



Maser Consulting Connecticut
2000 Midlantic Drive Suite 100
Mt. Laurel, NJ 08054
856.797.0412
greg.dulnik@colliersengineering.com

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10073431
Maser Consulting Connecticut Project #: 20777626A

May 27, 2021

Site Information

Site ID: 468004-VZW / NEW BRITAIN 3 CT
Site Name: NEW BRITAIN 3 CT
Carrier Name: Verizon Wireless
Address: 167 Lester St
New Britain, Connecticut 06051
Hartford County
Latitude: 41.686211°
Longitude: -72.757042°

Structure Information

Tower Type: 188.0-Ft Monopole
Mount Type: 13.25-Ft Platform

FUZE ID # 16231991

Analysis Results

Platform: 54.3% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

Report Prepared By: Selene Chen

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 324446, dated March 24, 2021
Mount Mapping Report	RKS Design & Engineering LLC., Site ID: CC: 803175, dated January 16, 2021
Mount Analysis Report	Maser Consulting Connecticut, Project #: 20777626A, dated May 26, 2021
Mount Modification Drawings	Maser Consulting Connecticut, Project #: 20777626A, dated May 27, 2021

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 118 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.997
Seismic Parameters:	S_s : 0.194 S_1 : 0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

The following equipment has been considered for the analysis of the mount:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
143.50	146.50	3	Samsung	MT6407-77A	Added
	143.00	3	Samsung	XXDWMM-12.5-65-8T-CBRS	Retained
	145.00	3	Amphenol	BXA-80063-6BF-EDIN-X	
		6	Andrew	SBNHH-1D65B	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RHSDC-3315-PF-48	
	1	Raycap	RRFDC-3315-PF-48		

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mount(s).

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
<i>Mount Pipe</i>	<i>37.6%</i>	<i>Pass</i>
<i>Corner Plate</i>	<i>36.4%</i>	<i>Pass</i>
<i>Face Horizontal</i>	<i>19.6%</i>	<i>Pass</i>
<i>Cross Arm Plate</i>	<i>51.5%</i>	<i>Pass</i>
<i>Crossmember</i>	<i>54.3%</i>	<i>Pass</i>
<i>Standoff</i>	<i>26.4%</i>	<i>Pass</i>
<i>Kicker</i>	<i>14.8%</i>	<i>Pass</i>
<i>Connection Check</i>	<i>24.4%</i>	<i>Pass</i>

Structure Rating – (Controlling Utilization of all Components)	54.3%
-----------------------------------------------------------------------	--------------

Recommendation:

The existing mount will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

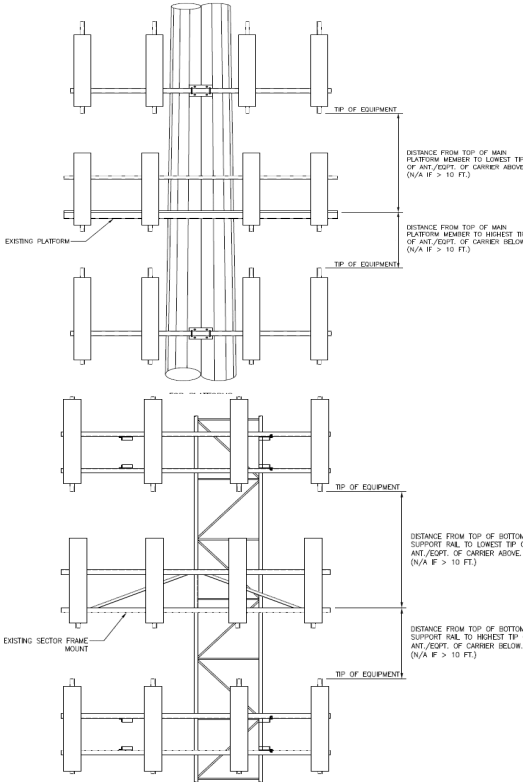
ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
- 4. Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter



Mount Azimuth (Degree) for Each Sector		Tower Leg Azimuth (Degree) for Each Sector		Sector B															
Sector A:	60.00	Deg	Leg A:		Deg	Ant _{1a}													
Sector B:	180.00	Deg	Leg B:		Deg	Ant _{1b}	BXA-171063-12CF-ED	6.00	4.00	72.50		146.348	33.75	8.00	180.00	18,173			
Sector C:	300.00	Deg	Leg C:		Deg	Ant _{1c}													
Sector D:		Deg	Leg D:		Deg	Ant _{2a}													
Climbing Facility Information						Ant _{2b}													
Location:	260.00	Deg	N/A			Ant _{2c}													
Climbing Facility	Corrosion Type:	N/A				Ant _{3a}	RFV01U-D1A	15.00	10.00	15.00		147.118	27.50	-7.00					173
	Access:	Climbing path was unobstructed.				Ant _{3b}	(2)SBNHH-1D65B	12.00	7.00	72.00		146.931	29.75	10.50	180.00	18,173			
	Condition:	Good condition.				Ant _{3c}													
						Ant _{4a}	RFV01U-D2A	15.00	10.00	15.00		146.993	27.50	-7.00					18,173
						Ant _{4b}													
						Ant _{4c}													
						Ant _{5a}	UNKNOWN:GPS	3.00	3.00	7.00		142.368	81.50	-5.00					174
						Ant _{5b}	BXA-80063-6BF-EDIN	11.00	5.50	68.60		146.323	34.05	9.75	180.00	18,174			
						Ant _{5c}													
						Ant on Standoff													
						Ant on Standoff													
						Ant on Tower	RHSDC-3315-PF-48	15.00	10.00	29.00			58.00	7.25					142
						Ant on Tower	RRFDC-3315-PF-48	15.00	10.00	25.50			62.75	7.25					332
						Sector C													
						Ant _{1a}													
						Ant _{1b}	BXA-171063-12CF-ED	6.00	4.00	72.50		146.348	33.75	8.00	300.00	25,176			
						Ant _{1c}													
						Ant _{2a}													
						Ant _{2b}													
						Ant _{2c}													
						Ant _{3a}	RFV01U-D1A	15.00	10.00	15.00		147.118	27.50	-7.00					176
						Ant _{3b}	(2)SBNHH-1D65B	12.00	7.00	72.00		146.931	29.75	10.50	300.00	25,176			
						Ant _{3c}													
						Ant _{4a}	RFV01U-D2A	15.00	10.00	15.00		146.993	27.50	-7.00					25,176
						Ant _{4b}													
						Ant _{4c}													
						Ant _{5a}													
						Ant _{5b}	BXA-80063-6BF-EDIN	11.00	5.50	68.60		146.323	34.05	9.75	300.00	25,176			
						Ant _{5c}													
						Ant on Standoff													
						Ant on Standoff													
						Ant on Tower													
						Ant on Tower													
						Sector D													
						Ant _{1a}													
						Ant _{1b}													
						Ant _{1c}													
						Ant _{2a}													
						Ant _{2b}													
						Ant _{2c}													
						Ant _{3a}													
						Ant _{3b}													
						Ant _{3c}													
						Ant _{4a}													
						Ant _{4b}													
						Ant _{4c}													
						Ant _{5a}													
						Ant _{5b}													
						Ant _{5c}													
						Ant on Standoff													
						Ant on Standoff													
						Ant on Tower													
						Ant on Tower													



Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1	TOTAL COAX (14): (6) FH 1 5/8, (2) 1.5"Ø HYBRID, (6) FH 1 5/8 CUT COAX	
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions

1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.



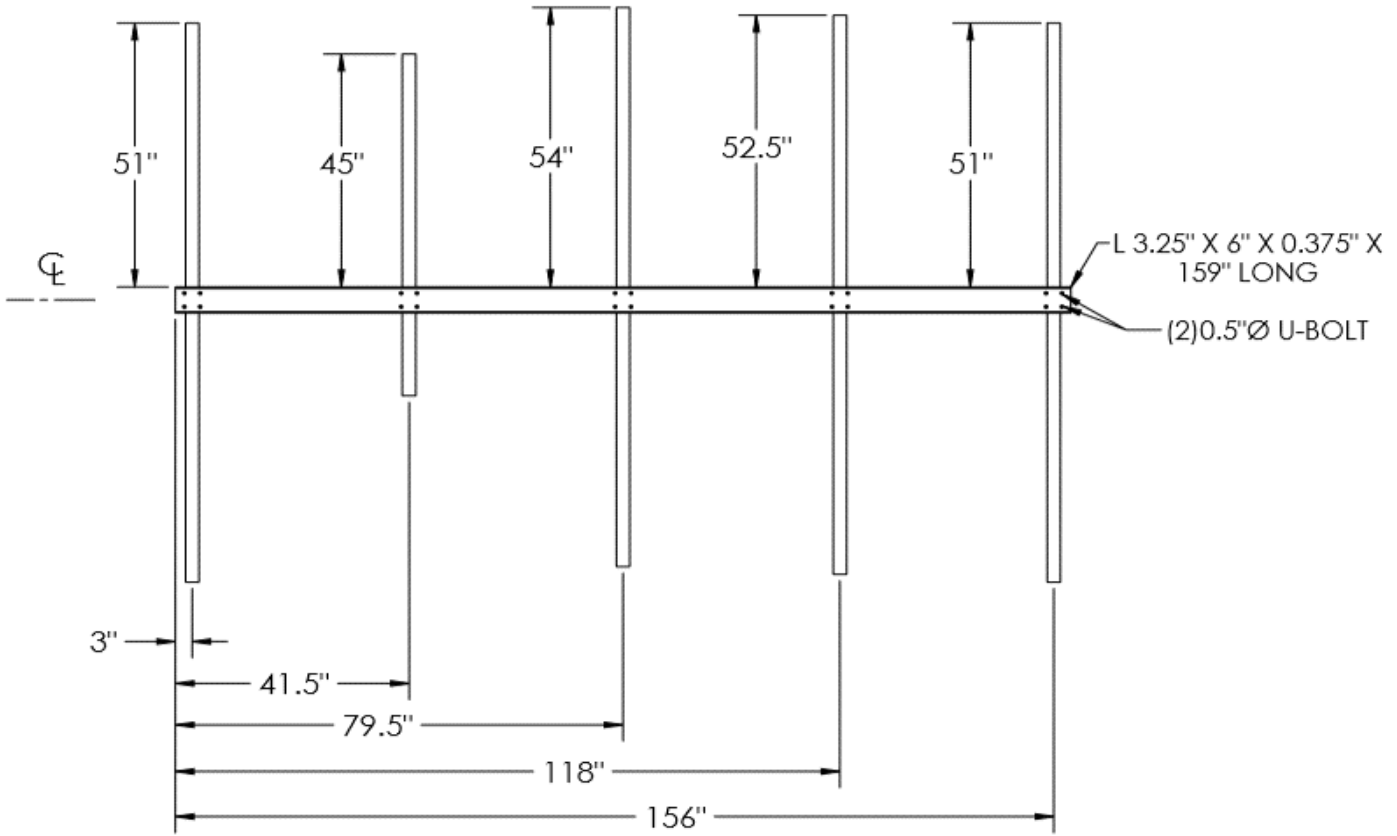
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

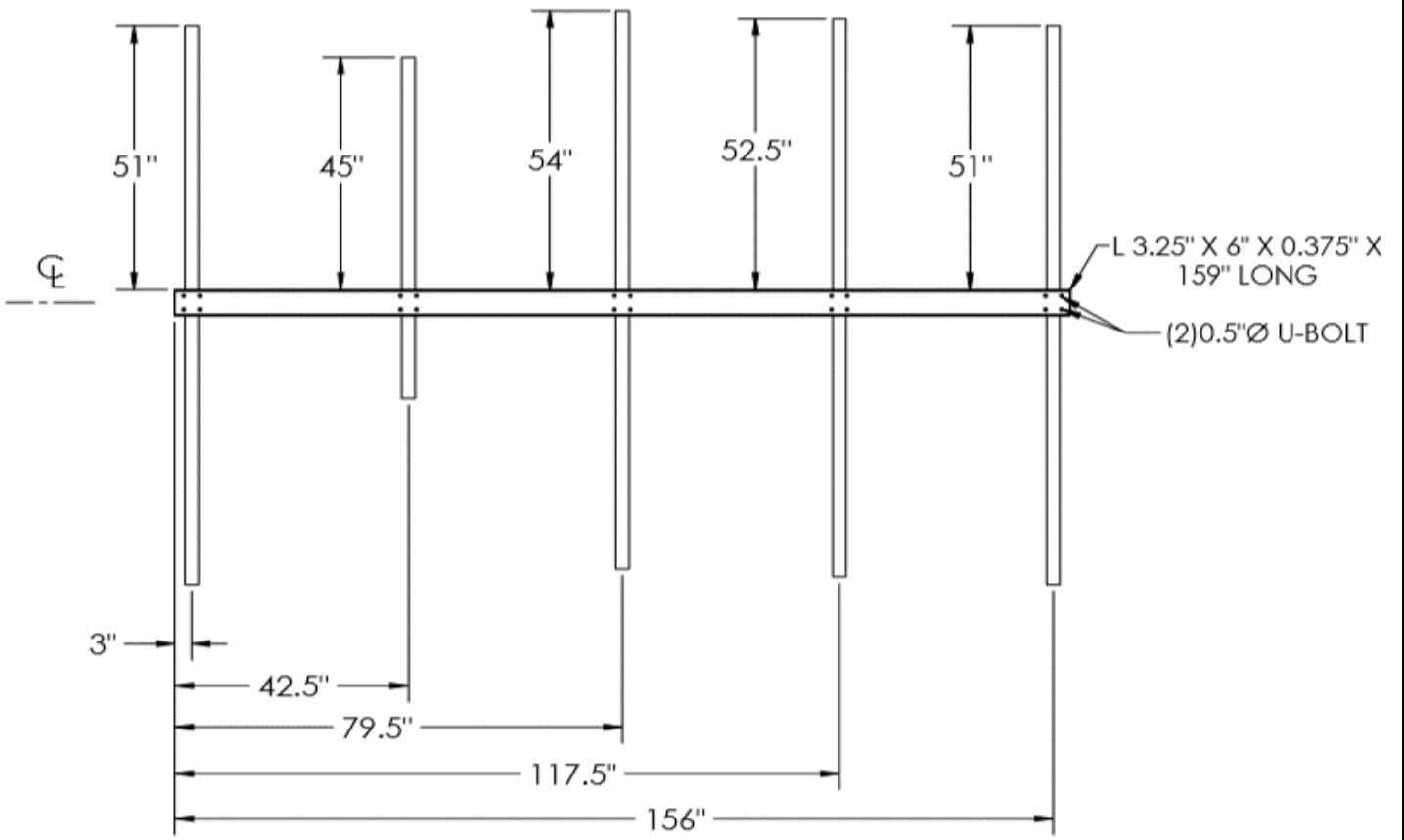
Tower Owner:	CROWN CASTLE	Mapping Date:	01-16-2021
Site Name:	CC:CT New Britain 3 CAC 803175, VZW: New Britain 3 CT	Tower Type:	Monopole
Site Number or ID:	CC: 803175	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC.	Mount Elevation (Ft.):	144.66

This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

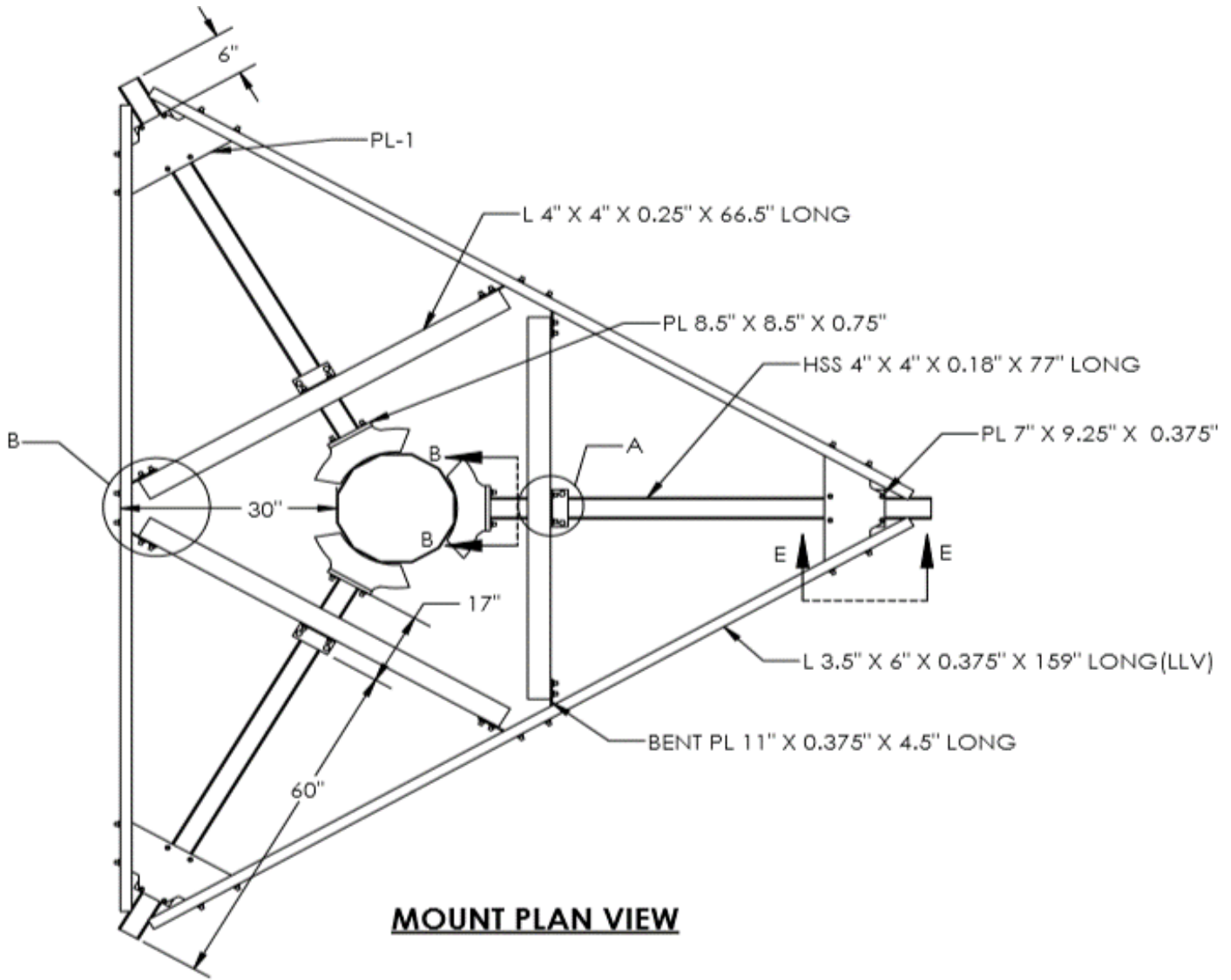
Please Insert Sketches of the Antenna Mount

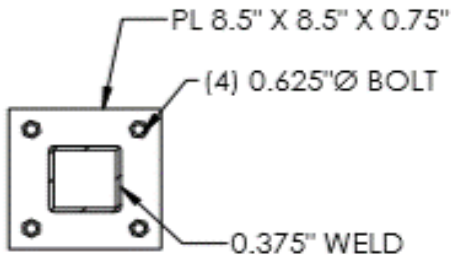


SECTOR-A

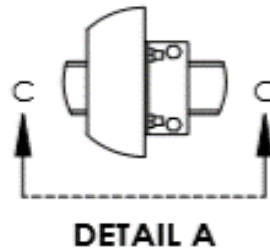


SECTOR-B&C

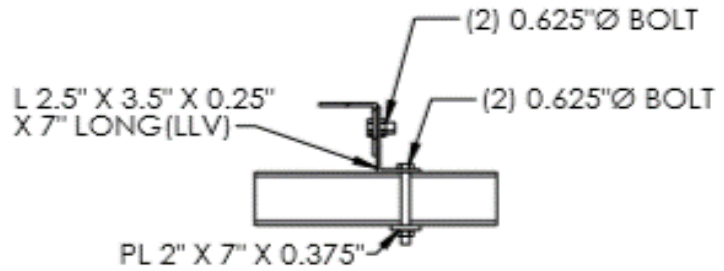




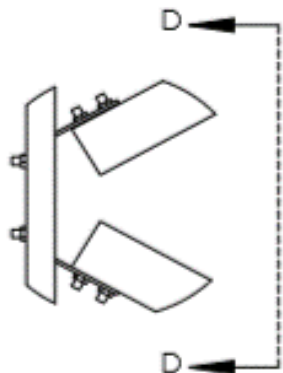
SECTION B-B



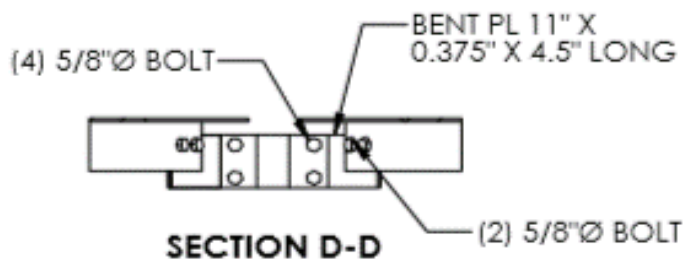
DETAIL A



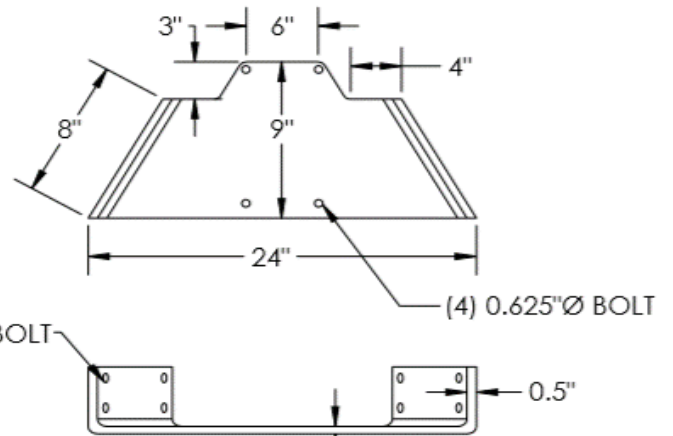
SECTION C-C



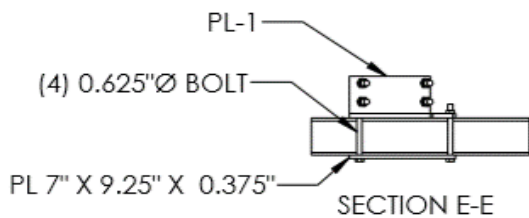
DETAIL B



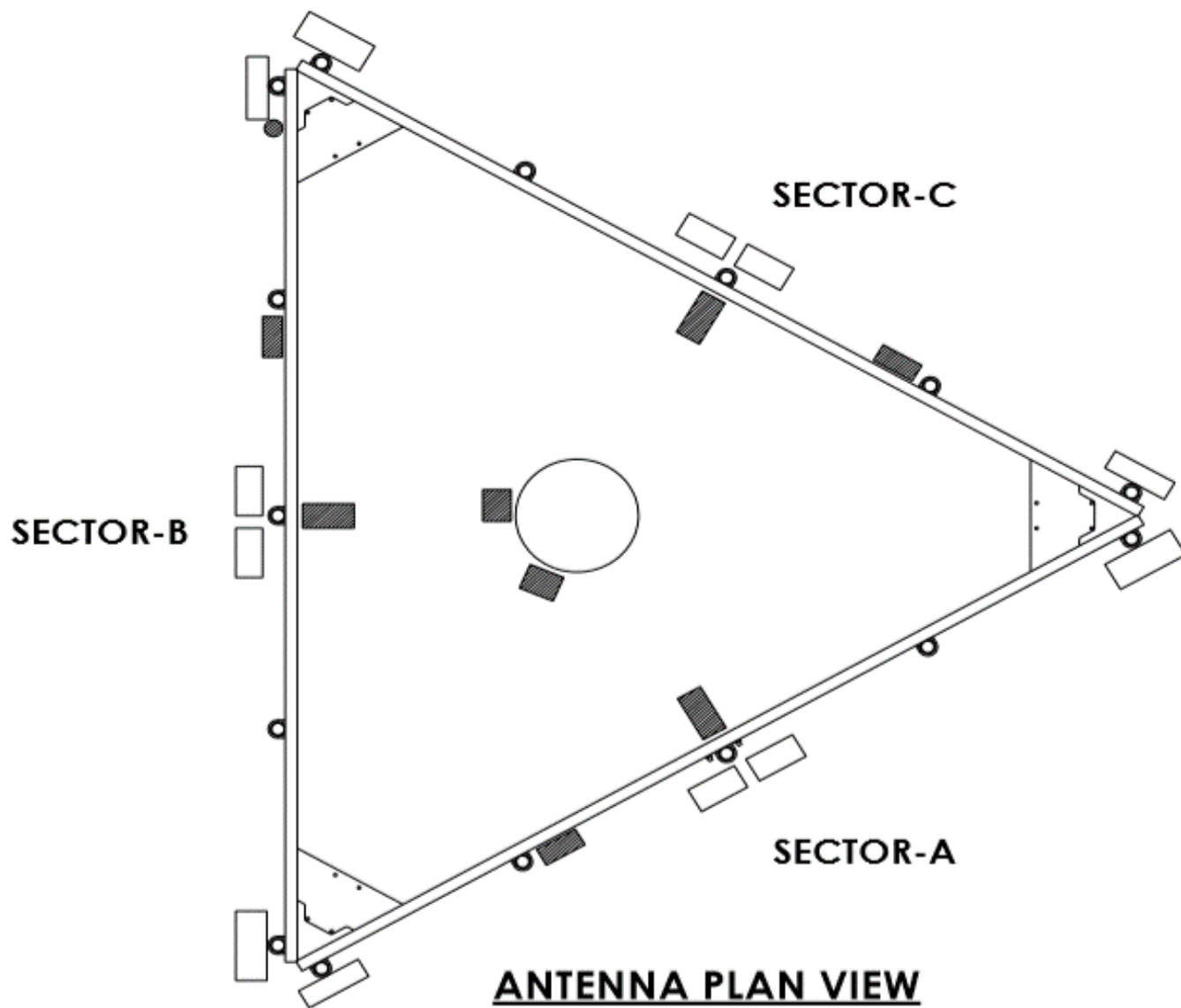
SECTION D-D

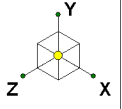


PL-1 DETAIL



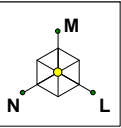
SECTION E-E



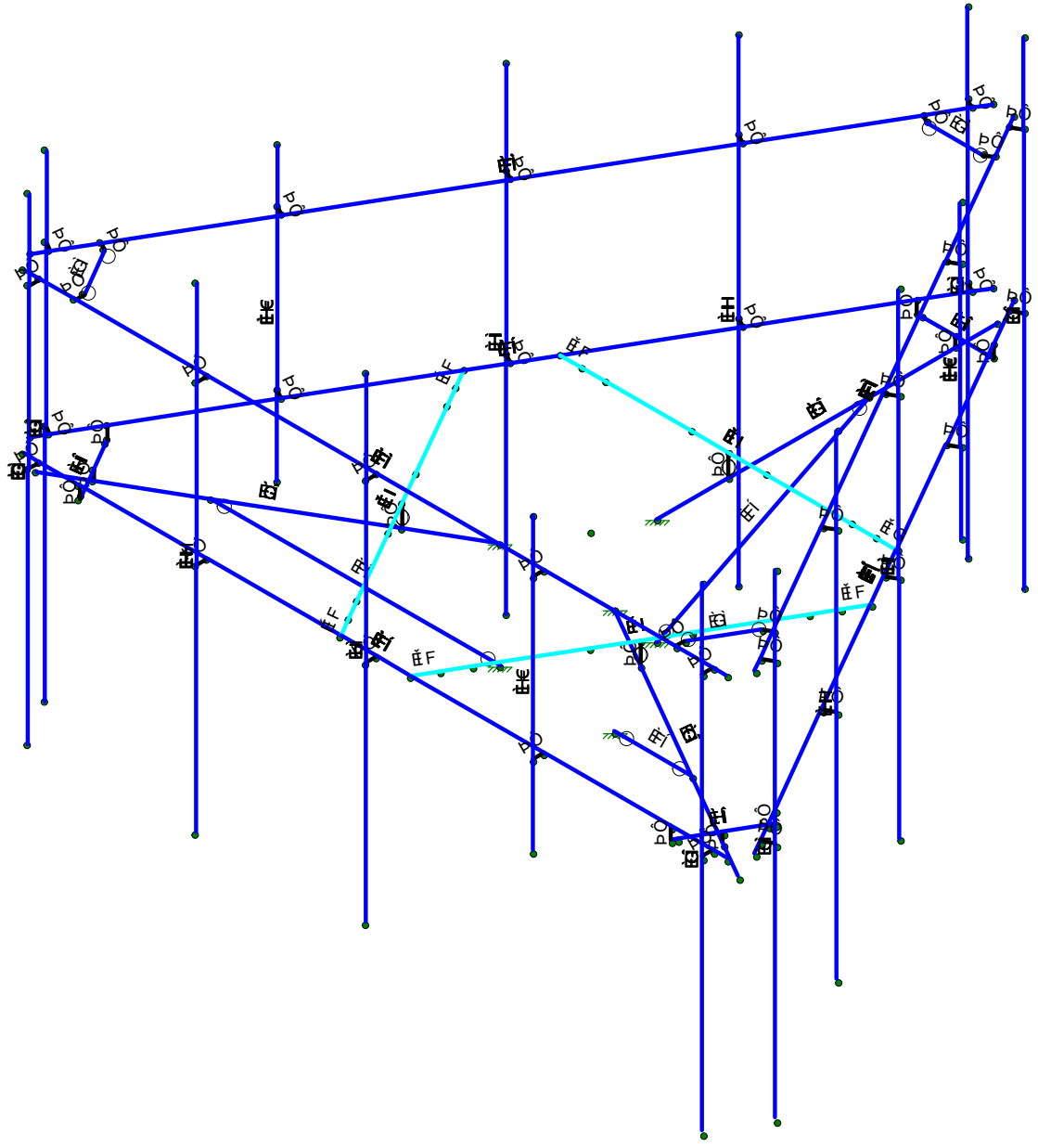


Envelope Only Solution

		SK - 1
	468004-VZW_MT_LO_H	May 27, 2021 at 10:54 AM
		LOADED_468004-VZW_MT_LO_H...



0[a^A@&
 (0) cD
 0[A^a&
 A^V^E
 0[E^E
 E^E
 A^E^E



T^ { a^i A [a^A @ & . A^a] | a^A A^D } c^i [] ^aD
 0, c^i [] ^A^U) | ^U [] ^a

		ÚSÄG T æ Ä G Ä G F a c K I Ä E ŠÜÖÖÖ I i i E E XZY 'TV' ŠÜ'P
	I i i E E XZY 'TV' ŠÜ'P	
		ŠÜÖÖÖ I i i E E XZY 'TV' ŠÜ'P

A Ya Vyf'Dc]bh@UXg f6 @ " +: '5 bhMbUK a 'fl '\$\$'8 Y] t'f' cb]bi YXL

	T ^{ à^!Áæ^	Öá^&á}	T æ) æ á^ ŽaÈ Eeá	Š &æ) ŽčÁ á
íí	T ÚHÓ	Ý	È ÈÍ F	È
íJ	T ÚHÓ	Z	È ÈÍ G	È
í€	T ÚHÓ	T ç	ÈÈÈ F	È
íF	T ÚHÓ	Ý	È ÈÍ F	í È
íG	T ÚHÓ	Z	È ÈÍ G	í È
íH	T ÚHÓ	T ç	ÈÈÈ F	í È
íI	T ÚHÓE	Ý	ÈÈÍ I	G
íÍ	T ÚHÓE	Z	ÈÈÍ I	G
íÎ	T ÚHÓE	T ç	ÈÈÈ G	G
íï	T ÚHÓ	Ý	È ÈÍ I	G
íì	T ÚHÓ	Z	ÈÈÈ È	G
íJ	T ÚHÓ	T ç	€	G
í€	T ÚHÓ	Ý	ÈÈÍ I	G
íF	T ÚHÓ	Z	ÈÈÈ I	G
íG	T ÚHÓ	T ç	ÈÈÈ G	G
íH	T ÚI Æ	Ý	ÈÈÈ I	G
íI	T ÚI Æ	Z	ÈÈÈ I	G
íÍ	T ÚI Æ	T ç	ÈÈÈ GH	G
íî	T ÚI Ó	Ý	È ÈÍ I	G
íì	T ÚI Ó	Z	ÈÈÈ È	G
íJ	T ÚI Ó	T ç	ÈÈÈ	G
íJ	T ÚI Ó	Ý	ÈÈÈ I	G
í€	T ÚI Ó	Z	ÈÈÈ I	G
íF	T ÚI Ó	T ç	ÈÈÈ GH	G
íG	T ÚFOE	Ý	ÈÈÈ I	È
íH	T ÚFOE	Z	ÈÈÈ FH	È
íI	T ÚFOE	T ç	ÈÈÈ G	È
íÍ	T ÚFOE	Ý	ÈÈÈ I	GÈ
íÎ	T ÚFOE	Z	ÈÈÈ FH	GÈ
íï	T ÚFOE	T ç	ÈÈÈ G	GÈ
íì	T ÚFÓ	Ý	È ÈÍ J	È
íJ	T ÚFÓ	Z	ÈÈÈ I G	È
J€	T ÚFÓ	T ç	€	È
JF	T ÚFÓ	Ý	È ÈÍ J	GÈ
JG	T ÚFÓ	Z	ÈÈÈ I G	GÈ
JH	T ÚFÓ	T ç	€	GÈ
JI	T ÚFÓ	Ý	ÈÈÈ I	È
JÍ	T ÚFÓ	Z	ÈÈÈ FH	È
JÎ	T ÚFÓ	T ç	ÈÈÈ G	È
Jï	T ÚFÓ	Ý	ÈÈÈ I	GÈ
Jì	T ÚFÓ	Z	ÈÈÈ FH	GÈ
JJ	T ÚFÓ	T ç	ÈÈÈ G	GÈ

A Ya Vyf'Dc]bh@UXg f6 @ " , : '5 bhMbUK a 'fl ' '\$'8 Y] t'

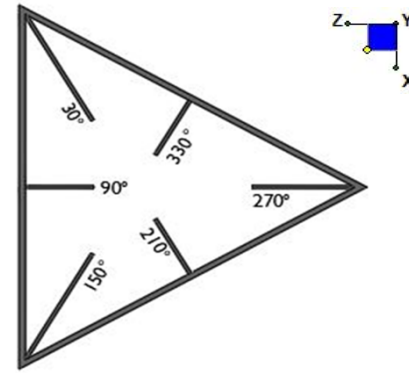
	T ^{ à^!Áæ^	Öá^&á}	T æ) æ á^ ŽaÈ Eeá	Š &æ) ŽčÁ á
F	T ÚFOE	Ý	ÈÈÈ I	í
G	T ÚFOE	Z	ÈÈÈ I	í
H	T ÚFOE	T ç	ÈÈÈ I	í
I	T ÚFÓ	Ý	ÈÈÈ I	í
Í	T ÚFÓ	Z	ÈÈÈ I	í
Î	T ÚFÓ	T ç	ÈÈÈ I	í



I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N26	30
N153A	270
N44	150



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch) :

d_y (in) (Delta Y of typ. bolt config. sketch) :

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

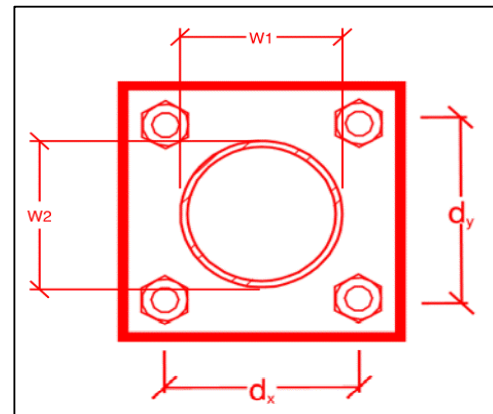
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
6.5
6.5
A307
0.625
9.8
4.7
10.0
6.0
24.4%*
19.5%



*Note: Tension reduction not required if tension or shear capacity < 30%

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

t_{plate} (in):

Weld Size (1/16 in):

$\Phi \cdot R_n$ (kip/in):

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Rect
8.5
8.5
4
4
36
0.75
6
8.35
1.47
16.5%
17.6%

Max Plate Bending Strengths

$M_{u_{xx}}$ (kip-in) :	0.3
$\Phi \cdot M_{n_{xx}}$ (kip-in) :	38.7
$M_{u_{yy}}$ (kip-in) :	6.1
$\Phi \cdot M_{n_{yy}}$ (kip-in) :	38.7

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Purpose – to provide Maser Consulting Connecticut the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount or the mount modification, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- Base and “During Installation Photos”
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- Photos taken at ground level
 - Overall tower structure before and after installation of the modifications
 - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- Photos taken at Mount Elevation

- Photos showing each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
 - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
- Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
- Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
- Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
 - If the drawings are as specified on the drawings
 - The contractor should provide the packing list or the materials utilized to perform the mount modification
 - If an equivalent is utilized
 - It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.


















The Material utilized was as specified on the Maser Consulting Connecticut Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials

The material utilized was an "equivalent" and included as part of the contractor submission is the Maser Consulting Connecticut certification, invoices, or specifications validating accepted status

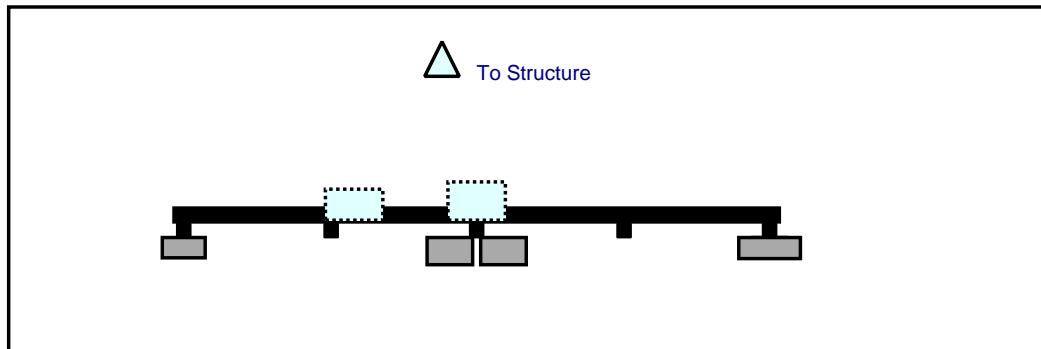
Certifying Individual: Company _____

Name _____

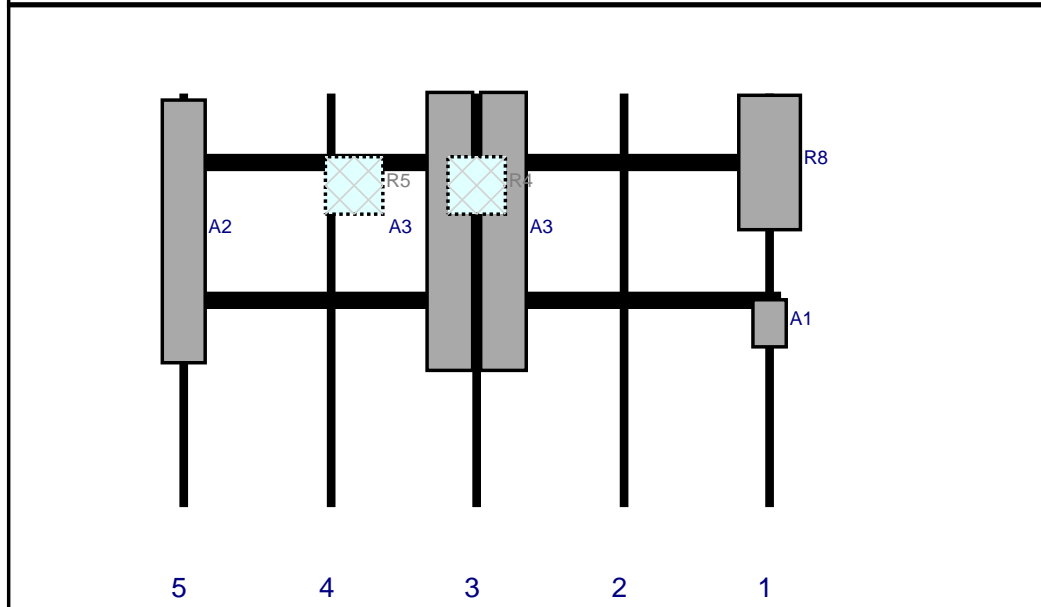
Schedule A – Photo & Document File Structure

-  VzW Site Number / Name
 -  Base & “During Installation” Photos
 -  Pre-Installation Photos
 -  Alpha
 -  Beta
 -  Gamma
 -  Ground Level
 -  Tape Drop
 -  Post-Installation Photos
 -  Alpha
 -  Beta
 -  Gamma
 -  Ground Level
 -  Tape Drop
 -  Photos of climbing facility and safety climb – If Present
-  Certifications – Submission of this document including certifications
-  Specific Required Additional Photos

Plan View

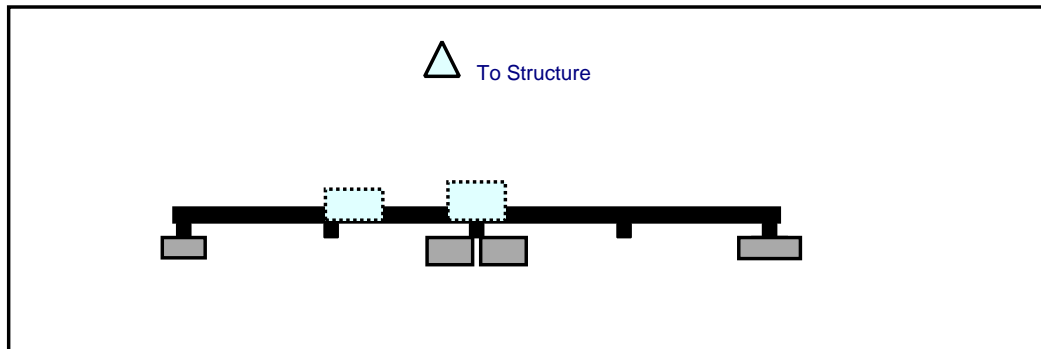


Front View
Looking at Structure

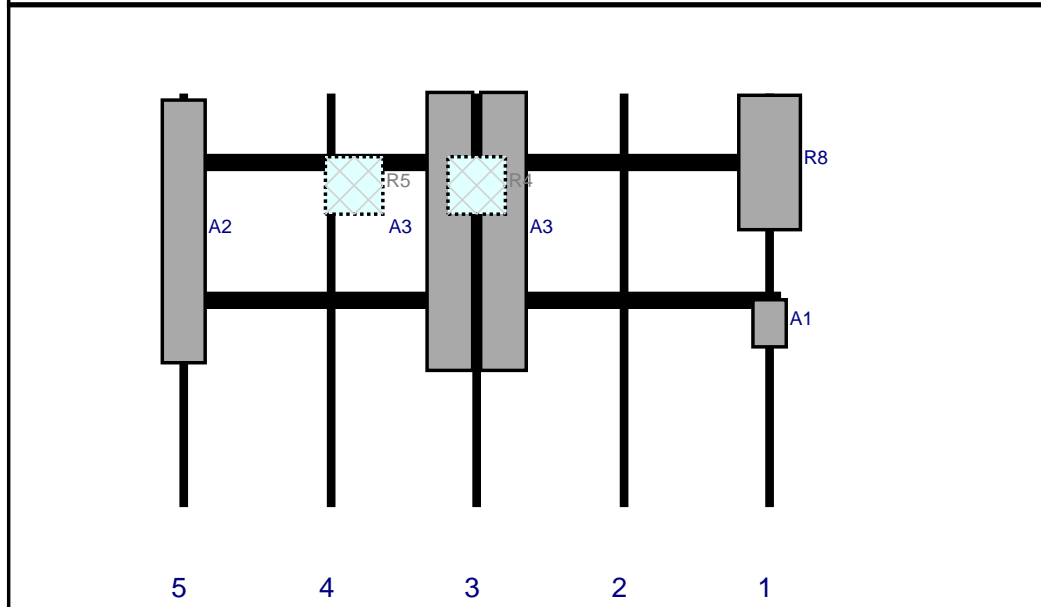


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	XXDWMM-12.5-65	12.3	8.7	156	1	a	Front	60	0	Retained	
R8	MT6407-77A	35.1	16.1	156	1	a	Front	18	0	Added	
A3	SBNHH-1D65B	72.6	11.9	79.5	3	a	Front	36	7	Retained	01/16/2021
A3	SBNHH-1D65B	72.6	11.9	79.5	3	b	Front	36	-7	Retained	01/16/2021
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	79.5	3	a	Behind	24	0	Retained	01/16/2021
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	4	a	Behind	24	6	Retained	01/16/2021
A2	BXA-80063-6BF-EDIN-X	68.6	11.2	3	5	a	Front	36	0	Retained	01/16/2021

Plan View

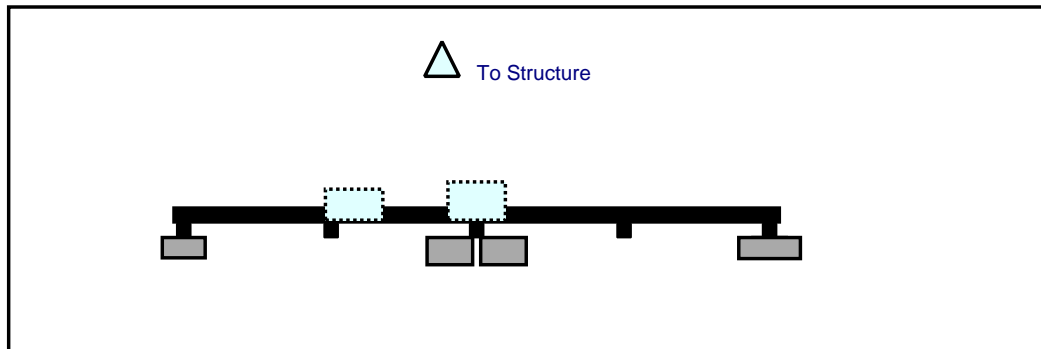


Front View
Looking at Structure

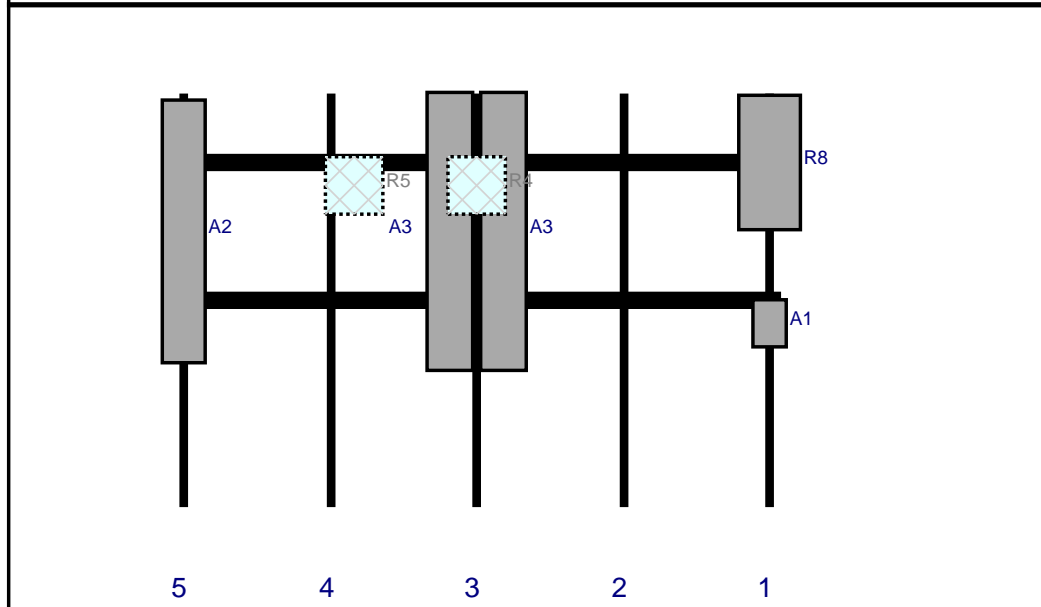


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	XXDWMM-12.5-65	12.3	8.7	156	1	a	Front	60	0	Retained	
R8	MT6407-77A	35.1	16.1	156	1	a	Front	18	0	Added	
A3	SBNHH-1D65B	72.6	11.9	79.5	3	a	Front	36	7	Retained	01/16/2021
A3	SBNHH-1D65B	72.6	11.9	79.5	3	b	Front	36	-7	Retained	01/16/2021
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	79.5	3	a	Behind	24	0	Retained	01/16/2021
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	4	a	Behind	24	6	Retained	01/16/2021
A2	BXA-80063-6BF-EDIN-X	68.6	11.2	3	5	a	Front	36	0	Retained	01/16/2021

Plan View



Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	XXDWMM-12.5-65	12.3	8.7	156	1	a	Front	60	0	Retained	
R8	MT6407-77A	35.1	16.1	156	1	a	Front	18	0	Added	
A3	SBNHH-1D65B	72.6	11.9	79.5	3	a	Front	36	7	Retained	01/16/2021
A3	SBNHH-1D65B	72.6	11.9	79.5	3	b	Front	36	-7	Retained	01/16/2021
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	79.5	3	a	Behind	24	0	Retained	01/16/2021
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	4	a	Behind	24	6	Retained	01/16/2021
A2	BXA-80063-6BF-EDIN-X	68.6	11.2	3	5	a	Front	36	0	Retained	01/16/2021

Maser Consulting Connecticut

Subject TIA-222-H Adoption and Wind Speed Usage

Site Information Site ID: 468004-VZW / NEW BRITAIN 3 CT
Site Name: NEW BRITAIN 3 CT
Carrier Name: Verizon Wireless
Address: 167 Lester St
New Britain, Connecticut 06051
Hartford County

Latitude: 41.686211°
Longitude: -72.757042°

Structure Information Tower Type: 188.0-Ft Monopole
Mount Type: 13.25-Ft Platform

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Taqi Khawaja, PE
Technical Manager