

April 9, 2014

David Martin and Members of the Siting Council Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

> RE: Notice of Exempt Modification 237 Sandy Hollow Road, West Mystic, CT 06388 N 41.369431 W 71.982540 *T-Mobile #: CTNL053A*

Dear Mr. Martin and Members of the Siting Council:

On behalf of T-Mobile, SBA Communications is submitting an exempt modification application to the Connecticut Siting council for modification of existing equipment at a tower facility located at 237 Sandy Hollow Road, West Mystic, CT 06388.

The 237 Sandy Hollow Road facility consists of a 130' Monopole owned and operated by SBA Infrastructure, LLC. In order to accommodate technological changes and enhance system performance in the State of Connecticut, T-Mobile plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

As part of T-Mobile's modernization project, T-Mobile desires to upgrade their equipment to meet the new standards of 4G technology. The new equipment will allow customers to download files and browse the internet at a high rate of speed while also allowing their phones to be compatible with the latest 4G technology.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in T-Mobile's operations at the site along with the required fee of \$625.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be



significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The overall height of the structure will be unaffected.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than the new equipment cabinets.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. The changes in radio frequency power density will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, SBA Communications on behalf of T-Mobile, respectfully submits that he proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at 508.251.0720 x 3804 with any questions you may have concerning this matter.

Thank you,

Kri Pelletier SBA Communications Corporation 33 Boston Post Road West Suite 320 Marlborough, MA 01752 508-251-0720 x 3804 + T 508-251-1755 + F 203-446-7700 + C kpelletier@sbasite.com



T-Mobile Equipment Modification

237 Sandy Hollow Road, West Mystic, CT 06388 Site number CTNL053A

Tower Owner:

SBA Infrastructure, LLC

Equipment Configuration: Monopole

Current and/or approved:

- (6) EMS RR90-17-02DP
- (3) RFS APX16DWV-A20
- (3) Ericsson KRY112 89/5 TMAs
- (3) RFS ATMAA1412D-1A20 TMAs
- (18) 1-5/8" Feed Lines

Planned Modifications:

- (3) Ericsson Air B2A B4P
- (3) Ericsson Air B4A B2P
- (3) Ericsson KRY112 144 TMAs
- (12) 1-5/8" Feed Lines
- (1) 1-5/8" Fiber

Structural Information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed modifications.

Power Density:

The anticipated Maximum Composite contributions from the T-Mobile facility are 0.746% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 4.246% of the allowable FCC established general public limit sampled at the ground level.

Site Comp	osite MPE %
Carrier	MPE %
T-Mobile	0.746%
MetroPCS	3.500%
Total Site MPE %	4.246%



April 9, 2014

Mr. Mark R. Oefinger Town Manager Town of Groton 45 Fort Hill Road Groton, CT 06340

RE: Telecommunications Facility @ 237 Sandy Hollow Road, West Mystic, CT 06388

Dear Mr. Oefinger,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, T-Mobile will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies (R.C.S.A.) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review T-Mobile's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes T-Mobile's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at 508.251.0720 x 3804.

Thank you,

Kri Pelletier SBA Communications Company 33 Boston Post Road West Suite 320 Marlborough, MA 01752 508-251-0720 x 3804 + T 508-251-1755 + F 203-446-7700 + C kpelletier@sbasite.com



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

T-Mobile Existing Facility

Site ID: CTNL053A MCF Ambulance

237 Sandy Hollow Road West Mystic, CT 06388

April 3, 2014

EBI Project Number: 62142256



April 3, 2014

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

Re: Emissions Values for Site: CTNL053A – MCF Ambulance

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 237 Sandy Hollow Road, West Mystic, CT, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μ W/cm2). The number of μ W/cm2 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.

<u>General population/uncontrolled exposure</u> 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 (μ W/cm2). The general population exposure limit for the cellular band is 567 μ W/cm2, and the general population exposure limit for the PCS and AWS bands is 1000 μ W/cm2. 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.



<u>Occupational/controlled exposure</u> 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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 237 Sandy Hollow Road, West Mystic, 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, the actual antenna pattern gain value in the direction of the sample area was used. For this report the sample point is a 6 foot person standing at the base of the tower.

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

- 2 GSM / UMTS channels (1935.000 MHz to 1945.000 MHz / 1983.000 MHz to 1984.000 MHz) were considered for each sector of the proposed installation.
- 2) 4 UMTS / LTE channels (2110.000 to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
- 3) 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.
- 4) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 5) The antenna used in this modeling is the Ericsson AIR21 for LTE, UMTS and GSM. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.6 dBd gain value at its main lobe. Actual antenna gain values were used for all calculations as per the manufacturers specifications.



- 6) The antenna mounting height centerline of the proposed antennas is **129 feet** above ground level (AGL).
- 7) 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.

	Site ID		53A - MCF /														
	Site Addresss	237 Sandy Hollo	ow Road, W	est Mystic, CT 06388													
	Site Type		Monopo	le													
1																	
	Sector 1																
						Power			Antenna Gain								
						Out Per			in direction							Power	Power
Antenna						Channel	Number of	Composite	of sample	Antenna	analysis		Cable Loss	Additional		Density	Density
Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	(Watts)	Channels	Power	point (dBd)	Height (ft)	height	Cable Size	(dB)	Loss	ERP	Value	Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	129	123	None	0	0	48.326044	1.148357	0.11484%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	129	123	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	129	123	None	0	0	24.163022	0.574179	0.05742%
1b	Ericsson	AIR21 B4A/B2P	Passive	AWS - 2100 MHz	UMTS	40	2	80	-3.95	129	123	None	0	0	32.217363	0.765571	0.07656%
												Sector tot	al Power De	ensity Value:	0.249%		
							Se	ctor 2									
						Power Out Per			Antenna Gain							Davisa	Davian
Antonno						Channel	Number of	Composito	in direction of sample	Antonno	opolysis		Cabla Loss	Additional		Power	Power
Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	(Watts)	Number of Channels	Composite Power		Antenna Height (ft)	analysis height	Cable Size	(dB)	Loss	ERP	Density Value	Density
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	129	123	None	0	0	48.326044	1.148357	Percentage 0.11484%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	00	2	0	-3.95	129	123	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	129	123	None	0	0	24.163022	0.574179	0.05742%
1b	Ericsson	AIR21 B4A/B2P	Passive	AWS - 2100 MHz	UMTS	40	2	80	-3.95	129	123	None	0	0	32.217363	0.765571	0.07656%
													al Power De	ensity Value:			
							Se	ctor 3									
						Power			Antenna Gain								
						Out Per		-	in direction							Power	Power
Antenna			C 1 1			Channel		Composite	of sample	Antenna	analysis					Density	Density
Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	(Watts)	Channels	Power		Height (ft)	height	Cable Size	(dB)	Loss	ERP	Value	Percentage
1a 1b	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	129 129	123 123	None	0	0	48.326044	1.148357	0.11484%
	Ericsson	AIR21 B4A/B2P	Not Used		-	20	2	0		129	-	None	0	0	0	0	0.00000%
2a 1b	Ericsson	AIR21 B2A / B4P AIR21 B4A/B2P	Active	PCS - 1950 MHz AWS - 2100 MHz	GSM / UMTS	30 40	2	60 80	-3.95 -3.95	129	123 123	None None	0	0	24.163022 32.217363	0.574179	0.05742%
10	Ericsson	AIKZI B4A/B2P	Passive	AWS - 2100 WHZ	UIVITS	40		80	-3.95	129	123		Ū	0	0.249%	0.705571	0.07656%
												Sector tot	ai Power De	ensity Value:	0.249%		

Site Composite MPE %						
Carrier	MPE %					
T-Mobile	0.746%					
MetroPCS	3.500%					
Total Site MPE %	4.246%					



Summary

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

The anticipated Maximum Composite contributions from the T-Mobile facility are **0.249%** (**0.746% from each sector**) of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **4.246%** 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.

A

Scott Heffernan RF Engineering Director

EBI Consulting 21 B Street Burlington, MA 01803



FDH Engineering, Inc., 6521 Meridien Drive Raleigh, NC 27616, Ph. 919.755.1012

Structural Analysis for SBA Network Services, Inc.

130' Monopole Tower

SBA Site Name: Groton 2 SBA Site ID: CT11561-A-01 T-Mobile Site ID: CTNL053A

FDH Project Number 1424NO1400

Analysis Results

Tower Components	42.3%	Sufficient
Foundation	32.3%	Sufficient

Prepared By: Analos 1. D. V. A.T.

Chip DeVoto, El Project Engineer

> FDH Engineering, Inc. 6521 Meridien Drive Raleigh, NC 27616 (919) 755-1012 info@fdh-inc.com



By s

Bradley R. Newman, PE Senior Project Engineer CT PE License No. 29630 OF CONVECTION OF

March 26, 2014

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures and the 2005 Connecticut Building Code (CBC)

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
Conclusions	3
Recommendations	3
APPURTENANCE LISTING	
RESULTS	5
GENERAL COMMENTS	6
LIMITATIONS	6
APPENDIX	7

EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Groton, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F* and the 2005 Connecticut Building Code (CBC). Information pertaining to the existing/proposed antenna loading, current tower geometry, geotechnical data, foundation dimensions and member sizes was obtained from:

- Fred A. Nudd Corporation (Project No. 208-13077) Design of 130' Monopole Tower dated May 9, 2008
- FDH, Inc. (Job No. 08-08060T) TIA Inspection Report dated November 6, 2008
- □ FDH Engineering, Inc. (Project No. 1424W71600) Geotechnical Evaluation of Subsurface Conditions dated March 26, 2014
- SBA Network Services, Inc.

The basic design wind speed per the TIA/EIA-222-F standards and the 2005 Connecticut Building Code is 85 mph without ice and 38 mph with 3/4" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from T-Mobile in place at 129 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and *2005 CBC*. Furthermore, provided the foundation was constructed per the original design drawings (see Fred A. Nudd Corporation Project No. 208-13077), and given the existing soil parameters (see FDH Engineering, Inc. Project No. 1424W71600), the foundation should have the necessary capacity to support the existing and proposed loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, existing antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *TIA/EIA-222-F* standards and *2005 CBC* are met with the existing and proposed loading in place, we have the following recommendations:

- 1. The proposed coax should be installed inside the monopole's shaft.
- 2. The proposed TMAs should be installed directly behind the proposed panel antennas.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. If the actual layout determined in the field deviates from the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.

Table 1 - Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Coax and Lines ¹	Carrier	Mount Elevation (ft)	Mount Type
129	(6) EMS RR90-17-02DP (3) RFS APX16DWV-A20 (3) Ericsson KRY112 89/5 TMAs (3) RFS ATMAA1412D-1A20 TMAs	(18) 1-5/8"	T-Mobile	128	(1) Low Profile Platform (CaAa = 18.01 ft ²)
117	(6) Kathrein 800 10504	(12) 1-5/8" (1) 3/8" RET	Metro PCS	117	(1) Low Profile Platform (CaAa = 14.49 ft ²)

1. Coax installed inside pole's shaft unless otherwise noted.

Proposed Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
129	(3) Ericsson Air B2A B4P (3) Ericsson Air B4A B2P (3) Ericsson KRY112 144 TMAs	(12) 1-5/8" (1) 1-5/8" Fiber	T-Mobile	128	(1) Low Profile Platform (CaAa = 18.01 ft ²)

RESULTS

Member TypeYield StrengthTower Shaft Sections65 ksiBase Plate50 ksiAnchor Bolts105 ksiFlange Plate @ 90'50 ksiFlange Bolts @ 90'92 ksi

Table 2 - Material Strength

The following yield strength of steel for individual members was used for analysis:

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 100% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information.

Table 3 - Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity*	Pass Fail
L1	130 - 90	Pole	TP31.5625x24x0.1875	35.0	Pass
	90	Flange Bolts	(18) 7/8" Ø w/ BC = 36"	42.3	Pass
	90	Flange Plate	PL 41" Ø x 1.75" thk.	15.2	Pass
L2	90 - 45	Pole	TP40.125x31.5625x0.3125	34.7	Pass
L3	45 - 0	Pole	TP48x38.5486x0.375	40.3	Pass
		Anchor Bolts	(12) 2.25" Ø w/ BC = 54"	37.9	Pass
		Base Plate	PL 60" Ø x 2.5" thk.	27.1	Pass

*Capacities include 1/3 allowable increase for wind.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis* (TIA/EIA-222-F)	Original Design (ANSI/TIA-222-G)
Axial	23 k	28 k
Shear	14 k	23 k
Moment	1,144 k-ft	2,189 k-ft

* Foundation determined to be adequate per independent analysis.

GENERAL COMMENTS

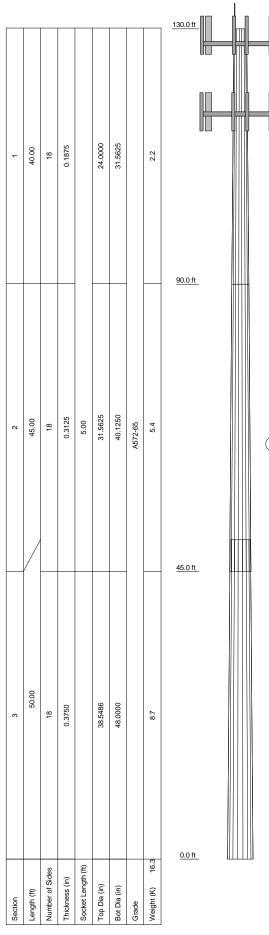
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

Structural Analysis Report SBA Network Services, Inc. SBA Site ID: CT11561-A-01 March 26, 2014

APPENDIX



DESIGNED APPURTENANCE LOADING TYPE ELEVATION TYPE

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	130	AIR B4A B2P w/Mount Pipe	129
Pipe Mount	129	AIR B4A B2P w/Mount Pipe	129
Pipe Mount	129	KRY112 144	129
Pipe Mount	129	KRY112 144	129
12.5' Low Profile Platform	128	KRY112 144	129
AIR B2A B4P w/Mount Pipe	129	(2) 800 10504 w/ mount pipe	117
AIR B2A B4P w/Mount Pipe	129	12' Low Profile Platform	117
AIR B2A B4P w/Mount Pipe	129	(2) 800 10504 w/ mount pipe	117
AIR B4A B2P w/Mount Pipe	129	(2) 800 10504 w/ mount pipe	117

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

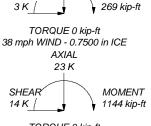
TOWER DESIGN NOTES

1. Tower is located in New London County, Connecticut.

2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.

3. Tower is also designed for a 38 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.

4. Deflections are based upon a 50 mph wind.



MOMENT

TORQUE 0 kip-ft REACTIONS - 85 mph WIND

AXIAL

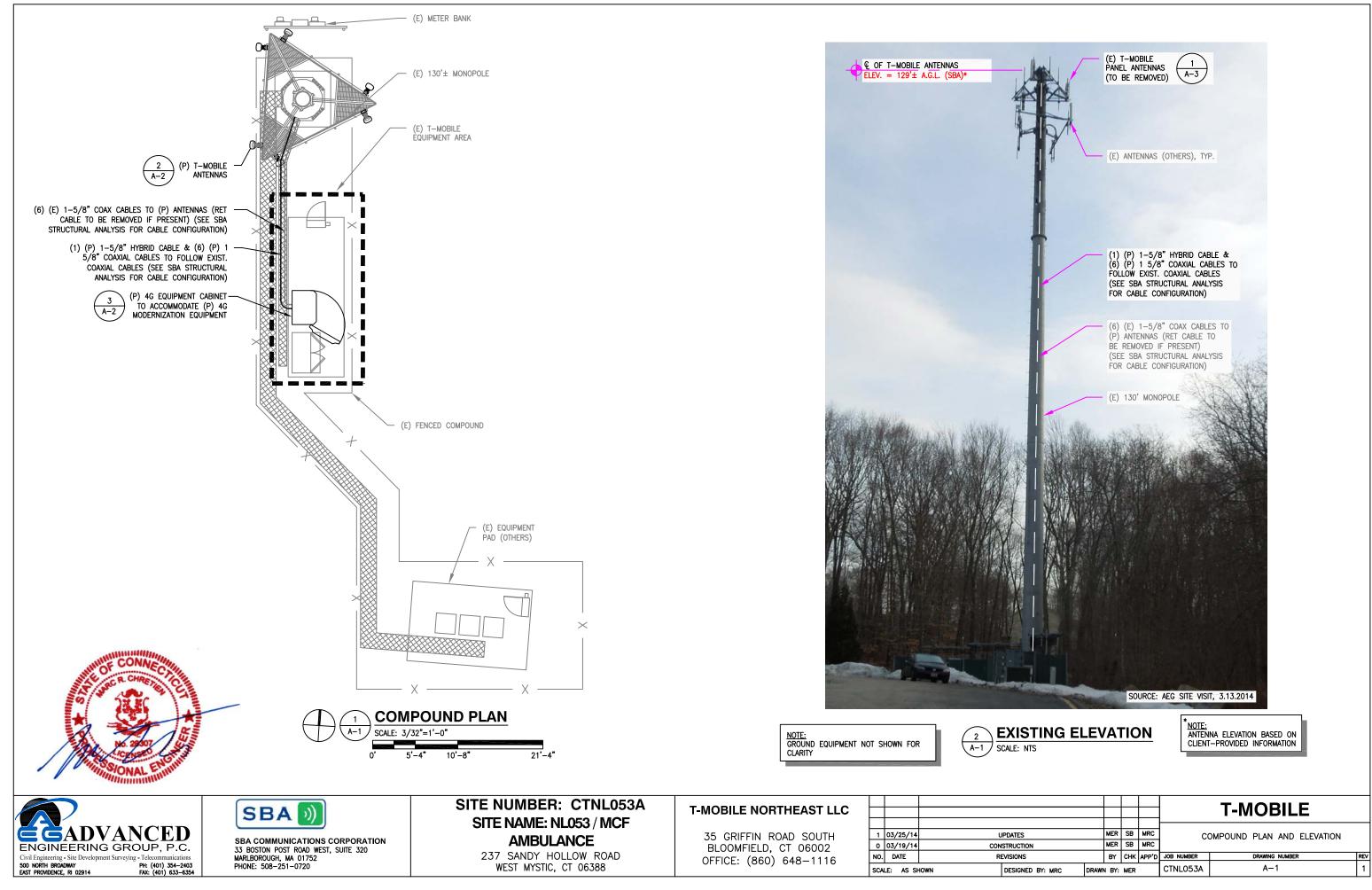
30 K

SHEAR

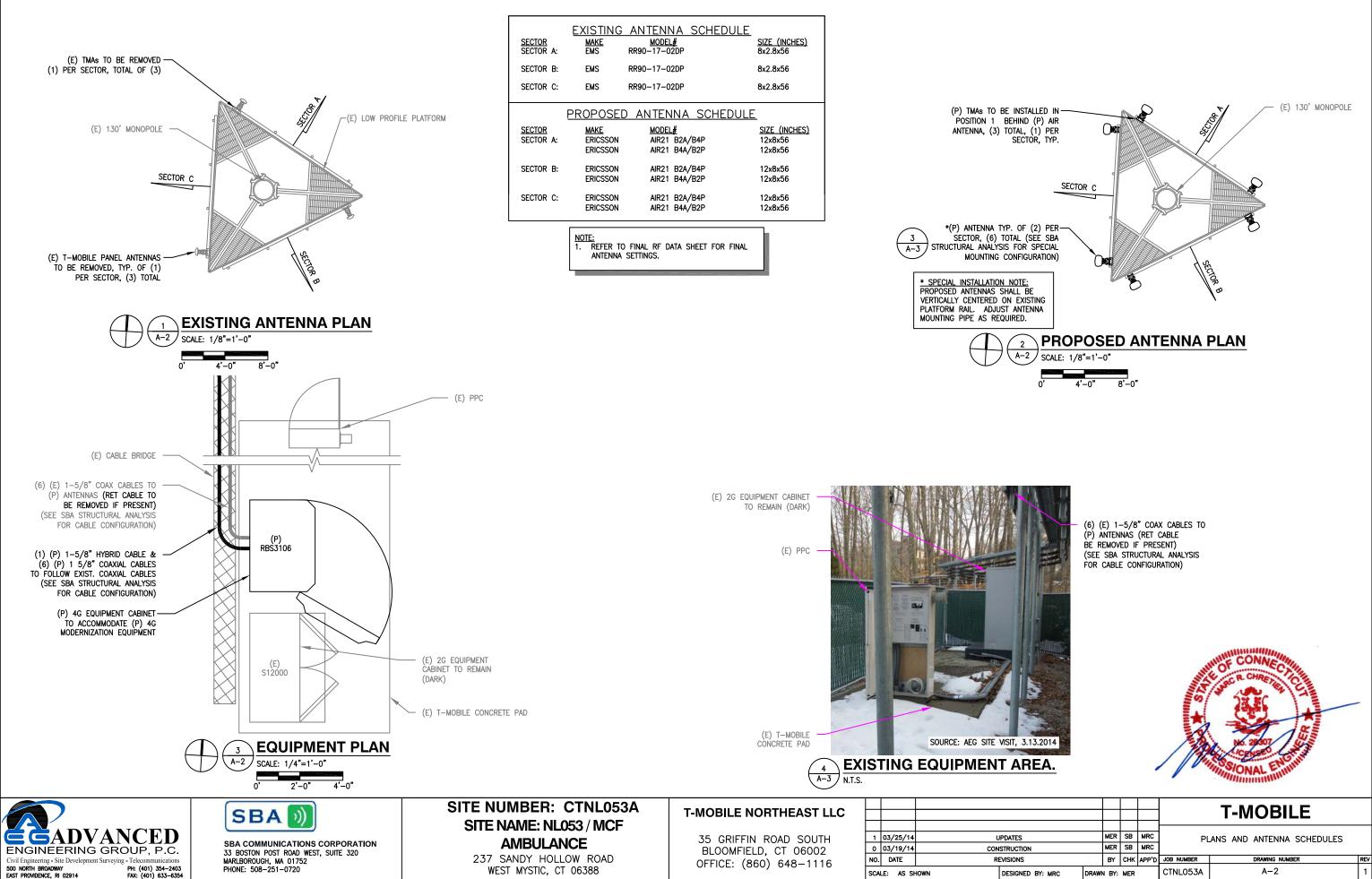


FDH Engineering, Inc. 6521 Meridien Drive Raleigh, NC 27616 Phone: (919) 755-1012 FAX: (919) 755-1031

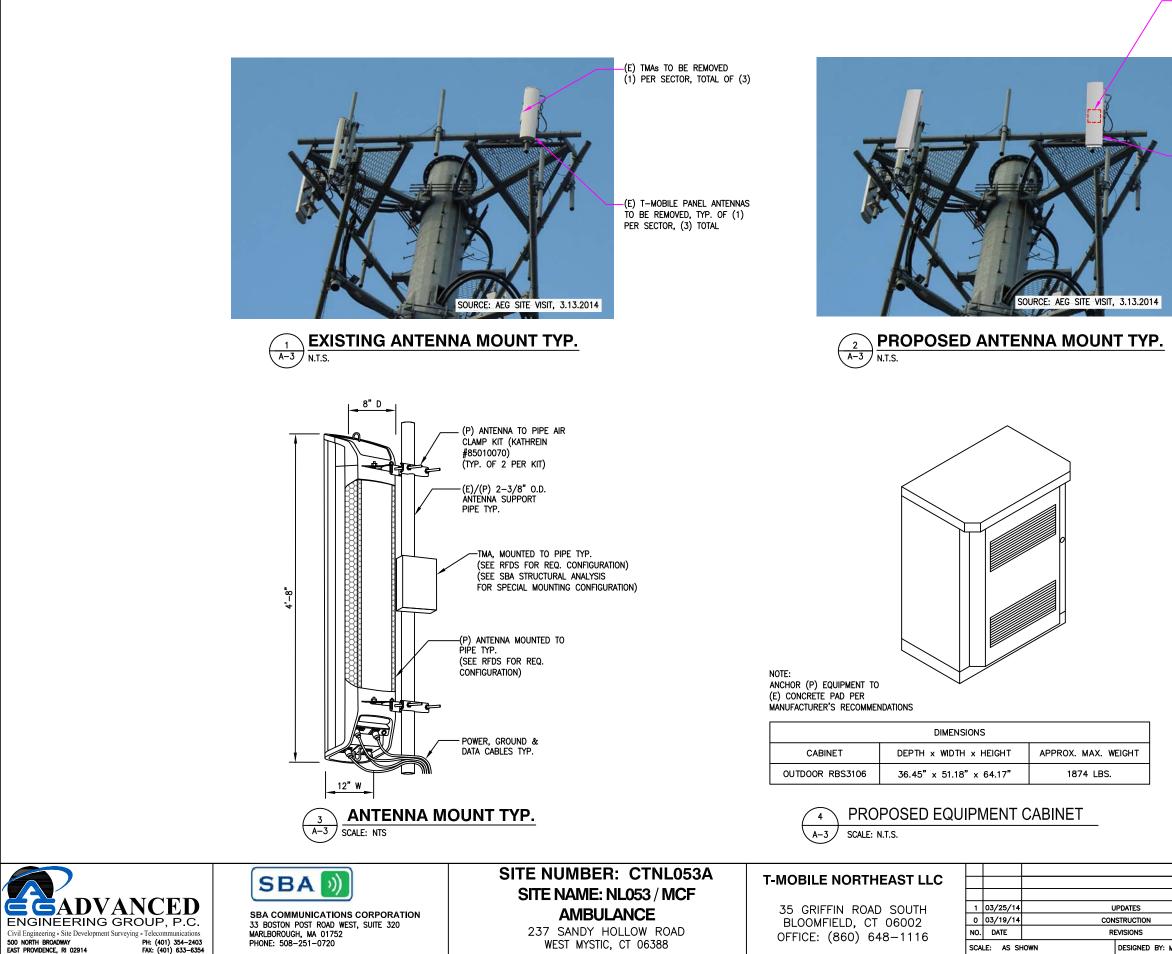
: .	^{100:} Groton 2, CT11561-A-01							
	Project: 1424NO1400							
	Client: SBA Network Services, Inc.	Drawn by: Chip DeVoto, El	App'd:					
	^{Code:} TIA/EIA-222-F	Date: 03/26/14	Scale: NTS					
	Path: INFINISERVER/POINT/INFINITION - Client Jack/SEAMET SEA Memory Services. InfoCT/CT1198-A. Group 20	T140801400AnatolicGone 2 CT1191Aan	Dwg No. E-1					



					T-MOBILE			
TES		MER	SB	MRC	COMPOUND PLAN AND ELEVATION			
UCTION		MER	SB	MRC				
ONS		BY	снк	APP'D	JOB NUMBER	DRAWING NUMBER RE		
SIGNED BY: MRC	DRAWN BY: MER				CTNL053A	A-1 1		



					I-MOBILE				
TES		MER	SB	MRC	PLANS AND ANTENNA SCHEDULES				
JCTION		MER	SB	MRC					
ONS		BY	снк	APP'D	JOB NUMBER	DRAWING NUMBER	REV		
GIGNED BY: MRC	DRAWN BY: MER				CTNL053A	A-2	1		



- (P) TMAs TO BE INSTALLED IN POSITION 1 BEHIND (P) AIR ANTENNA, (3) TOTAL, (1) PER SECTOR, TYP.

* SPECIAL INSTALLATION NOTE: PROPOSED ANTENNAS SHALL BE VERTICALLY CENTERED ON EXISTING PLATFORM RAIL. ADJUST ANTENNA MOUNTING PIPE AS REQUIRED.

*(P) ANTENNA TYP. OF (2) PER SECTOR, (6) TOTAL (SEE SBA STRUCTURAL ANALYSIS FOR SPECIAL MOUNTING CONFIGURATION)

 $\begin{pmatrix} 3 \\ A-3 \end{pmatrix}$



T-MOBILE MER SB MRC DETAILS MER SB MRC BY CHK APP'D JOB NUMBER DRAWING NUMBER REV CTNL053A A-3 DESIGNED BY: MRC DRAWN BY: MER