Jon Ritter

16 Chestnut Street, Suite 420
Foxboro, MA 02035
Tel (774) 264-0016
jritter@trmcom.com

4/18/2016

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

Re: **Notice of Exempt Modification**
14 Canton Springs Road, Canton CT 06019
41.822763/--72.8976637

Dear Ms. Bachman:

T-Mobile Northeast, LLC (T-Mobile) currently maintains four (4) antennas at the one hundred (100') foot level of the existing one hundred and forty (140') foot Monopole at 14 Canton Springs Road, Canton, CT. The monopole tower is owned by American Tower Corporation. The property is owned by the Canton Volunteer Fire Department. T-Mobile now intends to remove and replace four (4) antennas and add associated two (2) Smart Bias-Tee amplifiers as well as two (2) TMA's and one (1) battery backup cabinet on T-Mobile's equipment pad.

The original zoning decision has been included with this filing dated February 26th 1999. The decision includes no conditions that would impact the installation of cellular equipment or modification of the tower.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that 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, Leslee Hill for the Town of Canton, as well as the property owner and the tower owner.

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

1) The proposed modification will not result in an increase in the height of the existing structure.

2) The modifications will not require an extension of the site boundary.

3) The proposed modification will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4) The operation and replacement of antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5) The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6) The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile Northeast LLC respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A § 16-50j-72(b)(2)

Sincerely,

Jonathan H Ritter

Jon Ritter
On behalf of American Tower Corporation
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 420
Foxboro, MA 02035
774-264-0016
jritter@trmcom.com

cc: **First Selectman, Leslee Hill, Town of Canton**
American Tower Corporation
Canton Volunteer Fire Department

Exhibit 1

Site Plan

Exhibit 2

Power Density Report

Exhibit 3

Structural Analysis

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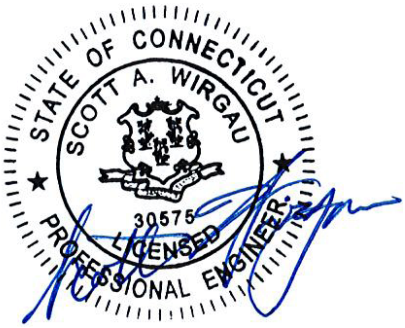
Structural Analysis Report

Structure	:	**140 ft Monopole**
ATC Site Name	:	**Canton CT, CT**
ATC Site Number	:	**411256**
Engineering Number	:	**65615222**
Proposed Carrier	:	**T-Mobile**
Carrier Site Name	:	**Simsbury-1/Rt 10**
Carrier Site Number	:	**CT11275C**
Site Location	:	**14 CANTON SPRINGS ROAD** **Canton, CT 06019-2401** **41.822876,-72.895164**
County	:	**Hartford**
Date	:	**March 16, 2016**
Max Usage	:	**96%**
Result	:	**Pass**

Reviewed by:
Scott Wirgau, PE
Structural Team Leader



Prepared By:
Joshua L. Johnson, E.I.
Structural Engineer I

Mar 31 2016 9:54 PM

COA: PEC.0001553

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 140 ft monopole to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	EEI Project #4960, dated May 20, 1999
Foundation Drawing	EEI Project #4960, dated May 21, 1999
Geotechnical Report	Clarence Welti Project #Banm Tower Site, dated November 23, 1998

Analysis

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

Basic Wind Speed:	80 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	69 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (4) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

Conclusion

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

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
138.0	146.0	1	16' Omni	Stand-Off	-	--
130.0	130.0	1	Andrew ABT-DMDF-ADBH	Platform w/ Handrails	(12) 7/8" Coax (4) 0.78" 8 AWG 6 (2) 0.39" Fiber Trunk (1) 3" Conduit	AT&T Mobility
		3	Kathrein Smart Bias Tee			
		3	Kathrein 782 10250			
		3	CSS DiPlexer DBC-750			
		2	Raycap DC6-48-60-0-8F			
		6	ADC CG-1900/800-DB-FB-DIN			
		6	Ericsson RRUS-11 (50 lbs.)			
		3	Ericsson RRUS 32			
		3	Kathrein 800-10121			
		1	KMW AM-X-CD-14-65-00T-RET			
		1	Andrew SBNHH-1D65A (33.5 lbs)			
		3	CSS DUO1417- 8686			
		1	KMW AM-X-CD-17-65-00T-RET			
		1	Andrew SBNH-1D6565C (60.8 lbs)			
		2	CCI HPA-65R-BUU-H8			
118.0	120.0	1	VZW Unused Reserve: 21,111 sq in	Platform w/ Handrails	(18) 1 5/8" Coax	Verizon
		6	Antel LPA-171063/8CF			
		2	Antel LPA-80080/4CF ___			
		2	Antel LPA-80063/4CF ___			
		2	48" x 16" Panel			
		3	Antel BXA-70063-6CF-EDIN-2			
100.0	-	-	-	Low Profile Platform	(8) 1 5/8" Coax	T-Mobile
90.0	90.0	1	PCTEL GPS-TMG-HR-26N	Low Profile Platform	(21) 1 5/8" Coax (3) 1 5/8" Hybriflex (1) 1/2" Coax	Sprint Nextel
		3	Alcatel-Lucent 800MHz RRH			
		3	Alcatel-Lucent 1900MHz 4X45 RRH			
		6	Andrew DB980F65E-M			
		3	RFS APXVSPP18-C-A20			
83.0	83.0	3	Kathrein 742 213	Low Profile Platform	-	Metro PCS

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
100.0	100.0	9	EMS RR65-18-02DP	-	-	T-Mobile

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
100.0	100.0	2	Kathrein Smart Bias Tee	Low Profile Platform	-	T-Mobile
		2	Ericsson KRY 112 489/2			
		2	RFS APXV18-209014-C			
		2	Commscope LNX-6515DS-VTM			

[1]Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax alongside existing T-Mobile coax.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	66%	Pass
Shaft	77%	Pass
Base Plate	96%	Pass

Foundations

Reaction Component	Original Design Reactions	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,921.8	3,141.6	80%
Shear (Kips)	38.7	30.4	79%

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
100.0	Kathrein Smart Bias Tee	T-Mobile	1.336	1.634
	Ericsson KRY 112 489/2			
	RFS APXV18-209014-C			
	Commscope LNX-6515DS-VTM			

***Deflection and Sway was evaluated considering a design wind speed of 50 mph (Fastest Mile) per ANSI/TIA/EIA-222-F.**

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Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

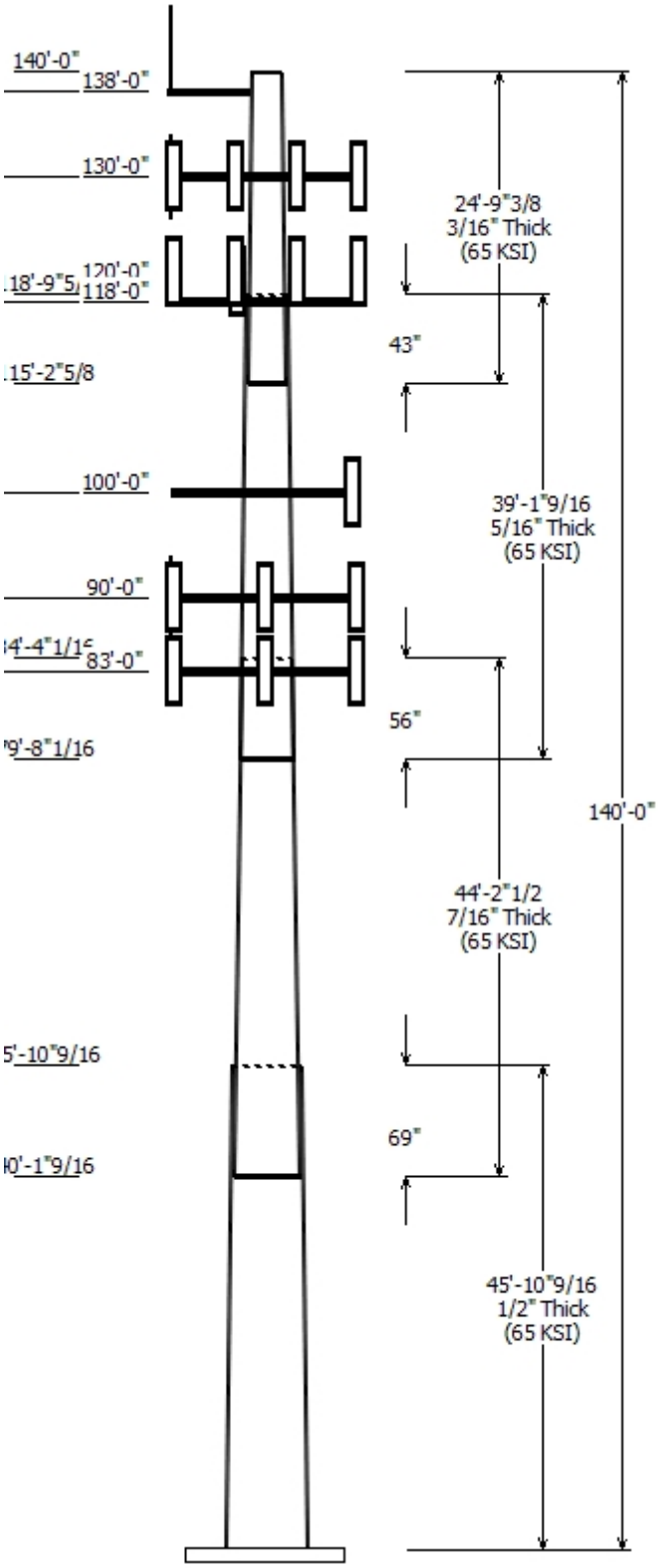
-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

-- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.



Job Information

Pole :	411256
Description :	140 ft Monopole
Client :	T- Mobile
Location :	Canton CT, CT
Shape :	18 Sides
Height :	140.00 (ft)
Base Elev (ft):	0.00
Taper:	0.24908 (in/ft)

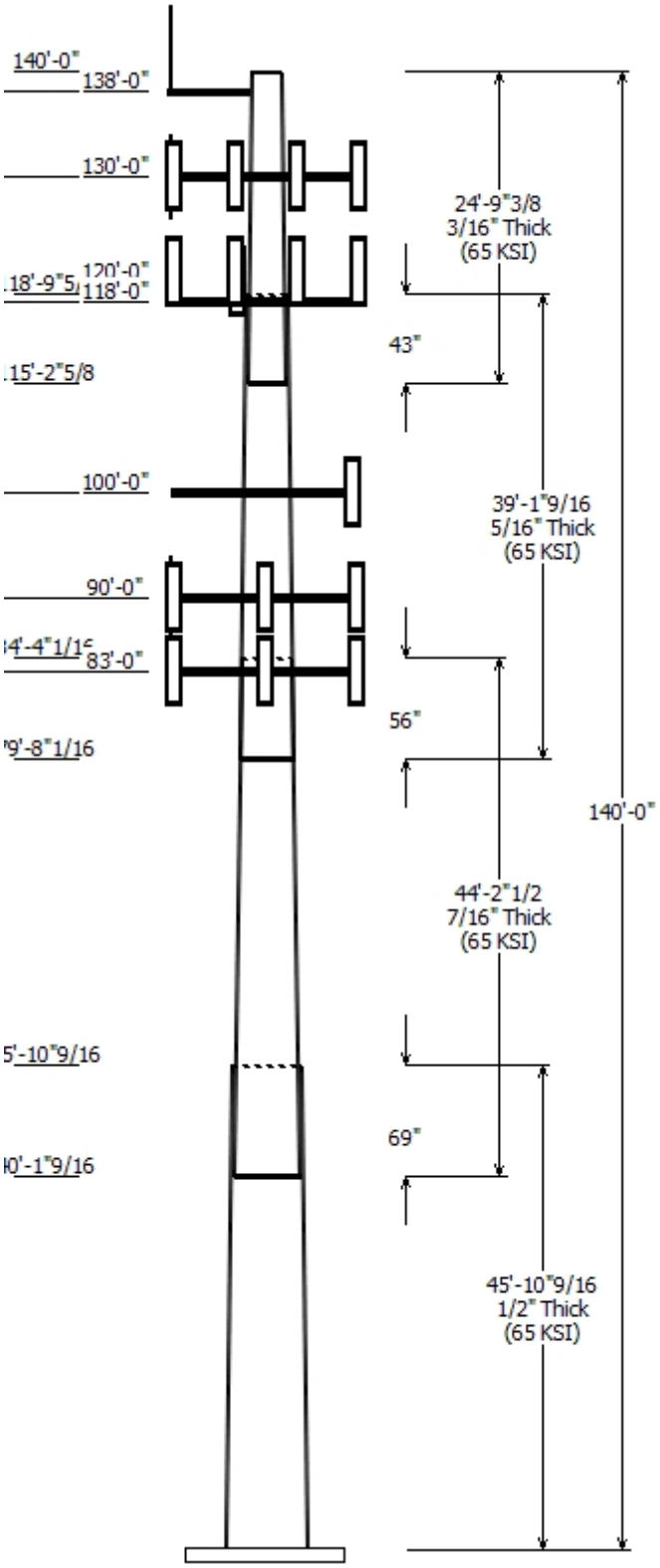
Code: TIA/EIA-222-F

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.880	39.57	51.00	0.500		0.000	0.249100	65
2	44.210	30.86	41.87	0.438	Slip Joint	69.000	0.249100	65
3	39.130	22.90	32.65	0.313	Slip Joint	56.000	0.249100	65
4	24.780	18.00	24.17	0.188	Slip Joint	43.000	0.249100	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
138.000	138.000	1	Stand-Off
138.000	146.000	1	16' Omni
130.000	130.000	2	CCI HPA-65R-BUU-H8
130.000	130.000	1	KMW AM-X-CD-17-65-00T-RET
130.000	130.000	1	Andrew SBNHH-1D65A (33.5
130.000	130.000	3	Ericsson RRUS 32
130.000	130.000	1	Raycap DC6-48-60-0-8F
130.000	130.000	1	Flat Platform w/ Handrails
130.000	130.000	3	Kathrein Scala 800-10121
130.000	130.000	1	KMW AM-X-CD-14-65-00T-RET
130.000	130.000	1	Andrew SBNH-1D6565C (60.8
130.000	130.000	3	CSS DUO1417- 8686
130.000	130.000	6	ADC CG-1900/800-DB-FB-DIN
130.000	130.000	3	CSS DiPlexer DBC-750
130.000	130.000	1	Andrew ABT-DMDF-ADBH
130.000	130.000	3	Kathrein Scala 782 10250
130.000	130.000	3	Kathrein Scala Smart Bias Tee
130.000	130.000	6	Ericsson RRUS-11 (50 lbs.)
130.000	130.000	1	Raycap DC6-48-60-0-8F
120.000	120.000	1	VZW Unused Reserve: 21,111
118.000	120.000	3	Amphenol Antel BXA-70063-
118.000	120.000	2	48" x 16" Panel
118.000	120.000	2	Antel LPA-80080/4CF ___
118.000	120.000	2	Antel LPA-80063/4CF ___
118.000	118.000	1	Flat Platform w/ Handrails
118.000	120.000	6	Amphenol Antel LPA-
100.000	100.000	2	Commscope LNX-6515DS-VTM
100.000	100.000	2	RFS APXV18-209014-C
100.000	100.000	2	Ericsson KRY 112 489/2
100.000	100.000	2	Kathrein Smart Bias Tee
100.000	100.000	1	Flat Low Profile Platform
90.000	90.000	1	Flat Low Profile Platform
90.000	90.000	3	RFS APXVSPP18-C-A20
90.000	90.000	6	Andrew DB980F65E-M
90.000	90.000	3	Alcatel-Lucent 800 MHz RRH
90.000	90.000	3	Alcatel-Lucent 1900 MHz 4X45
90.000	90.000	1	PCTEL GPS-TMG-HR-26N
83.000	83.000	1	Flat Low Profile Platform
83.000	83.000	3	Kathrein Scala 742 213



Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	90.000	1 5/8" Coax	No
0.000	90.000	1 5/8" Hybriflex	No
0.000	90.000	1/2" Coax	No
0.000	100.0	1 5/8" Coax	Yes
0.000	100.0	1 5/8" Coax	Yes
0.000	118.0	1 5/8" Coax	No
0.000	130.0	0.39" Fiber Trunk	No
0.000	130.0	0.78" 8 AWG 6	No
0.000	130.0	3" Conduit	No
0.000	130.0	7/8" Coax	No

Load Cases

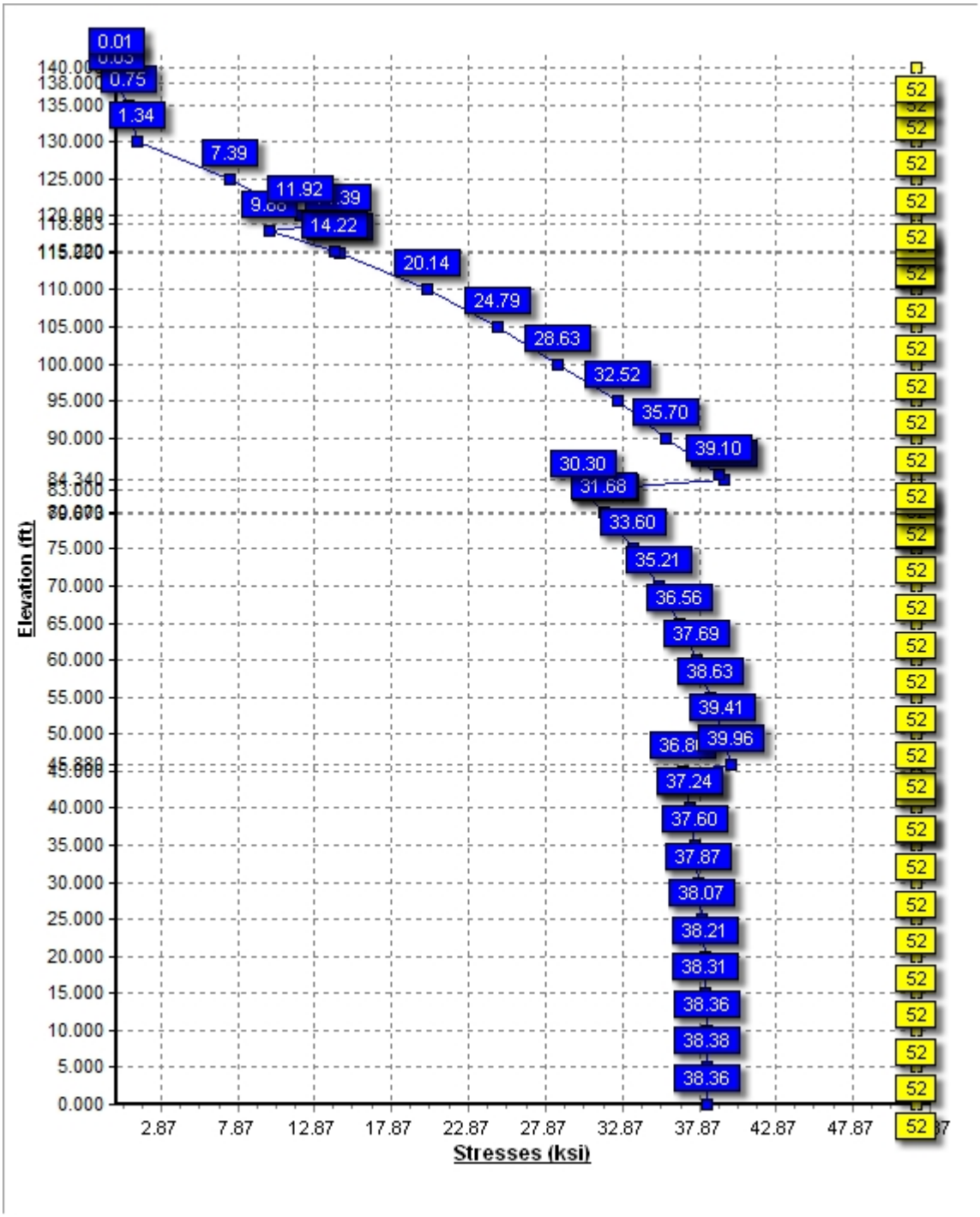
No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions

Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
No Ice	3141.65	30.42	42.98
Ice	1977.92	19.85	47.19
Twist/Sway	1228.27	11.88	43.01

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000


0.01
0.75
1.34
7.39
11.92
14.22
20.14
24.79
28.63
32.52
35.70
39.10
30.30
31.68
33.60
35.21
36.56
37.69
38.63
39.41
39.96
37.24
37.60
37.87
38.07
38.21
38.31
38.36
38.38
38.36
52
Elevation (ft)
Stresses (ksi)
2.87
7.87
12.87
17.87
22.87
27.87
32.87
37.87
42.87
47.87

Site Number:	**411256**	**Code: TIA/EIA-222-F**	
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:12 PM**
Customer:	**T- Mobile**		

Analysis Parameters

Location:	**Hartford County, CT**		
Code:	**TIA/EIA-222-F**	**Height (ft):**	**140**
Shape:	**18 Sides**	**Base Diameter (in):**	**51.00**
Pole Type:	**Taper**	**Top Diameter (in):**	**18.00**
Pole Manfacturer:	**EEI**	**Taper (in/ft) :**	**0.249**

Load Cases

No Ice	**80.00 mph Wind with No Ice**
Ice	**69.28 mph Wind with Ice**
Twist/Sway	**50.00 mph Wind with No Ice**

Site Number:	**411256**	**Code: TIA/EIA-222-F**		
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:12 PM**	
Customer:	**T- Mobile**			

Shaft Section Properties

							Bottom						Top						
Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip Joint Type	Slip Joint Len (in)	Weight (lb)	Dia (in)	Elev (ft)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	45.880	0.5000	65		0.00	11,096	51.00	0.00	80.14	25821.9	16.57	102.00	39.57	45.88	62.00	11959.3	12.54	79.14	0.249089
2-18	44.210	0.4375	65	Slip	69.00	7,507	41.87	40.13	57.54	12486.2	15.47	95.72	30.86	84.34	42.25	4943.1	11.03	70.55	0.249089
3-18	39.130	0.3125	65	Slip	56.00	3,628	32.65	79.67	32.08	4239.2	17.01	104.49	22.90	118.80	22.41	1445.5	11.51	73.30	0.249089
4-18	24.780	0.1875	65	Slip	43.00	1,049	24.17	115.22	14.28	1037.8	21.32	128.93	18.00	140.00	10.60	425.1	15.52	96.01	0.249089
				Shaft Weight		23,279													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor	Distance From Face (ft)	Vert Ecc (ft)
138.00	16' Omni	1	55.00	4.800	1.00	89.60	6.430	1.00	0.000	8.000
138.00	Stand-Off	1	75.00	2.500	1.00	218.70	5.900	1.00	0.000	0.000
130.00	ADC CG-1900/800-DB-FB-DIN	6	28.70	1.540	0.50	39.60	1.800	0.50	0.000	0.000
130.00	Andrew ABT-DMDF-ADBH	1	1.10	0.050	0.50	1.80	0.110	0.50	0.000	0.000
130.00	Andrew SBNH-1D6565C (60.8	1	60.80	11.440	0.70	126.70	12.370	0.70	0.000	0.000
130.00	Andrew SBNHH-1D65A (33.5	1	33.50	6.360	0.67	86.60	7.780	0.67	0.000	0.000
130.00	CCI HPA-65R-BUU-H8	2	68.00	13.290	0.66	69.00	13.990	0.66	0.000	0.000
130.00	CSS DiPlexer DBC-750	3	7.00	0.720	0.50	11.10	0.900	0.50	0.000	0.000
130.00	CSS DUO1417- 8686	3	20.30	6.530	0.68	0.00	7.150	0.68	0.000	0.000
130.00	Ericsson RRUS 32	3	50.80	3.140	0.50	33.60	3.640	0.50	0.000	0.000
130.00	Ericsson RRUS-11 (50 lbs.)	6	50.00	2.990	0.50	69.50	3.340	0.50	0.000	0.000
130.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	2,450.00	48.400	1.00	0.000	0.000
130.00	Kathrein Scala 782 10250	3	6.40	0.520	0.50	10.00	0.690	0.50	0.000	0.000
130.00	Kathrein Scala 800-10121	3	44.10	5.450	0.67	77.00	6.090	0.67	0.000	0.000
130.00	Kathrein Scala Smart Bias	3	3.30	0.090	0.50	4.30	0.160	0.50	0.000	0.000
130.00	KMW AM-X-CD-14-65-00T-	1	36.40	5.500	0.65	68.30	6.100	0.65	0.000	0.000
130.00	KMW AM-X-CD-17-65-00T-	1	59.50	11.310	0.68	120.90	12.230	0.68	0.000	0.000
130.00	Raycap DC6-48-60-0-8F	1	32.80	1.360	1.00	49.50	1.550	1.00	0.000	0.000
130.00	Raycap DC6-48-60-0-8F	1	32.80	1.360	1.00	49.50	1.550	1.00	0.000	0.000
120.00	VZW Unused Reserve:	1	2256.00	146.70	1.00	0.00	0.000	1.00	0.000	0.000
118.00	48" x 16" Panel	2	30.00	7.470	0.64	73.80	8.100	0.64	0.000	2.000
118.00	Amphenol Antel BXA-70063-	3	17.00	7.730	0.66	59.50	8.540	0.66	0.000	2.000
118.00	Amphenol Antel LPA-	6	11.50	3.690	0.79	40.20	4.240	0.79	0.000	2.000
118.00	Antel LPA-80063/4CF ___	2	20.00	7.000	0.75	0.00	7.620	0.75	0.000	2.000
118.00	Antel LPA-80080/4CF ___	2	12.00	6.060	0.62	0.00	6.650	0.62	0.000	2.000
118.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	2,450.00	48.400	1.00	0.000	0.000
100.00	Commscope LNX-6515DS-	2	50.30	11.440	0.84	0.00	0.000	0.84	0.000	0.000
100.00	Ericsson KRY 112 489/2	2	15.40	0.650	0.50	20.40	0.830	0.50	0.000	0.000
100.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
100.00	Kathrein Smart Bias Tee	2	3.30	0.090	0.50	4.30	0.160	0.50	0.000	0.000
100.00	RFS APXV18-209014-C	2	18.70	3.570	0.78	38.66	4.090	0.78	0.000	0.000
90.00	Alcatel-Lucent 1900 MHz	3	60.00	2.710	0.50	83.10	3.070	0.50	0.000	0.000
90.00	Alcatel-Lucent 800 MHz RRH	3	53.00	2.490	0.50	74.10	2.820	0.50	0.000	0.000
90.00	Andrew DB980F65E-M	6	8.50	3.750	0.68	0.00	4.320	0.68	0.000	0.000
90.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
90.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.090	0.50	1.90	0.140	0.50	0.000	0.000
90.00	RFS APXVSPP18-C-A20	3	57.00	8.260	0.68	106.50	9.080	0.68	0.000	0.000
83.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
83.00	Kathrein Scala 742 213	3	22.00	5.140	0.67	0.00	5.850	0.67	0.000	0.000
	Totals	89	13193.80			13,499.22			Number of Loadings :	39

Site Number:	**411256**	**Code: TIA/EIA-222-F**	
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:12 PM**
Customer:	**T- Mobile**		

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Qty	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
0.00	130.00	2	0.39" Fiber Trunk	0.12	0.00	0.00	0.00	N
0.00	130.00	4	0.78" 8 AWG 6	2.36	0.00	0.00	0.00	N
0.00	130.00	1	3" Conduit	7.58	0.00	0.00	0.00	N
0.00	130.00	12	7/8" Coax	4.62	0.00	0.00	0.00	N
0.00	118.00	18	1 5/8" Coax	14.76	0.00	0.00	0.00	N
0.00	100.00	6	1 5/8" Coax	4.92	0.20	9.46	0.25	Y
0.00	100.00	2	1 5/8" Coax	4.92	0.00	9.46	0.00	Y
0.00	90.00	21	1 5/8" Coax	17.22	0.00	0.00	0.00	N
0.00	90.00	3	1 5/8" Hybriflex	3.90	0.00	0.00	0.00	N
0.00	90.00	1	1/2" Coax	0.15	0.00	0.00	0.00	N
			Total Weight	**6,548.38 (lb)**		**1,892.00 (lb)**		

Segment Properties (Max Len : 5. ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Fa (ksi)	Weight (lb)
0.00		0.5000	51.000	80.141	25,821.9	16.57	102.00	65	52	0	0.0
5.00		0.5000	49.755	78.164	23,958.2	16.14	99.51	65	52	0	1,346.7
10.00		0.5000	48.509	76.188	22,186.3	15.70	97.02	65	52	0	1,313.1
15.00		0.5000	47.264	74.211	20,504.1	15.26	94.53	65	52	0	1,279.4
20.00		0.5000	46.018	72.235	18,909.1	14.82	92.04	65	52	0	1,245.8
25.00		0.5000	44.773	70.258	17,399.0	14.38	89.55	65	52	0	1,212.2
30.00		0.5000	43.527	68.282	15,971.6	13.94	87.05	65	52	0	1,178.6
35.00		0.5000	42.282	66.305	14,624.4	13.50	84.56	65	52	0	1,144.9
40.00		0.5000	41.036	64.329	13,355.2	13.06	82.07	65	52	0	1,111.3
40.13	Bot - Section 2	0.5000	41.004	64.278	13,323.2	13.05	82.01	65	52	0	28.4
45.00		0.5000	39.791	62.353	12,161.7	12.62	79.58	65	52	0	1,988.9
45.88	Top - Section 1	0.4375	40.447	55.556	11,235.8	14.89	92.45	65	52	0	353.0
50.00		0.4375	39.421	54.131	10,393.2	14.48	90.10	65	52	0	768.9
55.00		0.4375	38.175	52.401	9,428.6	13.98	87.26	65	52	0	906.3
60.00		0.4375	36.930	50.672	8,525.5	13.47	84.41	65	52	0	876.8
65.00		0.4375	35.684	48.943	7,682.1	12.97	81.56	65	52	0	847.4
70.00		0.4375	34.439	47.213	6,896.2	12.47	78.72	65	52	0	818.0
75.00		0.4375	33.193	45.484	6,165.8	11.97	75.87	65	52	0	788.6
79.67	Bot - Section 3	0.4375	32.029	43.867	5,531.5	11.50	73.21	65	52	0	710.4
80.00		0.4375	31.948	43.754	5,488.9	11.47	73.02	65	52	0	84.3
83.00		0.4375	31.201	42.717	5,107.5	11.16	71.32	65	52	0	764.2
84.34	Top - Section 2	0.3125	31.492	30.925	3,798.3	16.36	100.77	65	52	0	335.5
85.00		0.3125	31.327	30.762	3,738.6	16.27	100.25	65	52	0	69.3
90.00		0.3125	30.082	29.527	3,306.0	15.56	96.26	65	52	0	512.9
95.00		0.3125	28.837	28.291	2,908.2	14.86	92.28	65	52	0	491.9
100.0		0.3125	27.591	27.056	2,543.7	14.16	88.29	65	52	0	470.8
105.0		0.3125	26.346	25.821	2,210.9	13.45	84.31	65	52	0	449.8
110.0		0.3125	25.100	24.585	1,908.5	12.75	80.32	65	52	0	428.8
115.0		0.3125	23.855	23.350	1,635.1	12.05	76.34	65	52	0	407.8
115.2	Bot - Section 4	0.3125	23.800	23.296	1,623.7	12.02	76.16	65	52	0	17.5
118.0		0.3125	23.107	22.609	1,484.3	11.63	73.94	65	52	0	350.2
118.8	Top - Section 3	0.1875	23.282	13.744	926.2	20.48	124.17	65	52	0	99.3
120.0		0.1875	22.984	13.566	890.8	20.20	122.58	65	52	0	55.6
125.0		0.1875	21.739	12.825	752.6	19.03	115.94	65	52	0	224.5
130.0		0.1875	20.493	12.084	629.5	17.86	109.30	65	52	0	211.9
135.0		0.1875	19.248	11.343	520.6	16.69	102.66	65	52	0	199.3
138.0		0.1875	18.501	10.898	461.8	15.99	98.67	65	52	0	113.5
140.0		0.1875	18.003	10.602	425.1	15.52	96.01	65	52	0	73.2
											23,278.9

Site Number: 411256	**Code:** TIA/EIA-222-F		
Site Name: Canton CT, CT	**Engineering Number:** 65615222	**3/16/2016 4:56:12 PM**	
Customer: T- Mobile			

Load Case: No Ice — 80.00 mph Wind with No Ice — 23 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		188.9	0.0					0.0	0.0	188.9	0.0	0.0	0.0
5.00		373.1	1,346.7					27.7	302.8	400.8	1,649.4	0.0	0.0
10.00		363.8	1,313.1					27.7	302.8	391.5	1,615.8	0.0	0.0
15.00		354.4	1,279.4					27.7	302.8	382.1	1,582.2	0.0	0.0
20.00		345.1	1,245.8					27.7	302.8	372.8	1,548.6	0.0	0.0
25.00		335.8	1,212.2					27.7	302.8	363.4	1,514.9	0.0	0.0
30.00		326.4	1,178.6					27.7	302.8	354.1	1,481.3	0.0	0.0
35.00		322.9	1,144.9					27.7	302.8	350.6	1,447.7	0.0	0.0
40.00		166.2	1,111.3					28.7	302.8	195.0	1,414.0	0.0	0.0
40.13	Bot - Section 2	166.3	28.4					0.8	7.9	167.1	36.3	0.0	0.0
45.00		191.4	1,988.9					29.0	294.9	220.4	2,283.8	0.0	0.0
45.88	Top - Section 1	166.6	353.0					5.3	53.3	171.9	406.3	0.0	0.0
50.00		303.4	768.9					25.4	249.5	328.8	1,018.3	0.0	0.0
55.00		331.1	906.3					31.6	302.8	362.7	1,209.0	0.0	0.0
60.00		328.4	876.8					32.4	302.8	360.8	1,179.6	0.0	0.0
65.00		324.7	847.4					33.2	302.8	357.9	1,150.2	0.0	0.0
70.00		320.1	818.0					34.0	302.8	354.0	1,120.7	0.0	0.0
75.00		304.5	788.6					34.7	302.8	339.2	1,091.3	0.0	0.0
79.67	Bot - Section 3	156.1	710.4					33.0	283.0	189.1	993.4	0.0	0.0
80.00		104.1	84.3					2.3	19.8	106.4	104.1	0.0	0.0
83.00	Appertunance(s)	135.3	764.2	1,312.9	0.0	0.0	1,566.0	21.5	181.6	1,469.7	2,511.9	0.0	0.0
84.34	Top - Section 2	61.8	335.5					9.7	81.1	71.5	416.6	0.0	0.0
85.00		172.5	69.3					4.8	40.0	177.3	109.2	0.0	0.0
90.00	Appertunance(s)	300.4	512.9	2,437.7	0.0	0.0	2,061.6	36.6	302.8	2,774.6	2,877.2	0.0	0.0
95.00		292.5	491.9					37.2	196.4	329.6	688.3	0.0	0.0
100.00	Appertunance(s)	284.0	470.8	1,962.3	0.0	0.0	1,675.4	37.7	196.4	2,284.0	2,342.6	0.0	0.0
105.00		274.9	449.8					0.0	147.2	274.9	597.0	0.0	0.0
110.00		265.5	428.8					0.0	147.2	265.5	576.0	0.0	0.0
115.00		135.9	407.8					0.0	147.2	135.9	555.0	0.0	0.0
115.22	Bot - Section 4	76.9	17.5					0.0	6.5	76.9	23.9	0.0	0.0
118.00	Appertunance(s)	91.5	350.2	4,106.9	0.0	4,834.6	2,244.0	0.0	81.8	4,198.4	2,676.1	0.0	0.0
118.80	Top - Section 3	50.3	99.3					0.0	11.8	50.3	111.1	0.0	0.0
120.00	Appertunance(s)	151.9	55.6	5,873.9	0.0	0.0	2,256.0	0.0	17.6	6,025.9	2,329.2	0.0	0.0
125.00		238.5	224.5					0.0	73.4	238.5	297.9	0.0	0.0
130.00	Appertunance(s)	227.3	211.9	5,358.1	0.0	0.0	3,260.8	0.0	73.4	5,585.5	3,546.1	0.0	0.0
135.00		174.5	199.3					0.0	0.0	174.5	199.3	0.0	0.0
138.00	Appertunance(s)	105.0	113.5	307.4	0.0	1,626.2	130.0	0.0	0.0	412.4	243.5	0.0	0.0
140.00		41.3	73.2					0.0	0.0	41.3	73.2	0.0	0.0
								Totals:		30,544.2	43,021.0	0.00	0.00

Site Number:	**411256**	**Code: TIA/EIA-222-F**	
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:13 PM**
Customer:	**T- Mobile**		

Load Case: **No Ice** **80.00 mph Wind with No Ice** **23 Iterations**

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-30.420	-42.975	0.000	0.000	0.000	-3,141.647	0.000	0.000	0.000	0.000
5.00	-30.140	-41.236	0.000	0.000	0.000	-2,989.551	-0.091	0.000	0.091	-0.169
10.00	-29.862	-39.531	0.000	0.000	0.000	-2,838.855	-0.361	0.000	0.361	-0.342
15.00	-29.587	-37.860	0.000	0.000	0.000	-2,689.548	-0.814	0.000	0.814	-0.519
20.00	-29.314	-36.221	0.000	0.000	0.000	-2,541.617	-1.455	0.000	1.455	-0.701
25.00	-29.043	-34.617	0.000	0.000	0.000	-2,395.052	-2.289	0.000	2.289	-0.886
30.00	-28.774	-33.045	0.000	0.000	0.000	-2,249.840	-3.319	0.000	3.319	-1.076
35.00	-28.502	-31.508	0.000	0.000	0.000	-2,105.972	-4.550	0.000	4.550	-1.270
40.00	-28.326	-30.049	0.000	0.000	0.000	-1,963.464	-5.987	0.000	5.987	-1.468
40.13	-28.212	-29.967	0.000	0.000	0.000	-1,959.782	-6.027	0.000	6.027	-1.474
45.00	-27.984	-27.633	0.000	0.000	0.000	-1,822.393	-7.633	0.000	7.633	-1.670
45.88	-27.850	-27.181	0.000	0.000	0.000	-1,797.767	-7.944	0.000	7.944	-1.707
50.00	-27.580	-26.079	0.000	0.000	0.000	-1,683.026	-9.493	0.000	9.493	-1.878
55.00	-27.271	-24.778	0.000	0.000	0.000	-1,545.130	-11.579	0.000	11.579	-2.099
60.00	-26.957	-23.509	0.000	0.000	0.000	-1,408.777	-13.897	0.000	13.897	-2.322
65.00	-26.638	-22.271	0.000	0.000	0.000	-1,273.994	-16.449	0.000	16.449	-2.546
70.00	-26.314	-21.065	0.000	0.000	0.000	-1,140.808	-19.235	0.000	19.235	-2.769
75.00	-25.995	-19.896	0.000	0.000	0.000	-1,009.239	-22.254	0.000	22.254	-2.991
79.67	-25.788	-18.866	0.000	0.000	0.000	-887.759	-25.285	0.000	25.285	-3.195
80.00	-25.700	-18.735	0.000	0.000	0.000	-879.335	-25.504	0.000	25.504	-3.210
83.00	-24.116	-16.272	0.000	0.000	0.000	-802.236	-27.563	0.000	27.563	-3.341
84.34	-24.032	-15.842	0.000	0.000	0.000	-769.922	-28.509	0.000	28.509	-3.400
85.00	-23.890	-15.680	0.000	0.000	0.000	-754.061	-28.981	0.000	28.981	-3.429
90.00	-20.999	-12.887	0.000	0.000	0.000	-634.615	-32.714	0.000	32.714	-3.693
95.00	-20.676	-12.135	0.000	0.000	0.000	-529.619	-36.716	0.000	36.716	-3.943
100.0	-18.271	-9.889	0.000	0.000	0.000	-426.239	-40.972	0.000	40.972	-4.177
105.0	-17.984	-9.252	0.000	0.000	0.000	-334.888	-45.461	0.000	45.461	-4.390
110.0	-17.700	-8.646	0.000	0.000	0.000	-244.968	-50.159	0.000	50.159	-4.576
115.0	-17.530	-8.082	0.000	0.000	0.000	-156.469	-55.033	0.000	55.033	-4.726
115.2	-17.456	-8.053	0.000	0.000	0.000	-152.612	-55.250	0.000	55.250	-4.732
118.0	-13.054	-5.727	0.000	0.000	0.000	-99.250	-58.023	0.000	58.023	-4.794
118.8	-12.996	-5.617	0.000	0.000	0.000	-88.763	-58.831	0.000	58.831	-4.809
120.0	-6.799	-3.795	0.000	0.000	0.000	-73.212	-60.038	0.000	60.038	-4.828
125.0	-6.541	-3.511	0.000	0.000	0.000	-39.215	-65.141	0.000	65.141	-4.918
130.0	-0.670	-0.460	0.000	0.000	0.000	-6.511	-70.315	0.000	70.315	-4.961
135.0	-0.479	-0.276	0.000	0.000	0.000	-3.159	-75.510	0.000	75.510	-4.972
138.0	-0.047	-0.069	0.000	0.000	0.000	-0.095	-78.631	0.000	78.631	-4.976
140.0	-0.041	0.000	0.000	0.000	0.000	0.000	-80.713	0.000	80.713	-4.976

Load Case: No Ice 80.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.54	0.77	0.00	0.00	0.00	37.80	38.36	52.0	0.0	0.738
5.00	0.53	0.78	0.00	0.00	0.00	37.83	38.38	52.0	0.0	0.738
10.00	0.52	0.79	0.00	0.00	0.00	37.82	38.36	52.0	0.0	0.738
15.00	0.51	0.80	0.00	0.00	0.00	37.77	38.31	52.0	0.0	0.737
20.00	0.50	0.82	0.00	0.00	0.00	37.69	38.21	52.0	0.0	0.735
25.00	0.49	0.83	0.00	0.00	0.00	37.55	38.07	52.0	0.0	0.732
30.00	0.48	0.85	0.00	0.00	0.00	37.36	37.87	52.0	0.0	0.729
35.00	0.48	0.87	0.00	0.00	0.00	37.10	37.60	52.0	0.0	0.723
40.00	0.47	0.89	0.00	0.00	0.00	36.76	37.26	52.0	0.0	0.717
40.13	0.47	0.88	0.00	0.00	0.00	36.75	37.24	52.0	0.0	0.717
45.00	0.44	0.90	0.00	0.00	0.00	36.33	36.80	52.0	0.0	0.708
45.88	0.49	1.01	0.00	0.00	0.00	39.43	39.96	52.0	0.0	0.769
50.00	0.48	1.03	0.00	0.00	0.00	38.89	39.41	52.0	0.0	0.758
55.00	0.47	1.05	0.00	0.00	0.00	38.12	38.63	52.0	0.0	0.743
60.00	0.46	1.07	0.00	0.00	0.00	37.18	37.69	52.0	0.0	0.725
65.00	0.46	1.10	0.00	0.00	0.00	36.05	36.56	52.0	0.0	0.703
70.00	0.45	1.12	0.00	0.00	0.00	34.71	35.21	52.0	0.0	0.677
75.00	0.44	1.15	0.00	0.00	0.00	33.10	33.60	52.0	0.0	0.646
79.67	0.43	1.18	0.00	0.00	0.00	31.32	31.81	52.0	0.0	0.612
80.00	0.43	1.18	0.00	0.00	0.00	31.18	31.68	52.0	0.0	0.609
83.00	0.38	1.14	0.00	0.00	0.00	29.86	30.30	52.0	0.0	0.583
84.34	0.51	1.57	0.00	0.00	0.00	38.89	39.50	52.0	0.0	0.760
85.00	0.51	1.57	0.00	0.00	0.00	38.50	39.10	52.0	0.0	0.752
90.00	0.44	1.43	0.00	0.00	0.00	35.18	35.70	52.0	0.0	0.687
95.00	0.43	1.47	0.00	0.00	0.00	31.99	32.52	52.0	0.0	0.626
100.00	0.37	1.36	0.00	0.00	0.00	28.17	28.63	52.0	0.0	0.551
105.00	0.36	1.40	0.00	0.00	0.00	24.31	24.79	52.0	0.0	0.477
110.00	0.35	1.45	0.00	0.00	0.00	19.63	20.14	52.0	0.0	0.387
115.00	0.35	1.51	0.00	0.00	0.00	13.91	14.49	52.0	0.0	0.279
115.22	0.35	1.51	0.00	0.00	0.00	13.63	14.22	52.0	0.0	0.274
118.00	0.25	1.16	0.00	0.00	0.00	9.41	9.88	52.0	0.0	0.190
118.80	0.41	1.91	0.00	0.00	0.00	13.59	14.39	52.0	0.0	0.277
120.00	0.28	1.01	0.00	0.00	0.00	11.51	11.92	52.0	0.0	0.229
125.00	0.27	1.03	0.00	0.00	0.00	6.90	7.39	52.0	0.0	0.142
130.00	0.04	0.11	0.00	0.00	0.00	1.29	1.34	52.0	0.0	0.026
135.00	0.02	0.09	0.00	0.00	0.00	0.71	0.75	52.0	0.0	0.014
138.00	0.01	0.01	0.00	0.00	0.00	0.02	0.03	52.0	0.0	0.001
140.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	52.0	0.0	0.000

Site Number: 411256	**Code:** TIA/EIA-222-F		
Site Name: Canton CT, CT	**Engineering Number:** 65615222	**3/16/2016 4:56:14 PM**	
Customer: T- Mobile			

Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		144.5	0.0					0.0	0.0	144.5	0.0	0.0	0.0
5.00		285.4	1,501.8					26.0	348.1	311.4	1,849.9	0.0	0.0
10.00		278.4	1,464.3					26.0	348.1	304.4	1,812.4	0.0	0.0
15.00		271.4	1,426.8					26.0	348.1	297.4	1,775.0	0.0	0.0
20.00		264.4	1,389.4					26.0	348.1	290.4	1,737.5	0.0	0.0
25.00		257.4	1,351.9					26.0	348.1	283.4	1,700.0	0.0	0.0
30.00		250.4	1,314.4					26.0	348.1	276.4	1,662.6	0.0	0.0
35.00		247.9	1,276.9					26.0	348.1	273.8	1,625.1	0.0	0.0
40.00		127.7	1,239.5					26.9	348.1	154.6	1,587.6	0.0	0.0
40.13	Bot - Section 2	127.8	31.8					0.7	9.1	128.5	40.8	0.0	0.0
45.00		147.0	2,112.6					27.2	339.1	174.2	2,451.7	0.0	0.0
45.88	Top - Section 1	128.1	375.2					5.0	61.3	133.1	436.5	0.0	0.0
50.00		233.3	870.4					23.8	286.9	257.1	1,157.3	0.0	0.0
55.00		254.8	1,025.6					29.6	348.1	284.5	1,373.8	0.0	0.0
60.00		253.0	992.3					30.4	348.1	283.4	1,340.5	0.0	0.0
65.00		250.3	959.1					31.2	348.1	281.5	1,307.2	0.0	0.0
70.00		247.0	925.8					31.8	348.1	278.8	1,274.0	0.0	0.0
75.00		235.3	892.5					32.5	348.1	267.8	1,240.7	0.0	0.0
79.67	Bot - Section 3	120.6	804.3					30.9	325.4	151.6	1,129.7	0.0	0.0
80.00		80.5	91.0					2.2	22.7	82.7	113.7	0.0	0.0
83.00	Appertunance(s)	104.6	824.1	1,171.8	0.0	0.0	1,700.0	20.2	208.9	1,296.6	2,733.0	0.0	0.0
84.34	Top - Section 2	47.9	361.9					9.1	93.3	56.9	455.2	0.0	0.0
85.00		133.5	82.2					4.5	46.0	138.0	128.2	0.0	0.0
90.00	Appertunance(s)	232.8	607.2	2,120.2	0.0	0.0	2,493.0	34.3	348.1	2,387.2	3,448.4	0.0	0.0
95.00		226.9	582.4					34.8	241.8	261.8	824.2	0.0	0.0
100.00	Appertunance(s)	220.7	557.5	1,110.8	0.0	0.0	1,826.7	35.4	241.8	1,366.9	2,626.0	0.0	0.0
105.00		214.0	532.7					0.0	147.2	214.0	679.9	0.0	0.0
110.00		207.0	507.8					0.0	147.2	207.0	655.0	0.0	0.0
115.00		106.1	482.9					0.0	147.2	106.1	630.1	0.0	0.0
115.22	Bot - Section 4	60.1	20.8					0.0	6.5	60.1	27.2	0.0	0.0
118.00	Appertunance(s)	71.5	391.4	3,459.8	0.0	4,026.9	3,017.3	0.0	81.8	3,531.4	3,490.5	0.0	0.0
118.80	Top - Section 3	39.3	111.1					0.0	11.8	39.3	122.8	0.0	0.0
120.00	Appertunance(s)	119.0	72.9					0.0	17.6	119.0	90.5	0.0	0.0
125.00		187.1	293.1					0.0	73.4	187.1	366.5	0.0	0.0
130.00	Appertunance(s)	178.8	276.7	4,501.1	0.0	0.0	4,153.9	0.0	73.4	4,679.9	4,504.0	0.0	0.0
135.00		137.6	260.2					0.0	0.0	137.6	260.2	0.0	0.0
138.00	Appertunance(s)	83.0	148.7	388.6	0.0	1,633.7	308.3	0.0	0.0	471.6	457.0	0.0	0.0
140.00		32.7	96.0					0.0	0.0	32.7	96.0	0.0	0.0
								Totals:		19,952.5	47,210.7	0.00	0.00

Site Number:	**411256**	**Code: TIA/EIA-222-F**	
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:15 PM**
Customer:	**T- Mobile**		

Load Case: **Ice** **69.28 mph Wind with Ice** **22 Iterations**

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-19.852	-47.192	0.000	0.000	0.000	-1,977.919	0.000	0.000	0.000	0.000
5.00	-19.623	-45.306	0.000	0.000	0.000	-1,878.664	-0.057	0.000	0.057	-0.106
10.00	-19.397	-43.457	0.000	0.000	0.000	-1,780.548	-0.227	0.000	0.227	-0.215
15.00	-19.173	-41.646	0.000	0.000	0.000	-1,683.563	-0.512	0.000	0.512	-0.326
20.00	-18.951	-39.872	0.000	0.000	0.000	-1,587.699	-0.914	0.000	0.914	-0.439
25.00	-18.731	-38.137	0.000	0.000	0.000	-1,492.946	-1.436	0.000	1.436	-0.555
30.00	-18.513	-36.439	0.000	0.000	0.000	-1,399.294	-2.082	0.000	2.082	-0.674
35.00	-18.292	-34.779	0.000	0.000	0.000	-1,306.732	-2.852	0.000	2.852	-0.794
40.00	-18.150	-33.174	0.000	0.000	0.000	-1,215.275	-3.749	0.000	3.749	-0.917
40.13	-18.057	-33.115	0.000	0.000	0.000	-1,212.916	-3.774	0.000	3.774	-0.920
45.00	-17.879	-30.644	0.000	0.000	0.000	-1,124.979	-4.777	0.000	4.777	-1.042
45.88	-17.772	-30.190	0.000	0.000	0.000	-1,109.246	-4.971	0.000	4.971	-1.065
50.00	-17.554	-29.001	0.000	0.000	0.000	-1,036.026	-5.936	0.000	5.936	-1.170
55.00	-17.305	-27.593	0.000	0.000	0.000	-948.259	-7.235	0.000	7.235	-1.306
60.00	-17.052	-26.219	0.000	0.000	0.000	-861.735	-8.675	0.000	8.675	-1.442
65.00	-16.796	-24.880	0.000	0.000	0.000	-776.474	-10.260	0.000	10.260	-1.579
70.00	-16.536	-23.575	0.000	0.000	0.000	-692.496	-11.987	0.000	11.987	-1.715
75.00	-16.280	-22.307	0.000	0.000	0.000	-609.816	-13.855	0.000	13.855	-1.849
79.67	-16.115	-21.165	0.000	0.000	0.000	-533.735	-15.728	0.000	15.728	-1.972
80.00	-16.045	-21.042	0.000	0.000	0.000	-528.471	-15.863	0.000	15.863	-1.981
83.00	-14.671	-18.342	0.000	0.000	0.000	-480.338	-17.133	0.000	17.133	-2.060
84.34	-14.605	-17.882	0.000	0.000	0.000	-460.680	-17.717	0.000	17.717	-2.095
85.00	-14.491	-17.736	0.000	0.000	0.000	-451.040	-18.008	0.000	18.008	-2.112
90.00	-12.012	-14.350	0.000	0.000	0.000	-378.589	-20.306	0.000	20.306	-2.270
95.00	-11.751	-13.507	0.000	0.000	0.000	-318.532	-22.765	0.000	22.765	-2.420
100.0	-10.297	-10.919	0.000	0.000	0.000	-259.779	-25.376	0.000	25.376	-2.561
105.0	-10.074	-10.228	0.000	0.000	0.000	-208.296	-28.130	0.000	28.130	-2.692
110.0	-9.854	-9.565	0.000	0.000	0.000	-157.925	-31.014	0.000	31.014	-2.810
115.0	-9.724	-8.932	0.000	0.000	0.000	-108.655	-34.013	0.000	34.013	-2.909
115.2	-9.667	-8.904	0.000	0.000	0.000	-106.516	-34.147	0.000	34.147	-2.914
118.0	-5.964	-5.596	0.000	0.000	0.000	-75.615	-35.857	0.000	35.857	-2.959
118.8	-5.920	-5.474	0.000	0.000	0.000	-70.824	-36.356	0.000	36.356	-2.970
120.0	-5.801	-5.385	0.000	0.000	0.000	-63.740	-37.102	0.000	37.102	-2.986
125.0	-5.600	-5.023	0.000	0.000	0.000	-34.734	-40.275	0.000	40.275	-3.065
130.0	-0.685	-0.777	0.000	0.000	0.000	-6.733	-43.509	0.000	43.509	-3.104
135.0	-0.533	-0.525	0.000	0.000	0.000	-3.309	-46.765	0.000	46.765	-3.115
138.0	-0.038	-0.094	0.000	0.000	0.000	-0.075	-48.723	0.000	48.723	-3.119
140.0	-0.033	0.000	0.000	0.000	0.000	0.000	-50.029	0.000	50.029	-3.119

Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
0.00	0.59	0.50	0.00	0.00	0.00	23.80	24.40	52.0	0.0	0.470
5.00	0.58	0.51	0.00	0.00	0.00	23.77	24.37	52.0	0.0	0.469
10.00	0.57	0.51	0.00	0.00	0.00	23.72	24.31	52.0	0.0	0.468
15.00	0.56	0.52	0.00	0.00	0.00	23.64	24.22	52.0	0.0	0.466
20.00	0.55	0.53	0.00	0.00	0.00	23.54	24.11	52.0	0.0	0.464
25.00	0.54	0.54	0.00	0.00	0.00	23.41	23.97	52.0	0.0	0.461
30.00	0.53	0.55	0.00	0.00	0.00	23.23	23.79	52.0	0.0	0.458
35.00	0.52	0.56	0.00	0.00	0.00	23.02	23.56	52.0	0.0	0.453
40.00	0.52	0.57	0.00	0.00	0.00	22.75	23.29	52.0	0.0	0.448
40.13	0.52	0.57	0.00	0.00	0.00	22.74	23.28	52.0	0.0	0.448
45.00	0.49	0.58	0.00	0.00	0.00	22.43	22.94	52.0	0.0	0.441
45.88	0.54	0.64	0.00	0.00	0.00	24.33	24.90	52.0	0.0	0.479
50.00	0.54	0.65	0.00	0.00	0.00	23.94	24.50	52.0	0.0	0.471
55.00	0.53	0.67	0.00	0.00	0.00	23.39	23.95	52.0	0.0	0.461
60.00	0.52	0.68	0.00	0.00	0.00	22.74	23.29	52.0	0.0	0.448
65.00	0.51	0.69	0.00	0.00	0.00	21.97	22.52	52.0	0.0	0.433
70.00	0.50	0.71	0.00	0.00	0.00	21.07	21.60	52.0	0.0	0.416
75.00	0.49	0.72	0.00	0.00	0.00	20.00	20.53	52.0	0.0	0.395
79.67	0.48	0.74	0.00	0.00	0.00	18.83	19.35	52.0	0.0	0.372
80.00	0.48	0.74	0.00	0.00	0.00	18.74	19.26	52.0	0.0	0.371
83.00	0.43	0.69	0.00	0.00	0.00	17.88	18.35	52.0	0.0	0.353
84.34	0.58	0.95	0.00	0.00	0.00	23.27	23.91	52.0	0.0	0.460
85.00	0.58	0.95	0.00	0.00	0.00	23.03	23.66	52.0	0.0	0.455
90.00	0.49	0.82	0.00	0.00	0.00	20.99	21.52	52.0	0.0	0.414
95.00	0.48	0.84	0.00	0.00	0.00	19.24	19.77	52.0	0.0	0.380
100.00	0.40	0.77	0.00	0.00	0.00	17.17	17.62	52.0	0.0	0.339
105.00	0.40	0.79	0.00	0.00	0.00	15.12	15.58	52.0	0.0	0.300
110.00	0.39	0.81	0.00	0.00	0.00	12.65	13.12	52.0	0.0	0.252
115.00	0.38	0.84	0.00	0.00	0.00	9.66	10.15	52.0	0.0	0.195
115.22	0.38	0.84	0.00	0.00	0.00	9.51	10.00	52.0	0.0	0.192
118.00	0.25	0.53	0.00	0.00	0.00	7.17	7.48	52.0	0.0	0.144
118.80	0.40	0.87	0.00	0.00	0.00	10.85	11.35	52.0	0.0	0.218
120.00	0.40	0.86	0.00	0.00	0.00	10.02	10.52	52.0	0.0	0.202
125.00	0.39	0.88	0.00	0.00	0.00	6.11	6.68	52.0	0.0	0.129
130.00	0.06	0.11	0.00	0.00	0.00	1.34	1.41	52.0	0.0	0.027
135.00	0.05	0.09	0.00	0.00	0.00	0.75	0.81	52.0	0.0	0.016
138.00	0.01	0.01	0.00	0.00	0.00	0.02	0.03	52.0	0.0	0.001
140.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	52.0	0.0	0.000

Site Number: 411256	**Code:** TIA/EIA-222-F		
Site Name: Canton CT, CT	**Engineering Number:** 65615222	**3/16/2016 4:56:16 PM**	
Customer: T- Mobile			

Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		73.8	0.0					0.0	0.0	73.8	0.0	0.0	0.0
5.00		145.7	1,346.7					10.8	302.8	156.6	1,649.4	0.0	0.0
10.00		142.1	1,313.1					10.8	302.8	152.9	1,615.8	0.0	0.0
15.00		138.5	1,279.4					10.8	302.8	149.3	1,582.2	0.0	0.0
20.00		134.8	1,245.8					10.8	302.8	145.6	1,548.6	0.0	0.0
25.00		131.2	1,212.2					10.8	302.8	142.0	1,514.9	0.0	0.0
30.00		127.5	1,178.6					10.8	302.8	138.3	1,481.3	0.0	0.0
35.00		126.1	1,144.9					10.8	302.8	136.9	1,447.7	0.0	0.0
40.00		64.9	1,111.3					11.2	302.8	76.2	1,414.0	0.0	0.0
40.13	Bot - Section 2	65.0	28.4					0.3	7.9	65.3	36.3	0.0	0.0
45.00		74.8	1,988.9					11.3	294.9	86.1	2,283.8	0.0	0.0
45.88	Top - Section 1	65.1	353.0					2.1	53.3	67.2	406.3	0.0	0.0
50.00		118.5	768.9					9.9	249.5	128.4	1,018.3	0.0	0.0
55.00		129.3	906.3					12.4	302.8	141.7	1,209.0	0.0	0.0
60.00		128.3	876.8					12.7	302.8	141.0	1,179.6	0.0	0.0
65.00		126.8	847.4					13.0	302.8	139.8	1,150.2	0.0	0.0
70.00		125.0	818.0					13.3	302.8	138.3	1,120.7	0.0	0.0
75.00		119.0	788.6					13.5	302.8	132.5	1,091.3	0.0	0.0
79.67	Bot - Section 3	61.0	710.4					12.9	283.0	73.9	993.4	0.0	0.0
80.00		40.7	84.3					0.9	19.8	41.6	104.1	0.0	0.0
83.00	Appertunance(s)	52.8	764.2	512.8	0.0	0.0	1,566.0	8.4	181.6	574.1	2,511.9	0.0	0.0
84.34	Top - Section 2	24.2	335.5					3.8	81.1	27.9	416.6	0.0	0.0
85.00		67.4	69.3					1.9	40.0	69.2	109.2	0.0	0.0
90.00	Appertunance(s)	117.3	512.9	952.2	0.0	0.0	2,061.6	14.3	302.8	1,083.8	2,877.2	0.0	0.0
95.00		114.2	491.9					14.5	196.4	128.8	688.3	0.0	0.0
100.00	Appertunance(s)	110.9	470.8	766.5	0.0	0.0	1,675.4	14.7	196.4	892.2	2,342.6	0.0	0.0
105.00		107.4	449.8					0.0	147.2	107.4	597.0	0.0	0.0
110.00		103.7	428.8					0.0	147.2	103.7	576.0	0.0	0.0
115.00		53.1	407.8					0.0	147.2	53.1	555.0	0.0	0.0
115.22	Bot - Section 4	30.0	17.5					0.0	6.5	30.0	23.9	0.0	0.0
118.00	Appertunance(s)	35.8	350.2	1,604.3	0.0	1,888.5	2,244.0	0.0	81.8	1,640.0	2,676.1	0.0	0.0
118.80	Top - Section 3	19.6	99.3					0.0	11.8	19.6	111.1	0.0	0.0
120.00	Appertunance(s)	59.4	55.6	2,294.5	0.0	0.0	2,256.0	0.0	17.6	2,353.8	2,329.2	0.0	0.0
125.00		93.1	224.5					0.0	73.4	93.1	297.9	0.0	0.0
130.00	Appertunance(s)	88.8	211.9	2,093.0	0.0	0.0	3,260.8	0.0	73.4	2,181.8	3,546.1	0.0	0.0
135.00		68.2	199.3					0.0	0.0	68.2	199.3	0.0	0.0
138.00	Appertunance(s)	41.0	113.5	120.1	0.0	635.2	130.0	0.0	0.0	161.1	243.5	0.0	0.0
140.00		16.1	73.2					0.0	0.0	16.1	73.2	0.0	0.0
								Totals:		11,931.3	43,021.0	0.00	0.00

Site Number:	**411256**	**Code: TIA/EIA-222-F**	
Site Name:	**Canton CT, CT**	**Engineering Number: 65615222**	**3/16/2016 4:56:17 PM**
Customer:	**T- Mobile**		

Load Case: **Twist/Sway** **50.00 mph Wind with No Ice** **22 Iterations**

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-11.882	-43.014	0.000	0.000	0.000	-1,228.270	0.000	0.000	0.000	0.000
5.00	-11.773	-41.351	0.000	0.000	0.000	-1,168.861	-0.035	0.000	0.035	-0.066
10.00	-11.665	-39.721	0.000	0.000	0.000	-1,109.997	-0.141	0.000	0.141	-0.134
15.00	-11.557	-38.126	0.000	0.000	0.000	-1,051.675	-0.318	0.000	0.318	-0.203
20.00	-11.451	-36.563	0.000	0.000	0.000	-993.889	-0.569	0.000	0.569	-0.274
25.00	-11.346	-35.035	0.000	0.000	0.000	-936.635	-0.895	0.000	0.895	-0.347
30.00	-11.242	-33.540	0.000	0.000	0.000	-879.906	-1.298	0.000	1.298	-0.421
35.00	-11.136	-32.078	0.000	0.000	0.000	-823.699	-1.779	0.000	1.779	-0.497
40.00	-11.068	-30.657	0.000	0.000	0.000	-768.020	-2.341	0.000	2.341	-0.574
40.13	-11.023	-30.614	0.000	0.000	0.000	-766.581	-2.357	0.000	2.357	-0.576
45.00	-10.935	-28.323	0.000	0.000	0.000	-712.898	-2.985	0.000	2.985	-0.653
45.88	-10.883	-27.909	0.000	0.000	0.000	-703.275	-3.107	0.000	3.107	-0.668
50.00	-10.779	-26.878	0.000	0.000	0.000	-658.437	-3.712	0.000	3.712	-0.734
55.00	-10.659	-25.655	0.000	0.000	0.000	-604.545	-4.528	0.000	4.528	-0.821
60.00	-10.538	-24.462	0.000	0.000	0.000	-551.250	-5.435	0.000	5.435	-0.908
65.00	-10.415	-23.298	0.000	0.000	0.000	-498.561	-6.433	0.000	6.433	-0.996
70.00	-10.290	-22.165	0.000	0.000	0.000	-446.489	-7.524	0.000	7.524	-1.083
75.00	-10.167	-21.061	0.000	0.000	0.000	-395.041	-8.705	0.000	8.705	-1.170
79.67	-10.086	-20.062	0.000	0.000	0.000	-347.530	-9.891	0.000	9.891	-1.250
80.00	-10.053	-19.954	0.000	0.000	0.000	-344.235	-9.977	0.000	9.977	-1.256
83.00	-9.434	-17.450	0.000	0.000	0.000	-314.078	-10.783	0.000	10.783	-1.307
84.34	-9.401	-17.031	0.000	0.000	0.000	-301.437	-11.153	0.000	11.153	-1.330
85.00	-9.347	-16.914	0.000	0.000	0.000	-295.232	-11.338	0.000	11.338	-1.341
90.00	-8.218	-14.049	0.000	0.000	0.000	-248.498	-12.799	0.000	12.799	-1.445
95.00	-8.094	-13.351	0.000	0.000	0.000	-207.408	-14.366	0.000	14.366	-1.543
100.0	-7.154	-11.023	0.000	0.000	0.000	-166.941	-16.032	0.000	16.032	-1.634
105.0	-7.043	-10.420	0.000	0.000	0.000	-131.174	-17.790	0.000	17.790	-1.718
110.0	-6.933	-9.840	0.000	0.000	0.000	-95.959	-19.630	0.000	19.630	-1.791
115.0	-6.867	-9.283	0.000	0.000	0.000	-61.294	-21.539	0.000	21.539	-1.849
115.2	-6.839	-9.259	0.000	0.000	0.000	-59.783	-21.624	0.000	21.624	-1.852
118.0	-5.114	-6.636	0.000	0.000	0.000	-38.884	-22.710	0.000	22.710	-1.876
118.8	-5.092	-6.525	0.000	0.000	0.000	-34.775	-23.027	0.000	23.027	-1.882
120.0	-2.664	-4.274	0.000	0.000	0.000	-28.683	-23.499	0.000	23.499	-1.889
125.0	-2.563	-3.978	0.000	0.000	0.000	-15.363	-25.499	0.000	25.499	-1.925
130.0	-0.263	-0.507	0.000	0.000	0.000	-2.549	-27.525	0.000	27.525	-1.941
135.0	-0.188	-0.310	0.000	0.000	0.000	-1.236	-29.561	0.000	29.561	-1.946
138.0	-0.019	-0.073	0.000	0.000	0.000	-0.037	-30.784	0.000	30.784	-1.947
140.0	-0.016	0.000	0.000	0.000	0.000	0.000	-31.599	0.000	31.599	-1.947

Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.54	0.30	0.00	0.00	0.00	14.78	15.33	52.0	0.0	0.295
5.00	0.53	0.30	0.00	0.00	0.00	14.79	15.33	52.0	0.0	0.295
10.00	0.52	0.31	0.00	0.00	0.00	14.79	15.32	52.0	0.0	0.295
15.00	0.51	0.31	0.00	0.00	0.00	14.77	15.29	52.0	0.0	0.294
20.00	0.51	0.32	0.00	0.00	0.00	14.74	15.25	52.0	0.0	0.293
25.00	0.50	0.33	0.00	0.00	0.00	14.68	15.19	52.0	0.0	0.292
30.00	0.49	0.33	0.00	0.00	0.00	14.61	15.11	52.0	0.0	0.291
35.00	0.48	0.34	0.00	0.00	0.00	14.51	15.00	52.0	0.0	0.289
40.00	0.48	0.35	0.00	0.00	0.00	14.38	14.87	52.0	0.0	0.286
40.13	0.48	0.35	0.00	0.00	0.00	14.37	14.86	52.0	0.0	0.286
45.00	0.45	0.35	0.00	0.00	0.00	14.21	14.68	52.0	0.0	0.282
45.88	0.50	0.39	0.00	0.00	0.00	15.42	15.94	52.0	0.0	0.307
50.00	0.50	0.40	0.00	0.00	0.00	15.22	15.73	52.0	0.0	0.303
55.00	0.49	0.41	0.00	0.00	0.00	14.91	15.42	52.0	0.0	0.297
60.00	0.48	0.42	0.00	0.00	0.00	14.55	15.05	52.0	0.0	0.289
65.00	0.48	0.43	0.00	0.00	0.00	14.11	14.60	52.0	0.0	0.281
70.00	0.47	0.44	0.00	0.00	0.00	13.58	14.07	52.0	0.0	0.271
75.00	0.46	0.45	0.00	0.00	0.00	12.96	13.44	52.0	0.0	0.259
79.67	0.46	0.46	0.00	0.00	0.00	12.26	12.74	52.0	0.0	0.245
80.00	0.46	0.46	0.00	0.00	0.00	12.21	12.69	52.0	0.0	0.244
83.00	0.41	0.45	0.00	0.00	0.00	11.69	12.12	52.0	0.0	0.233
84.34	0.55	0.61	0.00	0.00	0.00	15.23	15.81	52.0	0.0	0.304
85.00	0.55	0.61	0.00	0.00	0.00	15.07	15.66	52.0	0.0	0.301
90.00	0.48	0.56	0.00	0.00	0.00	13.78	14.28	52.0	0.0	0.275
95.00	0.47	0.58	0.00	0.00	0.00	12.53	13.04	52.0	0.0	0.251
100.00	0.41	0.53	0.00	0.00	0.00	11.03	11.48	52.0	0.0	0.221
105.00	0.40	0.55	0.00	0.00	0.00	9.52	9.97	52.0	0.0	0.192
110.00	0.40	0.57	0.00	0.00	0.00	7.69	8.15	52.0	0.0	0.157
115.00	0.40	0.59	0.00	0.00	0.00	5.45	5.94	52.0	0.0	0.114
115.22	0.40	0.59	0.00	0.00	0.00	5.34	5.83	52.0	0.0	0.112
118.00	0.29	0.46	0.00	0.00	0.00	3.69	4.06	52.0	0.0	0.078
118.80	0.47	0.75	0.00	0.00	0.00	5.33	5.94	52.0	0.0	0.114
120.00	0.32	0.40	0.00	0.00	0.00	4.51	4.87	52.0	0.0	0.094
125.00	0.31	0.40	0.00	0.00	0.00	2.70	3.09	52.0	0.0	0.060
130.00	0.04	0.04	0.00	0.00	0.00	0.51	0.55	52.0	0.0	0.011
135.00	0.03	0.03	0.00	0.00	0.00	0.28	0.31	52.0	0.0	0.006
138.00	0.01	0.00	0.00	0.00	0.00	0.01	0.02	52.0	0.0	0.000
140.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	52.0	0.0	0.000

Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	30.4	0.00	42.98	0.00	0.00	3141.65	39.96	52.0	45.88	0.769
Ice	19.9	0.00	47.19	0.00	0.00	1977.92	24.90	52.0	45.88	0.479
Twist/Sway	11.9	0.00	43.01	0.00	0.00	1228.27	15.94	52.0	45.88	0.307

Base Summary

Reactions

Original Design			Analysis			
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment Design %
3,921.80	41.90	38.70	3,141.65	47.19	30.42	80.11

Base Plate

Yield (ksi)	Thick (in)	Width (in)	Style	Poly Sides	Clip Len (in)	Effective Len (in)	Moment (kip-in)	Allow Stress (ksi)	Applied Stress (ksi)	Stress Ratio
60.0	2.250	66.000	Round	0	0.00	8.093	391.76	60.00	57.37	0.96

Anchor Bolts

								Start	Compression			Tension		
Bolt Circle	Num Bolts	Bolt Type	Bolt Dia (in)	Yield (ksi)	Ultimate (ksi)	Arrange	Cluster Dist (in)	Angle (deg)	Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
60.00	20	2.25" 18J	2.25	75.00	100.00	Radial	0.00	0.0	128.03	195.00	0.66	123.31	195.00	0.63

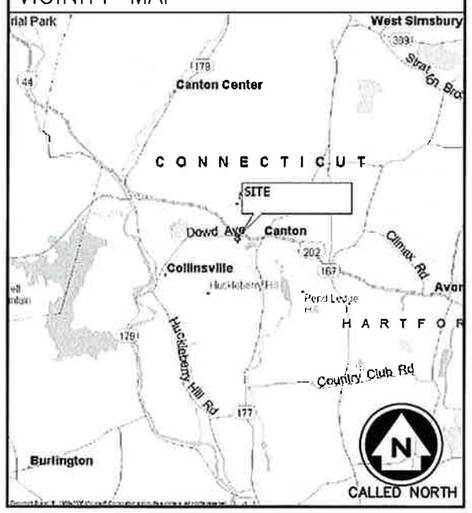
T-MOBILE NORTHEAST LLC

CT11275C
SIMSBURY-1/RT 10

14 CANTON SPRINGS RD.
CANTON, CT 06019

(704G CONFIGURATION)

VICINITY MAP



DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL:
"CALL BEFORE YOU DIG"
WWW.CBYD.COM
CALL 811, OR 1-800-922-4455
CALL THREE WORKING DAYS PRIOR TO DIGGING
SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTOR(S) AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC	– RED	SEWER	– GREEN
GAS/OIL	– YELLOW	SURVEY	– PINK
TEL/CATV	– ORANGE	PROPOSED EXCAVATION	– WHITE
WATER	– BLUE	RECLAIMED WATER	– PURPLE

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES. RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T–MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T–MOBILE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE T–MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

SITE NUMBER:	CT11275C	APPLICANT:	T–MOBILE NORTHEAST LLC 35 GRIFFIN RD SOUTH BLOOMFIELD, CT 06002
SITE NAME:	SIMSBURY–1/RT 10		
SITE ADDRESS:	14 CANTON SPRINGS RD. CANTON, CT 06019	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475
PROPERTY OWNER:	AMERICAN TOWER CORPORATION		
PARCEL:	1640014	CONTACT:	BRUCE HOFFMASTER 484–942–6339
CURRENT ZONING:	AR–1		
JURISDICTION:	TOWN OF CANTON	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205
ATC SITE NUMBER:	411256		
LAT./LONG.:	N 41.822779° / W –72.895191°		
CONSTRUCTION TYPE:	2B	CONTACT:	ALEX WELLER 518–690–0790
USE GROUP:	N/A		

PROJECT DESCRIPTION

- ☒ EXISTING MONOPOLE
- ☐ EXISTING LATTICE TOWER
- ☐ EXISTING TRANSMISSION TOWER
- ☐ EXISTING WATER TANK
- ☐ EXISTING BUILDING
- ☐ EXISTING FLAGPOLE
- ☐ EXISTING FORT WORTH
- ☒ EXISTING CABINET(S)
- ☐ EXISTING RBS 2106
- ☒ EXISTING RBS 6201
- ☒ PROPOSED BBU
- ☐ SITE SUPPORT KIT
- ☐ SITE SUPPORT CABINET
- ☒ GPS
- ☒ OUTDOOR
- ☐ INDOOR
- ☒ EXISTING CONCRETE PAD
- ☐ EXISTING STEEL PLATFORM
- ☒ EXISTING PPC
- ☐ PANELBOARD

T–MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. ADDITION OF PROPOSED LTE 700 PANEL ANTENNAS, TMA AND PROPOSED BBU. REUSE EXISTING COAX CABLES, GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

2005 CONNECTICUT BUILDING CODE WITH 2013 AMENDMENT
2011 NATIONAL ELECTRIC CODE
2009 INTERNATIONAL RESIDENTIAL CODE

SHEET INDEX

T–MOBILE NORTHEAST LLC
35 GRIFFIN RD SOUTH
BLOOMFIELD, CT 06002

INFINIGY
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/18/18	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11275C

SITE NAME:
SIMSBURY-1/RT 10

14 CANTON SPRINGS ROAD
CANTON, CT 06019

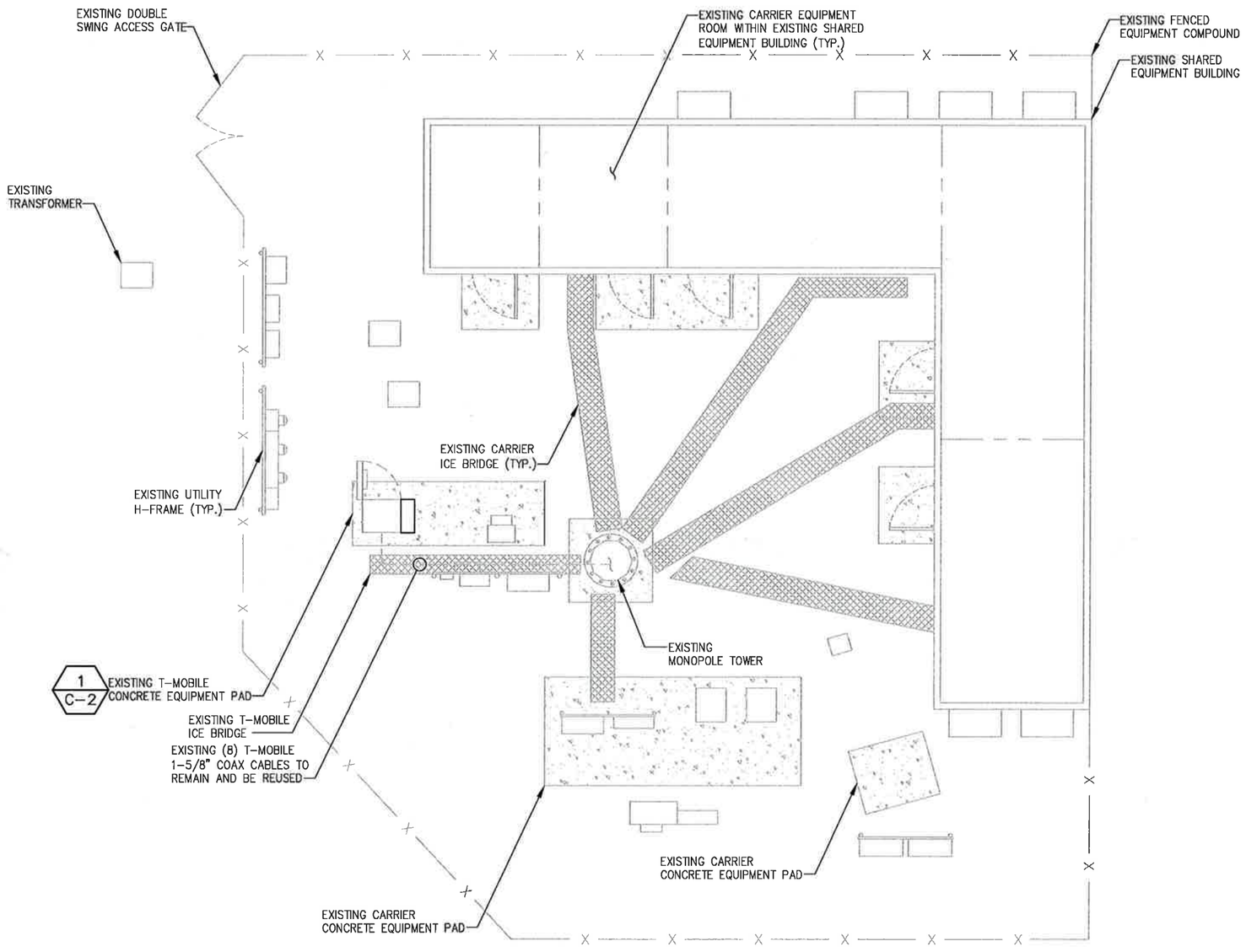
SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

SHEET 1 OF **8** SHEETS



CALLED NORTH

1 / -- COMPOUND PLAN
SCALE: AS NOTED

GENERAL SITE NOTES:

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY. BOUNDARY INFORMATION IF SHOWN WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SITE LEGEND

————	SITE PROPERTY LINE
————	STREET OR ROAD
— x — x —	CHAIN LINK FENCE
—o—o—	OPAQUE WOODEN FENCE
	TREES/SHRUBS
	TREE LINE
⊠	UTILITY POLE
(E)	EXISTING
(N)	NEW
(P)	PROPOSED
(F)	FUTURE

GRAPHIC SCALE

10' 5' 0 5' 10'

SCALE (11x17): 1" = 10'-0"
SCALE (22x34): 1" = 5'-0"

T-Mobile
T-MOBILE NORTHEAST LLC
35 GRIFFIN RD SOUTH
BLOOMFIELD, CT 06002

INFINIGY
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (516) 690-0790
Fax # (516) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
3/21/16	FOR REVIEW	A

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

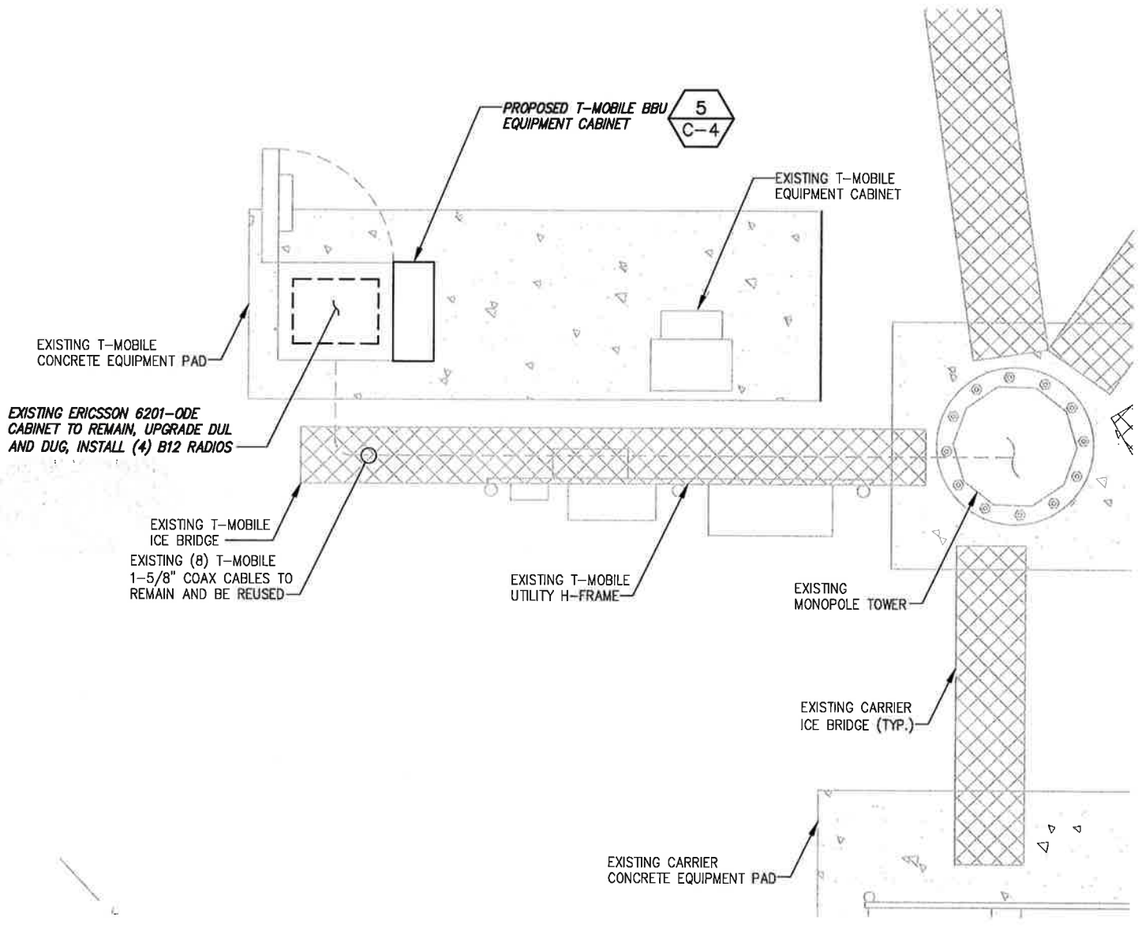
SITE NUMBER:
CT11275C

SITE NAME:
SIMSBURY-1/RT 10

14 CANTON SPRINGS ROAD
CANTON, CT 06019

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1



CALLED NORTH

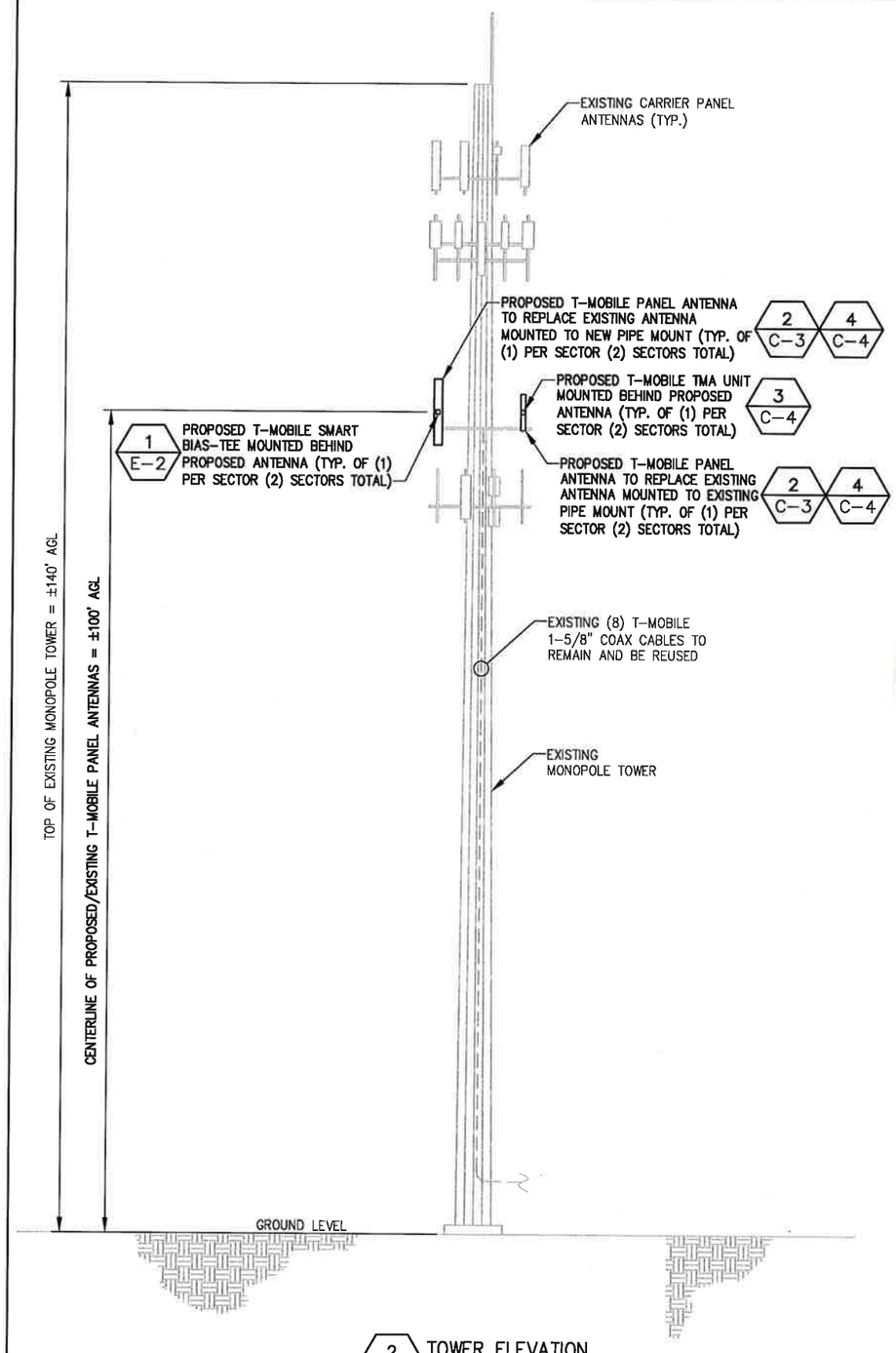
1 / -- COMPOUND PLAN
SCALE: AS NOTED

GRAPHIC SCALE

4' 2' 0 2' 4'

SCALE (11x17): 1" = 4'-0"
SCALE (22x34): 1" = 2'-0"

NOTE:
INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER OR MOUNT LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS.



2 / -- TOWER ELEVATION
NOT TO SCALE

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ZONING			
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14 CANTON SPRINGS ROAD
CANTON, CT 06019

SHEET TITLE

COMPOUND PLAN & ELEVATION

SHEET NUMBER

C-2

SHEET 3 OF **8** SHEETS

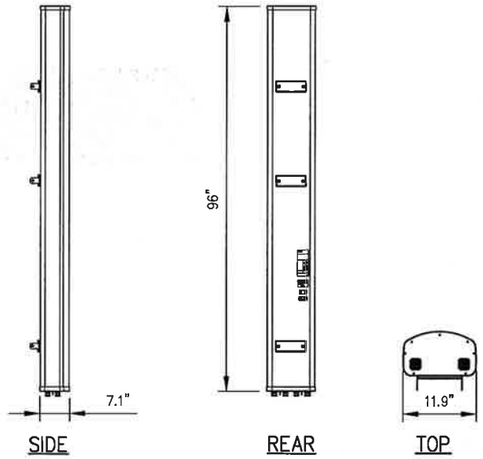
RF SYSTEM SCHEDULE (704G CONFIGURATION)

SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	QTY (REMOVED)	QTY (NEW)	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	RRU MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING
A	GSM/L19	TBD	B2P	APXV18-209014-C	RFS	1	1	90°	0°	2°	100'-0"	(PROPOSED) KRY 112 489/2	ERICSSON	-	-	EXISTING	1-5/8"	COAX	EXISTING	N/A	-	-	COAX	-	-
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	1	1	90°	0°	2°	100'-0"	-	-	-	-	EXISTING	1-5/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	-
C	GSM/L19	TBD	B2P	APXV18-209014-C	RFS	1	1	310°	0°	2°	100'-0"	(PROPOSED) KRY 112 489/2	ERICSSON	-	-	EXISTING	1-5/8"	COAX	EXISTING	N/A	-	-	COAX	-	-
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	1	1	310°	0°	2°	100'-0"	-	-	-	-	EXISTING	1-5/8"	COAX	TBD	N/A	LTE 700 COAX	-	COAX	LTE 700 COAX	-

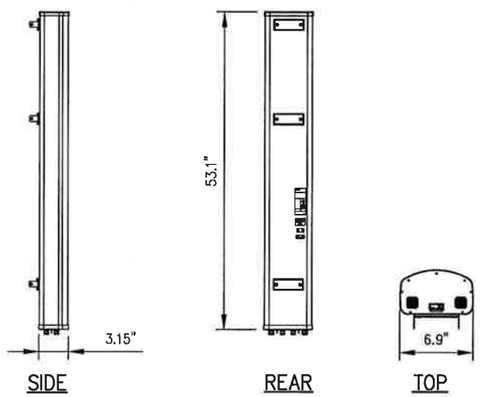
KEY

EXISTING	R - RED - GSM
PROPOSED	G - GREEN - UMTS 1900
FIBER CONNECTION	B - BLUE - UMTS AWS
	Y - YELLOW - LTE
	O - ORANGE - FIBER CABLE

1 RF SCHEDULE
-- NOT TO SCALE

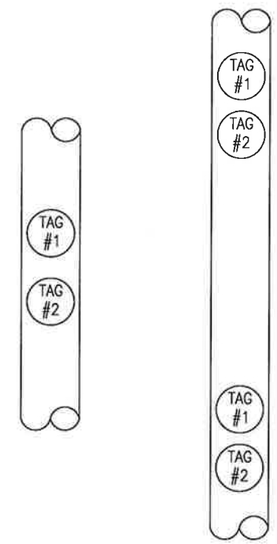


COMMSCOPE MODEL NO.:	LNX-6515DS-VTM
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	96"x11.9"x7.1" (2438 x 301 x 181 mm)
WEIGHT, W/ PRE-MOUNTED BRACKETS:	43.7 LBS
CONNECTOR:	7-16 DIN FEMALE



RFS MODEL NO.:	APXV18-209014-C
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	53"x6.8"x3.2" (1346 x 172 x 81 mm)
WEIGHT, W/ PRE-MOUNTED BRACKETS:	18.7 LBS (8.5 kg)
CONNECTOR:	(2) 7-16 DIN FEMALE

2 ANTENNA DETAIL
-- NOT TO SCALE



METALLIC TAG NOTES:

1. TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
2. CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
3. TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
4. STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMODATE ALL CONFIGURATIONS.

3 METALLIC TAG DETAIL
-- NOT TO SCALE

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PROJECT NO:	317-000
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SITE NUMBER:
CT11275C

SITE NAME:
SIMSBURY-1/RT 10

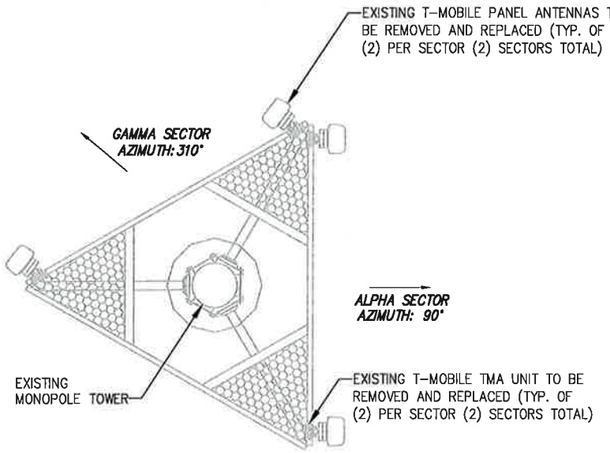
14 CANTON SPRINGS ROAD
CANTON, CT 06019

SHEET TITLE

ANTENNA DETAIL & RF SCHEDULE

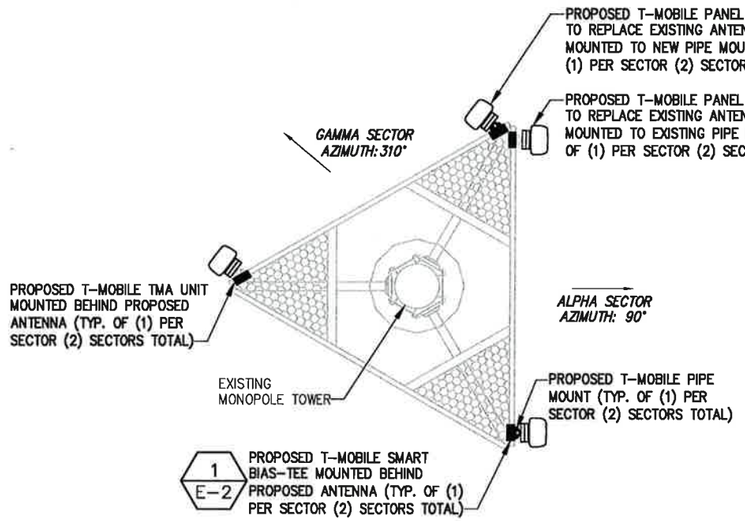
SHEET NUMBER

C-3



CALLED NORTH

1 / E-2 EXISTING ANTENNA ORIENTATION PLAN
NOT TO SCALE



CALLED NORTH

2 / -- PROPOSED ANTENNA ORIENTATION PLAN
NOT TO SCALE

STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
   - CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
   - STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
   - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
   - REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."
2. MATERIALS:
   - CONCRETE: fc' - 3000psi. (MIN. U.N.O.)
   - REINFORCING STEEL: ASTM A615, GRADE 60.
   - WIRE MESH: ASTM A185.
   - STRUCTURAL STEEL: ASTM A36.
   - ELECTRODES FOR WELDING: E 70xx.
   - GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
   - EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4"ø x 43/4" EMBEDMENT OR AN APPROVED EQUAL.

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SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

PROFESSIONAL SEAL

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SITE NUMBER:
CT11275C

SITE NAME:
SIMSBURY-1/RT 10

14 CANTON SPRINGS ROAD
CANTON, CT 06019

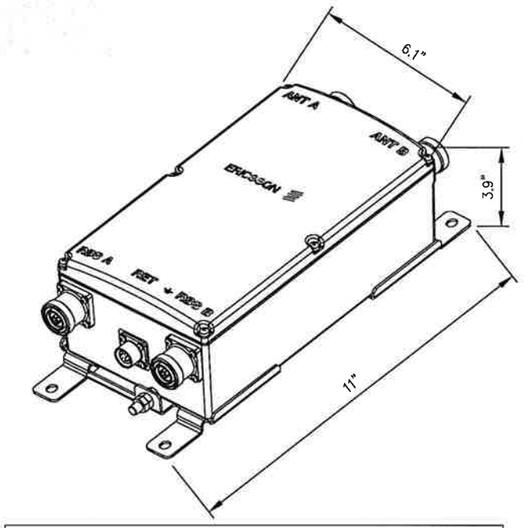
SHEET TITLE

EQUIPMENT SPECIFICATIONS

SHEET NUMBER

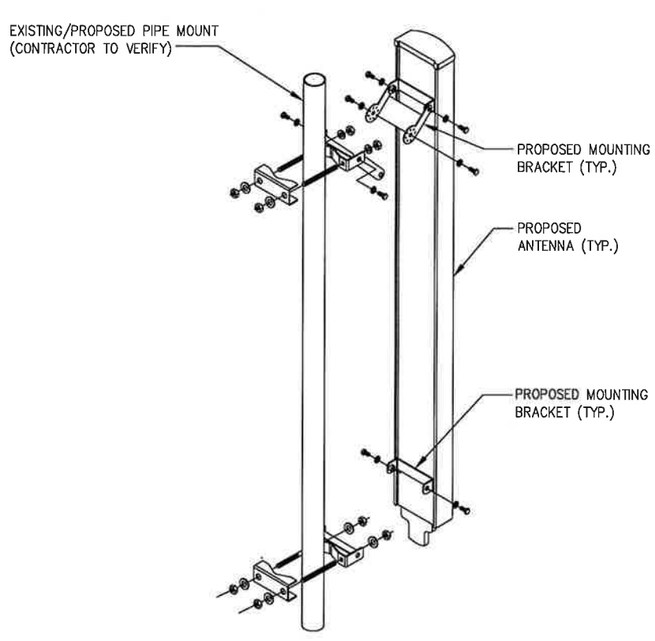
C-4

SHEET 5 OF 8 SHEETS



ERICSSON MODEL NO.:	KRY 112 489/2
COLOR:	GRAY
DIMENSIONS, HxWxD:	11"x6.1"x3.9"
WEIGHT:	15.4 LBS

3 / -- TMA DETAIL
NOT TO SCALE

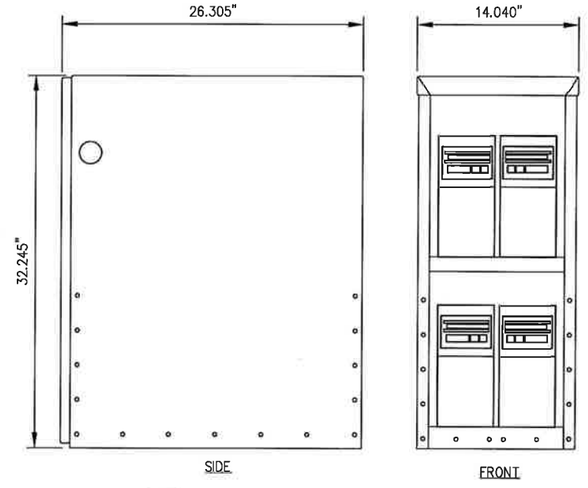


4 / -- MOUNTING DETAIL
NOT TO SCALE

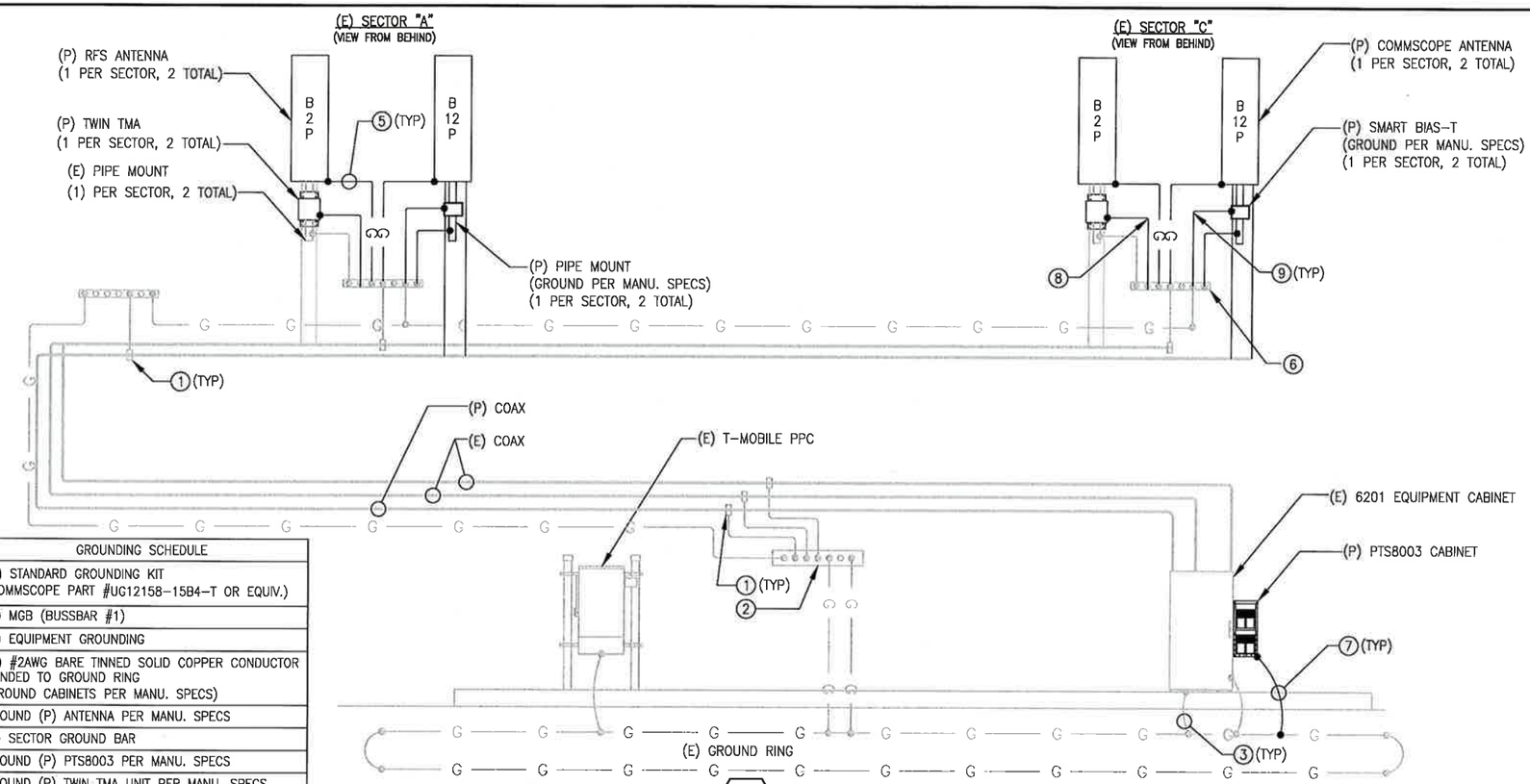
PTS - PTS8003

CABINET COLOR:	ALMOND POWDER COAT
DIMENSIONS (HxWxD IN):	32.245x14.040x26.305 IN
UNIT WEIGHT:	60LBS

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS

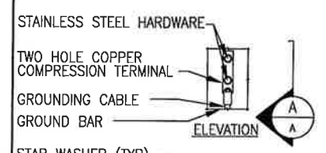


5 / -- BATTERY CABINET DETAIL
NOT TO SCALE

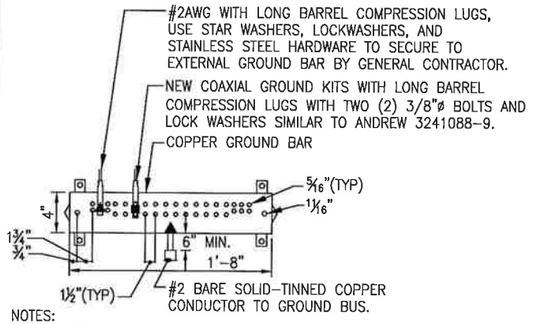


GROUNDING SCHEDULE	
①	(P) STANDARD GROUNDING KIT (COMMSCOPE PART #UG12158-15B4-T OR EQUIV.)
②	(E) MGB (BUSSBAR #1)
③	(E) EQUIPMENT GROUNDING
④	(P) #2AWG BARE TINNED SOLID COPPER CONDUCTOR BONDED TO GROUND RING (GROUND CABINETS PER MANU. SPECS)
⑤	GROUND (P) ANTENNA PER MANU. SPECS
⑥	(E) SECTOR GROUND BAR
⑦	GROUND (P) PTS8003 PER MANU. SPECS
⑧	GROUND (P) TWIN TMA UNIT PER MANU. SPECS
⑨	GROUND (P) SMART BIAS-T PER MANU. SPECS

1 GROUNDING DIAGRAM
SCALE: NOT TO SCALE



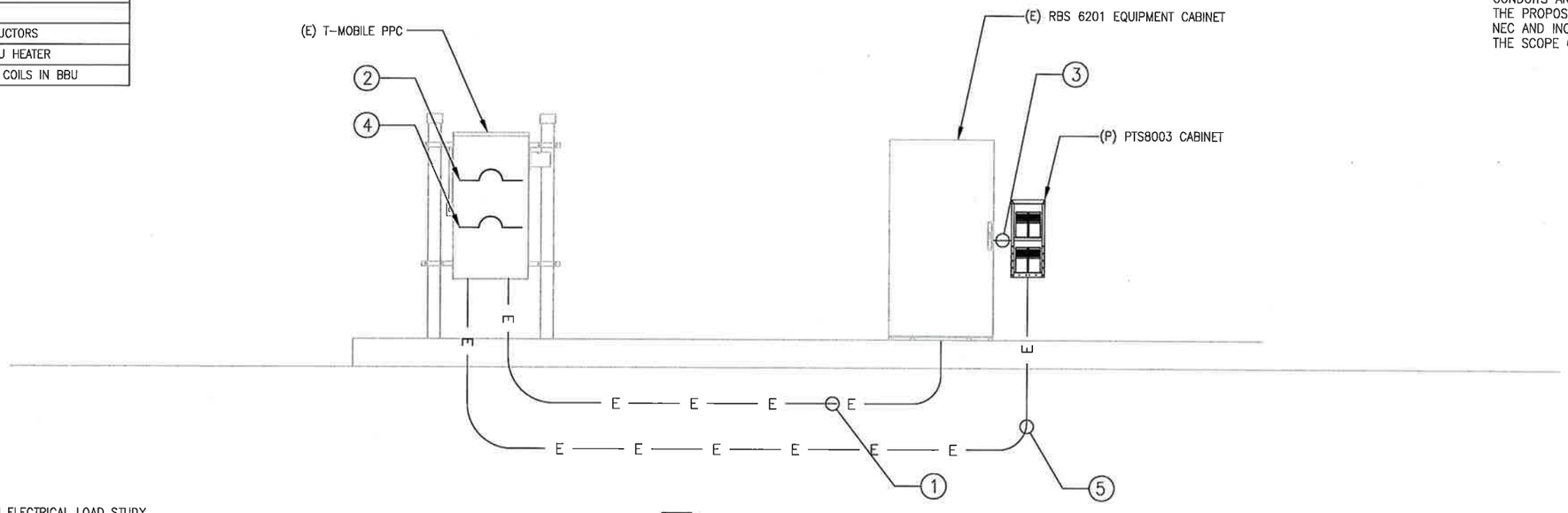
NOTES:
1. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.



NOTES:
1. ALL HARDWARE STAINLESS STEEL COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".

2 GROUND BAR CONNECTION DETAILS
SCALE: NOT TO SCALE

CONDUIT SCHEDULE	
①	(P) WIRE AND CONDUIT UPGRADE FOR POWER
②	(P) 20A BREAKER UPGRADE
③	(P) CONDUIT FOR -48V CONDUCTORS
④	(P) 20A/1P BREAKER FOR BBU HEATER
⑤	(P) (3) #12AWG FOR HEATING COILS IN BBU



3 POWER DIAGRAM
SCALE: NOT TO SCALE

NOTE:
INFINIGY HAS NOT CONDUCTED AN ELECTRICAL LOAD STUDY FOR THIS SITE. CONTRACTOR IS TO VERIFY EXISTING ELECTRICAL LOADING PRIOR TO CONSTRUCTION TO ENSURE EXISTING INCOMING SERVICE CAPACITY. ALL ELECTRICAL INSTALLATION IS TO COMPLY WITH NEC, ADOPTED VERSION.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY THAT THE EXISTING CONDUITS AND WIRE SIZES ARE ADEQUATE FOR THE PROPOSE LOADING IN ACCORDANCE WITH NEC AND INCLUDE ELECTRICAL UPGRADES IN THE SCOPE OF WORK AS REQUIRED.

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SITE NUMBER:
CT11275C

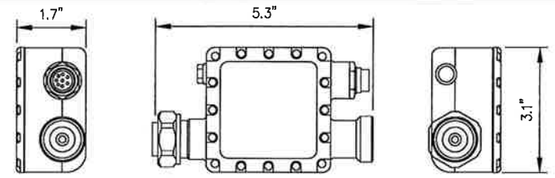
SITE NAME:
SIMSBURY-1/RT 10

14 CANTON SPRINGS ROAD
CANTON, CT 06019

SHEET TITLE
GROUNDING & POWER DIAGRAMS

SHEET NUMBER
E-1

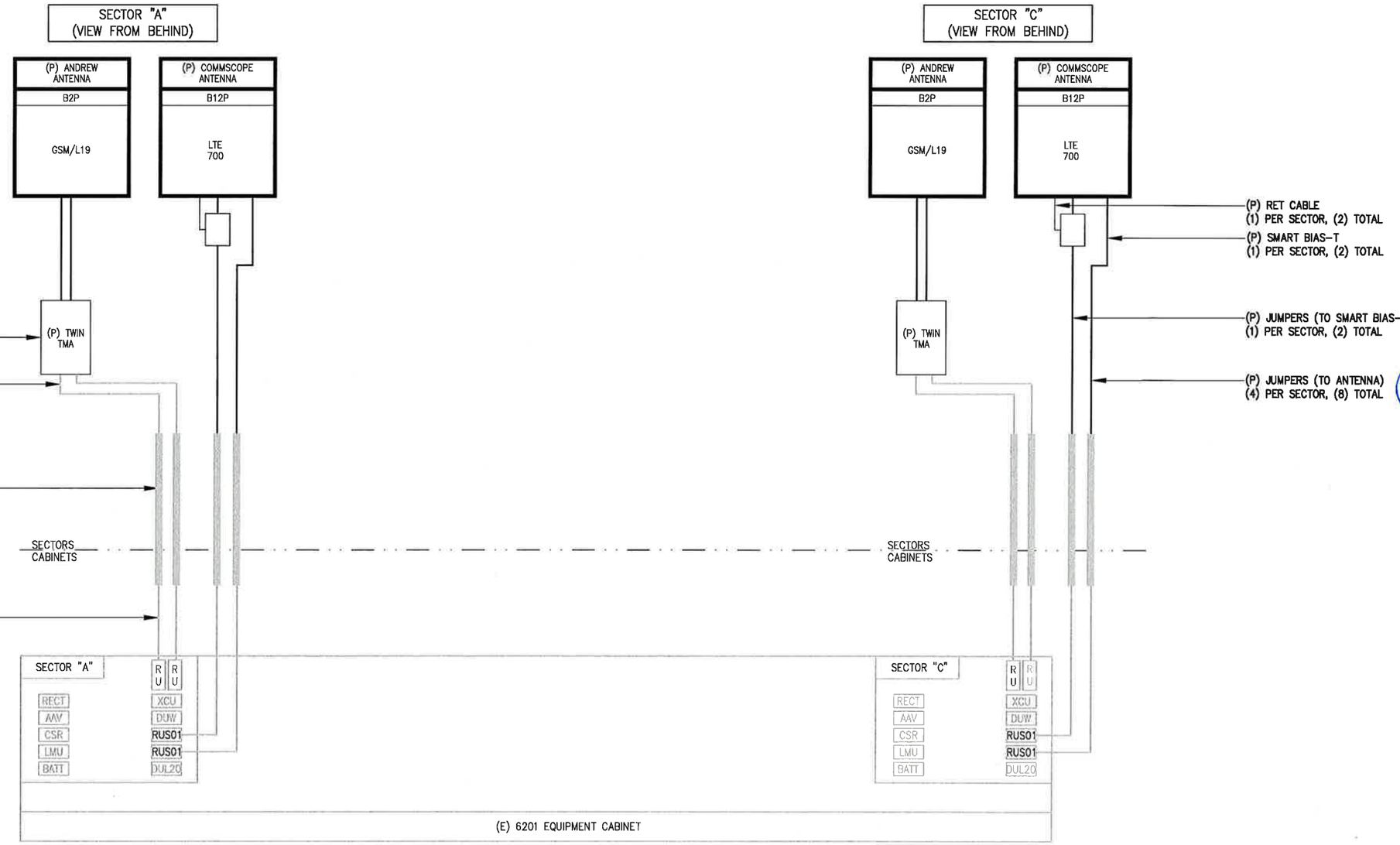
SHEET 6 OF 8 SHEETS



KATHREIN SCALA SMART BIAS T
WEIGHT: 3.3 LBS

1 SMART BIAS-TEE DETAIL
NOT TO SCALE

NOTES:
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
5. COIL EXCESS FIBER IN CABINET BASE.



2 704G CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

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14 CANTON SPRINGS ROAD
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SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2

ELECTRICAL NOTES:

WORK INCLUDED

1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
   B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
   C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
   D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
   E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
   F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

GENERAL REQUIREMENTS

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR OF SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
5. GENERAL
   A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
   B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
   A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
   B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
   C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
   D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
   E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.

GUARANTEE

1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

CLEANING

1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.

COORDINATION AND SUPERVISION

1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

SUBMITTALS

1. AS-BUILT DRAWINGS:
   A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
2. SERVICE MANUALS:
   A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
   B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

SPECIAL REQUIREMENTS

1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

GROUNDING

1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

RACEWAYS

1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
   A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
   B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
   C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
   D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
   E. ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
   F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
   G. MINIMUM SIZE CONDUIT TO BE ¾" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
   H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
   I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
   J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
   K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.
   L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
   M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
   N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
   O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
   P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8

8. VOLTAGE DROP IS NOT TO EXCEED 3%.
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.

DISCONNECT SWITCHES AND FUSES

1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:
   A. GENERAL ELECTRIC COMPANY
   B. SQUARE-D
5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
   A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
   B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

INTENT

1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH
3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

CONFLICTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

CONTRACTS AND WARRANTIES

1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

STORAGE

1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

CLEANUP

1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
2. EXTERIOR
   A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
3. INTERIOR
   A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

RELATED DOCUMENTS AND COORDINATION

1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

PRODUCTS AND SUBSTITUTIONS

1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

QUALITY ASSURANCE

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

ADMINISTRATION

1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

INSURANCE AND BONDS

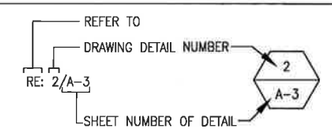
1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

ARCHITECTURAL SYMBOLS

ROOM ###

(X) →

DETAIL REFERENCE KEY



ABBREVIATIONS

ADJ	ADJUSTABLE
AGL	ABOVE GROUND LINE
&	AND
APPROX	APPROXIMATE
@	AT
BTS	BASE TRANSMISSION STATION
CAB	CABINET
CLG	CEILING
CONC	CONCRETE
CONT	CONTINUOUS
DIA OR ø	DIAMETER
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EGB	EQUIPMENT GROUND BAR
(E)	EXISTING
EXT	EXTERIOR
FF	FINISHED FLOOR
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
LG	LONG
MAX	MAXIMUM
MECH	MECHANICAL
MW	MICROWAVE DISH
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE
(P)	PROPOSED
PCS	PERSONAL COMMUNICATION SYSTEM
PPC	POWER PROTECTION CABINET
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SS	STAINLESS STEEL
STL	STEEL
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TYP	TYPICAL
VIF	VERIFY IN FIELD
UON	UNLESS OTHERWISE NOTED
WWF	WELDED WIRE FABRIC
W/	WITH

T-Mobile

T-MOBILE NORTHEAST LLC
35 GRIFFIN RD SOUTH
BLOOMFIELD, CT 06002

INFINIGY
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS		
DATE	DESCRIPTION	REVISION
3/21/18	FOR REVIEW	A

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11275C

SITE NAME:
SIMSBURY-1/RT 10

14 CANTON SPRINGS ROAD
CANTON, CT 06019

SHEET TITLE

GENERAL AND ELECTRICAL NOTES

SHEET NUMBER

N-1

SHEET 8 OF 8 SHEETS

EBI Consulting
environmental | engineering | due diligence

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

T-Mobile Existing Facility

Site ID: CT11275C

Simsbury- 1/RT 10
14 Canton Springs Road
Canton, CT 06019

March 28, 2016

EBI Project Number: 6216001750

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	10.42 %

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

March 28, 2016

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

Emissions Analysis for Site: **CT11275C – Simsbury- 1/RT 10**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **14 Canton Springs Road, Canton, 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 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ 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 ($\mu W/cm^2$). The general population exposure limit for the 700 MHz Band is approximately 467 $\mu W/cm^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu W/cm^2$. 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 **14 Canton Springs Road, Canton, 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 / UMTS 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) Since the radios are ground mounted there are additional cabling losses accounted for. For each RF path the following losses were calculated. 0.90 dB of additional cable loss for all 700 MHz Channels, 1.65 dB of additional cable loss for all 1900 MHz channels and 1.70 dB of additional cable loss for all 2100 MHz channels. This is based on manufacturers Specifications for 160 feet of 1-5/8” coax cable on each path.

6) 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.

7) 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.

8) The antennas used in this modeling are the **RFS APXV18-209014-C** 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 **RFS APXV18-209014-C** has a maximum gain of **14.4 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.

9) The antenna mounting height centerline of the proposed antennas is **100 feet** above ground level (AGL).

10) 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:	C
Antenna #:	**1**	Antenna #:	**1**
Make / Model:	RFS APXV18-209014	Make / Model:	RFS APXV18-209014
Gain:	14.4 dBd	Gain:	14.4 dBd
Height (AGL):	100	Height (AGL):	100
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	8	Channel Count	8
Total TX Power(W):	240	Total TX Power(W):	240
ERP (W):	4,481.95	ERP (W):	4,481.95
Antenna A1 MPE%	1.82	Antenna C1 MPE%	1.82
Antenna #:	**2**	Antenna #:	**2**
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	100	Height (AGL):	100
Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1
Total TX Power(W):	30	Total TX Power(W):	30
ERP (W):	703.27	ERP (W):	703.27
Antenna A2 MPE%	0.61	Antenna C2 MPE%	0.61

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile (Per Sector Max)	**2.44 %**
AT&T	1.00 %
Verizon Wireless	4.17 %
MetroPCS	1.15 %
Sprint	1.06 %
Canton FD	0.07 %
Nextel	0.53 %
Site Total MPE %:	**10.42 %**

T-Mobile Sector 1 Total:	2.44 %
T-Mobile Sector 3 Total:	2.44 %
Site Total:	10.42 %

T-Mobile _Max Value per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
T-Mobile 2100 MHz (AWS) LTE	**2**	**1117.25**	**100**	**9.09**	**2100**	**1000**	**0.91 %**
T-Mobile 1900 MHz (PCS) GSM/UMTS	**2**	**565.09**	**100**	**4.60**	**1900**	**1000**	**0.46 %**
T-Mobile 2100 MHz (AWS) UMTS	**2**	**558.63**	**100**	**4.55**	**2100**	**1000**	**0.45 %**
T-Mobile 700 MHz LTE	**1**	**703.27**	**100**	**2.86**	**700**	**467**	**0.61 %**
						Total:	**2.44 %**

EBI Consulting
environmental | engineering | due diligence

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:	2.44 %
Sector 3 :	2.44 %
T-Mobile Per Sector Maximum:	2.44 %
Site Total:	10.42 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **10.42%** 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

ZONING COMMISSION
Canton, Connecticut INC. 1806
4 Market Street, Collinsville, Connecticut 06022

February 26, 1999

Mr. Kenneth C. Baldwin
Robinson & Cole, LLP
One Commercial Plaza
280 Trumbull Street
Hartford, CT 06103-3597

1. RE: Special Exception and Site Plan Modification for Communications Tower and Facility, File #218, Apln 795; 14 Canton Springs Road; Canton Volunteer Fire Company, Inc., owner/applicant.

Dear Mr. Baldwin::

At a regular meeting held on Wednesday, February 17, 1999 at the Town Hall in Collinsville, the Canton Zoning Commission voted to approve the above-captioned request for a special exception and site plan modification in accordance with Canton Zoning Regulations §67.4.

This action of the Commission shall be effective 14 days after publication of the decision in the Hartford Courant on March 2, 1999.

RECORDING YOUR APPROVAL:

Enclosed you will find the Certificate of Action. In order to validate the certificate and make the action of the Commission effective, you must bring the original Certificate of Action to the Canton Town Clerk to be recorded on the Canton Land Records. Recording fees may be obtained by calling the Town Clerk's office at 693-7870.

Sincerely,

Eric M. Barz

Eric M. Barz, A.I.C.P.
Director of Planning and Community Development

Telephone (860) 693-7856

Fax (860) 693-7840

CERTIFICATE OF ACTION

CANTON ZONING COMMISSION

OWNER OF RECORD:	[	**ZONING FILE** *218*
Canton Volunteer Fire Company, Inc.	[	**APPLICATION** *795*
14 Canton Springs Road	[	**District** *B1*
Canton, CT 06019	[	**Map** *4-3* **Lot** *97*
APPLICANT: *Mr. Ralph Trumbull*	[	**Location** *14 Canton Springs Road*

APPROVAL OF SPECIAL EXCEPTION AND SITE PLAN MODIFICATION

As Secretary of the Canton Zoning Commission, I certify that at a regular meeting on February 17, 1999 the Zoning Commission approved your request for a special exception and site plan modification.

As approved, the Zoning Commission finds this application to be in conformance with Section 67.4 of the Canton Zoning Regulations.

Dated at Canton, Connecticut on February 26, 1999.

Douglas Kress, Secretary
CANTON ZONING COMMISSION