

October 18, 2023

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**  
**169 Cross Street, Middletown, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility at the above-referenced address (the “Property”). Cellco’s facility consists of antennas and remote radio heads attached to a tower. Equipment associated with the facility is located on the ground adjacent to the tower. The tower was approved by the City of Middletown (“City”) in July of 1998. Cellco’s use of the tower was approved by the Siting Council (“Council”) in April of 2018 (PE1133-VER-20180305a). A copy of the City’s approval and PE1133-VER-20180305a approval letter are included in Attachment 1.

Cellco’s proposed modification involves the installation of two (2) interference mitigation filters (“Filters”) on its existing antenna mounting assembly. The specification sheet for the Filter is 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 Middletown’s Chief Elected Official and Land Use Officer. The City of Middletown is the owner of the Property.

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. The Filters will be installed on Cellco’s existing antenna mounting assembly.

28042771-v1

Melanie A. Bachman, Esq.

October 18, 2023

Page 2

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 the Filters will not result in a change to radio frequency (RF) emissions from the facility. Therefore, no new RF emissions information is included in this filing.

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 Report (“SA”) and Antenna Mount Analysis Report (“MA”), the existing tower, foundation, antenna mounting assembly can support Cellco’s proposed modifications. A copy of the SA and MA are included in Attachment 3.

A copy of the parcel map and Property owner information is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 5.

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).

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Benjamin Florsheim, Mayor  
Marek Kozikowski, AICP, Director Land Use  
Alex Tyurin, Verizon Wireless

# **ATTACHMENT 1**

SPR 98-84

# INITIAL APPLICATION

FOR LAND-USE IN MIDDLETOWN, CT

Please fill out this application so we will know who you are, what you are applying to do, and how to contact you. With this basic information we will evaluate your project as it relates to City regulations as quickly as possible. Thank you for your cooperation.

GENERAL INFORMATION ABOUT THE PEOPLE INVOLVED Date 7-9-98  
 Applicant MICHAEL MILAGRO / SUPERVISOR, DEPT. OF PLANNING Phone# (860) 243-8013  
 Address: 169 CRESS ST. City MIDDLETOWN State CT Zip 06457  
 Agent: CITY OF MIDDLETOWN - Central Communications Phone# (860) 243-8013  
 Address: 169 CRESS ST. City MIDDLETOWN State CT Zip 06457

WHAT ARE YOU APPLYING TO DO? (CHECK ONE OR MORE)  
 Add an addition to a single/two family dwelling to be used for

- Construct a single family dwelling (A-2 survey required)
- Add an addition to a multi-family or non-residential building to be used for (A-2 survey required)
- Convert an existing building from present use as \_\_\_\_\_ to a new use as \_\_\_\_\_
- Construct one or more new buildings to be used for (A-2 survey required)
- Subdivide land into building lots (A-2 survey required)
- Change the text of the Zoning Code or amend the Zoning Map
- Install a sign
- Start a Residential Unit Business Pursuit
- Application for Zoning Board of Appeals
- Extract Natural Resources like sand or gravel or fill an area
- Other: ADD ON A SMALL AREA FOR THE INSTALLATION OF LANDSCAPE EQUIPMENT + FIRMING

DEPT. PLANNING & ZONING  
 98 JUL -9 AM 10:0

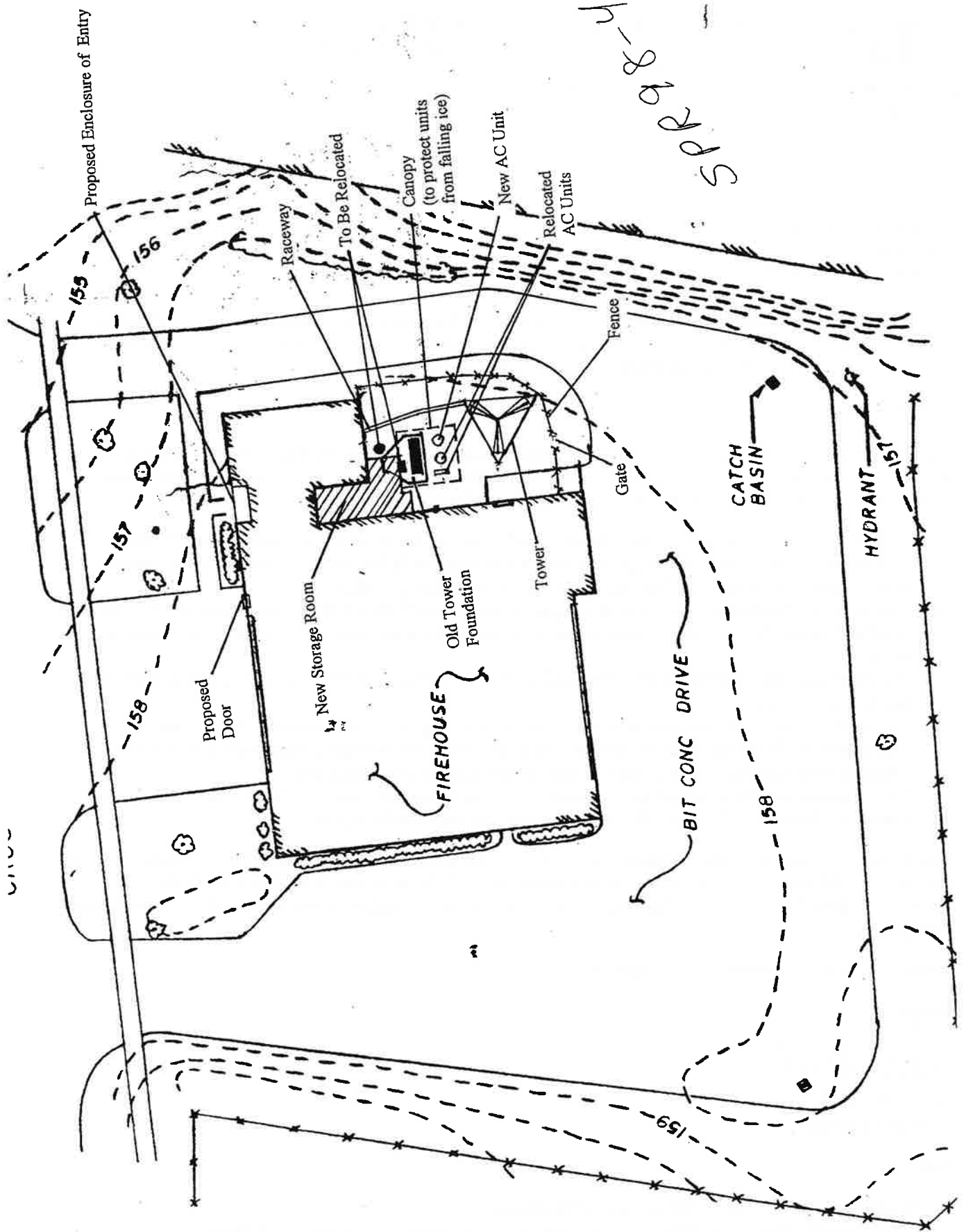
## FACTS ABOUT LAND PROPOSED FOR USE

Landowner: CITY OF MIDDLETOWN Location: 169 CRESS ST.  
 Zone: FD Lot Area \_\_\_\_\_ Tax Assessor's Map \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_  
 Is this project within 500' of a Municipal Boundary? Yes \_\_\_\_\_ No \_\_\_\_\_  
 Is this project located in a FEMA 100 or 500 year flood plain? Yes \_\_\_\_\_ No   
 Utilities Available: City Water (X); Private Well ( ); City Sewer (X); Private Septic ( )

<u>[Signature]</u> SIGNATURE OF I.W.A. STAFF	<u>Michael Milagro / Supt. of Planning</u> SIGNATURE OF APPLICANT/AGENT**
DATE APPLIED <u>7/13/98</u>	
<input type="checkbox"/> PERMIT REQUIRED	
<input type="checkbox"/> PERMIT NOT REQUIRED	
<input type="checkbox"/> IWA REVIEW REQUIRED	
<input checked="" type="checkbox"/> Meets Zoning Requirements	
<u>Wayne J. Bell</u> ZONING ENFORCEMENT OFFICER	
DATE <u>July 14, 1998</u>	
DATE OF APPROVED PLANS _____	
APPROVAL EXPIRATION DATE _____	

\*\*Both signatures required. I certify that the above information and plans submitted are true and correct, and that, if required, an application for an Inland/Wetlands permit has been filed before or on the same day as the filing of this application with the P&Z Commission.

SPRAG-4



Proposed Enclosure of Entry

159

156

157

158

Proposed Door

New Storage Room

FIREHOUSE

Old Tower Foundation

Tower

Raceway

To Be Relocated

Canopy

(to protect units from falling ice)

New AC Unit

Relocated AC Units

Fence

Gate

CATCH BASIN

BIT CONC DRIVE

158

HYDRANT

157

159



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

April 2, 2018

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: PE1133-VER-20180305a - Cellco Partnership d/b/a Verizon Wireless sub-petition for a declaratory ruling for approval of an eligible facility request for modifications to an existing telecommunications facility located at 169 Cross Street, Middletown, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby approves your Eligible Facilities Request (EFR) to install antennas and associated equipment at the above-referenced facility pursuant to the Federal Communications Commission Wireless Infrastructure Report and Order, with the following conditions:

- 1. Reinforcements shall be made in accordance with the structural analysis report dated August 17, 2017 performed by All-Points Technology Corporation and stamped by Robert E. Adair and the associated reinforcement drawings dated June 30, 2017 stamped by Robert E. Adair;
2. Within 45 days following completion of equipment installation, Cellco shall provide documentation certified by a Professional Engineer that its installation complied with the recommendations of the structural analysis report;
3. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
4. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by the Petitioner shall be removed within 60 days of the date the antenna ceased to function;
5. The validity of this action shall expire one year from the date of this letter; and
6. The Petitioner may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the EFR dated March 2, 2018 and additional information dated March 22, 2018. Any minor changes to the eligible facility request require advance notification and approval.

Thank you for your attention and cooperation.

Sincerely,

[Handwritten signature of Melanie Bachman]

Melanie Bachman
Executive Director

MB/CW

c: Honorable Daniel T. Drew, Mayor, City of Middletown
Joseph Samolis, Director of Planning, Conservation, and Development, City of Middletown



# **ATTACHMENT 2**

# BSF0020F3V1-1

## TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the BSF0020 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.



### FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available

### TECHNICAL SPECIFICATIONS

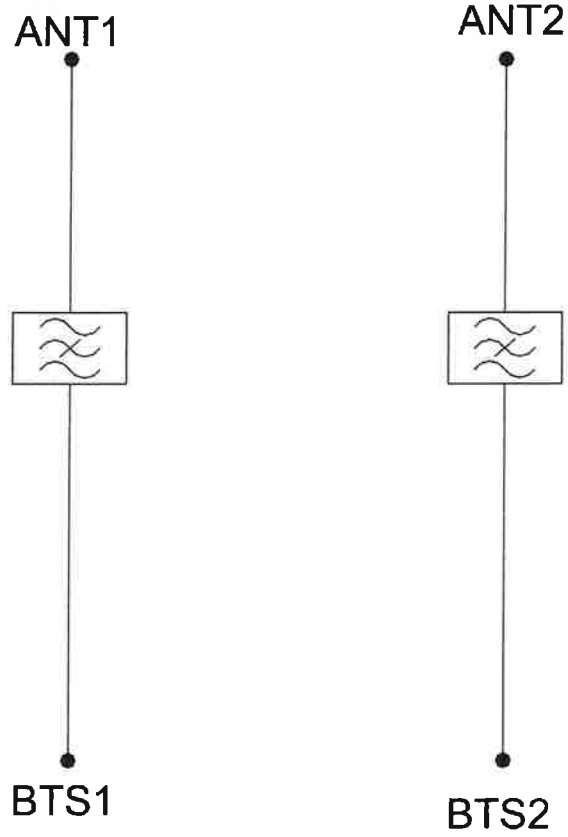
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0,1dB typical / 0,3dB maximum	0,5dB typical, 1,45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894,1 - 896.5MHz	
<b>ELECTRICAL</b>		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
<b>DC / AISG</b>		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
<b>ENVIRONMENTAL</b>		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C   -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m   8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
<b>MECHANICAL</b>		
Dimensions H x D x W	269 x 277 x 80mm   10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8,0 kg   17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4.3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	



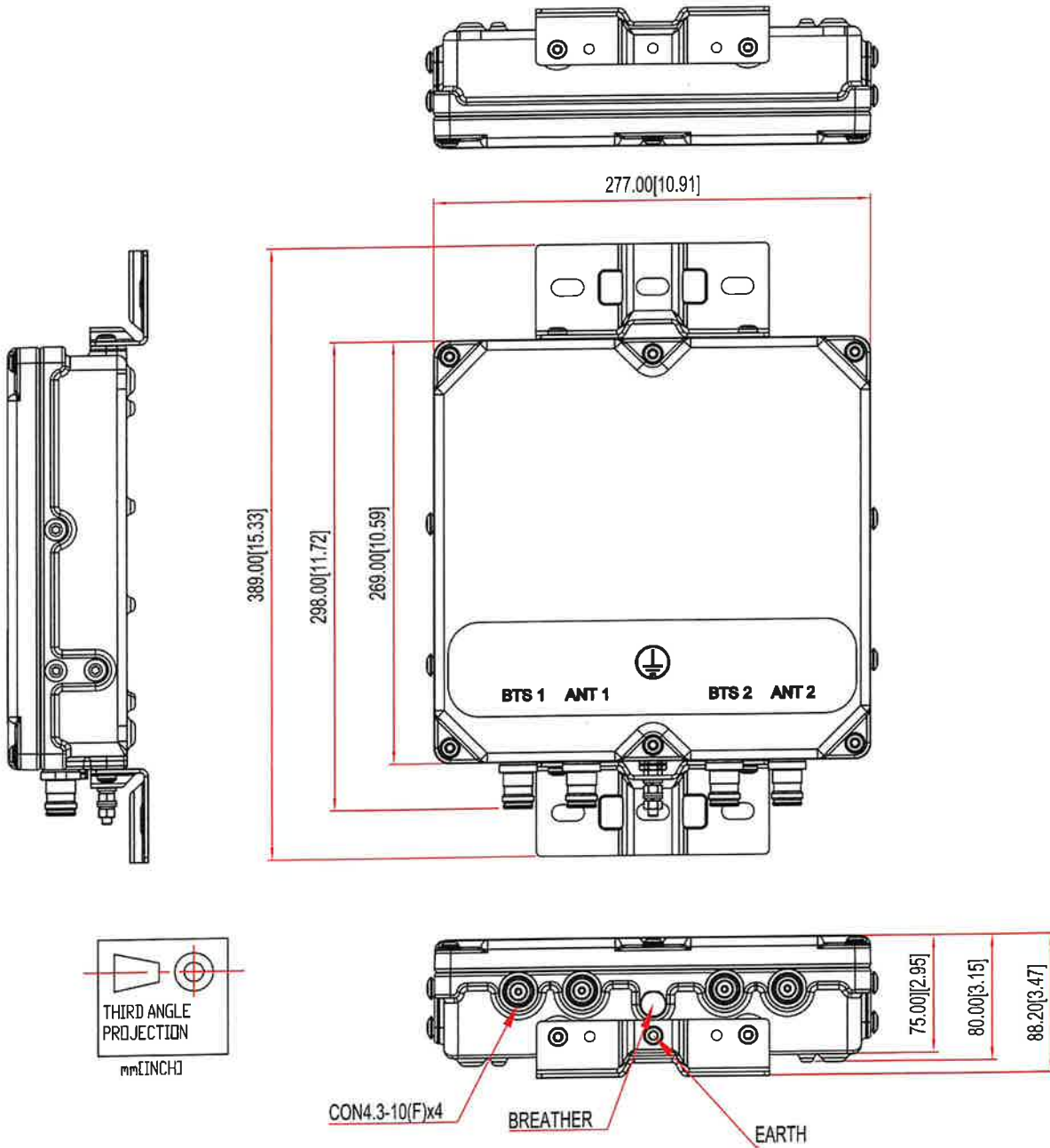
## ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



**MECHANICAL BLOCK DIAGRAM**



# **ATTACHMENT 3**



**STRUCTURAL ANALYSIS REPORT  
FOR PROPOSED ANTENNA AND APPURTENANCE  
MODIFICATION ON A 180' SELF-SUPPORTING TOWER  
MIDDLETOWN, CONNECTICUT**

Prepared for  
Verizon Wireless



**Verizon Site Ref:  
470718; Wesleyan University CT**

Site Address: 169 Cross Street, Middletown, CT 06457  
MDG Location I.D.: 5000185944  
FUZE ID: 17123772  
Location Code: 470718  
Project Type: Filter Add

APT Filing No. CT141\_14140

Rev 0 September 21, 2023



**STRUCTURAL ANALYSIS REPORT  
180' SELF-SUPPORTING TOWER  
MIDDLETOWN, CONNECTICUT  
prepared for  
Verizon Wireless**

**EXECUTIVE SUMMARY:**

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of an existing 180' self-supporting lattice tower structure to support a proposed Verizon equipment modification.

Details of the proposed equipment configuration are included within the table on the following page.

The requirements of this analysis indicate that the existing tower structure meets the requirements of the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code, and the ANSI/TIA-222-H standard with Verizon's proposed equipment modification.

The existing foundation consists of a 2.5' diameter x 3' tall reinforced concrete pedestal and a 22' square x 2.5' thick reinforced concrete pad. Evaluation of the existing base foundation was performed utilizing information within original design drawings previously provided to APT. Our analysis indicates that the existing foundation was determined to be adequately sized to support Verizon's proposed equipment modification.

The tower steel component structure usage is summarized in the table below:

Elevation/Component	Usage (%) <sup>1</sup>
Tower (Bracing @ 110'-130')	99.9%
Foundation (Bearing Pressure)	96.8%

**INTRODUCTION:**

A structural analysis of the subject communications tower was performed by APT for Verizon Wireless. The tower is located at Wesleyan University at 169 Cross Street Middletown, Connecticut.

The following information was utilized in the preparation of this analysis:

- Construction Drawings prepared by APT (Project No. CT141\_14140), marked Rev. 0, dated 08/31/23.
- Mount Analysis Report prepared by Colliers Engineering & Design CT, P.C. (Project No. 23777190), dated 07/24/23.
- RFDS detailing Verizon's proposed equipment changes, latest version.
- Structural analysis report prepared by CENTEK Engineering (Project No. 16104.00), dated 07/25/16.
- Tower and foundation drawings prepared by PiROD, Inc. (Eng. File No. A-110626), dated 08/15/94.

The structure is a 180' galvanized steel tower manufactured by PiROD Inc. The tower features truss legs with angle steel bracing members from 0'-110', and solid rod legs

and bracing members from 110'-180'. The analysis was conducted using the following equipment inventory (proposed equipment shown in **bold text**):

Carrier	Antenna and Appurtenance Make/Model	Elevation	Status <sup>1</sup>	Mount Type	Coax/Feed-Line
	Lightning rod	180'	ETR	10' pipe extension	N.A.
	(2) 10' omnidirectional whips	179'	ETR	Legs	(2) 7/8"
	DB404-B dipole (inverted)	179'	ETR	Below sidearm	7/8"
	PD1142 omnidirectional whip, 20' omnidirectional whip	178'	ETR	(2) 3' sidearms	(2) 7/8"
	Cambium PTP 50650	178'	ETR	Leg	3/8"
	SC479-HF1LDF omni w/ DS428E83101T TTA	163'	ETR	6' sidearm	1/2"
	PD1142 omnidirectional whip	157'	ETR	6' sidearm	7/8"
	DB404-B dipole (inverted)	154'	ETR	6' sidearm at 152'	7/8"
	10' omnidirectional whip	152'	ETR	6' sidearm	7/8"
	PD1142 omnidirectional whip	148.75'	ETR	6' sidearm	7/8"
	PD1142 omnidirectional whip	148.25'	ETR	6' sidearm	7/8"
	20' omnidirectional whip	147.67'	ETR	3' sidearm	7/8"
	8-bay dipole	147'	ETR	6' sidearm	7/8"
	3' high performance dish	135'	ETR	Leg	EW90
	SC479-HF1LDF omni	135'	ETR	6' sidearm	7/8"
Verizon Wireless	(3) Andrew SBNHH-1D65B, (6) Andrew JAHH-65B-R3B & (3) Samsung MT6407-77A antennas w/ integrated RRHs, (3) Samsung B2/B66A RRHBR049 (RFV01U-D1A) RRHs, (3) Samsung B5/B13 RRHBR04C (RFV01UD2A) RRHs, (3) CBC78T-DS-43-2X diplexers, (1) RVZDC-6627-PF-48 OVP, (2) <b>Kaelus KA-6030 mitigation filters (Beta sector)</b>	129' <sup>2</sup>	ETR ETR ETR  ETR ETR P	(3) SitePro1 VFA12-HD sector mounts w/ (12) P2.5 STD x 8' LG pipe mounts	12x24 hybrid, 3/8" ground
	PTP 58400 panel	124'	ETR	Leg	3/8"
	3' high performance dish	120'	ETR	Leg	EW90
	2' high performance dish	119'	ETR	Leg	(2) 3/8"
	3' high performance dish	116'	ETR	Leg	EW90
	4' high performance dish	115.5'	ETR	4' sidearm	(2) 3/8"
	15' omnidirectional whip	109'	ETR	3' sidearm	7/8"
	20' omnidirectional whip	104'	ETR	3' sidearm	7/8"
	17' omnidirectional whip	98'	ETR	2' standoff	7/8"
	17' omnidirectional whip	97.83'	ETR	2' standoff	7/8"
	20' omnidirectional whip	97.33'	ETR	2' standoff	7/8"
	20' omnidirectional whip	87'	ETR	1' sidearm	1/2"
	(2) 3' high performance dish	85'	ETR	Leg	(2) EW90
	(3) 17' omnidirectional whip	78'	ETR	(3) 2' standoff	(3) 7/8"
	12' omnidirectional whip	63'	ETR	6' sidearm	1/2"
	3' yagi w/ spray	55'	ETR	Leg	1/2"
	20' omnidirectional whip	54.5'	ETR	2' standoff	1/2"

Carrier	Antenna and Appurtenance Make/Model	Elevation	Status	Mount Type	Coax/Feed-Line
	.8M satellite dish	51.67'	ETR	1.5' sidearm	1/4"
	3' yagi	46'	ETR	Leg	1/2"
	8' omnidirectional whip	34'	ETR	2' standoff	3/8"
	MAXRAD MFBW7463 (2' x 1" omni whip)	30'	ETR	6' sidearm	1/2"
	3' yagi	25'	ETR	Leg	1/2"

Notes:

1. ETR = Existing to Remain; ERL= Existing to be Relocated; P = Proposed; F= Future; R= Reserved.
2. Mount elevation 127.5' per aforementioned mount analysis prepared by Colliers Engineering & Design CT, P.C.

**STRUCTURAL ANALYSIS:**

**Methodology:**

This structural analysis has been prepared in accordance with the ANSI/TIA-222-H standard entitled "Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures"; American Institute of Steel Construction (AISC) Manual of Steel Construction, and the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code utilizing the following criteria:

- o Load Case 1: 129 mph (3-second gust) Basic Design, 0" ice
- o Load Case 2: 50 mph (3-second gust) w/ 1.0" ice thickness
- o Load Case 3: 60 mph (3-second gust) (Service Load)
- o Risk Category: III
- o Exposure Category: B\*
- o Topographic Category: 1

*\* Site-Specific Exposure utilized for this analysis as allowed per section 2.6.5.1.2 of TIA-222-H and was performed in accordance with Figure C26.7-3 of ASCE 7-16.*

**Analysis Results:**

The analysis was conducted in accordance with the criteria outlined above with the aforementioned loading. The following table summarizes the results of the analysis:

Elevation	Legs (%)	Bracing (%)
170'-180'	10%	36%
150'-170'	30%	44%
130'-150'	40%	42%
110'-130'	67%	99.9%
100'-110'	56%	36%
80'-100'	43%	34%
60'-80'	53%	47%
40'-60'	62%	65%
20'-40'	56%	49%
0'-20'	63%	46%



**Bracing, Splice and Anchor Bolts:**

Connection bolts were evaluated under the proposed loading. All bolts were found to be adequately sized to support the proposed loads.

**Base Foundation:**

The existing foundation consists of a 2.5' diameter x 3' tall reinforced concrete pedestal and a 22' square x 2.5' thick reinforced concrete pad. Evaluation of the existing base foundation was performed utilizing information within the aforementioned original design drawings previously provided to APT. Our analysis indicates that the existing foundation was determined to be adequately sized to support Verizon's proposed equipment modification.

The calculated base reactions are indicated within the table below:

Load Effect	Calculated Reactions
Compression (Leg)	211.1 kips
Uplift (Leg)	186.8 kips
Shear	31.4 kips
Overturning Moment	2,767.3 ft-kips

**CONCLUSIONS AND RECOMMENDATIONS:**

In conclusion, our structural analysis indicates that the existing 180' self-supporting lattice tower structure located at Wesleyan University at 169 Cross Street in Middletown, Connecticut meets the requirements of the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code, and the ANSI/TIA-222-H standard with Verizon's proposed equipment modification.

Sincerely,  
All-Points Technology Corp. P.C.  
P.C.



Michael S. Trodden, P.E.  
Senior Structural Engineer



Prepared By:  
All-Points Technology Corp.



Jason R. Mead  
Department Manager –  
Structural Services

**LIMITATIONS:**

This report is based on the following:

1. Tower/structure is properly installed and maintained.
2. All members and components are in a non-deteriorated condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower/structure is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
7. Material yield stress values as follows:  
Legs: ASTM A572 Gr. 65  
Bracing: ASTM A572 Gr. 50

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or reinforcing bracing members.
2. Reinforcing members in any manner.
3. Adding or relocating antennas.
4. Installing antenna mounts or waveguide cables.
5. Extending tower.

APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

# *Appendix A*

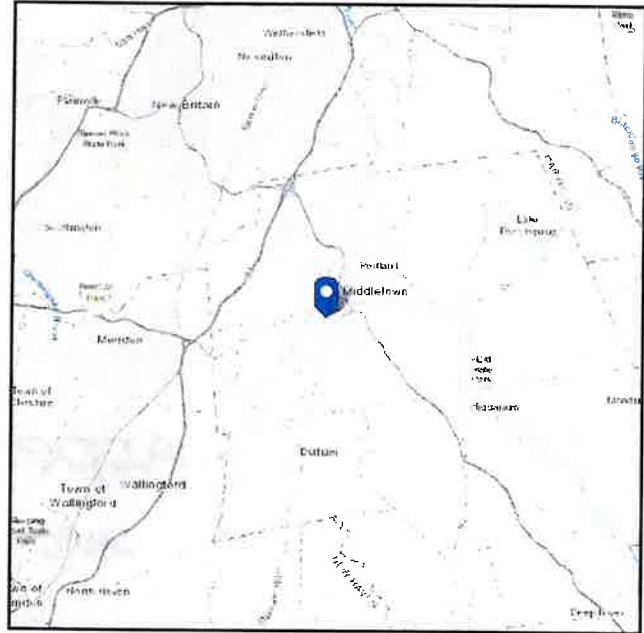
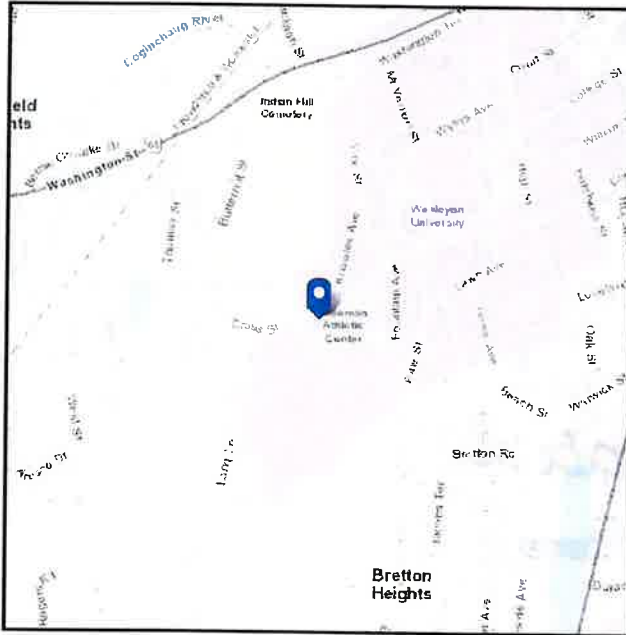
*Design Criteria*

# ASCE 7 Hazards Report

**Address:**  
169 Cross St  
Middletown, Connecticut  
06457

**Standard:** ASCE/SEI 7-16  
**Risk Category:** III  
**Soil Class:** undefined

**Latitude:** 41.551376  
**Longitude:** -72.662332  
**Elevation:** 158.17334838831863 ft  
(NAVD 88)



## Wind

### Results:

Wind Speed	129 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	91 Vmph
100-year MRI	98 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1C and Figs. CC.2-1–CC.2-4, and Section 26.5.2  
Date Accessed: Wed Sep 20 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 3% probability of exceedance in 50 years (annual exceedance probability = 0.000588, MRI = 1,700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.



## Ice

---

**Results:**

Ice Thickness: 1.00 in.  
Concurrent Temperature: 15 F  
Gust Speed 50 mph

**Data Source:** Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

**Date Accessed:** Fri Aug 11 2023

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

---

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

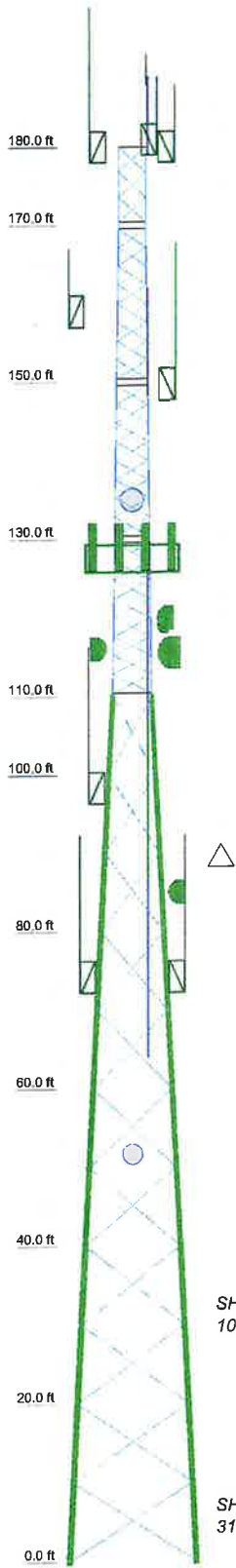
ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

# *Appendix B*

*Tower Schematic*

Section	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	P1rod 105217 w/ (2) 1-1/4" ile rods	P1rod 105217 w/ (2) 1-1/4" ile rods	P1rod 105216 w/ (2) 1-1/4" ile rods	A572-50	A36	A	1-3/4" SR with 1" SR	1-1/2" SR with 1" SR	SR 1 1/2	
Leg Grade	L3x3x5/16	L3x3x3/16	L2 1/2x2 1/2x3/16				SR 3/4	SR 5/8	SR 9/16	
Diagonals										
Diagonal Grade										
Top Girts			N.A.				SR 1	SR 7/8	SR 3/4	
Bottom Girts			N.A.				SR 1	SR 7/8	SR 3/4	
Face Width (ft)	14	12	10	6	5	4.5	4	4	3.5	
# Panels @ (ft)			11 @ 10					24 @ 2.39583	3 @ 3.19444	
Weight (lb) 190E3.6	31864.3	32760.9	27060.0	26020.4	28022.3	10862.3	1111.4	1992.3	617.7	204.1



### SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	P1rod 105244		

### TOWER DESIGN NOTES

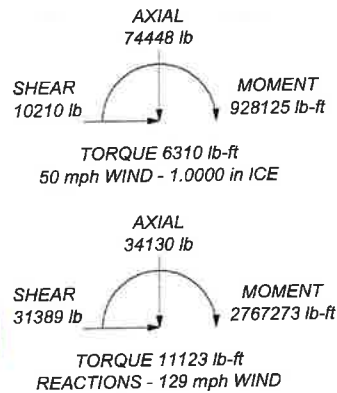
1. Tower designed for Exposure B to the TIA-222-H Standard.
2. Tower designed for a 129 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. Antennas not shown
8. TOWER RATING: 99.9%

ALL REACTIONS  
ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 211087 lb  
SHEAR: 21254 lb

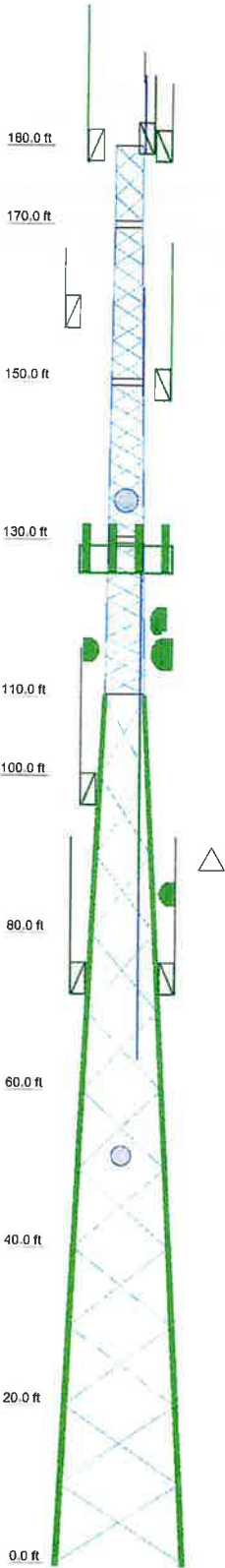
UPLIFT: -186792 lb  
SHEAR: 19038 lb



**All-Points Technology Corporation, P.C.**  
567 Vauxhall Street Ext. Suite 311  
Waterford, CT 06385  
Phone: (860) 663-1697  
FAX:

Job: <b>180' Self-Supporting Tower, Middletown, CT</b>		
Project: <b>CT141NB9294 Wesleyan</b>	Client: <b>Verizon Wireless</b>	Drawn by: <b>MST</b>
Code: <b>TIA-222-H</b>	Date: <b>09/21/23</b>	Scale: <b>NTS</b>
Path:		Dwg No. <b>E-1</b>

Section	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	P1rod 105217 w/ (2) 1-1/4" tie rods	P1rod 105216 w/ (2) 1-1/4" tie rods	A	1-3/4" SR with 1" SR	1-1/2" SR with 1" SR	SR 1 1/2	SR 1 1/2	SR 1 1/2	SR 1 1/2	SR 1 1/2	SR 1 1/2
Leg Grade	L3x3x5/16	L2 1/2x2 1/2x3/16	A572-50	SR 3/4	SR 3/4	SR 5/8	SR 5/8	SR 3/4	SR 3/4	SR 3/4	SR 9/16
Diagonals	L3x3x5/16	L2 1/2x2 1/2x3/16	A36	SR 3/4	SR 3/4	SR 5/8	SR 5/8	SR 3/4	SR 3/4	SR 3/4	SR 9/16
Diagonal Grade	N.A.	N.A.	N.A.	SR 1	SR 1	SR 7/8	SR 7/8	SR 7/8	SR 7/8	SR 3/4	SR 3/4
Top Girts	N.A.	N.A.	N.A.	SR 1	SR 1	SR 7/8	SR 7/8	SR 7/8	SR 7/8	SR 3/4	SR 3/4
Bottom Girts	N.A.	N.A.	N.A.	SR 1	SR 1	SR 7/8	SR 7/8	SR 7/8	SR 7/8	SR 3/4	SR 3/4
Face Width (ft)	16	14	12	10	8	6	5	4.5	4	3.5	3
# Panels @ (ft)	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10	11 @ 10
Weight (lb)	19053.6	2060.9	2060.9	2060.9	2060.9	2060.9	2060.9	2060.9	2060.9	2060.9	2060.9



### DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Generic Lightning Rod 4" copper	180	RVZDC-6627-PF-48 (VzW)	129
10'x2 3/8" Pipe Mount	180	SBNHH-1D65B (VzW)	129
10' x 2" omni whip	179	SBNHH-1D65B (VzW)	129
10' x 2" omni whip	179	SBNHH-1D65B (VzW)	129
DB404	179 - 175	(2) JAHH-65B-R3B (VzW)	129
20' x 2.5" omni whip	178	(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	127.5
3' sidearm	178	(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	127.5
10' x 2" omni whip	178	SitePro1 VFA12-HD (VzW)	127.5
3' sidearm	178	SitePro1 VFA12-HD (VzW)	127.5
PTP 50650	178	SitePro1 VFA12-HD (VzW)	127.5
8' x 10" x 3" box	178	(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	127.5
20' x 3" omni whip	167.67 - 147.67	SitePro1 VFA12-HD (VzW)	127.5
10' x 1.5" omni whip	167 - 157	(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	127.5
6' sidearm	163	15' x 2.5" omni whip	124 - 109
SC479-HF1LDF	163	20' x 2.5" omni whip	124 - 104
DS428E83101T TTA	163	PTP 58400	124
10' x 1.5" omni whip	158.75 - 148.75	3' HP dish	120
10' x 1.5" omni whip	158.25 - 148.25	2' HP dish	119
6' sidearm	157	20' x 2.5" omni whip	117.33 - 97.33
DB404	154 - 150	3' HP dish	116
DB404	154 - 150	4' HP dish	115.5
6' sidearm	152	4' sidearm	115.5
10' x 2" omni whip	148.75	17' x 2" omni whip	115 - 98
6' sidearm	148.75	17' x 2" omni whip	114.83 - 97.83
6' sidearm	148.25	3' sidearm	109
3' sidearm	147.67	20' x 2.5" omni whip	107 - 87
10' 8-bay dipole	147	3' sidearm	104
6' sidearm	147	2' standoff	98
SC479-HF1LDF	135	2' standoff	97.83
6' sidearm	135	2' standoff	97.33
3' HP dish	135	1' sidearm	87
(2) JAHH-65B-R3B (VzW)	129	17' x 2" omni whip	86.5 - 78
(2) JAHH-65B-R3B (VzW)	129	17' x 2" omni whip	86.5 - 78
MT6407-77A (VzW)	129	17' x 2" omni whip	86.5 - 78
MT6407-77A (VzW)	129	3' HP dish	85
MT6407-77A (VzW)	129	2' standoff	78
CBC78T-DS-43-2X diplexer (VzW)	129	2' standoff	78
CBC78T-DS-43-2X diplexer (VzW)	129	2' standoff	78
CBC78T-DS-43-2X diplexer (VzW)	129	12' x 1.5" omni whip	75 - 63
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	129	20' x 2.5" omni whip	74.5 - 54.5
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	129	6' sidearm	63
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	129	3' Yagi w/ spray	55
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	129	2' standoff	54.5
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	129	.8M satellite dish	51.67
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	129	1.5' sidearm	51.67
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	129	3' Yagi	46
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	129	8' x 1" omni whip	42 - 34
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	129	2' standoff	34
(2) KA-6030 mitigation filler (VzW)	129	MFBW7463 omni	32 - 30
		6' sidearm	30
		3' Yagi	25

### SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	P1rod 105244		

<b>All-Points Technology Corporation, P.C.</b>		<b>Job: 180' Self-Supporting Tower, Middletown, CT</b>	
567 Vauxhall Street Ext. Suite 311		Project: CT141NB9294 Wesleyan	
Waterford, CT 06385		Client: Verizon Wireless	Drawn by: MST
Phone: (860) 663-1697		Code: TIA-222-H	Date: 09/15/23
FAX:		Path:	App'd: NTS
		Dwg No. E-1	



# *Appendix C*

*Calculations*

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 1 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

## Tower Input Data

The main tower is a 3x free standing tower with an overall height of 180.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 3.50 ft at the top and 16.00 ft at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower base elevation above sea level: 0.00 ft.

Basic wind speed of 129 mph.

Risk Category III.

Exposure Category B.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

Antennas not shown.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Feed Line/Linear Appurtenances

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
7/8	B	No	No	Ar (CaAa)	78.00 - 8.00	-6.0000	-0.4	3	2	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	98.00 - 8.00	-7.0000	-0.38	3	3	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	104.00 - 8.00	-8.0000	-0.4	1	1	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	109.00 - 8.00	-6.0000	-0.42	1	1	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	135.00 - 8.00	-7.0000	-0.4	1	1	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	147.00 - 8.00	-8.0000	-0.41	1	1	1.1100	1.1100		0.54
1/2	A	No	No	Ar (CaAa)	55.00 - 8.00	-6.0000	0.39	2	2	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	46.00 - 8.00	-7.0000	0.38	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	63.00 - 8.00	-8.0000	0.42	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	87.00 - 8.00	-6.0000	0.43	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	163.00 - 8.00	-7.0000	0.37	1	1	0.5800	0.5800		0.25
1/4	A	No	No	Ar (CaAa)	52.00 - 8.00	-7.0000	0.37	1	1	0.2500	0.2500		0.05
EW90	C	No	No	Ar (CaAa)	85.00 - 8.00	-8.0000	0.38	2	2	0.9869	0.9869		0.32
EW90	C	No	No	Ar (CaAa)	116.00 - 8.00	-7.0000	0.4	1	1	0.9869	0.9869		0.32

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 2 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
3/8	C	No	No	Ar (CaAa)	119.00 - 8.00	-7.0000	0.4	2	2	0.4400	0.4400		0.08
EW90	C	No	No	Ar (CaAa)	120.00 - 8.00	-5.0000	0.39	1	1	0.9869	0.9869		0.32
EW90	C	No	No	Ar (CaAa)	135.00 - 8.00	-6.0000	0.41	1	1	0.9869	0.9869		0.32
1/2	C	No	No	Ar (CaAa)	25.00 - 8.00	-9.0000	0.42	1	1	0.5800	0.5800		0.25
1/2	C	No	No	Ar (CaAa)	30.00 - 8.00	-5.0000	0.42	1	1	0.5800	0.5800		0.25
7/8	A	No	No	Ar (CaAa)	148.00 - 8.00	-5.0000	-0.42	2	2	1.1100	1.1100		0.54
7/8	A	No	No	Ar (CaAa)	178.00 - 8.00	-9.0000	-0.39	2	2	1.1100	1.1100		0.54
7/8	A	No	No	Ar (CaAa)	152.00 - 8.00	-6.0000	-0.4	1	1	1.1100	1.1100		0.54
7/8	A	No	No	Ar (CaAa)	154.00 - 8.00	-7.0000	-0.45	1	1	1.1100	1.1100		0.54
7/8	A	No	No	Ar (CaAa)	163.00 - 8.00	-5.0000	-0.45	1	1	1.1100	1.1100		0.54
2" hybrid (12x24) (VzW)	C	No	No	Ar (CaAa)	129.00 - 8.00	-6.0000	-0.42	1	1	2.0160	2.0160		3.04
3/8 ground (VzW existing)	C	No	No	Ar (CaAa)	129.00 - 8.00	-6.0000	-0.44	1	1	0.4400	0.4400		0.08
3/8" safety cable	A	No	No	Ar (CaAa)	180.00 - 0.00	0.0000	-0.47	1	1	0.3750	0.3750		0.22

### Feed Line/Linear Appurtenances

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C <sub>AA</sub> ft <sup>2</sup> /ft	Weight plf
Climbing Ladder	C	No	No	CaAa (In Face)	110.00 - 0.00	0.0000	0.5	1	No Ice	7.90
									1/2" Ice	10.60
									1" Ice	13.30
									1" Ice	

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight lb
Generic Lightning Rod 4' copper	B	From Leg	0.00	0.0000	180.00	No Ice	0.50	0.00
			0.00			1/2" Ice	1.00	0.00
			10.00			1" Ice	1.50	0.00
10'x2 3/8" Pipe Mount	B	From Leg	0.00	0.0000	180.00	No Ice	2.38	36.50
			0.00			1/2" Ice	3.40	54.35
			5.00			1" Ice	4.45	78.71
10' x 2" omni whip	A	From Leg	0.50	0.0000	179.00	No Ice	2.00	60.00

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b>	180' Self-Supporting Tower, Middletown, CT	<b>Page</b>	3 of 12
	<b>Project</b>	CT141NB9294 Wesleyan	<b>Date</b>	16:07:10 09/21/23
	<b>Client</b>	Verizon Wireless	<b>Designed by</b>	MST

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>A</sub> A <sub>Front</sub>	C <sub>A</sub> A <sub>Side</sub>	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
10' x 2" omni whip	B	From Leg	0.00			1/2" Ice	3.02	3.02	75.50
			5.00			1" Ice	4.07	4.07	97.47
			0.50		0.0000	No Ice	2.00	2.00	60.00
			0.00			1/2" Ice	3.02	3.02	75.50
DB404	C	From Leg	5.00			1" Ice	4.07	4.07	97.47
			3.00		0.0000	No Ice	1.14	1.14	14.00
			0.00			1/2" Ice	2.05	2.05	18.20
			0.00			1" Ice	2.96	2.96	22.40
20' x 2.5" omni whip	C	From Leg	3.00		0.0000	No Ice	5.00	5.00	50.00
			0.00			1/2" Ice	7.03	7.03	86.96
			10.00			1" Ice	9.07	9.07	136.55
			0.00		0.0000	No Ice	1.43	0.72	30.00
3' sidearm	C	None				1/2" Ice	2.18	1.09	65.00
						1" Ice	2.93	1.47	105.00
						No Ice	2.00	2.00	60.00
						1/2" Ice	3.02	3.02	75.50
10' x 2" omni whip	B	From Leg	3.00		0.0000	1" Ice	4.07	4.07	97.47
			0.00			No Ice	1.43	0.72	30.00
			5.00			1/2" Ice	2.18	1.09	65.00
			0.00			1" Ice	2.93	1.47	105.00
3' sidearm	B	None			0.0000	No Ice	0.80	0.27	20.00
						1/2" Ice	0.91	0.35	25.49
						1" Ice	1.04	0.44	32.64
						No Ice	0.80	0.27	20.00
PTP 50650	C	None			0.0000	1/2" Ice	0.91	0.35	25.49
						1" Ice	1.04	0.44	32.64
						No Ice	0.80	0.27	20.00
						1/2" Ice	0.91	0.35	25.49
8" x 10" x 3" box	C	None			0.0000	1" Ice	1.04	0.44	32.64
						No Ice	0.80	0.27	20.00
						1/2" Ice	0.91	0.35	25.49
						1" Ice	1.04	0.44	32.64
SC479-HF1LDF	A	From Leg	6.00		0.0000	No Ice	4.39	4.39	35.00
			0.00			1/2" Ice	6.54	6.54	70.82
			7.00			1" Ice	8.04	8.04	115.98
			0.00			No Ice	0.40	0.46	10.00
DS428E83I01T TTA	A	From Leg	6.00		0.0000	1/2" Ice	0.48	0.55	15.02
			0.00			1" Ice	0.57	0.65	21.56
			0.00			No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
6' sidearm	B	None			0.0000	1" Ice	8.17	4.09	200.00
						No Ice	1.14	1.14	14.00
						1/2" Ice	2.05	2.05	18.20
						1" Ice	2.96	2.96	22.40
10' x 2" omni whip	A	From Leg	6.00		0.0000	No Ice	2.00	2.00	60.00
			0.00			1/2" Ice	3.02	3.02	75.50
			5.00			1" Ice	4.07	4.07	97.47
			0.00			No Ice	4.17	2.09	75.00
6' sidearm	A	None			0.0000	1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
						No Ice	1.50	1.50	60.00
						1/2" Ice	2.52	2.52	72.38
10' x 1.5" omni whip	A	From Leg	6.00		0.0000	1" Ice	3.56	3.56	91.17
			0.00			No Ice	4.17	2.09	75.00
			0.00			1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
6' sidearm	A	None			0.0000	No Ice	1.50	1.50	60.00
						1/2" Ice	2.52	2.52	72.38
						1" Ice	3.56	3.56	91.17
						No Ice	4.17	2.09	75.00
10' x 1.5" omni whip	A	From Leg	6.00		0.0000	1/2" Ice	6.17	3.09	125.00
			0.00			1" Ice	8.17	4.09	200.00
			0.00			No Ice	1.50	1.50	60.00
						1/2" Ice	2.52	2.52	72.38
6' sidearm	A	None			0.0000	1" Ice	3.56	3.56	91.17
						No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
20' x 3" omni whip	B	From Leg	3.00		0.0000	No Ice	6.00	6.00	50.00
						1" Ice	8.17	4.09	200.00
						1/2" Ice	6.17	3.09	125.00
						No Ice	6.00	6.00	50.00

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b>	180' Self-Supporting Tower, Middletown, CT	<b>Page</b>	4 of 12
	<b>Project</b>	CT141NB9294 Wesleyan	<b>Date</b>	16:07:10 09/21/23
	<b>Client</b>	Verizon Wireless	<b>Designed by</b>	MST

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
			0.00			1/2" Ice	8.03	8.03	93.17
			0.00			1" Ice	10.08	10.08	149.01
3' sidearm	B	None			0.0000	No Ice	1.43	0.72	30.00
						1/2" Ice	2.18	1.09	65.00
						1" Ice	2.93	1.47	105.00
10' 8-bay dipole	B	From Leg	6.00		0.0000	No Ice	2.50	2.50	75.00
			0.00			1/2" Ice	3.53	3.53	93.64
			5.00			1" Ice	4.58	4.58	118.79
6' sidearm	A	None			0.0000	No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
SC479-HF1LDF	A	From Leg	6.00		0.0000	No Ice	4.48	4.48	35.00
			0.00			1/2" Ice	6.54	6.54	70.82
			7.00			1" Ice	8.04	8.04	115.98
6' sidearm	A	None			0.0000	No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
SBNHH-1D65B (VzW)	A	From Face	3.00		0.0000	No Ice	8.20	5.42	40.60
			0.00			1/2" Ice	8.66	5.88	91.24
			0.00			1" Ice	9.13	6.35	148.02
SBNHH-1D65B (VzW)	B	From Face	3.00		0.0000	No Ice	8.20	5.42	40.60
			0.00			1/2" Ice	8.66	5.88	91.24
			0.00			1" Ice	9.13	6.35	148.02
SBNHH-1D65B (VzW)	C	From Face	3.00		0.0000	No Ice	8.20	5.42	40.60
			0.00			1/2" Ice	8.66	5.88	91.24
			0.00			1" Ice	9.13	6.35	148.02
(2) JAHH-65B-R3B (VzW)	A	From Face	3.00		0.0000	No Ice	9.11	5.98	65.00
			0.00			1/2" Ice	9.58	6.44	123.08
			0.00			1" Ice	10.05	6.91	187.45
(2) JAHH-65B-R3B (VzW)	B	From Face	3.00		0.0000	No Ice	9.11	5.98	65.00
			0.00			1/2" Ice	9.58	6.44	123.08
			0.00			1" Ice	10.05	6.91	187.45
(2) JAHH-65B-R3B (VzW)	C	From Face	3.00		0.0000	No Ice	9.11	5.98	65.00
			0.00			1/2" Ice	9.58	6.44	123.08
			0.00			1" Ice	10.05	6.91	187.45
MT6407-77A (VzW)	A	From Face	3.00		0.0000	No Ice	4.69	1.84	81.20
			0.00			1/2" Ice	4.98	2.06	110.44
			0.00			1" Ice	5.28	2.29	143.55
MT6407-77A (VzW)	B	From Face	3.00		0.0000	No Ice	4.69	1.84	81.20
			0.00			1/2" Ice	4.98	2.06	110.44
			0.00			1" Ice	5.28	2.29	143.55
MT6407-77A (VzW)	C	From Face	3.00		0.0000	No Ice	4.69	1.84	81.20
			0.00			1/2" Ice	4.98	2.06	110.44
			0.00			1" Ice	5.28	2.29	143.55
CBC78T-DS-43-2X diplexer (VzW)	A	From Face	3.00		0.0000	No Ice	0.43	0.60	26.00
			0.00			1/2" Ice	0.52	0.71	32.37
			0.00			1" Ice	0.62	0.82	40.42
CBC78T-DS-43-2X diplexer (VzW)	B	From Face	3.00		0.0000	No Ice	0.43	0.60	26.00
			0.00			1/2" Ice	0.52	0.71	32.37
			0.00			1" Ice	0.62	0.82	40.42
CBC78T-DS-43-2X diplexer (VzW)	C	From Face	3.00		0.0000	No Ice	0.43	0.60	26.00
			0.00			1/2" Ice	0.52	0.71	32.37
			0.00			1" Ice	0.62	0.82	40.42
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	A	From Face	2.50		0.0000	No Ice	1.88	1.25	85.00
			0.00			1/2" Ice	2.05	1.39	103.34
			0.00			1" Ice	2.22	1.54	124.47
B2/B66A RRHBR049	B	From Face	2.50		0.0000	No Ice	1.88	1.25	85.00

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b>	180' Self-Supporting Tower, Middletown, CT	<b>Page</b>	5 of 12
	<b>Project</b>	CT141NB9294 Wesleyan	<b>Date</b>	16:07:10 09/21/23
	<b>Client</b>	Verizon Wireless	<b>Designed by</b>	MST

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
(RFV01U-D1A) (VzW)			0.00			1/2" Ice	2.05	1.39	103.34
B2/B66A RRHBR049 (RFV01U-D1A) (VzW)	C	From Face	0.00		0.0000	1" Ice	2.22	1.54	124.47
			2.50			No Ice	1.88	1.25	85.00
			0.00			1/2" Ice	2.05	1.39	103.34
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	A	From Face	0.00		0.0000	1" Ice	2.22	1.54	124.47
			2.50			No Ice	1.88	1.01	82.00
			0.00			1/2" Ice	2.05	1.14	98.43
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	B	From Face	0.00		0.0000	1" Ice	2.22	1.28	117.53
			2.50			No Ice	1.88	1.01	82.00
			0.00			1/2" Ice	2.05	1.14	98.43
B5/B13 RRHBR04C (RFV01UD2A) (VzW)	C	From Face	0.00		0.0000	1" Ice	2.22	1.28	117.53
			2.50			No Ice	1.88	1.01	82.00
			0.00			1/2" Ice	2.05	1.14	98.43
(2) KA-6030 mitigation filter (VzW)	B	From Face	0.00		0.0000	1" Ice	2.22	1.28	117.53
			3.00			No Ice	0.96	0.29	17.60
			0.00			1/2" Ice	1.09	0.36	24.37
			2.00			1" Ice	1.22	0.45	32.93
RVZDC-6627-PF-48 (VzW)	A	None			0.0000	No Ice	6.13	5.25	45.00
						1/2" Ice	6.44	5.55	103.92
						1" Ice	6.76	5.85	167.82
SitePro1 VFA12-HD (VzW)	A	None			0.0000	No Ice	13.20	9.20	658.00
						1/2" Ice	19.50	14.60	804.00
						1" Ice	25.80	19.50	1015.00
SitePro1 VFA12-HD (VzW)	B	None			0.0000	No Ice	13.20	9.20	658.00
						1/2" Ice	19.50	14.60	804.00
						1" Ice	25.80	19.50	1015.00
SitePro1 VFA12-HD (VzW)	C	None			0.0000	No Ice	13.20	9.20	658.00
						1/2" Ice	19.50	14.60	804.00
						1" Ice	25.80	19.50	1015.00
(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	A	None			0.0000	No Ice	0.97	2.30	0.05
						1/2" Ice	1.21	3.13	0.06
						1" Ice	1.46	3.62	0.09
(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	B	None			0.0000	No Ice	0.97	2.30	0.05
						1/2" Ice	1.21	3.13	0.06
						1" Ice	1.46	3.62	0.09
(4) P2.5 Std x 8.0' Pipe Mount (50%N) (VzW)	C	None			0.0000	No Ice	0.97	2.30	0.05
						1/2" Ice	1.21	3.13	0.06
						1" Ice	1.46	3.62	0.09
PTP 58400	A	None			0.0000	No Ice	1.75	0.48	12.00
						1/2" Ice	1.92	0.58	23.43
						1" Ice	2.09	0.69	37.18
10' x 1.5" omni whip	C	From Leg	6.00		0.0000	No Ice	1.50	1.50	60.00
			0.00			1/2" Ice	2.52	2.52	72.38
			0.00			1" Ice	3.56	3.56	91.17
6' sidearm	C	None			0.0000	No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
DB404	C	From Leg	3.00		0.0000	No Ice	1.14	1.14	14.00
			0.00			1/2" Ice	2.05	2.05	18.20
			0.00			1" Ice	2.96	2.96	22.40
4' sidearm	A	None			0.0000	No Ice	2.43	1.22	50.00
						1/2" Ice	3.50	1.75	100.00
						1" Ice	4.50	2.25	175.00
15' x 2.5" omni whip	A	From Leg	3.00		0.0000	No Ice	3.75	3.75	50.00
			0.00			1/2" Ice	5.28	5.28	77.80
			0.00			1" Ice	6.83	6.83	115.17
3' sidearm	A	None			0.0000	No Ice	1.43	0.72	30.00

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 6 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C <sub>A</sub> A <sub>A</sub> Front ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Side ft <sup>2</sup>	Weight lb
						1/2" Ice	2.18	1.09	65.00
						1" Ice	2.93	1.47	105.00
						No Ice	5.00	5.00	50.00
20' x 2.5" omni whip	A	From Leg	3.00	0.0000	124.00 - 104.00	1/2" Ice	7.03	7.03	86.96
			0.00			1" Ice	9.07	9.07	136.55
			0.00			No Ice	1.43	0.72	30.00
3' sidearm	A	None		0.0000	104.00	1/2" Ice	2.18	1.09	65.00
						1" Ice	2.93	1.47	105.00
17' x 2" omni whip	A	From Leg	2.00	0.0000	115.00 - 98.00	No Ice	3.20	3.20	75.00
			0.00			1/2" Ice	4.83	4.83	99.66
			0.00			1" Ice	6.47	6.47	134.46
2' standoff	A	None		0.0000	98.00	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
2' standoff	C	None		0.0000	97.83	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
17' x 2" omni whip	C	From Leg	2.00	0.0000	114.83 - 97.83	No Ice	3.20	3.20	75.00
			0.00			1/2" Ice	4.83	4.83	99.66
			0.00			1" Ice	6.47	6.47	134.46
2' standoff	A	None		0.0000	97.33	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
20' x 2.5" omni whip	A	From Leg	2.00	0.0000	117.33 - 97.33	No Ice	5.00	5.00	50.00
			0.00			1/2" Ice	7.03	7.03	86.96
			0.00			1" Ice	9.07	9.07	136.55
20' x 2.5" omni whip	C	From Face	1.00	0.0000	107.00 - 87.00	No Ice	5.00	5.00	50.00
			0.00			1/2" Ice	7.03	7.03	86.96
			0.00			1" Ice	9.07	9.07	136.55
1' sidearm	B	From Leg	1.00	0.0000	87.00	No Ice	0.51	0.26	15.00
			0.00			1/2" Ice	0.95	0.48	25.00
			0.00			1" Ice	1.45	0.73	40.00
2' standoff	A	None		0.0000	78.00	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
2' standoff	B	None		0.0000	78.00	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
2' standoff	C	None		0.0000	78.00	No Ice	0.60	0.07	30.00
						1/2" Ice	0.75	0.11	35.96
						1" Ice	0.91	0.16	44.06
17' x 2" omni whip	A	From Leg	2.00	0.0000	86.50 - 78.00	No Ice	3.20	3.20	75.00
			0.00			1/2" Ice	4.83	4.83	99.66
			0.00			1" Ice	6.47	6.47	134.46
17' x 2" omni whip	B	From Leg	2.00	0.0000	86.50 - 78.00	No Ice	3.20	3.20	75.00
			0.00			1/2" Ice	4.83	4.83	99.66
			0.00			1" Ice	6.47	6.47	134.46
17' x 2" omni whip	C	From Leg	2.00	0.0000	86.50 - 78.00	No Ice	3.20	3.20	75.00
			0.00			1/2" Ice	4.83	4.83	99.66
			0.00			1" Ice	6.47	6.47	134.46
12' x 1.5" omni whip	A	From Leg	2.00	0.0000	75.00 - 63.00	No Ice	1.80	1.80	60.00
			0.00			1/2" Ice	3.02	3.02	74.82
			0.00			1" Ice	4.26	4.26	97.28
6' sidearm	A	None		0.0000	63.00	No Ice	4.17	2.09	75.00
						1/2" Ice	6.17	3.09	125.00
						1" Ice	8.17	4.09	200.00
3' Yagi w/ spray	A	None		0.0000	55.00	No Ice	2.08	2.08	30.95

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 7 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>A</sub> A		Weight	
			Horz Lateral	Vert			Front	Side		
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb	
20' x 2.5" omni whip	A	From Leg	2.00	0.00	0.0000	74.50 - 54.50	1/2" Ice	3.79	3.79	52.87
							1" Ice	5.52	5.52	85.27
							No Ice	5.00	5.00	50.00
							1/2" Ice	7.03	7.03	86.96
2' standoff	A	None	0.00	0.0000	54.50	1" Ice	9.07	9.07	136.55	
						No Ice	0.60	0.07	30.00	
						1/2" Ice	0.75	0.11	35.96	
						1" Ice	0.91	0.16	44.06	
1.5' sidearm	B	None	0.0000	51.67	51.67	No Ice	0.60	0.07	30.00	
						1/2" Ice	0.75	0.11	35.96	
						1" Ice	0.91	0.16	44.06	
						No Ice	2.08	2.08	30.95	
3' Yagi	A	None	0.0000	46.00	46.00	1/2" Ice	3.79	3.79	52.87	
						1" Ice	5.52	5.52	85.27	
						No Ice	0.80	0.80	30.00	
						1/2" Ice	1.62	1.62	37.43	
8' x 1" omni whip	A	From Leg	2.00	0.00	0.0000	42.00 - 34.00	1" Ice	2.45	2.45	50.01
							No Ice	0.60	0.07	30.00
							1/2" Ice	0.75	0.11	35.96
							1" Ice	0.91	0.16	44.06
MFBW7463 omni	A	From Leg	6.00	0.00	0.0000	32.00 - 30.00	No Ice	0.23	0.23	10.00
							1/2" Ice	0.37	0.37	12.16
							1" Ice	0.52	0.52	15.96
							No Ice	4.17	2.09	75.00
6' sidearm	A	None	0.0000	30.00	30.00	1/2" Ice	6.17	3.09	125.00	
						1" Ice	8.17	4.09	200.00	
						No Ice	2.08	2.08	30.95	
						1/2" Ice	3.79	3.79	52.87	
3' Yagi	A	None	0.0000	25.00	25.00	1" Ice	5.52	5.52	85.27	
						No Ice	2.08	2.08	30.95	

### Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight	
				Horz Lateral	Vert							
			ft	ft	°	°	ft	ft	ft <sup>2</sup>	lb		
.8M satellite dish	A	Paraboloid w/o Radome	From Leg	1.50	0.00	Worst	°	51.67	2.60	No Ice	5.31	50.00
										1/2" Ice	5.66	79.00
										1" Ice	6.00	108.00
4' HP dish	B	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst	°	115.50	4.00	No Ice	12.57	150.00
										1/2" Ice	13.10	217.33
										1" Ice	13.62	284.66
2' HP dish	B	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst	°	119.00	2.00	No Ice	3.14	50.00
										1/2" Ice	3.41	67.50
										1" Ice	3.68	85.00
3' HP dish	A	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst	°	135.00	3.00	No Ice	7.07	75.00
										1/2" Ice	7.47	113.33
										1" Ice	7.86	153.33
3' HP dish	B	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst	°	120.00	3.00	No Ice	7.07	75.00
										1/2" Ice	7.47	113.33
										1" Ice	7.86	153.33
3' HP dish	C	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst	°	116.00	3.00	No Ice	7.07	75.00
										1/2" Ice	7.47	113.33
										1" Ice	7.86	153.33



<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 8 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft <sup>2</sup>	Weight lb
3' HP dish	B	Paraboloid w/Shroud (HP)	From Leg	1.00 0.00 0.00	Worst		85.00	3.00	No Ice 1/2" Ice 1" Ice	75.00 113.33 153.33

## Solution Summary

## Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 170	5.390	83	0.2707	0.0327
T2	170 - 150	4.819	83	0.2689	0.0400
T3	150 - 130	3.702	83	0.2530	0.0407
T4	130 - 110	2.674	83	0.2221	0.0261
T5	110 - 100	1.797	94	0.1709	0.0108
T6	100 - 80	1.461	94	0.1427	0.0083
T7	80 - 60	0.918	94	0.1100	0.0060
T8	60 - 40	0.507	94	0.0784	0.0051
T9	40 - 20	0.225	94	0.0476	0.0030
T10	20 - 0	0.059	94	0.0237	0.0011

## Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	Generic Lightning Rod 4' copper	83	5.390	0.2707	0.0327	333965
179.00	10' x 2" omni whip	83	5.333	0.2707	0.0335	333965
178.00	20' x 2.5" omni whip	83	5.276	0.2706	0.0343	333965
177.00	DB404	83	5.219	0.2704	0.0351	333965
175.00	DB404	83	5.105	0.2702	0.0367	333965
167.67	20' x 3" omni whip	83	4.687	0.2680	0.0411	134743
167.00	10' x 1.5" omni whip	83	4.649	0.2676	0.0414	127683
163.00	SC479-HF1LDF	83	4.422	0.2652	0.0425	97204
162.67	20' x 3" omni whip	83	4.404	0.2650	0.0426	95326
162.00	10' x 1.5" omni whip	83	4.366	0.2645	0.0427	91728
158.75	10' x 1.5" omni whip	83	4.183	0.2619	0.0428	75581
158.25	10' x 1.5" omni whip	83	4.155	0.2615	0.0428	73168
157.67	20' x 3" omni whip	83	4.123	0.2610	0.0428	70503
157.00	10' x 1.5" omni whip	83	4.086	0.2603	0.0427	67603
154.00	DB404	83	3.920	0.2574	0.0421	57108
153.75	10' x 1.5" omni whip	83	3.906	0.2571	0.0420	56392
153.25	10' x 1.5" omni whip	83	3.879	0.2566	0.0419	55035
152.67	20' x 3" omni whip	83	3.847	0.2560	0.0417	53589
152.00	DB404	83	3.810	0.2553	0.0415	52088
150.00	DB404	83	3.702	0.2530	0.0407	48709
148.75	10' x 1.5" omni whip	83	3.634	0.2515	0.0401	47403
148.25	10' x 1.5" omni whip	83	3.607	0.2509	0.0399	47014
147.67	20' x 3" omni whip	83	3.576	0.2502	0.0396	46635

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 9 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
147.00	10' 8-bay dipole	83	3.541	0.2494	0.0392	46276
135.00	3' HP dish	83	2.920	0.2316	0.0305	42272
129.00	SBNHH-1D65B	83	2.625	0.2200	0.0252	36054
127.50	SitePro1 VFA12-HD	83	2.553	0.2168	0.0238	32792
124.00	PTP 58400	83	2.388	0.2087	0.0208	26110
120.00	3' HP dish	83	2.207	0.1988	0.0174	21066
119.00	2' HP dish	83	2.163	0.1961	0.0166	20095
117.33	20' x 2.5" omni whip	83	2.091	0.1917	0.0153	18660
116.00	3' HP dish	83	2.034	0.1880	0.0144	17655
115.50	4' HP dish	83	2.014	0.1867	0.0140	17305
115.00	17' x 2" omni whip	83	1.993	0.1853	0.0137	16968
114.83	17' x 2" omni whip	83	1.986	0.1848	0.0136	16857
114.00	15' x 2.5" omni whip	83	1.952	0.1825	0.0130	16343
112.33	20' x 2.5" omni whip	83	1.886	0.1777	0.0120	15549
109.33	17' x 2" omni whip	94	1.773	0.1689	0.0105	15421
109.16	17' x 2" omni whip	94	1.767	0.1684	0.0104	15479
109.00	15' x 2.5" omni whip	94	1.761	0.1679	0.0103	15543
107.33	20' x 2.5" omni whip	94	1.701	0.1629	0.0097	16557
107.00	20' x 2.5" omni whip	94	1.690	0.1620	0.0096	16833
104.00	20' x 2.5" omni whip	94	1.589	0.1532	0.0088	20381
103.67	17' x 2" omni whip	94	1.578	0.1523	0.0088	20874
103.50	17' x 2" omni whip	94	1.572	0.1518	0.0087	21131
102.33	20' x 2.5" omni whip	94	1.535	0.1486	0.0086	22991
102.00	20' x 2.5" omni whip	94	1.524	0.1477	0.0085	23538
98.00	17' x 2" omni whip	94	1.400	0.1381	0.0080	29034
97.83	2' standoff	94	1.395	0.1377	0.0080	29176
97.33	2' standoff	94	1.380	0.1366	0.0080	29554
97.00	20' x 2.5" omni whip	94	1.371	0.1359	0.0079	29773
92.00	20' x 2.5" omni whip	94	1.227	0.1268	0.0073	32147
87.00	20' x 2.5" omni whip	94	1.092	0.1194	0.0067	34723
86.50	17' x 2" omni whip	94	1.080	0.1187	0.0066	35004
85.00	3' HP dish	94	1.041	0.1167	0.0065	35873
82.25	17' x 2" omni whip	94	0.973	0.1130	0.0062	37442
78.00	2' standoff	94	0.872	0.1071	0.0059	38442
75.00	12' x 1.5" omni whip	94	0.804	0.1027	0.0057	37946
74.50	20' x 2.5" omni whip	94	0.792	0.1019	0.0057	37838
69.50	20' x 2.5" omni whip	94	0.686	0.0941	0.0055	36796
69.00	12' x 1.5" omni whip	94	0.676	0.0933	0.0055	36695
64.50	20' x 2.5" omni whip	94	0.588	0.0859	0.0053	35811
63.00	12' x 1.5" omni whip	94	0.560	0.0834	0.0052	35557
59.50	20' x 2.5" omni whip	94	0.498	0.0776	0.0050	35521
55.00	3' Yagi w/ spray	94	0.425	0.0702	0.0047	37041
54.50	20' x 2.5" omni whip	94	0.417	0.0694	0.0046	37262
51.67	.8M satellite dish	94	0.375	0.0649	0.0043	38564
46.00	3' Yagi	94	0.297	0.0562	0.0037	41466
42.00	8' x 1" omni whip	94	0.248	0.0504	0.0033	43579
38.00	8' x 1" omni whip	94	0.203	0.0449	0.0028	43725
34.00	8' x 1" omni whip	94	0.163	0.0399	0.0024	41892
32.00	MFBW7463 omni	94	0.145	0.0375	0.0022	40943
31.00	MFBW7463 omni	94	0.136	0.0363	0.0021	40484
30.00	MFBW7463 omni	94	0.127	0.0351	0.0020	40036
25.00	3' Yagi	94	0.089	0.0294	0.0015	37934

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 170	24.734	2	1.2388	0.1521

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 10 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T2	170 - 150	22.122	2	1.2291	0.1861
T3	150 - 130	17.019	2	1.1548	0.1892
T4	130 - 110	12.326	46	1.0181	0.1212
T5	110 - 100	8.304	46	0.7859	0.0502
T6	100 - 80	6.749	46	0.6578	0.0420
T7	80 - 60	4.239	46	0.5080	0.0320
T8	60 - 40	2.340	46	0.3621	0.0243
T9	40 - 20	1.039	46	0.2195	0.0142
T10	20 - 0	0.274	46	0.1091	0.0054

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	Generic Lightning Rod 4' copper	2	24.734	1.2388	0.1521	71328
179.00	10' x 2" omni whip	2	24.472	1.2383	0.1560	71328
178.00	20' x 2.5" omni whip	2	24.211	1.2377	0.1598	71328
177.00	DB404	2	23.949	1.2370	0.1635	71328
175.00	DB404	2	23.426	1.2355	0.1707	71328
167.67	20' x 3" omni whip	2	21.516	1.2244	0.1913	29051
167.00	10' x 1.5" omni whip	2	21.342	1.2227	0.1925	27575
163.00	SC479-HF1LDF	2	20.308	1.2112	0.1977	21169
162.67	20' x 3" omni whip	2	20.223	1.2101	0.1980	20771
162.00	10' x 1.5" omni whip	2	20.050	1.2078	0.1984	20007
158.75	10' x 1.5" omni whip	2	19.218	1.1955	0.1990	16523
158.25	10' x 1.5" omni whip	2	19.091	1.1935	0.1989	16043
157.67	20' x 3" omni whip	2	18.943	1.1911	0.1987	15515
157.00	10' x 1.5" omni whip	2	18.773	1.1882	0.1984	14947
154.00	DB404	2	18.016	1.1746	0.1957	12828
153.75	10' x 1.5" omni whip	2	17.953	1.1735	0.1954	12680
153.25	10' x 1.5" omni whip	2	17.828	1.1711	0.1948	12401
152.67	20' x 3" omni whip	2	17.683	1.1682	0.1939	12101
152.00	DB404	2	17.516	1.1649	0.1929	11788
150.00	DB404	2	17.019	1.1548	0.1892	11074
148.75	10' x 1.5" omni whip	2	16.712	1.1482	0.1866	10792
148.25	10' x 1.5" omni whip	2	16.589	1.1456	0.1854	10707
147.67	20' x 3" omni whip	2	16.447	1.1424	0.1840	10623
147.00	10' 8-bay dipole	2	16.284	1.1388	0.1823	10543
135.00	3' HP dish	46	13.452	1.0604	0.1416	9612
129.00	SBNHH-1D65B	46	12.104	1.0087	0.1170	8147
127.50	SiteProl VFA12-HD	46	11.775	0.9942	0.1108	7377
124.00	PTP 58400	46	11.020	0.9579	0.0964	5819
120.00	3' HP dish	46	10.188	0.9127	0.0808	4661
119.00	2' HP dish	46	9.986	0.9009	0.0771	4440
117.33	20' x 2.5" omni whip	46	9.655	0.8806	0.0712	4115
116.00	3' HP dish	46	9.397	0.8641	0.0668	3888
115.50	4' HP dish	46	9.301	0.8578	0.0652	3809
115.00	17' x 2" omni whip	46	9.206	0.8515	0.0636	3733
114.83	17' x 2" omni whip	46	9.174	0.8493	0.0631	3708
114.00	15' x 2.5" omni whip	46	9.019	0.8387	0.0606	3592
112.33	20' x 2.5" omni whip	46	8.714	0.8170	0.0559	3413
109.33	17' x 2" omni whip	46	8.191	0.7769	0.0487	3379
109.16	17' x 2" omni whip	46	8.162	0.7746	0.0484	3392
109.00	15' x 2.5" omni whip	46	8.135	0.7724	0.0481	3406
107.33	20' x 2.5" omni whip	46	7.860	0.7498	0.0455	3624
107.00	20' x 2.5" omni whip	46	7.806	0.7453	0.0453	3684
104.00	20' x 2.5" omni whip	46	7.338	0.7058	0.0438	4446

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 11 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
103.67	17' x 2" omni whip	46	7.287	0.7016	0.0436	4551
103.50	17' x 2" omni whip	46	7.262	0.6994	0.0435	4606
102.33	20' x 2.5" omni whip	46	7.088	0.6849	0.0430	5003
102.00	20' x 2.5" omni whip	46	7.039	0.6809	0.0429	5119
98.00	17' x 2" omni whip	46	6.467	0.6369	0.0411	6287
97.83	2' standoff	46	6.444	0.6352	0.0410	6318
97.33	2' standoff	46	6.375	0.6304	0.0408	6399
97.00	20' x 2.5" omni whip	46	6.329	0.6273	0.0406	6445
92.00	20' x 2.5" omni whip	46	5.665	0.5857	0.0381	6960
87.00	20' x 2.5" omni whip	46	5.044	0.5517	0.0355	7522
86.50	17' x 2" omni whip	46	4.984	0.5485	0.0352	7583
85.00	3' HP dish	46	4.806	0.5392	0.0345	7773
82.25	17' x 2" omni whip	46	4.490	0.5222	0.0331	8115
78.00	2' standoff	46	4.023	0.4949	0.0312	8313
75.00	12' x 1.5" omni whip	46	3.709	0.4743	0.0300	8209
74.50	20' x 2.5" omni whip	46	3.657	0.4708	0.0298	8187
69.50	20' x 2.5" omni whip	46	3.167	0.4344	0.0279	7970
69.00	12' x 1.5" omni whip	46	3.120	0.4307	0.0278	7949
64.50	20' x 2.5" omni whip	46	2.714	0.3965	0.0261	7764
63.00	12' x 1.5" omni whip	46	2.586	0.3851	0.0255	7711
59.50	20' x 2.5" omni whip	46	2.300	0.3582	0.0241	7706
55.00	3' Yagi w/ spray	46	1.961	0.3241	0.0220	8033
54.50	20' x 2.5" omni whip	46	1.925	0.3204	0.0218	8081
51.67	.8M satellite dish	46	1.729	0.2994	0.0203	8360
46.00	3' Yagi	46	1.371	0.2591	0.0174	8982
42.00	8' x 1" omni whip	46	1.144	0.2323	0.0153	9436
38.00	8' x 1" omni whip	46	0.938	0.2072	0.0132	9471
34.00	8' x 1" omni whip	46	0.752	0.1839	0.0112	9078
32.00	MFBW7463 omni	46	0.667	0.1728	0.0103	8874
31.00	MFBW7463 omni	46	0.626	0.1673	0.0098	8775
30.00	MFBW7463 omni	46	0.587	0.1619	0.0094	8678
25.00	3' Yagi	46	0.412	0.1353	0.0072	8226

### Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load Allowable	Allowable Ratio	Criteria
T1	180	Leg	A325N	0.5625	3	1076.44	22365.40	0.048 ✓	1	Bolt DS
T2	170	Leg	A325N	0.5625	3	4237.79	22365.40	0.189 ✓	1	Bolt DS
T3	150	Leg	A325N	0.6250	4	16877.90	27611.70	0.611 ✓	1	Bolt DS
T4	130	Leg	A325N	1.0000	6	12041.70	54517.00	0.221 ✓	1	Bolt Tension
T5	110	Leg	A325N	1.0000	6	12345.20	54517.00	0.226 ✓	1	Bolt Tension
T6	100	Diagonal	A325N	1.0000	1	5354.13	12723.80	0.421 ✓	1	Member Bearing
		Leg	A325N	1.0000	6	16544.50	54517.00	0.303 ✓	1	Bolt Tension
T7	80	Diagonal	A325N	1.0000	1	4784.17	12723.80	0.376 ✓	1	Member Bearing
		Leg	A325N	1.0000	6	20181.00	54517.00	0.370 ✓	1	Bolt Tension
T8	60	Diagonal	A325N	1.0000	1	4575.40	12723.80	0.360 ✓	1	Member Bearing
		Leg	A325N	1.0000	6	23678.40	54517.00	0.434 ✓	1	Bolt Tension
T9	40	Diagonal	A325N	1.0000	1	5123.35	12723.80	0.403 ✓	1	Member Bearing
		Leg	A325N	1.0000	6	27078.70	54517.00	0.497 ✓	1	Bolt Tension

<b>tnxTower</b>  <b>All-Points Technology Corporation, P.C.</b> 567 Vauxhall Street Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX:	<b>Job</b> 180' Self-Supporting Tower, Middletown, CT	<b>Page</b> 12 of 12
	<b>Project</b> CT141NB9294 Wesleyan	<b>Date</b> 16:07:10 09/21/23
	<b>Client</b> Verizon Wireless	<b>Designed by</b> MST

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Allowable	Allowable Ratio	Criteria
T10	20	Diagonal	A325N	1.0000	1	5461.29	12723.80	0.429 ✓	1	Member Bearing
		Leg	A325N	1.0000	6	30198.10	54517.00	0.554 ✓	1	Bolt Tension
		Diagonal	A325N	1.0000	1	6591.36	21206.30	0.311 ✓	1	Member Bearing

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	$\phi P_{allow}$ lb	% Capacity	Pass Fail		
T1	180 - 170	Leg	1 1/2	2	-3723.67	37040.00	10.1	Pass		
		Diagonal	9/16	11	-655.35	1823.47	35.9	Pass		
		Top Girt	3/4	6	-12.70	4365.65	0.3	Pass		
		Bottom Girt	3/4	9	-169.82	4365.65	3.9	Pass		
T2	170 - 150	Leg	1 1/2	29	12713.40	41804.40	30.4	Pass		
		Diagonal	5/8	42	-1250.07	2844.12	44.0	Pass		
		Top Girt	3/4	32	-246.72	4338.82	5.7	Pass		
		Bottom Girt	3/4	35	-597.38	3329.59	17.9	Pass		
T3	150 - 130	Leg	1-1/2" SR with 1" SR	87	-33755.80	85202.30	39.6	Pass		
		Diagonal	3/4	99	-2153.10	5094.46	42.3	Pass		
		Top Girt	7/8	89	-584.71	6372.94	9.2	Pass		
		Bottom Girt	7/8	93	-921.10	5026.23	18.3	Pass		
T4	130 - 110	Leg	1-3/4" SR with 1" SR	144	-78399.30	117549.00	66.7	Pass		
		Diagonal	3/4	153	-4298.80	4305.12	99.9	Pass		
		Top Girt	1	146	-1358.02	8574.52	15.8	Pass		
		Bottom Girt	1	148	-1534.47	6935.24	22.1	Pass		
T5	110 - 100	Leg	Pirod 105244	201	-79805.70	142493.00	56.0	Pass		
		Diagonal	L2 1/2x2 1/2x3/16	207	-5861.51	16304.10	36.0	Pass		
T6	100 - 80	Leg	Pirod 105216 w/ (2) 1-1/4" tie rods	210	-108158.00	252244.00	42.9	Pass		
		Diagonal	L2 1/2x2 1/2x3/16	220	-4807.56	14052.60	34.2	Pass		
T7	80 - 60	Leg	Pirod 105216 w/ (2) 1-1/4" tie rods	223	-133225.00	252244.00	52.8	Pass		
		Diagonal	L2 1/2x2 1/2x3/16	231	-4820.75	10285.30	46.9	Pass		
T8	60 - 40	Leg	Pirod 105216 w/ (2) 1-1/4" tie rods	238	-157449.00	252244.00	62.4	Pass		
		Diagonal	L2 1/2x2 1/2x3/16	246	-5398.17	8265.82	65.3	Pass		
T9	40 - 20	Leg	Pirod 105217 w/ (2) 1-1/4" tie rods	253	-181496.00	324918.00	55.9	Pass		
		Diagonal	L3x3x3/16	261	-5755.82	11757.60	49.0	Pass		
T10	20 - 0	Leg	Pirod 105217 w/ (2) 1-1/4" tie rods	268	-204117.00	324918.00	62.8	Pass		
		Diagonal	L3x3x5/16	276	-7089.47	15403.20	46.0	Pass		
		Summary								
			Leg (T4)					66.7	Pass	
	Diagonal (T4)					99.9	Pass			
	Top Girt (T4)					15.8	Pass			
	Bottom Girt (T4)					22.1	Pass			
	Bolt Checks					61.1	Pass			
	<b>RATING =</b>					<b>99.9</b>	<b>Pass</b>			



567 Vauxhall Street Ext.,  
Waterford, CT 06385  
PH: 860-663-1697

Verizon - 17123772 Wesleyan University CT

169 Cross Street, Middletown, CT 06457

APT FILING No. CT141\_14140

Lattice Tower Foundation Analysis

Prepared by: JRM:  
Checked by: MST, P.E.

Date: 08.31.23 - Rev 0

## Mat Foundation Analysis and Design:

### Input Data:

#### Tower Data

Overturing Moment =	$Moment := 2767.3 \cdot \text{ft} \cdot \text{kip}$	
Shear Force =	$Shear := 31.4 \cdot \text{kip}$	(User Input Rx from tnxTower)
Axial Force =	$Axial := 34.1 \cdot \text{kip}$	
Max Leg Compression Force =	$C_c := 211.1 \cdot \text{kip}$	
Max Leg Uplift Force =	$U_c := 186.8 \cdot \text{kip}$	
Tower Height =	$H_t := 180.0 \cdot \text{ft}$	(User Input)
Tower Width =	$W_t := 16.00 \cdot \text{ft}$	(User Input)
Tower Position on Foundation (1=offset, 2=centered) =	$Pos_t := 1$	(User Input)
Weight of Tower =	$WT_t := 1.0 \cdot \text{kip}$	(User Input)

#### Footing Data:

Overall Depth of Footing =	$D_f := 5.50 \cdot \text{ft}$	(User Input)
Thickness of Footing =	$T_f := 2.50 \cdot \text{ft}$	(User Input)
Width of Footing =	$W_f := 22.00 \cdot \text{ft}$	(User Input)
Length of Pier =	$L_p := 3.00 \cdot \text{ft}$	(User Input)
Extension of Pier Above Grade =	$L_{pg} := 0.00 \cdot \text{ft}$	(User Input)
Diameter of Pier =	$d_p := 2.50 \cdot \text{ft}$	(User Input)

#### Material Properties:

Concrete Compressive Strength =	$f_c := 3000 \cdot \text{psi}$	(User Input)
Steel Reinforcement Yield Strength =	$f_y := 60000 \cdot \text{psi}$	(User Input)
Internal Friction Angle of Soil =	$\Phi_s := 30 \cdot \text{deg}$	(User Input)
Soil Resistance Factor =	$\theta_s := 0.75$	(User Input)
Ultimate Soil Bearing Capacity =	$q_u := 6000 \cdot \text{psf}$	(User Input)
Allowable Soil Bearing Capacity =	$q_s := 3000 \cdot \text{psf}$	(User Input)
Unit Weight of Soil =	$\gamma_{soil} := 113 \cdot \text{pcf}$	(User Input)
Unit Weight of Concrete =	$\gamma_{conc} := 150 \cdot \text{pcf}$	(User Input)
Foundation Buoyancy =	$Buoyancy := 0$ (Yes=1 / No=0)	(User Input)
Depth to Neglect =	$n := 0.0 \cdot \text{ft}$	(User Input)
Cohesion of Clay Type Soil =	$c := 0 \cdot \text{ksf}$ (Use 0 for Sandy Soil)	(User Input)
Coefficient of Friction Between Concrete =	$\mu := 0.45$	(User Input)
Load Factor =	$LF := 1.0$	(User Input)



567 Vauxhall Street Ext.,  
Waterford, CT 06385  
PH: 860-663-1697

Verizon - 17123772 Wesleyan University CT

169 Cross Street, Middletown, CT 06457

APT FILING No. CT141\_14140

Lattice Tower Foundation Analysis

Prepared by: JRM:  
Checked by: MST, P.E.

Date: 08.31.23 - Rev 0

**Pier Reinforcement:**

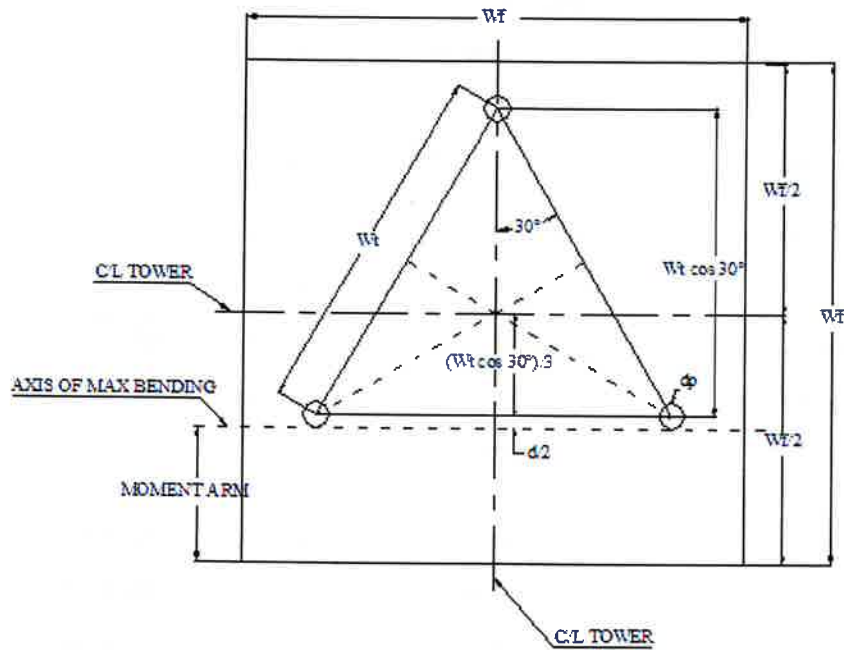
Bar Size =	$BS_{pier} := 8$	(User Input)	
Bar Diameter =	$d_{bpier} := 1.000 \cdot in$	(User Input)	
Number of Bars =	$NB_{pier} := 9$	(User Input)	
Clear Cover of Reinforcement =	$Cvr_{pier} := 3 \cdot in$	(User Input)	
Reinforcement Location Factor =	$\alpha_{pier} := 1.0$	(User Input)	
Coating Factor =	$\beta_{pier} := 1.0$	(User Input)	
Concrete Strength Factor =	$\lambda_{pier} := 1.0$	(User Input)	(ACI 318-14 Section 25.4.2.4)
Reinforcement Size Factor =	$\gamma_{pier} := 1.0$	(User Input)	
Diameter of Tie =	$d_{Tie} := 4 \cdot in$	(User Input)	

**Pad Reinforcement:**

Bar Size =	$BS_{top} := 9$	(User Input)	(Top of Pad)
Bar Diameter =	$d_{btop} := 1.128 \cdot in$	(User Input)	(Top of Pad)
Number of Bars =	$NB_{top} := 33$	(User Input)	(Top of Pad)
Bar Size =	$BS_{bot} := 9$	(User Input)	(Bottom of Pad)
Bar Diameter =	$d_{bbot} := 1.128 \cdot in$	(User Input)	(Bottom of Pad)
Number of Bars =	$NB_{bot} := 33$	(User Input)	(Bottom of Pad)
Clear Cover of Reinforcement =	$Cvr_{pad} := 3.0 \cdot in$	(User Input)	
Reinforcement Location Factor =	$\alpha_{pad} := 1.0$	(User Input)	
Coating Factor =	$\beta_{pad} := 1.0$	(User Input)	
Concrete Strength Factor =	$\lambda_{pad} := 1.0$	(User Input)	(ACI 318-14 Section 25.4.2.4)
Reinforcement Size Factor =	$\gamma_{pad} := 1.0$	(User Input)	

**Calculated Factors:**

Pier Reinforcement Bar Area =	$A_{bpier} := \frac{\pi \cdot d_{bpier}^2}{4} = 0.785 \cdot in^2$
Pad Top Reinforcement Bar Area =	$A_{btop} := \frac{\pi \cdot d_{btop}^2}{4} = 0.999 \cdot in^2$
Pad Bottom Reinforcement Bar Area =	$A_{bbot} := \frac{\pi \cdot d_{bbot}^2}{4} = 0.999 \cdot in^2$
Coefficient of Lateral Soil Pressure =	$K_p := \frac{1 + \sin(\Phi_s)}{1 - \sin(\Phi_s)} = 3$



### Tower/Foundation Plan Geometry

#### Stability of Footing:

Adjusted Concrete Unit Weight =

$$Y_c := \text{if} (Bouyancy = 1, Y_{conc} - 62.4 \cdot pcf, Y_{conc}) = 150 \text{ pcf}$$

Adjusted Soil Unit Weight =

$$Y_s := \text{if} (Bouyancy = 1, Y_{soil} - 62.4 \cdot pcf, Y_{soil}) = 113 \text{ pcf}$$

Passive Pressure =

$$P_{pn} := K_p \cdot Y_s \cdot n + c \cdot 2 \cdot \sqrt{K_p} = 0 \text{ ksf}$$

$$P_{pt} := K_p \cdot Y_s \cdot (D_f - T_f) + c \cdot 2 \cdot \sqrt{K_p} = 1.017 \text{ ksf}$$

$$P_{top} := \text{if} (n < (D_f - T_f), P_{pt}, P_{pn}) = 1.017 \text{ ksf}$$

$$P_{bot} := K_p \cdot Y_s \cdot D_f + c \cdot 2 \cdot \sqrt{K_p} = 1.865 \text{ ksf}$$

$$P_{ave} := \frac{P_{top} + P_{bot}}{2} = 1.441 \text{ ksf}$$

$$T_p := \text{if} (n < (D_f - T_f), T_f, (D_f - n)) = 2.5 \text{ ft}$$

$$A_p := W_f \cdot T_p = 55 \text{ ft}^2$$

Ultimate Shear =

$$S_u := P_{ave} \cdot A_p = 79.24 \text{ kip}$$





567 Vauxhall Street Ext.,  
Waterford, CT 06385  
PH: 860-663-1697

Verizon - 17123772 Wesleyan University CT

169 Cross Street, Middletown, CT 06457

APT FILING No. CT141\_14140

Lattice Tower Foundation Analysis

Prepared by: JRM:  
Checked by: MST, P.E.

Date: 08.31.23 - Rev 0

Weight of Concrete Pedestal/Piers =  $WT_p := 3 \left( \frac{d_p^2 \cdot \pi}{4} \cdot L_p \right) \cdot \gamma_c = 6.63 \text{ kip}$

Weight of Concrete Pad =  $WT_{pad} := (W_f^2 \cdot T_f) \cdot \gamma_c = 181.5 \text{ kip}$

Weight of Soil Above Footing =  $WT_{s1} = 162.412 \text{ kip}$

Weight of Soil At Back Wedge =  $WT_{sw} := WT_{s2} + WT_{s3} = 28.945 \text{ kip}$

Total Weight of Concrete =  $WT_c := WT_{pad} + WT_p = 188.13 \text{ kip}$

Tower Offset =  $X_{t1} := \frac{W_f}{2} - \frac{W_t \cdot \cos(30 \cdot \text{deg})}{2} = 4.072 \text{ ft}$      $X_{t2} := \frac{W_f}{2} - \frac{W_t \cdot \cos(30 \cdot \text{deg})}{3} = 6.381 \text{ ft}$

$X_i := \text{if } (Pos_i) = 1 = 4.072 \text{ ft}$

$X_{t1}$

else

$X_{t2}$

Additional Offset of Footing =  $X_{off1} := \frac{W_f}{2} - \left( \frac{W_t \cdot \cos(30 \cdot \text{deg})}{3} + X_i \right) = 2.309 \text{ ft}$      $X_{off2} := 0 \text{ ft}$

$X_{off} := \text{if } (Pos_i) = 1 = 2.309 \text{ ft}$

$X_{off1}$

else

$X_{off2}$

Resisting Moment =

$M_r := (0.9 \cdot WT_c + 0.75 \cdot WT_{s1}) \cdot \frac{W_f}{2} + 0.75 \cdot S_u \cdot \frac{T_p}{3} + 0.75 \cdot WT_{sw} \cdot \left( W_f + \frac{T_p \cdot \tan(\phi_s)}{3} \right) = 3740 \text{ ft}\cdot\text{kip}$

Overturning Moment =

$M_{ot} := \text{Moment} + \text{Shear} \cdot (L_p + T_f) + (W_t \cdot X_{off}) = 2942.3 \text{ ft}\cdot\text{kip}$

Required Factor of Safety =

$FS_{req} := 1.0$

Provided Factor of Safety =

$FS := \left( \frac{M_r}{M_{ot}} \right) = 1.27$

$OverTurning\_Usage := \text{if } (FS \geq FS_{req}, \text{"Okay"}, \text{"No Good"})$

$OverTurning\_Usage = \text{"Okay"}$



567 Vauxhall Street Ext.,  
Waterford, CT 06385  
PH: 860-663-1697

Verizon - 17123772 Wesleyan University CT

169 Cross Street, Middletown, CT 06457

APT FILING No. CT141\_14140

Lattice Tower Foundation Analysis

Prepared by: JRM:  
Checked by: MST, P.E.

Date: 08.31.23 - Rev 0

### **Bearing Pressure Caused by Footing:**

Total Load =

$$Load_{tot} := \left( \frac{Axial}{1.2} + WT_c + WT_{st} \right) \cdot 0.9 = 341 \text{ kip}$$

Area of the Mat =

$$A_{mat} := W_f^2 = 484 \text{ ft}^2$$

Section Modulus of Mat =

$$S := \frac{W_f^3}{6} = 1774.67 \text{ ft}^3$$

Maximum Pressure in Mat =

$$P_{max} := \frac{Load_{tot}}{A_{mat}} + \frac{M_{ot}}{S} = 2.363 \text{ ksf}$$

$$Max\_Pressure\_Check := \text{if}(P_{max} < \theta_s \cdot q_u, \text{"Okay"}, \text{"No Good"})$$

$$Max\_Pressure\_Check = \text{"Okay"}$$

Minimum Pressure in Mat =

$$P_{min} := \frac{Load_{tot}}{A_{mat}} - \frac{M_{ot}}{S} = -0.953 \text{ ksf}$$

$$Min\_Pressure\_Check := \text{if}((P_{min} \geq 0) \cdot (P_{min} < \theta_s \cdot q_u), \text{"Okay"}, \text{"No Good"})$$

$$Min\_Pressure\_Check = \text{"No Good"}$$

Distance to Resultant of Pressure Distribution =

$$X_p := \frac{P_{max}}{\frac{P_{max} - P_{min}}{W_f}} \cdot \frac{1}{3} = 5.225 \text{ ft}$$

Distance to Kern =

$$X_k := \frac{W_f}{3} = 7.333 \text{ ft}$$

Since Resultant Force is Not in Kern, Area to which Pressure is Applied Must be Reduced.

Eccentricity =

$$e := \frac{M_{ot}}{Load_{tot}} = 8.627 \text{ ft}$$

Adjusted Soil Pressure =

$$P_a := \frac{2 \cdot Load_{tot}}{3 \cdot W_f \cdot \left( \frac{W_f}{2} - e \right)} = 4.355 \text{ ksf}$$

$$q_{adj} := \text{if}(P_{min} < 0, P_a, P_{max}) = 4.355 \text{ ksf}$$

$$Pressure\_Check := \text{if}(q_{adj} < \theta_s \cdot q_u, \text{"Okay"}, \text{"No Good"})$$

$$Pressure\_Check = \text{"Okay"}$$



Colliers Engineering & Design CT, P.C.  
 1055 Washington Boulevard  
 Stamford, CT 06901  
 203.324.0800  
 peter.albano@collierseng.com

## Antenna Mount Analysis Report and PMI Requirements

### Mount ReAnalysis

SMART Tool Project #: 10207616  
 Colliers Engineering & Design CT, P.C. Project #: 23777190

July 24, 2023

#### Site Information

Site ID: 5000185944-VZW / WESLEYAN UNIVERSITY CT  
 Site Name: WESLEYAN UNIVERSITY CT  
 Carrier Name: Verizon Wireless  
 Address: 169 Cross Street  
 Middletown, Connecticut 06457  
 Middlesex County  
 Latitude: 41.55137166°  
 Longitude: -72.66213527°

#### Structure Information

Tower Type: Self Support  
 Mount Type: 12.50-Ft Sector Frame

**FUZE ID # 17123772**

### Analysis Results

Sector Frame: **53.3% Pass\***

**\*Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

#### \*\*\*Contractor PMI Requirements:

Included at the end of this MA report  
 Available & Submitted via portal at <https://pmi.vzsmart.com>

**For additional questions and support, please reach out to:  
 pmisupport@colliersengineering.com**

Report Prepared By: Andy Hanes



**Executive Summary:**

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

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

**Sources of Information:**

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 5035804, dated November 18, 2020
Mount Mapping Report	Delta Oaks Group, Site ID: 470718, dated November 11, 2020
Previous Mount Analysis	Maser Consulting Connecticut, Project #: 20777390A, dated January 18, 2021
PMI Report	Maser Consulting Connecticut, Project #: 20777390A, dated October 14, 2021
Filter Add Scope	Provided by Verizon Wireless

**Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ULT}$ : 130 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: III Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, $K_e$ : 0.994
Seismic Parameters:	$S_s$ : 0.209g $S_1$ : 0.056 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, $L_v$ : 250 lbs. Maintenance Load, $L_m$ : 500 lbs.
Analysis Software:	RISA-3D (V17)

**Final Loading Configuration:**

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
127.50	129.00	2	KAelus	KA-6030	Added
		6	Commscope	JAHH-65B-R3B	Retained
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	
		3	Commscope	CBC78T-DS-43-2X	
		3	Andrew	SBNHH-1D65B	

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

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

**Standard Conditions:**

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design CT, P.C. 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 Colliers Engineering & Design CT, P.C. 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 in accordance with the NSTD-446 Standard, 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. Colliers Engineering & Design CT, P.C. 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

**Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design CT, P.C.**

**Analysis Results:**

Component	Utilization %	Pass/Fail
Connection Check	11.6 %	Pass
Horizontal Mount Pipe	24.6 %	Pass
Standoff Plate	38.0 %	Pass
Standoff Horizontal	32.9 %	Pass
Standoff Diagonal	6.9 %	Pass
Tieback	6.0 %	Pass
Antenna Pipe	53.3 %	Pass
Standoff Vertical	7.9 %	Pass

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>53.3%</b>
---	--------------

**Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:**

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	15.2	8.9	24.3	18.0
0.5	23.8	15.4	36.7	28.4
1	31.7	21.4	48.5	38.2

**Notes:**

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

**Requirements:**

The existing mounts are **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

N/A
-----

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

**Attachments:**

1. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

## Mount Desktop – Post Modification Inspection (PMI) Report Requirements

### Documents & Photos Required from Contractor – Passing Mount Analysis

Passing Mount Analysis requires a PMI due to a modification in loading.

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>.

For additional questions and support, please reach out to [pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

---

MDG #: 5000185944

SMART Project #: 10207616

Fuze Project ID: 17123772

**Purpose** – to provide SMART Tool structural vendor 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 installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

### **Base Requirements:**

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built mount drawings” showing contractor’s name, contact information, preparer’s signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- 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. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

### **Photo Requirements:**

- **Photos taken at ground level**
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- **Photos taken at Mount Elevation**
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.



- These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

**Antenna & equipment placement and Geometry Confirmation:**

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

**Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:**

**Issue:**

N/A

**Response:**

**Special Instruction Confirmation:**

- The contractor has read and acknowledges the above special instructions.
- All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.
- The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

The material utilized was approved by a SMART Tool engineering vendor as an "equivalent" and this approval is included as part of the contractor submission.

**Comments:**

--

**Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:**

Yes       No

**Contractor certifies no new damage created during the current installation:**

Yes       No

**Contractor to certify the condition of the safety climb and verify no damage when leaving the site:**

Safety Climb in Good Condition       Safety Climb Damaged

**Certifying Individual:**

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

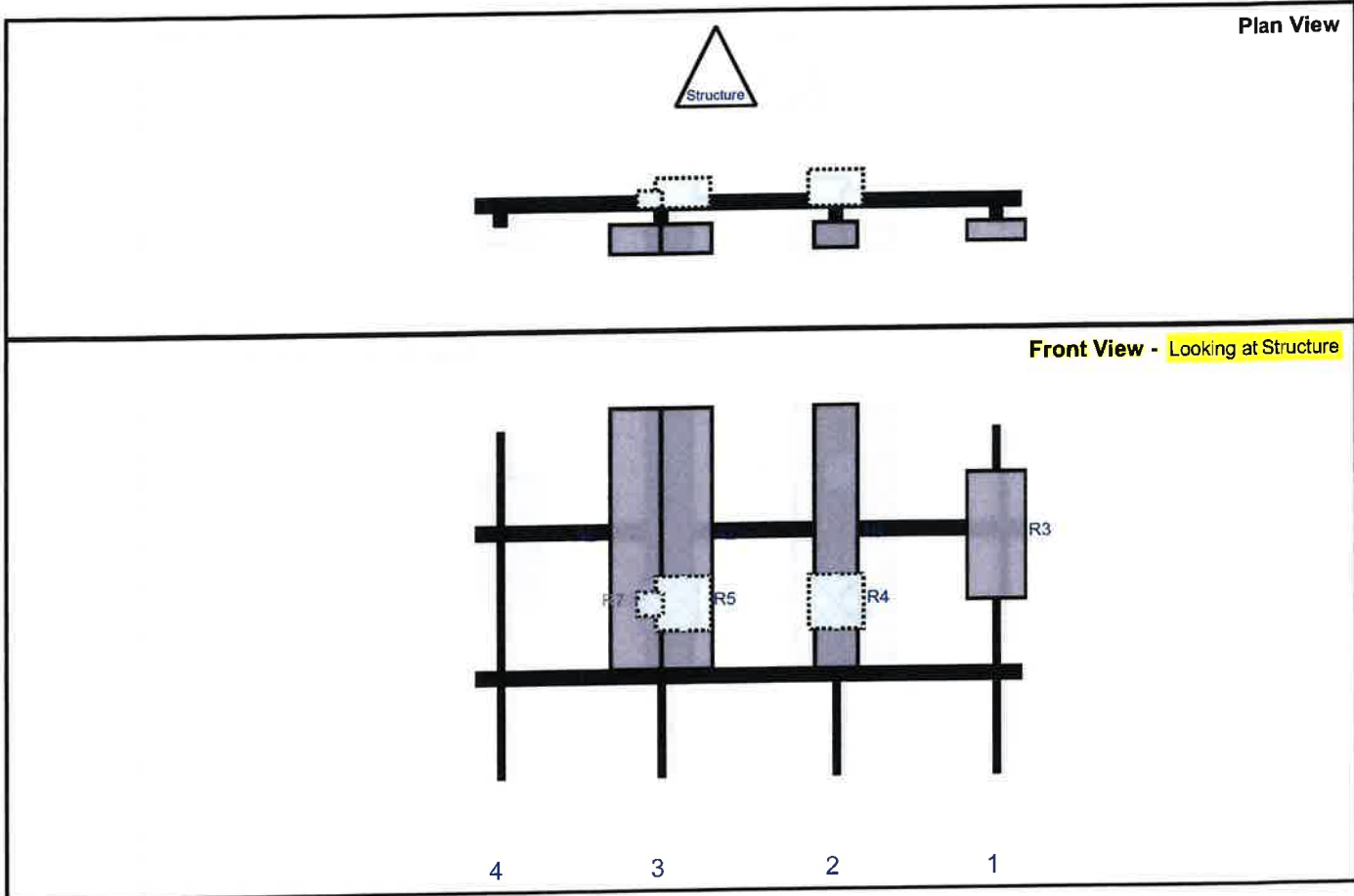
Sector: A  
 Structure Type: Self Support  
 Mount Elev: 127.50

10207616

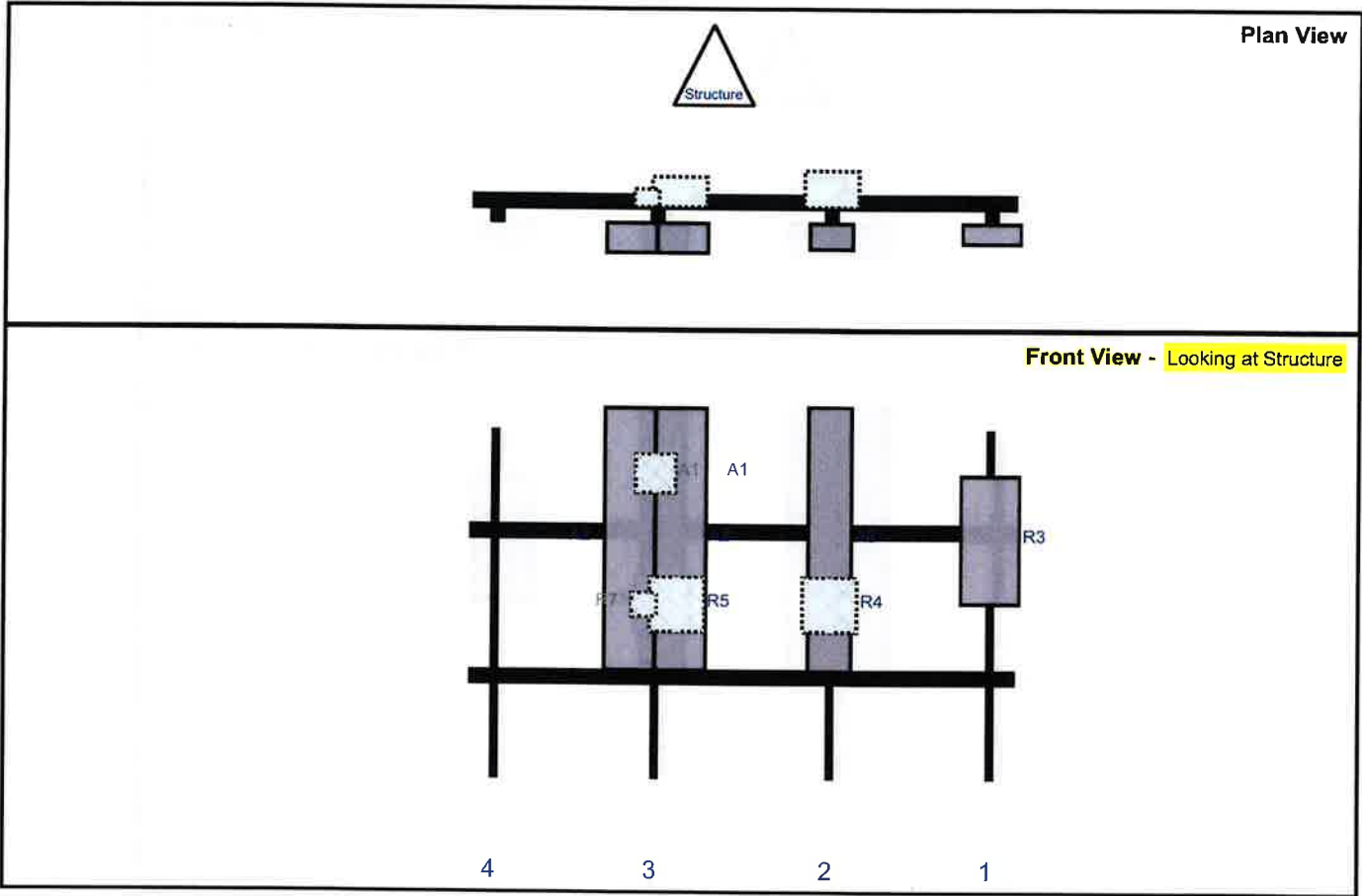
7/24/2023



Page: 1



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
R3	MT6407-77A	35.1	16.1	143	1	a	Front	30	0	Retained	09/29/2021
A8	SBNHH-1D65B	72.6	11.9	99	2	a	Front	30	0	Retained	09/29/2021
R4	B2/B66A RRH-BR049	15	15	99	2	a	Behind	48	0	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	a	Front	30	7	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	b	Front	30	-7	Retained	09/29/2021
R5	B5/B13 RRH-BR04C	15	15	51	3	a	Behind	48	6	Retained	09/29/2021
R7	CBC78T-DS-43-2X	6.4	6.9	51	3	a	Behind	48	-3	Retained	09/29/2021
M45A	RVZDC-6627-PF-48	28.9	15.7			Member				Retained	09/29/2021



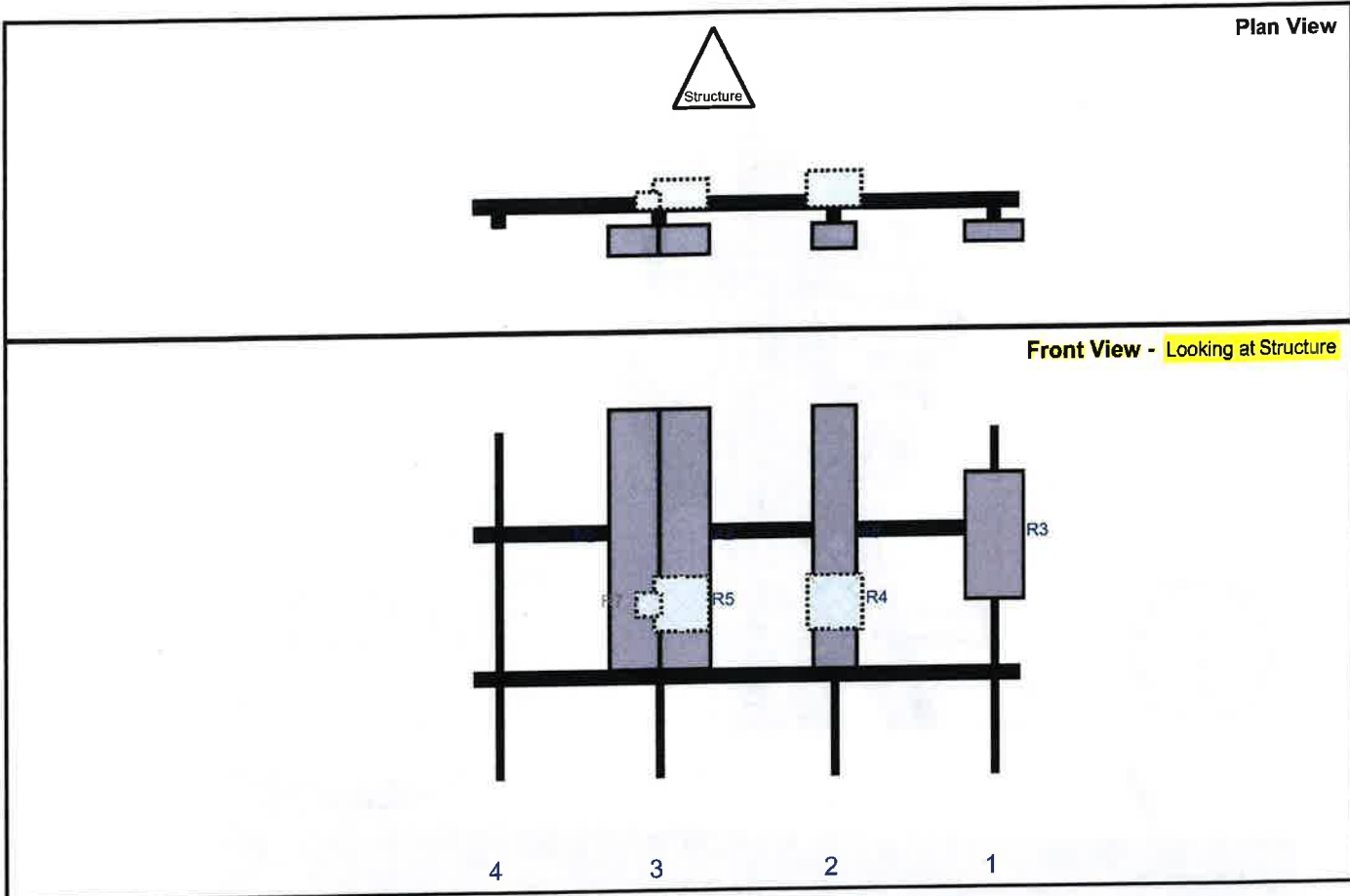
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R3	MT6407-77A	35.1	16.1	143	1	a	Front	30	0	Retained	09/29/2021
A8	SBNHH-1D65B	72.6	11.9	99	2	a	Front	30	0	Retained	09/29/2021
R4	B2/B66A RRH-BR049	15	15	99	2	a	Behind	48	0	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	a	Front	30	7	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	b	Front	30	-7	Retained	09/29/2021
A1	KA-6030	10.6	10.9	51	3	a	Behind	12	0	Added	
A1	KA-6030	10.6	10.9	51	3	b	Behind	12	0	Added	
R5	B5/B13 RRH-BR04C	15	15	51	3	a	Behind	48	6	Retained	09/29/2021
R7	CBC78T-DS-43-2X	6.4	6.9	51	3	a	Behind	48	-3	Retained	09/29/2021

Sector: C

Structure Type: Self Support

10207616

Mount Elev: 127.50

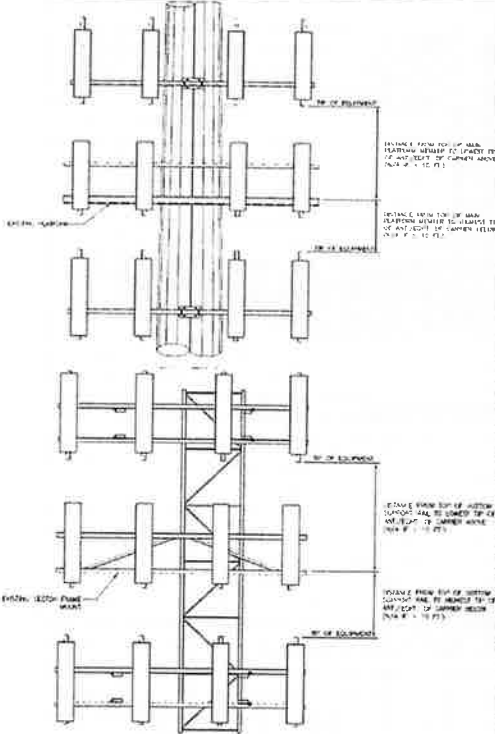


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R3	MT6407-77A	35.1	16.1	143	1	a	Front	30	0	Retained	09/29/2021
A8	SBNHH-1D65B	72.6	11.9	99	2	a	Front	30	0	Retained	09/29/2021
R4	B2/B66A RRH-BR049	15	15	99	2	a	Behind	48	0	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	a	Front	30	7	Retained	09/29/2021
A2	JAHH-65B-R3B	72	13.8	51	3	b	Front	30	-7	Retained	09/29/2021
R5	B5/B13 RRH-BR04C	15	15	51	3	a	Behind	48	6	Retained	09/29/2021
R7	CBC78T-DS-43-2X	6.4	6.9	51	3	a	Behind	48	-3	Retained	09/29/2021





Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B									
Sector A:	30.00	Deg	Leg A:	30.00	Deg	Ant <sub>1a</sub>	UHIE B66A RRH 4X45	11.80	7.20	25.80		129.333	44.00	-7.00		270	
Sector B:	150.00	Deg	Leg B:	150.00	Deg	Ant <sub>1b</sub>											
Sector C:	270.00	Deg	Leg C:	270.00	Deg	Ant <sub>1c</sub>											
Sector D:		Deg	Leg D:		Deg	Ant <sub>2a</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	150.00	272	
						Ant <sub>2b</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	150.00	274	
<b>Climbing Facility Information</b>																	
Location:	270, 330	Deg	Outside Face C				Ant <sub>3a</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	150.00	299
Climbing Facility	Corrosion Type:		Good condition.				Ant <sub>3b</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	150.00	301
	Access:		Climbing path was unobstructed.				Ant <sub>3c</sub>	B13 RRH 4X30	11.80	7.50	20.90		129.667	40.00	-7.00		304
	Condition:		Good condition.				Ant <sub>4a</sub>										
						Ant <sub>4b</sub>											
						Ant <sub>4c</sub>											
						Ant <sub>5a</sub>											
						Ant <sub>5b</sub>											
						Ant <sub>5c</sub>											
						Ant on Standoff											
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											
<b>Sector C</b>																	
						Ant <sub>1a</sub>	UHIE B66A RRH 4X45	11.80	7.20	25.80		129.333	44.00	-7.00		311	
						Ant <sub>1b</sub>											
						Ant <sub>1c</sub>											
						Ant <sub>2a</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	270.00	316	
						Ant <sub>2b</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	270.00	319	
						Ant <sub>2c</sub>											
						Ant <sub>3a</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	270.00	321	
						Ant <sub>3b</sub>	SBNHH-1D65B	11.90	7.10	72.00		130.5	30.00	9.00	270.00	323	
						Ant <sub>3c</sub>	B13 RRH 4X30	11.80	7.50	20.90		129.667	40.00	-7.00		325	
						Ant <sub>4a</sub>											
						Ant <sub>4b</sub>											
						Ant <sub>4c</sub>											
						Ant <sub>5a</sub>											
						Ant <sub>5b</sub>											
						Ant <sub>5c</sub>											
						Ant on Standoff											
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											
<b>Sector D</b>																	
						Ant <sub>1a</sub>											
						Ant <sub>1b</sub>											
						Ant <sub>1c</sub>											
						Ant <sub>2a</sub>											
						Ant <sub>2b</sub>											
						Ant <sub>2c</sub>											
						Ant <sub>3a</sub>											
						Ant <sub>3b</sub>											
						Ant <sub>3c</sub>											
						Ant <sub>4a</sub>											
						Ant <sub>4b</sub>											
						Ant <sub>4c</sub>											
						Ant <sub>5a</sub>											
						Ant <sub>5b</sub>											
						Ant <sub>5c</sub>											
						Ant on Standoff											
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											



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



1	The top cap of the safety cable system is damaged.	335
2	Corrosion on mount bracket.	329
3		
4		
5		
6		
7		
8		

#### Mapping Notes

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

#### Standard Conditions

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



### Antenna Mount Mapping Form (PATENT PENDING)

FCC #

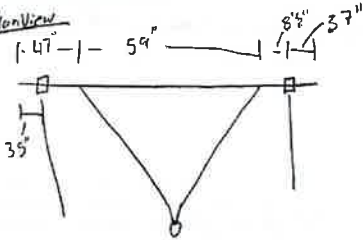
Tower Owner:	City of Middletown	Mapping Date:	11/11/2020
Site Name:	Westleyan University CT	Tower Type:	Self Support
Site Number or ID:	470718	Tower Height (FL):	Unknown
Mapping Contractor:	Delta Oaks Group	Mount Elevation (FL):	129

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

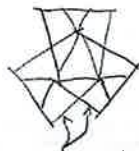
Please Insert Sketches of the Antenna Mount

Westleyan University

Plan View

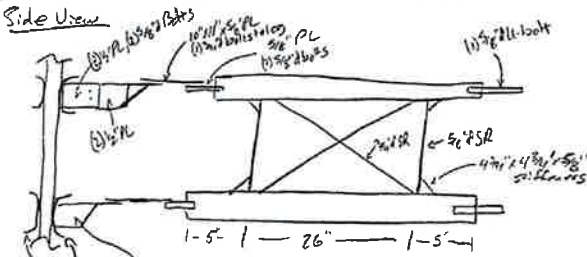


Plan View



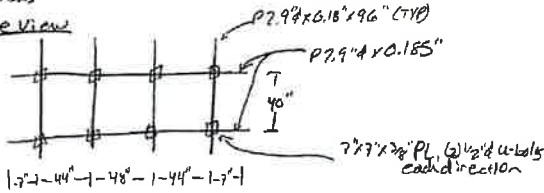
P 2.9" x 0.14" x 7.7"

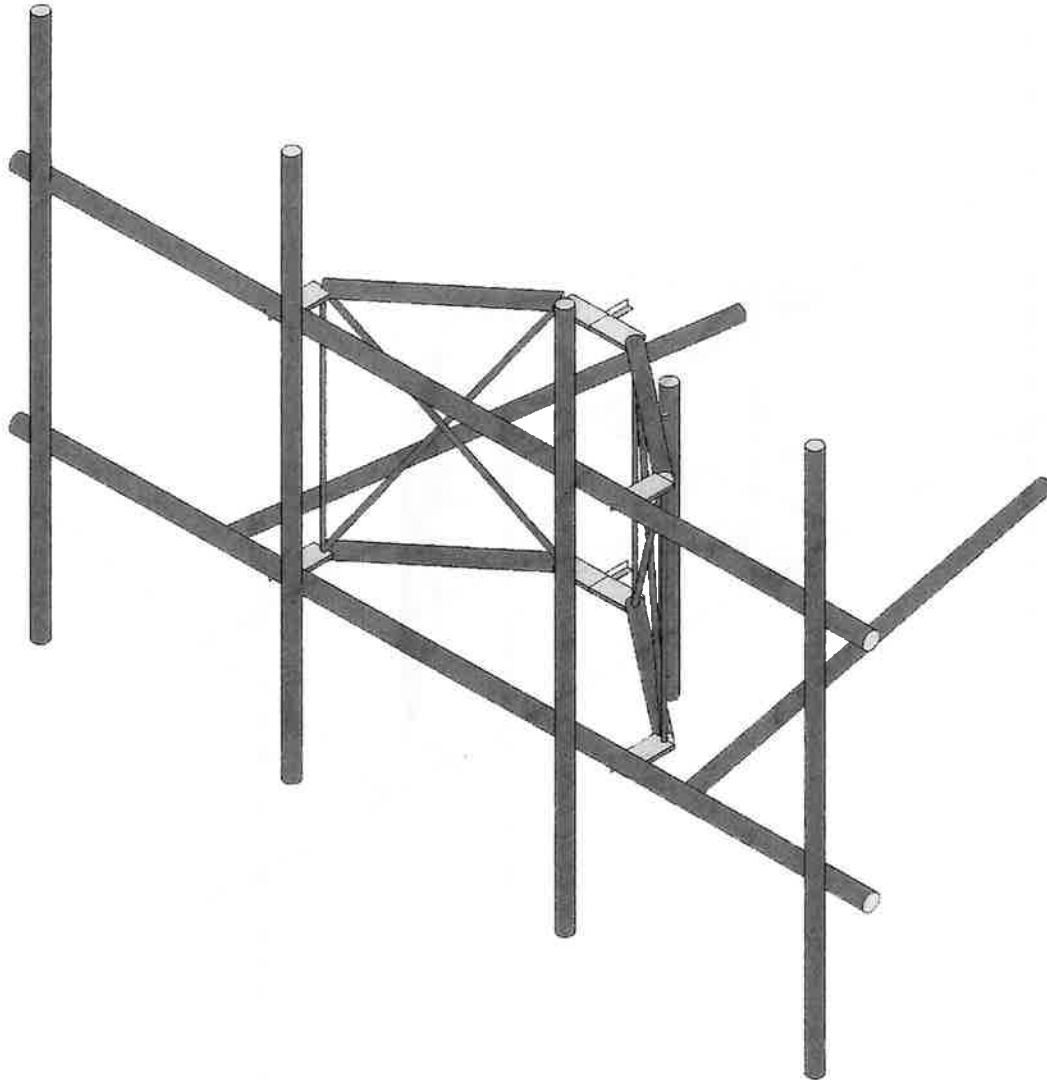
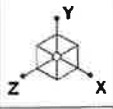
Side View



SPL C 7/8" x 2 1/2"  
4x4 threaded rods

Face View



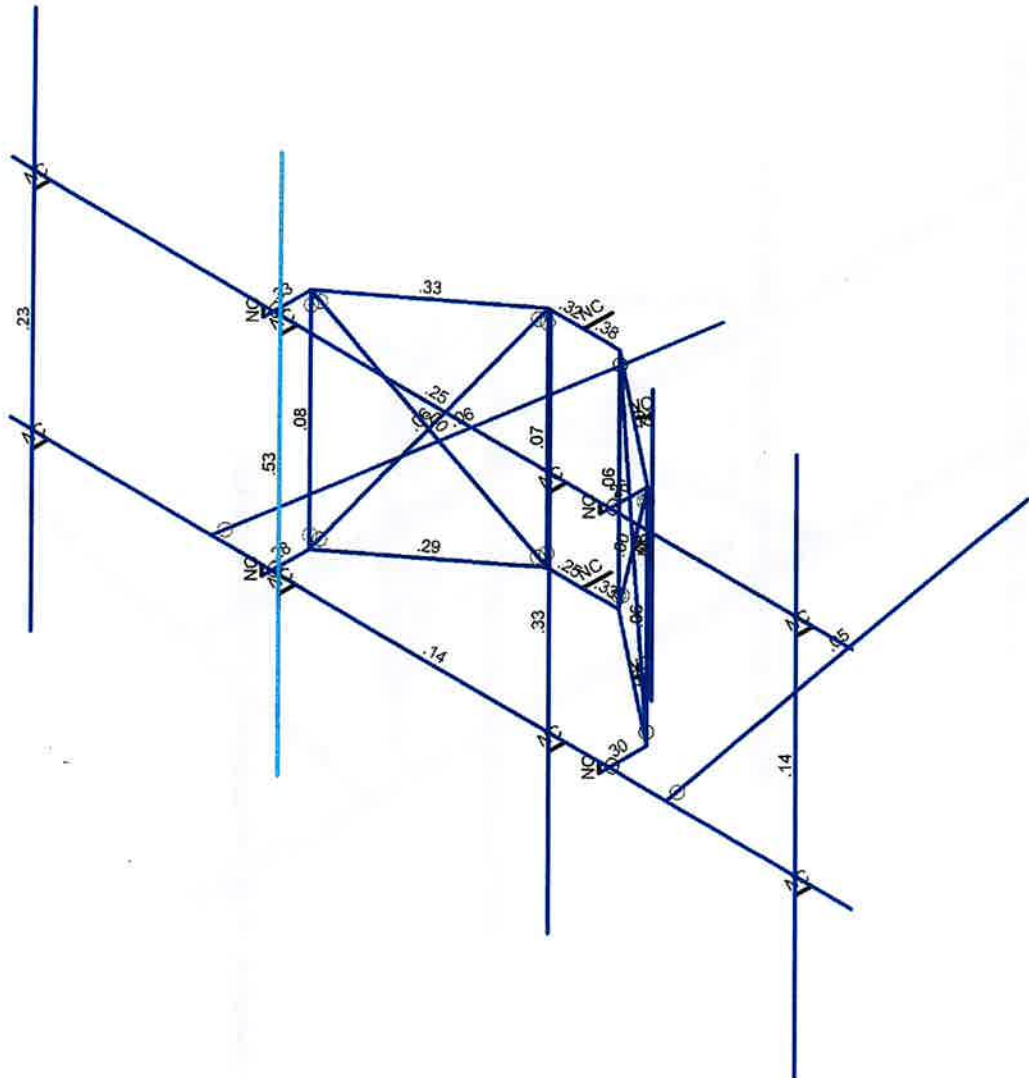
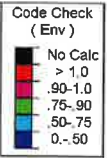
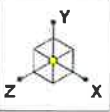


Envelope Only Solution

SK - 1

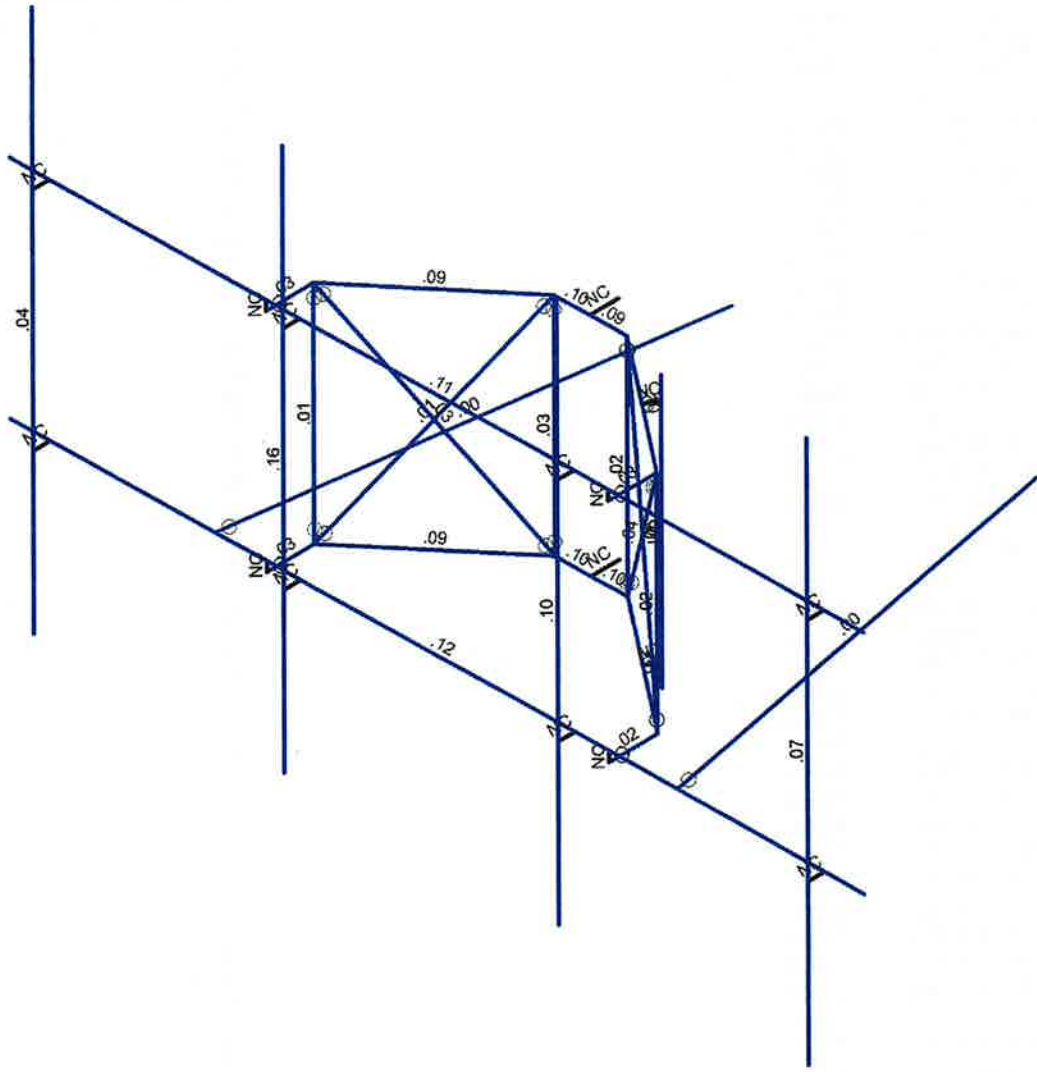
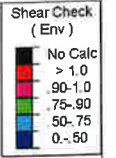
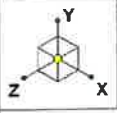
July 21, 2023 at 3:58 PM

5000185944-VZW\_MT\_LOT\_B\_H.r3d



Member Code Checks Displayed (Enveloped)  
Envelope Only Solution

	SK - 2
	July 21, 2023 at 3:58 PM
	5000185944-VZW_MT_LOT_B_H.r3d



Member Shear Checks Displayed (Enveloped)  
Envelope Only Solution

	SK - 3
	July 21, 2023 at 3:58 PM
	5000185944-VZW_MT_LOT_B_H.r3d



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Basic Load Cases**

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...
1 Antenna D	None					42		
2 Antenna Di	None					42		
3 Antenna Wo (0 Deg)	None					42		
4 Antenna Wo (30 Deg)	None					42		
5 Antenna Wo (60 Deg)	None					42		
6 Antenna Wo (90 Deg)	None					42		
7 Antenna Wo (120 Deg)	None					42		
8 Antenna Wo (150 Deg)	None					42		
9 Antenna Wo (180 Deg)	None					42		
10 Antenna Wo (210 Deg)	None					42		
11 Antenna Wo (240 Deg)	None					42		
12 Antenna Wo (270 Deg)	None					42		
13 Antenna Wo (300 Deg)	None					42		
14 Antenna Wo (330 Deg)	None					42		
15 Antenna Wi (0 Deg)	None					42		
16 Antenna Wi (30 Deg)	None					42		
17 Antenna Wi (60 Deg)	None					42		
18 Antenna Wi (90 Deg)	None					42		
19 Antenna Wi (120 Deg)	None					42		
20 Antenna Wi (150 Deg)	None					42		
21 Antenna Wi (180 Deg)	None					42		
22 Antenna Wi (210 Deg)	None					42		
23 Antenna Wi (240 Deg)	None					42		
24 Antenna Wi (270 Deg)	None					42		
25 Antenna Wi (300 Deg)	None					42		
26 Antenna Wi (330 Deg)	None					42		
27 Antenna Wm (0 Deg)	None					42		
28 Antenna Wm (30 Deg)	None					42		
29 Antenna Wm (60 Deg)	None					42		
30 Antenna Wm (90 Deg)	None					42		
31 Antenna Wm (120 Deg)	None					42		
32 Antenna Wm (150 Deg)	None					42		
33 Antenna Wm (180 Deg)	None					42		
34 Antenna Wm (210 Deg)	None					42		
35 Antenna Wm (240 Deg)	None					42		
36 Antenna Wm (270 Deg)	None					42		
37 Antenna Wm (300 Deg)	None					42		
38 Antenna Wm (330 Deg)	None					42		
39 Structure D	None		-1					
40 Structure Di	None						29	
41 Structure Wo (0 Deg)	None						58	
42 Structure Wo (30 Deg)	None						58	
43 Structure Wo (60 Deg)	None						58	
44 Structure Wo (90 Deg)	None						58	
45 Structure Wo (120 D...	None						58	
46 Structure Wo (150 D...	None						58	
47 Structure Wo (180 D...	None						58	
48 Structure Wo (210 D...	None						58	
49 Structure Wo (240 D...	None						58	
50 Structure Wo (270 D...	None						58	
51 Structure Wo (300 D...	None						58	
52 Structure Wo (330 D...	None						58	
53 Structure Wi (0 Deg)	None						58	



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Basic Load Cases (Continued)**

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...)
54 Structure Wi (30 Deg)	None						58	
55 Structure Wi (60 Deg)	None						58	
56 Structure Wi (90 Deg)	None						58	
57 Structure Wi (120 De..)	None						58	
58 Structure Wi (150 De..)	None						58	
59 Structure Wi (180 De..)	None						58	
60 Structure Wi (210 De..)	None						58	
61 Structure Wi (240 De..)	None						58	
62 Structure Wi (270 De..)	None						58	
63 Structure Wi (300 De..)	None						58	
64 Structure Wi (330 De..)	None						58	
65 Structure Wm (0 Deg)	None						58	
66 Structure Wm (30 De..)	None						58	
67 Structure Wm (60 De..)	None						58	
68 Structure Wm (90 De..)	None						58	
69 Structure Wm (120 D..)	None						58	
70 Structure Wm (150 D..)	None						58	
71 Structure Wm (180 D..)	None						58	
72 Structure Wm (210 D..)	None						58	
73 Structure Wm (240 D..)	None						58	
74 Structure Wm (270 D..)	None						58	
75 Structure Wm (300 D..)	None						58	
76 Structure Wm (330 D..)	None						58	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					42		
82 Antenna Eh (0 Deg)	None					28		
83 Antenna Eh (90 Deg)	None					28		
84 Structure Ev	ELY							
85 Structure Eh (0 Deg)	ELZ			-03				
86 Structure Eh (90 Deg)	ELX	.03						

**Load Combinations**

Description	Sol.	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1 1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1								
2 1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1								
3 1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1								
4 1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1								
5 1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1								
6 1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1								
7 1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1								
8 1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1								
9 1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1								
10 1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1								
11 1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1								
12 1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1								
13 1.2D + 1.0Di + 1.0Wi (0 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14 1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15 1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16 1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1				
17 1.2D + 1.0Di + 1.0Wi (120 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18 1.2D + 1.0Di + 1.0Wi (150 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19 1.2D + 1.0Di + 1.0Wi (180 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1				

**Load Combinations (Continued)**

	Description	Sol.	P.	S.	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	Fa	B.	
20	1.2D + 1.0Di + 1.0Wi (210 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + 1.0Wi (240 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + 1.0Wi (270 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + 1.0Wi (300 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										
24	1.2D + 1.0Di + 1.0Wi (330 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1										
25	1.2D + 1.5Lm1 + 1.0Wm (0 Deg)	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1												
26	1.2D + 1.5Lm1 + 1.0Wm (30 Deg)	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1												
27	1.2D + 1.5Lm1 + 1.0Wm (60 Deg)	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1												
28	1.2D + 1.5Lm1 + 1.0Wm (90 Deg)	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1												
29	1.2D + 1.5Lm1 + 1.0Wm (120 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1												
30	1.2D + 1.5Lm1 + 1.0Wm (150 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1												
31	1.2D + 1.5Lm1 + 1.0Wm (180 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1												
32	1.2D + 1.5Lm1 + 1.0Wm (210 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1												
33	1.2D + 1.5Lm1 + 1.0Wm (240 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1												
34	1.2D + 1.5Lm1 + 1.0Wm (270 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1												
35	1.2D + 1.5Lm1 + 1.0Wm (300 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1												
36	1.2D + 1.5Lm1 + 1.0Wm (330 D..)	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1												
37	1.2D + 1.5Lm2 + 1.0Wm (0 Deg)	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1												
38	1.2D + 1.5Lm2 + 1.0Wm (30 Deg)	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1												
39	1.2D + 1.5Lm2 + 1.0Wm (60 Deg)	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1												
40	1.2D + 1.5Lm2 + 1.0Wm (90 Deg)	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1												
41	1.2D + 1.5Lm2 + 1.0Wm (120 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1												
42	1.2D + 1.5Lm2 + 1.0Wm (150 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1												
43	1.2D + 1.5Lm2 + 1.0Wm (180 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1												
44	1.2D + 1.5Lm2 + 1.0Wm (210 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1												
45	1.2D + 1.5Lm2 + 1.0Wm (240 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1												
46	1.2D + 1.5Lm2 + 1.0Wm (270 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1												
47	1.2D + 1.5Lm2 + 1.0Wm (300 D..)	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1												
48	1.2D + 1.5Lm2 + 1.0Wm (330 D..)	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	1.2D + 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83	E...	1	E...								
53	1.2D + 1.0Ev + 1.0Eh (30 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	E...	.866	E...	.5	E...	.866				
54	1.2D + 1.0Ev + 1.0Eh (60 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	E...	.5	E...	.866						
55	1.2D + 1.0Ev + 1.0Eh (90 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	E...		E...	1						
56	1.2D + 1.0Ev + 1.0Eh (120 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	E...	-.5	E...	.866						
57	1.2D + 1.0Ev + 1.0Eh (150 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8	83	.5	E...	-.8	E...	.5						
58	1.2D + 1.0Ev + 1.0Eh (180 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83	E...	-1	E...								
59	1.2D + 1.0Ev + 1.0Eh (210 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8	83	-.5	E...	-.8	E...	-.5						
60	1.2D + 1.0Ev + 1.0Eh (240 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.8	E...	-.5	E...	-.8						
61	1.2D + 1.0Ev + 1.0Eh (270 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	E...		E...	-1						
62	1.2D + 1.0Ev + 1.0Eh (300 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.8	E...	.5	E...	-.8						
63	1.2D + 1.0Ev + 1.0Eh (330 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	E...	.866	E...	-.5						
64	0.9D - 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83	E...	1	E...								
65	0.9D - 1.0Ev + 1.0Eh (30 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	E...	.866	E...	.5						
66	0.9D - 1.0Ev + 1.0Eh (60 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	E...	.5	E...	.866						
67	0.9D - 1.0Ev + 1.0Eh (90 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	E...		E...	1						
68	0.9D - 1.0Ev + 1.0Eh (120 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	E...	-.5	E...	.866						
69	0.9D - 1.0Ev + 1.0Eh (150 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8	83	.5	E...	-.8	E...	.5						
70	0.9D - 1.0Ev + 1.0Eh (180 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83	E...	-1	E...								
71	0.9D - 1.0Ev + 1.0Eh (210 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8	83	-.5	E...	-.8	E...	-.5						
72	0.9D - 1.0Ev + 1.0Eh (240 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.8	E...	-.5	E...	-.8						
73	0.9D - 1.0Ev + 1.0Eh (270 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	E...		E...	-1						
74	0.9D - 1.0Ev + 1.0Eh (300 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.8	E...	.5	E...	-.8						
75	0.9D - 1.0Ev + 1.0Eh (330 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	E...	.866	E...	-.5						





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Joint Coordinates and Temperatures**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.416667	0.145833	8.364383	0	
2	N2	-9.083333	0.145833	8.364383	0	
3	N3	3.416667	3.479167	8.364383	0	
4	N4	-9.083333	3.479167	8.364383	0	
5	N5	-8.5	0.145833	8.364383	0	
6	N6	-8.5	3.479167	8.364383	0	
7	N7	-4.833333	0.145833	8.364383	0	
8	N8	-4.833333	3.479167	8.364383	0	
9	N9	-0.833333	0.145833	8.364383	0	
10	N10	-0.833333	3.479167	8.364383	0	
11	N11	2.833333	0.145833	8.364383	0	
12	N12	2.833333	3.479167	8.364383	0	
13	N13	-8.5	0.145833	8.614383	0	
14	N14	-8.5	3.479167	8.614383	0	
15	N15	-4.833333	0.145833	8.614383	0	
16	N16	-4.833333	3.479167	8.614383	0	
17	N17	-0.833333	0.145833	8.614383	0	
18	N18	-0.833333	3.479167	8.614383	0	
19	N19	2.833333	0.145833	8.614383	0	
20	N20	2.833333	3.479167	8.614383	0	
21	N21	-5.333333	0	8.364417	0	
22	N22	-5.333333	3.333333	8.364417	0	
23	N23	-0.333333	0	8.364383	0	
24	N24	-0.333333	3.333333	8.364417	0	
25	N25	-5.333333	0	7.661458	0	
26	N26	-5.333333	3.333333	7.661458	0	
27	N27	-0.333333	0	7.661458	0	
28	N28	-0.333333	3.333333	7.661458	0	
29	N29	-2.833333	0	6.119792	0	
30	N30	-2.833333	3.333333	6.119792	0	
31	N31	-3.364583	0	6.119792	0	
32	N32	-3.364583	3.333333	6.119792	0	
33	N33	-2.302083	0	6.119792	0	
34	N34	-2.302083	3.333333	6.119792	0	
35	N35	-2.833333	0	5.703125	0	
36	N36	-2.833333	3.333333	5.703125	0	
37	N37	-6.083328	0.145833	8.364383	0	
38	N38	0.66666	0.145833	8.364383	0	
39	N39	-8.5	5.8125	8.614383	0	
40	N40	-4.833333	5.8125	8.614383	0	
41	N41	-0.833333	5.8125	8.614383	0	
42	N42	2.833333	5.8125	8.614383	0	
43	N43	-8.5	-2.1875	8.614383	0	
44	N44	-4.833333	-2.1875	8.614383	0	
45	N45	-0.833333	-2.1875	8.614383	0	
46	N46	2.833333	-2.1875	8.614383	0	
47	N58	-5.333333	3.333333	7.708333	0	
48	N76	-2.927083	0	6.119792	0	
49	N77	-3.229167	0	6.119792	0	
50	N78	-2.739583	0	6.119792	0	
51	N79	-2.4375	0	6.119792	0	
52	N80	-2.927083	3.333333	6.119792	0	
53	N81	-3.229167	3.333333	6.119792	0	
54	N82	-2.739583	3.333333	6.119792	0	
55	N83	-2.4375	3.333333	6.119792	0	
56	N58A	-2.833333	3.479167	8.364383	0	



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N59	-5.333333	0.145833	8.364383	0	
58	N60	-5.333333	3.479167	8.364383	0	
59	N61	-0.333333	0.145833	8.364383	0	
60	N62	-0.333333	3.479167	8.364383	0	
61	N63	-5.083333	0.145834	1.806011	0	
62	N66	-0.583333	0.145834	1.806011	0	
63	N70A	-1.317042	3.333333	6.890625	0	
64	N71A	-1.317042	0	6.890625	0	
65	N72	-1.212875	3.333333	6.710203	0	
66	N73B	-1.212875	0	6.710203	0	
67	N74A	-1.212875	3.666667	6.710203	0	
68	N75	-1.212875	-0.333333	6.710203	0	

**Hot Rolled Steel Section Sets**

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount pi...	PIPE 2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE 2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR 0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE 2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR 0.625	Beam	BAR	Q235	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253

**Hot Rolled Steel Properties**

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	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	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N6	N14			RIGID	None	None	RIGID	Typical
5	M5	N8	N16			RIGID	None	None	RIGID	Typical
6	M6	N7	N15			RIGID	None	None	RIGID	Typical
7	M9	N10	N18			RIGID	None	None	RIGID	Typical
8	M10	N9	N17			RIGID	None	None	RIGID	Typical
9	M11	N12	N20			RIGID	None	None	RIGID	Typical
10	M12	N11	N19			RIGID	None	None	RIGID	Typical
11	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
13	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
14	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
15	M17	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
16	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical
17	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
18	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
19	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
20	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
21	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
22	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
23	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
24	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
25	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
26	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
27	M29	N29	N35			RIGID	None	None	RIGID	Typical
28	M30	N30	N36			RIGID	None	None	RIGID	Typical
29	M31	N37	N63			Tieback	Beam	Pipe	Q235	Typical
30	M32	N38	N66			Tieback	Beam	Pipe	Q235	Typical
31	MP4A	N39	N43			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
32	MP3A	N40	N44			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
33	MP2A	N41	N45			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
34	MP1A	N42	N46			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
35	M44	N25	N26			Standoff Vertical	Beam	BAR	Q235	Typical
36	M45	N31	N32			Standoff Vertical	Beam	BAR	Q235	Typical
37	M46	N33	N34			Standoff Vertical	Beam	BAR	Q235	Typical
38	M47	N27	N28			Standoff Vertical	Beam	BAR	Q235	Typical
39	M47B	N22	N60			RIGID	None	None	RIGID	Typical
40	M48A	N21	N59			RIGID	None	None	RIGID	Typical
41	M49A	N24	N62			RIGID	None	None	RIGID	Typical
42	M50A	N23	N61			RIGID	None	None	RIGID	Typical
43	M46A	N30	N36			RIGID	None	None	RIGID	Typical
44	M47A	N29	N35			RIGID	None	None	RIGID	Typical
45	M48	N70A	N72			RIGID	None	None	RIGID	Typical
46	M49	N71A	N73B			RIGID	None	None	RIGID	Typical
47	M45A	N74A	N75			Antenna Pipe	Beam	Pipe	A53 Gr. B	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	M1						Yes				None
2	M2						Yes				None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M9						Yes	** NA **			None
8	M10						Yes	** NA **			None
9	M11						Yes	** NA **			None
10	M12						Yes	** NA **			None
11	M13	OOOXOX					Yes	Default			None
12	M14	OOOXOX					Yes	Default			None
13	M15	OOOXOX					Yes				None
14	M16	OOOXOX					Yes				None
15	M17						Yes	Default			None
16	M18						Yes				None
17	M19						Yes				None
18	M20						Yes	Default			None
19	M21						Yes	Default			None
20	M22						Yes				None
21	M23						Yes				None
22	M24						Yes				None



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat	Analysis ...	Inactive	Seismic...
23	M25	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
24	M26	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
25	M27	BenPIN	BenPIN			Euler Buc...	Yes				None
26	M28	BenPIN	BenPIN			Euler Buc...	Yes				None
27	M29						Yes	** NA **		Inactive	None
28	M30						Yes	** NA **		Inactive	None
29	M31	BenPIN					Yes	Default			None
30	M32	BenPIN					Yes	Default			None
31	MP4A						Yes				None
32	MP3A						Yes				None
33	MP2A						Yes				None
34	MP1A						Yes				None
35	M44	BenPIN	BenPIN				Yes				None
36	M45	BenPIN	BenPIN				Yes				None
37	M46	BenPIN	BenPIN				Yes				None
38	M47	BenPIN	BenPIN				Yes	Default			None
39	M47B						Yes	** NA **			None
40	M48A						Yes	** NA **			None
41	M49A						Yes	** NA **			None
42	M50A						Yes	** NA **			None
43	M46A						Yes	** NA **			None
44	M47A						Yes	** NA **			None
45	M48		OOOXOO				Yes	** NA **			None
46	M49		OOOXOO				Yes	** NA **			None
47	M45A						Yes				None

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-17.6	1
2	MP3A	My	.009	1
3	MP3A	Mz	0	1
4	MP3A	Y	-17.6	1
5	MP3A	Mv	.009	1
6	MP3A	Mz	0	1
7	MP3A	Y	-31.65	.5
8	MP3A	My	-.016	.5
9	MP3A	Mz	.018	.5
10	MP3A	Y	-31.65	4.5
11	MP3A	My	-.016	4.5
12	MP3A	Mz	.018	4.5
13	MP3A	Y	-31.65	.5
14	MP3A	My	-.016	.5
15	MP3A	Mz	-.018	.5
16	MP3A	Y	-31.65	4.5
17	MP3A	Mv	-.016	4.5
18	MP3A	Mz	-.018	4.5
19	MP1A	Y	-43.55	1.5
20	MP1A	My	-.022	1.5
21	MP1A	Mz	0	1.5
22	MP1A	Y	-43.55	3.5
23	MP1A	Mv	-.022	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	-84.4	4
26	MP2A	Mv	.042	4
27	MP2A	Mz	0	4



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
28	MP3A	Y	-70.3	4
29	MP3A	My	.035	4
30	MP3A	Mz	.035	4
31	MP3A	Y	-10.4	4
32	MP3A	My	.005	4
33	MP3A	Mz	-.003	4
34	MP2A	Y	-20	.5
35	MP2A	My	-.015	.5
36	MP2A	Mz	0	.5
37	MP2A	Y	-20	4.5
38	MP2A	My	-.015	4.5
39	MP2A	Mz	0	4.5
40	M45A	Y	-32	2
41	M45A	My	0	2
42	M45A	Mz	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-20.426	1
2	MP3A	My	.01	1
3	MP3A	Mz	0	1
4	MP3A	Y	-20.426	1
5	MP3A	My	.01	1
6	MP3A	Mz	0	1
7	MP3A	Y	-80.956	.5
8	MP3A	My	-.04	.5
9	MP3A	Mz	.047	.5
10	MP3A	Y	-80.956	4.5
11	MP3A	My	-.04	4.5
12	MP3A	Mz	.047	4.5
13	MP3A	Y	-80.956	.5
14	MP3A	My	-.04	.5
15	MP3A	Mz	-.047	.5
16	MP3A	Y	-80.956	4.5
17	MP3A	My	-.04	4.5
18	MP3A	Mz	-.047	4.5
19	MP1A	Y	-41.334	1.5
20	MP1A	My	-.021	1.5
21	MP1A	Mz	0	1.5
22	MP1A	Y	-41.334	3.5
23	MP1A	My	-.021	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	-52.232	4
26	MP2A	My	.026	4
27	MP2A	Mz	0	4
28	MP3A	Y	-47.027	4
29	MP3A	My	.024	4
30	MP3A	Mz	.024	4
31	MP3A	Y	-12.738	4
32	MP3A	My	.006	4
33	MP3A	Mz	-.003	4
34	MP2A	Y	-70.781	.5
35	MP2A	My	-.053	.5
36	MP2A	Mz	0	.5
37	MP2A	Y	-70.781	4.5
38	MP2A	My	-.053	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
39	MP2A	Mz	0	4.5
40	M45A	Y	-88.021	2
41	M45A	Mv	0	2
42	M45A	Mz	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	0	1
2	MP3A	Z	-46.423	1
3	MP3A	Mx	0	1
4	MP3A	X	0	1
5	MP3A	Z	-46.423	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	-220.268	.5
9	MP3A	Mx	-.128	.5
10	MP3A	X	0	4.5
11	MP3A	Z	-220.268	4.5
12	MP3A	Mx	-.128	4.5
13	MP3A	X	0	.5
14	MP3A	Z	-220.268	.5
15	MP3A	Mx	.128	.5
16	MP3A	X	0	4.5
17	MP3A	Z	-220.268	4.5
18	MP3A	Mx	.128	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	-94.78	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	-94.78	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	-74.954	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-74.954	4
30	MP3A	Mx	-.037	4
31	MP3A	X	0	4
32	MP3A	Z	-17.892	4
33	MP3A	Mx	.004	4
34	MP2A	X	0	.5
35	MP2A	Z	-133.225	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-133.225	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	-144.105	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	19.169	1
2	MP3A	Z	-33.201	1
3	MP3A	Mx	.01	1
4	MP3A	X	19.169	1



Company  
Designer  
Job Number  
Model Name

July 21, 2023  
3:59 PM  
Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
5	MP3A	Z	-33.201	1
6	MP3A	Mx	.01	1
7	MP3A	X	100.684	.5
8	MP3A	Z	-174.39	.5
9	MP3A	Mx	-.152	.5
10	MP3A	X	100.684	4.5
11	MP3A	Z	-174.39	4.5
12	MP3A	Mx	-.152	4.5
13	MP3A	X	100.684	.5
14	MP3A	Z	-174.39	.5
15	MP3A	Mx	.051	.5
16	MP3A	X	100.684	4.5
17	MP3A	Z	-174.39	4.5
18	MP3A	Mx	.051	4.5
19	MP1A	X	39.623	1.5
20	MP1A	Z	-68.629	1.5
21	MP1A	Mx	-.02	1.5
22	MP1A	X	39.623	3.5
23	MP1A	Z	-68.629	3.5
24	MP1A	Mx	-.02	3.5
25	MP2A	X	34.394	4
26	MP2A	Z	-59.572	4
27	MP2A	Mx	.017	4
28	MP3A	X	33.246	4
29	MP3A	Z	-57.583	4
30	MP3A	Mx	-.012	4
31	MP3A	X	8.257	4
32	MP3A	Z	-14.302	4
33	MP3A	Mx	.008	4
34	MP2A	X	57.122	.5
35	MP2A	Z	-98.938	.5
36	MP2A	Mx	-.043	.5
37	MP2A	X	57.122	4.5
38	MP2A	Z	-98.938	4.5
39	MP2A	Mx	-.043	4.5
40	M45A	X	76.646	2
41	M45A	Z	-132.756	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	19.196	1
2	MP3A	Z	-11.083	1
3	MP3A	Mx	.01	1
4	MP3A	X	19.196	1
5	MP3A	Z	-11.083	1
6	MP3A	Mx	.01	1
7	MP3A	X	141.655	.5
8	MP3A	Z	-81.784	.5
9	MP3A	Mx	-.119	.5
10	MP3A	X	141.655	4.5
11	MP3A	Z	-81.784	4.5
12	MP3A	Mx	-.119	4.5
13	MP3A	X	141.655	.5
14	MP3A	Z	-81.784	.5
15	MP3A	Mx	-.023	.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
16	MP3A	X	141.655	4.5
17	MP3A	Z	-81.784	4.5
18	MP3A	Mx	-.023	4.5
19	MP1A	X	41.722	1.5
20	MP1A	Z	-24.088	1.5
21	MP1A	Mx	-.021	1.5
22	MP1A	X	41.722	3.5
23	MP1A	Z	-24.088	3.5
24	MP1A	Mx	-.021	3.5
25	MP2A	X	48.893	4
26	MP2A	Z	-28.229	4
27	MP2A	Mx	.024	4
28	MP3A	X	42.926	4
29	MP3A	Z	-24.783	4
30	MP3A	Mx	.009	4
31	MP3A	X	11.914	4
32	MP3A	Z	-6.879	4
33	MP3A	Mx	.008	4
34	MP2A	X	66.064	.5
35	MP2A	Z	-38.142	.5
36	MP2A	Mx	-.05	.5
37	MP2A	X	66.064	4.5
38	MP2A	Z	-38.142	4.5
39	MP2A	Mx	-.05	4.5
40	M45A	X	124.799	2
41	M45A	Z	-72.052	2
42	M45A	Mx	0	2

**Member Point Loads (BLC 6 : Antenna Wo (90 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	14.08	1
2	MP3A	Z	0	1
3	MP3A	Mx	.007	1
4	MP3A	X	14.08	1
5	MP3A	Z	0	1
6	MP3A	Mx	.007	1
7	MP3A	X	144.669	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	-.072	.5
10	MP3A	X	144.669	4.5
11	MP3A	Z	0	4.5
12	MP3A	Mx	-.072	4.5
13	MP3A	X	144.669	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	-.072	.5
16	MP3A	X	144.669	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	-.072	4.5
19	MP1A	X	32.641	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	-.016	1.5
22	MP1A	X	32.641	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.016	3.5
25	MP2A	X	50.292	4
26	MP2A	Z	0	4





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
27	MP2A	Mx	.025	4
28	MP3A	X	41.104	4
29	MP3A	Z	0	4
30	MP3A	Mx	.021	4
31	MP3A	X	12.379	4
32	MP3A	Z	0	4
33	MP3A	Mx	.006	4
34	MP2A	X	57.303	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.043	.5
37	MP2A	X	57.303	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.043	4.5
40	M45A	X	125.729	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	19.196	1
2	MP3A	Z	11.083	1
3	MP3A	Mx	.01	1
4	MP3A	X	19.196	1
5	MP3A	Z	11.083	1
6	MP3A	Mx	.01	1
7	MP3A	X	141.655	.5
8	MP3A	Z	81.784	.5
9	MP3A	Mx	-.023	.5
10	MP3A	X	141.655	4.5
11	MP3A	Z	81.784	4.5
12	MP3A	Mx	-.023	4.5
13	MP3A	X	141.655	.5
14	MP3A	Z	81.784	.5
15	MP3A	Mx	-.119	.5
16	MP3A	X	141.655	4.5
17	MP3A	Z	81.784	4.5
18	MP3A	Mx	-.119	4.5
19	MP1A	X	41.722	1.5
20	MP1A	Z	24.088	1.5
21	MP1A	Mx	-.021	1.5
22	MP1A	X	41.722	3.5
23	MP1A	Z	24.088	3.5
24	MP1A	Mx	-.021	3.5
25	MP2A	X	48.893	4
26	MP2A	Z	28.229	4
27	MP2A	Mx	.024	4
28	MP3A	X	42.926	4
29	MP3A	Z	24.783	4
30	MP3A	Mx	.034	4
31	MP3A	X	11.914	4
32	MP3A	Z	6.879	4
33	MP3A	Mx	.004	4
34	MP2A	X	66.064	.5
35	MP2A	Z	38.142	.5
36	MP2A	Mx	-.05	.5
37	MP2A	X	66.064	4.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP2A	Z	38.142	4.5
39	MP2A	Mx	-.05	4.5
40	M45A	X	100.928	2
41	M45A	Z	58.271	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	19.169	1
2	MP3A	Z	33.201	1
3	MP3A	Mx	.01	1
4	MP3A	X	19.169	1
5	MP3A	Z	33.201	1
6	MP3A	Mx	.01	1
7	MP3A	X	100.684	.5
8	MP3A	Z	174.39	.5
9	MP3A	Mx	.051	.5
10	MP3A	X	100.684	4.5
11	MP3A	Z	174.39	4.5
12	MP3A	Mx	.051	4.5
13	MP3A	X	100.684	.5
14	MP3A	Z	174.39	.5
15	MP3A	Mx	-.152	.5
16	MP3A	X	100.684	4.5
17	MP3A	Z	174.39	4.5
18	MP3A	Mx	-.152	4.5
19	MP1A	X	39.623	1.5
20	MP1A	Z	68.629	1.5
21	MP1A	Mx	-.02	1.5
22	MP1A	X	39.623	3.5
23	MP1A	Z	68.629	3.5
24	MP1A	Mx	-.02	3.5
25	MP2A	X	34.394	4
26	MP2A	Z	59.572	4
27	MP2A	Mx	.017	4
28	MP3A	X	33.246	4
29	MP3A	Z	57.583	4
30	MP3A	Mx	.045	4
31	MP3A	X	8.257	4
32	MP3A	Z	14.302	4
33	MP3A	Mx	.000553	4
34	MP2A	X	57.122	.5
35	MP2A	Z	98.938	.5
36	MP2A	Mx	-.043	.5
37	MP2A	X	57.122	4.5
38	MP2A	Z	98.938	4.5
39	MP2A	Mx	-.043	4.5
40	M45A	X	62.865	2
41	M45A	Z	108.885	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	1
2	MP3A	Z	46.423	1
3	MP3A	Mx	0	1



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
4	MP3A	X	0	1
5	MP3A	Z	46.423	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	220.268	.5
9	MP3A	Mx	.128	.5
10	MP3A	X	0	4.5
11	MP3A	Z	220.268	4.5
12	MP3A	Mx	.128	4.5
13	MP3A	X	0	.5
14	MP3A	Z	220.268	.5
15	MP3A	Mx	-.128	.5
16	MP3A	X	0	4.5
17	MP3A	Z	220.268	4.5
18	MP3A	Mx	-.128	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	94.78	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	94.78	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	74.954	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	74.954	4
30	MP3A	Mx	.037	4
31	MP3A	X	0	4
32	MP3A	Z	17.892	4
33	MP3A	Mx	-.004	4
34	MP2A	X	0	.5
35	MP2A	Z	133.225	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	133.225	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	144.105	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-19.169	1
2	MP3A	Z	33.201	1
3	MP3A	Mx	-.01	1
4	MP3A	X	-19.169	1
5	MP3A	Z	33.201	1
6	MP3A	Mx	-.01	1
7	MP3A	X	-100.684	.5
8	MP3A	Z	174.39	.5
9	MP3A	Mx	.152	.5
10	MP3A	X	-100.684	4.5
11	MP3A	Z	174.39	4.5
12	MP3A	Mx	.152	4.5
13	MP3A	X	-100.684	.5
14	MP3A	Z	174.39	.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
15	MP3A	Mx	-.051	.5
16	MP3A	X	-100.684	4.5
17	MP3A	Z	174.39	4.5
18	MP3A	Mx	-.051	4.5
19	MP1A	X	-39.623	1.5
20	MP1A	Z	68.629	1.5
21	MP1A	Mx	.02	1.5
22	MP1A	X	-39.623	3.5
23	MP1A	Z	68.629	3.5
24	MP1A	Mx	.02	3.5
25	MP2A	X	-34.394	4
26	MP2A	Z	59.572	4
27	MP2A	Mx	-.017	4
28	MP3A	X	-33.246	4
29	MP3A	Z	57.583	4
30	MP3A	Mx	.012	4
31	MP3A	X	-8.257	4
32	MP3A	Z	14.302	4
33	MP3A	Mx	-.008	4
34	MP2A	X	-57.122	.5
35	MP2A	Z	98.938	.5
36	MP2A	Mx	.043	.5
37	MP2A	X	-57.122	4.5
38	MP2A	Z	98.938	4.5
39	MP2A	Mx	.043	4.5
40	M45A	X	-76.646	2
41	M45A	Z	132.756	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-19.196	1
2	MP3A	Z	11.083	1
3	MP3A	Mx	-.01	1
4	MP3A	X	-19.196	1
5	MP3A	Z	11.083	1
6	MP3A	Mx	-.01	1
7	MP3A	X	-141.655	.5
8	MP3A	Z	81.784	.5
9	MP3A	Mx	.119	.5
10	MP3A	X	-141.655	4.5
11	MP3A	Z	81.784	4.5
12	MP3A	Mx	.119	4.5
13	MP3A	X	-141.655	.5
14	MP3A	Z	81.784	.5
15	MP3A	Mx	.023	.5
16	MP3A	X	-141.655	4.5
17	MP3A	Z	81.784	4.5
18	MP3A	Mx	.023	4.5
19	MP1A	X	-41.722	1.5
20	MP1A	Z	24.088	1.5
21	MP1A	Mx	.021	1.5
22	MP1A	X	-41.722	3.5
23	MP1A	Z	24.088	3.5
24	MP1A	Mx	.021	3.5
25	MP2A	X	-48.893	4



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
26	MP2A	Z	28.229	4
27	MP2A	Mx	-.024	4
28	MP3A	X	-42.926	4
29	MP3A	Z	24.783	4
30	MP3A	Mx	-.009	4
31	MP3A	X	-11.914	4
32	MP3A	Z	6.879	4
33	MP3A	Mx	-.008	4
34	MP2A	X	-66.064	.5
35	MP2A	Z	38.142	.5
36	MP2A	Mx	.05	.5
37	MP2A	X	-66.064	4.5
38	MP2A	Z	38.142	4.5
39	MP2A	Mx	.05	4.5
40	M45A	X	-124.799	2
41	M45A	Z	72.052	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-14.08	1
2	MP3A	Z	0	1
3	MP3A	Mx	-.007	1
4	MP3A	X	-14.08	1
5	MP3A	Z	0	1
6	MP3A	Mx	-.007	1
7	MP3A	X	-144.669	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	.072	.5
10	MP3A	X	-144.669	4.5
11	MP3A	Z	0	4.5
12	MP3A	Mx	.072	4.5
13	MP3A	X	-144.669	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	.072	.5
16	MP3A	X	-144.669	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	.072	4.5
19	MP1A	X	-32.641	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	.016	1.5
22	MP1A	X	-32.641	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	.016	3.5
25	MP2A	X	-50.292	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.025	4
28	MP3A	X	-41.104	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.021	4
31	MP3A	X	-12.379	4
32	MP3A	Z	0	4
33	MP3A	Mx	-.006	4
34	MP2A	X	-57.303	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.043	.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
37	MP2A	X	-57.303	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.043	4.5
40	M45A	X	-125.729	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-19.196	1
2	MP3A	Z	-11.083	1
3	MP3A	Mx	-.01	1
4	MP3A	X	-19.196	1
5	MP3A	Z	-11.083	1
6	MP3A	Mx	-.01	1
7	MP3A	X	-141.655	.5
8	MP3A	Z	-81.784	.5
9	MP3A	Mx	.023	.5
10	MP3A	X	-141.655	4.5
11	MP3A	Z	-81.784	4.5
12	MP3A	Mx	.023	4.5
13	MP3A	X	-141.655	.5
14	MP3A	Z	-81.784	.5
15	MP3A	Mx	.119	.5
16	MP3A	X	-141.655	4.5
17	MP3A	Z	-81.784	4.5
18	MP3A	Mx	.119	4.5
19	MP1A	X	-41.722	1.5
20	MP1A	Z	-24.088	1.5
21	MP1A	Mx	.021	1.5
22	MP1A	X	-41.722	3.5
23	MP1A	Z	-24.088	3.5
24	MP1A	Mx	.021	3.5
25	MP2A	X	-48.893	4
26	MP2A	Z	-28.229	4
27	MP2A	Mx	-.024	4
28	MP3A	X	-42.926	4
29	MP3A	Z	-24.783	4
30	MP3A	Mx	-.034	4
31	MP3A	X	-11.914	4
32	MP3A	Z	-6.879	4
33	MP3A	Mx	-.004	4
34	MP2A	X	-66.064	.5
35	MP2A	Z	-38.142	.5
36	MP2A	Mx	.05	.5
37	MP2A	X	-66.064	4.5
38	MP2A	Z	-38.142	4.5
39	MP2A	Mx	.05	4.5
40	M45A	X	-100.928	2
41	M45A	Z	-58.271	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-19.169	1
2	MP3A	Z	-33.201	1



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP3A	Mx	-.01	1
4	MP3A	X	-19.169	1
5	MP3A	Z	-33.201	1
6	MP3A	Mx	-.01	1
7	MP3A	X	-100.684	.5
8	MP3A	Z	-174.39	.5
9	MP3A	Mx	-.051	.5
10	MP3A	X	-100.684	4.5
11	MP3A	Z	-174.39	4.5
12	MP3A	Mx	-.051	4.5
13	MP3A	X	-100.684	.5
14	MP3A	Z	-174.39	.5
15	MP3A	Mx	.152	.5
16	MP3A	X	-100.684	4.5
17	MP3A	Z	-174.39	4.5
18	MP3A	Mx	.152	4.5
19	MP1A	X	-39.623	1.5
20	MP1A	Z	-68.629	1.5
21	MP1A	Mx	.02	1.5
22	MP1A	X	-39.623	3.5
23	MP1A	Z	-68.629	3.5
24	MP1A	Mx	.02	3.5
25	MP2A	X	-34.394	4
26	MP2A	Z	-59.572	4
27	MP2A	Mx	-.017	4
28	MP3A	X	-33.246	4
29	MP3A	Z	-57.583	4
30	MP3A	Mx	-.045	4
31	MP3A	X	-8.257	4
32	MP3A	Z	-14.302	4
33	MP3A	Mx	-.000553	4
34	MP2A	X	-57.122	.5
35	MP2A	Z	-98.938	.5
36	MP2A	Mx	.043	.5
37	MP2A	X	-57.122	4.5
38	MP2A	Z	-98.938	4.5
39	MP2A	Mx	.043	4.5
40	M45A	X	-62.865	2
41	M45A	Z	-108.885	2
42	M45A	Mx	0	2

**Member Point Loads (BLC 15 : Antenna Wi (0 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	1
2	MP3A	Z	-9.242	1
3	MP3A	Mx	0	1
4	MP3A	X	0	1
5	MP3A	Z	-9.242	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	-36.733	.5
9	MP3A	Mx	-.021	.5
10	MP3A	X	0	4.5
11	MP3A	Z	-36.733	4.5
12	MP3A	Mx	-.021	4.5
13	MP3A	X	0	.5

**Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
14	MP3A	Z	-36.733	.5
15	MP3A	Mx	.021	.5
16	MP3A	X	0	4.5
17	MP3A	Z	-36.733	4.5
18	MP3A	Mx	.021	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	-19.612	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	-19.612	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	-16.66	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-16.66	4
30	MP3A	Mx	-.008	4
31	MP3A	X	0	4
32	MP3A	Z	-4.157	4
33	MP3A	Mx	.001	4
34	MP2A	X	0	.5
35	MP2A	Z	-33.143	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-33.143	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	-29.378	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	3.914	1
2	MP3A	Z	-6.778	1
3	MP3A	Mx	.002	1
4	MP3A	X	3.914	1
5	MP3A	Z	-6.778	1
6	MP3A	Mx	.002	1
7	MP3A	X	16.921	.5
8	MP3A	Z	-29.308	.5
9	MP3A	Mx	-.026	.5
10	MP3A	X	16.921	4.5
11	MP3A	Z	-29.308	4.5
12	MP3A	Mx	-.026	4.5
13	MP3A	X	16.921	.5
14	MP3A	Z	-29.308	.5
15	MP3A	Mx	.009	.5
16	MP3A	X	16.921	4.5
17	MP3A	Z	-29.308	4.5
18	MP3A	Mx	.009	4.5
19	MP1A	X	8.411	1.5
20	MP1A	Z	-14.569	1.5
21	MP1A	Mx	-.004	1.5
22	MP1A	X	8.411	3.5
23	MP1A	Z	-14.569	3.5
24	MP1A	Mx	-.004	3.5





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP2A	X	7.704	4
26	MP2A	Z	-13.344	4
27	MP2A	Mx	.004	4
28	MP3A	X	7.466	4
29	MP3A	Z	-12.932	4
30	MP3A	Mx	-.003	4
31	MP3A	X	1.952	4
32	MP3A	Z	-3.381	4
33	MP3A	Mx	.002	4
34	MP2A	X	15.302	.5
35	MP2A	Z	-26.504	.5
36	MP2A	Mx	-.011	.5
37	MP2A	X	15.302	4.5
38	MP2A	Z	-26.504	4.5
39	MP2A	Mx	-.011	4.5
40	M45A	X	15.933	2
41	M45A	Z	-27.597	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	4.328	1
2	MP3A	Z	-2.499	1
3	MP3A	Mx	.002	1
4	MP3A	X	4.328	1
5	MP3A	Z	-2.499	1
6	MP3A	Mx	.002	1
7	MP3A	X	24.3	.5
8	MP3A	Z	-14.03	.5
9	MP3A	Mx	-.02	.5
10	MP3A	X	24.3	4.5
11	MP3A	Z	-14.03	4.5
12	MP3A	Mx	-.02	4.5
13	MP3A	X	24.3	.5
14	MP3A	Z	-14.03	.5
15	MP3A	Mx	-.004	.5
16	MP3A	X	24.3	4.5
17	MP3A	Z	-14.03	4.5
18	MP3A	Mx	-.004	4.5
19	MP1A	X	9.738	1.5
20	MP1A	Z	-5.622	1.5
21	MP1A	Mx	-.005	1.5
22	MP1A	X	9.738	3.5
23	MP1A	Z	-5.622	3.5
24	MP1A	Mx	-.005	3.5
25	MP2A	X	11.176	4
26	MP2A	Z	-6.453	4
27	MP2A	Mx	.006	4
28	MP3A	X	9.941	4
29	MP3A	Z	-5.739	4
30	MP3A	Mx	.002	4
31	MP3A	X	2.945	4
32	MP3A	Z	-1.7	4
33	MP3A	Mx	.002	4
34	MP2A	X	22.106	.5
35	MP2A	Z	-12.763	.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2A	Mx	-.017	.5
37	MP2A	X	22.106	4.5
38	MP2A	Z	-12.763	4.5
39	MP2A	Mx	-.017	4.5
40	M45A	X	25.442	2
41	M45A	Z	-14.689	2
42	M45A	Mx	0	2

**Member Point Loads (BLC 18 : Antenna Wi (90 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.584	1
2	MP3A	Z	0	1
3	MP3A	Mx	.002	1
4	MP3A	X	3.584	1
5	MP3A	Z	0	1
6	MP3A	Mx	.002	1
7	MP3A	X	25.168	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	-.013	.5
10	MP3A	X	25.168	4.5
11	MP3A	Z	0	4.5
12	MP3A	Mx	-.013	4.5
13	MP3A	X	25.168	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	-.013	.5
16	MP3A	X	25.168	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	-.013	4.5
19	MP1A	X	8.455	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	-.004	1.5
22	MP1A	X	8.455	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.004	3.5
25	MP2A	X	11.654	4
26	MP2A	Z	0	4
27	MP2A	Mx	.006	4
28	MP3A	X	9.751	4
29	MP3A	Z	0	4
30	MP3A	Mx	.005	4
31	MP3A	X	3.148	4
32	MP3A	Z	0	4
33	MP3A	Mx	.002	4
34	MP2A	X	22.987	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.017	.5
37	MP2A	X	22.987	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.017	4.5
40	M45A	X	24.403	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	4.328	1



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP3A	Z	2.499	1
3	MP3A	Mx	.002	1
4	MP3A	X	4.328	1
5	MP3A	Z	2.499	1
6	MP3A	Mx	.002	1
7	MP3A	X	24.3	.5
8	MP3A	Z	14.03	.5
9	MP3A	Mx	-.004	.5
10	MP3A	X	24.3	4.5
11	MP3A	Z	14.03	4.5
12	MP3A	Mx	-.004	4.5
13	MP3A	X	24.3	.5
14	MP3A	Z	14.03	.5
15	MP3A	Mx	-.02	.5
16	MP3A	X	24.3	4.5
17	MP3A	Z	14.03	4.5
18	MP3A	Mx	-.02	4.5
19	MP1A	X	9.738	1.5
20	MP1A	Z	5.622	1.5
21	MP1A	Mx	-.005	1.5
22	MP1A	X	9.738	3.5
23	MP1A	Z	5.622	3.5
24	MP1A	Mx	-.005	3.5
25	MP2A	X	11.176	4
26	MP2A	Z	6.453	4
27	MP2A	Mx	.006	4
28	MP3A	X	9.941	4
29	MP3A	Z	5.739	4
30	MP3A	Mx	.008	4
31	MP3A	X	2.945	4
32	MP3A	Z	1.7	4
33	MP3A	Mx	.001	4
34	MP2A	X	22.106	.5
35	MP2A	Z	12.763	.5
36	MP2A	Mx	-.017	.5
37	MP2A	X	22.106	4.5
38	MP2A	Z	12.763	4.5
39	MP2A	Mx	-.017	4.5
40	M45A	X	18.979	2
41	M45A	Z	10.958	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.914	1
2	MP3A	Z	6.778	1
3	MP3A	Mx	.002	1
4	MP3A	X	3.914	1
5	MP3A	Z	6.778	1
6	MP3A	Mx	.002	1
7	MP3A	X	16.921	.5
8	MP3A	Z	29.308	.5
9	MP3A	Mx	.009	.5
10	MP3A	X	16.921	4.5
11	MP3A	Z	29.308	4.5
12	MP3A	Mx	.009	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
13	MP3A	X	16.921	.5
14	MP3A	Z	29.308	.5
15	MP3A	Mx	-.026	.5
16	MP3A	X	16.921	4.5
17	MP3A	Z	29.308	4.5
18	MP3A	Mx	-.026	4.5
19	MP1A	X	8.411	1.5
20	MP1A	Z	14.569	1.5
21	MP1A	Mx	-.004	1.5
22	MP1A	X	8.411	3.5
23	MP1A	Z	14.569	3.5
24	MP1A	Mx	-.004	3.5
25	MP2A	X	7.704	4
26	MP2A	Z	13.344	4
27	MP2A	Mx	.004	4
28	MP3A	X	7.466	4
29	MP3A	Z	12.932	4
30	MP3A	Mx	.01	4
31	MP3A	X	1.952	4
32	MP3A	Z	3.381	4
33	MP3A	Mx	.000131	4
34	MP2A	X	15.302	.5
35	MP2A	Z	26.504	.5
36	MP2A	Mx	-.011	.5
37	MP2A	X	15.302	4.5
38	MP2A	Z	26.504	4.5
39	MP2A	Mx	-.011	4.5
40	M45A	X	12.201	2
41	M45A	Z	21.134	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	0	1
2	MP3A	Z	9.242	1
3	MP3A	Mx	0	1
4	MP3A	X	0	1
5	MP3A	Z	9.242	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	36.733	.5
9	MP3A	Mx	.021	.5
10	MP3A	X	0	4.5
11	MP3A	Z	36.733	4.5
12	MP3A	Mx	.021	4.5
13	MP3A	X	0	.5
14	MP3A	Z	36.733	.5
15	MP3A	Mx	-.021	.5
16	MP3A	X	0	4.5
17	MP3A	Z	36.733	4.5
18	MP3A	Mx	-.021	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	19.612	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	19.612	3.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	16.66	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	16.66	4
30	MP3A	Mx	.008	4
31	MP3A	X	0	4
32	MP3A	Z	4.157	4
33	MP3A	Mx	-.001	4
34	MP2A	X	0	.5
35	MP2A	Z	33.143	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	33.143	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	29.378	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.914	1
2	MP3A	Z	6.778	1
3	MP3A	Mx	-.002	1
4	MP3A	X	-3.914	1
5	MP3A	Z	6.778	1
6	MP3A	Mx	-.002	1
7	MP3A	X	-16.921	.5
8	MP3A	Z	29.308	.5
9	MP3A	Mx	.026	.5
10	MP3A	X	-16.921	4.5
11	MP3A	Z	29.308	4.5
12	MP3A	Mx	.026	4.5
13	MP3A	X	-16.921	.5
14	MP3A	Z	29.308	.5
15	MP3A	Mx	-.009	.5
16	MP3A	X	-16.921	4.5
17	MP3A	Z	29.308	4.5
18	MP3A	Mx	-.009	4.5
19	MP1A	X	-8.411	1.5
20	MP1A	Z	14.569	1.5
21	MP1A	Mx	.004	1.5
22	MP1A	X	-8.411	3.5
23	MP1A	Z	14.569	3.5
24	MP1A	Mx	.004	3.5
25	MP2A	X	-7.704	4
26	MP2A	Z	13.344	4
27	MP2A	Mx	-.004	4
28	MP3A	X	-7.466	4
29	MP3A	Z	12.932	4
30	MP3A	Mx	.003	4
31	MP3A	X	-1.952	4
32	MP3A	Z	3.381	4
33	MP3A	Mx	-.002	4
34	MP2A	X	-15.302	.5





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-3.584	1
2	MP3A	Z	0	1
3	MP3A	Mx	-.002	1
4	MP3A	X	-3.584	1
5	MP3A	Z	0	1
6	MP3A	Mx	-.002	1
7	MP3A	X	-25.168	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	.013	.5
10	MP3A	X	-25.168	4.5
11	MP3A	Z	0	4.5
12	MP3A	Mx	.013	4.5
13	MP3A	X	-25.168	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	.013	.5
16	MP3A	X	-25.168	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	.013	4.5
19	MP1A	X	-8.455	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	.004	1.5
22	MP1A	X	-8.455	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	.004	3.5
25	MP2A	X	-11.654	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.006	4
28	MP3A	X	-9.751	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.005	4
31	MP3A	X	-3.148	4
32	MP3A	Z	0	4
33	MP3A	Mx	-.002	4
34	MP2A	X	-22.987	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.017	.5
37	MP2A	X	-22.987	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.017	4.5
40	M45A	X	-24.403	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-4.328	1
2	MP3A	Z	-2.499	1
3	MP3A	Mx	-.002	1
4	MP3A	X	-4.328	1
5	MP3A	Z	-2.499	1
6	MP3A	Mx	-.002	1
7	MP3A	X	-24.3	.5
8	MP3A	Z	-14.03	.5
9	MP3A	Mx	.004	.5
10	MP3A	X	-24.3	4.5
11	MP3A	Z	-14.03	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP3A	Mx	.004	4.5
13	MP3A	X	-24.3	.5
14	MP3A	Z	-14.03	.5
15	MP3A	Mx	.02	.5
16	MP3A	X	-24.3	4.5
17	MP3A	Z	-14.03	4.5
18	MP3A	Mx	.02	4.5
19	MP1A	X	-9.738	1.5
20	MP1A	Z	-5.622	1.5
21	MP1A	Mx	.005	1.5
22	MP1A	X	-9.738	3.5
23	MP1A	Z	-5.622	3.5
24	MP1A	Mx	.005	3.5
25	MP2A	X	-11.176	4
26	MP2A	Z	-6.453	4
27	MP2A	Mx	-.006	4
28	MP3A	X	-9.941	4
29	MP3A	Z	-5.739	4
30	MP3A	Mx	-.008	4
31	MP3A	X	-2.945	4
32	MP3A	Z	-1.7	4
33	MP3A	Mx	-.001	4
34	MP2A	X	-22.106	.5
35	MP2A	Z	-12.763	.5
36	MP2A	Mx	.017	.5
37	MP2A	X	-22.106	4.5
38	MP2A	Z	-12.763	4.5
39	MP2A	Mx	.017	4.5
40	M45A	X	-18.979	2
41	M45A	Z	-10.958	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.914	1
2	MP3A	Z	-6.778	1
3	MP3A	Mx	-.002	1
4	MP3A	X	-3.914	1
5	MP3A	Z	-6.778	1
6	MP3A	Mx	-.002	1
7	MP3A	X	-16.921	.5
8	MP3A	Z	-29.308	.5
9	MP3A	Mx	-.009	.5
10	MP3A	X	-16.921	4.5
11	MP3A	Z	-29.308	4.5
12	MP3A	Mx	-.009	4.5
13	MP3A	X	-16.921	.5
14	MP3A	Z	-29.308	.5
15	MP3A	Mx	.026	.5
16	MP3A	X	-16.921	4.5
17	MP3A	Z	-29.308	4.5
18	MP3A	Mx	.026	4.5
19	MP1A	X	-8.411	1.5
20	MP1A	Z	-14.569	1.5
21	MP1A	Mx	.004	1.5
22	MP1A	X	-8.411	3.5





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
23	MP1A	Z	-14.569	3.5
24	MP1A	Mx	.004	3.5
25	MP2A	X	-7.704	4
26	MP2A	Z	-13.344	4
27	MP2A	Mx	-.004	4
28	MP3A	X	-7.466	4
29	MP3A	Z	-12.932	4
30	MP3A	Mx	-.01	4
31	MP3A	X	-1.952	4
32	MP3A	Z	-3.381	4
33	MP3A	Mx	-.000131	4
34	MP2A	X	-15.302	.5
35	MP2A	Z	-26.504	.5
36	MP2A	Mx	.011	.5
37	MP2A	X	-15.302	4.5
38	MP2A	Z	-26.504	4.5
39	MP2A	Mx	.011	4.5
40	M45A	X	-12.201	2
41	M45A	Z	-21.134	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	0	1
2	MP3A	Z	-2.511	1
3	MP3A	Mx	0	1
4	MP3A	X	0	1
5	MP3A	Z	-2.511	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	-11.913	.5
9	MP3A	Mx	-.007	.5
10	MP3A	X	0	4.5
11	MP3A	Z	-11.913	4.5
12	MP3A	Mx	-.007	4.5
13	MP3A	X	0	.5
14	MP3A	Z	-11.913	.5
15	MP3A	Mx	.007	.5
16	MP3A	X	0	4.5
17	MP3A	Z	-11.913	4.5
18	MP3A	Mx	.007	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	-5.126	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	-5.126	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	-4.054	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-4.054	4
30	MP3A	Mx	-.002	4
31	MP3A	X	0	4
32	MP3A	Z	-.968	4
33	MP3A	Mx	.000242	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
34	MP2A	X	0	.5
35	MP2A	Z	-7.205	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-7.205	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	-7.794	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	1.037	1
2	MP3A	Z	-1.796	1
3	MP3A	Mx	.000518	1
4	MP3A	X	1.037	1
5	MP3A	Z	-1.796	1
6	MP3A	Mx	.000518	1
7	MP3A	X	5.445	.5
8	MP3A	Z	-9.432	.5
9	MP3A	Mx	-.008	.5
10	MP3A	X	5.445	4.5
11	MP3A	Z	-9.432	4.5
12	MP3A	Mx	-.008	4.5
13	MP3A	X	5.445	.5
14	MP3A	Z	-9.432	.5
15	MP3A	Mx	.003	.5
16	MP3A	X	5.445	4.5
17	MP3A	Z	-9.432	4.5
18	MP3A	Mx	.003	4.5
19	MP1A	X	2.143	1.5
20	MP1A	Z	-3.712	1.5
21	MP1A	Mx	-.001	1.5
22	MP1A	X	2.143	3.5
23	MP1A	Z	-3.712	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	1.86	4
26	MP2A	Z	-3.222	4
27	MP2A	Mx	.00093	4
28	MP3A	X	1.798	4
29	MP3A	Z	-3.114	4
30	MP3A	Mx	-.000658	4
31	MP3A	X	.447	4
32	MP3A	Z	-.773	4
33	MP3A	Mx	.000417	4
34	MP2A	X	3.089	.5
35	MP2A	Z	-5.351	.5
36	MP2A	Mx	-.002	.5
37	MP2A	X	3.089	4.5
38	MP2A	Z	-5.351	4.5
39	MP2A	Mx	-.002	4.5
40	M45A	X	4.145	2
41	M45A	Z	-7.18	2
42	M45A	Mx	0	2



Company  
Designer  
Job Number  
Model Name

July 21, 2023  
3:59 PM  
Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	1.038	1
2	MP3A	Z	-.599	1
3	MP3A	Mx	.000519	1
4	MP3A	X	1.038	1
5	MP3A	Z	-.599	1
6	MP3A	Mx	.000519	1
7	MP3A	X	7.661	.5
8	MP3A	Z	-4.423	.5
9	MP3A	Mx	-.006	.5
10	MP3A	X	7.661	4.5
11	MP3A	Z	-4.423	4.5
12	MP3A	Mx	-.006	4.5
13	MP3A	X	7.661	.5
14	MP3A	Z	-4.423	.5
15	MP3A	Mx	-.001	.5
16	MP3A	X	7.661	4.5
17	MP3A	Z	-4.423	4.5
18	MP3A	Mx	-.001	4.5
19	MP1A	X	2.256	1.5
20	MP1A	Z	-1.303	1.5
21	MP1A	Mx	-.001	1.5
22	MP1A	X	2.256	3.5
23	MP1A	Z	-1.303	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	2.644	4
26	MP2A	Z	-1.527	4
27	MP2A	Mx	.001	4
28	MP3A	X	2.322	4
29	MP3A	Z	-1.34	4
30	MP3A	Mx	.000491	4
31	MP3A	X	.644	4
32	MP3A	Z	-.372	4
33	MP3A	Mx	.000415	4
34	MP2A	X	3.573	.5
35	MP2A	Z	-2.063	.5
36	MP2A	Mx	-.003	.5
37	MP2A	X	3.573	4.5
38	MP2A	Z	-2.063	4.5
39	MP2A	Mx	-.003	4.5
40	M45A	X	6.75	2
41	M45A	Z	-3.897	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.762	1
2	MP3A	Z	0	1
3	MP3A	Mx	.000381	1
4	MP3A	X	.762	1
5	MP3A	Z	0	1
6	MP3A	Mx	.000381	1
7	MP3A	X	7.824	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	-.004	.5
10	MP3A	X	7.824	4.5
11	MP3A	Z	0	4.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
12	MP3A	Mx	-.004	4.5
13	MP3A	X	7.824	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	-.004	.5
16	MP3A	X	7.824	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	-.004	4.5
19	MP1A	X	1.765	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	-.000882	1.5
22	MP1A	X	1.765	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.000882	3.5
25	MP2A	X	2.72	4
26	MP2A	Z	0	4
27	MP2A	Mx	.001	4
28	MP3A	X	2.223	4
29	MP3A	Z	0	4
30	MP3A	Mx	.001	4
31	MP3A	X	.67	4
32	MP3A	Z	0	4
33	MP3A	Mx	.000335	4
34	MP2A	X	3.099	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.002	.5
37	MP2A	X	3.099	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.002	4.5
40	M45A	X	6.8	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	1.038	1
2	MP3A	Z	.599	1
3	MP3A	Mx	.000519	1
4	MP3A	X	1.038	1
5	MP3A	Z	.599	1
6	MP3A	Mx	.000519	1
7	MP3A	X	7.661	.5
8	MP3A	Z	4.423	.5
9	MP3A	Mx	-.001	.5
10	MP3A	X	7.661	4.5
11	MP3A	Z	4.423	4.5
12	MP3A	Mx	-.001	4.5
13	MP3A	X	7.661	.5
14	MP3A	Z	4.423	.5
15	MP3A	Mx	-.006	.5
16	MP3A	X	7.661	4.5
17	MP3A	Z	4.423	4.5
18	MP3A	Mx	-.006	4.5
19	MP1A	X	2.256	1.5
20	MP1A	Z	1.303	1.5
21	MP1A	Mx	-.001	1.5
22	MP1A	X	2.256	3.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP1A	Z	1.303	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	2.644	4
26	MP2A	Z	1.527	4
27	MP2A	Mx	.001	4
28	MP3A	X	2.322	4
29	MP3A	Z	1.34	4
30	MP3A	Mx	.002	4
31	MP3A	X	.644	4
32	MP3A	Z	.372	4
33	MP3A	Mx	.000229	4
34	MP2A	X	3.573	.5
35	MP2A	Z	2.063	.5
36	MP2A	Mx	-.003	.5
37	MP2A	X	3.573	4.5
38	MP2A	Z	2.063	4.5
39	MP2A	Mx	-.003	4.5
40	M45A	X	5.459	2
41	M45A	Z	3.151	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	1.037	1
2	MP3A	Z	1.796	1
3	MP3A	Mx	.000518	1
4	MP3A	X	1.037	1
5	MP3A	Z	1.796	1
6	MP3A	Mx	.000518	1
7	MP3A	X	5.445	.5
8	MP3A	Z	9.432	.5
9	MP3A	Mx	.003	.5
10	MP3A	X	5.445	4.5
11	MP3A	Z	9.432	4.5
12	MP3A	Mx	.003	4.5
13	MP3A	X	5.445	.5
14	MP3A	Z	9.432	.5
15	MP3A	Mx	-.008	.5
16	MP3A	X	5.445	4.5
17	MP3A	Z	9.432	4.5
18	MP3A	Mx	-.008	4.5
19	MP1A	X	2.143	1.5
20	MP1A	Z	3.712	1.5
21	MP1A	Mx	-.001	1.5
22	MP1A	X	2.143	3.5
23	MP1A	Z	3.712	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	1.86	4
26	MP2A	Z	3.222	4
27	MP2A	Mx	.00093	4
28	MP3A	X	1.798	4
29	MP3A	Z	3.114	4
30	MP3A	Mx	.002	4
31	MP3A	X	.447	4
32	MP3A	Z	.773	4
33	MP3A	Mx	3e-5	4



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP2A	X	3.089	.5
35	MP2A	Z	5.351	.5
36	MP2A	Mx	-.002	.5
37	MP2A	X	3.089	4.5
38	MP2A	Z	5.351	4.5
39	MP2A	Mx	-.002	4.5
40	M45A	X	3.4	2
41	M45A	Z	5.889	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	1
2	MP3A	Z	2.511	1
3	MP3A	Mx	0	1
4	MP3A	X	0	1
5	MP3A	Z	2.511	1
6	MP3A	Mx	0	1
7	MP3A	X	0	.5
8	MP3A	Z	11.913	.5
9	MP3A	Mx	.007	.5
10	MP3A	X	0	4.5
11	MP3A	Z	11.913	4.5
12	MP3A	Mx	.007	4.5
13	MP3A	X	0	.5
14	MP3A	Z	11.913	.5
15	MP3A	Mx	-.007	.5
16	MP3A	X	0	4.5
17	MP3A	Z	11.913	4.5
18	MP3A	Mx	-.007	4.5
19	MP1A	X	0	1.5
20	MP1A	Z	5.126	1.5
21	MP1A	Mx	0	1.5
22	MP1A	X	0	3.5
23	MP1A	Z	5.126	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	4
26	MP2A	Z	4.054	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	4.054	4
30	MP3A	Mx	.002	4
31	MP3A	X	0	4
32	MP3A	Z	.968	4
33	MP3A	Mx	-.000242	4
34	MP2A	X	0	.5
35	MP2A	Z	7.205	.5
36	MP2A	Mx	0	.5
37	MP2A	X	0	4.5
38	MP2A	Z	7.205	4.5
39	MP2A	Mx	0	4.5
40	M45A	X	0	2
41	M45A	Z	7.794	2
42	M45A	Mx	0	2



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-1.037	1
2	MP3A	Z	1.796	1
3	MP3A	Mx	-.000518	1
4	MP3A	X	-1.037	1
5	MP3A	Z	1.796	1
6	MP3A	Mx	-.000518	1
7	MP3A	X	-5.445	.5
8	MP3A	Z	9.432	.5
9	MP3A	Mx	.008	.5
10	MP3A	X	-5.445	4.5
11	MP3A	Z	9.432	4.5
12	MP3A	Mx	.008	4.5
13	MP3A	X	-5.445	.5
14	MP3A	Z	9.432	.5
15	MP3A	Mx	-.003	.5
16	MP3A	X	-5.445	4.5
17	MP3A	Z	9.432	4.5
18	MP3A	Mx	-.003	4.5
19	MP1A	X	-2.143	1.5
20	MP1A	Z	3.712	1.5
21	MP1A	Mx	.001	1.5
22	MP1A	X	-2.143	3.5
23	MP1A	Z	3.712	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	-1.86	4
26	MP2A	Z	3.222	4
27	MP2A	Mx	-.00093	4
28	MP3A	X	-1.798	4
29	MP3A	Z	3.114	4
30	MP3A	Mx	.000658	4
31	MP3A	X	-.447	4
32	MP3A	Z	.773	4
33	MP3A	Mx	-.000417	4
34	MP2A	X	-3.089	.5
35	MP2A	Z	5.351	.5
36	MP2A	Mx	.002	.5
37	MP2A	X	-3.089	4.5
38	MP2A	Z	5.351	4.5
39	MP2A	Mx	.002	4.5
40	M45A	X	-4.145	2
41	M45A	Z	7.18	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-1.038	1
2	MP3A	Z	.599	1
3	MP3A	Mx	-.000519	1
4	MP3A	X	-1.038	1
5	MP3A	Z	.599	1
6	MP3A	Mx	-.000519	1
7	MP3A	X	-7.661	.5
8	MP3A	Z	4.423	.5
9	MP3A	Mx	.006	.5
10	MP3A	X	-7.661	4.5
11	MP3A	Z	4.423	4.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
12	MP3A	Mx	.006	4.5
13	MP3A	X	-7.661	.5
14	MP3A	Z	4.423	.5
15	MP3A	Mx	.001	.5
16	MP3A	X	-7.661	4.5
17	MP3A	Z	4.423	4.5
18	MP3A	Mx	.001	4.5
19	MP1A	X	-2.256	1.5
20	MP1A	Z	1.303	1.5
21	MP1A	Mx	.001	1.5
22	MP1A	X	-2.256	3.5
23	MP1A	Z	1.303	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	-2.644	4
26	MP2A	Z	1.527	4
27	MP2A	Mx	-.001	4
28	MP3A	X	-2.322	4
29	MP3A	Z	1.34	4
30	MP3A	Mx	-.000491	4
31	MP3A	X	-.644	4
32	MP3A	Z	.372	4
33	MP3A	Mx	-.000415	4
34	MP2A	X	-3.573	.5
35	MP2A	Z	2.063	.5
36	MP2A	Mx	.003	.5
37	MP2A	X	-3.573	4.5
38	MP2A	Z	2.063	4.5
39	MP2A	Mx	.003	4.5
40	M45A	X	-6.75	2
41	M45A	Z	3.897	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-.762	1
2	MP3A	Z	0	1
3	MP3A	Mx	-.000381	1
4	MP3A	X	-.762	1
5	MP3A	Z	0	1
6	MP3A	Mx	-.000381	1
7	MP3A	X	-7.824	.5
8	MP3A	Z	0	.5
9	MP3A	Mx	.004	.5
10	MP3A	X	-7.824	4.5
11	MP3A	Z	0	4.5
12	MP3A	Mx	.004	4.5
13	MP3A	X	-7.824	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	.004	.5
16	MP3A	X	-7.824	4.5
17	MP3A	Z	0	4.5
18	MP3A	Mx	.004	4.5
19	MP1A	X	-1.765	1.5
20	MP1A	Z	0	1.5
21	MP1A	Mx	.000882	1.5
22	MP1A	X	-1.765	3.5





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
23	MP1A	Z	0	3.5
24	MP1A	Mx	.000882	3.5
25	MP2A	X	-2.72	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.001	4
28	MP3A	X	-2.223	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.001	4
31	MP3A	X	-.67	4
32	MP3A	Z	0	4
33	MP3A	Mx	-.000335	4
34	MP2A	X	-3.099	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.002	.5
37	MP2A	X	-3.099	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.002	4.5
40	M45A	X	-6.8	2
41	M45A	Z	0	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-1.038	1
2	MP3A	Z	-.599	1
3	MP3A	Mx	-.000519	1
4	MP3A	X	-1.038	1
5	MP3A	Z	-.599	1
6	MP3A	Mx	-.000519	1
7	MP3A	X	-7.661	.5
8	MP3A	Z	-4.423	.5
9	MP3A	Mx	.001	.5
10	MP3A	X	-7.661	4.5
11	MP3A	Z	-4.423	4.5
12	MP3A	Mx	.001	4.5
13	MP3A	X	-7.661	.5
14	MP3A	Z	-4.423	.5
15	MP3A	Mx	.006	.5
16	MP3A	X	-7.661	4.5
17	MP3A	Z	-4.423	4.5
18	MP3A	Mx	.006	4.5
19	MP1A	X	-2.256	1.5
20	MP1A	Z	-1.303	1.5
21	MP1A	Mx	.001	1.5
22	MP1A	X	-2.256	3.5
23	MP1A	Z	-1.303	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	-2.644	4
26	MP2A	Z	-1.527	4
27	MP2A	Mx	-.001	4
28	MP3A	X	-2.322	4
29	MP3A	Z	-1.34	4
30	MP3A	Mx	-.002	4
31	MP3A	X	-.644	4
32	MP3A	Z	-.372	4
33	MP3A	Mx	-.000229	4



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
34	MP2A	X	-3.573	.5
35	MP2A	Z	-2.063	.5
36	MP2A	Mx	.003	.5
37	MP2A	X	-3.573	4.5
38	MP2A	Z	-2.063	4.5
39	MP2A	Mx	.003	4.5
40	M45A	X	-5.459	2
41	M45A	Z	-3.151	2
42	M45A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-1.037	1
2	MP3A	Z	-1.796	1
3	MP3A	Mx	-0.00518	1
4	MP3A	X	-1.037	1
5	MP3A	Z	-1.796	1
6	MP3A	Mx	-0.00518	1
7	MP3A	X	-5.445	.5
8	MP3A	Z	-9.432	.5
9	MP3A	Mx	-.003	.5
10	MP3A	X	-5.445	4.5
11	MP3A	Z	-9.432	4.5
12	MP3A	Mx	-.003	4.5
13	MP3A	X	-5.445	.5
14	MP3A	Z	-9.432	.5
15	MP3A	Mx	.008	.5
16	MP3A	X	-5.445	4.5
17	MP3A	Z	-9.432	4.5
18	MP3A	Mx	.008	4.5
19	MP1A	X	-2.143	1.5
20	MP1A	Z	-3.712	1.5
21	MP1A	Mx	.001	1.5
22	MP1A	X	-2.143	3.5
23	MP1A	Z	-3.712	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	-1.86	4
26	MP2A	Z	-3.222	4
27	MP2A	Mx	-.00093	4
28	MP3A	X	-1.798	4
29	MP3A	Z	-3.114	4
30	MP3A	Mx	-.002	4
31	MP3A	X	-.447	4
32	MP3A	Z	-.773	4
33	MP3A	Mx	-3e-5	4
34	MP2A	X	-3.089	.5
35	MP2A	Z	-5.351	.5
36	MP2A	Mx	.002	.5
37	MP2A	X	-3.089	4.5
38	MP2A	Z	-5.351	4.5
39	MP2A	Mx	.002	4.5
40	M45A	X	-3.4	2
41	M45A	Z	-5.889	2
42	M45A	Mx	0	2



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-500	%34

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-500	%66

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-250	0

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-250	%50

**Member Point Loads (BLC 81 : Antenna Ev)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	0	1
2	MP3A	My	0	1
3	MP3A	Mz	0	1
4	MP3A	Y	0	1
5	MP3A	My	0	1
6	MP3A	Mz	0	1
7	MP3A	Y	0	.5
8	MP3A	My	0	.5
9	MP3A	Mz	0	.5
10	MP3A	Y	0	4.5
11	MP3A	My	0	4.5
12	MP3A	Mz	0	4.5
13	MP3A	Y	0	.5
14	MP3A	My	0	.5
15	MP3A	Mz	0	.5
16	MP3A	Y	0	4.5
17	MP3A	My	0	4.5
18	MP3A	Mz	0	4.5
19	MP1A	Y	0	1.5
20	MP1A	My	0	1.5
21	MP1A	Mz	0	1.5
22	MP1A	Y	0	3.5
23	MP1A	My	0	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	0	4
26	MP2A	My	0	4
27	MP2A	Mz	0	4
28	MP3A	Y	0	4
29	MP3A	My	0	4
30	MP3A	Mz	0	4
31	MP3A	Y	0	4
32	MP3A	My	0	4
33	MP3A	Mz	0	4
34	MP2A	Y	0	.5
35	MP2A	My	0	.5
36	MP2A	Mz	0	.5
37	MP2A	Y	0	4.5
38	MP2A	My	0	4.5
39	MP2A	Mz	0	4.5



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Point Loads (BLC 81 : Antenna Ev) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
40	M45A	Y	0	2
41	M45A	My	0	2
42	M45A	Mz	0	2

**Member Point Loads (BLC 82 : Antenna Eh (0 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	Z	-.528	1
2	MP3A	Mx	0	1
3	MP3A	Z	-.528	1
4	MP3A	Mx	0	1
5	MP3A	Z	-.95	.5
6	MP3A	Mx	-.000554	.5
7	MP3A	Z	-.95	4.5
8	MP3A	Mx	-.000554	4.5
9	MP3A	Z	-.95	.5
10	MP3A	Mx	.000554	.5
11	MP3A	Z	-.95	4.5
12	MP3A	Mx	.000554	4.5
13	MP1A	Z	-1.306	1.5
14	MP1A	Mx	0	1.5
15	MP1A	Z	-1.306	3.5
16	MP1A	Mx	0	3.5
17	MP2A	Z	-2.532	4
18	MP2A	Mx	0	4
19	MP3A	Z	-2.109	4
20	MP3A	Mx	-.001	4
21	MP3A	Z	-.312	4
22	MP3A	Mx	7.8e-5	4
23	MP2A	Z	-.6	.5
24	MP2A	Mx	0	.5
25	MP2A	Z	-.6	4.5
26	MP2A	Mx	0	4.5
27	M45A	Z	-.96	2
28	M45A	Mx	0	2

**Member Point Loads (BLC 83 : Antenna Eh (90 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	.528	1
2	MP3A	Mx	.000264	1
3	MP3A	X	.528	1
4	MP3A	Mx	.000264	1
5	MP3A	X	.95	.5
6	MP3A	Mx	-.000475	.5
7	MP3A	X	.95	4.5
8	MP3A	Mx	-.000475	4.5
9	MP3A	X	.95	.5
10	MP3A	Mx	-.000475	.5
11	MP3A	X	.95	4.5
12	MP3A	Mx	-.000475	4.5
13	MP1A	X	1.306	1.5
14	MP1A	Mx	-.000653	1.5
15	MP1A	X	1.306	3.5
16	MP1A	Mx	-.000653	3.5
17	MP2A	X	2.532	4
18	MP2A	Mx	.001	4
19	MP3A	X	2.109	4



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Point Loads (BLC 83 : Antenna Eh (90 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
20	MP3A	Mx	.001	4
21	MP3A	X	.312	4
22	MP3A	Mx	.000156	4
23	MP2A	X	.6	.5
24	MP2A	Mx	-.00045	.5
25	MP2A	X	.6	4.5
26	MP2A	Mx	-.00045	4.5
27	M45A	X	.96	2
28	M45A	Mx	0	2

**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	M1	Y	-6.752	-6.752	0	%100
2	M2	Y	-6.752	-6.752	0	%100
3	M13	Y	-7.847	-7.847	0	%100
4	M14	Y	-7.847	-7.847	0	%100
5	M15	Y	-7.847	-7.847	0	%100
6	M16	Y	-7.847	-7.847	0	%100
7	M17	Y	-5.946	-5.946	0	%100
8	M18	Y	-5.946	-5.946	0	%100
9	M19	Y	-5.946	-5.946	0	%100
10	M20	Y	-5.946	-5.946	0	%100
11	M21	Y	-7.847	-7.847	0	%100
12	M22	Y	-7.847	-7.847	0	%100
13	M23	Y	-7.847	-7.847	0	%100
14	M24	Y	-7.847	-7.847	0	%100
15	M25	Y	-3.33	-3.33	0	%100
16	M26	Y	-3.33	-3.33	0	%100
17	M27	Y	-3.33	-3.33	0	%100
18	M28	Y	-3.33	-3.33	0	%100
19	M31	Y	-5.946	-5.946	0	%100
20	M32	Y	-5.946	-5.946	0	%100
21	MP4A	Y	-5.946	-5.946	0	%100
22	MP3A	Y	-5.946	-5.946	0	%100
23	MP2A	Y	-5.946	-5.946	0	%100
24	MP1A	Y	-5.946	-5.946	0	%100
25	M44	Y	-3.129	-3.129	0	%100
26	M45	Y	-3.129	-3.129	0	%100
27	M46	Y	-3.129	-3.129	0	%100
28	M47	Y	-3.129	-3.129	0	%100
29	M45A	Y	-5.946	-5.946	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	M1	X	0	0	0	%100
2	M1	Z	-13.903	-13.903	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-13.903	-13.903	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-5.489	-5.489	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-5.489	-5.489	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-5.489	-5.489	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-5.489	-5.489	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-3.022	-3.022	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-3.022	-3.022	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-3.022	-3.022	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-3.022	-3.022	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-3.13	-3.13	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-3.13	-3.13	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-3.13	-3.13	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-3.13	-3.13	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-261	-261	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-403	-403	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	-11.485	-11.485	0	%100
43	MP3A	X	0	0	0	%100
44	MP3A	Z	-11.485	-11.485	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	-11.485	-11.485	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-11.485	-11.485	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	-3.022	-3.022	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	-3.022	-3.022	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	-3.022	-3.022	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	-3.022	-3.022	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	-10.466	-10.466	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	M1	X	5.214	5.214	0	%100
2	M1	Z	-9.03	-9.03	0	%100
3	M2	X	5.214	5.214	0	%100
4	M2	Z	-9.03	-9.03	0	%100
5	M13	X	.378	.378	0	%100
6	M13	Z	-.654	-.654	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
7	M14	X	.378	.378	0	%100
8	M14	Z	-.654	-.654	0	%100
9	M15	X	.378	.378	0	%100
10	M15	Z	-.654	-.654	0	%100
11	M16	X	.378	.378	0	%100
12	M16	Z	-.654	-.654	0	%100
13	M17	X	.618	.618	0	%100
14	M17	Z	-1.07	-1.07	0	%100
15	M18	X	.618	.618	0	%100
16	M18	Z	-1.07	-1.07	0	%100
17	M19	X	4.34	4.34	0	%100
18	M19	Z	-7.518	-7.518	0	%100
19	M20	X	4.34	4.34	0	%100
20	M20	Z	-7.518	-7.518	0	%100
21	M21	X	1.133	1.133	0	%100
22	M21	Z	-1.963	-1.963	0	%100
23	M22	X	1.133	1.133	0	%100
24	M22	Z	-1.963	-1.963	0	%100
25	M23	X	1.133	1.133	0	%100
26	M23	Z	-1.963	-1.963	0	%100
27	M24	X	1.133	1.133	0	%100
28	M24	Z	-1.963	-1.963	0	%100
29	M25	X	1.252	1.252	0	%100
30	M25	Z	-2.168	-2.168	0	%100
31	M26	X	1.252	1.252	0	%100
32	M26	Z	-2.168	-2.168	0	%100
33	M27	X	1.801	1.801	0	%100
34	M27	Z	-3.119	-3.119	0	%100
35	M28	X	1.801	1.801	0	%100
36	M28	Z	-3.119	-3.119	0	%100
37	M31	X	.76	.76	0	%100
38	M31	Z	-1.316	-1.316	0	%100
39	M32	X	2.451	2.451	0	%100
40	M32	Z	-4.245	-4.245	0	%100
41	MP4A	X	5.742	5.742	0	%100
42	MP4A	Z	-9.946	-9.946	0	%100
43	MP3A	X	5.742	5.742	0	%100
44	MP3A	Z	-9.946	-9.946	0	%100
45	MP2A	X	5.742	5.742	0	%100
46	MP2A	Z	-9.946	-9.946	0	%100
47	MP1A	X	5.742	5.742	0	%100
48	MP1A	Z	-9.946	-9.946	0	%100
49	M44	X	1.511	1.511	0	%100
50	M44	Z	-2.617	-2.617	0	%100
51	M45	X	1.511	1.511	0	%100
52	M45	Z	-2.617	-2.617	0	%100
53	M46	X	1.511	1.511	0	%100
54	M46	Z	-2.617	-2.617	0	%100
55	M47	X	1.511	1.511	0	%100
56	M47	Z	-2.617	-2.617	0	%100
57	M45A	X	5.233	5.233	0	%100
58	M45A	Z	-9.064	-9.064	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	M1	X	3.01	3.01	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
2	M1	Z	-1.738	-1.738	0	%100
3	M2	X	3.01	3.01	0	%100
4	M2	Z	-1.738	-1.738	0	%100
5	M13	X	1.963	1.963	0	%100
6	M13	Z	-1.133	-1.133	0	%100
7	M14	X	1.963	1.963	0	%100
8	M14	Z	-1.133	-1.133	0	%100
9	M15	X	1.963	1.963	0	%100
10	M15	Z	-1.133	-1.133	0	%100
11	M16	X	1.963	1.963	0	%100
12	M16	Z	-1.133	-1.133	0	%100
13	M17	X	.151	.151	0	%100
14	M17	Z	-.087	-.087	0	%100
15	M18	X	.151	.151	0	%100
16	M18	Z	-.087	-.087	0	%100
17	M19	X	6.598	6.598	0	%100
18	M19	Z	-3.81	-3.81	0	%100
19	M20	X	6.598	6.598	0	%100
20	M20	Z	-3.81	-3.81	0	%100
21	M21	X	.654	.654	0	%100
22	M21	Z	-.378	-.378	0	%100
23	M22	X	.654	.654	0	%100
24	M22	Z	-.378	-.378	0	%100
25	M23	X	.654	.654	0	%100
26	M23	Z	-.378	-.378	0	%100
27	M24	X	.654	.654	0	%100
28	M24	Z	-.378	-.378	0	%100
29	M25	X	2.032	2.032	0	%100
30	M25	Z	-1.173	-1.173	0	%100
31	M26	X	2.032	2.032	0	%100
32	M26	Z	-1.173	-1.173	0	%100
33	M27	X	2.983	2.983	0	%100
34	M27	Z	-1.722	-1.722	0	%100
35	M28	X	2.983	2.983	0	%100
36	M28	Z	-1.722	-1.722	0	%100
37	M31	X	6.063	6.063	0	%100
38	M31	Z	-3.501	-3.501	0	%100
39	M32	X	8.869	8.869	0	%100
40	M32	Z	-5.121	-5.121	0	%100
41	MP4A	X	9.946	9.946	0	%100
42	MP4A	Z	-5.742	-5.742	0	%100
43	MP3A	X	9.946	9.946	0	%100
44	MP3A	Z	-5.742	-5.742	0	%100
45	MP2A	X	9.946	9.946	0	%100
46	MP2A	Z	-5.742	-5.742	0	%100
47	MP1A	X	9.946	9.946	0	%100
48	MP1A	Z	-5.742	-5.742	0	%100
49	M44	X	2.617	2.617	0	%100
50	M44	Z	-1.511	-1.511	0	%100
51	M45	X	2.617	2.617	0	%100
52	M45	Z	-1.511	-1.511	0	%100
53	M46	X	2.617	2.617	0	%100
54	M46	Z	-1.511	-1.511	0	%100
55	M47	X	2.617	2.617	0	%100
56	M47	Z	-1.511	-1.511	0	%100
57	M45A	X	9.064	9.064	0	%100
58	M45A	Z	-5.233	-5.233	0	%100





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	3.022	3.022	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	3.022	3.022	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	3.022	3.022	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	3.022	3.022	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	3.366	3.366	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	3.366	3.366	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	3.366	3.366	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	3.366	3.366	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.817	2.817	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.817	2.817	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.817	2.817	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.817	2.817	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	11.224	11.224	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	11.082	11.082	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	11.485	11.485	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	11.485	11.485	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	11.485	11.485	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	11.485	11.485	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	3.022	3.022	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	3.022	3.022	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	3.022	3.022	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	3.022	3.022	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	10.466	10.466	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
58	M45A	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	M1	X	3.01	3.01	0	%100
2	M1	Z	1.738	1.738	0	%100
3	M2	X	3.01	3.01	0	%100
4	M2	Z	1.738	1.738	0	%100
5	M13	X	1.963	1.963	0	%100
6	M13	Z	1.133	1.133	0	%100
7	M14	X	1.963	1.963	0	%100
8	M14	Z	1.133	1.133	0	%100
9	M15	X	1.963	1.963	0	%100
10	M15	Z	1.133	1.133	0	%100
11	M16	X	1.963	1.963	0	%100
12	M16	Z	1.133	1.133	0	%100
13	M17	X	6.598	6.598	0	%100
14	M17	Z	3.81	3.81	0	%100
15	M18	X	6.598	6.598	0	%100
16	M18	Z	3.81	3.81	0	%100
17	M19	X	.151	.151	0	%100
18	M19	Z	.087	.087	0	%100
19	M20	X	.151	.151	0	%100
20	M20	Z	.087	.087	0	%100
21	M21	X	.654	.654	0	%100
22	M21	Z	.378	.378	0	%100
23	M22	X	.654	.654	0	%100
24	M22	Z	.378	.378	0	%100
25	M23	X	.654	.654	0	%100
26	M23	Z	.378	.378	0	%100
27	M24	X	.654	.654	0	%100
28	M24	Z	.378	.378	0	%100
29	M25	X	2.983	2.983	0	%100
30	M25	Z	1.722	1.722	0	%100
31	M26	X	2.983	2.983	0	%100
32	M26	Z	1.722	1.722	0	%100
33	M27	X	2.032	2.032	0	%100
34	M27	Z	1.173	1.173	0	%100
35	M28	X	2.032	2.032	0	%100
36	M28	Z	1.173	1.173	0	%100
37	M31	X	8.63	8.63	0	%100
38	M31	Z	4.983	4.983	0	%100
39	M32	X	5.701	5.701	0	%100
40	M32	Z	3.292	3.292	0	%100
41	MP4A	X	9.946	9.946	0	%100
42	MP4A	Z	5.742	5.742	0	%100
43	MP3A	X	9.946	9.946	0	%100
44	MP3A	Z	5.742	5.742	0	%100
45	MP2A	X	9.946	9.946	0	%100
46	MP2A	Z	5.742	5.742	0	%100
47	MP1A	X	9.946	9.946	0	%100
48	MP1A	Z	5.742	5.742	0	%100
49	M44	X	2.617	2.617	0	%100
50	M44	Z	1.511	1.511	0	%100
51	M45	X	2.617	2.617	0	%100
52	M45	Z	1.511	1.511	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
53	M46	X	2.617	2.617	0	%100
54	M46	Z	1.511	1.511	0	%100
55	M47	X	2.617	2.617	0	%100
56	M47	Z	1.511	1.511	0	%100
57	M45A	X	9.064	9.064	0	%100
58	M45A	Z	5.233	5.233	0	%100

**Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	5.214	5.214	0	%100
2	M1	Z	9.03	9.03	0	%100
3	M2	X	5.214	5.214	0	%100
4	M2	Z	9.03	9.03	0	%100
5	M13	X	.378	.378	0	%100
6	M13	Z	.654	.654	0	%100
7	M14	X	.378	.378	0	%100
8	M14	Z	.654	.654	0	%100
9	M15	X	.378	.378	0	%100
10	M15	Z	.654	.654	0	%100
11	M16	X	.378	.378	0	%100
12	M16	Z	.654	.654	0	%100
13	M17	X	4.34	4.34	0	%100
14	M17	Z	7.518	7.518	0	%100
15	M18	X	4.34	4.34	0	%100
16	M18	Z	7.518	7.518	0	%100
17	M19	X	.618	.618	0	%100
18	M19	Z	1.07	1.07	0	%100
19	M20	X	.618	.618	0	%100
20	M20	Z	1.07	1.07	0	%100
21	M21	X	1.133	1.133	0	%100
22	M21	Z	1.963	1.963	0	%100
23	M22	X	1.133	1.133	0	%100
24	M22	Z	1.963	1.963	0	%100
25	M23	X	1.133	1.133	0	%100
26	M23	Z	1.963	1.963	0	%100
27	M24	X	1.133	1.133	0	%100
28	M24	Z	1.963	1.963	0	%100
29	M25	X	1.801	1.801	0	%100
30	M25	Z	3.119	3.119	0	%100
31	M26	X	1.801	1.801	0	%100
32	M26	Z	3.119	3.119	0	%100
33	M27	X	1.252	1.252	0	%100
34	M27	Z	2.168	2.168	0	%100
35	M28	X	1.252	1.252	0	%100
36	M28	Z	2.168	2.168	0	%100
37	M31	X	2.242	2.242	0	%100
38	M31	Z	3.883	3.883	0	%100
39	M32	X	.622	.622	0	%100
40	M32	Z	1.077	1.077	0	%100
41	MP4A	X	5.742	5.742	0	%100
42	MP4A	Z	9.946	9.946	0	%100
43	MP3A	X	5.742	5.742	0	%100
44	MP3A	Z	9.946	9.946	0	%100
45	MP2A	X	5.742	5.742	0	%100
46	MP2A	Z	9.946	9.946	0	%100
47	MP1A	X	5.742	5.742	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
48	MP1A	Z	9.946	9.946	0	%100
49	M44	X	1.511	1.511	0	%100
50	M44	Z	2.617	2.617	0	%100
51	M45	X	1.511	1.511	0	%100
52	M45	Z	2.617	2.617	0	%100
53	M46	X	1.511	1.511	0	%100
54	M46	Z	2.617	2.617	0	%100
55	M47	X	1.511	1.511	0	%100
56	M47	Z	2.617	2.617	0	%100
57	M45A	X	5.233	5.233	0	%100
58	M45A	Z	9.064	9.064	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	13.903	13.903	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	13.903	13.903	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	5.489	5.489	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	5.489	5.489	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	5.489	5.489	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	5.489	5.489	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	3.022	3.022	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	3.022	3.022	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	3.022	3.022	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	3.022	3.022	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	3.13	3.13	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	3.13	3.13	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	3.13	3.13	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	3.13	3.13	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.261	.261	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	.403	.403	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	11.485	11.485	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
43	MP3A	X	0	0	0	%100
44	MP3A	Z	11.485	11.485	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	11.485	11.485	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	11.485	11.485	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	3.022	3.022	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	3.022	3.022	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	3.022	3.022	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	3.022	3.022	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	10.466	10.466	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	M1	X	-5.214	-5.214	0	%100
2	M1	Z	9.03	9.03	0	%100
3	M2	X	-5.214	-5.214	0	%100
4	M2	Z	9.03	9.03	0	%100
5	M13	X	-.378	-.378	0	%100
6	M13	Z	.654	.654	0	%100
7	M14	X	-.378	-.378	0	%100
8	M14	Z	.654	.654	0	%100
9	M15	X	-.378	-.378	0	%100
10	M15	Z	.654	.654	0	%100
11	M16	X	-.378	-.378	0	%100
12	M16	Z	.654	.654	0	%100
13	M17	X	-.618	-.618	0	%100
14	M17	Z	1.07	1.07	0	%100
15	M18	X	-.618	-.618	0	%100
16	M18	Z	1.07	1.07	0	%100
17	M19	X	-4.34	-4.34	0	%100
18	M19	Z	7.518	7.518	0	%100
19	M20	X	-4.34	-4.34	0	%100
20	M20	Z	7.518	7.518	0	%100
21	M21	X	-1.133	-1.133	0	%100
22	M21	Z	1.963	1.963	0	%100
23	M22	X	-1.133	-1.133	0	%100
24	M22	Z	1.963	1.963	0	%100
25	M23	X	-1.133	-1.133	0	%100
26	M23	Z	1.963	1.963	0	%100
27	M24	X	-1.133	-1.133	0	%100
28	M24	Z	1.963	1.963	0	%100
29	M25	X	-1.252	-1.252	0	%100
30	M25	Z	2.168	2.168	0	%100
31	M26	X	-1.252	-1.252	0	%100
32	M26	Z	2.168	2.168	0	%100
33	M27	X	-1.801	-1.801	0	%100
34	M27	Z	3.119	3.119	0	%100
35	M28	X	-1.801	-1.801	0	%100
36	M28	Z	3.119	3.119	0	%100
37	M31	X	-.76	-.76	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
38	M31	Z	1.316	1.316	0	%100
39	M32	X	-2.451	-2.451	0	%100
40	M32	Z	4.245	4.245	0	%100
41	MP4A	X	-5.742	-5.742	0	%100
42	MP4A	Z	9.946	9.946	0	%100
43	MP3A	X	-5.742	-5.742	0	%100
44	MP3A	Z	9.946	9.946	0	%100
45	MP2A	X	-5.742	-5.742	0	%100
46	MP2A	Z	9.946	9.946	0	%100
47	MP1A	X	-5.742	-5.742	0	%100
48	MP1A	Z	9.946	9.946	0	%100
49	M44	X	-1.511	-1.511	0	%100
50	M44	Z	2.617	2.617	0	%100
51	M45	X	-1.511	-1.511	0	%100
52	M45	Z	2.617	2.617	0	%100
53	M46	X	-1.511	-1.511	0	%100
54	M46	Z	2.617	2.617	0	%100
55	M47	X	-1.511	-1.511	0	%100
56	M47	Z	2.617	2.617	0	%100
57	M45A	X	-5.233	-5.233	0	%100
58	M45A	Z	9.064	9.064	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	M1	X	-3.01	-3.01	0	%100
2	M1	Z	1.738	1.738	0	%100
3	M2	X	-3.01	-3.01	0	%100
4	M2	Z	1.738	1.738	0	%100
5	M13	X	-1.963	-1.963	0	%100
6	M13	Z	1.133	1.133	0	%100
7	M14	X	-1.963	-1.963	0	%100
8	M14	Z	1.133	1.133	0	%100
9	M15	X	-1.963	-1.963	0	%100
10	M15	Z	1.133	1.133	0	%100
11	M16	X	-1.963	-1.963	0	%100
12	M16	Z	1.133	1.133	0	%100
13	M17	X	-.151	-.151	0	%100
14	M17	Z	.087	.087	0	%100
15	M18	X	-.151	-.151	0	%100
16	M18	Z	.087	.087	0	%100
17	M19	X	-6.598	-6.598	0	%100
18	M19	Z	3.81	3.81	0	%100
19	M20	X	-6.598	-6.598	0	%100
20	M20	Z	3.81	3.81	0	%100
21	M21	X	-.654	-.654	0	%100
22	M21	Z	.378	.378	0	%100
23	M22	X	-.654	-.654	0	%100
24	M22	Z	.378	.378	0	%100
25	M23	X	-.654	-.654	0	%100
26	M23	Z	.378	.378	0	%100
27	M24	X	-.654	-.654	0	%100
28	M24	Z	.378	.378	0	%100
29	M25	X	-2.032	-2.032	0	%100
30	M25	Z	1.173	1.173	0	%100
31	M26	X	-2.032	-2.032	0	%100
32	M26	Z	1.173	1.173	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
33	M27	X	-2.983	-2.983	0	%100
34	M27	Z	1.722	1.722	0	%100
35	M28	X	-2.983	-2.983	0	%100
36	M28	Z	1.722	1.722	0	%100
37	M31	X	-6.063	-6.063	0	%100
38	M31	Z	3.501	3.501	0	%100
39	M32	X	-8.869	-8.869	0	%100
40	M32	Z	5.121	5.121	0	%100
41	MP4A	X	-9.946	-9.946	0	%100
42	MP4A	Z	5.742	5.742	0	%100
43	MP3A	X	-9.946	-9.946	0	%100
44	MP3A	Z	5.742	5.742	0	%100
45	MP2A	X	-9.946	-9.946	0	%100
46	MP2A	Z	5.742	5.742	0	%100
47	MP1A	X	-9.946	-9.946	0	%100
48	MP1A	Z	5.742	5.742	0	%100
49	M44	X	-2.617	-2.617	0	%100
50	M44	Z	1.511	1.511	0	%100
51	M45	X	-2.617	-2.617	0	%100
52	M45	Z	1.511	1.511	0	%100
53	M46	X	-2.617	-2.617	0	%100
54	M46	Z	1.511	1.511	0	%100
55	M47	X	-2.617	-2.617	0	%100
56	M47	Z	1.511	1.511	0	%100
57	M45A	X	-9.064	-9.064	0	%100
58	M45A	Z	5.233	5.233	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-3.022	-3.022	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-3.022	-3.022	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-3.022	-3.022	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-3.022	-3.022	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-3.366	-3.366	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-3.366	-3.366	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-3.366	-3.366	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-3.366	-3.366	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	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.%]
28	M24	Z	0	0	0	%100
29	M25	X	-2.817	-2.817	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.817	-2.817	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.817	-2.817	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.817	-2.817	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-11.224	-11.224	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-11.082	-11.082	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	-11.485	-11.485	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	-11.485	-11.485	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	-11.485	-11.485	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	-11.485	-11.485	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	-3.022	-3.022	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	-3.022	-3.022	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	-3.022	-3.022	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	-3.022	-3.022	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	-10.466	-10.466	0	%100
58	M45A	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	M1	X	-3.01	-3.01	0	%100
2	M1	Z	-1.738	-1.738	0	%100
3	M2	X	-3.01	-3.01	0	%100
4	M2	Z	-1.738	-1.738	0	%100
5	M13	X	-1.963	-1.963	0	%100
6	M13	Z	-1.133	-1.133	0	%100
7	M14	X	-1.963	-1.963	0	%100
8	M14	Z	-1.133	-1.133	0	%100
9	M15	X	-1.963	-1.963	0	%100
10	M15	Z	-1.133	-1.133	0	%100
11	M16	X	-1.963	-1.963	0	%100
12	M16	Z	-1.133	-1.133	0	%100
13	M17	X	-6.598	-6.598	0	%100
14	M17	Z	-3.81	-3.81	0	%100
15	M18	X	-6.598	-6.598	0	%100
16	M18	Z	-3.81	-3.81	0	%100
17	M19	X	-.151	-.151	0	%100
18	M19	Z	-.087	-.087	0	%100
19	M20	X	-.151	-.151	0	%100
20	M20	Z	-.087	-.087	0	%100
21	M21	X	-.654	-.654	0	%100
22	M21	Z	-.378	-.378	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
23	M22	X	- .654	- .654	0	%100
24	M22	Z	- .378	- .378	0	%100
25	M23	X	- .654	- .654	0	%100
26	M23	Z	- .378	- .378	0	%100
27	M24	X	- .654	- .654	0	%100
28	M24	Z	- .378	- .378	0	%100
29	M25	X	-2.983	-2.983	0	%100
30	M25	Z	-1.722	-1.722	0	%100
31	M26	X	-2.983	-2.983	0	%100
32	M26	Z	-1.722	-1.722	0	%100
33	M27	X	-2.032	-2.032	0	%100
34	M27	Z	-1.173	-1.173	0	%100
35	M28	X	-2.032	-2.032	0	%100
36	M28	Z	-1.173	-1.173	0	%100
37	M31	X	-8.63	-8.63	0	%100
38	M31	Z	-4.983	-4.983	0	%100
39	M32	X	-5.701	-5.701	0	%100
40	M32	Z	-3.292	-3.292	0	%100
41	MP4A	X	-9.946	-9.946	0	%100
42	MP4A	Z	-5.742	-5.742	0	%100
43	MP3A	X	-9.946	-9.946	0	%100
44	MP3A	Z	-5.742	-5.742	0	%100
45	MP2A	X	-9.946	-9.946	0	%100
46	MP2A	Z	-5.742	-5.742	0	%100
47	MP1A	X	-9.946	-9.946	0	%100
48	MP1A	Z	-5.742	-5.742	0	%100
49	M44	X	-2.617	-2.617	0	%100
50	M44	Z	-1.511	-1.511	0	%100
51	M45	X	-2.617	-2.617	0	%100
52	M45	Z	-1.511	-1.511	0	%100
53	M46	X	-2.617	-2.617	0	%100
54	M46	Z	-1.511	-1.511	0	%100
55	M47	X	-2.617	-2.617	0	%100
56	M47	Z	-1.511	-1.511	0	%100
57	M45A	X	-9.064	-9.064	0	%100
58	M45A	Z	-5.233	-5.233	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-5.214	-5.214	0	%100
2	M1	Z	-9.03	-9.03	0	%100
3	M2	X	-5.214	-5.214	0	%100
4	M2	Z	-9.03	-9.03	0	%100
5	M13	X	- .378	- .378	0	%100
6	M13	Z	- .654	- .654	0	%100
7	M14	X	- .378	- .378	0	%100
8	M14	Z	- .654	- .654	0	%100
9	M15	X	- .378	- .378	0	%100
10	M15	Z	- .654	- .654	0	%100
11	M16	X	- .378	- .378	0	%100
12	M16	Z	- .654	- .654	0	%100
13	M17	X	-4.34	-4.34	0	%100
14	M17	Z	-7.518	-7.518	0	%100
15	M18	X	-4.34	-4.34	0	%100
16	M18	Z	-7.518	-7.518	0	%100
17	M19	X	- .618	- .618	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
18	M19	Z	-1.07	-1.07	0	%100
19	M20	X	-618	-618	0	%100
20	M20	Z	-1.07	-1.07	0	%100
21	M21	X	-1.133	-1.133	0	%100
22	M21	Z	-1.963	-1.963	0	%100
23	M22	X	-1.133	-1.133	0	%100
24	M22	Z	-1.963	-1.963	0	%100
25	M23	X	-1.133	-1.133	0	%100
26	M23	Z	-1.963	-1.963	0	%100
27	M24	X	-1.133	-1.133	0	%100
28	M24	Z	-1.963	-1.963	0	%100
29	M25	X	-1.801	-1.801	0	%100
30	M25	Z	-3.119	-3.119	0	%100
31	M26	X	-1.801	-1.801	0	%100
32	M26	Z	-3.119	-3.119	0	%100
33	M27	X	-1.252	-1.252	0	%100
34	M27	Z	-2.168	-2.168	0	%100
35	M28	X	-1.252	-1.252	0	%100
36	M28	Z	-2.168	-2.168	0	%100
37	M31	X	-2.242	-2.242	0	%100
38	M31	Z	-3.883	-3.883	0	%100
39	M32	X	-622	-622	0	%100
40	M32	Z	-1.077	-1.077	0	%100
41	MP4A	X	-5.742	-5.742	0	%100
42	MP4A	Z	-9.946	-9.946	0	%100
43	MP3A	X	-5.742	-5.742	0	%100
44	MP3A	Z	-9.946	-9.946	0	%100
45	MP2A	X	-5.742	-5.742	0	%100
46	MP2A	Z	-9.946	-9.946	0	%100
47	MP1A	X	-5.742	-5.742	0	%100
48	MP1A	Z	-9.946	-9.946	0	%100
49	M44	X	-1.511	-1.511	0	%100
50	M44	Z	-2.617	-2.617	0	%100
51	M45	X	-1.511	-1.511	0	%100
52	M45	Z	-2.617	-2.617	0	%100
53	M46	X	-1.511	-1.511	0	%100
54	M46	Z	-2.617	-2.617	0	%100
55	M47	X	-1.511	-1.511	0	%100
56	M47	Z	-2.617	-2.617	0	%100
57	M45A	X	-5.233	-5.233	0	%100
58	M45A	Z	-9.064	-9.064	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	M1	X	0	0	0	%100
2	M1	Z	-4.004	-4.004	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-4.004	-4.004	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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	M17	X	0	0	0	%100
14	M17	Z	-1.712	-1.712	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.712	-1.712	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.712	-1.712	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.712	-1.712	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.571	-1.571	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.571	-1.571	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.571	-1.571	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.571	-1.571	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.939	-1.939	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.939	-1.939	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.939	-1.939	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-1.939	-1.939	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-0.083	-0.083	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-0.128	-0.128	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	-3.64	-3.64	0	%100
43	MP3A	X	0	0	0	%100
44	MP3A	Z	-3.64	-3.64	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	-3.64	-3.64	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-3.64	-3.64	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	-2.021	-2.021	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	-2.021	-2.021	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	-2.021	-2.021	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	-2.021	-2.021	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	-3.247	-3.247	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	M1	X	1.501	1.501	0	%100
2	M1	Z	-2.6	-2.6	0	%100
3	M2	X	1.501	1.501	0	%100
4	M2	Z	-2.6	-2.6	0	%100
5	M13	X	.199	.199	0	%100
6	M13	Z	-.346	-.346	0	%100
7	M14	X	.199	.199	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
8	M14	Z	-.346	-.346	0	%100
9	M15	X	.199	.199	0	%100
10	M15	Z	-.346	-.346	0	%100
11	M16	X	.199	.199	0	%100
12	M16	Z	-.346	-.346	0	%100
13	M17	X	.193	.193	0	%100
14	M17	Z	-.334	-.334	0	%100
15	M18	X	.193	.193	0	%100
16	M18	Z	-.334	-.334	0	%100
17	M19	X	1.354	1.354	0	%100
18	M19	Z	-2.345	-2.345	0	%100
19	M20	X	1.354	1.354	0	%100
20	M20	Z	-2.345	-2.345	0	%100
21	M21	X	.589	.589	0	%100
22	M21	Z	-1.02	-1.02	0	%100
23	M22	X	.589	.589	0	%100
24	M22	Z	-1.02	-1.02	0	%100
25	M23	X	.589	.589	0	%100
26	M23	Z	-1.02	-1.02	0	%100
27	M24	X	.589	.589	0	%100
28	M24	Z	-1.02	-1.02	0	%100
29	M25	X	.775	.775	0	%100
30	M25	Z	-1.342	-1.342	0	%100
31	M26	X	.775	.775	0	%100
32	M26	Z	-1.342	-1.342	0	%100
33	M27	X	1.115	1.115	0	%100
34	M27	Z	-1.931	-1.931	0	%100
35	M28	X	1.115	1.115	0	%100
36	M28	Z	-1.931	-1.931	0	%100
37	M31	X	.241	.241	0	%100
38	M31	Z	-.417	-.417	0	%100
39	M32	X	.777	.777	0	%100
40	M32	Z	-1.346	-1.346	0	%100
41	MP4A	X	1.82	1.82	0	%100
42	MP4A	Z	-3.153	-3.153	0	%100
43	MP3A	X	1.82	1.82	0	%100
44	MP3A	Z	-3.153	-3.153	0	%100
45	MP2A	X	1.82	1.82	0	%100
46	MP2A	Z	-3.153	-3.153	0	%100
47	MP1A	X	1.82	1.82	0	%100
48	MP1A	Z	-3.153	-3.153	0	%100
49	M44	X	1.01	1.01	0	%100
50	M44	Z	-1.75	-1.75	0	%100
51	M45	X	1.01	1.01	0	%100
52	M45	Z	-1.75	-1.75	0	%100
53	M46	X	1.01	1.01	0	%100
54	M46	Z	-1.75	-1.75	0	%100
55	M47	X	1.01	1.01	0	%100
56	M47	Z	-1.75	-1.75	0	%100
57	M45A	X	1.623	1.623	0	%100
58	M45A	Z	-2.812	-2.812	0	%100

**Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.867	.867	0	%100
2	M1	Z	-.5	-.5	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
3	M2	X	.867	.867	0	%100
4	M2	Z	-5	-5	0	%100
5	M13	X	1.037	1.037	0	%100
6	M13	Z	-598	-598	0	%100
7	M14	X	1.037	1.037	0	%100
8	M14	Z	-598	-598	0	%100
9	M15	X	1.037	1.037	0	%100
10	M15	Z	-598	-598	0	%100
11	M16	X	1.037	1.037	0	%100
12	M16	Z	-598	-598	0	%100
13	M17	X	.047	.047	0	%100
14	M17	Z	-.027	-.027	0	%100
15	M18	X	.047	.047	0	%100
16	M18	Z	-.027	-.027	0	%100
17	M19	X	2.058	2.058	0	%100
18	M19	Z	-1.188	-1.188	0	%100
19	M20	X	2.058	2.058	0	%100
20	M20	Z	-1.188	-1.188	0	%100
21	M21	X	.34	.34	0	%100
22	M21	Z	-.196	-.196	0	%100
23	M22	X	.34	.34	0	%100
24	M22	Z	-.196	-.196	0	%100
25	M23	X	.34	.34	0	%100
26	M23	Z	-.196	-.196	0	%100
27	M24	X	.34	.34	0	%100
28	M24	Z	-.196	-.196	0	%100
29	M25	X	1.258	1.258	0	%100
30	M25	Z	-.727	-.727	0	%100
31	M26	X	1.258	1.258	0	%100
32	M26	Z	-.727	-.727	0	%100
33	M27	X	1.847	1.847	0	%100
34	M27	Z	-1.067	-1.067	0	%100
35	M28	X	1.847	1.847	0	%100
36	M28	Z	-1.067	-1.067	0	%100
37	M31	X	1.922	1.922	0	%100
38	M31	Z	-1.11	-1.11	0	%100
39	M32	X	2.811	2.811	0	%100
40	M32	Z	-1.623	-1.623	0	%100
41	MP4A	X	3.153	3.153	0	%100
42	MP4A	Z	-1.82	-1.82	0	%100
43	MP3A	X	3.153	3.153	0	%100
44	MP3A	Z	-1.82	-1.82	0	%100
45	MP2A	X	3.153	3.153	0	%100
46	MP2A	Z	-1.82	-1.82	0	%100
47	MP1A	X	3.153	3.153	0	%100
48	MP1A	Z	-1.82	-1.82	0	%100
49	M44	X	1.75	1.75	0	%100
50	M44	Z	-1.01	-1.01	0	%100
51	M45	X	1.75	1.75	0	%100
52	M45	Z	-1.01	-1.01	0	%100
53	M46	X	1.75	1.75	0	%100
54	M46	Z	-1.01	-1.01	0	%100
55	M47	X	1.75	1.75	0	%100
56	M47	Z	-1.01	-1.01	0	%100
57	M45A	X	2.812	2.812	0	%100
58	M45A	Z	-1.623	-1.623	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.596	1.596	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.596	1.596	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.596	1.596	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.596	1.596	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	1.05	1.05	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	1.05	1.05	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	1.05	1.05	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	1.05	1.05	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.745	1.745	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.745	1.745	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	1.745	1.745	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.745	1.745	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	3.558	3.558	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	3.513	3.513	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	3.64	3.64	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	3.64	3.64	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	3.64	3.64	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	3.64	3.64	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	2.021	2.021	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	2.021	2.021	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	2.021	2.021	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	2.021	2.021	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	3.247	3.247	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
58	M45A	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	M1	X	.867	.867	0	%100
2	M1	Z	.5	.5	0	%100
3	M2	X	.867	.867	0	%100
4	M2	Z	.5	.5	0	%100
5	M13	X	1.037	1.037	0	%100
6	M13	Z	.598	.598	0	%100
7	M14	X	1.037	1.037	0	%100
8	M14	Z	.598	.598	0	%100
9	M15	X	1.037	1.037	0	%100
10	M15	Z	.598	.598	0	%100
11	M16	X	1.037	1.037	0	%100
12	M16	Z	.598	.598	0	%100
13	M17	X	2.058	2.058	0	%100
14	M17	Z	1.188	1.188	0	%100
15	M18	X	2.058	2.058	0	%100
16	M18	Z	1.188	1.188	0	%100
17	M19	X	.047	.047	0	%100
18	M19	Z	.027	.027	0	%100
19	M20	X	.047	.047	0	%100
20	M20	Z	.027	.027	0	%100
21	M21	X	.34	.34	0	%100
22	M21	Z	.196	.196	0	%100
23	M22	X	.34	.34	0	%100
24	M22	Z	.196	.196	0	%100
25	M23	X	.34	.34	0	%100
26	M23	Z	.196	.196	0	%100
27	M24	X	.34	.34	0	%100
28	M24	Z	.196	.196	0	%100
29	M25	X	1.847	1.847	0	%100
30	M25	Z	1.067	1.067	0	%100
31	M26	X	1.847	1.847	0	%100
32	M26	Z	1.067	1.067	0	%100
33	M27	X	1.258	1.258	0	%100
34	M27	Z	.727	.727	0	%100
35	M28	X	1.258	1.258	0	%100
36	M28	Z	.727	.727	0	%100
37	M31	X	2.735	2.735	0	%100
38	M31	Z	1.579	1.579	0	%100
39	M32	X	1.807	1.807	0	%100
40	M32	Z	1.043	1.043	0	%100
41	MP4A	X	3.153	3.153	0	%100
42	MP4A	Z	1.82	1.82	0	%100
43	MP3A	X	3.153	3.153	0	%100
44	MP3A	Z	1.82	1.82	0	%100
45	MP2A	X	3.153	3.153	0	%100
46	MP2A	Z	1.82	1.82	0	%100
47	MP1A	X	3.153	3.153	0	%100
48	MP1A	Z	1.82	1.82	0	%100
49	M44	X	1.75	1.75	0	%100
50	M44	Z	1.01	1.01	0	%100
51	M45	X	1.75	1.75	0	%100
52	M45	Z	1.01	1.01	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
53	M46	X	1.75	1.75	0	%100
54	M46	Z	1.01	1.01	0	%100
55	M47	X	1.75	1.75	0	%100
56	M47	Z	1.01	1.01	0	%100
57	M45A	X	2.812	2.812	0	%100
58	M45A	Z	1.623	1.623	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.501	1.501	0	%100
2	M1	Z	2.6	2.6	0	%100
3	M2	X	1.501	1.501	0	%100
4	M2	Z	2.6	2.6	0	%100
5	M13	X	.199	.199	0	%100
6	M13	Z	.346	.346	0	%100
7	M14	X	.199	.199	0	%100
8	M14	Z	.346	.346	0	%100
9	M15	X	.199	.199	0	%100
10	M15	Z	.346	.346	0	%100
11	M16	X	.199	.199	0	%100
12	M16	Z	.346	.346	0	%100
13	M17	X	1.354	1.354	0	%100
14	M17	Z	2.345	2.345	0	%100
15	M18	X	1.354	1.354	0	%100
16	M18	Z	2.345	2.345	0	%100
17	M19	X	.193	.193	0	%100
18	M19	Z	.334	.334	0	%100
19	M20	X	.193	.193	0	%100
20	M20	Z	.334	.334	0	%100
21	M21	X	.589	.589	0	%100
22	M21	Z	1.02	1.02	0	%100
23	M22	X	.589	.589	0	%100
24	M22	Z	1.02	1.02	0	%100
25	M23	X	.589	.589	0	%100
26	M23	Z	1.02	1.02	0	%100
27	M24	X	.589	.589	0	%100
28	M24	Z	1.02	1.02	0	%100
29	M25	X	1.115	1.115	0	%100
30	M25	Z	1.931	1.931	0	%100
31	M26	X	1.115	1.115	0	%100
32	M26	Z	1.931	1.931	0	%100
33	M27	X	.775	.775	0	%100
34	M27	Z	1.342	1.342	0	%100
35	M28	X	.775	.775	0	%100
36	M28	Z	1.342	1.342	0	%100
37	M31	X	.711	.711	0	%100
38	M31	Z	1.231	1.231	0	%100
39	M32	X	.197	.197	0	%100
40	M32	Z	.341	.341	0	%100
41	MP4A	X	1.82	1.82	0	%100
42	MP4A	Z	3.153	3.153	0	%100
43	MP3A	X	1.82	1.82	0	%100
44	MP3A	Z	3.153	3.153	0	%100
45	MP2A	X	1.82	1.82	0	%100
46	MP2A	Z	3.153	3.153	0	%100
47	MP1A	X	1.82	1.82	0	%100





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
48	MP1A	Z	3.153	3.153	0	%100
49	M44	X	1.01	1.01	0	%100
50	M44	Z	1.75	1.75	0	%100
51	M45	X	1.01	1.01	0	%100
52	M45	Z	1.75	1.75	0	%100
53	M46	X	1.01	1.01	0	%100
54	M46	Z	1.75	1.75	0	%100
55	M47	X	1.01	1.01	0	%100
56	M47	Z	1.75	1.75	0	%100
57	M45A	X	1.623	1.623	0	%100
58	M45A	Z	2.812	2.812	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	M1	X	0	0	0	%100
2	M1	Z	4.004	4.004	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	4.004	4.004	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	1.712	1.712	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.712	1.712	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.712	1.712	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.712	1.712	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.571	1.571	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.571	1.571	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.571	1.571	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.571	1.571	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.939	1.939	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.939	1.939	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.939	1.939	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.939	1.939	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.083	.083	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	.128	.128	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	3.64	3.64	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
43	MP3A	X	0	0	0	%100
44	MP3A	Z	3.64	3.64	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	3.64	3.64	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	3.64	3.64	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	2.021	2.021	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	2.021	2.021	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	2.021	2.021	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	2.021	2.021	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	3.247	3.247	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	M1	X	-1.501	-1.501	0	%100
2	M1	Z	2.6	2.6	0	%100
3	M2	X	-1.501	-1.501	0	%100
4	M2	Z	2.6	2.6	0	%100
5	M13	X	-.199	-.199	0	%100
6	M13	Z	.346	.346	0	%100
7	M14	X	-.199	-.199	0	%100
8	M14	Z	.346	.346	0	%100
9	M15	X	-.199	-.199	0	%100
10	M15	Z	.346	.346	0	%100
11	M16	X	-.199	-.199	0	%100
12	M16	Z	.346	.346	0	%100
13	M17	X	-.193	-.193	0	%100
14	M17	Z	.334	.334	0	%100
15	M18	X	-.193	-.193	0	%100
16	M18	Z	.334	.334	0	%100
17	M19	X	-1.354	-1.354	0	%100
18	M19	Z	2.345	2.345	0	%100
19	M20	X	-1.354	-1.354	0	%100
20	M20	Z	2.345	2.345	0	%100
21	M21	X	-.589	-.589	0	%100
22	M21	Z	1.02	1.02	0	%100
23	M22	X	-.589	-.589	0	%100
24	M22	Z	1.02	1.02	0	%100
25	M23	X	-.589	-.589	0	%100
26	M23	Z	1.02	1.02	0	%100
27	M24	X	-.589	-.589	0	%100
28	M24	Z	1.02	1.02	0	%100
29	M25	X	-.775	-.775	0	%100
30	M25	Z	1.342	1.342	0	%100
31	M26	X	-.775	-.775	0	%100
32	M26	Z	1.342	1.342	0	%100
33	M27	X	-1.115	-1.115	0	%100
34	M27	Z	1.931	1.931	0	%100
35	M28	X	-1.115	-1.115	0	%100
36	M28	Z	1.931	1.931	0	%100
37	M31	X	-.241	-.241	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
38	M31	Z	.417	.417	0	%100
39	M32	X	-.777	-.777	0	%100
40	M32	Z	1.346	1.346	0	%100
41	MP4A	X	-1.82	-1.82	0	%100
42	MP4A	Z	3.153	3.153	0	%100
43	MP3A	X	-1.82	-1.82	0	%100
44	MP3A	Z	3.153	3.153	0	%100
45	MP2A	X	-1.82	-1.82	0	%100
46	MP2A	Z	3.153	3.153	0	%100
47	MP1A	X	-1.82	-1.82	0	%100
48	MP1A	Z	3.153	3.153	0	%100
49	M44	X	-1.01	-1.01	0	%100
50	M44	Z	1.75	1.75	0	%100
51	M45	X	-1.01	-1.01	0	%100
52	M45	Z	1.75	1.75	0	%100
53	M46	X	-1.01	-1.01	0	%100
54	M46	Z	1.75	1.75	0	%100
55	M47	X	-1.01	-1.01	0	%100
56	M47	Z	1.75	1.75	0	%100
57	M45A	X	-1.623	-1.623	0	%100
58	M45A	Z	2.812	2.812	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	M1	X	-.867	-.867	0	%100
2	M1	Z	.5	.5	0	%100
3	M2	X	-.867	-.867	0	%100
4	M2	Z	.5	.5	0	%100
5	M13	X	-1.037	-1.037	0	%100
6	M13	Z	.598	.598	0	%100
7	M14	X	-1.037	-1.037	0	%100
8	M14	Z	.598	.598	0	%100
9	M15	X	-1.037	-1.037	0	%100
10	M15	Z	.598	.598	0	%100
11	M16	X	-1.037	-1.037	0	%100
12	M16	Z	.598	.598	0	%100
13	M17	X	-.047	-.047	0	%100
14	M17	Z	.027	.027	0	%100
15	M18	X	-.047	-.047	0	%100
16	M18	Z	.027	.027	0	%100
17	M19	X	-2.058	-2.058	0	%100
18	M19	Z	1.188	1.188	0	%100
19	M20	X	-2.058	-2.058	0	%100
20	M20	Z	1.188	1.188	0	%100
21	M21	X	-.34	-.34	0	%100
22	M21	Z	.196	.196	0	%100
23	M22	X	-.34	-.34	0	%100
24	M22	Z	.196	.196	0	%100
25	M23	X	-.34	-.34	0	%100
26	M23	Z	.196	.196	0	%100
27	M24	X	-.34	-.34	0	%100
28	M24	Z	.196	.196	0	%100
29	M25	X	-1.258	-1.258	0	%100
30	M25	Z	.727	.727	0	%100
31	M26	X	-1.258	-1.258	0	%100
32	M26	Z	.727	.727	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.%]
33	M27	X	-1.847	-1.847	0	%100
34	M27	Z	1.067	1.067	0	%100
35	M28	X	-1.847	-1.847	0	%100
36	M28	Z	1.067	1.067	0	%100
37	M31	X	-1.922	-1.922	0	%100
38	M31	Z	1.11	1.11	0	%100
39	M32	X	-2.811	-2.811	0	%100
40	M32	Z	1.623	1.623	0	%100
41	MP4A	X	-3.153	-3.153	0	%100
42	MP4A	Z	1.82	1.82	0	%100
43	MP3A	X	-3.153	-3.153	0	%100
44	MP3A	Z	1.82	1.82	0	%100
45	MP2A	X	-3.153	-3.153	0	%100
46	MP2A	Z	1.82	1.82	0	%100
47	MP1A	X	-3.153	-3.153	0	%100
48	MP1A	Z	1.82	1.82	0	%100
49	M44	X	-1.75	-1.75	0	%100
50	M44	Z	1.01	1.01	0	%100
51	M45	X	-1.75	-1.75	0	%100
52	M45	Z	1.01	1.01	0	%100
53	M46	X	-1.75	-1.75	0	%100
54	M46	Z	1.01	1.01	0	%100
55	M47	X	-1.75	-1.75	0	%100
56	M47	Z	1.01	1.01	0	%100
57	M45A	X	-2.812	-2.812	0	%100
58	M45A	Z	1.623	1.623	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.596	-1.596	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.596	-1.596	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.596	-1.596	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.596	-1.596	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-1.05	-1.05	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-1.05	-1.05	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-1.05	-1.05	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-1.05	-1.05	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
28	M24	Z	0	0	0	%100
29	M25	X	-1.745	-1.745	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.745	-1.745	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.745	-1.745	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.745	-1.745	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-3.558	-3.558	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-3.513	-3.513	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	-3.64	-3.64	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	-3.64	-3.64	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	-3.64	-3.64	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	-3.64	-3.64	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	-2.021	-2.021	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	-2.021	-2.021	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	-2.021	-2.021	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	-2.021	-2.021	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	-3.247	-3.247	0	%100
58	M45A	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	M1	X	-867	-867	0	%100
2	M1	Z	-5	-5	0	%100
3	M2	X	-867	-867	0	%100
4	M2	Z	-5	-5	0	%100
5	M13	X	-1.037	-1.037	0	%100
6	M13	Z	-598	-598	0	%100
7	M14	X	-1.037	-1.037	0	%100
8	M14	Z	-598	-598	0	%100
9	M15	X	-1.037	-1.037	0	%100
10	M15	Z	-598	-598	0	%100
11	M16	X	-1.037	-1.037	0	%100
12	M16	Z	-598	-598	0	%100
13	M17	X	-2.058	-2.058	0	%100
14	M17	Z	-1.188	-1.188	0	%100
15	M18	X	-2.058	-2.058	0	%100
16	M18	Z	-1.188	-1.188	0	%100
17	M19	X	-.047	-.047	0	%100
18	M19	Z	-.027	-.027	0	%100
19	M20	X	-.047	-.047	0	%100
20	M20	Z	-.027	-.027	0	%100
21	M21	X	-.34	-.34	0	%100
22	M21	Z	-.196	-.196	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
23	M22	X	-0.34	-0.34	0	%100
24	M22	Z	-1.196	-1.196	0	%100
25	M23	X	-0.34	-0.34	0	%100
26	M23	Z	-1.196	-1.196	0	%100
27	M24	X	-0.34	-0.34	0	%100
28	M24	Z	-1.196	-1.196	0	%100
29	M25	X	-1.847	-1.847	0	%100
30	M25	Z	-1.067	-1.067	0	%100
31	M26	X	-1.847	-1.847	0	%100
32	M26	Z	-1.067	-1.067	0	%100
33	M27	X	-1.258	-1.258	0	%100
34	M27	Z	-0.727	-0.727	0	%100
35	M28	X	-1.258	-1.258	0	%100
36	M28	Z	-0.727	-0.727	0	%100
37	M31	X	-2.735	-2.735	0	%100
38	M31	Z	-1.579	-1.579	0	%100
39	M32	X	-1.807	-1.807	0	%100
40	M32	Z	-1.043	-1.043	0	%100
41	MP4A	X	-3.153	-3.153	0	%100
42	MP4A	Z	-1.82	-1.82	0	%100
43	MP3A	X	-3.153	-3.153	0	%100
44	MP3A	Z	-1.82	-1.82	0	%100
45	MP2A	X	-3.153	-3.153	0	%100
46	MP2A	Z	-1.82	-1.82	0	%100
47	MP1A	X	-3.153	-3.153	0	%100
48	MP1A	Z	-1.82	-1.82	0	%100
49	M44	X	-1.75	-1.75	0	%100
50	M44	Z	-1.01	-1.01	0	%100
51	M45	X	-1.75	-1.75	0	%100
52	M45	Z	-1.01	-1.01	0	%100
53	M46	X	-1.75	-1.75	0	%100
54	M46	Z	-1.01	-1.01	0	%100
55	M47	X	-1.75	-1.75	0	%100
56	M47	Z	-1.01	-1.01	0	%100
57	M45A	X	-2.812	-2.812	0	%100
58	M45A	Z	-1.623	-1.623	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	M1	X	-1.501	-1.501	0	%100
2	M1	Z	-2.6	-2.6	0	%100
3	M2	X	-1.501	-1.501	0	%100
4	M2	Z	-2.6	-2.6	0	%100
5	M13	X	-0.199	-0.199	0	%100
6	M13	Z	-0.346	-0.346	0	%100
7	M14	X	-0.199	-0.199	0	%100
8	M14	Z	-0.346	-0.346	0	%100
9	M15	X	-0.199	-0.199	0	%100
10	M15	Z	-0.346	-0.346	0	%100
11	M16	X	-0.199	-0.199	0	%100
12	M16	Z	-0.346	-0.346	0	%100
13	M17	X	-1.354	-1.354	0	%100
14	M17	Z	-2.345	-2.345	0	%100
15	M18	X	-1.354	-1.354	0	%100
16	M18	Z	-2.345	-2.345	0	%100
17	M19	X	-0.193	-0.193	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
18	M19	Z	-334	-334	0	%100
19	M20	X	-193	-193	0	%100
20	M20	Z	-334	-334	0	%100
21	M21	X	-589	-589	0	%100
22	M21	Z	-1.02	-1.02	0	%100
23	M22	X	-589	-589	0	%100
24	M22	Z	-1.02	-1.02	0	%100
25	M23	X	-589	-589	0	%100
26	M23	Z	-1.02	-1.02	0	%100
27	M24	X	-589	-589	0	%100
28	M24	Z	-1.02	-1.02	0	%100
29	M25	X	-1.115	-1.115	0	%100
30	M25	Z	-1.931	-1.931	0	%100
31	M26	X	-1.115	-1.115	0	%100
32	M26	Z	-1.931	-1.931	0	%100
33	M27	X	-775	-775	0	%100
34	M27	Z	-1.342	-1.342	0	%100
35	M28	X	-775	-775	0	%100
36	M28	Z	-1.342	-1.342	0	%100
37	M31	X	-711	-711	0	%100
38	M31	Z	-1.231	-1.231	0	%100
39	M32	X	-197	-197	0	%100
40	M32	Z	-341	-341	0	%100
41	MP4A	X	-1.82	-1.82	0	%100
42	MP4A	Z	-3.153	-3.153	0	%100
43	MP3A	X	-1.82	-1.82	0	%100
44	MP3A	Z	-3.153	-3.153	0	%100
45	MP2A	X	-1.82	-1.82	0	%100
46	MP2A	Z	-3.153	-3.153	0	%100
47	MP1A	X	-1.82	-1.82	0	%100
48	MP1A	Z	-3.153	-3.153	0	%100
49	M44	X	-1.01	-1.01	0	%100
50	M44	Z	-1.75	-1.75	0	%100
51	M45	X	-1.01	-1.01	0	%100
52	M45	Z	-1.75	-1.75	0	%100
53	M46	X	-1.01	-1.01	0	%100
54	M46	Z	-1.75	-1.75	0	%100
55	M47	X	-1.01	-1.01	0	%100
56	M47	Z	-1.75	-1.75	0	%100
57	M45A	X	-1.623	-1.623	0	%100
58	M45A	Z	-2.812	-2.812	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	M1	X	0	0	0	%100
2	M1	Z	-752	-752	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-752	-752	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	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.%]
13	M17	X	0	0	0	%100
14	M17	Z	-.297	-.297	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-.297	-.297	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-.297	-.297	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-.297	-.297	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-.163	-.163	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-.163	-.163	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-.163	-.163	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.163	-.163	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-.169	-.169	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-.169	-.169	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-.169	-.169	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-.169	-.169	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-.014	-.014	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-.022	-.022	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	-.621	-.621	0	%100
43	MP3A	X	0	0	0	%100
44	MP3A	Z	-.621	-.621	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	-.621	-.621	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-.621	-.621	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	-.163	-.163	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	-.163	-.163	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	-.163	-.163	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	-.163	-.163	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	-.566	-.566	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	M1	X	.282	.282	0	%100
2	M1	Z	-.488	-.488	0	%100
3	M2	X	.282	.282	0	%100
4	M2	Z	-.488	-.488	0	%100
5	M13	X	.02	.02	0	%100
6	M13	Z	-.035	-.035	0	%100
7	M14	X	.02	.02	0	%100





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
8	M14	Z	-.035	-.035	0	%100
9	M15	X	.02	.02	0	%100
10	M15	Z	-.035	-.035	0	%100
11	M16	X	.02	.02	0	%100
12	M16	Z	-.035	-.035	0	%100
13	M17	X	.033	.033	0	%100
14	M17	Z	-.058	-.058	0	%100
15	M18	X	.033	.033	0	%100
16	M18	Z	-.058	-.058	0	%100
17	M19	X	.235	.235	0	%100
18	M19	Z	-.407	-.407	0	%100
19	M20	X	.235	.235	0	%100
20	M20	Z	-.407	-.407	0	%100
21	M21	X	.061	.061	0	%100
22	M21	Z	-.106	-.106	0	%100
23	M22	X	.061	.061	0	%100
24	M22	Z	-.106	-.106	0	%100
25	M23	X	.061	.061	0	%100
26	M23	Z	-.106	-.106	0	%100
27	M24	X	.061	.061	0	%100
28	M24	Z	-.106	-.106	0	%100
29	M25	X	.068	.068	0	%100
30	M25	Z	-.117	-.117	0	%100
31	M26	X	.068	.068	0	%100
32	M26	Z	-.117	-.117	0	%100
33	M27	X	.097	.097	0	%100
34	M27	Z	-.169	-.169	0	%100
35	M28	X	.097	.097	0	%100
36	M28	Z	-.169	-.169	0	%100
37	M31	X	.041	.041	0	%100
38	M31	Z	-.071	-.071	0	%100
39	M32	X	.133	.133	0	%100
40	M32	Z	-.23	-.23	0	%100
41	MP4A	X	.311	.311	0	%100
42	MP4A	Z	-.538	-.538	0	%100
43	MP3A	X	.311	.311	0	%100
44	MP3A	Z	-.538	-.538	0	%100
45	MP2A	X	.311	.311	0	%100
46	MP2A	Z	-.538	-.538	0	%100
47	MP1A	X	.311	.311	0	%100
48	MP1A	Z	-.538	-.538	0	%100
49	M44	X	.082	.082	0	%100
50	M44	Z	-.142	-.142	0	%100
51	M45	X	.082	.082	0	%100
52	M45	Z	-.142	-.142	0	%100
53	M46	X	.082	.082	0	%100
54	M46	Z	-.142	-.142	0	%100
55	M47	X	.082	.082	0	%100
56	M47	Z	-.142	-.142	0	%100
57	M45A	X	.283	.283	0	%100
58	M45A	Z	-.49	-.49	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	M1	X	.163	.163	0	%100
2	M1	Z	-.094	-.094	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
3	M2	X	.163	.163	0	%100
4	M2	Z	-.094	-.094	0	%100
5	M13	X	.106	.106	0	%100
6	M13	Z	-.061	-.061	0	%100
7	M14	X	.106	.106	0	%100
8	M14	Z	-.061	-.061	0	%100
9	M15	X	.106	.106	0	%100
10	M15	Z	-.061	-.061	0	%100
11	M16	X	.106	.106	0	%100
12	M16	Z	-.061	-.061	0	%100
13	M17	X	.008	.008	0	%100
14	M17	Z	-.005	-.005	0	%100
15	M18	X	.008	.008	0	%100
16	M18	Z	-.005	-.005	0	%100
17	M19	X	.357	.357	0	%100
18	M19	Z	-.206	-.206	0	%100
19	M20	X	.357	.357	0	%100
20	M20	Z	-.206	-.206	0	%100
21	M21	X	.035	.035	0	%100
22	M21	Z	-.02	-.02	0	%100
23	M22	X	.035	.035	0	%100
24	M22	Z	-.02	-.02	0	%100
25	M23	X	.035	.035	0	%100
26	M23	Z	-.02	-.02	0	%100
27	M24	X	.035	.035	0	%100
28	M24	Z	-.02	-.02	0	%100
29	M25	X	.11	.11	0	%100
30	M25	Z	-.063	-.063	0	%100
31	M26	X	.11	.11	0	%100
32	M26	Z	-.063	-.063	0	%100
33	M27	X	.161	.161	0	%100
34	M27	Z	-.093	-.093	0	%100
35	M28	X	.161	.161	0	%100
36	M28	Z	-.093	-.093	0	%100
37	M31	X	.328	.328	0	%100
38	M31	Z	-.189	-.189	0	%100
39	M32	X	.48	.48	0	%100
40	M32	Z	-.277	-.277	0	%100
41	MP4A	X	.538	.538	0	%100
42	MP4A	Z	-.311	-.311	0	%100
43	MP3A	X	.538	.538	0	%100
44	MP3A	Z	-.311	-.311	0	%100
45	MP2A	X	.538	.538	0	%100
46	MP2A	Z	-.311	-.311	0	%100
47	MP1A	X	.538	.538	0	%100
48	MP1A	Z	-.311	-.311	0	%100
49	M44	X	.142	.142	0	%100
50	M44	Z	-.082	-.082	0	%100
51	M45	X	.142	.142	0	%100
52	M45	Z	-.082	-.082	0	%100
53	M46	X	.142	.142	0	%100
54	M46	Z	-.082	-.082	0	%100
55	M47	X	.142	.142	0	%100
56	M47	Z	-.082	-.082	0	%100
57	M45A	X	.49	.49	0	%100
58	M45A	Z	-.283	-.283	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	.163	.163	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.163	.163	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	.163	.163	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.163	.163	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.182	.182	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.182	.182	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.182	.182	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.182	.182	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.152	.152	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.152	.152	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.152	.152	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.152	.152	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	.607	.607	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	.599	.599	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	.621	.621	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	.621	.621	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	.621	.621	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	.621	.621	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	.163	.163	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	.163	.163	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	.163	.163	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	.163	.163	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	.566	.566	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

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

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.]	Start Location[ft.%]	End Location[ft.%]
58 M45A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.]	Start Location[ft.%]	End Location[ft.%]
1 M1	X	.163	.163	0	%100
2 M1	Z	.094	.094	0	%100
3 M2	X	.163	.163	0	%100
4 M2	Z	.094	.094	0	%100
5 M13	X	.106	.106	0	%100
6 M13	Z	.061	.061	0	%100
7 M14	X	.106	.106	0	%100
8 M14	Z	.061	.061	0	%100
9 M15	X	.106	.106	0	%100
10 M15	Z	.061	.061	0	%100
11 M16	X	.106	.106	0	%100
12 M16	Z	.061	.061	0	%100
13 M17	X	.357	.357	0	%100
14 M17	Z	.206	.206	0	%100
15 M18	X	.357	.357	0	%100
16 M18	Z	.206	.206	0	%100
17 M19	X	.008	.008	0	%100
18 M19	Z	.005	.005	0	%100
19 M20	X	.008	.008	0	%100
20 M20	Z	.005	.005	0	%100
21 M21	X	.035	.035	0	%100
22 M21	Z	.02	.02	0	%100
23 M22	X	.035	.035	0	%100
24 M22	Z	.02	.02	0	%100
25 M23	X	.035	.035	0	%100
26 M23	Z	.02	.02	0	%100
27 M24	X	.035	.035	0	%100
28 M24	Z	.02	.02	0	%100
29 M25	X	.161	.161	0	%100
30 M25	Z	.093	.093	0	%100
31 M26	X	.161	.161	0	%100
32 M26	Z	.093	.093	0	%100
33 M27	X	.11	.11	0	%100
34 M27	Z	.063	.063	0	%100
35 M28	X	.11	.11	0	%100
36 M28	Z	.063	.063	0	%100
37 M31	X	.467	.467	0	%100
38 M31	Z	.269	.269	0	%100
39 M32	X	.308	.308	0	%100
40 M32	Z	.178	.178	0	%100
41 MP4A	X	.538	.538	0	%100
42 MP4A	Z	.311	.311	0	%100
43 MP3A	X	.538	.538	0	%100
44 MP3A	Z	.311	.311	0	%100
45 MP2A	X	.538	.538	0	%100
46 MP2A	Z	.311	.311	0	%100
47 MP1A	X	.538	.538	0	%100
48 MP1A	Z	.311	.311	0	%100
49 M44	X	.142	.142	0	%100
50 M44	Z	.082	.082	0	%100
51 M45	X	.142	.142	0	%100
52 M45	Z	.082	.082	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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	M46	X	.142	.142	0	%100
54	M46	Z	.082	.082	0	%100
55	M47	X	.142	.142	0	%100
56	M47	Z	.082	.082	0	%100
57	M45A	X	.49	.49	0	%100
58	M45A	Z	.283	.283	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	M1	X	.282	.282	0	%100
2	M1	Z	.488	.488	0	%100
3	M2	X	.282	.282	0	%100
4	M2	Z	.488	.488	0	%100
5	M13	X	.02	.02	0	%100
6	M13	Z	.035	.035	0	%100
7	M14	X	.02	.02	0	%100
8	M14	Z	.035	.035	0	%100
9	M15	X	.02	.02	0	%100
10	M15	Z	.035	.035	0	%100
11	M16	X	.02	.02	0	%100
12	M16	Z	.035	.035	0	%100
13	M17	X	.235	.235	0	%100
14	M17	Z	.407	.407	0	%100
15	M18	X	.235	.235	0	%100
16	M18	Z	.407	.407	0	%100
17	M19	X	.033	.033	0	%100
18	M19	Z	.058	.058	0	%100
19	M20	X	.033	.033	0	%100
20	M20	Z	.058	.058	0	%100
21	M21	X	.061	.061	0	%100
22	M21	Z	.106	.106	0	%100
23	M22	X	.061	.061	0	%100
24	M22	Z	.106	.106	0	%100
25	M23	X	.061	.061	0	%100
26	M23	Z	.106	.106	0	%100
27	M24	X	.061	.061	0	%100
28	M24	Z	.106	.106	0	%100
29	M25	X	.097	.097	0	%100
30	M25	Z	.169	.169	0	%100
31	M26	X	.097	.097	0	%100
32	M26	Z	.169	.169	0	%100
33	M27	X	.068	.068	0	%100
34	M27	Z	.117	.117	0	%100
35	M28	X	.068	.068	0	%100
36	M28	Z	.117	.117	0	%100
37	M31	X	.121	.121	0	%100
38	M31	Z	.21	.21	0	%100
39	M32	X	.034	.034	0	%100
40	M32	Z	.058	.058	0	%100
41	MP4A	X	.311	.311	0	%100
42	MP4A	Z	.538	.538	0	%100
43	MP3A	X	.311	.311	0	%100
44	MP3A	Z	.538	.538	0	%100
45	MP2A	X	.311	.311	0	%100
46	MP2A	Z	.538	.538	0	%100
47	MP1A	X	.311	.311	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
48	MP1A	Z	.538	.538	0	%100
49	M44	X	.082	.082	0	%100
50	M44	Z	.142	.142	0	%100
51	M45	X	.082	.082	0	%100
52	M45	Z	.142	.142	0	%100
53	M46	X	.082	.082	0	%100
54	M46	Z	.142	.142	0	%100
55	M47	X	.082	.082	0	%100
56	M47	Z	.142	.142	0	%100
57	M45A	X	.283	.283	0	%100
58	M45A	Z	.49	.49	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	M1	X	0	0	0	%100
2	M1	Z	.752	.752	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.752	.752	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	.297	.297	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.297	.297	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.297	.297	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.297	.297	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.163	.163	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.163	.163	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.163	.163	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.163	.163	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.169	.169	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.169	.169	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.169	.169	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.169	.169	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.014	.014	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	.022	.022	0	%100
41	MP4A	X	0	0	0	%100
42	MP4A	Z	.621	.621	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
43	MP3A	X	0	0	0	%100
44	MP3A	Z	.621	.621	0	%100
45	MP2A	X	0	0	0	%100
46	MP2A	Z	.621	.621	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	.621	.621	0	%100
49	M44	X	0	0	0	%100
50	M44	Z	.163	.163	0	%100
51	M45	X	0	0	0	%100
52	M45	Z	.163	.163	0	%100
53	M46	X	0	0	0	%100
54	M46	Z	.163	.163	0	%100
55	M47	X	0	0	0	%100
56	M47	Z	.163	.163	0	%100
57	M45A	X	0	0	0	%100
58	M45A	Z	.566	.566	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	M1	X	-.282	-.282	0	%100
2	M1	Z	.488	.488	0	%100
3	M2	X	-.282	-.282	0	%100
4	M2	Z	.488	.488	0	%100
5	M13	X	-.02	-.02	0	%100
6	M13	Z	.035	.035	0	%100
7	M14	X	-.02	-.02	0	%100
8	M14	Z	.035	.035	0	%100
9	M15	X	-.02	-.02	0	%100
10	M15	Z	.035	.035	0	%100
11	M16	X	-.02	-.02	0	%100
12	M16	Z	.035	.035	0	%100
13	M17	X	-.033	-.033	0	%100
14	M17	Z	.058	.058	0	%100
15	M18	X	-.033	-.033	0	%100
16	M18	Z	.058	.058	0	%100
17	M19	X	-.235	-.235	0	%100
18	M19	Z	.407	.407	0	%100
19	M20	X	-.235	-.235	0	%100
20	M20	Z	.407	.407	0	%100
21	M21	X	-.061	-.061	0	%100
22	M21	Z	.106	.106	0	%100
23	M22	X	-.061	-.061	0	%100
24	M22	Z	.106	.106	0	%100
25	M23	X	-.061	-.061	0	%100
26	M23	Z	.106	.106	0	%100
27	M24	X	-.061	-.061	0	%100
28	M24	Z	.106	.106	0	%100
29	M25	X	-.068	-.068	0	%100
30	M25	Z	.117	.117	0	%100
31	M26	X	-.068	-.068	0	%100
32	M26	Z	.117	.117	0	%100
33	M27	X	-.097	-.097	0	%100
34	M27	Z	.169	.169	0	%100
35	M28	X	-.097	-.097	0	%100
36	M28	Z	.169	.169	0	%100
37	M31	X	-.041	-.041	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.%]
38	M31	Z	.071	.071	0	%100
39	M32	X	-.133	-.133	0	%100
40	M32	Z	.23	.23	0	%100
41	MP4A	X	-.311	-.311	0	%100
42	MP4A	Z	.538	.538	0	%100
43	MP3A	X	-.311	-.311	0	%100
44	MP3A	Z	.538	.538	0	%100
45	MP2A	X	-.311	-.311	0	%100
46	MP2A	Z	.538	.538	0	%100
47	MP1A	X	-.311	-.311	0	%100
48	MP1A	Z	.538	.538	0	%100
49	M44	X	-.082	-.082	0	%100
50	M44	Z	.142	.142	0	%100
51	M45	X	-.082	-.082	0	%100
52	M45	Z	.142	.142	0	%100
53	M46	X	-.082	-.082	0	%100
54	M46	Z	.142	.142	0	%100
55	M47	X	-.082	-.082	0	%100
56	M47	Z	.142	.142	0	%100
57	M45A	X	-.283	-.283	0	%100
58	M45A	Z	.49	.49	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	M1	X	-.163	-.163	0	%100
2	M1	Z	.094	.094	0	%100
3	M2	X	-.163	-.163	0	%100
4	M2	Z	.094	.094	0	%100
5	M13	X	-.106	-.106	0	%100
6	M13	Z	.061	.061	0	%100
7	M14	X	-.106	-.106	0	%100
8	M14	Z	.061	.061	0	%100
9	M15	X	-.106	-.106	0	%100
10	M15	Z	.061	.061	0	%100
11	M16	X	-.106	-.106	0	%100
12	M16	Z	.061	.061	0	%100
13	M17	X	-.008	-.008	0	%100
14	M17	Z	.005	.005	0	%100
15	M18	X	-.008	-.008	0	%100
16	M18	Z	.005	.005	0	%100
17	M19	X	-.357	-.357	0	%100
18	M19	Z	.206	.206	0	%100
19	M20	X	-.357	-.357	0	%100
20	M20	Z	.206	.206	0	%100
21	M21	X	-.035	-.035	0	%100
22	M21	Z	.02	.02	0	%100
23	M22	X	-.035	-.035	0	%100
24	M22	Z	.02	.02	0	%100
25	M23	X	-.035	-.035	0	%100
26	M23	Z	.02	.02	0	%100
27	M24	X	-.035	-.035	0	%100
28	M24	Z	.02	.02	0	%100
29	M25	X	-.11	-.11	0	%100
30	M25	Z	.063	.063	0	%100
31	M26	X	-.11	-.11	0	%100
32	M26	Z	.063	.063	0	%100





Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
33	M27	X	-.161	-.161	0	%100
34	M27	Z	.093	.093	0	%100
35	M28	X	-.161	-.161	0	%100
36	M28	Z	.093	.093	0	%100
37	M31	X	-.328	-.328	0	%100
38	M31	Z	.189	.189	0	%100
39	M32	X	-.48	-.48	0	%100
40	M32	Z	.277	.277	0	%100
41	MP4A	X	-.538	-.538	0	%100
42	MP4A	Z	.311	.311	0	%100
43	MP3A	X	-.538	-.538	0	%100
44	MP3A	Z	.311	.311	0	%100
45	MP2A	X	-.538	-.538	0	%100
46	MP2A	Z	.311	.311	0	%100
47	MP1A	X	-.538	-.538	0	%100
48	MP1A	Z	.311	.311	0	%100
49	M44	X	-.142	-.142	0	%100
50	M44	Z	.082	.082	0	%100
51	M45	X	-.142	-.142	0	%100
52	M45	Z	.082	.082	0	%100
53	M46	X	-.142	-.142	0	%100
54	M46	Z	.082	.082	0	%100
55	M47	X	-.142	-.142	0	%100
56	M47	Z	.082	.082	0	%100
57	M45A	X	-.49	-.49	0	%100
58	M45A	Z	.283	.283	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.163	-.163	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.163	-.163	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.163	-.163	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.163	-.163	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-.182	-.182	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-.182	-.182	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.182	-.182	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.182	-.182	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
28	M24	Z	0	0	0	%100
29	M25	X	-.152	-.152	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.152	-.152	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.152	-.152	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.152	-.152	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-.607	-.607	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-.599	-.599	0	%100
40	M32	Z	0	0	0	%100
41	MP4A	X	-.621	-.621	0	%100
42	MP4A	Z	0	0	0	%100
43	MP3A	X	-.621	-.621	0	%100
44	MP3A	Z	0	0	0	%100
45	MP2A	X	-.621	-.621	0	%100
46	MP2A	Z	0	0	0	%100
47	MP1A	X	-.621	-.621	0	%100
48	MP1A	Z	0	0	0	%100
49	M44	X	-.163	-.163	0	%100
50	M44	Z	0	0	0	%100
51	M45	X	-.163	-.163	0	%100
52	M45	Z	0	0	0	%100
53	M46	X	-.163	-.163	0	%100
54	M46	Z	0	0	0	%100
55	M47	X	-.163	-.163	0	%100
56	M47	Z	0	0	0	%100
57	M45A	X	-.566	-.566	0	%100
58	M45A	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	M1	X	-.163	-.163	0	%100
2	M1	Z	-.094	-.094	0	%100
3	M2	X	-.163	-.163	0	%100
4	M2	Z	-.094	-.094	0	%100
5	M13	X	-.106	-.106	0	%100
6	M13	Z	-.061	-.061	0	%100
7	M14	X	-.106	-.106	0	%100
8	M14	Z	-.061	-.061	0	%100
9	M15	X	-.106	-.106	0	%100
10	M15	Z	-.061	-.061	0	%100
11	M16	X	-.106	-.106	0	%100
12	M16	Z	-.061	-.061	0	%100
13	M17	X	-.357	-.357	0	%100
14	M17	Z	-.206	-.206	0	%100
15	M18	X	-.357	-.357	0	%100
16	M18	Z	-.206	-.206	0	%100
17	M19	X	-.008	-.008	0	%100
18	M19	Z	-.005	-.005	0	%100
19	M20	X	-.008	-.008	0	%100
20	M20	Z	-.005	-.005	0	%100
21	M21	X	-.035	-.035	0	%100
22	M21	Z	-.02	-.02	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
23	M22	X	-035	-035	0	%100
24	M22	Z	-02	-02	0	%100
25	M23	X	-035	-035	0	%100
26	M23	Z	-02	-02	0	%100
27	M24	X	-035	-035	0	%100
28	M24	Z	-02	-02	0	%100
29	M25	X	-161	-161	0	%100
30	M25	Z	-093	-093	0	%100
31	M26	X	-161	-161	0	%100
32	M26	Z	-093	-093	0	%100
33	M27	X	-11	-11	0	%100
34	M27	Z	-063	-063	0	%100
35	M28	X	-11	-11	0	%100
36	M28	Z	-063	-063	0	%100
37	M31	X	-467	-467	0	%100
38	M31	Z	-269	-269	0	%100
39	M32	X	-308	-308	0	%100
40	M32	Z	-178	-178	0	%100
41	MP4A	X	-538	-538	0	%100
42	MP4A	Z	-311	-311	0	%100
43	MP3A	X	-538	-538	0	%100
44	MP3A	Z	-311	-311	0	%100
45	MP2A	X	-538	-538	0	%100
46	MP2A	Z	-311	-311	0	%100
47	MP1A	X	-538	-538	0	%100
48	MP1A	Z	-311	-311	0	%100
49	M44	X	-142	-142	0	%100
50	M44	Z	-082	-082	0	%100
51	M45	X	-142	-142	0	%100
52	M45	Z	-082	-082	0	%100
53	M46	X	-142	-142	0	%100
54	M46	Z	-082	-082	0	%100
55	M47	X	-142	-142	0	%100
56	M47	Z	-082	-082	0	%100
57	M45A	X	-49	-49	0	%100
58	M45A	Z	-283	-283	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	M1	X	-282	-282	0	%100
2	M1	Z	-488	-488	0	%100
3	M2	X	-282	-282	0	%100
4	M2	Z	-488	-488	0	%100
5	M13	X	-02	-02	0	%100
6	M13	Z	-035	-035	0	%100
7	M14	X	-02	-02	0	%100
8	M14	Z	-035	-035	0	%100
9	M15	X	-02	-02	0	%100
10	M15	Z	-035	-035	0	%100
11	M16	X	-02	-02	0	%100
12	M16	Z	-035	-035	0	%100
13	M17	X	-235	-235	0	%100
14	M17	Z	-407	-407	0	%100
15	M18	X	-235	-235	0	%100
16	M18	Z	-407	-407	0	%100
17	M19	X	-033	-033	0	%100



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**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.%]
18	M19	Z	-.058	-.058	0	%100
19	M20	X	-.033	-.033	0	%100
20	M20	Z	-.058	-.058	0	%100
21	M21	X	-.061	-.061	0	%100
22	M21	Z	-.106	-.106	0	%100
23	M22	X	-.061	-.061	0	%100
24	M22	Z	-.106	-.106	0	%100
25	M23	X	-.061	-.061	0	%100
26	M23	Z	-.106	-.106	0	%100
27	M24	X	-.061	-.061	0	%100
28	M24	Z	-.106	-.106	0	%100
29	M25	X	-.097	-.097	0	%100
30	M25	Z	-.169	-.169	0	%100
31	M26	X	-.097	-.097	0	%100
32	M26	Z	-.169	-.169	0	%100
33	M27	X	-.068	-.068	0	%100
34	M27	Z	-.117	-.117	0	%100
35	M28	X	-.068	-.068	0	%100
36	M28	Z	-.117	-.117	0	%100
37	M31	X	-.121	-.121	0	%100
38	M31	Z	-.21	-.21	0	%100
39	M32	X	-.034	-.034	0	%100
40	M32	Z	-.058	-.058	0	%100
41	MP4A	X	-.311	-.311	0	%100
42	MP4A	Z	-.538	-.538	0	%100
43	MP3A	X	-.311	-.311	0	%100
44	MP3A	Z	-.538	-.538	0	%100
45	MP2A	X	-.311	-.311	0	%100
46	MP2A	Z	-.538	-.538	0	%100
47	MP1A	X	-.311	-.311	0	%100
48	MP1A	Z	-.538	-.538	0	%100
49	M44	X	-.082	-.082	0	%100
50	M44	Z	-.142	-.142	0	%100
51	M45	X	-.082	-.082	0	%100
52	M45	Z	-.142	-.142	0	%100
53	M46	X	-.082	-.082	0	%100
54	M46	Z	-.142	-.142	0	%100
55	M47	X	-.082	-.082	0	%100
56	M47	Z	-.142	-.142	0	%100
57	M45A	X	-.283	-.283	0	%100
58	M45A	Z	-.49	-.49	0	%100

**Member Area Loads**

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

**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	N35	max	863.607	10	1250.117	19	1474.203	16	-.169	1	0	75	.153	5
2		min	-631.234	4	398.661	64	367.084	10	-.604	19	0	1	-.104	11
3	N36	max	1072.405	9	1234.391	13	1380.196	1	-.186	64	0	75	.165	5
4		min	-1306.696	3	394.381	70	-2737.409	7	-.57	23	0	1	-.116	11
5	N63	max	133.608	6	33.649	17	1119.619	11	0	75	0	75	0	75
6		min	-147.988	12	10.352	73	-1037.563	5	0	1	0	1	0	1



Company :  
 Designer :  
 Job Number :  
 Model Name :

July 21, 2023  
 3:59 PM  
 Checked By: \_\_\_\_\_

**Envelope Joint Reactions (Continued)**

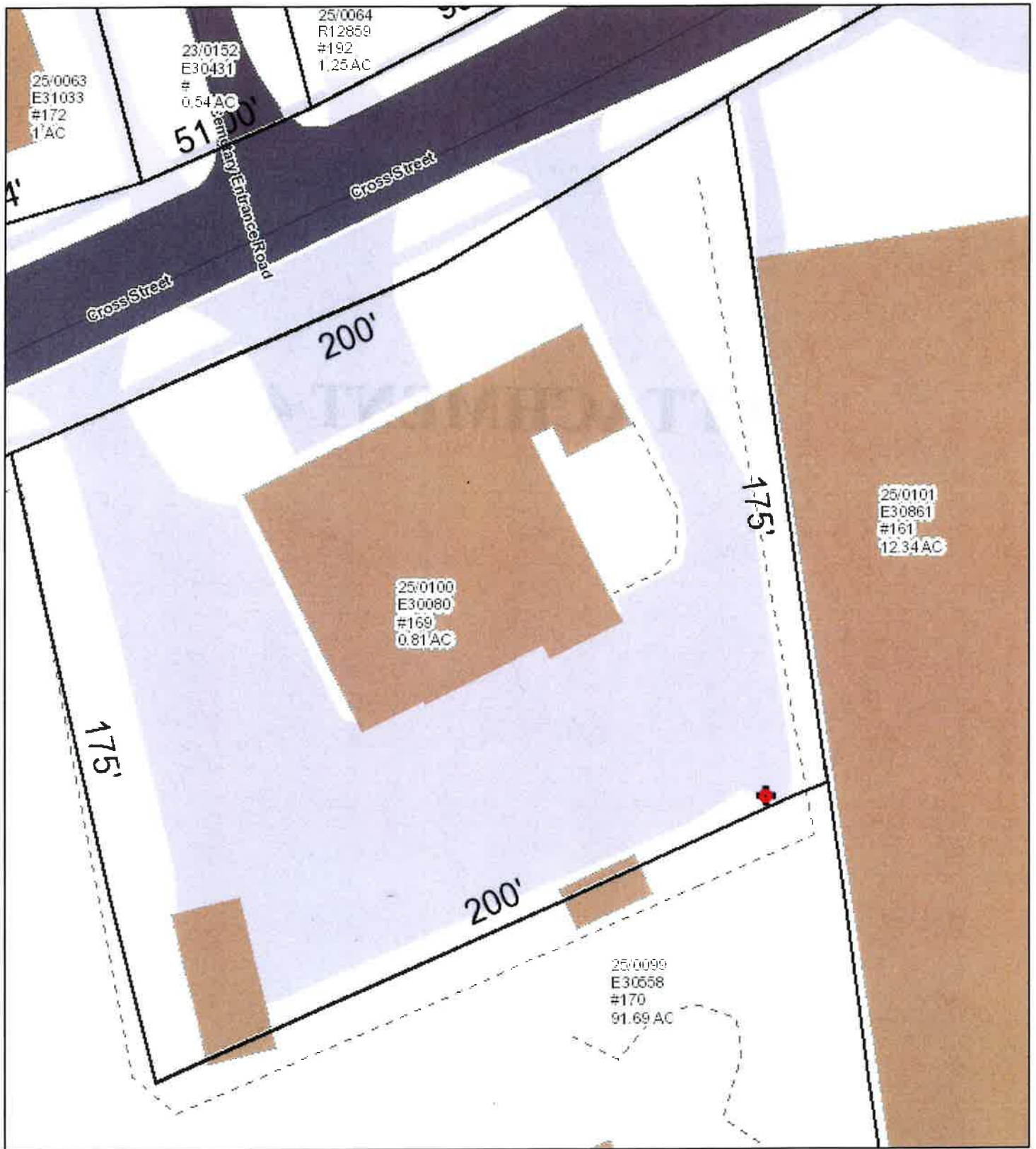
Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
7	N66	max	147.701	2	33.88	20	844.871	3	0	75	0	75	0	75
8		min	-131.961	8	10.414	66	-766.451	9	0	1	0	1	0	1
9	Totals:	max	1703.472	10	2531.843	18	2657.014	1						
10		min	-1703.472	4	814.1	74	-2657.018	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn	
1	M1	PIPE 2.5	.137	4.167	11	.123	3.125	11	14558.7...	50715	3.596	3.596	3...	H1-1b	
2	M2	PIPE 2.5	.246	8.724	6	.109	3.776	1	14558.7...	50715	3.596	3.596	3...	H1-1b	
3	M13	PL5/8X3.5	.330	0	12	.029	.703	v	8	61612.5...	68906.25	.897	5.024	1...	H1-1b
4	M14	PL5/8X3.5	.281	0	32	.027	.703	y	5	61612.5...	68906.25	.897	5.024	1...	H1-1b
5	M15	PL5/8X3.5	.305	0	42	.020	.703	y	11	61613.1...	68906.25	.897	5.024	1...	H1-1b
6	M16	PL5/8X3.5	.255	0	2	.029	.703	y	6	61612.5...	68906.25	.897	5.024	1...	H1-1b
7	M17	PIPE 2.0	.329	0	8	.090	0		20	31128.25	32130	1.872	1.872	2...	H1-1b
8	M18	PIPE 2.0	.292	0	5	.091	0		20	31128.25	32130	1.872	1.872	1...	H1-1b
9	M19	PIPE 2.0	.218	0	11	.108	0		18	31128.25	32130	1.872	1.872	1...	H1-1b
10	M20	PIPE 2.0	.323	0	6	.100	0		18	31128.25	32130	1.872	1.872	2...	H1-1b
11	M21	PL5/8X3.5	.315	.531	8	.097	.531	v	20	67591.76	68906.25	.897	5.024	1...	H1-1b
12	M22	PL5/8X3.5	.380	.531	18	.090	.531	y	6	67591.76	68906.25	.897	5.024	1...	H1-1b
13	M23	PL5/8X3.5	.246	.531	24	.100	0	v	18	67591.76	68906.25	.897	5.024	1...	H1-1b
14	M24	PL5/8X3.5	.325	.531	15	.098	0	y	43	67591.76	68906.25	.897	5.024	1...	H1-1b
15	M25	SR 0.75	.000	0	75	.031	0		11	2863.936	13916.2...	.174	.174	1...	H1-1a
16	M26	SR 0.75	.061	0	21	.011	0		49	2863.936	13916.2...	.174	.174	1...	H1-1b*
17	M27	SR 0.75	.000	0	75	.036	4.167		5	2863.936	13916.2...	.174	.174	1...	H1-1a
18	M28	SR 0.75	.069	4.167	17	.013	0		22	2863.936	13916.2...	.174	.174	1...	H1-1b*
19	M31	PIPE 2.0	.060	3.317	10	.004	0		10	18955.4...	32130	1.872	1.872	1...	H1-1b
20	M32	PIPE 2.0	.054	3.338	3	.004	0		10	18828.0...	32130	1.872	1.872	1...	H1-1b
21	MP4A	PIPE 2.0	.228	5.667	49	.036	5.667		6	14916.0...	32130	1.872	1.872	4...	H1-1b
22	MP3A	PIPE 2.0	.533	2.333	7	.158	5.667		5	14916.0...	32130	1.872	1.872	3...	H1-1b
23	MP2A	PIPE 2.0	.333	2.333	6	.103	5.667		5	14916.0...	32130	1.872	1.872	3...	H1-1b
24	MP1A	PIPE 2.0	.144	2.333	17	.070	5.667		8	14916.0...	32130	1.872	1.872	4...	H1-1b
25	M44	SR 0.625	.079	1.667	12	.012	0		2	2158.269	9664.074	.101	.101	1...	H1-1b
26	M45	SR 0.625	.071	1.667	7	.029	0		5	2158.269	9664.074	.101	.101	1...	H1-1b
27	M46	SR 0.625	.059	1.667	6	.025	0		11	2158.269	9664.074	.101	.101	1...	H1-1b
28	M47	SR 0.625	.060	1.667	2	.017	0		6	2158.269	9664.074	.101	.101	1...	H1-1b
29	M45A	PIPE 2.0	.077	2	8	.064	3.667		8	26521.4...	32130	1.872	1.872	1...	H1-1b



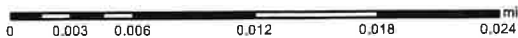
# **ATTACHMENT 4**



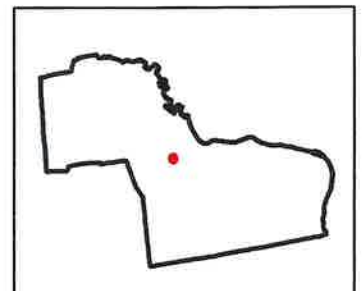
## cross street prop map

Map generated 10/13/2023

Map Legend: <http://gis.cityofmiddletown.com/middletownct/legend.pdf>  
 <vision link>



1 in = 50 ft



### MAP FOR REFERENCE ONLY - NOT A LEGAL DOCUMENT

Because of different update schedules, current property assessments may not reflect recent changes to property boundaries. Check with the Board of Assessors to confirm boundaries uses at the time of assessment.



# 169 CROSS ST

**Location** 169 CROSS ST

**Map-Lot** 25 / 0100 / 1

**Acct#** E30080

**Owner** CITY OF MIDDLETOWN

**Municipality**

**Assessment** \$2,608,850

**Appraisal** \$3,726,920

**PID** 39

**Building Count** 1

**Assessing District**

## Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2022	\$3,332,470	\$394,450	\$3,726,920

Assessment			
Valuation Year	Improvements	Land	Total
2022	\$2,332,730	\$276,120	\$2,608,850

## Parcel Addresses

Additional Addresses
No Additional Addresses available for this parcel

## Owner of Record

**Owner** CITY OF MIDDLETOWN  
**Co-Owner**  
**Address** 245 DEKOVEN DR  
MIDDLETOWN, CT 06457

**Sale Price** \$0  
**Certificate**  
**Book & Page** 0336/0035  
**Sale Date** 04/24/1964  
**Instrument** 29

## Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
CITY OF MIDDLETOWN	\$0		0336/0035	29	04/24/1964

## Building Information

# **ATTACHMENT 5**

**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

*[Handwritten: 2]*

TOTAL NO.  
of Pieces Received at Post Office™

*[Handwritten: 2]*

Postmaster, per (name of receiving employee)

*[Handwritten Signature]*

Affix Stamp Here  
 Postmark with Date of Receipt.



USPS® Tracking Number  
 Firm-specific Identifier

Postage

Fee

Special Handling

Parcel Airlift

Address  
 (Name, Street, City, State, and ZIP Code™)

1. Benjamin Florsheim, Mayor  
 City of Middletown  
 245 deKoven Drive  
 Middletown, CT 06457  
 2. Marek Kozikowski, Director of Land Use  
 City of Middletown  
 245 deKoven Drive  
 Middletown, CT 06457  
 3.  
 4.  
 5.  
 6.