CENTERLINE COMMUNICATIONS

verizonwireless

Alex Murshteyn, Site Acquisition
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767
Mobile: (508) 821-0159
AMurshteyn@centerlinecommunications.com

EM-VER-142-171208

December 7, 2017

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

ORIGINAL

RECEIVED
DEC 8 2017
Connecticut Siting Council

RE: Notice of Exempt Modification // Site: Tolland CT (ATC: 302495)
56 Ruops (fka 5 Barbara; aka 1 Eagle Hill) Road, Tolland, CT 06084
N 41.8733 // W -72.3383

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains 15 antennas at the 142-foot mount on the existing 150-foot monopole tower, located at 56 Ruops (fka 5 Barbara) Road, Tolland, CT. The tower is owned by American Tower. The property is owned by the Town of Tolland. Verizon Wireless now intends to remove 9 of its antennas to replace with 6 and install side-by-side mounts for these 6 LTE (2100 MHz) replacements for its PCS/AWS/LTE upgrade. Additionally, Verizon Wireless will relocate 3 remote radio heads (RRHs) and thereby install 12 new RRHs on the tower with its new antennas; while updating certain leased equipment rights, as reflected by the final configuration outlined in the structural analysis and proposed hereby.

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 William Eccles, Chair of the Town Council for the Town of Tolland, which is also the underlying property owner, Town's Director of Planning & Development Heidi Samokar, AICP, including for the Planning & Zoning Commission and American Tower, the tower owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated September 27, 2017 by ATC Tower Services, LLC, a structural analysis dated August 25, 2017 by A.T. Engineering Service, PLLC and radio frequency (RF) analysis table showing worst-case RF emission calculation by Verizon Wireless RF Design Engineering.

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

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

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

4. The operation of the new 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, as shown in the attached structural analysis by A.T. Engineering Service, PLLC, dated August 25, 2017.

For the foregoing reasons, Verizon Wireless 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,

Alex Murshteyn, Site Acquisition
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767
Mobile: (508) 821-0159
AMurshteyn@centerlinecommunications.com

Attachments

cc: William Eccles, Chair, Tolland Town Council - as elected official - 1Z9Y45030311525819
Heidi Samokar, Director of Planning & Development - as P&Z official - 1Z9Y45030316690828
American Tower Corporation - as tower owner - 1Z9Y45030314857830
William Eccles, Chair, Tolland Town Council - as property owner - same as above

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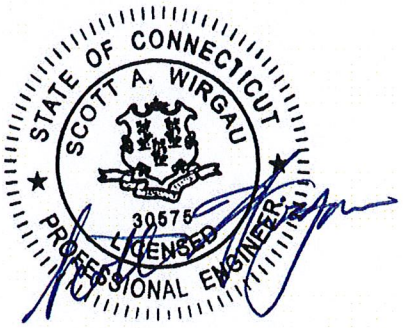
Structural Analysis Report

Structure	:	**155 ft Monopole**
ATC Site Name	:	**Tolland CT, CT**
ATC Site Number	:	**302495**
Engineering Number	:	**OAA709616_C3_02**
Proposed Carrier	:	**Verizon Wireless**
Carrier Site Name	:	**Tolland CT**
Carrier Site Number	:	**324969**
Site Location	:	**5 Barbara Road** **Tolland, CT 06084-3116** **41.873300,-72.338300**
County	:	**Tolland**
Date	:	**August 25, 2017**
Max Usage	:	**83%**
Result	:	**Pass**

Prepared By:
Robert D. Barrett, E.I.
Structural Engineer I

Robert D. Barrett

Reviewed By:



Aug 25 2017 1:28 PM

cosign

COA: PEC.0001553

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Table of Contents

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 155 ft monopole to reflect the change in loading by Verizon Wireless.

Supporting Documents

Tower Drawings	EEI Drawing #GS50842 Rev 1, dated June 24, 1998
Foundation Drawing	EEI Drawing #F3503-150.N, dated March 2, 1998
Geotechnical Report	ASR Project #12-06077, dated December 1, 2006
Modifications	Spectrasite Drawing #CT-0031-M1, dated November 15, 2004

Analysis

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

Basic Wind Speed:	97 mph (3-Second Gust, V_{asd}) / 125 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	Ss = 0.17, S_1 = 0.06
Site Class:	D - Stiff Soil

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					
155.0	164.0	3	EMS RR90-17-02DP	Flush	(6) 1 5/8" Coax	T-Mobile
	159.0	6	Ericsson KRY 112 71/x			
149.0	152.0	1	7' Omni	Platform w/ Handrails	(1) 1 1/4" Coax	Spok Holdings
	149.0	1	Andrew ABT-DMDF-ADBH		(12) 1 1/4" Coax (2) 0.78" 8 AWG 6 (1) 0.39" Fiber Trunk (1) 3" Conduit (1) 3/8" RET Control Cable	AT&T Mobility
		3	Powerwave 7020.00 Dual Band RET			
		6	Kathrein 782-10250			
		6	CCI DTMABP7819VG12A			
		1	Raycap DC6-48-60-18-8F			
		3	Ericsson RRUS 11 (Band 12)			
		3	Ericsson RRUS-12 800MHz			
		3	Powerwave 7770.00			
		6	KMW AM-X-CD-16-65-00T-RET			
142.0	142.0	6	Swedcom ALP 9212-N	Platform w/ Handrails	(15) 1 5/8" Coax (1) 1 5/8" Hybriflex	Verizon Wireless
		1	RFS DB-T1-6Z-8AB-0Z			
133.0	133.0	5	Decibel 980H65T2E-M	Platform w/ Handrails	(9) 1 5/8" Coax	Sprint Nextel
		4	Decibel DB980H90A-KL			
123.0	123.0	12	Decibel DB844H90E-A	Platform w/ Handrails	(12) 1 1/4" Coax	
107.0	107.0	3	Commscope LNX-6515DS-VTM	Flush	(6) 1 1/4" Coax	Metro PCS
105.0	105.0	3	Kathrein Smart Bias Tee	Flush	-	
83.0	83.0	1	GPS	Stand-Off	(1) 1/2" Coax	T-Mobile
63.0	63.0	2	GPS	Stand-Offs	(2) 1/2" Coax	Sprint Nextel
52.0	52.0	1	2" x 4" GPS	Stand-Off	(1) 1/2" Coax	
17.0	17.0	1	4' Std. Dish	Leg	(1) 0.27" RG-6/U	Spok Holdings

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
142.0	142.0	6	Andrew HBXX-6516DS-A2M	-	-	Verizon Wireless
		3	Andrew LNX-6513DS-A1M			
		3	Alcatel-Lucent RRH2X60-AWS			

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
142.0	142.0	3	Nokia B5 RRH4x40-850	Platform w/ Handrails	(1) 1 5/8" Hybriflex	Verizon Wireless
		3	Alcatel-Lucent RRH2x60 700			
		3	Alcatel-Lucent RRH AWS			
		3	Alcatel-Lucent RRH2x60			
		1	RFS DB-T1-6Z-8AB-0Z			
		6	Commscope JAHH-65B-R3B			

[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 outside the pole shaft. Stacking coax is not allowed.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	74%	Pass
Shaft	83%	Pass
Base Plate	54%	Pass
Flanges	20%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	3,721.7	80%
Axial (Kips)	51.4	5%
Shear (Kips)	33.8	57%

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
142.0	Nokia B5 RRH4x40-850	Verizon Wireless	2.307	1.835
	Alcatel-Lucent RRH2x60 700			
	Alcatel-Lucent RRH AWS			
	Alcatel-Lucent RRH2x60			
	RFS DB-T1-6Z-8AB-0Z			
	Commscope JAHH-65B-R3B			
17.0	4' Std. Dish	Spok Holdings	0.029	0.196

***Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G**

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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:

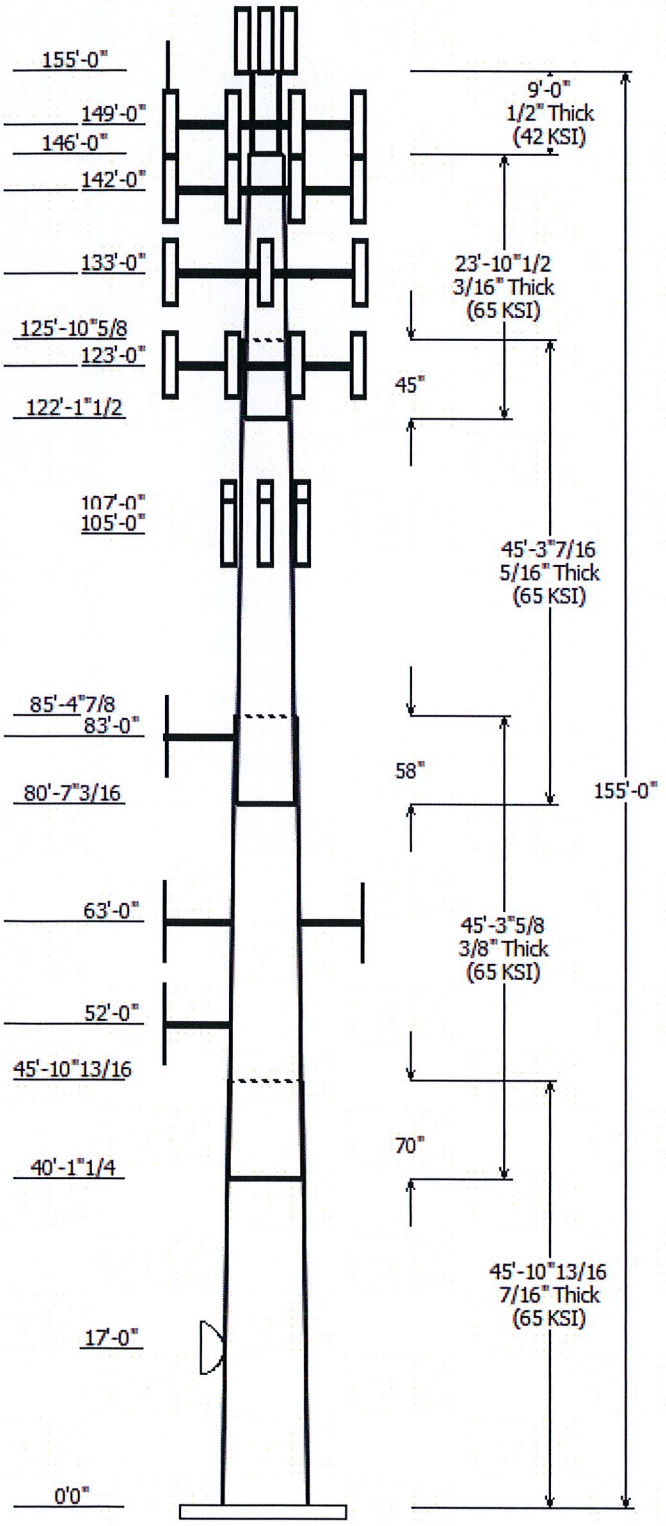
-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

-- 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 :	302495	Code:	ANSI/TIA-222-G
Description :	EEI 155' Monopole - Model verified 4/25/12		
Client :	Verizon Wireless	Struct Class :	II
Location :	Tolland CT, CT		
Shape :	12 Sides	Exposure :	B
Height :	155.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.210616 (in/ft)		

Sections Properties

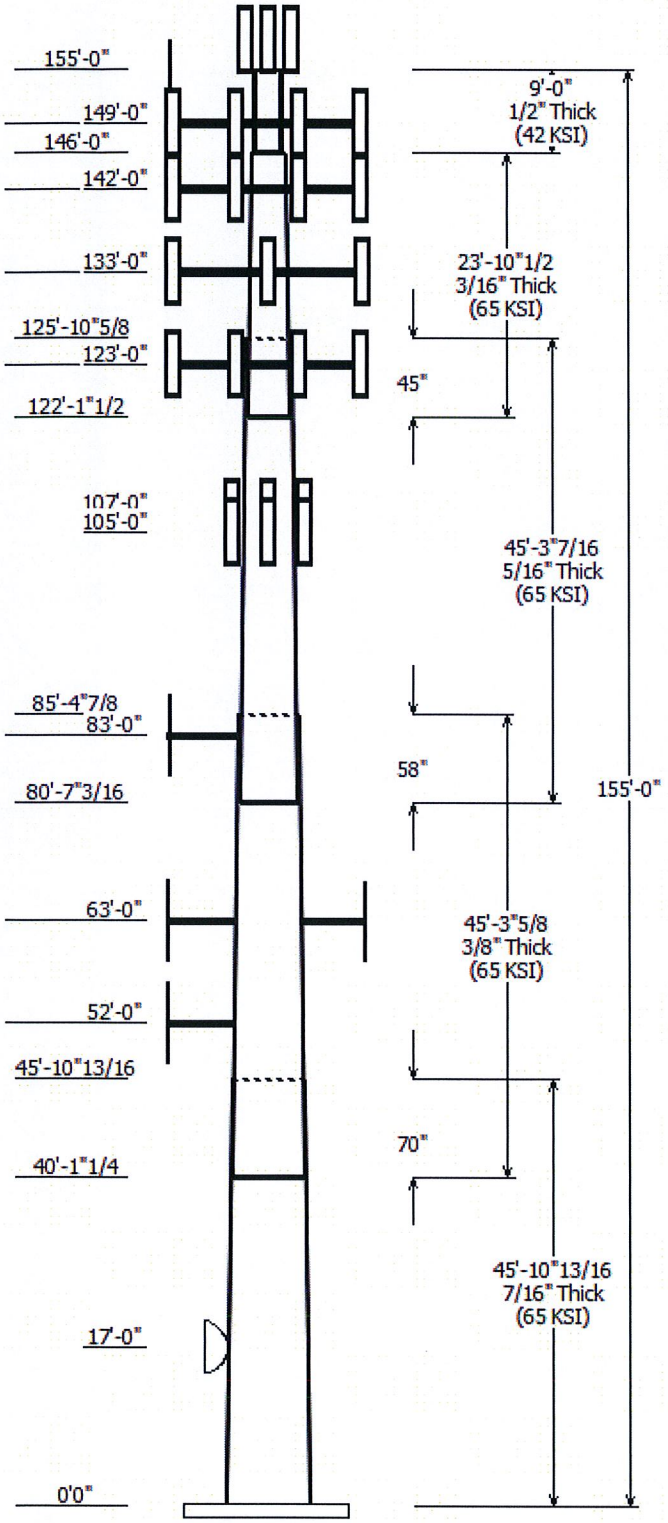
Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.898	40.33	50.00	0.438		0.000	0.210600	65
2	45.302	32.76	42.30	0.375	Slip Joint	69.531	0.210600	65
3	45.286	24.86	34.40	0.313	Slip Joint	57.688	0.210600	65
4	23.878	21.00	26.02	0.188	Slip Joint	45.156	0.210600	65
5	9.000	16.00	16.00	0.500	Butt Joint	0.000	0.000000	42

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
155.000	155.000	1	Canister
155.000	159.000	6	Ericsson KRY 112 71/x
155.000	164.000	3	EMS RR90-17-02DP
149.000	149.000	3	Ericsson RRUS-12 800 MHz
149.000	149.000	1	Raycap DC6-48-60-18-8F
149.000	152.000	1	7' Omni
149.000	149.000	3	Powerwave Allgon 7770.00
149.000	149.000	1	Flat Platform w/ Handrails
149.000	149.000	3	Powerwave Allgon 7020.00
149.000	149.000	6	KMW AM-X-CD-16-65-00T-RET
149.000	149.000	3	Ericsson RRUS 11 (Band 12)
149.000	149.000	6	CCI DTMABP7819VG12A
149.000	149.000	6	Kathrein Scala 782-10250
149.000	149.000	1	Andrew ABT-DMDF-ADBH
142.000	142.000	6	Commscope JAHH-65B-R3B
142.000	142.000	3	Alcatel-Lucent RRH2x60
142.000	142.000	3	Alcatel-Lucent RRH AWS
142.000	142.000	3	Alcatel-Lucent RRH2x60 700
142.000	142.000	3	Nokia B5 RRH4x40-850
142.000	142.000	1	RFS DB-T1-6Z-8AB-0Z
142.000	142.000	1	Flat Platform w/ Handrails
142.000	142.000	1	RFS DB-T1-6Z-8AB-0Z
142.000	142.000	6	Swedcom ALP 9212-N
133.000	133.000	1	Flat Platform w/ Handrails
133.000	133.000	4	Decibel DB980H90A-KL
133.000	133.000	5	Decibel 980H65T2E-M
123.000	123.000	12	Decibel DB844H90E-A
123.000	123.000	1	Flat Platform w/ Handrails
107.000	107.000	3	Commscope LNX-6515DS-VTM
105.000	105.000	3	Kathrein Smart Bias Tee
83.000	83.000	1	Stand-Off
83.000	83.000	1	GPS
63.000	63.000	2	Stand-Off
63.000	63.000	2	GPS
52.000	52.000	1	Stand-Off
52.000	52.000	1	2" x 4" GPS
17.000	17.000	1	4' Std. Dish

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind



120.0	149.0	Climbing Ladder	Yes
0.000	155.0	1 5/8" Coax	No
0.000	17.000	0.27" RG-6/U	Yes
0.000	52.000	1/2" Coax	Yes
0.000	63.000	1/2" Coax	Yes
0.000	83.000	1/2" Coax	Yes
0.000	107.0	1 1/4" Coax	Yes
0.000	123.0	1 1/4" Coax	No
0.000	133.0	1 5/8" Coax	No
0.000	142.0	1 5/8" Coax	Yes
0.000	142.0	1 5/8" Coax	No
0.000	142.0	1 5/8" Hybriflex	Yes
0.000	142.0	1 5/8" Hybriflex	Yes
0.000	149.0	0.39" Fiber Trunk	No
0.000	149.0	0.78" 8 AWG 6	No
0.000	149.0	1 1/4" Coax	No
0.000	149.0	1 1/4" Coax	Yes
0.000	149.0	1 1/4" Coax	No
0.000	149.0	3" Conduit	No
0.000	149.0	3/8" RET Control	No

Load Cases

1.2D + 1.6W	97 mph with No Ice
0.9D + 1.6W	97 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

Reactions

Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	3721.74	33.84	51.43
0.9D + 1.6W	3634.25	33.60	38.56
1.2D + 1.0Di + 1.0Wi	1025.84	8.26	96.98
(1.2 + 0.2Sds) * DL + E ELFM	221.81	1.68	51.99
(1.2 + 0.2Sds) * DL + E EMAM	313.72	2.53	51.99
(0.9 - 0.2Sds) * DL + E ELFM	217.00	1.67	36.25
(0.9 - 0.2Sds) * DL + E EMAM	306.78	2.53	36.25
1.0D + 1.0W	875.87	8.04	42.89

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	17.00	0.347	0.196

Site Name: Tolland CT

Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW PCS	1970	1	5181	5181	140	0.0951	1.0	9.51%
VZW Cellular	869	9	317	2853	140	0.0523	0.579333333	9.04%
VZW 850 LTE	869	1	3710	3710	140	0.0681	0.579333333	11.75%
VZW AWS	2145	1	8326	8326	140	0.1528	1.0	15.28%
VZW 700	746	1	2063	2063	140	0.0379	0.497333333	7.61%

Total Percentage of Maximum Permissible Exposure 53.18%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:
1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

Property Information

Property ID	23/E/051
Location	1 EAGLE HILL
Owner	TOWN OF TOLLAND

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Tolland, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Properties updated 12/05/2017

1 EAGLE HILL

Location	1 EAGLE HILL	**Mblu**	23/ E/ 51/00 /
Acct#	6783	**Owner**	TOWN OF TOLLAND
Assessment	$47,896,000	**Appraisal**	$68,422,700
PID	3893	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2014	$65,645,700	$2,777,000	$68,422,700
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2014	$45,952,100	$1,943,900	$47,896,000

Owner of Record

Owner	TOWN OF TOLLAND
Co-Owner	
Address	21 TOLLAND GREEN TOLLAND, CT 06084-0000

Sale Price	$850,000
Certificate	
Book & Page	819/ 81
Sale Date	04/24/2003
Instrument	15

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
TOWN OF TOLLAND	$850,000		819/ 81	15	04/24/2003
RUOPS ALBERT J TRUSTEE U TR	$0		396/ 288	29	06/16/1960

Building Information

Building 1 : Section 1

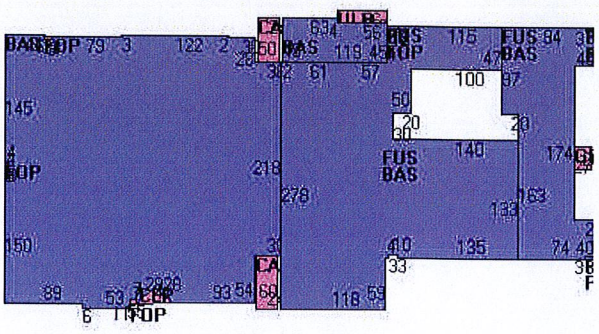
Year Built: 2005
Living Area: 258,330
Replacement Cost: $69,099,782
Building Percent Good: 91
Replacement Cost Less Depreciation: $62,880,800

Building Attributes	
Field	**Description**
STYLE	Schools-Public
MODEL	Commercial
Grade	Excellent
Stories:	2
Occupancy	1
Ext Wall 1	Brick Veneer
Exterior Wall 2	Reinforc Concr
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minim/Masonry
Interior Wall 2	Drywall/Sheet
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Hot Water
AC Type	Vapor Cooler
Bldg Use	Municipal
Total Rooms	70
Total Bedrms	0
Total Baths	0
Solar	
1st Floor Use:	901C
Heat/AC	Heat/AC Split
Frame Type	Fireprf Steel
Baths/Plumbing	Average
Ceiling/Wall	Sus Ceil Min W
Rooms/Prtns	Above Average
Wall Height	16
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos/TollandCTPhotos//\00\00\69/90.jpg)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	Main Floor	177,914	177,914
FUS	Finished Upper Story	80,416	80,416
CAN	Canopy	2,640	0
CLP	Covered Loading Platform	380	0
FOP	Open Porch	202	0
GRN	Green House	540	0
ULP	Loading Platform	728	0
		262,820	258,330

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
SPR1	SPRINKLERS-WET	248306 S.F.	$180,800	1
ELV	ELEVATOR	1 UNITS	$24,600	1

Land

Land Use

Use Code	901C
Description	Municipal
Zone	RDD
Neighborhood	350C
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	68.5
Frontage	1351
Depth	
Assessed Value	$1,943,900
Appraised Value	$2,777,000

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
PAV	PAVING	A	Asphalt	480000 S.F.	$645,100	1
FN	FENCE	CL4	4' Chain Link	7500 L.F.	$50,400	1
PLS	POLES	L1	Lighting	48 UNITS	$121,000	1
BALL	FIELD HARD			1 UNITS	$702,000	1
TRL1	TRAILER	A	Storage	640 S.F.	$9,600	1
FGR	GARAGE	1F	1Story Frame	720 S.F.	$16,800	1
FGR	GARAGE	1F	1Story Frame	720 S.F.	$16,800	1
SHD	SHED	1LT	1 Stry Lean To	1024 S.F.	$9,200	1
BALL	FIELD HARD			2 UNITS	$650,000	1
AF	ATHLETIC FLD	FB	Football	1 UNITS	$126,000	1
AF	ATHLETIC FLD	RT	Running Trck	1 UNITS	$210,000	1
SHD	SHED	1F	1 Stry Frame	160 S.F.	$2,600	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$65,645,700	$2,777,000	$68,422,700
2014	$65,645,700	$2,777,000	$68,422,700
2013	$62,968,300	$3,111,000	$66,079,300

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$45,952,100	$1,943,900	$47,896,000
2014	$45,952,100	$1,943,900	$47,896,000
2013	$44,077,800	$2,177,700	$46,255,500

56 RUOPS ROAD

Location	56 RUOPS ROAD	**Mblu**	23/ E/ 51/ /
Acct#	5384	**Owner**	TOWN OF TOLLAND
Assessment	$985,200	**Appraisal**	$1,407,400
PID	3892	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2014	$124,100	$1,283,300	$1,407,400

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2014	$86,900	$898,300	$985,200

Owner of Record

Owner	TOWN OF TOLLAND
Co-Owner	C/O SPECTRASITE COMMUNICATIONS
Address	PO BOX 723597 ATLANTA, GA 31139

Sale Price	$0
Certificate	
Book & Page	819/ 81
Sale Date	04/24/2003
Instrument	15

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
TOWN OF TOLLAND	$0		819/ 81	15	04/24/2003

Building Information

Building 1 : Section 1

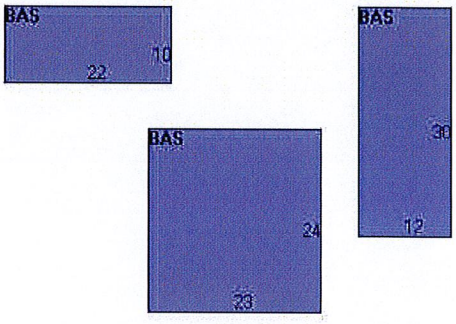
Year Built: 1989
Living Area: 1,132
Replacement Cost: $139,802
Building Percent Good: 85
Replacement Cost Less Depreciation: $118,800

Building Attributes	
Field	**Description**
STYLE	Communications Bld
MODEL	Ind/Comm
Grade	Average
Stories:	1
Occupancy	1
Ext Wall 1	Poly-Steel/Con
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Hot Air-no Duc
AC Type	Heat Pump
Bldg Use	Industrial
Total Rooms	
Total Bedrms	
Total Baths	
Solar	
1st Floor Use:	300
Heat/AC	Heat/AC Pkg
Frame Type	Masonry
Baths/Plumbing	None
Ceiling/Wall	None
Rooms/Prtns	Light
Wall Height	8
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos/TollandCTPhotos//\00\00\63/46.jpg)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	Main Floor	1,132	1,132
		1,132	1,132

- **Extra Features**

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	300
Description	Industrial
Zone	RDD
Neighborhood	350C
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.78
Frontage	2973
Depth	
Assessed Value	$898,300
Appraised Value	$1,283,300

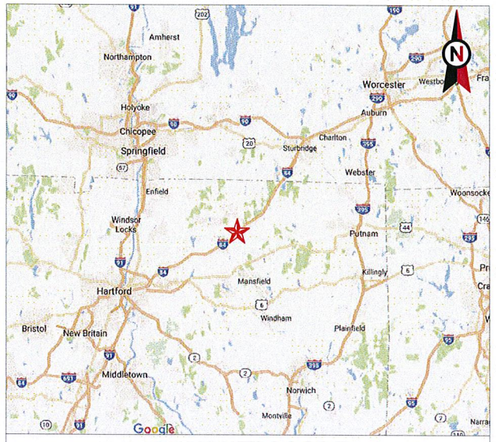
Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
FN	FENCE	CL8	8' Chain Link	380 L.F.	$5,300	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$124,100	$1,283,300	$1,407,400
2014	$124,100	$1,283,300	$1,407,400
2013	$107,300	$487,400	$594,700

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$86,900	$898,300	$985,200
2014	$86,900	$898,300	$985,200
2013	$75,100	$341,200	$416,300

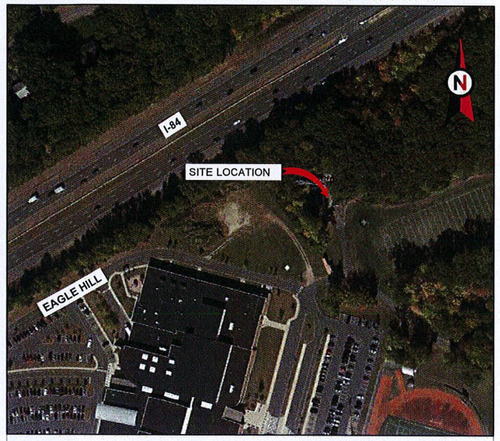


VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: TOLLAND CT
ATC SITE NUMBER: 302495
VERIZON SITE NAME: TOLLAND CT
SITE ADDRESS: 5 BARBARA RD
TOLLAND, CT 06084

VERIZON WIRELESS
ANTENNA AMENDMENT DRAWINGS



LOCATION MAP

COMPLIANCE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. INTERNATIONAL BUILDING CODE (IBC)
2. NATIONAL ELECTRIC CODE (NEC)
3. LOCAL BUILDING CODE
4. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: CONNECTICUT LIGHT & POWER
PHONE: (800) 322-3223

TELEPHONE COMPANY: FRONTIER COMMUNICATIONS
PHONE: (800) 921-8102

811 Know what's **below.** **Call** before you dig.

PROJECT SUMMARY

SITE ADDRESS:
5 BARBARA RD
TOLLAND, CT 06084
COUNTY: TOLLAND

GEOGRAPHIC COORDINATES:
LATITUDE: 41.87333
LONGITUDE: -72.3383
GROUND ELEVATION: 695' AMSL

PROJECT TEAM

TOWER OWNER:
AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:
VERIZON WIRELESS
99 EAST RIVER DRIVE, 9TH FLOOR
EAST HARTFORD, CT 06108

ENGINEER:
ATC TOWER SERVICES, LLC
3500 REGENCY PKWY STE 100
CARY, NC 27518

PROPERTY OWNER:
VINCENT RUOPS
40 VAALCOM ROAD
TOLLAND, CT 06084

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

REMOVE (9) PANELS

INSTALL (6) NEW PANELS AND (9) RRUs

EXISTING (6) PANELS, (3) RRUs, (15) 1-5/8" COAX CABLES, (2) 1-5/8" HYBRID CABLES, AND (2) OVPs TO REMAIN

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.

PROJECT LOCATION DIRECTIONS

FROM HARTFORD, CT:

TAKE I-84 E TO EXIT 68. TURN RIGHT ONTO RT 195. AT LIGHT TURN LEFT ON RHODES RD (ABOUT .3 MILES) FOLLOW FOR 2 MILES THEN TURN LEFT ON KATE RD. FOLLOW FOR ABOUT .8 MILES AND TURN LEFT ON ROUPS RD. ACCESS ROAD IS AT THE END.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	COVER SHEET	0	09/27/17	BRL
G-002	GENERAL NOTES	0	09/27/17	BRL
C-101	DETAILED SITE PLAN	0	09/27/17	BRL
C-501	RF SCHEDULE AND ANTENNA INSTALLATION	0	09/27/17	BRL
C-502	CONSTRUCTION DETAILS	0	09/27/17	BRL

AMERICAN TOWER®
ATC TOWER SERVICES
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 6260F

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	BRL	09/27/17

ATC SITE NUMBER:
302495

ATC SITE NAME:
TOLLAND CT

SITE ADDRESS:
5 BARBARA RD
TOLLAND, CT 06084

SEAL:

Sep 27 2017 5:58 PM cosign

verizon

DRAWN BY:	BRL
APPROVED BY:	KRF
DATE DRAWN:	09/27/17
ATC JOB NO:	12142575
CUSTOMER ID:	TOLLAND CT

COVER SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC MASTER SPECIFICATIONS.
2. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
4. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
6. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON WIRELESS REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON WIRELESS REP PRIOR TO PROCEEDING.
11. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON WIRELESS REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER.
13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON WIRELESS REP IMMEDIATELY.
15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
16. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
17. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
18. CONTRACTOR SHALL FURNISH VERIZON WIRELESS WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
19. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON WIRELESS REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
20. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON WIRELESS REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
21. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON WIRELESS SPECIFICATIONS AND REQUIREMENTS.
22. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON WIRELESS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
23. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
24. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
25. CONTRACTOR SHALL NOTIFY VERIZON WIRELESS REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
27. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
28. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON WIRELESS REP. ANY WORK FOUND BY THE VERIZON WIRELESS REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
29. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
   A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
   A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

AMERICAN TOWER®
ATC TOWER SERVICES
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 6260F

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	BRL	09/27/17
△			
△			
△			
△			

ATC SITE NUMBER:
302495

ATC SITE NAME:
TOLLAND CT

SITE ADDRESS:
5 BARBARA RD
TOLLAND, CT 06084

SEAL:

Sep 27 2017 5:58 PM cosign

verizon

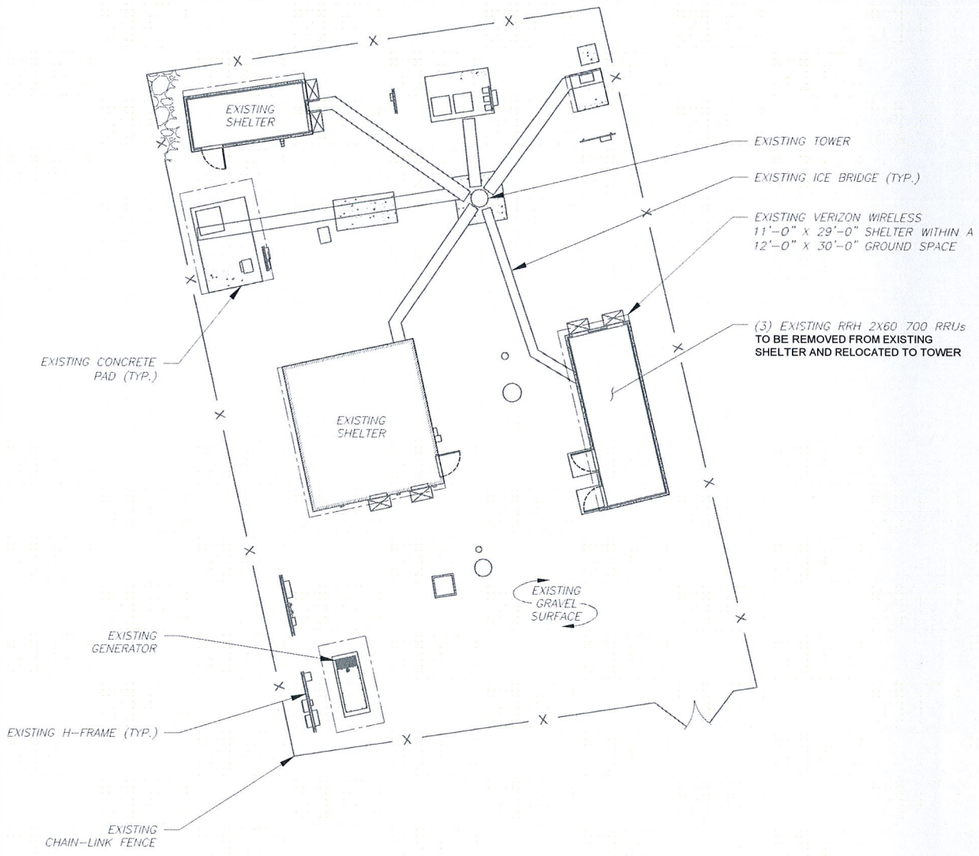
DRAWN BY:	BRL
APPROVED BY:	KRF
DATE DRAWN:	09/27/17
ATC JOB NO:	12142575
CUSTOMER ID:	TOLLAND CT

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

SITE PLAN NOTES:

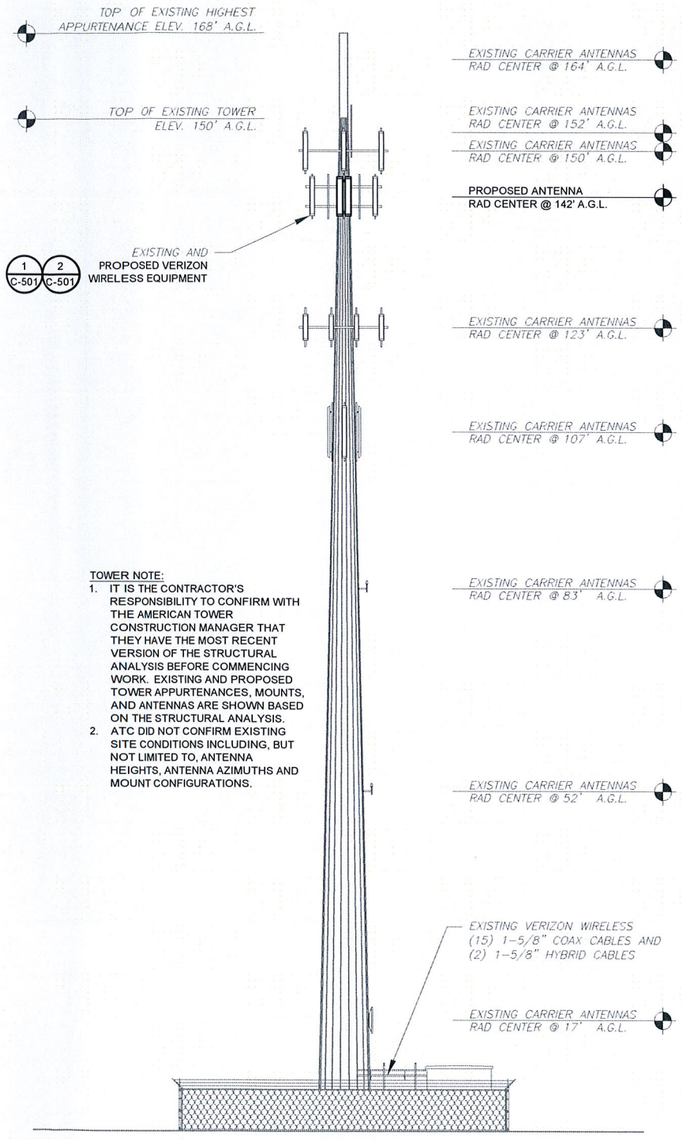
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, CABLE SUPPORTS, AND CABLES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE INSTALLING NEW CABLE SUPPORT STRUCTURES, COAX PORTS, OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE ATC CONSTRUCTION MANAGER AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.



1 DETAILED SITE PLAN

0 20' 40'

SCALE: 1"=20' (11X17)
1"=10' (22X34)



TOWER NOTE:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE AMERICAN TOWER CONSTRUCTION MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
2. ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA HEIGHTS, ANTENNA AZIMUTHS AND MOUNT CONFIGURATIONS.

2 TOWER ELEVATION

SCALE: NOT TO SCALE

AMERICAN TOWER®
ATC TOWER SERVICES
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 6260F

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	BRL	09/27/17

ATC SITE NUMBER:
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SITE ADDRESS:
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SEAL:

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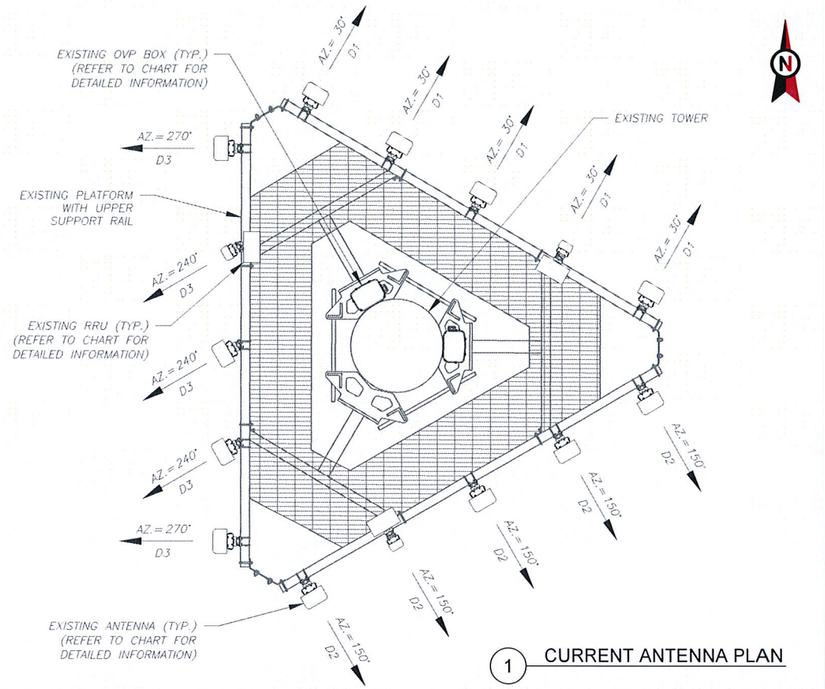
verizon

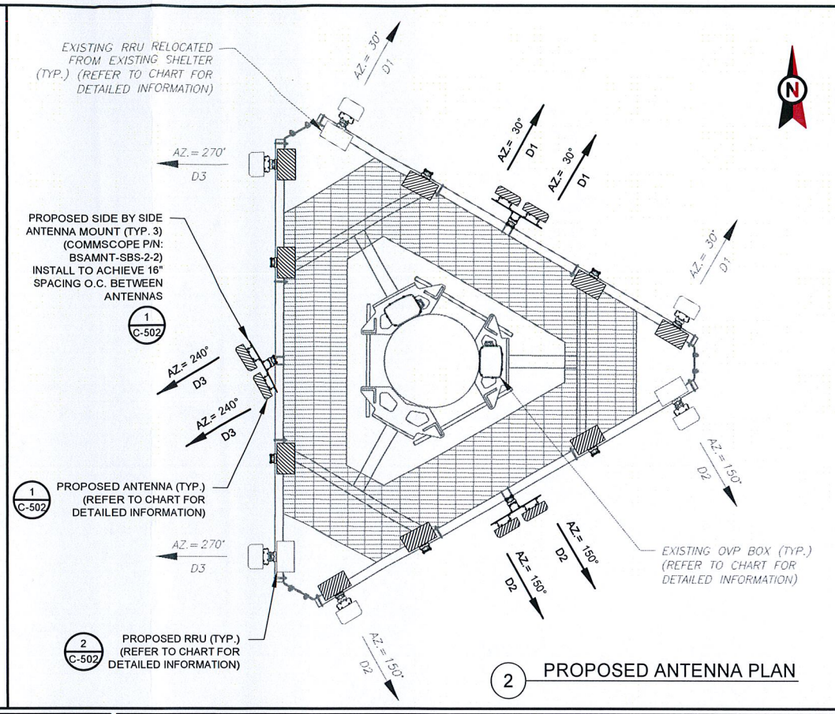
DRAWN BY:	BRL
APPROVED BY:	KRF
DATE DRAWN:	09/27/17
ATC JOB NO:	12142575
CUSTOMER ID:	TOLLAND CT

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0



1 CURRENT ANTENNA PLAN



2 PROPOSED ANTENNA PLAN

CURRENT ANTENNA AND RF EQUIPMENT SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	BAND	MODEL NUMBER	STATUS	POS	MODEL NUMBER	STATUS
D1	142'	30°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	–	–
		30°	2	700	LNX-6513DS-A1M	RMV	2	–	–
		30°	3	2100	HBXX-6516DS-A2M	RMV	3	–	–
		30°	4	2100	HBXX-6516DS-A2M	RMV	4	RRH 2X60 AWS	RMV
		30°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	–	–
D2	142'	150°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	–	–
		150°	2	700	LNX-6513DS-A1M	RMV	2	–	–
		150°	3	2100	HBXX-6516DS-A2M	RMV	3	–	–
		150°	4	2100	HBXX-6516DS-A2M	RMV	4	RRH 2X60 AWS	RMV
		150°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	–	–
D3	142'	270°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	–	–
		240°	2	700	LNX-6513DS-A1M	RMV	2	–	–
		240°	3	2100	HBXX-6516DS-A2M	RMV	3	–	–
		240°	4	2100	HBXX-6516DS-A2M	RMV	4	RRH 2X60 AWS	RMV
		270°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	–	–

CURRENT FIBER DISTRIBUTION / OVP BOX

LOCATION	POS	BAND	MODEL NUMBER	STATUS
TOWER	N/A	–	(2) DB-T1-6Z-8AB-0Z	RMN
–	–	–	–	–

CURRENT CABLING SUMMARY

COAX	HYBRID	STATUS
(15) 1-5/8"	(2) 1-5/8"	RMN
–	–	–

NOTES

1. BASED ON APPROVED ATC APPLICATION OAA709616, DATED 8-11-2017. CONFIRM WITH VERIZON WIRELESS REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS.
2. ATC HAS NOT YET VERIFIED ANY EXISTING ANTENNA CONFIGURATION OR MOUNT CONFIGURATION. CONTRACTOR TO VERIFY MOUNT CONFIGURATION HAS SUFFICIENT SPACE FOR PROPOSED LESSEE EQUIPMENT (I.E. CLEARANCES, MOUNT PIPE OR SUFFICIENT LENGTH, ETC.) ATC DID NOT ANALYZE ANTENNA MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY LESSEE LOADING.
3. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS ON FILE WITH THE ATC CM.
4. CONFIRM SPACING OF PROPOSED EQUIPMENT DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
5. POSITIONS START WITH FIRST PIPE ON THE LEFT SIDE (AS VIEWED FROM BEHIND THE MOUNT).
6. VERIFY LOCATION OF EXISTING OVPs IN FIELD.

PROPOSED ANTENNA AND RF EQUIPMENT SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	BAND	MODEL NUMBER	STATUS	POS	MODEL NUMBER	STATUS
D1	142'	30°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	RRH 2X60 700	REL
		–	2	–	EMPTY PIPE	–	2	RRH 2X90 AWS	ADD
		30°	3	2100	(2) JAHH-65BR3B	ADD	3	–	–
		–	4	–	EMPTY PIPE	–	4	RRH 2X60 PCS	ADD
		30°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	RRH 4X40 850	ADD
D2	142'	150°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	RRH 2X60 700	REL
		–	2	–	EMPTY PIPE	–	2	RRH 2X90 AWS	ADD
		150°	3	2100	(2) JAHH-65BR3B	ADD	3	–	–
		–	4	–	EMPTY PIPE	–	4	RRH 2X60 PCS	ADD
		150°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	RRH 4X40 850	ADD
D3	142'	270°	1	850 CDMA	SC-9012/ALPE-9011	RMN	1	RRH 2X60 700	REL
		–	2	–	EMPTY PIPE	–	2	RRH 2X90 AWS	ADD
		240°	3	2100	(2) JAHH-65BR3B	ADD	3	–	–
		–	4	–	EMPTY PIPE	–	4	RRH 2X60 PCS	ADD
		270°	5	850 CDMA	SC-9012/ALPE-9011	RMN	5	RRH 4X40 850	ADD

CURRENT FIBER DISTRIBUTION / OVP BOX

LOCATION	POS	BAND	MODEL NUMBER	STATUS
TOWER	N/A	–	(2) DB-T1-6Z-8AB-0Z	RMN
–	–	–	–	–

CURRENT CABLING SUMMARY

COAX	HYBRID	STATUS
(15) 1-5/8"	(2) 1-5/8"	RMN
–	–	–

STATUS ABBREVIATIONS

RMV: TO BE REMOVED
RMN: TO REMAIN
REL: TO BE RELOCATED
DSC: TO BE DISCONNECTED AND TO REMAIN

3 ANTENNA AND RF EQUIPMENT SCHEDULES

AMERICAN TOWER®
ATC TOWER SERVICES
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 6260F

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	BRL	09/27/17

ATC SITE NUMBER:
302495

ATC SITE NAME:
TOLLAND CT

SITE ADDRESS:
5 BARBARA RD
TOLLAND, CT 06084

SEAL:

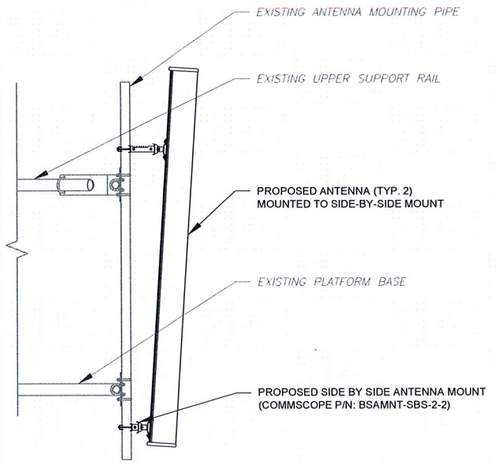
Sep 27 2017 5:58 PM cosign

verizon

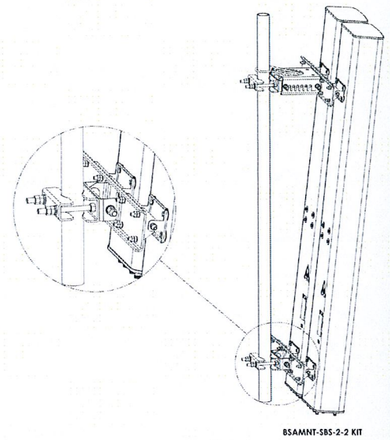
DRAWN BY:	BRL
APPROVED BY:	KRF
DATE DRAWN:	09/27/17
ATC JOB NO:	12142575
CUSTOMER ID:	TOLLAND CT

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:	REVISION:
C-501	0

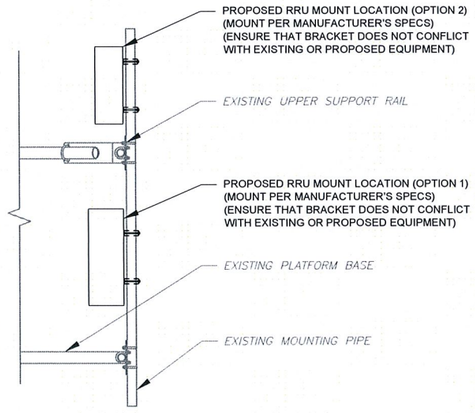


PROFILE VIEW

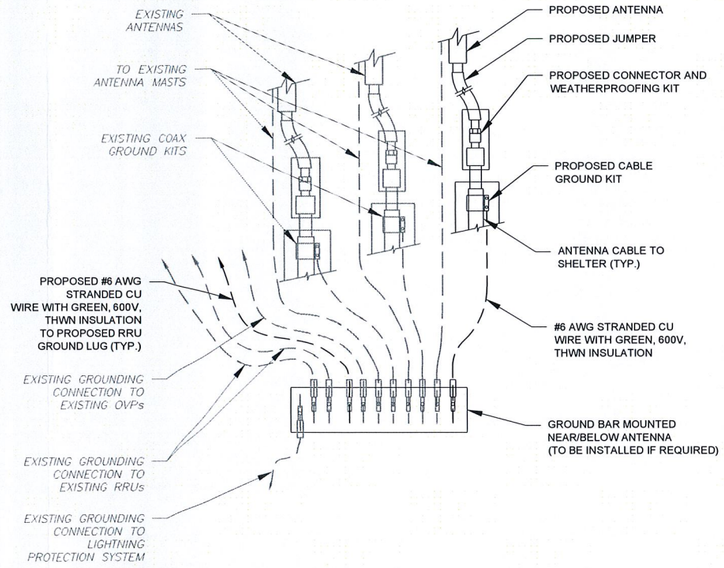


ISOMETRIC VIEW (BY MANUFACTURER)

1 PROPOSED SIDE-BY-SIDE MOUNT



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL



NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH VERIZON WIRELESS GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH VERIZON WIRELESS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

3 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: NOT TO SCALE

AMERICAN TOWER®
ATC TOWER SERVICES
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 6260F

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	BRL	09/27/17

ATC SITE NUMBER:
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ATC SITE NAME:
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SITE ADDRESS:
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verizon

DRAWN BY:	BRL
APPROVED BY:	KRF
DATE DRAWN:	09/27/17
ATC JOB NO:	12142575
CUSTOMER ID:	TOLLAND CT

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-502	0