

KENNETH C. BALDWIN

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts  
and New York

September 8, 2021

*Via Electronic Mail*

Melanie A. Bachman, Esq.  
Executive Director/Staff Attorney  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification  
170 Southeast Road (a/k/a 47 Garrett Ridge Court), New Hartford, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Council in November 2003 (Docket No. 251). Cellco’s received Council approval in February of 2004 (Petition No. 649) to extend the height of the tower by ten feet. A copy of the Council’s Docket No. 251 Decision and Order and its Petition No. 687 Staff Report are included in Attachment 1.

Cellco now intends to modify its facility by removing twelve (12) existing antennas and installing three (3) Samsung MT6407-77A antennas and six (6) NHH-65C-R2B antennas. Cellco will also install six (6) remote radio heads (“RRHs”) on its existing antenna platform. A set of project plans showing Cellco’s proposed facility modifications and the new antennas and RRHs specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 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 New Hartford’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.  
September 8, 2021  
Page 2

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas and RRHs will be installed on its existing antenna platform.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, 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 installation of Cellco's new antennas and RRHs will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A General Power Density table for the modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

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

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna platform, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

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

Melanie A. Bachman, Esq.  
September 8, 2021  
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

Daniel V. Jerram, New Hartford First Selectman  
Michael Lucas, New Hartford Inland Wetlands/Zoning Enforcement Officer  
SBA Towers II LLC  
Karla Hanna

# **ATTACHMENT 1**

**DOCKET NO. 251** - Bay Communications Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a wireless telecommunications facility at 170 Southeast Road, New Hartford, Connecticut.

} Connecticut  
} Siting  
} Council

November 20, 2003

## Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Sprint Spectrum L. P. (Sprint) for the construction, maintenance and operation of a wireless telecommunications facility at 170 Southeast Road, New Hartford, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services and sufficient to accommodate the antennas of Sprint, AT&T and other entities, both public and private, but such tower shall not exceed a height of 150 feet above ground level. The facility shall be accessed using the alternate road design.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) a detailed site development plan that depicts the location of the access road, compound, tower, utility line, erosion and sedimentation control features, and landscaping;
  - b) specifications for the tower, tower foundation, antennas, equipment building, and security fence; and

c) construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case

modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder shall provide space on the tower for no compensation for any municipal antennas, provided such antennas are compatible with the structural integrity of the tower.

6. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.

8. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the The Hartford Courant and the Norwich Bulletin.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

**Applicant**

Sprint Spectrum, L.P.

d/b/a Sprint PCS

**Intervenor**

Cellco Partnership

d/b/a Verizon Wireless

**Intervenor**

AT&T Wireless PCS, LLC

d/b/a AT&T Wireless

**Representative**

Thomas J. Regan, Esq.

Brown Rudnick Berlack Israels LLP

CityPlace I, 38<sup>th</sup> Floor

185 Asylum Street

Hartford, CT 06103-3402

**Representative**

Kenneth C. Baldwin, Esq.

Robinson & Cole LLP

280 Trumbull Street

Hartford, CT 06103-3597

**Representative**

Christopher B. Fisher, Esq.

Cuddy & Feder LLP

90 Maple Avenue

White Plains, New York 10601

Petition No. 649 - Project Summary  
Cellco Partnership  
New Hartford, Connecticut  
February 3, 2004

**Introduction**

Cellco Partnership d/b/a as Verizon Wireless (Cellco) seeks to extend the height of a Sprint owned 150-foot monopole to be constructed at 170 Southeast Road, New Hartford, Connecticut. The tower, not yet constructed, was approved by the Council on November 18, 2003 under Docket 251. Cellco was an intervenor in this proceeding and presented the tower extension proposal at the September 23, 2003 hearing. At the direction of the Council, Cellco resubmitted the proposal as a petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the tower extension.

**Proposed Modification**

Cellco seeks to extend the height of the approved tower to 160 feet. Cellco would install 12 panel antennas on a platform at a centerline height of 160 feet. Cellco would install a 12-foot by 30-foot equipment shelter within the approved compound. Additional site clearing would not be required.

**Visibility Impact**

Extending the tower to 160 feet would marginally increase visibility on Route 202, a state designated scenic roadway approximately a quarter-mile from the site. Visibility on Southeast Road, approximately a half-mile west of the site, would increase by a tenth of a mile. The extended tower would be visible from a residentially developed section of Stedman Road, approximately 1.1 miles north of the site. Views from residentially developed properties would increase from six to nine with one additional property on Southeast Road and two properties on Stedman Road. The extended tower would be seasonally visible from the Rome Spare overlook, a prominent viewpoint approximately 1.3 miles north of the site in the Nepaug State Forest. An increase in seasonal and year-round views would occur from Browns Corner Park, a Town park with ballfields approximately 0.7 miles from the site.

**Power Density**

The conservative worst-case approximation of electromagnetic radiofrequency emissions for telecommunications operations at the site would increase from 10.7% to 12.8% of the applicable standard for uncontrolled environments.



# **ATTACHMENT 2**



# WIRELESS COMMUNICATIONS FACILITY

NEW HARTFORD E CT  
170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06057

## DRAWING INDEX

- T-1 TITLE SHEET
- C-1 COMPOUND PLAN, TOWER ELEVATION, EQUIPMENT CONFIGURATION PLANS & ELEVATIONS.
- B-1 RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS.
- N-1 NOTES & SPECIFICATIONS

## SITE DIRECTIONS

START: 20 ALEXANDER DRIVE  
WALLINGFORD, CONNECTICUT 06492

END: 170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06057

- |  |        |
|--|--------|
| 1. HEAD SOUTH TOWARDS ALEXANDER DRIVE                          | 279 FT |
| 2. SLIGHT RIGHT TOWARDS ALEXANDER DRIVE                        | 289 FT |
| 3. TURN RIGHT TOWARDS ALEXANDER DRIVE                          | 167 FT |
| 4. TURN RIGHT ONTO ALEXANDER DRIVE                             | 0.3 MI |
| 5. TURN RIGHT ONTO BARNES INDUSTRIAL RD S.                     | 0.1 MI |
| 6. TURN RIGHT ONTO CT-68 W                                     | 0.4 MI |
| 7. TURN RIGHT ONTO N. COLONY RD                                | 0.3 MI |
| 8. TURN RIGHT ONTO CT-15 N                                     | 0.5 MI |
| 9. CONTINUE ONTO CT-15 N                                       | 3.1 MI |
| 10. TAKE EXIT 68 W TO 1-691 W                                  | 7.9 MI |
| 11. TAKE EXIT 2 TO I-84 E TOWARD HARTFORD                      | 8.6 MI |
| 12. TAKE EXIT 33 TO CT-72 W                                    | 2.2 MI |
| 13. TAKE EXIT 1 TOWARD CT-177 N                                | 0.2 MI |
| 14. TURN RIGHT ONTO CT-177 N                                   | 5.8 MI |
| 15. SLIGHT LEFT ONTO CT-4 W                                    | 2.6 MI |
| 16. TURN LEFT ONTO CT-4  | 0.7 MI |
| 17. TURN RIGHT ONTO VINEYARD ROAD                              | 1.5 MI |
| 18. TURN RIGHT ONTO CLEAR BROOK ROAD                           | 0.3 MI |
| 19. TURN LEFT ONTO HOTCHKISS ROAD                              | 0.4 MI |
| 20. TURN RIGHT ONTO COVEY ROAD                                 | 1.1 MI |
| 21. SLIGHT RIGHT TO STAY ON COVEY ROAD                         | 0.6 MI |
| 22. CONTINUE ONTO SOUTH EAST ROAD                              | 1.0 MI |
| 23. TURN RIGHT ONTO GARRETT RIDGE COURT (DESTINATION ON RIGHT) | 0.2 MI |



LOCATION MAP  
SCALE: 1" = 800'-0"

## SITE INFORMATION

VZ SITE NAME: NEW HARTFORD E CT  
VZ PROJ FLZE I.D.: 16271983  
VZ LOCATION CODE: 468081  
VZ PROJECT CODE: 20212221246  
LOCATION: 170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06057

PROJECT SCOPE: REFER TO NOTES ON DRAWING C-1 FOR SCOPE OF WORK.

MAP/BLOCK/LOT: 34/12/6

ZONING DISTRICT: R-2

LATITUDE: 41° 49' 02.1285" N (41.817258° N)

LONGITUDE: 72° 58' 15.4103" W (-72.970947° W)

GROUND ELEVATION: 667.8± AMSL

PROPERTY OWNER: ESTATE OF PAUL M MIANO  
211 BIANCA ROAD  
DUXBURY, MA 02332

APPLICANT: CELCO PARTNERSHIP  
d/b/a VERIZON WIRELESS  
20 ALEXANDER DRIVE  
WALLINGFORD, CT 06492

LEGAL/REGULATORY COUNSEL: ROBINSON & COLE, LLP  
KENNETH C. BALDWIN, ESQ.  
280 TRUMBULL STREET  
HARTFORD, CT 06103

ENGINEER CONTACT: ALL-POINTS TECHNOLOGY CORP., P.C.  
567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385  
(860) 663-1697

VERIZON SMART TOOL PROJECT # 10037874; 10068126

SITE COORDINATES AND GROUND ELEVATION  
OBTAINED FROM FAA-2C CERTIFICATION  
PREPARED BY MARTIN SURVEYING  
ASSOCIATES, LLC. - DATED MARCH 26, 2021.

Cellco Partnership d/b/a



20 ALEXANDER DRIVE  
WALLINGFORD, CT 06492



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PHONE: (860) 663-1697  
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

### CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	03/26/21	FOR REVIEW - JRM
1	08/03/21	REV. FOR FILING - JRM
2	08/11/21	REV. FOR FILING - JRM
3		
4		
5		
6		



### DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.  
COMP: ALL-POINTS TECHNOLOGY  
CORPORATION, P.C.  
ADD: 567 VAUXHALL STREET EXT.  
SUITE 311  
WATERFORD, CT 06385

OWNER: ESTATE OF PAUL M MIANO  
ADDRESS: 211 BIANCA ROAD  
DUXBURY, MA 02332

### NEW HARTFORD E CT

SITE: 170 SOUTHEAST ROAD  
ADDRESS: NEW HARTFORD, CT 06057

APT FILING NUMBER: CT141\_12010

DATE: 03/26/21 DRAWN BY: CSH

CHECKED BY: JRM

VZ PROJECT CODE: 20212221246

VZ LOCATION CODE: 468081

VZ FLZE ID: 16271983

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



20 ALEXANDER DRIVE  
WALLINGFORD, CT 06492



567 VAUXHALL STREET EXTENSION, SUITE 311  
WATERFORD, CT 06385 PHONE: (860) 663-1607  
WWW.ALLPOINTSCT.COM FAX: (860) 663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	03/26/21	FOR REVIEW - JRM
1	08/03/21	REV. FOR FILING - JRM
2	06/11/21	REV. FOR FILING - JRM
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.  
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.  
ADDR: 567 VAUXHALL STREET EXT. SUITE 311  
WATERFORD, CT 06385

OWNER: ESTATE OF PAUL M. MIANO  
ADDRESS: 211 BIANCA ROAD  
DUXBURY, MA 02532

NEW HARTFORD E CT

SITE: 170 SOUTHEAST ROAD  
ADDRESS: NEW HARTFORD, CT 06057

APT FILING NUMBER: CT141\_12010

DATE: 03/26/21 DRAWN BY: CSH

CHECKED BY: JRM

VZ PROJECT CODE: 2021221246

VZ LOCATION CODE: 468081

VZ FUZE ID: 16271983

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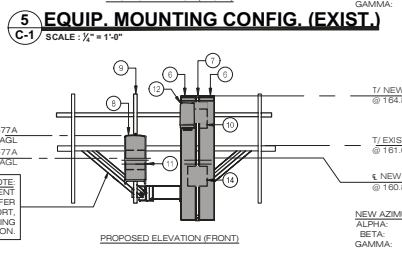
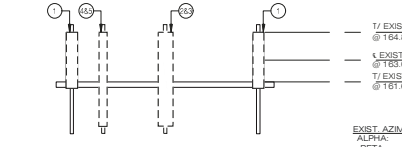
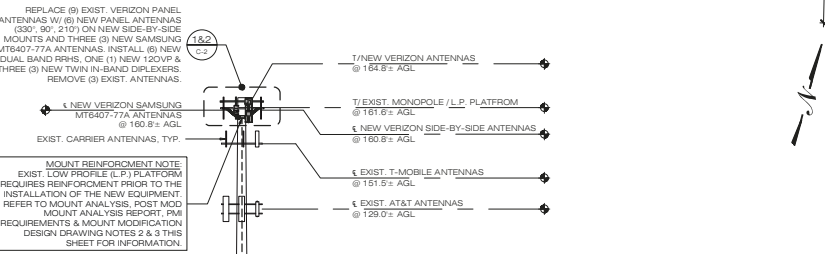
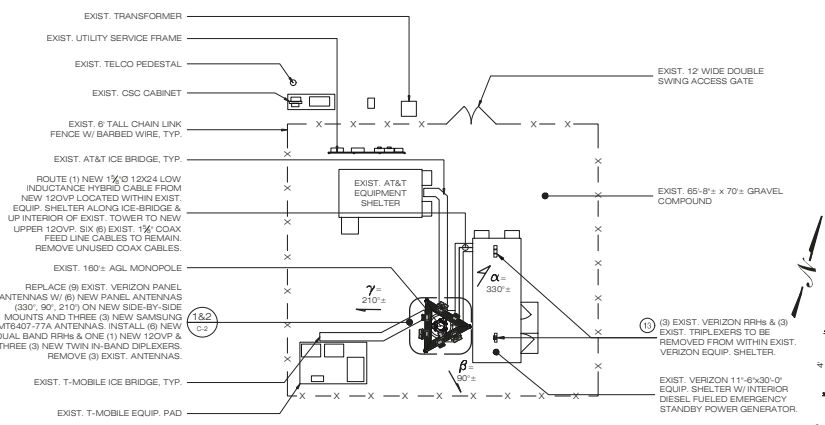
COMPOUND PLAN, TOWER ELEVATION & NOTES

SHEET NUMBER:

C-1

- GENERAL ABBREVIATION LIST:
- ABP ABOVE BASE PLATE
  - AGL ABOVE GROUND LEVEL
  - AMSL ABOVE MEAN SEA LEVEL
  - AWSS ADVANCED WIRELESS SERVICE
  - HGD HOT DIP GALVANIZED
  - OVP OVER VOLTAGE PROTECTION
  - RRH REMOTE RADIO HEAD
  - V.I.F. VERIFY IN FIELD
  - W.P. WORK POINT
  - A.F.R. ABOVE FINISH ROOF

- NOTES:
- REFER TO TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY TOWER ENGINEERING SOLUTIONS DATED 08/08/21 AVAILABLE UNDER SEPARATE COVER.
  - REFER TO MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING, P.A., PROJECT #2177047A MARKED REV. DATED 04/02/21 AVAILABLE UNDER SEPARATE COVER.
  - REFER TO ROST MOD MOUNT ANALYSIS REPORT, PMI REQUIREMENTS & MOUNT MODIFICATION DESIGN DRAWINGS PREPARED BY MASER CONSULTING, P.A., PROJECT #2177047A DATED 05/21/21. AVAILABLE UNDER SEPARATE COVER.
  - PROJECT SCOPE INCLUDES THE FOLLOWING:
    - REPLACEMENT OF (6) EXIST. PANEL ANTENNAS W/ (6) NEW PANEL ANTENNAS MOUNTED VIA NEW SIDE-BY-SIDE BRACKETS (COMMSCOPE BSAANT-SBS-2-2) & (3) NEW SAMSUNG MT6407-77A ANTENNAS.
    - INSTALLATION OF (6) NEW DUAL-BAND RRHS.
    - INSTALLATION OF (1) NEW 120VP.
    - INSTALLATION OF ONE (1) 1 1/2" 12X24 LOW-INDUCTANCE HYBRID CABLE.
    - INSTALLATION OF (3) NEW TWIN IN-BAND DIPLEXERS.
    - REMOVAL OF (3) EXIST. PANEL ANTENNAS.
    - REMOVAL OF (3) EXIST. RRHS & (3) EXIST. TRIPLEXERS FROM WITHIN EXIST. VERIZON EQUIP. SHELTER.
  - ALL EXPOSED STEEL AND HARDWARE TO BE HOT DIP GALV. (HDC). PAINT TO MATCH EXIST. (WHERE APPLICABLE).
  - CAP & WEATHERPROOF ALL UN-USED CABLE ENTRY PORTS (WHERE APPLICABLE).
  - MOUNT & GROUND ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC (NFPA-70), NESC AND MANUFACTURERS SPECIFICATION.
  - SECURE ALL NEW ANTENNA CABLES PER MANUFACTURER RECOMMENDATIONS.
  - BOND NEW ANTENNA MOUNTING PIPES TO ANTENNA SECTOR GROUND BAR W/ # 2 AWG. BOND, (WHERE APPLICABLE).
  - CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS UNLESS NOTED OTHERWISE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.
  - ANTENNA CONFIGURATIONS SHOWN HEREIN ARE FRONT ELEVATIONS.
  - ANTENNA SPACING DIMENSIONS ARE TO THE CENTER OF THE EXIST. ANTENNA AND PROP. ANTENNA FACE.
  - REFER TO THE FINAL RFDS PROVIDED BY VERIZON FOR THE LATEST INFORMATION REGARDING EQUIPMENT MODELS, REQUIRED CABLEING & DOWN-TILT INFORMATION.
  - APPLY 3M FILM OVER ALL EXPOSED MM/WAVE ANTENNAS COLOR TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE W/ VERIZON CONSTRUCTION MANAGER AND LL.
  - PAINT ALL NON SAMSUNG MT6407-77A ANTENNAS & APPURTENANCES TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE W/ VERIZON CONSTRUCTION MANAGER & BUILDING OWNER.



MOUNT REINFORCEMENT NOTE:  
EXIST. LOW PROFILE (L.P.) PLATFORM REQUIRES REINFORCEMENT PRIOR TO THE INSTALLATION OF THE NEW EQUIPMENT. REFER TO MOUNT ANALYSIS REPORT, PMI REQUIREMENTS & MOUNT MODIFICATION DESIGN DRAWING NOTES 2 & 3 THIS SHEET FOR INFORMATION.

EXIST. AZIMUTHS  
ALPHA: 330°  
BETA: 90°  
GAMMA: 210°

NEW AZIMUTHS  
ALPHA: 330°  
BETA: 90°  
GAMMA: 210°



- GENERAL ABBREVIATION LIST:
- ABP ABOVE BASE PLATE
  - AGL ABOVE GROUND LEVEL
  - AMSL ABOVE MEAN SEA LEVEL
  - AWSS ADVANCED WIRELESS SERVICE
  - HGD HOT DIP GALVANIZED
  - OVP OVER VOLTAGE PROTECTION
  - RRH REMOTE RADIO HEAD
  - V.I.F. VERIFY IN FIELD
  - W.P. WORK POINT
  - A.F.R. ABOVE FINISH ROOF

SCOPE OF WORK (ALL) SECTORS

- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANTEL BXA-16590-12CF
- EXIST. ANTENNA PIPE MAST TO BE RELOCATED. (UTILIZE NEW GALV. HARDWARE TO MATCH EXIST.)
- EXIST. ANTENNA PIPE MAST TO BE REPLACED.
- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANTEL BXA-16590-12CF
- EXIST. ANTENNA PIPE MAST TO BE RELOCATED. (UTILIZE NEW GALV. HARDWARE TO MATCH EXIST.)
- EXIST. ANTENNA PIPE MAST TO BE REPLACED.

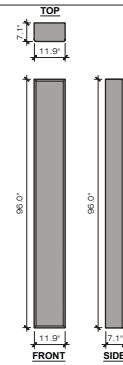
- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANTEL BXA-16590-12CF
- EXIST. ANTENNA PIPE MAST TO BE RELOCATED. (UTILIZE NEW GALV. HARDWARE TO MATCH EXIST.)
- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANTEL BXA-16590-12CF
- EXIST. ANTENNA PIPE MAST TO BE RELOCATED. (UTILIZE NEW GALV. HARDWARE TO MATCH EXIST.)
- EXIST. ANTENNA PIPE MAST TO BE REPLACED.
- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANTEL BXA-16590-12CF

- NEW P2.5 STD X8' LG. ANTENNA PIPE MAST (GALV.). UTILIZE NEW PIPE TO RAIL HARDWARE.
- NEW SAMSUNG MT6407-77A ANTENNA MOUNTED ON NEW PIPE MAST
- NEW P2.5 STD X7' LG. ANTENNA PIPE MAST (GALV.). UTILIZE NEW PIPE TO RAIL HARDWARE.
- NEW DUAL BAND RRH MODEL: SAMSUNG B13-B5 RRH-BR04C (RV11U-D2A)
- NEW DUAL BAND RRH MODEL: SAMSUNG B66-B2A RRH-BR049 (RV11U-D14)
- NEW 120VP MODEL: RAYCAP RVZDC-6627-PF-48

- (3) EXIST. RRHS & (3) EXIST. TRIPLEXERS (TO BE REMOVED FROM WITHIN EXIST. EQUIP. SHELTER) MODEL: COMMSCOPE CBG7823T-DS
- TWIN IN-BAND DIPLEXER (B50) MODEL: COMMSCOPE TD-850-LT678-43

EQUIPMENT DATA								
EQUIPMENT SPECIFICATIONS								
SECTOR	ANTENNA MAKE/MODEL	QTY	AZIMUTH	EQUIPMENT STATUS	HEIGHT (ft)	WIDTH (ft)	DEPTH (ft)	WEIGHT (LBS)
ALPHA	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	330°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	330°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
BETA	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	90°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	90°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
GAMMA	SAMSUNG MT6407-77A ANTENNA	1	90°	NEW	35.1 <sup>(2)</sup>	16.1 <sup>(3)</sup>	5.5 <sup>(4)</sup>	87.1 <sup>(5)</sup>
	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	210°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
	700/850/1900/2100 COMMSCOPE NHH-65C-R2B	1	210°	NEW	96.0	11.9	7.1	51.6 <sup>(1)</sup>
	SAMSUNG MT6407-77A ANTENNA	1	210°	NEW	35.1 <sup>(2)</sup>	16.1 <sup>(3)</sup>	5.5 <sup>(4)</sup>	87.1 <sup>(5)</sup>
APPURTENANCE MAKE/MODEL								
	SAMSUNG B2/B66A RRH-BR049 (RFV01U-D1A)	3	-	NEW	14.9	14.9	10.04	97.5
	SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A)	3	-	NEW	14.9	14.9	8.14	82.0
	COMMSCOPE TD-850B-LTE7B-43	3	-	NEW	15.4	15.3	6.4	53.0
	RAYCAP RVZDC-6627-PF-4B	1	-	NEW	29.5	16.5	12.6	32

- (1) ETR DENOTES EXIST. TO REMAIN  
 (2) WEIGHT WITHOUT MOUNTING BRACKET  
 (3) ANTENNA DATA BASED ON RFDS REV3 DATED 05/10/21  
 (4) EQUIPMENT CONFIGURATION AS VIEWED FROM BEHIND  
 (5) NOT TO EXCEED

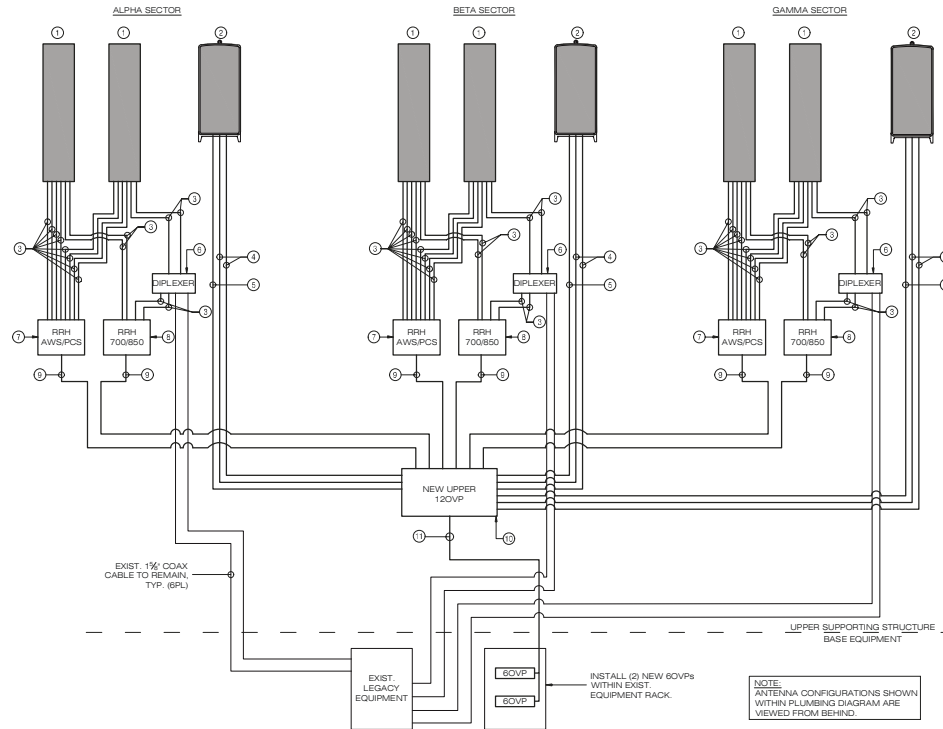


COMMSCOPE NHH-65C-R2B  
 X-POL ANTENNA  
 HxWxD=96.0x11.9x7.1' (51.6 Lbs)

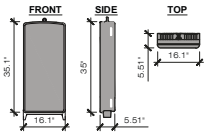
**2 NEW ANTENNA DETAIL**  
 B-1 SCALE: 3/8" = 1'-0"

BILL OF MATERIALS				COMMENTS
QTY	LENGTH			
①	6			(COMMSCOPE NHH-65C-R2B) MOUNTED TO PIPE MAST VIA NEW SIDE BY SIDE MOUNT BRACKETS (JMA 91900314-02)
②	3			MOUNTED TO EXIST. PIPE MAST
③	42	15 FT		ROUTE FROM RRH TO ANTENNAS
④	6	15 M		ROUTE FROM UPPER OVP TO ANTENNAS
⑤	3	15 M		PROPRIETARY POWER CABLE FROM EXIST. OVP TO ANTENNAS
⑥	3			COMMSCOPE TD850B-LTE7B-43
⑦	3			SAMSUNG B2/B66 RRH-BR049 (RFV01U-D1A)
⑧	3			SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A)
⑨	6	15 M		PROPRIETARY POWER & FIBER CABLES
⑩	1			(RVZDC-6627-PF-4B)
⑪	1	240 ± FT		12x24 LOW INDUCTANCE HYBRID CABLE (1 1/2")

- NOTES:  
 1. INFORMATION SHOWN HEREON IS FOR USE BY VERIZON EQUIPMENT OPERATIONS.  
 2. INFORMATION IS BASED ON RFDS REV3 DATED 05/10/21.  
 3. \* DENOTES EQUIPMENT DESIGNATED "FOR LEASING ONLY" (WHERE APPLICABLE)  
 4. INSTALL ALARM BORDERS AT ALL OVPs WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING.  
 5. INSTALL UP-CONVERTERS LOCATED AT BASE OVPs WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING AS NECESSARY.  
 6. COORDINATE ANTENNA CABLEING REQUIREMENTS WITH VERIZON ENGINEERING.  
 7. CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MAST REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.

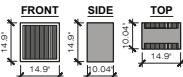


**1 PLUMBING DIAGRAM**  
 B-1 SCALE: 3/8" = 1'-0"



SAMSUNG MT6407-77A ANTENNA  
 HxWxD=35.1'x16.1'x5.51'  
 WT=87.1 Lbs  
 (NOT TO EXCEED)

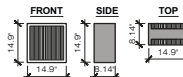
**3 NEW ANTENNA DETAIL**  
 B-1 SCALE: 3/8" = 1'-0"



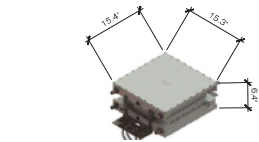
SAMSUNG DUAL HIGH BAND B2/B66A  
 RRH-BR049 (RFV01U-D1A)  
 RRH PCS/AWS  
 REMOTE RADIO HEAD (RRH)  
 WxDxH=14.9'x14.9'x10.04' (97.5 Lbs)

NOTE: WEIGHTS INCLUDE SOLAR SHIELD & MOUNTING BRACKET

**4 RRH EQUIPMENT DETAILS**  
 B-1 SCALE: 3/8" = 1'-0"

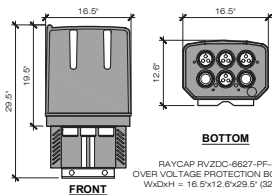


SAMSUNG DUAL HIGH BAND B5/B13  
 RRH-BR04C (RFV01U-D2A)  
 RRH 850/700  
 REMOTE RADIO HEAD (RRH)  
 WxDxH=14.9'x14.9'x8.14' (82.0 Lbs)



COMMSCOPE TD-850B-LTE7B-43  
 TWIN IN-BAND DIPLEXER (850)  
 WxDxH = 15.3'x6.4'x15.4' (53.0 lbs)

**5 TWIN IN-BAND DIPLEXER**  
 B-1 SCALE: 3/4" = 1'-0"



RAYCAP RVZDC-6627-PF-4B  
 OVER VOLTAGE PROTECTION BOX (OVP)  
 WxDxH = 16.5'x12.6'x29.5' (32.0 lbs)

**5 OVER VOLTAGE PROTECTION BOX (OVP)**  
 B-1 SCALE: 1" = 1'-0"

Cellco Partnership d/b/a  
**verizon**  
 20 ALEXANDER DRIVE  
 WALLINGFORD, CT 06492

**ALL-POINTS**  
 TECHNOLOGY CORPORATION  
 567 VAUXHALL STREET EXTENSION, SUITE 311  
 WATERFORD, CT 06385 PHONE: (860) 663-1667  
 WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

**CONSTRUCTION DOCUMENTS**

NO	DATE	REVISION
0	03/26/21	FOR REVIEW: JRM
1	06/03/21	REV. FOR FILING: JRM
2	06/11/21	REV. FOR FILING: JRM
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD  
 PROF. MICHAEL S. TRODDEN P.E.  
 COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.  
 ADDR: 567 VAUXHALL STREET EXT. SUITE 311  
 WATERFORD, CT 06385  
 OWNER: ESTATE OF PAUL M MIANO  
 ADDRESS: 211 BIANCA ROAD  
 DUXBURY, MA 02332

**NEW HARTFORD E CT**  
 SITE: 170 SOUTHEAST ROAD  
 ADDRESS: NEW HARTFORD, CT 06657  
 APT FILING NUMBER: CT141\_12010  
 DATE: 03/26/21 CHECKED BY: JRM  
 VZ PROJECT CODE: 20212221246  
 VZ LOCATION CODE: 468081  
 VZ FUZE ID: 16271983

SHEET TITLE:  
**RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS**

SHEET NUMBER:  
**B-1**

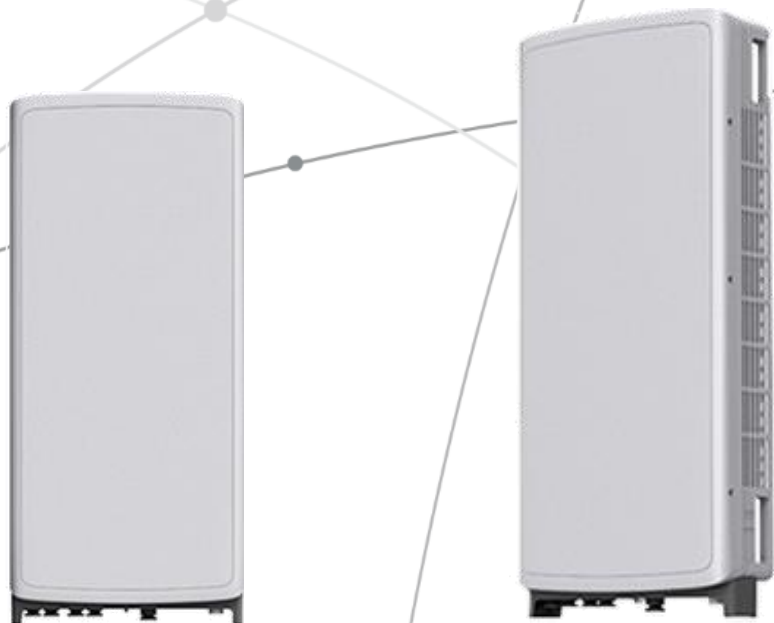


## **SAMSUNG** C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A



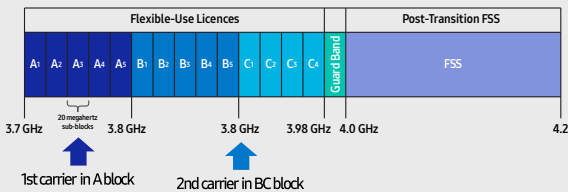
# Points of Differentiation

## Wide Bandwidth

With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks

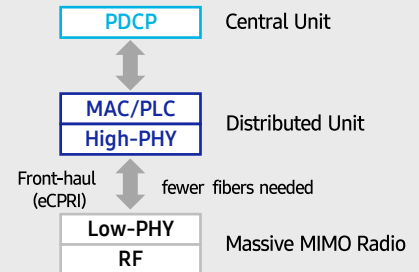
C-Band spectrum supported by Massive MIMO Radio



## Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.

It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.

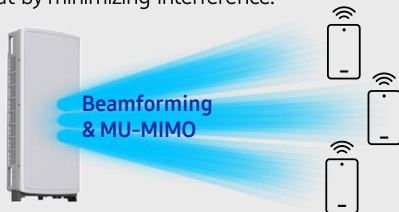


## Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

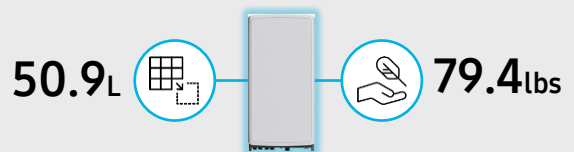
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



## Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment.



# Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/Weight	16.06 x 35.06 x 5.51 inch (50.86L) / 79.4 lbs



# SAMSUNG



## **About Samsung Electronics Co., Ltd.**

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

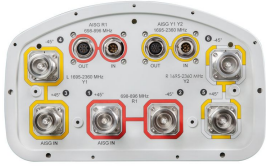
129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

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# NHH-65C-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light gray
<b>Effective Projective Area (EPA), frontal</b>	0.37 m <sup>2</sup>   3.983 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.31 m <sup>2</sup>   3.337 ft <sup>2</sup>
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>RF Connector Interface</b>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information, General

<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male

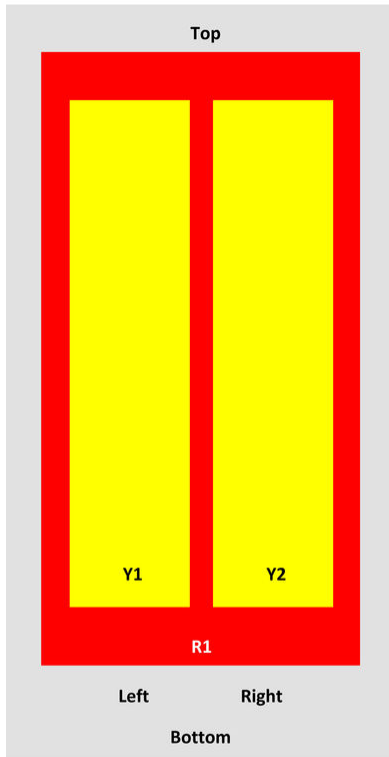
## Dimensions

<b>Width</b>	301 mm   11.85 in
<b>Length</b>	2438 mm   95.984 in
<b>Depth</b>	180 mm   7.087 in

## Array Layout

# NHH-65C-R2B

NHH



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna  
(Sizes of colored boxes are not true depictions of array sizes)

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   698 – 896 MHz
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Remote Electrical Tilt (RET) Information, Electrical

<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 3
<b>Internal RET</b>	High band (1)   Low band (1)

# NHH-65C-R2B

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	16	16.1	17.3	17.7	18.3	18.2
Beamwidth, Horizontal, degrees	65	62	74	66	62	59
Beamwidth, Vertical, degrees	9	7.9	5.6	5.2	4.9	4.5
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	21	18	19	20	22	18
Front-to-Back Ratio at 180°, dB	35	31	33	29	29	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR   Return loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	400	400	350	350	350	300

## Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	15.8	15.9	16.9	17.5	18	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±0.3	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0°   15.9 5°   15.9 11°   15.5	0°   15.8 5°   16.0 11°   15.7	0°   16.9 4°   17.0 7°   16.9	0°   17.4 4°   17.5 7°   17.4	0°   17.9 4°   18.0 7°   18.0	0°   17.8 4°   17.9 7°   17.9
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.6	±5.3	±3.4	±6	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	15	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	25.6	23.8	28	25	25	24
CPR at Boresight, dB	18	26	20	25	20	17
CPR at Sector, dB	15	9	11	10	8	2

## Material Specifications

Radiator Material

Copper | Low loss circuit board

# NHH-65C-R2B

---

**Reflector Material** Aluminum

## Mechanical Specifications

**Wind Loading at Velocity, frontal** 393.0 N @ 150 km/h | 88.8 lbf @ 150 km/h  
**Wind Loading at Velocity, lateral** 330.0 N @ 150 km/h | 74.2 lbf @ 150 km/h  
**Wind Loading at Velocity, maximum** 170.2 lbf @ 150 km/h | 757.0 N @ 150 km/h  
**Wind Speed, maximum** 241 km/h | 149.75 mph

## Packaging and Weights

**Width, packed** 409 mm | 16.102 in  
**Depth, packed** 299 mm | 11.772 in  
**Length, packed** 2561 mm | 100.827 in  
**Net Weight, without mounting kit** 23.4 kg | 51.588 lb  
**Weight, gross** 36.1 kg | 79.587 lb

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted



## Included Products

**BSAMNT-3** — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

# SAMSUNG

## Dual-Band Radio Unit AWS/PCS (B66/B2)

RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

### Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

### Key Technical Specifications

Duplex Type: FDD

Operating Frequencies:

B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)

B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)

Instantaneous Bandwidth:

70MHz(B66) + 60MHz(B2)

RF Chain: 4T4R/2T4R/2T2R

Output Power: Total 320W

DU-RU Interface: CPRI (10Gbps)

Dimensions: 380 x 380 x 255mm (36.8L)

Weight: 38.3kg

Input Power: -48V DC

Operating Temp.: -40 - 55°(w/o solar load)

Cooling: Natural convection

# SAMSUNG

## Dual-Band Radio Unit 700/850MHz (B13/B5) RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

### Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

### Key Technical Specifications

Duplex Type: FDD  
Operating Frequencies:  
B13: DL(746-756MHz)/UL(777-787MHz)  
B5: DL(869-894MHz)/UL(824-849MHz)  
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)  
RF Chain: 4T4R/2T4R/2T2R  
Output Power: Total 320W  
DU-RU Interface: CPRI (10Gbps)  
Dimensions: 380 x 380 x 207mm (29.9L)  
Weight: 31.9kg  
Input Power: -48V DC  
Operating Temp.: -40 - 55°(w/o solar load)  
Cooling: Natural convection

# **ATTACHMENT 3**

	General	Power	Density					
<b>Site Name: New Hartford E</b>								
<b>Tower Height: Verizon @ 160.8ft</b>								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	FREQ.	CALC. POWER DENS	MAX. PERMISS. EXP.	FRACTION MPE	Total
*AT&T	1	883	100	737	0.0359	0.4913	0.73%	
*AT&T	1	4541	100	1900	0.1848	1.0000	1.85%	
*AT&T	1	2845	100	763	0.1158	0.5087	2.28%	
*AT&T	1	7114	100	2100	0.2895	1.0000	2.90%	
*AT&T	1	1510	100	850	0.0615	0.5667	1.08%	
*AT&T	1	1256	100	722	0.0511	0.4813	1.06%	
*AT&T	1	3206	100	2300	0.1305	1.0000	1.30%	
*AT&T	1	566	100	850	0.0230	0.5667	0.41%	
*MetroPCS	3	444	108	2140	0.0460	1.0000	0.46%	
*Clearwire	2	153	78	2496	0.0212	1.0000	0.21%	
*Clearwire	1	211	78	11 GHz	0.0146	1.0000	0.15%	
*Nextel iDEN	12	100	78	851	0.0832	0.5673	1.47%	
*Sprint	3	562	78	2657	0.1170	1.0000	1.17%	
*Sprint	2	4	78	22500	0.0006	1.0000	0.01%	
<b>VZW 700</b>	<b>4</b>	<b>758</b>	<b>160.8</b>	<b>751</b>	<b>0.0042</b>	<b>0.5007</b>	<b>0.84%</b>	
<b>VZW CDMA</b>	<b>2</b>	<b>483</b>	<b>160.8</b>	<b>878.49</b>	<b>0.0013</b>	<b>0.5857</b>	<b>0.23%</b>	
<b>VZW Cellular</b>	<b>4</b>	<b>721</b>	<b>160.8</b>	<b>874</b>	<b>0.0040</b>	<b>0.5827</b>	<b>0.69%</b>	
<b>VZW PCS</b>	<b>4</b>	<b>1213</b>	<b>160.8</b>	<b>1975</b>	<b>0.0068</b>	<b>1.0000</b>	<b>0.68%</b>	
<b>VZW AWS</b>	<b>4</b>	<b>1357</b>	<b>160.8</b>	<b>2120</b>	<b>0.0075</b>	<b>1.0000</b>	<b>0.75%</b>	
<b>VZW CBAND</b>	<b>4</b>	<b>6531</b>	<b>160.8</b>	<b>3730.08</b>	<b>0.0363</b>	<b>1.0000</b>	<b>3.63%</b>	
								<b>21.89%</b>
* Source: Siting Council								



# **ATTACHMENT 4**



**Tower Engineering Solutions**

Phone (972) 483-0607, Fax (972) 975-9615  
1320 Greenway Drive, Suite 600, Irving, Texas 75038

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## Structural Analysis Report

**Existing 159 ft EEI Monopole**

**Customer Name: SBA Communications Corp**

**Customer Site Number: CT12219-A**

**Customer Site Name: New Hartford 2, CT**

**Carrier Name: Verizon (App#: 146253, V3)**

**Carrier Site ID / Name: 468081 / New Hartford East CT**

**Site Location: 170 S. East Road**

**New Hartford, Connecticut**

**Litchfield County**

**Latitude: 41.817258**

**Longitude: -72.970947**

**Analysis Result:**

**Max Structural Usage: 56.4% [Pass]**

**Max Foundation Usage: 60.0% [Pass]**

**Additional Usage Caused by Mount Modification: +1.9%**



**Report Prepared By : Delu Zhou**



**Tower Engineering Solutions**

Phone (972) 483-0607, Fax (972) 975-9615  
1320 Greenway Drive, Suite 600, Irving, Texas 75038

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## **Structural Analysis Report**

**Existing 159 ft EEI Monopole**

**Customer Name: SBA Communications Corp**

**Customer Site Number: CT12219-A**

**Customer Site Name: New Hartford 2, CT**

**Carrier Name: Verizon (App#: 146253, V3)**

**Carrier Site ID / Name: 468081 / New Hartford East CT**

**Site Location: 170 S. East Road**

**New Hartford, Connecticut**

**Litchfield County**

**Latitude: 41.817258**

**Longitude: -72.970947**

### **Analysis Result:**

**Max Structural Usage: 56.4% [Pass]**

**Max Foundation Usage: 60.0% [Pass]**

**Additional Usage Caused by Mount Modification:**

**Report Prepared By : Delu Zhou**

## Introduction

The purpose of this report is to summarize the analysis results on the 159 ft EEI Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

## Sources of Information

<b>Tower Drawings</b>	EEI Project #15635-P01, dated 10/07/08
<b>Foundation Drawing</b>	EEI Project #15635-P01, dated 10/16/08
<b>Geotechnical Report</b>	Clarence Welti Associates Geotechnical Report for Proposed Sprint Site CT33XC271, dated 01/08/04
<b>Modification Drawings</b>	
<b>Mount Analysis</b>	Maser Consulting, MA, Project # 10068126, dated 05/21/2021

## Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA- In accordance with this standard, the structure was analyzed using **TESPoles**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

<b>Wind Speed Used in the Analysis:</b>	Ultimate Design Wind Speed $V_{ult} = 120.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 93.0$ mph (3-Sec. Gust)
<b>Wind Speed with Ice:</b>	40 mph (3-Sec. Gust) with 1" radial ice concurrent
<b>Operational Wind Speed:</b>	60 mph + 0" Radial ice
<b>Standard/Codes:</b>	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
<b>Exposure Category:</b>	
<b>Structure Class:</b>	
<b>Topographic Category:</b>	
<b>Crest Height:</b>	0 ft
<b>Seismic Parameters:</b>	

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

## Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Swedcom - SCE-6014 - Panel	Low Profile Platform		Verizon
			Antel - BXA-70063/6CF - Panel			
			Antel - BXA-185060/12CF - Panel			
		3	RFS APXVAARR24_43-U-NA20- Panel	(3) Modified T-Arms	(1) 1 5/8" Fiber	T-Mobile
			Ericsson KRY 112 144/1 TMA			
			Ericsson KRY 112 489/2 TMA			
		3	Ericsson Radio 4449 B71 + B12- RRU	(3) T-Frame w/ (6) Reforce Kit PRK-SFS-L (3) 2" Std Pipe	(2) 3" Conduit	
			Powerwave 7770.00A - Panel			
			Powerwave LGP21401			
			Ericsson 4478 B71 RRU			
			Ericsson 4449 B5/B12 RRU			
			Ericsson 8843 B2/B66A RRU			
			Raycap DC6-48-60-18-8F			
		3	Commscope ABT-DF-DMADBH Bias-T			
			Cci DMP65R-BU8DA - Panel			
			Raycap DC6-48-60-0-8C-EV			
			Raycap DC6-48-60-18-8C-EV			

## Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Commscope NHH-65C-R2B Panel	Low Profile Platform w/ Support Rail & Pipes Kicker Kit	(1) 1 5/8" Hybrid	Verizon
			Samsung MT6407-77A Panel			
			Commscope TD-850B-LTE78-43			
			Samsung RFV01U-D2A			
			Samsung RFV01U-D1A			

See the attached coax layout for the line placement considered in the analysis.

## **Analysis Results**

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:			
Pass/Fail	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

## **Foundations**

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions			

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

## **Operational Condition (Rigidity):**

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.0222 degrees under the operational wind speed as specified in the Analysis Criteria.

## **Conclusions**

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

## Standard Conditions

This analysis was performed based on the information supplied to **Tower Engineering Solutions**. Verification of the information provided was not included in the Scope of Work for . The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of . In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, should be notified in writing and the applicable minimum values provided by the client.

The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

# Usage Diagram - Max Ratio 56.37% at 97.9ft

**Structure:** CT12219-A-SBA  
**Site Name:** New Hartford 2, CT  
**Height:** 159.00 (ft)  
**Base Elev:** 0.000 (ft)

**Code:** EIA/TIA-222-G  
**Exposure:** B  
**Gh:** 1.1

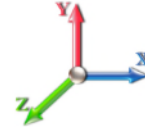
6/8/2021



Page: 1

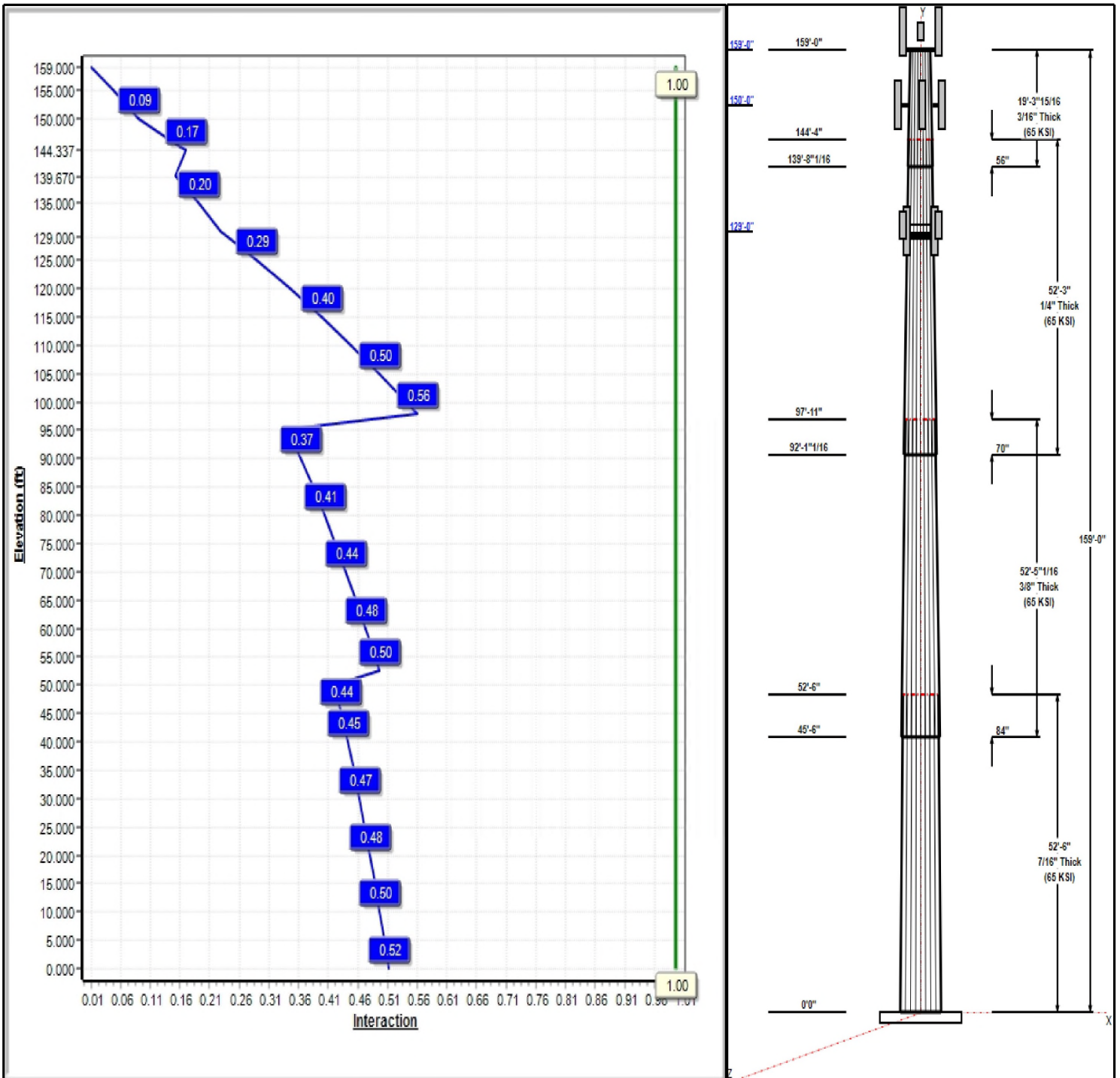
**Dead Load Factor:** 1.20  
**Wind Load Factor:** 1.60

**Load Case : 1.2D + 1.6W 93 mph Wind**



**Iterations:** 22

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## Structure: CT12219-A-SBA

**Type:** Tapered  
**Site Name:** New Hartford 2, CT  
**Height:** 159.00 (ft)  
**Base Elev:** 0.00 (ft)

**Base Shape:** 18 Sided  
**Taper:** 0.20833

6/8/2021

Page: 2



### Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	52.50	49.56	60.50	0.438		0.20833	65
2	52.42	40.85	51.77	0.375	Slip	0.20833	65
3	52.25	31.68	42.57	0.250	Slip	0.20833	65
4	19.33	29.00	33.03	0.188	Slip	0.20833	65

### Discrete Appurtenances

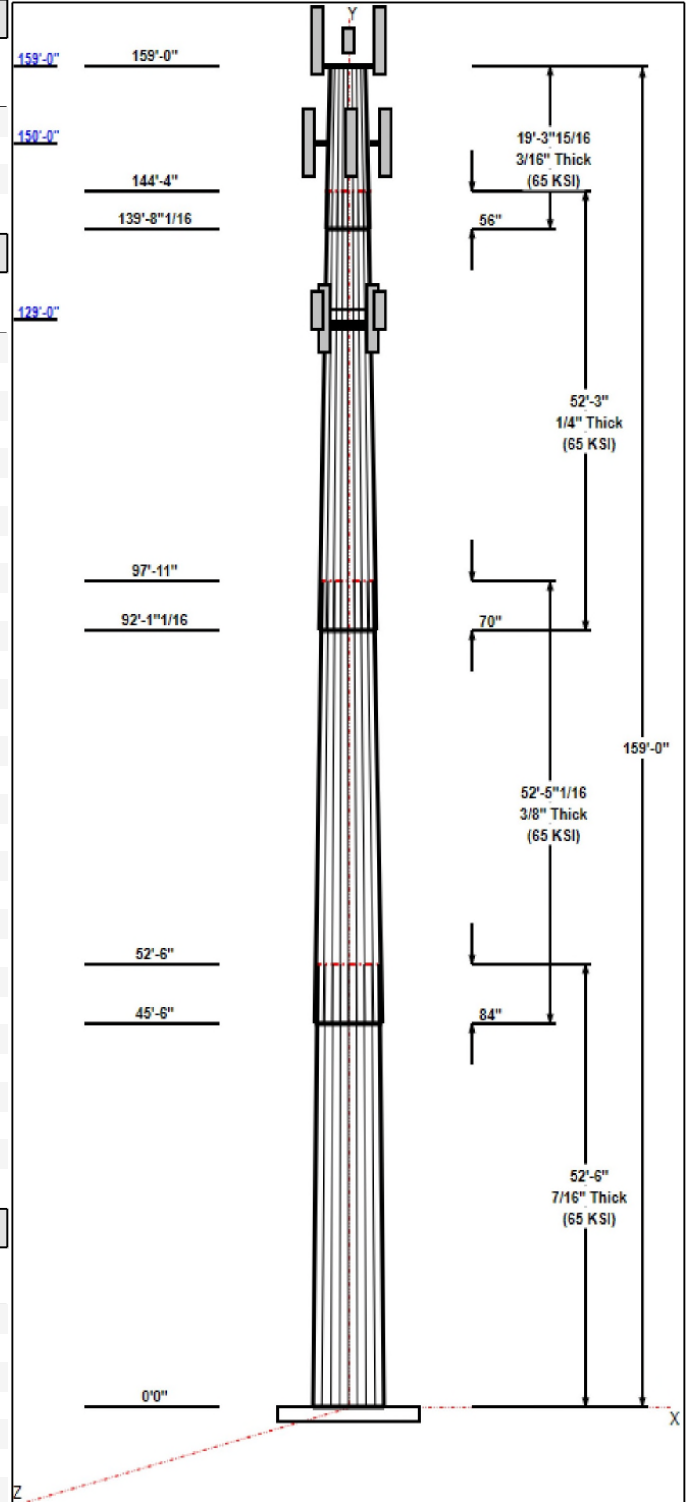
Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
159.00	159.00	1	Low Profile Platform	Verizon
159.00	159.00	1	Support Rail w/ Pipes	Verizon
159.00	159.00	1	Kicker Kit	Verizon
159.00	162.00	6	NHH-65C-R2B	Verizon
159.00	162.00	3	MT6407-77A	Verizon
159.00	162.00	3	TD-850B-LTE78-43	Verizon
159.00	162.00	3	RFV01U-D2A	Verizon
159.00	162.00	3	RFV01U-D1A	Verizon
159.00	162.00	1	DB-C1-12C-24AB-0Z	Verizon
150.00	150.00	3	4449 B5/B12	T-Mobile
150.00	150.00	1	MS-HR35	T-Mobile
150.00	150.00	1	(3) T-Arm Kit	T-Mobile
150.00	150.00	1	MS-H1436 (Heavy Collar	T-Mobile
150.00	150.00	3	APX16DWV-16DWV-S-E-	T-Mobile
150.00	150.00	3	APXVAARR24_43-U-NA20	T-Mobile
150.00	150.00	3	KRY 112 144/1	T-Mobile
150.00	150.00	3	KRY 112 489/2	T-Mobile
150.00	150.00	3	T-Arm	T-Mobile
130.00	130.00	3	T-Frame	AT&T
130.00	130.00	6	Powerwave 7770.00A	AT&T
130.00	130.00	24	Powerwave LGP21401	AT&T
130.00	130.00	1	Raycap DC6-48-60-18-8F	AT&T
130.00	130.00	3	Commscope	AT&T
130.00	130.00	3	Ericsson 4478 B71 RRU	AT&T
130.00	130.00	3	Ericsson 4449 B5/B12	AT&T
130.00	130.00	3	Ericsson 8843 B2/B66A	AT&T
130.00	130.00	1	(6) Reinforce Kit	AT&T
129.00	129.00	6	DMP65R-BU8DA	AT&T
129.00	129.00	1	Raycap	AT&T
129.00	129.00	1	Raycap	AT&T

### Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	159.00	Inside	1 5/8" Coax	Verizon
0.00	159.00	Inside	1 5/8" Hybrid	Verizon
0.00	159.00	Inside	1" Coax	Verizon
0.00	150.00	Inside	1 5/8" Coax	T-Mobile
0.00	150.00	Inside	1 5/8" Fiber	T-Mobile
0.00	130.00	Inside	1 5/8" Coax	AT&T
0.00	130.00	Outside	3" Conduit	AT&T

### Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
24	2.25" 18J	75.0	Radial



**Structure: CT12219-A-SBA**

**Type:** Tapered  
**Site Name:** New Hartford 2, CT  
**Height:** 159.00 (ft)  
**Base Elev:** 0.00 (ft)

**Base Shape:** 18 Sided  
**Taper:** 0.20833

6/8/2021

Page: 3



**Base Plate**

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
3.2500	74.0	50.0	Round

**Reactions**

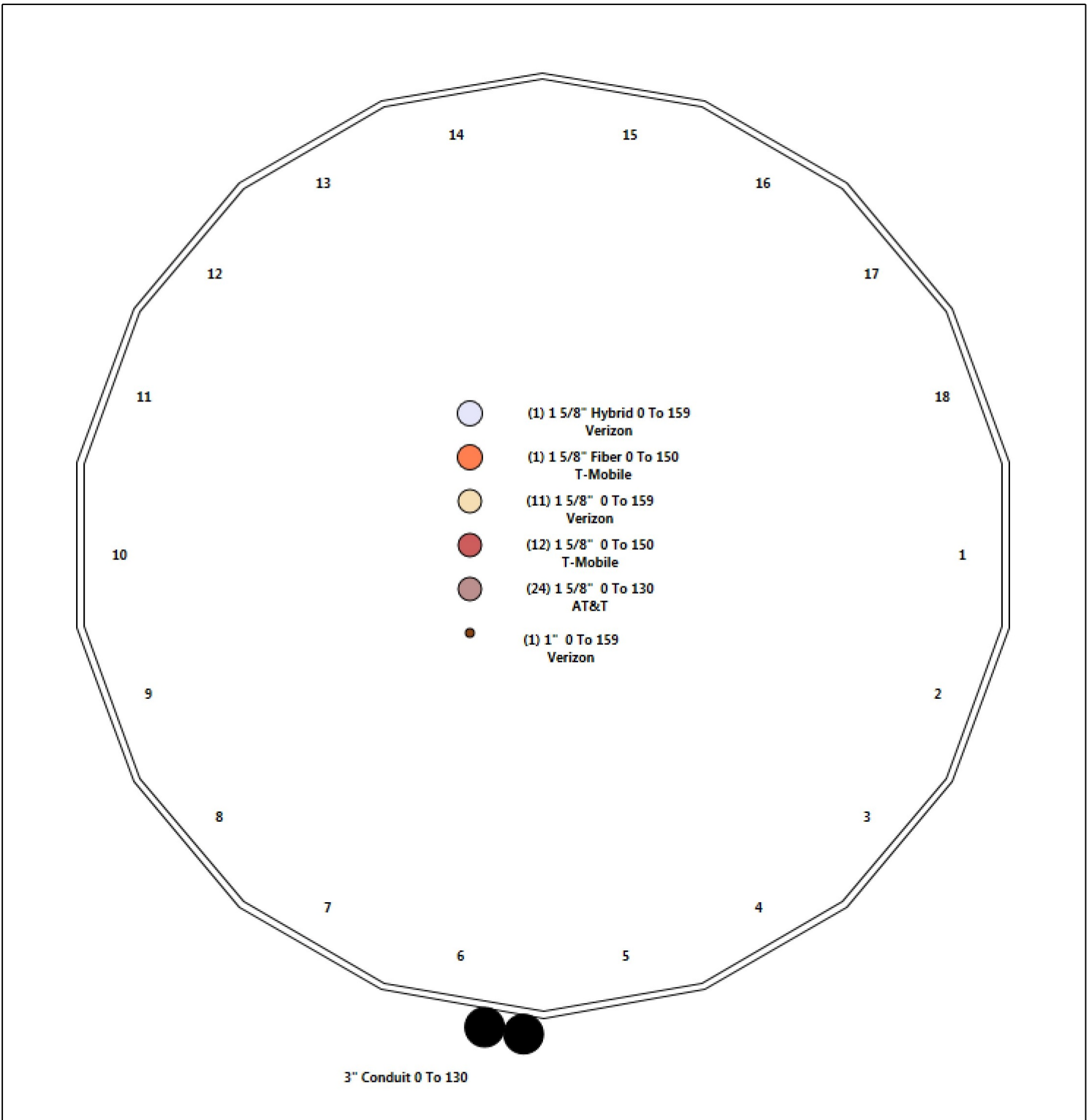
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	3490.7	29.3	57.6
0.9D + 1.6W 93 mph Wind	3457.6	29.3	43.2
1.2D + 1.0Di + 1.0Wi 40 mph Wind	739.2	6.1	100.1
1.2D + 1.0E	306.2	2.4	57.7
0.9D + 1.0E	303.1	2.4	43.2
1.0D + 1.0W 60 mph Wind	902.8	7.6	48.0

# Structure: CT12219-A-SBA - Coax Line Placement

Type: Monopole  
Site Name: New Hartford 2, CT  
Height: 159.00 (ft)

6/8/2021

Page: 4



## Shaft Properties

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 5

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	52.500	0.4375	65		0.00	13,543
2	18	52.420	0.3750	65	Slip	84.00	9,752
3	18	52.250	0.2500	65	Slip	70.00	5,202
4	18	19.330	0.1875	65	Slip	56.00	1,207
<b>Total Shaft Weight:</b>							<b>29,703</b>

Bottom

Top

Sec. No.	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper
1	60.50	0.00	83.40	38013.04	22.97	138.29	49.56	52.50	68.21	20798.4	18.56	113.2	0.208333
2	51.77	45.50	61.17	20415.47	22.93	138.06	40.85	97.92	48.17	9970.94	17.80	108.9	0.208333
3	42.57	92.09	33.58	7595.84	28.61	170.26	31.68	144.34	24.94	3112.52	20.93	126.7	0.208333
4	33.03	139.6	19.54	2662.80	29.65	176.14	29.00	159.00	17.15	1798.41	25.86	154.6	0.208333

## Load Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 6

### Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	159.00	Low Profile Platform	1	1600.00	40.20	1.00	3472.44	85.363	1.00	0.00	0.00
2	159.00	Support Rail w/ Pipes	1	430.00	8.75	1.00	1114.38	20.219	1.00	0.00	0.00
3	159.00	Kicker Kit	1	146.00	5.33	1.00	419.38	12.815	1.00	0.00	0.00
4	159.00	NHH-65C-R2B	6	51.60	11.39	0.78	426.11	13.632	0.78	0.00	3.00
5	159.00	MT6407-77A	3	79.40	4.69	0.70	251.44	5.981	0.70	0.00	3.00
6	159.00	TD-850B-LTE78-43	3	52.90	1.16	0.67	98.32	2.246	0.67	0.00	3.00
7	159.00	RFV01U-D2A	3	70.30	1.88	0.67	135.52	2.619	0.67	0.00	3.00
8	159.00	RFV01U-D1A	3	84.40	1.88	0.67	153.14	2.619	0.67	0.00	3.00
9	159.00	DB-C1-12C-24AB-OZ	1	32.00	4.06	1.00	184.79	5.162	1.00	0.00	3.00
10	150.00	4449 B5/B12	3	71.00	1.97	0.67	142.17	2.700	0.67	0.00	0.00
11	150.00	MS-HR35	1	430.00	8.75	1.00	1110.40	20.152	1.00	0.00	0.00
12	150.00	(3) T-Arm Kit	1	500.00	16.50	1.00	1291.16	38.001	1.00	0.00	0.00
13	150.00	MS-H1436 (Heavy Collar Mount)	1	136.70	2.25	1.00	391.18	5.391	1.00	0.00	0.00
14	150.00	APX16DWV-16DWV-S-E-A20	3	40.70	6.46	0.62	237.43	7.978	0.62	0.00	0.00
15	150.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	709.08	22.805	0.70	0.00	0.00
16	150.00	KRY 112 144/1	3	11.00	0.41	0.70	25.38	1.044	0.70	0.00	0.00
17	150.00	KRY 112 489/2	3	15.40	0.65	0.82	38.89	1.466	0.82	0.00	0.00
18	150.00	T-Arm	3	500.00	15.60	0.75	965.39	33.750	0.75	0.00	0.00
19	130.00	T-Frame	3	550.00	17.60	0.75	1054.66	37.786	0.75	0.00	0.00
20	130.00	Powerwave 7770.00A	6	27.00	5.54	0.72	177.23	8.346	0.72	0.00	0.00
21	130.00	Powerwave LGP21401	24	17.50	1.29	0.50	58.29	2.388	0.50	0.00	0.00
22	130.00	Raycap DC6-48-60-18-8F	1	32.80	0.92	1.00	116.62	1.496	1.00	0.00	0.00
23	130.00	Commscope ABT-DF-DMADBH	3	1.14	0.05	0.67	4.18	0.303	0.67	0.00	0.00
24	130.00	Ericsson 4478 B71 RRU	3	60.00	1.65	0.67	115.05	2.331	0.67	0.00	0.00
25	130.00	Ericsson 4449 B5/B12 RRU	3	71.00	1.97	0.67	141.16	2.689	0.67	0.00	0.00
26	130.00	Ericsson 8843 B2/B66A RRU	3	75.00	1.65	0.67	194.86	2.778	0.67	0.00	0.00
27	130.00	(6) Reinforce Kit [PRK-SFS-L]	1	230.00	9.70	1.00	652.08	23.050	1.00	0.00	0.00
28	129.00	DMP65R-BU8DA	6	95.70	17.87	0.83	612.27	20.296	0.83	0.00	0.00
29	129.00	Raycap DC6-48-60-0-8C-EV	1	26.20	4.78	1.00	292.31	5.941	1.00	0.00	0.00
30	129.00	Raycap DC6-48-60-18-8C-EV	1	26.20	4.78	1.00	292.31	5.941	1.00	0.00	0.00
<b>Totals:</b>			<b>98</b>	<b>10,486.42</b>			<b>30,829.58</b>				

### Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	159.00	(11) 1 5/8" Coax	0.00	Inside
0.00	159.00	(1) 1 5/8" Hybrid	0.00	Inside
0.00	159.00	(1) 1" Coax	0.00	Inside
0.00	150.00	(12) 1 5/8" Coax	0.00	Inside
0.00	150.00	(1) 1 5/8" Fiber	0.00	Inside
0.00	130.00	(24) 1 5/8" Coax	0.00	Inside
0.00	130.00	(2) 3" Conduit	6.00	Outside

## Shaft Section Properties

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II
		Page: 7



**Increment Length:** 5 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in <sup>3</sup> )	Weight (lb)
0.00		0.4375	60.500	83.401	38013.0	22.97	138.29	74.4	1237.	0.0
5.00		0.4375	59.458	81.955	36069.4	22.55	135.90	74.9	1194.	1406.7
10.00		0.4375	58.417	80.508	34193.1	22.13	133.52	75.4	1152.	1382.1
15.00		0.4375	57.375	79.062	32383.0	21.71	131.14	75.9	1111.	1357.5
20.00		0.4375	56.333	77.616	30638.0	21.29	128.76	76.4	1071.	1332.8
25.00		0.4375	55.292	76.169	28956.8	20.87	126.38	76.8	1031.	1308.2
30.00		0.4375	54.250	74.723	27338.3	20.45	124.00	77.3	992.6	1283.6
35.00		0.4375	53.208	73.276	25781.3	20.03	121.62	77.8	954.3	1259.0
40.00		0.4375	52.167	71.830	24284.5	19.61	119.24	78.3	916.9	1234.4
45.00		0.4375	51.125	70.383	22846.8	19.19	116.86	78.8	880.2	1209.8
45.50	Bot - Section 2	0.4375	51.021	70.239	22706.2	19.15	116.62	78.9	876.6	119.6
50.00		0.4375	50.083	68.937	21467.0	18.77	114.48	79.3	844.2	1993.7
52.50	Top - Section 1	0.3750	50.313	59.436	18726.5	22.25	134.17	0.0	0.0	1091.6
55.00		0.3750	49.792	58.816	18146.6	22.00	132.78	75.5	717.8	503.0
60.00		0.3750	48.750	57.576	17023.1	21.51	130.00	76.1	687.8	990.1
65.00		0.3750	47.708	56.336	15946.9	21.02	127.22	76.7	658.4	969.0
70.00		0.3750	46.667	55.097	14917.1	20.53	124.44	77.3	629.6	948.0
75.00		0.3750	45.625	53.857	13932.6	20.04	121.67	77.8	601.5	926.9
80.00		0.3750	44.583	52.617	12992.4	19.55	118.89	78.4	574.0	905.8
85.00		0.3750	43.542	51.377	12095.4	19.06	116.11	79.0	547.1	884.7
90.00		0.3750	42.500	50.137	11240.8	18.57	113.33	79.6	520.9	863.6
92.09	Bot - Section 3	0.3750	42.065	49.620	10896.3	18.37	112.17	79.8	510.2	354.2
95.00		0.3750	41.458	48.898	10427.3	18.08	110.56	80.1	495.4	818.8
97.92	Top - Section 2	0.2500	41.350	32.612	6960.0	27.75	165.40	0.0	0.0	808.7
100.00		0.2500	40.917	32.268	6742.2	27.45	163.67	69.1	324.5	229.6
105.00		0.2500	39.875	31.441	6237.2	26.71	159.50	70.0	308.1	542.0
110.00		0.2500	38.833	30.615	5758.2	25.98	155.33	70.8	292.1	527.9
115.00		0.2500	37.792	29.788	5304.3	25.24	151.17	71.7	276.4	513.8
120.00		0.2500	36.750	28.962	4874.9	24.51	147.00	72.6	261.3	499.8
125.00		0.2500	35.708	28.135	4469.3	23.77	142.83	73.4	246.5	485.7
129.00		0.2500	34.875	27.474	4161.5	23.19	139.50	74.1	235.0	378.5
130.00		0.2500	34.667	27.309	4086.9	23.04	138.67	74.3	232.2	93.2
135.00		0.2500	33.625	26.482	3726.9	22.31	134.50	75.2	218.3	457.6
139.67	Bot - Section 4	0.2500	32.652	25.710	3410.4	21.62	130.61	76.0	205.7	414.7
140.00		0.2500	32.583	25.656	3388.7	21.57	130.33	76.0	204.8	50.8
144.34	Top - Section 3	0.1875	32.055	18.964	2433.2	28.73	170.96	0.0	0.0	657.1
145.00		0.1875	31.917	18.882	2401.7	28.60	170.22	67.8	148.2	42.7
150.00		0.1875	30.875	18.262	2172.9	27.62	164.67	68.9	138.6	316.0
155.00		0.1875	29.833	17.642	1959.0	26.64	159.11	70.1	129.3	305.4
159.00		0.1875	29.000	17.146	1798.4	25.86	154.67	71.0	122.1	236.8

**29703.3**

## Wind Loading - Shaft

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Page:</b> 8
	<b>Struct Class:</b> II	

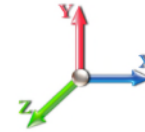


**Load Case:** 1.2D + 1.6W 93 mph Wind

**Iterations** 22

**Dead Load Factor** 1.20

**Wind Load Factor** 1.60



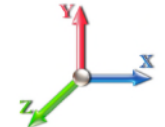
Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	398.34	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	391.48	0.650	0.000	5.00	25.377	16.49	427.5	0.0	1688.0
10.00		1.00	0.70	14.724	16.20	384.62	0.650*	0.000	5.00	24.936	16.22	420.4	0.0	1658.5
15.00		1.00	0.70	14.724	16.20	377.77	0.654*	0.000	5.00	24.495	16.02	415.2	0.0	1628.9
20.00		1.00	0.70	14.724	16.20	370.91	0.658*	0.000	5.00	24.055	15.82	410.0	0.0	1599.4
25.00		1.00	0.70	14.724	16.20	364.05	0.661*	0.000	5.00	23.614	15.62	404.8	0.0	1569.9
30.00		1.00	0.70	14.736	16.21	357.34	0.665*	0.000	5.00	23.173	15.42	399.9	0.0	1540.4
35.00		1.00	0.73	15.400	16.94	358.28	0.669*	0.000	5.00	22.733	15.22	412.5	0.0	1510.8
40.00		1.00	0.76	15.999	17.60	358.03	0.674*	0.000	5.00	22.292	15.02	422.9	0.0	1481.3
45.00		1.00	0.79	16.546	18.20	356.84	0.678*	0.000	5.00	21.851	14.82	431.5	0.0	1451.8
45.50 Bot - Section 2		1.00	0.79	16.599	18.26	356.67	0.681*	0.000	0.50	2.161	1.47	43.0	0.0	143.6
50.00		1.00	0.81	17.052	18.76	354.87	0.683*	0.000	4.50	19.535	13.34	400.4	0.0	2392.5
52.50 Top - Section 1		1.00	0.82	17.292	19.02	353.64	0.686*	0.000	2.50	10.699	7.34	223.4	0.0	1309.9
55.00		1.00	0.83	17.523	19.28	357.64	0.685*	0.000	2.50	10.588	7.26	223.8	0.0	603.6
60.00		1.00	0.85	17.964	19.76	354.54	0.689*	0.000	5.00	20.846	14.36	454.0	0.0	1188.2
65.00		1.00	0.87	18.380	20.22	350.95	0.694*	0.000	5.00	20.405	14.16	458.0	0.0	1162.9
70.00		1.00	0.89	18.773	20.65	346.94	0.699*	0.000	5.00	19.965	13.96	461.2	0.0	1137.5
75.00		1.00	0.91	19.147	21.06	342.56	0.705*	0.000	5.00	19.524	13.76	463.6	0.0	1112.2
80.00		1.00	0.93	19.503	21.45	337.84	0.710*	0.000	5.00	19.083	13.56	465.4	0.0	1086.9
85.00		1.00	0.94	19.844	21.83	332.81	0.716*	0.000	5.00	18.643	13.36	466.5	0.0	1061.6
90.00		1.00	0.96	20.170	22.19	327.52	0.723*	0.000	5.00	18.202	13.16	467.1	0.0	1036.3
92.09 Bot - Section 3		1.00	0.97	20.303	22.33	325.23	0.728*	0.000	2.09	7.466	5.43	194.1	0.0	425.0
95.00		1.00	0.97	20.484	22.53	321.97	0.731*	0.000	2.91	10.419	7.61	274.5	0.0	982.5
97.92 Top - Section 2		1.00	0.98	20.662	22.73	318.62	0.735*	0.000	2.92	10.292	7.56	275.1	0.0	970.4
100.00		1.00	0.99	20.787	22.87	320.10	0.735*	0.000	2.08	7.240	5.32	194.7	0.0	275.5
105.00		1.00	1.00	21.079	23.19	314.13	0.740*	0.000	5.00	17.091	12.65	469.4	0.0	650.4
110.00		1.00	1.02	21.361	23.50	307.96	0.748*	0.000	5.00	16.651	12.45	468.1	0.0	633.5
115.00		1.00	1.03	21.634	23.80	301.61	0.756*	0.000	5.00	16.210	12.25	466.4	0.0	616.6
120.00		1.00	1.04	21.898	24.09	295.09	0.764*	0.000	5.00	15.769	12.05	464.4	0.0	599.7
125.00		1.00	1.05	22.155	24.37	288.40	0.773*	0.000	5.00	15.328	11.85	462.0	0.0	582.9
129.00 Appurtenance(s)		1.00	1.06	22.356	24.59	282.94	0.781*	0.000	4.00	11.945	9.34	367.3	0.0	454.1
130.00 Appurtenance(s)		1.00	1.07	22.405	24.65	281.56	0.786*	0.000	1.00	2.942	2.31	91.2	0.0	111.8
135.00		1.00	1.08	22.648	24.91	274.57	0.650	0.000	5.00	14.447	9.39	374.3	0.0	549.1
139.67 Bot - Section 4		1.00	1.09	22.869	25.16	267.93	0.650	0.000	4.67	13.095	8.51	342.6	0.0	497.6
140.00		1.00	1.09	22.884	25.17	267.45	0.650	0.000	0.33	0.921	0.60	24.1	0.0	60.9
144.34 Top - Section 3		1.00	1.10	23.085	25.39	261.17	0.650	0.000	4.34	11.929	7.75	315.0	0.0	788.5
145.00		1.00	1.10	23.115	25.43	263.30	0.650	0.000	0.66	1.795	1.17	47.5	0.0	51.3
150.00 Appurtenance(s)		1.00	1.11	23.340	25.67	255.94	0.650	0.000	5.00	13.283	8.63	354.7	0.0	379.2
155.00		1.00	1.12	23.560	25.92	248.47	0.650	0.000	5.00	12.843	8.35	346.1	0.0	366.5
159.00 Appurtenance(s)		1.00	1.13	23.732	26.10	242.41	0.650	0.000	4.00	9.957	6.47	270.3	0.0	284.1
<b>Totals:</b>									<b>159.00</b>			<b>13,672.8</b>		<b>35,644.0</b>

\* CfA djusted by Linear Load RaE ffect

## Discrete Appurtenance Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



<b>Load Case:</b> 1.2D + 1.6W 93 mph Wind	<b>Iterations</b> 22
<b>Dead Load Factor</b> 1.20	
<b>Wind Load Factor</b> 1.60	

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	159.00	NHH-65C-R2B	6	23.859	26.245	0.78	1.00	53.31	371.52	0.000	3.000	2238.37	0.00	6715.11
2	159.00	Low Profile Platform	1	23.732	26.105	1.00	1.00	40.20	1920.00	0.000	0.000	1679.07	0.00	0.00
3	159.00	Support Rail w/ Pipes	1	23.732	26.105	0.75	0.75	6.56	516.00	0.000	0.000	274.10	0.00	0.00
4	159.00	Kicker Kit	1	23.732	26.105	0.75	0.75	4.00	175.20	0.000	0.000	166.97	0.00	0.00
5	159.00	DB-C1-12C-24AB-0Z	1	23.859	26.245	1.00	1.00	4.06	38.40	0.000	3.000	170.49	0.00	511.46
6	159.00	MT6407-77A	3	23.859	26.245	0.70	1.00	9.85	285.84	0.000	3.000	413.57	0.00	1240.72
7	159.00	TD-850B-LTE78-43	3	23.859	26.245	0.67	1.00	2.33	190.44	0.000	3.000	97.91	0.00	293.72
8	159.00	RFV01U-D2A	3	23.859	26.245	0.67	1.00	3.78	253.08	0.000	3.000	158.68	0.00	476.03
9	159.00	RFV01U-D1A	3	23.859	26.245	0.67	1.00	3.78	303.84	0.000	3.000	158.68	0.00	476.03
10	150.00	MS-H1436 (Heavy Collar	1	23.340	25.674	0.75	0.75	1.69	164.04	0.000	0.000	69.32	0.00	0.00
11	150.00	(3) T-Arm Kit	1	23.340	25.674	0.75	0.75	12.38	600.00	0.000	0.000	508.34	0.00	0.00
12	150.00	MS-HR35	1	23.340	25.674	0.75	0.75	6.56	516.00	0.000	0.000	269.58	0.00	0.00
13	150.00	4449 B5/B12	3	23.340	25.674	0.54	0.80	3.17	255.60	0.000	0.000	130.13	0.00	0.00
14	150.00	KRY 112 489/2	3	23.340	25.674	0.66	0.80	1.28	55.44	0.000	0.000	52.55	0.00	0.00
15	150.00	KRY 112 144/1	3	23.340	25.674	0.56	0.80	0.69	39.60	0.000	0.000	28.29	0.00	0.00
16	150.00	APXVAARR24_43-U-NA2	3	23.340	25.674	0.56	0.80	34.00	460.80	0.000	0.000	1396.79	0.00	0.00
17	150.00	APX16DWV-16DWV-S-E-	3	23.340	25.674	0.50	0.80	9.61	146.52	0.000	0.000	394.86	0.00	0.00
18	150.00	T-Arm	3	23.340	25.674	0.56	0.75	26.32	1800.00	0.000	0.000	1081.39	0.00	0.00
19	130.00	T-Frame	3	22.405	24.645	0.56	0.75	29.70	1980.00	0.000	0.000	1171.15	0.00	0.00
20	130.00	Powerwave 7770.00A	6	22.405	24.645	0.58	0.80	19.15	194.40	0.000	0.000	754.99	0.00	0.00
21	130.00	Powerwave LGP21401	24	22.405	24.645	0.40	0.80	12.38	504.00	0.000	0.000	488.33	0.00	0.00
22	130.00	Raycap DC6-48-60-18-8F	1	22.405	24.645	1.00	1.00	0.92	39.36	0.000	0.000	36.28	0.00	0.00
23	130.00	Commscope	3	22.405	24.645	0.54	0.80	0.08	4.10	0.000	0.000	3.17	0.00	0.00
24	130.00	Ericsson 4478 B71 RRU	3	22.405	24.645	0.54	0.80	2.65	216.00	0.000	0.000	104.62	0.00	0.00
25	130.00	Ericsson 4449 B5/B12	3	22.405	24.645	0.54	0.80	3.17	255.60	0.000	0.000	124.91	0.00	0.00
26	130.00	Ericsson 8843 B2/B66A	3	22.405	24.645	0.54	0.80	2.65	270.00	0.000	0.000	104.62	0.00	0.00
27	130.00	(6) Reinforce Kit	1	22.405	24.645	0.75	0.75	7.27	276.00	0.000	0.000	286.87	0.00	0.00
28	129.00	DMP65R-BU8DA	6	22.356	24.591	0.66	0.80	71.19	689.04	0.000	0.000	2801.18	0.00	0.00
29	129.00	Raycap	1	22.356	24.591	1.00	1.00	4.78	31.44	0.000	0.000	188.07	0.00	0.00
30	129.00	Raycap	1	22.356	24.591	1.00	1.00	4.78	31.44	0.000	0.000	188.07	0.00	0.00
<b>Totals:</b>									<b>12,583.70</b>			<b>15,541.36</b>		



## Total Applied Force Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

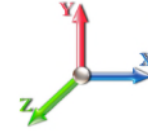


Page: 10

**Load Case:** 1.2D + 1.6W 93 mph Wind

**Dead Load Factor** 1.20

**Wind Load Factor** 1.60



**Iterations** 22

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		427.46	2019.81	0.00	0.00
10.00		420.35	1990.28	0.00	0.00
15.00		415.16	1960.75	0.00	0.00
20.00		409.96	1931.22	0.00	0.00
25.00		404.77	1901.69	0.00	0.00
30.00		399.91	1872.15	0.00	0.00
35.00		412.48	1842.62	0.00	0.00
40.00		422.87	1813.09	0.00	0.00
45.00		431.50	1783.56	0.00	0.00
45.50		42.96	176.73	0.00	0.00
50.00		400.39	2691.08	0.00	0.00
52.50		223.44	1475.85	0.00	0.00
55.00		223.75	769.48	0.00	0.00
60.00		454.02	1519.97	0.00	0.00
65.00		458.03	1494.66	0.00	0.00
70.00		461.21	1469.35	0.00	0.00
75.00		463.63	1444.03	0.00	0.00
80.00		465.38	1418.72	0.00	0.00
85.00		466.50	1393.41	0.00	0.00
90.00		467.07	1368.10	0.00	0.00
92.09		194.08	563.47	0.00	0.00
95.00		274.54	1175.88	0.00	0.00
97.92		275.09	1164.20	0.00	0.00
100.00		194.71	413.55	0.00	0.00
105.00		469.35	982.16	0.00	0.00
110.00		468.09	965.29	0.00	0.00
115.00		466.44	948.41	0.00	0.00
120.00		464.42	931.54	0.00	0.00
125.00		462.05	914.66	0.00	0.00
129.00	(8) attachments	3544.63	1471.50	0.00	0.00
130.00	(47) attachments	3166.19	3917.67	0.00	0.00
135.00		374.31	711.83	0.00	0.00
139.67		342.60	649.61	0.00	0.00
140.00		24.12	71.65	0.00	0.00
144.34		315.03	929.68	0.00	0.00
145.00		47.48	72.84	0.00	0.00
150.00	(21) attachments	4285.93	4579.90	0.00	0.00
155.00		346.14	447.77	0.00	0.00
159.00	(22) attachments	5628.15	4403.42	0.00	9713.08
	<b>Totals:</b>	<b>29,214.17</b>	<b>57,651.58</b>	<b>0.00</b>	<b>9,713.08</b>

## Linear Appurtenance Segment Forces (Factored)

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

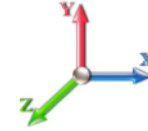


Page: 11

**Load Case:** 1.2D + 1.6W 93 mph Wind

**Dead Load Factor** 1.20

**Wind Load Factor** 1.60



**Iterations** 22

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
5.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.099	0.000	14.724	0.00	19.32
10.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.100	1.001	14.724	0.00	19.32
15.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.102	1.006	14.724	0.00	19.32
20.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.104	1.012	14.724	0.00	19.32
25.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.106	1.018	14.724	0.00	19.32
30.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.108	1.024	14.736	0.00	19.32
35.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.110	1.030	15.400	0.00	19.32
40.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.112	1.036	15.999	0.00	19.32
45.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.114	1.043	16.546	0.00	19.32
45.50	3" Conduit	Yes	0.50	0.000	6.00	0.25	0.00	0.116	1.047	16.599	0.00	1.93
50.00	3" Conduit	Yes	4.50	0.000	6.00	2.25	0.00	0.117	1.051	17.052	0.00	17.39
52.50	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.119	1.056	17.292	0.00	9.66
55.00	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.118	1.054	17.523	0.00	9.66
60.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.120	1.060	17.964	0.00	19.32
65.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.123	1.068	18.380	0.00	19.32
70.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.125	1.076	18.773	0.00	19.32
75.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.128	1.084	19.147	0.00	19.32
80.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.131	1.093	19.503	0.00	19.32
85.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.134	1.102	19.844	0.00	19.32
90.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.137	1.112	20.170	0.00	19.32
92.09	3" Conduit	Yes	2.09	0.000	6.00	1.04	0.00	0.140	1.119	20.303	0.00	8.06
95.00	3" Conduit	Yes	2.91	0.000	6.00	1.46	0.00	0.141	1.124	20.484	0.00	11.26
97.92	3" Conduit	Yes	2.92	0.000	6.00	1.46	0.00	0.144	1.131	20.662	0.00	11.28
100.00	3" Conduit	Yes	2.08	0.000	6.00	1.04	0.00	0.144	1.131	20.787	0.00	8.04
105.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.146	1.139	21.079	0.00	19.32
110.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.150	1.150	21.361	0.00	19.32
115.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.154	1.163	21.634	0.00	19.32
120.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.159	1.176	21.898	0.00	19.32
125.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.163	1.189	22.155	0.00	19.32
129.00	3" Conduit	Yes	4.00	0.000	6.00	2.00	0.00	0.167	1.202	22.356	0.00	15.46
130.00	3" Conduit	Yes	1.00	0.000	6.00	0.50	0.00	0.170	1.210	22.405	0.00	3.86
<b>Totals:</b>											<b>0.0</b>	<b>502.3</b>

## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

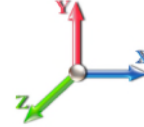


Page: 12

**Load Case:** 1.2D + 1.6W 93 mph Wind

**Iterations** 22

**Dead Load Factor** 1.20  
**Wind Load Factor** 1.60



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-57.62	-29.28	0.00	-3490.7	0.00	3490.70	5583.09	2791.54	13786.8	6903.66	0.00	0.000	0.000	0.516
5.00	-55.53	-28.97	0.00	-3344.3	0.00	3344.31	5522.68	2761.34	13399.4	6709.67	0.07	-0.128	0.000	0.509
10.00	-53.48	-28.67	0.00	-3199.4	0.00	3199.44	5460.99	2730.49	13014.1	6516.76	0.27	-0.257	0.000	0.501
15.00	-51.46	-28.36	0.00	-3056.1	0.00	3056.11	5398.01	2699.00	12631.2	6325.01	0.61	-0.387	0.000	0.493
20.00	-49.47	-28.05	0.00	-2914.3	0.00	2914.31	5333.74	2666.87	12250.7	6134.50	1.09	-0.518	0.000	0.484
25.00	-47.50	-27.73	0.00	-2774.0	0.00	2774.08	5268.20	2634.10	11872.9	5945.31	1.70	-0.650	0.000	0.476
30.00	-45.57	-27.42	0.00	-2635.4	0.00	2635.41	5201.36	2600.68	11497.9	5757.54	2.45	-0.783	0.000	0.467
35.00	-43.67	-27.08	0.00	-2498.3	0.00	2498.34	5133.24	2566.62	11125.9	5571.26	3.35	-0.917	0.000	0.457
40.00	-41.81	-26.72	0.00	-2362.9	0.00	2362.95	5063.83	2531.92	10757.1	5386.55	4.38	-1.051	0.000	0.447
45.00	-40.00	-26.31	0.00	-2229.3	0.00	2229.34	4993.14	2496.57	10391.5	5203.50	5.55	-1.185	0.000	0.437
45.50	-39.79	-26.31	0.00	-2216.1	0.00	2216.18	4986.00	2493.00	10355.1	5185.29	5.68	-1.199	0.000	0.435
50.00	-37.07	-25.91	0.00	-2097.8	0.00	2097.80	4921.16	2460.58	10029.4	5022.20	6.87	-1.321	0.000	0.425
52.50	-35.56	-25.69	0.00	-2033.0	0.00	2033.02	4024.48	2012.24	8260.88	4136.58	7.58	-1.389	0.000	0.500
55.00	-34.75	-25.52	0.00	-1968.7	0.00	1968.79	3997.76	1998.88	8119.79	4065.93	8.32	-1.458	0.000	0.493
60.00	-33.18	-25.11	0.00	-1841.2	0.00	1841.20	3943.34	1971.67	7839.16	3925.41	9.93	-1.607	0.000	0.478
65.00	-31.64	-24.69	0.00	-1715.6	0.00	1715.65	3887.63	1943.82	7560.73	3785.98	11.69	-1.756	0.000	0.461
70.00	-30.12	-24.26	0.00	-1592.2	0.00	1592.20	3830.65	1915.32	7284.66	3647.74	13.61	-1.903	0.000	0.445
75.00	-28.63	-23.82	0.00	-1470.9	0.00	1470.91	3772.37	1886.19	7011.11	3510.77	15.68	-2.049	0.000	0.427
80.00	-27.17	-23.37	0.00	-1351.8	0.00	1351.82	3712.81	1856.40	6740.26	3375.14	17.91	-2.193	0.000	0.408
85.00	-25.74	-22.91	0.00	-1234.9	0.00	1234.97	3651.96	1825.98	6472.27	3240.95	20.28	-2.335	0.000	0.388
90.00	-24.36	-22.43	0.00	-1120.4	0.00	1120.42	3589.83	1794.92	6207.31	3108.27	22.80	-2.473	0.000	0.367
92.09	-23.78	-22.24	0.00	-1073.6	0.00	1073.62	3563.52	1781.76	6097.66	3053.36	23.89	-2.531	0.000	0.358
95.00	-22.58	-21.94	0.00	-1008.8	0.00	1008.84	3526.41	1763.21	5945.54	2977.19	25.46	-2.611	0.000	0.345
97.92	-21.41	-21.64	0.00	-944.77	0.00	944.77	2018.06	1009.03	3414.14	1709.61	27.08	-2.688	0.000	0.564
100.00	-20.96	-21.47	0.00	-899.76	0.00	899.76	2007.23	1003.61	3359.78	1682.39	28.27	-2.743	0.000	0.546
105.00	-19.94	-21.01	0.00	-792.42	0.00	792.42	1980.26	990.13	3229.23	1617.01	31.24	-2.922	0.000	0.501
110.00	-18.94	-20.55	0.00	-687.37	0.00	687.37	1952.01	976.01	3098.96	1551.78	34.39	-3.090	0.000	0.453
115.00	-17.97	-20.08	0.00	-584.64	0.00	584.64	1922.48	961.24	2969.14	1486.78	37.71	-3.247	0.000	0.403
120.00	-17.02	-19.60	0.00	-484.26	0.00	484.26	1891.66	945.83	2839.95	1422.08	41.19	-3.391	0.000	0.350
125.00	-16.10	-19.11	0.00	-386.27	0.00	386.27	1859.56	929.78	2711.53	1357.78	44.81	-3.518	0.000	0.294
129.00	-14.84	-15.50	0.00	-309.82	0.00	309.82	1832.95	916.47	2609.48	1306.68	47.79	-3.606	0.000	0.245
130.00	-11.11	-12.10	0.00	-294.32	0.00	294.32	1826.17	913.08	2584.07	1293.95	48.55	-3.627	0.000	0.234
135.00	-10.41	-11.70	0.00	-233.82	0.00	233.82	1791.49	895.74	2457.72	1230.69	52.40	-3.719	0.000	0.196
139.67	-9.78	-11.32	0.00	-179.20	0.00	179.20	1757.94	878.97	2340.87	1172.18	56.07	-3.793	0.000	0.159
140.00	-9.70	-11.30	0.00	-175.46	0.00	175.46	1755.53	877.76	2332.66	1168.06	56.33	-3.797	0.000	0.156
144.34	-8.79	-10.92	0.00	-126.48	0.00	126.48	1153.87	576.93	1513.89	758.07	59.81	-3.852	0.000	0.175
145.00	-8.71	-10.88	0.00	-119.23	0.00	119.23	1151.46	575.73	1504.14	753.19	60.34	-3.860	0.000	0.166
150.00	-4.43	-6.29	0.00	-64.85	0.00	64.85	1132.60	566.30	1430.64	716.38	64.42	-3.914	0.000	0.095
155.00	-4.00	-5.92	0.00	-33.39	0.00	33.39	1112.45	556.22	1357.20	679.61	68.53	-3.947	0.000	0.053
159.00	0.00	-5.63	0.00	-9.71	0.00	9.71	1095.40	547.70	1298.60	650.26	71.84	-3.959	0.000	0.015

## Wind Loading - Shaft

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 13

<b>Load Case:</b> 0.9D + 1.6W 93 mph Wind	<b>Iterations</b> 22
<b>Dead Load Factor</b> 0.90	
<b>Wind Load Factor</b> 1.60	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	398.34	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	391.48	0.650	0.000	5.00	25.377	16.49	427.5	0.0	1266.0
10.00		1.00	0.70	14.724	16.20	384.62	0.650*	0.000	5.00	24.936	16.22	420.4	0.0	1243.9
15.00		1.00	0.70	14.724	16.20	377.77	0.654*	0.000	5.00	24.495	16.02	415.2	0.0	1221.7
20.00		1.00	0.70	14.724	16.20	370.91	0.658*	0.000	5.00	24.055	15.82	410.0	0.0	1199.6
25.00		1.00	0.70	14.724	16.20	364.05	0.661*	0.000	5.00	23.614	15.62	404.8	0.0	1177.4
30.00		1.00	0.70	14.736	16.21	357.34	0.665*	0.000	5.00	23.173	15.42	399.9	0.0	1155.3
35.00		1.00	0.73	15.400	16.94	350.63	0.669*	0.000	5.00	22.733	15.22	412.5	0.0	1133.1
40.00		1.00	0.76	15.999	17.60	344.03	0.674*	0.000	5.00	22.292	15.02	422.9	0.0	1111.0
45.00		1.00	0.79	16.546	18.20	337.54	0.678*	0.000	5.00	21.851	14.82	431.5	0.0	1088.8
45.50	Bot - Section 2	1.00	0.79	16.599	18.26	331.16	0.681*	0.000	0.50	2.161	1.47	43.0	0.0	107.7
50.00		1.00	0.81	17.052	18.76	324.91	0.683*	0.000	4.50	19.535	13.34	400.4	0.0	1794.3
52.50	Top - Section 1	1.00	0.82	17.292	19.02	318.78	0.686*	0.000	2.50	10.699	7.34	223.4	0.0	982.5
55.00		1.00	0.83	17.523	19.28	312.76	0.685*	0.000	2.50	10.588	7.26	223.8	0.0	452.7
60.00		1.00	0.85	17.964	19.76	306.85	0.689*	0.000	5.00	20.846	14.36	454.0	0.0	891.1
65.00		1.00	0.87	18.380	20.22	301.05	0.694*	0.000	5.00	20.405	14.16	458.0	0.0	872.1
70.00		1.00	0.89	18.773	20.65	295.34	0.699*	0.000	5.00	19.965	13.96	461.2	0.0	853.2
75.00		1.00	0.91	19.147	21.06	289.72	0.705*	0.000	5.00	19.524	13.76	463.6	0.0	834.2
80.00		1.00	0.93	19.503	21.45	284.18	0.710*	0.000	5.00	19.083	13.56	465.4	0.0	815.2
85.00		1.00	0.94	19.844	21.83	278.71	0.716*	0.000	5.00	18.643	13.36	466.5	0.0	796.2
90.00		1.00	0.96	20.170	22.19	273.30	0.723*	0.000	5.00	18.202	13.16	467.1	0.0	777.2
92.09	Bot - Section 3	1.00	0.97	20.303	22.33	268.03	0.728*	0.000	2.09	7.466	5.43	194.1	0.0	318.7
95.00		1.00	0.97	20.484	22.53	262.91	0.731*	0.000	2.91	10.419	7.61	274.5	0.0	736.9
97.92	Top - Section 2	1.00	0.98	20.662	22.73	257.92	0.735*	0.000	2.92	10.292	7.56	275.1	0.0	727.8
100.00		1.00	0.99	20.787	22.87	253.06	0.735*	0.000	2.08	7.240	5.32	194.7	0.0	206.6
105.00		1.00	1.00	21.079	23.19	248.33	0.740*	0.000	5.00	17.091	12.65	469.4	0.0	487.8
110.00		1.00	1.02	21.361	23.50	243.74	0.748*	0.000	5.00	16.651	12.45	468.1	0.0	475.1
115.00		1.00	1.03	21.634	23.80	239.20	0.756*	0.000	5.00	16.210	12.25	466.4	0.0	462.5
120.00		1.00	1.04	21.898	24.09	234.70	0.764*	0.000	5.00	15.769	12.05	464.4	0.0	449.8
125.00		1.00	1.05	22.155	24.37	230.25	0.773*	0.000	5.00	15.328	11.85	462.0	0.0	437.1
129.00	Appurtenance(s)	1.00	1.06	22.356	24.59	225.94	0.781*	0.000	4.00	11.945	9.34	367.3	0.0	340.6
130.00	Appurtenance(s)	1.00	1.07	22.405	24.65	221.76	0.786*	0.000	1.00	2.942	2.31	91.2	0.0	83.9
135.00		1.00	1.08	22.648	24.91	217.62	0.650	0.000	5.00	14.447	9.39	374.3	0.0	411.8
139.67	Bot - Section 4	1.00	1.09	22.869	25.16	213.52	0.650	0.000	4.67	13.095	8.51	342.6	0.0	373.2
140.00		1.00	1.09	22.884	25.17	209.46	0.650	0.000	0.33	0.921	0.60	24.1	0.0	45.7
144.34	Top - Section 3	1.00	1.10	23.085	25.39	205.44	0.650	0.000	4.34	11.929	7.75	315.0	0.0	591.4
145.00		1.00	1.10	23.115	25.43	201.46	0.650	0.000	0.66	1.795	1.17	47.5	0.0	38.4
150.00	Appurtenance(s)	1.00	1.11	23.340	25.67	197.52	0.650	0.000	5.00	13.283	8.63	354.7	0.0	284.4
155.00		1.00	1.12	23.560	25.92	193.62	0.650	0.000	5.00	12.843	8.35	346.1	0.0	274.9
159.00	Appurtenance(s)	1.00	1.13	23.732	26.10	189.76	0.650	0.000	4.00	9.957	6.47	270.3	0.0	213.1
<b>Totals:</b>									<b>159.00</b>			<b>13,672.8</b>		<b>26,733.0</b>

\* CfA djusted by Linear Load RaE ffect

## Discrete Appurtenance Forces

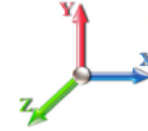
<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II
		Page: 14



**Load Case:** 0.9D + 1.6W 93 mph Wind

**Dead Load Factor** 0.90

**Wind Load Factor** 1.60



**Iterations** 22

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	
1	159.00	NHH-65C-R2B	6	23.859	26.245	0.78	1.00	53.31	278.64	0.000	3.000	2238.37	0.00	6715.11	
2	159.00	Low Profile Platform	1	23.732	26.105	1.00	1.00	40.20	1440.00	0.000	0.000	1679.07	0.00	0.00	
3	159.00	Support Rail w/ Pipes	1	23.732	26.105	0.75	0.75	6.56	387.00	0.000	0.000	274.10	0.00	0.00	
4	159.00	Kicker Kit	1	23.732	26.105	0.75	0.75	4.00	131.40	0.000	0.000	166.97	0.00	0.00	
5	159.00	DB-C1-12C-24AB-0Z	1	23.859	26.245	1.00	1.00	4.06	28.80	0.000	3.000	170.49	0.00	511.46	
6	159.00	MT6407-77A	3	23.859	26.245	0.70	1.00	9.85	214.38	0.000	3.000	413.57	0.00	1240.72	
7	159.00	TD-850B-LTE78-43	3	23.859	26.245	0.67	1.00	2.33	142.83	0.000	3.000	97.91	0.00	293.72	
8	159.00	RFV01U-D2A	3	23.859	26.245	0.67	1.00	3.78	189.81	0.000	3.000	158.68	0.00	476.03	
9	159.00	RFV01U-D1A	3	23.859	26.245	0.67	1.00	3.78	227.88	0.000	3.000	158.68	0.00	476.03	
10	150.00	MS-H1436 (Heavy Collar	1	23.340	25.674	0.75	0.75	1.69	123.03	0.000	0.000	69.32	0.00	0.00	
11	150.00	(3) T-Arm Kit	1	23.340	25.674	0.75	0.75	12.38	450.00	0.000	0.000	508.34	0.00	0.00	
12	150.00	MS-HR35	1	23.340	25.674	0.75	0.75	6.56	387.00	0.000	0.000	269.58	0.00	0.00	
13	150.00	4449 B5/B12	3	23.340	25.674	0.54	0.80	3.17	191.70	0.000	0.000	130.13	0.00	0.00	
14	150.00	KRY 112 489/2	3	23.340	25.674	0.66	0.80	1.28	41.58	0.000	0.000	52.55	0.00	0.00	
15	150.00	KRY 112 144/1	3	23.340	25.674	0.56	0.80	0.69	29.70	0.000	0.000	28.29	0.00	0.00	
16	150.00	APXVAARR24_43-U-NA2	3	23.340	25.674	0.56	0.80	34.00	345.60	0.000	0.000	1396.79	0.00	0.00	
17	150.00	APX16DWV-16DWV-S-E-	3	23.340	25.674	0.50	0.80	9.61	109.89	0.000	0.000	394.86	0.00	0.00	
18	150.00	T-Arm	3	23.340	25.674	0.56	0.75	26.32	1350.00	0.000	0.000	1081.39	0.00	0.00	
19	130.00	T-Frame	3	22.405	24.645	0.56	0.75	29.70	1485.00	0.000	0.000	1171.15	0.00	0.00	
20	130.00	Powerwave 7770.00A	6	22.405	24.645	0.58	0.80	19.15	145.80	0.000	0.000	754.99	0.00	0.00	
21	130.00	Powerwave LGP21401	24	22.405	24.645	0.40	0.80	12.38	378.00	0.000	0.000	488.33	0.00	0.00	
22	130.00	Raycap DC6-48-60-18-8F	1	22.405	24.645	1.00	1.00	0.92	29.52	0.000	0.000	36.28	0.00	0.00	
23	130.00	Commscope	3	22.405	24.645	0.54	0.80	0.08	3.08	0.000	0.000	3.17	0.00	0.00	
24	130.00	Ericsson 4478 B71 RRU	3	22.405	24.645	0.54	0.80	2.65	162.00	0.000	0.000	104.62	0.00	0.00	
25	130.00	Ericsson 4449 B5/B12	3	22.405	24.645	0.54	0.80	3.17	191.70	0.000	0.000	124.91	0.00	0.00	
26	130.00	Ericsson 8843 B2/B66A	3	22.405	24.645	0.54	0.80	2.65	202.50	0.000	0.000	104.62	0.00	0.00	
27	130.00	(6) Reinforce Kit	1	22.405	24.645	0.75	0.75	7.27	207.00	0.000	0.000	286.87	0.00	0.00	
28	129.00	DMP65R-BU8DA	6	22.356	24.591	0.66	0.80	71.19	516.78	0.000	0.000	2801.18	0.00	0.00	
29	129.00	Raycap	1	22.356	24.591	1.00	1.00	4.78	23.58	0.000	0.000	188.07	0.00	0.00	
30	129.00	Raycap	1	22.356	24.591	1.00	1.00	4.78	23.58	0.000	0.000	188.07	0.00	0.00	
<b>Totals:</b>									<b>9,437.78</b>						<b>15,541.36</b>

## Total Applied Force Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

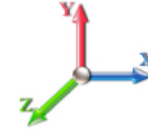


Page: 15

**Load Case:** 0.9D + 1.6W 93 mph Wind

**Dead Load Factor** 0.90

**Wind Load Factor** 1.60



**Iterations** 22

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		427.46	1514.86	0.00	0.00
10.00		420.35	1492.71	0.00	0.00
15.00		415.16	1470.56	0.00	0.00
20.00		409.96	1448.41	0.00	0.00
25.00		404.77	1426.26	0.00	0.00
30.00		399.91	1404.12	0.00	0.00
35.00		412.48	1381.97	0.00	0.00
40.00		422.87	1359.82	0.00	0.00
45.00		431.50	1337.67	0.00	0.00
45.50		42.96	132.55	0.00	0.00
50.00		400.39	2018.31	0.00	0.00
52.50		223.44	1106.88	0.00	0.00
55.00		223.75	577.11	0.00	0.00
60.00		454.02	1139.98	0.00	0.00
65.00		458.03	1120.99	0.00	0.00
70.00		461.21	1102.01	0.00	0.00
75.00		463.63	1083.03	0.00	0.00
80.00		465.38	1064.04	0.00	0.00
85.00		466.50	1045.06	0.00	0.00
90.00		467.07	1026.07	0.00	0.00
92.09		194.08	422.60	0.00	0.00
95.00		274.54	881.91	0.00	0.00
97.92		275.09	873.15	0.00	0.00
100.00		194.71	310.16	0.00	0.00
105.00		469.35	736.62	0.00	0.00
110.00		468.09	723.97	0.00	0.00
115.00		466.44	711.31	0.00	0.00
120.00		464.42	698.65	0.00	0.00
125.00		462.05	686.00	0.00	0.00
129.00	(8) attachments	3544.63	1103.63	0.00	0.00
130.00	(47) attachments	3166.19	2938.25	0.00	0.00
135.00		374.31	533.88	0.00	0.00
139.67		342.60	487.21	0.00	0.00
140.00		24.12	53.74	0.00	0.00
144.34		315.03	697.26	0.00	0.00
145.00		47.48	54.63	0.00	0.00
150.00	(21) attachments	4285.93	3434.93	0.00	0.00
155.00		346.14	335.82	0.00	0.00
159.00	(22) attachments	5628.15	3302.57	0.00	9713.08
	<b>Totals:</b>	<b>29,214.17</b>	<b>43,238.68</b>	<b>0.00</b>	<b>9,713.08</b>

## Linear Appurtenance Segment Forces (Factored)

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 16

**Load Case:** 0.9D + 1.6W 93 mph Wind

**Dead Load Factor** 0.90

**Wind Load Factor** 1.60



**Iterations** 22

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
5.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.099	0.000	14.724	0.00	14.49
10.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.100	1.001	14.724	0.00	14.49
15.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.102	1.006	14.724	0.00	14.49
20.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.104	1.012	14.724	0.00	14.49
25.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.106	1.018	14.724	0.00	14.49
30.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.108	1.024	14.736	0.00	14.49
35.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.110	1.030	15.400	0.00	14.49
40.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.112	1.036	15.999	0.00	14.49
45.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.114	1.043	16.546	0.00	14.49
45.50	3" Conduit	Yes	0.50	0.000	6.00	0.25	0.00	0.116	1.047	16.599	0.00	1.45
50.00	3" Conduit	Yes	4.50	0.000	6.00	2.25	0.00	0.117	1.051	17.052	0.00	13.04
52.50	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.119	1.056	17.292	0.00	7.25
55.00	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.118	1.054	17.523	0.00	7.25
60.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.120	1.060	17.964	0.00	14.49
65.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.123	1.068	18.380	0.00	14.49
70.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.125	1.076	18.773	0.00	14.49
75.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.128	1.084	19.147	0.00	14.49
80.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.131	1.093	19.503	0.00	14.49
85.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.134	1.102	19.844	0.00	14.49
90.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.137	1.112	20.170	0.00	14.49
92.09	3" Conduit	Yes	2.09	0.000	6.00	1.04	0.00	0.140	1.119	20.303	0.00	6.05
95.00	3" Conduit	Yes	2.91	0.000	6.00	1.46	0.00	0.141	1.124	20.484	0.00	8.44
97.92	3" Conduit	Yes	2.92	0.000	6.00	1.46	0.00	0.144	1.131	20.662	0.00	8.46
100.00	3" Conduit	Yes	2.08	0.000	6.00	1.04	0.00	0.144	1.131	20.787	0.00	6.03
105.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.146	1.139	21.079	0.00	14.49
110.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.150	1.150	21.361	0.00	14.49
115.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.154	1.163	21.634	0.00	14.49
120.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.159	1.176	21.898	0.00	14.49
125.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.163	1.189	22.155	0.00	14.49
129.00	3" Conduit	Yes	4.00	0.000	6.00	2.00	0.00	0.167	1.202	22.356	0.00	11.59
130.00	3" Conduit	Yes	1.00	0.000	6.00	0.50	0.00	0.170	1.210	22.405	0.00	2.90
<b>Totals:</b>											<b>0.0</b>	<b>376.7</b>

## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 17

**Load Case:** 0.9D + 1.6W 93 mph Wind

**Iterations** 22

**Dead Load Factor** 0.90  
**Wind Load Factor** 1.60



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-43.21	-29.26	0.00	-3457.5	0.00	3457.58	5583.09	2791.54	13786.8	6903.66	0.00	0.000	0.000	0.509
5.00	-41.63	-28.93	0.00	-3311.2	0.00	3311.27	5522.68	2761.34	13399.4	6709.67	0.07	-0.127	0.000	0.501
10.00	-40.07	-28.59	0.00	-3166.6	0.00	3166.64	5460.99	2730.49	13014.1	6516.76	0.27	-0.254	0.000	0.493
15.00	-38.54	-28.25	0.00	-3023.7	0.00	3023.70	5398.01	2699.00	12631.2	6325.01	0.61	-0.383	0.000	0.485
20.00	-37.03	-27.92	0.00	-2882.4	0.00	2882.43	5333.74	2666.87	12250.7	6134.50	1.08	-0.513	0.000	0.477
25.00	-35.55	-27.58	0.00	-2742.8	0.00	2742.85	5268.20	2634.10	11872.9	5945.31	1.68	-0.643	0.000	0.468
30.00	-34.08	-27.24	0.00	-2604.9	0.00	2604.96	5201.36	2600.68	11497.9	5757.54	2.43	-0.775	0.000	0.459
35.00	-32.65	-26.88	0.00	-2468.7	0.00	2468.76	5133.24	2566.62	11125.9	5571.26	3.31	-0.907	0.000	0.450
40.00	-31.23	-26.51	0.00	-2334.3	0.00	2334.35	5063.83	2531.92	10757.1	5386.55	4.33	-1.039	0.000	0.440
45.00	-29.87	-26.09	0.00	-2201.8	0.00	2201.80	4993.14	2496.57	10391.5	5203.50	5.49	-1.172	0.000	0.429
45.50	-29.71	-26.08	0.00	-2188.7	0.00	2188.76	4986.00	2493.00	10355.1	5185.29	5.62	-1.186	0.000	0.428
50.00	-27.66	-25.68	0.00	-2071.4	0.00	2071.40	4921.16	2460.58	10029.4	5022.20	6.79	-1.306	0.000	0.418
52.50	-26.53	-25.46	0.00	-2007.2	0.00	2007.21	4024.48	2012.24	8260.88	4136.58	7.49	-1.374	0.000	0.492
55.00	-25.91	-25.27	0.00	-1943.5	0.00	1943.55	3997.76	1998.88	8119.79	4065.93	8.23	-1.441	0.000	0.485
60.00	-24.72	-24.85	0.00	-1817.1	0.00	1817.19	3943.34	1971.67	7839.16	3925.41	9.82	-1.588	0.000	0.469
65.00	-23.55	-24.42	0.00	-1692.9	0.00	1692.93	3887.63	1943.82	7560.73	3785.98	11.56	-1.735	0.000	0.453
70.00	-22.40	-23.98	0.00	-1570.8	0.00	1570.82	3830.65	1915.32	7284.66	3647.74	13.46	-1.881	0.000	0.437
75.00	-21.27	-23.54	0.00	-1450.9	0.00	1450.90	3772.37	1886.19	7011.11	3510.77	15.51	-2.025	0.000	0.419
80.00	-20.17	-23.08	0.00	-1333.2	0.00	1333.22	3712.81	1856.40	6740.26	3375.14	17.70	-2.167	0.000	0.401
85.00	-19.09	-22.62	0.00	-1217.8	0.00	1217.81	3651.96	1825.98	6472.27	3240.95	20.05	-2.307	0.000	0.381
90.00	-18.05	-22.14	0.00	-1104.7	0.00	1104.71	3589.83	1794.92	6207.31	3108.27	22.54	-2.443	0.000	0.361
92.09	-17.61	-21.95	0.00	-1058.5	0.00	1058.51	3563.52	1781.76	6097.66	3053.36	23.62	-2.500	0.000	0.352
95.00	-16.71	-21.66	0.00	-994.56	0.00	994.56	3526.41	1763.21	5945.54	2977.19	25.17	-2.578	0.000	0.339
97.92	-15.83	-21.36	0.00	-931.31	0.00	931.31	2018.06	1009.03	3414.14	1709.61	26.77	-2.655	0.000	0.553
100.00	-15.48	-21.19	0.00	-886.88	0.00	886.88	2007.23	1003.61	3359.78	1682.39	27.94	-2.709	0.000	0.535
105.00	-14.71	-20.73	0.00	-780.95	0.00	780.95	1980.26	990.13	3229.23	1617.01	30.87	-2.885	0.000	0.491
110.00	-13.95	-20.26	0.00	-677.32	0.00	677.32	1952.01	976.01	3098.96	1551.78	33.98	-3.051	0.000	0.444
115.00	-13.22	-19.79	0.00	-576.02	0.00	576.02	1922.48	961.24	2969.14	1486.78	37.26	-3.206	0.000	0.395
120.00	-12.50	-19.31	0.00	-477.08	0.00	477.08	1891.66	945.83	2839.95	1422.08	40.70	-3.347	0.000	0.343
125.00	-11.81	-18.83	0.00	-380.51	0.00	380.51	1859.56	929.78	2711.53	1357.78	44.27	-3.472	0.000	0.287
129.00	-10.91	-15.24	0.00	-305.17	0.00	305.17	1832.95	916.47	2609.48	1306.68	47.22	-3.560	0.000	0.240
130.00	-8.16	-11.90	0.00	-289.93	0.00	289.93	1826.17	913.08	2584.07	1293.95	47.97	-3.580	0.000	0.229
135.00	-7.64	-11.51	0.00	-230.41	0.00	230.41	1791.49	895.74	2457.72	1230.69	51.76	-3.671	0.000	0.192
139.67	-7.17	-11.14	0.00	-176.67	0.00	176.67	1757.94	878.97	2340.87	1172.18	55.39	-3.743	0.000	0.155
140.00	-7.11	-11.12	0.00	-173.00	0.00	173.00	1755.53	877.76	2332.66	1168.06	55.65	-3.748	0.000	0.152
144.34	-6.43	-10.76	0.00	-124.80	0.00	124.80	1153.87	576.93	1513.89	758.07	59.08	-3.802	0.000	0.171
145.00	-6.37	-10.71	0.00	-117.66	0.00	117.66	1151.46	575.73	1504.14	753.19	59.61	-3.810	0.000	0.162
150.00	-3.23	-6.21	0.00	-64.11	0.00	64.11	1132.60	566.30	1430.64	716.38	63.63	-3.863	0.000	0.092
155.00	-2.91	-5.84	0.00	-33.07	0.00	33.07	1112.45	556.22	1357.20	679.61	67.69	-3.895	0.000	0.051
159.00	0.00	-5.63	0.00	-9.71	0.00	9.71	1095.40	547.70	1298.60	650.26	70.96	-3.908	0.000	0.015



## Wind Loading - Shaft

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



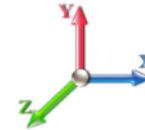
Page: 18

**Load Case:** 1.2D + 1.0Di + 1.0Wi 40 mph Wind

**Iterations** 22

**Dead Load Factor** 1.20

**Wind Load Factor** 1.00



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	2.724	3.00	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	2.724	3.00	0.00	1.200	1.656	5.00	26.757	32.11	96.2	634.0	2322.0
10.00		1.00	0.70	2.724	3.00	0.00	1.201*	1.775	5.00	26.415	31.72	95.0	669.2	2327.7
15.00		1.00	0.70	2.724	3.00	0.00	1.207*	1.848	5.00	26.036	31.44	94.2	685.7	2314.6
20.00		1.00	0.70	2.724	3.00	0.00	1.214*	1.902	5.00	25.640	31.13	93.3	693.9	2293.3
25.00		1.00	0.70	2.724	3.00	0.00	1.221*	1.945	5.00	25.235	30.82	92.3	697.4	2267.2
30.00		1.00	0.70	2.726	3.00	0.00	1.228*	1.981	5.00	24.824	30.49	91.4	697.7	2238.1
35.00		1.00	0.73	2.849	3.13	0.00	1.236*	2.012	5.00	24.409	30.17	94.5	695.8	2206.6
40.00		1.00	0.76	2.960	3.26	0.00	1.244*	2.039	5.00	23.991	29.84	97.1	692.2	2173.5
45.00		1.00	0.79	3.061	3.37	0.00	1.252*	2.063	5.00	23.570	29.51	99.4	687.2	2139.0
45.50 Bot - Section 2		1.00	0.79	3.071	3.38	0.00	1.256*	2.065	0.50	2.333	2.93	9.9	68.7	212.2
50.00		1.00	0.81	3.155	3.47	0.00	1.261*	2.085	4.50	21.099	26.60	92.3	621.9	3014.3
52.50 Top - Section 1		1.00	0.82	3.199	3.52	0.00	1.267*	2.095	2.50	11.571	14.66	51.6	343.8	1653.8
55.00		1.00	0.83	3.242	3.57	0.00	1.265*	2.105	2.50	11.465	14.50	51.7	342.1	945.6
60.00		1.00	0.85	3.323	3.66	0.00	1.272*	2.123	5.00	22.616	28.76	105.1	676.5	1864.6
65.00		1.00	0.87	3.400	3.74	0.00	1.281*	2.140	5.00	22.189	28.43	106.3	668.2	1831.0
70.00		1.00	0.89	3.473	3.82	0.00	1.291*	2.156	5.00	21.762	28.09	107.3	659.3	1796.8
75.00		1.00	0.91	3.542	3.90	0.00	1.301*	2.171	5.00	21.333	27.75	108.1	649.8	1762.1
80.00		1.00	0.93	3.608	3.97	0.00	1.312*	2.185	5.00	20.904	27.42	108.8	640.0	1726.9
85.00		1.00	0.94	3.671	4.04	0.00	1.323*	2.198	5.00	20.475	27.08	109.4	629.7	1691.3
90.00		1.00	0.96	3.731	4.10	0.00	1.334*	2.211	5.00	20.044	26.75	109.8	619.1	1655.3
92.09 Bot - Section 3		1.00	0.97	3.756	4.13	0.00	1.343*	2.216	2.09	8.237	11.06	45.7	256.5	681.4
95.00		1.00	0.97	3.789	4.17	0.00	1.349*	2.223	2.91	11.498	15.51	64.7	358.4	1340.9
97.92 Top - Section 2		1.00	0.98	3.822	4.20	0.00	1.357*	2.230	2.92	11.377	15.44	64.9	355.4	1325.8
100.00		1.00	0.99	3.845	4.23	0.00	1.357*	2.234	2.08	8.014	10.88	46.0	251.2	526.7
105.00		1.00	1.00	3.899	4.29	0.00	1.367*	2.245	5.00	18.962	25.91	111.2	592.2	1242.6
110.00		1.00	1.02	3.952	4.35	0.00	1.381*	2.256	5.00	18.530	25.58	111.2	580.4	1213.9
115.00		1.00	1.03	4.002	4.40	0.00	1.395*	2.266	5.00	18.098	25.25	111.2	568.3	1184.9
120.00		1.00	1.04	4.051	4.46	0.00	1.411*	2.276	5.00	17.665	24.92	111.1	556.0	1155.8
125.00		1.00	1.05	4.099	4.51	0.00	1.427*	2.285	5.00	17.232	24.59	110.9	543.5	1126.4
129.00 Appurtenance(s)		1.00	1.06	4.136	4.55	0.00	1.443*	2.292	4.00	13.473	19.44	88.4	426.7	880.8
130.00 Appurtenance(s)		1.00	1.07	4.145	4.56	0.00	1.452*	2.294	1.00	3.325	4.83	22.0	106.2	218.0
135.00		1.00	1.08	4.190	4.61	0.00	1.200	2.303	5.00	16.366	19.64	90.5	517.9	1067.0
139.67 Bot - Section 4		1.00	1.09	4.231	4.65	0.00	1.200	2.310	4.67	14.894	17.87	83.2	472.3	970.0
140.00		1.00	1.09	4.233	4.66	0.00	1.200	2.311	0.33	1.048	1.26	5.9	33.7	94.6
144.34 Top - Section 3		1.00	1.10	4.270	4.70	0.00	1.200	2.318	4.34	13.604	16.32	76.7	432.6	1221.2
145.00		1.00	1.10	4.276	4.70	0.00	1.200	2.319	0.66	2.052	2.46	11.6	65.9	117.2
150.00 Appurtenance(s)		1.00	1.11	4.318	4.75	0.00	1.200	2.327	5.00	15.223	18.27	86.8	483.6	862.8
155.00		1.00	1.12	4.358	4.79	0.00	1.200	2.335	5.00	14.788	17.75	85.1	470.1	836.6
159.00 Appurtenance(s)		1.00	1.13	4.390	4.83	0.00	1.200	2.341	4.00	11.517	13.82	66.7	367.3	651.4
<b>Totals:</b>								<b>159.00</b>			<b>3,207.4</b>	<b>55,154.0</b>		

\* CfA djusted by Linear Load RaE effect

## Discrete Appurtenance Forces

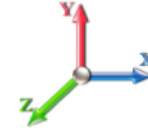
<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 19

**Load Case:** 1.2D + 1.0Di + 1.0Wi 40 mph Wind

**Dead Load Factor** 1.20  
**Wind Load Factor** 1.00



**Iterations** 22

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	159.00	NHH-65C-R2B	6	4.414	4.855	0.78	1.00	63.80	2618.59	0.000	3.000	309.74	0.00	929.22
2	159.00	Low Profile Platform	1	4.390	4.829	1.00	1.00	85.36	3892.44	0.000	0.000	412.24	0.00	0.00
3	159.00	Support Rail w/ Pipes	1	4.390	4.829	0.75	0.75	15.16	1630.38	0.000	0.000	73.23	0.00	0.00
4	159.00	Kicker Kit	1	4.390	4.829	0.75	0.75	9.61	384.58	0.000	0.000	46.42	0.00	0.00
5	159.00	DB-C1-12C-24AB-0Z	1	4.414	4.855	1.00	1.00	5.16	162.59	0.000	3.000	25.06	0.00	75.19
6	159.00	MT6407-77A	3	4.414	4.855	0.70	1.00	12.56	801.95	0.000	3.000	60.98	0.00	182.94
7	159.00	TD-850B-LTE78-43	3	4.414	4.855	0.67	1.00	4.51	329.09	0.000	3.000	21.92	0.00	65.75
8	159.00	RFV01U-D2A	3	4.414	4.855	0.67	1.00	5.26	413.95	0.000	3.000	25.56	0.00	76.68
9	159.00	RFV01U-D1A	3	4.414	4.855	0.67	1.00	5.26	404.47	0.000	3.000	25.56	0.00	76.68
10	150.00	MS-H1436 (Heavy Collar	1	4.318	4.749	0.75	0.75	4.04	358.42	0.000	0.000	19.20	0.00	0.00
11	150.00	(3) T-Arm Kit	1	4.318	4.749	0.75	0.75	28.50	1241.16	0.000	0.000	135.36	0.00	0.00
12	150.00	MS-HR35	1	4.318	4.749	0.75	0.75	15.11	1626.40	0.000	0.000	71.78	0.00	0.00
13	150.00	4449 B5/B12	3	4.318	4.749	0.54	0.80	4.34	428.32	0.000	0.000	20.62	0.00	0.00
14	150.00	KRY 112 489/2	3	4.318	4.749	0.66	0.80	2.89	110.92	0.000	0.000	13.70	0.00	0.00
15	150.00	KRY 112 144/1	3	4.318	4.749	0.56	0.80	1.75	73.42	0.000	0.000	8.33	0.00	0.00
16	150.00	APXVAARR24_43-U-NA2	3	4.318	4.749	0.56	0.80	38.31	2204.04	0.000	0.000	181.96	0.00	0.00
17	150.00	APX16DWV-16DWV-S-E-	3	4.318	4.749	0.50	0.80	11.87	736.71	0.000	0.000	56.38	0.00	0.00
18	150.00	T-Arm	3	4.318	4.749	0.56	0.75	56.95	3436.17	0.000	0.000	270.50	0.00	0.00
19	130.00	T-Frame	3	4.145	4.559	0.56	0.75	63.76	3703.97	0.000	0.000	290.72	0.00	0.00
20	130.00	Powerwave 7770.00A	6	4.145	4.559	0.58	0.80	28.84	899.58	0.000	0.000	131.50	0.00	0.00
21	130.00	Powerwave LGP21401	24	4.145	4.559	0.40	0.80	22.93	1394.05	0.000	0.000	104.54	0.00	0.00
22	130.00	Raycap DC6-48-60-18-8F	1	4.145	4.559	1.00	1.00	1.50	106.48	0.000	0.000	6.82	0.00	0.00
23	130.00	Commscope	3	4.145	4.559	0.54	0.80	0.49	11.24	0.000	0.000	2.22	0.00	0.00
24	130.00	Ericsson 4478 B71 RRU	3	4.145	4.559	0.54	0.80	3.75	354.76	0.000	0.000	17.09	0.00	0.00
25	130.00	Ericsson 4449 B5/B12	3	4.145	4.559	0.54	0.80	4.32	425.29	0.000	0.000	19.72	0.00	0.00
26	130.00	Ericsson 8843 B2/B66A	3	4.145	4.559	0.54	0.80	4.47	629.59	0.000	0.000	20.37	0.00	0.00
27	130.00	(6) Reinforce Kit	1	4.145	4.559	0.75	0.75	17.29	597.08	0.000	0.000	78.82	0.00	0.00
28	129.00	DMP65R-BU8DA	6	4.136	4.549	0.66	0.80	80.86	3788.45	0.000	0.000	367.85	0.00	0.00
29	129.00	Raycap	1	4.136	4.549	1.00	1.00	5.94	277.95	0.000	0.000	27.03	0.00	0.00
30	129.00	Raycap	1	4.136	4.549	1.00	1.00	5.94	277.95	0.000	0.000	27.03	0.00	0.00
<b>Totals:</b>									<b>33,319.98</b>			<b>2,872.24</b>		

## Total Applied Force Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

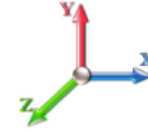


Page: 20

**Load Case:** 1.2D + 1.0Di + 1.0Wi 40 mph Wind

**Dead Load Factor** 1.20

**Wind Load Factor** 1.00



**Iterations** 22

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		96.20	2716.70	0.00	0.00
10.00		95.05	2727.65	0.00	0.00
15.00		94.19	2717.92	0.00	0.00
20.00		93.27	2699.11	0.00	0.00
25.00		92.33	2675.06	0.00	0.00
30.00		91.44	2647.56	0.00	0.00
35.00		94.54	2617.59	0.00	0.00
40.00		97.14	2585.74	0.00	0.00
45.00		99.35	2552.42	0.00	0.00
45.50		9.90	253.57	0.00	0.00
50.00		92.30	3387.38	0.00	0.00
52.50		51.59	1861.27	0.00	0.00
55.00		51.72	1153.37	0.00	0.00
60.00		105.14	2281.02	0.00	0.00
65.00		106.31	2248.24	0.00	0.00
70.00		107.31	2214.83	0.00	0.00
75.00		108.13	2180.85	0.00	0.00
80.00		108.81	2146.37	0.00	0.00
85.00		109.36	2111.45	0.00	0.00
90.00		109.79	2076.12	0.00	0.00
92.09		45.70	857.15	0.00	0.00
95.00		64.67	1586.42	0.00	0.00
97.92		64.91	1572.06	0.00	0.00
100.00		46.01	702.22	0.00	0.00
105.00		111.15	1665.07	0.00	0.00
110.00		111.20	1636.91	0.00	0.00
115.00		111.16	1608.49	0.00	0.00
120.00		111.05	1579.81	0.00	0.00
125.00		110.88	1550.90	0.00	0.00
129.00	(8) attachments	510.33	5565.09	0.00	0.00
130.00	(47) attachments	693.80	8425.03	0.00	0.00
135.00		90.51	1229.74	0.00	0.00
139.67		83.17	1121.93	0.00	0.00
140.00		5.86	105.33	0.00	0.00
144.34		76.69	1362.30	0.00	0.00
145.00		11.58	138.78	0.00	0.00
150.00	(21) attachments	864.60	11241.11	0.00	0.00
155.00		85.08	917.87	0.00	0.00
159.00	(22) attachments	1067.45	11354.48	0.00	1406.46
	<b>Totals:</b>	<b>6,079.68</b>	<b>100,074.93</b>	<b>0.00</b>	<b>1,406.46</b>

## Linear Appurtenance Segment Forces (Factored)

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 21

**Load Case:** 1.2D + 1.0Di + 1.0Wi 40 mph Wind

**Iterations** 22

**Dead Load Factor** 1.20

**Wind Load Factor** 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
5.00	3" Conduit	Yes	5.00	0.000	6.00	3.88	0.00	0.099	0.000	2.724	0.00	82.23
10.00	3" Conduit	Yes	5.00	0.000	6.00	3.98	0.00	0.100	1.001	2.724	0.00	87.49
15.00	3" Conduit	Yes	5.00	0.000	6.00	4.04	0.00	0.102	1.006	2.724	0.00	90.83
20.00	3" Conduit	Yes	5.00	0.000	6.00	4.09	0.00	0.104	1.012	2.724	0.00	93.32
25.00	3" Conduit	Yes	5.00	0.000	6.00	4.12	0.00	0.106	1.018	2.724	0.00	95.33
30.00	3" Conduit	Yes	5.00	0.000	6.00	4.15	0.00	0.108	1.024	2.726	0.00	97.03
35.00	3" Conduit	Yes	5.00	0.000	6.00	4.18	0.00	0.110	1.030	2.849	0.00	98.50
40.00	3" Conduit	Yes	5.00	0.000	6.00	4.20	0.00	0.112	1.036	2.960	0.00	99.80
45.00	3" Conduit	Yes	5.00	0.000	6.00	4.22	0.00	0.114	1.043	3.061	0.00	100.97
45.50	3" Conduit	Yes	0.50	0.000	6.00	0.42	0.00	0.116	1.047	3.071	0.00	10.11
50.00	3" Conduit	Yes	4.50	0.000	6.00	3.81	0.00	0.117	1.051	3.155	0.00	91.83
52.50	3" Conduit	Yes	2.50	0.000	6.00	2.12	0.00	0.119	1.056	3.199	0.00	51.26
55.00	3" Conduit	Yes	2.50	0.000	6.00	2.13	0.00	0.118	1.054	3.242	0.00	51.50
60.00	3" Conduit	Yes	5.00	0.000	6.00	4.27	0.00	0.120	1.060	3.323	0.00	103.91
65.00	3" Conduit	Yes	5.00	0.000	6.00	4.28	0.00	0.123	1.068	3.400	0.00	104.75
70.00	3" Conduit	Yes	5.00	0.000	6.00	4.30	0.00	0.125	1.076	3.473	0.00	105.54
75.00	3" Conduit	Yes	5.00	0.000	6.00	4.31	0.00	0.128	1.084	3.542	0.00	106.29
80.00	3" Conduit	Yes	5.00	0.000	6.00	4.32	0.00	0.131	1.093	3.608	0.00	106.99
85.00	3" Conduit	Yes	5.00	0.000	6.00	4.33	0.00	0.134	1.102	3.671	0.00	107.65
90.00	3" Conduit	Yes	5.00	0.000	6.00	4.34	0.00	0.137	1.112	3.731	0.00	108.29
92.09	3" Conduit	Yes	2.09	0.000	6.00	1.81	0.00	0.140	1.119	3.756	0.00	45.30
95.00	3" Conduit	Yes	2.91	0.000	6.00	2.54	0.00	0.141	1.124	3.789	0.00	63.45
97.92	3" Conduit	Yes	2.92	0.000	6.00	2.55	0.00	0.144	1.131	3.822	0.00	63.79
100.00	3" Conduit	Yes	2.08	0.000	6.00	1.81	0.00	0.144	1.131	3.845	0.00	45.54
105.00	3" Conduit	Yes	5.00	0.000	6.00	4.37	0.00	0.146	1.139	3.899	0.00	110.02
110.00	3" Conduit	Yes	5.00	0.000	6.00	4.38	0.00	0.150	1.150	3.952	0.00	110.56
115.00	3" Conduit	Yes	5.00	0.000	6.00	4.39	0.00	0.154	1.163	4.002	0.00	111.07
120.00	3" Conduit	Yes	5.00	0.000	6.00	4.40	0.00	0.159	1.176	4.051	0.00	111.56
125.00	3" Conduit	Yes	5.00	0.000	6.00	4.40	0.00	0.163	1.189	4.099	0.00	112.04
129.00	3" Conduit	Yes	4.00	0.000	6.00	3.53	0.00	0.167	1.202	4.136	0.00	89.93
130.00	3" Conduit	Yes	1.00	0.000	6.00	0.88	0.00	0.170	1.210	4.145	0.00	22.50
<b>Totals:</b>											<b>0.0</b>	<b>2,679.4</b>

## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 22

**Load Case:** 1.2D + 1.0Di + 1.0Wi 40 mph Wind

**Iterations** 22

**Dead Load Factor** 1.20  
**Wind Load Factor** 1.00



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-100.0	-6.10	0.00	-739.23	0.00	739.23	5583.09	2791.54	13786.8	6903.66	0.00	0.000	0.000	0.125
5.00	-97.35	-6.05	0.00	-708.71	0.00	708.71	5522.68	2761.34	13399.4	6709.67	0.01	-0.027	0.000	0.123
10.00	-94.62	-6.00	0.00	-678.45	0.00	678.45	5460.99	2730.49	13014.1	6516.76	0.06	-0.054	0.000	0.121
15.00	-91.90	-5.95	0.00	-648.44	0.00	648.44	5398.01	2699.00	12631.2	6325.01	0.13	-0.082	0.000	0.120
20.00	-89.20	-5.89	0.00	-618.70	0.00	618.70	5333.74	2666.87	12250.7	6134.50	0.23	-0.110	0.000	0.118
25.00	-86.52	-5.84	0.00	-589.23	0.00	589.23	5268.20	2634.10	11872.9	5945.31	0.36	-0.138	0.000	0.116
30.00	-83.87	-5.78	0.00	-560.04	0.00	560.04	5201.36	2600.68	11497.9	5757.54	0.52	-0.166	0.000	0.113
35.00	-81.25	-5.72	0.00	-531.13	0.00	531.13	5133.24	2566.62	11125.9	5571.26	0.71	-0.195	0.000	0.111
40.00	-78.66	-5.65	0.00	-502.54	0.00	502.54	5063.83	2531.92	10757.1	5386.55	0.93	-0.223	0.000	0.109
45.00	-76.11	-5.56	0.00	-474.28	0.00	474.28	4993.14	2496.57	10391.5	5203.50	1.18	-0.252	0.000	0.106
45.50	-75.86	-5.57	0.00	-471.50	0.00	471.50	4986.00	2493.00	10355.1	5185.29	1.20	-0.255	0.000	0.106
50.00	-72.47	-5.49	0.00	-446.43	0.00	446.43	4921.16	2460.58	10029.4	5022.20	1.46	-0.280	0.000	0.104
52.50	-70.61	-5.45	0.00	-432.71	0.00	432.71	4024.48	2012.24	8260.88	4136.58	1.61	-0.295	0.000	0.122
55.00	-69.45	-5.42	0.00	-419.10	0.00	419.10	3997.76	1998.88	8119.79	4065.93	1.77	-0.310	0.000	0.120
60.00	-67.17	-5.33	0.00	-392.02	0.00	392.02	3943.34	1971.67	7839.16	3925.41	2.11	-0.341	0.000	0.117
65.00	-64.92	-5.25	0.00	-365.35	0.00	365.35	3887.63	1943.82	7560.73	3785.98	2.48	-0.373	0.000	0.113
70.00	-62.70	-5.16	0.00	-339.10	0.00	339.10	3830.65	1915.32	7284.66	3647.74	2.89	-0.404	0.000	0.109
75.00	-60.52	-5.07	0.00	-313.29	0.00	313.29	3772.37	1886.19	7011.11	3510.77	3.33	-0.436	0.000	0.105
80.00	-58.37	-4.98	0.00	-287.94	0.00	287.94	3712.81	1856.40	6740.26	3375.14	3.80	-0.466	0.000	0.101
85.00	-56.26	-4.88	0.00	-263.06	0.00	263.06	3651.96	1825.98	6472.27	3240.95	4.31	-0.496	0.000	0.097
90.00	-54.18	-4.77	0.00	-238.67	0.00	238.67	3589.83	1794.92	6207.31	3108.27	4.84	-0.526	0.000	0.092
92.09	-53.32	-4.73	0.00	-228.72	0.00	228.72	3563.52	1781.76	6097.66	3053.36	5.08	-0.538	0.000	0.090
95.00	-51.73	-4.66	0.00	-214.94	0.00	214.94	3526.41	1763.21	5945.54	2977.19	5.41	-0.555	0.000	0.087
97.92	-50.16	-4.60	0.00	-201.32	0.00	201.32	2018.06	1009.03	3414.14	1709.61	5.76	-0.572	0.000	0.143
100.00	-49.46	-4.57	0.00	-191.76	0.00	191.76	2007.23	1003.61	3359.78	1682.39	6.01	-0.583	0.000	0.139
105.00	-47.79	-4.47	0.00	-168.94	0.00	168.94	1980.26	990.13	3229.23	1617.01	6.64	-0.621	0.000	0.129
110.00	-46.15	-4.37	0.00	-146.60	0.00	146.60	1952.01	976.01	3098.96	1551.78	7.31	-0.657	0.000	0.118
115.00	-44.54	-4.26	0.00	-124.77	0.00	124.77	1922.48	961.24	2969.14	1486.78	8.02	-0.691	0.000	0.107
120.00	-42.96	-4.15	0.00	-103.47	0.00	103.47	1891.66	945.83	2839.95	1422.08	8.76	-0.722	0.000	0.095
125.00	-41.41	-4.04	0.00	-82.71	0.00	82.71	1859.56	929.78	2711.53	1357.78	9.53	-0.749	0.000	0.083
129.00	-35.85	-3.46	0.00	-66.56	0.00	66.56	1832.95	916.47	2609.48	1306.68	10.16	-0.768	0.000	0.071
130.00	-27.44	-2.66	0.00	-63.09	0.00	63.09	1826.17	913.08	2584.07	1293.95	10.33	-0.772	0.000	0.064
135.00	-26.21	-2.56	0.00	-49.80	0.00	49.80	1791.49	895.74	2457.72	1230.69	11.14	-0.792	0.000	0.055
139.67	-25.09	-2.47	0.00	-37.84	0.00	37.84	1757.94	878.97	2340.87	1172.18	11.93	-0.807	0.000	0.047
140.00	-24.98	-2.46	0.00	-37.02	0.00	37.02	1755.53	877.76	2332.66	1168.06	11.98	-0.808	0.000	0.046
144.34	-23.62	-2.37	0.00	-26.35	0.00	26.35	1153.87	576.93	1513.89	758.07	12.72	-0.820	0.000	0.055
145.00	-23.48	-2.36	0.00	-24.78	0.00	24.78	1151.46	575.73	1504.14	753.19	12.84	-0.822	0.000	0.053
150.00	-12.25	-1.33	0.00	-13.00	0.00	13.00	1132.60	566.30	1430.64	716.38	13.70	-0.833	0.000	0.029
155.00	-11.34	-1.23	0.00	-6.34	0.00	6.34	1112.45	556.22	1357.20	679.61	14.58	-0.839	0.000	0.020
159.00	0.00	-1.07	0.00	-1.41	0.00	1.41	1095.40	547.70	1298.60	650.26	15.29	-0.841	0.000	0.002

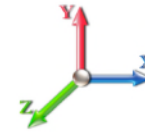
## Seismic Segment Forces (Factored)

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 23

<b>Load Case:</b> 1.2D + 1.0E						<b>Iterations</b> 20
<b>Gust Response Factor</b>	1.10			<b>Sds</b>	0.19	<b>Ss</b> 0.18
<b>Dead Load Factor</b>	1.20	<b>Seismic Load Factor</b>	1.00	<b>Sd1</b>	0.10	<b>S1</b> 0.07
<b>Wind Load Factor</b>	0.00	<b>Structure Frequency (f1)</b>	0.37	<b>SA</b>	0.04	<b>Seismic Importance Factor</b> 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1406.6	0.00	0.03	0.02	23.36	
10.00		1382.0	0.01	0.05	0.03	34.11	
15.00		1357.4	0.02	0.06	0.04	39.21	
20.00		1332.8	0.03	0.07	0.04	41.50	
25.00		1308.2	0.05	0.07	0.04	42.45	
30.00		1283.6	0.07	0.07	0.04	42.83	
35.00		1259.0	0.09	0.07	0.04	43.03	
40.00		1234.4	0.12	0.07	0.03	43.15	
45.00		1209.8	0.15	0.07	0.03	43.10	
45.50	Bot - Section 2	119.63	0.15	0.07	0.03	4.27	
50.00		1993.7	0.19	0.06	0.02	71.67	
52.50	Top - Section 1	1091.6	0.21	0.06	0.02	39.16	
55.00		502.98	0.23	0.06	0.02	17.89	
60.00		990.14	0.27	0.05	0.02	33.66	
65.00		969.05	0.32	0.04	0.01	29.72	
70.00		947.96	0.37	0.03	0.01	23.76	
75.00		926.86	0.42	0.01	0.01	15.70	
80.00		905.77	0.48	-0.01	0.01	5.93	
85.00		884.67	0.54	-0.03	0.01	-4.53	
90.00		863.58	0.61	-0.05	0.02	-14.19	
92.09	Bot - Section 3	354.16	0.63	-0.07	0.02	-7.31	
95.00		818.79	0.67	-0.08	0.03	-21.01	
97.92	Top - Section 2	808.69	0.72	-0.09	0.03	-23.88	
100.00		229.60	0.75	-0.10	0.04	-7.23	
105.00		541.97	0.82	-0.12	0.06	-17.93	
110.00		527.91	0.90	-0.12	0.09	-15.93	
115.00		513.85	0.99	-0.11	0.13	-11.66	
120.00		499.78	1.08	-0.08	0.17	-5.32	
125.00		485.72	1.17	-0.02	0.23	2.89	
129.00	Appurtenance(s)	1005.0	1.24	0.05	0.29	22.61	
130.00	Appurtenance(s)	3209.4	1.26	0.07	0.30	86.94	
135.00		457.59	1.36	0.22	0.39	24.16	
139.67	Bot - Section 4	414.69	1.46	0.40	0.49	33.59	
140.00		50.76	1.47	0.42	0.50	4.22	
144.34	Top - Section 3	657.12	1.56	0.65	0.61	74.45	
145.00		42.71	1.57	0.69	0.63	5.05	
150.00	Appurtenance(s)	3680.9	1.68	1.06	0.79	581.96	
155.00		305.44	1.80	1.52	0.97	61.97	
159.00	Appurtenance(s)	3615.3	1.89	1.98	1.14	876.00	
<b>Totals:</b>		<b>40,189.7</b>				<b>2,239.4</b>	<b>Total Wind: 29,214.2</b>

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

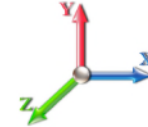
## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 24

<b>Load Case:</b> 1.2D + 1.0E						<b>Iterations</b> 20
<b>Gust Response Factor</b>	1.10			<b>Sds</b>	0.19	<b>Ss</b> 0.18
<b>Dead Load Factor</b>	1.20	<b>Seismic Load Factor</b>	1.00	<b>Sd1</b>	0.10	<b>S1</b> 0.07
<b>Wind Load Factor</b>	0.00	<b>Structure Frequency (f1)</b>	0.37	<b>SA</b>	0.04	<b>Seismic Importance Factor</b> 1.00



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-57.65	-2.37	0.00	-306.17	0.00	306.17	5583.09	2791.54	13786.8	6903.66	0.00	0.00	0.00	0.055
5.00	-55.63	-2.36	0.00	-294.31	0.00	294.31	5522.68	2761.34	13399.4	6709.67	0.01	-0.01	0.054	
10.00	-53.64	-2.34	0.00	-282.51	0.00	282.51	5460.99	2730.49	13014.1	6516.76	0.02	-0.02	0.053	
15.00	-51.68	-2.31	0.00	-270.83	0.00	270.83	5398.01	2699.00	12631.2	6325.01	0.05	-0.03	0.052	
20.00	-49.75	-2.27	0.00	-259.29	0.00	259.29	5333.74	2666.87	12250.7	6134.50	0.10	-0.05	0.052	
25.00	-47.85	-2.24	0.00	-247.92	0.00	247.92	5268.20	2634.10	11872.9	5945.31	0.15	-0.06	0.051	
30.00	-45.97	-2.20	0.00	-236.73	0.00	236.73	5201.36	2600.68	11497.9	5757.54	0.22	-0.07	0.050	
35.00	-44.13	-2.17	0.00	-225.71	0.00	225.71	5133.24	2566.62	11125.9	5571.26	0.30	-0.08	0.049	
40.00	-42.32	-2.13	0.00	-214.87	0.00	214.87	5063.83	2531.92	10757.1	5386.55	0.39	-0.09	0.048	
45.00	-40.53	-2.09	0.00	-204.21	0.00	204.21	4993.14	2496.57	10391.5	5203.50	0.49	-0.11	0.047	
45.50	-40.36	-2.09	0.00	-203.17	0.00	203.17	4986.00	2493.00	10355.1	5185.29	0.50	-0.11	0.047	
50.00	-37.66	-2.02	0.00	-193.76	0.00	193.76	4921.16	2460.58	10029.4	5022.20	0.61	-0.12	0.046	
52.50	-36.19	-1.98	0.00	-188.72	0.00	188.72	4024.48	2012.24	8260.88	4136.58	0.67	-0.12	0.055	
55.00	-35.42	-1.97	0.00	-183.77	0.00	183.77	3997.76	1998.88	8119.79	4065.93	0.74	-0.13	0.054	
60.00	-33.90	-1.94	0.00	-173.93	0.00	173.93	3943.34	1971.67	7839.16	3925.41	0.89	-0.15	0.053	
65.00	-32.40	-1.91	0.00	-164.24	0.00	164.24	3887.63	1943.82	7560.73	3785.98	1.05	-0.16	0.052	
70.00	-30.93	-1.89	0.00	-154.68	0.00	154.68	3830.65	1915.32	7284.66	3647.74	1.22	-0.17	0.050	
75.00	-29.49	-1.88	0.00	-145.22	0.00	145.22	3772.37	1886.19	7011.11	3510.77	1.41	-0.19	0.049	
80.00	-28.07	-1.88	0.00	-135.83	0.00	135.83	3712.81	1856.40	6740.26	3375.14	1.61	-0.20	0.048	
85.00	-26.68	-1.88	0.00	-126.45	0.00	126.45	3651.96	1825.98	6472.27	3240.95	1.83	-0.22	0.046	
90.00	-25.31	-1.88	0.00	-117.07	0.00	117.07	3589.83	1794.92	6207.31	3108.27	2.07	-0.23	0.045	
92.09	-24.74	-1.88	0.00	-113.15	0.00	113.15	3563.52	1781.76	6097.66	3053.36	2.17	-0.24	0.044	
95.00	-23.57	-1.88	0.00	-107.69	0.00	107.69	3526.41	1763.21	5945.54	2977.19	2.32	-0.25	0.043	
97.92	-22.40	-1.87	0.00	-102.21	0.00	102.21	2018.06	1009.03	3414.14	1709.61	2.47	-0.25	0.071	
100.00	-21.99	-1.88	0.00	-98.31	0.00	98.31	2007.23	1003.61	3359.78	1682.39	2.58	-0.26	0.069	
105.00	-21.01	-1.88	0.00	-88.93	0.00	88.93	1980.26	990.13	3229.23	1617.01	2.86	-0.28	0.066	
110.00	-20.04	-1.88	0.00	-79.54	0.00	79.54	1952.01	976.01	3098.96	1551.78	3.17	-0.30	0.062	
115.00	-19.09	-1.88	0.00	-70.13	0.00	70.13	1922.48	961.24	2969.14	1486.78	3.49	-0.32	0.057	
120.00	-18.16	-1.88	0.00	-60.73	0.00	60.73	1891.66	945.83	2839.95	1422.08	3.83	-0.33	0.052	
125.00	-17.24	-1.88	0.00	-51.32	0.00	51.32	1859.56	929.78	2711.53	1357.78	4.19	-0.35	0.047	
129.00	-15.77	-1.85	0.00	-43.81	0.00	43.81	1832.95	916.47	2609.48	1306.68	4.49	-0.36	0.042	
130.00	-11.86	-1.74	0.00	-41.96	0.00	41.96	1826.17	913.08	2584.07	1293.95	4.57	-0.37	0.039	
135.00	-11.14	-1.71	0.00	-33.27	0.00	33.27	1791.49	895.74	2457.72	1230.69	4.96	-0.38	0.033	
139.67	-10.49	-1.67	0.00	-25.28	0.00	25.28	1757.94	878.97	2340.87	1172.18	5.33	-0.39	0.028	
140.00	-10.42	-1.67	0.00	-24.72	0.00	24.72	1755.53	877.76	2332.66	1168.06	5.36	-0.39	0.027	
144.34	-9.49	-1.59	0.00	-17.48	0.00	17.48	1153.87	576.93	1513.89	758.07	5.72	-0.40	0.031	
145.00	-9.42	-1.59	0.00	-16.42	0.00	16.42	1151.46	575.73	1504.14	753.19	5.77	-0.40	0.030	
150.00	-4.84	-0.97	0.00	-8.49	0.00	8.49	1132.60	566.30	1430.64	716.38	6.20	-0.41	0.016	
155.00	-4.40	-0.91	0.00	-3.63	0.00	3.63	1112.45	556.22	1357.20	679.61	6.62	-0.41	0.009	
159.00	0.00	-0.88	0.00	0.00	0.00	0.00	1095.40	547.70	1298.60	650.26	6.97	-0.41	0.000	

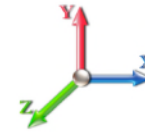
## Seismic Segment Forces (Factored)

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 25

<b>Load Case:</b> 0.9D + 1.0E				<b>Iterations</b> 20
<b>Gust Response Factor</b>	1.10	<b>Sds</b>	0.19	<b>Ss</b> 0.18
<b>Dead Load Factor</b>	0.90	<b>Seismic Load Factor</b>	1.00	<b>S1</b> 0.07
<b>Wind Load Factor</b>	0.00	<b>Structure Frequency (f1)</b>	0.37	<b>SA</b> 0.04
				<b>Seismic Importance Factor</b> 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1406.6	0.00	0.03	0.02	23.36	
10.00		1382.0	0.01	0.05	0.03	34.11	
15.00		1357.4	0.02	0.06	0.04	39.21	
20.00		1332.8	0.03	0.07	0.04	41.50	
25.00		1308.2	0.05	0.07	0.04	42.45	
30.00		1283.6	0.07	0.07	0.04	42.83	
35.00		1259.0	0.09	0.07	0.04	43.03	
40.00		1234.4	0.12	0.07	0.03	43.15	
45.00		1209.8	0.15	0.07	0.03	43.10	
45.50	Bot - Section 2	119.63	0.15	0.07	0.03	4.27	
50.00		1993.7	0.19	0.06	0.02	71.67	
52.50	Top - Section 1	1091.6	0.21	0.06	0.02	39.16	
55.00		502.98	0.23	0.06	0.02	17.89	
60.00		990.14	0.27	0.05	0.02	33.66	
65.00		969.05	0.32	0.04	0.01	29.72	
70.00		947.96	0.37	0.03	0.01	23.76	
75.00		926.86	0.42	0.01	0.01	15.70	
80.00		905.77	0.48	-0.01	0.01	5.93	
85.00		884.67	0.54	-0.03	0.01	-4.53	
90.00		863.58	0.61	-0.05	0.02	-14.19	
92.09	Bot - Section 3	354.16	0.63	-0.07	0.02	-7.31	
95.00		818.79	0.67	-0.08	0.03	-21.01	
97.92	Top - Section 2	808.69	0.72	-0.09	0.03	-23.88	
100.00		229.60	0.75	-0.10	0.04	-7.23	
105.00		541.97	0.82	-0.12	0.06	-17.93	
110.00		527.91	0.90	-0.12	0.09	-15.93	
115.00		513.85	0.99	-0.11	0.13	-11.66	
120.00		499.78	1.08	-0.08	0.17	-5.32	
125.00		485.72	1.17	-0.02	0.23	2.89	
129.00	Appurtenance(s)	1005.0	1.24	0.05	0.29	22.61	
130.00	Appurtenance(s)	3209.4	1.26	0.07	0.30	86.94	
135.00		457.59	1.36	0.22	0.39	24.16	
139.67	Bot - Section 4	414.69	1.46	0.40	0.49	33.59	
140.00		50.76	1.47	0.42	0.50	4.22	
144.34	Top - Section 3	657.12	1.56	0.65	0.61	74.45	
145.00		42.71	1.57	0.69	0.63	5.05	
150.00	Appurtenance(s)	3680.9	1.68	1.06	0.79	581.96	
155.00		305.44	1.80	1.52	0.97	61.97	
159.00	Appurtenance(s)	3615.3	1.89	1.98	1.14	876.00	
<b>Totals:</b>		<b>40,189.7</b>				<b>2,239.4</b>	<b>Total Wind: 29,214.2</b>

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required



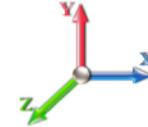
## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 26

<b>Load Case:</b> 0.9D + 1.0E		<b>Iterations</b> 20
<b>Gust Response Factor</b> 1.10	<b>Sds</b> 0.19	<b>Ss</b> 0.18
<b>Dead Load Factor</b> 0.90	<b>Seismic Load Factor</b> 1.00	<b>S1</b> 0.07
<b>Wind Load Factor</b> 0.00	<b>Structure Frequency (f1)</b> 0.37	<b>SA</b> 0.04
	<b>Seismic Importance Factor</b> 1.00	



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-43.24	-2.37	0.00	-303.05	0.00	303.05	5583.09	2791.54	13786.8	6903.66	0.00	0.00	0.00	0.052
5.00	-41.72	-2.36	0.00	-291.20	0.00	291.20	5522.68	2761.34	13399.4	6709.67	0.01	-0.01	0.051	
10.00	-40.23	-2.33	0.00	-279.42	0.00	279.42	5460.99	2730.49	13014.1	6516.76	0.02	-0.02	0.050	
15.00	-38.76	-2.30	0.00	-267.77	0.00	267.77	5398.01	2699.00	12631.2	6325.01	0.05	-0.03	0.050	
20.00	-37.31	-2.26	0.00	-256.28	0.00	256.28	5333.74	2666.87	12250.7	6134.50	0.09	-0.05	0.049	
25.00	-35.88	-2.23	0.00	-244.97	0.00	244.97	5268.20	2634.10	11872.9	5945.31	0.15	-0.06	0.048	
30.00	-34.48	-2.19	0.00	-233.84	0.00	233.84	5201.36	2600.68	11497.9	5757.54	0.21	-0.07	0.047	
35.00	-33.10	-2.15	0.00	-222.90	0.00	222.90	5133.24	2566.62	11125.9	5571.26	0.29	-0.08	0.046	
40.00	-31.74	-2.11	0.00	-212.15	0.00	212.15	5063.83	2531.92	10757.1	5386.55	0.38	-0.09	0.046	
45.00	-30.40	-2.07	0.00	-201.59	0.00	201.59	4993.14	2496.57	10391.5	5203.50	0.49	-0.10	0.045	
45.50	-30.27	-2.07	0.00	-200.55	0.00	200.55	4986.00	2493.00	10355.1	5185.29	0.50	-0.11	0.045	
50.00	-28.25	-2.00	0.00	-191.24	0.00	191.24	4921.16	2460.58	10029.4	5022.20	0.60	-0.12	0.044	
52.50	-27.14	-1.96	0.00	-186.25	0.00	186.25	4024.48	2012.24	8260.88	4136.58	0.67	-0.12	0.052	
55.00	-26.56	-1.94	0.00	-181.35	0.00	181.35	3997.76	1998.88	8119.79	4065.93	0.73	-0.13	0.051	
60.00	-25.42	-1.91	0.00	-171.62	0.00	171.62	3943.34	1971.67	7839.16	3925.41	0.88	-0.14	0.050	
65.00	-24.30	-1.89	0.00	-162.05	0.00	162.05	3887.63	1943.82	7560.73	3785.98	1.03	-0.16	0.049	
70.00	-23.20	-1.87	0.00	-152.61	0.00	152.61	3830.65	1915.32	7284.66	3647.74	1.21	-0.17	0.048	
75.00	-22.12	-1.85	0.00	-143.28	0.00	143.28	3772.37	1886.19	7011.11	3510.77	1.39	-0.19	0.047	
80.00	-21.05	-1.85	0.00	-134.01	0.00	134.01	3712.81	1856.40	6740.26	3375.14	1.59	-0.20	0.045	
85.00	-20.01	-1.85	0.00	-124.77	0.00	124.77	3651.96	1825.98	6472.27	3240.95	1.81	-0.21	0.044	
90.00	-18.98	-1.85	0.00	-115.52	0.00	115.52	3589.83	1794.92	6207.31	3108.27	2.04	-0.23	0.042	
92.09	-18.56	-1.85	0.00	-111.66	0.00	111.66	3563.52	1781.76	6097.66	3053.36	2.14	-0.23	0.042	
95.00	-17.67	-1.85	0.00	-106.27	0.00	106.27	3526.41	1763.21	5945.54	2977.19	2.29	-0.24	0.041	
97.92	-16.80	-1.85	0.00	-100.87	0.00	100.87	2018.06	1009.03	3414.14	1709.61	2.44	-0.25	0.067	
100.00	-16.49	-1.85	0.00	-97.03	0.00	97.03	2007.23	1003.61	3359.78	1682.39	2.55	-0.26	0.066	
105.00	-15.75	-1.85	0.00	-87.78	0.00	87.78	1980.26	990.13	3229.23	1617.01	2.83	-0.28	0.062	
110.00	-15.03	-1.85	0.00	-78.53	0.00	78.53	1952.01	976.01	3098.96	1551.78	3.13	-0.29	0.058	
115.00	-14.32	-1.85	0.00	-69.26	0.00	69.26	1922.48	961.24	2969.14	1486.78	3.45	-0.31	0.054	
120.00	-13.62	-1.85	0.00	-60.00	0.00	60.00	1891.66	945.83	2839.95	1422.08	3.78	-0.33	0.049	
125.00	-12.93	-1.85	0.00	-50.73	0.00	50.73	1859.56	929.78	2711.53	1357.78	4.14	-0.35	0.044	
129.00	-11.83	-1.82	0.00	-43.33	0.00	43.33	1832.95	916.47	2609.48	1306.68	4.43	-0.36	0.040	
130.00	-8.89	-1.72	0.00	-41.51	0.00	41.51	1826.17	913.08	2584.07	1293.95	4.51	-0.36	0.037	
135.00	-8.36	-1.69	0.00	-32.92	0.00	32.92	1791.49	895.74	2457.72	1230.69	4.90	-0.37	0.031	
139.67	-7.87	-1.66	0.00	-25.01	0.00	25.01	1757.94	878.97	2340.87	1172.18	5.27	-0.38	0.026	
140.00	-7.81	-1.65	0.00	-24.47	0.00	24.47	1755.53	877.76	2332.66	1168.06	5.29	-0.39	0.025	
144.34	-7.12	-1.57	0.00	-17.30	0.00	17.30	1153.87	576.93	1513.89	758.07	5.65	-0.39	0.029	
145.00	-7.06	-1.57	0.00	-16.26	0.00	16.26	1151.46	575.73	1504.14	753.19	5.70	-0.39	0.028	
150.00	-3.63	-0.96	0.00	-8.41	0.00	8.41	1132.60	566.30	1430.64	716.38	6.12	-0.40	0.015	
155.00	-3.30	-0.90	0.00	-3.60	0.00	3.60	1112.45	556.22	1357.20	679.61	6.54	-0.41	0.008	
159.00	0.00	-0.88	0.00	0.00	0.00	0.00	1095.40	547.70	1298.60	650.26	6.88	-0.41	0.000	

## Wind Loading - Shaft

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 27

<b>Load Case:</b> 1.0D + 1.0W 60 mph Wind	<b>Iterations</b> 21
<b>Dead Load Factor</b> 1.00	
<b>Wind Load Factor</b> 1.00	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.74	256.99	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.74	252.57	0.650	0.000	5.00	25.377	16.49	111.2	0.0	1406.7
10.00		1.00	0.70	6.129	6.74	248.14	0.650*	0.000	5.00	24.936	16.22	109.4	0.0	1382.1
15.00		1.00	0.70	6.129	6.74	243.72	0.654*	0.000	5.00	24.495	16.02	108.0	0.0	1357.5
20.00		1.00	0.70	6.129	6.74	239.29	0.658*	0.000	5.00	24.055	15.82	106.6	0.0	1332.8
25.00		1.00	0.70	6.129	6.74	234.87	0.661*	0.000	5.00	23.614	15.62	105.3	0.0	1308.2
30.00		1.00	0.70	6.134	6.75	230.54	0.665*	0.000	5.00	23.173	15.42	104.0	0.0	1283.6
35.00		1.00	0.73	6.410	7.05	231.15	0.669*	0.000	5.00	22.733	15.22	107.3	0.0	1259.0
40.00		1.00	0.76	6.659	7.33	230.99	0.674*	0.000	5.00	22.292	15.02	110.0	0.0	1234.4
45.00		1.00	0.79	6.887	7.58	230.22	0.678*	0.000	5.00	21.851	14.82	112.3	0.0	1209.8
45.50	Bot - Section 2	1.00	0.79	6.909	7.60	230.11	0.681*	0.000	0.50	2.161	1.47	11.2	0.0	119.6
50.00		1.00	0.81	7.098	7.81	228.95	0.683*	0.000	4.50	19.535	13.34	104.2	0.0	1993.7
52.50	Top - Section 1	1.00	0.82	7.197	7.92	228.15	0.686*	0.000	2.50	10.699	7.34	58.1	0.0	1091.6
55.00		1.00	0.83	7.294	8.02	230.73	0.685*	0.000	2.50	10.588	7.26	58.2	0.0	503.0
60.00		1.00	0.85	7.477	8.22	228.73	0.689*	0.000	5.00	20.846	14.36	118.1	0.0	990.1
65.00		1.00	0.87	7.650	8.42	226.42	0.694*	0.000	5.00	20.405	14.16	119.2	0.0	969.0
70.00		1.00	0.89	7.814	8.60	223.83	0.699*	0.000	5.00	19.965	13.96	120.0	0.0	948.0
75.00		1.00	0.91	7.969	8.77	221.01	0.705*	0.000	5.00	19.524	13.76	120.6	0.0	926.9
80.00		1.00	0.93	8.118	8.93	217.96	0.710*	0.000	5.00	19.083	13.56	121.1	0.0	905.8
85.00		1.00	0.94	8.260	9.09	214.72	0.716*	0.000	5.00	18.643	13.36	121.4	0.0	884.7
90.00		1.00	0.96	8.396	9.24	211.30	0.723*	0.000	5.00	18.202	13.16	121.5	0.0	863.6
92.09	Bot - Section 3	1.00	0.97	8.451	9.30	209.82	0.728*	0.000	2.09	7.466	5.43	50.5	0.0	354.2
95.00		1.00	0.97	8.526	9.38	207.72	0.731*	0.000	2.91	10.419	7.61	71.4	0.0	818.8
97.92	Top - Section 2	1.00	0.98	8.600	9.46	205.56	0.735*	0.000	2.92	10.292	7.56	71.6	0.0	808.7
100.00		1.00	0.99	8.652	9.52	206.51	0.735*	0.000	2.08	7.240	5.32	50.7	0.0	229.6
105.00		1.00	1.00	8.774	9.65	202.66	0.740*	0.000	5.00	17.091	12.65	122.1	0.0	542.0
110.00		1.00	1.02	8.891	9.78	198.69	0.748*	0.000	5.00	16.651	12.45	121.8	0.0	527.9
115.00		1.00	1.03	9.005	9.91	194.59	0.756*	0.000	5.00	16.210	12.25	121.3	0.0	513.8
120.00		1.00	1.04	9.115	10.03	190.38	0.764*	0.000	5.00	15.769	12.05	120.8	0.0	499.8
125.00		1.00	1.05	9.222	10.14	186.06	0.773*	0.000	5.00	15.328	11.85	120.2	0.0	485.7
129.00	Appurtenance(s)	1.00	1.06	9.305	10.24	182.54	0.781*	0.000	4.00	11.945	9.34	95.6	0.0	378.5
130.00	Appurtenance(s)	1.00	1.07	9.326	10.26	181.65	0.786*	0.000	1.00	2.942	2.31	23.7	0.0	93.2
135.00		1.00	1.08	9.427	10.37	177.15	0.650	0.000	5.00	14.447	9.39	97.4	0.0	457.6
139.67	Bot - Section 4	1.00	1.09	9.519	10.47	172.86	0.650	0.000	4.67	13.095	8.51	89.1	0.0	414.7
140.00		1.00	1.09	9.525	10.48	172.55	0.650	0.000	0.33	0.921	0.60	6.3	0.0	50.8
144.34	Top - Section 3	1.00	1.10	9.609	10.57	168.50	0.650	0.000	4.34	11.929	7.75	82.0	0.0	657.1
145.00		1.00	1.10	9.621	10.58	169.87	0.650	0.000	0.66	1.795	1.17	12.4	0.0	42.7
150.00	Appurtenance(s)	1.00	1.11	9.715	10.69	165.12	0.650	0.000	5.00	13.283	8.63	92.3	0.0	316.0
155.00		1.00	1.12	9.806	10.79	160.30	0.650	0.000	5.00	12.843	8.35	90.0	0.0	305.4
159.00	Appurtenance(s)	1.00	1.13	9.878	10.87	156.39	0.650	0.000	4.00	9.957	6.47	70.3	0.0	236.8
<b>Totals:</b>												<b>159.00</b>	<b>3,556.9</b>	<b>29,703.3</b>

\* CfA djusted by Linear Load RaE effect

## Discrete Appurtenance Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II

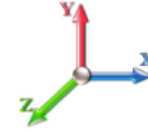


Page: 28

**Load Case:** 1.0D + 1.0W 60 mph Wind

**Dead Load Factor** 1.00

**Wind Load Factor** 1.00



**Iterations** 21

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	
1	159.00	NHH-65C-R2B	6	9.931	10.924	0.78	1.00	53.31	309.60	0.000	3.000	582.30	0.00	1746.91	
2	159.00	Low Profile Platform	1	9.878	10.866	1.00	1.00	40.20	1600.00	0.000	0.000	436.80	0.00	0.00	
3	159.00	Support Rail w/ Pipes	1	9.878	10.866	0.75	0.75	6.56	430.00	0.000	0.000	71.31	0.00	0.00	
4	159.00	Kicker Kit	1	9.878	10.866	0.75	0.75	4.00	146.00	0.000	0.000	43.44	0.00	0.00	
5	159.00	DB-C1-12C-24AB-0Z	1	9.931	10.924	1.00	1.00	4.06	32.00	0.000	3.000	44.35	0.00	133.05	
6	159.00	MT6407-77A	3	9.931	10.924	0.70	1.00	9.85	238.20	0.000	3.000	107.59	0.00	322.77	
7	159.00	TD-850B-LTE78-43	3	9.931	10.924	0.67	1.00	2.33	158.70	0.000	3.000	25.47	0.00	76.41	
8	159.00	RFV01U-D2A	3	9.931	10.924	0.67	1.00	3.78	210.90	0.000	3.000	41.28	0.00	123.84	
9	159.00	RFV01U-D1A	3	9.931	10.924	0.67	1.00	3.78	253.20	0.000	3.000	41.28	0.00	123.84	
10	150.00	MS-H1436 (Heavy Collar	1	9.715	10.686	0.75	0.75	1.69	136.70	0.000	0.000	18.03	0.00	0.00	
11	150.00	(3) T-Arm Kit	1	9.715	10.686	0.75	0.75	12.38	500.00	0.000	0.000	132.24	0.00	0.00	
12	150.00	MS-HR35	1	9.715	10.686	0.75	0.75	6.56	430.00	0.000	0.000	70.13	0.00	0.00	
13	150.00	4449 B5/B12	3	9.715	10.686	0.54	0.80	3.17	213.00	0.000	0.000	33.85	0.00	0.00	
14	150.00	KRY 112 489/2	3	9.715	10.686	0.66	0.80	1.28	46.20	0.000	0.000	13.67	0.00	0.00	
15	150.00	KRY 112 144/1	3	9.715	10.686	0.56	0.80	0.69	33.00	0.000	0.000	7.36	0.00	0.00	
16	150.00	APXVAARR24_43-U-NA2	3	9.715	10.686	0.56	0.80	34.00	384.00	0.000	0.000	363.37	0.00	0.00	
17	150.00	APX16DWV-16DWV-S-E-	3	9.715	10.686	0.50	0.80	9.61	122.10	0.000	0.000	102.72	0.00	0.00	
18	150.00	T-Arm	3	9.715	10.686	0.56	0.75	26.32	1500.00	0.000	0.000	281.32	0.00	0.00	
19	130.00	T-Frame	3	9.326	10.258	0.56	0.75	29.70	1650.00	0.000	0.000	304.67	0.00	0.00	
20	130.00	Powerwave 7770.00A	6	9.326	10.258	0.58	0.80	19.15	162.00	0.000	0.000	196.41	0.00	0.00	
21	130.00	Powerwave LGP21401	24	9.326	10.258	0.40	0.80	12.38	420.00	0.000	0.000	127.04	0.00	0.00	
22	130.00	Raycap DC6-48-60-18-8F	1	9.326	10.258	1.00	1.00	0.92	32.80	0.000	0.000	9.44	0.00	0.00	
23	130.00	Commscope	3	9.326	10.258	0.54	0.80	0.08	3.42	0.000	0.000	0.82	0.00	0.00	
24	130.00	Ericsson 4478 B71 RRU	3	9.326	10.258	0.54	0.80	2.65	180.00	0.000	0.000	27.22	0.00	0.00	
25	130.00	Ericsson 4449 B5/B12	3	9.326	10.258	0.54	0.80	3.17	213.00	0.000	0.000	32.50	0.00	0.00	
26	130.00	Ericsson 8843 B2/B66A	3	9.326	10.258	0.54	0.80	2.65	225.00	0.000	0.000	27.22	0.00	0.00	
27	130.00	(6) Reinforce Kit	1	9.326	10.258	0.75	0.75	7.27	230.00	0.000	0.000	74.63	0.00	0.00	
28	129.00	DMP65R-BU8DA	6	9.305	10.236	0.66	0.80	71.19	574.20	0.000	0.000	728.72	0.00	0.00	
29	129.00	Raycap	1	9.305	10.236	1.00	1.00	4.78	26.20	0.000	0.000	48.93	0.00	0.00	
30	129.00	Raycap	1	9.305	10.236	1.00	1.00	4.78	26.20	0.000	0.000	48.93	0.00	0.00	
<b>Totals:</b>									<b>10,486.42</b>						<b>4,043.02</b>

## Total Applied Force Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 29

**Load Case:** 1.0D + 1.0W 60 mph Wind

**Dead Load Factor** 1.00

**Wind Load Factor** 1.00



**Iterations** 21

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		111.20	1683.18	0.00	0.00
10.00		109.35	1658.57	0.00	0.00
15.00		108.00	1633.96	0.00	0.00
20.00		106.65	1609.35	0.00	0.00
25.00		105.30	1584.74	0.00	0.00
30.00		104.03	1560.13	0.00	0.00
35.00		107.30	1535.52	0.00	0.00
40.00		110.01	1510.91	0.00	0.00
45.00		112.25	1486.30	0.00	0.00
45.50		11.18	147.28	0.00	0.00
50.00		104.16	2242.56	0.00	0.00
52.50		58.13	1229.87	0.00	0.00
55.00		58.21	641.23	0.00	0.00
60.00		118.11	1266.64	0.00	0.00
65.00		119.15	1245.55	0.00	0.00
70.00		119.98	1224.46	0.00	0.00
75.00		120.61	1203.36	0.00	0.00
80.00		121.07	1182.27	0.00	0.00
85.00		121.36	1161.17	0.00	0.00
90.00		121.51	1140.08	0.00	0.00
92.09		50.49	469.56	0.00	0.00
95.00		71.42	979.90	0.00	0.00
97.92		71.56	970.16	0.00	0.00
100.00		50.65	344.63	0.00	0.00
105.00		122.10	818.47	0.00	0.00
110.00		121.77	804.41	0.00	0.00
115.00		121.34	790.35	0.00	0.00
120.00		120.82	776.28	0.00	0.00
125.00		120.20	762.22	0.00	0.00
129.00	(8) attachments	922.12	1226.25	0.00	0.00
130.00	(47) attachments	823.67	3264.73	0.00	0.00
135.00		97.37	593.19	0.00	0.00
139.67		89.13	541.34	0.00	0.00
140.00		6.27	59.71	0.00	0.00
144.34		81.95	774.73	0.00	0.00
145.00		12.35	60.70	0.00	0.00
150.00	(21) attachments	1114.97	3816.59	0.00	0.00
155.00		90.05	373.14	0.00	0.00
159.00	(22) attachments	1464.14	3669.52	0.00	2526.82
	<b>Totals:</b>	<b>7,599.94</b>	<b>48,042.98</b>	<b>0.00</b>	<b>2,526.82</b>

## Linear Appurtenance Segment Forces (Factored)

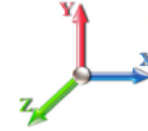
<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	Page: 30
	<b>Struct Class:</b> II	



**Load Case:** 1.0D + 1.0W 60 mph Wind

**Dead Load Factor** 1.00

**Wind Load Factor** 1.00



**Iterations** 21

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
5.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.099	0.000	6.129	0.00	16.10
10.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.100	1.001	6.129	0.00	16.10
15.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.102	1.006	6.129	0.00	16.10
20.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.104	1.012	6.129	0.00	16.10
25.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.106	1.018	6.129	0.00	16.10
30.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.108	1.024	6.134	0.00	16.10
35.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.110	1.030	6.410	0.00	16.10
40.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.112	1.036	6.659	0.00	16.10
45.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.114	1.043	6.887	0.00	16.10
45.50	3" Conduit	Yes	0.50	0.000	6.00	0.25	0.00	0.116	1.047	6.909	0.00	1.61
50.00	3" Conduit	Yes	4.50	0.000	6.00	2.25	0.00	0.117	1.051	7.098	0.00	14.49
52.50	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.119	1.056	7.197	0.00	8.05
55.00	3" Conduit	Yes	2.50	0.000	6.00	1.25	0.00	0.118	1.054	7.294	0.00	8.05
60.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.120	1.060	7.477	0.00	16.10
65.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.123	1.068	7.650	0.00	16.10
70.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.125	1.076	7.814	0.00	16.10
75.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.128	1.084	7.969	0.00	16.10
80.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.131	1.093	8.118	0.00	16.10
85.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.134	1.102	8.260	0.00	16.10
90.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.137	1.112	8.396	0.00	16.10
92.09	3" Conduit	Yes	2.09	0.000	6.00	1.04	0.00	0.140	1.119	8.451	0.00	6.72
95.00	3" Conduit	Yes	2.91	0.000	6.00	1.46	0.00	0.141	1.124	8.526	0.00	9.38
97.92	3" Conduit	Yes	2.92	0.000	6.00	1.46	0.00	0.144	1.131	8.600	0.00	9.40
100.00	3" Conduit	Yes	2.08	0.000	6.00	1.04	0.00	0.144	1.131	8.652	0.00	6.70
105.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.146	1.139	8.774	0.00	16.10
110.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.150	1.150	8.891	0.00	16.10
115.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.154	1.163	9.005	0.00	16.10
120.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.159	1.176	9.115	0.00	16.10
125.00	3" Conduit	Yes	5.00	0.000	6.00	2.50	0.00	0.163	1.189	9.222	0.00	16.10
129.00	3" Conduit	Yes	4.00	0.000	6.00	2.00	0.00	0.167	1.202	9.305	0.00	12.88
130.00	3" Conduit	Yes	1.00	0.000	6.00	0.50	0.00	0.170	1.210	9.326	0.00	3.22
<b>Totals:</b>											<b>0.0</b>	<b>418.6</b>

## Calculated Forces

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 31

**Load Case:** 1.0D + 1.0W 60 mph Wind

**Iterations** 21

**Dead Load Factor** 1.00  
**Wind Load Factor** 1.00



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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-48.04	-7.61	0.00	-902.83	0.00	902.83	5583.09	2791.54	13786.8	6903.66	0.00	0.000	0.000	0.139
5.00	-46.35	-7.53	0.00	-864.76	0.00	864.76	5522.68	2761.34	13399.4	6709.67	0.02	-0.033	0.000	0.137
10.00	-44.69	-7.44	0.00	-827.12	0.00	827.12	5460.99	2730.49	13014.1	6516.76	0.07	-0.066	0.000	0.135
15.00	-43.05	-7.36	0.00	-789.91	0.00	789.91	5398.01	2699.00	12631.2	6325.01	0.16	-0.100	0.000	0.133
20.00	-41.44	-7.27	0.00	-753.11	0.00	753.11	5333.74	2666.87	12250.7	6134.50	0.28	-0.134	0.000	0.131
25.00	-39.85	-7.19	0.00	-716.75	0.00	716.75	5268.20	2634.10	11872.9	5945.31	0.44	-0.168	0.000	0.128
30.00	-38.29	-7.10	0.00	-680.81	0.00	680.81	5201.36	2600.68	11497.9	5757.54	0.63	-0.202	0.000	0.126
35.00	-36.75	-7.01	0.00	-645.30	0.00	645.30	5133.24	2566.62	11125.9	5571.26	0.86	-0.237	0.000	0.123
40.00	-35.23	-6.92	0.00	-610.25	0.00	610.25	5063.83	2531.92	10757.1	5386.55	1.13	-0.272	0.000	0.120
45.00	-33.74	-6.81	0.00	-575.67	0.00	575.67	4993.14	2496.57	10391.5	5203.50	1.43	-0.306	0.000	0.117
45.50	-33.59	-6.81	0.00	-572.27	0.00	572.27	4986.00	2493.00	10355.1	5185.29	1.47	-0.310	0.000	0.117
50.00	-31.35	-6.70	0.00	-541.65	0.00	541.65	4921.16	2460.58	10029.4	5022.20	1.77	-0.341	0.000	0.114
52.50	-30.12	-6.65	0.00	-524.90	0.00	524.90	4024.48	2012.24	8260.88	4136.58	1.96	-0.359	0.000	0.134
55.00	-29.47	-6.60	0.00	-508.28	0.00	508.28	3997.76	1998.88	8119.79	4065.93	2.15	-0.377	0.000	0.132
60.00	-28.20	-6.49	0.00	-475.30	0.00	475.30	3943.34	1971.67	7839.16	3925.41	2.57	-0.415	0.000	0.128
65.00	-26.96	-6.38	0.00	-442.85	0.00	442.85	3887.63	1943.82	7560.73	3785.98	3.02	-0.454	0.000	0.124
70.00	-25.73	-6.27	0.00	-410.96	0.00	410.96	3830.65	1915.32	7284.66	3647.74	3.52	-0.492	0.000	0.119
75.00	-24.52	-6.15	0.00	-379.63	0.00	379.63	3772.37	1886.19	7011.11	3510.77	4.05	-0.529	0.000	0.115
80.00	-23.34	-6.03	0.00	-348.88	0.00	348.88	3712.81	1856.40	6740.26	3375.14	4.63	-0.566	0.000	0.110
85.00	-22.17	-5.91	0.00	-318.71	0.00	318.71	3651.96	1825.98	6472.27	3240.95	5.24	-0.603	0.000	0.104
90.00	-21.03	-5.79	0.00	-289.14	0.00	289.14	3589.83	1794.92	6207.31	3108.27	5.89	-0.639	0.000	0.099
92.09	-20.56	-5.74	0.00	-277.06	0.00	277.06	3563.52	1781.76	6097.66	3053.36	6.17	-0.654	0.000	0.097
95.00	-19.58	-5.66	0.00	-260.34	0.00	260.34	3526.41	1763.21	5945.54	2977.19	6.58	-0.674	0.000	0.093
97.92	-18.61	-5.59	0.00	-243.80	0.00	243.80	2018.06	1009.03	3414.14	1709.61	7.00	-0.694	0.000	0.152
100.00	-18.26	-5.54	0.00	-232.18	0.00	232.18	2007.23	1003.61	3359.78	1682.39	7.30	-0.708	0.000	0.147
105.00	-17.44	-5.42	0.00	-204.47	0.00	204.47	1980.26	990.13	3229.23	1617.01	8.07	-0.754	0.000	0.135
110.00	-16.63	-5.30	0.00	-177.36	0.00	177.36	1952.01	976.01	3098.96	1551.78	8.88	-0.798	0.000	0.123
115.00	-15.84	-5.18	0.00	-150.85	0.00	150.85	1922.48	961.24	2969.14	1486.78	9.74	-0.839	0.000	0.110
120.00	-15.07	-5.06	0.00	-124.95	0.00	124.95	1891.66	945.83	2839.95	1422.08	10.64	-0.875	0.000	0.096
125.00	-14.30	-4.93	0.00	-99.67	0.00	99.67	1859.56	929.78	2711.53	1357.78	11.58	-0.908	0.000	0.081
129.00	-13.09	-3.99	0.00	-79.94	0.00	79.94	1832.95	916.47	2609.48	1306.68	12.35	-0.931	0.000	0.068
130.00	-9.84	-3.12	0.00	-75.94	0.00	75.94	1826.17	913.08	2584.07	1293.95	12.54	-0.936	0.000	0.064
135.00	-9.25	-3.02	0.00	-60.35	0.00	60.35	1791.49	895.74	2457.72	1230.69	13.54	-0.960	0.000	0.054
139.67	-8.71	-2.92	0.00	-46.27	0.00	46.27	1757.94	878.97	2340.87	1172.18	14.49	-0.979	0.000	0.044
140.00	-8.65	-2.91	0.00	-45.30	0.00	45.30	1755.53	877.76	2332.66	1168.06	14.55	-0.980	0.000	0.044
144.34	-7.87	-2.82	0.00	-32.67	0.00	32.67	1153.87	576.93	1513.89	758.07	15.45	-0.995	0.000	0.050
145.00	-7.81	-2.81	0.00	-30.80	0.00	30.80	1151.46	575.73	1504.14	753.19	15.59	-0.997	0.000	0.048
150.00	-4.01	-1.63	0.00	-16.77	0.00	16.77	1132.60	566.30	1430.64	716.38	16.64	-1.011	0.000	0.027
155.00	-3.64	-1.53	0.00	-8.64	0.00	8.64	1112.45	556.22	1357.20	679.61	17.71	-1.019	0.000	0.016
159.00	0.00	-1.46	0.00	-2.53	0.00	2.53	1095.40	547.70	1298.60	650.26	18.56	-1.022	0.000	0.004

## Final Analysis Summary

<b>Structure:</b> CT12219-A-SBA	<b>Code:</b> EIA/TIA-222-G	6/8/2021
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 32

### Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 93 mph Wind	29.3	0.00	57.62	0.00	0.00	3490.70
0.9D + 1.6W 93 mph Wind	29.3	0.00	43.21	0.00	0.00	3457.58
1.2D + 1.0Di + 1.0Wi 40 mph Wind	6.1	0.00	100.07	0.00	0.00	739.23
1.2D + 1.0E	2.4	0.00	57.65	0.00	0.00	306.17
0.9D + 1.0E	2.4	0.00	43.24	0.00	0.00	303.05
1.0D + 1.0W 60 mph Wind	7.6	0.00	48.04	0.00	0.00	902.83

### Max Stresses

Load Case	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)	Elev (ft)	Stress Ratio
1.2D + 1.6W 93 mph Wind	-21.41	-21.64	0.00	-944.77	0.00	-944.77	2018.06	1009.0	3414.14	1709.61	97.92	0.564
0.9D + 1.6W 93 mph Wind	-15.83	-21.36	0.00	-931.31	0.00	-931.31	2018.06	1009.0	3414.14	1709.61	97.92	0.553
1.2D + 1.0Di + 1.0Wi 40 mph Wind	-50.16	-4.60	0.00	-201.32	0.00	-201.32	2018.06	1009.0	3414.14	1709.61	97.92	0.143
1.2D + 1.0E	-22.40	-1.87	0.00	-102.21	0.00	-102.21	2018.06	1009.0	3414.14	1709.61	97.92	0.071
0.9D + 1.0E	-16.80	-1.85	0.00	-100.87	0.00	-100.87	2018.06	1009.0	3414.14	1709.61	97.92	0.067
1.0D + 1.0W 60 mph Wind	-18.61	-5.59	0.00	-243.80	0.00	-243.80	2018.06	1009.0	3414.14	1709.61	97.92	0.152

## Base Plate Summary

<b>Structure:</b> CT12219-A-SB	<b>Code:</b> EIA/TIA-222-G	<b>6/8/2021</b>
<b>Site Name:</b> New Hartford 2, CT	<b>Exposure:</b> B	
<b>Height:</b> 159.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 1.1	<b>Topography:</b> 1	<b>Struct Class:</b> II



Page: 33

Reactions	Base Plate	Anchor Bolts
Original Design	<b>Yield (ksi):</b> 50.00	<b>Bolt Circle:</b> 68.00
<b>Moment (kip-ft):</b> 5847.05	<b>Width (in):</b> 74.00	<b>Number Bolts:</b> 24.00
<b>Axial (kip):</b> 49.10	<b>Style:</b> Round	<b>Bolt Type:</b> 2.25" 18J
<b>Shear (kip):</b> 51.35	<b>Polygon Sides:</b> 0.00	<b>Bolt Diameter (in):</b> 2.25
Analysis (1.2D + 1.6W)	<b>Clip Length (in):</b> 0.00	<b>Yield (ksi):</b> 75.00
<b>Moment (kip-ft):</b> 3490.70	<b>Effective Len (in):</b> 11.75	<b>Ultimate (ksi):</b> 100.00
<b>Axial (kip):</b> 57.62	<b>Moment (kip-in):</b> 400.64	<b>Arrangement:</b> Radial
<b>Shear (kip):</b> 29.28	<b>Allow Stress (ksi):</b> 67.50	<b>Cluster Dist (in):</b> 0.00
	<b>Applied Stress (ksi):</b> 19.57	<b>Start Angle (deg):</b> 0.00
	<b>Stress Ratio:</b> 0.29	<b>Compression</b>
		<b>Force (kip):</b> 106.84
		<b>Allowable (kip):</b> 260.00
		<b>Ratio:</b> 0.42
		<b>Tension</b>
		<b>Force (kip):</b> 98.50
		<b>Allowable (kip):</b> 260.00
		<b>Ratio:</b> 0.39





# Monopole Mat Foundation Design

Date

6/8/2021

<b>Customer Name:</b>	Verizon	<b>EIA/TIA Standard:</b>	EIA-222-G
<b>Site Name:</b>		<b>Structure Height (Ft.):</b>	159
<b>Site Number:</b>	CT12219-A-SBA	<b>Engineer Name:</b>	D. Zhou
<b>Engr. Number:</b>	109879	<b>Engineer Login ID:</b>	

**Foundation Info Obtained from:**

Drawings/Calculations
Monopole
Analysis

**Structure Type:**

**Analysis or Design?**

**Base Reactions (Factored):**

Axial Load (Kips):	57.6	Shear Force (Kips):	29.3
Uplift Force (Kips):	0.0	Moment (Kips-ft):	3490.7

Allowable overstress %: 5.0%

**Foundation Geometries:**

Diameter of Pier (ft.):	7.5	Depth of Base BG (ft.):	5.0
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft.):	3.00
Length of Pad (ft.):	29.5	Width of Pad (ft.):	29.5

Final Length of pad (ft)	29.5	Final width of pad (ft):	29.5
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**Material Properties and Rebar Info:**

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	8	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	42	Tie Spacing (in):	6.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	32	Qty. of Rebar in Pad (W):	32
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	13	Qty. of Rebar in Pad (W):	13
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Apply 1.35 factor for e/w Per G: 1.35

**Soil Design Parameters:**

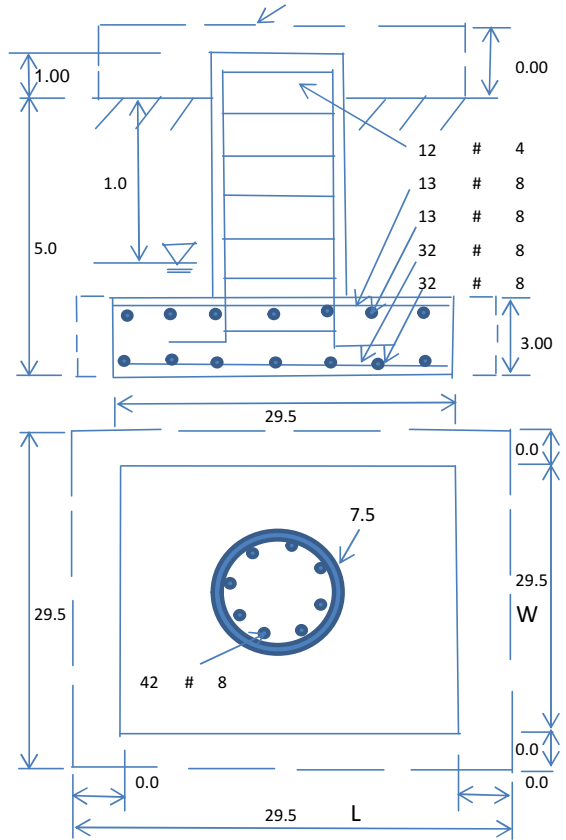
Soil Unit Weight (pcf):	125.0	Soil Buoyant Weight:	50.0	Pcf
Water Table B.G.S. (ft):	1.0	Unit Weight of Water:	62.4	pcf
Ultimate Bearing Pressure (psf):	8000	Ultimate Skin Friction:	800	Psf
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	Yes	Angle from Top of Pad:
Consider soil hor. resist. for OTM.:	Yes	Reduction factor on the maximum soil bearing pressure:	1.00	Angle from Bottm of Pad:
				Angle from Bottm of Pad:
				25

**Foundation Analysis and Design:**

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	826.07	Total Dry Soil Weight (Kips):	103.26
Total Buoyant Soil Volume (cu. Ft.):	860.36	Total Buoyant Soil Weight (Kips):	43.02
Total Effective Soil Weight (Kips):	146.28	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	88.36	Total Dry Concrete Weight (Kips):	13.25
Total Buoyant Concrete Volume (cu. Ft.):	2654.93	Total Buoyant Concrete Weight (Kips):	232.57
Total Effective Concrete Weight (Kips):	245.83	Total Vertical Load on Base (Kips):	449.70

**Check Soil Capacities:**

Calculated Maxium Net Soil Pressure under the base (psf):	814	<	Allowable Factored Soil Bearing (psf):	6000	0.14	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	6032.0	>	Design Factored Momont (kips-ft):	3591	0.60	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.68					OK!



**Check the capacities of Reinforcing Concrete:**

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00

**(1) Concrete Pier:**

Vertical Steel Rebar Area (sq. in./each):	0.79	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	6074.2	> Design Factored Moment (Mu, Kips-F	3578.6	0.59	OK!
Calculated Shear Capacity (Kips):	891.5	> Design Factored Shear (Kips):	29.3	0.03	OK!
Calculated Tension Capacity (Tn, Kips):	1791.7	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	11188.9	> Design Factored Axial Load (Pu Kips):	57.6	0.01	OK!
Moment & Axial Strength Combination:	0.59	OK! Check Tie Spacing (Design/Required):		0.5	OK!
Pier Reinforcement Ratio:	0.005	Reinforcement Ratio is satisfied per ACI			

**(2).Concrete Pad:**

One-Way Design Shear Capacity (L-Direction, Kips):	1091.5	> One-Way Factored Shear (L-D. Kips):	163.6	0.15	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1091.5	> One-Way Factored Shear (W-D., Kips)	163.6	0.15	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	1065.7	> One-Way Factored Shear (C-C, Kips):	168.3	0.16	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct. ):	0.0022	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0022		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	3625.5	> Moment at Bottom ( L-Dir. K-Ft):	1003.7	0.28	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3625.5	> Moment at Bottom ( W-Dir. K-Ft):	1003.7	0.28	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	5105.0	> Moment at Bottom ( C-C Dir. K-Ft):	1419.5	0.28	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct. ):	0.0009	OK! Upper Steel Reinf. Ratio (W-Dir. ):	0.0009		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	1490.2	> Moment at the top (L-Dir K-Ft):	414.4	0.28	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	1490.2	> Moment at the top (W-Dir K-Ft):	414.4	0.28	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	2103.7	> Moment at the top (C-C Dir. K-Ft):	387.6	0.18	OK!

**(3).Check Punching Shear Capacity due to Moment in the Pier:**

Moment transferred by punching shear:	1396.3	k-ft.	Max. factored shear stress $v_{u\_CD}$ :	2.2	Psi
Max. factored shear stress $v_{u\_AB}$ :	9.4	Psi	Factored shear Strength $\phi v_n$ :	189.7	Psi
Max. factored shear stress $v_u$ :	9.4	Psi	Check Usage of Punching Shear Capacity:	0.05	OK!



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

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## Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10068126  
Maser Consulting Connecticut Project #: 21777047A

May 21, 2021

### Site Information

Site ID: 468081-VZW / NEW HARTFORD E CT  
Site Name: NEW HARTFORD E CT  
Carrier Name: Verizon Wireless  
Address: 170 Southeast Road  
New Hartford, Connecticut 06057  
Litchfield County  
Latitude: 41.817256°  
Longitude: -72.970942°

### Structure Information

Tower Type: Monopole  
Mount Type: 13.33-Ft Platform

FUZE ID # 16271983

### Analysis Results

Platform: 66.7% 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:**

<b>Document Type</b>	<b>Remarks</b>
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS Site ID: 324454, dated May 10, 2021</i>
<i>Drawings for Fabrication</i>	<i>Engineered Endeavors, Drawing #: 12443-T1</i>
<i>Mount Analysis Report</i>	<i>Maser Consulting Connecticut, Project #: 21777047A, dated April 30, 2021</i>
<i>Mount Modification Drawings</i>	<i>Maser Consulting Connecticut, Project #: 21777047A, dated May 21, 2021</i>

## **Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), Ice Wind Speed (3-sec. Gust): Design Ice Thickness: Risk Category: Exposure Category: Topographic Category: Topographic Feature Considered: Topographic Method: Ground Elevation Factor, $K_e$ :	115 mph 50 mph 1.50 in II B 1 N/A N/A 0.976
Seismic Parameters:	$S_s$ : $S_1$ :	0.176 0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust): Maintenance Live Load, $L_v$ : Maintenance Live Load, $L_m$ :	30 mph 250 lbs. 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
			Commscope		Added
			Samsung		
			Commscope		
			Samsung		
			Samsung		

The recent drawing fabrication did not report existing OVP units. However, 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.

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:**

<b>Component</b>	<b>Utilization %</b>	<b>Pass/Fail</b>
<i>Mount Pipe</i>	<i>24.6%</i>	<i>Pass</i>
<i>Standoff Horizontal</i>	<i>31.2%</i>	<i>Pass</i>
<i>Face Horizontal</i>	<i>25.9%</i>	<i>Pass</i>
<i>Support Rail</i>	<i>12.4%</i>	<i>Pass</i>
<i>Support Rail Corner</i>	<i>14.1%</i>	<i>Pass</i>
<i>Kicker</i>	<i>14.2%</i>	<i>Pass</i>
<i>OVP Pipe</i>	<i>14.9%</i>	<i>Pass</i>
<i>Connection Check</i>	<i>66.7%</i>	<i>Pass</i>

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>66.7%</b>
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**Recommendation:**

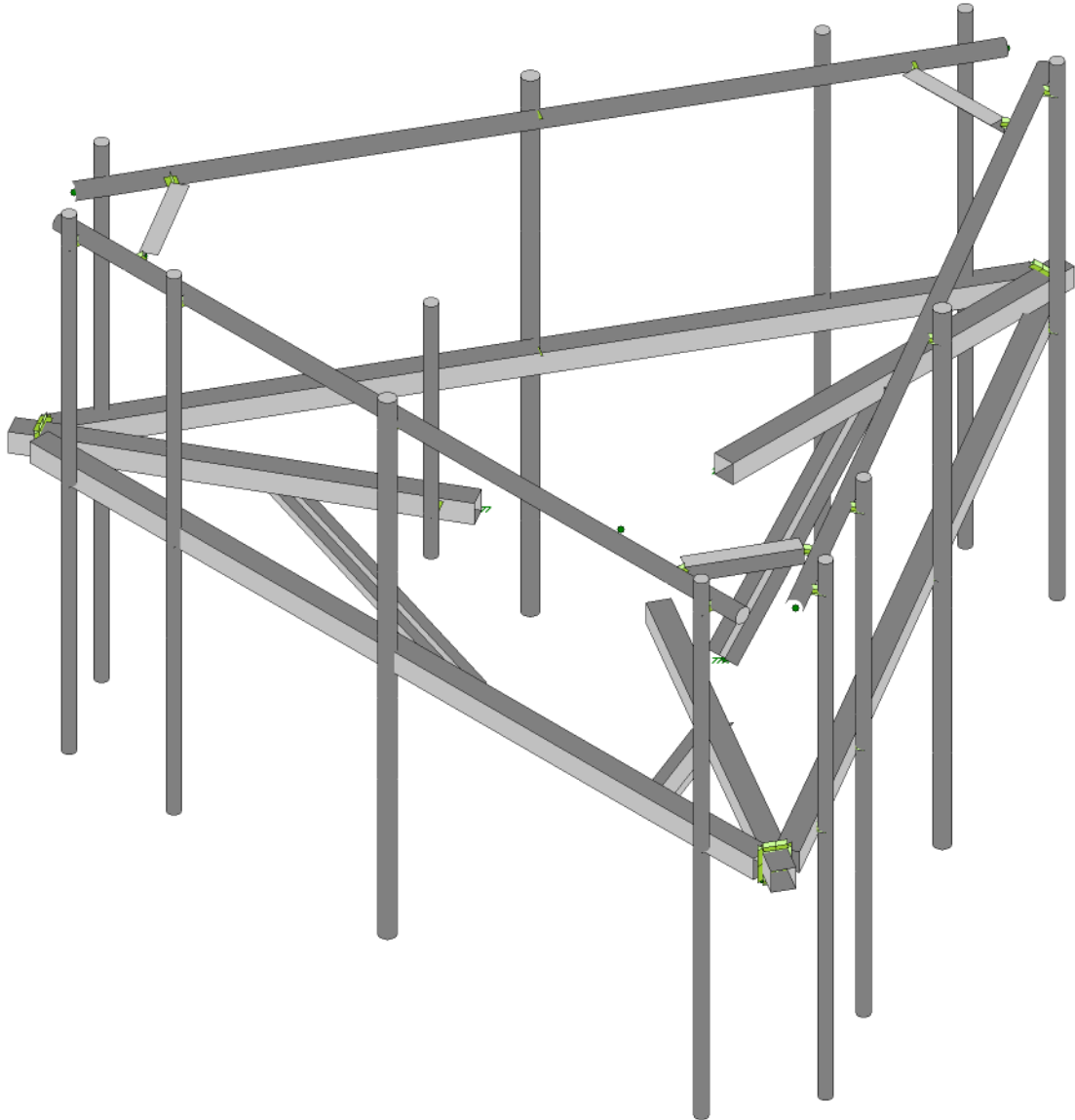
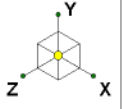
The existing mount will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

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:**

- Mount Photos
- Analysis Calculations
- Contractor Required PMI Report Deliverables**
- Antenna Placement Diagrams
- TIA Adoption and Wind Speed Usage Letter





Envelope Only Solution

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Project No. 10068126

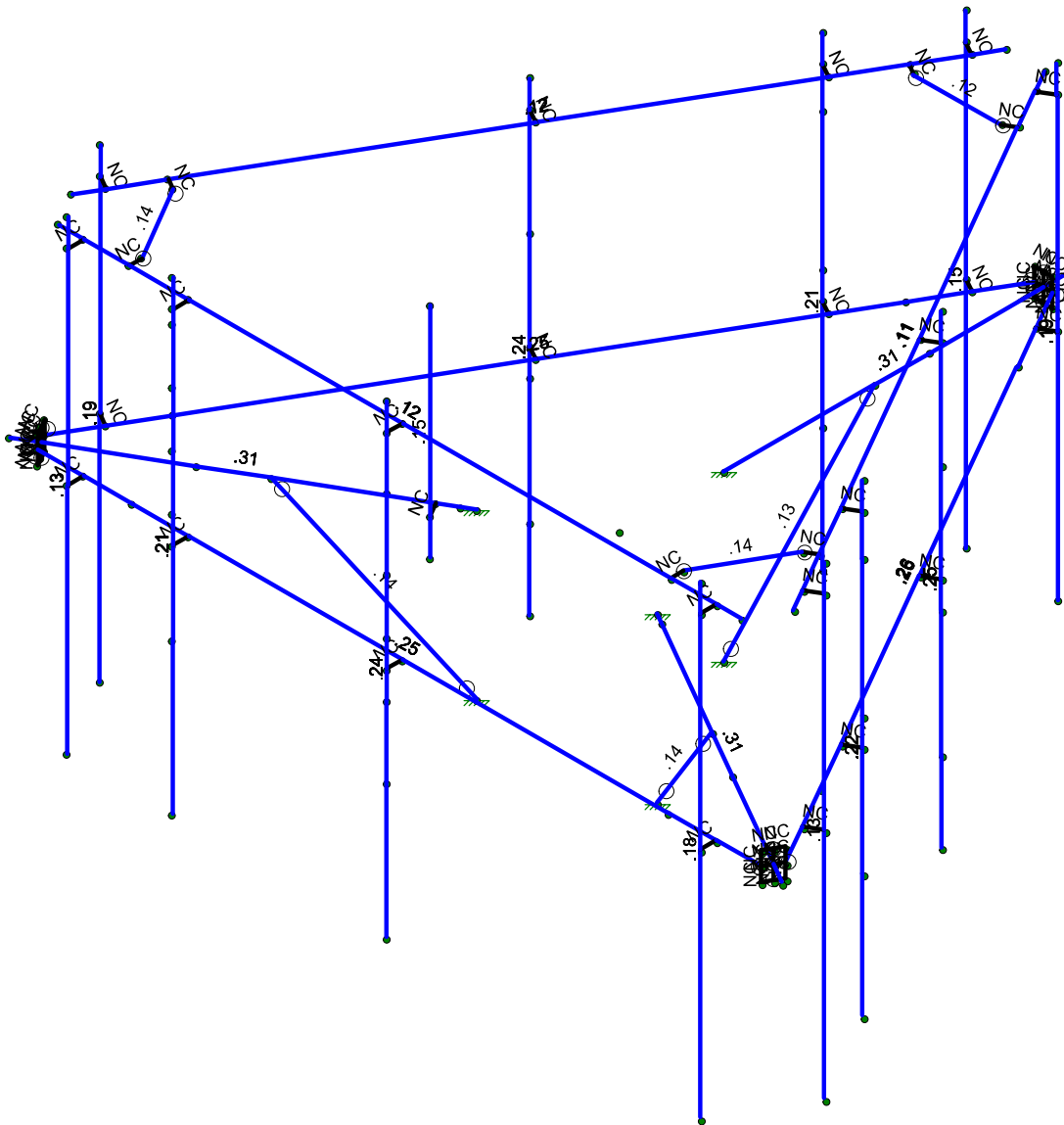
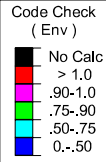
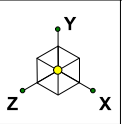
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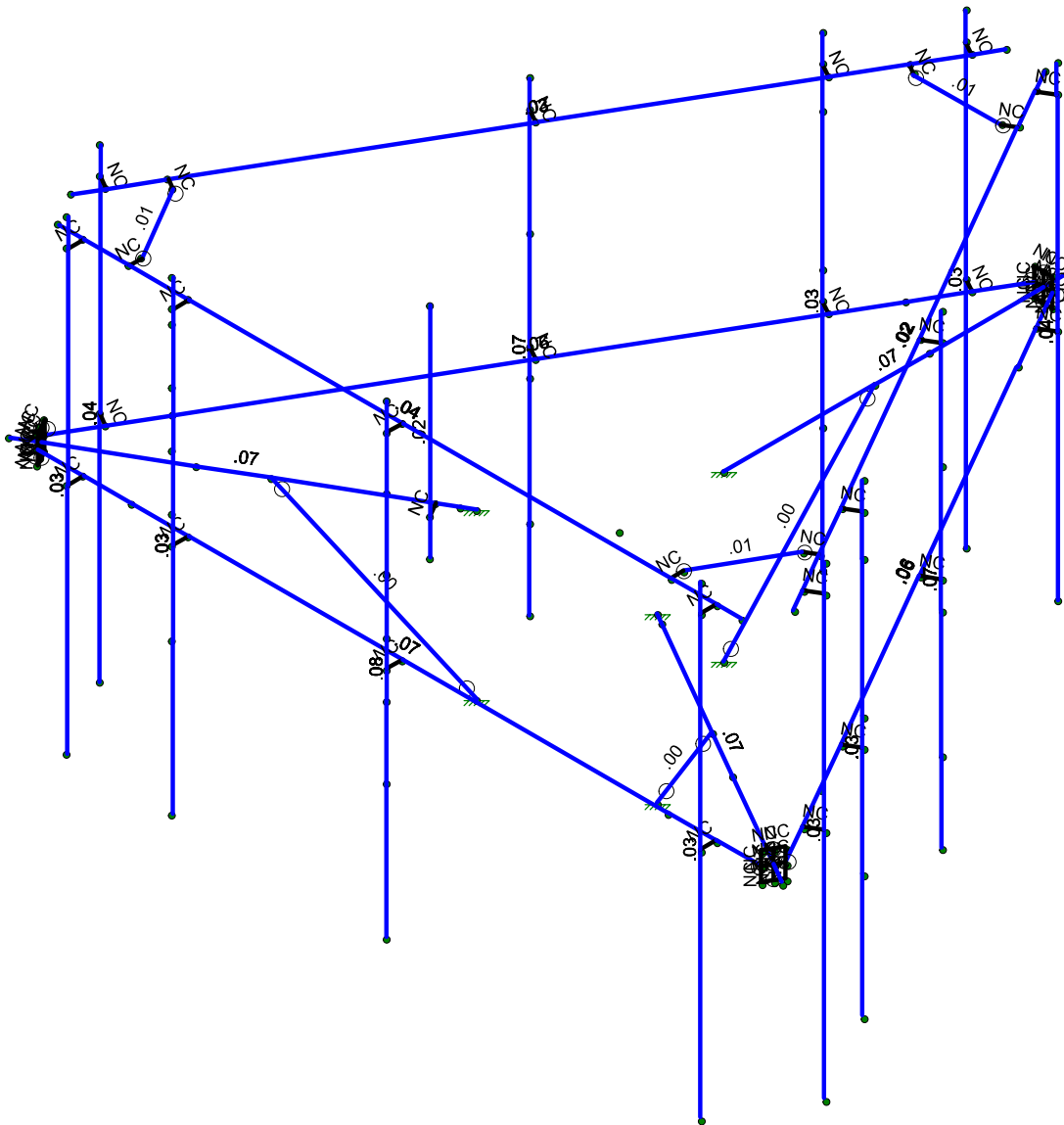
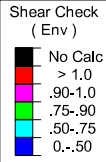
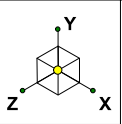
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**Basic Load Cases**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					84		
2	Antenna Di	None					84		
3	Antenna Wo (0 Deg)	None					84		
4	Antenna Wo (30 Deg)	None					84		
5	Antenna Wo (60 Deg)	None					84		
6	Antenna Wo (90 Deg)	None					84		
7	Antenna Wo (120 Deg)	None					84		
8	Antenna Wo (150 Deg)	None					84		
9	Antenna Wo (180 Deg)	None					84		
10	Antenna Wo (210 Deg)	None					84		
11	Antenna Wo (240 Deg)	None					84		
12	Antenna Wo (270 Deg)	None					84		
13	Antenna Wo (300 Deg)	None					84		
14	Antenna Wo (330 Deg)	None					84		
15	Antenna Wi (0 Deg)	None					84		
16	Antenna Wi (30 Deg)	None					84		
17	Antenna Wi (60 Deg)	None					84		
18	Antenna Wi (90 Deg)	None					84		
19	Antenna Wi (120 Deg)	None					84		
20	Antenna Wi (150 Deg)	None					84		
21	Antenna Wi (180 Deg)	None					84		
22	Antenna Wi (210 Deg)	None					84		
23	Antenna Wi (240 Deg)	None					84		
24	Antenna Wi (270 Deg)	None					84		
25	Antenna Wi (300 Deg)	None					84		
26	Antenna Wi (330 Deg)	None					84		
27	Antenna Wm (0 Deg)	None					84		
28	Antenna Wm (30 Deg)	None					84		
29	Antenna Wm (60 Deg)	None					84		
30	Antenna Wm (90 Deg)	None					84		
31	Antenna Wm (120 De...	None					84		
32	Antenna Wm (150 De...	None					84		
33	Antenna Wm (180 De...	None					84		
34	Antenna Wm (210 De...	None					84		
35	Antenna Wm (240 De...	None					84		
36	Antenna Wm (270 De...	None					84		
37	Antenna Wm (300 De...	None					84		
38	Antenna Wm (330 De...	None					84		
39	Structure D	None		-1					3
40	Structure Di	None					28		3
41	Structure Wo (0 Deg)	None					56		
42	Structure Wo (30 Deg)	None					56		
43	Structure Wo (60 Deg)	None					56		
44	Structure Wo (90 Deg)	None					56		
45	Structure Wo (120 D...	None					56		
46	Structure Wo (150 D...	None					56		
47	Structure Wo (180 D...	None					56		
48	Structure Wo (210 D...	None					56		
49	Structure Wo (240 D...	None					56		
50	Structure Wo (270 D...	None					56		
51	Structure Wo (300 D...	None					56		

### Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...
52	Structure Wo (330 D...	None						56	
53	Structure Wi (0 Deg)	None						56	
54	Structure Wi (30 Deg)	None						56	
55	Structure Wi (60 Deg)	None						56	
56	Structure Wi (90 Deg)	None						56	
57	Structure Wi (120 De...	None						56	
58	Structure Wi (150 De...	None						56	
59	Structure Wi (180 De...	None						56	
60	Structure Wi (210 De...	None						56	
61	Structure Wi (240 De...	None						56	
62	Structure Wi (270 De...	None						56	
63	Structure Wi (300 De...	None						56	
64	Structure Wi (330 De...	None						56	
65	Structure Wm (0 Deg)	None						56	
66	Structure Wm (30 D...	None						56	
67	Structure Wm (60 D...	None						56	
68	Structure Wm (90 D...	None						56	
69	Structure Wm (120 ...	None						56	
70	Structure Wm (150 ...	None						56	
71	Structure Wm (180 ...	None						56	
72	Structure Wm (210 ...	None						56	
73	Structure Wm (240 ...	None						56	
74	Structure Wm (270 ...	None						56	
75	Structure Wm (300 ...	None						56	
76	Structure Wm (330 ...	None						56	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		
81	BLC 39 Transient Are..	None						51	
82	BLC 40 Transient Are..	None						51	

### Load Combinations

	Description	Solve	PDelta	S...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...
1	1.2D+1.0Wo (0...	Yes	Y		1	1.2	39	1.2	3	1	41	1		
2	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	4	1	42	1		
3	1.2D+1.0Wo (6...	Yes	Y		1	1.2	39	1.2	5	1	43	1		
4	1.2D+1.0Wo (9...	Yes	Y		1	1.2	39	1.2	6	1	44	1		
5	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	7	1	45	1		
6	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	8	1	46	1		
7	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	9	1	47	1		
8	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	10	1	48	1		
9	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	11	1	49	1		
10	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	12	1	50	1		
11	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	13	1	51	1		
12	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	14	1	52	1		
13	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1
14	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1
15	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1
16	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1

**Load Combinations (Continued)**

	Description	Solve	PDelta	S...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...
17	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1		
18	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1		
19	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1		
20	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1		
21	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1		
22	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1		
23	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1		
24	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1		
25	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1				
26	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1				
27	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1				
28	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1				
29	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1				
30	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1				
31	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1				
32	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1				
33	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1				
34	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1				
35	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1				
36	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1				
37	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1				
38	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1				
39	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1				
40	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1				
41	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1				
42	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1				
43	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1				
44	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1				
45	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1				
46	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1				
47	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1				
48	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1				
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5								
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5								
51	1.4D	Yes	Y		1	1.4	39	1.4										
52	Seismic Mass		Y		1	1	39	1										
53	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1				
54	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866				
55	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5				
56	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ					
57	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5				
58	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866				
59	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1				
60	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866				
61	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5				
62	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ					
63	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5				
64	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866				



Company : Maser Consulting  
Designer : AE  
Job Number : Project No. 10068126  
Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
4:40 PM  
Checked By: DX

### **Joint Coordinates and Temperatures**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N3	-0.	0	-1.90625	0	
2	N27	-0.	0	-8.15625	0	
3	CP	0	0	0	0	
4	N5	-0.	0	-7.739583	0	
5	N6	0.166667	0	-7.739583	0	
6	N7	-0.166667	0	-7.739583	0	
7	N8	-0.	.25	-7.739583	0	
8	N9	0.166667	.25	-7.739583	0	
9	N10	-0.166667	.25	-7.739583	0	
10	N11	-0.	-.25	-7.739583	0	
11	N12	0.166667	-.25	-7.739583	0	
12	N13	-0.166667	-.25	-7.739583	0	
13	N14	-1.840304	0	1.0625	0	
14	N17	-6.702676	0	3.869792	0	
15	N18	-6.786009	0	3.725454	0	
16	N19	-6.619342	0	4.014129	0	
17	N20	-6.702676	.25	3.869792	0	
18	N21	-6.786009	.25	3.725454	0	
19	N22	-6.619342	.25	4.014129	0	
20	N23	-6.702676	-.25	3.869792	0	
21	N24	-6.786009	-.25	3.725454	0	
22	N25	-6.619342	-.25	4.014129	0	
23	N26	1.840304	0	1.0625	0	
24	N29	6.702676	0	3.869792	0	
25	N30	6.619342	0	4.014129	0	
26	N31	6.786009	0	3.725454	0	
27	N32	6.702676	.25	3.869792	0	
28	N33	6.619342	.25	4.014129	0	
29	N34	6.786009	.25	3.725454	0	
30	N35	6.702676	-.25	3.869792	0	
31	N36	6.619342	-.25	4.014129	0	
32	N37	6.786009	-.25	3.725454	0	
33	N38	-5.786009	0	4.014129	0	
34	N39	-3.869342	0	4.014129	0	
35	N41	5.797326	0	4.014129	0	
36	N41A	0.047326	0	4.014129	0	
37	N42	-5.786009	0	4.305796	0	
38	N43	-3.869342	0	4.305796	0	
39	N44	5.797326	0	4.305796	0	
40	N45	0.047326	0	4.305796	0	
41	N46	-5.786009	4.25	4.305796	0	
42	N47	-3.869342	4.25	4.305796	0	
43	N48	5.797326	4.25	4.305796	0	
44	N49	0.047326	4.25	4.305796	0	
45	N50	-5.786009	-4.25	4.305796	0	
46	N51	-3.869342	-4.25	4.305796	0	
47	N52	5.797326	-4.25	4.305796	0	
48	N53	0.047326	-4.25	4.305796	0	
49	N90	-1.983146	0	1.481757	0	
50	N91	-2.128979	0	1.229167	0	
51	N92	-1.983146	3.333333	1.481757	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
52	N93	-1.983146	-0.666667	1.481757	0	
53	N85A	-1.650861	0	0.953125	0	
54	N86	-7.06352	0	4.078125	0	
55	N88	1.650861	0	0.953125	0	
56	N89	7.06352	0	4.078125	0	
57	N89A	-3.869342	-1.5	4.305796	0	
58	N90A	-3.869342	3.5	4.305796	0	
59	N64	6.369342	0	3.003766	0	
60	N65	5.411009	0	1.343884	0	
61	N66	0.577675	0	-7.027696	0	
62	N67	3.452675	0	-2.04805	0	
63	N68	6.621933	0	2.857933	0	
64	N69	5.6636	0	1.198051	0	
65	N70	0.830266	0	-7.173529	0	
66	N71	3.705266	0	-2.193883	0	
67	N72	6.621933	4.25	2.857933	0	
68	N73	5.6636	4.25	1.198051	0	
69	N74	0.830266	4.25	-7.173529	0	
70	N75	3.705266	4.25	-2.193883	0	
71	N76	6.621933	-4.25	2.857933	0	
72	N77	5.6636	-4.25	1.198051	0	
73	N78	0.830266	-4.25	-7.173529	0	
74	N79	3.705266	-4.25	-2.193883	0	
75	N80	5.6636	-2	1.198051	0	
76	N81	5.6636	3	1.198051	0	
77	N82	5.6636	0.5	1.198051	0	
78	N83	3.705266	1.791667	-2.193883	0	
79	N84	3.705266	-2.791667	-2.193883	0	
80	N85	3.705266	-.5	-2.193883	0	
81	N87	-0.583333	0	-7.017895	0	
82	N88A	-1.541667	0	-5.358013	0	
83	N89B	-6.375001	0	3.013567	0	
84	N90B	-3.500001	0	-1.966079	0	
85	N91B	-0.835924	0	-7.163729	0	
86	N92B	-1.794257	0	-5.503847	0	
87	N93B	-6.627592	0	2.867733	0	
88	N94A	-3.752592	0	-2.111913	0	
89	N95	-0.835924	4.25	-7.163729	0	
90	N96	-1.794257	4.25	-5.503847	0	
91	N97	-6.627592	4.25	2.867733	0	
92	N98	-3.752592	4.25	-2.111913	0	
93	N99	-0.835924	-4.25	-7.163729	0	
94	N100	-1.794257	-4.25	-5.503847	0	
95	N101	-6.627592	-4.25	2.867733	0	
96	N102	-3.752592	-4.25	-2.111913	0	
97	N103	-1.794257	-2	-5.503847	0	
98	N104	-1.794257	3	-5.503847	0	
99	N105	-1.794257	0.5	-5.503847	0	
100	N106	-3.752592	1.791667	-2.111913	0	
101	N107	-3.752592	-2.791667	-2.111913	0	
102	N108	-3.752592	-.5	-2.111913	0	
103	N107A	-3.869342	.5	4.305796	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
104	N108B	-3.869342	1.5	4.305796	0	
105	N109	-3.869342	2.5	4.305796	0	
106	N108A	0.047326	.5	4.305796	0	
107	N109A	0.047326	2.791667	4.305796	0	
108	N110	0.047326	-1.791667	4.305796	0	
109	N109B	0.047326	1.5	4.305796	0	
110	N110A	0.047326	-.5	4.305796	0	
111	N111	-0.	0	-5.65625	0	
112	N113	-4.898456	0	2.828125	0	
113	N115	4.898456	0	2.828125	0	
114	N114	-4.898456	0	4.014133	0	
115	N115A	4.898456	0	4.014133	0	
116	N119	5.92557	0	2.235121	0	
117	N120	1.027113	0	-6.249254	0	
118	N124	-1.027113	0	-6.249254	0	
119	N125	-5.92557	0	2.235121	0	
120	N120A	-0.	0	-4.65625	0	
121	N122	-4.032431	0	2.328125	0	
122	N124A	4.032431	0	2.328125	0	
123	N123	-0.	-3	-1.90625	0	
124	N124B	-1.650861	-3	0.953125	0	
125	N125A	1.650861	-3	0.953125	0	
126	N126	-6.244342	3.75	4.014129	0	
127	N127	6.255659	3.75	4.014129	0	
128	N128	-5.786009	3.75	4.014129	0	
129	N129	-3.869342	3.75	4.014129	0	
130	N130	5.797326	3.75	4.014129	0	
131	N131	-5.786009	3.75	4.305796	0	
132	N132	-3.869342	3.75	4.305796	0	
133	N133	5.797326	3.75	4.305796	0	
134	N134	6.598509	3.75	3.400695	0	
135	N135	0.348508	3.75	-7.424624	0	
136	N136	6.369342	3.75	3.003766	0	
137	N137	5.411009	3.75	1.343884	0	
138	N138	0.577675	3.75	-7.027696	0	
139	N139	6.621933	3.75	2.857933	0	
140	N140	5.6636	3.75	1.198051	0	
141	N141	0.830266	3.75	-7.173529	0	
142	N142	-0.354167	3.75	-7.414824	0	
143	N143	-6.604167	3.75	3.410495	0	
144	N144	-0.583333	3.75	-7.017895	0	
145	N145	-1.541667	3.75	-5.358013	0	
146	N146	-6.375001	3.75	3.013567	0	
147	N147	-0.835924	3.75	-7.163729	0	
148	N148	-1.794257	3.75	-5.503847	0	
149	N149	-6.627592	3.75	2.867733	0	
150	N150	0.047326	3.75	4.014129	0	
151	N151	0.047326	3.75	4.305796	0	
152	N152	3.452675	3.75	-2.04805	0	
153	N153	3.705266	3.75	-2.193883	0	
154	N154	-3.500001	3.75	-1.966079	0	
155	N155	-3.752592	3.75	-2.111913	0	





### Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
156	N156	-4.952676	3.75	4.014129	0	
157	N157	4.963992	3.75	4.014129	0	
158	N158	4.963992	3.75	3.784963	0	
159	N160	-4.952674	3.75	3.784963	0	
160	N160A	5.952676	3.75	2.282078	0	
161	N161	0.994342	3.75	-6.306008	0	
162	N162	0.795878	3.75	-6.191425	0	
163	N163	5.754211	3.75	2.39666	0	
164	N164	-1	3.75	-6.296208	0	
165	N165	-5.958334	3.75	2.291879	0	
166	N166	-5.75987	3.75	2.406462	0	
167	N167	-0.801537	3.75	-6.181623	0	

### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	HSS4X4X3	Beam	SquareTube	A500 Gr.B ...	Typical	2.58	6.21	6.21	10
2	Standoff Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr.B ...	Typical	3.37	7.8	7.8	12.8
3	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Dual Mount Pipe	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
5	Mod Support Rail	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
6	Mod Support Rail Co...	L3X3X4	Column	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
7	Mod Kickers	LL3x3x3x6	Column	Double Angle (3..	A36 Gr.36	Typical	2.18	4.97	1.9	.027

### Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3
8	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

### Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M4	N3	N27			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
2	M4A	N10	N8			RIGID	None	None	RIGID	Typical
3	M5	N9	N8			RIGID	None	None	RIGID	Typical
4	M6	N13	N11			RIGID	None	None	RIGID	Typical
5	M7	N12	N11			RIGID	None	None	RIGID	Typical
6	M10	N7	N10			RIGID	None	None	RIGID	Typical
7	M11	N6	N9			RIGID	None	None	RIGID	Typical
8	M12	N7	N13			RIGID	None	None	RIGID	Typical
9	M13	N6	N12			RIGID	None	None	RIGID	Typical
10	M17	N22	N20			RIGID	None	None	RIGID	Typical
11	M18	N21	N20			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
12	M19	N25	N23			RIGID	None	None	RIGID	Typical
13	M20	N24	N23			RIGID	None	None	RIGID	Typical
14	M23	N19	N22			RIGID	None	None	RIGID	Typical
15	M24	N18	N21			RIGID	None	None	RIGID	Typical
16	M25	N19	N25			RIGID	None	None	RIGID	Typical
17	M26	N18	N24			RIGID	None	None	RIGID	Typical
18	M28	N31	N29			RIGID	None	None	RIGID	Typical
19	M29	N30	N29			RIGID	None	None	RIGID	Typical
20	M30	N34	N32			RIGID	None	None	RIGID	Typical
21	M31	N33	N32			RIGID	None	None	RIGID	Typical
22	M32	N37	N35			RIGID	None	None	RIGID	Typical
23	M33	N36	N35			RIGID	None	None	RIGID	Typical
24	M34	N32	N29			RIGID	None	None	RIGID	Typical
25	M35	N35	N29			RIGID	None	None	RIGID	Typical
26	M36	N31	N34			RIGID	None	None	RIGID	Typical
27	M37	N30	N33			RIGID	None	None	RIGID	Typical
28	M38	N31	N37			RIGID	None	None	RIGID	Typical
29	M39	N30	N36			RIGID	None	None	RIGID	Typical
30	M40	N18	N7			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
31	M41	N6	N31			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
32	M42	N19	N30			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
33	M43	N38	N42			RIGID	None	None	RIGID	Typical
34	M44	N39	N43			RIGID	None	None	RIGID	Typical
35	M45	N41A	N45			RIGID	None	None	RIGID	Typical
36	M46	N41	N44			RIGID	None	None	RIGID	Typical
37	MP4A	N46	N50			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
38	MP3A	N47	N51			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
39	MP2A	N49	N53			Dual Mount Pipe	Column	Pipe	A53 Gr.B	Typical
40	MP1A	N48	N52			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
41	DC	N92	N93			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
42	M68	N91	N90			RIGID	None	None	RIGID	Typical
43	M67	N85A	N86			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
44	M68A	N88	N89			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
45	M53	N64	N68			RIGID	None	None	RIGID	Typical
46	M54	N65	N69			RIGID	None	None	RIGID	Typical
47	M55	N67	N71			RIGID	None	None	RIGID	Typical
48	M56	N66	N70			RIGID	None	None	RIGID	Typical
49	MP4C	N72	N76		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
50	MP3C	N73	N77		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
51	MP2C	N75	N79		240	Dual Mount Pipe	Column	Pipe	A53 Gr.B	Typical
52	MP1C	N74	N78		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
53	M61	N87	N91B			RIGID	None	None	RIGID	Typical
54	M62	N88A	N92B			RIGID	None	None	RIGID	Typical
55	M63	N90B	N94A			RIGID	None	None	RIGID	Typical
56	M64	N89B	N93B			RIGID	None	None	RIGID	Typical
57	MP4B	N95	N99		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
58	MP3B	N96	N100		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
59	MP2B	N98	N102		120	Dual Mount Pipe	Column	Pipe	A53 Gr.B	Typical
60	MP1B	N97	N101		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
61	M61A	N7	N5			RIGID	None	None	RIGID	Typical
62	M62A	N6	N5			RIGID	None	None	RIGID	Typical
63	M63A	N8	N5		240	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
64	M64A	N11	N5		120	RIGID	None	None	RIGID	Typical
65	M65	N19	N17			RIGID	None	None	RIGID	Typical
66	M66	N18	N17			RIGID	None	None	RIGID	Typical
67	M67A	N20	N17		120	RIGID	None	None	RIGID	Typical
68	M68B	N23	N17		240	RIGID	None	None	RIGID	Typical
69	M69	N120A	N123			Mod Kickers	Column	Double Angle (...)	A36 Gr.36	Typical
70	M70	N122	N124B			Mod Kickers	Column	Double Angle (...)	A36 Gr.36	Typical
71	M71	N124A	N125A			Mod Kickers	Column	Double Angle (...)	A36 Gr.36	Typical
72	M72	N126	N127			Mod Support ...	Column	Pipe	A53 Gr.B	Typical
73	M73	N128	N131			RIGID	None	None	RIGID	Typical
74	M74	N129	N132			RIGID	None	None	RIGID	Typical
75	M75	N130	N133			RIGID	None	None	RIGID	Typical
76	M76	N134	N135			Mod Support ...	Column	Pipe	A53 Gr.B	Typical
77	M77	N136	N139			RIGID	None	None	RIGID	Typical
78	M78	N137	N140			RIGID	None	None	RIGID	Typical
79	M79	N138	N141			RIGID	None	None	RIGID	Typical
80	M80	N142	N143			Mod Support ...	Column	Pipe	A53 Gr.B	Typical
81	M81	N144	N147			RIGID	None	None	RIGID	Typical
82	M82	N145	N148			RIGID	None	None	RIGID	Typical
83	M83	N146	N149			RIGID	None	None	RIGID	Typical
84	M84	N150	N151			RIGID	None	None	RIGID	Typical
85	M85	N152	N153			RIGID	None	None	RIGID	Typical
86	M86	N154	N155			RIGID	None	None	RIGID	Typical
87	M87	N158	N157			RIGID	None	None	RIGID	Typical
88	M88	N160	N156			RIGID	None	None	RIGID	Typical
89	M89	N162	N161			RIGID	None	None	RIGID	Typical
90	M90	N163	N160A			RIGID	None	None	RIGID	Typical
91	M91	N166	N165			RIGID	None	None	RIGID	Typical
92	M92	N167	N164			RIGID	None	None	RIGID	Typical
93	M93	N160	N166		90	Mod Support ...	Column	Single Angle	A36 Gr.36	Typical
94	M94	N163	N158		90	Mod Support ...	Column	Single Angle	A36 Gr.36	Typical
95	M95	N167	N162		90	Mod Support ...	Column	Single Angle	A36 Gr.36	Typical

**Member Advanced Data**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M4						Yes				None
2	M4A						Yes	** NA **			None
3	M5						Yes	** NA **			None
4	M6						Yes	** NA **			None
5	M7						Yes	** NA **			None
6	M10						Yes	** NA **			None
7	M11						Yes	** NA **			None
8	M12						Yes	** NA **			None
9	M13						Yes	** NA **			None
10	M17						Yes	** NA **			None
11	M18						Yes	** NA **			None
12	M19						Yes	** NA **			None
13	M20						Yes	** NA **			None
14	M23						Yes	** NA **			None
15	M24						Yes	** NA **			None





**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
68	M68B		BenPIN				Yes	** NA **			None
69	M69	BenPIN	BenPIN				Yes	** NA **			None
70	M70	BenPIN	BenPIN				Yes	** NA **			None
71	M71	BenPIN	BenPIN				Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M73						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	M75						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	M77						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	M79						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	M81						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	M83						Yes	** NA **			None
84	M84						Yes	** NA **			None
85	M85						Yes	** NA **			None
86	M86						Yes	** NA **			None
87	M87		000000				Yes	** NA **			None
88	M88		000000				Yes	** NA **			None
89	M89		000000				Yes	** NA **			None
90	M90		000000				Yes	** NA **			None
91	M91		000000				Yes	** NA **			None
92	M92		000000				Yes	** NA **			None
93	M93						Yes	** NA **			None
94	M94						Yes	** NA **			None
95	M95						Yes	** NA **			None

**Member Point Loads (BLC 1 : Antenna D)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-25.8	1.25
2	MP2A	My	-.017	1.25
3	MP2A	Mz	.017	1.25
4	MP2A	Y	-25.8	6.25
5	MP2A	My	-.017	6.25
6	MP2A	Mz	.017	6.25
7	MP2B	Y	-25.8	1.25
8	MP2B	My	.023	1.25
9	MP2B	Mz	.006	1.25
10	MP2B	Y	-25.8	6.25
11	MP2B	My	.023	6.25
12	MP2B	Mz	.006	6.25
13	MP2C	Y	-25.8	1.25
14	MP2C	My	-.006	1.25
15	MP2C	Mz	-.023	1.25
16	MP2C	Y	-25.8	6.25
17	MP2C	My	-.006	6.25
18	MP2C	Mz	-.023	6.25
19	MP2A	Y	-25.8	1.25



**Member Point Loads (BLC 1 : Antenna D) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP2A	My	-.017	1.25
21	MP2A	Mz	-.017	1.25
22	MP2A	Y	-25.8	6.25
23	MP2A	My	-.017	6.25
24	MP2A	Mz	-.017	6.25
25	MP2B	Y	-25.8	1.25
26	MP2B	My	-.006	1.25
27	MP2B	Mz	.023	1.25
28	MP2B	Y	-25.8	6.25
29	MP2B	My	-.006	6.25
30	MP2B	Mz	.023	6.25
31	MP2C	Y	-25.8	1.25
32	MP2C	My	.023	1.25
33	MP2C	Mz	-.006	1.25
34	MP2C	Y	-25.8	6.25
35	MP2C	My	.023	6.25
36	MP2C	Mz	-.006	6.25
37	MP1A	Y	-43.55	2.75
38	MP1A	My	-.022	2.75
39	MP1A	Mz	0	2.75
40	MP1A	Y	-43.55	4.75
41	MP1A	My	-.022	4.75
42	MP1A	Mz	0	4.75
43	MP1B	Y	-43.55	2.75
44	MP1B	My	.011	2.75
45	MP1B	Mz	.019	2.75
46	MP1B	Y	-43.55	4.75
47	MP1B	My	.011	4.75
48	MP1B	Mz	.019	4.75
49	MP1C	Y	-43.55	2.75
50	MP1C	My	.011	2.75
51	MP1C	Mz	-.019	2.75
52	MP1C	Y	-43.55	4.75
53	MP1C	My	.011	4.75
54	MP1C	Mz	-.019	4.75
55	DC	Y	-32	1.5
56	DC	My	0	1.5
57	DC	Mz	0	1.5
58	MP2A	Y	-84.4	2.5
59	MP2A	My	.042	2.5
60	MP2A	Mz	0	2.5
61	MP2B	Y	-84.4	2.5
62	MP2B	My	-.021	2.5
63	MP2B	Mz	-.037	2.5
64	MP2C	Y	-84.4	2.5
65	MP2C	My	-.021	2.5
66	MP2C	Mz	.037	2.5
67	MP3A	Y	-70.3	2.5
68	MP3A	My	.035	2.5
69	MP3A	Mz	0	2.5
70	MP3B	Y	-70.3	2.5
71	MP3B	My	-.018	2.5



**Member Point Loads (BLC 1 : Antenna D) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
72	MP3B	Mz	-.03	2.5
73	MP3C	Y	-70.3	2.5
74	MP3C	My	-.018	2.5
75	MP3C	Mz	.03	2.5
76	MP4A	Y	-52.9	2.5
77	MP4A	My	.026	2.5
78	MP4A	Mz	0	2.5
79	MP4B	Y	-52.9	2.5
80	MP4B	My	-.013	2.5
81	MP4B	Mz	-.023	2.5
82	MP4C	Y	-52.9	2.5
83	MP4C	My	.013	2.5
84	MP4C	Mz	.023	2.5

**Member Point Loads (BLC 2 : Antenna Di)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-127.069	1.25
2	MP2A	My	-.085	1.25
3	MP2A	Mz	.085	1.25
4	MP2A	Y	-127.069	6.25
5	MP2A	My	-.085	6.25
6	MP2A	Mz	.085	6.25
7	MP2B	Y	-127.069	1.25
8	MP2B	My	.116	1.25
9	MP2B	Mz	.031	1.25
10	MP2B	Y	-127.069	6.25
11	MP2B	My	.116	6.25
12	MP2B	Mz	.031	6.25
13	MP2C	Y	-127.069	1.25
14	MP2C	My	-.031	1.25
15	MP2C	Mz	-.116	1.25
16	MP2C	Y	-127.069	6.25
17	MP2C	My	-.031	6.25
18	MP2C	Mz	-.116	6.25
19	MP2A	Y	-127.069	1.25
20	MP2A	My	-.085	1.25
21	MP2A	Mz	-.085	1.25
22	MP2A	Y	-127.069	6.25
23	MP2A	My	-.085	6.25
24	MP2A	Mz	-.085	6.25
25	MP2B	Y	-127.069	1.25
26	MP2B	My	-.031	1.25
27	MP2B	Mz	.116	1.25
28	MP2B	Y	-127.069	6.25
29	MP2B	My	-.031	6.25
30	MP2B	Mz	.116	6.25
31	MP2C	Y	-127.069	1.25
32	MP2C	My	.116	1.25
33	MP2C	Mz	-.031	1.25
34	MP2C	Y	-127.069	6.25
35	MP2C	My	.116	6.25

**Member Point Loads (BLC 2 : Antenna Di) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP2C	Mz	-.031	6.25
37	MP1A	Y	-57.471	2.75
38	MP1A	My	-.029	2.75
39	MP1A	Mz	0	2.75
40	MP1A	Y	-57.471	4.75
41	MP1A	My	-.029	4.75
42	MP1A	Mz	0	4.75
43	MP1B	Y	-57.471	2.75
44	MP1B	My	.014	2.75
45	MP1B	Mz	.025	2.75
46	MP1B	Y	-57.471	4.75
47	MP1B	My	.014	4.75
48	MP1B	Mz	.025	4.75
49	MP1C	Y	-57.471	2.75
50	MP1C	My	.014	2.75
51	MP1C	Mz	-.025	2.75
52	MP1C	Y	-57.471	4.75
53	MP1C	My	.014	4.75
54	MP1C	Mz	-.025	4.75
55	DC	Y	-140.545	1.5
56	DC	My	0	1.5
57	DC	Mz	0	1.5
58	MP2A	Y	-73.071	2.5
59	MP2A	My	.037	2.5
60	MP2A	Mz	0	2.5
61	MP2B	Y	-73.071	2.5
62	MP2B	My	-.018	2.5
63	MP2B	Mz	-.032	2.5
64	MP2C	Y	-73.071	2.5
65	MP2C	My	-.018	2.5
66	MP2C	Mz	.032	2.5
67	MP3A	Y	-65.985	2.5
68	MP3A	My	.033	2.5
69	MP3A	Mz	0	2.5
70	MP3B	Y	-65.985	2.5
71	MP3B	My	-.016	2.5
72	MP3B	Mz	-.029	2.5
73	MP3C	Y	-65.985	2.5
74	MP3C	My	-.016	2.5
75	MP3C	Mz	.029	2.5
76	MP4A	Y	-61.304	2.5
77	MP4A	My	.031	2.5
78	MP4A	Mz	0	2.5
79	MP4B	Y	-61.304	2.5
80	MP4B	My	-.015	2.5
81	MP4B	Mz	-.027	2.5
82	MP4C	Y	-61.304	2.5
83	MP4C	My	.015	2.5
84	MP4C	Mz	.027	2.5

**Member Point Loads (BLC 3 : Antenna Wo (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
 4:40 PM  
 Checked By: DX

**Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.25
2	MP2A	Z	-181.901	1.25
3	MP2A	Mx	-.121	1.25
4	MP2A	X	0	6.25
5	MP2A	Z	-181.901	6.25
6	MP2A	Mx	-.121	6.25
7	MP2B	X	0	1.25
8	MP2B	Z	-137.171	1.25
9	MP2B	Mx	-.033	1.25
10	MP2B	X	0	6.25
11	MP2B	Z	-137.171	6.25
12	MP2B	Mx	-.033	6.25
13	MP2C	X	0	1.25
14	MP2C	Z	-137.171	1.25
15	MP2C	Mx	.125	1.25
16	MP2C	X	0	6.25
17	MP2C	Z	-137.171	6.25
18	MP2C	Mx	.125	6.25
19	MP2A	X	0	1.25
20	MP2A	Z	-181.901	1.25
21	MP2A	Mx	.121	1.25
22	MP2A	X	0	6.25
23	MP2A	Z	-181.901	6.25
24	MP2A	Mx	.121	6.25
25	MP2B	X	0	1.25
26	MP2B	Z	-137.171	1.25
27	MP2B	Mx	-.125	1.25
28	MP2B	X	0	6.25
29	MP2B	Z	-137.171	6.25
30	MP2B	Mx	-.125	6.25
31	MP2C	X	0	1.25
32	MP2C	Z	-137.171	1.25
33	MP2C	Mx	.033	1.25
34	MP2C	X	0	6.25
35	MP2C	Z	-137.171	6.25
36	MP2C	Mx	.033	6.25
37	MP1A	X	0	2.75
38	MP1A	Z	-75.06	2.75
39	MP1A	Mx	0	2.75
40	MP1A	X	0	4.75
41	MP1A	Z	-75.06	4.75
42	MP1A	Mx	0	4.75
43	MP1B	X	0	2.75
44	MP1B	Z	-40.805	2.75
45	MP1B	Mx	-.018	2.75
46	MP1B	X	0	4.75
47	MP1B	Z	-40.805	4.75
48	MP1B	Mx	-.018	4.75
49	MP1C	X	0	2.75
50	MP1C	Z	-40.805	2.75
51	MP1C	Mx	.018	2.75
52	MP1C	X	0	4.75

**Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	-40.805	4.75
54	MP1C	Mx	.018	4.75
55	DC	X	0	1.5
56	DC	Z	-121.993	1.5
57	DC	Mx	0	1.5
58	MP2A	X	0	2.5
59	MP2A	Z	-59.729	2.5
60	MP2A	Mx	0	2.5
61	MP2B	X	0	2.5
62	MP2B	Z	-44.876	2.5
63	MP2B	Mx	.019	2.5
64	MP2C	X	0	2.5
65	MP2C	Z	-44.876	2.5
66	MP2C	Mx	-.019	2.5
67	MP3A	X	0	2.5
68	MP3A	Z	-59.729	2.5
69	MP3A	Mx	0	2.5
70	MP3B	X	0	2.5
71	MP3B	Z	-39.187	2.5
72	MP3B	Mx	.017	2.5
73	MP3C	X	0	2.5
74	MP3C	Z	-39.187	2.5
75	MP3C	Mx	-.017	2.5
76	MP4A	X	0	2.5
77	MP4A	Z	-62.603	2.5
78	MP4A	Mx	0	2.5
79	MP4B	X	0	2.5
80	MP4B	Z	-35.326	2.5
81	MP4B	Mx	.015	2.5
82	MP4C	X	0	2.5
83	MP4C	Z	-35.326	2.5
84	MP4C	Mx	-.015	2.5

**Member Point Loads (BLC 4 : Antenna Wo (30 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	83.496	1.25
2	MP2A	Z	-144.619	1.25
3	MP2A	Mx	-.152	1.25
4	MP2A	X	83.496	6.25
5	MP2A	Z	-144.619	6.25
6	MP2A	Mx	-.152	6.25
7	MP2B	X	83.496	1.25
8	MP2B	Z	-144.619	1.25
9	MP2B	Mx	.041	1.25
10	MP2B	X	83.496	6.25
11	MP2B	Z	-144.619	6.25
12	MP2B	Mx	.041	6.25
13	MP2C	X	61.131	1.25
14	MP2C	Z	-105.881	1.25
15	MP2C	Mx	.082	1.25
16	MP2C	X	61.131	6.25

**Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-105.881	6.25
18	MP2C	Mx	.082	6.25
19	MP2A	X	83.496	1.25
20	MP2A	Z	-144.619	1.25
21	MP2A	Mx	.041	1.25
22	MP2A	X	83.496	6.25
23	MP2A	Z	-144.619	6.25
24	MP2A	Mx	.041	6.25
25	MP2B	X	83.496	1.25
26	MP2B	Z	-144.619	1.25
27	MP2B	Mx	-.152	1.25
28	MP2B	X	83.496	6.25
29	MP2B	Z	-144.619	6.25
30	MP2B	Mx	-.152	6.25
31	MP2C	X	61.131	1.25
32	MP2C	Z	-105.881	1.25
33	MP2C	Mx	.082	1.25
34	MP2C	X	61.131	6.25
35	MP2C	Z	-105.881	6.25
36	MP2C	Mx	.082	6.25
37	MP1A	X	31.821	2.75
38	MP1A	Z	-55.115	2.75
39	MP1A	Mx	-.016	2.75
40	MP1A	X	31.821	4.75
41	MP1A	Z	-55.115	4.75
42	MP1A	Mx	-.016	4.75
43	MP1B	X	31.821	2.75
44	MP1B	Z	-55.115	2.75
45	MP1B	Mx	-.016	2.75
46	MP1B	X	31.821	4.75
47	MP1B	Z	-55.115	4.75
48	MP1B	Mx	-.016	4.75
49	MP1C	X	14.693	2.75
50	MP1C	Z	-25.449	2.75
51	MP1C	Mx	.015	2.75
52	MP1C	X	14.693	4.75
53	MP1C	Z	-25.449	4.75
54	MP1C	Mx	.015	4.75
55	DC	X	64.839	1.5
56	DC	Z	-112.305	1.5
57	DC	Mx	0	1.5
58	MP2A	X	27.389	2.5
59	MP2A	Z	-47.439	2.5
60	MP2A	Mx	.014	2.5
61	MP2B	X	27.389	2.5
62	MP2B	Z	-47.439	2.5
63	MP2B	Mx	.014	2.5
64	MP2C	X	19.963	2.5
65	MP2C	Z	-34.577	2.5
66	MP2C	Mx	-.02	2.5
67	MP3A	X	26.441	2.5
68	MP3A	Z	-45.797	2.5



### Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.013	2.5
70	MP3B	X	26.441	2.5
71	MP3B	Z	-45.797	2.5
72	MP3B	Mx	.013	2.5
73	MP3C	X	16.17	2.5
74	MP3C	Z	-28.007	2.5
75	MP3C	Mx	-.016	2.5
76	MP4A	X	26.756	2.5
77	MP4A	Z	-46.342	2.5
78	MP4A	Mx	.013	2.5
79	MP4B	X	26.756	2.5
80	MP4B	Z	-46.342	2.5
81	MP4B	Mx	.013	2.5
82	MP4C	X	26.756	2.5
83	MP4C	Z	-46.342	2.5
84	MP4C	Mx	-.013	2.5

### Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	118.794	1.25
2	MP2A	Z	-68.586	1.25
3	MP2A	Mx	-.125	1.25
4	MP2A	X	118.794	6.25
5	MP2A	Z	-68.586	6.25
6	MP2A	Mx	-.125	6.25
7	MP2B	X	157.531	1.25
8	MP2B	Z	-90.951	1.25
9	MP2B	Mx	.121	1.25
10	MP2B	X	157.531	6.25
11	MP2B	Z	-90.951	6.25
12	MP2B	Mx	.121	6.25
13	MP2C	X	118.794	1.25
14	MP2C	Z	-68.586	1.25
15	MP2C	Mx	.033	1.25
16	MP2C	X	118.794	6.25
17	MP2C	Z	-68.586	6.25
18	MP2C	Mx	.033	6.25
19	MP2A	X	118.794	1.25
20	MP2A	Z	-68.586	1.25
21	MP2A	Mx	-.033	1.25
22	MP2A	X	118.794	6.25
23	MP2A	Z	-68.586	6.25
24	MP2A	Mx	-.033	6.25
25	MP2B	X	157.531	1.25
26	MP2B	Z	-90.951	1.25
27	MP2B	Mx	-.121	1.25
28	MP2B	X	157.531	6.25
29	MP2B	Z	-90.951	6.25
30	MP2B	Mx	-.121	6.25
31	MP2C	X	118.794	1.25
32	MP2C	Z	-68.586	1.25



**Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.125	1.25
34	MP2C	X	118.794	6.25
35	MP2C	Z	-68.586	6.25
36	MP2C	Mx	.125	6.25
37	MP1A	X	35.338	2.75
38	MP1A	Z	-20.402	2.75
39	MP1A	Mx	-.018	2.75
40	MP1A	X	35.338	4.75
41	MP1A	Z	-20.402	4.75
42	MP1A	Mx	-.018	4.75
43	MP1B	X	65.004	2.75
44	MP1B	Z	-37.53	2.75
45	MP1B	Mx	0	2.75
46	MP1B	X	65.004	4.75
47	MP1B	Z	-37.53	4.75
48	MP1B	Mx	0	4.75
49	MP1C	X	35.338	2.75
50	MP1C	Z	-20.402	2.75
51	MP1C	Mx	.018	2.75
52	MP1C	X	35.338	4.75
53	MP1C	Z	-20.402	4.75
54	MP1C	Mx	.018	4.75
55	DC	X	105.649	1.5
56	DC	Z	-60.996	1.5
57	DC	Mx	0	1.5
58	MP2A	X	38.864	2.5
59	MP2A	Z	-22.438	2.5
60	MP2A	Mx	.019	2.5
61	MP2B	X	51.727	2.5
62	MP2B	Z	-29.864	2.5
63	MP2B	Mx	0	2.5
64	MP2C	X	38.864	2.5
65	MP2C	Z	-22.438	2.5
66	MP2C	Mx	-.019	2.5
67	MP3A	X	33.937	2.5
68	MP3A	Z	-19.594	2.5
69	MP3A	Mx	.017	2.5
70	MP3B	X	51.727	2.5
71	MP3B	Z	-29.864	2.5
72	MP3B	Mx	0	2.5
73	MP3C	X	33.937	2.5
74	MP3C	Z	-19.594	2.5
75	MP3C	Mx	-.017	2.5
76	MP4A	X	30.593	2.5
77	MP4A	Z	-17.663	2.5
78	MP4A	Mx	.015	2.5
79	MP4B	X	54.216	2.5
80	MP4B	Z	-31.302	2.5
81	MP4B	Mx	0	2.5
82	MP4C	X	54.216	2.5
83	MP4C	Z	-31.302	2.5
84	MP4C	Mx	0	2.5











**Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.017	2.5
70	MP3B	X	33.937	2.5
71	MP3B	Z	19.594	2.5
72	MP3B	Mx	-.017	2.5
73	MP3C	X	51.727	2.5
74	MP3C	Z	29.864	2.5
75	MP3C	Mx	0	2.5
76	MP4A	X	30.593	2.5
77	MP4A	Z	17.663	2.5
78	MP4A	Mx	.015	2.5
79	MP4B	X	30.593	2.5
80	MP4B	Z	17.663	2.5
81	MP4B	Mx	-.015	2.5
82	MP4C	X	30.593	2.5
83	MP4C	Z	17.663	2.5
84	MP4C	Mx	.015	2.5

**Member Point Loads (BLC 8 : Antenna Wo (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	83.496	1.25
2	MP2A	Z	144.619	1.25
3	MP2A	Mx	.041	1.25
4	MP2A	X	83.496	6.25
5	MP2A	Z	144.619	6.25
6	MP2A	Mx	.041	6.25
7	MP2B	X	61.131	1.25
8	MP2B	Z	105.881	1.25
9	MP2B	Mx	.082	1.25
10	MP2B	X	61.131	6.25
11	MP2B	Z	105.881	6.25
12	MP2B	Mx	.082	6.25
13	MP2C	X	83.496	1.25
14	MP2C	Z	144.619	1.25
15	MP2C	Mx	-.152	1.25
16	MP2C	X	83.496	6.25
17	MP2C	Z	144.619	6.25
18	MP2C	Mx	-.152	6.25
19	MP2A	X	83.496	1.25
20	MP2A	Z	144.619	1.25
21	MP2A	Mx	-.152	1.25
22	MP2A	X	83.496	6.25
23	MP2A	Z	144.619	6.25
24	MP2A	Mx	-.152	6.25
25	MP2B	X	61.131	1.25
26	MP2B	Z	105.881	1.25
27	MP2B	Mx	.082	1.25
28	MP2B	X	61.131	6.25
29	MP2B	Z	105.881	6.25
30	MP2B	Mx	.082	6.25
31	MP2C	X	83.496	1.25
32	MP2C	Z	144.619	1.25



**Member Point Loads (BLC 8 : Antenna Wo (150 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.041	1.25
34	MP2C	X	83.496	6.25
35	MP2C	Z	144.619	6.25
36	MP2C	Mx	.041	6.25
37	MP1A	X	31.821	2.75
38	MP1A	Z	55.115	2.75
39	MP1A	Mx	-.016	2.75
40	MP1A	X	31.821	4.75
41	MP1A	Z	55.115	4.75
42	MP1A	Mx	-.016	4.75
43	MP1B	X	14.693	2.75
44	MP1B	Z	25.449	2.75
45	MP1B	Mx	.015	2.75
46	MP1B	X	14.693	4.75
47	MP1B	Z	25.449	4.75
48	MP1B	Mx	.015	4.75
49	MP1C	X	31.821	2.75
50	MP1C	Z	55.115	2.75
51	MP1C	Mx	-.016	2.75
52	MP1C	X	31.821	4.75
53	MP1C	Z	55.115	4.75
54	MP1C	Mx	-.016	4.75
55	DC	X	53.311	1.5
56	DC	Z	92.337	1.5
57	DC	Mx	0	1.5
58	MP2A	X	27.389	2.5
59	MP2A	Z	47.439	2.5
60	MP2A	Mx	.014	2.5
61	MP2B	X	19.963	2.5
62	MP2B	Z	34.577	2.5
63	MP2B	Mx	-.02	2.5
64	MP2C	X	27.389	2.5
65	MP2C	Z	47.439	2.5
66	MP2C	Mx	.014	2.5
67	MP3A	X	26.441	2.5
68	MP3A	Z	45.797	2.5
69	MP3A	Mx	.013	2.5
70	MP3B	X	16.17	2.5
71	MP3B	Z	28.007	2.5
72	MP3B	Mx	-.016	2.5
73	MP3C	X	26.441	2.5
74	MP3C	Z	45.797	2.5
75	MP3C	Mx	.013	2.5
76	MP4A	X	26.756	2.5
77	MP4A	Z	46.342	2.5
78	MP4A	Mx	.013	2.5
79	MP4B	X	13.117	2.5
80	MP4B	Z	22.719	2.5
81	MP4B	Mx	-.013	2.5
82	MP4C	X	13.117	2.5
83	MP4C	Z	22.719	2.5
84	MP4C	Mx	.013	2.5



**Member Point Loads (BLC 9 : Antenna Wo (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP2A	X	0	1.25
2	MP2A	Z	181.901	1.25
3	MP2A	Mx	.121	1.25
4	MP2A	X	0	6.25
5	MP2A	Z	181.901	6.25
6	MP2A	Mx	.121	6.25
7	MP2B	X	0	1.25
8	MP2B	Z	137.171	1.25
9	MP2B	Mx	.033	1.25
10	MP2B	X	0	6.25
11	MP2B	Z	137.171	6.25
12	MP2B	Mx	.033	6.25
13	MP2C	X	0	1.25
14	MP2C	Z	137.171	1.25
15	MP2C	Mx	-.125	1.25
16	MP2C	X	0	6.25
17	MP2C	Z	137.171	6.25
18	MP2C	Mx	-.125	6.25
19	MP2A	X	0	1.25
20	MP2A	Z	181.901	1.25
21	MP2A	Mx	-.121	1.25
22	MP2A	X	0	6.25
23	MP2A	Z	181.901	6.25
24	MP2A	Mx	-.121	6.25
25	MP2B	X	0	1.25
26	MP2B	Z	137.171	1.25
27	MP2B	Mx	.125	1.25
28	MP2B	X	0	6.25
29	MP2B	Z	137.171	6.25
30	MP2B	Mx	.125	6.25
31	MP2C	X	0	1.25
32	MP2C	Z	137.171	1.25
33	MP2C	Mx	-.033	1.25
34	MP2C	X	0	6.25
35	MP2C	Z	137.171	6.25
36	MP2C	Mx	-.033	6.25
37	MP1A	X	0	2.75
38	MP1A	Z	75.06	2.75
39	MP1A	Mx	0	2.75
40	MP1A	X	0	4.75
41	MP1A	Z	75.06	4.75
42	MP1A	Mx	0	4.75
43	MP1B	X	0	2.75
44	MP1B	Z	40.805	2.75
45	MP1B	Mx	.018	2.75
46	MP1B	X	0	4.75
47	MP1B	Z	40.805	4.75
48	MP1B	Mx	.018	4.75
49	MP1C	X	0	2.75
50	MP1C	Z	40.805	2.75
51	MP1C	Mx	-.018	2.75
52	MP1C	X	0	4.75



**Member Point Loads (BLC 9 : Antenna Wo (180 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	40.805	4.75
54	MP1C	Mx	-.018	4.75
55	DC	X	0	1.5
56	DC	Z	121.993	1.5
57	DC	Mx	0	1.5
58	MP2A	X	0	2.5
59	MP2A	Z	59.729	2.5
60	MP2A	Mx	0	2.5
61	MP2B	X	0	2.5
62	MP2B	Z	44.876	2.5
63	MP2B	Mx	-.019	2.5
64	MP2C	X	0	2.5
65	MP2C	Z	44.876	2.5
66	MP2C	Mx	.019	2.5
67	MP3A	X	0	2.5
68	MP3A	Z	59.729	2.5
69	MP3A	Mx	0	2.5
70	MP3B	X	0	2.5
71	MP3B	Z	39.187	2.5
72	MP3B	Mx	-.017	2.5
73	MP3C	X	0	2.5
74	MP3C	Z	39.187	2.5
75	MP3C	Mx	.017	2.5
76	MP4A	X	0	2.5
77	MP4A	Z	62.603	2.5
78	MP4A	Mx	0	2.5
79	MP4B	X	0	2.5
80	MP4B	Z	35.326	2.5
81	MP4B	Mx	-.015	2.5
82	MP4C	X	0	2.5
83	MP4C	Z	35.326	2.5
84	MP4C	Mx	.015	2.5

**Member Point Loads (BLC 10 : Antenna Wo (210 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-83.496	1.25
2	MP2A	Z	144.619	1.25
3	MP2A	Mx	.152	1.25
4	MP2A	X	-83.496	6.25
5	MP2A	Z	144.619	6.25
6	MP2A	Mx	.152	6.25
7	MP2B	X	-83.496	1.25
8	MP2B	Z	144.619	1.25
9	MP2B	Mx	-.041	1.25
10	MP2B	X	-83.496	6.25
11	MP2B	Z	144.619	6.25
12	MP2B	Mx	-.041	6.25
13	MP2C	X	-61.131	1.25
14	MP2C	Z	105.881	1.25
15	MP2C	Mx	-.082	1.25
16	MP2C	X	-61.131	6.25



**Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	105.881	6.25
18	MP2C	Mx	-.082	6.25
19	MP2A	X	-83.496	1.25
20	MP2A	Z	144.619	1.25
21	MP2A	Mx	-.041	1.25
22	MP2A	X	-83.496	6.25
23	MP2A	Z	144.619	6.25
24	MP2A	Mx	-.041	6.25
25	MP2B	X	-83.496	1.25
26	MP2B	Z	144.619	1.25
27	MP2B	Mx	.152	1.25
28	MP2B	X	-83.496	6.25
29	MP2B	Z	144.619	6.25
30	MP2B	Mx	.152	6.25
31	MP2C	X	-61.131	1.25
32	MP2C	Z	105.881	1.25
33	MP2C	Mx	-.082	1.25
34	MP2C	X	-61.131	6.25
35	MP2C	Z	105.881	6.25
36	MP2C	Mx	-.082	6.25
37	MP1A	X	-31.821	2.75
38	MP1A	Z	55.115	2.75
39	MP1A	Mx	.016	2.75
40	MP1A	X	-31.821	4.75
41	MP1A	Z	55.115	4.75
42	MP1A	Mx	.016	4.75
43	MP1B	X	-31.821	2.75
44	MP1B	Z	55.115	2.75
45	MP1B	Mx	.016	2.75
46	MP1B	X	-31.821	4.75
47	MP1B	Z	55.115	4.75
48	MP1B	Mx	.016	4.75
49	MP1C	X	-14.693	2.75
50	MP1C	Z	25.449	2.75
51	MP1C	Mx	-.015	2.75
52	MP1C	X	-14.693	4.75
53	MP1C	Z	25.449	4.75
54	MP1C	Mx	-.015	4.75
55	DC	X	-64.839	1.5
56	DC	Z	112.305	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-27.389	2.5
59	MP2A	Z	47.439	2.5
60	MP2A	Mx	-.014	2.5
61	MP2B	X	-27.389	2.5
62	MP2B	Z	47.439	2.5
63	MP2B	Mx	-.014	2.5
64	MP2C	X	-19.963	2.5
65	MP2C	Z	34.577	2.5
66	MP2C	Mx	.02	2.5
67	MP3A	X	-26.441	2.5
68	MP3A	Z	45.797	2.5



**Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	-.013	2.5
70	MP3B	X	-26.441	2.5
71	MP3B	Z	45.797	2.5
72	MP3B	Mx	-.013	2.5
73	MP3C	X	-16.17	2.5
74	MP3C	Z	28.007	2.5
75	MP3C	Mx	.016	2.5
76	MP4A	X	-26.756	2.5
77	MP4A	Z	46.342	2.5
78	MP4A	Mx	-.013	2.5
79	MP4B	X	-26.756	2.5
80	MP4B	Z	46.342	2.5
81	MP4B	Mx	-.013	2.5
82	MP4C	X	-26.756	2.5
83	MP4C	Z	46.342	2.5
84	MP4C	Mx	.013	2.5

**Member Point Loads (BLC 11 : Antenna Wo (240 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-118.794	1.25
2	MP2A	Z	68.586	1.25
3	MP2A	Mx	.125	1.25
4	MP2A	X	-118.794	6.25
5	MP2A	Z	68.586	6.25
6	MP2A	Mx	.125	6.25
7	MP2B	X	-157.531	1.25
8	MP2B	Z	90.951	1.25
9	MP2B	Mx	-.121	1.25
10	MP2B	X	-157.531	6.25
11	MP2B	Z	90.951	6.25
12	MP2B	Mx	-.121	6.25
13	MP2C	X	-118.794	1.25
14	MP2C	Z	68.586	1.25
15	MP2C	Mx	-.033	1.25
16	MP2C	X	-118.794	6.25
17	MP2C	Z	68.586	6.25
18	MP2C	Mx	-.033	6.25
19	MP2A	X	-118.794	1.25
20	MP2A	Z	68.586	1.25
21	MP2A	Mx	.033	1.25
22	MP2A	X	-118.794	6.25
23	MP2A	Z	68.586	6.25
24	MP2A	Mx	.033	6.25
25	MP2B	X	-157.531	1.25
26	MP2B	Z	90.951	1.25
27	MP2B	Mx	.121	1.25
28	MP2B	X	-157.531	6.25
29	MP2B	Z	90.951	6.25
30	MP2B	Mx	.121	6.25
31	MP2C	X	-118.794	1.25
32	MP2C	Z	68.586	1.25



**Member Point Loads (BLC 11 : Antenna Wo (240 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	-.125	1.25
34	MP2C	X	-118.794	6.25
35	MP2C	Z	68.586	6.25
36	MP2C	Mx	-.125	6.25
37	MP1A	X	-35.338	2.75
38	MP1A	Z	20.402	2.75
39	MP1A	Mx	.018	2.75
40	MP1A	X	-35.338	4.75
41	MP1A	Z	20.402	4.75
42	MP1A	Mx	.018	4.75
43	MP1B	X	-65.004	2.75
44	MP1B	Z	37.53	2.75
45	MP1B	Mx	0	2.75
46	MP1B	X	-65.004	4.75
47	MP1B	Z	37.53	4.75
48	MP1B	Mx	0	4.75
49	MP1C	X	-35.338	2.75
50	MP1C	Z	20.402	2.75
51	MP1C	Mx	-.018	2.75
52	MP1C	X	-35.338	4.75
53	MP1C	Z	20.402	4.75
54	MP1C	Mx	-.018	4.75
55	DC	X	-105.649	1.5
56	DC	Z	60.996	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-38.864	2.5
59	MP2A	Z	22.438	2.5
60	MP2A	Mx	-.019	2.5
61	MP2B	X	-51.727	2.5
62	MP2B	Z	29.864	2.5
63	MP2B	Mx	0	2.5
64	MP2C	X	-38.864	2.5
65	MP2C	Z	22.438	2.5
66	MP2C	Mx	.019	2.5
67	MP3A	X	-33.937	2.5
68	MP3A	Z	19.594	2.5
69	MP3A	Mx	-.017	2.5
70	MP3B	X	-51.727	2.5
71	MP3B	Z	29.864	2.5
72	MP3B	Mx	0	2.5
73	MP3C	X	-33.937	2.5
74	MP3C	Z	19.594	2.5
75	MP3C	Mx	.017	2.5
76	MP4A	X	-30.593	2.5
77	MP4A	Z	17.663	2.5
78	MP4A	Mx	-.015	2.5
79	MP4B	X	-54.216	2.5
80	MP4B	Z	31.302	2.5
81	MP4B	Mx	0	2.5
82	MP4C	X	-54.216	2.5
83	MP4C	Z	31.302	2.5
84	MP4C	Mx	0	2.5



**Member Point Loads (BLC 12 : Antenna Wo (270 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-122.261	1.25
2	MP2A	Z	0	1.25
3	MP2A	Mx	.082	1.25
4	MP2A	X	-122.261	6.25
5	MP2A	Z	0	6.25
6	MP2A	Mx	.082	6.25
7	MP2B	X	-166.991	1.25
8	MP2B	Z	0	1.25
9	MP2B	Mx	-.152	1.25
10	MP2B	X	-166.991	6.25
11	MP2B	Z	0	6.25
12	MP2B	Mx	-.152	6.25
13	MP2C	X	-166.991	1.25
14	MP2C	Z	0	1.25
15	MP2C	Mx	.041	1.25
16	MP2C	X	-166.991	6.25
17	MP2C	Z	0	6.25
18	MP2C	Mx	.041	6.25
19	MP2A	X	-122.261	1.25
20	MP2A	Z	0	1.25
21	MP2A	Mx	.082	1.25
22	MP2A	X	-122.261	6.25
23	MP2A	Z	0	6.25
24	MP2A	Mx	.082	6.25
25	MP2B	X	-166.991	1.25
26	MP2B	Z	0	1.25
27	MP2B	Mx	.041	1.25
28	MP2B	X	-166.991	6.25
29	MP2B	Z	0	6.25
30	MP2B	Mx	.041	6.25
31	MP2C	X	-166.991	1.25
32	MP2C	Z	0	1.25
33	MP2C	Mx	-.152	1.25
34	MP2C	X	-166.991	6.25
35	MP2C	Z	0	6.25
36	MP2C	Mx	-.152	6.25
37	MP1A	X	-29.386	2.75
38	MP1A	Z	0	2.75
39	MP1A	Mx	.015	2.75
40	MP1A	X	-29.386	4.75
41	MP1A	Z	0	4.75
42	MP1A	Mx	.015	4.75
43	MP1B	X	-63.642	2.75
44	MP1B	Z	0	2.75
45	MP1B	Mx	-.016	2.75
46	MP1B	X	-63.642	4.75
47	MP1B	Z	0	4.75
48	MP1B	Mx	-.016	4.75
49	MP1C	X	-63.642	2.75
50	MP1C	Z	0	2.75
51	MP1C	Mx	-.016	2.75
52	MP1C	X	-63.642	4.75





**Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	0	4.75
54	MP1C	Mx	-.016	4.75
55	DC	X	-106.621	1.5
56	DC	Z	0	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-39.926	2.5
59	MP2A	Z	0	2.5
60	MP2A	Mx	-.02	2.5
61	MP2B	X	-54.778	2.5
62	MP2B	Z	0	2.5
63	MP2B	Mx	.014	2.5
64	MP2C	X	-54.778	2.5
65	MP2C	Z	0	2.5
66	MP2C	Mx	.014	2.5
67	MP3A	X	-32.34	2.5
68	MP3A	Z	0	2.5
69	MP3A	Mx	-.016	2.5
70	MP3B	X	-52.882	2.5
71	MP3B	Z	0	2.5
72	MP3B	Mx	.013	2.5
73	MP3C	X	-52.882	2.5
74	MP3C	Z	0	2.5
75	MP3C	Mx	.013	2.5
76	MP4A	X	-26.234	2.5
77	MP4A	Z	0	2.5
78	MP4A	Mx	-.013	2.5
79	MP4B	X	-53.511	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.013	2.5
82	MP4C	X	-53.511	2.5
83	MP4C	Z	0	2.5
84	MP4C	Mx	-.013	2.5

**Member Point Loads (BLC 13 : Antenna Wo (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-118.794	1.25
2	MP2A	Z	-68.586	1.25
3	MP2A	Mx	.033	1.25
4	MP2A	X	-118.794	6.25
5	MP2A	Z	-68.586	6.25
6	MP2A	Mx	.033	6.25
7	MP2B	X	-118.794	1.25
8	MP2B	Z	-68.586	1.25
9	MP2B	Mx	-.125	1.25
10	MP2B	X	-118.794	6.25
11	MP2B	Z	-68.586	6.25
12	MP2B	Mx	-.125	6.25
13	MP2C	X	-157.531	1.25
14	MP2C	Z	-90.951	1.25
15	MP2C	Mx	.121	1.25
16	MP2C	X	-157.531	6.25



Company : Maser Consulting  
Designer : AE  
Job Number : Project No. 10068126  
Model Name : 468081-VZW\_MT\_LO\_H

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**Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-90.951	6.25
18	MP2C	Mx	.121	6.25
19	MP2A	X	-118.794	1.25
20	MP2A	Z	-68.586	1.25
21	MP2A	Mx	.125	1.25
22	MP2A	X	-118.794	6.25
23	MP2A	Z	-68.586	6.25
24	MP2A	Mx	.125	6.25
25	MP2B	X	-118.794	1.25
26	MP2B	Z	-68.586	1.25
27	MP2B	Mx	-.033	1.25
28	MP2B	X	-118.794	6.25
29	MP2B	Z	-68.586	6.25
30	MP2B	Mx	-.033	6.25
31	MP2C	X	-157.531	1.25
32	MP2C	Z	-90.951	1.25
33	MP2C	Mx	-.121	1.25
34	MP2C	X	-157.531	6.25
35	MP2C	Z	-90.951	6.25
36	MP2C	Mx	-.121	6.25
37	MP1A	X	-35.338	2.75
38	MP1A	Z	-20.402	2.75
39	MP1A	Mx	.018	2.75
40	MP1A	X	-35.338	4.75
41	MP1A	Z	-20.402	4.75
42	MP1A	Mx	.018	4.75
43	MP1B	X	-35.338	2.75
44	MP1B	Z	-20.402	2.75
45	MP1B	Mx	-.018	2.75
46	MP1B	X	-35.338	4.75
47	MP1B	Z	-20.402	4.75
48	MP1B	Mx	-.018	4.75
49	MP1C	X	-65.004	2.75
50	MP1C	Z	-37.53	2.75
51	MP1C	Mx	0	2.75
52	MP1C	X	-65.004	4.75
53	MP1C	Z	-37.53	4.75
54	MP1C	Mx	0	4.75
55	DC	X	-85.681	1.5
56	DC	Z	-49.468	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-38.864	2.5
59	MP2A	Z	-22.438	2.5
60	MP2A	Mx	-.019	2.5
61	MP2B	X	-38.864	2.5
62	MP2B	Z	-22.438	2.5
63	MP2B	Mx	.019	2.5
64	MP2C	X	-51.727	2.5
65	MP2C	Z	-29.864	2.5
66	MP2C	Mx	0	2.5
67	MP3A	X	-33.937	2.5
68	MP3A	Z	-19.594	2.5



### Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	-.041	1.25
34	MP2C	X	-83.496	6.25
35	MP2C	Z	-144.619	6.25
36	MP2C	Mx	-.041	6.25
37	MP1A	X	-31.821	2.75
38	MP1A	Z	-55.115	2.75
39	MP1A	Mx	.016	2.75
40	MP1A	X	-31.821	4.75
41	MP1A	Z	-55.115	4.75
42	MP1A	Mx	.016	4.75
43	MP1B	X	-14.693	2.75
44	MP1B	Z	-25.449	2.75
45	MP1B	Mx	-.015	2.75
46	MP1B	X	-14.693	4.75
47	MP1B	Z	-25.449	4.75
48	MP1B	Mx	-.015	4.75
49	MP1C	X	-31.821	2.75
50	MP1C	Z	-55.115	2.75
51	MP1C	Mx	.016	2.75
52	MP1C	X	-31.821	4.75
53	MP1C	Z	-55.115	4.75
54	MP1C	Mx	.016	4.75
55	DC	X	-53.311	1.5
56	DC	Z	-92.337	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-27.389	2.5
59	MP2A	Z	-47.439	2.5
60	MP2A	Mx	-.014	2.5
61	MP2B	X	-19.963	2.5
62	MP2B	Z	-34.577	2.5
63	MP2B	Mx	.02	2.5
64	MP2C	X	-27.389	2.5
65	MP2C	Z	-47.439	2.5
66	MP2C	Mx	-.014	2.5
67	MP3A	X	-26.441	2.5
68	MP3A	Z	-45.797	2.5
69	MP3A	Mx	-.013	2.5
70	MP3B	X	-16.17	2.5
71	MP3B	Z	-28.007	2.5
72	MP3B	Mx	.016	2.5
73	MP3C	X	-26.441	2.5
74	MP3C	Z	-45.797	2.5
75	MP3C	Mx	-.013	2.5
76	MP4A	X	-26.756	2.5
77	MP4A	Z	-46.342	2.5
78	MP4A	Mx	-.013	2.5
79	MP4B	X	-13.117	2.5
80	MP4B	Z	-22.719	2.5
81	MP4B	Mx	.013	2.5
82	MP4C	X	-13.117	2.5
83	MP4C	Z	-22.719	2.5
84	MP4C	Mx	-.013	2.5





**Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-24.105	6.25
18	MP2C	Mx	.019	6.25
19	MP2A	X	18.261	1.25
20	MP2A	Z	-31.628	1.25
21	MP2A	Mx	.009	1.25
22	MP2A	X	18.261	6.25
23	MP2A	Z	-31.628	6.25
24	MP2A	Mx	.009	6.25
25	MP2B	X	18.261	1.25
26	MP2B	Z	-31.628	1.25
27	MP2B	Mx	-.033	1.25
28	MP2B	X	18.261	6.25
29	MP2B	Z	-31.628	6.25
30	MP2B	Mx	-.033	6.25
31	MP2C	X	13.917	1.25
32	MP2C	Z	-24.105	1.25
33	MP2C	Mx	.019	1.25
34	MP2C	X	13.917	6.25
35	MP2C	Z	-24.105	6.25
36	MP2C	Mx	.019	6.25
37	MP1A	X	7.337	2.75
38	MP1A	Z	-12.708	2.75
39	MP1A	Mx	-.004	2.75
40	MP1A	X	7.337	4.75
41	MP1A	Z	-12.708	4.75
42	MP1A	Mx	-.004	4.75
43	MP1B	X	7.337	2.75
44	MP1B	Z	-12.708	2.75
45	MP1B	Mx	-.004	2.75
46	MP1B	X	7.337	4.75
47	MP1B	Z	-12.708	4.75
48	MP1B	Mx	-.004	4.75
49	MP1C	X	3.79	2.75
50	MP1C	Z	-6.565	2.75
51	MP1C	Mx	.004	2.75
52	MP1C	X	3.79	4.75
53	MP1C	Z	-6.565	4.75
54	MP1C	Mx	.004	4.75
55	DC	X	14.798	1.5
56	DC	Z	-25.631	1.5
57	DC	Mx	0	1.5
58	MP2A	X	6.852	2.5
59	MP2A	Z	-11.868	2.5
60	MP2A	Mx	.003	2.5
61	MP2B	X	6.852	2.5
62	MP2B	Z	-11.868	2.5
63	MP2B	Mx	.003	2.5
64	MP2C	X	5.244	2.5
65	MP2C	Z	-9.082	2.5
66	MP2C	Mx	-.005	2.5
67	MP3A	X	6.648	2.5
68	MP3A	Z	-11.515	2.5



Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

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**Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.003	2.5
70	MP3B	X	6.648	2.5
71	MP3B	Z	-11.515	2.5
72	MP3B	Mx	.003	2.5
73	MP3C	X	4.429	2.5
74	MP3C	Z	-7.671	2.5
75	MP3C	Mx	-.004	2.5
76	MP4A	X	6.682	2.5
77	MP4A	Z	-11.573	2.5
78	MP4A	Mx	.003	2.5
79	MP4B	X	6.682	2.5
80	MP4B	Z	-11.573	2.5
81	MP4B	Mx	.003	2.5
82	MP4C	X	6.682	2.5
83	MP4C	Z	-11.573	2.5
84	MP4C	Mx	-.003	2.5

**Member Point Loads (BLC 17 : Antenna Wi (60 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	26.613	1.25
2	MP2A	Z	-15.365	1.25
3	MP2A	Mx	-.028	1.25
4	MP2A	X	26.613	6.25
5	MP2A	Z	-15.365	6.25
6	MP2A	Mx	-.028	6.25
7	MP2B	X	34.136	1.25
8	MP2B	Z	-19.709	1.25
9	MP2B	Mx	.026	1.25
10	MP2B	X	34.136	6.25
11	MP2B	Z	-19.709	6.25
12	MP2B	Mx	.026	6.25
13	MP2C	X	26.613	1.25
14	MP2C	Z	-15.365	1.25
15	MP2C	Mx	.007	1.25
16	MP2C	X	26.613	6.25
17	MP2C	Z	-15.365	6.25
18	MP2C	Mx	.007	6.25
19	MP2A	X	26.613	1.25
20	MP2A	Z	-15.365	1.25
21	MP2A	Mx	-.007	1.25
22	MP2A	X	26.613	6.25
23	MP2A	Z	-15.365	6.25
24	MP2A	Mx	-.007	6.25
25	MP2B	X	34.136	1.25
26	MP2B	Z	-19.709	1.25
27	MP2B	Mx	-.026	1.25
28	MP2B	X	34.136	6.25
29	MP2B	Z	-19.709	6.25
30	MP2B	Mx	-.026	6.25
31	MP2C	X	26.613	1.25
32	MP2C	Z	-15.365	1.25





Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
 4:40 PM  
 Checked By: DX

**Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.028	1.25
34	MP2C	X	26.613	6.25
35	MP2C	Z	-15.365	6.25
36	MP2C	Mx	.028	6.25
37	MP1A	X	8.613	2.75
38	MP1A	Z	-4.972	2.75
39	MP1A	Mx	-.004	2.75
40	MP1A	X	8.613	4.75
41	MP1A	Z	-4.972	4.75
42	MP1A	Mx	-.004	4.75
43	MP1B	X	14.755	2.75
44	MP1B	Z	-8.519	2.75
45	MP1B	Mx	0	2.75
46	MP1B	X	14.755	4.75
47	MP1B	Z	-8.519	4.75
48	MP1B	Mx	0	4.75
49	MP1C	X	8.613	2.75
50	MP1C	Z	-4.972	2.75
51	MP1C	Mx	.004	2.75
52	MP1C	X	8.613	4.75
53	MP1C	Z	-4.972	4.75
54	MP1C	Mx	.004	4.75
55	DC	X	24.291	1.5
56	DC	Z	-14.024	1.5
57	DC	Mx	0	1.5
58	MP2A	X	10.011	2.5
59	MP2A	Z	-5.78	2.5
60	MP2A	Mx	.005	2.5
61	MP2B	X	12.797	2.5
62	MP2B	Z	-7.388	2.5
63	MP2B	Mx	0	2.5
64	MP2C	X	10.011	2.5
65	MP2C	Z	-5.78	2.5
66	MP2C	Mx	-.005	2.5
67	MP3A	X	8.952	2.5
68	MP3A	Z	-5.169	2.5
69	MP3A	Mx	.004	2.5
70	MP3B	X	12.797	2.5
71	MP3B	Z	-7.388	2.5
72	MP3B	Mx	0	2.5
73	MP3C	X	8.952	2.5
74	MP3C	Z	-5.169	2.5
75	MP3C	Mx	-.004	2.5
76	MP4A	X	8.228	2.5
77	MP4A	Z	-4.75	2.5
78	MP4A	Mx	.004	2.5
79	MP4B	X	13.246	2.5
80	MP4B	Z	-7.648	2.5
81	MP4B	Mx	0	2.5
82	MP4C	X	13.246	2.5
83	MP4C	Z	-7.648	2.5
84	MP4C	Mx	0	2.5







**Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.004	2.5
70	MP3B	X	8.952	2.5
71	MP3B	Z	5.169	2.5
72	MP3B	Mx	-.004	2.5
73	MP3C	X	12.797	2.5
74	MP3C	Z	7.388	2.5
75	MP3C	Mx	0	2.5
76	MP4A	X	8.228	2.5
77	MP4A	Z	4.75	2.5
78	MP4A	Mx	.004	2.5
79	MP4B	X	8.228	2.5
80	MP4B	Z	4.75	2.5
81	MP4B	Mx	-.004	2.5
82	MP4C	X	8.228	2.5
83	MP4C	Z	4.75	2.5
84	MP4C	Mx	.004	2.5

**Member Point Loads (BLC 20 : Antenna Wi (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	18.261	1.25
2	MP2A	Z	31.628	1.25
3	MP2A	Mx	.009	1.25
4	MP2A	X	18.261	6.25
5	MP2A	Z	31.628	6.25
6	MP2A	Mx	.009	6.25
7	MP2B	X	13.917	1.25
8	MP2B	Z	24.105	1.25
9	MP2B	Mx	.019	1.25
10	MP2B	X	13.917	6.25
11	MP2B	Z	24.105	6.25
12	MP2B	Mx	.019	6.25
13	MP2C	X	18.261	1.25
14	MP2C	Z	31.628	1.25
15	MP2C	Mx	-.033	1.25
16	MP2C	X	18.261	6.25
17	MP2C	Z	31.628	6.25
18	MP2C	Mx	-.033	6.25
19	MP2A	X	18.261	1.25
20	MP2A	Z	31.628	1.25
21	MP2A	Mx	-.033	1.25
22	MP2A	X	18.261	6.25
23	MP2A	Z	31.628	6.25
24	MP2A	Mx	-.033	6.25
25	MP2B	X	13.917	1.25
26	MP2B	Z	24.105	1.25
27	MP2B	Mx	.019	1.25
28	MP2B	X	13.917	6.25
29	MP2B	Z	24.105	6.25
30	MP2B	Mx	.019	6.25
31	MP2C	X	18.261	1.25
32	MP2C	Z	31.628	1.25





**Member Point Loads (BLC 21 : Antenna Wi (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.25
2	MP2A	Z	39.417	1.25
3	MP2A	Mx	.026	1.25
4	MP2A	X	0	6.25
5	MP2A	Z	39.417	6.25
6	MP2A	Mx	.026	6.25
7	MP2B	X	0	1.25
8	MP2B	Z	30.73	1.25
9	MP2B	Mx	.007	1.25
10	MP2B	X	0	6.25
11	MP2B	Z	30.73	6.25
12	MP2B	Mx	.007	6.25
13	MP2C	X	0	1.25
14	MP2C	Z	30.73	1.25
15	MP2C	Mx	-.028	1.25
16	MP2C	X	0	6.25
17	MP2C	Z	30.73	6.25
18	MP2C	Mx	-.028	6.25
19	MP2A	X	0	1.25
20	MP2A	Z	39.417	1.25
21	MP2A	Mx	-.026	1.25
22	MP2A	X	0	6.25
23	MP2A	Z	39.417	6.25
24	MP2A	Mx	-.026	6.25
25	MP2B	X	0	1.25
26	MP2B	Z	30.73	1.25
27	MP2B	Mx	.028	1.25
28	MP2B	X	0	6.25
29	MP2B	Z	30.73	6.25
30	MP2B	Mx	.028	6.25
31	MP2C	X	0	1.25
32	MP2C	Z	30.73	1.25
33	MP2C	Mx	-.007	1.25
34	MP2C	X	0	6.25
35	MP2C	Z	30.73	6.25
36	MP2C	Mx	-.007	6.25
37	MP1A	X	0	2.75
38	MP1A	Z	17.038	2.75
39	MP1A	Mx	0	2.75
40	MP1A	X	0	4.75
41	MP1A	Z	17.038	4.75
42	MP1A	Mx	0	4.75
43	MP1B	X	0	2.75
44	MP1B	Z	9.945	2.75
45	MP1B	Mx	.004	2.75
46	MP1B	X	0	4.75
47	MP1B	Z	9.945	4.75
48	MP1B	Mx	.004	4.75
49	MP1C	X	0	2.75
50	MP1C	Z	9.945	2.75
51	MP1C	Mx	-.004	2.75
52	MP1C	X	0	4.75







**Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	24.105	6.25
18	MP2C	Mx	-.019	6.25
19	MP2A	X	-18.261	1.25
20	MP2A	Z	31.628	1.25
21	MP2A	Mx	-.009	1.25
22	MP2A	X	-18.261	6.25
23	MP2A	Z	31.628	6.25
24	MP2A	Mx	-.009	6.25
25	MP2B	X	-18.261	1.25
26	MP2B	Z	31.628	1.25
27	MP2B	Mx	.033	1.25
28	MP2B	X	-18.261	6.25
29	MP2B	Z	31.628	6.25
30	MP2B	Mx	.033	6.25
31	MP2C	X	-13.917	1.25
32	MP2C	Z	24.105	1.25
33	MP2C	Mx	-.019	1.25
34	MP2C	X	-13.917	6.25
35	MP2C	Z	24.105	6.25
36	MP2C	Mx	-.019	6.25
37	MP1A	X	-7.337	2.75
38	MP1A	Z	12.708	2.75
39	MP1A	Mx	.004	2.75
40	MP1A	X	-7.337	4.75
41	MP1A	Z	12.708	4.75
42	MP1A	Mx	.004	4.75
43	MP1B	X	-7.337	2.75
44	MP1B	Z	12.708	2.75
45	MP1B	Mx	.004	2.75
46	MP1B	X	-7.337	4.75
47	MP1B	Z	12.708	4.75
48	MP1B	Mx	.004	4.75
49	MP1C	X	-3.79	2.75
50	MP1C	Z	6.565	2.75
51	MP1C	Mx	-.004	2.75
52	MP1C	X	-3.79	4.75
53	MP1C	Z	6.565	4.75
54	MP1C	Mx	-.004	4.75
55	DC	X	-14.798	1.5
56	DC	Z	25.631	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-6.852	2.5
59	MP2A	Z	11.868	2.5
60	MP2A	Mx	-.003	2.5
61	MP2B	X	-6.852	2.5
62	MP2B	Z	11.868	2.5
63	MP2B	Mx	-.003	2.5
64	MP2C	X	-5.244	2.5
65	MP2C	Z	9.082	2.5
66	MP2C	Mx	.005	2.5
67	MP3A	X	-6.648	2.5
68	MP3A	Z	11.515	2.5





### Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-27.834	1.25
2	MP2A	Z	0	1.25
3	MP2A	Mx	.019	1.25
4	MP2A	X	-27.834	6.25
5	MP2A	Z	0	6.25
6	MP2A	Mx	.019	6.25
7	MP2B	X	-36.521	1.25
8	MP2B	Z	0	1.25
9	MP2B	Mx	-.033	1.25
10	MP2B	X	-36.521	6.25
11	MP2B	Z	0	6.25
12	MP2B	Mx	-.033	6.25
13	MP2C	X	-36.521	1.25
14	MP2C	Z	0	1.25
15	MP2C	Mx	.009	1.25
16	MP2C	X	-36.521	6.25
17	MP2C	Z	0	6.25
18	MP2C	Mx	.009	6.25
19	MP2A	X	-27.834	1.25
20	MP2A	Z	0	1.25
21	MP2A	Mx	.019	1.25
22	MP2A	X	-27.834	6.25
23	MP2A	Z	0	6.25
24	MP2A	Mx	.019	6.25
25	MP2B	X	-36.521	1.25
26	MP2B	Z	0	1.25
27	MP2B	Mx	.009	1.25
28	MP2B	X	-36.521	6.25
29	MP2B	Z	0	6.25
30	MP2B	Mx	.009	6.25
31	MP2C	X	-36.521	1.25
32	MP2C	Z	0	1.25
33	MP2C	Mx	-.033	1.25
34	MP2C	X	-36.521	6.25
35	MP2C	Z	0	6.25
36	MP2C	Mx	-.033	6.25
37	MP1A	X	-7.581	2.75
38	MP1A	Z	0	2.75
39	MP1A	Mx	.004	2.75
40	MP1A	X	-7.581	4.75
41	MP1A	Z	0	4.75
42	MP1A	Mx	.004	4.75
43	MP1B	X	-14.674	2.75
44	MP1B	Z	0	2.75
45	MP1B	Mx	-.004	2.75
46	MP1B	X	-14.674	4.75
47	MP1B	Z	0	4.75
48	MP1B	Mx	-.004	4.75
49	MP1C	X	-14.674	2.75
50	MP1C	Z	0	2.75
51	MP1C	Mx	-.004	2.75
52	MP1C	X	-14.674	4.75



**Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	0	4.75
54	MP1C	Mx	-.004	4.75
55	DC	X	-24.953	1.5
56	DC	Z	0	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-10.487	2.5
59	MP2A	Z	0	2.5
60	MP2A	Mx	-.005	2.5
61	MP2B	X	-13.704	2.5
62	MP2B	Z	0	2.5
63	MP2B	Mx	.003	2.5
64	MP2C	X	-13.704	2.5
65	MP2C	Z	0	2.5
66	MP2C	Mx	.003	2.5
67	MP3A	X	-8.857	2.5
68	MP3A	Z	0	2.5
69	MP3A	Mx	-.004	2.5
70	MP3B	X	-13.297	2.5
71	MP3B	Z	0	2.5
72	MP3B	Mx	.003	2.5
73	MP3C	X	-13.297	2.5
74	MP3C	Z	0	2.5
75	MP3C	Mx	.003	2.5
76	MP4A	X	-7.569	2.5
77	MP4A	Z	0	2.5
78	MP4A	Mx	-.004	2.5
79	MP4B	X	-13.364	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.003	2.5
82	MP4C	X	-13.364	2.5
83	MP4C	Z	0	2.5
84	MP4C	Mx	-.003	2.5

**Member Point Loads (BLC 25 : Antenna Wi (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-26.613	1.25
2	MP2A	Z	-15.365	1.25
3	MP2A	Mx	.007	1.25
4	MP2A	X	-26.613	6.25
5	MP2A	Z	-15.365	6.25
6	MP2A	Mx	.007	6.25
7	MP2B	X	-26.613	1.25
8	MP2B	Z	-15.365	1.25
9	MP2B	Mx	-.028	1.25
10	MP2B	X	-26.613	6.25
11	MP2B	Z	-15.365	6.25
12	MP2B	Mx	-.028	6.25
13	MP2C	X	-34.136	1.25
14	MP2C	Z	-19.709	1.25
15	MP2C	Mx	.026	1.25
16	MP2C	X	-34.136	6.25







**Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	-.009	1.25
34	MP2C	X	-18.261	6.25
35	MP2C	Z	-31.628	6.25
36	MP2C	Mx	-.009	6.25
37	MP1A	X	-7.337	2.75
38	MP1A	Z	-12.708	2.75
39	MP1A	Mx	.004	2.75
40	MP1A	X	-7.337	4.75
41	MP1A	Z	-12.708	4.75
42	MP1A	Mx	.004	4.75
43	MP1B	X	-3.79	2.75
44	MP1B	Z	-6.565	2.75
45	MP1B	Mx	-.004	2.75
46	MP1B	X	-3.79	4.75
47	MP1B	Z	-6.565	4.75
48	MP1B	Mx	-.004	4.75
49	MP1C	X	-7.337	2.75
50	MP1C	Z	-12.708	2.75
51	MP1C	Mx	.004	2.75
52	MP1C	X	-7.337	4.75
53	MP1C	Z	-12.708	4.75
54	MP1C	Mx	.004	4.75
55	DC	X	-12.477	1.5
56	DC	Z	-21.61	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-6.852	2.5
59	MP2A	Z	-11.868	2.5
60	MP2A	Mx	-.003	2.5
61	MP2B	X	-5.244	2.5
62	MP2B	Z	-9.082	2.5
63	MP2B	Mx	.005	2.5
64	MP2C	X	-6.852	2.5
65	MP2C	Z	-11.868	2.5
66	MP2C	Mx	-.003	2.5
67	MP3A	X	-6.648	2.5
68	MP3A	Z	-11.515	2.5
69	MP3A	Mx	-.003	2.5
70	MP3B	X	-4.429	2.5
71	MP3B	Z	-7.671	2.5
72	MP3B	Mx	.004	2.5
73	MP3C	X	-6.648	2.5
74	MP3C	Z	-11.515	2.5
75	MP3C	Mx	-.003	2.5
76	MP4A	X	-6.682	2.5
77	MP4A	Z	-11.573	2.5
78	MP4A	Mx	-.003	2.5
79	MP4B	X	-3.785	2.5
80	MP4B	Z	-6.555	2.5
81	MP4B	Mx	.004	2.5
82	MP4C	X	-3.785	2.5
83	MP4C	Z	-6.555	2.5
84	MP4C	Mx	-.004	2.5





**Member Point Loads (BLC 27 : Antenna Wm (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.25
2	MP2A	Z	-12.379	1.25
3	MP2A	Mx	-.008	1.25
4	MP2A	X	0	6.25
5	MP2A	Z	-12.379	6.25
6	MP2A	Mx	-.008	6.25
7	MP2B	X	0	1.25
8	MP2B	Z	-9.335	1.25
9	MP2B	Mx	-.002	1.25
10	MP2B	X	0	6.25
11	MP2B	Z	-9.335	6.25
12	MP2B	Mx	-.002	6.25
13	MP2C	X	0	1.25
14	MP2C	Z	-9.335	1.25
15	MP2C	Mx	.009	1.25
16	MP2C	X	0	6.25
17	MP2C	Z	-9.335	6.25
18	MP2C	Mx	.009	6.25
19	MP2A	X	0	1.25
20	MP2A	Z	-12.379	1.25
21	MP2A	Mx	.008	1.25
22	MP2A	X	0	6.25
23	MP2A	Z	-12.379	6.25
24	MP2A	Mx	.008	6.25
25	MP2B	X	0	1.25
26	MP2B	Z	-9.335	1.25
27	MP2B	Mx	-.009	1.25
28	MP2B	X	0	6.25
29	MP2B	Z	-9.335	6.25
30	MP2B	Mx	-.009	6.25
31	MP2C	X	0	1.25
32	MP2C	Z	-9.335	1.25
33	MP2C	Mx	.002	1.25
34	MP2C	X	0	6.25
35	MP2C	Z	-9.335	6.25
36	MP2C	Mx	.002	6.25
37	MP1A	X	0	2.75
38	MP1A	Z	-5.108	2.75
39	MP1A	Mx	0	2.75
40	MP1A	X	0	4.75
41	MP1A	Z	-5.108	4.75
42	MP1A	Mx	0	4.75
43	MP1B	X	0	2.75
44	MP1B	Z	-2.777	2.75
45	MP1B	Mx	-.001	2.75
46	MP1B	X	0	4.75
47	MP1B	Z	-2.777	4.75
48	MP1B	Mx	-.001	4.75
49	MP1C	X	0	2.75
50	MP1C	Z	-2.777	2.75
51	MP1C	Mx	.001	2.75
52	MP1C	X	0	4.75

**Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	-2.777	4.75
54	MP1C	Mx	.001	4.75
55	DC	X	0	1.5
56	DC	Z	-8.302	1.5
57	DC	Mx	0	1.5
58	MP2A	X	0	2.5
59	MP2A	Z	-4.065	2.5
60	MP2A	Mx	0	2.5
61	MP2B	X	0	2.5
62	MP2B	Z	-3.054	2.5
63	MP2B	Mx	.001	2.5
64	MP2C	X	0	2.5
65	MP2C	Z	-3.054	2.5
66	MP2C	Mx	-.001	2.5
67	MP3A	X	0	2.5
68	MP3A	Z	-4.065	2.5
69	MP3A	Mx	0	2.5
70	MP3B	X	0	2.5
71	MP3B	Z	-2.667	2.5
72	MP3B	Mx	.001	2.5
73	MP3C	X	0	2.5
74	MP3C	Z	-2.667	2.5
75	MP3C	Mx	-.001	2.5
76	MP4A	X	0	2.5
77	MP4A	Z	-4.26	2.5
78	MP4A	Mx	0	2.5
79	MP4B	X	0	2.5
80	MP4B	Z	-2.404	2.5
81	MP4B	Mx	.001	2.5
82	MP4C	X	0	2.5
83	MP4C	Z	-2.404	2.5
84	MP4C	Mx	-.001	2.5

**Member Point Loads (BLC 28 : Antenna Wm (30 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.682	1.25
2	MP2A	Z	-9.842	1.25
3	MP2A	Mx	-.01	1.25
4	MP2A	X	5.682	6.25
5	MP2A	Z	-9.842	6.25
6	MP2A	Mx	-.01	6.25
7	MP2B	X	5.682	1.25
8	MP2B	Z	-9.842	1.25
9	MP2B	Mx	.003	1.25
10	MP2B	X	5.682	6.25
11	MP2B	Z	-9.842	6.25
12	MP2B	Mx	.003	6.25
13	MP2C	X	4.16	1.25
14	MP2C	Z	-7.206	1.25
15	MP2C	Mx	.006	1.25
16	MP2C	X	4.16	6.25





**Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.009	1.25
34	MP2C	X	8.084	6.25
35	MP2C	Z	-4.667	6.25
36	MP2C	Mx	.009	6.25
37	MP1A	X	2.405	2.75
38	MP1A	Z	-1.388	2.75
39	MP1A	Mx	-.001	2.75
40	MP1A	X	2.405	4.75
41	MP1A	Z	-1.388	4.75
42	MP1A	Mx	-.001	4.75
43	MP1B	X	4.424	2.75
44	MP1B	Z	-2.554	2.75
45	MP1B	Mx	0	2.75
46	MP1B	X	4.424	4.75
47	MP1B	Z	-2.554	4.75
48	MP1B	Mx	0	4.75
49	MP1C	X	2.405	2.75
50	MP1C	Z	-1.388	2.75
51	MP1C	Mx	.001	2.75
52	MP1C	X	2.405	4.75
53	MP1C	Z	-1.388	4.75
54	MP1C	Mx	.001	4.75
55	DC	X	7.19	1.5
56	DC	Z	-4.151	1.5
57	DC	Mx	0	1.5
58	MP2A	X	2.645	2.5
59	MP2A	Z	-1.527	2.5
60	MP2A	Mx	.001	2.5
61	MP2B	X	3.52	2.5
62	MP2B	Z	-2.032	2.5
63	MP2B	Mx	0	2.5
64	MP2C	X	2.645	2.5
65	MP2C	Z	-1.527	2.5
66	MP2C	Mx	-.001	2.5
67	MP3A	X	2.31	2.5
68	MP3A	Z	-1.333	2.5
69	MP3A	Mx	.001	2.5
70	MP3B	X	3.52	2.5
71	MP3B	Z	-2.032	2.5
72	MP3B	Mx	0	2.5
73	MP3C	X	2.31	2.5
74	MP3C	Z	-1.333	2.5
75	MP3C	Mx	-.001	2.5
76	MP4A	X	2.082	2.5
77	MP4A	Z	-1.202	2.5
78	MP4A	Mx	.001	2.5
79	MP4B	X	3.69	2.5
80	MP4B	Z	-2.13	2.5
81	MP4B	Mx	0	2.5
82	MP4C	X	3.69	2.5
83	MP4C	Z	-2.13	2.5
84	MP4C	Mx	0	2.5

**Member Point Loads (BLC 30 : Antenna Wm (90 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.32	1.25
2	MP2A	Z	0	1.25
3	MP2A	Mx	-.006	1.25
4	MP2A	X	8.32	6.25
5	MP2A	Z	0	6.25
6	MP2A	Mx	-.006	6.25
7	MP2B	X	11.364	1.25
8	MP2B	Z	0	1.25
9	MP2B	Mx	.01	1.25
10	MP2B	X	11.364	6.25
11	MP2B	Z	0	6.25
12	MP2B	Mx	.01	6.25
13	MP2C	X	11.364	1.25
14	MP2C	Z	0	1.25
15	MP2C	Mx	-.003	1.25
16	MP2C	X	11.364	6.25
17	MP2C	Z	0	6.25
18	MP2C	Mx	-.003	6.25
19	MP2A	X	8.32	1.25
20	MP2A	Z	0	1.25
21	MP2A	Mx	-.006	1.25
22	MP2A	X	8.32	6.25
23	MP2A	Z	0	6.25
24	MP2A	Mx	-.006	6.25
25	MP2B	X	11.364	1.25
26	MP2B	Z	0	1.25
27	MP2B	Mx	-.003	1.25
28	MP2B	X	11.364	6.25
29	MP2B	Z	0	6.25
30	MP2B	Mx	-.003	6.25
31	MP2C	X	11.364	1.25
32	MP2C	Z	0	1.25
33	MP2C	Mx	.01	1.25
34	MP2C	X	11.364	6.25
35	MP2C	Z	0	6.25
36	MP2C	Mx	.01	6.25
37	MP1A	X	2	2.75
38	MP1A	Z	0	2.75
39	MP1A	Mx	-.001	2.75
40	MP1A	X	2	4.75
41	MP1A	Z	0	4.75
42	MP1A	Mx	-.001	4.75
43	MP1B	X	4.331	2.75
44	MP1B	Z	0	2.75
45	MP1B	Mx	.001	2.75
46	MP1B	X	4.331	4.75
47	MP1B	Z	0	4.75
48	MP1B	Mx	.001	4.75
49	MP1C	X	4.331	2.75
50	MP1C	Z	0	2.75
51	MP1C	Mx	.001	2.75
52	MP1C	X	4.331	4.75



**Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	0	4.75
54	MP1C	Mx	.001	4.75
55	DC	X	7.256	1.5
56	DC	Z	0	1.5
57	DC	Mx	0	1.5
58	MP2A	X	2.717	2.5
59	MP2A	Z	0	2.5
60	MP2A	Mx	.001	2.5
61	MP2B	X	3.728	2.5
62	MP2B	Z	0	2.5
63	MP2B	Mx	-.000932	2.5
64	MP2C	X	3.728	2.5
65	MP2C	Z	0	2.5
66	MP2C	Mx	-.000932	2.5
67	MP3A	X	2.201	2.5
68	MP3A	Z	0	2.5
69	MP3A	Mx	.001	2.5
70	MP3B	X	3.599	2.5
71	MP3B	Z	0	2.5
72	MP3B	Mx	-.0009	2.5
73	MP3C	X	3.599	2.5
74	MP3C	Z	0	2.5
75	MP3C	Mx	-.0009	2.5
76	MP4A	X	1.785	2.5
77	MP4A	Z	0	2.5
78	MP4A	Mx	.000892	2.5
79	MP4B	X	3.642	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	-.00091	2.5
82	MP4C	X	3.642	2.5
83	MP4C	Z	0	2.5
84	MP4C	Mx	.00091	2.5

**Member Point Loads (BLC 31 : Antenna Wm (120 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.084	1.25
2	MP2A	Z	4.667	1.25
3	MP2A	Mx	-.002	1.25
4	MP2A	X	8.084	6.25
5	MP2A	Z	4.667	6.25
6	MP2A	Mx	-.002	6.25
7	MP2B	X	8.084	1.25
8	MP2B	Z	4.667	1.25
9	MP2B	Mx	.009	1.25
10	MP2B	X	8.084	6.25
11	MP2B	Z	4.667	6.25
12	MP2B	Mx	.009	6.25
13	MP2C	X	10.72	1.25
14	MP2C	Z	6.189	1.25
15	MP2C	Mx	-.008	1.25
16	MP2C	X	10.72	6.25





**Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.001	2.5
70	MP3B	X	2.31	2.5
71	MP3B	Z	1.333	2.5
72	MP3B	Mx	-.001	2.5
73	MP3C	X	3.52	2.5
74	MP3C	Z	2.032	2.5
75	MP3C	Mx	0	2.5
76	MP4A	X	2.082	2.5
77	MP4A	Z	1.202	2.5
78	MP4A	Mx	.001	2.5
79	MP4B	X	2.082	2.5
80	MP4B	Z	1.202	2.5
81	MP4B	Mx	-.001	2.5
82	MP4C	X	2.082	2.5
83	MP4C	Z	1.202	2.5
84	MP4C	Mx	.001	2.5

**Member Point Loads (BLC 32 : Antenna Wm (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.682	1.25
2	MP2A	Z	9.842	1.25
3	MP2A	Mx	.003	1.25
4	MP2A	X	5.682	6.25
5	MP2A	Z	9.842	6.25
6	MP2A	Mx	.003	6.25
7	MP2B	X	4.16	1.25
8	MP2B	Z	7.206	1.25
9	MP2B	Mx	.006	1.25
10	MP2B	X	4.16	6.25
11	MP2B	Z	7.206	6.25
12	MP2B	Mx	.006	6.25
13	MP2C	X	5.682	1.25
14	MP2C	Z	9.842	1.25
15	MP2C	Mx	-.01	1.25
16	MP2C	X	5.682	6.25
17	MP2C	Z	9.842	6.25
18	MP2C	Mx	-.01	6.25
19	MP2A	X	5.682	1.25
20	MP2A	Z	9.842	1.25
21	MP2A	Mx	-.01	1.25
22	MP2A	X	5.682	6.25
23	MP2A	Z	9.842	6.25
24	MP2A	Mx	-.01	6.25
25	MP2B	X	4.16	1.25
26	MP2B	Z	7.206	1.25
27	MP2B	Mx	.006	1.25
28	MP2B	X	4.16	6.25
29	MP2B	Z	7.206	6.25
30	MP2B	Mx	.006	6.25
31	MP2C	X	5.682	1.25
32	MP2C	Z	9.842	1.25



**Member Point Loads (BLC 33 : Antenna Wm (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.25
2	MP2A	Z	12.379	1.25
3	MP2A	Mx	.008	1.25
4	MP2A	X	0	6.25
5	MP2A	Z	12.379	6.25
6	MP2A	Mx	.008	6.25
7	MP2B	X	0	1.25
8	MP2B	Z	9.335	1.25
9	MP2B	Mx	.002	1.25
10	MP2B	X	0	6.25
11	MP2B	Z	9.335	6.25
12	MP2B	Mx	.002	6.25
13	MP2C	X	0	1.25
14	MP2C	Z	9.335	1.25
15	MP2C	Mx	-.009	1.25
16	MP2C	X	0	6.25
17	MP2C	Z	9.335	6.25
18	MP2C	Mx	-.009	6.25
19	MP2A	X	0	1.25
20	MP2A	Z	12.379	1.25
21	MP2A	Mx	-.008	1.25
22	MP2A	X	0	6.25
23	MP2A	Z	12.379	6.25
24	MP2A	Mx	-.008	6.25
25	MP2B	X	0	1.25
26	MP2B	Z	9.335	1.25
27	MP2B	Mx	.009	1.25
28	MP2B	X	0	6.25
29	MP2B	Z	9.335	6.25
30	MP2B	Mx	.009	6.25
31	MP2C	X	0	1.25
32	MP2C	Z	9.335	1.25
33	MP2C	Mx	-.002	1.25
34	MP2C	X	0	6.25
35	MP2C	Z	9.335	6.25
36	MP2C	Mx	-.002	6.25
37	MP1A	X	0	2.75
38	MP1A	Z	5.108	2.75
39	MP1A	Mx	0	2.75
40	MP1A	X	0	4.75
41	MP1A	Z	5.108	4.75
42	MP1A	Mx	0	4.75
43	MP1B	X	0	2.75
44	MP1B	Z	2.777	2.75
45	MP1B	Mx	.001	2.75
46	MP1B	X	0	4.75
47	MP1B	Z	2.777	4.75
48	MP1B	Mx	.001	4.75
49	MP1C	X	0	2.75
50	MP1C	Z	2.777	2.75
51	MP1C	Mx	-.001	2.75
52	MP1C	X	0	4.75





**Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	7.206	6.25
18	MP2C	Mx	-.006	6.25
19	MP2A	X	-5.682	1.25
20	MP2A	Z	9.842	1.25
21	MP2A	Mx	-.003	1.25
22	MP2A	X	-5.682	6.25
23	MP2A	Z	9.842	6.25
24	MP2A	Mx	-.003	6.25
25	MP2B	X	-5.682	1.25
26	MP2B	Z	9.842	1.25
27	MP2B	Mx	.01	1.25
28	MP2B	X	-5.682	6.25
29	MP2B	Z	9.842	6.25
30	MP2B	Mx	.01	6.25
31	MP2C	X	-4.16	1.25
32	MP2C	Z	7.206	1.25
33	MP2C	Mx	-.006	1.25
34	MP2C	X	-4.16	6.25
35	MP2C	Z	7.206	6.25
36	MP2C	Mx	-.006	6.25
37	MP1A	X	-2.166	2.75
38	MP1A	Z	3.751	2.75
39	MP1A	Mx	.001	2.75
40	MP1A	X	-2.166	4.75
41	MP1A	Z	3.751	4.75
42	MP1A	Mx	.001	4.75
43	MP1B	X	-2.166	2.75
44	MP1B	Z	3.751	2.75
45	MP1B	Mx	.001	2.75
46	MP1B	X	-2.166	4.75
47	MP1B	Z	3.751	4.75
48	MP1B	Mx	.001	4.75
49	MP1C	X	-1	2.75
50	MP1C	Z	1.732	2.75
51	MP1C	Mx	-.001	2.75
52	MP1C	X	-1	4.75
53	MP1C	Z	1.732	4.75
54	MP1C	Mx	-.001	4.75
55	DC	X	-4.413	1.5
56	DC	Z	7.643	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-1.864	2.5
59	MP2A	Z	3.228	2.5
60	MP2A	Mx	-.000932	2.5
61	MP2B	X	-1.864	2.5
62	MP2B	Z	3.228	2.5
63	MP2B	Mx	-.000932	2.5
64	MP2C	X	-1.359	2.5
65	MP2C	Z	2.353	2.5
66	MP2C	Mx	.001	2.5
67	MP3A	X	-1.799	2.5
68	MP3A	Z	3.117	2.5



**Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	-.0009	2.5
70	MP3B	X	-1.799	2.5
71	MP3B	Z	3.117	2.5
72	MP3B	Mx	-.0009	2.5
73	MP3C	X	-1.1	2.5
74	MP3C	Z	1.906	2.5
75	MP3C	Mx	.001	2.5
76	MP4A	X	-1.821	2.5
77	MP4A	Z	3.154	2.5
78	MP4A	Mx	-.00091	2.5
79	MP4B	X	-1.821	2.5
80	MP4B	Z	3.154	2.5
81	MP4B	Mx	-.00091	2.5
82	MP4C	X	-1.821	2.5
83	MP4C	Z	3.154	2.5
84	MP4C	Mx	.00091	2.5

**Member Point Loads (BLC 35 : Antenna Wm (240 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.084	1.25
2	MP2A	Z	4.667	1.25
3	MP2A	Mx	.009	1.25
4	MP2A	X	-8.084	6.25
5	MP2A	Z	4.667	6.25
6	MP2A	Mx	.009	6.25
7	MP2B	X	-10.72	1.25
8	MP2B	Z	6.189	1.25
9	MP2B	Mx	-.008	1.25
10	MP2B	X	-10.72	6.25
11	MP2B	Z	6.189	6.25
12	MP2B	Mx	-.008	6.25
13	MP2C	X	-8.084	1.25
14	MP2C	Z	4.667	1.25
15	MP2C	Mx	-.002	1.25
16	MP2C	X	-8.084	6.25
17	MP2C	Z	4.667	6.25
18	MP2C	Mx	-.002	6.25
19	MP2A	X	-8.084	1.25
20	MP2A	Z	4.667	1.25
21	MP2A	Mx	.002	1.25
22	MP2A	X	-8.084	6.25
23	MP2A	Z	4.667	6.25
24	MP2A	Mx	.002	6.25
25	MP2B	X	-10.72	1.25
26	MP2B	Z	6.189	1.25
27	MP2B	Mx	.008	1.25
28	MP2B	X	-10.72	6.25
29	MP2B	Z	6.189	6.25
30	MP2B	Mx	.008	6.25
31	MP2C	X	-8.084	1.25
32	MP2C	Z	4.667	1.25









Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
 4:40 PM  
 Checked By: DX

**Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	0	4.75
54	MP1C	Mx	-.001	4.75
55	DC	X	-7.256	1.5
56	DC	Z	0	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-2.717	2.5
59	MP2A	Z	0	2.5
60	MP2A	Mx	-.001	2.5
61	MP2B	X	-3.728	2.5
62	MP2B	Z	0	2.5
63	MP2B	Mx	.000932	2.5
64	MP2C	X	-3.728	2.5
65	MP2C	Z	0	2.5
66	MP2C	Mx	.000932	2.5
67	MP3A	X	-2.201	2.5
68	MP3A	Z	0	2.5
69	MP3A	Mx	-.001	2.5
70	MP3B	X	-3.599	2.5
71	MP3B	Z	0	2.5
72	MP3B	Mx	.0009	2.5
73	MP3C	X	-3.599	2.5
74	MP3C	Z	0	2.5
75	MP3C	Mx	.0009	2.5
76	MP4A	X	-1.785	2.5
77	MP4A	Z	0	2.5
78	MP4A	Mx	-.000892	2.5
79	MP4B	X	-3.642	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.00091	2.5
82	MP4C	X	-3.642	2.5
83	MP4C	Z	0	2.5
84	MP4C	Mx	-.00091	2.5

**Member Point Loads (BLC 37 : Antenna Wm (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.084	1.25
2	MP2A	Z	-4.667	1.25
3	MP2A	Mx	.002	1.25
4	MP2A	X	-8.084	6.25
5	MP2A	Z	-4.667	6.25
6	MP2A	Mx	.002	6.25
7	MP2B	X	-8.084	1.25
8	MP2B	Z	-4.667	1.25
9	MP2B	Mx	-.009	1.25
10	MP2B	X	-8.084	6.25
11	MP2B	Z	-4.667	6.25
12	MP2B	Mx	-.009	6.25
13	MP2C	X	-10.72	1.25
14	MP2C	Z	-6.189	1.25
15	MP2C	Mx	.008	1.25
16	MP2C	X	-10.72	6.25

***Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)***

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-6.189	6.25
18	MP2C	Mx	.008	6.25
19	MP2A	X	-8.084	1.25
20	MP2A	Z	-4.667	1.25
21	MP2A	Mx	.009	1.25
22	MP2A	X	-8.084	6.25
23	MP2A	Z	-4.667	6.25
24	MP2A	Mx	.009	6.25
25	MP2B	X	-8.084	1.25
26	MP2B	Z	-4.667	1.25
27	MP2B	Mx	-.002	1.25
28	MP2B	X	-8.084	6.25
29	MP2B	Z	-4.667	6.25
30	MP2B	Mx	-.002	6.25
31	MP2C	X	-10.72	1.25
32	MP2C	Z	-6.189	1.25
33	MP2C	Mx	-.008	1.25
34	MP2C	X	-10.72	6.25
35	MP2C	Z	-6.189	6.25
36	MP2C	Mx	-.008	6.25
37	MP1A	X	-2.405	2.75
38	MP1A	Z	-1.388	2.75
39	MP1A	Mx	.001	2.75
40	MP1A	X	-2.405	4.75
41	MP1A	Z	-1.388	4.75
42	MP1A	Mx	.001	4.75
43	MP1B	X	-2.405	2.75
44	MP1B	Z	-1.388	2.75
45	MP1B	Mx	-.001	2.75
46	MP1B	X	-2.405	4.75
47	MP1B	Z	-1.388	4.75
48	MP1B	Mx	-.001	4.75
49	MP1C	X	-4.424	2.75
50	MP1C	Z	-2.554	2.75
51	MP1C	Mx	0	2.75
52	MP1C	X	-4.424	4.75
53	MP1C	Z	-2.554	4.75
54	MP1C	Mx	0	4.75
55	DC	X	-5.831	1.5
56	DC	Z	-3.366	1.5
57	DC	Mx	0	1.5
58	MP2A	X	-2.645	2.5
59	MP2A	Z	-1.527	2.5
60	MP2A	Mx	-.001	2.5
61	MP2B	X	-2.645	2.5
62	MP2B	Z	-1.527	2.5
63	MP2B	Mx	.001	2.5
64	MP2C	X	-3.52	2.5
65	MP2C	Z	-2.032	2.5
66	MP2C	Mx	0	2.5
67	MP3A	X	-2.31	2.5
68	MP3A	Z	-1.333	2.5



**Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	-.001	2.5
70	MP3B	X	-2.31	2.5
71	MP3B	Z	-1.333	2.5
72	MP3B	Mx	.001	2.5
73	MP3C	X	-3.52	2.5
74	MP3C	Z	-2.032	2.5
75	MP3C	Mx	0	2.5
76	MP4A	X	-2.082	2.5
77	MP4A	Z	-1.202	2.5
78	MP4A	Mx	-.001	2.5
79	MP4B	X	-2.082	2.5
80	MP4B	Z	-1.202	2.5
81	MP4B	Mx	.001	2.5
82	MP4C	X	-2.082	2.5
83	MP4C	Z	-1.202	2.5
84	MP4C	Mx	-.001	2.5

**Member Point Loads (BLC 38 : Antenna Wm (330 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.682	1.25
2	MP2A	Z	-9.842	1.25
3	MP2A	Mx	-.003	1.25
4	MP2A	X	-5.682	6.25
5	MP2A	Z	-9.842	6.25
6	MP2A	Mx	-.003	6.25
7	MP2B	X	-4.16	1.25
8	MP2B	Z	-7.206	1.25
9	MP2B	Mx	-.006	1.25
10	MP2B	X	-4.16	6.25
11	MP2B	Z	-7.206	6.25
12	MP2B	Mx	-.006	6.25
13	MP2C	X	-5.682	1.25
14	MP2C	Z	-9.842	1.25
15	MP2C	Mx	.01	1.25
16	MP2C	X	-5.682	6.25
17	MP2C	Z	-9.842	6.25
18	MP2C	Mx	.01	6.25
19	MP2A	X	-5.682	1.25
20	MP2A	Z	-9.842	1.25
21	MP2A	Mx	.01	1.25
22	MP2A	X	-5.682	6.25
23	MP2A	Z	-9.842	6.25
24	MP2A	Mx	.01	6.25
25	MP2B	X	-4.16	1.25
26	MP2B	Z	-7.206	1.25
27	MP2B	Mx	-.006	1.25
28	MP2B	X	-4.16	6.25
29	MP2B	Z	-7.206	6.25
30	MP2B	Mx	-.006	6.25
31	MP2C	X	-5.682	1.25
32	MP2C	Z	-9.842	1.25





Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
 4:40 PM  
 Checked By: DX

**Member Point Loads (BLC 77 : Lm1)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M42	Y	-500	%50.5

**Member Point Loads (BLC 78 : Lm2)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M42	Y	-500	%94

**Member Point Loads (BLC 79 : Lv1)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M42	Y	-250	%50

**Member Point Loads (BLC 80 : Lv2)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M42	Y	-250	0

**Member Distributed Loads (BLC 40 : Structure Di)**

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M4	Y	-15.909	-15.909	0	%100
2	M40	Y	-15.909	-15.909	0	%100
3	M41	Y	-15.909	-15.909	0	%100
4	M42	Y	-15.909	-15.909	0	%100
5	MP4A	Y	-8.866	-8.866	0	%100
6	MP3A	Y	-9.939	-9.939	0	%100
7	MP2A	Y	-8.866	-8.866	0	%100
8	MP1A	Y	-8.866	-8.866	0	%100
9	DC	Y	-8.866	-8.866	0	%100
10	M67	Y	-15.909	-15.909	0	%100
11	M68A	Y	-15.909	-15.909	0	%100
12	MP4C	Y	-8.866	-8.866	0	%100
13	MP3C	Y	-9.939	-9.939	0	%100
14	MP2C	Y	-8.866	-8.866	0	%100
15	MP1C	Y	-8.866	-8.866	0	%100
16	MP4B	Y	-8.866	-8.866	0	%100
17	MP3B	Y	-9.939	-9.939	0	%100
18	MP2B	Y	-8.866	-8.866	0	%100
19	MP1B	Y	-8.866	-8.866	0	%100
20	M69	Y	-18.255	-18.255	0	%100
21	M70	Y	-18.255	-18.255	0	%100
22	M71	Y	-18.255	-18.255	0	%100
23	M72	Y	-9.939	-9.939	0	%100
24	M76	Y	-9.939	-9.939	0	%100
25	M80	Y	-9.939	-9.939	0	%100
26	M93	Y	-12.874	-12.874	0	%100
27	M94	Y	-12.874	-12.874	0	%100
28	M95	Y	-12.874	-12.874	0	%100

**Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M4	X	0	0	0	%100



**Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M4	Z	0	0	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	-3.327	-3.327	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	-3.327	-3.327	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	-13.309	-13.309	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-7.586	-7.586	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-9.183	-9.183	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	-7.586	-7.586	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-7.586	-7.586	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	-6.913	-6.913	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	-9.011	-9.011	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	-9.011	-9.011	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	-7.586	-7.586	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	-9.183	-9.183	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	-7.586	-7.586	0	%100
29	MP1C	X	0	0	0	%100
30	MP1C	Z	-7.586	-7.586	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-7.586	-7.586	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-9.183	-9.183	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-7.586	-7.586	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-7.586	-7.586	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	-13.745	-13.745	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	-13.673	-13.673	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	-13.673	-13.673	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	-9.183	-9.183	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	-2.296	-2.296	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	-2.296	-2.296	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	-2.799	-2.799	0	%100
53	M94	X	0	0	0	%100

**Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
54	M94	Z	-2.683	-2.683	0	% 100
55	M95	X	0	0	0	% 100
56	M95	Z	-10.962	-10.962	0	% 100

**Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	1.502	1.502	0	% 100
2	M4	Z	-2.601	-2.601	0	% 100
3	M40	X	0	0	0	% 100
4	M40	Z	0	0	0	% 100
5	M41	X	4.991	4.991	0	% 100
6	M41	Z	-8.644	-8.644	0	% 100
7	M42	X	4.991	4.991	0	% 100
8	M42	Z	-8.644	-8.644	0	% 100
9	MP4A	X	3.793	3.793	0	% 100
10	MP4A	Z	-6.57	-6.57	0	% 100
11	MP3A	X	4.591	4.591	0	% 100
12	MP3A	Z	-7.953	-7.953	0	% 100
13	MP2A	X	3.793	3.793	0	% 100
14	MP2A	Z	-6.57	-6.57	0	% 100
15	MP1A	X	3.793	3.793	0	% 100
16	MP1A	Z	-6.57	-6.57	0	% 100
17	DC	X	3.457	3.457	0	% 100
18	DC	Z	-5.987	-5.987	0	% 100
19	M67	X	1.502	1.502	0	% 100
20	M67	Z	-2.601	-2.601	0	% 100
21	M68A	X	6.007	6.007	0	% 100
22	M68A	Z	-10.405	-10.405	0	% 100
23	MP4C	X	3.793	3.793	0	% 100
24	MP4C	Z	-6.57	-6.57	0	% 100
25	MP3C	X	4.591	4.591	0	% 100
26	MP3C	Z	-7.953	-7.953	0	% 100
27	MP2C	X	3.793	3.793	0	% 100
28	MP2C	Z	-6.57	-6.57	0	% 100
29	MP1C	X	3.793	3.793	0	% 100
30	MP1C	Z	-6.57	-6.57	0	% 100
31	MP4B	X	3.793	3.793	0	% 100
32	MP4B	Z	-6.57	-6.57	0	% 100
33	MP3B	X	4.591	4.591	0	% 100
34	MP3B	Z	-7.953	-7.953	0	% 100
35	MP2B	X	3.793	3.793	0	% 100
36	MP2B	Z	-6.57	-6.57	0	% 100
37	MP1B	X	3.793	3.793	0	% 100
38	MP1B	Z	-6.57	-6.57	0	% 100
39	M69	X	6.86	6.86	0	% 100
40	M69	Z	-11.882	-11.882	0	% 100
41	M70	X	6.86	6.86	0	% 100
42	M70	Z	-11.882	-11.882	0	% 100
43	M71	X	6.824	6.824	0	% 100
44	M71	Z	-11.82	-11.82	0	% 100
45	M72	X	3.444	3.444	0	% 100

**Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
46	M72	Z	-5.964	-5.964	0	%100
47	M76	X	3.444	3.444	0	%100
48	M76	Z	-5.964	-5.964	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	4.14	4.14	0	%100
52	M93	Z	-7.171	-7.171	0	%100
53	M94	X	.000206	.000206	0	%100
54	M94	Z	-.000357	-.000357	0	%100
55	M95	X	4.082	4.082	0	%100
56	M95	Z	-7.07	-7.07	0	%100

**Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	7.804	7.804	0	%100
2	M4	Z	-4.505	-4.505	0	%100
3	M40	X	2.881	2.881	0	%100
4	M40	Z	-1.664	-1.664	0	%100
5	M41	X	11.526	11.526	0	%100
6	M41	Z	-6.654	-6.654	0	%100
7	M42	X	2.881	2.881	0	%100
8	M42	Z	-1.664	-1.664	0	%100
9	MP4A	X	6.57	6.57	0	%100
10	MP4A	Z	-3.793	-3.793	0	%100
11	MP3A	X	7.953	7.953	0	%100
12	MP3A	Z	-4.591	-4.591	0	%100
13	MP2A	X	6.57	6.57	0	%100
14	MP2A	Z	-3.793	-3.793	0	%100
15	MP1A	X	6.57	6.57	0	%100
16	MP1A	Z	-3.793	-3.793	0	%100
17	DC	X	5.987	5.987	0	%100
18	DC	Z	-3.457	-3.457	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	7.804	7.804	0	%100
22	M68A	Z	-4.505	-4.505	0	%100
23	MP4C	X	6.57	6.57	0	%100
24	MP4C	Z	-3.793	-3.793	0	%100
25	MP3C	X	7.953	7.953	0	%100
26	MP3C	Z	-4.591	-4.591	0	%100
27	MP2C	X	6.57	6.57	0	%100
28	MP2C	Z	-3.793	-3.793	0	%100
29	MP1C	X	6.57	6.57	0	%100
30	MP1C	Z	-3.793	-3.793	0	%100
31	MP4B	X	6.57	6.57	0	%100
32	MP4B	Z	-3.793	-3.793	0	%100
33	MP3B	X	7.953	7.953	0	%100
34	MP3B	Z	-4.591	-4.591	0	%100
35	MP2B	X	6.57	6.57	0	%100
36	MP2B	Z	-3.793	-3.793	0	%100
37	MP1B	X	6.57	6.57	0	%100





**Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	MP1B	Z	-3.793	-3.793	0	%100
39	M69	X	11.841	11.841	0	%100
40	M69	Z	-6.836	-6.836	0	%100
41	M70	X	11.903	11.903	0	%100
42	M70	Z	-6.872	-6.872	0	%100
43	M71	X	11.841	11.841	0	%100
44	M71	Z	-6.836	-6.836	0	%100
45	M72	X	1.988	1.988	0	%100
46	M72	Z	-1.148	-1.148	0	%100
47	M76	X	7.953	7.953	0	%100
48	M76	Z	-4.591	-4.591	0	%100
49	M80	X	1.988	1.988	0	%100
50	M80	Z	-1.148	-1.148	0	%100
51	M93	X	9.494	9.494	0	%100
52	M93	Z	-5.481	-5.481	0	%100
53	M94	X	2.424	2.424	0	%100
54	M94	Z	-1.4	-1.4	0	%100
55	M95	X	2.323	2.323	0	%100
56	M95	Z	-1.341	-1.341	0	%100

**Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	12.015	12.015	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	9.981	9.981	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	9.981	9.981	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	0	0	0	%100
9	MP4A	X	7.586	7.586	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	9.183	9.183	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	7.586	7.586	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	7.586	7.586	0	%100
16	MP1A	Z	0	0	0	%100
17	DC	X	6.913	6.913	0	%100
18	DC	Z	0	0	0	%100
19	M67	X	3.004	3.004	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	3.004	3.004	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	7.586	7.586	0	%100
24	MP4C	Z	0	0	0	%100
25	MP3C	X	9.183	9.183	0	%100
26	MP3C	Z	0	0	0	%100
27	MP2C	X	7.586	7.586	0	%100
28	MP2C	Z	0	0	0	%100
29	MP1C	X	7.586	7.586	0	%100

**Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	MP1C	Z	0	0	0	%100
31	MP4B	X	7.586	7.586	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	9.183	9.183	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	7.586	7.586	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	7.586	7.586	0	%100
38	MP1B	Z	0	0	0	%100
39	M69	X	13.649	13.649	0	%100
40	M69	Z	0	0	0	%100
41	M70	X	13.721	13.721	0	%100
42	M70	Z	0	0	0	%100
43	M71	X	13.721	13.721	0	%100
44	M71	Z	0	0	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	0	0	0	%100
47	M76	X	6.887	6.887	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	6.887	6.887	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	8.164	8.164	0	%100
52	M93	Z	0	0	0	%100
53	M94	X	8.28	8.28	0	%100
54	M94	Z	0	0	0	%100
55	M95	X	.000413	.000413	0	%100
56	M95	Z	0	0	0	%100

**Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	7.804	7.804	0	%100
2	M4	Z	4.505	4.505	0	%100
3	M40	X	11.526	11.526	0	%100
4	M40	Z	6.654	6.654	0	%100
5	M41	X	2.881	2.881	0	%100
6	M41	Z	1.664	1.664	0	%100
7	M42	X	2.881	2.881	0	%100
8	M42	Z	1.664	1.664	0	%100
9	MP4A	X	6.57	6.57	0	%100
10	MP4A	Z	3.793	3.793	0	%100
11	MP3A	X	7.953	7.953	0	%100
12	MP3A	Z	4.591	4.591	0	%100
13	MP2A	X	6.57	6.57	0	%100
14	MP2A	Z	3.793	3.793	0	%100
15	MP1A	X	6.57	6.57	0	%100
16	MP1A	Z	3.793	3.793	0	%100
17	DC	X	5.987	5.987	0	%100
18	DC	Z	3.457	3.457	0	%100
19	M67	X	7.804	7.804	0	%100
20	M67	Z	4.505	4.505	0	%100
21	M68A	X	0	0	0	%100





**Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M41	Z	3.327	3.327	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	13.309	13.309	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	7.586	7.586	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	9.183	9.183	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	7.586	7.586	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	7.586	7.586	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	6.913	6.913	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	9.011	9.011	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	9.011	9.011	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	7.586	7.586	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	9.183	9.183	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	7.586	7.586	0	%100
29	MP1C	X	0	0	0	%100
30	MP1C	Z	7.586	7.586	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	7.586	7.586	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	9.183	9.183	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	7.586	7.586	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	7.586	7.586	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	13.745	13.745	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	13.673	13.673	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	13.673	13.673	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	9.183	9.183	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	2.296	2.296	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	2.296	2.296	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	2.799	2.799	0	%100
53	M94	X	0	0	0	%100
54	M94	Z	2.683	2.683	0	%100
55	M95	X	0	0	0	%100
56	M95	Z	10.962	10.962	0	%100

### **Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	-1.502	-1.502	0 %100
2	M4	Z	2.601	2.601	0 %100
3	M40	X	0	0	0 %100
4	M40	Z	0	0	0 %100
5	M41	X	-4.991	-4.991	0 %100
6	M41	Z	8.644	8.644	0 %100
7	M42	X	-4.991	-4.991	0 %100
8	M42	Z	8.644	8.644	0 %100
9	MP4A	X	-3.793	-3.793	0 %100
10	MP4A	Z	6.57	6.57	0 %100
11	MP3A	X	-4.591	-4.591	0 %100
12	MP3A	Z	7.953	7.953	0 %100
13	MP2A	X	-3.793	-3.793	0 %100
14	MP2A	Z	6.57	6.57	0 %100
15	MP1A	X	-3.793	-3.793	0 %100
16	MP1A	Z	6.57	6.57	0 %100
17	DC	X	-3.457	-3.457	0 %100
18	DC	Z	5.987	5.987	0 %100
19	M67	X	-1.502	-1.502	0 %100
20	M67	Z	2.601	2.601	0 %100
21	M68A	X	-6.007	-6.007	0 %100
22	M68A	Z	10.405	10.405	0 %100
23	MP4C	X	-3.793	-3.793	0 %100
24	MP4C	Z	6.57	6.57	0 %100
25	MP3C	X	-4.591	-4.591	0 %100
26	MP3C	Z	7.953	7.953	0 %100
27	MP2C	X	-3.793	-3.793	0 %100
28	MP2C	Z	6.57	6.57	0 %100
29	MP1C	X	-3.793	-3.793	0 %100
30	MP1C	Z	6.57	6.57	0 %100
31	MP4B	X	-3.793	-3.793	0 %100
32	MP4B	Z	6.57	6.57	0 %100
33	MP3B	X	-4.591	-4.591	0 %100
34	MP3B	Z	7.953	7.953	0 %100
35	MP2B	X	-3.793	-3.793	0 %100
36	MP2B	Z	6.57	6.57	0 %100
37	MP1B	X	-3.793	-3.793	0 %100
38	MP1B	Z	6.57	6.57	0 %100
39	M69	X	-6.86	-6.86	0 %100
40	M69	Z	11.882	11.882	0 %100
41	M70	X	-6.86	-6.86	0 %100
42	M70	Z	11.882	11.882	0 %100
43	M71	X	-6.824	-6.824	0 %100
44	M71	Z	11.82	11.82	0 %100
45	M72	X	-3.444	-3.444	0 %100
46	M72	Z	5.964	5.964	0 %100
47	M76	X	-3.444	-3.444	0 %100
48	M76	Z	5.964	5.964	0 %100
49	M80	X	0	0	0 %100
50	M80	Z	0	0	0 %100
51	M93	X	-4.14	-4.14	0 %100
52	M93	Z	7.171	7.171	0 %100



Company : Maser Consulting  
Designer : AE  
Job Number : Project No. 10068126  
Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
4:40 PM  
Checked By: DX

**Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M94	X	-.000206	-.000206	0	%100
54	M94	Z	.000357	.000357	0	%100
55	M95	X	-4.082	-4.082	0	%100
56	M95	Z	7.07	7.07	0	%100

**Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	-7.804	-7.804	0	%100
2	M4	Z	4.505	4.505	0	%100
3	M40	X	-2.881	-2.881	0	%100
4	M40	Z	1.664	1.664	0	%100
5	M41	X	-11.526	-11.526	0	%100
6	M41	Z	6.654	6.654	0	%100
7	M42	X	-2.881	-2.881	0	%100
8	M42	Z	1.664	1.664	0	%100
9	MP4A	X	-6.57	-6.57	0	%100
10	MP4A	Z	3.793	3.793	0	%100
11	MP3A	X	-7.953	-7.953	0	%100
12	MP3A	Z	4.591	4.591	0	%100
13	MP2A	X	-6.57	-6.57	0	%100
14	MP2A	Z	3.793	3.793	0	%100
15	MP1A	X	-6.57	-6.57	0	%100
16	MP1A	Z	3.793	3.793	0	%100
17	DC	X	-5.987	-5.987	0	%100
18	DC	Z	3.457	3.457	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	-7.804	-7.804	0	%100
22	M68A	Z	4.505	4.505	0	%100
23	MP4C	X	-6.57	-6.57	0	%100
24	MP4C	Z	3.793	3.793	0	%100
25	MP3C	X	-7.953	-7.953	0	%100
26	MP3C	Z	4.591	4.591	0	%100
27	MP2C	X	-6.57	-6.57	0	%100
28	MP2C	Z	3.793	3.793	0	%100
29	MP1C	X	-6.57	-6.57	0	%100
30	MP1C	Z	3.793	3.793	0	%100
31	MP4B	X	-6.57	-6.57	0	%100
32	MP4B	Z	3.793	3.793	0	%100
33	MP3B	X	-7.953	-7.953	0	%100
34	MP3B	Z	4.591	4.591	0	%100
35	MP2B	X	-6.57	-6.57	0	%100
36	MP2B	Z	3.793	3.793	0	%100
37	MP1B	X	-6.57	-6.57	0	%100
38	MP1B	Z	3.793	3.793	0	%100
39	M69	X	-11.841	-11.841	0	%100
40	M69	Z	6.836	6.836	0	%100
41	M70	X	-11.903	-11.903	0	%100
42	M70	Z	6.872	6.872	0	%100
43	M71	X	-11.841	-11.841	0	%100
44	M71	Z	6.836	6.836	0	%100



**Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	M72	X	-1.988	-1.988	0	%100
46	M72	Z	1.148	1.148	0	%100
47	M76	X	-7.953	-7.953	0	%100
48	M76	Z	4.591	4.591	0	%100
49	M80	X	-1.988	-1.988	0	%100
50	M80	Z	1.148	1.148	0	%100
51	M93	X	-9.494	-9.494	0	%100
52	M93	Z	5.481	5.481	0	%100
53	M94	X	-2.424	-2.424	0	%100
54	M94	Z	1.4	1.4	0	%100
55	M95	X	-2.323	-2.323	0	%100
56	M95	Z	1.341	1.341	0	%100

**Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-12.015	-12.015	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	-9.981	-9.981	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	-9.981	-9.981	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	0	0	0	%100
9	MP4A	X	-7.586	-7.586	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-9.183	-9.183	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	-7.586	-7.586	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	-7.586	-7.586	0	%100
16	MP1A	Z	0	0	0	%100
17	DC	X	-6.913	-6.913	0	%100
18	DC	Z	0	0	0	%100
19	M67	X	-3.004	-3.004	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	-3.004	-3.004	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	-7.586	-7.586	0	%100
24	MP4C	Z	0	0	0	%100
25	MP3C	X	-9.183	-9.183	0	%100
26	MP3C	Z	0	0	0	%100
27	MP2C	X	-7.586	-7.586	0	%100
28	MP2C	Z	0	0	0	%100
29	MP1C	X	-7.586	-7.586	0	%100
30	MP1C	Z	0	0	0	%100
31	MP4B	X	-7.586	-7.586	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	-9.183	-9.183	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	-7.586	-7.586	0	%100
36	MP2B	Z	0	0	0	%100





**Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	MP1B	X	-7.586	-7.586	0	%100
38	MP1B	Z	0	0	0	%100
39	M69	X	-13.649	-13.649	0	%100
40	M69	Z	0	0	0	%100
41	M70	X	-13.721	-13.721	0	%100
42	M70	Z	0	0	0	%100
43	M71	X	-13.721	-13.721	0	%100
44	M71	Z	0	0	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	0	0	0	%100
47	M76	X	-6.887	-6.887	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	-6.887	-6.887	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	-8.164	-8.164	0	%100
52	M93	Z	0	0	0	%100
53	M94	X	-8.28	-8.28	0	%100
54	M94	Z	0	0	0	%100
55	M95	X	-.000413	-.000413	0	%100
56	M95	Z	0	0	0	%100

**Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-7.804	-7.804	0	%100
2	M4	Z	-4.505	-4.505	0	%100
3	M40	X	-11.526	-11.526	0	%100
4	M40	Z	-6.654	-6.654	0	%100
5	M41	X	-2.881	-2.881	0	%100
6	M41	Z	-1.664	-1.664	0	%100
7	M42	X	-2.881	-2.881	0	%100
8	M42	Z	-1.664	-1.664	0	%100
9	MP4A	X	-6.57	-6.57	0	%100
10	MP4A	Z	-3.793	-3.793	0	%100
11	MP3A	X	-7.953	-7.953	0	%100
12	MP3A	Z	-4.591	-4.591	0	%100
13	MP2A	X	-6.57	-6.57	0	%100
14	MP2A	Z	-3.793	-3.793	0	%100
15	MP1A	X	-6.57	-6.57	0	%100
16	MP1A	Z	-3.793	-3.793	0	%100
17	DC	X	-5.987	-5.987	0	%100
18	DC	Z	-3.457	-3.457	0	%100
19	M67	X	-7.804	-7.804	0	%100
20	M67	Z	-4.505	-4.505	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	-6.57	-6.57	0	%100
24	MP4C	Z	-3.793	-3.793	0	%100
25	MP3C	X	-7.953	-7.953	0	%100
26	MP3C	Z	-4.591	-4.591	0	%100
27	MP2C	X	-6.57	-6.57	0	%100
28	MP2C	Z	-3.793	-3.793	0	%100





**Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M68A	X	-1.502	-1.502	0	%100
22	M68A	Z	-2.601	-2.601	0	%100
23	MP4C	X	-3.793	-3.793	0	%100
24	MP4C	Z	-6.57	-6.57	0	%100
25	MP3C	X	-4.591	-4.591	0	%100
26	MP3C	Z	-7.953	-7.953	0	%100
27	MP2C	X	-3.793	-3.793	0	%100
28	MP2C	Z	-6.57	-6.57	0	%100
29	MP1C	X	-3.793	-3.793	0	%100
30	MP1C	Z	-6.57	-6.57	0	%100
31	MP4B	X	-3.793	-3.793	0	%100
32	MP4B	Z	-6.57	-6.57	0	%100
33	MP3B	X	-4.591	-4.591	0	%100
34	MP3B	Z	-7.953	-7.953	0	%100
35	MP2B	X	-3.793	-3.793	0	%100
36	MP2B	Z	-6.57	-6.57	0	%100
37	MP1B	X	-3.793	-3.793	0	%100
38	MP1B	Z	-6.57	-6.57	0	%100
39	M69	X	-6.86	-6.86	0	%100
40	M69	Z	-11.882	-11.882	0	%100
41	M70	X	-6.824	-6.824	0	%100
42	M70	Z	-11.82	-11.82	0	%100
43	M71	X	-6.86	-6.86	0	%100
44	M71	Z	-11.882	-11.882	0	%100
45	M72	X	-3.444	-3.444	0	%100
46	M72	Z	-5.964	-5.964	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	-3.444	-3.444	0	%100
50	M80	Z	-5.964	-5.964	0	%100
51	M93	X	-0.00206	-0.00206	0	%100
52	M93	Z	-0.00357	-0.00357	0	%100
53	M94	X	-4.082	-4.082	0	%100
54	M94	Z	-7.07	-7.07	0	%100
55	M95	X	-4.14	-4.14	0	%100
56	M95	Z	-7.171	-7.171	0	%100

**Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	-1.159	-1.159	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	-1.159	-1.159	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	-4.637	-4.637	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-3.555	-3.555	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-3.857	-3.857	0	%100



**Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
13	MP2A	X	0	0	0	%100
14	MP2A	Z	-3.555	-3.555	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-3.555	-3.555	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	-2.983	-2.983	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	-3.187	-3.187	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	-3.187	-3.187	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	-3.555	-3.555	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	-3.857	-3.857	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	-3.555	-3.555	0	%100
29	MP1C	X	0	0	0	%100
30	MP1C	Z	-3.555	-3.555	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-3.555	-3.555	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-3.857	-3.857	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-3.555	-3.555	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-3.555	-3.555	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	-3.514	-3.514	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	-4.077	-4.077	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	-4.077	-4.077	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	-3.857	-3.857	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	-.964	-.964	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	-.964	-.964	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	-.875	-.875	0	%100
53	M94	X	0	0	0	%100
54	M94	Z	-.838	-.838	0	%100
55	M95	X	0	0	0	%100
56	M95	Z	-3.426	-3.426	0	%100

**Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
1	M4	X	.531	.531	0	%100
2	M4	Z	-.92	-.92	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	0	0	0	%100







**Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	M72	X	0	0	0	%100
46	M72	Z	0	0	0	%100
47	M76	X	2.893	2.893	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	2.893	2.893	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	2.551	2.551	0	%100
52	M93	Z	0	0	0	%100
53	M94	X	2.587	2.587	0	%100
54	M94	Z	0	0	0	%100
55	M95	X	.000129	.000129	0	%100
56	M95	Z	0	0	0	%100

**Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	2.76	2.76	0	%100
2	M4	Z	1.593	1.593	0	%100
3	M40	X	4.016	4.016	0	%100
4	M40	Z	2.318	2.318	0	%100
5	M41	X	1.004	1.004	0	%100
6	M41	Z	.58	.58	0	%100
7	M42	X	1.004	1.004	0	%100
8	M42	Z	.58	.58	0	%100
9	MP4A	X	3.079	3.079	0	%100
10	MP4A	Z	1.778	1.778	0	%100
11	MP3A	X	3.34	3.34	0	%100
12	MP3A	Z	1.929	1.929	0	%100
13	MP2A	X	3.079	3.079	0	%100
14	MP2A	Z	1.778	1.778	0	%100
15	MP1A	X	3.079	3.079	0	%100
16	MP1A	Z	1.778	1.778	0	%100
17	DC	X	2.583	2.583	0	%100
18	DC	Z	1.491	1.491	0	%100
19	M67	X	2.76	2.76	0	%100
20	M67	Z	1.593	1.593	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	3.079	3.079	0	%100
24	MP4C	Z	1.778	1.778	0	%100
25	MP3C	X	3.34	3.34	0	%100
26	MP3C	Z	1.929	1.929	0	%100
27	MP2C	X	3.079	3.079	0	%100
28	MP2C	Z	1.778	1.778	0	%100
29	MP1C	X	3.079	3.079	0	%100
30	MP1C	Z	1.778	1.778	0	%100
31	MP4B	X	3.079	3.079	0	%100
32	MP4B	Z	1.778	1.778	0	%100
33	MP3B	X	3.34	3.34	0	%100
34	MP3B	Z	1.929	1.929	0	%100
35	MP2B	X	3.079	3.079	0	%100
36	MP2B	Z	1.778	1.778	0	%100





**Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP1C	X	1.778	1.778	0	%100
30	MP1C	Z	3.079	3.079	0	%100
31	MP4B	X	1.778	1.778	0	%100
32	MP4B	Z	3.079	3.079	0	%100
33	MP3B	X	1.929	1.929	0	%100
34	MP3B	Z	3.34	3.34	0	%100
35	MP2B	X	1.778	1.778	0	%100
36	MP2B	Z	3.079	3.079	0	%100
37	MP1B	X	1.778	1.778	0	%100
38	MP1B	Z	3.079	3.079	0	%100
39	M69	X	1.851	1.851	0	%100
40	M69	Z	3.206	3.206	0	%100
41	M70	X	2.133	2.133	0	%100
42	M70	Z	3.694	3.694	0	%100
43	M71	X	1.851	1.851	0	%100
44	M71	Z	3.206	3.206	0	%100
45	M72	X	1.446	1.446	0	%100
46	M72	Z	2.505	2.505	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	1.446	1.446	0	%100
50	M80	Z	2.505	2.505	0	%100
51	M93	X	6.4e-5	6.4e-5	0	%100
52	M93	Z	.000112	.000112	0	%100
53	M94	X	1.276	1.276	0	%100
54	M94	Z	2.209	2.209	0	%100
55	M95	X	1.294	1.294	0	%100
56	M95	Z	2.241	2.241	0	%100

**Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	1.159	1.159	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	1.159	1.159	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	4.637	4.637	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	3.555	3.555	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	3.857	3.857	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	3.555	3.555	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	3.555	3.555	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	2.983	2.983	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	3.187	3.187	0	%100

**Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
21	M68A	X	0	0	0	%100
22	M68A	Z	3.187	3.187	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	3.555	3.555	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	3.857	3.857	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	3.555	3.555	0	%100
29	MP1C	X	0	0	0	%100
30	MP1C	Z	3.555	3.555	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	3.555	3.555	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	3.857	3.857	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	3.555	3.555	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	3.555	3.555	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	3.514	3.514	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	4.077	4.077	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	4.077	4.077	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	3.857	3.857	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	.964	.964	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	.964	.964	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	.875	.875	0	%100
53	M94	X	0	0	0	%100
54	M94	Z	.838	.838	0	%100
55	M95	X	0	0	0	%100
56	M95	Z	3.426	3.426	0	%100

**Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
1	M4	X	-.531	-.531	0	%100
2	M4	Z	.92	.92	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	-1.739	-1.739	0	%100
6	M41	Z	3.012	3.012	0	%100
7	M42	X	-1.739	-1.739	0	%100
8	M42	Z	3.012	3.012	0	%100
9	MP4A	X	-1.778	-1.778	0	%100
10	MP4A	Z	3.079	3.079	0	%100
11	MP3A	X	-1.929	-1.929	0	%100
12	MP3A	Z	3.34	3.34	0	%100



**Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	MP2A	X	-1.778	-1.778	0 %100
14	MP2A	Z	3.079	3.079	0 %100
15	MP1A	X	-1.778	-1.778	0 %100
16	MP1A	Z	3.079	3.079	0 %100
17	DC	X	-1.491	-1.491	0 %100
18	DC	Z	2.583	2.583	0 %100
19	M67	X	-.531	-.531	0 %100
20	M67	Z	.92	.92	0 %100
21	M68A	X	-2.124	-2.124	0 %100
22	M68A	Z	3.68	3.68	0 %100
23	MP4C	X	-1.778	-1.778	0 %100
24	MP4C	Z	3.079	3.079	0 %100
25	MP3C	X	-1.929	-1.929	0 %100
26	MP3C	Z	3.34	3.34	0 %100
27	MP2C	X	-1.778	-1.778	0 %100
28	MP2C	Z	3.079	3.079	0 %100
29	MP1C	X	-1.778	-1.778	0 %100
30	MP1C	Z	3.079	3.079	0 %100
31	MP4B	X	-1.778	-1.778	0 %100
32	MP4B	Z	3.079	3.079	0 %100
33	MP3B	X	-1.929	-1.929	0 %100
34	MP3B	Z	3.34	3.34	0 %100
35	MP2B	X	-1.778	-1.778	0 %100
36	MP2B	Z	3.079	3.079	0 %100
37	MP1B	X	-1.778	-1.778	0 %100
38	MP1B	Z	3.079	3.079	0 %100
39	M69	X	-1.851	-1.851	0 %100
40	M69	Z	3.206	3.206	0 %100
41	M70	X	-1.851	-1.851	0 %100
42	M70	Z	3.206	3.206	0 %100
43	M71	X	-2.133	-2.133	0 %100
44	M71	Z	3.694	3.694	0 %100
45	M72	X	-1.446	-1.446	0 %100
46	M72	Z	2.505	2.505	0 %100
47	M76	X	-1.446	-1.446	0 %100
48	M76	Z	2.505	2.505	0 %100
49	M80	X	0	0	0 %100
50	M80	Z	0	0	0 %100
51	M93	X	-1.294	-1.294	0 %100
52	M93	Z	2.241	2.241	0 %100
53	M94	X	-6.4e-5	-6.4e-5	0 %100
54	M94	Z	.000112	.000112	0 %100
55	M95	X	-1.276	-1.276	0 %100
56	M95	Z	2.209	2.209	0 %100

**Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-2.76	-2.76	0 %100
2	M4	Z	1.593	1.593	0 %100
3	M40	X	-1.004	-1.004	0 %100
4	M40	Z	.58	.58	0 %100



**Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	M41	X	-4.016	-4.016	0 %100
6	M41	Z	2.318	2.318	0 %100
7	M42	X	-1.004	-1.004	0 %100
8	M42	Z	.58	.58	0 %100
9	MP4A	X	-3.079	-3.079	0 %100
10	MP4A	Z	1.778	1.778	0 %100
11	MP3A	X	-3.34	-3.34	0 %100
12	MP3A	Z	1.929	1.929	0 %100
13	MP2A	X	-3.079	-3.079	0 %100
14	MP2A	Z	1.778	1.778	0 %100
15	MP1A	X	-3.079	-3.079	0 %100
16	MP1A	Z	1.778	1.778	0 %100
17	DC	X	-2.583	-2.583	0 %100
18	DC	Z	1.491	1.491	0 %100
19	M67	X	0	0	0 %100
20	M67	Z	0	0	0 %100
21	M68A	X	-2.76	-2.76	0 %100
22	M68A	Z	1.593	1.593	0 %100
23	MP4C	X	-3.079	-3.079	0 %100
24	MP4C	Z	1.778	1.778	0 %100
25	MP3C	X	-3.34	-3.34	0 %100
26	MP3C	Z	1.929	1.929	0 %100
27	MP2C	X	-3.079	-3.079	0 %100
28	MP2C	Z	1.778	1.778	0 %100
29	MP1C	X	-3.079	-3.079	0 %100
30	MP1C	Z	1.778	1.778	0 %100
31	MP4B	X	-3.079	-3.079	0 %100
32	MP4B	Z	1.778	1.778	0 %100
33	MP3B	X	-3.34	-3.34	0 %100
34	MP3B	Z	1.929	1.929	0 %100
35	MP2B	X	-3.079	-3.079	0 %100
36	MP2B	Z	1.778	1.778	0 %100
37	MP1B	X	-3.079	-3.079	0 %100
38	MP1B	Z	1.778	1.778	0 %100
39	M69	X	-3.531	-3.531	0 %100
40	M69	Z	2.039	2.039	0 %100
41	M70	X	-3.043	-3.043	0 %100
42	M70	Z	1.757	1.757	0 %100
43	M71	X	-3.531	-3.531	0 %100
44	M71	Z	2.039	2.039	0 %100
45	M72	X	-.835	-.835	0 %100
46	M72	Z	.482	.482	0 %100
47	M76	X	-3.34	-3.34	0 %100
48	M76	Z	1.929	1.929	0 %100
49	M80	X	-.835	-.835	0 %100
50	M80	Z	.482	.482	0 %100
51	M93	X	-2.967	-2.967	0 %100
52	M93	Z	1.713	1.713	0 %100
53	M94	X	-.758	-.758	0 %100
54	M94	Z	.437	.437	0 %100
55	M95	X	-.726	-.726	0 %100
56	M95	Z	.419	.419	0 %100



**Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-4.249	-4.249	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	-3.478	-3.478	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	-3.478	-3.478	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	0	0	0	%100
9	MP4A	X	-3.555	-3.555	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-3.857	-3.857	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	-3.555	-3.555	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	-3.555	-3.555	0	%100
16	MP1A	Z	0	0	0	%100
17	DC	X	-2.983	-2.983	0	%100
18	DC	Z	0	0	0	%100
19	M67	X	-1.062	-1.062	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	-1.062	-1.062	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	-3.555	-3.555	0	%100
24	MP4C	Z	0	0	0	%100
25	MP3C	X	-3.857	-3.857	0	%100
26	MP3C	Z	0	0	0	%100
27	MP2C	X	-3.555	-3.555	0	%100
28	MP2C	Z	0	0	0	%100
29	MP1C	X	-3.555	-3.555	0	%100
30	MP1C	Z	0	0	0	%100
31	MP4B	X	-3.555	-3.555	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	-3.857	-3.857	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	-3.555	-3.555	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	-3.555	-3.555	0	%100
38	MP1B	Z	0	0	0	%100
39	M69	X	-4.265	-4.265	0	%100
40	M69	Z	0	0	0	%100
41	M70	X	-3.702	-3.702	0	%100
42	M70	Z	0	0	0	%100
43	M71	X	-3.702	-3.702	0	%100
44	M71	Z	0	0	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	0	0	0	%100
47	M76	X	-2.893	-2.893	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	-2.893	-2.893	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	-2.551	-2.551	0	%100
52	M93	Z	0	0	0	%100



**Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M94	X	-2.587	-2.587	0	%100
54	M94	Z	0	0	0	%100
55	M95	X	-0.00129	-0.00129	0	%100
56	M95	Z	0	0	0	%100

**Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-2.76	-2.76	0	%100
2	M4	Z	-1.593	-1.593	0	%100
3	M40	X	-4.016	-4.016	0	%100
4	M40	Z	-2.318	-2.318	0	%100
5	M41	X	-1.004	-1.004	0	%100
6	M41	Z	-.58	-.58	0	%100
7	M42	X	-1.004	-1.004	0	%100
8	M42	Z	-.58	-.58	0	%100
9	MP4A	X	-3.079	-3.079	0	%100
10	MP4A	Z	-1.778	-1.778	0	%100
11	MP3A	X	-3.34	-3.34	0	%100
12	MP3A	Z	-1.929	-1.929	0	%100
13	MP2A	X	-3.079	-3.079	0	%100
14	MP2A	Z	-1.778	-1.778	0	%100
15	MP1A	X	-3.079	-3.079	0	%100
16	MP1A	Z	-1.778	-1.778	0	%100
17	DC	X	-2.583	-2.583	0	%100
18	DC	Z	-1.491	-1.491	0	%100
19	M67	X	-2.76	-2.76	0	%100
20	M67	Z	-1.593	-1.593	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	-3.079	-3.079	0	%100
24	MP4C	Z	-1.778	-1.778	0	%100
25	MP3C	X	-3.34	-3.34	0	%100
26	MP3C	Z	-1.929	-1.929	0	%100
27	MP2C	X	-3.079	-3.079	0	%100
28	MP2C	Z	-1.778	-1.778	0	%100
29	MP1C	X	-3.079	-3.079	0	%100
30	MP1C	Z	-1.778	-1.778	0	%100
31	MP4B	X	-3.079	-3.079	0	%100
32	MP4B	Z	-1.778	-1.778	0	%100
33	MP3B	X	-3.34	-3.34	0	%100
34	MP3B	Z	-1.929	-1.929	0	%100
35	MP2B	X	-3.079	-3.079	0	%100
36	MP2B	Z	-1.778	-1.778	0	%100
37	MP1B	X	-3.079	-3.079	0	%100
38	MP1B	Z	-1.778	-1.778	0	%100
39	M69	X	-3.531	-3.531	0	%100
40	M69	Z	-2.039	-2.039	0	%100
41	M70	X	-3.531	-3.531	0	%100
42	M70	Z	-2.039	-2.039	0	%100
43	M71	X	-3.043	-3.043	0	%100
44	M71	Z	-1.757	-1.757	0	%100



**Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	M72	X	-.835	-.835	0	% 100
46	M72	Z	-.482	-.482	0	% 100
47	M76	X	-.835	-.835	0	% 100
48	M76	Z	-.482	-.482	0	% 100
49	M80	X	-3.34	-3.34	0	% 100
50	M80	Z	-1.929	-1.929	0	% 100
51	M93	X	-.726	-.726	0	% 100
52	M93	Z	-.419	-.419	0	% 100
53	M94	X	-2.967	-2.967	0	% 100
54	M94	Z	-1.713	-1.713	0	% 100
55	M95	X	-.758	-.758	0	% 100
56	M95	Z	-.437	-.437	0	% 100

**Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-.531	-.531	0	% 100
2	M4	Z	-.92	-.92	0	% 100
3	M40	X	-1.739	-1.739	0	% 100
4	M40	Z	-3.012	-3.012	0	% 100
5	M41	X	0	0	0	% 100
6	M41	Z	0	0	0	% 100
7	M42	X	-1.739	-1.739	0	% 100
8	M42	Z	-3.012	-3.012	0	% 100
9	MP4A	X	-1.778	-1.778	0	% 100
10	MP4A	Z	-3.079	-3.079	0	% 100
11	MP3A	X	-1.929	-1.929	0	% 100
12	MP3A	Z	-3.34	-3.34	0	% 100
13	MP2A	X	-1.778	-1.778	0	% 100
14	MP2A	Z	-3.079	-3.079	0	% 100
15	MP1A	X	-1.778	-1.778	0	% 100
16	MP1A	Z	-3.079	-3.079	0	% 100
17	DC	X	-1.491	-1.491	0	% 100
18	DC	Z	-2.583	-2.583	0	% 100
19	M67	X	-2.124	-2.124	0	% 100
20	M67	Z	-3.68	-3.68	0	% 100
21	M68A	X	-.531	-.531	0	% 100
22	M68A	Z	-.92	-.92	0	% 100
23	MP4C	X	-1.778	-1.778	0	% 100
24	MP4C	Z	-3.079	-3.079	0	% 100
25	MP3C	X	-1.929	-1.929	0	% 100
26	MP3C	Z	-3.34	-3.34	0	% 100
27	MP2C	X	-1.778	-1.778	0	% 100
28	MP2C	Z	-3.079	-3.079	0	% 100
29	MP1C	X	-1.778	-1.778	0	% 100
30	MP1C	Z	-3.079	-3.079	0	% 100
31	MP4B	X	-1.778	-1.778	0	% 100
32	MP4B	Z	-3.079	-3.079	0	% 100
33	MP3B	X	-1.929	-1.929	0	% 100
34	MP3B	Z	-3.34	-3.34	0	% 100
35	MP2B	X	-1.778	-1.778	0	% 100
36	MP2B	Z	-3.079	-3.079	0	% 100





**Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	MP1B	X	-1.778	-1.778	0	%100
38	MP1B	Z	-3.079	-3.079	0	%100
39	M69	X	-1.851	-1.851	0	%100
40	M69	Z	-3.206	-3.206	0	%100
41	M70	X	-2.133	-2.133	0	%100
42	M70	Z	-3.694	-3.694	0	%100
43	M71	X	-1.851	-1.851	0	%100
44	M71	Z	-3.206	-3.206	0	%100
45	M72	X	-1.446	-1.446	0	%100
46	M72	Z	-2.505	-2.505	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	-1.446	-1.446	0	%100
50	M80	Z	-2.505	-2.505	0	%100
51	M93	X	-6.4e-5	-6.4e-5	0	%100
52	M93	Z	-.000112	-.000112	0	%100
53	M94	X	-1.276	-1.276	0	%100
54	M94	Z	-2.209	-2.209	0	%100
55	M95	X	-1.294	-1.294	0	%100
56	M95	Z	-2.241	-2.241	0	%100

**Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	-.226	-.226	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	-.226	-.226	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	-.906	-.906	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-.516	-.516	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-.625	-.625	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	-.516	-.516	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-.516	-.516	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	-.47	-.47	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	-.613	-.613	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	-.613	-.613	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	-.516	-.516	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	-.625	-.625	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	-.516	-.516	0	%100

**Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
29	MP1C	X	0	0	0	%100
30	MP1C	Z	-.516	-.516	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-.516	-.516	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-.625	-.625	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-.516	-.516	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-.516	-.516	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	-.935	-.935	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	-.93	-.93	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	-.93	-.93	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	-.625	-.625	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	-.156	-.156	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	-.156	-.156	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	-.19	-.19	0	%100
53	M94	X	0	0	0	%100
54	M94	Z	-.183	-.183	0	%100
55	M95	X	0	0	0	%100
56	M95	Z	-.746	-.746	0	%100

**Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	.102	.102	0	%100
2	M4	Z	-.177	-.177	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	.34	.34	0	%100
6	M41	Z	-.588	-.588	0	%100
7	M42	X	.34	.34	0	%100
8	M42	Z	-.588	-.588	0	%100
9	MP4A	X	.258	.258	0	%100
10	MP4A	Z	-.447	-.447	0	%100
11	MP3A	X	.312	.312	0	%100
12	MP3A	Z	-.541	-.541	0	%100
13	MP2A	X	.258	.258	0	%100
14	MP2A	Z	-.447	-.447	0	%100
15	MP1A	X	.258	.258	0	%100
16	MP1A	Z	-.447	-.447	0	%100
17	DC	X	.235	.235	0	%100
18	DC	Z	-.407	-.407	0	%100
19	M67	X	.102	.102	0	%100
20	M67	Z	-.177	-.177	0	%100



**Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M68A	X	.409	.409	0	%100
22	M68A	Z	-.708	-.708	0	%100
23	MP4C	X	.258	.258	0	%100
24	MP4C	Z	-.447	-.447	0	%100
25	MP3C	X	.312	.312	0	%100
26	MP3C	Z	-.541	-.541	0	%100
27	MP2C	X	.258	.258	0	%100
28	MP2C	Z	-.447	-.447	0	%100
29	MP1C	X	.258	.258	0	%100
30	MP1C	Z	-.447	-.447	0	%100
31	MP4B	X	.258	.258	0	%100
32	MP4B	Z	-.447	-.447	0	%100
33	MP3B	X	.312	.312	0	%100
34	MP3B	Z	-.541	-.541	0	%100
35	MP2B	X	.258	.258	0	%100
36	MP2B	Z	-.447	-.447	0	%100
37	MP1B	X	.258	.258	0	%100
38	MP1B	Z	-.447	-.447	0	%100
39	M69	X	.467	.467	0	%100
40	M69	Z	-.809	-.809	0	%100
41	M70	X	.467	.467	0	%100
42	M70	Z	-.809	-.809	0	%100
43	M71	X	.464	.464	0	%100
44	M71	Z	-.804	-.804	0	%100
45	M72	X	.234	.234	0	%100
46	M72	Z	-.406	-.406	0	%100
47	M76	X	.234	.234	0	%100
48	M76	Z	-.406	-.406	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	.282	.282	0	%100
52	M93	Z	-.488	-.488	0	%100
53	M94	X	1.4e-5	1.4e-5	0	%100
54	M94	Z	-2.4e-5	-2.4e-5	0	%100
55	M95	X	.278	.278	0	%100
56	M95	Z	-.481	-.481	0	%100

**Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	.531	.531	0	%100
2	M4	Z	-.307	-.307	0	%100
3	M40	X	.196	.196	0	%100
4	M40	Z	-.113	-.113	0	%100
5	M41	X	.784	.784	0	%100
6	M41	Z	-.453	-.453	0	%100
7	M42	X	.196	.196	0	%100
8	M42	Z	-.113	-.113	0	%100
9	MP4A	X	.447	.447	0	%100
10	MP4A	Z	-.258	-.258	0	%100
11	MP3A	X	.541	.541	0	%100
12	MP3A	Z	-.312	-.312	0	%100



**Member Distributed Loads (BLC 67 : Structure Wm (60 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	MP2A	X	.447	.447	0 %100
14	MP2A	Z	-.258	-.258	0 %100
15	MP1A	X	.447	.447	0 %100
16	MP1A	Z	-.258	-.258	0 %100
17	DC	X	.407	.407	0 %100
18	DC	Z	-.235	-.235	0 %100
19	M67	X	0	0	0 %100
20	M67	Z	0	0	0 %100
21	M68A	X	.531	.531	0 %100
22	M68A	Z	-.307	-.307	0 %100
23	MP4C	X	.447	.447	0 %100
24	MP4C	Z	-.258	-.258	0 %100
25	MP3C	X	.541	.541	0 %100
26	MP3C	Z	-.312	-.312	0 %100
27	MP2C	X	.447	.447	0 %100
28	MP2C	Z	-.258	-.258	0 %100
29	MP1C	X	.447	.447	0 %100
30	MP1C	Z	-.258	-.258	0 %100
31	MP4B	X	.447	.447	0 %100
32	MP4B	Z	-.258	-.258	0 %100
33	MP3B	X	.541	.541	0 %100
34	MP3B	Z	-.312	-.312	0 %100
35	MP2B	X	.447	.447	0 %100
36	MP2B	Z	-.258	-.258	0 %100
37	MP1B	X	.447	.447	0 %100
38	MP1B	Z	-.258	-.258	0 %100
39	M69	X	.806	.806	0 %100
40	M69	Z	-.465	-.465	0 %100
41	M70	X	.81	.81	0 %100
42	M70	Z	-.468	-.468	0 %100
43	M71	X	.806	.806	0 %100
44	M71	Z	-.465	-.465	0 %100
45	M72	X	.135	.135	0 %100
46	M72	Z	-.078	-.078	0 %100
47	M76	X	.541	.541	0 %100
48	M76	Z	-.312	-.312	0 %100
49	M80	X	.135	.135	0 %100
50	M80	Z	-.078	-.078	0 %100
51	M93	X	.646	.646	0 %100
52	M93	Z	-.373	-.373	0 %100
53	M94	X	.165	.165	0 %100
54	M94	Z	-.095	-.095	0 %100
55	M95	X	.158	.158	0 %100
56	M95	Z	-.091	-.091	0 %100

**Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	.818	.818	0 %100
2	M4	Z	0	0	0 %100
3	M40	X	.679	.679	0 %100
4	M40	Z	0	0	0 %100



Company : Maser Consulting  
 Designer : AE  
 Job Number : Project No. 10068126  
 Model Name : 468081-VZW\_MT\_LO\_H

May 19, 2021  
 4:40 PM  
 Checked By: DX

### Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M41	X	.679	.679	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	0	0	0	%100
9	MP4A	X	.516	.516	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	.625	.625	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	.516	.516	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	.516	.516	0	%100
16	MP1A	Z	0	0	0	%100
17	DC	X	.47	.47	0	%100
18	DC	Z	0	0	0	%100
19	M67	X	.204	.204	0	%100
20	M67	Z	0	0	0	%100
21	M68A	X	.204	.204	0	%100
22	M68A	Z	0	0	0	%100
23	MP4C	X	.516	.516	0	%100
24	MP4C	Z	0	0	0	%100
25	MP3C	X	.625	.625	0	%100
26	MP3C	Z	0	0	0	%100
27	MP2C	X	.516	.516	0	%100
28	MP2C	Z	0	0	0	%100
29	MP1C	X	.516	.516	0	%100
30	MP1C	Z	0	0	0	%100
31	MP4B	X	.516	.516	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	.625	.625	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	.516	.516	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	.516	.516	0	%100
38	MP1B	Z	0	0	0	%100
39	M69	X	.929	.929	0	%100
40	M69	Z	0	0	0	%100
41	M70	X	.934	.934	0	%100
42	M70	Z	0	0	0	%100
43	M71	X	.934	.934	0	%100
44	M71	Z	0	0	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	0	0	0	%100
47	M76	X	.469	.469	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	.469	.469	0	%100
50	M80	Z	0	0	0	%100
51	M93	X	.556	.556	0	%100
52	M93	Z	0	0	0	%100
53	M94	X	.563	.563	0	%100
54	M94	Z	0	0	0	%100
55	M95	X	2.8e-5	2.8e-5	0	%100
56	M95	Z	0	0	0	%100





**Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M94	X	.646	.646	0	%100
54	M94	Z	.373	.373	0	%100
55	M95	X	.165	.165	0	%100
56	M95	Z	.095	.095	0	%100

**Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	.102	.102	0	%100
2	M4	Z	.177	.177	0	%100
3	M40	X	.34	.34	0	%100
4	M40	Z	.588	.588	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	.34	.34	0	%100
8	M42	Z	.588	.588	0	%100
9	MP4A	X	.258	.258	0	%100
10	MP4A	Z	.447	.447	0	%100
11	MP3A	X	.312	.312	0	%100
12	MP3A	Z	.541	.541	0	%100
13	MP2A	X	.258	.258	0	%100
14	MP2A	Z	.447	.447	0	%100
15	MP1A	X	.258	.258	0	%100
16	MP1A	Z	.447	.447	0	%100
17	DC	X	.235	.235	0	%100
18	DC	Z	.407	.407	0	%100
19	M67	X	.409	.409	0	%100
20	M67	Z	.708	.708	0	%100
21	M68A	X	.102	.102	0	%100
22	M68A	Z	.177	.177	0	%100
23	MP4C	X	.258	.258	0	%100
24	MP4C	Z	.447	.447	0	%100
25	MP3C	X	.312	.312	0	%100
26	MP3C	Z	.541	.541	0	%100
27	MP2C	X	.258	.258	0	%100
28	MP2C	Z	.447	.447	0	%100
29	MP1C	X	.258	.258	0	%100
30	MP1C	Z	.447	.447	0	%100
31	MP4B	X	.258	.258	0	%100
32	MP4B	Z	.447	.447	0	%100
33	MP3B	X	.312	.312	0	%100
34	MP3B	Z	.541	.541	0	%100
35	MP2B	X	.258	.258	0	%100
36	MP2B	Z	.447	.447	0	%100
37	MP1B	X	.258	.258	0	%100
38	MP1B	Z	.447	.447	0	%100
39	M69	X	.467	.467	0	%100
40	M69	Z	.809	.809	0	%100
41	M70	X	.464	.464	0	%100
42	M70	Z	.804	.804	0	%100
43	M71	X	.467	.467	0	%100
44	M71	Z	.809	.809	0	%100

**Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	M72	X	.234	.234	0	%100
46	M72	Z	.406	.406	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	.234	.234	0	%100
50	M80	Z	.406	.406	0	%100
51	M93	X	1.4e-5	1.4e-5	0	%100
52	M93	Z	2.4e-5	2.4e-5	0	%100
53	M94	X	.278	.278	0	%100
54	M94	Z	.481	.481	0	%100
55	M95	X	.282	.282	0	%100
56	M95	Z	.488	.488	0	%100

**Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	.226	.226	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	.226	.226	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	.906	.906	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	.516	.516	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	.625	.625	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	.516	.516	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	.516	.516	0	%100
17	DC	X	0	0	0	%100
18	DC	Z	.47	.47	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	.613	.613	0	%100
21	M68A	X	0	0	0	%100
22	M68A	Z	.613	.613	0	%100
23	MP4C	X	0	0	0	%100
24	MP4C	Z	.516	.516	0	%100
25	MP3C	X	0	0	0	%100
26	MP3C	Z	.625	.625	0	%100
27	MP2C	X	0	0	0	%100
28	MP2C	Z	.516	.516	0	%100
29	MP1C	X	0	0	0	%100
30	MP1C	Z	.516	.516	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	.516	.516	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	.625	.625	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	.516	.516	0	%100



**Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	MP1B	X	0	0	0	%100
38	MP1B	Z	.516	.516	0	%100
39	M69	X	0	0	0	%100
40	M69	Z	.935	.935	0	%100
41	M70	X	0	0	0	%100
42	M70	Z	.93	.93	0	%100
43	M71	X	0	0	0	%100
44	M71	Z	.93	.93	0	%100
45	M72	X	0	0	0	%100
46	M72	Z	.625	.625	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	.156	.156	0	%100
49	M80	X	0	0	0	%100
50	M80	Z	.156	.156	0	%100
51	M93	X	0	0	0	%100
52	M93	Z	.19	.19	0	%100
53	M94	X	0	0	0	%100
54	M94	Z	.183	.183	0	%100
55	M95	X	0	0	0	%100
56	M95	Z	.746	.746	0	%100

**Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-.102	-.102	0	%100
2	M4	Z	.177	.177	0	%100
3	M40	X	0	0	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	-.34	-.34	0	%100
6	M41	Z	.588	.588	0	%100
7	M42	X	-.34	-.34	0	%100
8	M42	Z	.588	.588	0	%100
9	MP4A	X	-.258	-.258	0	%100
10	MP4A	Z	.447	.447	0	%100
11	MP3A	X	-.312	-.312	0	%100
12	MP3A	Z	.541	.541	0	%100
13	MP2A	X	-.258	-.258	0	%100
14	MP2A	Z	.447	.447	0	%100
15	MP1A	X	-.258	-.258	0	%100
16	MP1A	Z	.447	.447	0	%100
17	DC	X	-.235	-.235	0	%100
18	DC	Z	.407	.407	0	%100
19	M67	X	-.102	-.102	0	%100
20	M67	Z	.177	.177	0	%100
21	M68A	X	-.409	-.409	0	%100
22	M68A	Z	.708	.708	0	%100
23	MP4C	X	-.258	-.258	0	%100
24	MP4C	Z	.447	.447	0	%100
25	MP3C	X	-.312	-.312	0	%100
26	MP3C	Z	.541	.541	0	%100
27	MP2C	X	-.258	-.258	0	%100
28	MP2C	Z	.447	.447	0	%100

**Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP1C	X	-.258	-.258	0 %100
30	MP1C	Z	.447	.447	0 %100
31	MP4B	X	-.258	-.258	0 %100
32	MP4B	Z	.447	.447	0 %100
33	MP3B	X	-.312	-.312	0 %100
34	MP3B	Z	.541	.541	0 %100
35	MP2B	X	-.258	-.258	0 %100
36	MP2B	Z	.447	.447	0 %100
37	MP1B	X	-.258	-.258	0 %100
38	MP1B	Z	.447	.447	0 %100
39	M69	X	-.467	-.467	0 %100
40	M69	Z	.809	.809	0 %100
41	M70	X	-.467	-.467	0 %100
42	M70	Z	.809	.809	0 %100
43	M71	X	-.464	-.464	0 %100
44	M71	Z	.804	.804	0 %100
45	M72	X	-.234	-.234	0 %100
46	M72	Z	.406	.406	0 %100
47	M76	X	-.234	-.234	0 %100
48	M76	Z	.406	.406	0 %100
49	M80	X	0	0	0 %100
50	M80	Z	0	0	0 %100
51	M93	X	-.282	-.282	0 %100
52	M93	Z	.488	.488	0 %100
53	M94	X	-1.4e-5	-1.4e-5	0 %100
54	M94	Z	2.4e-5	2.4e-5	0 %100
55	M95	X	-.278	-.278	0 %100
56	M95	Z	.481	.481	0 %100

**Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-.531	-.531	0 %100
2	M4	Z	.307	.307	0 %100
3	M40	X	-.196	-.196	0 %100
4	M40	Z	.113	.113	0 %100
5	M41	X	-.784	-.784	0 %100
6	M41	Z	.453	.453	0 %100
7	M42	X	-.196	-.196	0 %100
8	M42	Z	.113	.113	0 %100
9	MP4A	X	-.447	-.447	0 %100
10	MP4A	Z	.258	.258	0 %100
11	MP3A	X	-.541	-.541	0 %100
12	MP3A	Z	.312	.312	0 %100
13	MP2A	X	-.447	-.447	0 %100
14	MP2A	Z	.258	.258	0 %100
15	MP1A	X	-.447	-.447	0 %100
16	MP1A	Z	.258	.258	0 %100
17	DC	X	-.407	-.407	0 %100
18	DC	Z	.235	.235	0 %100
19	M67	X	0	0	0 %100
20	M67	Z	0	0	0 %100

**Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
21	M68A	X	-.531	-.531	0	%100
22	M68A	Z	.307	.307	0	%100
23	MP4C	X	-.447	-.447	0	%100
24	MP4C	Z	.258	.258	0	%100
25	MP3C	X	-.541	-.541	0	%100
26	MP3C	Z	.312	.312	0	%100
27	MP2C	X	-.447	-.447	0	%100
28	MP2C	Z	.258	.258	0	%100
29	MP1C	X	-.447	-.447	0	%100
30	MP1C	Z	.258	.258	0	%100
31	MP4B	X	-.447	-.447	0	%100
32	MP4B	Z	.258	.258	0	%100
33	MP3B	X	-.541	-.541	0	%100
34	MP3B	Z	.312	.312	0	%100
35	MP2B	X	-.447	-.447	0	%100
36	MP2B	Z	.258	.258	0	%100
37	MP1B	X	-.447	-.447	0	%100
38	MP1B	Z	.258	.258	0	%100
39	M69	X	-.806	-.806	0	%100
40	M69	Z	.465	.465	0	%100
41	M70	X	-.81	-.81	0	%100
42	M70	Z	.468	.468	0	%100
43	M71	X	-.806	-.806	0	%100
44	M71	Z	.465	.465	0	%100
45	M72	X	-.135	-.135	0	%100
46	M72	Z	.078	.078	0	%100
47	M76	X	-.541	-.541	0	%100
48	M76	Z	.312	.312	0	%100
49	M80	X	-.135	-.135	0	%100
50	M80	Z	.078	.078	0	%100
51	M93	X	-.646	-.646	0	%100
52	M93	Z	.373	.373	0	%100
53	M94	X	-.165	-.165	0	%100
54	M94	Z	.095	.095	0	%100
55	M95	X	-.158	-.158	0	%100
56	M95	Z	.091	.091	0	%100

**Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	-.818	-.818	0	%100
2	M4	Z	0	0	0	%100
3	M40	X	-.679	-.679	0	%100
4	M40	Z	0	0	0	%100
5	M41	X	-.679	-.679	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	0	0	0	%100
8	M42	Z	0	0	0	%100
9	MP4A	X	-.516	-.516	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-.625	-.625	0	%100
12	MP3A	Z	0	0	0	%100



**Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	MP2A	X	-.516	-.516	0	% 100
14	MP2A	Z	0	0	0	% 100
15	MP1A	X	-.516	-.516	0	% 100
16	MP1A	Z	0	0	0	% 100
17	DC	X	-.47	-.47	0	% 100
18	DC	Z	0	0	0	% 100
19	M67	X	-.204	-.204	0	% 100
20	M67	Z	0	0	0	% 100
21	M68A	X	-.204	-.204	0	% 100
22	M68A	Z	0	0	0	% 100
23	MP4C	X	-.516	-.516	0	% 100
24	MP4C	Z	0	0	0	% 100
25	MP3C	X	-.625	-.625	0	% 100
26	MP3C	Z	0	0	0	% 100
27	MP2C	X	-.516	-.516	0	% 100
28	MP2C	Z	0	0	0	% 100
29	MP1C	X	-.516	-.516	0	% 100
30	MP1C	Z	0	0	0	% 100
31	MP4B	X	-.516	-.516	0	% 100
32	MP4B	Z	0	0	0	% 100
33	MP3B	X	-.625	-.625	0	% 100
34	MP3B	Z	0	0	0	% 100
35	MP2B	X	-.516	-.516	0	% 100
36	MP2B	Z	0	0	0	% 100
37	MP1B	X	-.516	-.516	0	% 100
38	MP1B	Z	0	0	0	% 100
39	M69	X	-.929	-.929	0	% 100
40	M69	Z	0	0	0	% 100
41	M70	X	-.934	-.934	0	% 100
42	M70	Z	0	0	0	% 100
43	M71	X	-.934	-.934	0	% 100
44	M71	Z	0	0	0	% 100
45	M72	X	0	0	0	% 100
46	M72	Z	0	0	0	% 100
47	M76	X	-.469	-.469	0	% 100
48	M76	Z	0	0	0	% 100
49	M80	X	-.469	-.469	0	% 100
50	M80	Z	0	0	0	% 100
51	M93	X	-.556	-.556	0	% 100
52	M93	Z	0	0	0	% 100
53	M94	X	-.563	-.563	0	% 100
54	M94	Z	0	0	0	% 100
55	M95	X	-2.8e-5	-2.8e-5	0	% 100
56	M95	Z	0	0	0	% 100

**Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	X	-.531	-.531	0	% 100
2	M4	Z	-.307	-.307	0	% 100
3	M40	X	-.784	-.784	0	% 100
4	M40	Z	-.453	-.453	0	% 100

**Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M41	X	-.196	-.196	0 %100
6	M41	Z	-.113	-.113	0 %100
7	M42	X	-.196	-.196	0 %100
8	M42	Z	-.113	-.113	0 %100
9	MP4A	X	-.447	-.447	0 %100
10	MP4A	Z	-.258	-.258	0 %100
11	MP3A	X	-.541	-.541	0 %100
12	MP3A	Z	-.312	-.312	0 %100
13	MP2A	X	-.447	-.447	0 %100
14	MP2A	Z	-.258	-.258	0 %100
15	MP1A	X	-.447	-.447	0 %100
16	MP1A	Z	-.258	-.258	0 %100
17	DC	X	-.407	-.407	0 %100
18	DC	Z	-.235	-.235	0 %100
19	M67	X	-.531	-.531	0 %100
20	M67	Z	-.307	-.307	0 %100
21	M68A	X	0	0	0 %100
22	M68A	Z	0	0	0 %100
23	MP4C	X	-.447	-.447	0 %100
24	MP4C	Z	-.258	-.258	0 %100
25	MP3C	X	-.541	-.541	0 %100
26	MP3C	Z	-.312	-.312	0 %100
27	MP2C	X	-.447	-.447	0 %100
28	MP2C	Z	-.258	-.258	0 %100
29	MP1C	X	-.447	-.447	0 %100
30	MP1C	Z	-.258	-.258	0 %100
31	MP4B	X	-.447	-.447	0 %100
32	MP4B	Z	-.258	-.258	0 %100
33	MP3B	X	-.541	-.541	0 %100
34	MP3B	Z	-.312	-.312	0 %100
35	MP2B	X	-.447	-.447	0 %100
36	MP2B	Z	-.258	-.258	0 %100
37	MP1B	X	-.447	-.447	0 %100
38	MP1B	Z	-.258	-.258	0 %100
39	M69	X	-.806	-.806	0 %100
40	M69	Z	-.465	-.465	0 %100
41	M70	X	-.806	-.806	0 %100
42	M70	Z	-.465	-.465	0 %100
43	M71	X	-.81	-.81	0 %100
44	M71	Z	-.468	-.468	0 %100
45	M72	X	-.135	-.135	0 %100
46	M72	Z	-.078	-.078	0 %100
47	M76	X	-.135	-.135	0 %100
48	M76	Z	-.078	-.078	0 %100
49	M80	X	-.541	-.541	0 %100
50	M80	Z	-.312	-.312	0 %100
51	M93	X	-.158	-.158	0 %100
52	M93	Z	-.091	-.091	0 %100
53	M94	X	-.646	-.646	0 %100
54	M94	Z	-.373	-.373	0 %100
55	M95	X	-.165	-.165	0 %100
56	M95	Z	-.095	-.095	0 %100



**Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	X	-.102	-.102	0	%100
2	M4	Z	-.177	-.177	0	%100
3	M40	X	-.34	-.34	0	%100
4	M40	Z	-.588	-.588	0	%100
5	M41	X	0	0	0	%100
6	M41	Z	0	0	0	%100
7	M42	X	-.34	-.34	0	%100
8	M42	Z	-.588	-.588	0	%100
9	MP4A	X	-.258	-.258	0	%100
10	MP4A	Z	-.447	-.447	0	%100
11	MP3A	X	-.312	-.312	0	%100
12	MP3A	Z	-.541	-.541	0	%100
13	MP2A	X	-.258	-.258	0	%100
14	MP2A	Z	-.447	-.447	0	%100
15	MP1A	X	-.258	-.258	0	%100
16	MP1A	Z	-.447	-.447	0	%100
17	DC	X	-.235	-.235	0	%100
18	DC	Z	-.407	-.407	0	%100
19	M67	X	-.409	-.409	0	%100
20	M67	Z	-.708	-.708	0	%100
21	M68A	X	-.102	-.102	0	%100
22	M68A	Z	-.177	-.177	0	%100
23	MP4C	X	-.258	-.258	0	%100
24	MP4C	Z	-.447	-.447	0	%100
25	MP3C	X	-.312	-.312	0	%100
26	MP3C	Z	-.541	-.541	0	%100
27	MP2C	X	-.258	-.258	0	%100
28	MP2C	Z	-.447	-.447	0	%100
29	MP1C	X	-.258	-.258	0	%100
30	MP1C	Z	-.447	-.447	0	%100
31	MP4B	X	-.258	-.258	0	%100
32	MP4B	Z	-.447	-.447	0	%100
33	MP3B	X	-.312	-.312	0	%100
34	MP3B	Z	-.541	-.541	0	%100
35	MP2B	X	-.258	-.258	0	%100
36	MP2B	Z	-.447	-.447	0	%100
37	MP1B	X	-.258	-.258	0	%100
38	MP1B	Z	-.447	-.447	0	%100
39	M69	X	-.467	-.467	0	%100
40	M69	Z	-.809	-.809	0	%100
41	M70	X	-.464	-.464	0	%100
42	M70	Z	-.804	-.804	0	%100
43	M71	X	-.467	-.467	0	%100
44	M71	Z	-.809	-.809	0	%100
45	M72	X	-.234	-.234	0	%100
46	M72	Z	-.406	-.406	0	%100
47	M76	X	0	0	0	%100
48	M76	Z	0	0	0	%100
49	M80	X	-.234	-.234	0	%100
50	M80	Z	-.406	-.406	0	%100
51	M93	X	-1.4e-5	-1.4e-5	0	%100
52	M93	Z	-2.4e-5	-2.4e-5	0	%100

**Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M94	X	-.278	-.278	0	%100
54	M94	Z	-.481	-.481	0	%100
55	M95	X	-.282	-.282	0	%100
56	M95	Z	-.488	-.488	0	%100

**Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M4	Y	-7.121	-7.121	2.838	3.898
2	M40	Y	-3.084	-3.084	1.721	2.333
3	M40	Y	-3.084	-4.625	2.333	2.946
4	M40	Y	-4.625	-6.167	2.946	3.558
5	M40	Y	-6.167	-6.167	3.558	4.17
6	M40	Y	-6.167	-6.167	4.17	4.782
7	M40	Y	-6.167	-6.167	4.782	5.395
8	M40	Y	-6.167	-6.167	5.395	6.007
9	M40	Y	-6.167	-6.167	6.007	6.619
10	M40	Y	-6.167	-6.167	6.619	7.232
11	M40	Y	-6.167	-6.167	7.232	7.844
12	M40	Y	-6.167	-6.167	7.844	8.456
13	M40	Y	-6.167	-6.167	8.456	9.069
14	M40	Y	-6.167	-6.167	9.069	9.681
15	M40	Y	-6.167	-4.625	9.681	10.293
16	M40	Y	-4.625	-3.084	10.293	10.905
17	M40	Y	-3.084	-3.084	10.905	11.518
18	M67	Y	-7.121	-7.121	2.838	3.898
19	M41	Y	-3.084	-3.084	1.721	2.333
20	M41	Y	-3.084	-4.625	2.333	2.946
21	M41	Y	-4.625	-6.167	2.946	3.558
22	M41	Y	-6.167	-6.167	3.558	4.17
23	M41	Y	-6.167	-6.167	4.17	4.782
24	M41	Y	-6.167	-6.167	4.782	5.395
25	M41	Y	-6.167	-6.167	5.395	6.007
26	M41	Y	-6.167	-6.167	6.007	6.619
27	M41	Y	-6.167	-6.167	6.619	7.232
28	M41	Y	-6.167	-6.167	7.232	7.844
29	M41	Y	-6.167	-6.167	7.844	8.456
30	M41	Y	-6.167	-6.167	8.456	9.069
31	M41	Y	-6.167	-6.167	9.069	9.681
32	M41	Y	-6.167	-4.625	9.681	10.293
33	M41	Y	-4.625	-3.084	10.293	10.905
34	M41	Y	-3.084	-3.084	10.905	11.518
35	M68A	Y	-7.121	-7.121	2.838	3.898
36	M42	Y	-3.084	-3.084	1.721	2.333
37	M42	Y	-3.084	-4.625	2.333	2.946
38	M42	Y	-4.625	-6.167	2.946	3.558
39	M42	Y	-6.167	-6.167	3.558	4.17
40	M42	Y	-6.167	-6.167	4.17	4.782
41	M42	Y	-6.167	-6.167	4.782	5.395
42	M42	Y	-6.167	-6.167	5.395	6.007
43	M42	Y	-6.167	-6.167	6.007	6.619
44	M42	Y	-6.167	-6.167	6.619	7.232



***Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads) (Continued)***

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	M42	Y	-6.167	-6.167	7.232	7.844
46	M42	Y	-6.167	-6.167	7.844	8.456
47	M42	Y	-6.167	-6.167	8.456	9.069
48	M42	Y	-6.167	-6.167	9.069	9.681
49	M42	Y	-6.167	-4.625	9.681	10.293
50	M42	Y	-4.625	-3.084	10.293	10.905
51	M42	Y	-3.084	-3.084	10.905	11.518

***Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads)***

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M4	Y	-17.617	-17.617	2.838	3.898
2	M40	Y	-7.628	-7.628	1.721	2.333
3	M40	Y	-7.628	-11.443	2.333	2.946
4	M40	Y	-11.443	-15.257	2.946	3.558
5	M40	Y	-15.257	-15.257	3.558	4.17
6	M40	Y	-15.257	-15.257	4.17	4.782
7	M40	Y	-15.257	-15.257	4.782	5.395
8	M40	Y	-15.257	-15.257	5.395	6.007
9	M40	Y	-15.257	-15.257	6.007	6.619
10	M40	Y	-15.257	-15.257	6.619	7.232
11	M40	Y	-15.257	-15.257	7.232	7.844
12	M40	Y	-15.257	-15.257	7.844	8.456
13	M40	Y	-15.257	-15.257	8.456	9.069
14	M40	Y	-15.257	-15.257	9.069	9.681
15	M40	Y	-15.257	-11.443	9.681	10.293
16	M40	Y	-11.443	-7.628	10.293	10.905
17	M40	Y	-7.628	-7.628	10.905	11.518
18	M67	Y	-17.617	-17.617	2.838	3.898
19	M41	Y	-7.628	-7.628	1.721	2.333
20	M41	Y	-7.628	-11.443	2.333	2.946
21	M41	Y	-11.443	-15.257	2.946	3.558
22	M41	Y	-15.257	-15.257	3.558	4.17
23	M41	Y	-15.257	-15.257	4.17	4.782
24	M41	Y	-15.257	-15.257	4.782	5.395
25	M41	Y	-15.257	-15.257	5.395	6.007
26	M41	Y	-15.257	-15.257	6.007	6.619
27	M41	Y	-15.257	-15.257	6.619	7.232
28	M41	Y	-15.257	-15.257	7.232	7.844
29	M41	Y	-15.257	-15.257	7.844	8.456
30	M41	Y	-15.257	-15.257	8.456	9.069
31	M41	Y	-15.257	-15.257	9.069	9.681
32	M41	Y	-15.257	-11.443	9.681	10.293
33	M41	Y	-11.443	-7.628	10.293	10.905
34	M41	Y	-7.628	-7.628	10.905	11.518
35	M68A	Y	-17.617	-17.617	2.838	3.898
36	M42	Y	-7.628	-7.628	1.721	2.333
37	M42	Y	-7.628	-11.443	2.333	2.946
38	M42	Y	-11.443	-15.257	2.946	3.558
39	M42	Y	-15.257	-15.257	3.558	4.17
40	M42	Y	-15.257	-15.257	4.17	4.782
41	M42	Y	-15.257	-15.257	4.782	5.395



**Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
42	M42	Y	-15.257	-15.257	5.395	6.007
43	M42	Y	-15.257	-15.257	6.007	6.619
44	M42	Y	-15.257	-15.257	6.619	7.232
45	M42	Y	-15.257	-15.257	7.232	7.844
46	M42	Y	-15.257	-15.257	7.844	8.456
47	M42	Y	-15.257	-15.257	8.456	9.069
48	M42	Y	-15.257	-15.257	9.069	9.681
49	M42	Y	-15.257	-11.443	9.681	10.293
50	M42	Y	-11.443	-7.628	10.293	10.905
51	M42	Y	-7.628	-7.628	10.905	11.518

**Member Area Loads (BLC 39 : Structure D)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N113	N125	N124	N111	Y	Two Way	-.005
2	N111	N120	N119	N115	Y	Two Way	-.005
3	N115	N115A	N114	N113	Y	Two Way	-.005

**Member Area Loads (BLC 40 : Structure Di)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N113	N125	N124	N111	Y	Two Way	-.013
2	N111	N120	N119	N115	Y	Two Way	-.013
3	N115	N115A	N114	N113	Y	Two Way	-.013

**Envelope Joint Reactions**

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N3	max	719.714	10	-391.745	7	3862.24	13	-.302	7	1.72	4	0	4
2		min	-723.195	4	-1711.075	13	-1342.234	7	-1.234	13	-1.713	10	0	10
3	N85A	max	3664.267	21	-295.882	3	904.819	2	.6	24	1.189	12	1.111	19
4		min	-1375.755	3	-1652.409	21	-2145.819	8	.009	6	-1.193	6	.279	1
5	N88	max	1164.234	11	-401.032	11	724.975	12	.669	17	1.188	8	-.268	11
6		min	-3583.636	17	-1849.878	17	-2058.113	17	.155	11	-1.191	2	-1.159	17
7	N123	max	25.897	10	4583.715	13	-1129.655	7	0	51	0	4	0	10
8		min	-25.881	4	1219.921	7	-4145.24	13	0	1	0	10	0	4
9	N124B	max	-950.772	3	4904.184	21	2219.675	21	0	6	0	12	0	12
10		min	-3844.417	21	1185.147	3	548.762	3	0	12	0	6	0	6
11	N125A	max	3807.651	17	4857.907	17	2198.452	17	0	8	0	8	0	8
12		min	994.108	11	1239.689	11	573.71	11	0	2	0	2	0	2
13	Totals:	max	4250.438	10	8916.453	14	4265.865	1						
14		min	-4250.436	4	3302.154	8	-4265.865	7						

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M4	HSS4X4X4	.306	5.794	16	.070	2.799	y	13	118476.3...	139518	16.181	16.181	1....	H1-1b
2	M40	HSS4X4X3	.248	0	17	.056	0	y	21	52759.678	106812	12.662	12.662	2....	H1-1b
3	M41	HSS4X4X3	.259	13.239	21	.056	13.239	y	15	52759.678	106812	12.662	12.662	2....	H1-1b
4	M42	HSS4X4X3	.250	0	13	.066	13.239	y	17	52759.678	106812	12.662	12.662	2....	H1-1b
5	MP4A	PIPE 2.0	.131	4.25	11	.032	4.25		12	13511.278	32130	1.872	1.872	1....	H1-1b

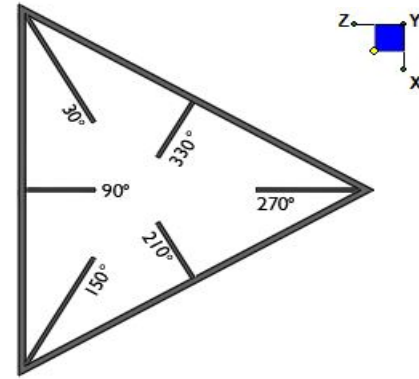




## I. Mount-to-Tower Connection Check

### RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N3	270
N88	150
N85A	30

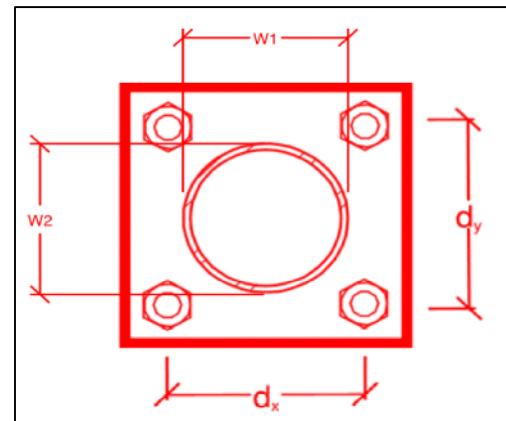


TYPICAL PLATFORM

### 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
3
8
A325N
0.625
15.1
2.9
20.7
12.4
<b>18.2%*</b>
<b>5.8%</b>



\*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\*Rn (kip/in):  
 Required Weld Strength (kip/in):  
 Plate Bending Capacity:  
 Weld Capacity:

Rect
6
10
4
4
36
0.5
3
4.18
1.08
<b>66.7%</b>
<b>25.9%</b>

### Max Plate Bending Strengths

$Mu_{xx}$ (kip-in):	8.1
Phi*Mn <sub>xx</sub> (kip-in):	12.2
$Mu_{yy}$ (kip-in):	0.0
Phi*Mn <sub>yy</sub> (kip-in):	20.3

# 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 \_\_\_\_\_

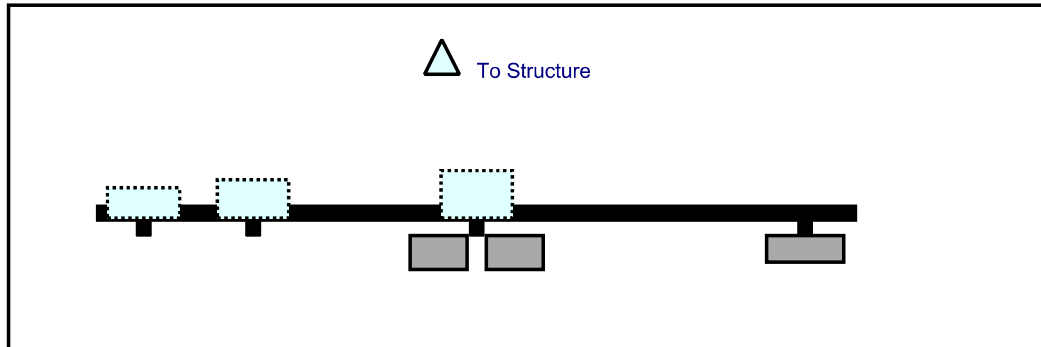
Name \_\_\_\_\_



## **Schedule A – Photo & Document File Structure**

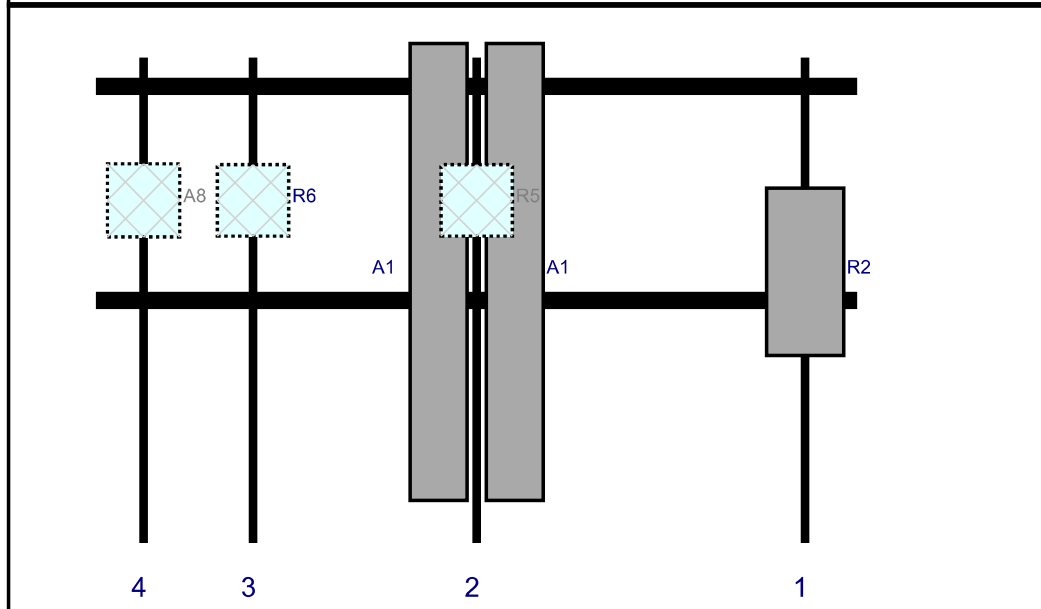
-  VzW Site Number / Name
  -  Base & “During Installation” Photos
  -  Pre-Installation Photos
    -  Alpha
    -  Beta
    -  Gamma
    -  Ground Level
    -  Tape Drop
  -  Post-Installation Photos
    -  Alpha
    -  Beta
    -  Gamma
    -  Ground Level
    -  Tape Drop
    -  Photos of climbing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

Plan View



Front View

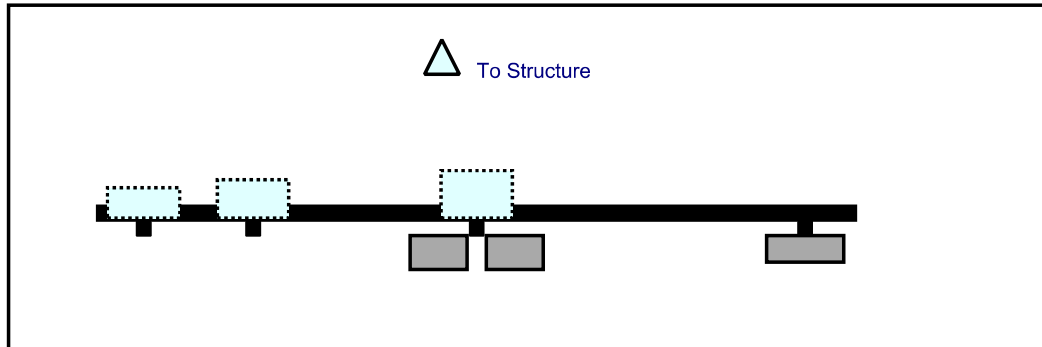
Looking at Structure



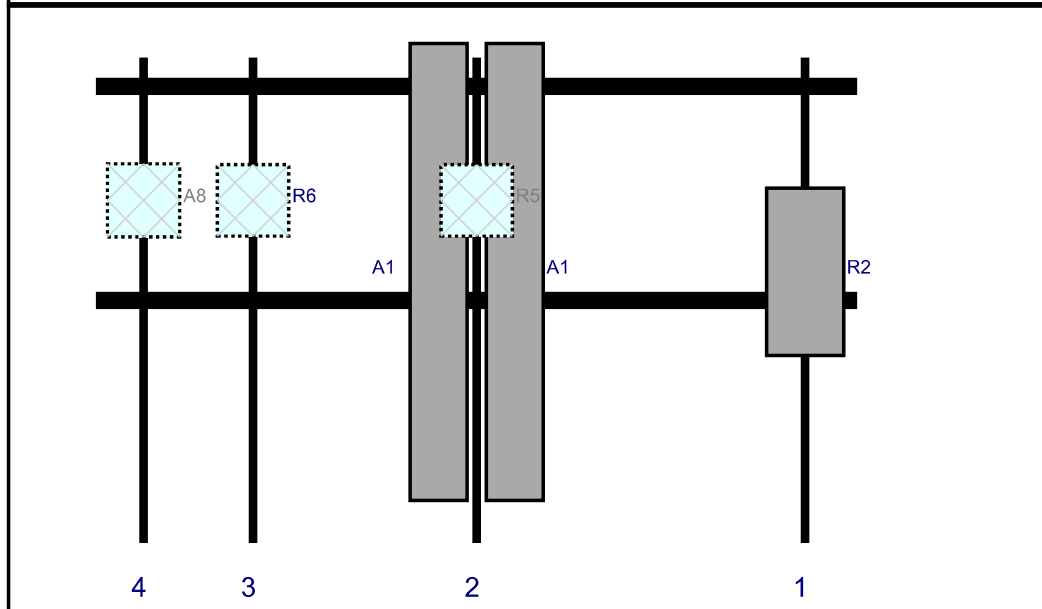
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	149	1	a	Front	45	0	Added	
A1	NHH-65C-R2B	96	11.9	80	2	a	Front	45	8	Added	
A1	NHH-65C-R2B	96	11.9	80	2	b	Front	45	-8	Added	
R5	B2/B66A RRH-BR04	15	15	80	2	a	Behind	30	0	Added	
R6	B5/B13 RRH-BR04C	15	15	33	3	a	Behind	30	0	Added	
A8	TD-850B-LTE78-43	15.4	15.2	10	4	a	Behind	30	0	Added	



Plan View

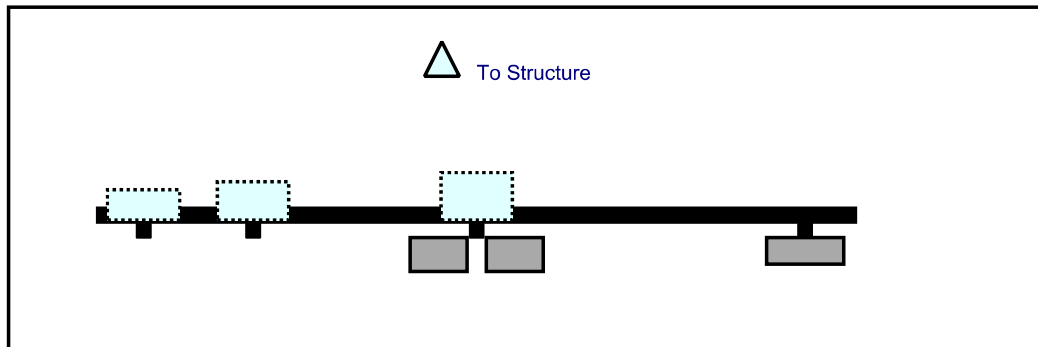


Front View  
Looking at Structure

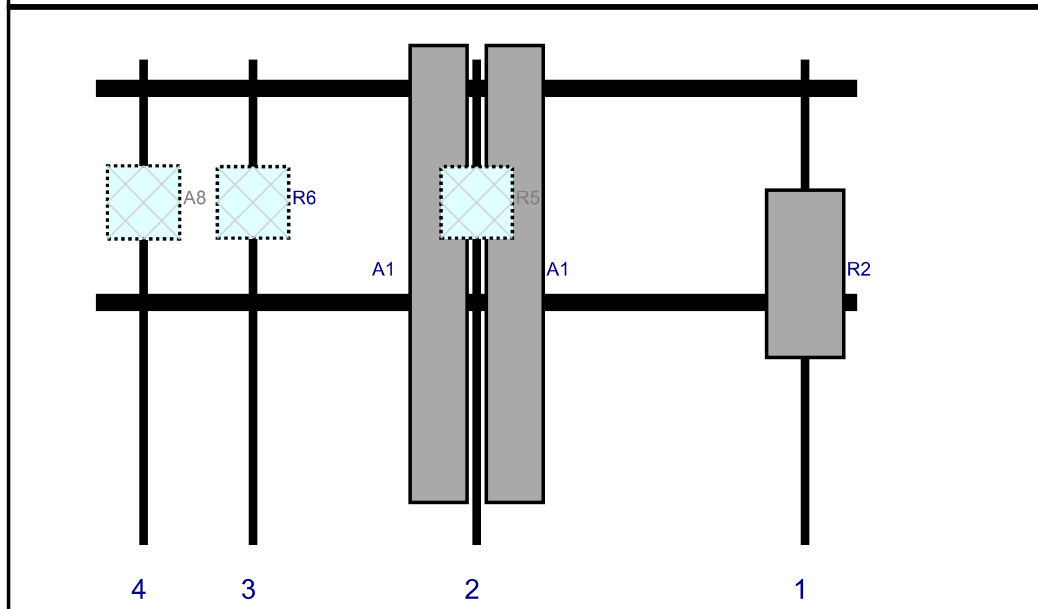


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	149	1	a	Front	45	0	Added	
A1	NHH-65C-R2B	96	11.9	80	2	a	Front	45	8	Added	
A1	NHH-65C-R2B	96	11.9	80	2	b	Front	45	-8	Added	
R5	B2/B66A RRH-BR04	15	15	80	2	a	Behind	30	0	Added	
R6	B5/B13 RRH-BR04C	15	15	33	3	a	Behind	30	0	Added	
A8	TD-850B-LTE78-43	15.4	15.2	10	4	a	Behind	30	0	Added	

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
R2	MT6407-77A	35.1	16.1	149	1	a	Front	45	0	Added	
A1	NHH-65C-R2B	96	11.9	80	2	a	Front	45	8	Added	
A1	NHH-65C-R2B	96	11.9	80	2	b	Front	45	-8	Added	
R5	B2/B66A RRH-BR04	15	15	80	2	a	Behind	30	0	Added	
R6	B5/B13 RRH-BR04C	15	15	33	3	a	Behind	30	0	Added	
A8	TD-850B-LTE78-43	15.4	15.2	10	4	a	Behind	30	0	Added	

**Subject**

TIA-222-H Usage

**Site Information**

Site ID: 468081-VZW / NEW HARTFORD E CT  
Site Name: NEW HARTFORD E CT  
Carrier Name: Verizon Wireless  
Address: 170 Southeast Road  
New Hartford, Connecticut 06057  
Litchfield County  
Latitude: 41.817256°  
Longitude: -72.970942°

**Structure Information**

Tower Type: Monopole  
Mount Type: 13.33-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 map 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 method, seismic analysis, 30-degree increment wind direction 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,



Digitally signed by Justin Linette  
Date: 2021.05.21 10:59:35-04'00'

Justin Linette, PE  
Sr. Technical Manager

**PROJECT NOTES**

- SEE MODIFICATION NOTES
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS OF ALL APPLICABLE MUNICIPAL UTILITY COMPANIES OR OTHER PUBLIC GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIAL, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY IN WRITING OF ANY ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF RADIATION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY IN WRITING OF ANY SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RE EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).



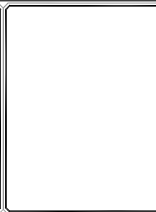
**MOUNT MODIFICATION DRAWINGS  
EXISTING 13.33' PLATFORM**

**SITE NAME: NEW HARTFORD E CT  
SITE NUMBER: 468081**

**170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06057  
LITCHFIELD COUNTY**

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DATE	AS SHOWN	REVISED	BY	DESCRIPTION



Digitally signed by Juan Rodriguez  
DN: cn=Juan Rodriguez, o=Maser Consulting, ou=Professional Engineer, email=juan@maser.com, c=US

PLEASE SIGNATURE AND SEAL AND REGISTERED PROFESSIONAL ENGINEER TO VALID THIS DOCUMENT.

**SITE NAME:**  
**NEW HARTFORD E CT  
468081**  
**170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06057  
LITCHFIELD COUNTY**



**TITLE SHEET**

**T-1**

PROJECT INFORMATION	
<b>SITE INFORMATION</b>	<b>SHEET INDEX</b>
LATITUDE: 41.817765° N	T-1 TITLE SHEET
LONGITUDE: 72.970987° W	S-1 BILL OF MATERIALS
JURISDICTION: LITCHFIELD COUNTY	S-2 MODIFICATION NOTES
<b>APPLICANT/LESEE</b>	S-3 MODIFICATION NOTES
VERIZON WIRELESS	S-4 MODIFICATION DETAILS
<b>CLIENT REPRESENTATIVE</b>	S-5 MODIFICATION DETAILS
VERIZON WIRELESS	S-6 MOUNT PHOTOS
COMPANY: VERIZON WIRELESS	SPECIFICATION SHEETS
CITY: WESTBOROUGH, MA 01581	
CONTACT: ANDREW CANDELLO	
EMAIL: ANDREW.CANDELLO@VERIZONWIRELESS.COM	
<b>PROJECT MANAGER</b>	
MASER CONSULTING CONNECTICUT	
PETER ALBANO	
PHONE: (860) 797-9412	
EMAIL: PETER.ALBANO@COLLIERSENGINEERING.COM	

CONTRACTOR PMI REQUIREMENTS	REFERENCED DOCUMENTS
PMI LOCATION: https://pmi.vzwsmart.com	FAILING MOUNT ANALYSIS REPORT
SMART TOOL PROJECT #: 00688126	SMART TOOL PROJECT #: 00378784
VZW LOCATION CODE (PSCI): 468081	MASER CONSULTING CT PROJECT #: 21777017A
FUZE ID: 16271983	ANALYSIS DATE: 4/30/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

**BILL OF MATERIALS**

**VZWSMART KITS**

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
1		VZWSMART-PLK1	SUPPORT RAIL KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2.
1		VZWSMART-PLK5	KICKER KIT	
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY	
	VZWSMART			

**OTHER REQUIRED PARTS**


QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
4	SITE PRO 1	SQCX4-K	CROSSOVER PLATE KIT W/SQUARE BUBOLTS AND STD. UBOLTS	OR FOR APPROVED EQUAL. CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION.
3	-	-	102" LONG P2.5 STD	GALVANIZED
1	-	-	48" LONG P2.0 STD	GALVANIZED

**NOTE: ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR**

**VZWSMART KITS - APPROVED VENDORS**

<b>COMMSCOPE</b>	CONTACT SALVADOR ANGUIANO PHONE (817) 306-7492 EMAIL SALVADOR.ANGUIANO@COMMSCOPE.COM WEBSITE WWW.COMMSCOPE.COM
<b>METROSITE FABRICATORS, LLC</b>	CONTACT KENT RAMEY PHONE (766) 335-7645 (O), (766) 983-9788 (M) EMAIL KENT@METROSITELLC.COM WEBSITE METROSITEFABRICATORS.COM
<b>PERFECTIVISION</b>	CONTACT WIRELESS SALES PHONE (841) 887-6723 EMAIL WWW.PERFECT-VISION.COM WEBSITE WIRELESSALES@PERFECT-VISION.COM
<b>SABRE INDUSTRIES, INC.</b>	CONTACT ANGIE WELCH PHONE (866) 428-6937 EMAIL AKWELCH@SABREINDUSTRIES.COM WEBSITE WWW.SABRESITESOLUTIONS.COM
<b>SITE PRO 1</b>	CONTACT PAULA BOSWELL PHONE (972) 236-9843 EMAIL PAULA.BOSWELL@VALMONT.COM WEBSITE WWW.SITEPRO1.COM

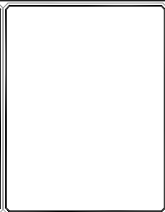
**NOTE: WHEN SPECIFIED, VZWSMART KITS SHALL BE REQUIRED AND WILL BE VERIFIED DURING THE DESKTOP PMI**



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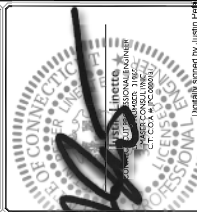
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PROJECT: AS SHOWN 177827A

REV	DATE	DESCRIPTION	DRAWN	CHECKED	BY



I hereby agree by Juan Rodriguez, License No. 177827A  
I have read and understand the contents of this document  
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**SITE NAME:**  
**NEW HARTFORD E CT**  
468081  
170 SOUTHEAST ROAD  
NEW HARTFORD, CT 06457  
LITCHFIELD COUNTY



WIRELESS COMMUNICATIONS  
Masonry  
Phone: 863.597.6143  
Fax: 863.592.1150

**BILL OF MATERIALS**  
S-1

**GENERAL NOTES**

- THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO CONDITIONS BEING REPAIRED BY THE CONTRACTOR SHALL BE TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
- IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
- WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS WINDS LESS THAN 30(MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING BRACING AND ANY OTHERS STRUCTURAL HANDLING AND ERECTION OF THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
- ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
- CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOPRAC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
- CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
- DO NOT SCALE DRAWINGS.
- DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
- ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING TO BE ALTERED SIZE AND/OR STRENGTH. THIS MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
- THE POINT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

**DESIGN LOADS**

- WIND LOADS**
- BASIC WIND SPEED (3 SECOND GUST), V = 115 MPH
  - EXPOSURE CATEGORY B
  - TOPOGRAPHIC CATEGORY 1
  - MEAN BASE ELEVATION (AHSL) = 664.02'
- ICE LOADS**
- ICE WIND SPEED (3 SECOND GUST), V = 90 MPH
  - ICE THICKNESS = 1.50 IN
- SEISMIC LOADS**
- SEISMIC DESIGN CATEGORY B
  - SHORT TERM MCEER GROUND MOTION, S<sub>s</sub> = 176
  - LONG TERM MCEER GROUND MOTION, S = 054

**STRUCTURAL STEEL**

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
  - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
  - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
  - AISC CODE OF STANDARD PRACTICE
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
  - CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 35)
  - STEEL PIPE ASTM A53 (GR 35)
  - BOLTS ASTM A325
  - NUTS ASTM A325
  - LOCKING STRUCTURAL GRADE
  - LOCK WASHERS
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND CORRECTION, SHALL BE NOTED IN THE SHOP DRAWINGS. COSTS ASSOCIATED WITH THE SUBSTITUTIONS SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SUB-CONTRACTORS SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
  - SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERSENGINEERING.COM
  - PROVIDE MASER CONSULTING PROJECT CT # AND MASER CONSULTING CT PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
- WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE NUTS, BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO BE FULLY ENGAGED BY THE BOLT AND TO BE FULLY ENGAGED BY THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO

PROTECT STEEL BY ANY OTHER MEANS.

- ALL EXISTING PAINTED GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

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Digitally signed by Juan Torres  
 DN: cn=Juan Torres, o=Maser Consulting, ou=MASER CONSULTING, email=juan@maser.com, c=US

**SITE NAME:**  
 NEW HARTFORD E CT  
 468081  
 175 SOUTHEAST ROAD  
 NEW HARTFORD, CT 06487  
 LITCHFIELD COUNTY



**MODIFICATION NOTES**



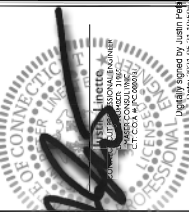
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1		ISSUE FOR CONSTRUCTION	PLM	J

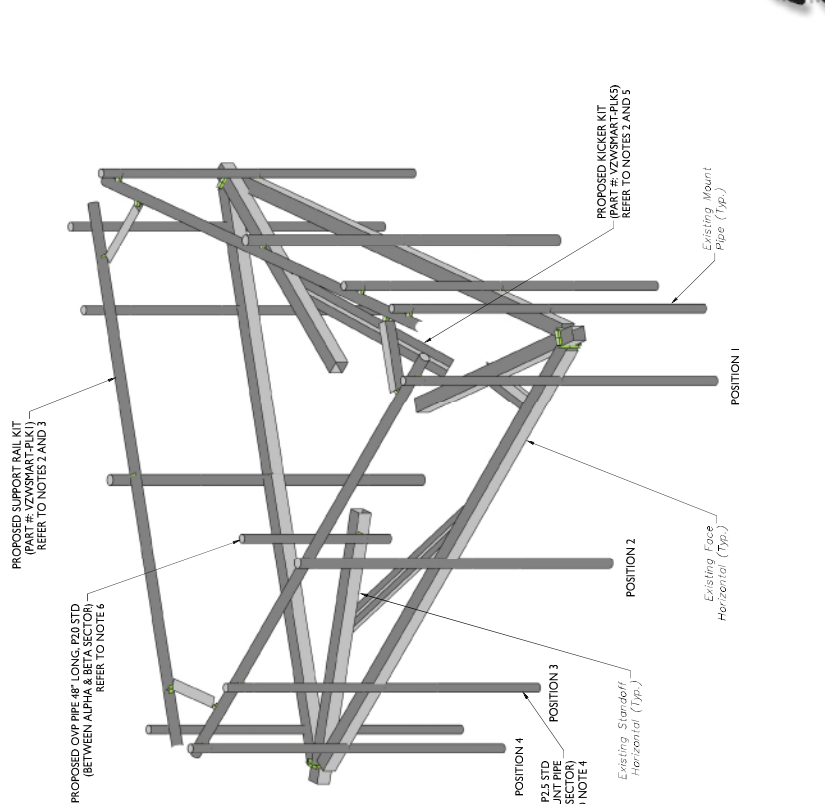


Typically signed by Juan Rodriguez, License No. 17049, State of Connecticut. UNLESS THE CONTRACTOR HAS CONTACTED THE ENGINEER TO VERIFY THIS DOCUMENT.

**SITE NAME:**  
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 468081  
 170 SOUTH EAST ROAD  
 NEW HARTFORD, CT 06857  
 LITCHFIELD COUNTY



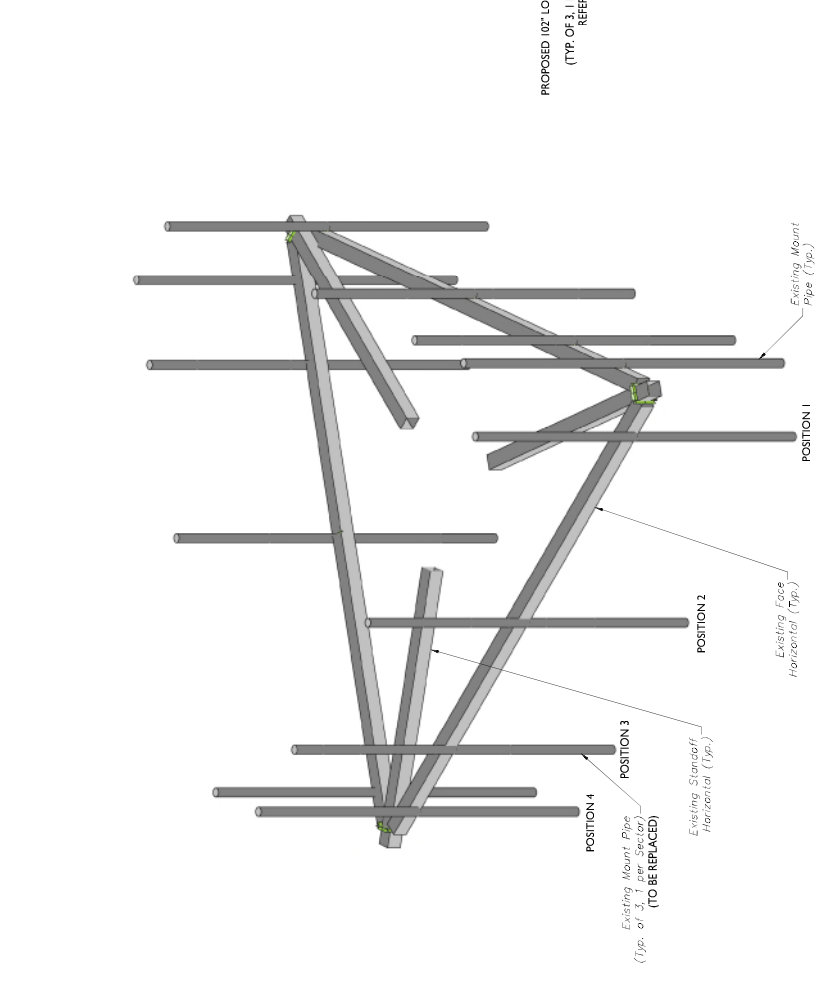
**MODIFICATION DETAILS**  
 S-4



**2** PROPOSED PLATFORM ISOMETRIC VIEW (TYP. ALL SECTORS)  
 SCALE: N.T.S.

**MODIFICATION NOTES:**

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2.
3. RADIO AND/OR THE POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
4. CONNECT NEW MOUNT PIPE TO EXISTING FACE HORIZONTAL WITH CROSSOVER PLATES (PART # SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
5. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART # VZWSMART-PLK7).
6. CONNECT NEW OVP PIPE TO EXISTING ST AND/OFF HORIZONTAL WITH CROSSOVER PLATES (PART # SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
7. CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDES AROUND MOUNT CONNECTIONS AS NEEDED



**1** EXISTING PLATFORM ISOMETRIC VIEW (TYP. ALL SECTORS)  
 SCALE: N.T.S.

**STRUCTURAL NOTES:**

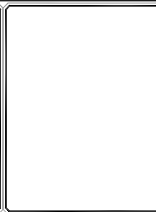
1. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE. CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE, TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



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REV	DATE	DESCRIPTION	BY	CHKD

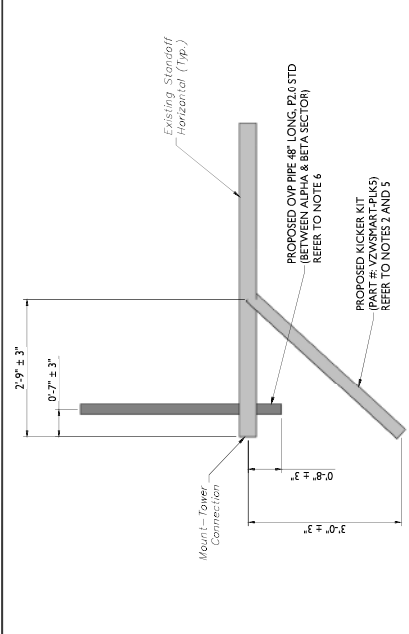


Verifiably signed by Juan Rodriguez, License No. 17775A  
 STATE OF CONNECTICUT  
 PROFESSIONAL ENGINEER  
 ALL STATES REQUIRE AN OPERATOR TO BE TRAINED AND CERTIFIED IN THE USE OF FALL PROTECTION EQUIPMENT. THIS DOCUMENT IS NOT VALID UNLESS THE OPERATOR HAS BEEN TRAINED AND CERTIFIED IN THE USE OF FALL PROTECTION EQUIPMENT.

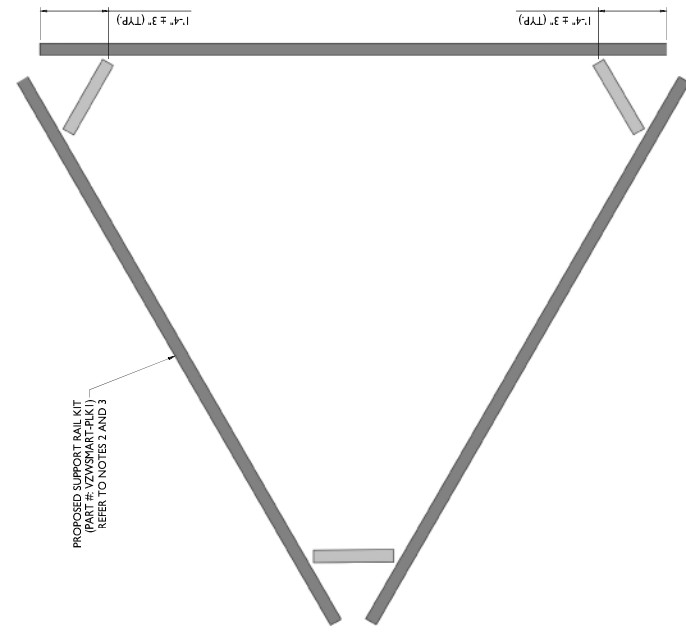
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 468081  
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 NEW HARTFORD, CT 06157  
 LITCHFIELD COUNTY



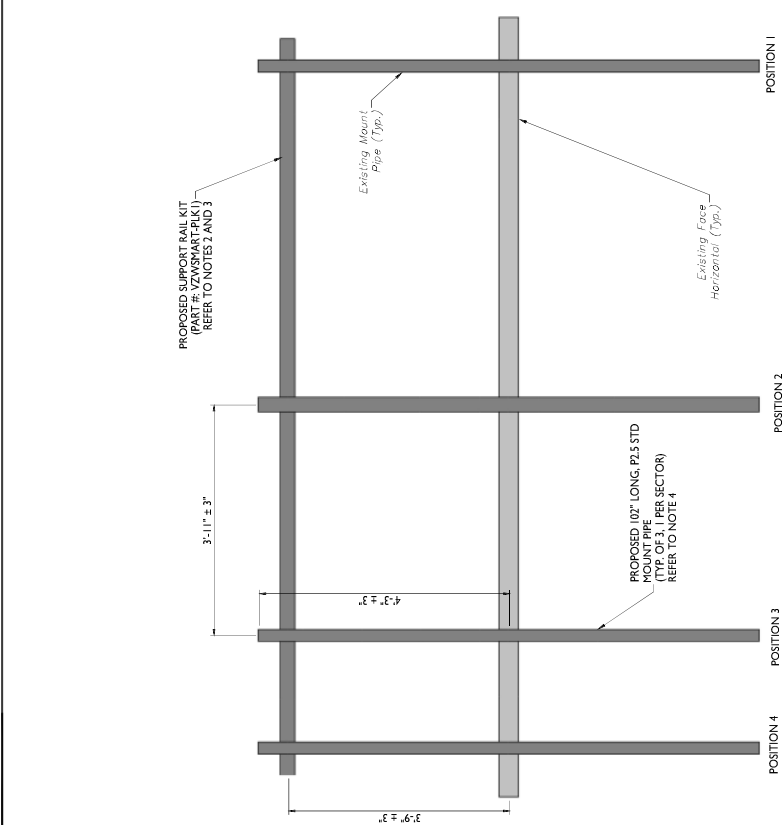
**MODIFICATION DETAILS**  
 DATE: 11/11/2019  
 TIME: 10:00 AM  
 DRAWING NO: 468081-001  
 PROJECT NO: 468081-001



**2** PROPOSED SIDE ELEVATION (TYP. ALL SECTORS)  
 SCALE: N.T.S.



**3** PROPOSED PLAN VIEW  
 SCALE: N.T.S.

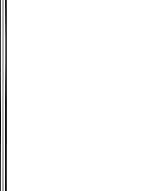


**1** PROPOSED FRONT ELEVATION (TYP. ALL SECTORS)  
 SCALE: N.T.S.

- MODIFICATION NOTES:**
- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
  - CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
  - RADIO AND/OR THE POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
  - CONNECT NEW MOUNT PIPE TO EXISTING FACE HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
  - CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
  - CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
  - CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDES AROUND MOUNT CONNECTIONS AS NEEDED.

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0		ISSUE FOR CONSTRUCTION	JAC	J

Digitally signed by Juan Lopez  
 DN: cn=Juan Lopez, o=MASER INC., ou=Engineering, email=Juan.Lopez@maser.com, c=US  
 CT: C=US, E=Juan.Lopez@maser.com

THIS AGREEMENT IS VOID AND OF NO EFFECT UNLESS THE CONTRACTING UNDER THE DIRECTION OF AN ENGINEER REGISTERED WITH THE PROFESSIONAL ENGINEERS BOARD OF THE STATE OF CONNECTICUT.

**SITE NAME:**  
 NEW HARTFORD E CT  
 468081  
 170 SOUTHEAST ROAD  
 NEW HARTFORD, CT 06857  
 LITCHFIELD COUNTY

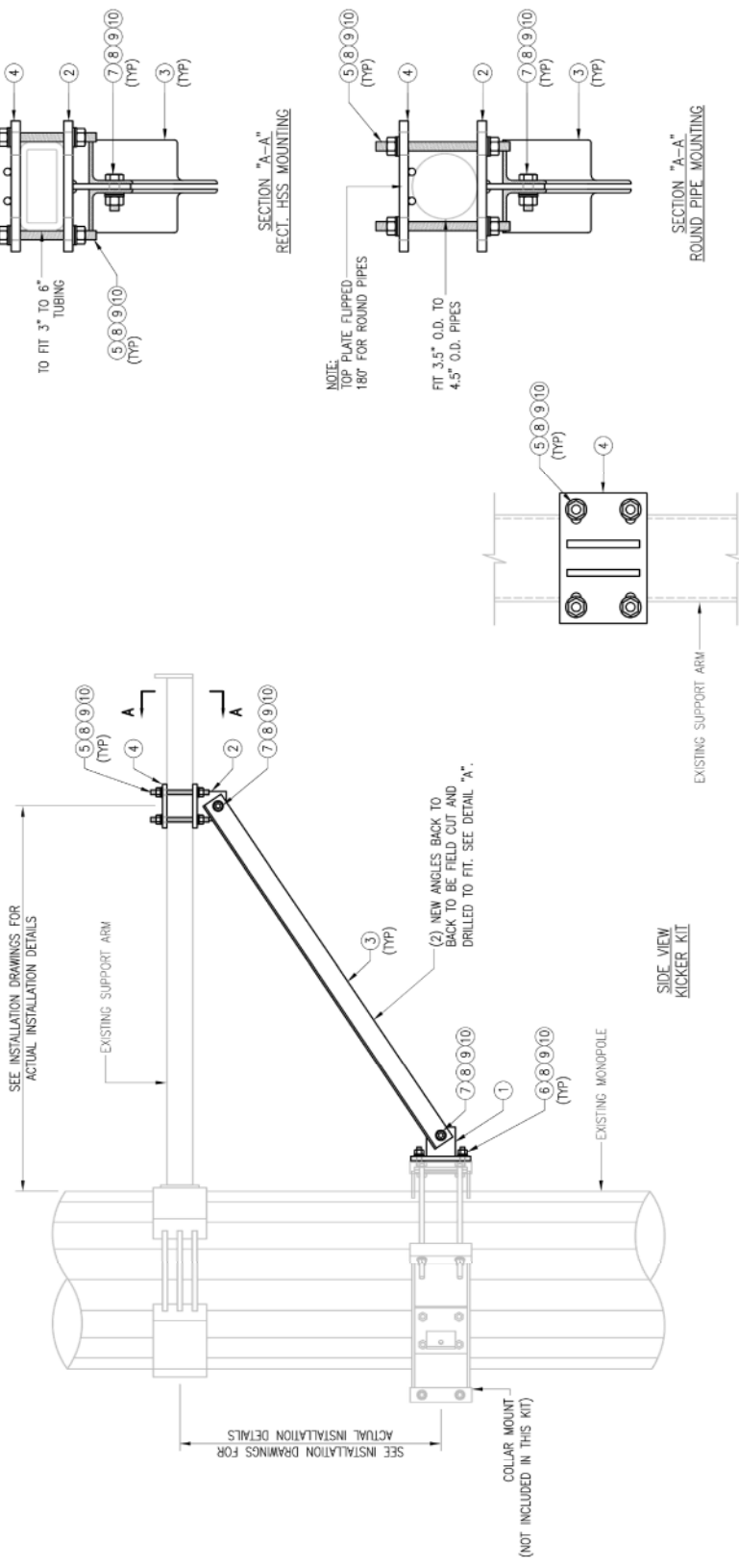
**MOUNT PHOTOS**  
 MOUNT PHOTOS

**S-6**

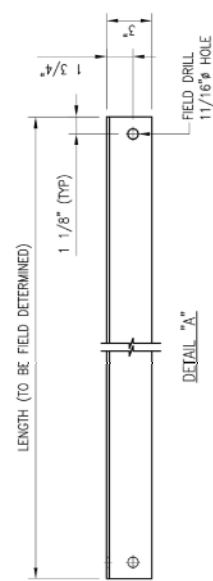


MOUNT PHOTO 1

NOTE:  
 THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	43.8
2	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F2	35.7
3	6	L31675-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	----	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	----	----
6	6	----	BOLT 5/8" X 2" A325	----	----
7	12	----	BOLT 5/8" X 2 1/2" A325	----	----
8	42	FW-625	5/8" HEG USS FLAT WASHER	----	3
9	42	LW-625	5/8" HEG LOCK WASHER	----	1
10	42	NUT-625	5/8" HEG HEX NUT	----	5
				GALVANIZED WT 291	



NOTES:  
 1. ALL HOLES ARE 11/16" DIA. U.N.O  
 2. HOT-DIPPED GALVANIZED PER ASTM A123.  
 3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE

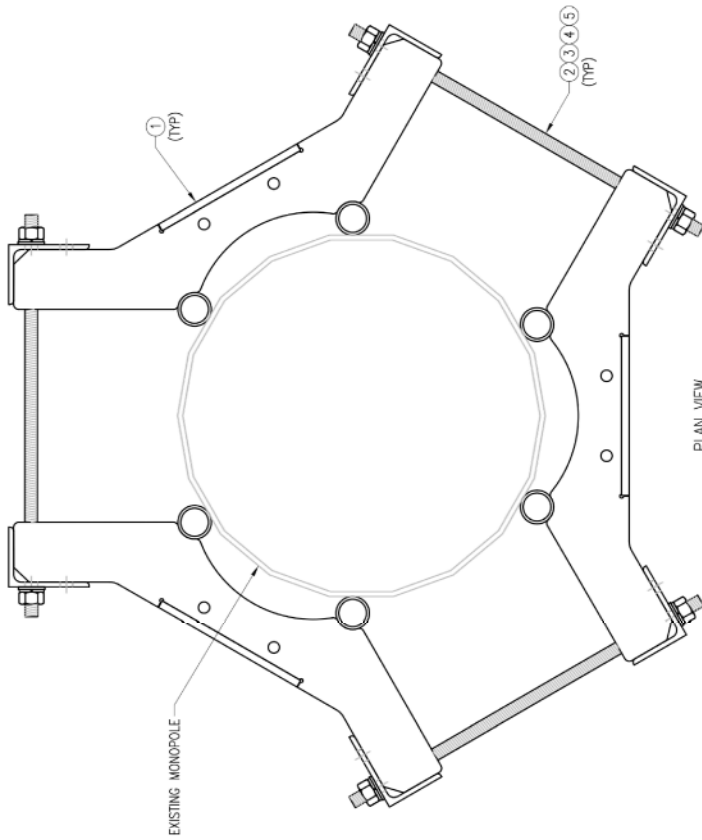
DRAWN BY: HMA/AV  
 CHECKED BY: HMA/AV  
 REV. DESCRIPTION BY DATE  
 1 FIRST ISSUE MA 05/08/20  
 2  
 3  
 4  
 5

SHEET TITLE:  
 VZWSMART-PLK5  
 KICKER KIT

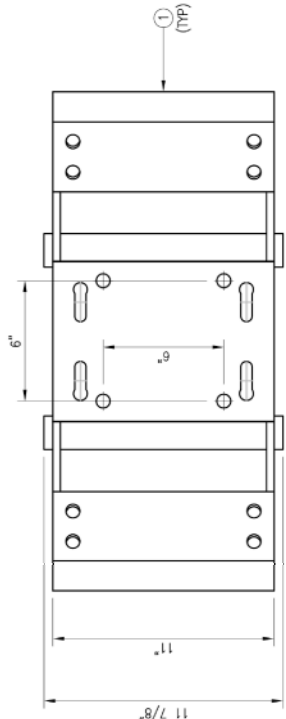
SHEET NUMBER:  
 VZWSMART-PLK5  
 REV # 0

DRAWN BY: BT	CHECKED BY: HMA/ZW
REV. DESCRIPTION	BY DATE
1 FIRST ISSUE	BT 06/11/20
△	
△	
△	

SHEET TITLE:	VZWSMART-PLK7 MONOPOLE COLLAR MOUNT ASSEMBLY
SHEET NUMBER:	REV # 0



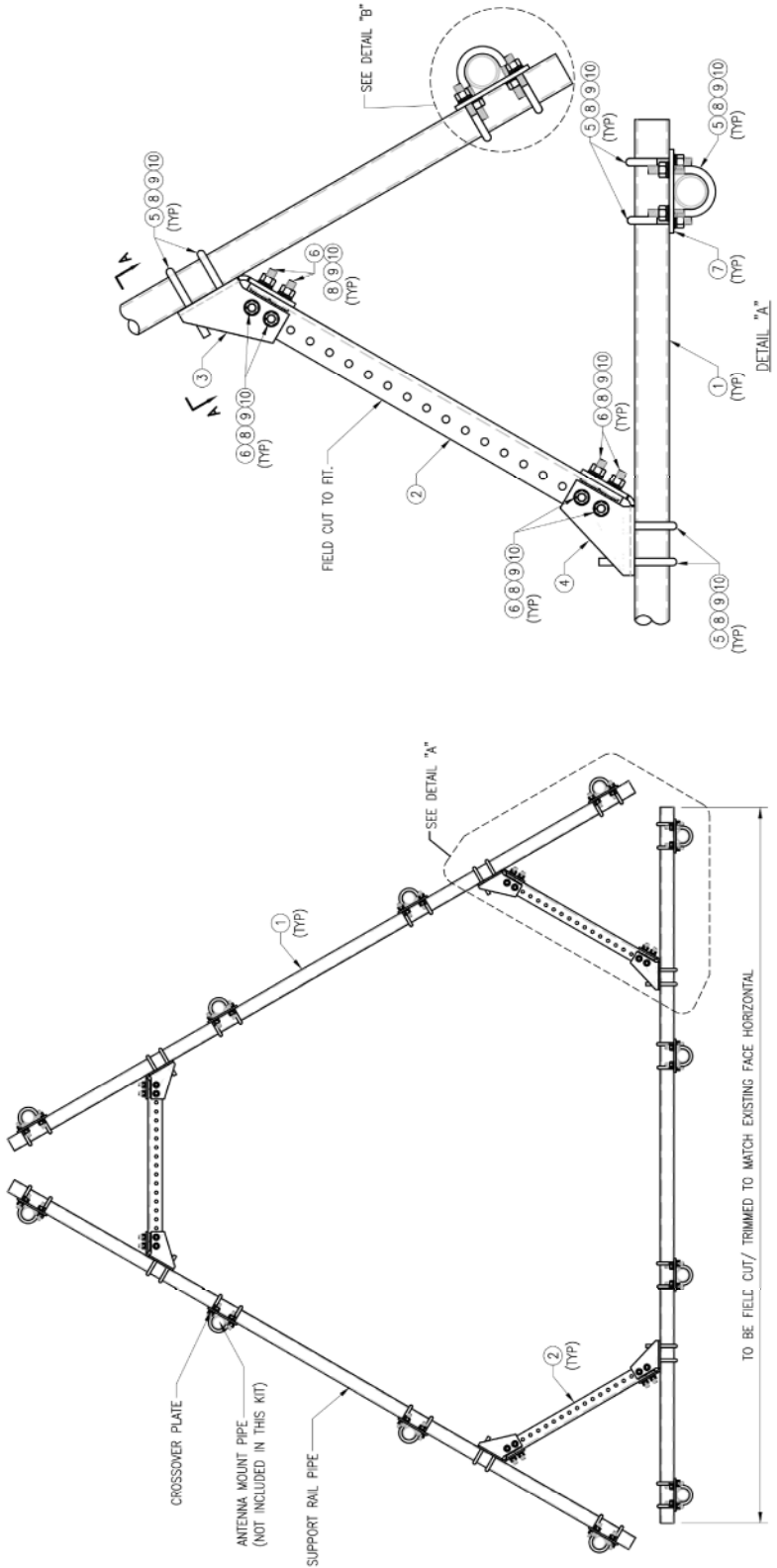
PLAN VIEW  
 MONOPOLE COLLAR MOUNT ASSEMBLY



FRONT VIEW

VZWSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CU-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	---
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	150

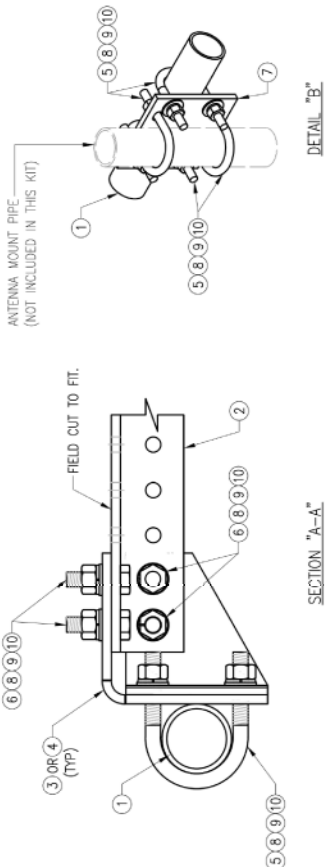
NOTES:  
 1. FIT 12" TO 45" DIA MONOPOLE.  
 2. HOT-DIPPED GALVANIZED PER ASTM A123.



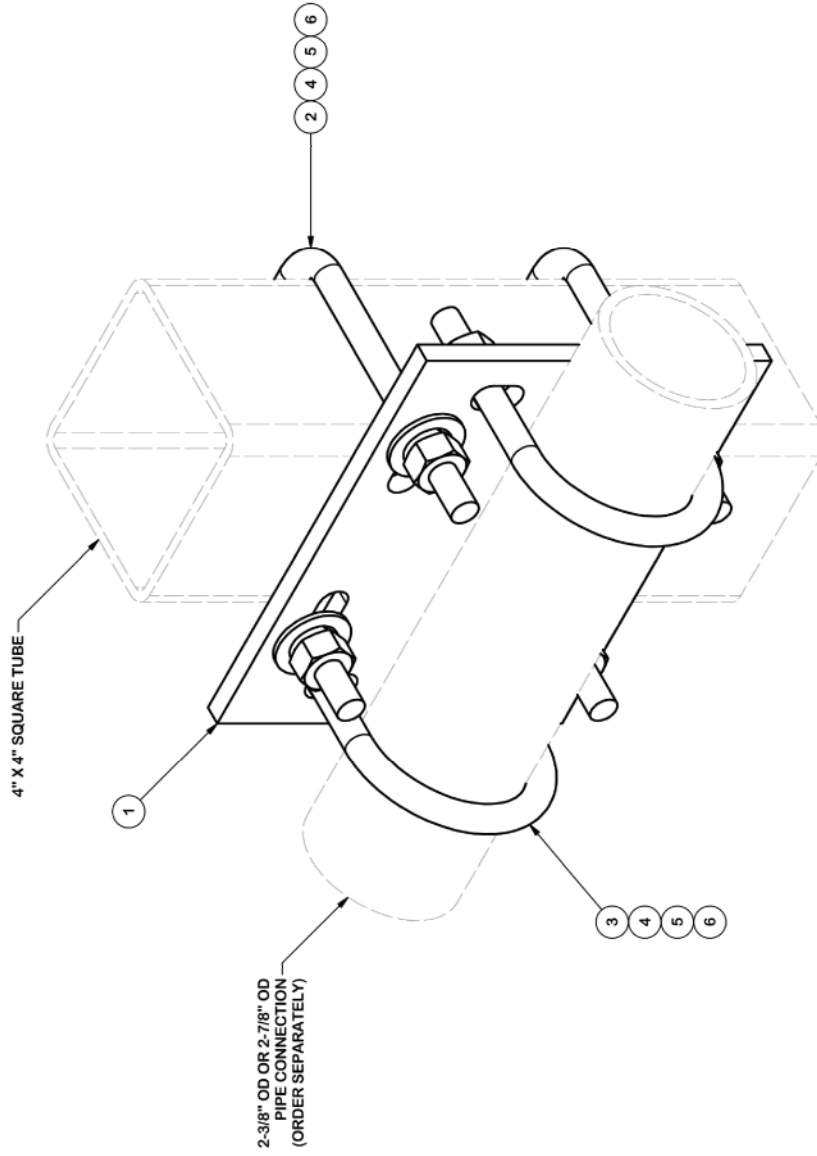
NOTES:  
 1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZW SMART-PLK1 (SUPPORT RAIL KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	PS12875-12.5	2.5" PST (2.875" O.D. X 0.203" THK.) X 12'-6" A53 GR-B	PLK1-F1	292
2	3	L33375-3	L 3" X 3" X 3/8" X 3'-0" A36	PLK1-F1	66
3	3	CBP-L	CORNER BENT PLATE BRACKET	PLK1-F2	28
4	3	CBP-R	CORNER BENT PLATE BRACKET	PLK1-F2	28
5	60	MS02-625-300-500	RU-BOLT 5/8" X 3" 1.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	82
6	24	---	BOLT 5/8" X 2" A325	---	9
7	12	PL375-857	PL 3/8" X 1 1/2" X 7'-0" A36	PLK1-F3	77
8	144	FW-625	5/8" HDG USS FLAT WASHER	---	12
9	144	LW-625	5/8" HDG LOCK WASHER	---	3
10	144	NUT-625	5/8" HDG HEX NUT	---	17
GALVANIZED WT					504



ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	SCX4	CROSSOVER PLATE	8 1/2" in	6.02	6.02
2	2	X-SUB1418	SQUARE U-BOLT 0.5" DIA. X 4.125" IW X 6" IL X 3" TR		0.98	1.95
3	2	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.60	1.19
3	2	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.67	1.34
4	8	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.27
5	8	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.11
6	8	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.57
					<b>TOTAL WT. #</b>	<b>11.35</b>



**TOLERANCE NOTES**

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
 SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.030"$ )  
 DRILLED AND GAS CUT HOLES ( $\pm 0.030"$ ) - NO CONING OF HOLES  
 LASER CUT EDGES AND HOLES ( $\pm 0.010"$ ) - NO CONING OF HOLES  
 BENDS ARE  $\pm 1/2$  DEGREE  
 ALL OTHER MACHINING ( $\pm 0.030"$ )  
 ALL OTHER ASSEMBLY ( $\pm 0.060"$ )

PROPRIETARY NOTE: DIMENSIONS AND DRAWINGS ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION	
CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS	
CPD NO.	87
CLASS	87
SUB	02

DRAWN BY	CSL	9/18/2018	3RD PARTY
DRAWING USAGE	CUSTOMER	BMC	11/12/2018
ENG. APPROVAL			
CHECKED BY			

**SITE PRO 1**  
 A valmont COMPANY

Locations:  
 New York, NY  
 Atlanta, GA  
 Los Angeles, CA  
 Plymouth, IN  
 Salem, OR  
 Dallas, TX

Engineering Support Team:  
 1-888-753-7446

PART NO.	SQCX4-K	PAGE	1 OF 1
DWG. NO.	SQCX4-K		

# **ATTACHMENT 5**



Town of New Hartford, Connecticut - Assessment Parcel Map

Parcel: 034-012-006

Address: 47 GARRETT RIDGE COURT

001  
1696.86 ac

143.49 77.57 214.22

84.52

006  
5.48 ac

743.09

6-16  
3.02 ac

45.34

Garrett Ridge Court

48

123.52' 59.57' 71.01' 198.28'

302.23'

53.16'

110.81'

236.85'

95.48'

45

31.84' 269.01' 117.63'

21' 207.89'

6-15  
7.5 ac

479.8'

471.49'

6-08  
2.45 ac

162.88'

347.63' 347.61'

712.35'

6-09  
2.01 ac

372'

285'

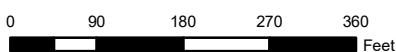
155'

6-14  
20.01 ac

456.69'



Approximate Scale: 1 inch = 200 feet



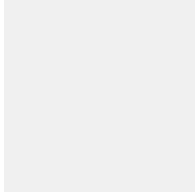
Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of New Hartford and its mapping contractors assume no legal responsibility for the information contained herein.

Map Produced May 2021





# New Hartford, CT



47 GARRETT RIDGE COURT

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---  
---

**Location**

47 GARRETT RIDGE COURT

**Mblu**

034/ 012/ 06A/ /

**Account #**

06007431

**Owner**

SBA TOWERS II LLC

**Assessment**

\$242,760

**Appraisal**

\$346,800

**PID**

184846

**Building Count**

1

**topoTopography**

**Utility**

**Location**

**Street/Road**

Current Value

---

**Appraisal**

Valuation Year	Improvements	Land	Total
----------------	--------------	------	-------

2018	\$22,800	\$324,000	\$346,800
------	----------	-----------	-----------

**Assessment**

Valuation Year	Improvements	Land	Total
2018	\$15,960	\$226,800	\$242,760

**Owner of Record**

**Owner** SBA TOWERS II LLC

**Co-Owner**

**Address** 8051 CONGRESS AVENUE  
BOCA RATON, FL 33487

**Sale Price** \$958,500

**Book** 0305

**Page** 0876

**Sale Date** 06/30/2020

Ownership History

**Ownership History**

Owner	Sale Price	Sale Date	Book	Page
SBA TOWERS II LLC	\$958,500	06/30/2020	0305	0876
MIANO PAUL M ESTATE OF	\$0	06/15/2016	0290	0588
MIANO PAUL M	\$0	02/24/1992	0142	0708

Building Information

Building 1 : Section 1

**Year Built:**

**Living Area:** 0

**Replacement Cost:** \$0

**Building Percent Good:**

**Building Attributes**

Field	Description
Style:	Vacant Land
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:	
Total Full Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Num Kitchens	
Cndtn	
Extra Kitchens	
Fireplaces	
Extra Openings	
Basement Garage	
Whirlpool	

Num Park	
Fireplaces	
Stove	
Fndtn Cndtn	
Basement	



Building Photo

Building Layout

**Building Sub-Areas (sq ft) Legend**

No Data for Building Sub-Areas

Land

Land Use

**Use Code** 3900

**Description** COM VACANT

**Zone** R2

**Neighborhood** 80

Land Line Valuation

**Size (Acres)** 0.40

**Assessed Value** \$226,800

**Appraised Value** \$324,000

Outbuildings

---

**Outbuildings Legend**

Code	Description	Size	Value	Assessed Value	Bldg #
SHD2	Shed - Masonry	330.00 S.F.	\$7,400	\$5,180	1
SHD7	PreCast Conc	228.00 S.F.	\$15,400	\$10,780	1
GEN	Generator	0.00 UNITS	\$0	\$0	1

Valuation History

---

**Appraisal**

Valuation Year	Improvements	Land	Total
2020	\$22,800	\$324,000	\$346,800
2019	\$22,800	\$324,000	\$346,800
2018	\$22,800	\$324,000	\$346,800

---

**Assessment**

Valuation Year	Improvements	Land	Total
2020	\$15,960	\$226,800	\$242,760
2019	\$15,960	\$226,800	\$242,760
2018	\$15,960	\$226,800	\$242,760

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[closeclosecloseclose](#)


Name:

Email:

# **ATTACHMENT 6**



NEW HARTFORD EAST  
**Certificate of Mailing — Firm**

Name and Address of Sender  Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender  <div style="text-align: center; font-size: 2em;">3</div>	TOTAL NO. of Pieces Received at Post Office™  <div style="text-align: center; font-size: 2em;">3</div>	Affix Stamp Here <i>Postmark with Date of Receipt.</i>  <div style="text-align: right;"> <p>neopost<sup>SM</sup>            09/08/2021  <b>US POSTAGE \$002.99</b></p>  <p>ZIP 06103            041L12203937</p> </div>
	Postmaster, per (name of receiving employee)  <div style="text-align: center; font-size: 2em;">0</div>		

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Daniel V. Jerram, First Selectman Town of New Hartford 530 Main Street New Hartford, CT 06057				
2.	Michael Lucas, Inland Wetlands/Zoning Enforcement Officer Town of New Hartford 530 Main Street New Hartford, CT 06057				
3.	SBA Towers II LLC. 8051 Congress Avenue Boca Raton, FL 33487				
4.					
5.					
6.					

