

JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport
WRITER'S DIRECT DIAL: (203) 337-4157
E-Mail Address: jkohler@cohenandwolf.com

April 1, 2015

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

**Re: Notice of Exempt Modification
Message Center Management/T-Mobile equipment upgrade
Site ID CT11166A
1 Broadway Extension (a/k/a 7 Broadway Avenue Extension), Stonington, CT**

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, Message Center Management ("MCM") owns the existing water tower and related telecommunication facility located at 1 Broadway Extension (a/k/a 7 Broadway Avenue Extension), Stonington Connecticut (Latitude: 41.349536 Longitude: -71.963644). T-Mobile intends to replace three (3) antennas and add related equipment at this existing telecommunications facility in Stonington ("Stonington 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 First Selectman of Stonington, George Crouse. MCM is also the property owner.

The existing Stonington Facility consists of a 152 foot tall water tower.¹ T-Mobile plans to replace three (3) antennas and add three (3) RRUs (remote radio units) on existing pipe masts at a centerline of 116'-6". T-Mobile will also use spare fiber cable for the antenna installation. (See the plans revised to March 27, 2015 attached hereto as Exhibit A). The existing Stonington Facility is structurally capable of supporting T-Mobile's proposed modifications, as indicated in the structural analysis dated April 1, 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 recent notices of intent captioned EM-CING-137-140421, EM-T-MOBILE-137-140328, and EM-VER-137-130314.

April 1, 2015
Site ID CT11166A
Page 2

The planned modifications to the Stonington 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 replacement antennas will be installed at a centerline of 116'-6" feet, merely replacing existing antennas located at the same 116'-6" foot elevation. The enclosed tower drawing confirms that the proposed modification will not increase the height of the tower.

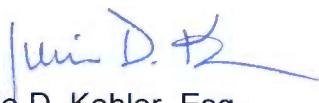
2. The proposed modifications will not require an extension of the site boundaries. T-Mobile's equipment will be located entirely within the existing compound and leased area as shown on LE-2 of Exhibit A.

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

4. The operation of the replacement 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 31, 2015, T-Mobile's operations would add 9.79% 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 69.00% of the FCC Standard as calculated for a mixed frequency site as evidenced by the engineering exhibit attached hereto as Exhibit C.

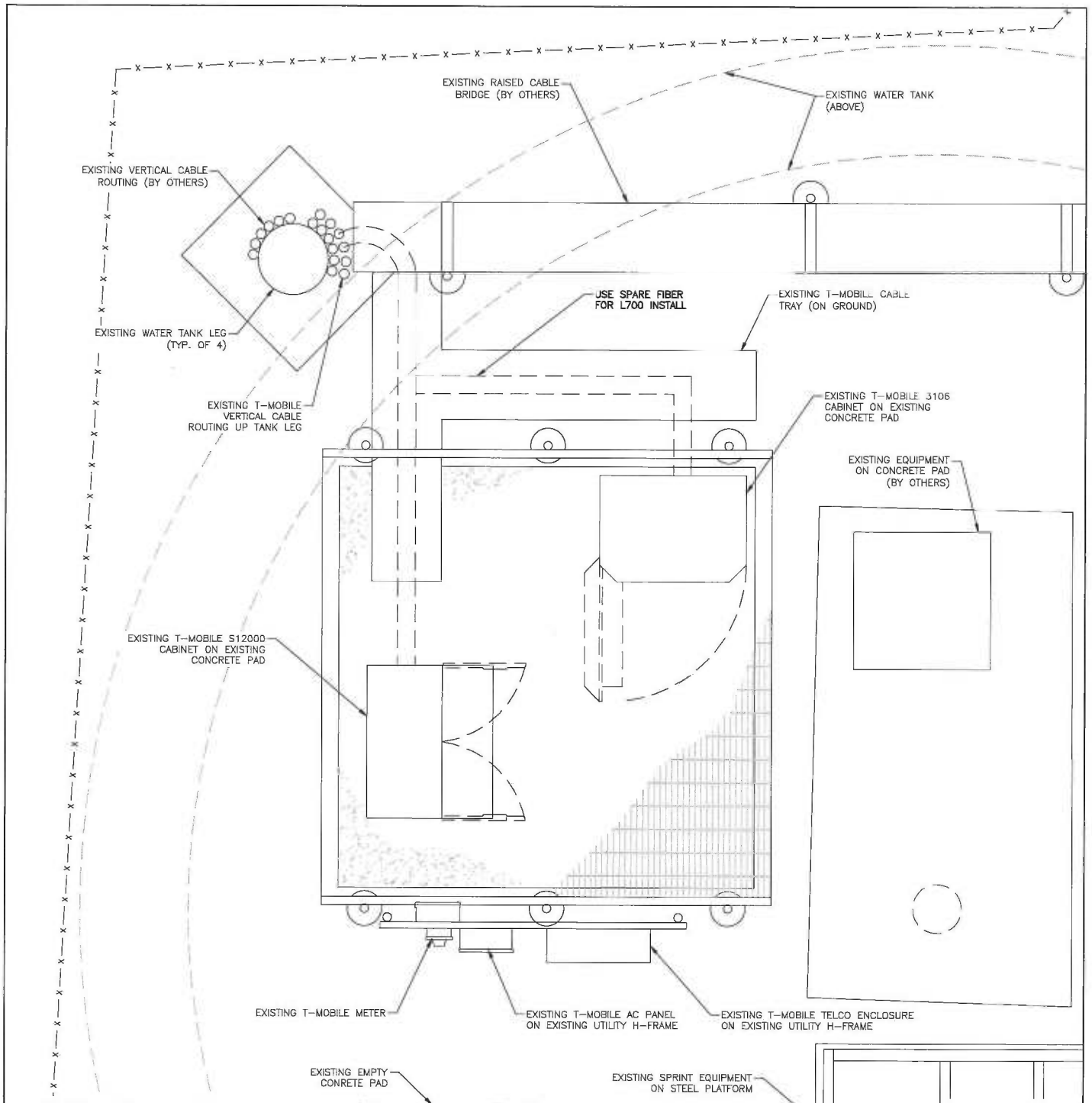
For the foregoing reasons, T-Mobile respectfully submits that the proposed replacement antennas and equipment at the Stonington Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Upon acknowledgement by the Council of this proposed exempt modification, T-Mobile shall commence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

Sincerely,

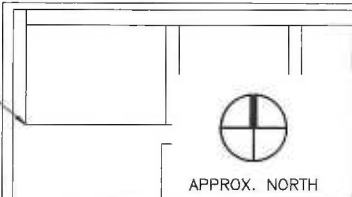

Julie D. Kohler, Esq.

cc: Town of Stonington, First Selectman George Crouse
Message Center Management
Jamie Ford, EBI Consulting

EXHIBIT A



CONFIGURATION
702CU



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

EQUIPMENT PLAN

SCALE: 1/4" = 1'-0"

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.:
8115000106

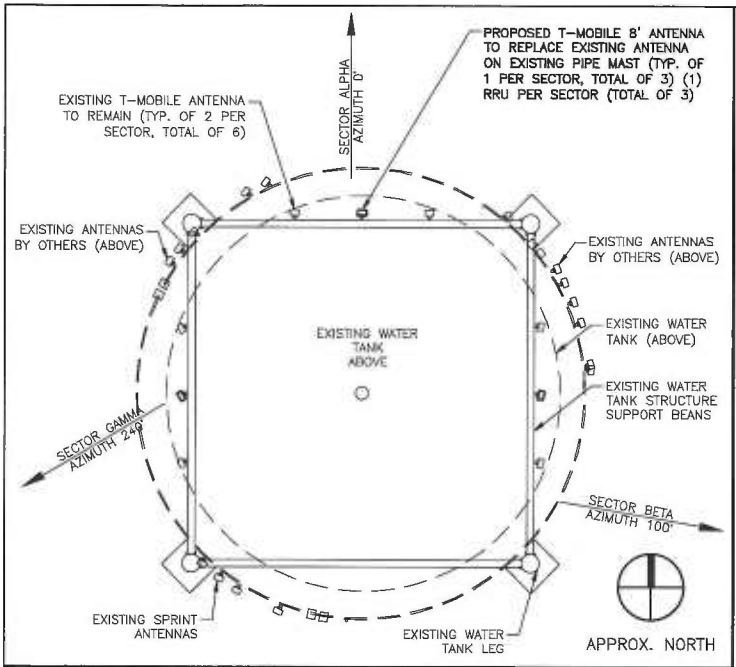
CLIENT:
T-Mobile Northeast, LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
860.892.7100

SITE INFO:
MYSTIC/DOWNTOWN_1
CT11166A
1 BROADWAY EXTENSION
STONINGTON, CT 06355

SUBMITTALS			
NO.	DATE	DESCRIPTION	BY
A	3/18/15	FOR REVIEW	MK
B	03/27/15	RAD REVISED	BB

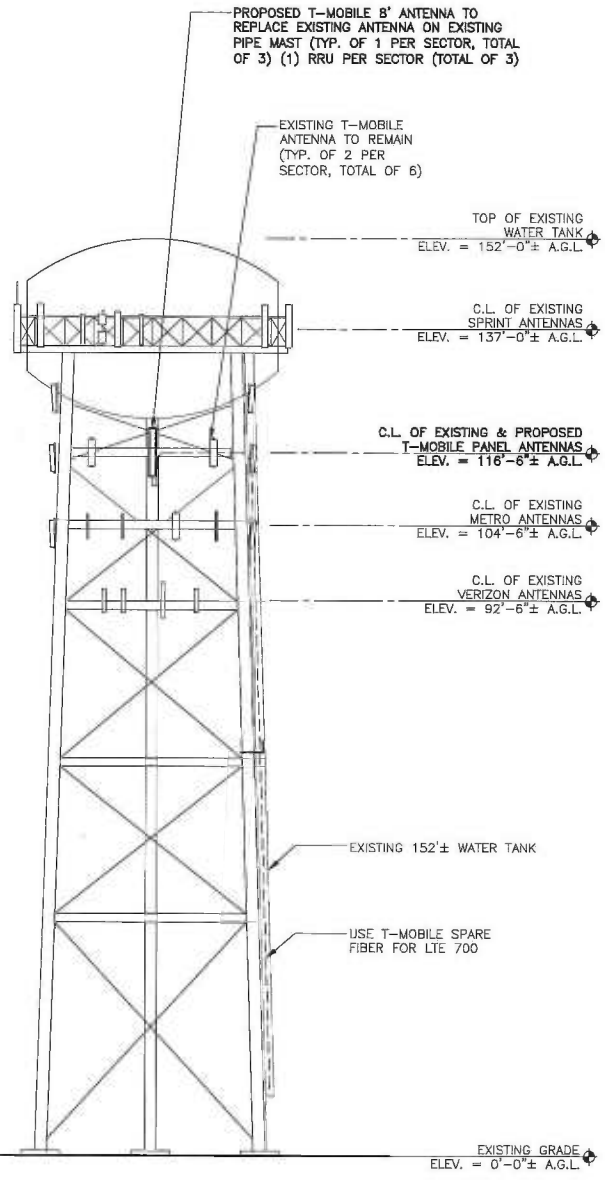
DRAWN BY: MK
CHECKED BY: BB
DATE: 3/05/15

SHEET NO:
LE-2



ANTENNA CONFIGURATION

NTS



TOWER ELEVATION

SCALE: 1:30

CONFIGURATION
702CU

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

PREPARED BY: 21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com EBI JOB NO.: 8115000106	CLIENT: T-Mobile Northeast, LLC 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860.692.7100	SITE INFO: MYSTIC/DOWNTOWN_1 CT11166A 1 BROADWAY EXTENSION STONINGTON, CT 06355	SUBMITTALS				DRAWN BY:	SHEET NO:
			NO.	DATE	DESCRIPTION	BY	MK	
A	3/18/15	FOR REVIEW		MK	BB	DATE: 3/05/15	LE-3	
B	03/27/15	RAD REVISED		BB				

EXHIBIT B

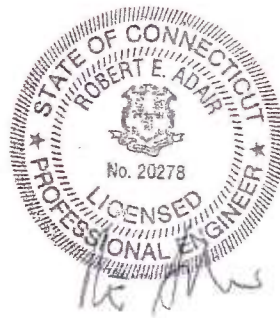


**STRUCTURAL ANALYSIS REPORT
152'± WATER TOWER
MYSTIC, CONNECTICUT**

Prepared for
T-Mobile Northeast, LLC

T-Mobile Site: CT11166A

April 1, 2015



APT Project #CT1071450

STRUCTURAL ANALYSIS REPORT
152'± WATER TOWER
MYSTIC, CONNECTICUT
prepared for
T-Mobile

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of this 152'± water tower. The analysis was performed for T-Mobile's proposed replacement of three of their existing nine panel antennas with three LNX-6515DS-VTM panel antennas, and installation of three Ericsson RRUS-11 remote radio heads (RRHs). The equipment will be fed by three 1-1/4" hybrid power/fiber lines, six 1-1/4" and six 1-5/8" waveguide cables.

Our analysis indicates the water tower meets the requirements of the Connecticut State Building Code with the proposed equipment changes.

INTRODUCTION:

A structural analysis was performed on the above-mentioned water tower by APT for T-Mobile. The tower is located at 7 Broadway Avenue Extension in Mystic, Connecticut.

APT previously climbed the structure on July 9, 2002 to record information regarding physical and dimensional properties of the structure and its appurtenances. This analysis also relied on a structural analysis by Infinigy Engineering for AT&T Mobility dated July 15, 2014 and an equipment inventory dated September 2014 provided by Message Center Management.

The structure is a 152'± painted steel, four-legged water tower. A schematic drawing with a listing of existing, reserved and proposed equipment is provided in Appendix A. This analysis assumed diagonal bracing reinforcement was completed as designed for Verizon Wireless by APT on November 14, 2014.

STRUCTURAL ANALYSIS:

Methodology:

The structural analysis was done in accordance with Connecticut State Building Code, EIA/TIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures and the American Institute of Steel Construction (AISC), Manual of Steel

All-Points Technology Corporation, P.C.

116 Grandview Road
Conway, NH 03818
(603) 496-5853

3 Saddlebrook Drive
Killingworth, CT 06419
(860) 663-1697

Construction, Allowable Stress Design, Ninth Edition. The analysis was conducted using a wind speed of 85 miles per hour in accordance with the Connecticut State Building Code and EIA/TIA Standard for this area of Connecticut.

The following table summarizes the results of the analysis based on stresses of individual leg and bracing members:

Elevation	Legs	Bracing
117'-138'	6%	57%
92'-117'	13%	83%
65'-92'	22%	75%
35'-65'	34%	86%
0'-35'	49%	100%

Evaluation of the existing base foundations could not be performed, as information on their design or construction was not available to APT. Base reactions with the proposed equipment changes are as follows:

Compression: 153.6 kips
Uplift: 100.9 kips
Shear: 33.9 kips
Overturning Moment: 6422 ft-kips

CONCLUSIONS AND RECOMMENDATIONS:

Our structural analysis indicates the 152-foot self-supporting water tank located at 7 Broadway Avenue Extension in Mystic, Connecticut meets requirements of the Connecticut State Building Code with the equipment changes proposed by T-Mobile.

LIMITATIONS:

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed hereafter which APT is not directly involved. Modifications include but are not limited to:

1. Replacing or strengthening bracing members.
2. Reinforcing leg members in any manner.
3. Installing antennas and/or mounting brackets or side arms.

All-Points Technology Corporation, P.C.

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APT 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 the information contained and set forth herein. If you are aware of any information which is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication and erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

All-Points Technology Corporation, P.C.

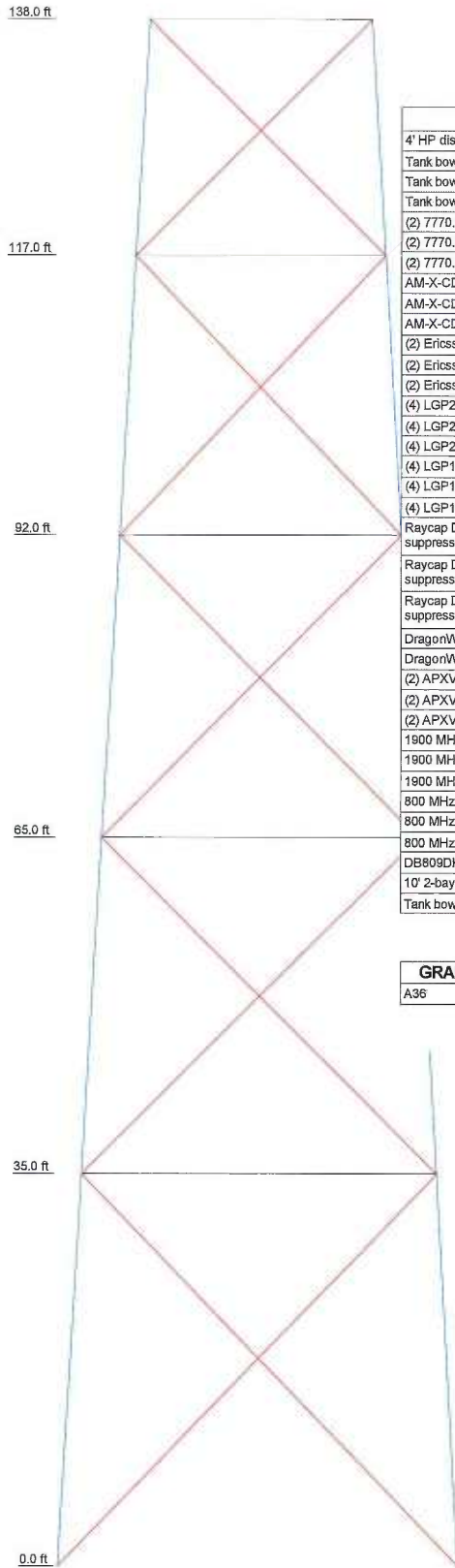
116 Grandview Road
Conway, NH 03818
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3 Saddlebrook Drive
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Appendix A

Tower Schematic

Section	T1	T2	T3	T4	T5
Legs	P18x26				
Leg Grade	A36				
Diagonals	SR 1				
Diagonal Grade	A36				
Top Girts	W16x35				
Face Width (ft)	20	22.4346	25.3333	28.4638	31.942
# Panels @ (ft)	1 @ 21	1 @ 25	1 @ 27	1 @ 30	1 @ 35
Weight (lb)	7463.8	8644.8	9663.3	14863.4	16883.7



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
4' HP dish	140	LNx-6515DS-VTM	117
Tank bowl	138	LNx-6515DS-VTM	117
Tank bowl	138	Ericsson RRUS-11	117
Tank bowl	138	Ericsson RRUS-11	117
(2) 7770.00	138	Ericsson RRUS-11	117
(2) 7770.00	138	(2) AIR 21 B2A B4P panel	117
(2) 7770.00	138	(2) AIR 21 B2A B4P panel	117
AM-X-CD-14-65	138	(2) AIR 21 B2A B4P panel	117
AM-X-CD-14-65	138	KRY 112 7 1/2 TMA	117
AM-X-CD-14-65	138	KRY 112 7 1/2 TMA	117
(2) Ericsson RRUS-11	138	KRY 112 7 1/2 TMA	117
(2) Ericsson RRUS-11	138	LNx-6515DS-VTM	117
(2) Ericsson RRUS-11	138	(2) 800-10504	103
(4) LGP2140X TMA	138	(2) 800-10504	103
(4) LGP2140X TMA	138	(2) 860-10025 RCU	103
(4) LGP13519 Diplexer	138	(2) 860-10025 RCU	103
(4) LGP13519 Diplexer	138	(2) 800-10504	103
(4) LGP13519 Diplexer	138	(2) 800-10504	103
Raycap DC6-48-60-18-8F surge suppressor	138	LNx-6514DS-VTM	93
Raycap DC6-48-60-18-8F surge suppressor	138	LNx-6514DS-VTM	93
Raycap DC6-48-60-18-8F surge suppressor	138	BXA-171083/12	93
Raycap DC6-48-60-18-8F surge suppressor	138	BXA-171083/12	93
Raycap DC6-48-60-18-8F surge suppressor	138	BXA-171083/12	93
DragonWave Horizon Compact+ ODU	138	BXA-80080/4	93
DragonWave Horizon Compact+ ODU	138	BXA-80080/4	93
(2) APXVSPP18-C-A20	138	MG D5-800TX	93
(2) APXVSPP18-C-A20	138	MG D5-800TX	93
(2) APXVSPP18-C-A20	138	MG D5-800TX	93
1900 MHz RRH	138	(2) ALU RRH2x40 w/bracket	93
1900 MHz RRH	138	(2) ALU RRH2x40 w/bracket	93
1900 MHz RRH	138	(2) ALU RRH2x40 w/bracket	93
800 MHz RRH	138	RFS DB-E1-2C-4AB-0Z D-box	93
800 MHz RRH	138	RFS DB-E1-2C-4AB-0Z D-box	93
800 MHz RRH	138	RFS DB-E1-2C-4AB-0Z D-box	93
DB809DK-Y	138	RFS DB-T1-6Z-8AB-0Z D-box	93
10' 2-bay dipole	138	LNx-6514DS-VTM	93
Tank bowl	138	GPS on 3' standoff	68

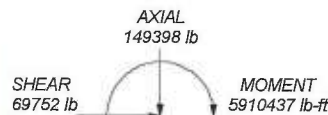
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

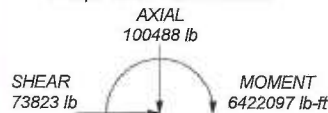
MAX. CORNER REACTIONS AT BASE:

DOWN: 153560 lb
SHEAR: 13466 lb

UPLIFT: -100853 lb
SHEAR: 33877 lb



TORQUE 78192 lb-ft
74 mph WIND - 0.7500 in ICE



TORQUE 88261 lb-ft
REACTIONS - 85 mph WIND

All-Points Technology Corporation 116 Grandview Road Conway, NH 03818 Phone: (603) 496-5853 FAX: (603) 447-2124	Job: Mystic Water Tank
	Project: CT1071450 Mystic
	Client: T-Mobile Drawn by: Rob Adair App'd:
	Code: TIA/EIA-222-F Date: 03/30/15 Scale: NTS
	Path: C:\Users\Rob Adair\Documents\Jobs\CT1071450 Mystic\CT1071450 Mystic.dwg Dwg No.: E-1

Appendix B

Calculations

tnxTower All-Points Technology Corporation 116 Grandview Road Conway, NH 03818 Phone: (603) 496-5853 FAX: (603) 447-2124	Job	Mystic Water Tank	Page	1 of 7
	Project	CT1071450 Mystic	Date	16:32:45 03/30/15
	Client	T-Mobile	Designed by	Rob Adair

Tower Input Data

The main tower is a 4x free standing tower with an overall height of 138.00 ft above the ground line.

The face width of the tower is 20.00 ft at the top and 36.00 ft at the base.

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 0.7500 in.

Ice density of 56 pcf.

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

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

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.

Feed Line/Linear Appurtenances

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW) in	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 5/8	C	Yes	Ar (CfAe)	138.00 - 8.00	0.0000	0.5	18	6	0.5000	1.9800		1.04
7/8	C	Yes	Ar (CfAe)	138.00 - 8.00	0.0000	0.5	2	2	0.5000	1.1100		0.54
1-1/4" Hybrid fiber-power cable	D	Yes	Ar (CfAe)	138.00 - 8.00	0.0000	0.5	9	9	0.5000	1.2500		0.66
1-1/4" Hybrid fiber-power cable	B	Yes	Ar (CfAe)	117.00 - 8.00	0.0000	0.5	3	3	0.5000	1.2500		0.66
1 1/4	B	Yes	Ar (CfAe)	117.00 - 8.00	0.0000	0.5	6	6	0.5000	1.5500		0.66
1 5/8	B	Yes	Ar (CfAe)	117.00 - 8.00	0.0000	0.5	6	3	0.5000	1.9800		1.04
1 5/8	A	Yes	Ar (CfAe)	103.00 - 8.00	0.0000	0.5	12	6	0.5000	1.9800		1.04
1 5/8	D	Yes	Ar (CfAe)	93.00 - 8.00	0.0000	0.5	12	6	0.5000	1.9800		1.04
1.57" Hybrid fiber-power cable	D	Yes	Ar (CfAe)	93.00 - 8.00	0.0000	0.5	1	1	0.5000	1.5700		0.66
Feedline Ladder (Af)	C	Yes	Af (CfAe)	138.00 - 10.00	0.0000	0.5	1	1	3.0000	3.0000	12.0000	8.40

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW) in	#	C _{AA} ft ² /ft	Weight plf	
36" standpipe	A	No	CaAa (Out Of Face)	130.00 - 0.00	-120.0000	0	1	No Ice	3.60	47.44
								1/2" Ice	3.70	69.74
								1" Ice	3.80	92.04

tnxTower All-Points Technology Corporation 116 Grandview Road Conway, NH 03818 Phone: (603) 496-5853 FAX: (603) 447-2124	Job	Mystic Water Tank	Page	2 of 7
	Project	CT1071450 Mystic	Date	16:32:45 03/30/15
	Client	T-Mobile	Designed by	Rob Adair

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA}		Weight	
			Horz Lateral	Vert			Front	Side		
			ft	ft	°	ft	ft ²	ft ²	lb	
Tank bowl	A	None			0.0000	138.00	No Ice	75.66	75.66	5844.00
							1/2" Ice	76.96	76.96	6893.00
							1" Ice	78.26	78.26	7942.00
Tank bowl	B	None			0.0000	138.00	No Ice	75.66	75.66	5844.00
							1/2" Ice	76.96	76.96	6893.00
							1" Ice	78.26	78.26	7942.00
Tank bowl	C	None			0.0000	138.00	No Ice	75.66	75.66	5844.00
							1/2" Ice	76.96	76.96	6893.00
							1" Ice	78.26	78.26	7942.00
Tank bowl	D	None			0.0000	138.00	No Ice	75.66	75.66	5844.00
							1/2" Ice	76.96	76.96	6893.00
							1" Ice	78.26	78.26	7942.00
(2) 7770.00	A	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.88	2.93	35.00
							1/2" Ice	6.31	3.27	67.63
							1" Ice	6.75	3.63	105.06
(2) 7770.00	B	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.88	2.93	35.00
							1/2" Ice	6.31	3.27	67.63
							1" Ice	6.75	3.63	105.06
(2) 7770.00	C	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.88	2.93	35.00
							1/2" Ice	6.31	3.27	67.63
							1" Ice	6.75	3.63	105.06
AM-X-CD-14-65	A	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.51	2.83	40.00
							1/2" Ice	5.90	3.14	71.95
							1" Ice	6.30	3.47	108.36
AM-X-CD-14-65	B	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.51	2.83	40.00
							1/2" Ice	5.90	3.14	71.95
							1" Ice	6.30	3.47	108.36
AM-X-CD-14-65	C	From Leg	3.00	0.00	0.0000	138.00	No Ice	5.51	2.83	40.00
							1/2" Ice	5.90	3.14	71.95
							1" Ice	6.30	3.47	108.36
(2) Ericsson RRUS-11	A	From Leg	2.50	0.00	0.0000	138.00	No Ice	3.25	1.19	55.00
							1/2" Ice	3.50	1.35	75.86
							1" Ice	3.75	1.52	99.77
(2) Ericsson RRUS-11	B	From Leg	2.50	0.00	0.0000	138.00	No Ice	3.25	1.19	55.00
							1/2" Ice	3.50	1.35	75.86
							1" Ice	3.75	1.52	99.77
(2) Ericsson RRUS-11	C	From Leg	2.50	0.00	0.0000	138.00	No Ice	3.25	1.19	55.00
							1/2" Ice	3.50	1.35	75.86
							1" Ice	3.75	1.52	99.77
(4) LGP2140X TMA	A	From Leg	2.50	0.00	0.0000	138.00	No Ice	1.26	0.38	20.00
							1/2" Ice	1.42	0.49	27.13
							1" Ice	1.58	0.62	36.14
(4) LGP2140X TMA	B	From Leg	2.50	0.00	0.0000	138.00	No Ice	1.26	0.38	20.00
							1/2" Ice	1.42	0.49	27.13
							1" Ice	1.58	0.62	36.14
(4) LGP2140X TMA	C	From Leg	2.50	0.00	0.0000	138.00	No Ice	1.26	0.38	20.00
							1/2" Ice	1.42	0.49	27.13
							1" Ice	1.58	0.62	36.14
(4) LGP13519 Diplexer	A	From Leg	2.50	0.00	0.0000	138.00	No Ice	0.27	0.13	6.00
							1/2" Ice	0.34	0.18	8.41
							1" Ice	0.43	0.24	11.91
(4) LGP13519 Diplexer	B	From Leg	2.50	0.00	0.0000	138.00	No Ice	0.27	0.13	6.00
							1/2" Ice	0.34	0.18	8.41
							1" Ice	0.43	0.24	11.91
(4) LGP13519 Diplexer	C	From Leg	2.50	0.00	0.0000	138.00	No Ice	0.27	0.13	6.00
							1/2" Ice	0.34	0.18	8.41
							1" Ice	0.43	0.24	11.91

tnxTower All-Points Technology Corporation 116 Grandview Road Conway, NH 03818 Phone: (603) 496-5853 FAX: (603) 447-2124	Job	Mystic Water Tank	Page	3 of 7
	Project	CT1071450 Mystic	Date	16:32:45 03/30/15
	Client	T-Mobile	Designed by	Rob Adair

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C _{AA}		Weight
						Front	Side	
			ft	°	ft	ft ²	ft ²	lb
			2.00			1" Ice 0.43	0.24	11.91
Raycap DC6-48-60-18-8F surge suppressor	A	From Leg	2.50	0.0000	138.00	No Ice 1.19	1.19	30.00
			0.00			1/2" Ice 1.37	1.37	44.34
			2.00			1" Ice 1.56	1.56	60.93
Raycap DC6-48-60-18-8F surge suppressor	B	From Leg	2.50	0.0000	138.00	No Ice 1.19	1.19	30.00
			0.00			1/2" Ice 1.37	1.37	44.34
			2.00			1" Ice 1.56	1.56	60.93
Raycap DC6-48-60-18-8F surge suppressor	C	From Leg	2.50	0.0000	138.00	No Ice 1.19	1.19	30.00
			0.00			1/2" Ice 1.37	1.37	44.34
			2.00			1" Ice 1.56	1.56	60.93
DragonWave Horizon Compact+ ODU	A	From Leg	3.00	0.0000	138.00	No Ice 0.81	0.37	10.00
			0.00			1/2" Ice 0.93	0.46	15.82
			2.00			1" Ice 1.06	0.57	23.28
DragonWave Horizon Compact+ ODU	B	From Leg	3.00	0.0000	138.00	No Ice 0.81	0.37	10.00
			0.00			1/2" Ice 0.93	0.46	15.82
			2.00			1" Ice 1.06	0.57	23.28
(2) APXVSP18-C-A20	A	From Leg	3.00	0.0000	138.00	No Ice 8.26	5.28	107.00
			0.00			1/2" Ice 8.81	5.74	156.52
			2.00			1" Ice 9.36	6.20	212.12
(2) APXVSP18-C-A20	B	From Leg	3.00	0.0000	138.00	No Ice 8.26	5.28	107.00
			0.00			1/2" Ice 8.81	5.74	156.52
			2.00			1" Ice 9.36	6.20	212.12
(2) APXVSP18-C-A20	C	From Leg	3.00	0.0000	138.00	No Ice 8.26	5.28	107.00
			0.00			1/2" Ice 8.81	5.74	156.52
			2.00			1" Ice 9.36	6.20	212.12
1900 MHz RRH	A	From Leg	3.00	0.0000	138.00	No Ice 3.80	2.91	144.00
			0.00			1/2" Ice 4.06	3.14	175.27
			2.00			1" Ice 4.34	3.39	210.18
1900 MHz RRH	B	From Leg	3.00	0.0000	138.00	No Ice 3.80	2.91	144.00
			0.00			1/2" Ice 4.06	3.14	175.27
			2.00			1" Ice 4.34	3.39	210.18
1900 MHz RRH	C	From Leg	3.00	0.0000	138.00	No Ice 3.80	2.91	144.00
			0.00			1/2" Ice 4.06	3.14	175.27
			2.00			1" Ice 4.34	3.39	210.18
800 MHz RRH	A	From Leg	3.00	0.0000	138.00	No Ice 2.83	3.45	82.00
			0.00			1/2" Ice 3.06	3.70	112.15
			2.00			1" Ice 3.30	3.95	145.84
800 MHz RRH	B	From Leg	3.00	0.0000	138.00	No Ice 2.83	3.45	82.00
			0.00			1/2" Ice 3.06	3.70	112.15
			2.00			1" Ice 3.30	3.95	145.84
800 MHz RRH	C	From Leg	3.00	0.0000	138.00	No Ice 2.83	3.45	82.00
			0.00			1/2" Ice 3.06	3.70	112.15
			2.00			1" Ice 3.30	3.95	145.84
DB809DK-Y	C	From Leg	3.00	0.0000	138.00	No Ice 3.39	3.39	32.00
			0.00			1/2" Ice 4.55	4.55	56.57
			2.00			1" Ice 5.73	5.73	88.49
10' 2-bay dipole	C	From Leg	3.00	0.0000	138.00	No Ice 2.50	2.50	75.00
			0.00			1/2" Ice 3.53	3.53	93.64
			2.00			1" Ice 4.58	4.58	118.79
LNX-6515DS-VTM	A	From Leg	1.00	0.0000	117.00	No Ice 11.39	7.66	50.00
			0.00			1/2" Ice 12.01	8.25	115.61
			0.00			1" Ice 12.63	8.84	188.87
LNX-6515DS-VTM	B	From Leg	1.00	0.0000	117.00	No Ice 11.39	7.66	50.00
			0.00			1/2" Ice 12.01	8.25	115.61
			0.00			1" Ice 12.63	8.84	188.87
LNX-6515DS-VTM	C	From Leg	1.00	0.0000	117.00	No Ice 11.39	7.66	50.00
			0.00			1/2" Ice 12.01	8.25	115.61
			0.00			1" Ice 12.63	8.84	188.87
Ericsson RRUS-11	A	From Leg	1.00	0.0000	117.00	No Ice 3.25	1.19	55.00

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	Client	T-Mobile	Designed by	Rob Adair

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Lateral Vert					
			ft	°	ft	ft ²	ft ²	lb	
Ericsson RRUS-11	B	From Leg	0.00		117.00	1/2" Ice	3.50	1.35	75.86
			0.00			1" Ice	3.75	1.52	99.77
			1.00	0.0000		No Ice	3.25	1.19	55.00
Ericsson RRUS-11	C	From Leg	0.00		117.00	1/2" Ice	3.50	1.35	75.86
			0.00			1" Ice	3.75	1.52	99.77
			1.00	0.0000		No Ice	3.25	1.19	55.00
(2) AIR 21 B2A B4P panel	A	From Leg	0.00		117.00	1/2" Ice	3.50	1.35	75.86
			0.00			1" Ice	3.75	1.52	99.77
			1.00	0.0000		No Ice	6.59	4.31	95.00
(2) AIR 21 B2A B4P panel	B	From Leg	0.00		117.00	1/2" Ice	7.03	4.72	136.89
			0.00			1" Ice	7.49	5.15	183.90
			1.00	0.0000		No Ice	6.59	4.31	95.00
(2) AIR 21 B2A B4P panel	C	From Leg	0.00		117.00	1/2" Ice	7.03	4.72	136.89
			0.00			1" Ice	7.49	5.15	183.90
			1.00	0.0000		No Ice	6.59	4.31	95.00
KRY 112 7 1/2 TMA	A	From Leg	0.00		117.00	1/2" Ice	0.86	0.55	20.32
			0.00			1" Ice	0.99	0.66	27.27
			1.00	0.0000		No Ice	0.73	0.44	15.00
KRY 112 7 1/2 TMA	B	From Leg	0.00		117.00	1/2" Ice	0.86	0.55	20.32
			0.00			1" Ice	0.99	0.66	27.27
			1.00	0.0000		No Ice	0.73	0.44	15.00
KRY 112 7 1/2 TMA	C	From Leg	0.00		117.00	1/2" Ice	0.86	0.55	20.32
			0.00			1" Ice	0.99	0.66	27.27
			1.00	0.0000		No Ice	0.73	0.44	15.00
(2) 800-10504	A	From Leg	0.00		103.00	1/2" Ice	3.70	2.19	43.03
			0.00			1" Ice	4.05	2.52	65.34
			2.00	0.0000		No Ice	3.35	1.86	25.00
(2) 800-10504	B	From Leg	0.00		103.00	1/2" Ice	3.70	2.19	43.03
			0.00			1" Ice	4.05	2.52	65.34
			2.00	0.0000		No Ice	3.35	1.86	25.00
(2) 800-10504	C	From Leg	0.00		103.00	1/2" Ice	3.70	2.19	43.03
			0.00			1" Ice	4.05	2.52	65.34
			2.00	0.0000		No Ice	3.35	1.86	25.00
(2) 860-10025 RCU	A	From Leg	0.00		103.00	1/2" Ice	0.20	0.17	4.36
			0.00			1" Ice	0.26	0.23	6.59
			2.00	0.0000		No Ice	0.14	0.11	3.00
(2) 860-10025 RCU	B	From Leg	0.00		103.00	1/2" Ice	0.20	0.17	4.36
			0.00			1" Ice	0.26	0.23	6.59
			2.00	0.0000		No Ice	0.14	0.11	3.00
(2) 860-10025 RCU	C	From Leg	0.00		103.00	1/2" Ice	0.20	0.17	4.36
			0.00			1" Ice	0.26	0.23	6.59
			2.00	0.0000		No Ice	0.14	0.11	3.00
LNX-6514DS-VTM	A	From Leg	0.00		93.00	1/2" Ice	8.96	4.61	74.68
			0.00			1" Ice	9.52	5.07	125.36
			1.00	0.0000		No Ice	8.41	4.17	30.00
LNX-6514DS-VTM	B	From Leg	0.00		93.00	1/2" Ice	8.96	4.61	74.68
			0.00			1" Ice	9.52	5.07	125.36
			1.00	0.0000		No Ice	8.41	4.17	30.00
LNX-6514DS-VTM	C	From Leg	0.00		93.00	1/2" Ice	8.96	4.61	74.68
			0.00			1" Ice	9.52	5.07	125.36
			1.00	0.0000		No Ice	8.41	4.17	30.00
BXA-171063/12	A	From Leg	0.00		93.00	1/2" Ice	5.24	4.06	52.45
			0.00			1" Ice	5.70	4.50	85.45
			1.00	0.0000		No Ice	4.79	3.62	25.00
BXA-171063/12	B	From Leg	0.00		93.00	1/2" Ice	5.24	4.06	52.45
			0.00			1" Ice	5.70	4.50	85.45
			1.00	0.0000		No Ice	4.79	3.62	25.00

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	Client	T-Mobile	Designed by	Rob Adair

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Lateral Vert					
			ft	°	ft	ft ²	ft ²	lb	
BXA-171063/12	C	From Leg	1.00	0.0000	93.00	No Ice	4.79	3.62	25.00
			0.00			1/2" Ice	5.24	4.06	52.45
			0.00			1" Ice	5.70	4.50	85.45
BXA-80080/4	A	□ 1.00	1.00	0.0000	93.00	No Ice	5.25	2.84	20.00
			0.00			1/2" Ice	5.64	3.15	51.00
			0.00			1" Ice	6.04	3.48	86.43
BXA-80080/4	B	From Leg	1.00	0.0000	93.00	No Ice	5.25	2.84	20.00
			0.00			1/2" Ice	5.64	3.15	51.00
			0.00			1" Ice	6.04	3.48	86.43
BXA-80080/4	C	From Leg	1.00	0.0000	93.00	No Ice	5.25	2.84	20.00
			0.00			1/2" Ice	5.64	3.15	51.00
			0.00			1" Ice	6.04	3.48	86.43
MG D5-800TX	A	From Leg	1.00	0.0000	93.00	No Ice	3.23	2.37	25.00
			0.00			1/2" Ice	3.57	2.70	45.03
			0.00			1" Ice	3.91	3.03	69.33
MG D5-800TX	B	From Leg	1.00	0.0000	93.00	No Ice	3.23	2.37	25.00
			0.00			1/2" Ice	3.57	2.70	45.03
			0.00			1" Ice	3.91	3.03	69.33
MG D5-800TX	C	From Leg	1.00	0.0000	93.00	No Ice	3.23	2.37	25.00
			0.00			1/2" Ice	3.57	2.70	45.03
			0.00			1" Ice	3.91	3.03	69.33
(2) ALU RRH2x40 w/bracket	A	From Leg	1.00	0.0000	93.00	No Ice	3.32	1.59	131.00
			0.00			1/2" Ice	3.57	1.80	151.90
			0.00			1" Ice	3.84	2.01	175.92
(2) ALU RRH2x40 w/bracket	B	From Leg	1.00	0.0000	93.00	No Ice	3.32	1.59	131.00
			0.00			1/2" Ice	3.57	1.80	151.90
			0.00			1" Ice	3.84	2.01	175.92
(2) ALU RRH2x40 w/bracket	C	From Leg	1.00	0.0000	93.00	No Ice	3.32	1.59	131.00
			0.00			1/2" Ice	3.57	1.80	151.90
			0.00			1" Ice	3.84	2.01	175.92
RFS DB-E1-2C-4AB-0Z D-box	A	From Leg	1.00	0.0000	93.00	No Ice	1.08	1.34	10.00
			0.00			1/2" Ice	1.22	1.50	21.80
			0.00			1" Ice	1.37	1.66	35.86
RFS DB-E1-2C-4AB-0Z D-box	B	From Leg	1.00	0.0000	93.00	No Ice	1.08	1.34	10.00
			0.00			1/2" Ice	1.22	1.50	21.80
			0.00			1" Ice	1.37	1.66	35.86
RFS DB-E1-2C-4AB-0Z D-box	C	From Leg	1.00	0.0000	93.00	No Ice	1.08	1.34	10.00
			0.00			1/2" Ice	1.22	1.50	21.80
			0.00			1" Ice	1.37	1.66	35.86
RFS DB-T1-6Z-8AB-0Z D-box	C	From Leg	1.00	0.0000	93.00	No Ice	5.60	2.33	45.00
			0.00			1/2" Ice	5.92	2.56	81.13
			0.00			1" Ice	6.24	2.79	121.22
GPS on 3' standoff	C	From Leg	1.00	0.0000	68.00	No Ice	0.60	0.60	50.00
			0.00			1/2" Ice	0.79	0.79	55.81
			0.00			1" Ice	0.99	0.99	63.86

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight	
				Horz	Lateral Vert							
			ft	°	°	ft	ft	ft ²	lb			
4' HP dish	A	Paraboloid w/Shroud (HP)	From Leg	3.00	0.0000			140.00	4.00	No Ice	12.57	150.00
				0.00						1/2" Ice	13.10	217.33
				0.00						1" Ice	13.62	284.66

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Solution Summary

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	138 - 117	1.342	10	0.0038	0.0178
T2	117 - 92	1.237	10	0.0050	0.0162
T3	92 - 65	1.003	10	0.0071	0.0133
T4	65 - 35	0.757	10	0.0067	0.0104
T5	35 - 0	0.436	10	0.0044	0.0065

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	4' HP dish	10	1.342	0.0038	0.0178	162097
138.00	Tank bowl	10	1.342	0.0038	0.0178	162097
117.00	LNX-6515DS-VTM	10	1.237	0.0050	0.0162	42183
103.00	(2) 800-10504	10	1.113	0.0063	0.0146	162562
93.00	LNX-6514DS-VTM	10	1.013	0.0070	0.0134	136018
68.00	GPS on 3' standoff	10	0.785	0.0068	0.0107	167109

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
T5	35	Leg	A307	1.2500	4	16610.50	24543.70	0.677	✓	1.333 Bolt Tension

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
T1	138 - 117	Leg	P18x.25	3	-22761.50	356177.59	6.4	Pass
		Diagonal	1	14	12843.90	22613.81	56.8	Pass
		Top Girt	W8x35	7	-5272.82	216033.97	2.4	Pass
T2	117 - 92	Leg	P18x.25	19	-45573.50	344319.22	13.2	Pass
		Diagonal	1	30	18684.90	22613.81	82.6	Pass
		Top Girt	W8x35	23	-11288.70	200473.86	5.6	Pass
T3	92 - 65	Leg	P18x.25	35	-74544.40	338046.12	22.1	Pass
		Diagonal	1 1/4	46	26462.10	35334.10	74.9	Pass
		Top Girt	W8x35	39	-16083.40	180570.84	8.9	Pass
T4	65 - 35	Leg	P18x.25	51	-109924.00	328224.58	33.5	Pass
		Diagonal	1 1/4	62	30238.00	35334.10	85.6	Pass
		Top Girt	W10x68	55	-20336.90	386711.28	5.3	Pass
T5	35 - 0	Leg	P18x.25	67	-152775.00	310778.27	49.2	Pass

50.8 (b)

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Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail
		Diagonal	1 1/4	78	35263.40	35334.10	99.8	Pass
		Top Girt	W10x68	71	-23500.30	350253.73	6.7	Pass
							Summary	
							Leg (T5)	50.8 Pass
							Diagonal (T5)	99.8 Pass
							Top Girt (T3)	8.9 Pass
							Bolt Checks	67.7 Pass
							RATING =	99.8 Pass

EXHIBIT C

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

T-Mobile Existing Facility

Site ID: CT11166A

Mystic Downtown_1
1 Broadway Extension
Stonington, CT 06355

March 31, 2015

EBI Project Number: 6215001953

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	69.00 %

March 31, 2015

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

Emissions Analysis for Site: **CT11166A – Mystic Downtown_1**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **1 Broadway Extension, Stonington, 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 **1 Broadway Extension, Stonington, 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 & B2A/B4P)** 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 & B2A/B4P)** have a maximum gain of **15.9 dBd** at their 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 **117 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):	117	Height (AGL):	117	Height (AGL):	117
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%	1.36	Antenna B1 MPE%	1.36	Antenna C1 MPE%	1.36
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):	117	Height (AGL):	117	Height (AGL):	117
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%	1.36	Antenna B2 MPE%	1.36	Antenna C2 MPE%	1.36
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):	117	Height (AGL):	117	Height (AGL):	117
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%	0.54	Antenna B3 MPE%	0.54	Antenna C3 MPE%	0.54

Site Composite MPE%	
Carrier	MPE%
T-Mobile	9.79
American Messaging	0.28 %
Town of Stonington	Receive Only
Sprint	5.28 %
AT&T Microwave	2.23 %
Verizon Wireless	43.09 %
AT&T	8.33 %
Site Total MPE %:	69.00 %

T-Mobile Sector 1 Total:	3.26 %
T-Mobile Sector 2 Total:	3.26 %
T-Mobile Sector 3 Total:	3.26 %
Site Total:	69.00 %

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:	3.26 %
Sector 2:	3.26 %
Sector 3 :	3.26 %
T-Mobile Total:	9.79 %
Site Total:	69.00 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **69.00%** 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.



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