0.854	0.8	1	16.578			
T19 7.00-0.00	208.54	1265.66	A	0.607	1.8	0.758	0.8	1	9.197	247.70	35.39	A
			B	0.59	1.811	0.748	0.8	1	8.843			
			C	0.586	1.813	0.745	0.8	1	8.756			
Sum Weight:	41179.71	43200.33								36654.97		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 36 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	107.76	541.44	A	0.47	1.942	0.683	0.85	1	14.660	828.51	48.74	A
			B	0.302	2.291	0.616	0.85	1	8.498			
			C	0.346	2.181	0.631	0.85	1	9.980			
T1 330.00-320.00	103.90	951.26	A	0.382	2.1	0.644	0.85	1	12.981	784.30	78.43	A
			B	0.244	2.455	0.6	0.85	1	7.733			
			C	0.323	2.236	0.623	0.85	1	10.612			
T2 320.00-300.00	257.93	1927.50	A	0.388	2.087	0.647	0.85	1	26.487	1569.10	78.45	A
			B	0.276	2.363	0.609	0.85	1	17.682			
			C	0.317	2.253	0.621	0.85	1	20.729			
T3 300.00-280.00	408.75	1927.50	A	0.388	2.087	0.647	0.85	1	26.487	1539.48	76.97	A
			B	0.326	2.23	0.624	0.85	1	21.417			
			C	0.388	2.088	0.647	0.85	1	26.474			
T4 280.00-260.00	460.59	1952.34	A	0.403	2.058	0.653	0.85	1	27.748	1608.53	80.43	C
			B	0.331	2.217	0.626	0.85	1	21.826			
			C	0.418	2.029	0.659	0.85	1	29.057			
T5 260.00-240.00	520.21	1927.50	A	0.429	2.009	0.664	0.85	1	30.037	1661.16	83.06	C
			B	0.33	2.219	0.626	0.85	1	21.760			
			C	0.444	1.984	0.671	0.85	1	31.380			
T6 240.00-220.00	1222.50	1927.50	A	0.467	1.947	0.681	0.85	1	33.735	2467.49	123.37	C
			B	0.33	2.219	0.626	0.85	1	21.760			
			C	0.63	1.788	0.773	0.85	1	52.947			
T7 220.00-200.00	1578.98	2388.32	A	0.535	1.859	0.716	0.85	1	41.193	2699.35	134.97	C
			B	0.346	2.181	0.631	0.85	1	23.104			
			C	0.687	1.776	0.81	0.85	1	59.867			
T8 200.00-180.00	2479.15	3137.50	A	0.583	1.815	0.744	0.85	1	46.876	2906.88	145.34	C
			B	0.54	1.854	0.719	0.85	1	43.166			
			C	0.735	1.782	0.845	0.85	1	66.102			
T9 180.00-160.00	3322.94	3201.74	A	0.743	1.785	0.852	0.85	1	67.224	2868.18	143.41	A
		TA	B	0.594	1.808	0.75	0.85	1	49.254			
		1718.09	C	0.735	1.782	0.846	0.85	1	66.177			
T10 160.00-140.00	3798.64	2607.94	A	0.733	1.782	0.844	0.85	1	65.798	2721.23	136.06	C
			B	0.681	1.776	0.807	0.85	1	59.660			
			C	0.735	1.782	0.846	0.85	1	66.196			
T11 140.00-120.00	3850.67	2607.94	A	0.733	1.782	0.844	0.85	1	65.798	2675.42	133.77	C
			B	0.705	1.776	0.823	0.85	1	62.440			
			C	0.747	1.786	0.854	0.85	1	67.655			
T12 120.00-100.00	3958.15	2607.94	A	0.733	1.782	0.844	0.85	1	65.843	2550.73	127.54	C
			B	0.708	1.777	0.826	0.85	1	62.846			
			C	0.747	1.786	0.854	0.85	1	67.655			
T13 100.00-80.00	4011.73	2607.94	A	0.733	1.782	0.844	0.85	1	65.860	2462.45	123.12	C
			B	0.72	1.778	0.834	0.85	1	64.243			
			C	0.757	1.79	0.862	0.85	1	69.007			
T14 80.00-60.00	4076.48	2607.94	A	0.733	1.782	0.844	0.85	1	65.860	2349.43	117.47	C
			B	0.765	1.794	0.868	0.85	1	70.011			
			C	0.768	1.796	0.871	0.85	1	70.527			
T15 60.00-40.00	4080.30	2607.94	A	0.733	1.782	0.844	0.85	1	65.860	2134.08	106.70	C
			B	0.768	1.796	0.871	0.85	1	70.449			
			C	0.768	1.796	0.871	0.85	1	70.527			
T16 40.00-20.00	4080.30	2607.94	A	0.733	1.782	0.844	0.85	1	65.860	1895.19	94.76	C
			B	0.768	1.796	0.871	0.85	1	70.449			
			C	0.768	1.796	0.871	0.85	1	70.527			
T17 20.00-12.00	1632.12	996.68	A	0.728	1.78	0.84	0.85	1	26.097	750.21	93.78	B
			B	0.764	1.794	0.868	0.85	1	27.951			
			C	0.761	1.792	0.865	0.85	1	27.826			
T18 12.00-7.00	1020.08	1081.74	A	0.725	1.78	0.838	0.85	1	16.239	466.67	93.33	B
			B	0.762	1.793	0.866	0.85	1	17.397			
			C	0.746	1.786	0.854	0.85	1	16.899			
T19 7.00-0.00	208.54	1265.66	A	0.607	1.8	0.758	0.85	1	9.291	250.23	35.75	A
			B	0.59	1.811	0.748	0.85	1	8.938			
			C	0.586	1.813	0.745	0.85	1	8.838			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 37 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
Sum Weight:	41179.71	43200.33								37188.62		

Tower Forces - Service - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	1	1	6.820	319.28	18.78	A
			B	0.14	2.81	0.58	1	1	3.583			
			C	0.162	2.728	0.583	1	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	1	1	7.257	344.85	34.49	A
			B	0.14	2.809	0.58	1	1	4.210			
			C	0.178	2.672	0.586	1	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	1	1	14.749	688.45	34.42	A
			B	0.16	2.735	0.583	1	1	9.671			
			C	0.175	2.682	0.586	1	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	1	1	14.749	675.46	33.77	A
			B	0.198	2.602	0.59	1	1	12.129			
			C	0.225	2.513	0.596	1	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	1	1	15.222	682.68	34.13	C
			B	0.203	2.588	0.591	1	1	12.416			
			C	0.247	2.447	0.601	1	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	1	1	16.296	706.11	35.31	C
			B	0.202	2.591	0.591	1	1	12.357			
			C	0.265	2.394	0.606	1	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	1	1	18.207	983.69	49.18	C
			B	0.202	2.591	0.591	1	1	12.357			
			C	0.408	2.048	0.655	1	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	1	1	22.567	1062.31	53.12	C
			B	0.219	2.533	0.594	1	1	13.568			
			C	0.455	1.965	0.676	1	1	32.051			
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	1	1	26.289	1119.55	55.98	C
			B	0.365	2.137	0.638	1	1	24.377			
			C	0.493	1.909	0.694	1	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	1	1	37.329	1119.90	55.99	A
		TA	B	0.405	2.054	0.654	1	1	27.710			
		1294.07	C	0.494	1.908	0.694	1	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	1	1	35.843	1048.11	52.41	A
			B	0.465	1.95	0.68	1	1	33.067			
			C	0.484	1.921	0.69	1	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	1	1	35.843	1006.12	50.31	A
			B	0.479	1.929	0.687	1	1	34.385			
			C	0.489	1.914	0.692	1	1	35.403			
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	1	1	35.843	959.22	47.96	A
			B	0.481	1.926	0.688	1	1	34.575			
			C	0.489	1.914	0.692	1	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	1	1	35.843	906.83	45.34	C
			B	0.487	1.917	0.691	1	1	35.228			
			C	0.494	1.908	0.695	1	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	1	1	35.843	883.80	44.19	B
			B	0.517	1.879	0.706	1	1	38.160			
			C	0.5	1.9	0.697	1	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	1	1	35.843	806.51	40.33	B
			B	0.519	1.877	0.707	1	1	38.391			
			C	0.5	1.9	0.697	1	1	36.452			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 38 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	1	1	35.843	716.22	35.81	B
			B	0.519	1.877	0.707	1	1	38.391			
			C	0.5	1.9	0.697	1	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	1	1	14.174	284.19	35.52	B
			B	0.515	1.881	0.705	1	1	15.195			
			C	0.494	1.909	0.694	1	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	1	1	8.922	178.83	35.77	B
			B	0.513	1.884	0.704	1	1	9.550			
			C	0.481	1.926	0.688	1	1	8.773			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	1	1	5.090	104.87	14.98	A
			B	0.394	2.076	0.649	1	1	5.061			
			C	0.386	2.093	0.646	1	1	4.939			
Sum Weight:	12201.62	35496.94								14596.99		

Tower Forces - Service - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	0.8	1	6.820	319.28	18.78	A
			B	0.14	2.81	0.58	0.8	1	3.583			
			C	0.162	2.728	0.583	0.8	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	0.8	1	7.257	344.85	34.49	A
			B	0.14	2.809	0.58	0.8	1	4.210			
			C	0.178	2.672	0.586	0.8	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	0.8	1	14.749	688.45	34.42	A
			B	0.16	2.735	0.583	0.8	1	9.671			
			C	0.175	2.682	0.586	0.8	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	0.8	1	14.749	675.46	33.77	A
			B	0.198	2.602	0.59	0.8	1	12.129			
			C	0.225	2.513	0.596	0.8	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	0.8	1	15.222	682.68	34.13	C
			B	0.203	2.588	0.591	0.8	1	12.416			
			C	0.247	2.447	0.601	0.8	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	0.8	1	16.296	706.11	35.31	C
			B	0.202	2.591	0.591	0.8	1	12.357			
			C	0.265	2.394	0.606	0.8	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	0.8	1	18.207	983.69	49.18	C
			B	0.202	2.591	0.591	0.8	1	12.357			
			C	0.408	2.048	0.655	0.8	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	0.8	1	22.567	1062.31	53.12	C
			B	0.219	2.533	0.594	0.8	1	13.568			
			C	0.455	1.965	0.676	0.8	1	32.051			
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	0.8	1	26.289	1119.55	55.98	C
			B	0.365	2.137	0.638	0.8	1	24.377			
			C	0.493	1.909	0.694	0.8	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	0.8	1	37.329	1119.90	55.99	A
		TA	B	0.405	2.054	0.654	0.8	1	27.710			
		1294.07	C	0.494	1.908	0.694	0.8	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1048.11	52.41	A
			B	0.465	1.95	0.68	0.8	1	33.067			
			C	0.484	1.921	0.69	0.8	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	1006.12	50.31	A
			B	0.479	1.929	0.687	0.8	1	34.385			
			C	0.489	1.914	0.692	0.8	1	35.403			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 39 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb	e						ft ²	lb	plf	
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	959.22	47.96	A
			B	0.481	1.926	0.688	0.8	1	34.575			
			C	0.489	1.914	0.692	0.8	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	906.83	45.34	C
			B	0.487	1.917	0.691	0.8	1	35.228			
			C	0.494	1.908	0.695	0.8	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	883.80	44.19	B
			B	0.517	1.879	0.706	0.8	1	38.160			
			C	0.5	1.9	0.697	0.8	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	806.51	40.33	B
			B	0.519	1.877	0.707	0.8	1	38.391			
			C	0.5	1.9	0.697	0.8	1	36.452			
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	0.8	1	35.843	716.22	35.81	B
			B	0.519	1.877	0.707	0.8	1	38.391			
			C	0.5	1.9	0.697	0.8	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	0.8	1	14.174	284.19	35.52	B
			B	0.515	1.881	0.705	0.8	1	15.195			
			C	0.494	1.909	0.694	0.8	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	0.8	1	8.849	177.54	35.51	B
			B	0.513	1.884	0.704	0.8	1	9.481			
			C	0.481	1.926	0.688	0.8	1	8.699			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	0.8	1	5.003	103.09	14.73	A
			B	0.394	2.076	0.649	0.8	1	4.974			
			C	0.386	2.093	0.646	0.8	1	4.851			
Sum Weight:	12201.62	35496.94								14593.92		

Tower Forces - Service - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb	e						ft ²	lb	plf	
L1 347.00-330.00	40.24	371.63	A	0.255	2.422	0.603	0.85	1	6.820	319.28	18.78	A
			B	0.14	2.81	0.58	0.85	1	3.583			
			C	0.162	2.728	0.583	0.85	1	4.184			
T1 330.00-320.00	37.90	758.74	A	0.234	2.486	0.598	0.85	1	7.257	344.85	34.49	A
			B	0.14	2.809	0.58	0.85	1	4.210			
			C	0.178	2.672	0.586	0.85	1	5.406			
T2 320.00-300.00	93.24	1537.10	A	0.237	2.476	0.599	0.85	1	14.749	688.45	34.42	A
			B	0.16	2.735	0.583	0.85	1	9.671			
			C	0.175	2.682	0.586	0.85	1	10.629			
T3 300.00-280.00	148.86	1537.10	A	0.237	2.476	0.599	0.85	1	14.749	675.46	33.77	A
			B	0.198	2.602	0.59	0.85	1	12.129			
			C	0.225	2.513	0.596	0.85	1	13.937			
T4 280.00-260.00	165.33	1559.65	A	0.244	2.455	0.6	0.85	1	15.222	682.68	34.13	C
			B	0.203	2.588	0.591	0.85	1	12.416			
			C	0.247	2.447	0.601	0.85	1	15.392			
T5 260.00-240.00	184.92	1537.10	A	0.26	2.408	0.604	0.85	1	16.296	706.11	35.31	C
			B	0.202	2.591	0.591	0.85	1	12.357			
			C	0.265	2.394	0.606	0.85	1	16.634			
T6 240.00-220.00	383.46	1537.10	A	0.287	2.332	0.612	0.85	1	18.207	983.69	49.18	C
			B	0.202	2.591	0.591	0.85	1	12.357			
			C	0.408	2.048	0.655	0.85	1	27.745			
T7 220.00-200.00	487.86	1961.60	A	0.344	2.186	0.63	0.85	1	22.567	1062.31	53.12	C
			B	0.219	2.533	0.594	0.85	1	13.568			
			C	0.455	1.965	0.676	0.85	1	32.051			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	40 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	R _R	D _F	D _R	A _E	F	w	Ctrl. Face
ft	lb	lb							ft ²	lb	plf	
T8 200.00-180.00	736.38	2654.17	A	0.389	2.087	0.647	0.85	1	26.289	1119.55	55.98	C
			B	0.365	2.137	0.638	0.85	1	24.377			
			C	0.493	1.909	0.694	0.85	1	35.766			
T9 180.00-160.00	978.36	2706.58	A	0.509	1.889	0.702	0.85	1	37.329	1119.90	55.99	A
			TA	0.405	2.054	0.654	0.85	1	27.710			
			C	0.494	1.908	0.694	0.85	1	35.856			
T10 160.00-140.00	1112.52	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1048.11	52.41	A
			B	0.465	1.95	0.68	0.85	1	33.067			
			C	0.484	1.921	0.69	0.85	1	34.916			
T11 140.00-120.00	1126.94	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	1006.12	50.31	A
			B	0.479	1.929	0.687	0.85	1	34.385			
			C	0.489	1.914	0.692	0.85	1	35.403			
T12 120.00-100.00	1149.17	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	959.22	47.96	A
			B	0.481	1.926	0.688	0.85	1	34.575			
			C	0.489	1.914	0.692	0.85	1	35.403			
T13 100.00-80.00	1163.06	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	906.83	45.34	C
			B	0.487	1.917	0.691	0.85	1	35.228			
			C	0.494	1.908	0.695	0.85	1	35.899			
T14 80.00-60.00	1186.08	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	883.80	44.19	B
			B	0.517	1.879	0.706	0.85	1	38.160			
			C	0.5	1.9	0.697	0.85	1	36.452			
T15 60.00-40.00	1187.40	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	806.51	40.33	B
			B	0.519	1.877	0.707	0.85	1	38.391			
			C	0.5	1.9	0.697	0.85	1	36.452			
T16 40.00-20.00	1187.40	2172.06	A	0.494	1.908	0.694	0.85	1	35.843	716.22	35.81	B
			B	0.519	1.877	0.707	0.85	1	38.391			
			C	0.5	1.9	0.697	0.85	1	36.452			
T17 20.00-12.00	474.96	833.60	A	0.489	1.914	0.692	0.85	1	14.174	284.19	35.52	B
			B	0.515	1.881	0.705	0.85	1	15.195			
			C	0.494	1.909	0.694	0.85	1	14.333			
T18 12.00-7.00	296.85	922.97	A	0.487	1.917	0.691	0.85	1	8.867	177.86	35.57	B
			B	0.513	1.884	0.704	0.85	1	9.499			
			C	0.481	1.926	0.688	0.85	1	8.718			
T19 7.00-0.00	60.69	1081.13	A	0.396	2.073	0.65	0.85	1	5.025	103.53	14.79	A
			B	0.394	2.076	0.649	0.85	1	4.996			
			C	0.386	2.093	0.646	0.85	1	4.873			
Sum Weight:	12201.62	35496.94							14594.68			

Force Totals (Does not include forces on guys)

Load Case	Vertical Forces	Sum of Forces X	Sum of Forces Z	Sum of Torques
	lb	lb	lb	lb-ft
Leg Weight	17841.35			
Bracing Weight	17655.59			
Total Member Self-Weight	35496.94			
Guy Weight	6572.10			
Total Weight	67615.40			
Wind 0 deg - No Ice		102.58	-55321.80	337.27
Wind 30 deg - No Ice		27405.44	-47714.51	-3329.95
Wind 60 deg - No Ice		47012.89	-27592.50	-3512.21
Wind 90 deg - No Ice		53670.25	-239.64	-1600.13
Wind 120 deg - No Ice		46640.55	28487.74	-1453.66
Wind 150 deg - No Ice		26905.71	48203.37	-1163.58
Wind 180 deg - No Ice		-856.37	55866.84	934.12

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	41 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Torques lb-ft
Wind 210 deg - No Ice		-27657.40	48482.70	2024.01
Wind 240 deg - No Ice		-47094.28	28868.15	1116.39
Wind 270 deg - No Ice		-53980.10	314.94	292.50
Wind 300 deg - No Ice		-47449.05	-26855.46	2578.10
Wind 330 deg - No Ice		-27214.03	-47469.49	3777.15
Member Ice	7703.39			
Guy Ice	3761.63			
Total Weight Ice	115147.41			
Wind 0 deg - Ice		-53.21	-64334.05	-1935.88
Wind 30 deg - Ice		30980.33	-53793.58	-6660.26
Wind 60 deg - Ice		52444.98	-30901.23	-5241.20
Wind 90 deg - Ice		60276.55	-70.67	-1181.78
Wind 120 deg - Ice		53350.70	36409.68	7647.17
Wind 150 deg - Ice		29197.15	56589.34	8068.49
Wind 180 deg - Ice		-817.73	64286.14	2953.11
Wind 210 deg - Ice		-29916.03	56831.81	-3655.79
Wind 240 deg - Ice		-53890.16	36659.68	-5711.29
Wind 270 deg - Ice		-60632.54	371.95	220.34
Wind 300 deg - Ice		-52940.68	-30243.18	2288.09
Wind 330 deg - Ice		-30924.46	-53579.39	3209.01
Total Weight	67615.40			
Wind 0 deg - Service		51.11	-27565.19	168.05
Wind 30 deg - Service		13655.31	-23774.70	-1659.21
Wind 60 deg - Service		23425.11	-13748.51	-1750.03
Wind 90 deg - Service		26742.27	-119.41	-797.30
Wind 120 deg - Service		23239.58	14194.58	-724.31
Wind 150 deg - Service		13406.30	24018.29	-579.77
Wind 180 deg - Service		-426.70	27836.77	465.44
Wind 210 deg - Service		-13780.85	24157.47	1008.50
Wind 240 deg - Service		-23465.66	14384.13	556.26
Wind 270 deg - Service		-26896.66	156.92	145.75
Wind 300 deg - Service		-23642.43	-13381.27	1284.59
Wind 330 deg - Service		-13559.93	-23652.62	1882.04

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice+Guy
3	Dead+Wind 30 deg - No Ice+Guy
4	Dead+Wind 60 deg - No Ice+Guy
5	Dead+Wind 90 deg - No Ice+Guy
6	Dead+Wind 120 deg - No Ice+Guy
7	Dead+Wind 150 deg - No Ice+Guy
8	Dead+Wind 180 deg - No Ice+Guy
9	Dead+Wind 210 deg - No Ice+Guy
10	Dead+Wind 240 deg - No Ice+Guy
11	Dead+Wind 270 deg - No Ice+Guy
12	Dead+Wind 300 deg - No Ice+Guy
13	Dead+Wind 330 deg - No Ice+Guy
14	Dead+Ice+Temp+Guy
15	Dead+Wind 0 deg+Ice+Temp+Guy
16	Dead+Wind 30 deg+Ice+Temp+Guy

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	42 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Comb. No.	Description
17	Dead+Wind 60 deg+Ice+Temp+Guy
18	Dead+Wind 90 deg+Ice+Temp+Guy
19	Dead+Wind 120 deg+Ice+Temp+Guy
20	Dead+Wind 150 deg+Ice+Temp+Guy
21	Dead+Wind 180 deg+Ice+Temp+Guy
22	Dead+Wind 210 deg+Ice+Temp+Guy
23	Dead+Wind 240 deg+Ice+Temp+Guy
24	Dead+Wind 270 deg+Ice+Temp+Guy
25	Dead+Wind 300 deg+Ice+Temp+Guy
26	Dead+Wind 330 deg+Ice+Temp+Guy
27	Dead+Wind 0 deg - Service+Guy
28	Dead+Wind 30 deg - Service+Guy
29	Dead+Wind 60 deg - Service+Guy
30	Dead+Wind 90 deg - Service+Guy
31	Dead+Wind 120 deg - Service+Guy
32	Dead+Wind 150 deg - Service+Guy
33	Dead+Wind 180 deg - Service+Guy
34	Dead+Wind 210 deg - Service+Guy
35	Dead+Wind 240 deg - Service+Guy
36	Dead+Wind 270 deg - Service+Guy
37	Dead+Wind 300 deg - Service+Guy
38	Dead+Wind 330 deg - Service+Guy

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
L1	347 - 330	Latticed Pole Leg	Max Tension	25	6500.96	-10.21	-11.45
			Max. Compression	19	-15538.55	0.00	0.00
			Max. Mx	23	-10004.94	242.43	-169.02
			Max. My	15	-10778.38	18.36	289.47
			Max. Vy	23	2909.36	242.43	-169.02
			Max. Vx	15	3473.83	18.36	289.47
		Latticed Pole Diagonal	Max Tension	3	998.41	0.00	0.00
			Max. Compression	22	-1112.25	0.00	0.00
			Max. Mx	26	464.95	-0.73	-0.01
			Max. My	22	-1107.71	-0.36	0.70
			Max. Vy	26	-1.25	-0.73	-0.01
			Max. Vx	22	0.43	0.00	0.00
		Latticed Pole Top Girt	Max Tension	8	4.23	0.00	0.00
			Max. Compression	19	-8.33	0.00	0.00
			Max. Mx	14	-3.13	1.77	0.00
			Max. My	16	-3.88	0.00	0.00
			Max. Vy	14	-2.83	0.00	0.00
			Max. Vx	16	-0.00	0.00	0.00
		Latticed Pole Mid Girt	Max Tension	25	66.90	0.00	0.00
			Max. Compression	10	-7.70	0.00	0.00
			Max. Mx	14	48.58	1.77	0.00
Max. My	16		52.41	0.00	0.00		
Max. Vy	14		-2.83	0.00	0.00		
Max. Vx	16		-0.00	0.00	0.00		
Guy A	Bottom Tension	21	23634.02				
	Top Tension	21	24242.55				
	Top Cable Vert	21	21056.03				
	Top Cable Norm	21	12014.35				

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	43 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft			
T1	330 - 320	Guy B	Top Cable Tan	21	0.48					
			Bot Cable Vert	21	-19714.87					
			Bot Cable Norm	21	13034.21					
			Bot Cable Tan	21	0.48					
			Bottom Tension	25	20508.69					
			Top Tension	25	21077.88					
			Top Cable Vert	25	18016.81					
			Top Cable Norm	25	10939.44					
			Top Cable Tan	25	8.82					
			Bot Cable Vert	25	-16721.17					
			Bot Cable Norm	25	11874.71					
			Bot Cable Tan	25	8.82					
			Bottom Tension	17	19941.80					
			Top Tension	17	20484.09					
			Top Cable Vert	17	17263.56					
		Top Cable Norm	17	11025.77						
		Top Cable Tan	17	8.57						
		Bot Cable Vert	17	-16000.69						
		Bot Cable Norm	17	11901.81						
		Bot Cable Tan	17	8.57						
		Top Guy Pull-Off	Max Tension	15	7188.84		0.00	0.00		
			Max. Compression	1	0.00		0.00	0.00		
			Max. Mx	14	3217.42		4.10	0.00		
			Max. My	16	4837.07		0.00	0.00		
			Max. Vy	14	6.56		0.00	0.00		
			Max. Vx	16	0.00		0.00	0.00		
			Leg	Max Tension	1	0.00		0.00	0.00	
				Max. Compression	21	-20838.03		-0.49	21.40	
				Max. Mx	24	-14978.09		506.18	-315.21	
				Max. My	16	-12066.51		-265.58	502.59	
				Max. Vy	25	1034.90		24.12	17.27	
				Max. Vx	19	-1193.50		-1.30	-158.50	
				Diagonal	Max Tension	20	1872.01		0.00	0.00
					Max. Compression	24	-2051.50		0.00	0.00
					Max. Mx	16	1476.59		-3.68	-0.35
		Max. My			17	-2002.90		-3.21	-1.81	
		Max. Vy			16	4.93		-3.68	-0.35	
		Max. Vx			17	0.68		-3.21	-1.81	
		Horizontal		Max Tension	15	575.74		0.00	0.00	
				Max. Compression	21	-234.62		0.00	0.00	
				Max. Mx	21	-0.00		9.02	0.00	
			Max. My	17	260.55		0.00	-0.00		
			Max. Vy	21	-7.22		0.00	0.00		
			Max. Vx	17	0.00		0.00	0.00		
		Bottom Girt	Max Tension	10	449.08		0.00	0.00		
Max. Compression	12		-281.37		0.00	0.00				
Max. Mx	14		47.12		11.22	0.00				
Max. My	20		-22.25		0.00	-0.00				
Max. Vy	14		8.97		0.00	0.00				
Max. Vx	20		-0.00		0.00	0.00				
T2	320 - 300	Leg	Max Tension	10	2252.61		-37.72	-24.62		
			Max. Compression	21	-21631.87		-8.31	-34.04		
			Max. Mx	24	-16099.02		-511.66	287.14		
			Max. My	16	-12079.45		263.13	-530.80		
			Max. Vy	24	1017.56		-3.79	-14.10		
			Max. Vx	16	1033.30		-1.01	-14.80		
		Diagonal	Max Tension	24	1648.00		0.00	0.00		
			Max. Compression	17	-1978.13		0.00	0.00		
			Max. Mx	17	-1337.95		-3.67	-1.16		
			Max. My	17	-1955.74		-3.01	-1.78		
			Max. Vy	17	4.93		-3.67	-1.16		

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	44 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft	
T3	300 - 280	Horizontal	Max. Vx	17	0.67	-3.01	-1.78	
			Max Tension	15	448.28	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	21	135.52	9.02	0.00	
			Max. My	17	352.19	0.00	-0.00	
			Max. Vy	21	-7.22	0.00	0.00	
		Top Girt	Max. Vx	17	0.00	0.00	0.00	
			Max Tension	23	323.60	0.00	0.00	
			Max. Compression	10	-281.07	0.00	0.00	
			Max. Mx	14	33.29	11.22	0.00	
			Max. My	20	204.39	0.00	-0.00	
			Max. Vy	14	8.97	0.00	0.00	
		Bottom Girt	Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	19	335.00	0.00	0.00	
			Max. Compression	20	-100.38	0.00	0.00	
			Max. Mx	14	44.36	11.22	0.00	
			Max. My	20	-100.24	0.00	-0.00	
			Max. Vy	14	8.97	0.00	0.00	
		Mid Girt	Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	15	375.70	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	14	69.70	11.22	0.00	
			Max. My	20	98.92	0.00	-0.00	
			Max. Vy	14	8.97	0.00	0.00	
		Leg	Diagonal	Max. Vx	20	-0.00	0.00	0.00
				Max Tension	10	2240.67	-121.95	-165.40
				Max. Compression	20	-20912.12	5.65	-12.83
				Max. Mx	17	-16071.89	840.26	-356.52
				Max. My	16	-10597.42	168.62	-936.86
				Max. Vy	17	1678.91	1.33	14.09
			Diagonal	Max. Vx	16	-1869.45	-1.35	-2.89
				Max Tension	16	2872.49	0.00	0.00
				Max. Compression	16	-2981.46	0.00	0.00
				Max. Mx	20	2251.82	-3.83	-0.07
				Max. My	16	-2958.39	-3.32	-2.17
				Max. Vy	20	5.00	-3.83	-0.07
			Horizontal	Max. Vx	16	0.81	-3.32	-2.17
				Max Tension	15	524.61	0.00	0.00
				Max. Compression	8	-20.13	0.00	0.00
		Max. Mx		21	62.35	9.02	0.00	
		Max. My		17	296.59	0.00	-0.00	
		Max. Vy		21	-7.22	0.00	0.00	
		Top Girt	Max. Vx	17	0.00	0.00	0.00	
			Max Tension	15	345.12	0.00	0.00	
			Max. Compression	21	-129.49	0.00	0.00	
Max. Mx	14		31.51	11.22	0.00			
Max. My	20		204.37	0.00	-0.00			
Max. Vy	14		8.97	0.00	0.00			
Bottom Girt	Max. Vx	20	-0.00	0.00	0.00			
	Max Tension	21	919.10	0.00	0.00			
	Max. Compression	19	-581.05	0.00	0.00			
	Max. Mx	14	57.26	11.22	0.00			
	Max. My	20	-101.17	0.00	-0.00			
	Max. Vy	14	8.97	0.00	0.00			
Mid Girt	Max. Vx	20	-0.00	0.00	0.00			
	Max Tension	15	347.10	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			
	Max. Mx	14	76.30	11.22	0.00			
	Max. My	20	92.23	0.00	-0.00			
	Max. Vy	14	8.97	0.00	0.00			
	Max. Vx	20	-0.00	0.00	0.00			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	45 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft	
T4	280 - 260	Leg	Max Tension	21	3908.43	-3.08	89.76	
			Max. Compression	19	-38782.50	17.39	-26.35	
			Max. Mx	17	-36962.30	-1211.15	153.63	
			Max. My	20	-16486.61	-266.83	-1248.60	
			Max. Vy	17	-2451.34	-1211.15	153.63	
			Max. Vx	20	-2466.67	-266.92	-1248.51	
		Diagonal	Max Tension	20	3624.86	0.00	0.00	
			Max. Compression	20	-4024.71	0.00	0.00	
			Max. Mx	19	758.17	-5.05	0.17	
			Max. My	17	-3944.38	-3.09	-3.23	
			Max. Vy	19	5.44	-5.05	0.17	
			Max. Vx	17	1.19	-3.09	-3.23	
		Horizontal	Max Tension	21	823.70	0.00	0.00	
			Max. Compression	15	-438.48	0.00	0.00	
			Max. Mx	14	386.59	9.02	0.00	
			Max. My	17	134.08	0.00	-0.00	
			Max. Vy	14	-7.22	0.00	0.00	
			Max. Vx	17	0.00	0.00	0.00	
		Top Girt	Max Tension	19	809.31	0.00	0.00	
			Max. Compression	25	-558.26	0.00	0.00	
			Max. Mx	14	66.60	11.22	0.00	
			Max. My	20	273.96	0.00	-0.00	
			Max. Vy	14	8.97	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
		Bottom Girt	Max Tension	15	1280.86	0.00	0.00	
			Max. Compression	4	-945.34	0.00	0.00	
			Max. Mx	14	110.17	11.22	0.00	
			Max. My	20	308.52	0.00	-0.00	
			Max. Vy	14	8.97	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
		Guy A	Bottom Tension	21	31999.13			
			Top Tension	21	32648.68			
			Top Cable Vert	21	26765.74			
			Top Cable Norm	21	18695.77			
			Top Cable Tan	21	0.58			
			Bot Cable Vert	21	-25398.90			
			Bot Cable Norm	21	19463.81			
			Bot Cable Tan	21	0.58			
			Guy B	Bottom Tension	25	28679.60		
				Top Tension	25	29277.78		
		Top Cable Vert		25	23340.26			
		Top Cable Norm		25	17675.42			
		Top Cable Tan		25	8.32			
		Bot Cable Vert		25	-22033.90			
		Guy C	Bot Cable Norm	25	18358.29			
			Bot Cable Tan	25	8.32			
			Bottom Tension	17	28170.92			
Top Tension	17		28734.46					
Top Cable Vert	17		22381.63					
Top Cable Norm	17		18020.32					
Top Guy Pull-Off	Top Cable Tan	17	9.07					
	Bot Cable Vert	17	-21118.91					
	Bot Cable Norm	17	18643.83					
	Bot Cable Tan	17	9.07					
	Max Tension	19	7583.01	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			
	Max. Mx	14	2967.01	16.39	0.00			
	Max. My	20	4963.75	0.00	-0.00			
	Max. Vy	14	13.11	0.00	0.00			
	Max. Vx	20	-0.00	0.00	0.00			
T5	260 - 240	Leg	Max Tension	10	16099.61	710.59	173.68	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	46 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T6	240 - 220	Diagonal	Max. Compression	17	-58294.68	48.56	-64.78
			Max. Mx	17	-36984.40	1236.50	-210.26
			Max. My	20	-13676.62	274.79	1217.05
			Max. Vy	17	-2447.20	13.64	-29.15
			Max. Vx	20	-2465.55	4.52	-15.46
			Max Tension	20	3651.70	0.00	0.00
			Max. Compression	17	-4082.67	0.00	0.00
			Max. Mx	20	309.59	-4.60	0.82
			Max. My	17	-3657.69	-2.85	-3.71
			Max. Vy	19	5.27	-4.59	0.25
			Max. Vx	17	1.35	-2.85	-3.71
			Max Tension	15	1112.62	0.00	0.00
		Horizontal	Max. Compression	8	-40.89	0.00	0.00
			Max. Mx	14	428.03	9.02	0.00
			Max. My	17	701.29	0.00	-0.00
			Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	17	0.00	0.00	0.00
			Max Tension	21	1185.70	0.00	0.00
		Top Girt	Max. Compression	23	-791.57	0.00	0.00
			Max. Mx	14	91.64	11.22	0.00
			Max. My	20	-26.77	0.00	-0.00
			Max. Vy	14	8.97	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
			Max Tension	2	933.36	0.00	0.00
		Bottom Girt	Max. Compression	4	-599.64	0.00	0.00
			Max. Mx	14	83.91	11.22	0.00
			Max. My	20	133.38	0.00	-0.00
			Max. Vy	14	8.97	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
			Max Tension	15	959.10	0.00	0.00
		Mid Girt	Max. Compression	12	-10.90	0.00	0.00
			Max. Mx	14	163.27	11.22	0.00
			Max. My	20	279.00	0.00	-0.00
			Max. Vy	14	8.97	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
			Max Tension	10	18026.92	281.74	-24.24
		Leg	Max. Compression	17	-61511.99	24.48	-36.43
			Max. Mx	17	-19774.90	1049.86	-388.77
			Max. My	16	-51806.54	112.41	-1235.46
			Max. Vy	17	2552.45	-226.05	120.15
			Max. Vx	16	-2894.00	6.46	210.89
			Max Tension	16	4006.26	0.00	0.00
Max. Compression	16		-4311.69	0.00	0.00		
Max. Mx	18		-336.57	-5.21	-0.94		
Max. My	17		-3668.81	-2.35	-4.76		
Max. Vy	18		5.49	-5.21	-0.94		
Max. Vx	17		1.73	-2.35	-4.76		
Max Tension	15		1457.38	0.00	0.00		
Horizontal	Max. Compression	8	-395.05	0.00	0.00		
	Max. Mx	14	503.16	9.02	0.00		
	Max. My	17	683.22	0.00	-0.00		
	Max. Vy	14	-7.22	0.00	0.00		
	Max. Vx	17	0.00	0.00	0.00		
	Max Tension	4	827.37	0.00	0.00		
Top Girt	Max. Compression	10	-523.00	0.00	0.00		
	Max. Mx	14	82.54	11.22	0.00		
	Max. My	20	69.44	0.00	-0.00		
	Max. Vy	14	8.97	0.00	0.00		
	Max. Vx	20	-0.00	0.00	0.00		
	Max Tension	21	1119.01	0.00	0.00		
Bottom Girt	Max. Compression	19	-732.33	0.00	0.00		

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	47 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T7	220 - 200	Mid Girt	Max. Mx	14	93.88	11.22	0.00
			Max. My	20	57.79	0.00	-0.00
			Max. Vy	14	8.97	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
			Max Tension	15	944.67	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	179.04	11.22	0.00
			Max. My	20	211.68	0.00	-0.00
			Max. Vy	14	8.97	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
		Leg	Max Tension	10	6287.45	85.54	-168.69
			Max. Compression	17	-54665.22	-488.89	1211.26
			Max. Mx	17	-20710.67	-1500.56	628.49
			Max. My	16	-49067.23	-101.30	1654.02
			Max. Vy	19	3367.92	-378.61	-200.49
			Max. Vx	16	-3656.78	-95.26	341.49
			Max Tension	16	5221.12	0.00	0.00
			Max. Compression	16	-5564.55	0.00	0.00
			Max. Mx	20	3276.20	-5.99	0.01
			Max. My	16	-4719.00	-3.92	-4.69
		Diagonal	Max. Vy	20	6.66	-5.99	0.01
			Max. Vx	16	1.71	-3.92	-4.69
			Max Tension	15	972.27	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	506.78	9.02	0.00
			Max. My	19	882.74	0.00	0.00
			Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	19	-0.00	0.00	0.00
			Max Tension	15	1580.86	0.00	0.00
			Max. Compression	25	-932.58	0.00	0.00
		Top Girt	Max. Mx	14	112.49	16.39	0.00
			Max. My	20	214.58	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
			Max Tension	21	1847.49	0.00	0.00
			Max. Compression	19	-1420.26	0.00	0.00
			Max. Mx	14	118.66	16.39	0.00
			Max. My	20	130.57	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	20	-0.00	0.00	0.00
Bottom Girt	Max Tension	19	787.55	0.00	0.00		
	Max. Compression	1	0.00	0.00	0.00		
	Max. Mx	14	229.60	16.39	0.00		
	Max. My	20	294.71	0.00	-0.00		
	Max. Vy	14	13.11	0.00	0.00		
	Max. Vx	20	-0.00	0.00	0.00		
	Max Tension	21	46097.51	-326.35	2825.08		
	Max. Compression	15	-123486.43	-16.75	203.46		
	Max. Mx	24	-31717.88	-2931.83	206.12		
	Max. My	15	4498.30	-160.24	-3276.70		
Diagonal	Max. Vy	24	-6732.03	433.49	2.76		
	Max. Vx	15	-7316.88	123.91	380.53		
	Max Tension	16	9612.69	0.00	0.00		
	Max. Compression	16	-10057.35	0.00	0.00		
	Max. Mx	21	8337.49	-13.80	0.37		
	Max. My	16	-10051.02	0.96	-8.08		
	Max. Vy	21	11.57	-13.80	0.37		
	Max. Vx	16	2.92	-4.51	-8.08		
	Max Tension	21	1338.99	0.00	0.00		
	Max. Compression	15	-305.80	0.00	0.00		
Horizontal	Max. Mx	14	545.38	9.02	0.00		

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	48 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft	
T9	180 - 160	Top Girt	Max. My	19	1163.31	0.00	0.00	
			Max. Vy	14	-7.22	0.00	0.00	
			Max. Vx	19	-0.00	0.00	0.00	
			Max Tension	15	2300.95	0.00	0.00	
			Max. Compression	25	-1658.72	0.00	0.00	
			Max. Mx	14	146.92	22.61	0.00	
		Bottom Girt	Max. My	20	213.83	0.00	-0.00	
			Max. Vy	14	18.09	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	21	5841.48	0.00	0.00	
			Max. Compression	19	-5151.46	0.00	0.00	
			Max. Mx	14	351.58	22.61	0.00	
		Mid Girt	Max. My	20	532.18	0.00	-0.00	
			Max. Vy	14	18.09	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	21	1460.67	0.00	0.00	
			Max. Compression	19	-16.28	0.00	0.00	
			Max. Mx	14	318.59	22.61	0.00	
		Leg	Max. My	20	390.02	0.00	-0.00	
			Max. Vy	14	18.09	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	21	46081.88	31.49	-163.68	
			Max. Compression	15	-139521.60	78.47	-500.42	
			Max. Mx	24	-31754.31	3794.24	-200.68	
			Diagonal	Max. My	15	-5057.70	408.34	4040.89
				Max. Vy	24	-6723.27	3794.24	-200.68
				Max. Vx	15	-7323.03	408.43	4040.89
				Max Tension	21	4742.21	0.00	0.00
				Max. Compression	17	-5607.76	0.00	0.00
				Max. Mx	20	1122.08	-19.26	-0.29
		Horizontal	Max. My	17	-5573.58	-5.56	-3.74	
			Max. Vy	20	13.53	-19.26	-0.29	
			Max. Vx	17	1.35	0.00	0.00	
			Max Tension	21	1881.67	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	14	980.08	9.02	0.00	
		Bottom Girt	Max. My	20	1090.00	0.00	0.00	
			Max. Vy	14	-7.22	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
			Max Tension	15	1366.11	0.00	0.00	
Max. Compression	17		-346.67	0.00	0.00			
Max. Mx	14		301.72	22.61	0.00			
Mid Girt	Max. My	20	460.20	0.00	-0.00			
	Max. Vy	14	18.09	0.00	0.00			
	Max. Vx	20	-0.00	0.00	0.00			
	Max Tension	23	2126.23	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			
	Max. Mx	14	1280.80	22.61	0.00			
Guy A	Max. My	20	1715.89	0.00	-0.00			
	Max. Vy	14	18.09	0.00	0.00			
	Max. Vx	20	-0.00	0.00	0.00			
	Bottom Tension	21	28968.34					
	Top Tension	21	29468.28					
	Top Cable Vert	21	20641.82					
Guy B	Top Cable Norm	21	21030.81					
	Top Cable Tan	21	11.59					
	Bot Cable Vert	21	-19552.96					
	Bot Cable Norm	21	21373.96					
	Bot Cable Tan	21	15.24					
	Bottom Tension	25	27463.42					
Top Tension	25	27904.95						

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	49 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft	
T10	160 - 140	Guy C	Top Cable Vert	25	18277.37			
			Top Cable Norm	25	21086.10			
			Top Cable Tan	25	9.43			
			Bot Cable Vert	25	-17260.37			
			Bot Cable Norm	25	21361.62			
			Bot Cable Tan	25	15.32			
			Bottom Tension	17	27049.19			
			Top Tension	17	27451.75			
			Top Cable Vert	17	17015.02			
			Top Cable Norm	17	21542.69			
			Top Cable Tan	17	9.68			
			Bot Cable Vert	17	-16049.83			
			Bot Cable Norm	17	21772.95			
			Bot Cable Tan	17	13.47			
			Top Guy Pull-Off	Max Tension	21	15479.82	0.00	0.00
				Max. Compression	15	-8374.57	0.00	0.00
				Max. Mx	14	2478.18	22.61	0.00
				Max. My	20	2795.25	0.00	-0.00
				Max. Vy	14	18.09	0.00	0.00
				Max. Vx	20	-0.00	0.00	0.00
		Bottom Guy Pull-Off	Max Tension	17	6193.27	0.00	0.00	
			Max. Compression	19	-6135.26	0.00	0.00	
			Max. Mx	14	56.42	16.39	0.00	
			Max. My	20	-293.15	0.00	-0.00	
			Max. Vy	14	13.11	0.00	0.00	
			Max. Vx	20	-0.00	0.00	0.00	
		Torque Arm Top	Max Tension	17	28694.73	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	19	23871.86	146.58	0.00	
			Max. My	20	6814.96	0.00	0.36	
			Max. Vy	19	-65.86	0.00	0.00	
			Max. Vx	20	-0.16	0.00	0.00	
		Torque Arm Bottom	Max Tension	15	8264.49	0.00	0.00	
			Max. Compression	21	-28025.14	0.00	0.00	
			Max. Mx	20	-12506.95	147.43	0.00	
			Max. My	20	2913.96	0.00	-0.25	
			Max. Vy	20	-65.88	0.00	0.00	
			Max. Vx	20	0.11	0.00	0.00	
		Leg	Max Tension	1	0.00	0.00	0.00	
			Max. Compression	15	-103358.99	-220.82	-814.17	
			Max. Mx	17	-28211.37	843.13	-361.95	
			Max. My	15	-38973.51	21.78	-1015.86	
			Max. Vy	17	-1740.71	-26.39	-44.17	
			Max. Vx	15	2039.74	13.19	204.72	
		Diagonal	Max Tension	15	2247.93	0.00	0.00	
			Max. Compression	23	-2977.86	0.00	0.00	
			Max. Mx	15	-1812.52	-7.19	-1.27	
			Max. My	16	-1609.89	-3.10	-1.38	
			Max. Vy	15	7.09	-7.19	-1.27	
			Max. Vx	16	-0.50	-3.10	-1.38	
Horizontal	Max Tension	22	1357.47	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			
	Max. Mx	14	859.93	9.02	0.00			
	Max. My	23	1354.65	0.00	0.00			
	Max. Vy	14	-7.22	0.00	0.00			
	Max. Vx	23	-0.00	0.00	0.00			
Top Girt	Max Tension	21	1487.98	0.00	0.00			
	Max. Compression	19	-553.61	0.00	0.00			
	Max. Mx	14	265.75	16.39	0.00			
	Max. My	22	252.61	0.00	-0.00			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	50 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T11	140 - 120	Bottom Girt	Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	0.00	0.00	0.00
			Max Tension	15	814.46	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	242.39	16.39	0.00
			Max. My	22	393.78	0.00	-0.00
		Mid Girt	Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
			Max Tension	20	1342.82	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	505.01	16.39	0.00
			Max. My	22	631.67	0.00	-0.00
		Leg	Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	19	-95021.74	-64.81	-111.76
			Max. Mx	10	-37352.14	-512.87	347.09
			Max. My	15	-48089.29	80.98	-590.03
		Diagonal	Max. Vy	10	-1038.34	5.74	65.19
			Max. Vx	15	1079.80	-32.50	-51.03
			Max Tension	9	1415.66	0.00	0.00
			Max. Compression	17	-1989.32	0.00	0.00
			Max. Mx	19	348.67	-7.04	-0.28
			Max. My	16	-1870.82	-4.01	-1.22
		Horizontal	Max. Vy	19	7.04	-7.04	-0.28
			Max. Vx	16	0.45	0.00	0.00
			Max Tension	19	1309.64	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	904.31	9.02	0.00
			Max. My	23	1302.98	0.00	0.00
		Top Girt	Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	23	-0.00	0.00	0.00
			Max Tension	21	1007.47	0.00	0.00
			Max. Compression	19	-12.47	0.00	0.00
			Max. Mx	14	279.59	16.39	0.00
			Max. My	22	260.21	0.00	-0.00
		Bottom Girt	Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
			Max Tension	21	1080.03	0.00	0.00
			Max. Compression	10	-266.25	0.00	0.00
			Max. Mx	14	252.18	16.39	0.00
			Max. My	22	503.96	0.00	-0.00
Mid Girt	Max. Vy	14	13.11	0.00	0.00		
	Max. Vx	22	-0.00	0.00	0.00		
	Max Tension	20	1330.82	0.00	0.00		
	Max. Compression	1	0.00	0.00	0.00		
	Max. Mx	14	524.55	16.39	0.00		
	Max. My	22	631.30	0.00	-0.00		
Leg	Max. Vy	14	13.11	0.00	0.00		
	Max. Vx	22	0.00	0.00	0.00		
	Max Tension	1	0.00	0.00	0.00		
	Max. Compression	23	-113114.04	138.29	-130.06		
	Max. Mx	18	-46379.61	-2080.28	403.72		
	Max. My	21	-31717.16	-147.11	-2197.92		
Diagonal	Max. Vy	18	-3784.64	-2080.28	403.72		
	Max. Vx	21	-4050.72	-147.15	-2197.92		
	Max Tension	22	2024.68	0.00	0.00		
	Max. Compression	24	-2457.09	0.00	0.00		
	Max. Mx	23	1016.96	-7.26	0.28		
	Max. My	23	-763.31	-3.78	1.33		
		Max. Vy	23	7.12	-7.26	0.28	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	51 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
			Max. Vx	23	-0.49	0.00	0.00
		Horizontal	Max Tension	22	1429.55	0.00	0.00
			Max. Compression	2	-204.49	0.00	0.00
			Max. Mx	14	417.35	9.02	0.00
			Max. My	23	1392.94	0.00	0.00
			Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	23	-0.00	0.00	0.00
		Top Girt	Max Tension	16	768.45	0.00	0.00
			Max. Compression	12	-44.81	0.00	0.00
			Max. Mx	14	290.16	16.39	0.00
			Max. My	22	192.40	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	0.00	0.00	0.00
		Mid Girt	Max Tension	20	1471.47	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	570.05	16.39	0.00
			Max. My	22	758.20	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	0.00	0.00	0.00
		Guy A	Bottom Tension	21	22789.84		
			Top Tension	21	23106.22		
			Top Cable Vert	21	12128.97		
			Top Cable Norm	21	19666.85		
			Top Cable Tan	21	1.28		
			Bot Cable Vert	21	-11346.73		
			Bot Cable Norm	21	19764.32		
			Bot Cable Tan	21	1.28		
		Guy B	Bottom Tension	25	22366.43		
			Top Tension	25	22624.18		
			Top Cable Vert	25	10176.20		
			Top Cable Norm	25	20206.39		
			Top Cable Tan	25	2.97		
			Bot Cable Vert	25	-9456.09		
			Bot Cable Norm	25	20269.18		
			Bot Cable Tan	25	2.97		
		Guy C	Bottom Tension	17	21776.17		
			Top Tension	17	21994.83		
			Top Cable Vert	17	8665.89		
			Top Cable Norm	17	20215.71		
			Top Cable Tan	17	1.73		
			Bot Cable Vert	17	-7988.33		
			Bot Cable Norm	17	20258.04		
			Bot Cable Tan	17	1.73		
		Top Guy Pull-Off	Max Tension	23	9395.17	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	5362.69	16.39	0.00
			Max. My	22	5629.24	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
T13	100 - 80	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	23	-113116.30	-1153.41	451.97
			Max. Mx	18	-48325.94	1704.57	-351.84
			Max. My	21	-43016.26	149.85	1852.84
			Max. Vy	18	-3788.67	-188.89	26.33
			Max. Vx	21	-4054.01	1.38	-173.38
		Diagonal	Max Tension	20	3415.31	0.00	0.00
			Max. Compression	18	-4688.11	0.00	0.00
			Max. Mx	26	-1520.14	-7.48	0.24
			Max. My	21	-3584.87	-4.30	1.23
			Max. Vy	26	7.19	-7.48	0.24
			Max. Vx	21	0.45	0.00	0.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	52 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft	
T14	80 - 60	Horizontal	Max Tension	22	1586.43	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	14	1085.61	9.02	0.00	
			Max. My	23	1272.52	0.00	0.00	
			Max. Vy	14	-7.22	0.00	0.00	
		Top Girt	Max. Vx	23	-0.00	0.00	0.00	
			Max Tension	21	2162.69	0.00	0.00	
			Max. Compression	19	-165.75	0.00	0.00	
			Max. Mx	14	814.46	16.39	0.00	
			Max. My	22	914.77	0.00	-0.00	
		Bottom Girt	Max. Vy	14	13.11	0.00	0.00	
			Max. Vx	22	0.00	0.00	0.00	
			Max Tension	15	1638.31	0.00	0.00	
			Max. Compression	17	-452.20	0.00	0.00	
			Max. Mx	14	648.40	16.39	0.00	
		Mid Girt	Max. My	22	426.29	0.00	-0.00	
			Max. Vy	14	13.11	0.00	0.00	
			Max. Vx	22	-0.00	0.00	0.00	
			Max Tension	23	1491.59	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
		Leg	Max. Mx	14	646.00	16.39	0.00	
			Max. My	22	830.30	0.00	-0.00	
			Max. Vy	14	13.11	0.00	0.00	
			Max. Vx	22	0.00	0.00	0.00	
			Max Tension	1	0.00	0.00	0.00	
			Max. Compression	25	-94064.79	-58.81	-113.81	
			Max. Mx	18	-75196.24	1100.56	-126.00	
			Max. My	21	-74499.91	132.05	1176.53	
			Max. Vy	18	-2145.31	-48.61	-94.21	
			Max. Vx	15	2297.24	7.09	135.38	
			Diagonal	Max Tension	20	2260.60	0.00	0.00
				Max. Compression	18	-3531.59	0.00	0.00
				Max. Mx	22	955.41	-7.36	0.06
		Max. My		20	-2940.25	-3.80	1.06	
		Max. Vy		22	7.14	-7.36	0.06	
		Horizontal	Max. Vx	21	0.39	0.00	0.00	
			Max Tension	15	1609.84	0.00	0.00	
			Max. Compression	1	0.00	0.00	0.00	
			Max. Mx	14	1134.11	9.02	0.00	
			Max. My	23	1454.83	0.00	0.00	
			Max. Vy	14	-7.22	0.00	0.00	
			Max. Vx	23	-0.00	0.00	0.00	
			Top Girt	Max Tension	21	1530.27	0.00	0.00
				Max. Compression	19	-526.82	0.00	0.00
Max. Mx	14			619.78	16.39	0.00		
Max. My	22			398.24	0.00	-0.00		
Max. Vy	14			13.11	0.00	0.00		
Bottom Girt	Max. Vx		22	-0.00	0.00	0.00		
	Max Tension	15	1316.23	0.00	0.00			
	Max. Compression	4	-42.63	0.00	0.00			
	Max. Mx	14	676.96	16.39	0.00			
	Max. My	22	425.58	0.00	-0.00			
Mid Girt	Max. Vy	14	13.11	0.00	0.00			
	Max. Vx	22	-0.00	0.00	0.00			
	Max Tension	15	1489.48	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			
	Max. Mx	14	1101.03	16.39	0.00			
Leg	Max. My	22	816.13	0.00	-0.00			
	Max. Vy	14	13.11	0.00	0.00			
	Max. Vx	22	-0.00	0.00	0.00			
	Max Tension	1	0.00	0.00	0.00			
	Max. Compression	1	0.00	0.00	0.00			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	53 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
			Max. Compression	21	-100452.42	-0.58	170.34
			Max. Mx	18	-90891.19	503.38	-142.03
			Max. My	21	-94044.87	-14.70	601.90
			Max. Vy	19	-930.26	-31.33	-94.66
			Max. Vx	15	1020.66	7.16	109.77
		Diagonal	Max Tension	22	959.96	0.00	0.00
			Max. Compression	18	-1986.97	0.00	0.00
			Max. Mx	22	-596.87	-7.75	-0.57
			Max. My	22	-1524.56	-3.38	-0.70
			Max. Vy	22	7.28	-7.75	-0.57
			Max. Vx	22	0.26	-3.38	-0.70
		Horizontal	Max Tension	15	1661.97	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	1177.73	9.02	0.00
			Max. My	23	1415.75	0.00	0.00
			Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	23	-0.00	0.00	0.00
		Top Girt	Max Tension	22	1029.67	0.00	0.00
			Max. Compression	6	-17.87	0.00	0.00
			Max. Mx	14	643.85	16.39	0.00
			Max. My	22	408.57	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
		Bottom Girt	Max Tension	15	975.61	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	703.13	16.39	0.00
			Max. My	22	417.04	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
		Mid Girt	Max Tension	15	1633.53	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	1146.91	16.39	0.00
			Max. My	22	829.23	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	0.00	0.00	0.00
T16	40 - 20	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	21	-100715.86	-3.47	200.53
			Max. Mx	24	-95080.36	-543.52	-176.30
			Max. My	21	-97375.85	31.57	641.44
			Max. Vy	24	-973.86	-57.31	-97.96
			Max. Vx	21	1005.18	-1.36	139.46
		Diagonal	Max Tension	21	887.41	0.00	0.00
			Max. Compression	24	-2134.37	0.00	0.00
			Max. Mx	23	-221.00	-7.90	-0.32
			Max. My	22	-1132.02	-7.89	-0.75
			Max. Vy	23	7.34	-7.90	-0.32
			Max. Vx	22	0.27	-7.89	-0.75
		Horizontal	Max Tension	15	1721.16	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	1219.06	9.02	0.00
			Max. My	23	1424.71	0.00	0.00
			Max. Vy	14	-7.22	0.00	0.00
			Max. Vx	23	-0.00	0.00	0.00
		Top Girt	Max Tension	15	973.80	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	666.91	16.39	0.00
			Max. My	22	431.93	0.00	-0.00
			Max. Vy	14	13.11	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
		Bottom Girt	Max Tension	21	1091.20	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	54 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft		
T17	20 - 12	Mid Girt	Max. Mx	14	720.08	16.39	0.00		
			Max. My	22	433.61	0.00	-0.00		
			Max. Vy	14	13.11	0.00	0.00		
			Max. Vx	22	-0.00	0.00	0.00		
			Max Tension	15	1667.66	0.00	0.00		
			Max. Compression	1	0.00	0.00	0.00		
			Max. Mx	14	1187.75	16.39	0.00		
			Max. My	22	847.84	0.00	-0.00		
			Max. Vy	14	13.11	0.00	0.00		
			Max. Vx	22	-0.00	0.00	0.00		
			Max Tension	1	0.00	0.00	0.00		
			Max. Compression	21	-97117.17	-34.45	-369.68		
		Leg	Max. Mx	23	-74933.91	-919.88	371.19		
			Max. My	15	-71315.60	-80.30	-931.15		
			Max. Vy	23	-1577.13	-131.98	69.08		
			Max. Vx	15	-1573.26	3.36	-145.18		
			Diagonal	Max Tension	15	1428.85	0.00	0.00	
				Max. Compression	23	-2252.72	0.00	0.00	
				Max. Mx	23	-384.31	-6.80	-0.32	
				Max. My	23	-1660.68	0.20	-0.90	
				Max. Vy	23	6.94	-6.80	-0.32	
				Max. Vx	23	-0.33	0.20	-0.90	
			Horizontal	Max Tension	23	1462.14	0.00	0.00	
				Max. Compression	1	0.00	0.00	0.00	
Max. Mx	14	820.08		9.02	0.00				
Max. My	23	869.56		0.00	0.00				
Max. Vy	14	-7.22		0.00	0.00				
Max. Vx	23	-0.00		0.00	0.00				
Top Girt	Max Tension	15	1297.28	0.00	0.00				
	Max. Compression	25	-42.82	0.00	0.00				
	Max. Mx	14	702.43	16.39	0.00				
	Max. My	22	486.18	0.00	-0.00				
	Max. Vy	14	13.11	0.00	0.00				
	Max. Vx	22	-0.00	0.00	0.00				
T18	12 - 7	Leg	Max Tension	1	0.00	0.00	0.00		
			Max. Compression	21	-93135.10	-21.68	235.00		
			Max. Mx	25	-88571.65	2595.42	1512.45		
			Max. My	21	-90063.56	101.57	-3039.86		
			Max. Vy	24	-6765.14	2567.26	1508.41		
			Max. Vx	21	7776.28	101.57	-3039.86		
		Diagonal	Max Tension	23	2028.58	0.00	0.00		
			Max. Compression	24	-1999.52	0.00	0.00		
			Max. Mx	22	1298.78	5.26	0.00		
			Max. My	23	396.60	0.00	0.02		
			Max. Vy	22	-6.58	0.00	0.00		
			Max. Vx	23	-0.03	0.00	0.00		
		Horizontal	Max Tension	23	5310.70	0.00	0.00		
			Max. Compression	21	-1613.15	19.06	-0.41		
			Max. Mx	23	-1590.68	-49.27	0.14		
			Max. My	23	1590.68	-48.54	-0.59		
			Max. Vy	23	42.51	-49.27	0.14		
			Max. Vx	23	0.31	0.00	0.00		
		T19	7 - 0	Leg	Max Tension	1	0.00	0.00	0.00
					Max. Compression	22	-97986.11	-546.73	-1396.79
					Max. Mx	21	-86200.28	3039.87	97.57
					Max. My	22	-92160.67	-513.72	-1412.35
					Max. Vy	23	27877.32	433.77	-19.07
					Max. Vx	22	1360.90	-513.72	-1412.35
Diagonal	Max Tension			1	0.00	0.00	0.00		
	Max. Compression			23	-14119.61	-7.48	-4.93		
	Max. Mx			22	-13479.86	26.44	-19.29		

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	55 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
			Max. My	22	-13479.86	26.44	-19.29
			Max. Vy	22	38.44	0.00	0.00
			Max. Vx	22	-27.32	26.44	-19.29
		Secondary Horizontal	Max Tension	22	1798.00	0.00	0.00
			Max. Compression	22	-1798.00	0.00	0.00
			Max. Mx	23	1797.63	3.67	0.00
			Max. My	22	1798.00	0.00	-0.00
			Max. Vy	14	-4.08	0.00	0.00
			Max. Vx	22	0.00	0.00	0.00
		Top Girt	Max Tension	23	21180.77	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	17	17879.21	54.51	0.00
			Max. My	23	19687.95	0.00	11.24
			Max. Vy	17	-44.14	0.00	0.00
			Max. Vx	23	9.10	0.00	0.00
		Bottom Girt	Max Tension	23	9351.00	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	17	8040.51	1.14	0.00
			Max. My	23	8782.72	0.00	0.23
			Max. Vy	17	-6.38	0.00	0.00
			Max. Vx	23	-1.32	0.00	0.00
		Mid Girt	Max Tension	23	8014.33	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	17	7042.33	17.85	0.00
			Max. My	23	7647.66	0.00	3.68
			Max. Vy	17	-25.26	0.00	0.00
			Max. Vx	23	-5.21	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb	
Mast	Max. Vert	23	262642.32	2424.42	-1227.26	
	Max. H _x	24	250665.45	2883.17	200.97	
	Max. H _z	15	251836.31	69.39	2953.18	
	Max. M _x	1	0.00	40.01	-0.97	
	Max. M _z	1	0.00	40.01	-0.97	
	Max. Torsion	22	1767.84	1205.64	-2293.33	
	Min. Vert	1	147213.40	40.01	-0.97	
	Min. H _x	18	247729.65	-2784.38	206.61	
	Min. H _z	21	253265.33	104.79	-2703.90	
	Min. M _x	1	0.00	40.01	-0.97	
	Min. M _z	1	0.00	40.01	-0.97	
	Min. Torsion	3	-1602.73	-1194.86	1638.43	
	Guy C @ 220 ft Elev 11 ft Azimuth 240 deg	Max. Vert	10	-3191.07	-3466.00	1999.29
		Max. H _x	10	-3191.07	-3466.00	1999.29
		Max. H _z	17	-77003.48	-81437.03	47048.52
Min. Vert		17	-77003.48	-81437.03	47048.52	
Min. H _x		17	-77003.48	-81437.03	47048.52	
Min. H _z		10	-3191.07	-3466.00	1999.29	
Guy B @ 220 ft Elev -5 ft Azimuth 120 deg	Max. Vert	6	-3751.42	3567.05	2056.89	

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	56 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Guy A @ 220 ft Elev -29 ft Azimuth 0 deg	Max. H _x	25	-82706.31	80675.16	46594.44
	Max. H _z	25	-82706.31	80675.16	46594.44
	Min. Vert	25	-82706.31	80675.16	46594.44
	Min. H _x	6	-3751.42	3567.05	2056.89
	Min. H _z	6	-3751.42	3567.05	2056.89
	Max. Vert	2	-4549.29	0.61	-4299.82
	Max. H _x	24	-49109.05	3091.39	-49500.92
	Max. H _z	2	-4549.29	0.61	-4299.82
	Min. Vert	21	-95359.09	11.52	-94763.23
	Min. H _x	18	-49819.59	-3079.69	-50042.95
Min. H _z	21	-95359.09	11.52	-94763.23	

Tower Mast Reaction Summary

Load Combination	Vertical lb	Shear _x lb	Shear _z lb	Overturning Moment, M _x lb-ft	Overturning Moment, M _z lb-ft	Torque lb-ft
Dead Only	147213.40	-40.01	0.97	0.00	0.00	-2.71
Dead+Wind 0 deg - No Ice+Guy	181030.27	-2.27	-1872.54	0.00	0.00	1442.90
Dead+Wind 30 deg - No Ice+Guy	177311.64	1194.86	-1638.43	0.00	0.00	1602.73
Dead+Wind 60 deg - No Ice+Guy	171525.31	1970.56	-1122.08	0.00	0.00	1039.83
Dead+Wind 90 deg - No Ice+Guy	176004.28	2035.54	-245.86	0.00	0.00	256.68
Dead+Wind 120 deg - No Ice+Guy	184325.88	1531.26	768.81	0.00	0.00	-276.87
Dead+Wind 150 deg - No Ice+Guy	182467.29	665.37	1636.36	0.00	0.00	-780.25
Dead+Wind 180 deg - No Ice+Guy	176235.55	-50.02	2064.65	0.00	0.00	-1269.44
Dead+Wind 210 deg - No Ice+Guy	184441.38	-726.12	1634.13	0.00	0.00	-1504.36
Dead+Wind 240 deg - No Ice+Guy	188411.39	-1523.19	758.46	0.00	0.00	-1163.74
Dead+Wind 270 deg - No Ice+Guy	179134.12	-2024.69	-235.13	0.00	0.00	-444.96
Dead+Wind 300 deg - No Ice+Guy	173079.03	-1987.87	-1070.85	0.00	0.00	249.92
Dead+Wind 330 deg - No Ice+Guy	178678.21	-1208.79	-1576.81	0.00	0.00	883.29
Dead+Ice+Temp+Guy	210289.12	-97.97	24.65	0.00	0.00	-0.19
Dead+Wind 0 deg+Ice+Temp+Guy	251836.31	-69.39	-2953.18	0.00	0.00	1124.92
Dead+Wind 30 deg+Ice+Temp+Guy	249636.70	1521.46	-2314.42	0.00	0.00	1467.28
Dead+Wind 60 deg+Ice+Temp+Guy	246071.87	2513.58	-1438.46	0.00	0.00	1092.35
Dead+Wind 90 deg+Ice+Temp+Guy	247729.65	2784.38	-206.61	0.00	0.00	502.63
Dead+Wind 120 deg+Ice+Temp+Guy	258157.96	2339.75	1262.68	0.00	0.00	471.94
Dead+Wind 150 deg+Ice+Temp+Guy	255469.16	1027.05	2298.66	0.00	0.00	-23.02

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	57 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Load Combination	Vertical	Shear _x	Shear _z	Overturning Moment, M _x	Overturning Moment, M _z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
Dead+Wind 180	253265.33	-104.79	2703.90	0.00	0.00	-973.39
deg+Ice+Temp+Guy						
Dead+Wind 210	257050.05	-1205.64	2293.33	0.00	0.00	-1767.84
deg+Ice+Temp+Guy						
Dead+Wind 240	262642.32	-2424.42	1227.26	0.00	0.00	-1610.91
deg+Ice+Temp+Guy						
Dead+Wind 270	250665.45	-2883.17	-200.97	0.00	0.00	-614.91
deg+Ice+Temp+Guy						
Dead+Wind 300	247892.16	-2636.29	-1386.34	0.00	0.00	-92.58
deg+Ice+Temp+Guy						
Dead+Wind 330	251166.05	-1651.90	-2247.35	0.00	0.00	446.94
deg+Ice+Temp+Guy						
Dead+Wind 0 deg - Service+Guy	150361.91	-29.09	-1215.70	0.00	0.00	714.93
Dead+Wind 30 deg - Service+Guy	151660.73	578.13	-1040.68	0.00	0.00	763.18
Dead+Wind 60 deg - Service+Guy	152354.96	1019.97	-597.87	0.00	0.00	536.79
Dead+Wind 90 deg - Service+Guy	151450.32	1190.60	-3.82	0.00	0.00	181.96
Dead+Wind 120 deg - Service+Guy	150364.92	1031.51	577.70	0.00	0.00	-136.91
Dead+Wind 150 deg - Service+Guy	151750.23	563.51	996.84	0.00	0.00	-418.50
Dead+Wind 180 deg - Service+Guy	152706.72	-45.08	1146.02	0.00	0.00	-629.63
Dead+Wind 210 deg - Service+Guy	152070.90	-648.30	998.92	0.00	0.00	-720.00
Dead+Wind 240 deg - Service+Guy	150965.85	-1101.48	582.81	0.00	0.00	-577.48
Dead+Wind 270 deg - Service+Guy	151809.42	-1255.47	11.41	0.00	0.00	-269.84
Dead+Wind 300 deg - Service+Guy	152560.70	-1079.55	-580.06	0.00	0.00	95.53
Dead+Wind 330 deg - Service+Guy	151732.71	-636.69	-1029.14	0.00	0.00	466.97

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	
1	0.00	-67614.74	-0.00	-0.32	67614.76	1.18	0.002%
2	64.12	-67892.62	-62435.91	-64.30	67892.51	62431.73	0.005%
3	30875.01	-67513.95	-53827.58	-30875.53	67513.87	53824.03	0.004%
4	53003.67	-67150.82	-31119.09	-53005.33	67150.82	31117.27	0.003%
5	60562.92	-67567.28	-220.83	-60560.49	67567.22	223.12	0.004%
6	52664.82	-67991.43	32078.08	-52661.60	67991.33	-32075.80	0.004%
7	30435.28	-67668.07	54382.77	-30432.41	67667.99	-54381.23	0.004%
8	-817.91	-67336.86	62980.95	814.23	67336.84	-62980.11	0.004%
9	-31126.96	-67715.53	54595.77	31123.82	67715.45	-54594.24	0.004%
10	-53085.06	-68078.66	32394.75	53081.41	68078.55	-32392.38	0.005%
11	-60872.77	-67662.20	296.13	60870.72	67662.15	-294.34	0.003%
12	-53473.32	-67238.05	-30445.80	53476.09	67238.10	30446.28	0.003%
13	-30743.60	-67561.41	-53648.89	30743.85	67561.32	53645.03	0.004%
14	0.00	-115146.37	0.00	-1.15	115146.37	2.84	0.003%
15	-116.61	-115606.54	-76376.21	116.45	115606.42	76372.24	0.003%
16	36856.30	-114981.87	-64143.43	-36856.98	114981.79	64139.83	0.003%

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	58 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	
17	62591.97	-114382.68	-36871.22	-62593.15	114382.67	36868.71	0.002%
18	71953.31	-115068.84	-39.27	-71950.94	115068.78	41.66	0.002%
19	63553.60	-115767.60	42485.15	-63549.66	115767.47	-42482.62	0.003%
20	35172.52	-115233.33	67048.56	-35168.74	115233.25	-67047.07	0.003%
21	-754.34	-114686.20	76328.29	750.09	114686.13	-76325.56	0.004%
22	-35792.00	-115310.86	67181.66	35787.87	115310.77	-67180.20	0.003%
23	-64037.15	-115910.05	42629.68	64032.67	115909.90	-42627.04	0.004%
24	-72309.30	-115223.89	340.55	72306.62	115223.83	-338.00	0.003%
25	-63143.58	-114525.13	-36318.66	63144.25	114525.09	36314.85	0.003%
26	-36899.83	-115059.40	-64038.61	36900.27	115059.31	64034.76	0.003%
27	31.95	-67753.20	-31109.93	-32.00	67753.20	31108.47	0.002%
28	15384.09	-67564.52	-26820.66	-15384.44	67564.51	26819.54	0.002%
29	26410.13	-67383.58	-15505.71	-26409.05	67383.57	15504.98	0.002%
30	30176.68	-67591.09	-110.03	-30176.17	67591.09	110.84	0.001%
31	26241.30	-67802.43	15983.54	-26239.87	67802.43	-15982.67	0.002%
32	15164.99	-67641.31	27097.30	-15163.45	67641.30	-27096.54	0.002%
33	-407.54	-67476.28	31381.51	407.11	67476.27	-31379.97	0.002%
34	-15509.63	-67664.96	27203.43	15508.48	67664.95	-27203.00	0.002%
35	-26450.69	-67845.90	16141.33	26449.37	67845.89	-16140.53	0.002%
36	-30331.07	-67638.39	147.55	30330.44	67638.39	-146.62	0.002%
37	-26644.14	-67427.05	-15170.23	26642.75	67427.04	15170.32	0.002%
38	-15318.61	-67588.17	-26731.63	15318.81	67588.16	26730.46	0.002%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	15	0.00000001	0.00001989
2	Yes	29	0.00009400	0.00005964
3	Yes	28	0.00009434	0.00005334
4	Yes	19	0.00007932	0.00003488
5	Yes	29	0.00009838	0.00004763
6	Yes	31	0.00008896	0.00005476
7	Yes	31	0.00007312	0.00004521
8	Yes	20	0.00009330	0.00004703
9	Yes	32	0.00007898	0.00004826
10	Yes	32	0.00009576	0.00005989
11	Yes	31	0.00007563	0.00003820
12	Yes	16	0.00007319	0.00005016
13	Yes	28	0.00009509	0.00005606
14	Yes	13	0.00010000	0.00003581
15	Yes	31	0.00007579	0.00004339
16	Yes	30	0.00008301	0.00004234
17	Yes	22	0.00007737	0.00003083
18	Yes	31	0.00008683	0.00003739
19	Yes	33	0.00008354	0.00004992
20	Yes	33	0.00007755	0.00004362
21	Yes	21	0.00009588	0.00005291
22	Yes	34	0.00008490	0.00004595
23	Yes	34	0.00009190	0.00005473
24	Yes	32	0.00009013	0.00004021
25	Yes	20	0.00009580	0.00004177
26	Yes	30	0.00008192	0.00004332
27	Yes	16	0.00000001	0.00002582
28	Yes	19	0.00000001	0.00002204
29	Yes	13	0.00000001	0.00002218

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	59 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

30	Yes	19	0.00000001	0.00001736
31	Yes	16	0.00000001	0.00002567
32	Yes	19	0.00008741	0.00003039
33	Yes	17	0.00000001	0.00002886
34	Yes	20	0.00000001	0.00002196
35	Yes	17	0.00000001	0.00002374
36	Yes	19	0.00000001	0.00002014
37	Yes	15	0.00000001	0.00002318
38	Yes	19	0.00000001	0.00002184

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	347 - 330	6.900	33	0.0540	0.5515
T1	330 - 320	6.718	33	0.0480	0.4956
T2	320 - 300	6.659	33	0.0450	0.4800
T3	300 - 280	6.482	33	0.0528	0.4429
T4	280 - 260	6.214	33	0.0639	0.3956
T5	260 - 240	5.955	33	0.0718	0.3239
T6	240 - 220	5.607	33	0.1199	0.2292
T7	220 - 200	4.959	33	0.1802	0.1286
T8	200 - 180	4.102	33	0.2009	0.0566
T9	180 - 160	3.243	33	0.1686	0.0211
T10	160 - 140	2.663	33	0.1242	0.0173
T11	140 - 120	2.200	33	0.1060	0.0478
T12	120 - 100	1.781	33	0.0909	0.0698
T13	100 - 80	1.438	33	0.0651	0.0877
T14	80 - 60	1.237	33	0.0514	0.1055
T15	60 - 40	1.039	35	0.0583	0.1108
T16	40 - 20	0.772	35	0.0742	0.1032
T17	20 - 12	0.418	35	0.0909	0.0938
T18	12 - 7	0.253	35	0.0954	0.0884
T19	7 - 0	0.146	35	0.0972	0.0836

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
347.00	Lightning Rod	33	6.900	0.0540	0.5515	60756
345.00	LP-3E-Radomes	33	6.875	0.0504	0.5438	60756
340.00	LP-3E-Radomes	33	6.815	0.0419	0.5251	43397
335.00	LP-3E-Radomes	33	6.761	0.0439	0.5086	25315
330.08	Guy	33	6.718	0.0479	0.4958	21244
325.00	10' Grid Dish	33	6.687	0.0478	0.4869	55370
314.00	LP-2E-Radomes	33	6.619	0.0410	0.4704	39606
308.00	LP-2E-Radomes	33	6.567	0.0461	0.4592	40001
298.00	PD220	33	6.457	0.0543	0.4387	47751
295.00	DB810KE-Y	33	6.419	0.0566	0.4323	62774
277.00	Box 14"x10" dia.	33	6.174	0.0643	0.3866	83081
273.50	2' Side Mount Standoff	33	6.129	0.0646	0.3753	117846
273.00	6' Dish	33	6.122	0.0647	0.3736	125690
270.00	Guy	33	6.084	0.0651	0.3631	209254
263.30	PD1167	33	5.998	0.0684	0.3376	123823

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 60 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Elevation	Appurtenance	Gov. Load	Deflection	Tilt	Twist	Radius of Curvature
ft		Comb.	in	°	°	ft
251.40	2-1/2"x15' Omni Antenna	33	5.831	0.0877	0.2855	23301
250.30	6' Grid Dish	33	5.813	0.0904	0.2803	21308
236.70	(4) 4'x6.25"x8.25" Panel Antenna W/ Mast Pipe	33	5.521	0.1305	0.2121	12646
225.80	(2) DB980H90E-M w/Mount Pipe	33	5.176	0.1648	0.1561	16179
204.50	Kreco CO-41A	33	4.305	0.2012	0.0700	34404
203.80	2"x8' Omni Antenna	33	4.273	0.2014	0.0678	35745
199.00	Powerwave 7770 W/ Mast Pipe	33	4.056	0.2004	0.0539	61965
183.30	AIR21 B2A/B4P W/ Mast Pipe	33	3.369	0.1762	0.0252	14225
176.00	Guy	33	3.105	0.1590	0.0172	13914
171.00	Mid Beacon	33	2.952	0.1469	0.0168	18735
166.50	LPA-80080-4CF W/ Mast Pipe	33	2.828	0.1366	0.0167	27263
148.80	15' Dipole	33	2.397	0.1116	0.0322	89458
137.50	3"x20' Omni Antenna	33	2.145	0.1046	0.0516	111029
128.80	6' Dish	33	1.960	0.0989	0.0621	97979
111.40	1.5' Grid Dish	33	1.618	0.0801	0.0768	40033
111.30	3' Side Mount Standoff	33	1.616	0.0800	0.0769	39782
100.50	Guy	33	1.445	0.0657	0.0872	24577
89.50	Box 7"x5"x4.5"	33	1.322	0.0553	0.0979	61093
88.50	1.5' Grid Dish	33	1.313	0.0546	0.0988	72608
78.80	Shively Radome	33	1.227	0.0512	0.1063	97895
70.00	Shively Radome	35	1.143	0.0528	0.1101	74417
61.40	Shively Radome	35	1.055	0.0573	0.1109	63737
54.30	2.5' Side Mount Standoff	35	0.972	0.0624	0.1095	59155

Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load	Tilt	Twist
	ft	in	Comb.	°	°
L1	347 - 330	29.103	23	0.5162	1.3172
T1	330 - 320	27.327	23	0.4759	1.2106
T2	320 - 300	26.389	23	0.4870	1.1685
T3	300 - 280	24.382	23	0.5176	1.0532
T4	280 - 260	22.219	23	0.5251	0.9201
T5	260 - 240	20.172	23	0.5137	0.7514
T6	240 - 220	18.059	23	0.5801	0.5383
T7	220 - 200	15.457	23	0.6628	0.3408
T8	200 - 180	12.574	23	0.6618	0.2163
T9	180 - 160	9.870	23	0.5462	0.1234
T10	160 - 140	7.968	23	0.4045	0.0953
T11	140 - 120	6.481	23	0.3338	0.1448
T12	120 - 100	5.192	23	0.2798	0.1824
T13	100 - 80	4.153	23	0.2089	0.2151
T14	80 - 60	3.532	23	0.1585	0.2451
T15	60 - 40	2.929	23	0.1684	0.2522
T16	40 - 20	2.157	23	0.2110	0.2355
T17	20 - 12	1.162	23	0.2542	0.2142
T18	12 - 7	0.703	23	0.2660	0.2020
T19	7 - 0	0.406	23	0.2708	0.1912

Critical Deflections and Radius of Curvature - Design Wind

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	61 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
347.00	Lightning Rod	23	29.103	0.5162	1.3172	29464
345.00	LP-3E-Radomes	23	28.887	0.5093	1.3032	29464
340.00	LP-3E-Radomes	23	28.350	0.4933	1.2689	21046
335.00	LP-3E-Radomes	23	27.827	0.4812	1.2374	12277
330.08	Guy	23	27.335	0.4759	1.2110	10340
325.00	10' Grid Dish	23	26.854	0.4790	1.1892	28583
314.00	LP-2E-Radomes	23	25.814	0.4972	1.1385	17662
308.00	LP-2E-Radomes	23	25.215	0.5068	1.1036	19108
298.00	PD220	23	24.169	0.5199	1.0404	21038
295.00	DB810KE-Y	23	23.845	0.5228	1.0213	25912
277.00	Box 14"x10" dia.	23	21.903	0.5224	0.8977	18566
273.50	2' Side Mount Standoff	23	21.539	0.5186	0.8702	22003
273.00	6' Dish	23	21.488	0.5180	0.8661	22631
270.00	Guy	23	21.181	0.5149	0.8413	27307
263.30	PD1167	23	20.503	0.5117	0.7823	39934
251.40	2-1/2"x15' Omni Antenna	23	19.302	0.5332	0.6651	11184
250.30	6' Grid Dish	23	19.188	0.5370	0.6534	10327
236.70	(4) 4'x6.25"x8.25" Panel Antenna W/ Mast Pipe	23	17.665	0.5956	0.4992	6499
225.80	(2) DB980H90E-M w/Mount Pipe	23	16.257	0.6436	0.3833	8589
204.50	Kreco CO-41A	23	13.229	0.6726	0.2422	19860
203.80	2"x8' Omni Antenna	23	13.127	0.6714	0.2381	20768
199.00	Powerwave 7770 W/ Mast Pipe	23	12.429	0.6585	0.2106	34281
183.30	AIR21 B2A/B4P W/ Mast Pipe	23	10.268	0.5705	0.1339	5035
176.00	Guy	23	9.427	0.5154	0.1142	4920
171.00	Mid Beacon	23	8.925	0.4767	0.1067	6134
166.50	LPA-80080-4CF W/ Mast Pipe	23	8.514	0.4447	0.1019	7892
148.80	15' Dipole	23	7.106	0.3580	0.1220	17420
137.50	3"x20' Omni Antenna	23	6.310	0.3276	0.1505	22184
128.80	6' Dish	23	5.737	0.3054	0.1677	22206
111.40	1.5' Grid Dish	23	4.699	0.2507	0.1963	12821
111.30	3' Side Mount Standoff	23	4.693	0.2503	0.1965	12758
100.50	Guy	23	4.174	0.2106	0.2143	8640
89.50	Box 7"x5"x4.5"	23	3.795	0.1771	0.2325	18542
88.50	1.5' Grid Dish	23	3.766	0.1746	0.2340	20723
78.80	Shively Radome	23	3.499	0.1570	0.2463	39506
70.00	Shively Radome	23	3.246	0.1555	0.2522	28733
61.40	Shively Radome	23	2.976	0.1661	0.2526	23821
54.30	2.5' Side Mount Standoff	23	2.729	0.1791	0.2490	22003

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load lb	Ratio Load Allowable	Allowable Ratio	Criteria
L1	347	Latticed Pole Leg	A325N	1.2500	3	0.00	53987.30	0.000	✓	1.0664 Bolt Tension
T1	330	Leg	A325X	0.7500	5	4167.61	26507.20	0.157	✓	1.333 Bolt DS
T2	320	Leg	A325X	0.7500	5	3932.42	26507.20	0.148	✓	1.333 Bolt DS
T3	300	Leg	A325X	0.7500	5	4182.42	26507.20	0.158	✓	1.333 Bolt DS
T4	280	Leg	A325X	0.7500	5	7756.50	26507.20	0.293	✓	1.333 Bolt DS
T5	260	Leg	A325X	0.7500	5	11658.90	26507.20	0.440	✓	1.333 Bolt DS

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 62 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load lb	Ratio Load Allowable	Allowable Ratio	Criteria
T6	240	Leg	A325X	0.7500	5	10931.10	26507.20	0.412 ✓	1.333	Bolt DS
T7	220	Leg	A325X	0.7500	5	10431.90	26507.20	0.394 ✓	1.333	Bolt DS
T8	200	Leg	A325X	0.8750	5	24697.30	36079.20	0.685 ✓	1.333	Bolt DS
T9	180	Leg	A325X	0.8750	5	20668.40	36079.20	0.573 ✓	1.333	Bolt DS
		Torque Arm Top@176	A325N	0.7500	4	7173.68	16765.60	0.428 ✓	1.333	Member Block Shear
		Torque Arm Bottom@176	A325N	0.7500	4	7006.29	18555.00	0.378 ✓	1.333	Bolt Shear
T10	160	Leg	A325X	0.8750	5	18191.20	36079.20	0.504 ✓	1.333	Bolt DS
T11	140	Leg	A325X	0.8750	5	19004.30	36079.20	0.527 ✓	1.333	Bolt DS
T12	120	Leg	A325X	0.8750	5	22622.80	36079.20	0.627 ✓	1.333	Bolt DS
T13	100	Leg	A325X	0.8750	5	16683.80	36079.20	0.462 ✓	1.333	Bolt DS
T14	80	Leg	A325X	0.8750	5	18813.00	36079.20	0.521 ✓	1.333	Bolt DS
T15	60	Leg	A325X	0.8750	5	20090.50	36079.20	0.557 ✓	1.333	Bolt DS
T16	40	Leg	A325X	0.8750	5	19420.30	36079.20	0.538 ✓	1.333	Bolt DS
T17	20	Leg	A325X	0.8750	5	18609.00	36079.20	0.516 ✓	1.333	Bolt DS

Guy Design Data

Section No.	Elevation ft	Size	Initial Tension lb	Breaking Load lb	Actual T lb	Allowable T _a lb	Required S.F.	Actual S.F.
L1	330.08 (A) (1164)	11/16 BS	5800.00	57999.90	24242.50	29000.00	2.000	2.392 ✓
	330.08 (B) (1163)	11/16 BS	5800.00	57999.90	21077.90	29000.00	2.000	2.752 ✓
	330.08 (C) (1162)	11/16 BS	5800.00	57999.90	20484.10	29000.00	2.000	2.831 ✓
T4	270.00 (A) (1167)	13/16 BS	8000.00	79999.92	32648.70	40000.00	2.000	2.450 ✓
	270.00 (B) (1166)	13/16 BS	8000.00	79999.92	29277.80	40000.00	2.000	2.732 ✓
	270.00 (C) (1165)	13/16 BS	8000.00	79999.92	28734.50	40000.00	2.000	2.784 ✓
T9	176.00 (A) (1182)	7/8 BS	9200.00	92000.13	29166.80	46000.00	2.000	3.154 ✓
	176.00 (A) (1183)	7/8 BS	9200.00	92000.13	29468.30	46000.00	2.000	3.122 ✓
	176.00 (B) (1176)	7/8 BS	9200.00	92000.13	27863.10	46000.00	2.000	3.302 ✓
	176.00 (B) (1177)	7/8 BS	9200.00	92000.13	27904.90	46000.00	2.000	3.297 ✓
	176.00 (C) (1168)	7/8 BS	9200.00	92000.13	27451.70	46000.00	2.000	3.351 ✓
	176.00 (C) (1169)	7/8 BS	9200.00	92000.13	27113.40	46000.00	2.000	3.393 ✓
T12	100.50 (A) (1190)	7/8 BS	9200.00	92000.13	23106.20	46000.00	2.000	3.982 ✓

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	63 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	Initial Tension lb	Breaking Load lb	Actual T lb	Allowable T_a lb	Required S.F.	Actual S.F.
	100.50 (B) (1189)	7/8 BS	9200.00	92000.13	22624.20	46000.00	2.000	4.066 ✓
	100.50 (C) (1188)	7/8 BS	9200.00	92000.13	21994.80	46000.00	2.000	4.183 ✓

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	Mast Stability Index	F_a ksi	A in^2	Actual P lb	Allow. P_a lb	Ratio P/P_a
L1	347 - 330	1 1/4	17.00	2.10	80.8 K=1.00	1.00	18.852	1.2272	-15538.50	23134.90	0.672 ✓
T1	330 - 320	2 1/4	10.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-20838.00	96405.60	0.216 ✓
T2	320 - 300	2 1/4	20.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-21631.90	96405.60	0.224 ✓
T3	300 - 280	2 1/4	20.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-20912.10	96405.60	0.217 ✓
T4	280 - 260	2 1/4	20.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-38782.50	96405.60	0.402 ✓
T5	260 - 240	2 1/4	20.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-58294.70	96405.60	0.605 ✓
T6	240 - 220	2 1/4	20.00	2.38	50.7 K=1.00	1.00	24.246	3.9761	-61512.00	96405.60	0.638 ✓
T7	220 - 200	2 1/2	20.00	2.38	45.6 K=1.00	1.00	24.921	4.9087	-54655.80	122331.00	0.447 ✓
T8	200 - 180	2 3/4	20.00	2.38	41.5 K=1.00	0.99	25.446	5.9396	-123486.00	151137.00	0.817 ✓
T9	180 - 160	2 3/4	20.00	2.38	41.5 K=1.00	1.00	25.626	5.9396	-139522.00	152210.00	0.917 ✓
T10	160 - 140	2 3/4	20.00	2.38	41.5 K=1.00	1.00	25.626	5.9396	-103341.00	152210.00	0.679 ✓
T11	140 - 120	2 3/4	20.00	2.38	41.5 K=1.00	1.00	25.626	5.9396	-95021.70	152210.00	0.624 ✓
T12	120 - 100	2 3/4	20.00	2.38	41.5 K=1.00	1.00	25.626	5.9396	-113114.00	152210.00	0.743 ✓
T13	100 - 80	2 3/4	20.00	2.38	41.5 K=1.00	0.97	24.914	5.9396	-113114.00	147979.00	0.764 ✓
T14	80 - 60	2 3/4	20.00	2.38	41.5 K=1.00	0.96	24.691	5.9396	-94064.80	146653.00	0.641 ✓
T15	60 - 40	2 3/4	20.00	2.38	41.5 K=1.00	0.96	24.719	5.9396	-100452.00	146820.00	0.684 ✓
T16	40 - 20	2 3/4	20.00	2.38	41.5 K=1.00	0.96	24.714	5.9396	-100716.00	146792.00	0.686 ✓
T17	20 - 12	2 3/4	8.00	2.33	40.7 K=1.00	0.96	24.689	5.9396	-97101.20	146641.00	0.662 ✓

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	64 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	Mast Stability Index	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T18	12 - 7	2 3/4	5.00	0.50	8.7	0.83	24.273	5.9396	-69712.10	144174.00	0.484*
					K=1.00						✓
T19	7 - 0	2 3/4	7.57	1.08	18.9	0.85	24.273	5.9396	-75702.10	144174.00	0.525*
					K=1.00						✓

* DL controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
L1	347 - 330	1/2	3.27	1.57	112.7	11.750	0.1963	-1112.25	2307.13	0.482
					K=0.75					✓
T1	330 - 320	7/8	5.54	2.66	109.6	12.432	0.6013	-2051.50	7475.31	0.274
					K=0.75					✓
T2	320 - 300	7/8	5.54	2.66	109.6	12.432	0.6013	-1978.13	7475.31	0.265
					K=0.75					✓
T3	300 - 280	7/8	5.54	2.66	109.6	12.432	0.6013	-2981.46	7475.31	0.399
					K=0.75					✓
T4	280 - 260	7/8	5.54	2.66	109.6	12.432	0.6013	-4024.71	7475.31	0.538
					K=0.75					✓
T5	260 - 240	7/8	5.54	2.66	109.6	12.432	0.6013	-4082.67	7475.31	0.546
					K=0.75					✓
T6	240 - 220	7/8	5.54	2.66	109.6	12.432	0.6013	-4311.69	7475.31	0.577
					K=0.75					✓
T7	220 - 200	1	5.54	2.65	95.5	15.734	0.7854	-5564.55	12357.30	0.450
					K=0.75					✓
T8	200 - 180	1 1/4	5.54	2.64	87.8	17.399	1.2272	-10057.40	21351.80	0.471
					K=0.87					✓
T9	180 - 160	1 1/4	5.54	2.64	87.8	17.399	1.2272	-5607.76	21351.80	0.263
					K=0.87					✓
T10	160 - 140	1	5.54	2.64	95.1	15.827	0.7854	-2977.86	12430.20	0.240
					K=0.75					✓
T11	140 - 120	1	5.54	2.64	95.1	15.827	0.7854	-1989.32	12430.20	0.160
					K=0.75					✓
T12	120 - 100	1	5.54	2.64	95.1	15.827	0.7854	-2457.09	12430.20	0.198
					K=0.75					✓
T13	100 - 80	1	5.54	2.64	95.1	15.827	0.7854	-4688.11	12430.20	0.377
					K=0.75					✓
T14	80 - 60	1	5.54	2.64	95.1	15.827	0.7854	-3531.59	12430.20	0.284
					K=0.75					✓
T15	60 - 40	1	5.54	2.64	95.1	15.827	0.7854	-1986.97	12430.20	0.160
					K=0.75					✓
T16	40 - 20	1	5.54	2.64	95.1	15.827	0.7854	-2134.37	12430.20	0.172
					K=0.75					✓
T17	20 - 12	1	5.52	2.63	94.8	15.895	0.7854	-2252.72	12483.60	0.180
					K=0.75					✓

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 65 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T18	12 - 7	1 1/4	3.20	3.05	84.5 K=0.72	18.101	1.2272	-1999.52	22213.20	0.090
T19	7 - 0	1 1/4	3.50	2.58	99.1 K=1.00	14.911	1.2272	-14119.60	18298.70	0.772

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T1	330 - 320	7/8	5.00	4.81	184.8 K=0.70	4.373	0.6013	-234.62	2629.38	0.089
T3	300 - 280	7/8	5.00	4.81	184.8 K=0.70	4.373	0.6013	-20.13	2629.38	0.008
T4	280 - 260	7/8	5.00	4.81	184.8 K=0.70	4.373	0.6013	-438.48	2629.38	0.167
T5	260 - 240	7/8	5.00	4.81	184.8 K=0.70	4.373	0.6013	-40.89	2629.38	0.016
T6	240 - 220	7/8	5.00	4.81	184.8 K=0.70	4.373	0.6013	-395.05	2629.38	0.150
T8	200 - 180	7/8	5.00	4.77	183.2 K=0.70	4.449	0.6013	-305.80	2675.51	0.114
T12	120 - 100	7/8	5.00	4.77	183.2 K=0.70	4.449	0.6013	-204.49	2675.51	0.076
T18	12 - 7	6x3/4	5.00	2.39	132.2 K=1.00	8.543	4.5000	-1613.15	38442.70	0.042

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T19	7 - 0	3/4	3.60	3.37	107.8 K=0.50	12.861	0.4418	-1389.10	5681.82	0.244*

* DL controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
L1	347 - 330	3/4	2.50	2.40	107.3	12.962	0.4418	-8.33	5726.57	0.001

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	66 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T2	320 - 300	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-281.07	4485.60	0.063
T3	300 - 280	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-129.49	4485.60	0.029
T4	280 - 260	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-558.26	4485.60	0.124
T5	260 - 240	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-791.57	4485.60	0.176
T6	240 - 220	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-523.00	4485.60	0.117
T7	220 - 200	1 1/4	5.00	4.79	K=0.70 128.8	9.002	1.2272	-932.58	11046.60	0.084
T8	200 - 180	1 1/2	5.00	4.77	K=0.70 106.9	13.076	1.7672	-1658.72	23106.60	0.072
T10	160 - 140	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-553.61	11143.30	0.050
T11	140 - 120	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-12.47	11143.30	0.001
T12	120 - 100	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-44.81	11143.30	0.004
T13	100 - 80	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-165.75	11143.30	0.015
T14	80 - 60	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-526.82	11143.30	0.047
T15	60 - 40	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-17.87	11143.30	0.002
T17	20 - 12	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-42.82	11143.30	0.004

Bottom Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T1	330 - 320	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-281.37	4485.60	0.063
T2	320 - 300	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-100.38	4485.60	0.022
T3	300 - 280	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-581.05	4485.60	0.130
T4	280 - 260	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-945.34	4485.60	0.211
T5	260 - 240	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-599.64	4485.60	0.134
T6	240 - 220	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-732.33	4485.60	0.163
T7	220 - 200	1 1/4	5.00	4.79	K=0.70 128.8	9.002	1.2272	-1420.26	11046.60	0.129
T8	200 - 180	1 1/2	5.00	4.77	106.9	13.076	1.7672	-5151.46	23106.60	0.223

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 67 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P/P _a
T9	180 - 160	1 1/2	5.00	4.77	K=0.70 106.9	13.076	1.7672	-346.67	23106.60	0.015
T11	140 - 120	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-266.25	11143.30	0.024
T13	100 - 80	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-452.20	11143.30	0.041
T14	80 - 60	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-42.63	11143.30	0.004

Mid Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P/P _a
L1	347 - 330	3/4	2.50	2.40	K=0.70 107.3	12.962	0.4418	-7.70	5726.57	0.001
T5	260 - 240	1	5.00	4.81	K=0.70 161.7	5.711	0.7854	-10.90	4485.60	0.002
T8	200 - 180	1 1/2	5.00	4.77	K=0.70 106.9	13.076	1.7672	-16.28	23106.60	0.001

Top Guy Pull-Off Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P/P _a
T9	180 - 160	1 1/2	5.00	4.77	K=0.70 106.9	13.076	1.7672	-8374.57	23106.60	0.362

Bottom Guy Pull-Off Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P/P _a
T9	180 - 160	1 1/4	5.00	4.77	K=0.70 128.2	9.080	1.2272	-6135.26	11143.30	0.551

Torque-Arm Bottom Design Data

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 68 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T9	180 - 160 (1172)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-24541.00	39065.10	0.628
T9	180 - 160 (1173)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-27700.80	39065.10	0.709
T9	180 - 160 (1180)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-25630.10	39065.10	0.656
T9	180 - 160 (1181)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-24707.00	39065.10	0.632
T9	180 - 160 (1186)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-26019.00	39065.10	0.666
T9	180 - 160 (1187)	2L3x3x5/16	8.95	8.83	114.9 K=1.00	11.004	3.5500	-28025.10	39065.10	0.717

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
L1	347 - 330	1 1/4	17.00	2.10	80.8	30.000	1.2272	6500.96	36815.50	0.177
T2	320 - 300	2 1/4	20.00	2.38	50.7	32.500	2.1885	2252.61	71126.30	0.032
T3	300 - 280	2 1/4	20.00	2.38	50.7	32.500	2.1885	2240.67	71126.30	0.032
T4	280 - 260	2 1/4	20.00	2.38	50.7	32.500	2.1885	3908.43	71126.30	0.055
T5	260 - 240	2 1/4	20.00	0.50	10.7	32.500	2.1885	16099.60	71126.30	0.226
T6	240 - 220	2 1/4	20.00	2.38	50.7	32.500	2.1885	18026.90	71126.30	0.253
T7	220 - 200	2 1/2	20.00	2.38	45.6	32.500	2.9138	6287.45	94699.70	0.066
T8	200 - 180	2 3/4	20.00	0.50	8.7	32.500	3.4123	46097.50	110900.00	0.416
T9	180 - 160	2 3/4	20.00	2.38	41.5	32.500	3.4123	46081.90	110900.00	0.416

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
L1	347 - 330	1/2	3.27	1.57	150.3	30.000	0.1963	998.41	5890.49	0.169

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	69 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T1	330 - 320	7/8	5.54	2.66	146.1	30.000	0.6013	1872.01	18039.60	0.104
T2	320 - 300	7/8	5.54	2.66	146.1	30.000	0.6013	1648.00	18039.60	0.091
T3	300 - 280	7/8	5.54	2.66	146.1	30.000	0.6013	2872.49	18039.60	0.159
T4	280 - 260	7/8	5.54	2.66	146.1	30.000	0.6013	3624.85	18039.60	0.201
T5	260 - 240	7/8	5.54	2.66	146.1	30.000	0.6013	3651.70	18039.60	0.202
T6	240 - 220	7/8	5.54	2.66	146.1	30.000	0.6013	4006.26	18039.60	0.222
T7	220 - 200	1	5.54	2.65	127.3	30.000	0.7854	5221.12	23561.90	0.222
T8	200 - 180	1 1/4	5.54	2.64	101.4	30.000	1.2272	9612.69	36815.50	0.261
T9	180 - 160	1 1/4	5.54	2.64	101.4	30.000	1.2272	4742.21	36815.50	0.129
T10	160 - 140	1	5.54	2.64	126.8	30.000	0.7854	2247.93	23561.90	0.095
T11	140 - 120	1	5.54	2.64	126.8	30.000	0.7854	1415.66	23561.90	0.060
T12	120 - 100	1	5.54	2.64	126.8	30.000	0.7854	2024.68	23561.90	0.086
T13	100 - 80	1	5.54	2.64	126.8	30.000	0.7854	3415.31	23561.90	0.145
T14	80 - 60	1	5.54	2.64	126.8	30.000	0.7854	2260.60	23561.90	0.096
T15	60 - 40	1	5.54	2.64	126.8	30.000	0.7854	959.96	23561.90	0.041
T16	40 - 20	1	5.54	2.64	126.8	30.000	0.7854	887.41	23561.90	0.038
T17	20 - 12	1	5.52	2.63	126.4	30.000	0.7854	1428.85	23561.90	0.061
T18	12 - 7	1 1/4	3.20	3.05	117.3	30.000	1.2272	2028.58	36815.50	0.055

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T1	330 - 320	7/8	5.00	4.81	264.0	30.000	0.6013	575.74	18039.60	0.032
T2	320 - 300	7/8	5.00	4.81	264.0	30.000	0.6013	448.28	18039.60	0.025
T3	300 - 280	7/8	5.00	4.81	264.0	30.000	0.6013	524.61	18039.60	0.029
T4	280 - 260	7/8	5.00	4.81	264.0	30.000	0.6013	823.70	18039.60	0.046

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	70 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T5	260 - 240	7/8	5.00	4.81	264.0	30.000	0.6013	1112.62	18039.60	0.062
T6	240 - 220	7/8	5.00	4.81	264.0	30.000	0.6013	1457.38	18039.60	0.081
T7	220 - 200	7/8	5.00	4.79	262.9	30.000	0.6013	972.27	18039.60	0.054
T8	200 - 180	7/8	5.00	4.77	261.7	30.000	0.6013	1338.99	18039.60	0.074
T9	180 - 160	7/8	5.00	4.77	261.7	30.000	0.6013	1881.67	18039.60	0.104
T10	160 - 140	7/8	5.00	4.77	261.7	30.000	0.6013	1357.47	18039.60	0.075
T11	140 - 120	7/8	5.00	4.77	261.7	30.000	0.6013	1309.64	18039.60	0.073
T12	120 - 100	7/8	5.00	4.77	261.7	30.000	0.6013	1429.55	18039.60	0.079
T13	100 - 80	7/8	5.00	4.77	261.7	30.000	0.6013	1586.43	18039.60	0.088
T14	80 - 60	7/8	5.00	4.77	261.7	30.000	0.6013	1609.84	18039.60	0.089
T15	60 - 40	7/8	5.00	4.77	261.7	30.000	0.6013	1661.97	18039.60	0.092
T16	40 - 20	7/8	5.00	4.77	261.7	30.000	0.6013	1721.16	18039.60	0.095
T17	20 - 12	7/8	5.00	4.77	261.7	30.000	0.6013	1171.97	18039.60	0.065*
T18	12 - 7	6x3/4	5.00	2.39	132.2	21.600	4.5000	5310.70	97200.00	0.055

* DL controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T19	7 - 0	3/4	1.14	0.91	58.3	30.000	0.4418	1389.10	13253.60	0.105*

* DL controls

Top Girt Design Data (Tension)

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 71 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
L1	347 - 330	3/4	2.50	2.40	153.3	30.000	0.4418	4.23	13253.60	0.000
T2	320 - 300	1	5.00	4.81	231.0	30.000	0.7854	323.60	23561.90	0.014 ✓
T3	300 - 280	1	5.00	4.81	231.0	30.000	0.7854	345.12	23561.90	0.015 ✓
T4	280 - 260	1	5.00	4.81	231.0	30.000	0.7854	809.31	23561.90	0.034 ✓
T5	260 - 240	1	5.00	4.81	231.0	30.000	0.7854	1185.70	23561.90	0.050 ✓
T6	240 - 220	1	5.00	4.81	231.0	30.000	0.7854	827.37	23561.90	0.035 ✓
T7	220 - 200	1 1/4	5.00	4.79	184.0	30.000	1.2272	1580.86	36815.50	0.043 ✓
T8	200 - 180	1 1/2	5.00	4.77	152.7	30.000	1.7672	2300.95	53014.40	0.043 ✓
T10	160 - 140	1 1/4	5.00	4.77	183.2	30.000	1.2272	1487.98	36815.50	0.040 ✓
T11	140 - 120	1 1/4	5.00	4.77	183.2	30.000	1.2272	1007.47	36815.50	0.027 ✓
T12	120 - 100	1 1/4	5.00	4.77	183.2	30.000	1.2272	768.45	36815.50	0.021 ✓
T13	100 - 80	1 1/4	5.00	4.77	183.2	30.000	1.2272	2162.69	36815.50	0.059 ✓
T14	80 - 60	1 1/4	5.00	4.77	183.2	30.000	1.2272	1530.27	36815.50	0.042 ✓
T15	60 - 40	1 1/4	5.00	4.77	183.2	30.000	1.2272	1029.67	36815.50	0.028 ✓
T16	40 - 20	1 1/4	5.00	4.77	183.2	30.000	1.2272	973.80	36815.50	0.026 ✓
T17	20 - 12	1 1/4	5.00	4.77	183.2	30.000	1.2272	1297.28	36815.50	0.035 ✓
T19	7 - 0	6x3/4	4.94	4.71	261.1	21.600	4.5000	16148.20	97200.00	0.166* ✓

* DL controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T1	330 - 320	1	5.00	4.81	231.0	30.000	0.7854	449.08	23561.90	0.019 ✓
T2	320 - 300	1	5.00	4.81	231.0	30.000	0.7854	335.00	23561.90	0.014 ✓
T3	300 - 280	1	5.00	4.81	231.0	30.000	0.7854	919.10	23561.90	0.039 ✓
T4	280 - 260	1	5.00	4.81	231.0	30.000	0.7854	1280.86	23561.90	0.054 ✓

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 72 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
T5	260 - 240	1	5.00	4.81	231.0	30.000	0.7854	933.36	23561.90	0.040
T6	240 - 220	1	5.00	4.81	231.0	30.000	0.7854	1119.01	23561.90	0.047
T7	220 - 200	1 1/4	5.00	4.79	184.0	30.000	1.2272	1847.49	36815.50	0.050
T8	200 - 180	1 1/2	5.00	4.77	152.7	30.000	1.7672	5841.48	53014.40	0.110
T9	180 - 160	1 1/2	5.00	4.77	152.7	30.000	1.7672	1366.11	53014.40	0.026
T10	160 - 140	1 1/4	5.00	4.77	183.2	30.000	1.2272	814.46	36815.50	0.022
T11	140 - 120	1 1/4	5.00	4.77	183.2	30.000	1.2272	1080.03	36815.50	0.029
T13	100 - 80	1 1/4	5.00	4.77	183.2	30.000	1.2272	1638.31	36815.50	0.045
T14	80 - 60	1 1/4	5.00	4.77	183.2	30.000	1.2272	1316.23	36815.50	0.036
T15	60 - 40	1 1/4	5.00	4.77	183.2	30.000	1.2272	975.61	36815.50	0.026
T16	40 - 20	1 1/4	5.00	4.77	183.2	30.000	1.2272	1091.20	36815.50	0.030
T19	7 - 0	6x3/4	0.71	0.49	26.9	21.600	4.5000	7187.54	97200.00	0.074*

* DL controls

Mid Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P P _a
L1	347 - 330	3/4	2.50	2.40	153.3	30.000	0.4418	66.90	13253.60	0.005
T2	320 - 300	1	5.00	4.81	231.0	30.000	0.7854	375.70	23561.90	0.016
T3	300 - 280	1	5.00	4.81	231.0	30.000	0.7854	347.10	23561.90	0.015
T5	260 - 240	1	5.00	4.81	231.0	30.000	0.7854	959.10	23561.90	0.041
T6	240 - 220	1	5.00	4.81	231.0	30.000	0.7854	944.66	23561.90	0.040
T7	220 - 200	1 1/4	5.00	4.79	184.0	30.000	1.2272	787.55	36815.50	0.021
T8	200 - 180	1 1/2	5.00	4.77	152.7	30.000	1.7672	1460.67	53014.40	0.028
T9	180 - 160	1 1/2	5.00	4.77	152.7	30.000	1.7672	2126.23	53014.40	0.040
T10	160 - 140	1 1/4	5.00	4.77	183.2	30.000	1.2272	1342.82	36815.50	0.036

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job CTLN058A	Page 73 of 77
	Project 81150130	Date 13:46:17 02/24/15
	Client T-Mobile	Designed by Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T11	140 - 120	1 1/4	5.00	4.77	183.2	30.000	1.2272	1330.82	36815.50	0.036
T12	120 - 100	1 1/4	5.00	4.77	183.2	30.000	1.2272	1471.47	36815.50	0.040
T13	100 - 80	1 1/4	5.00	4.77	183.2	30.000	1.2272	1491.59	36815.50	0.041
T14	80 - 60	1 1/4	5.00	4.77	183.2	30.000	1.2272	1489.48	36815.50	0.040
T15	60 - 40	1 1/4	5.00	4.77	183.2	30.000	1.2272	1633.53	36815.50	0.044
T16	40 - 20	1 1/4	5.00	4.77	183.2	30.000	1.2272	1667.66	36815.50	0.045
T19	7 - 0	6x3/4	2.83	2.60	144.0	21.600	4.5000	6232.60	97200.00	0.064*

* DL controls

Top Guy Pull-Off Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
L1	347 - 330	1 1/4	2.50	2.40	92.0	30.000	1.2272	7188.84	36815.50	0.195
T4	280 - 260	1 1/4	5.00	4.81	184.8	30.000	1.2272	7583.01	36815.50	0.206
T9	180 - 160	1 1/2	5.00	4.77	152.7	30.000	1.7672	15479.80	53014.40	0.292
T12	120 - 100	1 1/4	5.00	4.77	183.2	30.000	1.2272	9395.17	36815.50	0.255

Bottom Guy Pull-Off Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T9	180 - 160	1 1/4	5.00	4.77	183.2	30.000	1.2272	6193.27	36815.50	0.168

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
-------------	-----------------	------	---------	----------------------	------	-----------------------	----------------------	----------------	-----------------------------	--------------------------

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	74 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T9	180 - 160 (1170)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	28345.70	76680.00	0.370
T9	180 - 160 (1171)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	28694.70	76680.00	0.374
T9	180 - 160 (1178)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	27102.60	76680.00	0.353
T9	180 - 160 (1179)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	26889.40	76680.00	0.351
T9	180 - 160 (1184)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	28016.80	76680.00	0.365
T9	180 - 160 (1185)	2L3x3x5/16	8.90	8.78	114.2	21.600	3.5500	28350.30	76680.00	0.370

Torque-Arm Bottom Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio $\frac{P}{P_a}$
T9	180 - 160 (1172)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	7079.59	76680.00	0.092
T9	180 - 160 (1173)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	8168.09	76680.00	0.107
T9	180 - 160 (1180)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	8018.90	76680.00	0.105
T9	180 - 160 (1181)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	7771.34	76680.00	0.101
T9	180 - 160 (1186)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	7423.42	76680.00	0.097
T9	180 - 160 (1187)	2L3x3x5/16	8.95	8.83	114.9	21.600	3.5500	8264.49	76680.00	0.108

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
L1	347 - 330	Latticed Pole Leg	1 1/4	3	-15538.50	24671.06	63.0	Pass
		Latticed Pole Diagonal	1/2	24	-1112.25	2460.32	45.2	Pass
		Latticed Pole Top Girt	3/4	6	-8.33	6106.81	0.1	Pass
		Latticed Pole Mid Girt	3/4	12	66.90	14133.64	0.5	Pass
		Guy A@330.083	11/16	1164	24242.50	29000.00	83.6	Pass
		Guy B@330.083	11/16	1163	21077.90	29000.00	72.7	Pass
		Guy C@330.083	11/16	1162	20484.10	29000.00	70.6	Pass
		Top Guy Pull-Off@330.083	1 1/4	7	7188.84	39260.05	18.3	Pass
T1	330 - 320	Leg	2 1/4	63	-20838.00	128508.66	16.2	Pass
		Diagonal	7/8	69	-2051.50	9964.59	20.6	Pass

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	75 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail	
T2	320 - 300	Horizontal	7/8	81	-234.62	3504.96	6.7	Pass	
		Bottom Girt	1	67	-281.37	5979.30	4.7	Pass	
		Leg	2 1/4	97	-21631.90	128508.66	16.8	Pass	
		Diagonal	7/8	155	-1978.13	9964.59	19.9	Pass	
		Horizontal	7/8	113	448.28	24046.79	1.9	Pass	
		Top Girt	1	99	-281.07	5979.30	4.7	Pass	
T3	300 - 280	Bottom Girt	1	102	-100.38	5979.30	1.7	Pass	
		Mid Girt	1	104	375.70	31408.01	1.2	Pass	
		Leg	2 1/4	161	-20912.10	128508.66	16.3	Pass	
		Diagonal	7/8	177	-2981.46	9964.59	29.9	Pass	
		Horizontal	7/8	179	524.61	24046.79	2.2	Pass	
		Top Girt	1	164	-129.49	5979.30	2.2	Pass	
T4	280 - 260	Bottom Girt	1	169	-581.05	5979.30	9.7	Pass	
		Mid Girt	1	170	347.10	31408.01	1.1	Pass	
		Leg	2 1/4	227	-38782.50	128508.66	30.2	Pass	
		Diagonal	7/8	242	-4024.71	9964.59	40.4	Pass	
		Horizontal	7/8	272	-438.48	3504.96	12.5	Pass	
		Top Girt	1	232	-558.26	5979.30	9.3	Pass	
T5	260 - 240	Bottom Girt	1	234	-945.34	5979.30	15.8	Pass	
		Guy A@270	13/16	1167	32648.70	40000.00	81.6	Pass	
		Guy B@270	13/16	1166	29277.80	40000.00	73.2	Pass	
		Guy C@270	13/16	1165	28734.50	40000.00	71.8	Pass	
		Top Guy	1 1/4	238	7583.01	49075.06	15.5	Pass	
		Pull-Off@270							
T6	240 - 220	Leg	2 1/4	293	-58294.70	128508.66	45.4	Pass	
		Diagonal	7/8	353	-4082.67	9964.59	41.0	Pass	
		Horizontal	7/8	352	1112.62	24046.79	4.6	Pass	
		Top Girt	1	297	-791.57	5979.30	13.2	Pass	
		Bottom Girt	1	300	-599.64	5979.30	10.0	Pass	
		Mid Girt	1	302	959.10	31408.01	3.1	Pass	
T7	220 - 200	Leg	2 1/4	359	-61512.00	128508.66	47.9	Pass	
		Diagonal	7/8	375	-4311.69	9964.59	43.3	Pass	
		Horizontal	7/8	418	-395.05	3504.96	11.3	Pass	
		Top Girt	1	363	-523.00	5979.30	8.7	Pass	
		Bottom Girt	1	367	-732.33	5979.30	12.2	Pass	
		Mid Girt	1	368	944.66	31408.01	3.0	Pass	
T8	200 - 180	Leg	2 1/2	425	-54655.80	163067.22	33.5	Pass	
		Diagonal	1	441	-5564.55	16472.28	33.8	Pass	
		Horizontal	7/8	443	972.27	24046.79	4.0	Pass	
		Top Girt	1 1/4	430	-932.58	14725.12	6.3	Pass	
		Bottom Girt	1 1/4	433	-1420.26	14725.12	9.6	Pass	
		Mid Girt	1 1/4	434	787.55	49075.06	1.6	Pass	
T9	180 - 160	Leg	2 3/4	493	-123486.00	201465.61	61.3	Pass	
		Diagonal	1 1/4	507	-10057.40	28461.95	35.3	Pass	
		Horizontal	7/8	516	-305.80	3566.45	8.6	Pass	
		Top Girt	1 1/2	496	-1658.72	30801.10	5.4	Pass	
		Bottom Girt	1 1/2	499	-5151.46	30801.10	16.7	Pass	
		Mid Girt	1 1/2	500	1460.67	70668.19	2.1	Pass	
T9	180 - 160	Leg	2 3/4	559	-139522.00	202895.92	68.8	Pass	
		Diagonal	1 1/4	596	-5607.76	28461.95	19.7	Pass	
		Horizontal	7/8	575	1881.67	24046.79	7.8	Pass	
		Bottom Girt	1 1/2	563	1366.11	70668.19	1.9	Pass	
		Mid Girt	1 1/2	567	2126.23	70668.19	3.0	Pass	
		Guy A@176	7/8	1183	29468.30	46000.00	64.1	Pass	
		Guy B@176	7/8	1177	27904.90	46000.00	60.7	Pass	
		Guy C@176	7/8	1168	27451.70	46000.00	59.7	Pass	
		Top Guy	1 1/2	560	-8374.57	30801.10	27.2	Pass	
		Pull-Off@176							
		Bottom Guy	1 1/4	1175	-6135.26	14854.02	41.3	Pass	
		Pull-Off@176							
Torque Arm	2L3x3x5/16	1171	28694.70	102214.44	28.1	Pass			

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	76 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
		Top@176						
		Torque Arm	2L3x3x5/16	1187	-28025.10	52073.78	53.8	Pass
		Bottom@176						
T10	160 - 140	Leg	2 3/4	625	-103341.00	202895.92	50.9	Pass
		Diagonal	1	684	-2977.86	16569.46	18.0	Pass
		Horizontal	7/8	641	1357.47	24046.79	5.6	Pass
		Top Girt	1 1/4	628	-553.61	14854.02	3.7	Pass
		Bottom Girt	1 1/4	629	814.46	49075.06	1.7	Pass
		Mid Girt	1 1/4	632	1342.82	49075.06	2.7	Pass
T11	140 - 120	Leg	2 3/4	690	-95021.70	202895.92	46.8	Pass
		Diagonal	1	749	-1989.32	16569.46	12.0	Pass
		Horizontal	7/8	707	1309.64	24046.79	5.4	Pass
		Top Girt	1 1/4	692	1007.47	49075.06	2.1	Pass
		Bottom Girt	1 1/4	695	1080.03	49075.06	2.2	Pass
		Mid Girt	1 1/4	698	1330.82	49075.06	2.7	Pass
T12	120 - 100	Leg	2 3/4	755	-113114.00	202895.92	55.7	Pass
		Diagonal	1	774	-2457.09	16569.46	14.8	Pass
		Horizontal	7/8	814	1429.55	24046.79	5.9	Pass
		Top Girt	1 1/4	758	768.45	49075.06	1.6	Pass
		Mid Girt	1 1/4	764	1471.47	49075.06	3.0	Pass
		Guy A@100.5	7/8	1190	23106.20	46000.00	50.2	Pass
		Guy B@100.5	7/8	1189	22624.20	46000.00	49.2	Pass
		Guy C@100.5	7/8	1188	21994.80	46000.00	47.8	Pass
		Top Guy	1 1/4	762	9395.17	49075.06	19.1	Pass
		Pull-Off@100.5						
T13	100 - 80	Leg	2 3/4	821	-113114.00	197256.00	57.3	Pass
		Diagonal	1	881	-4688.11	16569.46	28.3	Pass
		Horizontal	7/8	839	1586.43	24046.79	6.6	Pass
		Top Girt	1 1/4	824	2162.69	49075.06	4.4	Pass
		Bottom Girt	1 1/4	827	1638.31	49075.06	3.3	Pass
		Mid Girt	1 1/4	830	1491.59	49075.06	3.0	Pass
T14	80 - 60	Leg	2 3/4	888	-94064.80	195488.44	48.1	Pass
		Diagonal	1	947	-3531.59	16569.46	21.3	Pass
		Horizontal	7/8	946	1609.84	24046.79	6.7	Pass
		Top Girt	1 1/4	892	-526.82	14854.02	3.5	Pass
		Bottom Girt	1 1/4	893	1316.23	49075.06	2.7	Pass
		Mid Girt	1 1/4	896	1489.48	49075.06	3.0	Pass
T15	60 - 40	Leg	2 3/4	955	-100452.00	195711.05	51.3	Pass
		Diagonal	1	1013	-1986.97	16569.46	12.0	Pass
		Horizontal	7/8	1012	1661.97	24046.79	6.9	Pass
		Top Girt	1 1/4	956	1029.67	49075.06	2.1	Pass
		Bottom Girt	1 1/4	959	975.61	49075.06	2.0	Pass
		Mid Girt	1 1/4	962	1633.53	49075.06	3.3	Pass
T16	40 - 20	Leg	2 3/4	1021	-100716.00	195673.73	51.5	Pass
		Diagonal	1	1031	-2134.37	16569.46	12.9	Pass
		Horizontal	7/8	1037	1721.16	24046.79	7.2	Pass
		Top Girt	1 1/4	1022	973.80	49075.06	2.0	Pass
		Bottom Girt	1 1/4	1025	1091.20	49075.06	2.2	Pass
		Mid Girt	1 1/4	1028	1667.66	49075.06	3.4	Pass
T17	20 - 12	Leg	2 3/4	1087	-97101.20	195472.44	49.7	Pass
		Diagonal	1	1105	-2252.72	16640.64	13.5	Pass
		Horizontal	7/8	1104	1171.97	18039.60	6.5	Pass
		Top Girt	1 1/4	1088	1297.28	49075.06	2.6	Pass
T18	12 - 7	Leg	2 3/4	1113	-69712.10	144174.00	48.4	Pass
		Diagonal	1 1/4	1124	-1999.52	29610.19	6.8	Pass
		Horizontal	6x3/4	1114	5310.70	129567.59	4.1	Pass
T19	7 - 0	Leg	2 3/4	1134	-75702.10	144174.00	52.5	Pass
		Diagonal	1 1/4	1146	-14119.60	24392.17	57.9	Pass
		Secondary Horizontal	3/4	1161	-1389.10	5681.82	24.4	Pass
		Top Girt	6x3/4	1136	16148.20	97200.00	16.6	Pass
		Bottom Girt	6x3/4	1139	7187.54	97200.00	7.4	Pass

tnxTower EBI Consulting 21 B St Burlington, MA 01803 Phone: (781) 273 - 2500 FAX: (781) 273 - 3311	Job	CTLN058A	Page	77 of 77
	Project	81150130	Date	13:46:17 02/24/15
	Client	T-Mobile	Designed by	Brandon Kelsey

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
		Mid Girt	6x3/4	1142	6232.60	97200.00	6.4	Pass
							Summary	
							Latticed Pole Leg (L1)	63.0 Pass
							Latticed Pole Diagonal (L1)	45.2 Pass
							Latticed Pole Top Girt (L1)	0.1 Pass
							Latticed Pole Mid Girt (L1)	0.5 Pass
							Leg (T9)	68.8 Pass
							Diagonal (T19)	57.9 Pass
							Horizontal (T4)	12.5 Pass
							Secondary Horizontal (T19)	24.4 Pass
							Top Girt (T19)	16.6 Pass
							Bottom Girt (T8)	16.7 Pass
							Mid Girt (T19)	6.4 Pass
							Guy A (L1)	83.6 Pass
							Guy B (T4)	73.2 Pass
							Guy C (T4)	71.8 Pass
							Top Guy Pull-Off (T9)	27.2 Pass
							Bottom Guy Pull-Off (T9)	41.3 Pass
							Torque Arm Top (T9)	28.1 Pass
							Torque Arm Bottom (T9)	53.8 Pass
							Bolt Checks	51.4 Pass
							RATING =	83.6 Pass

EXHIBIT C

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL
TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CTNL058A

NL058 / Red Wolf_ET
889A Colonel Ledyard Hwy.
Ledyard, CT 06339

March 12, 2015

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	34.17 %

March 12, 2015

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CTNL058A – NL058 / Red Wolf_ET**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **889A Colonel Ledyard Hwy., Ledyard, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is $467 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS and AWS bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **889A Colonel Ledyard Hwy., Ledyard, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antennas used in this modeling are the **Ericsson AIR21 B4A/B2P** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson AIR21 B4A/B2P** has a maximum gain of **15.9 dBd** at its main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antenna mounting height centerline of the proposed antennas is **185 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	185	Height (AGL):	185	Height (AGL):	185
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	2	Channel Count	2	# PCS Channels:	2
Total TX Power:	120	Total TX Power:	120	# AWS Channels:	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	0.52	Antenna B1 MPE%	0.52	Antenna C1 MPE%	0.52
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	185	Height (AGL):	185	Height (AGL):	185
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	4	Channel Count	4	Channel Count	4
Total TX Power:	120	Total TX Power:	120	Total TX Power:	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A2 MPE%	0.52	Antenna B2 MPE%	0.52	Antenna C2 MPE%	0.52
Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	185	Height (AGL):	185	Height (AGL):	185
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A3 MPE%	0.21	Antenna B3 MPE%	0.21	Antenna C3 MPE%	0.21

Site Composite MPE%	
Carrier	MPE%
T-Mobile	3.77
Red Wolf, WERI	5.44 %
Marcus	1.35 %
Nextel	1.03 %
Sprint	1.04 %
Arch	0.83 %
AT&T	10.06 %
Verizon Wireless	10.65 %
Site Total MPE %:	34.17 %

T-Mobile Sector 1 Total:	1.26 %
T-Mobile Sector 2 Total:	1.26 %
T-Mobile Sector 3 Total:	1.26 %
Site Total:	34.17 %

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector 1:	1.26 %
Sector 2:	1.26 %
Sector 3 :	1.26 %
T-Mobile Total:	3.77 %
Site Total:	34.17 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **34.17%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803