

Karen Kilby, Site Acquisition Consultant
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (860) 830-8847
KKilby@centerlinecommunications.com

June 16th 2021

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

**RE: Notice of Exempt Modification // Site: ENFIELD 4 CT (ATC: 302489)
77 Town Farm Road Enfield, CT 06082
N 41.9659 // W 72.5527**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains 6 antennas at the 125-foot mount on the existing 150 foot monopole tower, located at 77 Town Farm Road Enfield, CT. The tower is owned by American Tower. The property is owned by the Town of Enfield. The tower was originally approved by the Council in 1985. Verizon Wireless now intends to remove 6 of its existing antennas to replace with 6 and install them on side-by-side mounts for the LTE (700/850/1900/2100/3700 MHz) replacements for its AWS/LTE-C upgrade. Additionally, Verizon Wireless will reinforce the mounts, remove 6 duplexers, 12 RRHs and 2 OVPs and replace with 9 RRHs and 1 OVP; altogether updating 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 Michael Ludwick, Mayor for Town of Enfield, which is also the ground owner, its Assistant Town Planner, Jennifer Pacacha 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 April 8th 2021 and a structural analysis dated April 27th 2021 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 April 27th 2021 pursuant to certain conditions defined therein. Design and engineering is fully illustrated within final construction drawings, signed and stamped dated April 8th 2021.

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,

Karen Kilby

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West Bridgewater, MA 02379
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Attachments

cc: Michael Ludwick, Mayor, Town of Enfield - as chief elected official & property owner
Jennifer Pacacha, Assistant Town Planner - as P&Z official
American Tower Corporation - as tower owner

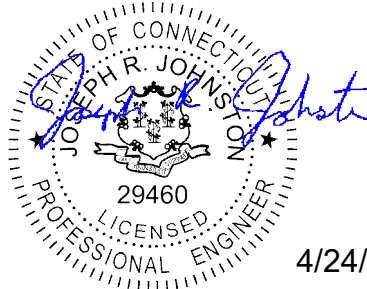
Mount Analysis Report

April 24, 2020

Verizon Wireless Site Name	ENFIELD 4 CT
Verizon Wireless Site Number	467219
ATC Asset Name	Enfd – Enfield, CT
ATC Asset Number	302489
ATC Engineering No.	13200028_C8_02
Infinigy Job Number	1009-Z0003-B
Client	ATC
Carrier	Verizon Wireless
Site Location	77 Town Farm Road Enfield, CT 06082-5152 Hartford County 41° 57' 57.2508" N NAD83 -72° 33' 9.6912" W NAD83
Mount Centerline EL.	125.0 ft
Mount Type	Platform
Structural Usage Ratio	82.7%
Overall Result	Pass

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements with the loading modifications listed below. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.

- Installation of proposed 3' Pipe 2 STD on existing mount standoff 6" from tower connection point, (2) per sector, (6) total. (1) Samsung B5/B13 RRH-BR04C & (1) Samsung B2/B66A RRH-BR049 will go on each proposed pipe mount per sector mounted 12" from the top of the proposed pipe mounts on standoff.



4/24/2020

Sergio J. Magallon, EIT
Senior Project Engineer

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Introduction

Infinigy Engineering has been requested to perform a mount analysis on the existing Verizon Wireless mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

Collocation Application	Collo App ID: 366272, Site Name: ENFIELD 4 CT, dated February 12, 2020
RFDS	Verizon Wireless RFDS ID: 2554737, Site Name: ENFIELD 4 CT, dated February 10, 2020
Structural Analysis Report	ATC Engineering, Site No. 302489, dated July 24, 2019
Mount Mapping Report	Infinigy Engineerin, PLLC, Site Name: ENFD - ENFIELD, dated March 13, 2020

Analysis Code Requirements

Wind Speed	97 mph (3-Second Gust, V_{ASD}) / 125 mph (3-Second Gust, V_{ULT})
Wind Speed w/ ice	50 mph (3-Second Gust, V_{ASD}) w/ 1" ice
TIA Revision	ANSI/TIA-222-G
Adopted Building Codes	2015 IBC / 2018 Connecticut State Building Code
Risk Category	II
Exposure Category	B*
Topographic Category	3*
Calculated Crest Height	27.0 ft.*
Spectral Response	$S_s = 0.181 \text{ g} / S_1 = 0.064 \text{ g}$
Site Class	D-Stiff Soil (Assumed)

*Wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-10 Section 26.5.3, IBC Section 1609.3, and TIA-222-G Section 2.6.6.2.5.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Sergio J. Magallon, EIT
 Senior Project Engineer | **INFINIGY**
 1033 Watervleit Shaker Road, Albany, NY 12205
 518-690-0790
 smagallon18@gmail.com | www.infinigy.com

April 24, 2020

Final Configuration Loading

Mount CL (ft)	Rad. HT (ft)	Vert. O/S (ft)	Horiz. O/S (ft)*	Qty	Appurtenance	Carrier
125.0	130.0	5.0	1.8	3	Amphenol Antel BXA-80080-6CF-EDIN-X	Verizon Wireless
		5.0	3.8, 10.8	6	Commscope NHH-65B-R2B	
		5.0	8.8	3	Antel BXA-70063/4CF	
		5.0	3.8	3	Samsung Outdoor CBRS 20W RRH	
		5.0	--	3	Samsung B5/B13 RRH-BR04C	
		5.0		3	Samsung B2/B66A RRH-BR049	
		5.0		1	Raycap RCMDC-6627-PF-48**	

*Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

** Raycap assumed to be installed directly on tower

Structure Usages

Horizontals	23.8%	Pass
Mount Pipes	23.9%	Pass
Standoffs	69.5%	Pass
Bracing	82.7%	Pass
RATING =	82.7%	Pass

Mount Connection Usages

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	20,340.2	6,586.5	32.4%
Max Shear (lbs.)	12,425.2	909.0	7.3%
Combined Tension/Shear	--	--	11.0%

*Assumed (1) 5/8" A325N bolts, (4) per mount to tower connection. Contractor to field verify anchor diameters prior to installation of proposed equipment.

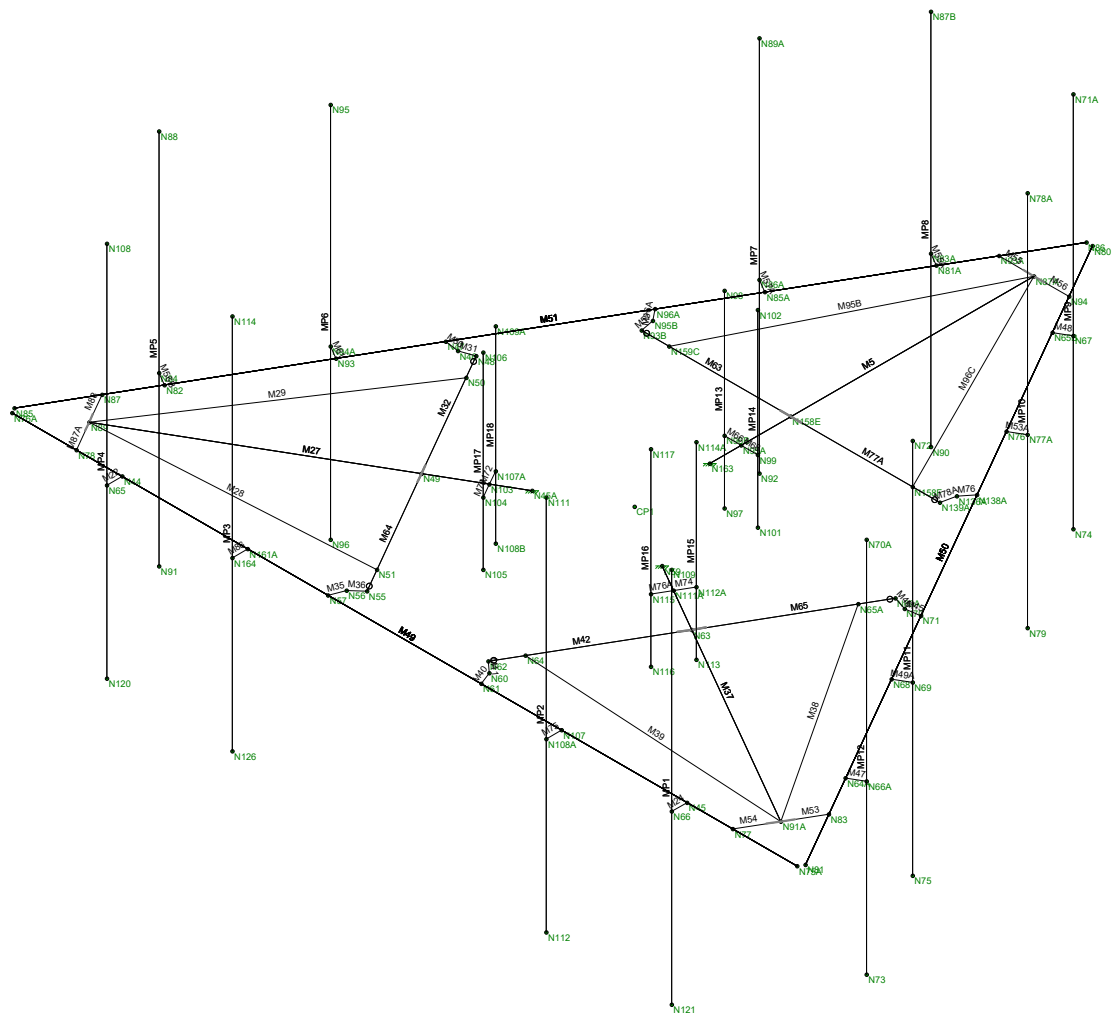
Anchor reactions are acceptable per rigorous structural analysis. Please see the calculations appended in this report for further detail.

Assumptions and Limitations

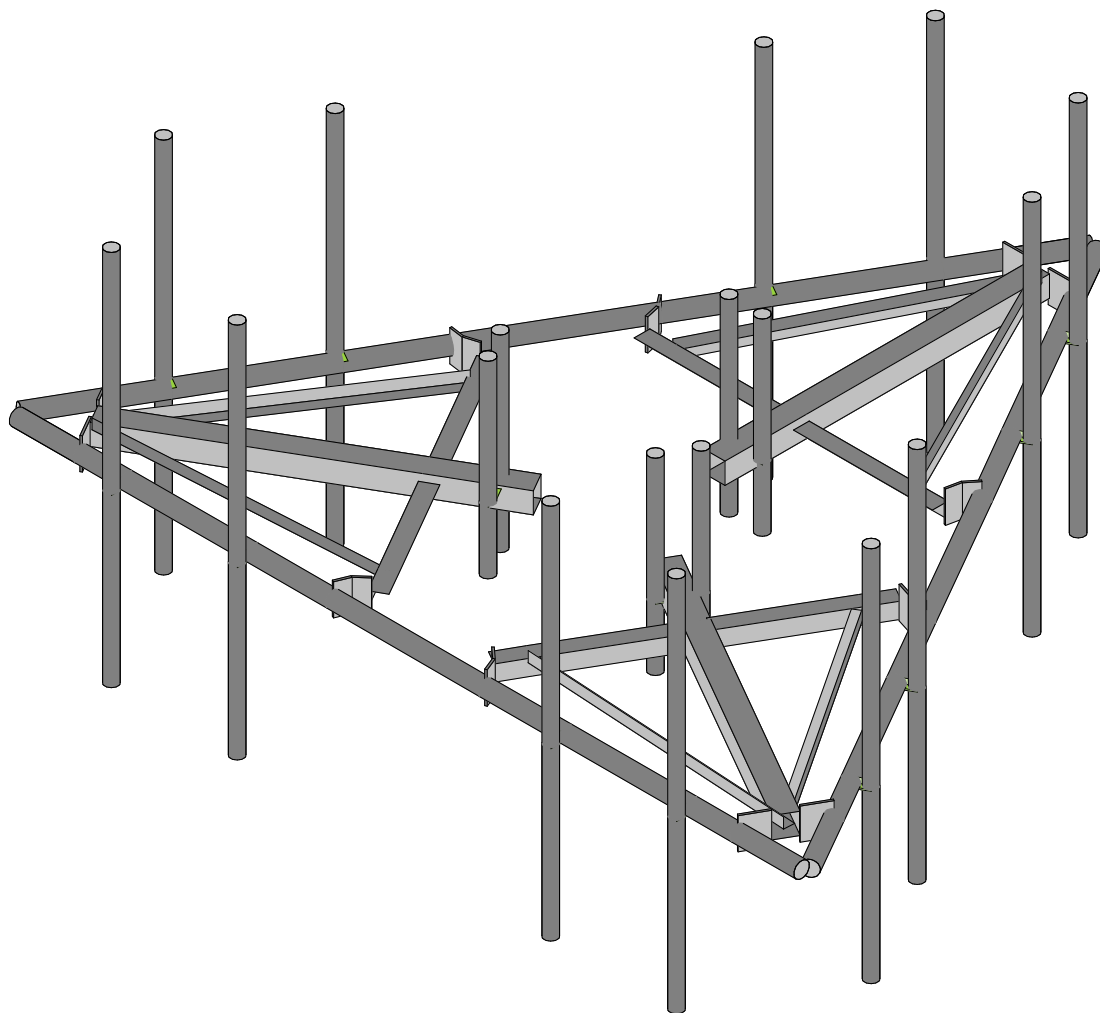
Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



Infinigy Engineering, PLLC	302489, ENFD - ENFIELD	Wireframe Model
SJM		Apr 24, 2020 at 10:01 AM
1009-Z0003-B		302489_467219 Enfd_Enfield (MA)...



Infinigy Engineering, PLLC	302489, ENFD - ENFIELD	Rendered Model
SJM		Apr 24, 2020 at 10:01 AM
1009-Z0003-B		302489_467219 Enfd_Enfield (MA)...

Program Inputs

PROJECT INFORMATION		
Client:	ATC	
Carrier:	Verizon Wireless	
Engineer:	Sergio Magallon	

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	B	
Topo Category:	5	
Site Class:	D - Stiff Soil	
Ground Elevation:	N/A	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	125.0	ft
Tower Height AGL:	150.0	ft

TOPOGRAPHIC DATA		
Topo Feature:	0	
Slope Distance:	200.0	ft
Crest Distance:	0.0	ft
Crest Height:	14.0	ft
ATC Calculated Crest Height:	27.3	ft

FACTORS		
Directionality Fact. (K_d):	0.95	
Ground Ele. Factor (K_e):	N/A	*Rev H Only
Rooftop Speed-Up (K_s):	N/A	*Rev H Only
Topographic Factor (K_{zt}):	1.00	
Gust Effect Factor (G_h):	1.0	

CODE STANDARDS		
Building Code:	2015 IBC	
TIA Standard:	TIA-222-G	
ASCE Standard:	ASCE 7-10	

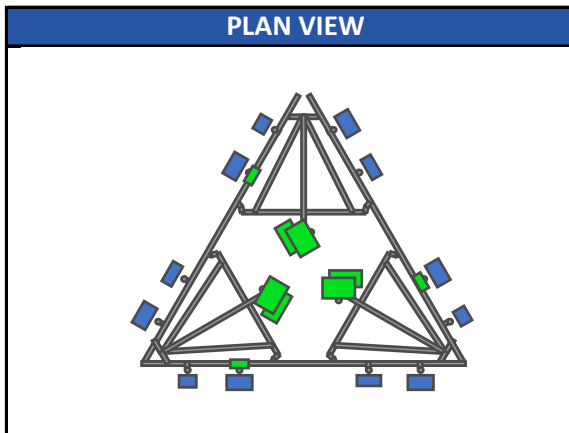
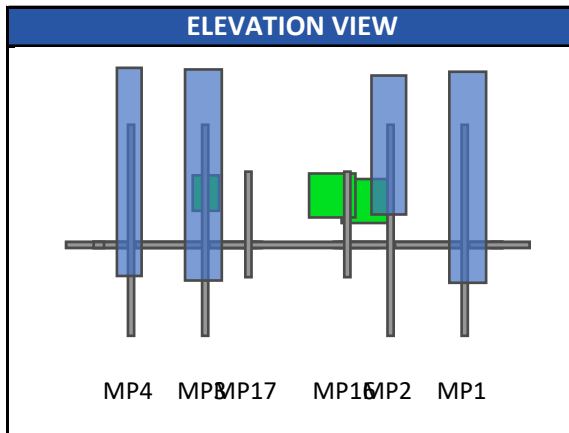
WIND AND ICE DATA		
Ultimate Wind (V_{ult}):	125	mph
Design Wind (V):	97	mph
Ice Wind (V_{ice}):	50	mph
Base Ice Thickness (t_i):	1	in
Flat Pressure:	48.21	psf
Round Pressure:	28.93	psf
Ice Wind Pressure:	7.69	psf

SEISMIC DATA		
Short-Period Accel. (S_s):	0.18	g
1-Second Accel. (S_1):	0.06	g
Short-Period Design (S_{DS}):	0.19	
1-Second Design (S_{D1}):	0.10	
Short-Period Coeff. (F_a):	1.60	
1-Second Coeff. (F_v):	2.40	
Amplification Factor (a_p):	1.00	
Response Mod. (R_p):	2.50	
Overstrength (Ω_o):	1.00	



Infinigy Load Calculator V2.1.4

Program Inputs

[illegible]

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M5	N163	N87A			Standoffs	Beam	Tube	A53 Gr.B	Typical
2	M22	N44	N65			RIGID	None	None	RIGID	Typical
3	M24	N45	N66			RIGID	None	None	RIGID	Typical
4	M86	N161A	N164			RIGID	None	None	RIGID	Typical
5	M95B	N87A	N159C		270	Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
6	M96C	N87A	N158F			Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
7	M87A	N78	N89			Corner Plate	Beam	RECT	A36 Gr.36	Typical
8	M88	N89	N87			Corner Plate	Beam	RECT	A36 Gr.36	Typical
9	M76	N136A	N138A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
10	M78A	N136A	N139A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
11	MP4	N108	N120			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
12	MP3	N114	N126			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
13	MP1	N109	N121			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
14	M77A	N139A	N158E		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
15	M75	N107	N108A			RIGID	None	None	RIGID	Typical
16	MP2	N111	N112			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
17	M49	N76A	N75A			Horizontals	Beam	Pipe	A53 Gr.B	Typical
18	M50	N81	N80			Horizontals	Beam	Pipe	A53 Gr.B	Typical
19	M51	N86	N85			Horizontals	Beam	Pipe	A53 Gr.B	Typical
20	M53	N83	N91A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
21	M54	N91A	N77			Corner Plate	Beam	RECT	A36 Gr.36	Typical
22	M55	N93A	N87A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
23	M56	N87A	N94			Corner Plate	Beam	RECT	A36 Gr.36	Typical
24	M56A	N95B	N96A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
25	M57	N95B	N93B			Corner Plate	Beam	RECT	A36 Gr.36	Typical
26	M27	N45A	N89			Standoffs	Beam	Tube	A53 Gr.B	Typical
27	M28	N89	N51		270	Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
28	M29	N89	N50			Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
29	M30	N46	N47			Corner Plate	Beam	RECT	A36 Gr.36	Typical
30	M31	N46	N48			Corner Plate	Beam	RECT	A36 Gr.36	Typical
31	M32	N48	N49		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
32	M35	N56	N57			Corner Plate	Beam	RECT	A36 Gr.36	Typical
33	M36	N56	N55			Corner Plate	Beam	RECT	A36 Gr.36	Typical
34	M37	N59	N91A			Standoffs	Beam	Tube	A53 Gr.B	Typical
35	M38	N91A	N65A		270	Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
36	M39	N91A	N64			Platform Angle	Beam	Single Angle	A36 Gr.36	Typical
37	M40	N60	N61			Corner Plate	Beam	RECT	A36 Gr.36	Typical
38	M41	N60	N62			Corner Plate	Beam	RECT	A36 Gr.36	Typical
39	M42	N62	N63		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
40	M45	N70	N71			Corner Plate	Beam	RECT	A36 Gr.36	Typical
41	M46	N70	N69A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
42	M47	N64A	N66A			RIGID	None	None	RIGID	Typical
43	M48	N65B	N67			RIGID	None	None	RIGID	Typical
44	M49A	N68	N69			RIGID	None	None	RIGID	Typical
45	MP12	N70A	N73			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
46	MP11	N72	N75			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
47	MP9	N71A	N74			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
48	M53A	N76	N77A			RIGID	None	None	RIGID	Typical
49	MP10	N78A	N79			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
50	M55A	N81A	N83A			RIGID	None	None	RIGID	Typical
51	M56B	N82	N84			RIGID	None	None	RIGID	Typical
52	M57A	N85A	N86A			RIGID	None	None	RIGID	Typical
53	MP8	N87B	N90			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
54	MP7	N89A	N92			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
55	MP5	N88	N91			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
56	M61	N93	N94A			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
57	MP6	N95	N96			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
58	M63	N158E	N93B		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
59	M64	N49	N55		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
60	M65	N63	N69A		180	Inner Horizont...	Beam	Channel	A36 Gr.36	Typical
61	M66	N95A	N96B			RIGID	None	None	RIGID	Typical
62	MP13	N98	N97			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
63	M68	N99	N95A			RIGID	None	None	RIGID	Typical
64	MP14	N102	N101			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
65	M70	N103	N104			RIGID	None	None	RIGID	Typical
66	MP17	N106	N105			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
67	M72	N107A	N103			RIGID	None	None	RIGID	Typical
68	MP18	N109A	N108B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
69	M74	N111A	N112A			RIGID	None	None	RIGID	Typical
70	MP15	N114A	N113			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
71	M76A	N115	N111A			RIGID	None	None	RIGID	Typical
72	MP16	N117	N116			Mount Pipe	Column	Pipe	A53 Gr.B	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RIGID		18	54.4	0
3	Total General		18	54.4	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	6"x0.37" Plate	18	61.1	.038
7	A36 Gr.36	L2x2x4	6	312	.084
8	A36 Gr.36	L3X3X3	6	159	.049
9	A53 Gr.B	HSS4X4X4	3	186	.178
10	A53 Gr.B	PIPE 2.0	18	1080	.312
11	A53 Gr.B	PIPE 2.5	3	450	.205
12	Total HR Steel		54	2248.1	.867

Basic Load Cases

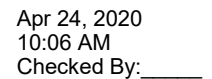
	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Self Weight	DL		-1			33	3	
2	Wind Load AZI 0	WLZ					66		
3	Wind Load AZI 30	None					66		
4	Wind Load AZI 60	None					66		
5	Wind Load AZI 90	WLX					66		
6	Wind Load AZI 120	None					66		
7	Wind Load AZI 150	None					66		
8	Wind Load AZI 180	None					66		
9	Wind Load AZI 210	None					66		
10	Wind Load AZI 240	None					66		
11	Wind Load AZI 270	None					66		
12	Wind Load AZI 300	None					66		
13	Wind Load AZI 330	None					66		
14	Distr. Wind Load Z	WLZ						81	
15	Distr. Wind Load X	WLX						81	
16	Ice Weight	OL1					33	81	3
17	Ice Wind Load AZI 0	OL2					66		
18	Ice Wind Load AZI 30	None					66		
19	Ice Wind Load AZI 60	None					66		
20	Ice Wind Load AZI 90	OL3					66		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
21	Ice Wind Load AZI 120	None					66		
22	Ice Wind Load AZI 150	None					66		
23	Ice Wind Load AZI 180	None					66		
24	Ice Wind Load AZI 210	None					66		
25	Ice Wind Load AZI 240	None					66		
26	Ice Wind Load AZI 270	None					66		
27	Ice Wind Load AZI 300	None					66		
28	Ice Wind Load AZI 330	None					66		
29	Distr. Ice Wind Load Z	OL2						81	
30	Distr. Ice Wind Load X	OL3						81	
31	Seismic Load Z	ELZ			-0.097		33		
32	Seismic Load X	ELX	-0.097				33		
33	Service Live Loads	LL				1			
34	BLC 1 Transient Area..	None						15	
35	BLC 16 Transient Are..	None						15	

Load Combinations

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...
1	1.4DL	Yes	Y			1	1.4														
2	1.2DL + 1.6WL AZI 0	Yes	Y			1	1.2	2	1.6	14	1.6	15									
3	1.2DL + 1.6WL AZI 30	Yes	Y			1	1.2	3	1.6	14	1.3...	15	.8								
4	1.2DL + 1.6WL AZI 60	Yes	Y			1	1.2	4	1.6	14	.8	15	1.3...								
5	1.2DL + 1.6WL AZI 90	Yes	Y			1	1.2	5	1.6	14		15	1.6								
6	1.2DL + 1.6WL AZI 120	Yes	Y			1	1.2	6	1.6	14	-.8	15	1.3...								
7	1.2DL + 1.6WL AZI 150	Yes	Y			1	1.2	7	1.6	14	-1....	15	.8								
8	1.2DL + 1.6WL AZI 180	Yes	Y			1	1.2	8	1.6	14	-1.6	15									
9	1.2DL + 1.6WL AZI 210	Yes	Y			1	1.2	9	1.6	14	-1....	15	-.8								
10	1.2DL + 1.6WL AZI 240	Yes	Y			1	1.2	10	1.6	14	-.8	15	-1....								
11	1.2DL + 1.6WL AZI 270	Yes	Y			1	1.2	11	1.6	14		15	-1.6								
12	1.2DL + 1.6WL AZI 300	Yes	Y			1	1.2	12	1.6	14	.8	15	-1....								
13	1.2DL + 1.6WL AZI 330	Yes	Y			1	1.2	13	1.6	14	1.3...	15	-.8								
14	0.9DL + 1.6WL AZI 0	Yes	Y			1	.9	2	1.6	14	1.6	15									
15	0.9DL + 1.6WL AZI 30	Yes	Y			1	.9	3	1.6	14	1.3...	15	.8								
16	0.9DL + 1.6WL AZI 60	Yes	Y			1	.9	4	1.6	14	.8	15	1.3...								
17	0.9DL + 1.6WL AZI 90	Yes	Y			1	.9	5	1.6	14		15	1.6								
18	0.9DL + 1.6WL AZI 120	Yes	Y			1	.9	6	1.6	14	-.8	15	1.3...								
19	0.9DL + 1.6WL AZI 150	Yes	Y			1	.9	7	1.6	14	-1....	15	.8								
20	0.9DL + 1.6WL AZI 180	Yes	Y			1	.9	8	1.6	14	-1.6	15									
21	0.9DL + 1.6WL AZI 210	Yes	Y			1	.9	9	1.6	14	-1....	15	-.8								
22	0.9DL + 1.6WL AZI 240	Yes	Y			1	.9	10	1.6	14	-.8	15	-1....								
23	0.9DL + 1.6WL AZI 270	Yes	Y			1	.9	11	1.6	14		15	-1.6								
24	0.9DL + 1.6WL AZI 300	Yes	Y			1	.9	12	1.6	14	.8	15	-1....								
25	0.9DL + 1.6WL AZI 330	Yes	Y			1	.9	13	1.6	14	1.3...	15	-.8								
26	1.2D + 1.0Di	Yes	Y			1	1.2	16	1												
27	1.2D + 1.0Di + 1.0Wi AZI 0	Yes	Y			1	1.2	16	1	17	1	29	1.6	30							
28	1.2D + 1.0Di + 1.0Wi AZI 30	Yes	Y			1	1.2	16	1	18	1	29	1.3...	30	.8						
29	1.2D + 1.0Di + 1.0Wi AZI 60	Yes	Y			1	1.2	16	1	19	1	29	.8	30	1.3...						
30	1.2D + 1.0Di + 1.0Wi AZI 90	Yes	Y			1	1.2	16	1	20	1	29		30	1.6						
31	1.2D + 1.0Di + 1.0Wi AZI 120	Yes	Y			1	1.2	16	1	21	1	29	-.8	30	1.3...						
32	1.2D + 1.0Di + 1.0Wi AZI 150	Yes	Y			1	1.2	16	1	22	1	29	-1....	30	.8						
33	1.2D + 1.0Di + 1.0Wi AZI 180	Yes	Y			1	1.2	16	1	23	1	29	-1.6	30							
34	1.2D + 1.0Di + 1.0Wi AZI 210	Yes	Y			1	1.2	16	1	24	1	29	-1....	30	-.8						
35	1.2D + 1.0Di + 1.0Wi AZI 240	Yes	Y			1	1.2	16	1	25	1	29	-.8	30	-1....						
36	1.2D + 1.0Di + 1.0Wi AZI 270	Yes	Y			1	1.2	16	1	26	1	29		30	-1.6						
37	1.2D + 1.0Di + 1.0Wi AZI 300	Yes	Y			1	1.2	16	1	27	1	29	.8	30	-1....						



Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)

	Member	Shape	Code ...	Loc[in]	LC	Shear...	Loc[...	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
4	M63	L3X3X3	.759	0	35	.123	21.5...	z	10	27199.62	35316	1320.097	2833.473	1...	H2-1
5	M32	L3X3X3	.753	26.5	35	.122	4.969	z	10	27199.6...	35316	1320.097	2833.473	1...	H2-1
6	M77A	L3X3X3	.729	26.5	31	.123	4.969	z	6	27199.6...	35316	1320.097	2833.473	1...	H2-1
7	M27	HSS4X4X4	.695	0	32	.143	0	y	34	97504.2...	106155	12311.25	12311.25	2...	H1-1b
8	M37	HSS4X4X4	.693	0	34	.130	0	y	32	97504.2...	106155	12311.25	12311.25	2...	H1-1b
9	M5	HSS4X4X4	.668	0	37	.131	0	y	30	97504.2...	106155	12311.25	12311.25	2...	H1-1b
10	M53	6"x0.37" Pl...	.290	4.709	11	.265	4.709	y	31	64846.0...	71928	553.5	8991	1...	H1-1b
11	M55	6"x0.37" Pl...	.288	4.709	3	.255	4.709	y	35	64846.0...	71928	553.5	8991	1...	H1-1b
12	M87A	6"x0.37" Pl...	.288	4.709	7	.273	4.709	y	27	64846.0...	71928	553.5	8991	1...	H1-1b
13	M88	6"x0.37" Pl...	.281	0	5	.232	0	y	35	64848.3...	71928	553.5	8991	1...	H1-1b
14	M28	L2x2x4	.279	0	28	.031	0	z	27	11812.2...	30585.6	690.934	1576.849	2...	H2-1
15	M56	6"x0.37" Pl...	.279	0	13	.222	0	y	31	64847.71	71928	553.5	8991	1...	H1-1b
16	M54	6"x0.37" Pl...	.278	0	9	.240	0	y	27	64848.3...	71928	553.5	8991	1...	H1-1b
17	M38	L2x2x4	.278	0	32	.031	0	z	31	11812.2...	30585.6	690.934	1576.849	2...	H2-1
18	M39	L2x2x4	.277	0	38	.031	0	y	38	11812.21	30585.6	690.934	1576.849	2...	H2-1
19	M29	L2x2x4	.276	0	34	.030	0	y	34	11812.21	30585.6	690.934	1576.849	2...	H2-1
20	M95B	L2x2x4	.267	0	36	.030	0	z	35	11812.2...	30585.6	690.934	1576.849	2...	H2-1
21	M96C	L2x2x4	.265	0	30	.029	0	y	30	11812.21	30585.6	690.934	1576.849	2...	H2-1
22	MP2	PIPE 2.0	.239	39.75	8	.022	39.75		8	20866.7...	32130	1871.625	1871.625	1...	H1-1b
23	MP6	PIPE 2.0	.239	39.75	4	.022	39.75		4	20866.7...	32130	1871.625	1871.625	1...	H1-1b
24	MP10	PIPE 2.0	.239	39.75	12	.022	39.75		12	20866.7...	32130	1871.625	1871.625	1...	H1-1b
25	M51	PIPE 2.5	.238	89.062	31	.261	12.5		4	14558.7...	50715	3596.25	3596.25	1...	H1-1b
26	M49	PIPE 2.5	.238	89.062	34	.263	12.5		8	14558.7...	50715	3596.25	3596.25	1...	H1-1b
27	M50	PIPE 2.5	.233	89.062	27	.262	12.5		12	14558.7...	50715	3596.25	3596.25	1...	H1-1b
28	MP12	PIPE 2.0	.228	39.75	12	.026	39.75		12	20866.7...	32130	1871.625	1871.625	1...	H1-1b
29	MP8	PIPE 2.0	.228	39.75	4	.026	39.75		4	20866.7...	32130	1871.625	1871.625	1...	H1-1b
30	MP4	PIPE 2.0	.228	39.75	8	.026	39.75		8	20866.7...	32130	1871.625	1871.625	1...	H1-1b
31	MP11	PIPE 2.0	.187	39.75	12	.015	39.75		12	20866.7...	32130	1871.625	1871.625	1...	H1-1b
32	MP7	PIPE 2.0	.187	39.75	4	.015	39.75		4	20866.7...	32130	1871.625	1871.625	1...	H1-1b
33	MP3	PIPE 2.0	.187	39.75	8	.015	39.75		8	20866.7...	32130	1871.625	1871.625	1...	H1-1b
34	MP5	PIPE 2.0	.169	39.75	4	.011	39.75		4	20866.7...	32130	1871.625	1871.625	1...	H1-1b
35	MP9	PIPE 2.0	.169	39.75	12	.011	39.75		12	20866.7...	32130	1871.625	1871.625	1...	H1-1b
36	MP1	PIPE 2.0	.169	39.75	8	.011	39.75		8	20866.7...	32130	1871.625	1871.625	1...	H1-1b
37	M45	6"x0.37" Pl...	.115	2.731	11	.155	0	y	31	69463.4...	71928	553.5	8991	1...	H1-1b
38	M30	6"x0.37" Pl...	.114	2.731	30	.152	0	y	34	69463.4...	71928	553.5	8991	1...	H1-1b
39	M40	6"x0.37" Pl...	.109	2.731	34	.160	0	y	27	69463.4...	71928	553.5	8991	1...	H1-1b
40	M35	6"x0.37" Pl...	.109	2.731	32	.164	0	y	27	69463.4...	71928	553.5	8991	1...	H1-1b
41	M56A	6"x0.37" Pl...	.106	2.731	3	.150	0	y	35	69463.4...	71928	553.5	8991	1...	H1-1b
42	M76	6"x0.37" Pl...	.104	2.731	38	.146	0	y	31	69463.4...	71928	553.5	8991	1...	H1-1b
43	MP14	PIPE 2.0	.060	24	12	.011	24		12	28843.4...	32130	1871.625	1871.625	2...	H1-1b
44	MP13	PIPE 2.0	.060	24	12	.011	24		12	28843.4...	32130	1871.625	1871.625	2...	H1-1b
45	MP18	PIPE 2.0	.051	24	4	.009	24		4	28843.4...	32130	1871.625	1871.625	2...	H1-1b
46	MP16	PIPE 2.0	.051	24	8	.009	24		8	28843.4...	32130	1871.625	1871.625	1...	H1-1b
47	MP17	PIPE 2.0	.050	24	4	.009	24		4	28843.4...	32130	1871.625	1871.625	2...	H1-1b
48	MP15	PIPE 2.0	.050	24	8	.009	24		8	28843.4...	32130	1871.625	1871.625	1...	H1-1b
49	M36	6"x0.37" Pl...	.045	0	27	.023	2.75	y	27	69429.3...	71928	553.5	8991	1...	H1-1b
50	M41	6"x0.37" Pl...	.044	0	27	.023	2.75	y	27	69429.5...	71928	553.5	8991	1...	H1-1b
51	M57	6"x0.37" Pl...	.044	0	36	.022	2.75	y	35	69429.3...	71928	553.5	8991	1.6	H1-1b
52	M78A	6"x0.37" Pl...	.043	0	30	.022	2.75	y	31	69429.5...	71928	553.5	8991	1...	H1-1b
53	M31	6"x0.37" Pl...	.042	0	31	.022	2.75	y	35	69429.5...	71928	553.5	8991	1...	H1-1b
54	M46	6"x0.37" Pl...	.040	0	35	.022	2.75	y	31	69429.3...	71928	553.5	8991	1...	H1-1b

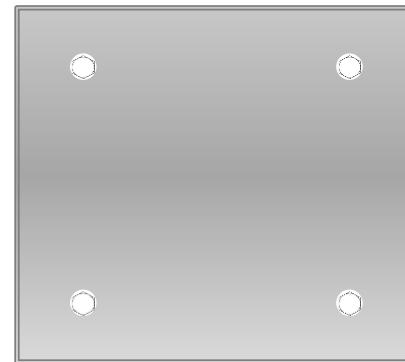
Bolt Calculation Tool, V1.4

PROJECT DATA	
Site Name:	ENFD - ENFIELD
Site Number:	302489
Job Code:	1009-Z0003-B
Connection Description:	Endoff-To-Collar Mount Connecti

APPLIED LOADS		
Bolt Tension:	6586.50	lbs
Bolt Shear:	909.01	lbs

BOLT PROPERTIES		
Bolt Type:	Bolt	-
Bolt Diameter:	0.625	in
Bolt Grade:	A325	-
# of Bolts:	4	-
Threads Excluded?	No	-

BOLT CHECK		
Tensile Strength	20340.15	
Shear Strength	12425.24	
Tensile Usage	32.4%	
Shear Usage	7.3%	
Interaction Check	0.11	≤1.05
Result	Pass	



77 TOWN FARM RD

Location	77 TOWN FARM RD	Mblu	071/ / 0003/ /
Acct#	002800010010	Owner	ENFIELD TOWN OF
Assessment	\$1,329,970	Appraisal	\$1,899,950
PID	4350	Building Count	2
Fire District	1		

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$802,530	\$1,097,420	\$1,899,950
Assessment			
Valuation Year	Improvements	Land	Total
2020	\$561,770	\$768,200	\$1,329,970

Owner of Record

Owner	ENFIELD TOWN OF	Sale Price	\$0
Co-Owner	REFUSE AREA (DUMP)	Certificate	1
Address	820 ENFIELD ST	Book & Page	0000/0000
	ENFIELD, CT 06082	Sale Date	

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
ENFIELD TOWN OF	\$0	1	0000/0000	

Building Information

Building 1 : Section 1	
Year Built:	1970
Living Area:	160
Replacement Cost:	\$7,069
Building Percent Good:	56

Replacement Cost
Less Depreciation: \$3,960

Building Attributes	
Field	Description
Style:	Job Shop
Model	Ind/Comm
Grade	Minimum
Stories:	1
Occupancy	1.00
Exterior Wall 1	Pre-finish Metl
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Metal/Tin
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Minimum/Plywd
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Electr Basebrd
AC Type	None
Struct Class	
Bldg Use	Exempt Comm
Total Rooms	
Total Bedrms	
Total Baths	
Total H Bths	
Extra Fixtures	
1st Floor Use:	
Heat/AC	
Frame Type	Steel
Baths/Plumbing	None
Ceiling/Wall	Ceil Walls
Rooms/Prtns	Average
Wall Height	7.00
% Comn Wall	

Building 2 : Section 1

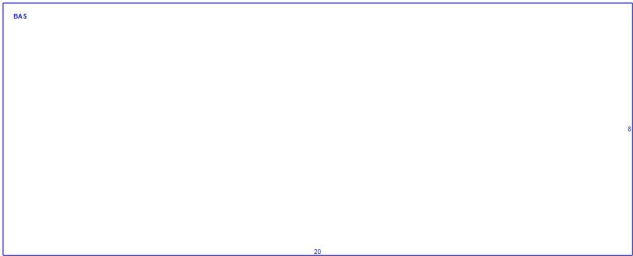
Year Built:
Living Area: 0
Replacement Cost: \$0
Building Percent Good:
Replacement Cost
Less Depreciation: \$0

Building Photo



(<http://images.vgsi.com/photos2/EnfieldCTPhotos//00\01\68\96.jpg>)

Building Layout



(ParcelSketch.ashx?pid=4350&bid=4350)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	160	160
		160	160

Building Attributes : Bldg 2 of 2	
Field	Description
Style	Outbuildings
Model	
Grade:	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Full Bthrms:	
Half Baths:	
Extra Fixtures	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Extra Kitchens	
Fireplace(s)	
Extra Opening(s)	
Gas Fireplace(s)	
Blocked FPL(s)	
Bsmt Garage(s)	
Fin Bsmt	
FBM Quality	
Whirlpool(s)	
Sauna	
Walk Out	
Solar	
Fndtn Cndtn	
Basement	

Building Photo



(<http://images.vgsi.com/photos2/EnfieldCTPhotos/default.jpg>)

Building Layout

 Building Layout (ParcelSketch.ashx?pid=4350&bid=30274)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use	Land Line Valuation
Use Code Description Zone Neighborhood Alt Land Appr Category 930 Exempt Ind R88 C500 No	Size (Acres) Frontage Depth Assessed Value Appraised Value 173.60 1513 \$768,200 \$1,097,420

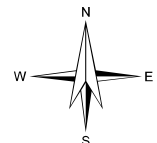
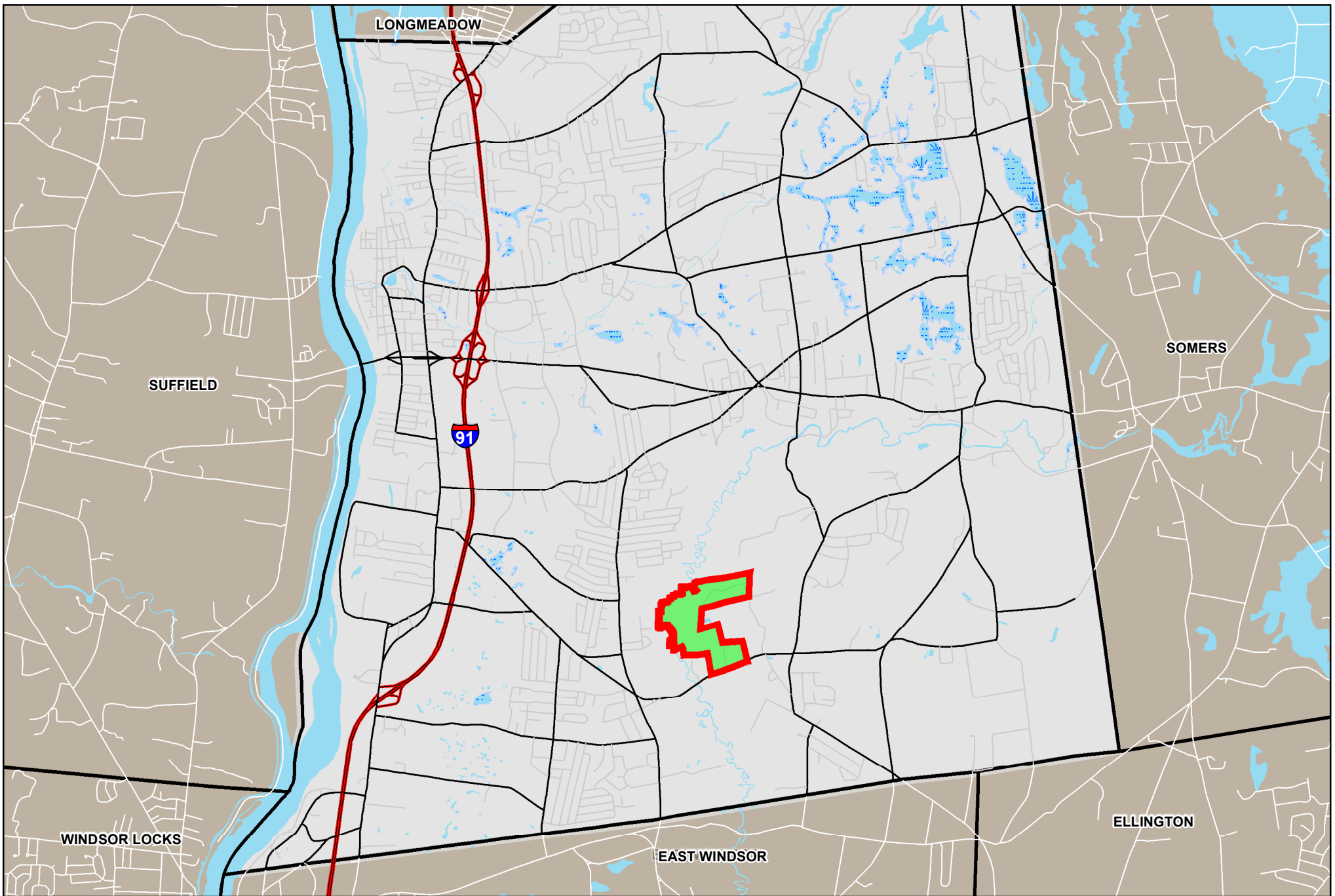
Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
SHD1	Shed	MS	Masonry	100.00 S.F.	\$820	1
SCL2	SCALES-ELECT			60.00 TONS	\$23,100	1
TWR2	Cell Twr 2 Carriers			1.00 UNITS	\$206,250	2
SHD1	Shed	MS	Masonry	140.00 S.F.	\$1,760	1
TWR4	Cell Twr4 Carriers			1.00 UNITS	\$562,500	2
FN3	FENCE-8' CHAIN			256.00 L.F.	\$4,140	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$802,530	\$1,097,420	\$1,899,950
2019	\$802,530	\$1,097,420	\$1,899,950
2018	\$802,530	\$1,097,420	\$1,899,950

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$561,770	\$768,200	\$1,329,970
2019	\$561,770	\$768,200	\$1,329,970
2018	\$561,770	\$768,200	\$1,329,970



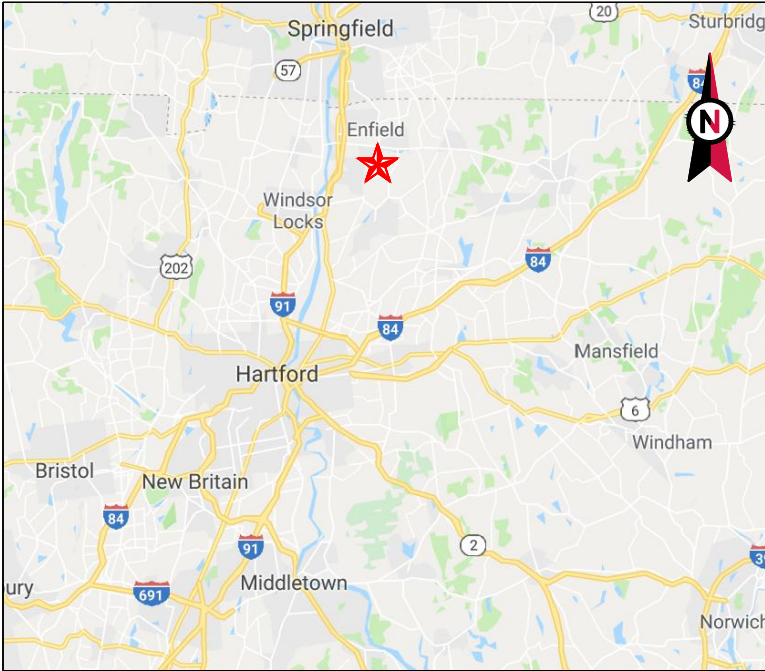
ENFIELD 4 CT

0 1,100 2,200 4,400 6,600 8,800 Feet

1 inch = 4,990 feet



The Town of Enfield, CT shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused or any decision made or action taken or not taken by reader in reliance upon any information or data furnished hereunder.



VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: ENFD - ENFIELD
ATC SITE NUMBER: 302489
VERIZON SITE NAME: ENFIELD 4 CT
VERIZON SITE NUMBER: 467219
SITE ADDRESS: 77 TOWN FARM ROAD
ENFIELD, CT 06082



LOCATION MAP

VERIZON
ANTENNA AMENDMENT DRAWINGS

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
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	<u>SITE ADDRESS:</u> 77 TOWN FARM ROAD ENFIELD, CT 06082 COUNTY: HARTFORD <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.96591667 LONGITUDE: -72.5527 GROUND ELEVATION: 159' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: REMOVE (6) ANTENNA(s), (6) DIPLEXERS (12) RRH(s), AND (2) OVPS INSTALL (6) ANTENNA(s), (9) RRH(s), (1) OVP(s), AND MOUNT MODIFICATIONS EXISTING (6) ANTENNA(S), (12) 1-5/8" COAX CABLES AND (1) 1-5/8" HYBRID CABLE(s) TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
			G-001	TITLE SHEET	0	04/08/21	TC
			G-002	GENERAL NOTES	0	04/08/21	TC
			C-101	DETAILED SITE PLAN	0	04/08/21	TC
			C-201	TOWER ELEVATION	0	04/08/21	TC
			C-401	ANTENNA INFORMATION & SCHEDULE	0	04/08/21	TC
			C-501	CONSTRUCTION DETAILS	0	04/08/21	TC
			E-501	GROUNDING DETAILS	0	04/08/21	TC
			R-601	SUPPLEMENTAL			



AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

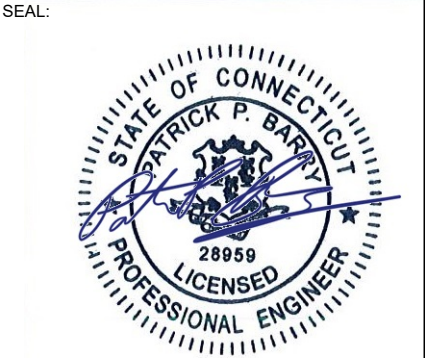
REV.	DESCRIPTION	BY	DATE
△	FOR CONSTRUCTION	TC	04/08/21
△			
△			
△			
△			

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

VERIZON SITE NAME:
ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082



DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

TITLE SHEET

SHEET NUMBER:
G-001

REVISION:
0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
- A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)

B. AC/TELCO INTERFACE BOX (PPC)

C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)

D. TOWERS, MONOPOLES

E. TOWER LIGHTING

F. GENERATORS & LIQUID PROPANE TANK

G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING

H. ANTENNAS (INSTALLED BY OTHERS)

I. TRANSMISSION LINE

J. TRANSMISSION LINE JUMPERS

K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS

L. TRANSMISSION LINE GROUND KITS

M. HANGERS

N. HOISTING GRIPS

O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. 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.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON 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.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. 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.
27. CONTRACTOR SHALL NOTIFY VERIZON 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.
28. 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.
29. 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.
30. 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 REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
31. 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.
32. VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
33. VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
- A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND

B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND VERIZON SPECIFICATIONS.

C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS

D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.

E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.

F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.

G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



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REV.	DESCRIPTION	BY	DATE
△0	FOR CONSTRUCTION	TC	04/08/21
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△			
△			
△			

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

VERIZON SITE NAME:
ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082

SEAL:



DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

GENERAL NOTES

SHEET NUMBER:

G-002

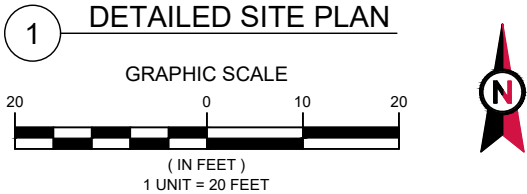
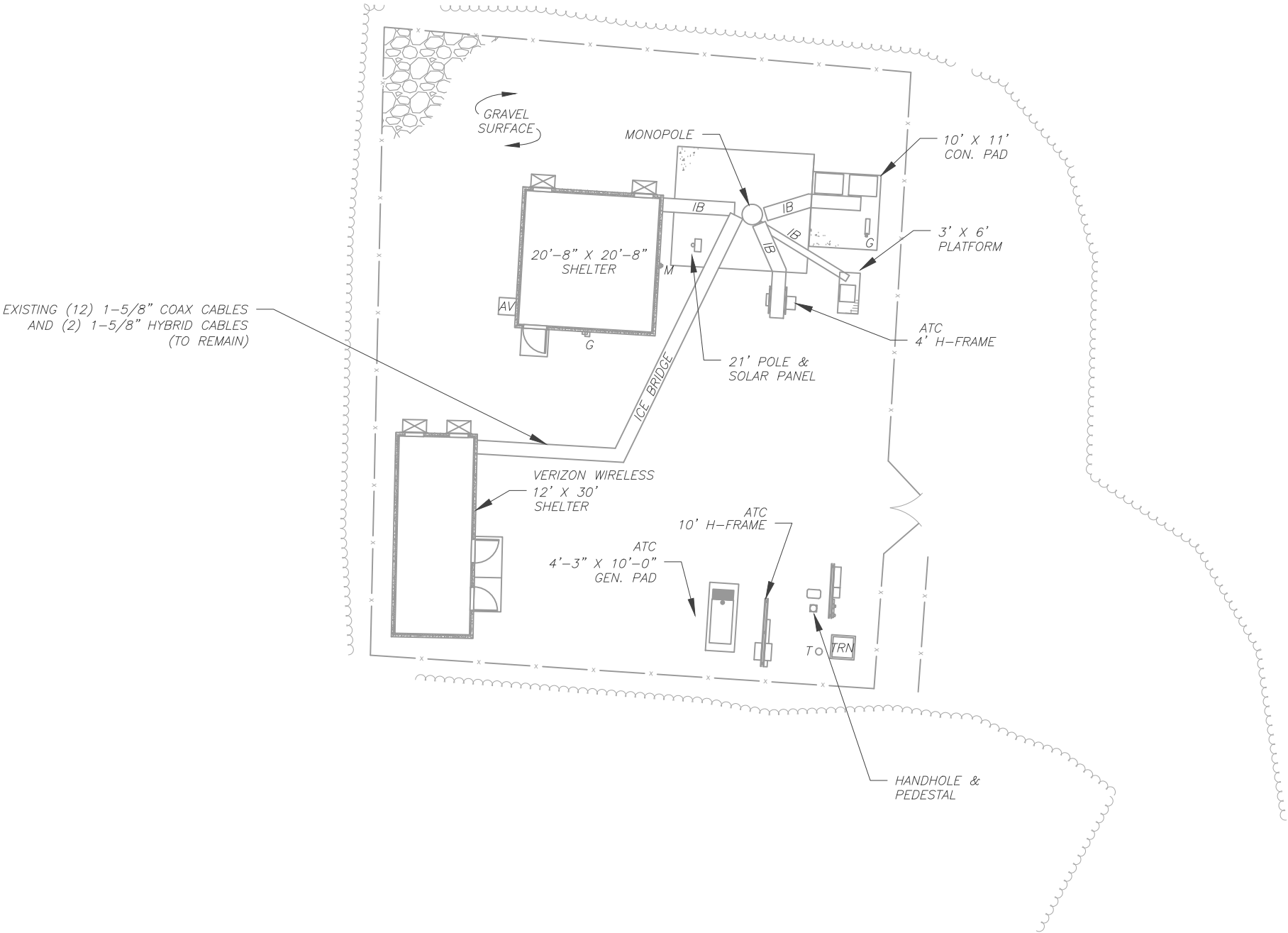
REVISION:

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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, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3.
- THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

LEGEND	
⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
— x —	CHAINLINK FENCE





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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	04/08/21

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

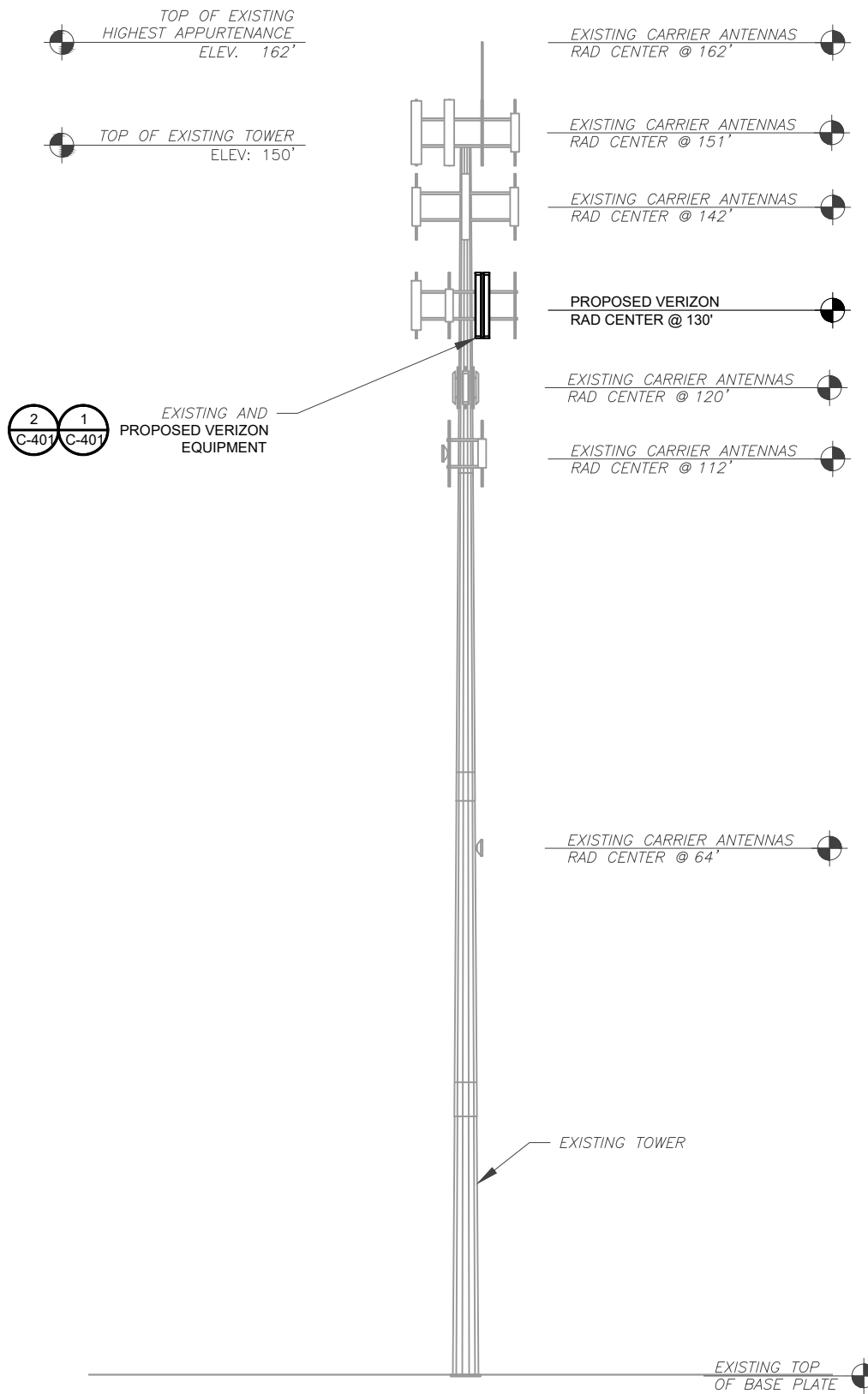
VERIZON SITE NAME:
ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082



DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

DETAILED SITE PLAN	
SHEET NUMBER: C-101	REVISION: 0



PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED 04/24/20, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT

- TOWER NOTE:**
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT 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. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 3. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

1 **TOWER ELEVATION**
SCALE: N.T.S.



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ATC SITE NUMBER:
302489

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ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082

SEAL:



DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
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CUSTOMER #:	467219

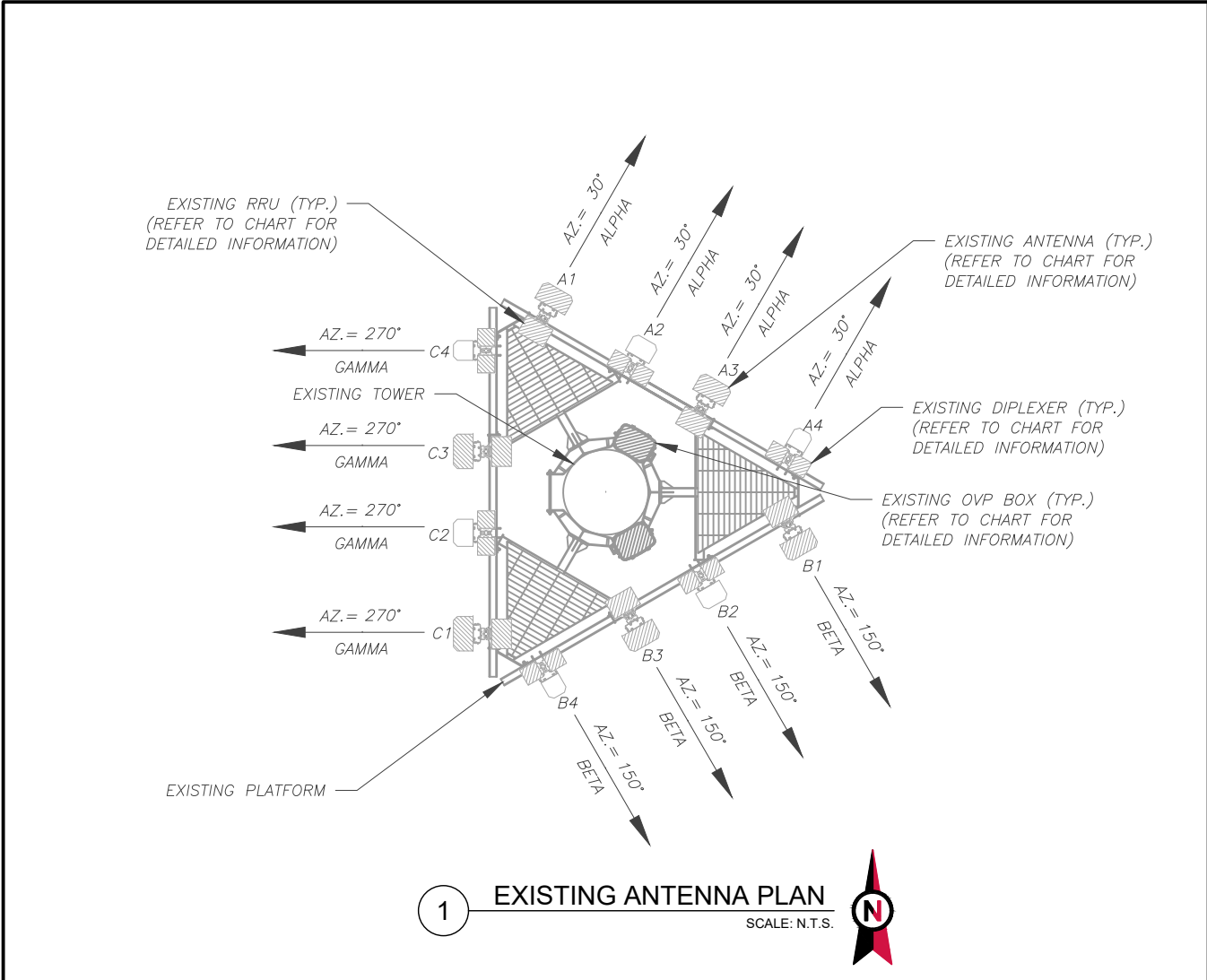
TOWER ELEVATION

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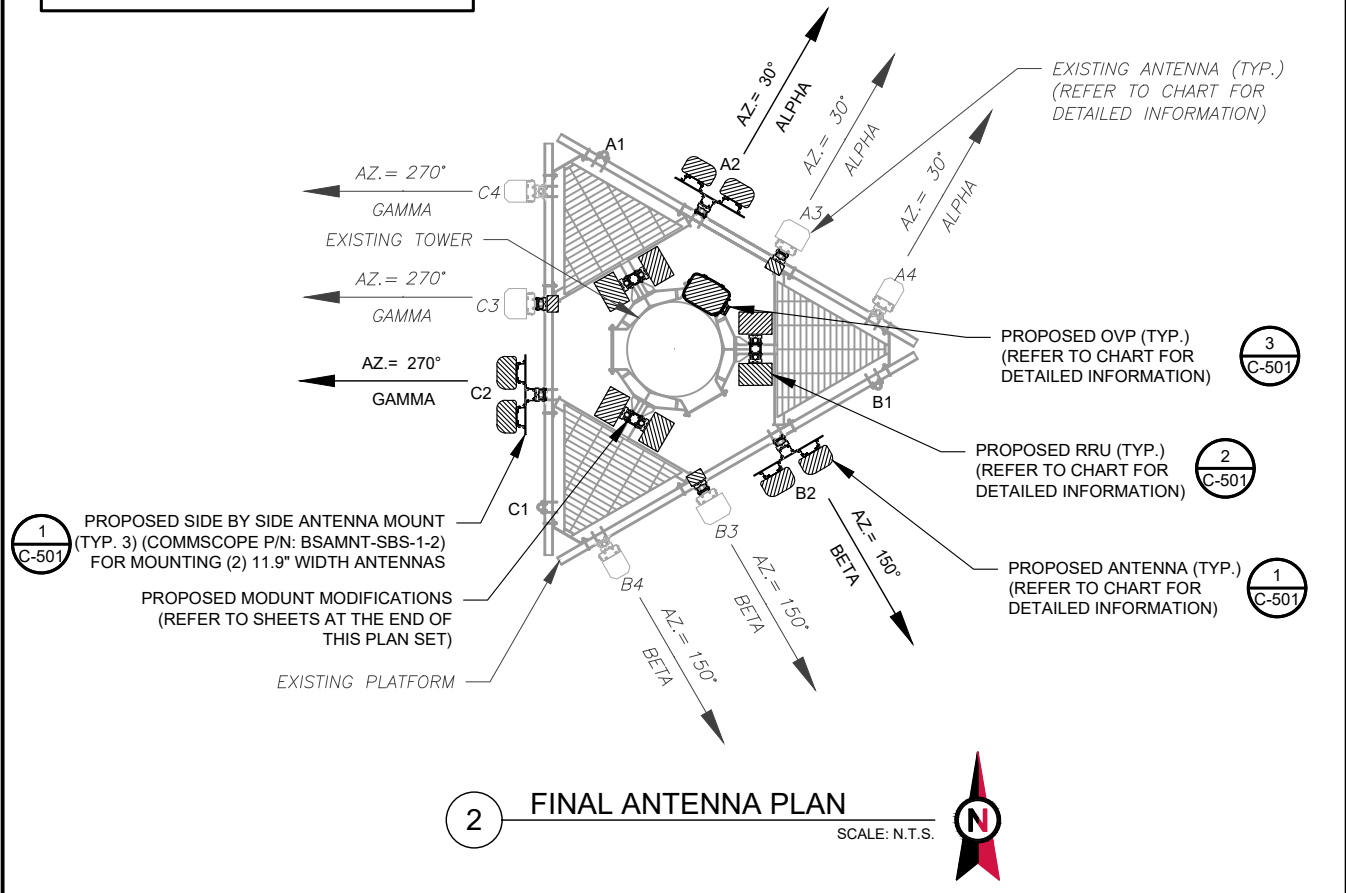
C-201

REVISION:

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PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED 04/24/20, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT



EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	130'	30°	A1	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B13 RRH4x30-4R 700U B25 RRH4x30	RMV RMV
			A2	BXA-70063/4CF	-	REL	FD9R6004/2C-3L	RMV
			A3	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B66A RRH 4x45 AIRSCALE RRH 4T4R B5 160W AHCA	RMV RMV
			A4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	FD9R6004/2C-3L	RMV
BETA	130'	150°	B1	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B13 RRH4x30-4R 700U	RMV RMV
			B2	BXA-70063/4CF	-	REL	FD9R6004/2C-3L	RMV
			B3	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B66A RRH 4x45	RMV RMV
			B4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	FD9R6004/2C-3L	RMV
GAMMA	130'	270°	C1	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B13 RRH4x30-4R 700U	RMV RMV
			C2	BXA-70063/4CF	-	REL	FD9R6004/2C-3L	RMV
			C3	JAHH-65B-R3B	700 LTE, AWS LTE	RMV	B66A RRH 4x45	RMV RMV
			C4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	FD9R6004/2C-3L	RMV

NOTES

1. CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.

2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

STATUS ABBREVIATIONS

RMV: TO BE REMOVED
RMN: TO REMAIN
REL: TO BE RELOCATED
ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'
RRU TO ANTENNA: 10'

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	130'	30°	A1	-	-	-	-	-
			A2	NHHSS-65C-R2B NHH-65B-R2B	700 LTE, 850 LTE, 1900 LTE, AWS LTE, CBRS LTE	ADD	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	ADD ADD
			A3	BXA-70063/4CF	-	REL	OUTDOOR CBRS 20W RRH	ADD
			A4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	-	-
BETA	130'	150°	B1	-	-	-	-	-
			B2	NHHSS-65C-R2B NHH-65B-R2B	700 LTE, 850 LTE, 1900 LTE, AWS LTE, CBRS LTE	ADD	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	ADD ADD
			B3	BXA-70063/4CF	-	REL	OUTDOOR CBRS 20W RRH	ADD
			B4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	-	-
GAMMA	130'	270°	C1	-	-	-	-	-
			C2	NHHSS-65C-R2B NHH-65B-R2B	700 LTE, 850 LTE, 1900 LTE, AWS LTE, CBRS LTE	ADD	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	ADD ADD
			C3	BXA-70063/4CF	-	REL	OUTDOOR CBRS 20W RRH	ADD
			C4	BXA-80080-6CFEDIN-X	850 CDMA	RMN	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
(2) DB-T1-6Z-8AB-0Z	RMV	(12) 1-5/8"	(2) 1-5/8"	RMN
-	-	-	-	-

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
RCMDC-6627-PF-48	ADD	(12) 1-5/8"	(2) 1-5/8"	RMN
-	-	-	-	-



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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	04/08/21
1			
2			
3			
4			
5			

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

VERIZON SITE NAME:
ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082

SEAL:

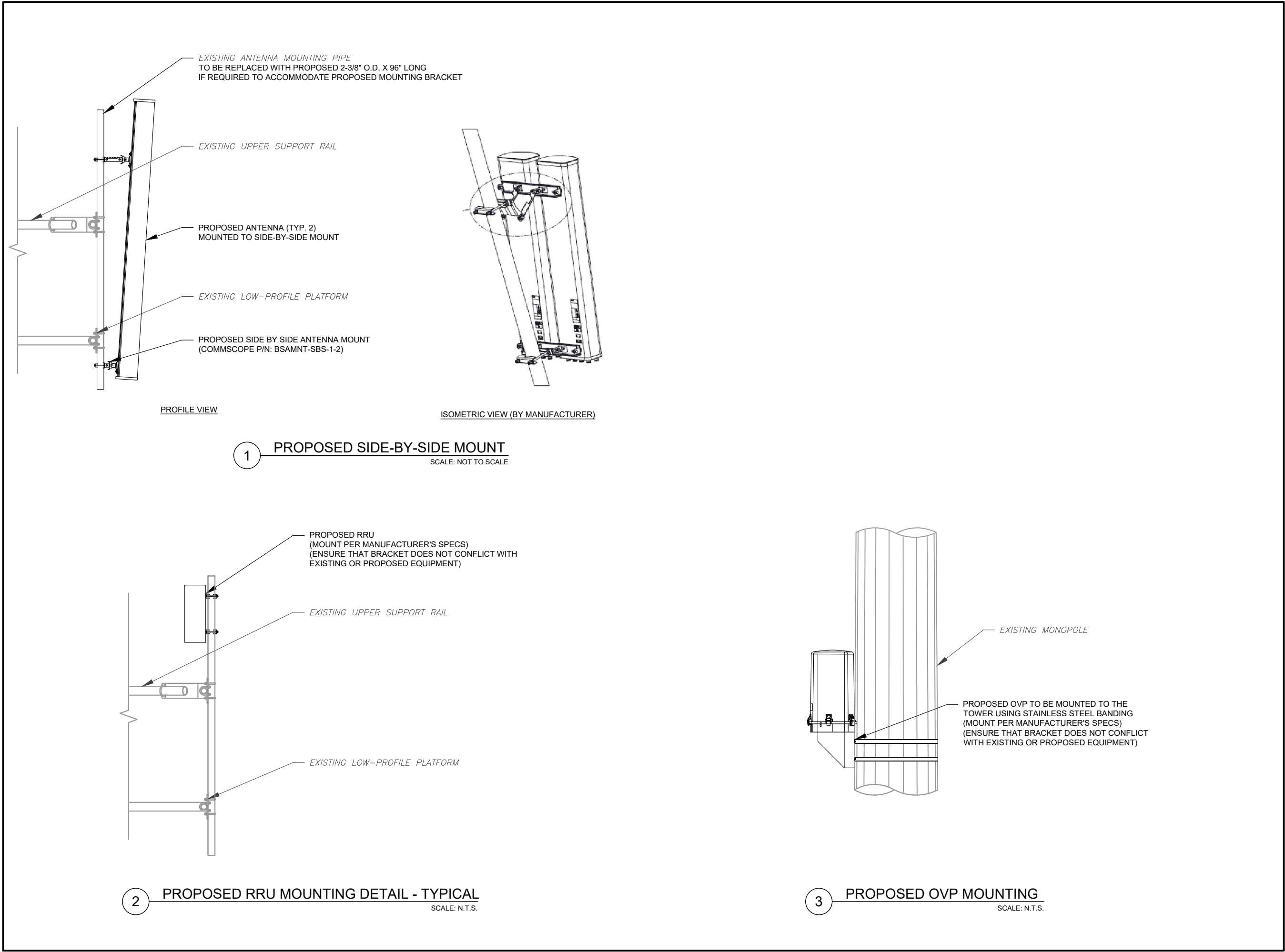




DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

ANTENNA INFORMATION
& SCHEDULE

SHEET NUMBER: C-401	REVISION: 0
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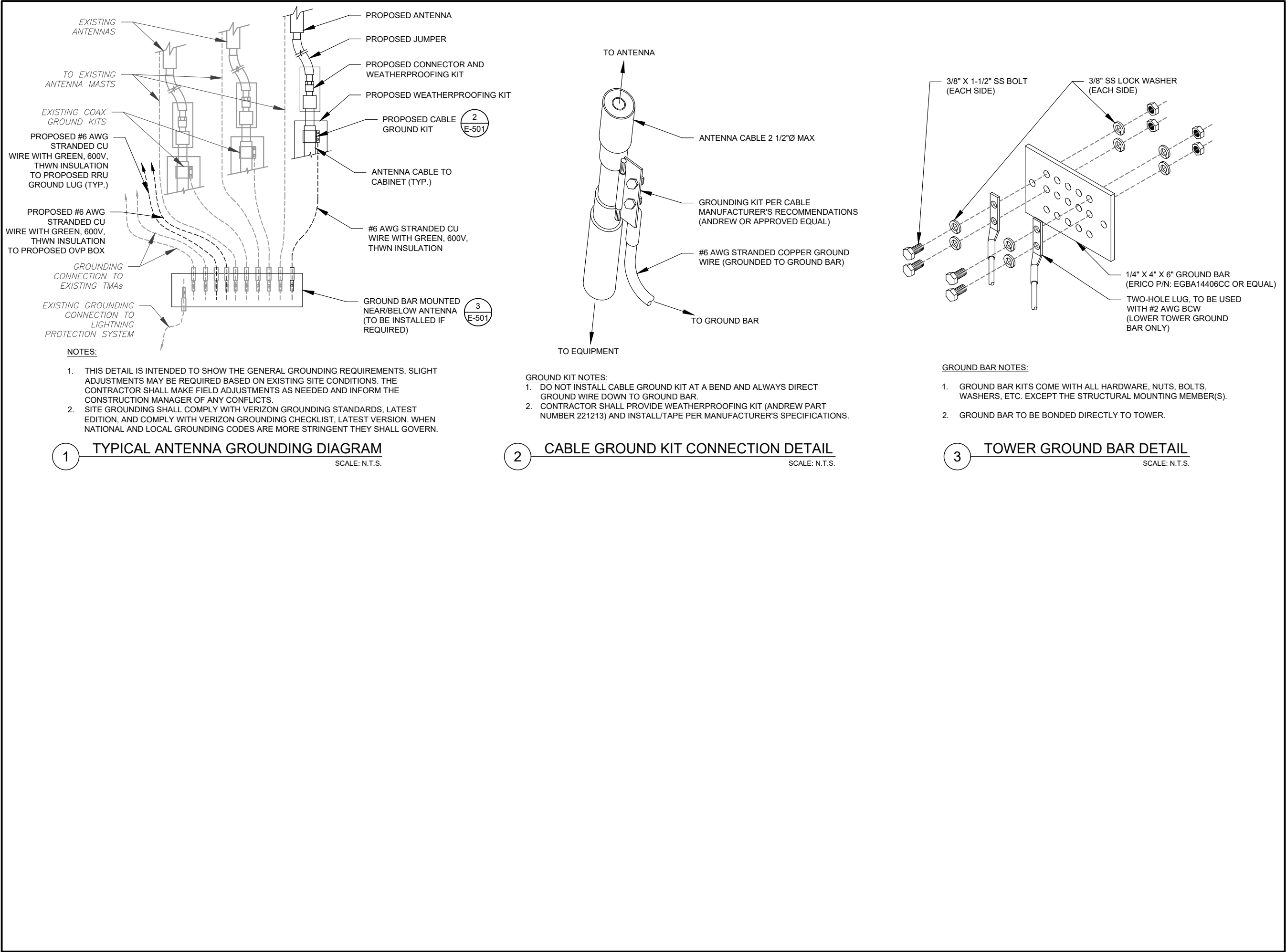


DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

CONSTRUCTION
DETAILS

SHEET NUMBER: C-501	REVISION: 0
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	04/08/21
1			
2			
3			
4			

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

VERIZON SITE NAME:
ENFIELD 4 CT

SITE ADDRESS:
77 TOWN FARM ROAD
ENFIELD, CT 06082

SEAL:



DATE DRAWN:	04/08/21
ATC JOB NO:	13200028_D1
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

GROUNDING DETAILS

SHEET NUMBER:

E-501

REVISION:

0

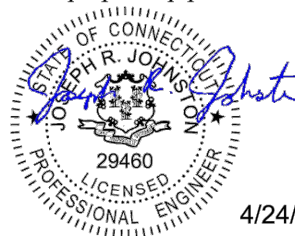
Mount Analysis Report

April 24, 2020

Verizon Wireless Site Name	ENFIELD 4 CT
Verizon Wireless Site Number	467219
ATC Asset Name	Enfd – Enfield, CT
ATC Asset Number	302489
ATC Engineering No.	13200028_C8_02
Infinigy Job Number	1009-Z0003-B
Client	ATC
Carrier	Verizon Wireless
Site Location	77 Town Farm Road Enfield, CT 06082-5152 Hartford County 41° 57' 57.2508" N NAD83 -72° 33' 9.6912" W NAD83
Mount Centerline EL.	125.0 ft
Mount Type	Platform
Structural Usage Ratio	82.7%
Overall Result	Pass

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements with the loading modifications listed below. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.

- Installation of proposed 3' Pipe 2 STD on existing mount standoff 6" from tower connection point, (2) per sector, (6) total. (1) Samsung B5/B13 RRH-BR04C & (1) Samsung B2/B66A RRH-BR049 will go on each proposed pipe mount per sector mounted 12" from the top of the proposed pipe mounts on standoff.



Sergio J. Magallon, EIT
Senior Project Engineer

AZ CA CO FL GA MD NC NH NJ NY TX WA



Mount Analysis Report

April 24, 2020

Introduction

Infinigy Engineering has been requested to perform a mount analysis on the existing Verizon Wireless mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

Collocation Application	Collo App ID: 366272, Site Name: ENFIELD 4 CT, dated February 12, 2020
RFDS	Verizon Wireless RFDS ID: 2554737, Site Name: ENFIELD 4 CT, dated February 10, 2020
Structural Analysis Report	ATC Engineering, Site No. 302489, dated July 24, 2019
Mount Mapping Report	Infinigy Engineerin, PLLC, Site Name: ENFD - ENFIELD, dated March 13, 2020

Analysis Code Requirements

Wind Speed	97 mph (3-Second Gust, V_{ASD}) / 125 mph (3-Second Gust, V_{ULT})
Wind Speed w/ ice	50 mph (3-Second Gust, V_{ASD}) w/ 1" ice
TIA Revision	ANSI/TIA-222-G
Adopted Building Codes	2015 IBC / 2018 Connecticut State Building Code
Risk Category	II
Exposure Category	B*
Topographic Category	3*
Calculated Crest Height	27.0 ft.*
Spectral Response	$S_s = 0.181$ g / $S_1 = 0.064$ g
Site Class	D-Stiff Soil (Assumed)

*Wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-10 Section 26.5.3, IBC Section 1609.3, and TIA-222-G Section 2.6.6.2.5.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Sergio J. Magallon, EIT
Senior Project Engineer | [INFINIGY](#)
1033 Watervleit Shaker Road, Albany, NY 12205
518-690-0790
smagallon18@gmail.com | www.infinigy.com

302489_Enfd - Enfield

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SUPPLEMENTAL

SHEET NUMBER:

R-601

REVISION:

0

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.



AMERICAN TOWER®
C O R P O R A T I O N

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : Enfd - Enfield, CT
ATC Asset Number : 302489
Engineering Number : 13669399_C3_01
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : ENFIELD IV CT
Carrier Site Number : 535791
Site Location : 77 Town Farm Road
Enfield, CT 06082-5152
41.965900,-72.552700
County : Hartford
Date : April 27, 2021
Max Usage : 97%
Result : Pass



Prepared By:
Josh Krehnbrink
Structural Engineer

Reviewed By:

COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection and Sway	3
Standard Conditions	4
Calculations	Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower Drawings	Smith Cullum Acquisition #CT-0025, dated May 14, 2001 ITT Meyer Specification #AT-8935, Type B, dated April 13, 1984
Foundation Drawing	Southern New England Telephone, dated June 6, 1985
Geotechnical Report	MB & A Project #011107, dated June 16, 2001
Modifications	ATC Job #40071639, dated December 6, 2007 ATC Job #48982632, dated April 25, 2012 ATC Job #613768312, dated February 2, 2016
Mount Analysis	Infinigy Job #1009-Z003-B, dated March 19, 2020

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:	116 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1 1/2" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Crest Height (H):	0 ft
Spectral Response:	$S_s = 0.17$, $S_1 = 0.05$
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

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
162.0	1	Decibel DB809KE-SY	Stand-Off	(1) 1 5/8" Coax	SPOK HOLDINGS, INC.
154.0	3	Kaelus DBC0061F1V51-2	Triangular Platform with Handrails	(4) 0.78" (19.7mm) 8 AWG 6 (11) 1 5/8" Coax (1) 2" conduit (2) 3" conduit	AT&T MOBILITY
	3	Powerwave Allgon LGP21401			
	3	Ericsson RRUS A2 B2			
	3	Ericsson RRUS 11 (Band 12) (55 lb)			
	2	Raycap DC6-48-60-18-8F ("Squid")			
	3	Ericsson RRUS 32 B30			
	3	Powerwave Allgon 7770.00			
	3	Ericsson Radio 8843			
	3	Ericsson RRUS-11 (19.7")			
	3	Ericsson RRUS-12 B2			
152.0	2	Diamond X50A	Stand-Off	(2) 1/2" Coax	ENERTRAC, INC.
151.0	3	CCI TPA-65R-LCUUUU-H8	Triangular Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (1) 3" conduit	AT&T MOBILITY
	3	CCI OPA-65R-LCUU-H8			
140.0	3	Ericsson AIR 21, 1.3M, B4A B2P	Triangular Platform with Handrails	(1) 1 1/4" Hybriflex Cable (12) 1 5/8" Coax	T-MOBILE
	3	Andrew LNX-6515DS-VTM			
	3	Ericsson AIR 21, 1.3 M, B2A B4P			
	3	Ericsson RRUS-11 (50 lbs.)			
	3	Ericsson KRY 112 144/1			
130.0	3	Commscope NHHSS-65C-R2B	Triangular Low Profile Platform	(6) 1 5/8" Coax (2) 1 5/8" Hybriflex	VERIZON WIRELESS
	1	Raycap RCMD-6627-PF-48			
	3	Samsung Outdoor CBRS 20W RRH			
	3	Samsung B5/B13 RRH-BR04C			
	3	Samsung B2/B66A RRH-BR049			
	3	Amphenol Antel BXA-80080-6CF-EDIN-X			
	3	Commscope NHH-65B-R2B			
120.0	3	Generic 76" x 6" Panel	Flush	(6) 1 5/8" Coax	METRO PCS INC
111.0	3	Alcatel-Lucent 1900MHz RRH (65MHz) w/ solar shield	Side Arm	(4) 1 1/4" Hybriflex Cable (4) 1/2" Coax (2) 2" conduit	CLEARWIRE CORPORATION
	2	DragonWave A-ANT-11G-2-C			
	3	RFS APXVTM14-ALU-I20			
	2	DragonWave Horizon Compact			
	6	Alcatel-Lucent RRH2x50-08			
	3	Nokia FZHN Flexi RRH 8TR 2600 9*20W			
	3	Commscope NNVV-65B-R4			
108.0	1	Generic 24" x 24" Junction Box			
64.0	1	Channel Master Type 120	Side Arm	(1) 0.28" (7mm) RG-6	SPOK HOLDINGS, INC.

**Equipment to be Removed**

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
130.0	3	Antel BXA-70063/4CF	-	(6) 1 5/8" Coax	VERIZON WIRELESS

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
130.0	3	Samsung MT6407-77A	Triangular Low Profile Platform	-	VERIZON WIRELESS

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	68%	Pass
Shaft	92%	Pass
Base Plate	47%	Pass
Reinforcement	89%	Pass
Flanges	47%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	3,385.8	78%
Axial (Kips)	75.5	85%
Shear (Kips)	30.1	97%

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) (°)
130.0	Samsung MT6407-77A	VERIZON WIRELESS	1.679	1.621
111.0	DragonWave A-ANT-11G-2-C	CLEARWIRE CORPORATION	1.197	1.343
64.0	Channel Master Type 120	SPOK HOLDINGS, INC.	0.376	0.655

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



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

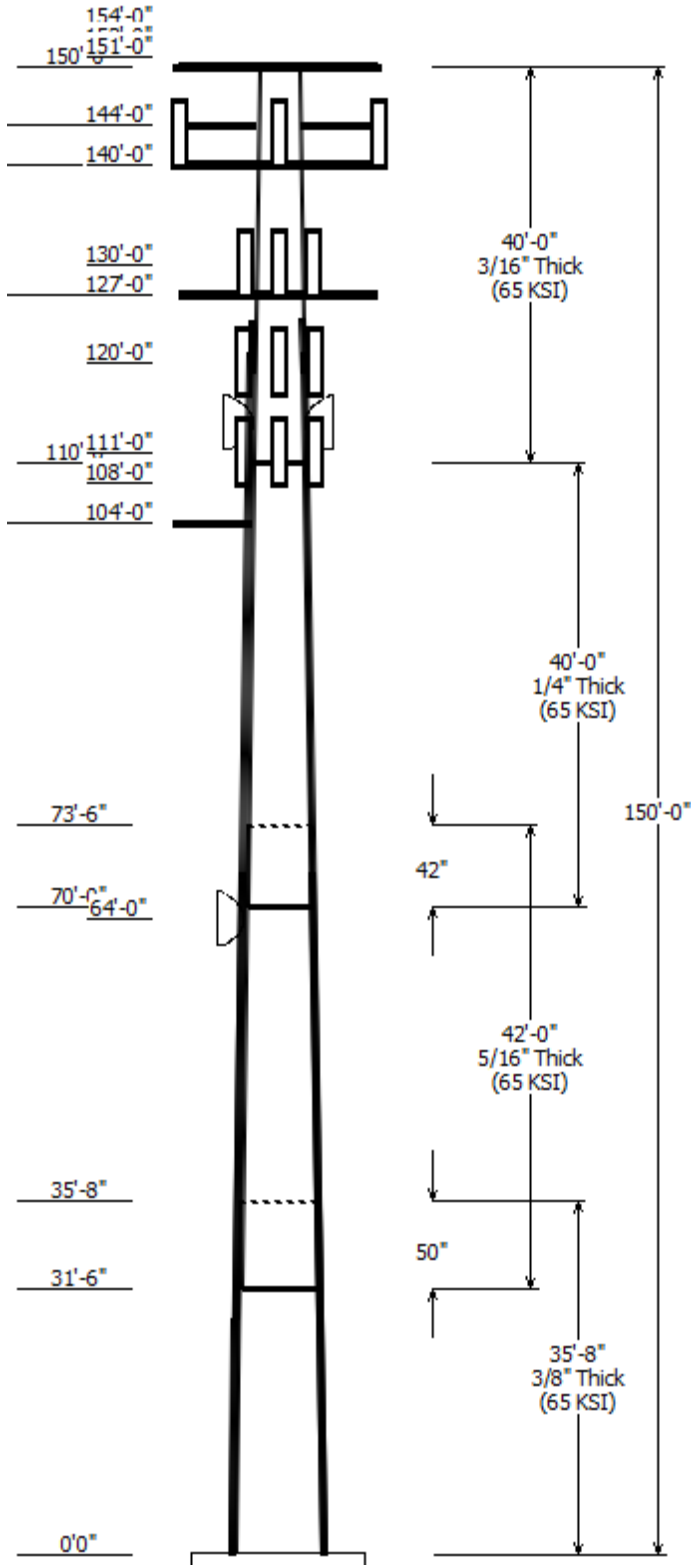
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

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.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively “American Tower”) are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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 supplied herein.



Job Information

Client : VERIZON WIRELESS

Pole : 302489

Code: ANSI/TIA-222-H

Location : Enfd - Enfield, CT

Description :

Risk Category : II

Shape : 12 Sides

Exposure : C

Height : 150.00 (ft)

Topo Method : Method 1

Base Elev (ft): 0.00

Topographic Category : 1

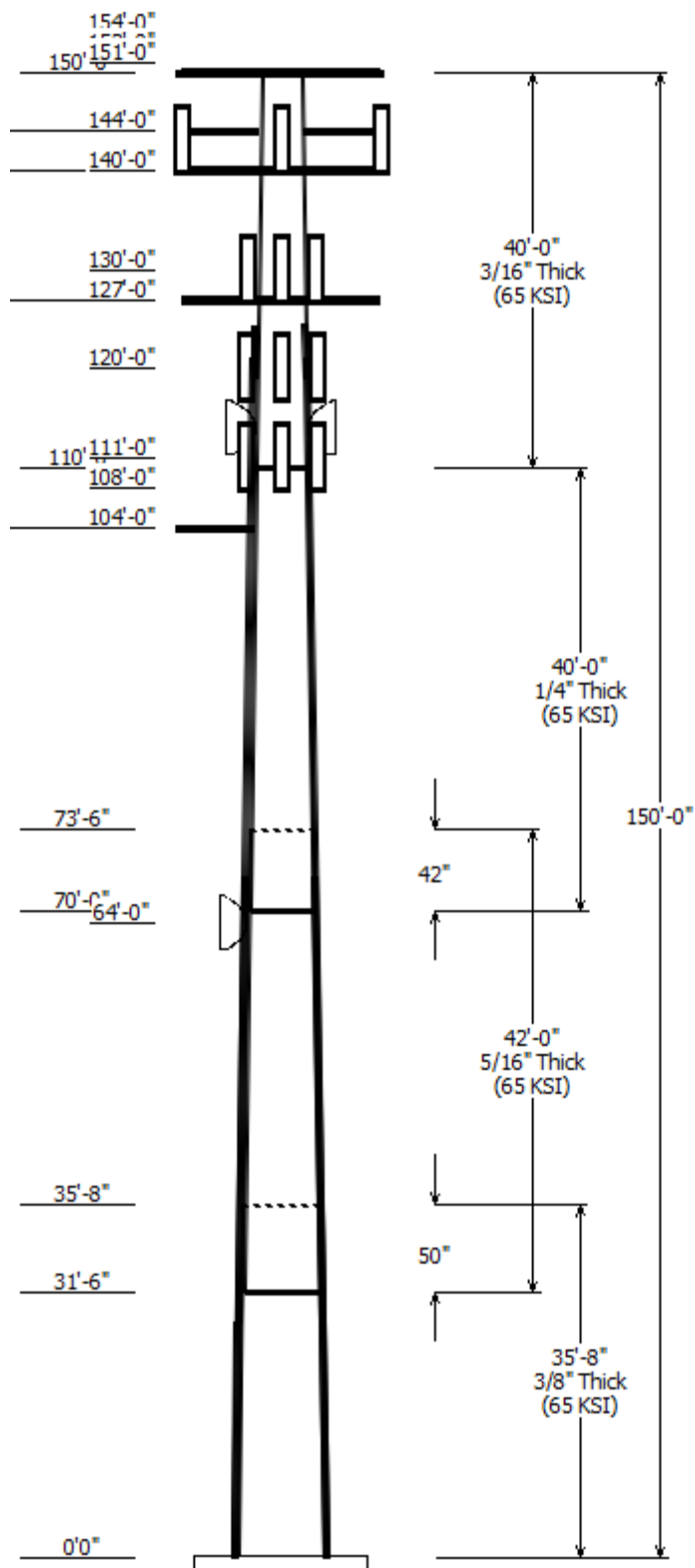
Taper: 0.15670@in/ft)

Sections Properties

Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade
		Top	Bottom				
1	35.667	31.79	37.38	0.375		0.000	12 Sides 65
2	42.000	26.48	33.06	0.313	Slip Joint	50.000	12 Sides 65
3	40.000	21.26	27.53	0.250	Slip Joint	42.000	12 Sides 65
4	40.000	15.00	21.26	0.188	Butt Joint	0.000	12 Sides 65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
162.000	162.000	1	Decibel DB809KE-SY
154.000	154.000	3	Powerwave Allgon 7770.00
154.000	154.000	3	Ericsson RRUS-12 B2
154.000	154.000	3	Ericsson RRUS-11 (19.7")
154.000	154.000	3	Ericsson RRUS 32 B30
154.000	154.000	3	Ericsson Radio 8843
154.000	154.000	3	Ericsson RRUS 11 (Band 12) (55
154.000	154.000	3	Ericsson RRUS A2 B2
154.000	154.000	3	Powerwave Allgon LGP21401
154.000	154.000	3	Kaelus DBC0061F1V51-2
154.000	154.000	2	Raycap DC6-48-60-18-8F
152.000	152.000	2	Diamond X50A
151.000	151.000	3	CCI TPA-65R-LCUUUU-H8
151.000	151.000	3	CCI OPA-65R-LCUU-H8
150.000	150.000	3	Round Side Arm
150.000	150.000	1	Platform w/ Handrails
144.000	144.000	2	Stand-Off
140.000	142.000	3	Andrew LNX-6515DS-VTM
140.000	142.000	3	Ericsson AIR 21, 1.3M, B4A B2P
140.000	142.000	3	Ericsson AIR 21, 1.3 M, B2A B4
140.000	142.000	3	Ericsson RRUS-11 (50 lbs.)
140.000	142.000	3	Ericsson KRY 112 144/1
140.000	140.000	1	Platform w/ Handrails
130.000	130.000	3	Commscope NHHSS-65C-R2B
130.000	130.000	3	Commscope NHH-65B-R2B
130.000	130.000	3	Amphenol Antel BXA-80080-
130.000	130.000	3	Samsung MT6407-77A
130.000	130.000	3	Samsung B2/B66A RRH-BR049
130.000	130.000	3	Samsung B5/B13 RRH-BR04C
130.000	130.000	3	Samsung Outdoor CBRS 20W
130.000	130.000	1	Raycap RCMD-6627-PF-48
127.000	127.000	1	Round Low Profile Platform
120.000	120.000	3	Generic 76" x 6" Panel
111.000	111.000	3	Commscope NNVV-65B-R4
111.000	111.000	3	RFS APXVTM14-ALU-I20
111.000	112.000	2	DragonWave A-ANT-11G-2-C
111.000	111.000	3	Alcatel-Lucent 1900MHz RRH
111.000	111.000	3	Nokia FZHN Flexi RRH 8TR 2600
111.000	111.000	6	Alcatel-Lucent RRH2x50-08
111.000	112.000	2	DragonWave Horizon Compact
108.000	112.000	1	Generic 24" x 24" Junction Box
104.000	104.000	1	Side Arms
64.000	64.000	1	Channel Master Type 120



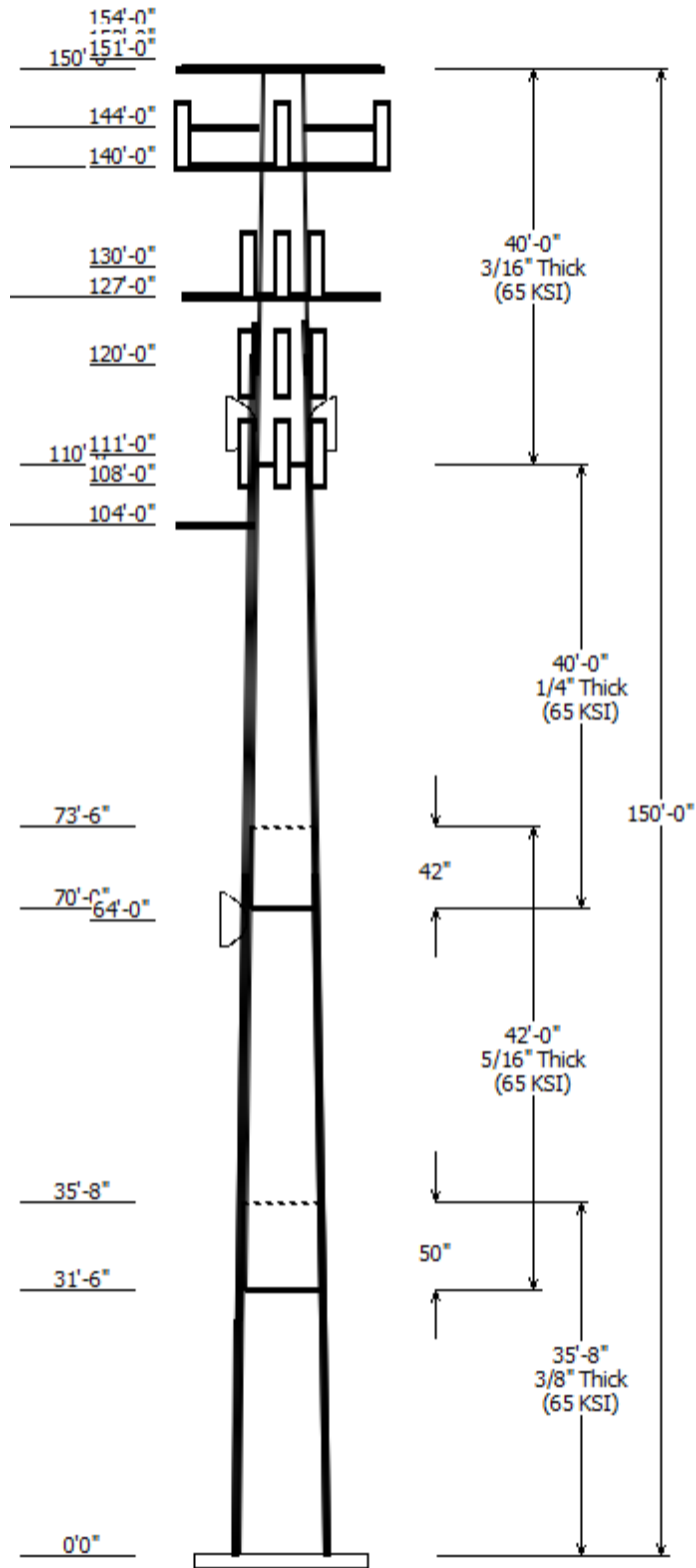
Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
140.0	150.0	1 5/8" Coax	Yes
140.0	151.0	0.39" (10mm)	Yes
114.0	129.0	#20 Dywidag bars	Yes
114.0	129.0	#20 Dywidag bars	Yes
114.0	129.0	#20 Dywidag bars	Yes
114.0	129.0	#20 Dywidag bars	Yes
31.000	76.700	#20 Dywidag bars	Yes
31.000	76.700	#20 Dywidag bars	Yes
31.000	76.700	#20 Dywidag bars	Yes
31.000	76.700	#20 Dywidag bars	Yes
10.000	108.0	2" conduit	Yes
10.000	130.0	1 5/8" Coax	Yes
10.000	130.0	1 5/8" Hybriflex	Yes
10.000	111.0	1 1/4" Hybriflex	Yes
10.000	140.0	1 5/8" Coax	No
10.000	150.0	1 5/8" Coax	No
10.000	154.0	0.78" (19.7mm) 8	No
10.000	154.0	2" conduit	No
0.000	162.0	1 5/8" Coax	No
0.000	151.0	3" conduit	No
0.000	152.0	1/2" Coax	No
0.000	154.0	1 5/8" Coax	No
0.000	154.0	3" conduit	No
0.000	120.0	1 5/8" Coax	No
0.000	125.0	#20 Dywidag bars	Yes
0.000	125.0	#20 Dywidag bars	Yes
0.000	125.0	#20 Dywidag bars	Yes
0.000	125.0	#20 Dywidag bars	Yes
0.000	140.0	1 1/4" Hybriflex	No
0.000	111.0	1/2" Coax	No
0.000	31.000	#20 Dywidag bars	Yes
0.000	31.000	#20 Dywidag bars	Yes
0.000	31.000	#20 Dywidag bars	Yes
0.000	31.000	#20 Dywidag bars	Yes
0.000	64.000	0.28" (7mm) RG-6	No

Load Cases	
1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

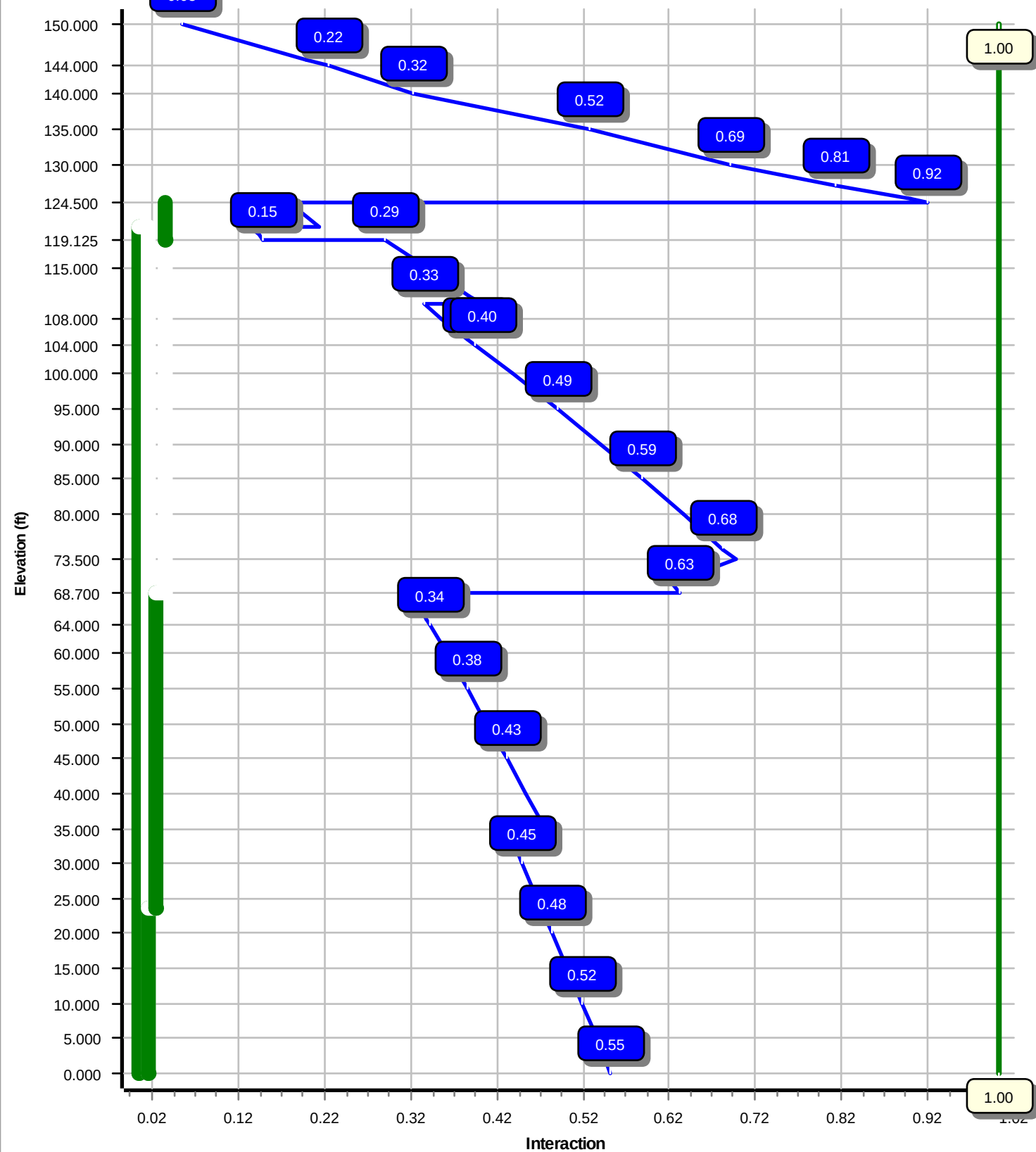
Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	3385.80	30.09	75.49
0.9D + 1.0W	3321.55	30.05	56.60
1.2D + 1.0Di + 1.0Wi	1208.36	11.39	107.62
1.2D + 1.0Ev + 1.0Eh	235.79	1.90	75.06
0.9D - 1.0Ev + 1.0Eh	230.43	1.90	52.35
1.0D + 1.0W	801.66	7.20	62.95

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)

1.0D + 1.0W	64.00	4.506	0.655
1.0D + 1.0W	111.00	14.369	1.343



Load Case : 1.2D + 1.0W
Max Ratio 91.70% at 124.5 ft



Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:14 AM

Customer: VERIZON WIRELESS

Analysis Parameters

Location :	Hartford County, CT	Height (ft) :	150
Code :	ANSI/TIA-222-H	Base Diameter (in) :	37.38
Shape :	12 Sides	Top Diameter (in) :	15.00
Pole Type :	Taper	Taper (in/ft) :	0.157
Pole Manufacturer :	ITT Meyer	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.99

Ice & Wind Parameters

Exposure Category:	C	Design Wind Speed Without Ice:	116 mph
Risk Category:	II	Design Wind Speed With Ice:	50 mph
Topographic Factor Procedure:	Method 1	Operational Wind Speed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.50 in
Crest Height:	0 ft	HMSL:	159.00 ft

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	2.90		
T_L (sec):	6	p :	1
S_s :	0.174	S_1 :	0.055
F_a :	1.600	F_v :	2.400
S_{ds} :	0.186	S_{d1} :	0.088
		C_s :	0.030
		C_s Max:	0.030
		C_s Min:	0.030

Load Cases

1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:14 AM

Customer: VERIZON WIRELESS

Shaft Section Properties

Slip							Bottom				Top								
Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	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)
1-12	35.667	0.3750	65		0.00	5,014	37.38	0.00	44.68	7810.1	24.03	99.68	31.79	35.67	37.93	4778.9	20.04	84.78	0.156700
2-12	42.000	0.3125	65	Slip	50.00	4,237	33.06	31.50	32.96	4514.2	25.68	105.82	26.48	73.50	26.34	2303.3	20.03	84.76	0.156700
3-12	40.000	0.2500	65	Slip	42.00	2,646	27.53	70.00	21.97	2087.4	26.83	110.14	21.26	110.00	16.92	954.0	20.12	85.07	0.156700
4-12	40.000	0.1875	65	Butt	0.00	1,475	21.26	110.00	12.73	721.9	27.71	113.43	15.00	150.00	8.94	250.5	18.76	80.00	0.156700
Shaft Weight						13,372													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
162.00	Decibel DB809KE-SY	1	1.00	0.000	26.00	3.400	0.90	111.85	7.466	0.90
154.00	Kaelus DBC0061F1V51-2	3	0.75	0.000	25.50	0.433	0.50	43.98	0.883	0.50
154.00	Powerwave Allgon LGP21401	3	0.75	0.000	14.10	1.104	0.50	39.06	1.818	0.50
154.00	Raycap DC6-48-60-18-8F	2	0.75	0.000	31.80	1.470	0.67	93.52	2.169	0.67
154.00	Ericsson RRUS A2 B2	3	0.75	0.000	22.00	2.064	0.50	66.11	3.008	0.50
154.00	Ericsson RRUS 11 (Band 12) (55	3	0.75	0.000	55.00	2.522	0.50	122.31	3.563	0.50
154.00	Ericsson RRUS 32 B30	3	0.75	0.000	60.00	2.743	0.50	133.59	3.913	0.50
154.00	Ericsson RRUS-11 (19.7")	3	0.75	0.000	51.00	2.791	0.50	127.13	3.886	0.50
154.00	Ericsson RRUS-12 B2	3	0.75	0.000	58.00	3.145	0.50	138.92	4.304	0.50
154.00	Ericsson Radio 8843	3	0.75	0.000	85.00	3.500	0.50	187.07	4.778	0.50
154.00	Powerwave Allgon 7770.00	3	0.75	0.000	35.00	5.508	0.65	169.89	6.563	0.65
152.00	Diamond X50A	2	1.00	0.000	2.30	1.120	0.90	3.75	2.909	0.90
151.00	CCI OPA-65R-LCUU-H8	3	0.75	0.000	88.00	12.976	0.67	345.09	16.557	0.67
151.00	CCI TPA-65R-LCUUUU-H8	3	0.75	0.000	81.60	13.298	0.69	358.49	17.033	0.69
150.00	Round Side Arm	3	0.75	0.000	150.00	5.200	0.67	223.18	7.918	0.67
150.00	Platform w/ Handrails	1	1.00	0.000	2,000.00	25.000	1.00	3,421.70	37.370	1.00
144.00	Stand-Off	2	0.90	0.000	75.00	2.500	0.90	111.45	3.472	0.90
140.00	Ericsson KRY 112 144/1	3	0.75	2.000	11.00	0.351	0.50	21.69	0.754	0.50
140.00	Ericsson RRUS-11 (50 lbs.)	3	0.75	2.000	50.00	2.566	0.50	117.72	3.607	0.50
140.00	Ericsson AIR 21, 1.3 M, B2A B4P	3	0.75	2.000	83.00	6.049	0.50	227.98	8.196	0.50
140.00	Ericsson AIR 21, 1.3M, B4A B2P	3	0.75	2.000	81.50	6.092	0.70	225.94	8.242	0.70
140.00	Andrew LNX-6515DS-VTM	3	0.75	2.000	51.30	11.430	0.70	279.01	14.649	0.70
140.00	Platform w/ Handrails	1	1.00	0.000	2,000.00	30.000	1.00	3,411.76	44.740	1.00
130.00	Samsung Outdoor CBRS 20W	3	0.80	0.000	18.60	0.857	0.50	42.28	1.476	0.50
130.00	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.875	0.50	126.74	2.766	0.50
130.00	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.875	0.50	147.35	2.766	0.50
130.00	Raycap RCMDC-6627-PF-48	1	0.80	0.000	32.00	4.056	1.00	157.40	5.403	1.00
130.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	182.17	6.208	0.61
130.00	Amphenol Antel BXA-80080-6CF-	3	0.80	0.000	18.00	5.760	0.73	142.74	8.096	0.73
130.00	Commscope NHH-65B-R2B	3	0.80	0.000	43.70	8.079	0.69	215.73	10.828	0.69
130.00	Commscope NHHSS-65C-R2B	3	0.80	0.000	56.00	11.350	0.70	281.18	14.533	0.70
127.00	Round Low Profile Platform	1	1.00	0.000	1,350.00	20.000	1.00	1,924.20	37.425	1.00
120.00	Generic 76" x 6" Panel	3	0.80	0.000	40.00	5.030	0.69	127.13	7.443	0.69
111.00	DragonWave Horizon Compact	2	0.80	1.000	10.60	0.721	0.50	32.45	1.274	0.50
111.00	Alcatel-Lucent RRH2x50-08	6	0.80	0.000	52.90	1.701	0.50	110.49	2.539	0.50
111.00	Nokia FZHN Flexi RRH 8TR 2600	3	0.80	0.000	44.10	2.020	0.50	91.67	2.928	0.50
111.00	Alcatel-Lucent 1900MHz RRH	3	0.80	0.000	60.00	2.583	0.50	149.62	3.666	0.50
111.00	DragonWave A-ANT-11G-2-C	2	1.00	1.000	27.00	4.688	0.90	121.71	5.926	0.90
111.00	RFS APXVTM14-ALU-I20	3	0.80	0.000	56.20	6.342	0.66	190.03	8.459	0.66
111.00	Commscope NNVV-65B-R4	3	0.80	0.000	77.40	12.271	0.64	321.61	14.996	0.64
108.00	Generic 24" x 24" Junction Box	1	0.80	4.000	20.00	4.800	0.50	131.17	6.176	0.50
104.00	Side Arms	1	1.00	0.000	560.00	8.500	1.00	1,011.37	15.351	1.00
64.00	Channel Master Type 120	1	1.00	0.000	126.00	20.190	1.00	314.66	22.951	1.00
Totals	Num Loadings:43	111			11,681.70			26,409.02		

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:14 AM

Customer: VERIZON WIRELESS

Linear Appurtenance Properties

Load Case Azimuth (deg) : 0

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	162.00	1	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	SPOK HOLDINGS,
0.00	154.00	11	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	154.00	2	3" conduit	3.50	7.58	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
10.00	154.00	4	0.78" (19.7mm) 8 AWG	0.78	0.59	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
10.00	154.00	1	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	152.00	2	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	ENERTRAC, INC.
0.00	151.00	1	3" conduit	3.50	7.58	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
140.00	151.00	2	0.39" (10mm) Fiber	0.39	0.06	N 2	0.00	0.00	230	0.00	Y	AT&T MOBILITY
10.00	150.00	3	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
140.00	150.00	8	1 5/8" Coax	1.98	0.82	N 4	0.00	0.00	210	0.00	Y	AT&T MOBILITY
0.00	140.00	1	1 1/4" Hybriflex Cable	1.54	1.00	N 0	0.00	0.00	0	0.00	N	T-MOBILE
10.00	140.00	12	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	T-MOBILE
10.00	130.00	6	1 5/8" Coax	1.98	0.82	N 6	0.00	0.00	45	0.00	Y	VERIZON WIRELESS
10.00	130.00	2	1 5/8" Hybriflex	1.98	1.30	N 2	0.00	0.00	60	0.00	Y	VERIZON WIRELESS
114.00	129.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	270	8.28	Y	
114.00	129.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	180	8.28	Y	
114.00	129.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	90	8.28	Y	
114.00	129.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	0	8.28	Y	
0.00	125.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	23	8.28	Y	
0.00	125.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	113	8.28	Y	
0.00	125.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	293	8.28	Y	
0.00	125.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	203	8.28	Y	
0.00	120.00	6	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	METRO PCS INC
0.00	111.00	4	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	CLEARWIRE
10.00	111.00	4	1 1/4" Hybriflex Cable	1.54	1.00	N 4	0.00	0.00	70	0.00	Y	CLEARWIRE
10.00	108.00	2	2" conduit	2.38	3.65	N 2	0.00	0.00	80	0.00	Y	CLEARWIRE
31.00	76.70	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	180	8.28	Y	
31.00	76.70	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	270	8.28	Y	
31.00	76.70	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	90	8.28	Y	
31.00	76.70	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	0	8.28	Y	
0.00	64.00	1	0.28" (7mm) RG-6	0.28	0.03	N 0	0.00	0.00	0	0.00	N	SPOK HOLDINGS,
0.00	31.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	90	8.28	Y	
0.00	31.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	270	8.28	Y	
0.00	31.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	180	8.28	Y	
0.00	31.00	1	#20 Dywidag bars	2.50	16.70	N 1	0.00	0.00	0	8.28	Y	

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Description	Spacing (in)	Len (in)	Connectors	Continuation?
0.00	121.0	4	SOL #20 All Thread	75	2.19	6" Angle Bracket	27.0	3.31	5/8" A36 U-Bolt	Yes
0.00	23.60	4	SOL #20 All Thread	80	8.28	6" T Bracket	27.0	3.31	5/8" A36 U-Bolt	Yes
23.60	68.70	4	SOL #20 All Thread	80	8.28	6" T Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes
119.1	124.5	3	SOL #20 (15 deg)	80	8.28	6" T Bracket	30.0	3.31	5/8" A36 U-Bolt	No

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:15 AM

Customer: VERIZON WIRELESS

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:15 AM

Customer: VERIZON WIRELESS

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	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)	Additional Reinforcing		
												Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.03	99.68	78.5	403.6	0.0	0.0	39.28	12,96	0.0
5.00		0.3750	36.597	43.737	7,324.4	23.47	97.59	79.1	386.6	0.0	752.2	39.28	12,56	668.0
10.00		0.3750	35.813	42.791	6,859.3	22.91	95.50	79.7	370.0	0.0	736.1	39.28	12,16	668.0
15.00		0.3750	35.029	41.845	6,414.3	22.35	93.41	80.3	353.7	0.0	720.0	39.28	11,77	668.0
20.00		0.3750	34.246	40.899	5,989.0	21.79	91.32	80.9	337.8	0.0	703.9	39.28	11,39	668.0
23.60	Reinf. Top Reinf	0.3750	33.682	40.218	5,694.8	21.39	89.82	81.4	326.6	0.0	496.8	39.28	11,12	481.0
25.00		0.3750	33.462	39.953	5,583.0	21.23	89.23	81.6	322.3	0.0	191.0	39.28	11,01	187.0
30.00		0.3750	32.679	39.007	5,195.7	20.67	87.14	81.9	307.1	0.0	671.7	39.28	10,64	668.0
31.50	Bot - Section 2	0.3750	32.444	38.723	5,083.1	20.50	86.52	81.9	302.7	0.0	198.4	39.28	10,53	200.4
35.00		0.3750	31.895	38.061	4,826.7	20.11	85.05	81.9	292.3	0.0	846.5	39.28	10,57	467.6
35.67	Top - Section 1	0.3125	32.416	32.304	4,249.6	25.12	103.73	77.3	253.3	0.0	159.6	39.28	10,52	89.1
40.00		0.3125	31.737	31.621	3,985.6	24.53	101.56	78.0	242.6	0.0	471.3	39.28	10,20	578.9
45.00		0.3125	30.953	30.833	3,694.9	23.86	99.05	78.7	230.6	0.0	531.3	39.28	9,853	668.0
50.00		0.3125	30.170	30.044	3,418.6	23.19	96.54	79.4	218.9	0.0	517.9	39.28	9,503	668.0
55.00		0.3125	29.386	29.256	3,156.5	22.52	94.04	80.2	207.5	0.0	504.5	39.28	9,159	668.0
60.00		0.3125	28.603	28.467	2,908.1	21.85	91.53	80.9	196.4	0.0	491.0	39.28	8,822	668.0
64.00		0.3125	27.976	27.837	2,719.1	21.31	89.52	81.5	187.8	0.0	383.2	39.28	8,557	534.4
65.00		0.3125	27.819	27.679	2,673.1	21.17	89.02	81.6	185.6	0.0	94.5	39.28	8,491	133.6
68.70	Reinf. Top	0.3125	27.240	27.096	2,507.6	20.68	87.17	81.9	177.8	0.0	344.8	39.28	8,251	494.3
70.00	Bot - Section 3	0.3125	27.036	26.891	2,451.2	20.50	86.52	81.9	175.1	0.0	119.4	19.64	2,879	86.8
73.50	Top - Section 2	0.2500	26.988	21.524	1,964.0	26.25	107.95	76.1	140.6	0.0	575.9	19.64	2,870	233.8
75.00		0.2500	26.752	21.335	1,912.7	25.99	107.01	76.4	138.1	0.0	109.4	19.64	2,830	100.2
80.00		0.2500	25.969	20.704	1,748.0	25.15	103.88	77.3	130.0	0.0	357.6	19.64	2,696	334.0
85.00		0.2500	25.185	20.073	1,593.1	24.31	100.74	78.2	122.2	0.0	346.9	19.64	2,566	334.0
90.00		0.2500	24.402	19.442	1,447.6	23.47	97.61	79.1	114.6	0.0	336.2	19.64	2,439	334.0
95.00		0.2500	23.618	18.812	1,311.2	22.63	94.47	80.0	107.2	0.0	325.4	19.64	2,315	334.0
100.0		0.2500	22.835	18.181	1,183.7	21.79	91.34	80.9	100.1	0.0	314.7	19.64	2,195	334.0
104.0		0.2500	22.208	17.676	1,087.9	21.12	88.83	81.7	94.6	0.0	244.0	19.64	2,101	267.2
105.0		0.2500	22.051	17.550	1,064.7	20.96	88.21	81.9	93.3	0.0	59.9	19.64	2,078	66.8
108.0		0.2500	21.581	17.172	997.3	20.45	86.33	81.9	89.3	0.0	177.2	19.64	2,009	200.4
110.0	Top - Section 3	0.2500	21.268	16.919	954.0	20.12	85.07	81.9	86.7	0.0	116.0	19.64	1,963	133.6
110.0	Bot - Section 4	0.1875	21.268	12.727	721.9	27.71	113.43	74.5	65.6	0.0		19.64	1,963	
111.0		0.1875	21.111	12.633	705.9	27.49	112.59	74.7	64.6	0.0	43.1	19.64	1,941	66.8
115.0		0.1875	20.484	12.254	644.4	26.59	109.25	75.7	60.8	0.0	169.4	19.64	1,853	267.2
119.1	Reinf Bottom	0.1875	19.838	11.864	584.8	25.67	105.80	76.7	56.9	0.0	169.3	19.64	1,764	275.5
120.0		0.1875	19.701	11.781	572.6	25.47	105.07	76.9	56.1	0.0	35.2	32.45	4,143	102.3
121.0	Reinf. Top	0.1875	19.544	11.687	558.9	25.25	104.24	77.2	55.2	0.0	39.9	32.45	4,231	317.3
124.5	Reinf. Top	0.1875	18.996	11.356	512.7	24.47	101.31	78.0	52.1	0.0	137.2	12.81	2,308	175.4
125.0		0.1875	18.917	11.308	506.4	24.35	100.89	78.2	51.7	0.0	19.3			
127.0		0.1875	18.604	11.119	481.4	23.91	99.22	78.6	50.0	0.0	76.3			
130.0		0.1875	18.134	10.835	445.4	23.24	96.71	79.4	47.5	0.0	112.1			
135.0		0.1875	17.350	10.362	389.6	22.12	92.54	80.6	43.4	0.0	180.3			
140.0		0.1875	16.567	9.889	338.6	21.00	88.36	81.8	39.5	0.0	172.3			
144.0		0.1875	15.940	9.511	301.2	20.10	85.01	81.9	36.5	0.0	132.0			
145.0		0.1875	15.783	9.416	292.3	19.88	84.18	81.9	35.8	0.0	32.2			
150.0		0.1875	15.000	8.943	250.5	18.76	80.00	81.9	32.3	0.0	156.2			
											13,372.1			
												13,141.		

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:15 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0W

116 mph with No Ice

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
Seg			Dead	Torsion		Moment	Dead		Dead	Torsion			
Elev		Wind FX	Load	Wind FX	MY	MZ	Load	Wind FX	Load	Wind FX	Load	MY	MZ
(ft)	Description	(lb)	(lb)	(lb)	(lb-ft)	(lb-ft)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb-ft)	(lb)
0.00		230.6	0.0					0.0	0.0	230.6	0.0	0.0	0.0
5.00		456.2	902.6					25.4	1,839.8	481.6	2,742.4	0.0	0.0
10.00		446.5	883.3					25.4	1,839.8	471.8	2,723.1	0.0	0.0
15.00		443.5	864.0					25.4	2,062.6	468.9	2,926.6	0.0	0.0
20.00		387.4	844.7					26.2	2,062.6	413.6	2,907.2	0.0	0.0
23.60	Reinf. Top Reinf	229.5	596.2					19.7	1,485.0	249.2	2,081.3	0.0	0.0
25.00		298.7	229.2					7.8	577.5	306.5	806.7	0.0	0.0
30.00		304.6	806.1					28.8	2,062.6	333.4	2,868.6	0.0	0.0
31.50	Bot - Section 2	239.7	238.1					8.8	618.8	248.5	856.8	0.0	0.0
35.00		201.3	1,015.8					21.0	1,443.8	222.2	2,459.6	0.0	0.0
35.67	Top - Section 1	242.6	191.5					4.0	275.0	246.6	466.5	0.0	0.0
40.00		453.2	565.6					26.7	1,787.5	479.9	2,353.1	0.0	0.0
45.00		485.5	637.5					31.5	2,062.6	517.0	2,700.1	0.0	0.0
50.00		483.8	621.4					32.3	2,062.6	516.1	2,684.0	0.0	0.0
55.00		480.8	605.4					33.0	2,062.6	513.8	2,667.9	0.0	0.0
60.00		429.5	589.3					33.6	2,062.6	463.1	2,651.8	0.0	0.0
64.00	Appurtenance(s)	237.2	459.8	832.5	0.0	0.0	151.2	27.3	1,650.0	1,097.0	2,261.1	0.0	0.0
65.00		220.9	113.3					6.9	412.5	227.8	525.8	0.0	0.0
68.70	Reinf. Top	234.3	413.8					25.7	1,526.2	260.0	1,939.9	0.0	0.0
70.00	Bot - Section 3	225.8	143.3					9.1	432.0	234.9	575.3	0.0	0.0
73.50	Top - Section 2	235.4	691.1					24.6	1,163.1	260.1	1,854.2	0.0	0.0
75.00		302.2	131.3					10.6	498.5	312.8	629.7	0.0	0.0
80.00		459.9	429.1					24.0	1,397.0	483.8	1,826.2	0.0	0.0
85.00		451.7	416.3					18.1	1,260.8	469.8	1,677.0	0.0	0.0
90.00		443.0	403.4					18.4	1,260.8	461.3	1,664.2	0.0	0.0
95.00		433.7	390.5					18.6	1,260.8	452.2	1,651.3	0.0	0.0
100.00		382.6	377.6					18.8	1,260.8	401.4	1,638.4	0.0	0.0
104.00	Appurtenance(s)	210.1	292.8	388.2	0.0	0.0	672.0	15.2	1,008.6	613.5	1,973.5	0.0	0.0
105.00		167.8	71.9					3.8	252.2	171.6	324.1	0.0	0.0
108.00	Appurtenance(s)	206.8	212.7	89.1	0.0	356.3	24.0	11.5	756.5	307.4	993.1	0.0	0.0
110.00	Top - Section 3	121.2	139.2					7.7	486.8	128.9	626.0	0.0	0.0
111.00	Appurtenance(s)	198.6	51.8	2,200.9	0.0	418.2	1,326.8	3.9	243.4	2,403.4	1,622.0	0.0	0.0
115.00		318.0	203.2					19.4	1,031.7	337.4	1,234.9	0.0	0.0
119.13	Reinf Bottom	192.9	203.1					32.2	1,311.9	225.1	1,515.0	0.0	0.0
120.00	Appurtenance(s)	71.2	42.2	392.1	0.0	0.0	144.0	6.9	330.9	470.2	517.1	0.0	0.0
121.00	Reinf. Top	168.6	47.9					7.9	612.7	176.5	660.6	0.0	0.0
124.50	Reinf. Top	149.2	164.7					27.6	1,022.3	176.7	1,187.0	0.0	0.0
125.00		91.6	23.1					4.0	116.0	95.5	139.1	0.0	0.0
127.00	Appurtenance(s)	181.0	91.6	952.7	0.0	0.0	1,620.0	7.9	303.6	1,141.6	2,015.2	0.0	0.0
130.00	Appurtenance(s)	282.6	134.5	2,786.3	0.0	0.0	1,379.8	8.0	375.3	3,076.8	1,889.5	0.0	0.0
135.00		343.0	216.4					0.0	313.1	343.0	529.5	0.0	0.0
140.00	Appurtenance(s)	298.2	206.7	3,296.5	0.0	3,675.5	3,396.5	0.0	313.1	3,594.7	3,916.4	0.0	0.0
144.00	Appurtenance(s)	161.7	158.4	198.1	0.0	0.0	180.0	10.2	230.5	370.0	569.0	0.0	0.0
145.00		186.9	38.6					2.6	57.6	189.5	96.3	0.0	0.0
150.00	Appurtenance(s)	155.0	187.4	1,620.1	0.0	0.0	2,940.0	13.5	288.2	1,788.7	3,415.6	0.0	0.0
Totals:										26,434.4	73,362.7	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:21 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0W

116 mph with No Ice

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-75.49	-30.09	0.00	-3,385.80	0.00	3,385.80	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.550
5.00	-72.63	-29.89	0.00	-3,235.36	0.00	3,235.36	3,114.35	767.59	2,623.11	2,294.24	0.12	-0.23	0.533
10.00	-69.79	-29.68	0.00	-3,085.91	0.00	3,085.91	3,070.50	750.99	2,510.89	2,212.51	0.48	-0.45	0.516
15.00	-66.75	-29.44	0.00	-2,937.52	0.00	2,937.52	3,025.61	734.39	2,401.13	2,131.46	1.08	-0.68	0.499
20.00	-63.75	-29.20	0.00	-2,790.32	0.00	2,790.32	2,979.68	717.78	2,293.82	2,051.14	1.91	-0.90	0.481
23.60	-61.62	-29.04	0.00	-2,685.20	0.00	2,685.20	2,945.97	705.83	2,218.08	1,993.78	2.65	-1.06	0.468
23.60	-61.62	-29.04	0.00	-2,685.20	0.00	2,685.20	2,945.97	705.83	2,218.08	1,993.78	2.65	-1.06	0.468
25.00	-60.75	-28.87	0.00	-2,644.55	0.00	2,644.55	2,932.71	701.18	2,188.97	1,971.59	2.97	-1.13	0.463
30.00	-57.82	-28.62	0.00	-2,500.22	0.00	2,500.22	2,875.21	684.57	2,086.57	1,886.65	4.27	-1.35	0.446
31.50	-56.91	-28.46	0.00	-2,457.29	0.00	2,457.29	2,854.29	679.59	2,056.33	1,859.14	4.71	-1.41	0.442
35.00	-54.41	-28.26	0.00	-2,357.70	0.00	2,357.70	2,805.48	667.97	1,986.62	1,795.73	5.80	-1.57	0.423
35.67	-53.90	-28.10	0.00	-2,338.86	0.00	2,338.86	2,248.07	566.94	1,717.07	1,468.70	6.02	-1.60	0.471
40.00	-51.47	-27.73	0.00	-2,217.11	0.00	2,217.11	2,218.59	554.95	1,645.23	1,418.49	7.56	-1.78	0.452
45.00	-48.68	-27.30	0.00	-2,078.47	0.00	2,078.47	2,183.60	541.11	1,564.24	1,360.97	9.54	-1.99	0.429
50.00	-45.92	-26.86	0.00	-1,941.96	0.00	1,941.96	2,147.58	527.27	1,485.29	1,303.95	11.74	-2.21	0.406
55.00	-43.19	-26.39	0.00	-1,807.68	0.00	1,807.68	2,110.52	513.44	1,408.39	1,247.47	14.16	-2.41	0.383
60.00	-40.48	-25.94	0.00	-1,675.73	0.00	1,675.73	2,072.42	499.60	1,333.53	1,191.58	16.80	-2.61	0.360
64.00	-38.23	-24.80	0.00	-1,571.98	0.00	1,571.98	2,041.18	488.53	1,275.12	1,147.34	19.06	-2.77	0.341
65.00	-37.67	-24.61	0.00	-1,547.18	0.00	1,547.18	2,033.27	485.76	1,260.72	1,136.35	19.64	-2.81	0.336
68.70	-35.71	-24.31	0.00	-1,456.14	0.00	1,456.14	1,997.21	475.53	1,208.15	1,092.40	21.88	-2.95	0.321
68.70	-35.71	-24.31	0.00	-1,456.14	0.00	1,456.14	1,997.21	475.53	1,208.15	1,092.40	21.88	-2.95	0.629
70.00	-35.08	-24.14	0.00	-1,424.54	0.00	1,424.54	1,982.10	471.93	1,189.95	1,075.84	22.69	-3.00	0.622
73.50	-33.17	-23.88	0.00	-1,340.05	0.00	1,340.05	1,473.96	377.74	952.81	802.32	24.98	-3.26	0.694
75.00	-32.46	-23.67	0.00	-1,304.23	0.00	1,304.23	1,466.28	374.42	936.13	791.05	26.03	-3.37	0.680
80.00	-30.52	-23.27	0.00	-1,185.86	0.00	1,185.86	1,440.00	363.35	881.62	753.69	29.75	-3.74	0.634
85.00	-28.73	-22.87	0.00	-1,069.49	0.00	1,069.49	1,412.68	352.28	828.74	716.65	33.87	-4.10	0.586
90.00	-26.98	-22.44	0.00	-955.15	0.00	955.15	1,384.32	341.21	777.49	679.98	38.35	-4.45	0.537
95.00	-25.25	-22.00	0.00	-842.94	0.00	842.94	1,354.92	330.14	727.89	643.72	43.18	-4.78	0.487
100.00	-23.55	-21.57	0.00	-732.94	0.00	732.94	1,324.47	319.08	679.91	607.94	48.35	-5.09	0.435
104.00	-21.58	-20.83	0.00	-646.66	0.00	646.66	1,299.37	310.22	642.71	579.69	52.71	-5.32	0.393
105.00	-21.24	-20.67	0.00	-625.82	0.00	625.82	1,292.99	308.01	633.57	572.68	53.83	-5.38	0.382
108.00	-20.23	-20.32	0.00	-563.44	0.00	563.44	1,265.73	301.36	606.56	548.38	57.26	-5.54	0.353
110.00	-19.60	-20.16	0.00	-522.80	0.00	522.80	1,247.14	296.94	588.87	532.29	59.60	-5.64	0.333
110.00	-19.60	-20.16	0.00	-522.80	0.00	522.80	853.24	223.36	444.19	366.34	59.60	-5.64	0.401
111.00	-18.18	-17.65	0.00	-502.23	0.00	502.23	849.67	221.70	437.62	362.07	60.78	-5.69	0.385
115.00	-16.93	-17.24	0.00	-431.65	0.00	431.65	834.99	215.06	411.80	345.06	65.63	-5.89	0.337
119.13	-15.41	-16.89	0.00	-360.52	0.00	360.52	819.16	208.21	385.99	327.64	70.80	-6.08	0.288
120.00	-14.94	-16.38	0.00	-345.74	0.00	345.74	815.71	206.76	380.63	323.96	71.91	-6.11	0.141
121.00	-14.29	-16.14	0.00	-329.37	0.00	329.37	811.73	205.10	374.54	319.77	73.20	-6.14	0.131
121.00	-14.29	-16.14	0.00	-329.37	0.00	329.37	811.73	205.10	374.54	319.77	73.20	-6.14	0.211
124.50	-13.12	-15.85	0.00	-272.88	0.00	272.88	797.47	199.29	353.62	305.16	77.71	-6.20	0.177
124.50	-13.12	-15.85	0.00	-272.88	0.00	272.88	797.47	199.29	353.62	305.16	77.71	-6.20	0.917
125.00	-12.95	-15.77	0.00	-264.96	0.00	264.96	795.39	198.46	350.69	303.09	78.36	-6.21	0.897

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:21 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0W

116 mph with No Ice

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

127.00	-10.99	-14.48	0.00	-233.42	0.00	233.42	786.97	195.14	339.05	294.81	81.02	-6.49	0.811
130.00	-9.38	-11.27	0.00	-190.00	0.00	190.00	774.02	190.16	321.97	282.49	85.21	-6.87	0.688
135.00	-8.81	-10.94	0.00	-133.63	0.00	133.63	751.62	181.86	294.48	262.21	92.68	-7.38	0.525
140.00	-5.37	-6.88	0.00	-75.27	0.00	75.27	728.18	173.55	268.22	242.31	100.61	-7.77	0.320
144.00	-4.85	-6.45	0.00	-47.73	0.00	47.73	701.03	166.91	248.09	224.25	107.19	-7.98	0.221
145.00	-4.77	-6.26	0.00	-41.28	0.00	41.28	694.06	165.25	243.18	219.78	108.86	-8.02	0.196
150.00	0.00	-5.52	0.00	-10.00	0.00	10.00	659.19	156.95	219.37	198.13	117.32	-8.15	0.052

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:21 AM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.0W

116 mph with No Ice (Reduced DL)

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
Seg			Dead	Torsion		Moment	Dead		Dead		Torsion	Moment	
Elev		Wind FX	Load	Wind FX	MY	MZ	Load	Wind FX	Load	Wind FX	Load	MY	MZ
(ft)	Description	(lb)	(lb)	(lb)	(lb-ft)	(lb-ft)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb-ft)	(lb)
0.00		230.6	0.0					0.0	0.0	230.6	0.0	0.0	0.0
5.00		456.2	677.0					25.4	1,379.8	481.6	2,056.8	0.0	0.0
10.00		446.5	662.5					25.4	1,379.8	471.8	2,042.3	0.0	0.0
15.00		443.5	648.0					25.4	1,546.9	468.9	2,194.9	0.0	0.0
20.00		387.4	633.5					26.2	1,546.9	413.6	2,180.4	0.0	0.0
23.60	Reinf. Top Reinf	229.5	447.2					19.7	1,113.8	249.2	1,560.9	0.0	0.0
25.00		298.7	171.9					7.8	433.1	306.5	605.0	0.0	0.0
30.00		304.6	604.5					28.8	1,546.9	333.4	2,151.5	0.0	0.0
31.50	Bot - Section 2	239.7	178.5					8.8	464.1	248.5	642.6	0.0	0.0
35.00		201.3	761.9					21.0	1,082.8	222.2	1,844.7	0.0	0.0
35.67	Top - Section 1	242.6	143.6					4.0	206.3	246.6	349.9	0.0	0.0
40.00		453.2	424.2					26.7	1,340.7	479.9	1,764.8	0.0	0.0
45.00		485.5	478.2					31.5	1,546.9	517.0	2,025.1	0.0	0.0
50.00		483.8	466.1					32.3	1,546.9	516.1	2,013.0	0.0	0.0
55.00		480.8	454.0					33.0	1,546.9	513.8	2,000.9	0.0	0.0
60.00		429.5	441.9					33.6	1,546.9	463.1	1,988.9	0.0	0.0
64.00	Appurtenance(s)	237.2	344.9	832.5	0.0	0.0	113.4	27.3	1,237.5	1,097.0	1,695.8	0.0	0.0
65.00		220.9	85.0					6.9	309.4	227.8	394.4	0.0	0.0
68.70	Reinf. Top	234.3	310.3					25.7	1,144.6	260.0	1,454.9	0.0	0.0
70.00	Bot - Section 3	225.8	107.5					9.1	324.0	234.9	431.5	0.0	0.0
73.50	Top - Section 2	235.4	518.3					24.6	872.3	260.1	1,390.7	0.0	0.0
75.00		302.2	98.4					10.6	373.9	312.8	472.3	0.0	0.0
80.00		459.9	321.9					24.0	1,047.8	483.8	1,369.6	0.0	0.0
85.00		451.7	312.2					18.1	945.6	469.8	1,257.8	0.0	0.0
90.00		443.0	302.5					18.4	945.6	461.3	1,248.1	0.0	0.0
95.00		433.7	292.9					18.6	945.6	452.2	1,238.5	0.0	0.0
100.00		382.6	283.2					18.8	945.6	401.4	1,228.8	0.0	0.0
104.00	Appurtenance(s)	210.1	219.6	388.2	0.0	0.0	504.0	15.2	756.5	613.5	1,480.1	0.0	0.0
105.00		167.8	53.9					3.8	189.1	171.6	243.1	0.0	0.0
108.00	Appurtenance(s)	206.8	159.5	89.1	0.0	356.3	18.0	11.5	567.3	307.4	744.9	0.0	0.0
110.00	Top - Section 3	121.2	104.4					7.7	365.1	128.9	469.5	0.0	0.0
111.00	Appurtenance(s)	198.6	38.8	2,200.9	0.0	418.2	995.1	3.9	182.5	2,403.4	1,216.5	0.0	0.0
115.00		318.0	152.4					19.4	773.7	337.4	926.2	0.0	0.0
119.13	Reinf Bottom	192.9	152.3					32.2	983.9	225.1	1,136.3	0.0	0.0
120.00	Appurtenance(s)	71.2	31.7	392.1	0.0	0.0	108.0	6.9	248.2	470.2	387.8	0.0	0.0
121.00	Reinf. Top	168.6	35.9					7.9	459.5	176.5	495.5	0.0	0.0
124.50	Reinf. Top	149.2	123.5					27.6	766.7	176.7	890.2	0.0	0.0
125.00		91.6	17.4					4.0	87.0	95.5	104.3	0.0	0.0
127.00	Appurtenance(s)	181.0	68.7	952.7	0.0	0.0	1,215.0	7.9	227.7	1,141.6	1,511.4	0.0	0.0
130.00	Appurtenance(s)	282.6	100.9	2,786.3	0.0	0.0	1,034.8	8.0	281.5	3,076.8	1,417.1	0.0	0.0
135.00		343.0	162.3					0.0	234.9	343.0	397.1	0.0	0.0
140.00	Appurtenance(s)	298.2	155.0	3,296.5	0.0	3,675.5	2,547.4	0.0	234.9	3,594.7	2,937.3	0.0	0.0
144.00	Appurtenance(s)	161.7	118.8	198.1	0.0	0.0	135.0	10.2	172.9	370.0	426.7	0.0	0.0
145.00		186.9	29.0					2.6	43.2	189.5	72.2	0.0	0.0
150.00	Appurtenance(s)	155.0	140.6	1,620.1	0.0	0.0	2,205.0	13.5	216.1	1,788.7	2,561.7	0.0	0.0
Totals:										26,434.4	55,022.0	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:27 AM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.0W

116 mph with No Ice (Reduced DL)

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-56.60	-30.05	0.00	-3,321.55	0.00	3,321.55	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.536
5.00	-54.43	-29.78	0.00	-3,171.30	0.00	3,171.30	3,114.35	767.59	2,623.11	2,294.24	0.12	-0.22	0.520
10.00	-52.28	-29.49	0.00	-3,022.43	0.00	3,022.43	3,070.50	750.99	2,510.89	2,212.51	0.47	-0.44	0.503
15.00	-49.97	-29.20	0.00	-2,874.96	0.00	2,874.96	3,025.61	734.39	2,401.13	2,131.46	1.06	-0.66	0.486
20.00	-47.71	-28.91	0.00	-2,728.99	0.00	2,728.99	2,979.68	717.78	2,293.82	2,051.14	1.87	-0.88	0.468
23.60	-46.09	-28.72	0.00	-2,624.92	0.00	2,624.92	2,945.97	705.83	2,218.08	1,993.78	2.60	-1.04	0.455
23.60	-46.09	-28.72	0.00	-2,624.92	0.00	2,624.92	2,945.97	705.83	2,218.08	1,993.78	2.60	-1.04	0.455
25.00	-45.43	-28.51	0.00	-2,584.71	0.00	2,584.71	2,932.71	701.18	2,188.97	1,971.59	2.91	-1.10	0.450
30.00	-43.21	-28.24	0.00	-2,442.14	0.00	2,442.14	2,875.21	684.57	2,086.57	1,886.65	4.18	-1.32	0.434
31.50	-42.52	-28.06	0.00	-2,399.78	0.00	2,399.78	2,854.29	679.59	2,056.33	1,859.14	4.61	-1.38	0.429
35.00	-40.64	-27.85	0.00	-2,301.59	0.00	2,301.59	2,805.48	667.97	1,986.62	1,795.73	5.68	-1.53	0.411
35.67	-40.25	-27.67	0.00	-2,283.02	0.00	2,283.02	2,248.07	566.94	1,717.07	1,468.70	5.90	-1.56	0.458
40.00	-38.41	-27.27	0.00	-2,163.13	0.00	2,163.13	2,218.59	554.95	1,645.23	1,418.49	7.40	-1.74	0.438
45.00	-36.30	-26.82	0.00	-2,026.79	0.00	2,026.79	2,183.60	541.11	1,564.24	1,360.97	9.34	-1.95	0.416
50.00	-34.21	-26.35	0.00	-1,892.70	0.00	1,892.70	2,147.58	527.27	1,485.29	1,303.95	11.49	-2.16	0.393
55.00	-32.15	-25.87	0.00	-1,760.94	0.00	1,760.94	2,110.52	513.44	1,408.39	1,247.47	13.86	-2.36	0.371
60.00	-30.10	-25.41	0.00	-1,631.59	0.00	1,631.59	2,072.42	499.60	1,333.53	1,191.58	16.43	-2.55	0.348
64.00	-28.42	-24.29	0.00	-1,529.93	0.00	1,529.93	2,041.18	488.53	1,275.12	1,147.34	18.64	-2.71	0.330
65.00	-28.00	-24.09	0.00	-1,505.64	0.00	1,505.64	2,033.27	485.76	1,260.72	1,136.35	19.21	-2.74	0.325
68.70	-26.52	-23.80	0.00	-1,416.53	0.00	1,416.53	1,997.21	475.53	1,208.15	1,092.40	21.39	-2.88	0.310
68.70	-26.52	-23.80	0.00	-1,416.53	0.00	1,416.53	1,997.21	475.53	1,208.15	1,092.40	21.39	-2.88	0.610
70.00	-26.04	-23.61	0.00	-1,385.59	0.00	1,385.59	1,982.10	471.93	1,189.95	1,075.84	22.19	-2.93	0.602
73.50	-24.59	-23.35	0.00	-1,302.96	0.00	1,302.96	1,473.96	377.74	952.81	802.32	24.43	-3.18	0.672
75.00	-24.04	-23.11	0.00	-1,267.93	0.00	1,267.93	1,466.28	374.42	936.13	791.05	25.45	-3.29	0.659
80.00	-22.56	-22.69	0.00	-1,152.37	0.00	1,152.37	1,440.00	363.35	881.62	753.69	29.08	-3.65	0.613
85.00	-21.21	-22.26	0.00	-1,038.94	0.00	1,038.94	1,412.68	352.28	828.74	716.65	33.10	-4.00	0.567
90.00	-19.87	-21.83	0.00	-927.63	0.00	927.63	1,384.32	341.21	777.49	679.98	37.47	-4.34	0.519
95.00	-18.56	-21.38	0.00	-818.51	0.00	818.51	1,354.92	330.14	727.89	643.72	42.18	-4.66	0.471
100.00	-17.27	-20.95	0.00	-711.62	0.00	711.62	1,324.47	319.08	679.91	607.94	47.22	-4.96	0.421
104.00	-15.80	-20.25	0.00	-627.80	0.00	627.80	1,299.37	310.22	642.71	579.69	51.46	-5.18	0.379
105.00	-15.54	-20.09	0.00	-607.55	0.00	607.55	1,292.99	308.01	633.57	572.68	52.55	-5.24	0.369
108.00	-14.78	-19.74	0.00	-546.94	0.00	546.94	1,265.73	301.36	606.56	548.38	55.89	-5.39	0.341
110.00	-14.30	-19.59	0.00	-507.45	0.00	507.45	1,247.14	296.94	588.87	532.29	58.17	-5.49	0.321
110.00	-14.30	-19.59	0.00	-507.45	0.00	507.45	853.24	223.36	444.19	366.34	58.17	-5.49	0.387
111.00	-13.28	-17.11	0.00	-487.44	0.00	487.44	849.67	221.70	437.62	362.07	59.33	-5.54	0.371
115.00	-12.34	-16.72	0.00	-419.01	0.00	419.01	834.99	215.06	411.80	345.06	64.05	-5.74	0.325
119.13	-11.20	-16.40	0.00	-350.03	0.00	350.03	819.16	208.21	385.99	327.64	69.09	-5.92	0.277
120.00	-10.86	-15.90	0.00	-335.67	0.00	335.67	815.71	206.76	380.63	323.96	70.17	-5.96	0.135
121.00	-10.37	-15.68	0.00	-319.77	0.00	319.77	811.73	205.10	374.54	319.77	71.42	-5.97	0.126
121.00	-10.37	-15.68	0.00	-319.77	0.00	319.77	811.73	205.10	374.54	319.77	71.42	-5.97	0.202
124.50	-9.49	-15.42	0.00	-264.88	0.00	264.88	797.47	199.29	353.62	305.16	75.82	-6.04	0.169
124.50	-9.49	-15.42	0.00	-264.88	0.00	264.88	797.47	199.29	353.62	305.16	75.82	-6.04	0.886
125.00	-9.36	-15.34	0.00	-257.17	0.00	257.17	795.39	198.46	350.69	303.09	76.45	-6.05	0.866

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:27 AM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.0W

116 mph with No Ice (Reduced DL)

25 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

127.00	-7.90	-14.08	0.00	-226.50	0.00	226.50	786.97	195.14	339.05	294.81	79.04	-6.32	0.784
130.00	-6.76	-10.92	0.00	-184.25	0.00	184.25	774.02	190.16	321.97	282.49	83.12	-6.68	0.664
135.00	-6.33	-10.58	0.00	-129.66	0.00	129.66	751.62	181.86	294.48	262.21	90.39	-7.19	0.506
140.00	-3.84	-6.65	0.00	-73.09	0.00	73.09	728.18	173.55	268.22	242.31	98.11	-7.56	0.308
144.00	-3.46	-6.24	0.00	-46.47	0.00	46.47	701.03	166.91	248.09	224.25	104.52	-7.76	0.214
145.00	-3.40	-6.05	0.00	-40.23	0.00	40.23	694.06	165.25	243.18	219.78	106.15	-7.80	0.189
150.00	0.00	-5.52	0.00	-10.00	0.00	10.00	659.19	156.95	219.37	198.13	114.37	-7.93	0.052

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:27 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.50 in Radial Ice

25 Iterations

Gust Response Factor :1.10

Ice Dead Load Factor 1.00

Dead Load Factor :1.20

Ice Importance Factor :1.00

Wind Load Factor :1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
Seg			Dead	Torsion		Moment	Dead			Dead	Torsion	Moment	
Elev		Wind FX	Load	Wind FX	MY	MZ	Load	Wind FX	Load	Wind FX	Load	MY	MZ
(ft)	Description	(lb)	(lb)	(lb)	(lb-ft)	(lb-ft)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb-ft)	(lb)
0.00		57.4	0.0					0.0	0.0	57.4	0.0	0.0	0.0
5.00		114.0	1,185.9					105.7	2,047.0	219.7	3,232.9	0.0	0.0
10.00		112.3	1,194.0					112.0	2,079.6	224.3	3,273.6	0.0	0.0
15.00		112.0	1,184.7					115.8	2,482.6	227.8	3,667.2	0.0	0.0
20.00		98.2	1,169.6					122.4	2,500.4	220.6	3,670.0	0.0	0.0
23.60	Reinf. Top Reinf	58.3	831.8					93.8	1,809.0	152.1	2,640.8	0.0	0.0
25.00		76.1	321.2					37.6	705.2	113.7	1,026.5	0.0	0.0
30.00		77.7	1,131.6					139.0	2,525.8	216.7	3,657.4	0.0	0.0
31.50	Bot - Section 2	61.2	336.2					43.2	759.7	104.4	1,095.9	0.0	0.0
35.00		51.4	1,247.2					102.8	1,775.9	154.3	3,023.1	0.0	0.0
35.67	Top - Section 1	62.1	235.7					19.9	338.8	82.0	574.5	0.0	0.0
40.00		116.3	849.2					131.8	2,205.5	248.0	3,054.7	0.0	0.0
45.00		124.9	961.0					156.8	2,552.0	281.7	3,513.0	0.0	0.0
50.00		124.9	940.8					161.5	2,558.9	286.4	3,499.7	0.0	0.0
55.00		124.6	920.1					165.9	2,565.3	290.4	3,485.4	0.0	0.0
60.00		111.6	899.0					169.9	2,571.1	281.5	3,470.1	0.0	0.0
64.00	Appurtenance(s)	61.8	704.4	175.8	0.0	0.0	310.3	138.7	2,060.8	376.3	3,075.6	0.0	0.0
65.00		57.7	174.4					35.0	515.7	92.7	690.1	0.0	0.0
68.70	Reinf. Top	61.2	636.1					130.9	1,909.8	192.1	2,545.9	0.0	0.0
70.00	Bot - Section 3	59.1	221.2					46.4	567.5	105.5	788.6	0.0	0.0
73.50	Top - Section 2	61.6	901.2					126.2	1,529.3	187.8	2,430.5	0.0	0.0
75.00		79.4	220.8					54.6	656.1	133.9	877.0	0.0	0.0
80.00		121.1	720.9					123.3	1,816.5	244.4	2,537.4	0.0	0.0
85.00		119.4	701.6					93.6	1,627.0	213.0	2,328.5	0.0	0.0
90.00		117.6	682.1					95.0	1,629.6	212.6	2,311.7	0.0	0.0
95.00		115.7	662.4					96.5	1,632.2	212.1	2,294.6	0.0	0.0
100.00		102.4	642.6					97.8	1,634.6	200.2	2,277.2	0.0	0.0
104.00	Appurtenance(s)	56.2	500.3	130.3	0.0	0.0	1,056.2	79.2	1,309.4	265.7	2,865.9	0.0	0.0
105.00		44.4	123.6					19.9	327.6	64.3	451.2	0.0	0.0
108.00	Appurtenance(s)	55.1	364.9	21.3	0.0	85.2	118.7	60.1	983.2	136.5	1,466.8	0.0	0.0
110.00	Top - Section 3	32.8	239.6					40.3	619.6	73.1	859.1	0.0	0.0
111.00	Appurtenance(s)	53.9	101.7	534.6	0.0	100.7	3,137.4	20.2	309.9	608.8	3,549.0	0.0	0.0
115.00		86.6	397.9					101.8	1,296.7	188.4	1,694.6	0.0	0.0
119.13	Reinf Bottom	52.7	398.7					169.5	1,694.6	222.2	2,093.3	0.0	0.0
120.00	Appurtenance(s)	19.5	83.6	107.8	0.0	0.0	367.1	36.2	412.3	163.5	863.0	0.0	0.0
121.00	Reinf. Top	46.3	94.8					41.4	705.9	87.7	800.7	0.0	0.0
124.50	Reinf. Top	41.0	324.9					145.7	1,349.1	186.7	1,674.0	0.0	0.0
125.00		25.3	46.0					20.9	162.8	46.2	208.8	0.0	0.0
127.00	Appurtenance(s)	50.1	181.7	331.2	0.0	0.0	2,110.5	41.9	420.4	423.2	2,712.5	0.0	0.0
130.00	Appurtenance(s)	78.6	266.8	696.8	0.0	0.0	3,449.5	42.1	515.4	817.5	4,231.7	0.0	0.0
135.00		96.0	428.8					0.0	313.1	96.0	742.0	0.0	0.0
140.00	Appurtenance(s)	84.1	411.3	858.8	0.0	909.3	6,132.7	0.0	313.1	942.9	6,857.1	0.0	0.0
144.00	Appurtenance(s)	45.8	317.0	51.1	0.0	0.0	242.4	41.3	306.8	138.3	866.2	0.0	0.0
145.00		53.4	78.0					10.4	76.7	63.8	154.8	0.0	0.0
150.00	Appurtenance(s)	44.3	375.8	451.9	0.0	0.0	4,345.7	52.4	384.0	548.7	5,105.5	0.0	0.0
Totals:										10,405.2	102,238.	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:34 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.50 in Radial Ice

25 Iterations

Gust Response Factor :1.10

Ice Dead Load Factor 1.00

Dead Load Factor :1.20

Ice Importance Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-107.62	-11.39	0.00	-1,208.36	0.00	1,208.36	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.209
5.00	-104.38	-11.31	0.00	-1,151.42	0.00	1,151.42	3,114.35	767.59	2,623.11	2,294.24	0.04	-0.08	0.203
10.00	-101.09	-11.22	0.00	-1,094.86	0.00	1,094.86	3,070.50	750.99	2,510.89	2,212.51	0.17	-0.16	0.196
15.00	-97.41	-11.12	0.00	-1,038.75	0.00	1,038.75	3,025.61	734.39	2,401.13	2,131.46	0.38	-0.24	0.189
20.00	-93.72	-10.99	0.00	-983.17	0.00	983.17	2,979.68	717.78	2,293.82	2,051.14	0.68	-0.32	0.181
23.60	-91.08	-10.88	0.00	-943.61	0.00	943.61	2,945.97	705.83	2,218.08	1,993.78	0.94	-0.38	0.176
23.60	-91.08	-10.88	0.00	-943.61	0.00	943.61	2,945.97	705.83	2,218.08	1,993.78	0.94	-0.38	0.176
25.00	-90.04	-10.84	0.00	-928.37	0.00	928.37	2,932.71	701.18	2,188.97	1,971.59	1.06	-0.40	0.174
30.00	-86.38	-10.67	0.00	-874.17	0.00	874.17	2,875.21	684.57	2,086.57	1,886.65	1.52	-0.48	0.167
31.50	-85.27	-10.62	0.00	-858.16	0.00	858.16	2,854.29	679.59	2,056.33	1,859.14	1.67	-0.50	0.165
35.00	-82.25	-10.48	0.00	-821.00	0.00	821.00	2,805.48	667.97	1,986.62	1,795.73	2.06	-0.55	0.158
35.67	-81.67	-10.44	0.00	-814.02	0.00	814.02	2,248.07	566.94	1,717.07	1,468.70	2.13	-0.56	0.176
40.00	-78.60	-10.26	0.00	-768.76	0.00	768.76	2,218.59	554.95	1,645.23	1,418.49	2.68	-0.63	0.168
45.00	-75.08	-10.03	0.00	-717.46	0.00	717.46	2,183.60	541.11	1,564.24	1,360.97	3.37	-0.70	0.159
50.00	-71.57	-9.79	0.00	-667.29	0.00	667.29	2,147.58	527.27	1,485.29	1,303.95	4.15	-0.77	0.150
55.00	-68.08	-9.54	0.00	-618.34	0.00	618.34	2,110.52	513.44	1,408.39	1,247.47	5.00	-0.84	0.141
60.00	-64.60	-9.27	0.00	-570.66	0.00	570.66	2,072.42	499.60	1,333.53	1,191.58	5.92	-0.91	0.132
64.00	-61.53	-8.88	0.00	-533.59	0.00	533.59	2,041.18	488.53	1,275.12	1,147.34	6.71	-0.97	0.125
65.00	-60.84	-8.81	0.00	-524.71	0.00	524.71	2,033.27	485.76	1,260.72	1,136.35	6.91	-0.98	0.123
68.70	-58.29	-8.60	0.00	-492.13	0.00	492.13	1,997.21	475.53	1,208.15	1,092.40	7.69	-1.03	0.117
68.70	-58.29	-8.60	0.00	-492.13	0.00	492.13	1,997.21	475.53	1,208.15	1,092.40	7.69	-1.03	0.226
70.00	-57.50	-8.53	0.00	-480.94	0.00	480.94	1,982.10	471.93	1,189.95	1,075.84	7.97	-1.04	0.223
73.50	-55.06	-8.36	0.00	-451.07	0.00	451.07	1,473.96	377.74	952.81	802.32	8.77	-1.13	0.248
75.00	-54.17	-8.29	0.00	-438.53	0.00	438.53	1,466.28	374.42	936.13	791.05	9.13	-1.17	0.243
80.00	-51.63	-8.10	0.00	-397.11	0.00	397.11	1,440.00	363.35	881.62	753.69	10.43	-1.29	0.226
85.00	-49.29	-7.93	0.00	-356.62	0.00	356.62	1,412.68	352.28	828.74	716.65	11.85	-1.41	0.209
90.00	-46.97	-7.75	0.00	-316.96	0.00	316.96	1,384.32	341.21	777.49	679.98	13.39	-1.53	0.191
95.00	-44.66	-7.56	0.00	-278.21	0.00	278.21	1,354.92	330.14	727.89	643.72	15.05	-1.64	0.173
100.00	-42.38	-7.36	0.00	-240.42	0.00	240.42	1,324.47	319.08	679.91	607.94	16.82	-1.74	0.154
104.00	-39.52	-7.03	0.00	-210.99	0.00	210.99	1,299.37	310.22	642.71	579.69	18.32	-1.82	0.139
105.00	-39.07	-6.98	0.00	-203.96	0.00	203.96	1,292.99	308.01	633.57	572.68	18.70	-1.83	0.135
108.00	-37.60	-6.82	0.00	-182.94	0.00	182.94	1,265.73	301.36	606.56	548.38	19.87	-1.89	0.125
110.00	-36.74	-6.74	0.00	-169.29	0.00	169.29	1,247.14	296.94	588.87	532.29	20.67	-1.92	0.118
110.00	-36.74	-6.74	0.00	-169.29	0.00	169.29	853.24	223.36	444.19	366.34	20.67	-1.92	0.142
111.00	-33.21	-6.03	0.00	-162.45	0.00	162.45	849.67	221.70	437.62	362.07	21.07	-1.94	0.136
115.00	-31.52	-5.82	0.00	-138.32	0.00	138.32	834.99	215.06	411.80	345.06	22.72	-2.00	0.119
119.13	-29.43	-5.54	0.00	-114.31	0.00	114.31	819.16	208.21	385.99	327.64	24.48	-2.06	0.101
120.00	-28.57	-5.35	0.00	-109.46	0.00	109.46	815.71	206.76	380.63	323.96	24.86	-2.07	0.051
121.00	-27.77	-5.24	0.00	-104.11	0.00	104.11	811.73	205.10	374.54	319.77	25.29	-2.08	0.048
121.00	-27.77	-5.24	0.00	-104.11	0.00	104.11	811.73	205.10	374.54	319.77	25.29	-2.08	0.079
124.50	-26.11	-5.00	0.00	-85.76	0.00	85.76	797.47	199.29	353.62	305.16	26.83	-2.10	0.067
124.50	-26.11	-5.00	0.00	-85.76	0.00	85.76	797.47	199.29	353.62	305.16	26.83	-2.10	0.314
125.00	-25.90	-4.97	0.00	-83.26	0.00	83.26	795.39	198.46	350.69	303.09	27.05	-2.10	0.308

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:34 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.50 in Radial Ice

25 Iterations

Gust Response Factor :1.10

Ice Dead Load Factor 1.00

Dead Load Factor :1.20

Ice Importance Factor :1.00

Wind Load Factor :1.00

127.00	-23.19	-4.48	0.00	-73.33	0.00	73.33	786.97	195.14	339.05	294.81	27.95	-2.19	0.279
130.00	-18.99	-3.55	0.00	-59.87	0.00	59.87	774.02	190.16	321.97	282.49	29.36	-2.31	0.237
135.00	-18.24	-3.47	0.00	-42.13	0.00	42.13	751.62	181.86	294.48	262.21	31.87	-2.47	0.185
140.00	-11.43	-2.24	0.00	-23.88	0.00	23.88	728.18	173.55	268.22	242.31	34.53	-2.59	0.114
144.00	-10.57	-2.07	0.00	-14.92	0.00	14.92	701.03	166.91	248.09	224.25	36.73	-2.66	0.082
145.00	-10.42	-2.00	0.00	-12.85	0.00	12.85	694.06	165.25	243.18	219.78	37.29	-2.67	0.074
150.00	0.00	-1.51	0.00	-2.84	0.00	2.84	659.19	156.95	219.37	198.13	40.11	-2.71	0.014

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:34 AM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

24 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
Seg			Dead	Torsion		Moment	Dead		Dead	Dead		Torsion	Moment
Elev		Wind FX	Load	Wind FX	MY	MZ	Load	Wind FX	Load	Wind FX	Load	MY	MZ
(ft)	Description	(lb)	(lb)	(lb)	(lb-ft)	(lb-ft)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb-ft)	(lb)
0.00		55.2	0.0					0.0	0.0	55.2	0.0	0.0	0.0
5.00		109.2	752.2					6.1	1,533.1	115.3	2,285.3	0.0	0.0
10.00		106.9	736.1					6.1	1,533.1	112.9	2,269.2	0.0	0.0
15.00		106.2	720.0					6.1	1,718.8	112.2	2,438.8	0.0	0.0
20.00		92.7	703.9					6.3	1,718.8	99.0	2,422.7	0.0	0.0
23.60	Reinf. Top Reinf	54.9	496.8					4.7	1,237.5	59.7	1,734.4	0.0	0.0
25.00		71.5	191.0					1.9	481.3	73.4	672.2	0.0	0.0
30.00		72.9	671.7					6.9	1,718.8	79.8	2,390.5	0.0	0.0
31.50	Bot - Section 2	57.4	198.4					2.1	515.6	59.5	714.0	0.0	0.0
35.00		48.2	846.5					5.0	1,203.2	53.2	2,049.7	0.0	0.0
35.67	Top - Section 1	58.1	159.6					1.0	229.2	59.0	388.8	0.0	0.0
40.00		108.5	471.3					6.4	1,489.6	114.9	1,960.9	0.0	0.0
45.00		116.2	531.3					7.5	1,718.8	123.8	2,250.1	0.0	0.0
50.00		115.8	517.9					7.7	1,718.8	123.5	2,236.7	0.0	0.0
55.00		115.1	504.5					7.9	1,718.8	123.0	2,223.3	0.0	0.0
60.00		102.8	491.0					8.0	1,718.8	110.8	2,209.8	0.0	0.0
64.00	Appurtenance(s)	56.8	383.2	199.3	0.0	0.0	126.0	6.5	1,375.0	262.6	1,884.2	0.0	0.0
65.00		52.9	94.5					1.6	343.7	54.5	438.2	0.0	0.0
68.70	Reinf. Top	56.1	344.8					6.1	1,271.8	62.2	1,616.6	0.0	0.0
70.00	Bot - Section 3	54.1	119.4					2.2	360.0	56.2	479.4	0.0	0.0
73.50	Top - Section 2	56.4	575.9					5.9	969.3	62.3	1,545.2	0.0	0.0
75.00		72.3	109.4					2.5	415.4	74.9	524.8	0.0	0.0
80.00		110.1	357.6					5.7	1,164.2	115.8	1,521.8	0.0	0.0
85.00		108.1	346.9					4.3	1,050.6	112.5	1,397.5	0.0	0.0
90.00		106.0	336.2					4.4	1,050.6	110.4	1,386.8	0.0	0.0
95.00		103.8	325.4					4.4	1,050.6	108.3	1,376.1	0.0	0.0
100.00		91.6	314.7					4.5	1,050.6	96.1	1,365.3	0.0	0.0
104.00	Appurtenance(s)	50.3	244.0	92.9	0.0	0.0	560.0	3.6	840.5	146.9	1,644.5	0.0	0.0
105.00		40.2	59.9					0.9	210.1	41.1	270.1	0.0	0.0
108.00	Appurtenance(s)	49.5	177.2	21.3	0.0	85.3	20.0	2.7	630.4	73.6	827.6	0.0	0.0
110.00	Top - Section 3	29.0	116.0					1.8	405.7	30.8	521.7	0.0	0.0
111.00	Appurtenance(s)	47.5	43.1	526.9	0.0	100.1	1,105.7	0.9	202.8	575.3	1,351.7	0.0	0.0
115.00		76.1	169.4					4.6	859.7	80.8	1,029.1	0.0	0.0
119.13	Reinf Bottom	46.2	169.3					7.7	1,093.2	53.9	1,262.5	0.0	0.0
120.00	Appurtenance(s)	17.0	35.2	93.9	0.0	0.0	120.0	1.6	275.7	112.5	430.9	0.0	0.0
121.00	Reinf. Top	40.4	39.9					1.9	510.6	42.2	550.5	0.0	0.0
124.50	Reinf. Top	35.7	137.2					6.6	851.9	42.3	989.1	0.0	0.0
125.00		21.9	19.3					0.9	96.7	22.9	115.9	0.0	0.0
127.00	Appurtenance(s)	43.3	76.3	228.1	0.0	0.0	1,350.0	1.9	253.0	273.3	1,679.3	0.0	0.0
130.00	Appurtenance(s)	67.6	112.1	667.0	0.0	0.0	1,149.8	1.9	312.7	736.5	1,574.6	0.0	0.0
135.00		82.1	180.3					0.0	261.0	82.1	441.3	0.0	0.0
140.00	Appurtenance(s)	71.4	172.3	789.1	0.0	879.8	2,830.4	0.0	261.0	860.5	3,263.6	0.0	0.0
144.00	Appurtenance(s)	38.7	132.0	47.4	0.0	0.0	150.0	2.4	192.1	88.6	474.1	0.0	0.0
145.00		44.7	32.2					0.6	48.0	45.4	80.2	0.0	0.0
150.00	Appurtenance(s)	37.1	156.2	387.8	0.0	0.0	2,450.0	3.2	240.2	428.2	2,846.3	0.0	0.0
Totals:										6,327.79	61,135.6	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

24 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-62.95	-7.20	0.00	-801.66	0.00	801.66	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.137
5.00	-60.66	-7.14	0.00	-765.68	0.00	765.68	3,114.35	767.59	2,623.11	2,294.24	0.03	-0.05	0.133
10.00	-58.38	-7.07	0.00	-730.00	0.00	730.00	3,070.50	750.99	2,510.89	2,212.51	0.11	-0.11	0.129
15.00	-55.94	-7.01	0.00	-694.63	0.00	694.63	3,025.61	734.39	2,401.13	2,131.46	0.26	-0.16	0.125
20.00	-53.51	-6.94	0.00	-659.59	0.00	659.59	2,979.68	717.78	2,293.82	2,051.14	0.45	-0.21	0.120
23.60	-51.77	-6.90	0.00	-634.59	0.00	634.59	2,945.97	705.83	2,218.08	1,993.78	0.63	-0.25	0.117
23.60	-51.77	-6.90	0.00	-634.59	0.00	634.59	2,945.97	705.83	2,218.08	1,993.78	0.63	-0.25	0.117
25.00	-51.10	-6.85	0.00	-624.93	0.00	624.93	2,932.71	701.18	2,188.97	1,971.59	0.70	-0.27	0.115
30.00	-48.70	-6.79	0.00	-590.66	0.00	590.66	2,875.21	684.57	2,086.57	1,886.65	1.01	-0.32	0.111
31.50	-47.99	-6.75	0.00	-580.47	0.00	580.47	2,854.29	679.59	2,056.33	1,859.14	1.11	-0.33	0.110
35.00	-45.94	-6.70	0.00	-556.85	0.00	556.85	2,805.48	667.97	1,986.62	1,795.73	1.37	-0.37	0.105
35.67	-45.54	-6.66	0.00	-552.38	0.00	552.38	2,248.07	566.94	1,717.07	1,468.70	1.42	-0.38	0.117
40.00	-43.58	-6.57	0.00	-523.52	0.00	523.52	2,218.59	554.95	1,645.23	1,418.49	1.79	-0.42	0.113
45.00	-41.32	-6.46	0.00	-490.69	0.00	490.69	2,183.60	541.11	1,564.24	1,360.97	2.26	-0.47	0.107
50.00	-39.08	-6.35	0.00	-458.38	0.00	458.38	2,147.58	527.27	1,485.29	1,303.95	2.78	-0.52	0.101
55.00	-36.86	-6.24	0.00	-426.61	0.00	426.61	2,110.52	513.44	1,408.39	1,247.47	3.35	-0.57	0.095
60.00	-34.64	-6.13	0.00	-395.42	0.00	395.42	2,072.42	499.60	1,333.53	1,191.58	3.97	-0.62	0.089
64.00	-32.76	-5.86	0.00	-370.89	0.00	370.89	2,041.18	488.53	1,275.12	1,147.34	4.51	-0.65	0.085
65.00	-32.32	-5.81	0.00	-365.03	0.00	365.03	2,033.27	485.76	1,260.72	1,136.35	4.64	-0.66	0.084
68.70	-30.70	-5.74	0.00	-343.52	0.00	343.52	1,997.21	475.53	1,208.15	1,092.40	5.17	-0.70	0.080
68.70	-30.70	-5.74	0.00	-343.52	0.00	343.52	1,997.21	475.53	1,208.15	1,092.40	5.17	-0.70	0.154
70.00	-30.22	-5.70	0.00	-336.05	0.00	336.05	1,982.10	471.93	1,189.95	1,075.84	5.36	-0.71	0.153
73.50	-28.67	-5.64	0.00	-316.10	0.00	316.10	1,473.96	377.74	952.81	802.32	5.91	-0.77	0.170
75.00	-28.14	-5.59	0.00	-307.64	0.00	307.64	1,466.28	374.42	936.13	791.05	6.15	-0.80	0.167
80.00	-26.61	-5.49	0.00	-279.71	0.00	279.71	1,440.00	363.35	881.62	753.69	7.03	-0.88	0.156
85.00	-25.21	-5.39	0.00	-252.26	0.00	252.26	1,412.68	352.28	828.74	716.65	8.01	-0.97	0.144
90.00	-23.82	-5.29	0.00	-225.31	0.00	225.31	1,384.32	341.21	777.49	679.98	9.07	-1.05	0.132
95.00	-22.44	-5.18	0.00	-198.87	0.00	198.87	1,354.92	330.14	727.89	643.72	10.21	-1.13	0.120
100.00	-21.07	-5.08	0.00	-172.95	0.00	172.95	1,324.47	319.08	679.91	607.94	11.43	-1.20	0.108
104.00	-19.42	-4.91	0.00	-152.61	0.00	152.61	1,299.37	310.22	642.71	579.69	12.46	-1.26	0.097
105.00	-19.15	-4.87	0.00	-147.70	0.00	147.70	1,292.99	308.01	633.57	572.68	12.72	-1.27	0.095
108.00	-18.33	-4.79	0.00	-132.99	0.00	132.99	1,265.73	301.36	606.56	548.38	13.53	-1.31	0.087
110.00	-17.80	-4.75	0.00	-123.41	0.00	123.41	1,247.14	296.94	588.87	532.29	14.09	-1.33	0.083
110.00	-17.80	-4.75	0.00	-123.41	0.00	123.41	853.24	223.36	444.19	366.34	14.09	-1.33	0.099
111.00	-16.46	-4.16	0.00	-118.55	0.00	118.55	849.67	221.70	437.62	362.07	14.37	-1.34	0.095
115.00	-15.43	-4.06	0.00	-101.92	0.00	101.92	834.99	215.06	411.80	345.06	15.52	-1.39	0.084
119.13	-14.17	-3.99	0.00	-85.16	0.00	85.16	819.16	208.21	385.99	327.64	16.74	-1.43	0.072
120.00	-13.74	-3.86	0.00	-81.67	0.00	81.67	815.71	206.76	380.63	323.96	17.00	-1.44	0.035
121.00	-13.19	-3.81	0.00	-77.81	0.00	77.81	811.73	205.10	374.54	319.77	17.30	-1.45	0.033
121.00	-13.19	-3.81	0.00	-77.81	0.00	77.81	811.73	205.10	374.54	319.77	17.30	-1.45	0.054
124.50	-12.20	-3.74	0.00	-64.48	0.00	64.48	797.47	199.29	353.62	305.16	18.37	-1.46	0.046
124.50	-12.20	-3.74	0.00	-64.48	0.00	64.48	797.47	199.29	353.62	305.16	18.37	-1.46	0.227
125.00	-12.09	-3.73	0.00	-62.60	0.00	62.60	795.39	198.46	350.69	303.09	18.53	-1.47	0.222

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

24 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

127.00	-10.41	-3.42	0.00	-55.15	0.00	55.15	786.97	195.14	339.05	294.81	19.16	-1.53	0.201
130.00	-8.85	-2.66	0.00	-44.88	0.00	44.88	774.02	190.16	321.97	282.49	20.15	-1.62	0.171
135.00	-8.41	-2.58	0.00	-31.58	0.00	31.58	751.62	181.86	294.48	262.21	21.91	-1.74	0.132
140.00	-5.17	-1.62	0.00	-17.80	0.00	17.80	728.18	173.55	268.22	242.31	23.79	-1.84	0.081
144.00	-4.70	-1.52	0.00	-11.30	0.00	11.30	701.03	166.91	248.09	224.25	25.35	-1.88	0.057
145.00	-4.62	-1.48	0.00	-9.78	0.00	9.78	694.06	165.25	243.18	219.78	25.75	-1.89	0.051
150.00	0.00	-1.32	0.00	-2.39	0.00	2.39	659.19	156.95	219.37	198.13	27.75	-1.92	0.012

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.17
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.19
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.90
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	62.96 k
Seismic Base Shear (E):	1.89 k

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
44	147.50	396	8,623	0.018	35	490
43	144.50	80	1,675	0.004	7	99
42	142.00	324	6,536	0.014	26	401
41	137.50	433	8,191	0.017	33	536
40	132.50	441	7,747	0.016	31	546
39	128.50	425	7,014	0.015	28	526
38	126.00	329	5,229	0.011	21	407
37	124.75	116	1,804	0.004	7	143
36	122.75	989	14,904	0.032	60	1,224
35	120.50	551	7,994	0.017	32	681
34	119.56	311	4,445	0.009	18	385
33	117.06	1,263	17,301	0.037	69	1,562
32	113.00	1,029	13,140	0.028	53	1,273
31	110.50	246	3,003	0.006	12	304
30	109.00	522	6,198	0.013	25	645
29	106.50	808	9,160	0.019	37	999
28	104.50	270	2,949	0.006	12	334
27	102.00	1,085	11,284	0.024	45	1,342
26	97.50	1,365	12,979	0.028	52	1,689
25	92.50	1,376	11,774	0.025	47	1,702
24	87.50	1,387	10,618	0.023	43	1,716
23	82.50	1,398	9,512	0.020	38	1,729
22	77.50	1,522	9,140	0.019	37	1,883
21	74.25	525	2,893	0.006	12	649
20	71.75	1,545	7,955	0.017	32	1,912

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

19	69.35	479	2,306	0.005	9	593
18	66.85	1,617	7,225	0.015	29	2,000
17	64.50	438	1,823	0.004	7	542
16	62.00	1,758	6,759	0.014	27	2,175
15	57.50	2,210	7,306	0.016	29	2,734
14	52.50	2,223	6,128	0.013	25	2,750
13	47.50	2,237	5,046	0.011	20	2,767
12	42.50	2,250	4,064	0.009	16	2,784
11	37.83	1,961	2,807	0.006	11	2,426
10	35.33	389	485	0.001	2	481
9	33.25	2,050	2,266	0.005	9	2,536
8	30.75	714	675	0.001	3	883
7	27.50	2,391	1,808	0.004	7	2,957
6	24.30	672	397	0.001	2	832
5	21.80	1,734	824	0.002	3	2,146
4	17.50	2,423	742	0.002	3	2,997
3	12.50	2,439	381	0.001	2	3,017
2	7.50	2,269	128	0.000	1	2,807
1	2.50	2,285	14	0.000	0	2,827
Decibel DB809KE-SY	150.00	26	585	0.001	2	32
Kaelus DBC0061F1V51-	150.00	76	1,721	0.004	7	95
Powerwave Allgon LGP	150.00	42	952	0.002	4	52
Raycap DC6-48-60-18-	150.00	64	1,431	0.003	6	79
Ericsson RRUS A2 B2	150.00	66	1,485	0.003	6	82
Ericsson RRUS 11 (Ba	150.00	165	3,713	0.008	15	204
Ericsson RRUS 32 B30	150.00	180	4,050	0.009	16	223
Ericsson RRUS-11 (19	150.00	153	3,443	0.007	14	189
Ericsson RRUS-12 B2	150.00	174	3,915	0.008	16	215
Ericsson Radio 8843	150.00	255	5,738	0.012	23	315
Powerwave Allgon 777	150.00	105	2,363	0.005	9	130
Diamond X50A	150.00	5	104	0.000	0	6
CCI OPA-65R-LCUU-H8	150.00	264	5,940	0.013	24	327
CCI TPA-65R-LCUUUU-H	150.00	245	5,508	0.012	22	303
Round Side Arm	150.00	450	10,125	0.021	41	557
Platform w/ Handrail	150.00	2,000	45,000	0.095	180	2,474
Stand-Off	144.00	150	3,110	0.007	12	186
Ericsson KRY 112 144	140.00	33	647	0.001	3	41
Ericsson RRUS-11 (50	140.00	150	2,940	0.006	12	186
Ericsson AIR 21, 1.3	140.00	249	4,880	0.010	20	308
Ericsson AIR 21, 1.3	140.00	244	4,792	0.010	19	302
Andrew LNX-6515DS-VT	140.00	154	3,016	0.006	12	190
Platform w/ Handrail	140.00	2,000	39,200	0.083	157	2,474
Samsung Outdoor CBRS	130.00	56	943	0.002	4	69
Samsung B5/B13 RRH-B	130.00	211	3,564	0.008	14	261
Samsung B2/B66A RRH-	130.00	253	4,279	0.009	17	313
Raycap RCMD-6627-PF	130.00	32	541	0.001	2	40
Samsung MT6407-77A	130.00	245	4,137	0.009	17	303
Amphenol Antel BXA-8	130.00	54	913	0.002	4	67
Commscope NHH-65B-R2	130.00	131	2,216	0.005	9	162
Commscope NHHSS-65C-	130.00	168	2,839	0.006	11	208
Round Low Profile PI	127.00	1,350	21,774	0.046	87	1,670
Generic 76" x 6" Pan	120.00	120	1,728	0.004	7	148
DragonWave Horizon C	111.00	21	261	0.001	1	26
Alcatel-Lucent RRH2x	111.00	317	3,911	0.008	16	393
Nokia FZHN Flexi RRH	111.00	132	1,630	0.003	7	164
Alcatel-Lucent 1900M	111.00	180	2,218	0.005	9	223
DragonWave A-ANT-11G	111.00	54	665	0.001	3	67
RFS APXVTM14-ALU-I20	111.00	169	2,077	0.004	8	209
Commscope NNVV-65B-R	111.00	232	2,861	0.006	11	287
Generic 24" x 24" Ju	108.00	20	233	0.000	1	25
Side Arms	104.00	560	6,057	0.013	24	693
Channel Master Type	64.00	126	516	0.001	2	156
		62,955	471,273	1.000	1,889	77,883

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
44	147.50	396	8,623	0.018	35	342
43	144.50	80	1,675	0.004	7	69
42	142.00	324	6,536	0.014	26	280
41	137.50	433	8,191	0.017	33	374
40	132.50	441	7,747	0.016	31	381
39	128.50	425	7,014	0.015	28	367
38	126.00	329	5,229	0.011	21	284
37	124.75	116	1,804	0.004	7	100
36	122.75	989	14,904	0.032	60	854
35	120.50	551	7,994	0.017	32	475
34	119.56	311	4,445	0.009	18	268
33	117.06	1,263	17,301	0.037	69	1,089
32	113.00	1,029	13,140	0.028	53	888
31	110.50	246	3,003	0.006	12	212
30	109.00	522	6,198	0.013	25	450
29	106.50	808	9,160	0.019	37	697
28	104.50	270	2,949	0.006	12	233
27	102.00	1,085	11,284	0.024	45	936
26	97.50	1,365	12,979	0.028	52	1,178
25	92.50	1,376	11,774	0.025	47	1,187
24	87.50	1,387	10,618	0.023	43	1,197
23	82.50	1,398	9,512	0.020	38	1,206
22	77.50	1,522	9,140	0.019	37	1,313
21	74.25	525	2,893	0.006	12	453
20	71.75	1,545	7,955	0.017	32	1,333
19	69.35	479	2,306	0.005	9	414
18	66.85	1,617	7,225	0.015	29	1,395
17	64.50	438	1,823	0.004	7	378
16	62.00	1,758	6,759	0.014	27	1,517
15	57.50	2,210	7,306	0.016	29	1,907
14	52.50	2,223	6,128	0.013	25	1,918
13	47.50	2,237	5,046	0.011	20	1,930
12	42.50	2,250	4,064	0.009	16	1,942
11	37.83	1,961	2,807	0.006	11	1,692
10	35.33	389	485	0.001	2	335
9	33.25	2,050	2,266	0.005	9	1,769
8	30.75	714	675	0.001	3	616
7	27.50	2,391	1,808	0.004	7	2,063
6	24.30	672	397	0.001	2	580
5	21.80	1,734	824	0.002	3	1,497
4	17.50	2,423	742	0.002	3	2,090
3	12.50	2,439	381	0.001	2	2,104
2	7.50	2,269	128	0.000	1	1,958
1	2.50	2,285	14	0.000	0	1,972
Decibel DB809KE-SY	150.00	26	585	0.001	2	22
Kaelus DBC0061F1V51-	150.00	76	1,721	0.004	7	66
Powerwave Allgon LGP	150.00	42	952	0.002	4	36
Raycap DC6-48-60-18-	150.00	64	1,431	0.003	6	55
Ericsson RRUS A2 B2	150.00	66	1,485	0.003	6	57
Ericsson RRUS 11 (Ba	150.00	165	3,713	0.008	15	142
Ericsson RRUS 32 B30	150.00	180	4,050	0.009	16	155
Ericsson RRUS-11 (19	150.00	153	3,443	0.007	14	132
Ericsson RRUS-12 B2	150.00	174	3,915	0.008	16	150
Ericsson Radio 8843	150.00	255	5,738	0.012	23	220
Powerwave Allgon 777	150.00	105	2,363	0.005	9	91
Diamond X50A	150.00	5	104	0.000	0	4
CCI OPA-65R-LCUU-H8	150.00	264	5,940	0.013	24	228

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

CCI TPA-65R-LCUUUU-H	150.00	245	5,508	0.012	22	211
Round Side Arm	150.00	450	10,125	0.021	41	388
Platform w/ Handrail	150.00	2,000	45,000	0.095	180	1,726
Stand-Off	144.00	150	3,110	0.007	12	129
Ericsson KRY 112 144	140.00	33	647	0.001	3	28
Ericsson RRUS-11 (50	140.00	150	2,940	0.006	12	129
Ericsson AIR 21, 1.3	140.00	249	4,880	0.010	20	215
Ericsson AIR 21, 1.3	140.00	244	4,792	0.010	19	211
Andrew LNX-6515DS-VT	140.00	154	3,016	0.006	12	133
Platform w/ Handrail	140.00	2,000	39,200	0.083	157	1,726
Samsung Outdoor CBRS	130.00	56	943	0.002	4	48
Samsung B5/B13 RRH-B	130.00	211	3,564	0.008	14	182
Samsung B2/B66A RRH-	130.00	253	4,279	0.009	17	218
Raycap RCMD-6627-PF	130.00	32	541	0.001	2	28
Samsung MT6407-77A	130.00	245	4,137	0.009	17	211
Amphenol Antel BXA-8	130.00	54	913	0.002	4	47
Commscope NHH-65B-R2	130.00	131	2,216	0.005	9	113
Commscope NHHSS-65C-	130.00	168	2,839	0.006	11	145
Round Low Profile PI	127.00	1,350	21,774	0.046	87	1,165
Generic 76" x 6" Pan	120.00	120	1,728	0.004	7	104
DragonWave Horizon C	111.00	21	261	0.001	1	18
Alcatel-Lucent RRH2x	111.00	317	3,911	0.008	16	274
Nokia FZHN Flexi RRH	111.00	132	1,630	0.003	7	114
Alcatel-Lucent 1900M	111.00	180	2,218	0.005	9	155
DragonWave A-ANT-11G	111.00	54	665	0.001	3	47
RFS APXVTM14-ALU-I20	111.00	169	2,077	0.004	8	145
Commscope NNVV-65B-R	111.00	232	2,861	0.006	11	200
Generic 24" x 24" Ju	108.00	20	233	0.000	1	17
Side Arms	104.00	560	6,057	0.013	24	483
Channel Master Type	64.00	126	516	0.001	2	109
		62,955	471,273	1.000	1,889	54,323

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-75.06	-1.90	0.00	-235.79	0.00	235.79	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.050
5.00	-72.25	-1.92	0.00	-226.29	0.00	226.29	3,114.35	767.59	2,623.11	2,294.24	0.01	-0.02	0.049
10.00	-69.23	-1.93	0.00	-216.71	0.00	216.71	3,070.50	750.99	2,510.89	2,212.51	0.03	-0.03	0.047
15.00	-66.23	-1.95	0.00	-207.04	0.00	207.04	3,025.61	734.39	2,401.13	2,131.46	0.08	-0.05	0.046
20.00	-64.09	-1.96	0.00	-197.30	0.00	197.30	2,979.68	717.78	2,293.82	2,051.14	0.13	-0.06	0.044
23.60	-63.25	-1.96	0.00	-190.26	0.00	190.26	2,945.97	705.83	2,218.08	1,993.78	0.19	-0.07	0.043
23.60	-63.25	-1.96	0.00	-190.26	0.00	190.26	2,945.97	705.83	2,218.08	1,993.78	0.19	-0.07	0.043
25.00	-60.30	-1.96	0.00	-187.51	0.00	187.51	2,932.71	701.18	2,188.97	1,971.59	0.21	-0.08	0.042
30.00	-59.41	-1.97	0.00	-177.70	0.00	177.70	2,875.21	684.57	2,086.57	1,886.65	0.30	-0.09	0.041
31.50	-56.88	-1.96	0.00	-174.74	0.00	174.74	2,854.29	679.59	2,056.33	1,859.14	0.33	-0.10	0.040
35.00	-56.40	-1.97	0.00	-167.87	0.00	167.87	2,805.48	667.97	1,986.62	1,795.73	0.41	-0.11	0.039
35.67	-53.97	-1.96	0.00	-166.56	0.00	166.56	2,248.07	566.94	1,717.07	1,468.70	0.42	-0.11	0.043
40.00	-51.19	-1.95	0.00	-158.07	0.00	158.07	2,218.59	554.95	1,645.23	1,418.49	0.53	-0.13	0.042
45.00	-48.42	-1.94	0.00	-148.33	0.00	148.33	2,183.60	541.11	1,564.24	1,360.97	0.67	-0.14	0.039
50.00	-45.67	-1.92	0.00	-138.66	0.00	138.66	2,147.58	527.27	1,485.29	1,303.95	0.83	-0.16	0.037
55.00	-42.93	-1.89	0.00	-129.08	0.00	129.08	2,110.52	513.44	1,408.39	1,247.47	1.00	-0.17	0.035
60.00	-40.76	-1.86	0.00	-119.63	0.00	119.63	2,072.42	499.60	1,333.53	1,191.58	1.19	-0.19	0.033
64.00	-40.06	-1.86	0.00	-112.18	0.00	112.18	2,041.18	488.53	1,275.12	1,147.34	1.35	-0.20	0.032
65.00	-38.06	-1.83	0.00	-110.32	0.00	110.32	2,033.27	485.76	1,260.72	1,136.35	1.39	-0.20	0.031
68.70	-37.47	-1.82	0.00	-103.56	0.00	103.56	1,997.21	475.53	1,208.15	1,092.40	1.55	-0.21	0.030
68.70	-37.47	-1.82	0.00	-103.56	0.00	103.56	1,997.21	475.53	1,208.15	1,092.40	1.55	-0.21	0.055
70.00	-35.55	-1.79	0.00	-101.20	0.00	101.20	1,982.10	471.93	1,189.95	1,075.84	1.60	-0.21	0.054
73.50	-34.91	-1.78	0.00	-94.95	0.00	94.95	1,473.96	377.74	952.81	802.32	1.77	-0.23	0.060
75.00	-33.02	-1.75	0.00	-92.28	0.00	92.28	1,466.28	374.42	936.13	791.05	1.84	-0.24	0.059
80.00	-31.29	-1.71	0.00	-83.54	0.00	83.54	1,440.00	363.35	881.62	753.69	2.10	-0.27	0.055
85.00	-29.58	-1.68	0.00	-74.97	0.00	74.97	1,412.68	352.28	828.74	716.65	2.40	-0.29	0.051
90.00	-27.87	-1.63	0.00	-66.59	0.00	66.59	1,384.32	341.21	777.49	679.98	2.71	-0.31	0.047
95.00	-26.18	-1.58	0.00	-58.43	0.00	58.43	1,354.92	330.14	727.89	643.72	3.06	-0.34	0.042
100.00	-24.84	-1.54	0.00	-50.53	0.00	50.53	1,324.47	319.08	679.91	607.94	3.42	-0.36	0.038
104.00	-23.82	-1.50	0.00	-44.39	0.00	44.39	1,299.37	310.22	642.71	579.69	3.73	-0.38	0.035
105.00	-22.82	-1.46	0.00	-42.89	0.00	42.89	1,292.99	308.01	633.57	572.68	3.81	-0.38	0.034
108.00	-22.15	-1.43	0.00	-38.52	0.00	38.52	1,265.73	301.36	606.56	548.38	4.05	-0.39	0.031
110.00	-21.84	-1.42	0.00	-35.66	0.00	35.66	1,247.14	296.94	588.87	532.29	4.22	-0.40	0.030
110.00	-21.84	-1.42	0.00	-35.66	0.00	35.66	853.24	223.36	444.19	366.34	4.22	-0.40	0.036
111.00	-19.20	-1.29	0.00	-34.25	0.00	34.25	849.67	221.70	437.62	362.07	4.30	-0.40	0.034
115.00	-17.64	-1.22	0.00	-29.07	0.00	29.07	834.99	215.06	411.80	345.06	4.64	-0.41	0.030
119.13	-17.26	-1.20	0.00	-24.04	0.00	24.04	819.16	208.21	385.99	327.64	5.00	-0.43	0.026
120.00	-16.43	-1.16	0.00	-22.99	0.00	22.99	815.71	206.76	380.63	323.96	5.08	-0.43	0.014
121.00	-15.20	-1.09	0.00	-21.84	0.00	21.84	811.73	205.10	374.54	319.77	5.17	-0.43	0.013
121.00	-15.20	-1.09	0.00	-21.84	0.00	21.84	811.73	205.10	374.54	319.77	5.17	-0.43	0.022
124.50	-15.06	-1.08	0.00	-18.03	0.00	18.03	797.47	199.29	353.62	305.16	5.49	-0.43	0.020
124.50	-15.06	-1.08	0.00	-18.03	0.00	18.03	797.47	199.29	353.62	305.16	5.49	-0.43	0.078
125.00	-14.65	-1.06	0.00	-17.49	0.00	17.49	795.39	198.46	350.69	303.09	5.54	-0.44	0.076
127.00	-12.46	-0.93	0.00	-15.38	0.00	15.38	786.97	195.14	339.05	294.81	5.72	-0.45	0.068
130.00	-10.49	-0.81	0.00	-12.59	0.00	12.59	774.02	190.16	321.97	282.49	6.02	-0.48	0.058
135.00	-9.95	-0.78	0.00	-8.53	0.00	8.53	751.62	181.86	294.48	262.21	6.54	-0.51	0.046
140.00	-6.05	-0.50	0.00	-4.64	0.00	4.64	728.18	173.55	268.22	242.31	7.09	-0.54	0.027

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

144.00	-5.77	-0.47	0.00	-2.66	0.00	2.66	701.03	166.91	248.09	224.25	7.54	-0.55	0.020
145.00	-5.28	-0.44	0.00	-2.18	0.00	2.18	694.06	165.25	243.18	219.78	7.66	-0.55	0.018
150.00	0.00	-0.38	0.00	0.00	0.00	0.00	659.19	156.95	219.37	198.13	8.24	-0.56	0.000

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

4/30/2021 8:37:40 AM

Customer: VERIZON WIRELESS

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-52.35	-1.90	0.00	-230.43	0.00	230.43	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.045
5.00	-50.39	-1.91	0.00	-220.96	0.00	220.96	3,114.35	767.59	2,623.11	2,294.24	0.01	-0.02	0.044
10.00	-48.29	-1.92	0.00	-211.42	0.00	211.42	3,070.50	750.99	2,510.89	2,212.51	0.03	-0.03	0.043
15.00	-46.20	-1.93	0.00	-201.83	0.00	201.83	3,025.61	734.39	2,401.13	2,131.46	0.07	-0.05	0.041
20.00	-44.70	-1.93	0.00	-192.19	0.00	192.19	2,979.68	717.78	2,293.82	2,051.14	0.13	-0.06	0.040
23.60	-44.12	-1.94	0.00	-185.24	0.00	185.24	2,945.97	705.83	2,218.08	1,993.78	0.18	-0.07	0.039
23.60	-44.12	-1.94	0.00	-185.24	0.00	185.24	2,945.97	705.83	2,218.08	1,993.78	0.18	-0.07	0.039
25.00	-42.06	-1.93	0.00	-182.53	0.00	182.53	2,932.71	701.18	2,188.97	1,971.59	0.20	-0.08	0.038
30.00	-41.44	-1.94	0.00	-172.86	0.00	172.86	2,875.21	684.57	2,086.57	1,886.65	0.29	-0.09	0.037
31.50	-39.67	-1.93	0.00	-169.95	0.00	169.95	2,854.29	679.59	2,056.33	1,859.14	0.32	-0.10	0.037
35.00	-39.33	-1.93	0.00	-163.20	0.00	163.20	2,805.48	667.97	1,986.62	1,795.73	0.40	-0.11	0.035
35.67	-37.64	-1.92	0.00	-161.91	0.00	161.91	2,248.07	566.94	1,717.07	1,468.70	0.41	-0.11	0.039
40.00	-35.70	-1.91	0.00	-153.58	0.00	153.58	2,218.59	554.95	1,645.23	1,418.49	0.52	-0.12	0.038
45.00	-33.77	-1.89	0.00	-144.03	0.00	144.03	2,183.60	541.11	1,564.24	1,360.97	0.65	-0.14	0.036
50.00	-31.85	-1.87	0.00	-134.55	0.00	134.55	2,147.58	527.27	1,485.29	1,303.95	0.81	-0.15	0.034
55.00	-29.94	-1.85	0.00	-125.19	0.00	125.19	2,110.52	513.44	1,408.39	1,247.47	0.97	-0.17	0.032
60.00	-28.43	-1.82	0.00	-115.96	0.00	115.96	2,072.42	499.60	1,333.53	1,191.58	1.16	-0.18	0.030
64.00	-27.94	-1.81	0.00	-108.67	0.00	108.67	2,041.18	488.53	1,275.12	1,147.34	1.31	-0.19	0.029
65.00	-26.54	-1.78	0.00	-106.86	0.00	106.86	2,033.27	485.76	1,260.72	1,136.35	1.35	-0.19	0.028
68.70	-26.13	-1.77	0.00	-100.27	0.00	100.27	1,997.21	475.53	1,208.15	1,092.40	1.51	-0.20	0.027
68.70	-26.13	-1.77	0.00	-100.27	0.00	100.27	1,997.21	475.53	1,208.15	1,092.40	1.51	-0.20	0.050
70.00	-24.80	-1.74	0.00	-97.96	0.00	97.96	1,982.10	471.93	1,189.95	1,075.84	1.56	-0.21	0.049
73.50	-24.34	-1.73	0.00	-91.86	0.00	91.86	1,473.96	377.74	952.81	802.32	1.72	-0.22	0.055
75.00	-23.03	-1.70	0.00	-89.26	0.00	89.26	1,466.28	374.42	936.13	791.05	1.79	-0.23	0.054
80.00	-21.82	-1.67	0.00	-80.76	0.00	80.76	1,440.00	363.35	881.62	753.69	2.05	-0.26	0.050
85.00	-20.63	-1.63	0.00	-72.43	0.00	72.43	1,412.68	352.28	828.74	716.65	2.33	-0.28	0.046
90.00	-19.44	-1.58	0.00	-64.30	0.00	64.30	1,384.32	341.21	777.49	679.98	2.64	-0.31	0.042
95.00	-18.26	-1.53	0.00	-56.40	0.00	56.40	1,354.92	330.14	727.89	643.72	2.97	-0.33	0.038
100.00	-17.33	-1.48	0.00	-48.76	0.00	48.76	1,324.47	319.08	679.91	607.94	3.33	-0.35	0.034
104.00	-16.61	-1.45	0.00	-42.82	0.00	42.82	1,299.37	310.22	642.71	579.69	3.63	-0.36	0.031
105.00	-15.91	-1.41	0.00	-41.38	0.00	41.38	1,292.99	308.01	633.57	572.68	3.70	-0.37	0.030
108.00	-15.44	-1.38	0.00	-37.16	0.00	37.16	1,265.73	301.36	606.56	548.38	3.94	-0.38	0.028
110.00	-15.23	-1.37	0.00	-34.39	0.00	34.39	1,247.14	296.94	588.87	532.29	4.10	-0.38	0.027
110.00	-15.23	-1.37	0.00	-34.39	0.00	34.39	853.24	223.36	444.19	366.34	4.10	-0.38	0.032
111.00	-13.39	-1.25	0.00	-33.03	0.00	33.03	849.67	221.70	437.62	362.07	4.18	-0.39	0.031
115.00	-12.30	-1.18	0.00	-28.02	0.00	28.02	834.99	215.06	411.80	345.06	4.51	-0.40	0.027
119.13	-12.03	-1.16	0.00	-23.17	0.00	23.17	819.16	208.21	385.99	327.64	4.86	-0.41	0.023
120.00	-11.46	-1.12	0.00	-22.16	0.00	22.16	815.71	206.76	380.63	323.96	4.94	-0.42	0.012
121.00	-10.60	-1.05	0.00	-21.04	0.00	21.04	811.73	205.10	374.54	319.77	5.02	-0.42	0.011
121.00	-10.60	-1.05	0.00	-21.04	0.00	21.04	811.73	205.10	374.54	319.77	5.02	-0.42	0.019
124.50	-10.50	-1.04	0.00	-17.37	0.00	17.37	797.47	199.29	353.62	305.16	5.33	-0.42	0.017
124.50	-10.50	-1.04	0.00	-17.37	0.00	17.37	797.47	199.29	353.62	305.16	5.33	-0.42	0.070
125.00	-10.22	-1.02	0.00	-16.85	0.00	16.85	795.39	198.46	350.69	303.09	5.38	-0.42	0.068
127.00	-8.69	-0.90	0.00	-14.81	0.00	14.81	786.97	195.14	339.05	294.81	5.56	-0.44	0.061
130.00	-7.31	-0.78	0.00	-12.11	0.00	12.11	774.02	190.16	321.97	282.49	5.84	-0.46	0.052
135.00	-6.94	-0.75	0.00	-8.21	0.00	8.21	751.62	181.86	294.48	262.21	6.34	-0.50	0.041
140.00	-4.22	-0.48	0.00	-4.46	0.00	4.46	728.18	173.55	268.22	242.31	6.88	-0.52	0.024

Site Number: 302489

Code: ANSI/TIA-222-H

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

144.00	-4.02	-0.46	0.00	-2.55	0.00	2.55	701.03	166.91	248.09	224.25	7.32	-0.53	0.017
145.00	-3.68	-0.42	0.00	-2.10	0.00	2.10	694.06	165.25	243.18	219.78	7.43	-0.53	0.015
150.00	0.00	-0.38	0.00	0.00	0.00	0.00	659.19	156.95	219.37	198.13	7.99	-0.54	0.000

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	30.09	0.00	75.49	0.00	0.00	3385.80	124.50	0.92
0.9D + 1.0W	30.05	0.00	56.60	0.00	0.00	3321.55	124.50	0.89
1.2D + 1.0Di + 1.0Wi	11.39	0.00	107.62	0.00	0.00	1208.36	124.50	0.31
1.2D + 1.0Ev + 1.0Eh	1.90	0.00	75.06	0.00	0.00	235.79	124.50	0.08
0.9D - 1.0Ev + 1.0Eh	1.90	0.00	52.35	0.00	0.00	230.43	124.50	0.07
1.0D + 1.0W	7.20	0.00	62.95	0.00	0.00	801.66	124.50	0.23

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number:13669399_C3_01

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Customer: VERIZON WIRELESS

Additional Steel Summary

			Intermediate Connectors				Max Member		
Elev	Elev		Shear	Shear			Pu	phiPn	
From	To		VQ/I	Applied	phiVn				
(ft)	(ft)	Member	(lb/in)	(kips)	(kips)	Ratio	(kip)	(kip)	Ratio
0.00	121.00	(4) SOL-#20 All Thread Bar	478.7	12.9	16.8	0.769	278.6	314.9	0.885
0.00	23.60	(4) SOL-#20 All Thread Bar	225.8	6.1	16.8	0.363	278.5	334.7	0.832
23.60	68.70	(4) SOL-#20 All Thread Bar	260.6	7.8	16.8	0.465	254.3	330.5	0.770
119.13	124.50	(3) SOL-#20 (15 deg Offset)	454.9	13.6	16.8	0.812	113.1	284.5	0.398

			Upper Termination					Lower Termination				
Elev	Elev		Connectors					Connectors				
From	To		MQ/I	phiVn	Num	Num		MQ/I	phiVn	Num	Num	
(ft)	(ft)	Member	(kips)	(kips)	Reqd	Actual	Ratio	(kips)	(kips)	Reqd	Actual	Ratio
0.00	121.00	(4) SOL-#20 All Thread Bar	55.5	12.0	5	10	0.463	0.0	12.0	0	0	0.000
0.00	23.60	(4) SOL-#20 All Thread Bar	0.0	12.0	0	24	0.000	0.0	12.0	0	0	0.000
23.60	68.70	(4) SOL-#20 All Thread Bar	185.8	12.0	16	24	0.645	0.0	12.0	0	0	0.000
119.13	124.50	(3) SOL-#20 (15 deg Offset)	94.0	12.0	8	12	0.653	75.2	12.0	7	12	0.522

Site Name: Enfd - Enfield, CT
Site Number: 302489
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-H Standards

Monolithic Mat & Pier Foundation Analysis

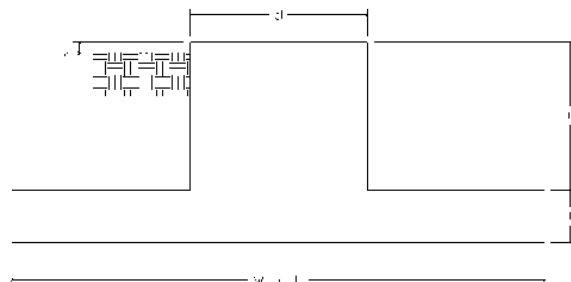
Foundation Analysis Parameters		
Design / Analysis / Mapping:	Analysis	-
Compression/Leg:	75.5	k
Uplift/Leg:	0.0	k
Total Shear:	30.1	k
Moment:	3,385.8	k-ft
Tower + Appurtenance Weight:	280.5	k
Depth to Base of Foundation (l + t - h):	8	ft
Diameter of Pier (d):	5	ft
Length of Pier (l):	5.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	18	ft
Length of Pad (L):	18	ft
Thickness of Pad (t):	3	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	115	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	52.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.3	-
Ultimate Compressive Bearing Pressure:	24,000	psf
Ultimate Passive Pressure on Pad Face:	0	psf
$f_{\text{Soil and Concrete Weight}}$:	0.9	-
f_{Soil} :	0.75	-

Overturning Moment Usage		
Design OTM:	3641.7	k-ft
OTM Resistance:	4682.9	k-ft
Design OTM / OTM Resistance:	78%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	15336	psf
Factored Nominal Bearing Pressure:	18000	psf
Factored Nominal (Net) Bearing Pressure:	85%	Pass
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge	

Sliding Factor of Safety		
Ultimate Friction Resistance:	171.2	k
Ultimate Passive Pressure Resistance:	0.0	k
Total Factored Sliding Resistance:	128.4	k
Sliding Design / Sliding Resistance:	23%	Pass

Foundation Steel Parameters		
Shear/Leg (Compression):	20.1	k
Shear/Leg (Uplift):	16.6	k
Concrete Strength (f'_c):	3,000	psi
Pad Tension Steel Depth:	32.38	in
Dead Load Factor:	0.9	-
f_{Shear} :	0.75	-
$f_{\text{Flexure / Tension}}$:	0.9	-
$f_{\text{Compression}}$:	0.65	-
b:	0.85	-
Bottom Pad Rebar Size #:	10	-
# of Bottom Pad Rebar:	34	-
Pad Bottom Steel Area:	43.18	in ²
Pad Steel F_y :	60,000	psi
Top Pad Rebar Size #:	10	-
# of Top Pad Rebar:	34	-
Pad Top Steel Area:	43.18	in ²
Pier Rebar Size #:	11	-
Pier Steel Area (Single Bar):	1.56	in ²
# of Pier Rebar:	52	-
Pier Steel F_y :	60,000	psi
Pier Cage Diameter:	51.6	in
Rebar Strain Limit:	0.008	-
Steel Elastic Modulus:	29,000	ksi
Tie Rebar Size #:	4	-
Tie Steel Area (Single Bar):	0.20	in ²
Tie Spacing:	12	in
Tie Steel F_y :	60,000	psi
Clear Cover:	3	in



Pad Strength Capacity		
Factored One Way Shear (V_u):	465.6	k
One Way Shear Capacity (fV_c):	480.7	k
V_u / fV_c :	97%	Pass
Load Direction Controlling Shear Capacity:	Diagonal to Pad Edge	
Lower Steel Pad Factored Moment (M_u):	2757.3	k-ft
Lower Steel Pad Moment Capacity (fM_n):	5902.3	k-ft
M_u / fM_n :	47%	Pass
Load Direction Controlling Flexural Capacity:	Parallel to Pad Edge	
Upper Steel Pad Factored Moment (M_u):	389.8	k-ft
Upper Steel Pad Moment Capacity (fM_n):	5902.3	k-ft
M_u / fM_n :	7%	Pass
Lower Pad Flexural Reinforcement Ratio:	0.0062	
Upper Pad Flexural Reinforcement Ratio:	0.0062	
Pad Shrinkage Reinforcement Ratio:	0.0123	
Lower Pad Reinforcement Spacing:	6.3	in
Upper Pad Reinforcement Spacing:	6.3	in
Ultimate Punching Shear Stress, v_u :	62.82	psi
Nominal Punching Shear Capacity ($f_c v_c$):	164.3	psi
$v_u / f_c v_c$:	38%	Pass
Pier Moment Pad Flexure Transfer Ratio, γ_f :	0.60	
Moment Transfer Effective Flexural Width, B_{eff} :	14.00	ft
Moment Transfer Through Pad Flexure:	25569.72	k-in
Moment Transfer Flexural Capacity ($fM_{sc,f}$):	57095.97	k-in
$g_f M_{sc} / fM_{sc,f}$:	0%	Pass

Pier Strength Capacity			
Factored Moment in Pier (M_u):	3551.4	k-ft	
Pier Moment Capacity (fM_n):	9214.4	k-ft	
M_u / fM_n :	39%	Pass	
Factored Shear in Pier (V_u):	30.1	k	ACI 318-14 22.5.1.1
Pier Shear Capacity (fV_n):	307.4	k	
V_u / fV_c :	10%	Pass	
Pier Shear Reinforcement Ratio:	0.0007		OK - No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k	
Pier Tension Capacity (fT_n):	4380.5	k	
T_u / fT_n :	0%	Pass	
Factored Compression in Pier (P_u):	75.5	k	ACI 318-14 22.4.2.1
Pier Compression Capacity (fP_n):	3690.3	k	
P_u / fP_n :	2%	Pass	
Pier Compression Reinforcement Ratio:	0.029		OK - TIA-222-H 9.4.1
Minimum Depth to Develop Vertical Rebar:	63	in	ACI 318-14 25.4.2.3
Minimum Hook Development Length:	31	in	ACI 318-14 25.4.3.1
Minimum Mat Thickness / Edge Distance from Pier:	34.0	in	
Minimum Foundation Depth:	8.35	ft	
$M_u / f_B M_n + T_u / f_T T_n$:	39%	Pass	



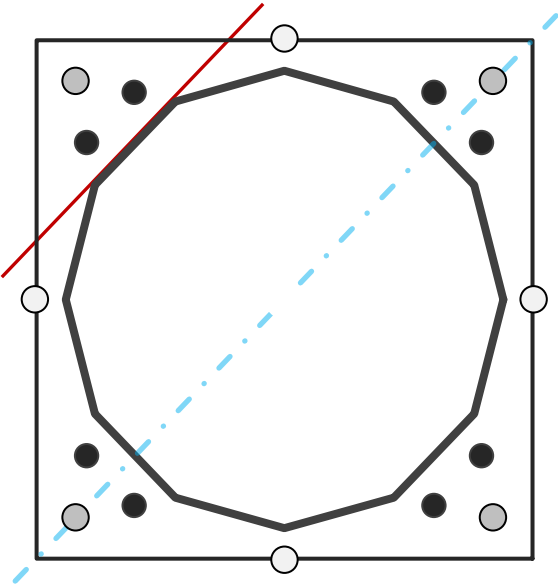
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	12	-
Diameter	37.375	in
Thickness	3/8	in
Orientation Offset	0	°

Base Reactions		
Moment, Mu	3,385.8	k-ft
Axial, Pu	75.5	k
Shear, Vu	30.1	k
Neutral Axis	45	°

Report Capacities		
Component	Capacity	Result
Base Plate	47%	Pass
Anchor Rods	68%	Pass
Dwyidag	72%	Pass

Base Plate		
Shape	Square	-
Width	44	in
Thickness	2 1/2	in
Grade	A572-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	0	in
Orientation Offset	0	°
Anchor Rod Detail	d	η=0.5
Clear Distance	3	in
Applied Moment, Mu	985.1	k
Bending Stress, φMn	2086.2	k



Dwyidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ø	2.5	in
Bracket Type	Angle	-
Circle	44.26	in
Orientation Offset	0	°
Applied Force, Pu	263.4	k
Dwyidag Bar, φPn	368.2	k

Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ø	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	161.7	k
Anchor Rods, φPn	243.6	k

Additional Anchor Rods		
Quantity	4	-
Diameter, ø	2 1/2	in
Bolt Circle	52.4	in
Grade	Other	
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Bypass Base?	Yes	
Orientation Offset	45	°
Applied Force, Pu	205.0	k
Additional Rod, φPn	299.9	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	30.1	1174.0	0.35
Anchor Rod Forces	30.1	1174.0	0.35
Additional Bolt (Grp1) Forces	0.0	874.6	0.26
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	1337.2	0.39
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	43.0934	3.5911	0.1692		7376.38
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
Bolt1	4.9087	3.9988	1.2725	4	5495.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	4.9087	4.9087	1.9175		4814.56
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	Square	-
Width, W	44	in
Thickness, t	2.5	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	23.219	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods		
Anchor Rod Quantity, N	8	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	44	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	161.7	k
Applied Shear, Vu	0.9	k
Compressive Capacity, φPn	243.6	k
Tensile Capacity, φRnt	0.664	OK
Interaction Capacity	0.671	OK

External Base Plate		
Chord Length AA	24.725	in
Additional AA	0.000	in
Section Modulus, Z	38.633	in ³
Applied Moment, Mu	985.1	k-ft
Bending Capacity, φMn	2086.2	k-ft
Capacity, Mu/φMn	0.472	OK
Chord Length AB	23.403	in
Additional AB	0.000	in
Section Modulus, Z	36.566	in ³
Applied Moment, Mu	771.2	k-ft
Bending Capacity, φMn	1974.6	k-ft
Capacity, Mu/φMn	0.391	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in ³
Applied Moment, Mu	0.0	k-ft
Bending Capacity, φMn	0.0	k-ft
Capacity, Mu/φMn		

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in ³
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, φMn	0.0	k-ft
Capacity, Mu/φMn		

Additional Bolt Group 1		
Bolt Quantity, N	4	-
Bolt Diameter, d	2.5	in
Bolt Circle, BC	52.4	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	205.0	k
Applied Shear, Vu	0.0	k
Compressive Capacity, φPn	299.9	k
Compressive Capacity, φPn	0.683	OK
Interaction Capacity	0.683	OK

Dywidag Reinforcement		
Dywidag Quantity, N	4	-
Dywidag Diameter, d	2.5	in
Bolt Circle, BC	44.255	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	263.4	k
Compressive Capacity, φPn	368.2	k
Capacity, Pu/φPn	0.716	OK

Flange Plate Analysis

Flange Plate	Plate Type	Flange	@ 110 ft
	Pole Diameter	21.25	in
	Pole Thickness	0.1875	in
	Plate Diameter	28.5	in
	Plate Thickness	1	in
	Plate Fy	60	ksi
	Weld Length	3/16	in
	f _s Resistance	96.45	k-in
	Applied	38.54	k-in

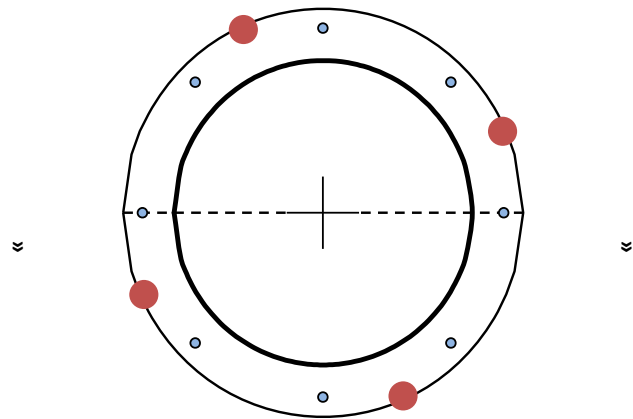
Code Rev.	H
A.S.I.	1.00
Moment	522.8 k-ft
Axial	19.6 k

Date	4/27/2021
Engineer	josh.krehnbrink
Site #	302489
Carrier	VERIZON WIRELESS

Required Flange Thickness:
0.63 in OK

Stiffeners	#	
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Bolts	#	8	
	Bolt Circle (R)adial / (S)quare	25.75 R	in
	Diameter	1	in
	Hole Diameter	1 1/8	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
	f _s Resistance	54.52	k
	Applied	25.69	k



Reinforcement	#	4	
	DYW. Circle	28	in
	Offset Angle	24	°
	Type	#20	
	Diameter	2.72	in
	Fu	100	ksi
	f _s Resistance	464.86	k
	Applied	156.63	k

Plate Stress Ratio:

40% Pass

Bolt Stress Ratio:

47% Pass

Extra Bolts O	#	0	
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Reinforcement Stress Ratio:

34% Pass

Site Name: **ENFIELD 4 CT**
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density
	(MHz)		(watts)	(watts)	(feet)	(mW/cm ²)
VZW 700	751	4	685	2742	130	0.0058
VZW CDMA	878.49	2	445	889	130	0.0019
VZW Cellular	874	4	690	2761	130	0.0059
VZW PCS	1975	4	1469	5876	130	0.0125
VZW AWS	2120	4	1633	6532	130	0.0139
VZW CBRS	3625	4	35	140	130	0.0003
VZW CBAND	3730.005	4	6531	26125	130	0.0556

Total Percentage of Maximum Permissible Exposure

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/II

**Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council'

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.

Maximum Permissible Exposure*	Fraction of MPE
(mW/cm ²)	(%)
0.5007	1.17%
0.5857	0.32%
0.5827	1.01%
1.0000	1.25%
1.0000	1.39%
1.0000	0.03%
1.0000	5.56%
	10.73%

EEE C95.1-1992

s November 10, 2015 Memorandum for Exempt Modification filings