Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

April 1, 2024

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

RE: **Notice of Exempt Modification for Verizon Wireless**
Crown #876338
41 Manitock Hill Road, Waterford, CT 06385
Latitude: 41° 21′ 16.70″ / Longitude: -72° 09′ 1.60″

Dear Ms. Bachman:

Verizon Wireless currently maintains twelve (12) antennas at the 107-foot mount on the existing 140-foot monopole tower located at 41 Manitock Hill Road, Waterford, CT. The property is owned the City of New London and the tower is owned by Crown Castle. Verizon now intends to add two (2) interference mitigation filters at the 107-foot level. This modification/proposal includes hardware that is both 4G (LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Panned Modification:

Tower:

Install New:
(2) Kaelus BSF0020F3V1- Interference Mitigation Filters

The facility was approved by the Town of Waterford Planning and Zoning Department on September 29, 1997 via grant of Special Permit #97-112/304.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Rob Brule, First Selectman, Town of Waterford and Jonathan Mullen, Planning Director. The City of New London is the landowner and Crown Castle is the tower owner.

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

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

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

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, Verizon Wireless respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Jeffrey Barbadora.

Sincerely,

Jeff Barbadora

Jeffrey Barbadora
Permitting Specialist
1800 W. Park Drive
Westborough, MA 01581
(781) 970-0053
Jeff.Barbadora@crowncastle.com

Attachments
cc:

Rob Brule, First Selectman
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385
860-442-0553

Jonathan Mullen, Planning Director
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385
860-442-5813

City of New London, Property Owner
c/o Treasurer's Office
181 State Street
New London, CT 06320
860-447-5200

Crown Castle, Tower Owner

VOL. 496 PAGE 0358

TOWN OF WATERFORD
PLANNING & ZONING COMMISSION

NOTICE OF GRANT OF A SPECIAL PERMIT

This is to certify that on September 29, 1997 the Waterford Planning & Zoning Commission granted Special Permit #97-112/304.

Owner of Record: City of New London

Address: 41 Manitock Hill Road

Description of Premises:

As recorded in Volume 173, Page 256 of the Waterford Land Records.

Nature of Special Permit: Special Permit granted for the construction of a 140 foot lattice design communications tower by Sprint. Co-location for additional carriers is provided for on this tower.

Applicable Zoning Regulations: Section 3.6, 5.2.1, 5.2.3 and 23.

Permit findings, stipulations and conditions are filed in the office of the Town Clerk as stated in the minutes of the Planning & Zoning Commission meeting of September 29, 1997.

PLANNING & ZONING COMMISSION

By: Pam Hagerman
Pamela Hagerman
Recording Secretary
Planning & Zoning Commission

This notice is to be recorded on the land records of the Town of Waterford, indexed in the Grantor's Index under the name of the record owner.

RECEIVED FOR RECORD March 16, 1999
4:02 P M. ATTEST [signature]
TOWN CLERK

41 MANITOCK HILL ROAD

Location	41 MANITOCK HILL ROAD	**Mblu**	117/ / 4376/ /
Acct#	00395800	**Owner**	NEW LONDON CITY OF
Assessment	$851,550	**Appraisal**	$1,216,500
PID	4376	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2022	$1,216,500	$0	$1,216,500

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2022	$851,550	$0	$851,550

Parcel Addreses

Additional Addresses
No Additional Addresses available for this parcel

Owner of Record

Owner NEW LONDON CITY OF
Co-Owner

Sale Price $0
Certificate
Book & Page 0173/0256
Sale Date 06/11/1968
Instrument 00

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
NEW LONDON CITY OF	$0		0173/0256	00	06/11/1968

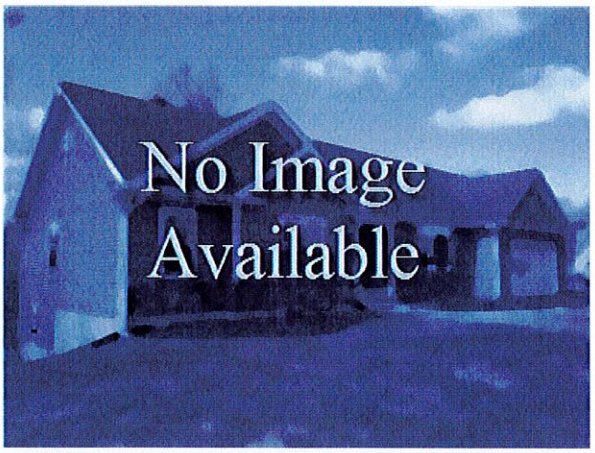
Building Information

Building 1 : Section 1

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

Building Attributes	
Field	**Description**
Style	Outbuildings
Model	
Grade:	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC %	
Total Bedrooms:	
Full Bthrms:	
Half Baths:	
Extra Fixtures	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Num Kitchens	
Fireplace(s)	
Extra Opening(s)	
Gas Fireplace(s)	
% Attic Fin	
LF Dormer	
Foundation	
Bsmt Gar(s)	
Bsmt %	
SF FBM	
SF Rec Rm	

Building Photo



(https://images.vgsi.com/photos/WaterfordCTPhotos//default.jpg)

Building Layout

Building Layout
(https://images.vgsi.com/photos/WaterfordCTPhotos//Sketches/4376_4376

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

Fin Bsmt Qual	
Bsmt Access	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	929
Description	Exempt Comm Vac OB
Zone	R-40
Neighborhood	600
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0
Frontage	0
Depth	0
Assessed Value	$0
Appraised Value	$0

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
SHD1	Shed	MT	Metal	200.00 S.F.	$1,500	1
LSUM	Lump Sum			1620000.00 UNITS	$1,215,000	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2023	$1,216,500	$0	$1,216,500
2022	$1,216,500	$0	$1,216,500

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2023	$851,550	$0	$851,550
2022	$851,550	$0	$851,550

395700

Search Results

Parcel Details

41 MANITOCK HILL ROAD

NO IMAGE AVAILABLE

NEW LONDON CITY OF

15 MASONIC ST
NEW LONDON, CT 06320

Parcel ID: 395700
Lot Size (ac): 5.50 AC
Total V[illegible] $11860

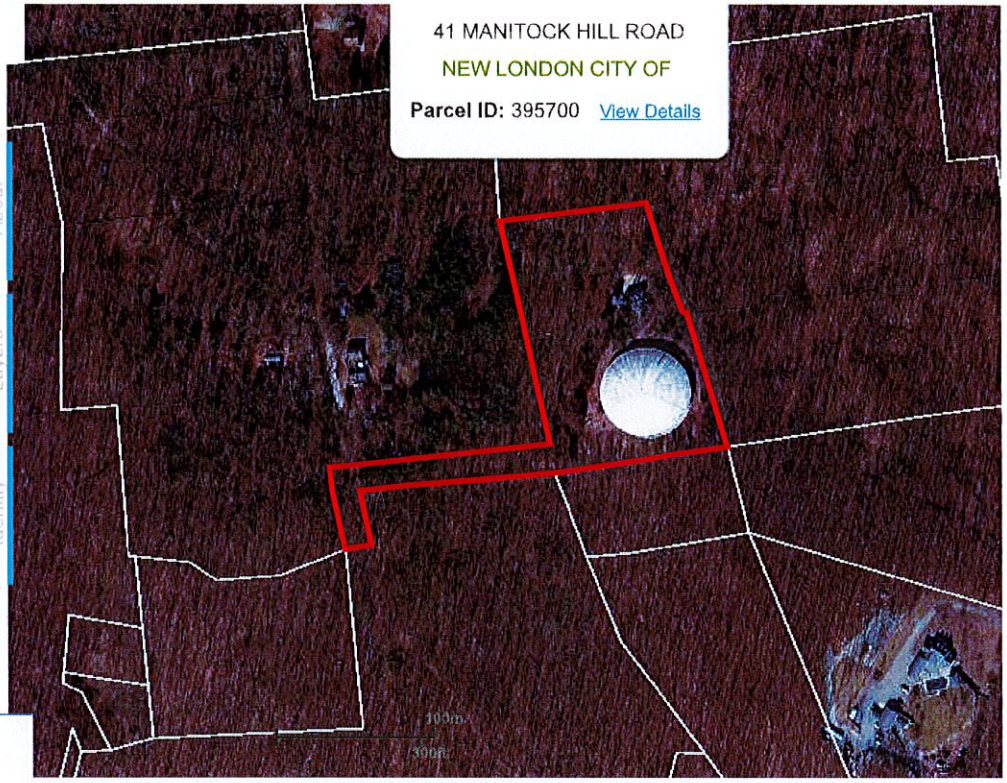
Links

Parcel Details [illegible]ogle Map

About

Layers

Identify



Tighe&Bond

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Wednesday, April 3, 2024 10:13 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775787920428: Your package has been delivered

Hi. Your package was delivered Wed, 04/03/2024 at 10:04am.

Delivered to 15 ROPE FERRY RD, WATERFORD, CT 06385

OBTAIN PROOF OF DELIVERY

How was your delivery ?

TRACKING NUMBER	775787920428
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Waterford Rob Brule, First Selectman 15 Rope Ferry Road WATERFORD, CT, US, 06385
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Tue 4/02/2024 05:48 PM
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WATERFORD, CT, US, 06385
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Wednesday, April 3, 2024 10:13 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775787944491: Your package has been delivered

Hi. Your package was delivered Wed, 04/03/2024 at 10:04am.

Delivered to 15 ROPE FERRY RD, WATERFORD, CT 06385

OBTAIN PROOF OF DELIVERY

How was your delivery ?

TRACKING NUMBER	775787944491
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Waterford Jonathan Mullen, Planning Director 15 Rope Ferry Road WATERFORD, CT, US, 06385
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Tue 4/02/2024 05:48 PM
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WATERFORD, CT, US, 06385
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Wednesday, April 3, 2024 10:36 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775788011366: Your package has been delivered

Hi. Your package was delivered Wed, 04/03/2024 at 10:29am.

Delivered to 181 STATE ST, NEW LONDON, CT 06320
Received by K.ALEXANDER

OBTAIN PROOF OF DELIVERY

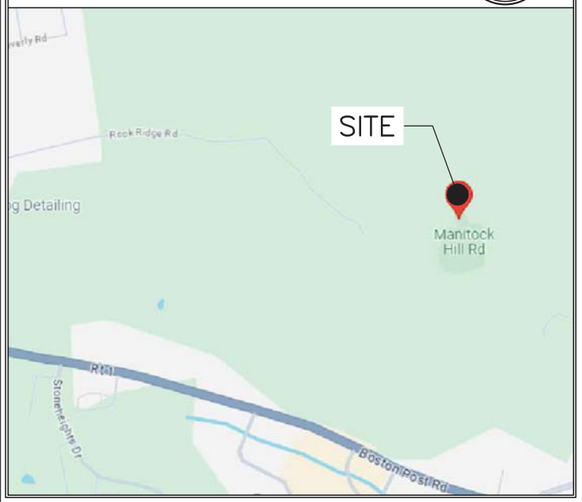
How was your delivery ?

TRACKING NUMBER	775788011366
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	C/O Treasurer's Office City of New London 181 State Street NEW LONDON, CT, US, 06320
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Tue 4/02/2024 05:48 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	NEW LONDON, CT, US, 06320
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

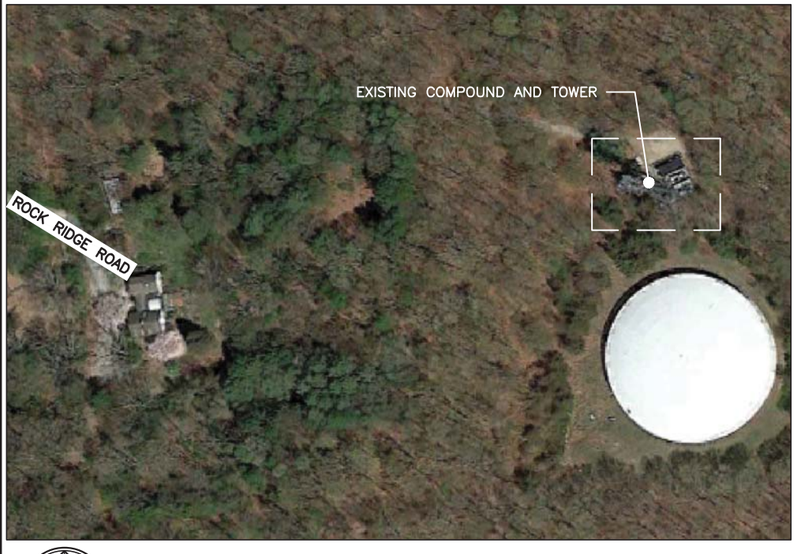
NOTE:
AN ANALYSIS OF THE CAPACITY OF THE STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY CROWN CASTLE DATED JANUARY 19, 2024.

LEASE EXHIBIT:
THIS LEASE EXHIBIT IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION FACILITY. THE SITE LAYOUT WILL BE FINALIZED UPON COMPLETION OF THE SITE SURVEY AND FACILITY DESIGN.

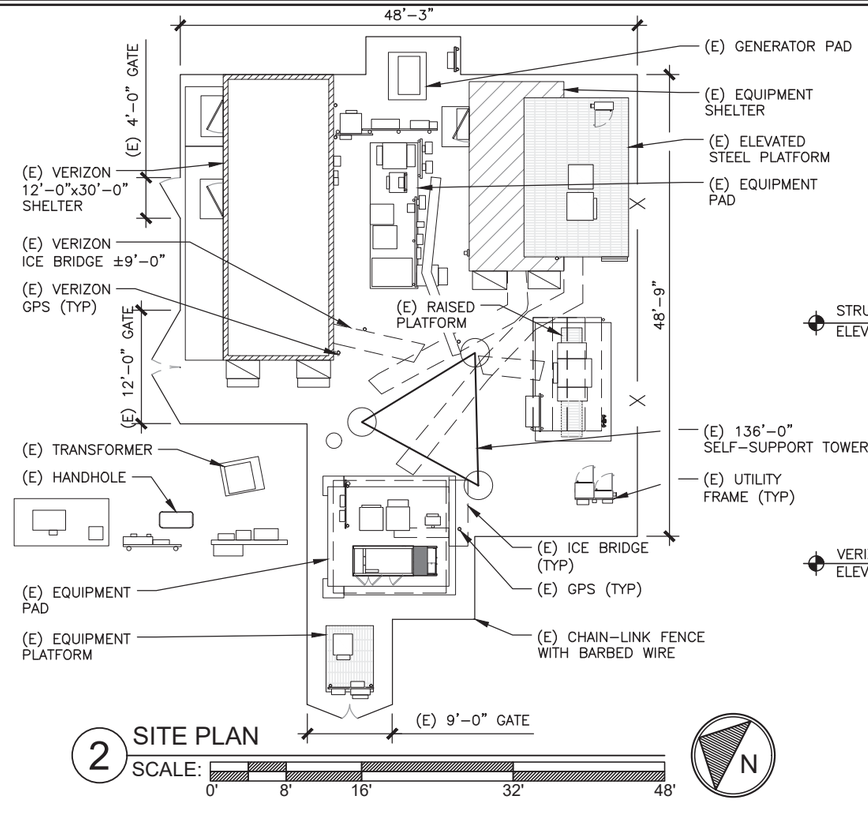
LOCATION MAP
N.T.S



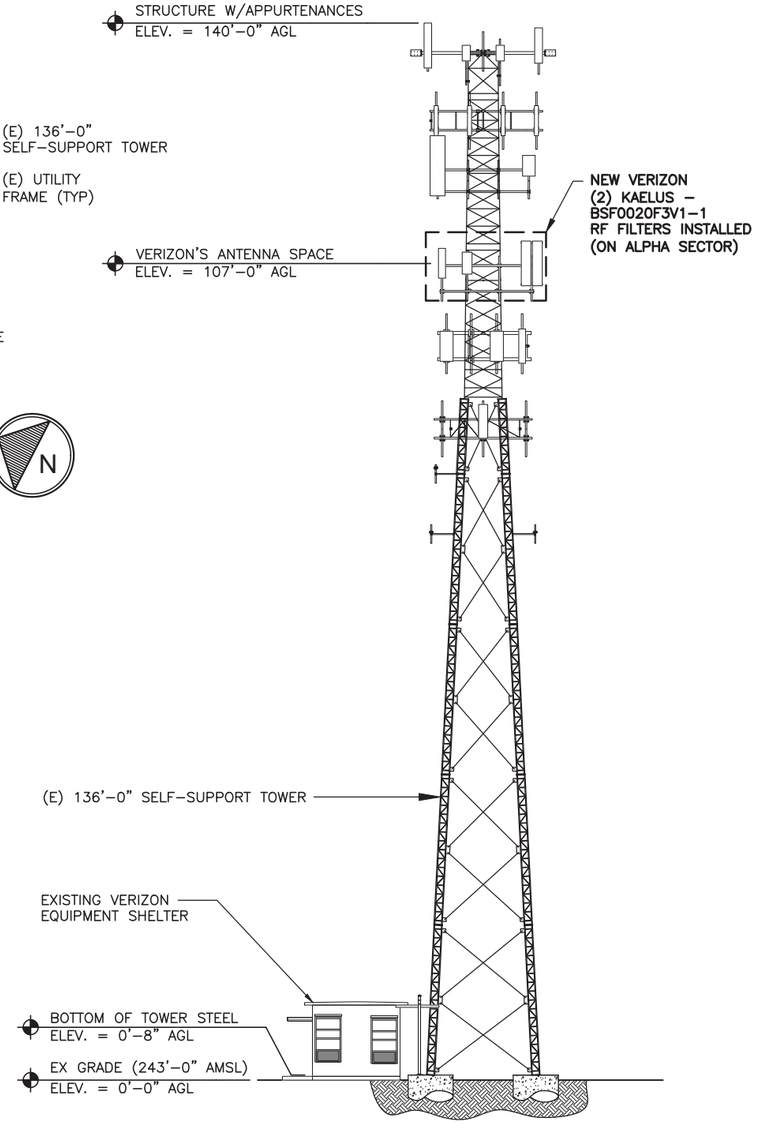
APPROXIMATE COORDINATES:	LATITUDE:	41° 21' 16.7" N	41.354639° N
	LONGITUDE:	72° 09' 1.6" W	72.150444° W



1 PARTIAL SITE / KEY PLAN
SCALE: N.T.S.



2 SITE PLAN
SCALE:



3 TOWER ELEVATION
SCALE: N.T.S

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
btwo@btgrp.com

WATERFORD 2 CT

41 MANITOCK HILL ROAD
WATERFORD, CT 06385

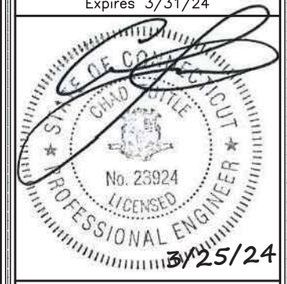
EXISTING SELF-SUPPORT TOWER

PROJECT NO:	99072.006.01.0001
CHECKED BY:	LR

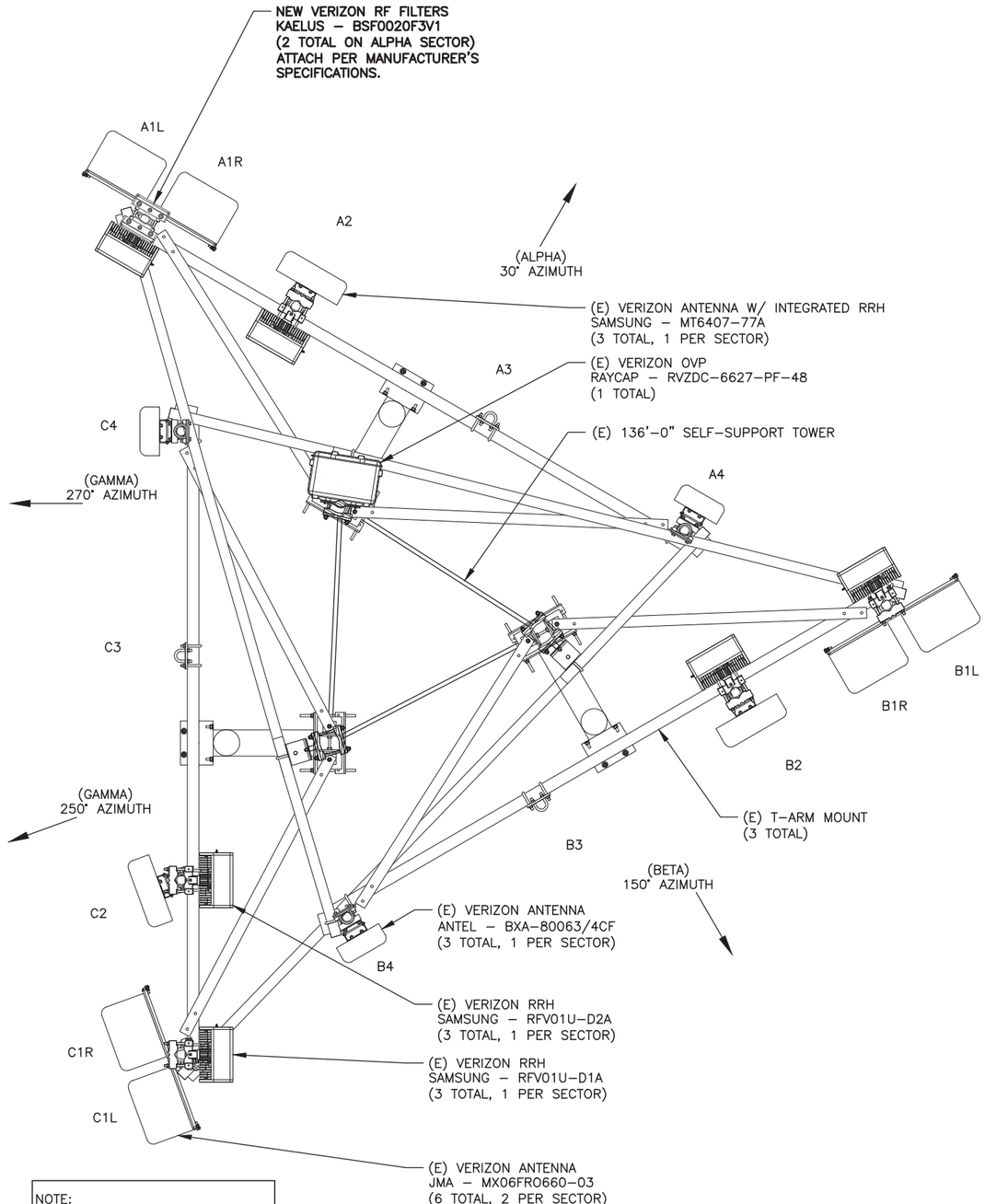
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	3/25/24	FM	CONSTRUCTION

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24



SHEET NUMBER:	REVISION:
LE-1	0

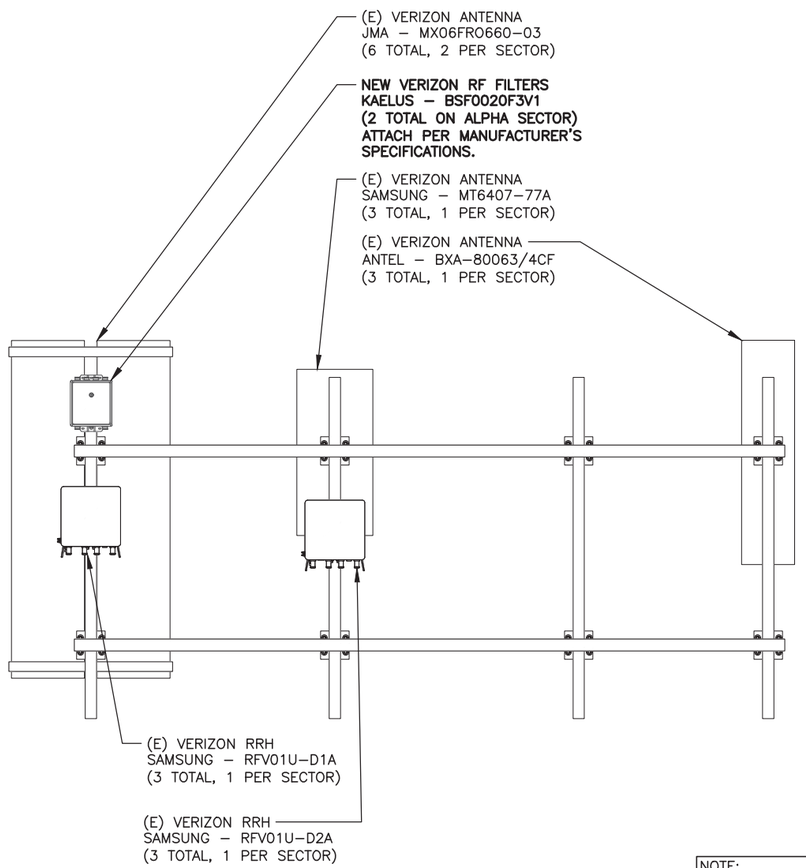


NOTE:

ANTENNA POSITIONS LABELED PER MOUNT ANALYSIS

1 NEW RF FILTER PLAN

SCALE: 0' 1' 2' 4' 8'



NOTE:

ELEVATION VIEW FROM BEHIND ANTENNAS

2 NEW RF FILTER ELEVATION

SCALE: 0' 1' 2' 4' 8'

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

B+T GRP

MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
btwo@btgrp.com

WATERFORD 2 CT

41 MANITOCK HILL ROAD
WATERFORD, CT 06385

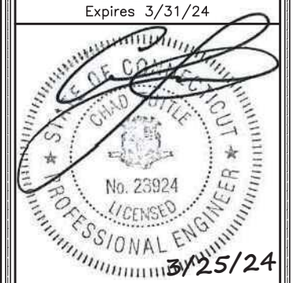
EXISTING SELF-SUPPORT TOWER

PROJECT NO:	99072.006.01.0001
CHECKED BY:	LR

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	3/25/24	FM	CONSTRUCTION

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24



SHEET NUMBER:	REVISION:
LE-2	0

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 #: 10206817
Colliers Engineering & Design CT. P.C. Project #: 23777119

July 11, 2023

Site Information	*Site ID:*	*5000245069-VZW / WATERFORD 2 CT*
	Site Name:	*WATERFORD 2 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*41 Manitock Hill* *Waterford, Connecticut 06385* *New London County*
	Latitude:	*41.357875°*
	Longitude:	*-72.151189°*
Structure Information	*Tower Type:*	*150-Ft Self Support*
	Mount Type:	*12.50-Ft T-Frame*

FUZE ID # 17123907

Analysis Results

T-Frame: **72.8% 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.vzwsmart.com

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

Report Prepared By: Selene Chen

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER

07/11/2023

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: 325076, dated February 11, 2021*
Mount Mapping Report	*Hudson Design Group, LLC., Site ID: 467304, dated March 22, 2021*
Previous Mount Analysis Report	*Maser Consulting Connecticut, Project #: 21777138, dated June 11, 2021*
Post-Modification Inspection Report	*Maser Consulting Connecticut, Project #: 21777138, dated August 18, 2022*
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:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.994
Seismic Parameters:	S_S:	0.194 g
	S_1:	0.053 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	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
105.80	107.00	6	JMA Wireless	MX06FRO660-03	Retained
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Antel	BXA-80063/4CF	
		1	Raycap	RRFDC-6627-PF-48*	
		2	KAelus	BSF0020F3V1-1	Added

* Equipment is flush mounted directly to the Self Support. They are not mounted on T-Frame mounts and are not included in this mount analysis.

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:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - 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
Face Pipe	*72.8 %*	*Pass*
Mast Pipe	*48.5 %*	*Pass*
SO4	*65.9 %*	*Pass*
SO1	*42.4 %*	*Pass*
SO2	*65.7 %*	*Pass*
SO3	*17.2 %*	*Pass*
Mount Pipe	*55.1 %*	*Pass*
Dual Mount Pipe	*31.7 %*	*Pass*
Tieback	*10.3 %*	*Pass*
Mod Bracing	*21.7 %*	*Pass*
Mod Tieback	*25.5 %*	*Pass*
Connection Check	*13.8 %*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**72.8%**

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	17.7	8.6	24.9	15.8
0.5	24.4	11.4	34.5	21.4
1	30.7	13.6	43.6	26.5

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.

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

---

MDG #: 5000245069 SMART Project #: 10206817 Fuze Project ID: 17123907

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:

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:

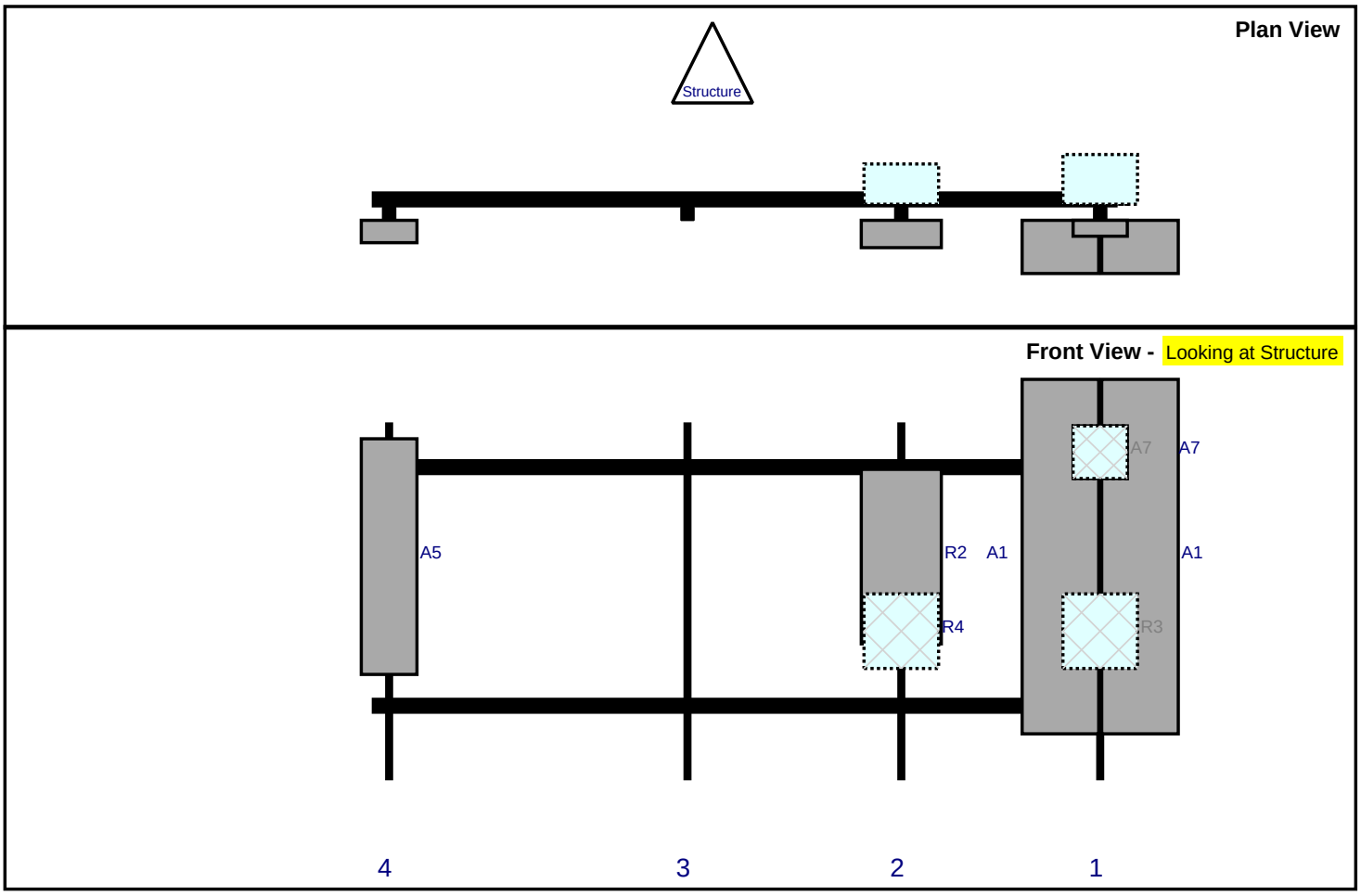
Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Structure: 5000245069-VZW - WATERFORD 2 CT

Sector: **A** 7/11/2023

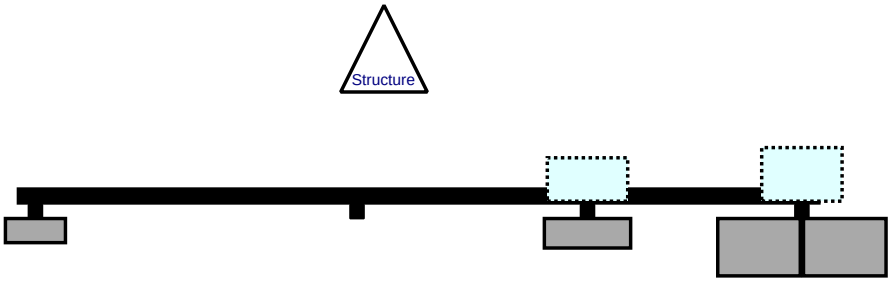
Structure Type: Self Support 10206817

Mount Elev: 105.80 Page: 1

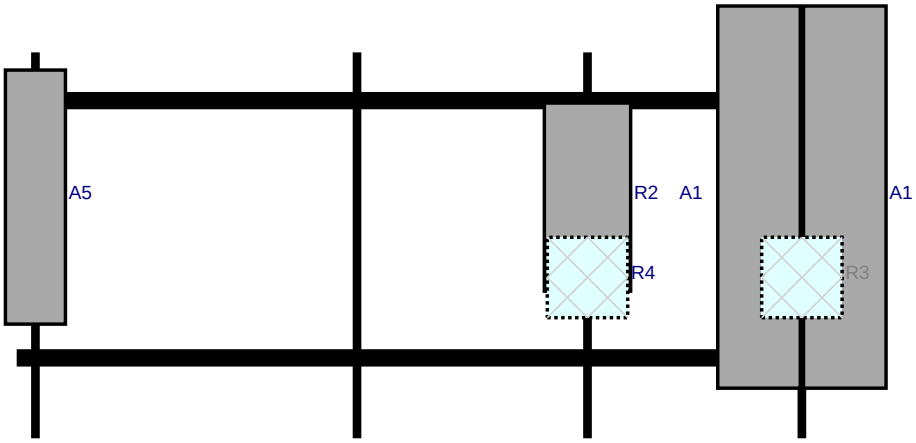


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MX06FRO660-03	71.3	15.4	146.5	1	a	Front	27	8	Retained	07/20/2022
A1	MX06FRO660-03	71.3	15.4	146.5	1	b	Front	27	-8	Retained	07/20/2022
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	146.5	1	a	Behind	42	0	Retained	07/20/2022
A7	BSF0020F3V1-1	10.6	10.9	146.5	1	a	Front	6	0	Added	
A7	BSF0020F3V1-1	10.6	10.9	146.5	1	b	Behind	6	0	Added	
R2	MT6407-77A	35.1	16.1	106.5	2	a	Front	27	0	Retained	07/20/2022
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	106.5	2	a	Behind	42	0	Retained	07/20/2022
A5	BXA-80063/4CF	47.4	11.2	3.5	4	a	Front	27	0	Retained	07/20/2022

Plan View

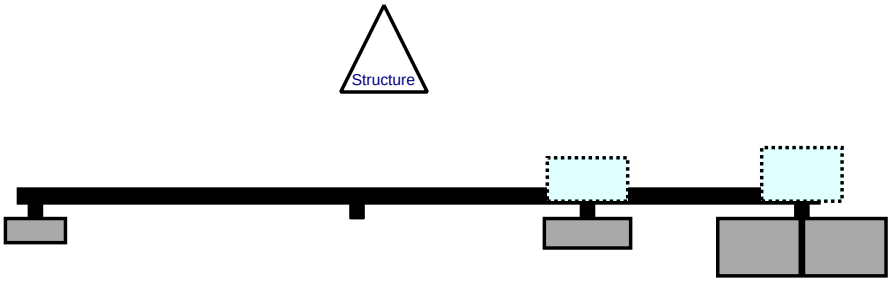


Front View - Looking at Structure

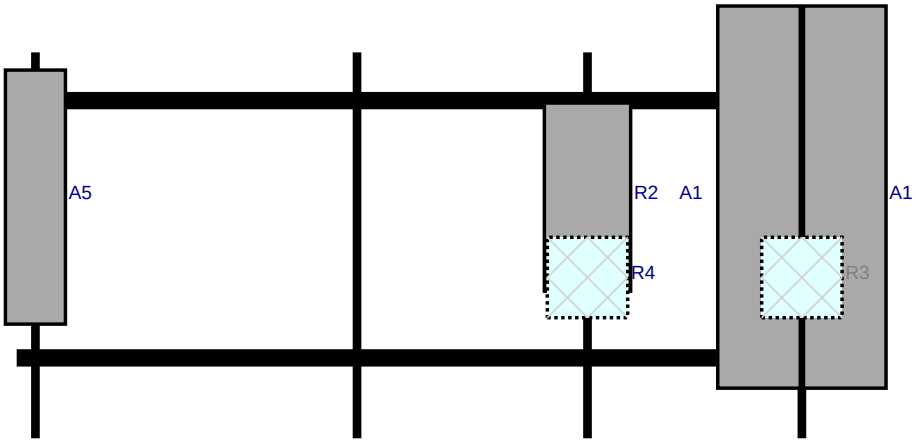


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MX06FRO660-03	71.3	15.4	146.5	1	a	Front	27	8	Retained	07/20/2022
A1	MX06FRO660-03	71.3	15.4	146.5	1	b	Front	27	-8	Retained	07/20/2022
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	146.5	1	a	Behind	42	0	Retained	07/20/2022
R2	MT6407-77A	35.1	16.1	106.5	2	a	Front	27	0	Retained	07/20/2022
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	106.5	2	a	Behind	42	0	Retained	07/20/2022
A5	BXA-80063/4CF	47.4	11.2	3.5	4	a	Front	27	0	Retained	07/20/2022

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
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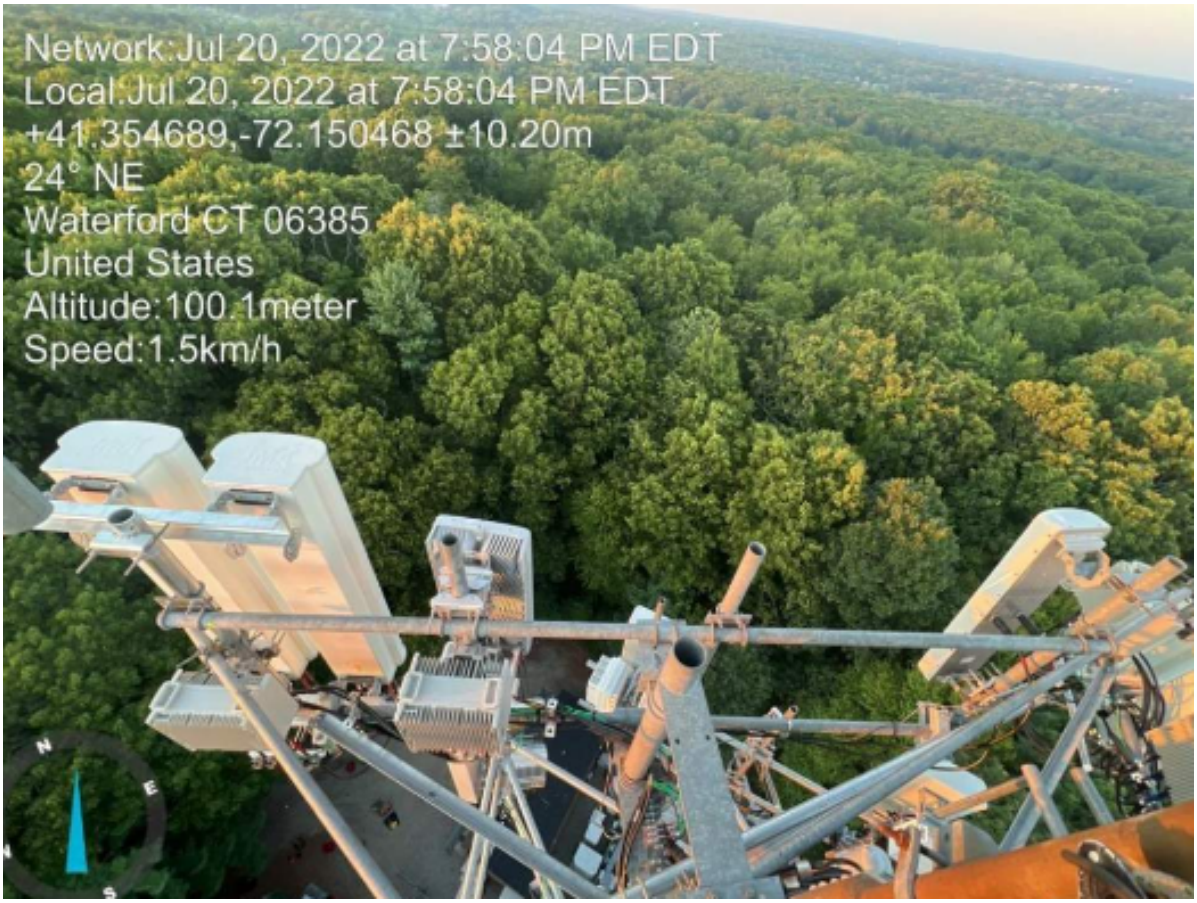
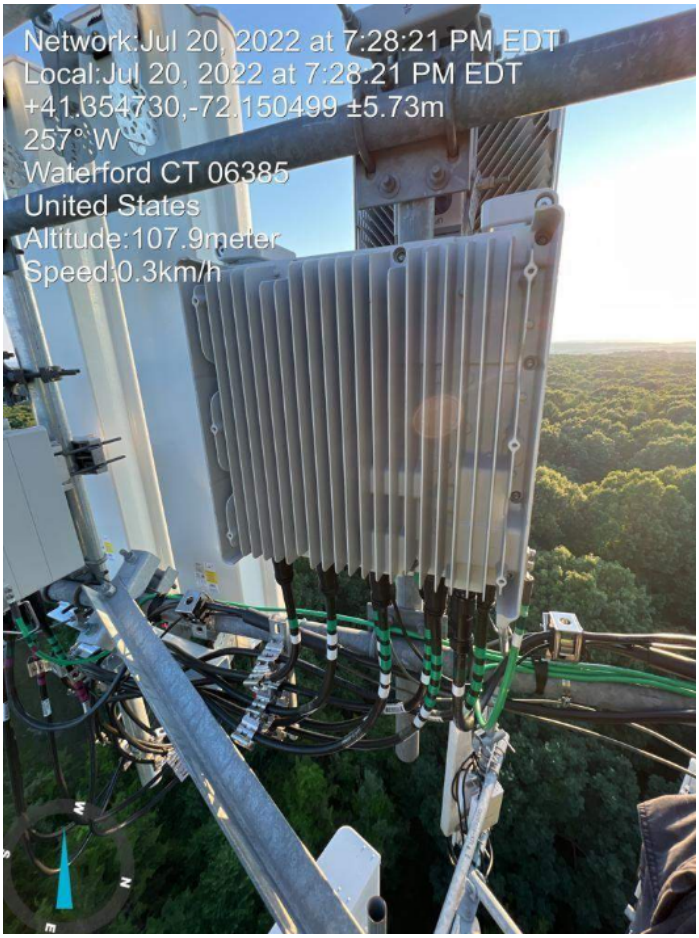
A5	BXA-80063/4CF	47.4	11.2	3.5	4	a	Front	27	0	Retained	07/20/2022


Network:Jul 20, 2022 at 7:58:04 PM EDT
Local:Jul 20, 2022 at 7:58:04 PM EDT
+41.354689,-72.150468 ±10.20m
24° NE
Waterford CT 06385
United States
Altitude:100.1meter
Speed:1.5km/h

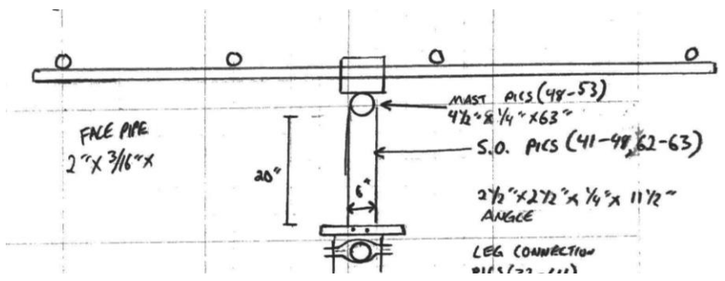

Network:Jul 20, 2022 at 7:28:21 PM EDT
Local:Jul 20, 2022 at 7:28:21 PM EDT
+41.354730,-72.150499 ±5.73m
257° W
Waterford CT 06385
United States
Altitude:107.9meter
Speed:0.3km/h

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	CROWN CASTLE	**Mapping Date:**	3/22/2021
Site Name:	WATERFORD 2 CT	**Tower Type:**	Self Support
Site Number or ID:	467304	**Tower Height (Ft.):**	150
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	106



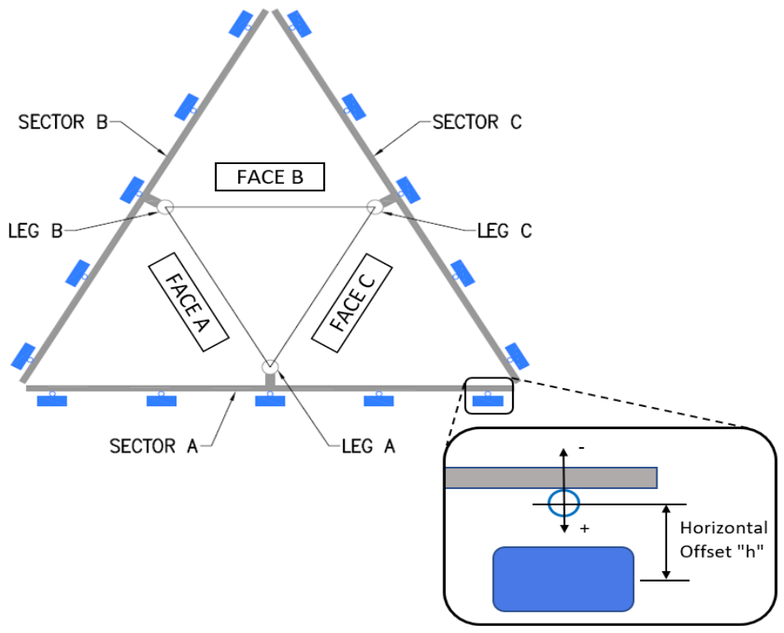
Mount Pipe Configuration and Geometries [Unit = Inches]

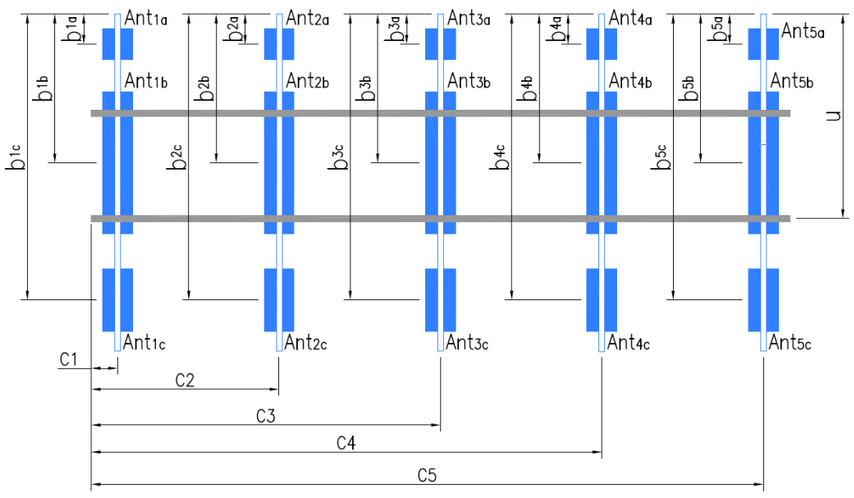
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 72" LONG	57.00	3.50	C1	2" STD. PIPE X 72" LONG	57.00	3.50
A2	2" STD. PIPE X 72" LONG	57.00	43.50	C2	2" STD. PIPE X 72" LONG	57.00	43.50
A3	2" STD. PIPE X 72" LONG	57.00	86.50	C3	2" STD. PIPE X 72" LONG	57.00	86.50
A4	2" STD. PIPE X 72" LONG	57.00	146.50	C4	2" STD. PIPE X 72" LONG	57.00	146.50
A5				C5			
A6				C6			
B1	2" STD. PIPE X 72" LONG	57.00	3.50	D1			
B2	2" STD. PIPE X 72" LONG	57.00	43.50	D2			
B3	2" STD. PIPE X 72" LONG	57.00	86.50	D3			
B4	2" STD. PIPE X 72" LONG	57.00	146.50	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	38.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	9.5
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	1.83

Please enter additional infomation or comments below.

Tower Face Width at Mount Elev. (ft.):	4.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.25



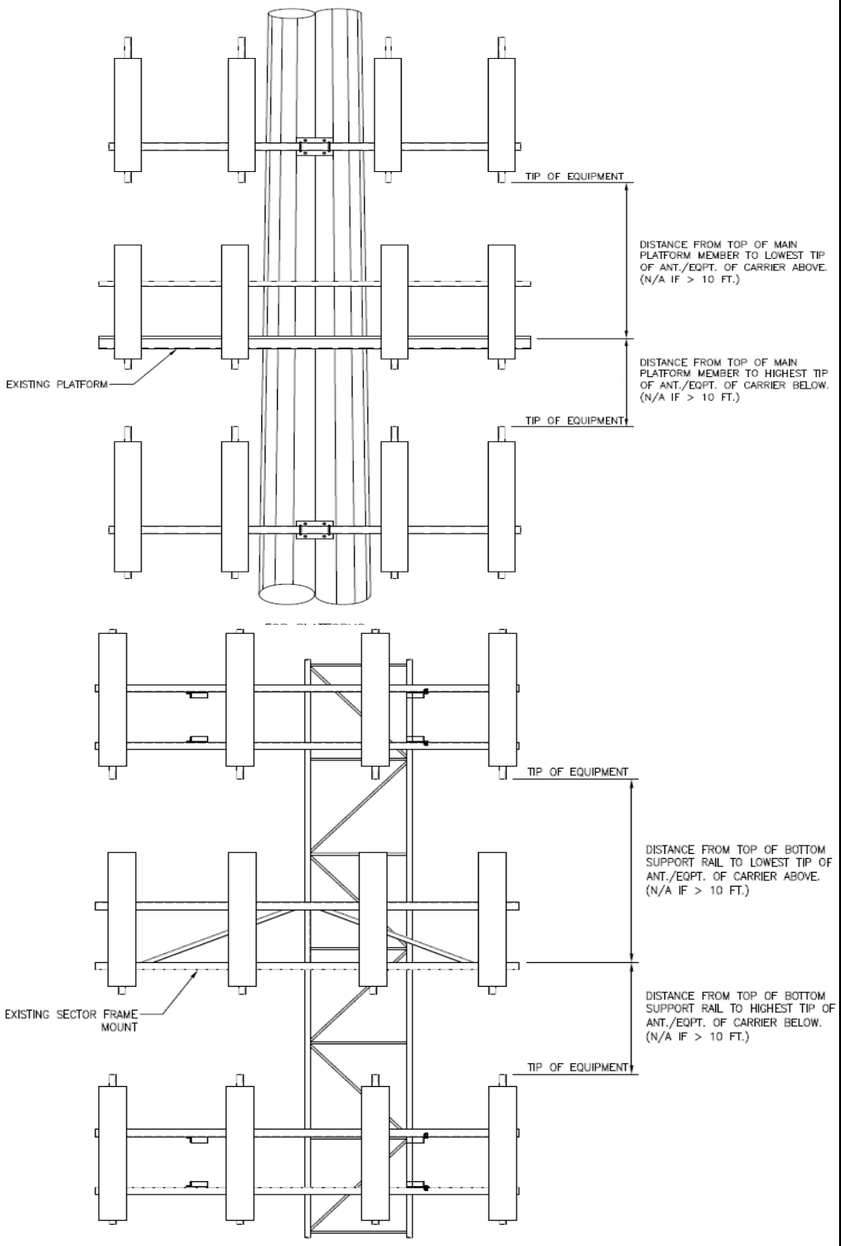


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	B66a RRH 4X45	12.00	7.00	25.50		104.583	36.00	-6.00		73,86
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2) SBNHH-1D65B	12.00	7.50	73.00		104.333	39.00	10.50	25.00	24,86
Ant_{2c}										
Ant_{3a}	B13 RRH4X30	12.00	8.00	21.00		104.667	35.00	-6.00		85,87
Ant_{3b}	BXA-70063-6BF-EDIN-	11.00	5.00	70.00		104.5	37.00	11.50	25.00	26,87
Ant_{3c}										
Ant_{4a}									25.00	
Ant_{4b}	BXA-80083-4CF-EDIN	11.00	5.00	48.00		105.333	27.00	10.00		88
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	B25 RRH 4X30	12.00	7.00	20.00						87,104
Ant on Standoff										
Ant on Tower	RRFDC-6627-PF-48	15.00	10.00	28.00						95,96
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	25.00	Deg	Leg A:	96.00	Deg
Sector B:	150.00	Deg	Leg B:	216.00	Deg
Sector C:	280.00	Deg	Leg C:	336.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	195.00	Deg	Outside Face B
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}	B66a RRH 4X45	12.00	7.00	25.50		104.583	36.00	-6.00		73,89
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2) SBNHH-1D65B	12.00	7.50	73.00		104.333	39.00	10.50	150.00	24,89
Ant_{2c}										
Ant_{3a}	B13 RRH4X30	12.00	8.00	21.00		104.667	35.00	-6.00		85,90
Ant_{3b}	BXA-70063-6BF-EDIN-	11.00	5.00	70.00		104.5	37.00	11.50	150.00	26,90
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-80083-4CF-EDIN	11.00	5.00	48.00		105.333	27.00	10.00	150.00	91
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	B25 RRH 4X30	12.00	7.00	20.00						90,104
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	B66a RRH 4X45	12.00	7.00	25.50		104.583	36.00	-6.00		73,92
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2) SBNHH-1D65B	12.00	7.50	73.00		104.333	39.00	10.50	280.00	24,92
Ant_{2c}										
Ant_{3a}	B13 RRH4X30	12.00	8.00	21.00		104.667	35.00	-6.00		85,94
Ant_{3b}	BXA-70063-6BF-EDIN-	11.00	5.00	70.00		104.5	37.00	11.50	280.00	26,94
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-80083-4CF-EDIN	11.00	5.00	48.00		105.333	27.00	10.00	280.00	26,94
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	B25 RRH 4X30	12.00	7.00	20.00						93,104
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

1		
2	(12) 1-5/8"Ø COAX, (2) 1-1/4"Ø HYBRID	115
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.

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

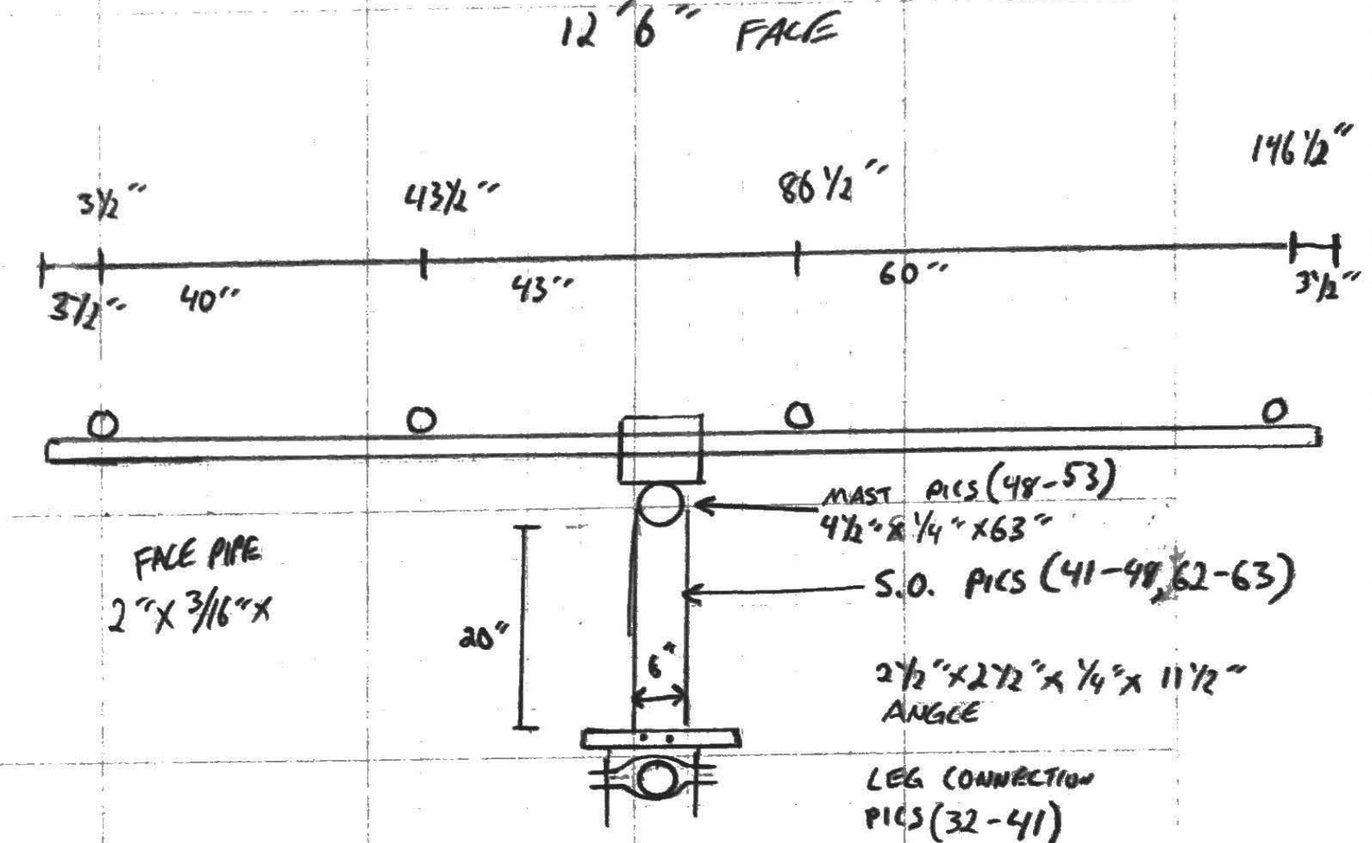
Tower Owner:	CROWN CASTLE	**Mapping Date:**	3/22/2021
Site Name:	WATERFORD 2 CT	**Tower Type:**	Self Support
Site Number or ID:	467304	**Tower Height (Ft.):**	150
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	106

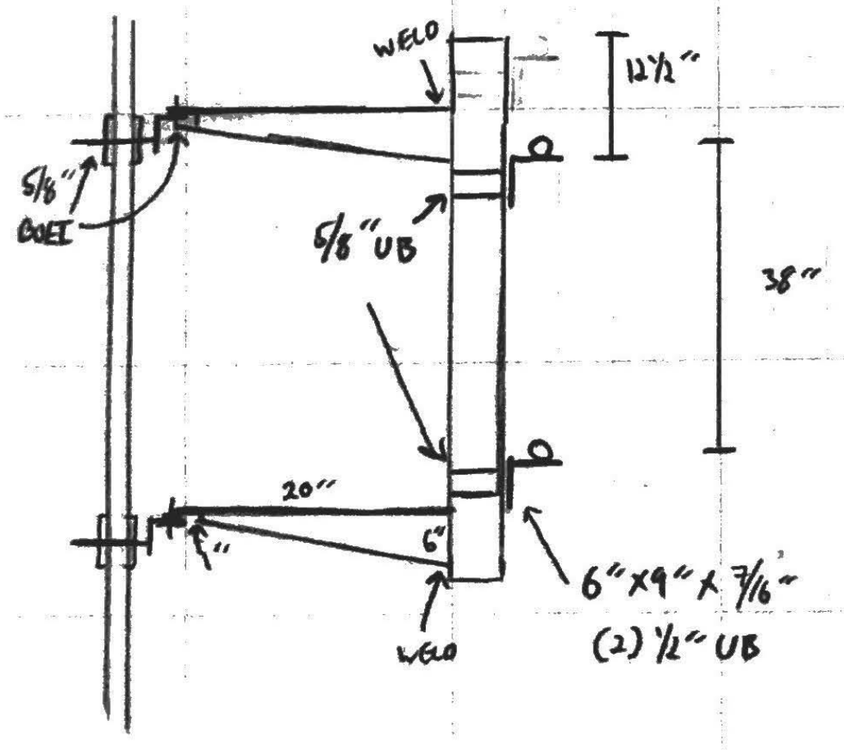
Please Insert Sketches of the Antenna Mount

DATE: 03222021
Project Name:
Project No.: WATERFORD 2 CT
Design By: [illegible] Chk'd By:
Page 2 of 2

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

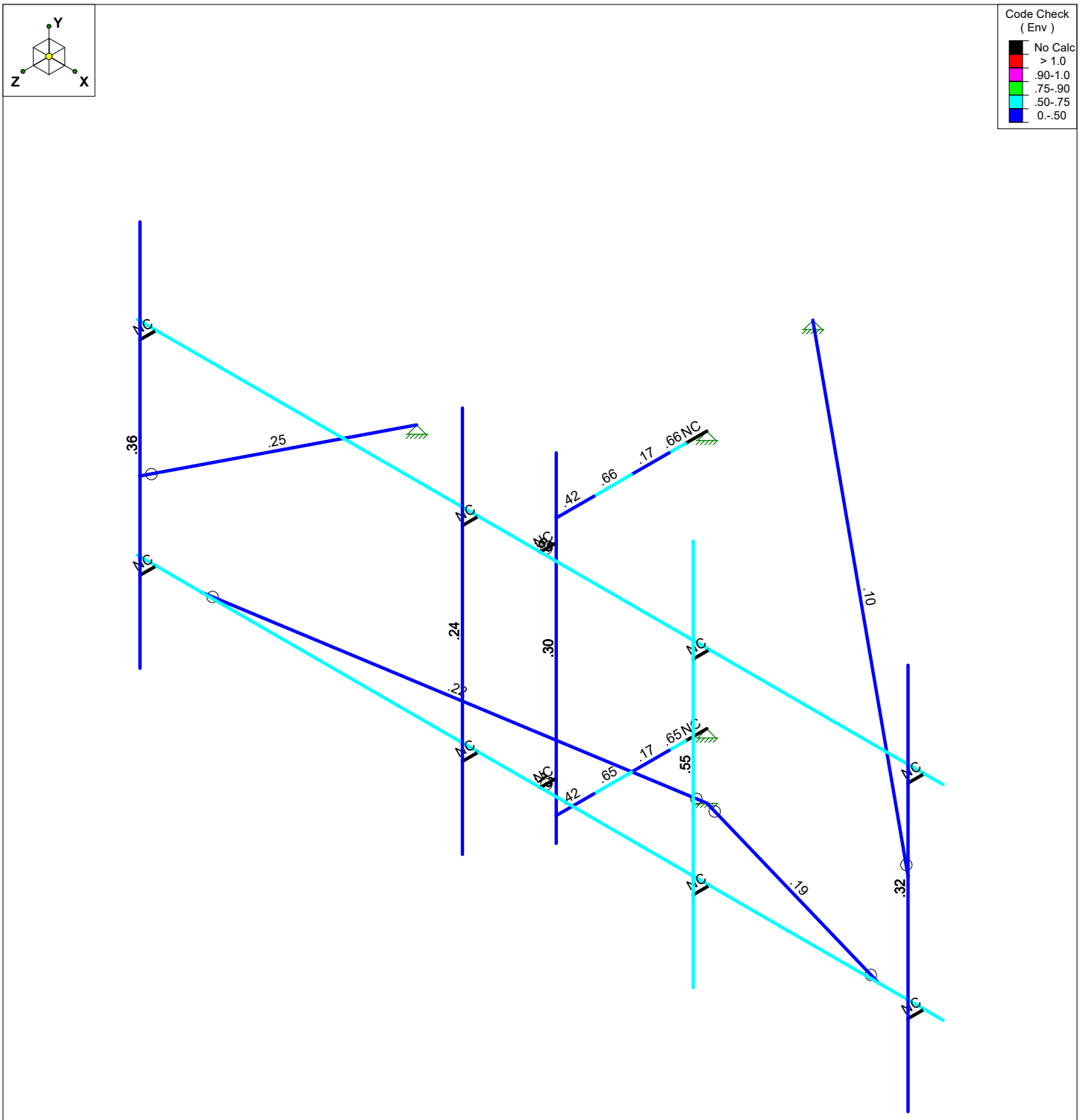
CL = 106'7"
T-F = 37"
TOWER LEG = 2 1/4"
FACE = 54" I.D.





Envelope Only Solution

Colliers Engineering & De...	5000245069-VZW_MT_LOT_SectorA_H	SK - 4
CDH		July 7, 2023 at 4:28 PM
Project No. 10206817		5000245069-VZW_MT_LOT_A_H....



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	5000245069-VZW_MT_LOT_SectorA_H	SK - 5
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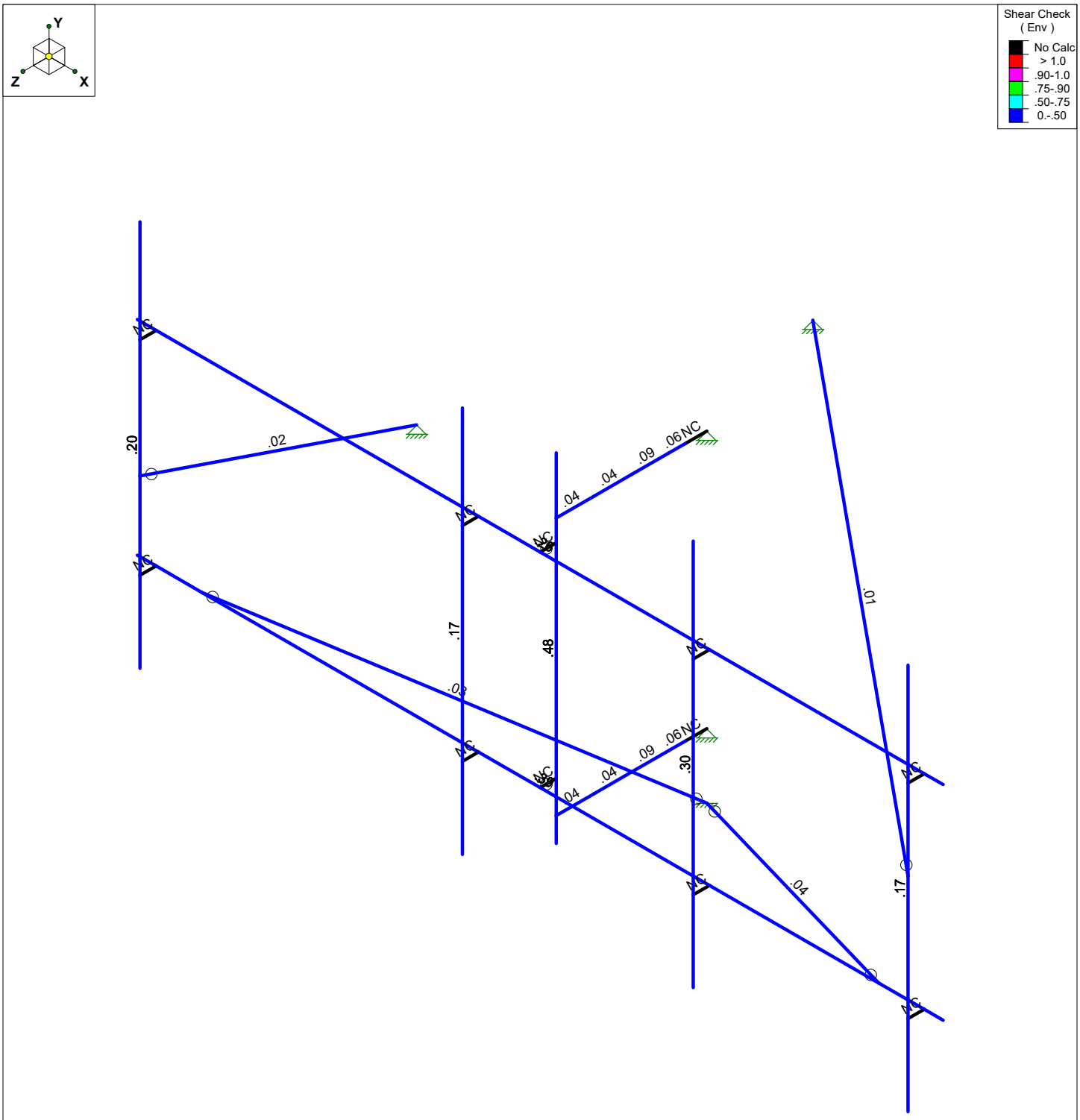
Project No. 10206817		5000245069-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

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CDH		July 7, 2023 at 4:29 PM
Project No. 10206817		5000245069-VZW_MT_LOT_A_H....

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
59	Structure Wi (180 Deg)	None						38		
60	Structure Wi (210 Deg)	None						38		
61	Structure Wi (240 Deg)	None						38		
62	Structure Wi (270 Deg)	None						38		
63	Structure Wi (300 Deg)	None						38		
64	Structure Wi (330 Deg)	None						38		
65	Structure Wm (0 Deg)	None						38		
66	Structure Wm (30 Deg)	None						38		
67	Structure Wm (60 Deg)	None						38		
68	Structure Wm (90 Deg)	None						38		
69	Structure Wm (120 Deg)	None						38		
70	Structure Wm (150 Deg)	None						38		
71	Structure Wm (180 Deg)	None						38		
72	Structure Wm (210 Deg)	None						38		
73	Structure Wm (240 Deg)	None						38		
74	Structure Wm (270 Deg)	None						38		
75	Structure Wm (300 Deg)	None						38		
76	Structure Wm (330 Deg)	None						38		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					36			
82	Antenna Eh (0 Deg)	None					24			
83	Antenna Eh (90 Deg)	None					24			
84	Structure Ev	ELY		-.041						
85	Structure Eh (0 Deg)	ELZ			-.103					
86	Structure Eh (90 Deg)	ELX	.103							

Load Combinations

	Description	So..	P...	S...	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..
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 (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1						
14	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1						
15	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1						
16	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1						
17	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1						
18	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1						
19	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1						
20	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1						
21	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1						
22	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1						
23	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1						
24	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1						
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1								
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1								

Load Combinations (Continued)

	Description	So..	P...	S...	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0...	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 ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX					
53	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	ELZ	.866	ELX	.5				
54	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	ELZ	.5	ELX	.866				
55	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1				
56	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
57	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
58	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX					
59	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
60	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
61	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1				
62	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
63	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	ELZ	.866	ELX	-.5				
64	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX					
65	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	ELZ	.866	ELX	.5				
66	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	ELZ	.5	ELX	.866				
67	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1				
68	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
69	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
70	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX					
71	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
72	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
73	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1				
74	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
75	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	12.5	0	0	0	
3	N3	0	3.166667	0	0	
4	N4	12.5	3.166667	0	0	
5	N5	6.25	0	0	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
6	N6	6.25	3.166667	0	0	
7	N31	6.25	0	-.25	0	
8	N32	6.25	3.166667	-.25	0	
9	N33	6.25	-.5	-.25	0	
10	N34	6.25	-.875	-.25	0	
11	N35	6.25	3.5	-.25	0	
12	N36	6.25	-.5	-2.25	0	
13	N37	6.25	3.5	-2.25	0	
14	N40	6.25	-.5	-2	0	
15	N41	6.25	3.5	-2	0	
16	N46	6.25	4.375	-.25	0	
17	N43	6.25	-.5	-0.833333	0	
18	N44	6.25	3.5	-0.833333	0	
19	N45	6.25	-.5	-1.416667	0	
20	N46B	6.25	3.5	-1.416667	0	
21	N47	6.25	-.5	-2.583333	0	
22	N48	6.25	3.5	-2.583333	0	
23	N25	12.208333	0	0	0	
24	N26	12.208333	3.166667	0	0	
25	N27	8.875	0	0	0	
26	N28	8.875	3.166667	0	0	
27	N29	5.291667	0	0	0	
28	N30	5.291667	3.166667	0	0	
29	N31A	0.291667	0	0	0	
30	N32A	0.291667	3.166667	0	0	
31	N33A	12.208333	0	.25	0	
32	N34A	12.208333	3.166667	.25	0	
33	N35A	8.875	0	.25	0	
34	N36A	8.875	3.166667	.25	0	
35	N37A	5.291667	0	.25	0	
36	N38	5.291667	3.166667	.25	0	
37	N39	0.291667	0	.25	0	
38	N40A	0.291667	3.166667	.25	0	
39	N41A	12.208333	4.75	.25	0	
40	N42	8.875	4.75	.25	0	
41	N43A	5.291667	4.75	.25	0	
42	N44A	0.291667	4.75	.25	0	
43	N45A	12.208333	-1.25	.25	0	
44	N46A	8.875	-1.25	.25	0	
45	N47B	5.291667	-1.25	.25	0	
46	N48A	0.291667	-1.25	.25	0	
47	N49A	12.208333	1.916663	.25	0	
48	N49	4	1.916663	-6.480448	0	
49	N49B	6.25	-1.5	-2.583333	0	
50	N50	1	0	0	0	
51	N51	11.5	0	0	0	
52	N53	1.75	1.33333	-2.583333	0	
53	N53A	0.291667	1.333333	.25	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Face Pipe	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Tieback	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Mast Pipe	PIPE_4.0	Column	Pipe	A53 Gr.B	Typical	2.96	6.82	6.82	13.6
5	TES SO1	W6X15	Beam	W_Tee	A36 Gr.36	Typical	4.43	9.32	29.1	.101
6	SO1	WT5X3/8	Beam	W_Tee	A36 Gr.36	Typical	3.81	7.05	7.86	.201

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
7	TES SO2	W6X15	Beam	W Tee	A36 Gr.36	Typical	4.43	9.32	29.1	.101
8	SO2	WT3X3/8	Beam	W Tee	A36 Gr.36	Typical	2.21	4.66	1.41	.05
9	SO3	WT1x3/8	Beam	W Tee	A36 Gr.36	Typical	4.42	8.35	9.28	.31
10	TES SO3	W6X15	Beam	W Tee	A36 Gr.36	Typical	4.43	9.32	29.1	.101
11	SO4	PL3/8x6	Beam	BAR	A36 Gr.36	Typical	2.25	.026	6.75	.101
12	Dual Mount Pipe	PIPE_2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
13	MOD Bracing	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
14	Mod Tieback	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Face Pipe	Beam	Pipe	A53 Gr.B	Typical
2	M2	N3	N4			Face Pipe	Beam	Pipe	A53 Gr.B	Typical
3	M15	N6	N32			RIGID	None	None	RIGID	Typical
4	M16	N5	N31			RIGID	None	None	RIGID	Typical
5	M17	N46	N34			Mast Pipe	Column	Pipe	A53 Gr.B	Typical
6	M25	N41	N37		90	SO4	Beam	BAR	A36 Gr.36	Typical
7	M26	N40	N36		90	SO4	Beam	BAR	A36 Gr.36	Typical
8	M21	N35	N44			SO1	Beam	W Tee	A36 Gr.36	Typical
9	M22	N33	N43			SO1	Beam	W Tee	A36 Gr.36	Typical
10	M23	N44	N46B			SO2	Beam	W Tee	A36 Gr.36	Typical
11	M24	N43	N45			SO2	Beam	W Tee	A36 Gr.36	Typical
12	M25B	N45	N40			SO3	Beam	W Tee	A36 Gr.36	Typical
13	M26B	N46B	N41			SO3	Beam	W Tee	A36 Gr.36	Typical
14	M27	N48	N37			RIGID	None	None	RIGID	Typical
15	M28	N47	N36			RIGID	None	None	RIGID	Typical
16	M17A	N40A	N32A			RIGID	None	None	RIGID	Typical
17	M18	N39	N31A			RIGID	None	None	RIGID	Typical
18	M19	N38	N30			RIGID	None	None	RIGID	Typical
19	M20	N37A	N29			RIGID	None	None	RIGID	Typical
20	M21A	N35A	N27			RIGID	None	None	RIGID	Typical
21	M22A	N33A	N25			RIGID	None	None	RIGID	Typical
22	M23A	N34A	N26			RIGID	None	None	RIGID	Typical
23	M24A	N36A	N28			RIGID	None	None	RIGID	Typical
24	MP4A	N44A	N48A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
25	MP3A	N43A	N47B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
26	MP2A	N42	N46A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
27	MP1A	N41A	N45A			Dual Mount Pi...	Column	Pipe	A53 Gr.B	Typical
28	M29	N49A	N49			Tieback	Beam	Pipe	A53 Gr.B	Typical
29	M29A	N50	N49B			MOD Bracing	Column	Single Angle	A36 Gr.36	Typical
30	M30	N51	N49B		270	MOD Bracing	Column	Single Angle	A36 Gr.36	Typical
31	M31	N53A	N53			Mod Tieback	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	M15		OOOOOO				Yes	** NA **			None
4	M16		OOOOOO				Yes	** NA **			None
5	M17						Yes	** NA **			None
6	M25						Yes				None
7	M26						Yes				None
8	M21						Yes				None
9	M22						Yes				None
10	M23						Yes				None
11	M24						Yes				None
12	M25B						Yes				None
13	M26B						Yes	Default			None
14	M27						Yes	** NA **			None
15	M28						Yes	** NA **			None
16	M17A						Yes	** NA **			None
17	M18						Yes	** NA **			None
18	M19						Yes	** NA **			None
19	M20						Yes	** NA **			None
20	M21A						Yes	** NA **			None
21	M22A						Yes	** NA **			None
22	M23A						Yes	** NA **			None
23	M24A						Yes	** NA **			None
24	MP4A						Yes	** NA **			None
25	MP3A						Yes	** NA **			None
26	MP2A						Yes	** NA **			None
27	MP1A						Yes	** NA **			None
28	M29	BenPIN					Yes	Default			None
29	M29A	BenPIN	BenPIN				Yes	** NA **			None
30	M30	BenPIN	BenPIN				Yes	** NA **			None
31	M31	OOOOXO					Yes	Default			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-23	.25
2	MP1A	My	-.017	.25
3	MP1A	Mz	.015	.25
4	MP1A	Y	-23	4.25
5	MP1A	My	-.017	4.25
6	MP1A	Mz	.015	4.25
7	MP1A	Y	-23	.25
8	MP1A	My	0	.25
9	MP1A	Mz	-.015	.25
10	MP1A	Y	-23	4.25
11	MP1A	My	0	4.25
12	MP1A	Mz	-.015	4.25
13	MP2A	Y	-43.55	1.25
14	MP2A	My	-.033	1.25
15	MP2A	Mz	0	1.25
16	MP2A	Y	-43.55	3.25
17	MP2A	My	-.033	3.25
18	MP2A	Mz	0	3.25
19	MP1A	Y	-84.4	3.5
20	MP1A	My	.042	3.5
21	MP1A	Mz	0	3.5
22	MP2A	Y	-70.3	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP2A	My	.035	3.5
24	MP2A	Mz	0	3.5
25	MP4A	Y	-4.95	1.25
26	MP4A	My	-.004	1.25
27	MP4A	Mz	0	1.25
28	MP4A	Y	-4.95	3.25
29	MP4A	My	-.004	3.25
30	MP4A	Mz	0	3.25
31	MP1A	Y	-17.6	.5
32	MP1A	My	.009	.5
33	MP1A	Mz	.004	.5
34	MP1A	Y	-17.6	.5
35	MP1A	My	.009	.5
36	MP1A	Mz	-.004	.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-80.115	.25
2	MP1A	My	-.06	.25
3	MP1A	Mz	.053	.25
4	MP1A	Y	-80.115	4.25
5	MP1A	My	-.06	4.25
6	MP1A	Mz	.053	4.25
7	MP1A	Y	-80.115	.25
8	MP1A	My	0	.25
9	MP1A	Mz	-.053	.25
10	MP1A	Y	-80.115	4.25
11	MP1A	My	0	4.25
12	MP1A	Mz	-.053	4.25
13	MP2A	Y	-34.57	1.25
14	MP2A	My	-.026	1.25
15	MP2A	Mz	0	1.25
16	MP2A	Y	-34.57	3.25
17	MP2A	My	-.026	3.25
18	MP2A	Mz	0	3.25
19	MP1A	Y	-43.566	3.5
20	MP1A	My	.022	3.5
21	MP1A	Mz	0	3.5
22	MP2A	Y	-39.171	3.5
23	MP2A	My	.02	3.5
24	MP2A	Mz	0	3.5
25	MP4A	Y	-33.083	1.25
26	MP4A	My	-.025	1.25
27	MP4A	Mz	0	1.25
28	MP4A	Y	-33.083	3.25
29	MP4A	My	-.025	3.25
30	MP4A	Mz	0	3.25
31	MP1A	Y	-16.791	.5
32	MP1A	My	.008	.5
33	MP1A	Mz	.004	.5
34	MP1A	Y	-16.791	.5
35	MP1A	My	.008	.5
36	MP1A	Mz	-.004	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-87.308	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP1A	Mx	-.058	.25
4	MP1A	X	0	4.25
5	MP1A	Z	-87.308	4.25
6	MP1A	Mx	-.058	4.25
7	MP1A	X	0	.25
8	MP1A	Z	-87.308	.25
9	MP1A	Mx	.058	.25
10	MP1A	X	0	4.25
11	MP1A	Z	-87.308	4.25
12	MP1A	Mx	.058	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	-72.357	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	-72.357	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	-57.221	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	-57.221	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	-87.124	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	-87.124	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	-35.44	.5
33	MP1A	Mx	-.009	.5
34	MP1A	X	0	.5
35	MP1A	Z	-35.44	.5
36	MP1A	Mx	.009	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	40.908	.25
2	MP1A	Z	-70.855	.25
3	MP1A	Mx	-.078	.25
4	MP1A	X	40.908	4.25
5	MP1A	Z	-70.855	4.25
6	MP1A	Mx	-.078	4.25
7	MP1A	X	40.908	.25
8	MP1A	Z	-70.855	.25
9	MP1A	Mx	.047	.25
10	MP1A	X	40.908	4.25
11	MP1A	Z	-70.855	4.25
12	MP1A	Mx	.047	4.25
13	MP2A	X	30.249	1.25
14	MP2A	Z	-52.392	1.25
15	MP2A	Mx	-.023	1.25
16	MP2A	X	30.249	3.25
17	MP2A	Z	-52.392	3.25
18	MP2A	Mx	-.023	3.25
19	MP1A	X	26.257	3.5
20	MP1A	Z	-45.479	3.5
21	MP1A	Mx	.013	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP2A	X	25.38	3.5
23	MP2A	Z	-43.96	3.5
24	MP2A	Mx	.013	3.5
25	MP4A	X	37.859	1.25
26	MP4A	Z	-65.573	1.25
27	MP4A	Mx	-.028	1.25
28	MP4A	X	37.859	3.25
29	MP4A	Z	-65.573	3.25
30	MP4A	Mx	-.028	3.25
31	MP1A	X	17.733	.5
32	MP1A	Z	-30.715	.5
33	MP1A	Mx	.001	.5
34	MP1A	X	17.733	.5
35	MP1A	Z	-30.715	.5
36	MP1A	Mx	.017	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	61.344	.25
2	MP1A	Z	-35.417	.25
3	MP1A	Mx	-.07	.25
4	MP1A	X	61.344	4.25
5	MP1A	Z	-35.417	4.25
6	MP1A	Mx	-.07	4.25
7	MP1A	X	61.344	.25
8	MP1A	Z	-35.417	.25
9	MP1A	Mx	.024	.25
10	MP1A	X	61.344	4.25
11	MP1A	Z	-35.417	4.25
12	MP1A	Mx	.024	4.25
13	MP2A	X	31.851	1.25
14	MP2A	Z	-18.389	1.25
15	MP2A	Mx	-.024	1.25
16	MP2A	X	31.851	3.25
17	MP2A	Z	-18.389	3.25
18	MP2A	Mx	-.024	3.25
19	MP1A	X	37.326	3.5
20	MP1A	Z	-21.55	3.5
21	MP1A	Mx	.019	3.5
22	MP2A	X	32.77	3.5
23	MP2A	Z	-18.92	3.5
24	MP2A	Mx	.016	3.5
25	MP4A	X	45.817	1.25
26	MP4A	Z	-26.452	1.25
27	MP4A	Mx	-.034	1.25
28	MP4A	X	45.817	3.25
29	MP4A	Z	-26.452	3.25
30	MP4A	Mx	-.034	3.25
31	MP1A	X	30.76	.5
32	MP1A	Z	-17.759	.5
33	MP1A	Mx	.011	.5
34	MP1A	X	30.76	.5
35	MP1A	Z	-17.759	.5
36	MP1A	Mx	.02	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	65.343	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP1A	Z	0	.25
3	MP1A	Mx	-.049	.25
4	MP1A	X	65.343	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	-.049	4.25
7	MP1A	X	65.343	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	65.343	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	24.919	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	-.019	1.25
16	MP2A	X	24.919	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	-.019	3.25
19	MP1A	X	38.393	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	.019	3.5
22	MP2A	X	31.379	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.016	3.5
25	MP4A	X	41.498	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	-.031	1.25
28	MP4A	X	41.498	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	-.031	3.25
31	MP1A	X	35.545	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	.018	.5
34	MP1A	X	35.545	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	.018	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	61.344	.25
2	MP1A	Z	35.417	.25
3	MP1A	Mx	-.022	.25
4	MP1A	X	61.344	4.25
5	MP1A	Z	35.417	4.25
6	MP1A	Mx	-.022	4.25
7	MP1A	X	61.344	.25
8	MP1A	Z	35.417	.25
9	MP1A	Mx	-.024	.25
10	MP1A	X	61.344	4.25
11	MP1A	Z	35.417	4.25
12	MP1A	Mx	-.024	4.25
13	MP2A	X	31.851	1.25
14	MP2A	Z	18.389	1.25
15	MP2A	Mx	-.024	1.25
16	MP2A	X	31.851	3.25
17	MP2A	Z	18.389	3.25
18	MP2A	Mx	-.024	3.25
19	MP1A	X	37.326	3.5
20	MP1A	Z	21.55	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	.019	3.5
22	MP2A	X	32.77	3.5
23	MP2A	Z	18.92	3.5
24	MP2A	Mx	.016	3.5
25	MP4A	X	45.817	1.25
26	MP4A	Z	26.452	1.25
27	MP4A	Mx	-.034	1.25
28	MP4A	X	45.817	3.25
29	MP4A	Z	26.452	3.25
30	MP4A	Mx	-.034	3.25
31	MP1A	X	30.76	.5
32	MP1A	Z	17.759	.5
33	MP1A	Mx	.02	.5
34	MP1A	X	30.76	.5
35	MP1A	Z	17.759	.5
36	MP1A	Mx	.011	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	40.908	.25
2	MP1A	Z	70.855	.25
3	MP1A	Mx	.017	.25
4	MP1A	X	40.908	4.25
5	MP1A	Z	70.855	4.25
6	MP1A	Mx	.017	4.25
7	MP1A	X	40.908	.25
8	MP1A	Z	70.855	.25
9	MP1A	Mx	-.047	.25
10	MP1A	X	40.908	4.25
11	MP1A	Z	70.855	4.25
12	MP1A	Mx	-.047	4.25
13	MP2A	X	30.249	1.25
14	MP2A	Z	52.392	1.25
15	MP2A	Mx	-.023	1.25
16	MP2A	X	30.249	3.25
17	MP2A	Z	52.392	3.25
18	MP2A	Mx	-.023	3.25
19	MP1A	X	26.257	3.5
20	MP1A	Z	45.479	3.5
21	MP1A	Mx	.013	3.5
22	MP2A	X	25.38	3.5
23	MP2A	Z	43.96	3.5
24	MP2A	Mx	.013	3.5
25	MP4A	X	37.859	1.25
26	MP4A	Z	65.573	1.25
27	MP4A	Mx	-.028	1.25
28	MP4A	X	37.859	3.25
29	MP4A	Z	65.573	3.25
30	MP4A	Mx	-.028	3.25
31	MP1A	X	17.733	.5
32	MP1A	Z	30.715	.5
33	MP1A	Mx	.017	.5
34	MP1A	X	17.733	.5
35	MP1A	Z	30.715	.5
36	MP1A	Mx	.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	87.308	.25
3	MP1A	Mx	.058	.25
4	MP1A	X	0	4.25
5	MP1A	Z	87.308	4.25
6	MP1A	Mx	.058	4.25
7	MP1A	X	0	.25
8	MP1A	Z	87.308	.25
9	MP1A	Mx	-.058	.25
10	MP1A	X	0	4.25
11	MP1A	Z	87.308	4.25
12	MP1A	Mx	-.058	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	72.357	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	72.357	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	57.221	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	57.221	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	87.124	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	87.124	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	35.44	.5
33	MP1A	Mx	.009	.5
34	MP1A	X	0	.5
35	MP1A	Z	35.44	.5
36	MP1A	Mx	-.009	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-40.908	.25
2	MP1A	Z	70.855	.25
3	MP1A	Mx	.078	.25
4	MP1A	X	-40.908	4.25
5	MP1A	Z	70.855	4.25
6	MP1A	Mx	.078	4.25
7	MP1A	X	-40.908	.25
8	MP1A	Z	70.855	.25
9	MP1A	Mx	-.047	.25
10	MP1A	X	-40.908	4.25
11	MP1A	Z	70.855	4.25
12	MP1A	Mx	-.047	4.25
13	MP2A	X	-30.249	1.25
14	MP2A	Z	52.392	1.25
15	MP2A	Mx	.023	1.25
16	MP2A	X	-30.249	3.25
17	MP2A	Z	52.392	3.25
18	MP2A	Mx	.023	3.25
19	MP1A	X	-26.257	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	45.479	3.5
21	MP1A	Mx	-.013	3.5
22	MP2A	X	-25.38	3.5
23	MP2A	Z	43.96	3.5
24	MP2A	Mx	-.013	3.5
25	MP4A	X	-37.859	1.25
26	MP4A	Z	65.573	1.25
27	MP4A	Mx	.028	1.25
28	MP4A	X	-37.859	3.25
29	MP4A	Z	65.573	3.25
30	MP4A	Mx	.028	3.25
31	MP1A	X	-17.733	.5
32	MP1A	Z	30.715	.5
33	MP1A	Mx	-.001	.5
34	MP1A	X	-17.733	.5
35	MP1A	Z	30.715	.5
36	MP1A	Mx	-.017	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-61.344	.25
2	MP1A	Z	35.417	.25
3	MP1A	Mx	.07	.25
4	MP1A	X	-61.344	4.25
5	MP1A	Z	35.417	4.25
6	MP1A	Mx	.07	4.25
7	MP1A	X	-61.344	.25
8	MP1A	Z	35.417	.25
9	MP1A	Mx	-.024	.25
10	MP1A	X	-61.344	4.25
11	MP1A	Z	35.417	4.25
12	MP1A	Mx	-.024	4.25
13	MP2A	X	-31.851	1.25
14	MP2A	Z	18.389	1.25
15	MP2A	Mx	.024	1.25
16	MP2A	X	-31.851	3.25
17	MP2A	Z	18.389	3.25
18	MP2A	Mx	.024	3.25
19	MP1A	X	-37.326	3.5
20	MP1A	Z	21.55	3.5
21	MP1A	Mx	-.019	3.5
22	MP2A	X	-32.77	3.5
23	MP2A	Z	18.92	3.5
24	MP2A	Mx	-.016	3.5
25	MP4A	X	-45.817	1.25
26	MP4A	Z	26.452	1.25
27	MP4A	Mx	.034	1.25
28	MP4A	X	-45.817	3.25
29	MP4A	Z	26.452	3.25
30	MP4A	Mx	.034	3.25
31	MP1A	X	-30.76	.5
32	MP1A	Z	17.759	.5
33	MP1A	Mx	-.011	.5
34	MP1A	X	-30.76	.5
35	MP1A	Z	17.759	.5
36	MP1A	Mx	-.02	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-65.343	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.049	.25
4	MP1A	X	-65.343	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	.049	4.25
7	MP1A	X	-65.343	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	-65.343	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	-24.919	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	.019	1.25
16	MP2A	X	-24.919	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	.019	3.25
19	MP1A	X	-38.393	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	-.019	3.5
22	MP2A	X	-31.379	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.016	3.5
25	MP4A	X	-41.498	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	.031	1.25
28	MP4A	X	-41.498	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	.031	3.25
31	MP1A	X	-35.545	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	-.018	.5
34	MP1A	X	-35.545	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	-.018	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-61.344	.25
2	MP1A	Z	-35.417	.25
3	MP1A	Mx	.022	.25
4	MP1A	X	-61.344	4.25
5	MP1A	Z	-35.417	4.25
6	MP1A	Mx	.022	4.25
7	MP1A	X	-61.344	.25
8	MP1A	Z	-35.417	.25
9	MP1A	Mx	.024	.25
10	MP1A	X	-61.344	4.25
11	MP1A	Z	-35.417	4.25
12	MP1A	Mx	.024	4.25
13	MP2A	X	-31.851	1.25
14	MP2A	Z	-18.389	1.25
15	MP2A	Mx	.024	1.25
16	MP2A	X	-31.851	3.25
17	MP2A	Z	-18.389	3.25
18	MP2A	Mx	.024	3.25
19	MP1A	X	-37.326	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-21.55	3.5
21	MP1A	Mx	-.019	3.5
22	MP2A	X	-32.77	3.5
23	MP2A	Z	-18.92	3.5
24	MP2A	Mx	-.016	3.5
25	MP4A	X	-45.817	1.25
26	MP4A	Z	-26.452	1.25
27	MP4A	Mx	.034	1.25
28	MP4A	X	-45.817	3.25
29	MP4A	Z	-26.452	3.25
30	MP4A	Mx	.034	3.25
31	MP1A	X	-30.76	.5
32	MP1A	Z	-17.759	.5
33	MP1A	Mx	-.02	.5
34	MP1A	X	-30.76	.5
35	MP1A	Z	-17.759	.5
36	MP1A	Mx	-.011	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-40.908	.25
2	MP1A	Z	-70.855	.25
3	MP1A	Mx	-.017	.25
4	MP1A	X	-40.908	4.25
5	MP1A	Z	-70.855	4.25
6	MP1A	Mx	-.017	4.25
7	MP1A	X	-40.908	.25
8	MP1A	Z	-70.855	.25
9	MP1A	Mx	.047	.25
10	MP1A	X	-40.908	4.25
11	MP1A	Z	-70.855	4.25
12	MP1A	Mx	.047	4.25
13	MP2A	X	-30.249	1.25
14	MP2A	Z	-52.392	1.25
15	MP2A	Mx	.023	1.25
16	MP2A	X	-30.249	3.25
17	MP2A	Z	-52.392	3.25
18	MP2A	Mx	.023	3.25
19	MP1A	X	-26.257	3.5
20	MP1A	Z	-45.479	3.5
21	MP1A	Mx	-.013	3.5
22	MP2A	X	-25.38	3.5
23	MP2A	Z	-43.96	3.5
24	MP2A	Mx	-.013	3.5
25	MP4A	X	-37.859	1.25
26	MP4A	Z	-65.573	1.25
27	MP4A	Mx	.028	1.25
28	MP4A	X	-37.859	3.25
29	MP4A	Z	-65.573	3.25
30	MP4A	Mx	.028	3.25
31	MP1A	X	-17.733	.5
32	MP1A	Z	-30.715	.5
33	MP1A	Mx	-.017	.5
34	MP1A	X	-17.733	.5
35	MP1A	Z	-30.715	.5
36	MP1A	Mx	-.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-29.321	.25
3	MP1A	Mx	-.02	.25
4	MP1A	X	0	4.25
5	MP1A	Z	-29.321	4.25
6	MP1A	Mx	-.02	4.25
7	MP1A	X	0	.25
8	MP1A	Z	-29.321	.25
9	MP1A	Mx	.02	.25
10	MP1A	X	0	4.25
11	MP1A	Z	-29.321	4.25
12	MP1A	Mx	.02	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	-14.453	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	-14.453	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	-12.163	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	-12.163	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	-14.497	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	-14.497	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	-2.501	.5
33	MP1A	Mx	-.000625	.5
34	MP1A	X	0	.5
35	MP1A	Z	-2.501	.5
36	MP1A	Mx	.000625	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.767	.25
2	MP1A	Z	-23.845	.25
3	MP1A	Mx	-.026	.25
4	MP1A	X	13.767	4.25
5	MP1A	Z	-23.845	4.25
6	MP1A	Mx	-.026	4.25
7	MP1A	X	13.767	.25
8	MP1A	Z	-23.845	.25
9	MP1A	Mx	.016	.25
10	MP1A	X	13.767	4.25
11	MP1A	Z	-23.845	4.25
12	MP1A	Mx	.016	4.25
13	MP2A	X	6.188	1.25
14	MP2A	Z	-10.717	1.25
15	MP2A	Mx	-.005	1.25
16	MP2A	X	6.188	3.25
17	MP2A	Z	-10.717	3.25
18	MP2A	Mx	-.005	3.25
19	MP1A	X	5.618	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-9.73	3.5
21	MP1A	Mx	.003	3.5
22	MP2A	X	5.441	3.5
23	MP2A	Z	-9.425	3.5
24	MP2A	Mx	.003	3.5
25	MP4A	X	6.383	1.25
26	MP4A	Z	-11.056	1.25
27	MP4A	Mx	-.005	1.25
28	MP4A	X	6.383	3.25
29	MP4A	Z	-11.056	3.25
30	MP4A	Mx	-.005	3.25
31	MP1A	X	1.772	.5
32	MP1A	Z	-3.07	.5
33	MP1A	Mx	.000119	.5
34	MP1A	X	1.772	.5
35	MP1A	Z	-3.07	.5
36	MP1A	Mx	.002	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	20.749	.25
2	MP1A	Z	-11.979	.25
3	MP1A	Mx	-.024	.25
4	MP1A	X	20.749	4.25
5	MP1A	Z	-11.979	4.25
6	MP1A	Mx	-.024	4.25
7	MP1A	X	20.749	.25
8	MP1A	Z	-11.979	.25
9	MP1A	Mx	.008	.25
10	MP1A	X	20.749	4.25
11	MP1A	Z	-11.979	4.25
12	MP1A	Mx	.008	4.25
13	MP2A	X	7.119	1.25
14	MP2A	Z	-4.11	1.25
15	MP2A	Mx	-.005	1.25
16	MP2A	X	7.119	3.25
17	MP2A	Z	-4.11	3.25
18	MP2A	Mx	-.005	3.25
19	MP1A	X	8.123	3.5
20	MP1A	Z	-4.69	3.5
21	MP1A	Mx	.004	3.5
22	MP2A	X	7.207	3.5
23	MP2A	Z	-4.161	3.5
24	MP2A	Mx	.004	3.5
25	MP4A	X	8.059	1.25
26	MP4A	Z	-4.653	1.25
27	MP4A	Mx	-.006	1.25
28	MP4A	X	8.059	3.25
29	MP4A	Z	-4.653	3.25
30	MP4A	Mx	-.006	3.25
31	MP1A	X	4.877	.5
32	MP1A	Z	-2.816	.5
33	MP1A	Mx	.002	.5
34	MP1A	X	4.877	.5
35	MP1A	Z	-2.816	.5
36	MP1A	Mx	.003	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	22.171	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	-.017	.25
4	MP1A	X	22.171	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	-.017	4.25
7	MP1A	X	22.171	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	22.171	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	6.142	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	-.005	1.25
16	MP2A	X	6.142	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	-.005	3.25
19	MP1A	X	8.452	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	.004	3.5
22	MP2A	X	7.041	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.004	3.5
25	MP4A	X	7.575	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	-.006	1.25
28	MP4A	X	7.575	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	-.006	3.25
31	MP1A	X	6.675	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	.003	.5
34	MP1A	X	6.675	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	.003	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	20.749	.25
2	MP1A	Z	11.979	.25
3	MP1A	Mx	-.008	.25
4	MP1A	X	20.749	4.25
5	MP1A	Z	11.979	4.25
6	MP1A	Mx	-.008	4.25
7	MP1A	X	20.749	.25
8	MP1A	Z	11.979	.25
9	MP1A	Mx	-.008	.25
10	MP1A	X	20.749	4.25
11	MP1A	Z	11.979	4.25
12	MP1A	Mx	-.008	4.25
13	MP2A	X	7.119	1.25
14	MP2A	Z	4.11	1.25
15	MP2A	Mx	-.005	1.25
16	MP2A	X	7.119	3.25
17	MP2A	Z	4.11	3.25
18	MP2A	Mx	-.005	3.25
19	MP1A	X	8.123	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	4.69	3.5
21	MP1A	Mx	.004	3.5
22	MP2A	X	7.207	3.5
23	MP2A	Z	4.161	3.5
24	MP2A	Mx	.004	3.5
25	MP4A	X	8.059	1.25
26	MP4A	Z	4.653	1.25
27	MP4A	Mx	-.006	1.25
28	MP4A	X	8.059	3.25
29	MP4A	Z	4.653	3.25
30	MP4A	Mx	-.006	3.25
31	MP1A	X	4.877	.5
32	MP1A	Z	2.816	.5
33	MP1A	Mx	.003	.5
34	MP1A	X	4.877	.5
35	MP1A	Z	2.816	.5
36	MP1A	Mx	.002	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.767	.25
2	MP1A	Z	23.845	.25
3	MP1A	Mx	.006	.25
4	MP1A	X	13.767	4.25
5	MP1A	Z	23.845	4.25
6	MP1A	Mx	.006	4.25
7	MP1A	X	13.767	.25
8	MP1A	Z	23.845	.25
9	MP1A	Mx	-.016	.25
10	MP1A	X	13.767	4.25
11	MP1A	Z	23.845	4.25
12	MP1A	Mx	-.016	4.25
13	MP2A	X	6.188	1.25
14	MP2A	Z	10.717	1.25
15	MP2A	Mx	-.005	1.25
16	MP2A	X	6.188	3.25
17	MP2A	Z	10.717	3.25
18	MP2A	Mx	-.005	3.25
19	MP1A	X	5.618	3.5
20	MP1A	Z	9.73	3.5
21	MP1A	Mx	.003	3.5
22	MP2A	X	5.441	3.5
23	MP2A	Z	9.425	3.5
24	MP2A	Mx	.003	3.5
25	MP4A	X	6.383	1.25
26	MP4A	Z	11.056	1.25
27	MP4A	Mx	-.005	1.25
28	MP4A	X	6.383	3.25
29	MP4A	Z	11.056	3.25
30	MP4A	Mx	-.005	3.25
31	MP1A	X	1.772	.5
32	MP1A	Z	3.07	.5
33	MP1A	Mx	.002	.5
34	MP1A	X	1.772	.5
35	MP1A	Z	3.07	.5
36	MP1A	Mx	.000119	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	29.321	.25
3	MP1A	Mx	.02	.25
4	MP1A	X	0	4.25
5	MP1A	Z	29.321	4.25
6	MP1A	Mx	.02	4.25
7	MP1A	X	0	.25
8	MP1A	Z	29.321	.25
9	MP1A	Mx	-.02	.25
10	MP1A	X	0	4.25
11	MP1A	Z	29.321	4.25
12	MP1A	Mx	-.02	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	14.453	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	14.453	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	12.163	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	12.163	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	14.497	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	14.497	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	2.501	.5
33	MP1A	Mx	.000625	.5
34	MP1A	X	0	.5
35	MP1A	Z	2.501	.5
36	MP1A	Mx	-.000625	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.767	.25
2	MP1A	Z	23.845	.25
3	MP1A	Mx	.026	.25
4	MP1A	X	-13.767	4.25
5	MP1A	Z	23.845	4.25
6	MP1A	Mx	.026	4.25
7	MP1A	X	-13.767	.25
8	MP1A	Z	23.845	.25
9	MP1A	Mx	-.016	.25
10	MP1A	X	-13.767	4.25
11	MP1A	Z	23.845	4.25
12	MP1A	Mx	-.016	4.25
13	MP2A	X	-6.188	1.25
14	MP2A	Z	10.717	1.25
15	MP2A	Mx	.005	1.25
16	MP2A	X	-6.188	3.25
17	MP2A	Z	10.717	3.25
18	MP2A	Mx	.005	3.25
19	MP1A	X	-5.618	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	9.73	3.5
21	MP1A	Mx	-.003	3.5
22	MP2A	X	-5.441	3.5
23	MP2A	Z	9.425	3.5
24	MP2A	Mx	-.003	3.5
25	MP4A	X	-6.383	1.25
26	MP4A	Z	11.056	1.25
27	MP4A	Mx	.005	1.25
28	MP4A	X	-6.383	3.25
29	MP4A	Z	11.056	3.25
30	MP4A	Mx	.005	3.25
31	MP1A	X	-1.772	.5
32	MP1A	Z	3.07	.5
33	MP1A	Mx	-.000119	.5
34	MP1A	X	-1.772	.5
35	MP1A	Z	3.07	.5
36	MP1A	Mx	-.002	.5

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-20.749	.25
2	MP1A	Z	11.979	.25
3	MP1A	Mx	.024	.25
4	MP1A	X	-20.749	4.25
5	MP1A	Z	11.979	4.25
6	MP1A	Mx	.024	4.25
7	MP1A	X	-20.749	.25
8	MP1A	Z	11.979	.25
9	MP1A	Mx	-.008	.25
10	MP1A	X	-20.749	4.25
11	MP1A	Z	11.979	4.25
12	MP1A	Mx	-.008	4.25
13	MP2A	X	-7.119	1.25
14	MP2A	Z	4.11	1.25
15	MP2A	Mx	.005	1.25
16	MP2A	X	-7.119	3.25
17	MP2A	Z	4.11	3.25
18	MP2A	Mx	.005	3.25
19	MP1A	X	-8.123	3.5
20	MP1A	Z	4.69	3.5
21	MP1A	Mx	-.004	3.5
22	MP2A	X	-7.207	3.5
23	MP2A	Z	4.161	3.5
24	MP2A	Mx	-.004	3.5
25	MP4A	X	-8.059	1.25
26	MP4A	Z	4.653	1.25
27	MP4A	Mx	.006	1.25
28	MP4A	X	-8.059	3.25
29	MP4A	Z	4.653	3.25
30	MP4A	Mx	.006	3.25
31	MP1A	X	-4.877	.5
32	MP1A	Z	2.816	.5
33	MP1A	Mx	-.002	.5
34	MP1A	X	-4.877	.5
35	MP1A	Z	2.816	.5
36	MP1A	Mx	-.003	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-22.171	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.017	.25
4	MP1A	X	-22.171	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	.017	4.25
7	MP1A	X	-22.171	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	-22.171	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	-6.142	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	.005	1.25
16	MP2A	X	-6.142	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	.005	3.25
19	MP1A	X	-8.452	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	-.004	3.5
22	MP2A	X	-7.041	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.004	3.5
25	MP4A	X	-7.575	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	.006	1.25
28	MP4A	X	-7.575	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	.006	3.25
31	MP1A	X	-6.675	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	-.003	.5
34	MP1A	X	-6.675	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	-.003	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-20.749	.25
2	MP1A	Z	-11.979	.25
3	MP1A	Mx	.008	.25
4	MP1A	X	-20.749	4.25
5	MP1A	Z	-11.979	4.25
6	MP1A	Mx	.008	4.25
7	MP1A	X	-20.749	.25
8	MP1A	Z	-11.979	.25
9	MP1A	Mx	.008	.25
10	MP1A	X	-20.749	4.25
11	MP1A	Z	-11.979	4.25
12	MP1A	Mx	.008	4.25
13	MP2A	X	-7.119	1.25
14	MP2A	Z	-4.11	1.25
15	MP2A	Mx	.005	1.25
16	MP2A	X	-7.119	3.25
17	MP2A	Z	-4.11	3.25
18	MP2A	Mx	.005	3.25
19	MP1A	X	-8.123	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-4.69	3.5
21	MP1A	Mx	-.004	3.5
22	MP2A	X	-7.207	3.5
23	MP2A	Z	-4.161	3.5
24	MP2A	Mx	-.004	3.5
25	MP4A	X	-8.059	1.25
26	MP4A	Z	-4.653	1.25
27	MP4A	Mx	.006	1.25
28	MP4A	X	-8.059	3.25
29	MP4A	Z	-4.653	3.25
30	MP4A	Mx	.006	3.25
31	MP1A	X	-4.877	.5
32	MP1A	Z	-2.816	.5
33	MP1A	Mx	-.003	.5
34	MP1A	X	-4.877	.5
35	MP1A	Z	-2.816	.5
36	MP1A	Mx	-.002	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.767	.25
2	MP1A	Z	-23.845	.25
3	MP1A	Mx	-.006	.25
4	MP1A	X	-13.767	4.25
5	MP1A	Z	-23.845	4.25
6	MP1A	Mx	-.006	4.25
7	MP1A	X	-13.767	.25
8	MP1A	Z	-23.845	.25
9	MP1A	Mx	.016	.25
10	MP1A	X	-13.767	4.25
11	MP1A	Z	-23.845	4.25
12	MP1A	Mx	.016	4.25
13	MP2A	X	-6.188	1.25
14	MP2A	Z	-10.717	1.25
15	MP2A	Mx	.005	1.25
16	MP2A	X	-6.188	3.25
17	MP2A	Z	-10.717	3.25
18	MP2A	Mx	.005	3.25
19	MP1A	X	-5.618	3.5
20	MP1A	Z	-9.73	3.5
21	MP1A	Mx	-.003	3.5
22	MP2A	X	-5.441	3.5
23	MP2A	Z	-9.425	3.5
24	MP2A	Mx	-.003	3.5
25	MP4A	X	-6.383	1.25
26	MP4A	Z	-11.056	1.25
27	MP4A	Mx	.005	1.25
28	MP4A	X	-6.383	3.25
29	MP4A	Z	-11.056	3.25
30	MP4A	Mx	.005	3.25
31	MP1A	X	-1.772	.5
32	MP1A	Z	-3.07	.5
33	MP1A	Mx	-.002	.5
34	MP1A	X	-1.772	.5
35	MP1A	Z	-3.07	.5
36	MP1A	Mx	-.000119	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-4.65	.25
3	MP1A	Mx	-.003	.25
4	MP1A	X	0	4.25
5	MP1A	Z	-4.65	4.25
6	MP1A	Mx	-.003	4.25
7	MP1A	X	0	.25
8	MP1A	Z	-4.65	.25
9	MP1A	Mx	.003	.25
10	MP1A	X	0	4.25
11	MP1A	Z	-4.65	4.25
12	MP1A	Mx	.003	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	-3.853	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	-3.853	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	-3.047	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	-3.047	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	-4.64	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	-4.64	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	-1.887	.5
33	MP1A	Mx	-.000472	.5
34	MP1A	X	0	.5
35	MP1A	Z	-1.887	.5
36	MP1A	Mx	.000472	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.179	.25
2	MP1A	Z	-3.773	.25
3	MP1A	Mx	-.004	.25
4	MP1A	X	2.179	4.25
5	MP1A	Z	-3.773	4.25
6	MP1A	Mx	-.004	4.25
7	MP1A	X	2.179	.25
8	MP1A	Z	-3.773	.25
9	MP1A	Mx	.003	.25
10	MP1A	X	2.179	4.25
11	MP1A	Z	-3.773	4.25
12	MP1A	Mx	.003	4.25
13	MP2A	X	1.611	1.25
14	MP2A	Z	-2.79	1.25
15	MP2A	Mx	-.001	1.25
16	MP2A	X	1.611	3.25
17	MP2A	Z	-2.79	3.25
18	MP2A	Mx	-.001	3.25
19	MP1A	X	1.398	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-2.422	3.5
21	MP1A	Mx	.000699	3.5
22	MP2A	X	1.352	3.5
23	MP2A	Z	-2.341	3.5
24	MP2A	Mx	.000676	3.5
25	MP4A	X	2.016	1.25
26	MP4A	Z	-3.492	1.25
27	MP4A	Mx	-.002	1.25
28	MP4A	X	2.016	3.25
29	MP4A	Z	-3.492	3.25
30	MP4A	Mx	-.002	3.25
31	MP1A	X	.944	.5
32	MP1A	Z	-1.636	.5
33	MP1A	Mx	6.3e-5	.5
34	MP1A	X	.944	.5
35	MP1A	Z	-1.636	.5
36	MP1A	Mx	.000881	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.267	.25
2	MP1A	Z	-1.886	.25
3	MP1A	Mx	-.004	.25
4	MP1A	X	3.267	4.25
5	MP1A	Z	-1.886	4.25
6	MP1A	Mx	-.004	4.25
7	MP1A	X	3.267	.25
8	MP1A	Z	-1.886	.25
9	MP1A	Mx	.001	.25
10	MP1A	X	3.267	4.25
11	MP1A	Z	-1.886	4.25
12	MP1A	Mx	.001	4.25
13	MP2A	X	1.696	1.25
14	MP2A	Z	-.979	1.25
15	MP2A	Mx	-.001	1.25
16	MP2A	X	1.696	3.25
17	MP2A	Z	-.979	3.25
18	MP2A	Mx	-.001	3.25
19	MP1A	X	1.988	3.5
20	MP1A	Z	-1.148	3.5
21	MP1A	Mx	.000994	3.5
22	MP2A	X	1.745	3.5
23	MP2A	Z	-1.008	3.5
24	MP2A	Mx	.000872	3.5
25	MP4A	X	2.44	1.25
26	MP4A	Z	-1.409	1.25
27	MP4A	Mx	-.002	1.25
28	MP4A	X	2.44	3.25
29	MP4A	Z	-1.409	3.25
30	MP4A	Mx	-.002	3.25
31	MP1A	X	1.638	.5
32	MP1A	Z	-.946	.5
33	MP1A	Mx	.000582	.5
34	MP1A	X	1.638	.5
35	MP1A	Z	-.946	.5
36	MP1A	Mx	.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.48	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	-.003	.25
4	MP1A	X	3.48	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	-.003	4.25
7	MP1A	X	3.48	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	3.48	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	1.327	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	-.000995	1.25
16	MP2A	X	1.327	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	-.000995	3.25
19	MP1A	X	2.045	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	.001	3.5
22	MP2A	X	1.671	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.000836	3.5
25	MP4A	X	2.21	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	-.002	1.25
28	MP4A	X	2.21	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	-.002	3.25
31	MP1A	X	1.893	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	.000947	.5
34	MP1A	X	1.893	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	.000947	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.267	.25
2	MP1A	Z	1.886	.25
3	MP1A	Mx	-.001	.25
4	MP1A	X	3.267	4.25
5	MP1A	Z	1.886	4.25
6	MP1A	Mx	-.001	4.25
7	MP1A	X	3.267	.25
8	MP1A	Z	1.886	.25
9	MP1A	Mx	-.001	.25
10	MP1A	X	3.267	4.25
11	MP1A	Z	1.886	4.25
12	MP1A	Mx	-.001	4.25
13	MP2A	X	1.696	1.25
14	MP2A	Z	.979	1.25
15	MP2A	Mx	-.001	1.25
16	MP2A	X	1.696	3.25
17	MP2A	Z	.979	3.25
18	MP2A	Mx	-.001	3.25
19	MP1A	X	1.988	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	1.148	3.5
21	MP1A	Mx	.000994	3.5
22	MP2A	X	1.745	3.5
23	MP2A	Z	1.008	3.5
24	MP2A	Mx	.000872	3.5
25	MP4A	X	2.44	1.25
26	MP4A	Z	1.409	1.25
27	MP4A	Mx	-.002	1.25
28	MP4A	X	2.44	3.25
29	MP4A	Z	1.409	3.25
30	MP4A	Mx	-.002	3.25
31	MP1A	X	1.638	.5
32	MP1A	Z	.946	.5
33	MP1A	Mx	.001	.5
34	MP1A	X	1.638	.5
35	MP1A	Z	.946	.5
36	MP1A	Mx	.000582	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.179	.25
2	MP1A	Z	3.773	.25
3	MP1A	Mx	.000881	.25
4	MP1A	X	2.179	4.25
5	MP1A	Z	3.773	4.25
6	MP1A	Mx	.000881	4.25
7	MP1A	X	2.179	.25
8	MP1A	Z	3.773	.25
9	MP1A	Mx	-.003	.25
10	MP1A	X	2.179	4.25
11	MP1A	Z	3.773	4.25
12	MP1A	Mx	-.003	4.25
13	MP2A	X	1.611	1.25
14	MP2A	Z	2.79	1.25
15	MP2A	Mx	-.001	1.25
16	MP2A	X	1.611	3.25
17	MP2A	Z	2.79	3.25
18	MP2A	Mx	-.001	3.25
19	MP1A	X	1.398	3.5
20	MP1A	Z	2.422	3.5
21	MP1A	Mx	.000699	3.5
22	MP2A	X	1.352	3.5
23	MP2A	Z	2.341	3.5
24	MP2A	Mx	.000676	3.5
25	MP4A	X	2.016	1.25
26	MP4A	Z	3.492	1.25
27	MP4A	Mx	-.002	1.25
28	MP4A	X	2.016	3.25
29	MP4A	Z	3.492	3.25
30	MP4A	Mx	-.002	3.25
31	MP1A	X	.944	.5
32	MP1A	Z	1.636	.5
33	MP1A	Mx	.000881	.5
34	MP1A	X	.944	.5
35	MP1A	Z	1.636	.5
36	MP1A	Mx	6.3e-5	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	4.65	.25
3	MP1A	Mx	.003	.25
4	MP1A	X	0	4.25
5	MP1A	Z	4.65	4.25
6	MP1A	Mx	.003	4.25
7	MP1A	X	0	.25
8	MP1A	Z	4.65	.25
9	MP1A	Mx	-.003	.25
10	MP1A	X	0	4.25
11	MP1A	Z	4.65	4.25
12	MP1A	Mx	-.003	4.25
13	MP2A	X	0	1.25
14	MP2A	Z	3.853	1.25
15	MP2A	Mx	0	1.25
16	MP2A	X	0	3.25
17	MP2A	Z	3.853	3.25
18	MP2A	Mx	0	3.25
19	MP1A	X	0	3.5
20	MP1A	Z	3.047	3.5
21	MP1A	Mx	0	3.5
22	MP2A	X	0	3.5
23	MP2A	Z	3.047	3.5
24	MP2A	Mx	0	3.5
25	MP4A	X	0	1.25
26	MP4A	Z	4.64	1.25
27	MP4A	Mx	0	1.25
28	MP4A	X	0	3.25
29	MP4A	Z	4.64	3.25
30	MP4A	Mx	0	3.25
31	MP1A	X	0	.5
32	MP1A	Z	1.887	.5
33	MP1A	Mx	.000472	.5
34	MP1A	X	0	.5
35	MP1A	Z	1.887	.5
36	MP1A	Mx	-.000472	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.179	.25
2	MP1A	Z	3.773	.25
3	MP1A	Mx	.004	.25
4	MP1A	X	-2.179	4.25
5	MP1A	Z	3.773	4.25
6	MP1A	Mx	.004	4.25
7	MP1A	X	-2.179	.25
8	MP1A	Z	3.773	.25
9	MP1A	Mx	-.003	.25
10	MP1A	X	-2.179	4.25
11	MP1A	Z	3.773	4.25
12	MP1A	Mx	-.003	4.25
13	MP2A	X	-1.611	1.25
14	MP2A	Z	2.79	1.25
15	MP2A	Mx	.001	1.25
16	MP2A	X	-1.611	3.25
17	MP2A	Z	2.79	3.25
18	MP2A	Mx	.001	3.25
19	MP1A	X	-1.398	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	2.422	3.5
21	MP1A	Mx	-.000699	3.5
22	MP2A	X	-1.352	3.5
23	MP2A	Z	2.341	3.5
24	MP2A	Mx	-.000676	3.5
25	MP4A	X	-2.016	1.25
26	MP4A	Z	3.492	1.25
27	MP4A	Mx	.002	1.25
28	MP4A	X	-2.016	3.25
29	MP4A	Z	3.492	3.25
30	MP4A	Mx	.002	3.25
31	MP1A	X	-.944	.5
32	MP1A	Z	1.636	.5
33	MP1A	Mx	-6.3e-5	.5
34	MP1A	X	-.944	.5
35	MP1A	Z	1.636	.5
36	MP1A	Mx	-.000881	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.267	.25
2	MP1A	Z	1.886	.25
3	MP1A	Mx	.004	.25
4	MP1A	X	-3.267	4.25
5	MP1A	Z	1.886	4.25
6	MP1A	Mx	.004	4.25
7	MP1A	X	-3.267	.25
8	MP1A	Z	1.886	.25
9	MP1A	Mx	-.001	.25
10	MP1A	X	-3.267	4.25
11	MP1A	Z	1.886	4.25
12	MP1A	Mx	-.001	4.25
13	MP2A	X	-1.696	1.25
14	MP2A	Z	.979	1.25
15	MP2A	Mx	.001	1.25
16	MP2A	X	-1.696	3.25
17	MP2A	Z	.979	3.25
18	MP2A	Mx	.001	3.25
19	MP1A	X	-1.988	3.5
20	MP1A	Z	1.148	3.5
21	MP1A	Mx	-.000994	3.5
22	MP2A	X	-1.745	3.5
23	MP2A	Z	1.008	3.5
24	MP2A	Mx	-.000872	3.5
25	MP4A	X	-2.44	1.25
26	MP4A	Z	1.409	1.25
27	MP4A	Mx	.002	1.25
28	MP4A	X	-2.44	3.25
29	MP4A	Z	1.409	3.25
30	MP4A	Mx	.002	3.25
31	MP1A	X	-1.638	.5
32	MP1A	Z	.946	.5
33	MP1A	Mx	-.000582	.5
34	MP1A	X	-1.638	.5
35	MP1A	Z	.946	.5
36	MP1A	Mx	-.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.48	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.003	.25
4	MP1A	X	-3.48	4.25
5	MP1A	Z	0	4.25
6	MP1A	Mx	.003	4.25
7	MP1A	X	-3.48	.25
8	MP1A	Z	0	.25
9	MP1A	Mx	0	.25
10	MP1A	X	-3.48	4.25
11	MP1A	Z	0	4.25
12	MP1A	Mx	0	4.25
13	MP2A	X	-1.327	1.25
14	MP2A	Z	0	1.25
15	MP2A	Mx	.000995	1.25
16	MP2A	X	-1.327	3.25
17	MP2A	Z	0	3.25
18	MP2A	Mx	.000995	3.25
19	MP1A	X	-2.045	3.5
20	MP1A	Z	0	3.5
21	MP1A	Mx	-.001	3.5
22	MP2A	X	-1.671	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.000836	3.5
25	MP4A	X	-2.21	1.25
26	MP4A	Z	0	1.25
27	MP4A	Mx	.002	1.25
28	MP4A	X	-2.21	3.25
29	MP4A	Z	0	3.25
30	MP4A	Mx	.002	3.25
31	MP1A	X	-1.893	.5
32	MP1A	Z	0	.5
33	MP1A	Mx	-.000947	.5
34	MP1A	X	-1.893	.5
35	MP1A	Z	0	.5
36	MP1A	Mx	-.000947	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.267	.25
2	MP1A	Z	-1.886	.25
3	MP1A	Mx	.001	.25
4	MP1A	X	-3.267	4.25
5	MP1A	Z	-1.886	4.25
6	MP1A	Mx	.001	4.25
7	MP1A	X	-3.267	.25
8	MP1A	Z	-1.886	.25
9	MP1A	Mx	.001	.25
10	MP1A	X	-3.267	4.25
11	MP1A	Z	-1.886	4.25
12	MP1A	Mx	.001	4.25
13	MP2A	X	-1.696	1.25
14	MP2A	Z	-.979	1.25
15	MP2A	Mx	.001	1.25
16	MP2A	X	-1.696	3.25
17	MP2A	Z	-.979	3.25
18	MP2A	Mx	.001	3.25
19	MP1A	X	-1.988	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-1.148	3.5
21	MP1A	Mx	-.000994	3.5
22	MP2A	X	-1.745	3.5
23	MP2A	Z	-1.008	3.5
24	MP2A	Mx	-.000872	3.5
25	MP4A	X	-2.44	1.25
26	MP4A	Z	-1.409	1.25
27	MP4A	Mx	.002	1.25
28	MP4A	X	-2.44	3.25
29	MP4A	Z	-1.409	3.25
30	MP4A	Mx	.002	3.25
31	MP1A	X	-1.638	.5
32	MP1A	Z	-.946	.5
33	MP1A	Mx	-.001	.5
34	MP1A	X	-1.638	.5
35	MP1A	Z	-.946	.5
36	MP1A	Mx	-.000582	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.179	.25
2	MP1A	Z	-3.773	.25
3	MP1A	Mx	-.000881	.25
4	MP1A	X	-2.179	4.25
5	MP1A	Z	-3.773	4.25
6	MP1A	Mx	-.000881	4.25
7	MP1A	X	-2.179	.25
8	MP1A	Z	-3.773	.25
9	MP1A	Mx	.003	.25
10	MP1A	X	-2.179	4.25
11	MP1A	Z	-3.773	4.25
12	MP1A	Mx	.003	4.25
13	MP2A	X	-1.611	1.25
14	MP2A	Z	-2.79	1.25
15	MP2A	Mx	.001	1.25
16	MP2A	X	-1.611	3.25
17	MP2A	Z	-2.79	3.25
18	MP2A	Mx	.001	3.25
19	MP1A	X	-1.398	3.5
20	MP1A	Z	-2.422	3.5
21	MP1A	Mx	-.000699	3.5
22	MP2A	X	-1.352	3.5
23	MP2A	Z	-2.341	3.5
24	MP2A	Mx	-.000676	3.5
25	MP4A	X	-2.016	1.25
26	MP4A	Z	-3.492	1.25
27	MP4A	Mx	.002	1.25
28	MP4A	X	-2.016	3.25
29	MP4A	Z	-3.492	3.25
30	MP4A	Mx	.002	3.25
31	MP1A	X	-.944	.5
32	MP1A	Z	-1.636	.5
33	MP1A	Mx	-.000881	.5
34	MP1A	X	-.944	.5
35	MP1A	Z	-1.636	.5
36	MP1A	Mx	-6.3e-5	.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%98

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%71

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	MP1A	Y	-.952	.25
2	MP1A	My	-.000714	.25
3	MP1A	Mz	.000635	.25
4	MP1A	Y	-.952	4.25
5	MP1A	My	-.000714	4.25
6	MP1A	Mz	.000635	4.25
7	MP1A	Y	-.952	.25
8	MP1A	My	0	.25
9	MP1A	Mz	-.000635	.25
10	MP1A	Y	-.952	4.25
11	MP1A	My	0	4.25
12	MP1A	Mz	-.000635	4.25
13	MP2A	Y	-1.802	1.25
14	MP2A	My	-.001	1.25
15	MP2A	Mz	0	1.25
16	MP2A	Y	-1.802	3.25
17	MP2A	My	-.001	3.25
18	MP2A	Mz	0	3.25
19	MP1A	Y	-3.493	3.5
20	MP1A	My	.002	3.5
21	MP1A	Mz	0	3.5
22	MP2A	Y	-2.909	3.5
23	MP2A	My	.001	3.5
24	MP2A	Mz	0	3.5
25	MP4A	Y	-.205	1.25
26	MP4A	My	-.000154	1.25
27	MP4A	Mz	0	1.25
28	MP4A	Y	-.205	3.25
29	MP4A	My	-.000154	3.25
30	MP4A	Mz	0	3.25
31	MP1A	Y	-.728	.5
32	MP1A	My	.000364	.5
33	MP1A	Mz	.000182	.5
34	MP1A	Y	-.728	.5
35	MP1A	My	.000364	.5
36	MP1A	Mz	-.000182	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-2.38	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP1A	Mx	-.002	.25
3	MP1A	Z	-2.38	4.25
4	MP1A	Mx	-.002	4.25
5	MP1A	Z	-2.38	.25
6	MP1A	Mx	.002	.25
7	MP1A	Z	-2.38	4.25
8	MP1A	Mx	.002	4.25
9	MP2A	Z	-4.506	1.25
10	MP2A	Mx	0	1.25
11	MP2A	Z	-4.506	3.25
12	MP2A	Mx	0	3.25
13	MP1A	Z	-8.733	3.5
14	MP1A	Mx	0	3.5
15	MP2A	Z	-7.274	3.5
16	MP2A	Mx	0	3.5
17	MP4A	Z	-.512	1.25
18	MP4A	Mx	0	1.25
19	MP4A	Z	-.512	3.25
20	MP4A	Mx	0	3.25
21	MP1A	Z	-1.821	.5
22	MP1A	Mx	-.000455	.5
23	MP1A	Z	-1.821	.5
24	MP1A	Mx	.000455	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.38	.25
2	MP1A	Mx	-.002	.25
3	MP1A	X	2.38	4.25
4	MP1A	Mx	-.002	4.25
5	MP1A	X	2.38	.25
6	MP1A	Mx	0	.25
7	MP1A	X	2.38	4.25
8	MP1A	Mx	0	4.25
9	MP2A	X	4.506	1.25
10	MP2A	Mx	-.003	1.25
11	MP2A	X	4.506	3.25
12	MP2A	Mx	-.003	3.25
13	MP1A	X	8.733	3.5
14	MP1A	Mx	.004	3.5
15	MP2A	X	7.274	3.5
16	MP2A	Mx	.004	3.5
17	MP4A	X	.512	1.25
18	MP4A	Mx	-.000384	1.25
19	MP4A	X	.512	3.25
20	MP4A	Mx	-.000384	3.25
21	MP1A	X	1.821	.5
22	MP1A	Mx	.000911	.5
23	MP1A	X	1.821	.5
24	MP1A	Mx	.000911	.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-4.802	-4.802	0	%100
2	M2	Y	-4.802	-4.802	0	%100
3	M17	Y	-7.719	-7.719	0	%100
4	M25	Y	-9.795	-9.795	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
5	M26	Y	-9.795	-9.795	0	%100
6	M21	Y	-13.19	-13.19	0	%100
7	M22	Y	-13.19	-13.19	0	%100
8	M23	Y	-13.19	-13.19	0	%100
9	M24	Y	-13.19	-13.19	0	%100
10	M25B	Y	-13.19	-13.19	0	%100
11	M26B	Y	-13.19	-13.19	0	%100
12	MP4A	Y	-4.802	-4.802	0	%100
13	MP3A	Y	-4.802	-4.802	0	%100
14	MP2A	Y	-4.802	-4.802	0	%100
15	MP1A	Y	-5.489	-5.489	0	%100
16	M29	Y	-4.802	-4.802	0	%100
17	M29A	Y	-6.395	-6.395	0	%100
18	M30	Y	-6.395	-6.395	0	%100
19	M31	Y	-4.802	-4.802	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-8.768	-8.768	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-8.768	-8.768	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	-11.347	-11.347	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	-8.768	-8.768	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	-8.768	-8.768	0	%100
27	MP2A	X	0	0	0	%100
28	MP2A	Z	-8.768	-8.768	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	-10.614	-10.614	0	%100
31	M29	X	0	0	0	%100
32	M29	Z	-5.243	-5.243	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	-12.568	-12.568	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	-12.568	-12.568	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-1.534	-1.534	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.288	3.288	0	%100
2	M1	Z	-5.695	-5.695	0	%100
3	M2	X	3.288	3.288	0	%100
4	M2	Z	-5.695	-5.695	0	%100
5	M17	X	5.673	5.673	0	%100
6	M17	Z	-9.827	-9.827	0	%100
7	M25	X	.173	.173	0	%100
8	M25	Z	-.3	-.3	0	%100
9	M26	X	.173	.173	0	%100
10	M26	Z	-.3	-.3	0	%100
11	M21	X	2.769	2.769	0	%100
12	M21	Z	-4.796	-4.796	0	%100
13	M22	X	2.769	2.769	0	%100
14	M22	Z	-4.796	-4.796	0	%100
15	M23	X	2.769	2.769	0	%100
16	M23	Z	-4.796	-4.796	0	%100
17	M24	X	2.769	2.769	0	%100
18	M24	Z	-4.796	-4.796	0	%100
19	M25B	X	2.769	2.769	0	%100
20	M25B	Z	-4.796	-4.796	0	%100
21	M26B	X	2.769	2.769	0	%100
22	M26B	Z	-4.796	-4.796	0	%100
23	MP4A	X	4.384	4.384	0	%100
24	MP4A	Z	-7.593	-7.593	0	%100
25	MP3A	X	4.384	4.384	0	%100
26	MP3A	Z	-7.593	-7.593	0	%100
27	MP2A	X	4.384	4.384	0	%100
28	MP2A	Z	-7.593	-7.593	0	%100
29	MP1A	X	5.307	5.307	0	%100
30	MP1A	Z	-9.192	-9.192	0	%100
31	M29	X	4.268	4.268	0	%100
32	M29	Z	-7.393	-7.393	0	%100
33	M29A	X	2.708	2.708	0	%100
34	M29A	Z	-4.69	-4.69	0	%100
35	M30	X	7.659	7.659	0	%100
36	M30	Z	-13.266	-13.266	0	%100
37	M31	X	.009	.009	0	%100
38	M31	Z	-.015	-.015	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.898	1.898	0	%100
2	M1	Z	-1.096	-1.096	0	%100
3	M2	X	1.898	1.898	0	%100
4	M2	Z	-1.096	-1.096	0	%100
5	M17	X	9.827	9.827	0	%100
6	M17	Z	-5.673	-5.673	0	%100
7	M25	X	.899	.899	0	%100
8	M25	Z	-.519	-.519	0	%100
9	M26	X	.899	.899	0	%100
10	M26	Z	-.519	-.519	0	%100
11	M21	X	14.387	14.387	0	%100
12	M21	Z	-8.306	-8.306	0	%100
13	M22	X	14.387	14.387	0	%100
14	M22	Z	-8.306	-8.306	0	%100
15	M23	X	14.387	14.387	0	%100
16	M23	Z	-8.306	-8.306	0	%100
17	M24	X	14.387	14.387	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
18	M24	Z	-8.306	-8.306	0	%100
19	M25B	X	14.387	14.387	0	%100
20	M25B	Z	-8.306	-8.306	0	%100
21	M26B	X	14.387	14.387	0	%100
22	M26B	Z	-8.306	-8.306	0	%100
23	MP4A	X	7.593	7.593	0	%100
24	MP4A	Z	-4.384	-4.384	0	%100
25	MP3A	X	7.593	7.593	0	%100
26	MP3A	Z	-4.384	-4.384	0	%100
27	MP2A	X	7.593	7.593	0	%100
28	MP2A	Z	-4.384	-4.384	0	%100
29	MP1A	X	9.192	9.192	0	%100
30	MP1A	Z	-5.307	-5.307	0	%100
31	M29	X	6.649	6.649	0	%100
32	M29	Z	-3.839	-3.839	0	%100
33	M29A	X	.876	.876	0	%100
34	M29A	Z	-.506	-.506	0	%100
35	M30	X	9.453	9.453	0	%100
36	M30	Z	-5.458	-5.458	0	%100
37	M31	X	1.857	1.857	0	%100
38	M31	Z	-1.072	-1.072	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	11.347	11.347	0	%100
6	M17	Z	0	0	0	%100
7	M25	X	1.384	1.384	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	1.384	1.384	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	22.15	22.15	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	22.15	22.15	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	22.15	22.15	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	22.15	22.15	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	22.15	22.15	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	22.15	22.15	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	8.768	8.768	0	%100
24	MP4A	Z	0	0	0	%100
25	MP3A	X	8.768	8.768	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	8.768	8.768	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	10.614	10.614	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	3.525	3.525	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	3.762	3.762	0	%100
34	M29A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
35	M30	X	3.762	3.762	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	5.789	5.789	0	%100
38	M31	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.898	1.898	0	%100
2	M1	Z	1.096	1.096	0	%100
3	M2	X	1.898	1.898	0	%100
4	M2	Z	1.096	1.096	0	%100
5	M17	X	9.827	9.827	0	%100
6	M17	Z	5.673	5.673	0	%100
7	M25	X	.899	.899	0	%100
8	M25	Z	.519	.519	0	%100
9	M26	X	.899	.899	0	%100
10	M26	Z	.519	.519	0	%100
11	M21	X	14.387	14.387	0	%100
12	M21	Z	8.306	8.306	0	%100
13	M22	X	14.387	14.387	0	%100
14	M22	Z	8.306	8.306	0	%100
15	M23	X	14.387	14.387	0	%100
16	M23	Z	8.306	8.306	0	%100
17	M24	X	14.387	14.387	0	%100
18	M24	Z	8.306	8.306	0	%100
19	M25B	X	14.387	14.387	0	%100
20	M25B	Z	8.306	8.306	0	%100
21	M26B	X	14.387	14.387	0	%100
22	M26B	Z	8.306	8.306	0	%100
23	MP4A	X	7.593	7.593	0	%100
24	MP4A	Z	4.384	4.384	0	%100
25	MP3A	X	7.593	7.593	0	%100
26	MP3A	Z	4.384	4.384	0	%100
27	MP2A	X	7.593	7.593	0	%100
28	MP2A	Z	4.384	4.384	0	%100
29	MP1A	X	9.192	9.192	0	%100
30	MP1A	Z	5.307	5.307	0	%100
31	M29	X	.2	.2	0	%100
32	M29	Z	.116	.116	0	%100
33	M29A	X	9.453	9.453	0	%100
34	M29A	Z	5.458	5.458	0	%100
35	M30	X	.876	.876	0	%100
36	M30	Z	.506	.506	0	%100
37	M31	X	6.327	6.327	0	%100
38	M31	Z	3.653	3.653	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.288	3.288	0	%100
2	M1	Z	5.695	5.695	0	%100
3	M2	X	3.288	3.288	0	%100
4	M2	Z	5.695	5.695	0	%100
5	M17	X	5.673	5.673	0	%100
6	M17	Z	9.827	9.827	0	%100
7	M25	X	.173	.173	0	%100
8	M25	Z	.3	.3	0	%100
9	M26	X	.173	.173	0	%100
10	M26	Z	.3	.3	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
11	M21	X	2.769	2.769	0	%100
12	M21	Z	4.796	4.796	0	%100
13	M22	X	2.769	2.769	0	%100
14	M22	Z	4.796	4.796	0	%100
15	M23	X	2.769	2.769	0	%100
16	M23	Z	4.796	4.796	0	%100
17	M24	X	2.769	2.769	0	%100
18	M24	Z	4.796	4.796	0	%100
19	M25B	X	2.769	2.769	0	%100
20	M25B	Z	4.796	4.796	0	%100
21	M26B	X	2.769	2.769	0	%100
22	M26B	Z	4.796	4.796	0	%100
23	MP4A	X	4.384	4.384	0	%100
24	MP4A	Z	7.593	7.593	0	%100
25	MP3A	X	4.384	4.384	0	%100
26	MP3A	Z	7.593	7.593	0	%100
27	MP2A	X	4.384	4.384	0	%100
28	MP2A	Z	7.593	7.593	0	%100
29	MP1A	X	5.307	5.307	0	%100
30	MP1A	Z	9.192	9.192	0	%100
31	M29	X	.545	.545	0	%100
32	M29	Z	.944	.944	0	%100
33	M29A	X	7.659	7.659	0	%100
34	M29A	Z	13.266	13.266	0	%100
35	M30	X	2.708	2.708	0	%100
36	M30	Z	4.69	4.69	0	%100
37	M31	X	2.589	2.589	0	%100
38	M31	Z	4.484	4.484	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	8.768	8.768	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	8.768	8.768	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	11.347	11.347	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	8.768	8.768	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	8.768	8.768	0	%100
27	MP2A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
28	MP2A	Z	8.768	8.768	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	10.614	10.614	0	%100
31	M29	X	0	0	0	%100
32	M29	Z	5.243	5.243	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	12.568	12.568	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	12.568	12.568	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	1.534	1.534	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.288	-3.288	0	%100
2	M1	Z	5.695	5.695	0	%100
3	M2	X	-3.288	-3.288	0	%100
4	M2	Z	5.695	5.695	0	%100
5	M17	X	-5.673	-5.673	0	%100
6	M17	Z	9.827	9.827	0	%100
7	M25	X	-.173	-.173	0	%100
8	M25	Z	.3	.3	0	%100
9	M26	X	-.173	-.173	0	%100
10	M26	Z	.3	.3	0	%100
11	M21	X	-2.769	-2.769	0	%100
12	M21	Z	4.796	4.796	0	%100
13	M22	X	-2.769	-2.769	0	%100
14	M22	Z	4.796	4.796	0	%100
15	M23	X	-2.769	-2.769	0	%100
16	M23	Z	4.796	4.796	0	%100
17	M24	X	-2.769	-2.769	0	%100
18	M24	Z	4.796	4.796	0	%100
19	M25B	X	-2.769	-2.769	0	%100
20	M25B	Z	4.796	4.796	0	%100
21	M26B	X	-2.769	-2.769	0	%100
22	M26B	Z	4.796	4.796	0	%100
23	MP4A	X	-4.384	-4.384	0	%100
24	MP4A	Z	7.593	7.593	0	%100
25	MP3A	X	-4.384	-4.384	0	%100
26	MP3A	Z	7.593	7.593	0	%100
27	MP2A	X	-4.384	-4.384	0	%100
28	MP2A	Z	7.593	7.593	0	%100
29	MP1A	X	-5.307	-5.307	0	%100
30	MP1A	Z	9.192	9.192	0	%100
31	M29	X	-4.268	-4.268	0	%100
32	M29	Z	7.393	7.393	0	%100
33	M29A	X	-2.708	-2.708	0	%100
34	M29A	Z	4.69	4.69	0	%100
35	M30	X	-7.659	-7.659	0	%100
36	M30	Z	13.266	13.266	0	%100
37	M31	X	-.009	-.009	0	%100
38	M31	Z	.015	.015	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.898	-1.898	0	%100
2	M1	Z	1.096	1.096	0	%100
3	M2	X	-1.898	-1.898	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	1.096	1.096	0	%100
5	M17	X	-9.827	-9.827	0	%100
6	M17	Z	5.673	5.673	0	%100
7	M25	X	-.899	-.899	0	%100
8	M25	Z	.519	.519	0	%100
9	M26	X	-.899	-.899	0	%100
10	M26	Z	.519	.519	0	%100
11	M21	X	-14.387	-14.387	0	%100
12	M21	Z	8.306	8.306	0	%100
13	M22	X	-14.387	-14.387	0	%100
14	M22	Z	8.306	8.306	0	%100
15	M23	X	-14.387	-14.387	0	%100
16	M23	Z	8.306	8.306	0	%100
17	M24	X	-14.387	-14.387	0	%100
18	M24	Z	8.306	8.306	0	%100
19	M25B	X	-14.387	-14.387	0	%100
20	M25B	Z	8.306	8.306	0	%100
21	M26B	X	-14.387	-14.387	0	%100
22	M26B	Z	8.306	8.306	0	%100
23	MP4A	X	-7.593	-7.593	0	%100
24	MP4A	Z	4.384	4.384	0	%100
25	MP3A	X	-7.593	-7.593	0	%100
26	MP3A	Z	4.384	4.384	0	%100
27	MP2A	X	-7.593	-7.593	0	%100
28	MP2A	Z	4.384	4.384	0	%100
29	MP1A	X	-9.192	-9.192	0	%100
30	MP1A	Z	5.307	5.307	0	%100
31	M29	X	-6.649	-6.649	0	%100
32	M29	Z	3.839	3.839	0	%100
33	M29A	X	-.876	-.876	0	%100
34	M29A	Z	.506	.506	0	%100
35	M30	X	-9.453	-9.453	0	%100
36	M30	Z	5.458	5.458	0	%100
37	M31	X	-1.857	-1.857	0	%100
38	M31	Z	1.072	1.072	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	-11.347	-11.347	0	%100
6	M17	Z	0	0	0	%100
7	M25	X	-1.384	-1.384	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	-1.384	-1.384	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	-22.15	-22.15	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	-22.15	-22.15	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	-22.15	-22.15	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	-22.15	-22.15	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	-22.15	-22.15	0	%100
20	M25B	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
21	M26B	X	-22.15	-22.15	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	-8.768	-8.768	0	%100
24	MP4A	Z	0	0	0	%100
25	MP3A	X	-8.768	-8.768	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	-8.768	-8.768	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	-10.614	-10.614	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	-3.525	-3.525	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	-3.762	-3.762	0	%100
34	M29A	Z	0	0	0	%100
35	M30	X	-3.762	-3.762	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	-5.789	-5.789	0	%100
38	M31	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.898	-1.898	0	%100
2	M1	Z	-1.096	-1.096	0	%100
3	M2	X	-1.898	-1.898	0	%100
4	M2	Z	-1.096	-1.096	0	%100
5	M17	X	-9.827	-9.827	0	%100
6	M17	Z	-5.673	-5.673	0	%100
7	M25	X	-.899	-.899	0	%100
8	M25	Z	-.519	-.519	0	%100
9	M26	X	-.899	-.899	0	%100
10	M26	Z	-.519	-.519	0	%100
11	M21	X	-14.387	-14.387	0	%100
12	M21	Z	-8.306	-8.306	0	%100
13	M22	X	-14.387	-14.387	0	%100
14	M22	Z	-8.306	-8.306	0	%100
15	M23	X	-14.387	-14.387	0	%100
16	M23	Z	-8.306	-8.306	0	%100
17	M24	X	-14.387	-14.387	0	%100
18	M24	Z	-8.306	-8.306	0	%100
19	M25B	X	-14.387	-14.387	0	%100
20	M25B	Z	-8.306	-8.306	0	%100
21	M26B	X	-14.387	-14.387	0	%100
22	M26B	Z	-8.306	-8.306	0	%100
23	MP4A	X	-7.593	-7.593	0	%100
24	MP4A	Z	-4.384	-4.384	0	%100
25	MP3A	X	-7.593	-7.593	0	%100
26	MP3A	Z	-4.384	-4.384	0	%100
27	MP2A	X	-7.593	-7.593	0	%100
28	MP2A	Z	-4.384	-4.384	0	%100
29	MP1A	X	-9.192	-9.192	0	%100
30	MP1A	Z	-5.307	-5.307	0	%100
31	M29	X	-.2	-.2	0	%100
32	M29	Z	-.116	-.116	0	%100
33	M29A	X	-9.453	-9.453	0	%100
34	M29A	Z	-5.458	-5.458	0	%100
35	M30	X	-.876	-.876	0	%100
36	M30	Z	-.506	-.506	0	%100
37	M31	X	-6.327	-6.327	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
38	M31	Z	-3.653	-3.653	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.288	-3.288	0	%100
2	M1	Z	-5.695	-5.695	0	%100
3	M2	X	-3.288	-3.288	0	%100
4	M2	Z	-5.695	-5.695	0	%100
5	M17	X	-5.673	-5.673	0	%100
6	M17	Z	-9.827	-9.827	0	%100
7	M25	X	-.173	-.173	0	%100
8	M25	Z	-.3	-.3	0	%100
9	M26	X	-.173	-.173	0	%100
10	M26	Z	-.3	-.3	0	%100
11	M21	X	-2.769	-2.769	0	%100
12	M21	Z	-4.796	-4.796	0	%100
13	M22	X	-2.769	-2.769	0	%100
14	M22	Z	-4.796	-4.796	0	%100
15	M23	X	-2.769	-2.769	0	%100
16	M23	Z	-4.796	-4.796	0	%100
17	M24	X	-2.769	-2.769	0	%100
18	M24	Z	-4.796	-4.796	0	%100
19	M25B	X	-2.769	-2.769	0	%100
20	M25B	Z	-4.796	-4.796	0	%100
21	M26B	X	-2.769	-2.769	0	%100
22	M26B	Z	-4.796	-4.796	0	%100
23	MP4A	X	-4.384	-4.384	0	%100
24	MP4A	Z	-7.593	-7.593	0	%100
25	MP3A	X	-4.384	-4.384	0	%100
26	MP3A	Z	-7.593	-7.593	0	%100
27	MP2A	X	-4.384	-4.384	0	%100
28	MP2A	Z	-7.593	-7.593	0	%100
29	MP1A	X	-5.307	-5.307	0	%100
30	MP1A	Z	-9.192	-9.192	0	%100
31	M29	X	-.545	-.545	0	%100
32	M29	Z	-.944	-.944	0	%100
33	M29A	X	-7.659	-7.659	0	%100
34	M29A	Z	-13.266	-13.266	0	%100
35	M30	X	-2.708	-2.708	0	%100
36	M30	Z	-4.69	-4.69	0	%100
37	M31	X	-2.589	-2.589	0	%100
38	M31	Z	-4.484	-4.484	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.524	-2.524	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.524	-2.524	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	-3.184	-3.184	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	-2.524	-2.524	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	-2.524	-2.524	0	%100
27	MP2A	X	0	0	0	%100
28	MP2A	Z	-2.524	-2.524	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	-2.797	-2.797	0	%100
31	M29	X	0	0	0	%100
32	M29	Z	-1.509	-1.509	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	-2.862	-2.862	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	-2.862	-2.862	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-.446	-.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.947	.947	0	%100
2	M1	Z	-1.639	-1.639	0	%100
3	M2	X	.947	.947	0	%100
4	M2	Z	-1.639	-1.639	0	%100
5	M17	X	1.592	1.592	0	%100
6	M17	Z	-2.757	-2.757	0	%100
7	M25	X	.115	.115	0	%100
8	M25	Z	-.199	-.199	0	%100
9	M26	X	.115	.115	0	%100
10	M26	Z	-.199	-.199	0	%100
11	M21	X	.501	.501	0	%100
12	M21	Z	-.867	-.867	0	%100
13	M22	X	.501	.501	0	%100
14	M22	Z	-.867	-.867	0	%100
15	M23	X	.501	.501	0	%100
16	M23	Z	-.867	-.867	0	%100
17	M24	X	.501	.501	0	%100
18	M24	Z	-.867	-.867	0	%100
19	M25B	X	.501	.501	0	%100
20	M25B	Z	-.867	-.867	0	%100
21	M26B	X	.501	.501	0	%100
22	M26B	Z	-.867	-.867	0	%100
23	MP4A	X	1.262	1.262	0	%100
24	MP4A	Z	-2.186	-2.186	0	%100
25	MP3A	X	1.262	1.262	0	%100
26	MP3A	Z	-2.186	-2.186	0	%100
27	MP2A	X	1.262	1.262	0	%100
28	MP2A	Z	-2.186	-2.186	0	%100
29	MP1A	X	1.399	1.399	0	%100
30	MP1A	Z	-2.422	-2.422	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
31	M29	X	1.229	1.229	0	%100
32	M29	Z	-2.128	-2.128	0	%100
33	M29A	X	.617	.617	0	%100
34	M29A	Z	-1.068	-1.068	0	%100
35	M30	X	1.744	1.744	0	%100
36	M30	Z	-3.021	-3.021	0	%100
37	M31	X	.002	.002	0	%100
38	M31	Z	-.004	-.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.546	.546	0	%100
2	M1	Z	-.316	-.316	0	%100
3	M2	X	.546	.546	0	%100
4	M2	Z	-.316	-.316	0	%100
5	M17	X	2.757	2.757	0	%100
6	M17	Z	-1.592	-1.592	0	%100
7	M25	X	.598	.598	0	%100
8	M25	Z	-.345	-.345	0	%100
9	M26	X	.598	.598	0	%100
10	M26	Z	-.345	-.345	0	%100
11	M21	X	2.602	2.602	0	%100
12	M21	Z	-1.502	-1.502	0	%100
13	M22	X	2.602	2.602	0	%100
14	M22	Z	-1.502	-1.502	0	%100
15	M23	X	2.602	2.602	0	%100
16	M23	Z	-1.502	-1.502	0	%100
17	M24	X	2.602	2.602	0	%100
18	M24	Z	-1.502	-1.502	0	%100
19	M25B	X	2.602	2.602	0	%100
20	M25B	Z	-1.502	-1.502	0	%100
21	M26B	X	2.602	2.602	0	%100
22	M26B	Z	-1.502	-1.502	0	%100
23	MP4A	X	2.186	2.186	0	%100
24	MP4A	Z	-1.262	-1.262	0	%100
25	MP3A	X	2.186	2.186	0	%100
26	MP3A	Z	-1.262	-1.262	0	%100
27	MP2A	X	2.186	2.186	0	%100
28	MP2A	Z	-1.262	-1.262	0	%100
29	MP1A	X	2.422	2.422	0	%100
30	MP1A	Z	-1.399	-1.399	0	%100
31	M29	X	1.914	1.914	0	%100
32	M29	Z	-1.105	-1.105	0	%100
33	M29A	X	.2	.2	0	%100
34	M29A	Z	-.115	-.115	0	%100
35	M30	X	2.153	2.153	0	%100
36	M30	Z	-1.243	-1.243	0	%100
37	M31	X	.54	.54	0	%100
38	M31	Z	-.312	-.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	3.184	3.184	0	%100
6	M17	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
7	M25	X	.921	.921	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	.921	.921	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	4.006	4.006	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	4.006	4.006	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	4.006	4.006	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	4.006	4.006	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	4.006	4.006	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	4.006	4.006	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	2.524	2.524	0	%100
24	MP4A	Z	0	0	0	%100
25	MP3A	X	2.524	2.524	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	2.524	2.524	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	2.797	2.797	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	1.015	1.015	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	.857	.857	0	%100
34	M29A	Z	0	0	0	%100
35	M30	X	.857	.857	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	1.683	1.683	0	%100
38	M31	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.546	.546	0	%100
2	M1	Z	.316	.316	0	%100
3	M2	X	.546	.546	0	%100
4	M2	Z	.316	.316	0	%100
5	M17	X	2.757	2.757	0	%100
6	M17	Z	1.592	1.592	0	%100
7	M25	X	.598	.598	0	%100
8	M25	Z	.345	.345	0	%100
9	M26	X	.598	.598	0	%100
10	M26	Z	.345	.345	0	%100
11	M21	X	2.602	2.602	0	%100
12	M21	Z	1.502	1.502	0	%100
13	M22	X	2.602	2.602	0	%100
14	M22	Z	1.502	1.502	0	%100
15	M23	X	2.602	2.602	0	%100
16	M23	Z	1.502	1.502	0	%100
17	M24	X	2.602	2.602	0	%100
18	M24	Z	1.502	1.502	0	%100
19	M25B	X	2.602	2.602	0	%100
20	M25B	Z	1.502	1.502	0	%100
21	M26B	X	2.602	2.602	0	%100
22	M26B	Z	1.502	1.502	0	%100
23	MP4A	X	2.186	2.186	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	MP4A	Z	1.262	1.262	0	%100
25	MP3A	X	2.186	2.186	0	%100
26	MP3A	Z	1.262	1.262	0	%100
27	MP2A	X	2.186	2.186	0	%100
28	MP2A	Z	1.262	1.262	0	%100
29	MP1A	X	2.422	2.422	0	%100
30	MP1A	Z	1.399	1.399	0	%100
31	M29	X	.058	.058	0	%100
32	M29	Z	.033	.033	0	%100
33	M29A	X	2.153	2.153	0	%100
34	M29A	Z	1.243	1.243	0	%100
35	M30	X	.2	.2	0	%100
36	M30	Z	.115	.115	0	%100
37	M31	X	1.839	1.839	0	%100
38	M31	Z	1.062	1.062	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.947	.947	0	%100
2	M1	Z	1.639	1.639	0	%100
3	M2	X	.947	.947	0	%100
4	M2	Z	1.639	1.639	0	%100
5	M17	X	1.592	1.592	0	%100
6	M17	Z	2.757	2.757	0	%100
7	M25	X	.115	.115	0	%100
8	M25	Z	.199	.199	0	%100
9	M26	X	.115	.115	0	%100
10	M26	Z	.199	.199	0	%100
11	M21	X	.501	.501	0	%100
12	M21	Z	.867	.867	0	%100
13	M22	X	.501	.501	0	%100
14	M22	Z	.867	.867	0	%100
15	M23	X	.501	.501	0	%100
16	M23	Z	.867	.867	0	%100
17	M24	X	.501	.501	0	%100
18	M24	Z	.867	.867	0	%100
19	M25B	X	.501	.501	0	%100
20	M25B	Z	.867	.867	0	%100
21	M26B	X	.501	.501	0	%100
22	M26B	Z	.867	.867	0	%100
23	MP4A	X	1.262	1.262	0	%100
24	MP4A	Z	2.186	2.186	0	%100
25	MP3A	X	1.262	1.262	0	%100
26	MP3A	Z	2.186	2.186	0	%100
27	MP2A	X	1.262	1.262	0	%100
28	MP2A	Z	2.186	2.186	0	%100
29	MP1A	X	1.399	1.399	0	%100
30	MP1A	Z	2.422	2.422	0	%100
31	M29	X	.157	.157	0	%100
32	M29	Z	.272	.272	0	%100
33	M29A	X	1.744	1.744	0	%100
34	M29A	Z	3.021	3.021	0	%100
35	M30	X	.617	.617	0	%100
36	M30	Z	1.068	1.068	0	%100
37	M31	X	.753	.753	0	%100
38	M31	Z	1.304	1.304	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.524	2.524	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.524	2.524	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	3.184	3.184	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	2.524	2.524	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	2.524	2.524	0	%100
27	MP2A	X	0	0	0	%100
28	MP2A	Z	2.524	2.524	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	2.797	2.797	0	%100
31	M29	X	0	0	0	%100
32	M29	Z	1.509	1.509	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	2.862	2.862	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	2.862	2.862	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.446	.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.947	-.947	0	%100
2	M1	Z	1.639	1.639	0	%100
3	M2	X	-.947	-.947	0	%100
4	M2	Z	1.639	1.639	0	%100
5	M17	X	-1.592	-1.592	0	%100
6	M17	Z	2.757	2.757	0	%100
7	M25	X	-.115	-.115	0	%100
8	M25	Z	.199	.199	0	%100
9	M26	X	-.115	-.115	0	%100
10	M26	Z	.199	.199	0	%100
11	M21	X	-.501	-.501	0	%100
12	M21	Z	.867	.867	0	%100
13	M22	X	-.501	-.501	0	%100
14	M22	Z	.867	.867	0	%100
15	M23	X	-.501	-.501	0	%100
16	M23	Z	.867	.867	0	%100
17	M24	X	-.501	-.501	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
18	M24	Z	.867	.867	0	%100
19	M25B	X	-.501	-.501	0	%100
20	M25B	Z	.867	.867	0	%100
21	M26B	X	-.501	-.501	0	%100
22	M26B	Z	.867	.867	0	%100
23	MP4A	X	-1.262	-1.262	0	%100
24	MP4A	Z	2.186	2.186	0	%100
25	MP3A	X	-1.262	-1.262	0	%100
26	MP3A	Z	2.186	2.186	0	%100
27	MP2A	X	-1.262	-1.262	0	%100
28	MP2A	Z	2.186	2.186	0	%100
29	MP1A	X	-1.399	-1.399	0	%100
30	MP1A	Z	2.422	2.422	0	%100
31	M29	X	-1.229	-1.229	0	%100
32	M29	Z	2.128	2.128	0	%100
33	M29A	X	-.617	-.617	0	%100
34	M29A	Z	1.068	1.068	0	%100
35	M30	X	-1.744	-1.744	0	%100
36	M30	Z	3.021	3.021	0	%100
37	M31	X	-.002	-.002	0	%100
38	M31	Z	.004	.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.546	-.546	0	%100
2	M1	Z	.316	.316	0	%100
3	M2	X	-.546	-.546	0	%100
4	M2	Z	.316	.316	0	%100
5	M17	X	-2.757	-2.757	0	%100
6	M17	Z	1.592	1.592	0	%100
7	M25	X	-.598	-.598	0	%100
8	M25	Z	.345	.345	0	%100
9	M26	X	-.598	-.598	0	%100
10	M26	Z	.345	.345	0	%100
11	M21	X	-2.602	-2.602	0	%100
12	M21	Z	1.502	1.502	0	%100
13	M22	X	-2.602	-2.602	0	%100
14	M22	Z	1.502	1.502	0	%100
15	M23	X	-2.602	-2.602	0	%100
16	M23	Z	1.502	1.502	0	%100
17	M24	X	-2.602	-2.602	0	%100
18	M24	Z	1.502	1.502	0	%100
19	M25B	X	-2.602	-2.602	0	%100
20	M25B	Z	1.502	1.502	0	%100
21	M26B	X	-2.602	-2.602	0	%100
22	M26B	Z	1.502	1.502	0	%100
23	MP4A	X	-2.186	-2.186	0	%100
24	MP4A	Z	1.262	1.262	0	%100
25	MP3A	X	-2.186	-2.186	0	%100
26	MP3A	Z	1.262	1.262	0	%100
27	MP2A	X	-2.186	-2.186	0	%100
28	MP2A	Z	1.262	1.262	0	%100
29	MP1A	X	-2.422	-2.422	0	%100
30	MP1A	Z	1.399	1.399	0	%100
31	M29	X	-1.914	-1.914	0	%100
32	M29	Z	1.105	1.105	0	%100
33	M29A	X	-.2	-.2	0	%100
34	M29A	Z	.115	.115	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
35	M30	X	-2.153	-2.153	0	%100
36	M30	Z	1.243	1.243	0	%100
37	M31	X	-.54	-.54	0	%100
38	M31	Z	.312	.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	-3.184	-3.184	0	%100
6	M17	Z	0	0	0	%100
7	M25	X	-.921	-.921	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	-.921	-.921	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	-4.006	-4.006	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	-4.006	-4.006	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	-4.006	-4.006	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	-4.006	-4.006	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	-4.006	-4.006	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	-4.006	-4.006	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	-2.524	-2.524	0	%100
24	MP4A	Z	0	0	0	%100
25	MP3A	X	-2.524	-2.524	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	-2.524	-2.524	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	-2.797	-2.797	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	-1.015	-1.015	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	-.857	-.857	0	%100
34	M29A	Z	0	0	0	%100
35	M30	X	-.857	-.857	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	-1.683	-1.683	0	%100
38	M31	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.546	-.546	0	%100
2	M1	Z	-.316	-.316	0	%100
3	M2	X	-.546	-.546	0	%100
4	M2	Z	-.316	-.316	0	%100
5	M17	X	-2.757	-2.757	0	%100
6	M17	Z	-1.592	-1.592	0	%100
7	M25	X	-.598	-.598	0	%100
8	M25	Z	-.345	-.345	0	%100
9	M26	X	-.598	-.598	0	%100
10	M26	Z	-.345	-.345	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
11	M21	X	-2.602	-2.602	0	%100
12	M21	Z	-1.502	-1.502	0	%100
13	M22	X	-2.602	-2.602	0	%100
14	M22	Z	-1.502	-1.502	0	%100
15	M23	X	-2.602	-2.602	0	%100
16	M23	Z	-1.502	-1.502	0	%100
17	M24	X	-2.602	-2.602	0	%100
18	M24	Z	-1.502	-1.502	0	%100
19	M25B	X	-2.602	-2.602	0	%100
20	M25B	Z	-1.502	-1.502	0	%100
21	M26B	X	-2.602	-2.602	0	%100
22	M26B	Z	-1.502	-1.502	0	%100
23	MP4A	X	-2.186	-2.186	0	%100
24	MP4A	Z	-1.262	-1.262	0	%100
25	MP3A	X	-2.186	-2.186	0	%100
26	MP3A	Z	-1.262	-1.262	0	%100
27	MP2A	X	-2.186	-2.186	0	%100
28	MP2A	Z	-1.262	-1.262	0	%100
29	MP1A	X	-2.422	-2.422	0	%100
30	MP1A	Z	-1.399	-1.399	0	%100
31	M29	X	-.058	-.058	0	%100
32	M29	Z	-.033	-.033	0	%100
33	M29A	X	-2.153	-2.153	0	%100
34	M29A	Z	-1.243	-1.243	0	%100
35	M30	X	-.2	-.2	0	%100
36	M30	Z	-.115	-.115	0	%100
37	M31	X	-1.839	-1.839	0	%100
38	M31	Z	-1.062	-1.062	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.947	-.947	0	%100
2	M1	Z	-1.639	-1.639	0	%100
3	M2	X	-.947	-.947	0	%100
4	M2	Z	-1.639	-1.639	0	%100
5	M17	X	-1.592	-1.592	0	%100
6	M17	Z	-2.757	-2.757	0	%100
7	M25	X	-.115	-.115	0	%100
8	M25	Z	-.199	-.199	0	%100
9	M26	X	-.115	-.115	0	%100
10	M26	Z	-.199	-.199	0	%100
11	M21	X	-.501	-.501	0	%100
12	M21	Z	-.867	-.867	0	%100
13	M22	X	-.501	-.501	0	%100
14	M22	Z	-.867	-.867	0	%100
15	M23	X	-.501	-.501	0	%100
16	M23	Z	-.867	-.867	0	%100
17	M24	X	-.501	-.501	0	%100
18	M24	Z	-.867	-.867	0	%100
19	M25B	X	-.501	-.501	0	%100
20	M25B	Z	-.867	-.867	0	%100
21	M26B	X	-.501	-.501	0	%100
22	M26B	Z	-.867	-.867	0	%100
23	MP4A	X	-1.262	-1.262	0	%100
24	MP4A	Z	-2.186	-2.186	0	%100
25	MP3A	X	-1.262	-1.262	0	%100
26	MP3A	Z	-2.186	-2.186	0	%100
27	MP2A	X	-1.262	-1.262	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
28	MP2A	Z	-2.186	-2.186	0	%100
29	MP1A	X	-1.399	-1.399	0	%100
30	MP1A	Z	-2.422	-2.422	0	%100
31	M29	X	-.157	-.157	0	%100
32	M29	Z	-.272	-.272	0	%100
33	M29A	X	-1.744	-1.744	0	%100
34	M29A	Z	-3.021	-3.021	0	%100
35	M30	X	-.617	-.617	0	%100
36	M30	Z	-1.068	-1.068	0	%100
37	M31	X	-.753	-.753	0	%100
38	M31	Z	-1.304	-1.304	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.467	-.467	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.467	-.467	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	-.604	-.604	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	-.467	-.467	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	-.467	-.467	0	%100
27	MP2A	X	0	0	0	%100
28	MP2A	Z	-.467	-.467	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	-.565	-.565	0	%100
31	M29	X	0	0	0	%100
32	M29	Z	-.279	-.279	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	-.669	-.669	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	-.669	-.669	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-.082	-.082	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.175	.175	0	%100
2	M1	Z	-.303	-.303	0	%100
3	M2	X	.175	.175	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	-.303	-.303	0	%100
5	M17	X	.302	.302	0	%100
6	M17	Z	-.523	-.523	0	%100
7	M25	X	.009	.009	0	%100
8	M25	Z	-.016	-.016	0	%100
9	M26	X	.009	.009	0	%100
10	M26	Z	-.016	-.016	0	%100
11	M21	X	.147	.147	0	%100
12	M21	Z	-.255	-.255	0	%100
13	M22	X	.147	.147	0	%100
14	M22	Z	-.255	-.255	0	%100
15	M23	X	.147	.147	0	%100
16	M23	Z	-.255	-.255	0	%100
17	M24	X	.147	.147	0	%100
18	M24	Z	-.255	-.255	0	%100
19	M25B	X	.147	.147	0	%100
20	M25B	Z	-.255	-.255	0	%100
21	M26B	X	.147	.147	0	%100
22	M26B	Z	-.255	-.255	0	%100
23	MP4A	X	.233	.233	0	%100
24	MP4A	Z	-.404	-.404	0	%100
25	MP3A	X	.233	.233	0	%100
26	MP3A	Z	-.404	-.404	0	%100
27	MP2A	X	.233	.233	0	%100
28	MP2A	Z	-.404	-.404	0	%100
29	MP1A	X	.283	.283	0	%100
30	MP1A	Z	-.489	-.489	0	%100
31	M29	X	.227	.227	0	%100
32	M29	Z	-.394	-.394	0	%100
33	M29A	X	.144	.144	0	%100
34	M29A	Z	-.25	-.25	0	%100
35	M30	X	.408	.408	0	%100
36	M30	Z	-.706	-.706	0	%100
37	M31	X	.000454	.000454	0	%100
38	M31	Z	-.000786	-.000786	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.101	.101	0	%100
2	M1	Z	-.058	-.058	0	%100
3	M2	X	.101	.101	0	%100
4	M2	Z	-.058	-.058	0	%100
5	M17	X	.523	.523	0	%100
6	M17	Z	-.302	-.302	0	%100
7	M25	X	.048	.048	0	%100
8	M25	Z	-.028	-.028	0	%100
9	M26	X	.048	.048	0	%100
10	M26	Z	-.028	-.028	0	%100
11	M21	X	.766	.766	0	%100
12	M21	Z	-.442	-.442	0	%100
13	M22	X	.766	.766	0	%100
14	M22	Z	-.442	-.442	0	%100
15	M23	X	.766	.766	0	%100
16	M23	Z	-.442	-.442	0	%100
17	M24	X	.766	.766	0	%100
18	M24	Z	-.442	-.442	0	%100
19	M25B	X	.766	.766	0	%100
20	M25B	Z	-.442	-.442	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
21	M26B	X	.766	.766	0	%100
22	M26B	Z	-.442	-.442	0	%100
23	MP4A	X	.404	.404	0	%100
24	MP4A	Z	-.233	-.233	0	%100
25	MP3A	X	.404	.404	0	%100
26	MP3A	Z	-.233	-.233	0	%100
27	MP2A	X	.404	.404	0	%100
28	MP2A	Z	-.233	-.233	0	%100
29	MP1A	X	.489	.489	0	%100
30	MP1A	Z	-.283	-.283	0	%100
31	M29	X	.354	.354	0	%100
32	M29	Z	-.204	-.204	0	%100
33	M29A	X	.047	.047	0	%100
34	M29A	Z	-.027	-.027	0	%100
35	M30	X	.503	.503	0	%100
36	M30	Z	-.291	-.291	0	%100
37	M31	X	.099	.099	0	%100
38	M31	Z	-.057	-.057	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	.604	.604	0	%100
6	M17	Z	0	0	0	%100
7	M25	X	.074	.074	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	.074	.074	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	1.18	1.18	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	1.18	1.18	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	1.18	1.18	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	1.18	1.18	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	1.18	1.18	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	1.18	1.18	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	.467	.467	0	%100
24	MP4A	Z	0	0	0	%100
25	MP3A	X	.467	.467	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	.467	.467	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	.565	.565	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	.188	.188	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	.2	.2	0	%100
34	M29A	Z	0	0	0	%100
35	M30	X	.2	.2	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	.308	.308	0	%100

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,%]
38	M31	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	.101	.101	0	%100
2	M1	Z	.058	.058	0	%100
3	M2	X	.101	.101	0	%100
4	M2	Z	.058	.058	0	%100
5	M17	X	.523	.523	0	%100
6	M17	Z	.302	.302	0	%100
7	M25	X	.048	.048	0	%100
8	M25	Z	.028	.028	0	%100
9	M26	X	.048	.048	0	%100
10	M26	Z	.028	.028	0	%100
11	M21	X	.766	.766	0	%100
12	M21	Z	.442	.442	0	%100
13	M22	X	.766	.766	0	%100
14	M22	Z	.442	.442	0	%100
15	M23	X	.766	.766	0	%100
16	M23	Z	.442	.442	0	%100
17	M24	X	.766	.766	0	%100
18	M24	Z	.442	.442	0	%100
19	M25B	X	.766	.766	0	%100
20	M25B	Z	.442	.442	0	%100
21	M26B	X	.766	.766	0	%100
22	M26B	Z	.442	.442	0	%100
23	MP4A	X	.404	.404	0	%100
24	MP4A	Z	.233	.233	0	%100
25	MP3A	X	.404	.404	0	%100
26	MP3A	Z	.233	.233	0	%100
27	MP2A	X	.404	.404	0	%100
28	MP2A	Z	.233	.233	0	%100
29	MP1A	X	.489	.489	0	%100
30	MP1A	Z	.283	.283	0	%100
31	M29	X	.011	.011	0	%100
32	M29	Z	.006	.006	0	%100
33	M29A	X	.503	.503	0	%100
34	M29A	Z	.291	.291	0	%100
35	M30	X	.047	.047	0	%100
36	M30	Z	.027	.027	0	%100
37	M31	X	.337	.337	0	%100
38	M31	Z	.195	.195	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.175	.175	0	%100
2	M1	Z	.303	.303	0	%100
3	M2	X	.175	.175	0	%100
4	M2	Z	.303	.303	0	%100
5	M17	X	.302	.302	0	%100
6	M17	Z	.523	.523	0	%100
7	M25	X	.009	.009	0	%100
8	M25	Z	.016	.016	0	%100
9	M26	X	.009	.009	0	%100
10	M26	Z	.016	.016	0	%100
11	M21	X	.147	.147	0	%100
12	M21	Z	.255	.255	0	%100
13	M22	X	.147	.147	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
14	M22	Z	.255	.255	0	%100
15	M23	X	.147	.147	0	%100
16	M23	Z	.255	.255	0	%100
17	M24	X	.147	.147	0	%100
18	M24	Z	.255	.255	0	%100
19	M25B	X	.147	.147	0	%100
20	M25B	Z	.255	.255	0	%100
21	M26B	X	.147	.147	0	%100
22	M26B	Z	.255	.255	0	%100
23	MP4A	X	.233	.233	0	%100
24	MP4A	Z	.404	.404	0	%100
25	MP3A	X	.233	.233	0	%100
26	MP3A	Z	.404	.404	0	%100
27	MP2A	X	.233	.233	0	%100
28	MP2A	Z	.404	.404	0	%100
29	MP1A	X	.283	.283	0	%100
30	MP1A	Z	.489	.489	0	%100
31	M29	X	.029	.029	0	%100
32	M29	Z	.05	.05	0	%100
33	M29A	X	.408	.408	0	%100
34	M29A	Z	.706	.706	0	%100
35	M30	X	.144	.144	0	%100
36	M30	Z	.25	.25	0	%100
37	M31	X	.138	.138	0	%100
38	M31	Z	.239	.239	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.467	.467	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.467	.467	0	%100
5	M17	X	0	0	0	%100
6	M17	Z	.604	.604	0	%100
7	M25	X	0	0	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	0	0	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	0	0	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	0	0	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	0	0	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	0	0	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	0	0	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	0	0	0	%100
24	MP4A	Z	.467	.467	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	.467	.467	0	%100
27	MP2A	X	0	0	0	%100
28	MP2A	Z	.467	.467	0	%100
29	MP1A	X	0	0	0	%100
30	MP1A	Z	.565	.565	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
31	M29	X	0	0	0	%100
32	M29	Z	.279	.279	0	%100
33	M29A	X	0	0	0	%100
34	M29A	Z	.669	.669	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	.669	.669	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.082	.082	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.175	-.175	0	%100
2	M1	Z	.303	.303	0	%100
3	M2	X	-.175	-.175	0	%100
4	M2	Z	.303	.303	0	%100
5	M17	X	-.302	-.302	0	%100
6	M17	Z	.523	.523	0	%100
7	M25	X	-.009	-.009	0	%100
8	M25	Z	.016	.016	0	%100
9	M26	X	-.009	-.009	0	%100
10	M26	Z	.016	.016	0	%100
11	M21	X	-.147	-.147	0	%100
12	M21	Z	.255	.255	0	%100
13	M22	X	-.147	-.147	0	%100
14	M22	Z	.255	.255	0	%100
15	M23	X	-.147	-.147	0	%100
16	M23	Z	.255	.255	0	%100
17	M24	X	-.147	-.147	0	%100
18	M24	Z	.255	.255	0	%100
19	M25B	X	-.147	-.147	0	%100
20	M25B	Z	.255	.255	0	%100
21	M26B	X	-.147	-.147	0	%100
22	M26B	Z	.255	.255	0	%100
23	MP4A	X	-.233	-.233	0	%100
24	MP4A	Z	.404	.404	0	%100
25	MP3A	X	-.233	-.233	0	%100
26	MP3A	Z	.404	.404	0	%100
27	MP2A	X	-.233	-.233	0	%100
28	MP2A	Z	.404	.404	0	%100
29	MP1A	X	-.283	-.283	0	%100
30	MP1A	Z	.489	.489	0	%100
31	M29	X	-.227	-.227	0	%100
32	M29	Z	.394	.394	0	%100
33	M29A	X	-.144	-.144	0	%100
34	M29A	Z	.25	.25	0	%100
35	M30	X	-.408	-.408	0	%100
36	M30	Z	.706	.706	0	%100
37	M31	X	-.000454	-.000454	0	%100
38	M31	Z	.000786	.000786	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.101	-.101	0	%100
2	M1	Z	.058	.058	0	%100
3	M2	X	-.101	-.101	0	%100
4	M2	Z	.058	.058	0	%100
5	M17	X	-.523	-.523	0	%100
6	M17	Z	.302	.302	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
7	M25	X	-.048	-.048	0	%100
8	M25	Z	.028	.028	0	%100
9	M26	X	-.048	-.048	0	%100
10	M26	Z	.028	.028	0	%100
11	M21	X	-.766	-.766	0	%100
12	M21	Z	.442	.442	0	%100
13	M22	X	-.766	-.766	0	%100
14	M22	Z	.442	.442	0	%100
15	M23	X	-.766	-.766	0	%100
16	M23	Z	.442	.442	0	%100
17	M24	X	-.766	-.766	0	%100
18	M24	Z	.442	.442	0	%100
19	M25B	X	-.766	-.766	0	%100
20	M25B	Z	.442	.442	0	%100
21	M26B	X	-.766	-.766	0	%100
22	M26B	Z	.442	.442	0	%100
23	MP4A	X	-.404	-.404	0	%100
24	MP4A	Z	.233	.233	0	%100
25	MP3A	X	-.404	-.404	0	%100
26	MP3A	Z	.233	.233	0	%100
27	MP2A	X	-.404	-.404	0	%100
28	MP2A	Z	.233	.233	0	%100
29	MP1A	X	-.489	-.489	0	%100
30	MP1A	Z	.283	.283	0	%100
31	M29	X	-.354	-.354	0	%100
32	M29	Z	.204	.204	0	%100
33	M29A	X	-.047	-.047	0	%100
34	M29A	Z	.027	.027	0	%100
35	M30	X	-.503	-.503	0	%100
36	M30	Z	.291	.291	0	%100
37	M31	X	-.099	-.099	0	%100
38	M31	Z	.057	.057	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	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	M17	X	-.604	-.604	0	%100
6	M17	Z	0	0	0	%100
7	M25	X	-.074	-.074	0	%100
8	M25	Z	0	0	0	%100
9	M26	X	-.074	-.074	0	%100
10	M26	Z	0	0	0	%100
11	M21	X	-1.18	-1.18	0	%100
12	M21	Z	0	0	0	%100
13	M22	X	-1.18	-1.18	0	%100
14	M22	Z	0	0	0	%100
15	M23	X	-1.18	-1.18	0	%100
16	M23	Z	0	0	0	%100
17	M24	X	-1.18	-1.18	0	%100
18	M24	Z	0	0	0	%100
19	M25B	X	-1.18	-1.18	0	%100
20	M25B	Z	0	0	0	%100
21	M26B	X	-1.18	-1.18	0	%100
22	M26B	Z	0	0	0	%100
23	MP4A	X	-.467	-.467	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	MP4A	Z	0	0	0	%100
25	MP3A	X	-.467	-.467	0	%100
26	MP3A	Z	0	0	0	%100
27	MP2A	X	-.467	-.467	0	%100
28	MP2A	Z	0	0	0	%100
29	MP1A	X	-.565	-.565	0	%100
30	MP1A	Z	0	0	0	%100
31	M29	X	-.188	-.188	0	%100
32	M29	Z	0	0	0	%100
33	M29A	X	-.2	-.2	0	%100
34	M29A	Z	0	0	0	%100
35	M30	X	-.2	-.2	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	-.308	-.308	0	%100
38	M31	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.101	-.101	0	%100
2	M1	Z	-.058	-.058	0	%100
3	M2	X	-.101	-.101	0	%100
4	M2	Z	-.058	-.058	0	%100
5	M17	X	-.523	-.523	0	%100
6	M17	Z	-.302	-.302	0	%100
7	M25	X	-.048	-.048	0	%100
8	M25	Z	-.028	-.028	0	%100
9	M26	X	-.048	-.048	0	%100
10	M26	Z	-.028	-.028	0	%100
11	M21	X	-.766	-.766	0	%100
12	M21	Z	-.442	-.442	0	%100
13	M22	X	-.766	-.766	0	%100
14	M22	Z	-.442	-.442	0	%100
15	M23	X	-.766	-.766	0	%100
16	M23	Z	-.442	-.442	0	%100
17	M24	X	-.766	-.766	0	%100
18	M24	Z	-.442	-.442	0	%100
19	M25B	X	-.766	-.766	0	%100
20	M25B	Z	-.442	-.442	0	%100
21	M26B	X	-.766	-.766	0	%100
22	M26B	Z	-.442	-.442	0	%100
23	MP4A	X	-.404	-.404	0	%100
24	MP4A	Z	-.233	-.233	0	%100
25	MP3A	X	-.404	-.404	0	%100
26	MP3A	Z	-.233	-.233	0	%100
27	MP2A	X	-.404	-.404	0	%100
28	MP2A	Z	-.233	-.233	0	%100
29	MP1A	X	-.489	-.489	0	%100
30	MP1A	Z	-.283	-.283	0	%100
31	M29	X	-.011	-.011	0	%100
32	M29	Z	-.006	-.006	0	%100
33	M29A	X	-.503	-.503	0	%100
34	M29A	Z	-.291	-.291	0	%100
35	M30	X	-.047	-.047	0	%100
36	M30	Z	-.027	-.027	0	%100
37	M31	X	-.337	-.337	0	%100
38	M31	Z	-.195	-.195	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.175	-.175	0	%100
2	M1	Z	-.303	-.303	0	%100
3	M2	X	-.175	-.175	0	%100
4	M2	Z	-.303	-.303	0	%100
5	M17	X	-.302	-.302	0	%100
6	M17	Z	-.523	-.523	0	%100
7	M25	X	-.009	-.009	0	%100
8	M25	Z	-.016	-.016	0	%100
9	M26	X	-.009	-.009	0	%100
10	M26	Z	-.016	-.016	0	%100
11	M21	X	-.147	-.147	0	%100
12	M21	Z	-.255	-.255	0	%100
13	M22	X	-.147	-.147	0	%100
14	M22	Z	-.255	-.255	0	%100
15	M23	X	-.147	-.147	0	%100
16	M23	Z	-.255	-.255	0	%100
17	M24	X	-.147	-.147	0	%100
18	M24	Z	-.255	-.255	0	%100
19	M25B	X	-.147	-.147	0	%100
20	M25B	Z	-.255	-.255	0	%100
21	M26B	X	-.147	-.147	0	%100
22	M26B	Z	-.255	-.255	0	%100
23	MP4A	X	-.233	-.233	0	%100
24	MP4A	Z	-.404	-.404	0	%100
25	MP3A	X	-.233	-.233	0	%100
26	MP3A	Z	-.404	-.404	0	%100
27	MP2A	X	-.233	-.233	0	%100
28	MP2A	Z	-.404	-.404	0	%100
29	MP1A	X	-.283	-.283	0	%100
30	MP1A	Z	-.489	-.489	0	%100
31	M29	X	-.029	-.029	0	%100
32	M29	Z	-.05	-.05	0	%100
33	M29A	X	-.408	-.408	0	%100
34	M29A	Z	-.706	-.706	0	%100
35	M30	X	-.144	-.144	0	%100
36	M30	Z	-.25	-.25	0	%100
37	M31	X	-.138	-.138	0	%100
38	M31	Z	-.239	-.239	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	N47	max	1710.669	2	613.531	20	597.772	9	0	75	0	75	0	75
2		min	-1103.819	8	104.784	2	-317.809	3	0	1	0	1	0	1
3	N48	max	1129.639	8	635.561	20	633.509	2	0	75	0	75	0	75
4		min	-1692.979	2	94.077	2	-1005.049	8	0	1	0	1	0	1
5	N49	max	595.674	1	55.891	18	506.947	1	0	75	0	75	0	75
6		min	-1289.471	7	16.407	74	-1097.835	7	0	1	0	1	0	1
7	N49B	max	2076.287	8	836.294	14	1364.377	14	.008	26	.002	8	.003	8
8		min	-1539.951	2	-95.886	8	-277.347	8	-.001	8	0	2	-.001	2
9	N53	max	408.134	3	156.271	49	547.068	9	0	75	0	75	0	75
10		min	-294.559	9	-92.089	3	-854.94	3	0	1	0	1	0	1
11	Totals:	max	1012.806	9	1953.853	21	1566.231	1						

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
12		min	-1012.772	3	649.106	68	-1566.2	7						

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [l...	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M1	PIPE_2.0	.728	12.109	31	.385	.911		2	6295.422	32130	1.872	1.872	1....	H3-6
2	M2	PIPE_2.0	.652	5.208	2	.264	5.208		2	6295.422	32130	1.872	1.872	1....	H3-6
3	M17	PIPE_4.0	.304	4.375	2	.485	.875		2	85371.279	93240	10.631	10.631	3....	H3-6
4	M25	PL3/8x6	.659	0	20	.059	.25	y	2	70011.354	72900	.57	9.113	1....	H1-1b
5	M26	PL3/8x6	.654	0	20	.059	0	y	2	70011.354	72900	.57	9.113	1....	H1-1b
6	M21	WT5X3/8	.423	0	2	.039	.583	z	2	109638.6...	123444	10.125	8.262	1....	H1-1b
7	M22	WT5X3/8	.424	0	2	.039	0	z	2	109638.6...	123444	10.125	8.262	1....	H1-1b
8	M23	WT3X3/8	.657	0	26	.039	.583	z	2	60129.298	71604	6.399	2.373	1....	H1-1b
9	M24	WT3X3/8	.652	0	26	.039	0	z	2	60129.298	71604	6.399	2.373	1....	H1-1b
10	M25B	WT1x3/8	.171	0	2	.087	.583	y	20	130758.91	143208	11.907	10.827	1....	H1-1b
11	M26B	WT1x3/8	.172	0	2	.090	.583	y	20	130758.91	143208	11.907	10.827	1....	H1-1b
12	MP4A	PIPE_2.0	.357	3.375	3	.199	4.75		2	20866.733	32130	1.872	1.872	2....	H1-1b
13	MP3A	PIPE_2.0	.243	4.75	2	.172	1.625		2	20866.733	32130	1.872	1.872	2....	H1-1b
14	MP2A	PIPE_2.0	.551	4.75	36	.302	4.75		36	20866.733	32130	1.872	1.872	2....	H3-6
15	MP1A	PIPE_2.5	.317	2.813	7	.171	2.875		31	37773.818	50715	3.596	3.596	1....	H1-1b
16	M29	PIPE_2.0	.103	5.307	2	.005	0		8	8730.011	32130	1.872	1.872	1....	H1-1b
17	M29A	L2.5x2.5x4	.217	3.146	2	.028	0	y	2	11887.508	38556	1.114	2.15	1....	H2-1
18	M30	L2.5x2.5x4	.192	3.02	14	.039	0	z	35	11887.508	38556	1.114	2.15	1....	H2-1
19	M31	PIPE_2.0	.255	0	49	.016	3.187		49	28446.902	32130	1.872	1.872	1....	H1-1b

VzW SMART Tool© Vendor

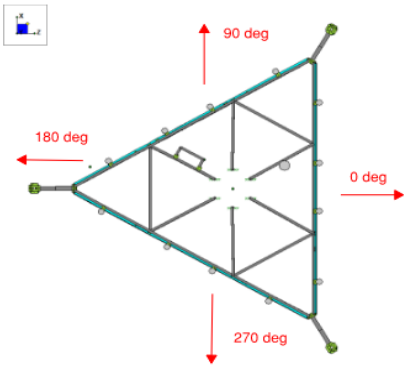
Client:	Verizon Wireless	Date:	7/7/2023
Site Name:	WATERFORD 2 CT		
MDG #:	5000245069		
Fuze ID #:	17123907	Page:	1

Version 1.01

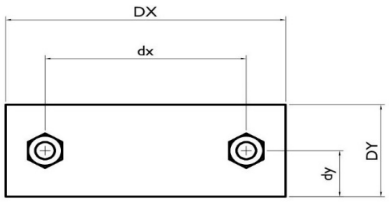
I. Mount-to-Tower Connection Check

Custom Orientation Required	Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N48	0
N47	0



Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	2 (Horizontal)
d_x (in) *(Delta X of typ. bolt config. sketch)* :	6.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	1
Bolt Type:	A307
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	0.2
Required Shear Strength / bolt (kips):	0.9
Tensile Capacity / bolt (kips):	10.4
Shear Capacity / bolt (kips):	6.2
Bolt Overall Utilization:	**13.8%**
Tower Connection Baseplate Checks	No



Date: **January 18, 2024**

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
(724) 416-2000

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	5000245069
	Site Name:	WATERFORD 2 CT
Crown Castle Designation:	**BU Number:**	876338
	Site Name:	WATERFORD
	JDE Job Number:	751362
	Work Order Number:	2278839
	Order Number:	654601 Rev. 0
Engineering Firm Designation:	**Crown Castle Project Number**	2278839
Site Data:	**41 Manitock Hill Road, Waterford, New London County, CT**	
	Latitude: *41° 21' 16.7"* Longitude: *-72° 9' 1.6"*	
	136 ft - Self Support Tower	

Crown Castle is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

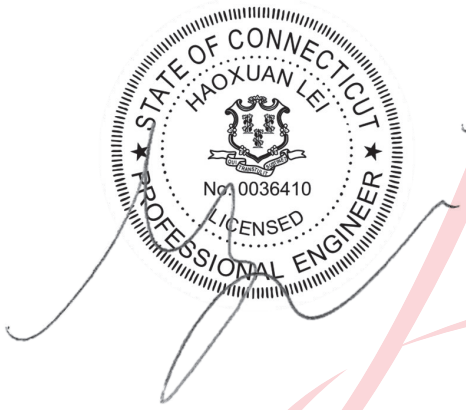
LC5: Proposed Equipment Configuration **Sufficient Capacity - 66.8%**

This analysis has been performed in accordance with the 2022 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 126 mph. Applicable Standard references and design criteria are listed in Section 2 – "Analysis Criteria".

Structural analysis prepared by: Steven Hu

Respectfully submitted by:

Haoxuan Lei
Project Engineer



Digitally signed by Haoxuan Lei
Date: 2024.01.19 16:11:52 -06'00'

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 136 ft Self Support Tower designed by Pirod Manufactures Inc.. The tower has been modified in the past to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	126 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.00 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
110	110	1	raycap	RVZDC-6627-PF-48_CCIv2	2	1-5/8
107	109	3	antel	BXA-80063/4CF w/ Mount Pipe	12	1-5/8
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
	108	6	jma wireless	MX06FRO660-03 w/ Mount Pipe		
		2	kaelus	BSF0020F3V1		
	107	3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
		1	tower mounts	Sector Mount [SM 402-3]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
136	137	3	alcatel lucent	TD-RRH8X20-25	4	1-1/4
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
	136	1	tower mounts	Platform Mount [LP 405-1]		
134		3	rfs celwave	IBC1900BB-1	-	-
		3	rfs celwave	IBC1900HG-2A		
	134	1	alcatel lucent	1900MHz RRH (65MHz)		
		2	alcatel lucent	1900MHZ RRH (65MHZ)		
		3	alcatel lucent	800MHZ 2X50W RRH W/FILTER		
		1	tower mounts	Pipe Mount [PM 601-3]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
127	127	12	decibel	DB844H90E-XY w/ Mount Pipe	12	1-1/4
		1	tower mounts	Sector Mount [SM 411-3]		
119	121	3	ericsson	AIR6449 B41_T-MOBILE	4	1-5/8
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO		
	119	3		12' HD V-Frame [#VFA12-HD]		
		9		8' Antenna Pipe [#P2STD]		
97	97	1	cci antennas	DMP65R-BU4D w/ Mount Pipe	6 2 4	1-1/4 3/8 7/8
		1	cci antennas	DMP65R-BU6D w/ Mount Pipe		
		1	cci antennas	DMP65R-BU8D w/ Mount Pipe		
		1	cci antennas	OPA65R-BU4D w/ Mount Pipe		
		1	cci antennas	OPA65R-BU6D w/ Mount Pipe		
		1	cci antennas	OPA65R-BU8D w/ Mount Pipe		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14_CCIV2		
		3	ericsson	RRUS 8843 B2/B66A_CCIV2		
		3	powerwave technologies	7770.00 w/ Mount Pipe		
		6	powerwave technologies	LGP21401		
		1	raycap	DC6-48-60-18-8F		
		1	raycap	DC9-48-60-24-8C-EV		
		1	tower mounts	Sector Mount [SM 504-3]		
86	89	3	samsung telecommunications	RF4450t-71A	1	1-1/2
		3	samsung telecommunications	RF4451d-70A		
	87	3	commscope	FFVV-65B-R2 w/ Mount Pipe		
	86	1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MTC3975083 (3)		
80	81	1	gps	GPS_A	1	1/2
	80	1	tower mounts	Side Arm Mount [SO 701-1]		
72	72	2	gps	GPS_A	2	1/2

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		2	tower mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	2035622	CCISITES
4-POST-MODIFICATION INSPECTION	2376132	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	2068030	CCISITES
4-TOWER MANUFACTURER DRAWINGS	1441523	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2125417	CCISITES

3.1) Analysis Method

tnxTower (version 8.2.2.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the reinforcing elements. These calculations are included in Appendix C.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Crown Castle should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass/ Fail
T1	136 - 133.625	Leg	1 1/2	2	-2.23	54.73	4.1	Pass
T2	133.625 - 130	Leg	1 1/2	14	-4.02	49.84	8.1	Pass
T3	130 - 110	Leg	2	29	-36.24	117.05	31.0	Pass
T4	110 - 94.9427	Leg	2 1/4	107	-78.50	156.33	50.2	Pass
T5	94.9427 - 92.5938	Leg	2 1/4	149	-86.45	179.34	48.2	Pass
T6	92.5938 - 90	Leg	2 1/4	161	-98.19	185.75	52.9	Pass
T7	90 - 80	Leg	Pirod 105244 w/ (2) 1-1/4" Tie Rod	176	-105.90	-	42.5	Pass[1s]
T8	80 - 60	Leg	Pirod 105217	184	-146.29	225.60	64.8	Pass
T9	60 - 40	Leg	Pirod 105218	199	-180.10	315.72	57.0	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass/ Fail
T10	40 - 20	Leg	Pirod 105218	214	-209.36	315.72	66.3	Pass
T11	20 - 0	Leg	Pirod 105219	229	-236.19	419.86	56.3	Pass
T1	136 - 133.625	Diagonal	3/4	8	-0.93	5.77	16.1	Pass
T2	133.625 - 130	Diagonal	3/4	24	-1.36	5.88	23.1	Pass
T3	130 - 110	Diagonal	7/8	40	-3.73	9.77	38.2	Pass
T4	110 - 94.9427	Diagonal	1	115	-4.91	14.70	33.4	Pass
T5	94.9427 - 92.5938	Diagonal	1	151	-5.18	14.41	35.9	Pass
T6	92.5938 - 90	Diagonal	1	166	-6.07	14.87	40.8	Pass
T7	90 - 80	Diagonal	L3x3x3/16	181	-7.34	25.34	29.0 61.2 (b)	Pass
T8	80 - 60	Diagonal	L2 1/2x2 1/2x3/16	187	-6.15	14.57	42.2 53.5 (b)	Pass
T9	60 - 40	Diagonal	L3x3x3/16	202	-5.69	20.18	28.2 44.6 (b)	Pass
T10	40 - 20	Diagonal	L3x3x3/16	217	-5.80	16.11	36.0 43.1 (b)	Pass
T11	20 - 0	Diagonal	L3x3x5/16	232	-7.78	20.97	37.1	Pass
T2	133.625 - 130	Horizontal	3/4	16	-0.18	3.48	5.2	Pass
T3	130 - 110	Horizontal	3/4	43	-0.68	2.88	23.8	Pass
T5	94.9427 - 92.5938	Secondary Horizontal	1 1/2	158	-1.50	50.44	3.0	Pass
T6	92.5938 - 90	Secondary Horizontal	1 1/2	172	-1.70	49.85	3.4	Pass
T1	136 - 133.625	Top Girt	6x3/8	4	-0.65	5.14	12.6	Pass
T3	130 - 110	Top Girt	7/8	31	-0.68	6.54	10.5	Pass
T4	110 - 94.9427	Top Girt	1	111	-1.59	8.78	18.2	Pass
T2	133.625 - 130	Bottom Girt	7/8	19	-0.56	6.44	8.6	Pass
T3	130 - 110	Bottom Girt	7/8	36	-1.69	5.18	32.5	Pass
T6	92.5938 - 90	Bottom Girt	1	163	-1.70	7.17	23.7	Pass
							Summary	
						Leg (T10)	66.3	Pass
						Diagonal (T7)	61.2	Pass
						Horizontal (T3)	23.8	Pass
						Secondary Horizontal (T6)	3.4	Pass
						Top Girt (T4)	18.2	Pass
						Bottom Girt (T3)	32.5	Pass
						Bolt Checks	61.2	Pass
						RATING =	66.3	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	37.0	Pass
1	Base Foundation (Structural)	0	19.5	Pass
1	Base Foundation (Soil)	0	66.8	Pass

Structure Rating (max from all components) =	66.8%

Notes:

1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed

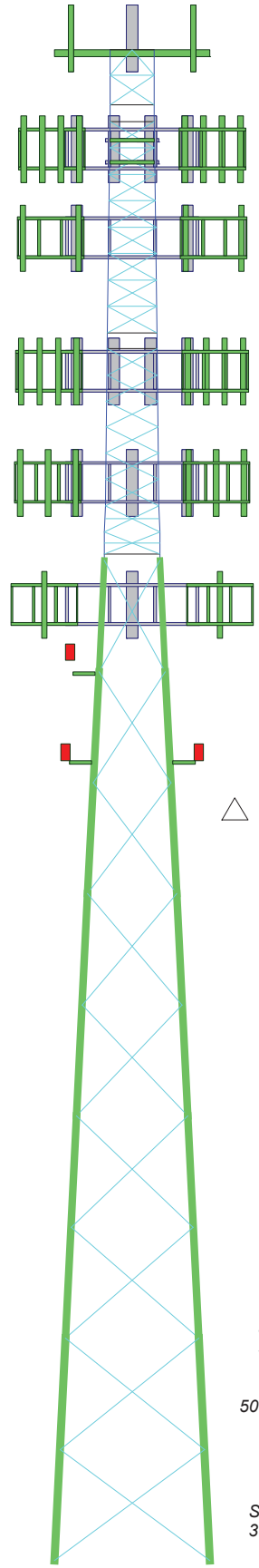
4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the considered equipment configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11
Legs	SR 1 1/2	SR 2	SR 2 1/4				A	Pirod 105217	Pirod 105218	Pirod 105219	
Leg Grade	A572-50										
Diagonals	SR 3/4	SR 7/8	SR 1				L3x3x3/16	L2 1/2x2 1/2x3/16	L3x3x3/16	L3x3x5/16	
Diagonal Grade	A572-50								A36		
Top Girts		SR 7/8	SR 1						N.A.		
Bottom Girts		SR 7/8	N.A.			C			N.A.		
Horizontals		SR 3/4	N.A.						N.A.		
Sec. Horizontals		N.A.				SR 1 1/2			N.A.		
Face Width (ft)	4			4.5	4.875	4.5	6	6	8	10	12
# Panels @ (ft)	8 @ 2.375			6 @ 2.34983		G	F		9 @ 10		
Weight (K)	17.4	1.4	1.2		0.3	0.3	1.4	2.3	2.8	2.9	4.5
	D	E									
	0.2	0.2									
	B										
	N.A.										



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	Pirod 105244 w/ (2) 1-1/4" Tie Rod	E	1 @ 2.625
B	6x3/8	F	1 @ 2.34896
C	SR 1	G	1 @ 2.01042
D	1 @ 2.375		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

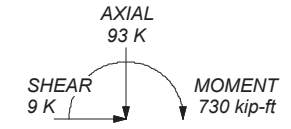
TOWER DESIGN NOTES

1. Tower is located in New London County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 126 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 66.3%

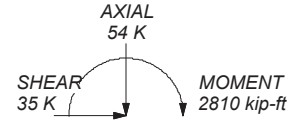
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 245 K
SHEAR: 24 K

UPLIFT: -212 K
SHEAR: 21 K



TORQUE 3 kip-ft
50 mph WIND - 1.0000 in ICE



TORQUE 15 kip-ft
REACTIONS - 126 mph WIND

CROWN CASTLE
The Pathway to Possible

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
Phone: (724) 416-2000
FAX:

Job: *876338*			
Project:			
Client: Crown Castle	Drawn by: SHu	App'd:	
Code: TIA-222-H	Date: 01/18/24	Scale: NTS	
Path: C:\SAPI Work Area\876338\WO 2278839 - SA\Prod\876338.eri		Dwg No. E-1	

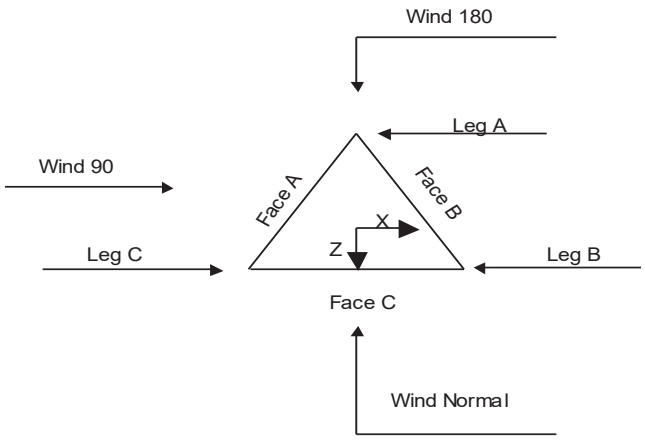
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 136.00 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 4.00 ft at the top and 14.00 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in New London County, Connecticut.
Tower base elevation above sea level: 242.00 ft.
Basic wind speed of 126 mph.
Risk Category II.
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.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Maximum demand-capacity ratio is: 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Horizontals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Consider Moments - Diagonals	√	Use Clear Spans For Wind Area	√	SR Leg Bolts Resist Compression
	Use Moment Magnification	√	Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Stress Ratios		Retension Guys To Initial Tension		Offset Girt At Foundation
√	Use Code Safety Factors - Guys	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Escalate Ice	√	Use Azimuth Dish Coefficients	√	Include Angle Block Shear Check
	Always Use Max Kz	√	Project Wind Area of Appurtenances		Use TIA-222-H Bracing Resist. Exemption
	Use Special Wind Profile		Alternative Appurt. EPA Calculation		Use TIA-222-H Tension Splice Exemption
√	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Poles
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Include Shear-Torsion Interaction
√	Secondary Horizontal Braces Leg	√	Sort Capacity Reports By Component		Always Use Sub-Critical Flow
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Use Top Mounted Sockets
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Pole Without Linear Attachments
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole With Shroud Or No Appurtenances
	Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules		Outside and Inside Corner Radii Are Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	136.00-133.63			4.00	1	2.38
T2	133.63-130.00			4.00	1	3.63
T3	130.00-110.00			4.00	1	20.00
T4	110.00-94.94			4.50	1	15.06
T5	94.94-92.59			4.88	1	2.35
T6	92.59-90.00			4.93	1	2.59
T7	90.00-80.00			5.00	1	10.00
T8	80.00-60.00			6.00	1	20.00
T9	60.00-40.00			8.00	1	20.00
T10	40.00-20.00			10.00	1	20.00
T11	20.00-0.00			12.00	1	20.00

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	136.00-133.63	2.38	K Brace Down	No	Yes	0.0000	0.0000
T2	133.63-130.00	2.63	X Brace	No	Yes	0.0000	12.0000
T3	130.00-110.00	2.38	X Brace	No	Yes	6.0000	6.0000
T4	110.00-94.94	2.35	X Brace	No	No	11.5000	0.0000
T5	94.94-92.59	2.35	X Brace	No	Yes	0.0000	0.0000
T6	92.59-90.00	2.01	X Brace	No	Yes	0.0000	7.0000
T7	90.00-80.00	10.00	X Brace	No	No	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T8	80.00-60.00	10.00	X Brace	No	No	0.0000	0.0000
T9	60.00-40.00	10.00	X Brace	No	No	0.0000	0.0000
T10	40.00-20.00	10.00	X Brace	No	No	0.0000	0.0000
T11	20.00-0.00	10.00	X Brace	No	No	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 136.00-133.63	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T2 133.63-130.00	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T3 130.00-110.00	Solid Round	2	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 110.00-94.94	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T5 94.94-92.59	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T6 92.59-90.00	Solid Round	2 1/4	A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)
T7 90.00-80.00	Truss Leg	Pirod 105244 w/ (2) 1-1/4'' Tie Rod	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T8 80.00-60.00	Truss Leg	Pirod 105217	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T9 60.00-40.00	Truss Leg	Pirod 105218	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T10 40.00-20.00	Truss Leg	Pirod 105218	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T11 20.00-0.00	Truss Leg	Pirod 105219	A572-50 (50 ksi)	Equal Angle	L3x3x5/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 136.00-133.63	Flat Bar	6x3/8	A36 (36 ksi)	Solid Round		A572-50 (50 ksi)
T2 133.63-130.00	Solid Round		A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T3 130.00-110.00	Solid Round	7/8	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 110.00-94.94	Solid Round	1	A572-50 (50 ksi)	Solid Round		A572-50 (50 ksi)
T6 92.59-90.00	Solid Round		A572-50 (50 ksi)	Solid Round	1	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1 136.00-133.63	None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T2 133.63-130.00	None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T3 130.00-110.00	None	Solid Round		A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T5 94.94-92.59	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round		A572-50 (50 ksi)
T6 92.59-90.00	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round		A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 136.00-133.63	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T2 133.63-130.00	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T3 130.00-110.00	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T4 110.00-94.94	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T5 94.94-92.59	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T6 92.59-90.00	0.00	0.0000	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T7 90.00-80.00	0.00	0.0000	A36 (36 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T8 80.00-60.00	0.00	0.0000	A36 (36 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T9 60.00-40.00	0.00	0.0000	A36 (36 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T10 40.00-20.00	0.00	0.0000	A36 (36 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T11 20.00-0.00	0.00	0.0000	A36 (36 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 136.00-133.63	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T2 133.63-130.00	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T3 130.00-110.00	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T4 110.00-94.94	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T5 94.94-92.59	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T6 92.59-90.00	No	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T7 90.00-80.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T8 80.00-60.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T9 60.00-40.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T10 40.00-20.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T11 20.00-0.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Truss-Leg K Factors: Truss-Legs Used As Leg Members — Leg Panels	X Brace Diagonals	Z Brace Diagonals	Truss-Legs Used As Inner Members — Leg Panels	X Brace Diagonals	Z Brace Diagonals
T7 90.00-80.00	0.999	0.5	0.85	1	1	1
T8 80.00-60.00	1	0.5	0.85	1	1	1
T9 60.00-40.00	1	0.5	0.85	1	1	1
T10 40.00-20.00	1	0.5	0.85	1	1	1
T11 20.00-0.00	1	0.5	0.85	1	0.5	0.85

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 136.00-133.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1
T2 133.63-130.00	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1
T3 130.00-110.00	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T4 110.00-94.94	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T5 94.94-92.59	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T6 92.59-90.00	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T7 90.00-80.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T8 80.00-60.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T9 60.00-40.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T10 40.00-20.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T11 20.00-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	1

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 136.00-133.63	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T2 133.63-130.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T3 130.00-110.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T4 110.00-94.94	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T5 94.94-92.59	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T6 92.59-90.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T7 90.00-80.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T8 80.00-60.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T9 60.00-40.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T10 40.00-20.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T11 20.00-0.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)

	0.0000 0.75 (3)	0.0000 0.75 (3)				0.0000 0.75 (3)	0.0000 0.75 (3)

	0.0000 0.75 (4)	0.0000 0.75 (4)				0.0000 0.75 (4)	0.0000 0.75 (4)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Leg Connection Type*	*Leg*		*Diagonal*		*Top Girt*		*Bottom Girt*		*Mid Girt*		*Long Horizontal*		*Short Horizontal*	
		Bolt Size in	*No.*	*Bolt Size in*	*No.*	*Bolt Size in*	*No.*	*Bolt Size in*	*No.*	*Bolt Size in*	*No.*	*Bolt Size in*	*No.*	*Bolt Size in*	*No.*
T1 136.00-133.63	Flange	0.6250 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T2 133.63-130.00	Sleeve DS	0.6250 A325N	5	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T3 130.00-110.00	Sleeve DS	0.7500 A325N	5	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T4 110.00-94.94	Flange	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T5 94.94-92.59	Flange	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T6 92.59-90.00	Flange	1.0000 A325N	6	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T7 90.00-80.00	Flange	1.0000 A325N	6	1.0000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T8 80.00-60.00	Flange	1.0000 A325N	6	1.0000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T9 60.00-40.00	Flange	1.0000 A325N	6	1.0000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T10 40.00-20.00	Flange	1.0000 A325N	6	1.0000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.5000 A325N	0	0.0000 A325N	0	0.5000 A325N	0
T11 20.00-0.00	Flange	1.2500 A-687	0	1.2500 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0

Feed Line/Linear Appurtenances - Entered As Round Or Flat

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*
*****													
Safety Line 3/8	C	No	No	Ar (CaAa)	90.00 - 0.00	0.0000	0.48	1	1	0.3750	0.3750		0.22
Safety Line 3/8	C	No	No	Ar (CaAa)	136.00 - 90.00	0.0000	0	1	1	0.3750	0.3750		0.22
Ladder Rung SR 3/4 (48''w 26''s)	C	No	No	Af (CaAa)	136.00 - 90.00	0.0000	0	1	1	1.3500	1.3500		2.71
*****													
HB114-1-08U4-M5J(1-1/4)	C	No	No	Ar (CaAa)	136.00 - 0.00	-5.0000	-0.3	3	3	0.5000	1.5400		1.08
HB114-21U3M12-XXXF(1-1/4)	C	No	No	Ar (CaAa)	136.00 - 0.00	-5.0000	-0.3	1	1	0.5000	1.5400		1.22
T-Brackets (Af)	C	No	No	Af (CaAa)	136.00 -	-7.0000	-0.35	1	1	1.0000	1.0000		8.40

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
					0.00								
*****													
LDF6-50A(1-1/4)	B	No	No	Ar (CaAa)	127.00 - 0.00	-1.0000	-0.4	6	6	0.5000	1.5500		0.60
LDF6-50A(1-1/4)	A	No	No	Ar (CaAa)	127.00 - 0.00	-1.0000	0.4	6	6	0.5000	1.5500		0.60
T-Brackets (Af)	C	No	No	Af (CaAa)	127.00 - 0.00	-4.0000	-0.35	1	1	1.0000	1.0000		8.40
*****													
*****													
HCS 6X12 4AWG(1-5/8)	A	No	No	Ar (CaAa)	119.00 - 0.00	-3.0000	-0.4	3	3	0.5000	1.6600		2.40
HB158-21U6S24-xxM_TMO(1-5/8)	C	No	No	Ar (CaAa)	119.00 - 0.00	-3.0000	0.4	1	1	0.5000	1.9960		2.50
T-Brackets (Af)	C	No	No	Af (CaAa)	119.00 - 0.00	-5.0000	-0.35	1	1	1.0000	1.0000		8.40
*****													
LDF7-50A(1-5/8)	B	No	No	Ar (CaAa)	107.00 - 0.00	-4.0000	0.37	12	6	0.5000	1.9800		0.82
HB158-1-08U8-S8J18(1-5/8)	B	No	No	Ar (CaAa)	110.00 - 0.00	-4.0000	0.37	2	1	0.5000	1.9800		1.30
Feedline Ladder (Af)	B	No	No	Af (CaAa)	107.00 - 0.00	-4.0000	0.4	1	1	3.0000	3.0000		8.40
*****													
LDF6-50A(1-1/4)	B	No	No	Ar (CaAa)	97.00 - 0.00	-2.0000	0.4	6	6	0.5000	1.5500		0.60
FB-L98-002-XXX(3/8)	B	No	No	Ar (CaAa)	97.00 - 0.00	-8.0000	0	2	2	0.5000	0.3937		0.06
WR-VG86ST-BRDA(7/8)	B	No	No	Ar (CaAa)	97.00 - 0.00	-8.0000	0	4	2	0.5000	0.8800		0.68
*****													
***													
CU12PSM9P6XXX(1-1/2)	A	No	No	Ar (CaAa)	86.00 - 0.00	0.0000	0	1	1	1.6000	1.6000		2.35
Feedline Ladder (Af)	A	No	No	Af (CaAa)	86.00 - 0.00	0.0000	0	1	1	3.0000	3.0000		8.40
*****													
FLC 12-50J(1/2)	C	No	No	Ar (CaAa)	80.00 - 0.00	-2.0000	-0.45	1	1	0.5000	0.6400		0.17
*****													
LDF4-50A(1/2)	B	No	No	Ar (CaAa)	72.00 - 0.00	-3.0000	-0.4	2	2	0.5000	0.6300		0.15
*****													

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight plf
*****								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	136.00-133.63	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.482	0.000	0.04
T2	133.63-130.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	3.789	0.000	0.06
T3	130.00-110.00	A	0.000	0.000	20.292	0.000	0.13
		B	0.000	0.000	15.810	0.000	0.06
		C	0.000	0.000	27.033	0.000	0.56
T4	110.00-94.94	A	0.000	0.000	21.502	0.000	0.16
		B	0.000	0.000	57.442	0.000	0.33
		C	0.000	0.000	23.762	0.000	0.53
T5	94.94-92.59	A	0.000	0.000	3.354	0.000	0.03
		B	0.000	0.000	13.067	0.000	0.07
		C	0.000	0.000	3.707	0.000	0.08
T6	92.59-90.00	A	0.000	0.000	3.704	0.000	0.03
		B	0.000	0.000	14.428	0.000	0.08
		C	0.000	0.000	4.093	0.000	0.09
T7	90.00-80.00	A	0.000	0.000	18.240	0.000	0.17
		B	0.000	0.000	55.627	0.000	0.31
		C	0.000	0.000	13.531	0.000	0.32
T8	80.00-60.00	A	0.000	0.000	41.760	0.000	0.43
		B	0.000	0.000	112.767	0.000	0.62
		C	0.000	0.000	28.342	0.000	0.65
T9	60.00-40.00	A	0.000	0.000	41.760	0.000	0.43
		B	0.000	0.000	113.775	0.000	0.62
		C	0.000	0.000	28.342	0.000	0.65
T10	40.00-20.00	A	0.000	0.000	41.760	0.000	0.43
		B	0.000	0.000	113.775	0.000	0.62
		C	0.000	0.000	28.342	0.000	0.65
T11	20.00-0.00	A	0.000	0.000	41.760	0.000	0.43
		B	0.000	0.000	113.775	0.000	0.62
		C	0.000	0.000	28.342	0.000	0.65

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	136.00-133.63	A	0.978	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	5.721	0.000	0.08
T2	133.63-130.00	A	0.976	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	8.724	0.000	0.12
T3	130.00-110.00	A	0.967	0.000	0.000	39.889	0.000	0.42
		B		0.000	0.000	30.110	0.000	0.29
		C		0.000	0.000	60.824	0.000	0.99
T4	110.00-94.94	A	0.952	0.000	0.000	42.884	0.000	0.47
		B		0.000	0.000	81.467	0.000	1.01
		C		0.000	0.000	52.448	0.000	0.90
T5	94.94-92.59	A	0.944	0.000	0.000	6.677	0.000	0.07
		B		0.000	0.000	20.084	0.000	0.23
		C		0.000	0.000	8.148	0.000	0.14
T6	92.59-90.00	A	0.941	0.000	0.000	7.369	0.000	0.08

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B		0.000	0.000	22.163	0.000	0.26
		C		0.000	0.000	8.986	0.000	0.15
T7	90.00-80.00	A	0.934	0.000	0.000	34.571	0.000	0.41
		B		0.000	0.000	85.302	0.000	0.98
		C		0.000	0.000	30.408	0.000	0.53
T8	80.00-60.00	A	0.916	0.000	0.000	77.041	0.000	0.95
		B		0.000	0.000	176.355	0.000	1.98
		C		0.000	0.000	65.212	0.000	1.10
T9	60.00-40.00	A	0.886	0.000	0.000	76.415	0.000	0.93
		B		0.000	0.000	179.182	0.000	1.97
		C		0.000	0.000	64.162	0.000	1.08
T10	40.00-20.00	A	0.842	0.000	0.000	75.505	0.000	0.91
		B		0.000	0.000	176.959	0.000	1.91
		C		0.000	0.000	62.636	0.000	1.05
T11	20.00-0.00	A	0.754	0.000	0.000	73.703	0.000	0.86
		B		0.000	0.000	172.556	0.000	1.79
		C		0.000	0.000	59.607	0.000	0.99

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	136.00-133.63	2.1792	1.1890	2.5820	1.9381
T2	133.63-130.00	4.4504	2.4199	4.1132	3.0537
T3	130.00-110.00	2.0252	-10.0757	2.5257	-6.5499
T4	110.00-94.94	4.9267	-5.3684	5.1789	-3.4841
T5	94.94-92.59	6.3140	-3.2110	5.8891	-2.5515
T6	92.59-90.00	6.2575	-3.2002	5.4374	-3.0406
T7	90.00-80.00	5.2021	-3.3942	4.2418	-3.9423
T8	80.00-60.00	6.5264	-4.5678	5.8423	-4.2551
T9	60.00-40.00	7.8377	-5.7844	7.8536	-4.7530
T10	40.00-20.00	9.2984	-6.9450	9.5923	-5.7315
T11	20.00-0.00	10.5008	-7.9382	11.0449	-6.8842

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	3	Safety Line 3/8	133.62 - 136.00	0.6000	0.4702
T1	4	Ladder Rung SR 3/4 (48"w 26"s)	133.62 - 136.00	0.6000	0.4702
T1	6	HB114-1-08U4-M5J(1-1/4)	133.62 - 136.00	0.6000	0.4702
T1	7	HB114-21U3M12-XXXF(1-1/4)	133.62 - 136.00	0.6000	0.4702
T1	8	T-Brackets (Af)	133.62 - 136.00	0.6000	0.4702
T2	3	Safety Line 3/8	130.00 - 133.62	0.6000	0.6000
T2	4	Ladder Rung SR 3/4 (48"w	130.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		26"s)	133.62		
T2	6	HB114-1-08U4-M5J(1-1/4)	130.00 - 133.62	0.6000	0.6000
T2	7	HB114-21U3M12-XXXF(1-1/4)	130.00 - 133.62	0.6000	0.6000
T2	8	T-Brackets (Af)	130.00 - 133.62	0.6000	0.6000
T3	3	Safety Line 3/8	110.00 - 130.00	0.6000	0.5619
T3	4	Ladder Rung SR 3/4 (48"w 26"s)	110.00 - 130.00	0.6000	0.5619
T3	6	HB114-1-08U4-M5J(1-1/4)	110.00 - 130.00	0.6000	0.5619
T3	7	HB114-21U3M12-XXXF(1-1/4)	110.00 - 130.00	0.6000	0.5619
T3	8	T-Brackets (Af)	110.00 - 130.00	0.6000	0.5619
T3	10	LDF6-50A(1-1/4)	110.00 - 127.00	1.0000	1.0000
T3	11	LDF6-50A(1-1/4)	110.00 - 127.00	1.0000	1.0000
T3	12	T-Brackets (Af)	110.00 - 127.00	0.6000	0.5619
T3	18	HCS 6X12 4AWG(1-5/8)	110.00 - 119.00	0.6000	0.5619
T3	19	HB158-21U6S24-xxM_TMO(1-5/8)	110.00 - 119.00	0.6000	0.5619
T3	20	T-Brackets (Af)	110.00 - 119.00	0.6000	0.5619
T4	3	Safety Line 3/8	94.94 - 110.00	0.6000	0.6000
T4	4	Ladder Rung SR 3/4 (48"w 26"s)	94.94 - 110.00	0.6000	0.6000
T4	6	HB114-1-08U4-M5J(1-1/4)	94.94 - 110.00	0.6000	0.6000
T4	7	HB114-21U3M12-XXXF(1-1/4)	94.94 - 110.00	0.6000	0.6000
T4	8	T-Brackets (Af)	94.94 - 110.00	0.6000	0.6000
T4	10	LDF6-50A(1-1/4)	94.94 - 110.00	1.0000	1.0000
T4	11	LDF6-50A(1-1/4)	94.94 - 110.00	1.0000	1.0000
T4	12	T-Brackets (Af)	94.94 - 110.00	0.6000	0.6000
T4	18	HCS 6X12 4AWG(1-5/8)	94.94 - 110.00	0.6000	0.6000
T4	19	HB158-21U6S24-xxM_TMO(1-5/8)	94.94 - 110.00	0.6000	0.6000
T4	20	T-Brackets (Af)	94.94 - 110.00	0.6000	0.6000
T4	22	LDF7-50A(1-5/8)	94.94 - 107.00	0.6000	0.6000
T4	23	HB158-1-08U8-S8J18(1-5/8)	94.94 - 110.00	0.6000	0.6000
T4	24	Feedline Ladder (Af)	94.94 - 107.00	0.6000	0.6000
T4	26	LDF6-50A(1-1/4)	94.94 - 97.00	0.6000	0.6000
T4	27	FB-L98-002-XXX(3/8)	94.94 - 97.00	0.6000	0.6000
T4	28	WR-VG86ST-BRDA(7/8)	94.94 - 97.00	0.6000	0.6000
T5	3	Safety Line 3/8	92.59 - 94.94	0.6000	0.5433
T5	4	Ladder Rung SR 3/4 (48"w 26"s)	92.59 - 94.94	0.6000	0.5433
T5	6	HB114-1-08U4-M5J(1-1/4)	92.59 - 94.94	0.6000	0.5433
T5	7	HB114-21U3M12-XXXF(1-1/4)	92.59 - 94.94	0.6000	0.5433
T5	8	T-Brackets (Af)	92.59 - 94.94	0.6000	0.5433
T5	10	LDF6-50A(1-1/4)	92.59 - 94.94	1.0000	1.0000
T5	11	LDF6-50A(1-1/4)	92.59 - 94.94	1.0000	1.0000
T5	12	T-Brackets (Af)	92.59 - 94.94	0.6000	0.5433
T5	18	HCS 6X12 4AWG(1-5/8)	92.59 - 94.94	0.6000	0.5433
T5	19	HB158-21U6S24-xxM_TMO(1-5/8)	92.59 - 94.94	0.6000	0.5433
T5	20	T-Brackets (Af)	92.59 - 94.94	0.6000	0.5433

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T5	22	LDF7-50A(1-5/8)	92.59 - 94.94	0.6000	0.5433
T5	23	HB158-1-08U8-S8J18(1-5/8)	92.59 - 94.94	0.6000	0.5433
T5	24	Feedline Ladder (Af)	92.59 - 94.94	0.6000	0.5433
T5	26	LDF6-50A(1-1/4)	92.59 - 94.94	0.6000	0.5433
T5	27	FB-L98-002-XXX(3/8)	92.59 - 94.94	0.6000	0.5433
T5	28	WR-VG86ST-BRDA(7/8)	92.59 - 94.94	0.6000	0.5433
T6	3	Safety Line 3/8	90.00 - 92.59	0.6000	0.4948
T6	4	Ladder Rung SR 3/4 (48"w 26"s)	90.00 - 92.59	0.6000	0.4948
T6	6	HB114-1-08U4-M5J(1-1/4)	90.00 - 92.59	0.6000	0.4948
T6	7	HB114-21U3M12-XXXF(1-1/4)	90.00 - 92.59	0.6000	0.4948
T6	8	T-Brackets (Af)	90.00 - 92.59	0.6000	0.4948
T6	10	LDF6-50A(1-1/4)	90.00 - 92.59	1.0000	1.0000
T6	11	LDF6-50A(1-1/4)	90.00 - 92.59	1.0000	1.0000
T6	12	T-Brackets (Af)	90.00 - 92.59	0.6000	0.4948
T6	18	HCS 6X12 4AWG(1-5/8)	90.00 - 92.59	0.6000	0.4948
T6	19	HB158-21U6S24-xxM_TMO(1-5/8)	90.00 - 92.59	0.6000	0.4948
T6	20	T-Brackets (Af)	90.00 - 92.59	0.6000	0.4948
T6	22	LDF7-50A(1-5/8)	90.00 - 92.59	0.6000	0.4948
T6	23	HB158-1-08U8-S8J18(1-5/8)	90.00 - 92.59	0.6000	0.4948
T6	24	Feedline Ladder (Af)	90.00 - 92.59	0.6000	0.4948
T6	26	LDF6-50A(1-1/4)	90.00 - 92.59	0.6000	0.4948
T6	27	FB-L98-002-XXX(3/8)	90.00 - 92.59	0.6000	0.4948
T6	28	WR-VG86ST-BRDA(7/8)	90.00 - 92.59	0.6000	0.4948
T7	2	Safety Line 3/8	80.00 - 90.00	0.6000	0.4512
T7	6	HB114-1-08U4-M5J(1-1/4)	80.00 - 90.00	0.6000	0.4512
T7	7	HB114-21U3M12-XXXF(1-1/4)	80.00 - 90.00	0.6000	0.4512
T7	8	T-Brackets (Af)	80.00 - 90.00	0.6000	0.4512
T7	10	LDF6-50A(1-1/4)	80.00 - 90.00	1.0000	1.0000
T7	11	LDF6-50A(1-1/4)	80.00 - 90.00	1.0000	1.0000
T7	12	T-Brackets (Af)	80.00 - 90.00	0.6000	0.4512
T7	18	HCS 6X12 4AWG(1-5/8)	80.00 - 90.00	0.6000	0.4512
T7	19	HB158-21U6S24-xxM_TMO(1-5/8)	80.00 - 90.00	0.6000	0.4512
T7	20	T-Brackets (Af)	80.00 - 90.00	0.6000	0.4512
T7	22	LDF7-50A(1-5/8)	80.00 - 90.00	0.6000	0.4512
T7	23	HB158-1-08U8-S8J18(1-5/8)	80.00 - 90.00	0.6000	0.4512
T7	24	Feedline Ladder (Af)	80.00 - 90.00	0.6000	0.4512
T7	26	LDF6-50A(1-1/4)	80.00 - 90.00	0.6000	0.4512
T7	27	FB-L98-002-XXX(3/8)	80.00 - 90.00	0.6000	0.4512
T7	28	WR-VG86ST-BRDA(7/8)	80.00 - 90.00	0.6000	0.4512
T7	32	CU12PSM9P6XXX(1-1/2)	80.00 - 86.00	0.6000	0.4512
T7	33	Feedline Ladder (Af)	80.00 - 86.00	0.6000	0.4512
T8	2	Safety Line 3/8	60.00 - 80.00	0.6000	0.5221
T8	6	HB114-1-08U4-M5J(1-1/4)	60.00 - 80.00	0.6000	0.5221
T8	7	HB114-21U3M12-XXXF(1-1/4)	60.00 - 80.00	0.6000	0.5221
T8	8	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5221
T8	10	LDF6-50A(1-1/4)	60.00 - 80.00	1.0000	1.0000
T8	11	LDF6-50A(1-1/4)	60.00 - 80.00	1.0000	1.0000
T8	12	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5221
T8	18	HCS 6X12 4AWG(1-5/8)	60.00 - 80.00	0.6000	0.5221
T8	19	HB158-21U6S24-xxM_TMO(1-5/8)	60.00 - 80.00	0.6000	0.5221
T8	20	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5221
T8	22	LDF7-50A(1-5/8)	60.00 - 80.00	0.6000	0.5221
T8	23	HB158-1-08U8-S8J18(1-5/8)	60.00 - 80.00	0.6000	0.5221
T8	24	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.5221
T8	26	LDF6-50A(1-1/4)	60.00 - 80.00	0.6000	0.5221
T8	27	FB-L98-002-XXX(3/8)	60.00 - 80.00	0.6000	0.5221

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	28	WR-VG86ST-BRDA(7/8)	60.00 - 80.00	0.6000	0.5221
T8	32	CU12PSM9P6XXX(1-1/2)	60.00 - 80.00	0.6000	0.5221
T8	33	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.5221
T8	35	FLC 12-50J(1/2)	60.00 - 80.00	0.6000	0.5221
T8	37	LDF4-50A(1/2)	60.00 - 72.00	0.6000	0.5221
T9	2	Safety Line 3/8	40.00 - 60.00	0.6000	0.5913
T9	6	HB114-1-08U4-M5J(1-1/4)	40.00 - 60.00	0.6000	0.5913
T9	7	HB114-21U3M12-XXXF(1-1/4)	40.00 - 60.00	0.6000	0.5913
T9	8	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5913
T9	10	LDF6-50A(1-1/4)	40.00 - 60.00	1.0000	1.0000
T9	11	LDF6-50A(1-1/4)	40.00 - 60.00	1.0000	1.0000
T9	12	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5913
T9	18	HCS 6X12 4AWG(1-5/8)	40.00 - 60.00	0.6000	0.5913
T9	19	HB158-21U6S24-xxM_TMO(1-5/8)	40.00 - 60.00	0.6000	0.5913
T9	20	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5913
T9	22	LDF7-50A(1-5/8)	40.00 - 60.00	0.6000	0.5913
T9	23	HB158-1-08U8-S8J18(1-5/8)	40.00 - 60.00	0.6000	0.5913
T9	24	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.5913
T9	26	LDF6-50A(1-1/4)	40.00 - 60.00	0.6000	0.5913
T9	27	FB-L98-002-XXX(3/8)	40.00 - 60.00	0.6000	0.5913
T9	28	WR-VG86ST-BRDA(7/8)	40.00 - 60.00	0.6000	0.5913
T9	32	CU12PSM9P6XXX(1-1/2)	40.00 - 60.00	0.6000	0.5913
T9	33	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.5913
T9	35	FLC 12-50J(1/2)	40.00 - 60.00	0.6000	0.5913
T9	37	LDF4-50A(1/2)	40.00 - 60.00	0.6000	0.5913
T10	2	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T10	6	HB114-1-08U4-M5J(1-1/4)	20.00 - 40.00	0.6000	0.6000
T10	7	HB114-21U3M12-XXXF(1-1/4)	20.00 - 40.00	0.6000	0.6000
T10	8	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T10	10	LDF6-50A(1-1/4)	20.00 - 40.00	1.0000	1.0000
T10	11	LDF6-50A(1-1/4)	20.00 - 40.00	1.0000	1.0000
T10	12	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T10	18	HCS 6X12 4AWG(1-5/8)	20.00 - 40.00	0.6000	0.6000
T10	19	HB158-21U6S24-xxM_TMO(1-5/8)	20.00 - 40.00	0.6000	0.6000
T10	20	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T10	22	LDF7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T10	23	HB158-1-08U8-S8J18(1-5/8)	20.00 - 40.00	0.6000	0.6000
T10	24	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T10	26	LDF6-50A(1-1/4)	20.00 - 40.00	0.6000	0.6000
T10	27	FB-L98-002-XXX(3/8)	20.00 - 40.00	0.6000	0.6000
T10	28	WR-VG86ST-BRDA(7/8)	20.00 - 40.00	0.6000	0.6000
T10	32	CU12PSM9P6XXX(1-1/2)	20.00 - 40.00	0.6000	0.6000
T10	33	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T10	35	FLC 12-50J(1/2)	20.00 - 40.00	0.6000	0.6000
T10	37	LDF4-50A(1/2)	20.00 - 40.00	0.6000	0.6000
T11	2	Safety Line 3/8	0.00 - 20.00	0.6000	0.6000
T11	6	HB114-1-08U4-M5J(1-1/4)	0.00 - 20.00	0.6000	0.6000
T11	7	HB114-21U3M12-XXXF(1-1/4)	0.00 - 20.00	0.6000	0.6000
T11	8	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T11	10	LDF6-50A(1-1/4)	0.00 - 20.00	1.0000	1.0000
T11	11	LDF6-50A(1-1/4)	0.00 - 20.00	1.0000	1.0000
T11	12	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T11	18	HCS 6X12 4AWG(1-5/8)	0.00 - 20.00	0.6000	0.6000
T11	19	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 20.00	0.6000	0.6000
T11	20	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T11	22	LDF7-50A(1-5/8)	0.00 - 20.00	0.6000	0.6000
T11	23	HB158-1-08U8-S8J18(1-5/8)	0.00 - 20.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T11	24	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T11	26	LDF6-50A(1-1/4)	0.00 - 20.00	0.6000	0.6000
T11	27	FB-L98-002-XXX(3/8)	0.00 - 20.00	0.6000	0.6000
T11	28	WR-VG86ST-BRDA(7/8)	0.00 - 20.00	0.6000	0.6000
T11	32	CU12PSM9P6XXX(1-1/2)	0.00 - 20.00	0.6000	0.6000
T11	33	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T11	35	FLC 12-50J(1/2)	0.00 - 20.00	0.6000	0.6000
T11	37	LDF4-50A(1/2)	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
*****					
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	80.0000	136.00
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.00 0.00 1.00	90.0000	136.00
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.00 0.00 1.00	60.0000	136.00
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	80.0000	136.00
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.00 0.00 1.00	80.0000	136.00
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.00 0.00 1.00	80.0000	136.00
TD-RRH8X20-25	A	From Leg	4.00 0.00 1.00	0.0000	136.00
TD-RRH8X20-25	B	From Leg	4.00 0.00 1.00	0.0000	136.00
TD-RRH8X20-25	C	From Leg	4.00 0.00 1.00	0.0000	136.00
6' x 2'' Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	136.00
6' x 2'' Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	136.00
6' x 2'' Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	136.00
Platform Mount [LP 405-1]	A	None		0.0000	136.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
*****					
1900MHz RRH (65MHz)	A	From Leg	1.00 0.00 0.00	0.0000	134.00
1900MHZ RRH (65MHZ)	B	From Leg	1.00 0.00 0.00	0.0000	134.00
1900MHZ RRH (65MHZ)	C	From Leg	1.00 0.00 0.00	0.0000	134.00
800MHZ 2X50W RRH W/FILTER	A	From Leg	1.00 0.00 0.00	0.0000	134.00
800MHZ 2X50W RRH W/FILTER	B	From Leg	1.00 0.00 0.00	0.0000	134.00
800MHZ 2X50W RRH W/FILTER	C	From Leg	1.00 0.00 0.00	0.0000	134.00
IBC1900BB-1	A	From Leg	1.00 0.00 2.00	0.0000	134.00
IBC1900BB-1	B	From Leg	1.00 0.00 2.00	0.0000	134.00
IBC1900BB-1	C	From Leg	1.00 0.00 2.00	0.0000	134.00
IBC1900HG-2A	A	From Leg	1.00 0.00 2.00	0.0000	134.00
IBC1900HG-2A	B	From Leg	1.00 0.00 2.00	0.0000	134.00
IBC1900HG-2A	C	From Leg	1.00 0.00 2.00	0.0000	134.00
Pipe Mount [PM 601-3]	A	None		0.0000	134.00
*****					
(4) DB844H90E-XY w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	50.0000	127.00
(4) DB844H90E-XY w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	50.0000	127.00
(4) DB844H90E-XY w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	50.0000	127.00
HSS 4''x4''x4'	A	From Face	0.50 0.00 1.00	0.0000	127.00
HSS 4''x4''x4'	A	From Face	0.50 0.00 -1.00	0.0000	127.00
HSS 4''x4''x4'	B	From Face	0.50 0.00 1.00	0.0000	127.00
HSS 4''x4''x4'	B	From	0.50	0.0000	127.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
		Face	0.00 -1.00		
HSS 4''x4''x4'	C	From Face	0.50 0.00 1.00	0.0000	127.00
HSS 4''x4''x4'	C	From Face	0.50 0.00 -1.00	0.0000	127.00
Sector Mount [SM 411-3]	A	None		0.0000	127.00
***** *****					
APXVAALL24_43-U-NA20_TMO	A	From Leg	4.00 0.00 2.00	80.0000	119.00
APXVAALL24_43-U-NA20_TMO	B	From Leg	4.00 0.00 2.00	80.0000	119.00
APXVAALL24_43-U-NA20_TMO	C	From Leg	4.00 0.00 2.00	80.0000	119.00
AIR6449 B41_T-MOBILE	A	From Leg	4.00 0.00 2.00	80.0000	119.00
AIR6449 B41_T-MOBILE	B	From Leg	4.00 0.00 2.00	80.0000	119.00
AIR6449 B41_T-MOBILE	C	From Leg	4.00 0.00 2.00	80.0000	119.00
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.00 0.00 2.00	0.0000	119.00
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.00 0.00 2.00	0.0000	119.00
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.00 0.00 2.00	0.0000	119.00
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.00 0.00 2.00	0.0000	119.00
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.00 0.00 2.00	0.0000	119.00
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.00 0.00 2.00	0.0000	119.00
(3) 8' Antenna Pipe [#P2STD]	A	From Leg	4.00 0.00 0.00	0.0000	119.00
(3) 8' Antenna Pipe [#P2STD]	B	From Leg	4.00 0.00 0.00	0.0000	119.00
(3) 8' Antenna Pipe [#P2STD]	C	From Leg	4.00 0.00 0.00	0.0000	119.00
12' HD V-Frame [#VFA12-HD]	A	From Leg	2.00 0.00	0.0000	119.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft
			0.00		
12' HD V-Frame [#VFA12-HD]	B	From Leg	2.00 0.00	0.0000	119.00
			0.00		
12' HD V-Frame [#VFA12-HD]	C	From Leg	2.00 0.00	0.0000	119.00
			0.00		
***					
RVZDC-6627-PF-48_CCIv2	A	From Leg	2.00 0.00	0.0000	110.00
			0.00		
(2) MX06FRO660-03 w/ Mount Pipe	A	From Leg	4.00 0.00	50.0000	107.00
			1.00		
(2) MX06FRO660-03 w/ Mount Pipe	B	From Leg	4.00 0.00	50.0000	107.00
			1.00		
(2) MX06FRO660-03 w/ Mount Pipe	C	From Leg	4.00 0.00	30.0000	107.00
			1.00		
BXA-80063/4CF w/ Mount Pipe	A	From Leg	4.00 0.00	50.0000	107.00
			2.00		
BXA-80063/4CF w/ Mount Pipe	B	From Leg	4.00 0.00	50.0000	107.00
			2.00		
BXA-80063/4CF w/ Mount Pipe	C	From Leg	4.00 0.00	50.0000	107.00
			2.00		
MT6407-77A w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	107.00
			2.00		
MT6407-77A w/ Mount Pipe	B	From Leg	4.00 0.00	0.0000	107.00
			2.00		
MT6407-77A w/ Mount Pipe	C	From Leg	4.00 0.00	0.0000	107.00
			2.00		
RFV01U-D1A	A	From Leg	4.00 0.00	0.0000	107.00
			0.00		
RFV01U-D1A	B	From Leg	4.00 0.00	0.0000	107.00
			0.00		
RFV01U-D1A	C	From Leg	4.00 0.00	0.0000	107.00
			0.00		
RFV01U-D2A	A	From Leg	4.00 0.00	0.0000	107.00
			0.00		
RFV01U-D2A	B	From Leg	4.00 0.00	0.0000	107.00
			0.00		
RFV01U-D2A	C	From Leg	4.00 0.00	0.0000	107.00
			0.00		
(2) BSF0020F3V1	A	From Leg	4.00 0.00	0.0000	107.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft
			1.00		
(4) Crossover Plate [#VZWSMART-MSK1]	A	From Leg	4.00 0.00 0.00	0.0000	107.00
(4) Crossover Plate [#VZWSMART-MSK1]	B	From Leg	4.00 0.00 0.00	0.0000	107.00
(4) Crossover Plate [#VZWSMART-MSK1]	C	From Leg	4.00 0.00 0.00	0.0000	107.00
Tieback Assembly [#VZWSMART-SFK1]	A	From Leg	2.00 0.00 0.00	0.0000	107.00
Tieback Assembly [#VZWSMART-SFK1]	B	From Leg	2.00 0.00 0.00	0.0000	107.00
Tieback Assembly [#VZWSMART-SFK1]	C	From Leg	2.00 0.00 0.00	0.0000	107.00
V-Bracing Kit [#VZWSMART-SFK3]	A	From Leg	2.00 0.00 0.00	0.0000	107.00
V-Bracing Kit [#VZWSMART-SFK3]	B	From Leg	2.00 0.00 0.00	0.0000	107.00
V-Bracing Kit [#VZWSMART-SFK3]	C	From Leg	2.00 0.00 0.00	0.0000	107.00
Sector Mount [SM 402-3]	A	None		0.0000	107.00
***					
***					
DMP65R-BU4D w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	85.0000	97.00
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	90.0000	97.00
DMP65R-BU8D w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	85.0000	97.00
OPA65R-BU4D w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	85.0000	97.00
OPA65R-BU6D w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	90.0000	97.00
OPA65R-BU8D w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	90.0000	97.00
7770.00 w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	90.0000	97.00
7770.00 w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	90.0000	97.00
7770.00 w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	90.0000	97.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RRUS 4449 B5/B12	A	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 4449 B5/B12	B	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 4449 B5/B12	C	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 4478 B14_CCIV2	A	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 4478 B14_CCIV2	B	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 4478 B14_CCIV2	C	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 8843 B2/B66A_CCIV2	A	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 8843 B2/B66A_CCIV2	B	From Leg	4.00 0.00 0.00	0.0000	97.00
RRUS 8843 B2/B66A_CCIV2	C	From Leg	4.00 0.00 0.00	0.0000	97.00
(2) LGP21401	A	From Leg	4.00 0.00 0.00	0.0000	97.00
(2) LGP21401	B	From Leg	4.00 0.00 0.00	0.0000	97.00
(2) LGP21401	C	From Leg	4.00 0.00 0.00	0.0000	97.00
DC9-48-60-24-8C-EV	A	From Leg	4.00 0.00 0.00	0.0000	97.00
DC6-48-60-18-8F	B	From Leg	4.00 0.00 0.00	0.0000	97.00
8' x 2'' Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	97.00
8' x 2'' Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	97.00
8' x 2'' Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	97.00
Sector Mount [SM 504-3] ***	A	None		0.0000	97.00
FFVV-65B-R2 w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	0.0000	86.00
FFVV-65B-R2 w/ Mount Pipe	B	From Leg	4.00 0.00	0.0000	86.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft
			1.00		
FFVV-65B-R2 w/ Mount Pipe	C	From Leg	4.00	0.0000	86.00
			0.00		
			1.00		
RDIDC-9181-PF-48	A	From Leg	4.00	0.0000	86.00
			0.00		
			0.00		
RF4450t-71A	A	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
RF4450t-71A	B	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
RF4450t-71A	C	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
RF4451d-70A	A	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
RF4451d-70A	B	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
RF4451d-70A	C	From Leg	4.00	0.0000	86.00
			0.00		
			3.00		
Commscope MTC3975083 (3)	C	None		0.0000	86.00
(2) 8' x 2'' Mount Pipe	A	From Leg	4.00	0.0000	86.00
			0.00		
			0.00		
(2) 8' x 2'' Mount Pipe	B	From Leg	4.00	0.0000	86.00
			0.00		
			0.00		
(2) 8' x 2'' Mount Pipe	C	From Leg	4.00	0.0000	86.00
			0.00		
			0.00		
*****					
GPS_A	C	From Leg	3.00	20.0000	80.00
			0.00		
			1.00		
Side Arm Mount [SO 701-1]	C	From Leg	1.50	0.0000	80.00
			0.00		
			0.00		
***					
GPS_A	B	From Leg	3.00	20.0000	72.00
			0.00		
			0.00		
GPS_A	C	From Leg	3.00	20.0000	72.00
			0.00		
			0.00		
Side Arm Mount [SO 701-1]	B	From Leg	1.50	0.0000	72.00
			0.00		
			0.00		
Side Arm Mount [SO 701-1]	C	From Leg	1.50	0.0000	72.00
			0.00		
			0.00		
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*******					
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Truss-Leg Properties

Section Designation	Area	Area Ice	Self Weight	Ice Weight	Equiv. Diameter	Equiv. Diameter Ice	Leg Area
	in^2	in^2	K	K	in	in	in^2
Pirod 105244 w/ (2) 1-1/4'' Tie Rod	1076.3951	2409.8482	0.73	0.26	7.4750	16.7351	6.1359
Pirod 105217	2307.7631	5498.6719	0.59	0.44	8.0131	19.0926	5.3014
Pirod 105218	2436.9191	5586.4323	0.73	0.43	8.4615	19.3973	7.2158
Pirod 105218	2436.9191	5338.1838	0.73	0.40	8.4615	18.5354	7.2158
Pirod 105219	2597.9095	5150.1891	1.09	0.36	9.0205	17.8826	9.4248

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service

Comb. No.	Description
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	136 - 133.625	Leg	Max Tension	1	0.00	0.000	0.000
			Max. Compression	31	-2.23	-0.028	-0.016
			Max. Mx	8	-1.58	-0.139	0.001
			Max. My	2	-1.59	0.005	0.141
			Max. Vy	8	0.22	-0.139	0.001
			Max. Vx	2	-0.21	0.005	0.141
		Diagonal	Max Tension	9	0.85	0.000	0.000
			Max. Compression	8	-0.93	0.000	0.000
			Max. Mx	30	0.14	0.003	0.000
			Max. My	14	-0.08	0.000	0.000
			Max. Vy	30	-0.00	0.000	0.000
			Max. Vx	14	-0.00	0.000	0.000
		Top Girt	Max Tension	22	0.65	-0.017	-0.000
			Max. Compression	10	-0.65	-0.050	0.001
			Max. Mx	14	-0.33	-0.066	0.001
			Max. My	6	-0.31	-0.065	0.002
			Max. Vy	33	0.05	-0.062	0.000
			Max. Vx	6	0.00	0.000	0.000
T2	133.625 - 130	Leg	Max Tension	7	2.73	0.365	-0.210
			Max. Compression	10	-5.34	-0.418	-0.232
			Max. Mx	8	-4.80	-0.471	-0.003
			Max. My	2	-5.27	0.016	0.481
			Max. Vy	8	0.90	-0.471	-0.003
			Max. Vx	2	-0.92	0.016	0.481
		Diagonal	Max Tension	13	1.25	0.000	0.000
			Max. Compression	12	-1.36	0.000	0.000
			Max. Mx	33	0.17	-0.002	0.000
			Max. My	14	-1.17	-0.001	-0.000
			Max. Vy	30	0.01	-0.002	0.000
			Max. Vx	14	-0.00	0.000	0.000
		Horizontal	Max Tension	2	0.32	0.000	0.000
			Max. Compression	15	-0.18	0.000	0.000
			Max. Mx	26	0.12	0.008	0.000
			Max. My	8	0.07	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
		Bottom Girt	Max Tension	14	0.63	0.000	0.000
			Max. Compression	3	-0.56	0.000	0.000
			Max. Mx	26	0.09	0.010	0.000
			Max. My	8	0.07	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
T3	130 - 110	Leg	Max Tension	7	31.19	1.569	-0.077
			Max. Compression	10	-39.46	-0.241	-0.030

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	10	-39.45	-1.623	-0.092
			Max. My	20	-4.28	0.017	1.641
			Max. Vy	10	-2.77	-0.241	-0.030
			Max. Vx	20	2.72	0.005	0.283
		Diagonal	Max Tension	24	3.66	0.000	0.000
			Max. Compression	24	-3.73	0.000	0.000
			Max. Mx	30	0.77	-0.004	-0.000
			Max. My	20	-2.36	-0.003	0.001
			Max. Vy	30	0.01	-0.004	-0.000
			Max. Vx	20	0.00	0.000	0.000
		Horizontal	Max Tension	6	0.66	0.000	0.000
			Max. Compression	11	-0.46	0.000	0.000
			Max. Mx	26	0.21	0.010	0.000
			Max. My	8	0.11	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
		Top Girt	Max Tension	2	0.58	0.000	0.000
			Max. Compression	14	-0.53	0.000	0.000
			Max. Mx	26	0.02	0.010	0.000
			Max. My	8	-0.00	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
		Bottom Girt	Max Tension	22	1.73	0.000	0.000
			Max. Compression	11	-1.69	0.000	0.000
			Max. Mx	26	0.13	0.012	0.000
			Max. My	8	0.25	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
T4	110 - 94.9427	Leg	Max Tension	7	65.10	-0.172	-0.008
			Max. Compression	10	-78.50	0.006	-0.013
			Max. Mx	10	-39.49	2.440	0.141
			Max. My	20	-4.43	-0.019	-2.408
			Max. Vy	10	-2.80	2.440	0.141
			Max. Vx	20	2.81	-0.019	-2.408
		Diagonal	Max Tension	24	4.85	0.000	0.000
			Max. Compression	24	-4.91	0.000	0.000
			Max. Mx	8	2.92	-0.006	-0.000
			Max. My	22	-3.94	-0.002	0.002
			Max. Vy	31	0.01	-0.006	0.000
			Max. Vx	22	-0.00	0.000	0.000
		Top Girt	Max Tension	10	1.73	0.000	0.000
			Max. Compression	22	-1.59	0.000	0.000
			Max. Mx	26	0.03	0.014	0.000
			Max. My	8	-0.17	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	8	0.00	0.000	0.000
T5	94.9427 - 92.5938	Leg	Max Tension	7	71.72	-0.025	-0.007
			Max. Compression	10	-86.45	-0.236	0.000
			Max. Mx	10	-86.40	0.297	0.002
			Max. My	12	-7.69	-0.012	-0.220
			Max. Vy	10	0.45	0.297	0.002
			Max. Vx	12	-0.23	0.033	0.047
		Diagonal	Max Tension	24	5.04	-0.005	-0.000
			Max. Compression	20	-5.18	0.000	0.000
			Max. Mx	10	4.41	-0.007	-0.001
			Max. My	9	-4.95	0.002	-0.001
			Max. Vy	31	0.01	-0.006	0.000
			Max. Vx	9	0.00	0.002	-0.001
		Secondary Horizontal	Max Tension	22	0.55	-0.008	0.001
			Max. Compression	11	-0.45	-0.002	-0.001

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	12	0.44	-0.008	0.001
			Max. My	20	-0.43	-0.005	-0.002
			Max. Vy	34	0.02	-0.008	-0.000
			Max. Vx	8	0.00	0.000	0.000
T6	92.5938 - 90	Leg	Max Tension	7	82.93	1.073	-0.015
			Max. Compression	10	-98.19	2.973	0.015
			Max. Mx	18	-97.74	3.020	-0.026
			Max. My	8	-8.10	0.048	1.390
			Max. Vy	18	-7.11	3.020	-0.026
			Max. Vx	8	-3.20	0.048	1.390
		Diagonal	Max Tension	20	5.87	-0.005	0.000
			Max. Compression	20	-6.07	0.000	0.000
			Max. Mx	10	3.96	-0.007	-0.001
			Max. My	8	-3.34	-0.003	-0.001
			Max. Vy	31	0.01	-0.006	0.000
			Max. Vx	8	-0.00	0.000	0.000
		Secondary Horizontal	Max Tension	18	1.32	-0.006	0.000
			Max. Compression	7	-1.21	-0.006	-0.001
			Max. Mx	31	-0.15	-0.010	-0.000
			Max. My	20	-0.92	-0.007	-0.002
			Max. Vy	31	0.02	-0.010	-0.000
			Max. Vx	8	0.00	0.000	0.000
		Bottom Girt	Max Tension	14	0.76	0.000	0.000
			Max. Compression	11	-0.71	0.000	0.000
			Max. Mx	26	0.05	0.017	0.000
			Max. My	16	-0.01	0.000	-0.000
			Max. Vy	26	-0.01	0.000	0.000
			Max. Vx	16	0.00	0.000	0.000
T7	90 - 80	Leg	Max Tension	7	90.19	-2.835	0.023
			Max. Compression	10	-105.90	3.272	0.031
			Max. Mx	6	87.94	-4.047	-0.042
			Max. My	8	-9.00	-0.386	6.571
			Max. Vy	22	0.44	-4.016	-0.037
			Max. Vx	16	-0.82	-0.362	6.435
		Diagonal	Max Tension	7	6.53	0.102	0.016
			Max. Compression	2	-7.34	0.000	0.000
			Max. Mx	6	6.18	0.103	-0.014
			Max. My	14	-4.52	-0.042	0.038
			Max. Vy	8	-0.02	0.094	-0.011
			Max. Vx	14	-0.01	0.000	0.000
T8	80 - 60	Leg	Max Tension	7	126.57	-5.533	-0.025
			Max. Compression	18	-146.29	5.539	-0.011
			Max. Mx	18	-128.62	5.691	-0.033
			Max. My	8	-10.39	-0.386	6.571
			Max. Vy	2	-0.35	5.597	0.003
			Max. Vx	4	-0.25	-0.362	-6.435
		Diagonal	Max Tension	24	5.99	0.000	0.000
			Max. Compression	20	-6.22	0.000	0.000
			Max. Mx	10	5.33	0.083	0.003
			Max. My	5	-5.61	-0.041	-0.010
			Max. Vy	31	-0.02	0.050	0.006
			Max. Vx	4	0.00	-0.037	-0.010
T9	60 - 40	Leg	Max Tension	7	156.70	-5.289	-0.029
			Max. Compression	18	-180.10	5.223	-0.023
			Max. Mx	6	140.38	-5.590	-0.049
			Max. My	8	-11.62	-0.033	5.490
			Max. Vy	22	-0.14	-5.475	-0.045
			Max. Vx	16	0.20	0.001	5.349
		Diagonal	Max Tension	20	5.48	0.000	0.000
			Max. Compression	20	-5.82	0.000	0.000
			Max. Mx	18	4.95	0.099	0.004

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	4	-3.15	0.014	-0.010
			Max. Vy	31	-0.03	0.067	0.007
			Max. Vx	28	0.00	0.000	0.000
T10	40 - 20	Leg	Max Tension	7	182.46	-4.665	-0.029
			Max. Compression	18	-209.36	6.521	0.045
			Max. Mx	18	-209.36	6.521	0.045
			Max. My	8	-13.65	-0.238	5.763
			Max. Vy	37	0.44	-3.992	-0.040
			Max. Vx	16	0.27	-0.198	5.541
		Diagonal	Max Tension	20	5.29	0.000	0.000
			Max. Compression	18	-5.80	0.000	0.000
			Max. Mx	18	4.29	0.092	0.005
			Max. My	4	-3.32	0.017	-0.010
			Max. Vy	29	0.04	0.062	0.008
			Max. Vx	28	0.00	0.000	0.000
T11	20 - 0	Leg	Max Tension	7	204.83	-4.903	-0.048
			Max. Compression	18	-236.19	0.000	0.000
			Max. Mx	18	-223.91	6.521	0.045
			Max. My	8	-15.75	-0.531	8.749
			Max. Vy	37	-0.75	-3.992	-0.040
			Max. Vx	8	0.99	-0.531	8.749
		Diagonal	Max Tension	7	6.88	0.000	0.000
			Max. Compression	18	-7.78	0.000	0.000
			Max. Mx	8	1.44	0.132	-0.012
			Max. My	2	3.22	0.099	-0.017
			Max. Vy	29	0.05	0.110	0.012
			Max. Vx	28	0.00	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	245.01	20.78	-11.76
	Max. H_x	18	245.01	20.78	-11.76
	Max. H_z	7	-211.80	-18.30	10.39
	Min. Vert	7	-211.80	-18.30	10.39
	Min. H_x	7	-211.80	-18.30	10.39
	Min. H_z	18	245.01	20.78	-11.76
Leg B	Max. Vert	10	240.57	-19.78	-11.84
	Max. H_x	23	-203.27	17.22	10.38
	Max. H_z	23	-203.27	17.22	10.38
	Min. Vert	23	-203.27	17.22	10.38
	Min. H_x	10	240.57	-19.78	-11.84
	Min. H_z	10	240.57	-19.78	-11.84
Leg A	Max. Vert	2	233.64	0.46	22.40
	Max. H_x	21	12.76	0.78	1.06
	Max. H_z	2	233.64	0.46	22.40
	Min. Vert	15	-200.80	-0.42	-19.56
	Min. H_x	9	12.76	-0.73	1.06
	Min. H_z	15	-200.80	-0.42	-19.56

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead Only	44.80	0.00	0.00	9.171	-13.649	-0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	53.77	0.00	-31.74	-2615.500	-16.524	10.639
0.9 Dead+1.0 Wind 0 deg - No Ice	40.32	0.00	-31.74	-2610.968	-12.368	10.614
1.2 Dead+1.0 Wind 30 deg - No Ice	53.77	16.31	-28.24	-2307.756	-1355.367	15.255
0.9 Dead+1.0 Wind 30 deg - No Ice	40.32	16.31	-28.24	-2304.112	-1347.485	15.225
1.2 Dead+1.0 Wind 60 deg - No Ice	53.77	29.04	-16.77	-1354.885	-2382.464	4.228
0.9 Dead+1.0 Wind 60 deg - No Ice	40.32	29.04	-16.77	-1353.902	-2371.767	4.200
1.2 Dead+1.0 Wind 90 deg - No Ice	53.77	34.52	-0.00	11.042	-2810.445	-10.332
0.9 Dead+1.0 Wind 90 deg - No Ice	40.32	34.52	-0.00	8.254	-2798.610	-10.350
1.2 Dead+1.0 Wind 120 deg - No Ice	53.77	28.33	16.36	1350.922	-2337.182	-9.025
0.9 Dead+1.0 Wind 120 deg - No Ice	40.32	28.33	16.36	1344.412	-2326.593	-9.031
1.2 Dead+1.0 Wind 150 deg - No Ice	53.77	15.38	26.64	2243.790	-1305.530	-5.052
0.9 Dead+1.0 Wind 150 deg - No Ice	40.32	15.38	26.64	2234.713	-1297.754	-5.039
1.2 Dead+1.0 Wind 180 deg - No Ice	53.77	0.00	31.09	2607.665	-16.525	-10.637
0.9 Dead+1.0 Wind 180 deg - No Ice	40.32	-0.00	31.09	2597.576	-12.369	-10.613
1.2 Dead+1.0 Wind 210 deg - No Ice	53.77	-16.31	28.24	2330.002	1322.247	-15.255
0.9 Dead+1.0 Wind 210 deg - No Ice	40.32	-16.31	28.24	2320.764	1322.692	-15.225
1.2 Dead+1.0 Wind 240 deg - No Ice	53.77	-29.61	17.09	1392.084	2375.450	-4.229
0.9 Dead+1.0 Wind 240 deg - No Ice	40.32	-29.61	17.09	1385.499	2373.033	-4.201
1.2 Dead+1.0 Wind 270 deg - No Ice	53.77	-34.52	-0.00	11.012	2777.447	10.332
0.9 Dead+1.0 Wind 270 deg - No Ice	40.32	-34.52	-0.00	8.233	2773.921	10.350
1.2 Dead+1.0 Wind 300 deg - No Ice	53.77	-27.77	-16.03	-1313.769	2278.175	9.030
0.9 Dead+1.0 Wind 300 deg - No Ice	40.32	-27.77	-16.03	-1312.860	2275.921	9.031
1.2 Dead+1.0 Wind 330 deg - No Ice	53.77	-15.38	-26.64	-2221.591	1272.569	5.053
0.9 Dead+1.0 Wind 330 deg - No Ice	40.32	-15.38	-26.64	-2218.106	1273.090	5.040
1.2 Dead+1.0 Ice+1.0 Temp	93.38	-0.00	-0.00	12.415	-33.732	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	93.38	-0.00	-7.94	-643.356	-33.921	2.839
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	93.38	4.10	-7.10	-568.143	-369.151	3.297
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	93.38	7.39	-4.26	-332.892	-632.135	0.739
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	93.38	8.60	-0.00	12.485	-729.707	-2.183
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	93.38	7.23	4.17	353.212	-624.076	-2.392
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	93.38	3.96	6.87	581.801	-362.614	-1.796

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	93.38	-0.00	7.86	664.566	-33.924	-2.839
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	93.38	-4.10	7.10	593.116	301.299	-3.297
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	93.38	-7.46	4.31	359.738	567.545	-0.739
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	93.38	-8.60	-0.00	12.472	661.865	2.183
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	93.38	-7.16	-4.13	-326.369	552.980	2.393
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	93.38	-3.96	-6.87	-556.831	294.777	1.796
Dead+Wind 0 deg - Service	44.80	0.00	-7.58	-616.809	-13.732	2.541
Dead+Wind 30 deg - Service	44.80	3.89	-6.74	-543.452	-332.822	3.632
Dead+Wind 60 deg - Service	44.80	6.93	-4.00	-316.339	-577.626	1.002
Dead+Wind 90 deg - Service	44.80	8.24	-0.00	9.226	-679.640	-2.469
Dead+Wind 120 deg - Service	44.80	6.76	3.91	328.567	-566.843	-2.164
Dead+Wind 150 deg - Service	44.80	3.67	6.36	541.346	-320.953	-1.216
Dead+Wind 180 deg - Service	44.80	0.00	7.42	628.080	-13.730	-2.541
Dead+Wind 210 deg - Service	44.80	-3.89	6.74	561.907	305.359	-3.632
Dead+Wind 240 deg - Service	44.80	-7.07	4.08	338.377	556.379	-1.002
Dead+Wind 270 deg - Service	44.80	-8.24	-0.00	9.220	652.183	2.469
Dead+Wind 300 deg - Service	44.80	-6.63	-3.83	-306.532	533.176	2.164
Dead+Wind 330 deg - Service	44.80	-3.67	-6.36	-522.897	293.490	1.216

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	K	K	K	K	K	K	
1	0.00	-44.80	0.00	0.00	44.80	0.00	0.000%
2	0.00	-53.77	-31.74	-0.00	53.77	31.74	0.000%
3	0.00	-40.32	-31.74	-0.00	40.32	31.74	0.000%
4	16.31	-53.77	-28.24	-16.31	53.77	28.24	0.000%
5	16.31	-40.32	-28.24	-16.31	40.32	28.24	0.000%
6	29.04	-53.77	-16.77	-29.04	53.77	16.77	0.000%
7	29.04	-40.32	-16.77	-29.04	40.32	16.77	0.000%
8	34.52	-53.77	0.00	-34.52	53.77	0.00	0.000%
9	34.52	-40.32	0.00	-34.52	40.32	0.00	0.000%
10	28.33	-53.77	16.36	-28.33	53.77	-16.36	0.000%
11	28.33	-40.32	16.36	-28.33	40.32	-16.36	0.000%
12	15.38	-53.77	26.64	-15.38	53.77	-26.64	0.000%
13	15.38	-40.32	26.64	-15.38	40.32	-26.64	0.000%
14	0.00	-53.77	31.09	-0.00	53.77	-31.09	0.000%
15	0.00	-40.32	31.09	0.00	40.32	-31.09	0.000%
16	-16.31	-53.77	28.24	16.31	53.77	-28.24	0.000%
17	-16.31	-40.32	28.24	16.31	40.32	-28.24	0.000%
18	-29.61	-53.77	17.09	29.61	53.77	-17.09	0.000%
19	-29.61	-40.32	17.09	29.61	40.32	-17.09	0.000%
20	-34.52	-53.77	0.00	34.52	53.77	0.00	0.000%
21	-34.52	-40.32	0.00	34.52	40.32	0.00	0.000%
22	-27.77	-53.77	-16.03	27.77	53.77	16.03	0.000%
23	-27.77	-40.32	-16.03	27.77	40.32	16.03	0.000%
24	-15.38	-53.77	-26.64	15.38	53.77	26.64	0.000%
25	-15.38	-40.32	-26.64	15.38	40.32	26.64	0.000%
26	0.00	-93.38	0.00	0.00	93.38	0.00	0.000%
27	0.00	-93.38	-7.94	0.00	93.38	7.94	0.000%
28	4.10	-93.38	-7.10	-4.10	93.38	7.10	0.000%
29	7.39	-93.38	-4.26	-7.39	93.38	4.26	0.000%
30	8.60	-93.38	0.00	-8.60	93.38	0.00	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
31	7.23	-93.38	4.17	-7.23	93.38	-4.17	0.000%
32	3.96	-93.38	6.87	-3.96	93.38	-6.87	0.000%
33	0.00	-93.38	7.86	0.00	93.38	-7.86	0.000%
34	-4.10	-93.38	7.10	4.10	93.38	-7.10	0.000%
35	-7.46	-93.38	4.31	7.46	93.38	-4.31	0.000%
36	-8.60	-93.38	0.00	8.60	93.38	0.00	0.000%
37	-7.16	-93.38	-4.13	7.16	93.38	4.13	0.000%
38	-3.96	-93.38	-6.87	3.96	93.38	6.87	0.000%
39	0.00	-44.80	-7.58	0.00	44.80	7.58	0.000%
40	3.89	-44.80	-6.74	-3.89	44.80	6.74	0.000%
41	6.93	-44.80	-4.00	-6.93	44.80	4.00	0.000%
42	8.24	-44.80	0.00	-8.24	44.80	0.00	0.000%
43	6.76	-44.80	3.91	-6.76	44.80	-3.91	0.000%
44	3.67	-44.80	6.36	-3.67	44.80	-6.36	0.000%
45	0.00	-44.80	7.42	0.00	44.80	-7.42	0.000%
46	-3.89	-44.80	6.74	3.89	44.80	-6.74	0.000%
47	-7.07	-44.80	4.08	7.07	44.80	-4.08	0.000%
48	-8.24	-44.80	0.00	8.24	44.80	0.00	0.000%
49	-6.63	-44.80	-3.83	6.63	44.80	3.83	0.000%
50	-3.67	-44.80	-6.36	3.67	44.80	6.36	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00000621
3	Yes	4	0.00000001	0.00000251
4	Yes	4	0.00000001	0.00000800
5	Yes	4	0.00000001	0.00000410
6	Yes	4	0.00000001	0.00000818
7	Yes	4	0.00000001	0.00000359
8	Yes	4	0.00000001	0.00000766
9	Yes	4	0.00000001	0.00000390
10	Yes	4	0.00000001	0.00000612
11	Yes	4	0.00000001	0.00000243
12	Yes	4	0.00000001	0.00000750
13	Yes	4	0.00000001	0.00000352
14	Yes	4	0.00000001	0.00000821
15	Yes	4	0.00000001	0.00000361
16	Yes	4	0.00000001	0.00000799
17	Yes	4	0.00000001	0.00000409
18	Yes	4	0.00000001	0.00000613
19	Yes	4	0.00000001	0.00000242
20	Yes	4	0.00000001	0.00000770
21	Yes	4	0.00000001	0.00000393
22	Yes	4	0.00000001	0.00000820
23	Yes	4	0.00000001	0.00000360
24	Yes	4	0.00000001	0.00000752
25	Yes	4	0.00000001	0.00000352
26	Yes	4	0.00000001	0.00000001
27	Yes	4	0.00000001	0.00002760
28	Yes	4	0.00000001	0.00002863
29	Yes	4	0.00000001	0.00002958
30	Yes	4	0.00000001	0.00002918
31	Yes	4	0.00000001	0.00002851
32	Yes	4	0.00000001	0.00002876
33	Yes	4	0.00000001	0.00002907

34	Yes	4	0.00000001	0.00002847
35	Yes	4	0.00000001	0.00002780
36	Yes	4	0.00000001	0.00002824
37	Yes	4	0.00000001	0.00002863
38	Yes	4	0.00000001	0.00002792
39	Yes	4	0.00000001	0.00000001
40	Yes	4	0.00000001	0.00000001
41	Yes	4	0.00000001	0.00000418
42	Yes	4	0.00000001	0.00000403
43	Yes	4	0.00000001	0.00000001
44	Yes	4	0.00000001	0.00000001
45	Yes	4	0.00000001	0.00000417
46	Yes	4	0.00000001	0.00000404
47	Yes	4	0.00000001	0.00000001
48	Yes	4	0.00000001	0.00000401
49	Yes	4	0.00000001	0.00000416
50	Yes	4	0.00000001	0.00000001

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	136 - 133.625	4.077	42	0.2607	0.0370
T2	133.625 - 130	3.947	42	0.2606	0.0372
T3	130 - 110	3.725	42	0.2593	0.0394
T4	110 - 94.9427	2.631	42	0.2396	0.0324
T5	94.9427 - 92.5938	1.878	42	0.2050	0.0217
T6	92.5938 - 90	1.775	42	0.1972	0.0211
T7	90 - 80	1.664	42	0.1879	0.0200
T8	80 - 60	1.279	42	0.1643	0.0164
T9	60 - 40	0.682	42	0.1086	0.0104
T10	40 - 20	0.292	42	0.0682	0.0060
T11	20 - 0	0.071	42	0.0290	0.0022

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
136.00	APXVSPP18-C-A20 w/ Mount Pipe	42	4.077	0.2607	0.0370	27070
134.00	1900MHz RRH (65MHz)	42	3.968	0.2606	0.0371	27070
127.00	(4) DB844H90E-XY w/ Mount Pipe	42	3.545	0.2577	0.0408	13819
119.00	APXVAALL24_43-U-NA20_TMO	42	3.101	0.2513	0.0395	28320
110.00	RVZDC-6627-PF-48_CCIv2	42	2.631	0.2396	0.0324	254776
107.00	(2) MX06FRO660-03 w/ Mount Pipe	42	2.474	0.2344	0.0294	109108
97.00	DMP65R-BU4D w/ Mount Pipe	42	1.973	0.2111	0.0222	13902
86.00	FFVV-65B-R2 w/ Mount Pipe	42	1.502	0.1768	0.0184	16932
80.00	GPS_A	42	1.279	0.1643	0.0164	20917
72.00	GPS_A	42	1.014	0.1433	0.0138	21837

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	136 - 133.625	16.906	8	1.0797	0.1549
T2	133.625 - 130	16.365	8	1.0794	0.1554
T3	130 - 110	15.447	8	1.0742	0.1650
T4	110 - 94.9427	10.910	8	0.9926	0.1353
T5	94.9427 - 92.5938	7.789	8	0.8493	0.0913
T6	92.5938 - 90	7.363	8	0.8170	0.0885
T7	90 - 80	6.901	8	0.7782	0.0841
T8	80 - 60	5.303	8	0.6805	0.0689
T9	60 - 40	2.828	8	0.4498	0.0435
T10	40 - 20	1.213	8	0.2821	0.0252
T11	20 - 0	0.294	8	0.1198	0.0093

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
136.00	APXVSPP18-C-A20 w/ Mount Pipe	8	16.906	1.0797	0.1549	6432
134.00	1900MHz RRH (65MHz)	8	16.454	1.0796	0.1550	6432
127.00	(4) DB844H90E-XY w/ Mount Pipe	8	14.700	1.0674	0.1707	3271
119.00	APXVAALL24_43-U-NA20_TMO	8	12.857	1.0409	0.1652	6785
110.00	RVZDC-6627-PF-48_CCIv2	8	10.910	0.9926	0.1353	66435
107.00	(2) MX06FRO660-03 w/ Mount Pipe	8	10.261	0.9712	0.1229	27738
97.00	DMP65R-BU4D w/ Mount Pipe	8	8.179	0.8748	0.0933	3335
86.00	FFVV-65B-R2 w/ Mount Pipe	8	6.227	0.7324	0.0775	4077
80.00	GPS_A	8	5.303	0.6805	0.0689	5046
72.00	GPS_A	8	4.203	0.5936	0.0581	5266

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T2	133.625	Leg	A325N	0.6250	5	1.07	27.61	0.039	1.05	Bolt DS
T3	130	Leg	A325N	0.7500	5	7.89	39.76	0.198	1.05	Bolt DS
T6	92.5938	Leg	A325N	1.0000	6	13.82	54.52	0.254	1.05	Bolt Tension
T7	90	Leg	A325N	1.0000	6	15.03	54.52	0.276	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	6.53	10.16	0.642	1.05	Member Block Shear
T8	80	Leg	A325N	1.0000	6	21.09	54.52	0.387	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	5.99	10.66	0.562	1.05	Member Block Shear
T9	60	Leg	A325N	1.0000	6	26.12	54.52	0.479	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	5.48	11.68	0.469	1.05	Member Block Shear
T10	40	Leg	A325N	1.0000	6	30.41	54.52	0.558	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	5.29	11.68	0.453	1.05	Member Block Shear
T11	20	Diagonal	A325N	1.2500	1	6.88	23.70	0.290	1.05	Member Block Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	136 - 133.625	1 1/2	2.38	2.38	76.0 K=1.00	1.7672	-2.23	52.13	0.043 [1]
T2	133.625 - 130	1 1/2	3.63	2.63	84.0 K=1.00	1.7672	-4.02	47.47	0.085 [1]
T3	130 - 110	2	20.00	2.38	57.0 K=1.00	3.1416	-36.24	111.47	0.325 [1]
T4	110 - 94.9427	2 1/4	15.06	2.35	50.1 K=1.00	3.9761	-78.50	148.89	0.527 [1]
T5	94.9427 - 92.5938	2 1/4	2.35	1.18	25.2 K=1.00	3.9761	-86.45	170.80	0.506 [1]
T6	92.5938 - 90	2 1/4	2.59	0.58	12.4 K=1.00	3.9761	-98.19	176.91	0.555 [1]
T7	90 - 80	Pirod 105244 w/ (2) 1-1/4'' Tie Rod	10.02	10.02	35.1 K=1.00	6.1359	-105.90	252.29	0.420 [1]
T8	80 - 60	Pirod 105217	20.03	10.02	37.8 K=1.00	5.3014	-146.29	214.86	0.681 [1]
T9	60 - 40	Pirod 105218	20.03	10.02	32.4 K=1.00	7.2158	-180.10	300.68	0.599 [1]
T10	40 - 20	Pirod 105218	20.03	10.02	32.4 K=1.00	7.2158	-209.36	300.68	0.696 [1]
T11	20 - 0	Pirod 105219	20.03	10.02	28.4 K=1.00	9.4248	-236.19	399.87	0.591 [1]

[1] P_u / ϕP_n controls

Truss-Leg Diagonal Data

Section No.	Elevation ft	Diagonal Size	L_d ft	Kl/r	ϕP_n K	A in^2	V_u K	ϕV_n K	Stress Ratio
T7	90 - 80	0.5	1.35	109.8	276.12	0.1963	0.83	3.48	0.238
T8	80 - 60	0.5	1.47	120.0	238.56	0.1963	0.35	3.34	0.105
T9	60 - 40	0.5	1.46	119.0	324.71	0.1963	0.20	3.38	0.060
T10	40 - 20	0.5	1.46	119.0	324.71	0.1963	0.44	3.38	0.129
T11	20 - 0	0.625	1.45	94.4	424.12	0.3068	0.99	6.96	0.143

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	136 - 133.625	3/4	3.10	3.01	134.8 K=0.70	0.4418	-0.93	5.50	0.169 [1]
T2	133.625 - 130	3/4	4.78	2.32	133.5 K=0.90	0.4418	-1.36	5.60	0.243 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T3	130 - 110	7/8	5.05	2.45	120.9 K=0.90	0.6013	-3.73	9.30	0.401 [1]
T4	110 - 94.9427	1	5.39	2.60	112.5 K=0.90	0.7854	-4.91	14.00	0.351 [1]
T5	94.9427 - 92.5938	1	5.44	2.63	113.7 K=0.90	0.7854	-5.18	13.73	0.377 [1]
T6	92.5938 - 90	1	5.35	2.59	111.8 K=0.90	0.7854	-6.07	14.17	0.429 [1]
T7	90 - 80	L3x3x3/16	11.42	5.26	109.4 K=1.03	1.0900	-7.34	24.13	0.304 [1]
T8	80 - 60	L2 1/2x2 1/2x3/16	12.50	5.63	136.4 K=1.00	0.9020	-6.15	13.87	0.443 [1]
T9	60 - 40	L3x3x3/16	13.80	6.33	127.4 K=1.00	1.0900	-5.69	19.22	0.296 [1]
T10	40 - 20	L3x3x3/16	15.24	7.08	142.6 K=1.00	1.0900	-5.80	15.35	0.378 [1]
T11	20 - 0	L3x3x5/16	16.80	7.84	159.7 K=1.00	1.7800	-7.78	19.97	0.390 [1]

[1] P_u / ϕP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T2	133.625 - 130	3/4	4.00	3.88	173.6 K=0.70	0.4418	-0.18	3.31	0.054 [1]
T3	130 - 110	3/4	4.43	4.26	190.9 K=0.70	0.4418	-0.68	2.74	0.250 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T5	94.9427 - 92.5938	1 1/2	4.90	2.36	83.0 K=1.10	1.7672	-1.50	48.04	0.031 [1]
T6	92.5938 - 90	1 1/2	4.96	2.39	84.0 K=1.10	1.7672	-1.70	47.47	0.036 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	136 - 133.625	6x3/8	4.00	2.91	322.2 K=1.00	2.2500	-0.65	4.90	0.132 [1]
		KL/R > 200 (C) - 4							
T3	130 - 110	7/8	4.01	3.85	147.7 K=0.70	0.6013	-0.68	6.23	0.110 [1]
T4	110 - 94.9427	1	4.52	4.34	145.7 K=0.70	0.7854	-1.59	8.36	0.191 [1]

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T2	133.625 - 130	7/8	4.00	3.88	148.8 K=0.70	0.6013	-0.56	6.14	0.091 [1]
T3	130 - 110	7/8	4.49	4.32	165.9 K=0.70	0.6013	-1.69	4.93	0.341 [1]
T6	92.5938 - 90	1	4.99	4.80	161.2 K=0.70	0.7854	-1.70	6.83	0.249 [1]

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T2	133.625 - 130	1 1/2	3.63	1.00	32.0	1.7672	2.73	79.52	0.034 [1 #]
T3	130 - 110	2	20.00	0.50	12.0	2.0581	31.19	100.33	0.311 [1 #]
T4	110 - 94.9427	2 1/4	15.06	2.35	50.1	3.9761	65.10	178.92	0.364 [1]
T5	94.9427 - 92.5938	2 1/4	2.35	1.17	24.9	3.9761	71.72	178.92	0.401 [1]
T6	92.5938 - 90	2 1/4	2.59	0.58	12.4	3.9761	82.93	178.92	0.464 [1]
T7	90 - 80	Pirod 105244 w/ (2) 1-1/4'' Tie Rod	10.02	10.02	35.1	6.1359	90.19	276.12	0.327 [1]
T8	80 - 60	Pirod 105217	20.03	10.02	37.8	5.3014	126.57	238.56	0.531 [1]
T9	60 - 40	Pirod 105218	20.03	10.02	32.4	7.2158	156.70	324.71	0.483 [1]
T10	40 - 20	Pirod 105218	20.03	10.02	32.4	7.2158	182.46	324.71	0.562 [1]
T11	20 - 0	Pirod 105219	20.03	10.02	28.4	9.4248	204.83	424.12	0.483 [1]

[1] P_u / ϕP_n controls
[#] Based on net area of leg in section below

Truss-Leg Diagonal Data

Section No.	Elevation ft	Diagonal Size	L_d ft	Kl/r	ϕP_n K	A in^2	V_u K	ϕV_n K	Stress Ratio
T7	90 - 80	0.5	1.35	109.8	276.12	0.1963	0.83	3.48	0.238
T8	80 - 60	0.5	1.47	120.0	238.56	0.1963	0.35	3.34	0.105
T9	60 - 40	0.5	1.46	119.0	324.71	0.1963	0.20	3.38	0.060
T10	40 - 20	0.5	1.46	119.0	324.71	0.1963	0.44	3.38	0.129
T11	20 - 0	0.625	1.45	94.4	424.12	0.3068	0.99	6.96	0.143

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	136 - 133.625	3/4	3.10	3.01	192.5	0.4418	0.85	19.88	0.043 [1]
T2	133.625 - 130	3/4	4.78	2.32	148.3	0.4418	1.25	19.88	0.063 [1]
T3	130 - 110	7/8	5.05	2.45	134.3	0.6013	3.66	27.06	0.135 [1]
T4	110 - 94.9427	1	5.39	2.60	125.0	0.7854	4.85	35.34	0.137 [1]
T5	94.9427 - 92.5938	1	5.44	2.63	126.3	0.7854	5.04	35.34	0.143 [1]
T6	92.5938 - 90	1	5.35	2.59	124.2	0.7854	5.87	35.34	0.166 [1]
T7	90 - 80	L3x3x3/16	11.42	5.26	69.3	0.6593	6.53	28.68	0.228 [1]
T8	80 - 60	L2 1/2x2 1/2x3/16	11.93	5.38	86.2	0.5183	5.99	22.55	0.266 [1]
T9	60 - 40	L3x3x3/16	13.13	6.02	79.5	0.6593	5.48	28.68	0.191 [1]
T10	40 - 20	L3x3x3/16	14.50	6.73	88.6	0.6593	5.29	28.68	0.184 [1]
T11	20 - 0	L3x3x5/16	16.80	7.84	105.3	1.0127	6.88	44.05	0.156 [1]

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	133.625 - 130	3/4	4.00	3.88	248.0	0.4418	0.32	19.88	0.016 [1]
T3	130 - 110	3/4	4.43	4.26	272.7	0.4418	0.68	19.88	0.034 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T5	94.9427 - 92.5938	1 1/2	4.90	2.36	151.0	1.7672	1.50	79.52	0.019 [1]
T6	92.5938 - 90	1 1/2	4.96	2.39	152.7	1.7672	1.70	79.52	0.021 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	136 - 133.625	6x3/8	4.00	2.91	322.2	2.2500	0.65	72.90	0.009 [1]
T3	130 - 110	7/8	4.01	3.85	211.0	0.6013	0.68	27.06	0.025 [1]
T4	110 - 94.9427	1	4.52	4.34	208.1	0.7854	1.73	35.34	0.049 [1]

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	133.625 - 130	7/8	4.00	3.88	212.6	0.6013	0.63	27.06	0.023 [1]
T3	130 - 110	7/8	4.49	4.32	237.0	0.6013	1.73	27.06	0.064 [1]
T6	92.5938 - 90	1	4.99	4.80	230.3	0.7854	1.70	35.34	0.048 [1]

[1] P_u / ϕP_n controls

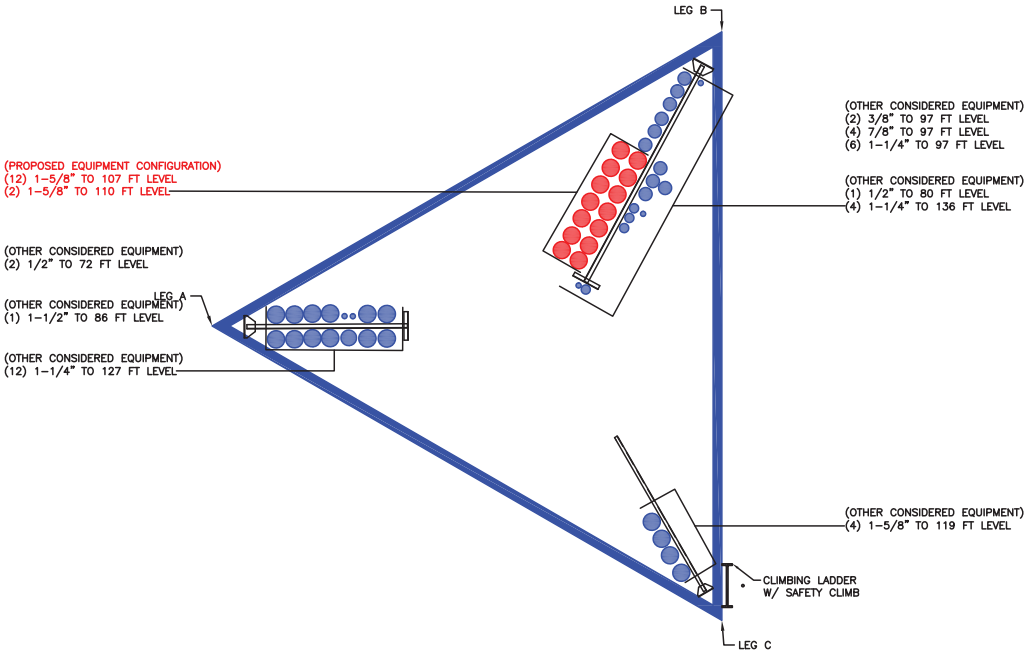
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	136 - 133.625	Leg	1 1/2	2	-2.23	54.73	4.1	Pass
T2	133.625 - 130	Leg	1 1/2	14	-4.02	49.84	8.1	Pass
T3	130 - 110	Leg	2	29	-36.24	117.05	31.0	Pass
T4	110 - 94.9427	Leg	2 1/4	107	-78.50	156.33	50.2	Pass
T5	94.9427 - 92.5938	Leg	2 1/4	149	-86.45	179.34	48.2	Pass
T6	92.5938 - 90	Leg	2 1/4	161	-98.19	185.75	52.9	Pass
T7	90 - 80	Leg	Pirod 105244 w/ (2) 1-1/4'' Tie Rod	176	-105.90	264.90	40.0	Pass
T8	80 - 60	Leg	Pirod 105217	184	-146.29	225.60	64.8	Pass
T9	60 - 40	Leg	Pirod 105218	199	-180.10	315.72	57.0	Pass
T10	40 - 20	Leg	Pirod 105218	214	-209.36	315.72	66.3	Pass
T11	20 - 0	Leg	Pirod 105219	229	-236.19	419.86	56.3	Pass
T1	136 - 133.625	Diagonal	3/4	8	-0.93	5.77	16.1	Pass
T2	133.625 - 130	Diagonal	3/4	24	-1.36	5.88	23.1	Pass
T3	130 - 110	Diagonal	7/8	40	-3.73	9.77	38.2	Pass
T4	110 - 94.9427	Diagonal	1	115	-4.91	14.70	33.4	Pass
T5	94.9427 - 92.5938	Diagonal	1	151	-5.18	14.41	35.9	Pass
T6	92.5938 - 90	Diagonal	1	166	-6.07	14.87	40.8	Pass
T7	90 - 80	Diagonal	L3x3x3/16	181	-7.34	25.34	29.0 61.2 (b)	Pass
T8	80 - 60	Diagonal	L2 1/2x2 1/2x3/16	187	-6.15	14.57	42.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
							53.5 (b)	
T9	60 - 40	Diagonal	L3x3x3/16	202	-5.69	20.18	28.2	Pass
							44.6 (b)	
T10	40 - 20	Diagonal	L3x3x3/16	217	-5.80	16.11	36.0	Pass
							43.1 (b)	
T11	20 - 0	Diagonal	L3x3x5/16	232	-7.78	20.97	37.1	Pass
T2	133.625 - 130	Horizontal	3/4	16	-0.18	3.48	5.2	Pass
T3	130 - 110	Horizontal	3/4	43	-0.68	2.88	23.8	Pass
T5	94.9427 - 92.5938	Secondary Horizontal	1 1/2	158	-1.50	50.44	3.0	Pass
T6	92.5938 - 90	Secondary Horizontal	1 1/2	172	-1.70	49.85	3.4	Pass
T1	136 - 133.625	Top Girt	6x3/8	4	-0.65	5.14	12.6	Pass
T3	130 - 110	Top Girt	7/8	31	-0.68	6.54	10.5	Pass
T4	110 - 94.9427	Top Girt	1	111	-1.59	8.78	18.2	Pass
T2	133.625 - 130	Bottom Girt	7/8	19	-0.56	6.44	8.6	Pass
T3	130 - 110	Bottom Girt	7/8	36	-1.69	5.18	32.5	Pass
T6	92.5938 - 90	Bottom Girt	1	163	-1.70	7.17	23.7	Pass
							Summary	
						Leg (T10)	66.3	Pass
						Diagonal (T7)	61.2	Pass
						Horizontal (T3)	23.8	Pass
						Secondary Horizontal (T6)	3.4	Pass
						Top Girt (T4)	18.2	Pass
						Bottom Girt (T3)	32.5	Pass
						Bolt Checks	61.2	Pass
						RATING =	**66.3**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


LEG B
(OTHER CONSIDERED EQUIPMENT)
(2) 3/8" TO 97 FT LEVEL
(4) 7/8" TO 97 FT LEVEL
(6) 1-1/4" TO 97 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION)
(12) 1-5/8" TO 107 FT LEVEL
(2) 1-5/8" TO 110 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 80 FT LEVEL
(4) 1-1/4" TO 136 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 1/2" TO 72 FT LEVEL
LEG A
(OTHER CONSIDERED EQUIPMENT)
(1) 1-1/2" TO 86 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(12) 1-1/4" TO 127 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(4) 1-5/8" TO 119 FT LEVEL
CLIMBING LADDER
W/ SAFETY CLIMB
LEG C

APPENDIX C

ADDITIONAL CALCULATIONS

Truss Leg Reinforcement

BU # :	876338
Site Name:	WATERFORD
Order:	654601 Rev. 0
Elevation:	90' - 80'

TIA-222 Revision:	H

Existing Tie Rods		
Diameter, de:	1.25	in
Unbraced Length, Le:	14.18	in
Yield Strength, Fye:	50	ksi

New Tie Rods		
Diameter, dn:	1.25	in
Unbraced Length, Ln:	14.18	in
Offset, X:	0.625	in
Yield Strength, Fyn:	50	ksi

Truss Leg		
Width, w:	12	in
Unbraced Length, Lleg:	10	ft

Reactions from tnx		
Compression, C:	105.9	kip
Tension, T:	90.19	kip

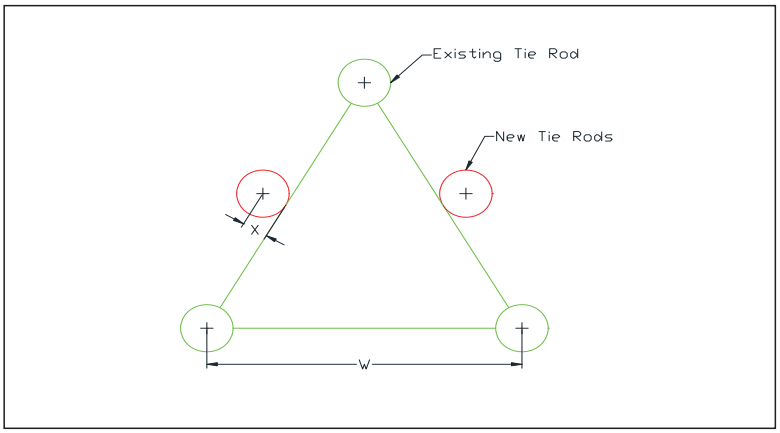
Output from tnx		
KL/r Modified Leg, KLtnx:	45.4	

Length Factors		
Length Factor of Existing Tie Rods, Ke:	1	
Length Factor of New Tie Rods, Kn:	1	
Length Factor of the Leg, Kleg:	1	

Results				
	Demand	Capacity	Rating*	Check
Compression (Existing Tie Rods), kip:	21.18	47.51	42.5%	**Pass**
Compression (New Tie Rods), kip:	21.18	47.51	42.5%	**Pass**
Compression (Modified Tie Rods), kip:	105.90	257.98	39.1%	**Pass**
Tension (Existing Tie Rods), kip:	18.04	55.22	31.1%	**Pass**
Tension (New Tie Rods), kip:	18.04	55.22	31.1%	**Pass**
Tension (Modified Tie Rods), kip:	90.19	276.12	31.1%	**Pass**

**Section 15.5 Applied*

Adjustments for tnx		
Diameter of modified truss leg, Deqv:	1.614	in
Leg K Factor Adjustment, K:	0.999	



BU #	**876338**
SITE NAME	**WATERFORD**
DATE	**1/18/2024**
ELEVATION	**80'**

Bolt Capacity for Tie-Rod Leg Reinf (Rev. H)

Total tensile Load	=	90.19	Kips
Load taken by Jump Plate	=	0	Kips
Bolt Diameter (inch)	=	1	
Bolt Grade	=	A325	
Total Number of Bolts (N)	=	10	
Load taken by Bolt group (Pu)	=	90.19	Kips
Allowable Load /bolt (Pall)	=	54.52	Kips

SR Diameter		Number	Area	Total Area
Original	1.25	3	1.227	3.682
New added	1.25	2	1.227	2.454
			Total area	6.136

P1 =	54.114 kips	force that 3 original pirods attract (3 original rods areas / total area of rods)*Pu
P2 =	36.076 kips	force that 2 retrofit rods attract (2 retrofit rods areas / total area of rods)*Pu
P total =	18.038 kips	P1/6 bolts + P2/4 bolts (6 bolts for original pirod and 4 bolts for retrofit rods)

P total should be the maximum load per bolt

Bolt Capacity (P total/Pall)	=	31.5%	**PASS**

*TIA-222-H Section 15.5 Applied

Self Support Anchor Rod Capacity

Site Info	
BU #	876338
Site Name	WATERFORD
Order #	654601 REV. 0

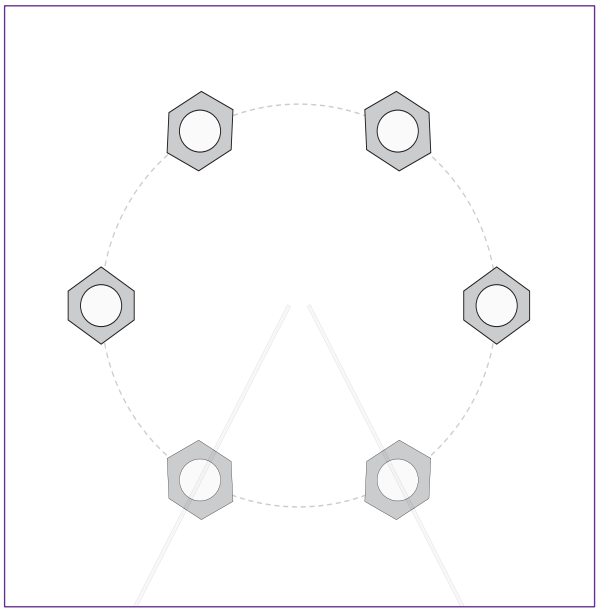
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	1.75

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	245.01	211.80
Shear Force (kips)	23.88	21.04

**TIA-222-H Section 15.5 Applied*

Considered Eccentricity	
Leg Mod Eccentricity (in)	0.000
Anchor Rod N.A Shift (in)	0.000
Total Eccentricity (in)	0.000

**Anchor Rod Eccentricity Applied*



Connection Properties

Anchor Rod Data

(6) 1-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi)

l_{ar} (in): 1.75

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

Pu_t = 35.3	ϕPn_t = 90.84	**Stress Rating**
Vu = 3.51	ϕVn = 57.52	**37.0%**
Mu = n/a	ϕMn = n/a	**Pass**

SST Unit Base Foundation

BU # :	876338
Site Name:	WATERFORD
App. Number:	654601 REV. 0
TIA-222 Revision:	H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☐
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions		
Global Moment, **M**:	2810.47	ft-kips
Global Axial, **P**:	53.77	kips
Global Shear, **V**:	34.52	kips
Leg Compression, P_{comp}:	245.01	kips
Leg Comp. Shear, V_{u_comp}:	23.88	kips
Leg Uplift, P_{uplift}:	211.8	kips
Leg Uplift. Shear, V_{u_uplift}:	21.04	kips
Tower Height, **H**:	136	ft
Base Face Width, **BW**:	14	ft
BP Dist. Above Fdn, bp_{dist}:	2.5	in

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, **dpier**:	3.0	ft
Ext. Above Grade, **E**:	0.50	ft
Pier Rebar Size, **Sc**:	8	
Pier Rebar Quantity, **mc**:	15	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:	7	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties		
Depth, **D**:	6.00	ft
Pad Width, W_1:	23.00	ft
Pad Thickness, **T**:	3.25	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	9	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	46	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δc:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	120	pcf
Ultimate Gross Bearing, Qult:	8.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	36	degrees
SPT Blow Count, N_{blows}:	25	
Base Friction, μ:		
Neglected Depth, **N**:	3.3	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	N/A	ft

<-- Toggle between Gross and Net

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	244.54	34.52	**13.4%**	**Pass**
Bearing Pressure (ksf)	6.00	2.36	**39.3%**	**Pass**
*Overturning (kip*ft)*	4552.30	3042.04	**66.8%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	845.23	77.61	**8.7%**	**Pass**
*Pier Flexure (Tension) (kip*ft)*	508.55	68.38	**12.8%**	**Pass**
Pier Compression (kip)	3374.26	249.15	**7.0%**	**Pass**
*Pad Flexure (kip*ft)*	6695.87	793.04	**11.3%**	**Pass**
Pad Shear - 1-way (kips)	777.96	125.14	**15.3%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.164	0.034	**19.5%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	5260.90	46.57	**0.8%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.164	0.033	**18.8%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	5260.90	41.03	**0.7%**	**Pass**

**Rating per TIA-222-H Section 15.5*

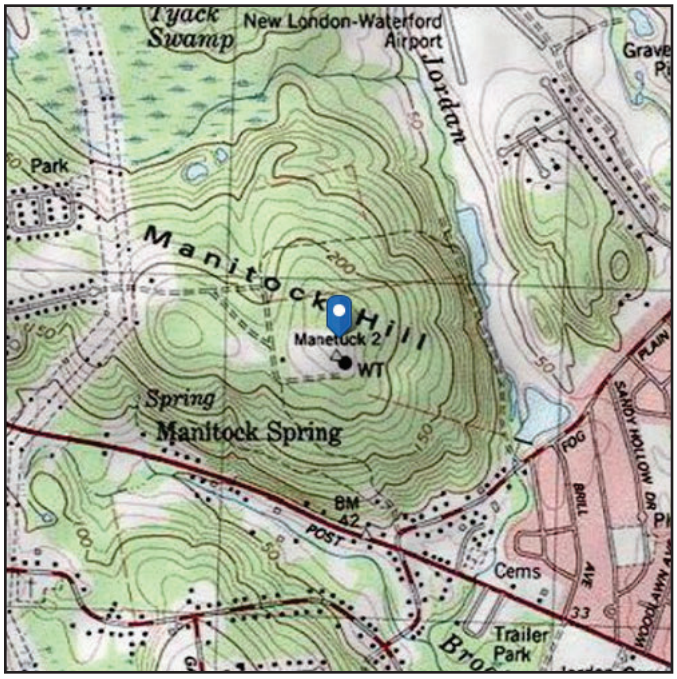
Structural Rating*:	**19.5%**
Soil Rating*:	**66.8%**

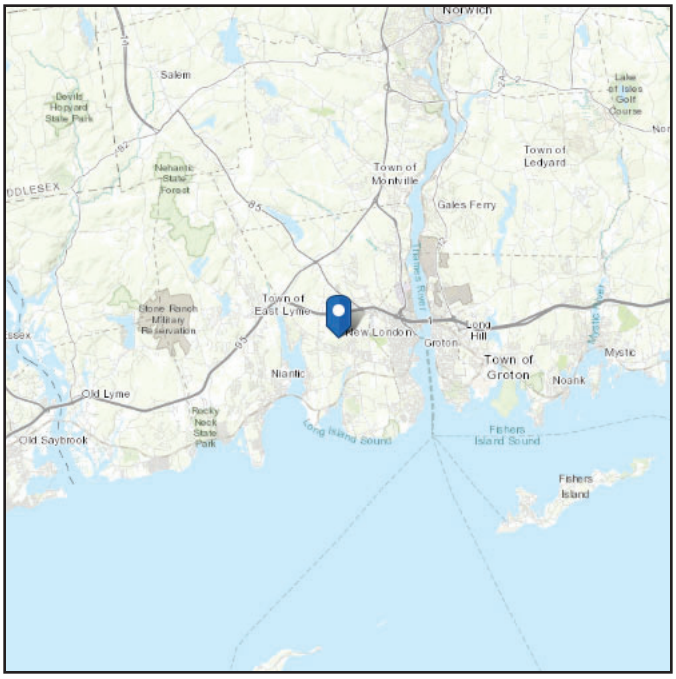
ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Elevation: 242 ft (NAVD 88)
Latitude: 41.354639
Longitude: -72.150444





Wind

Results:

Wind Speed	126 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	98 Vmph
100-year MRI	104 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Tue Nov 01 2022

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 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 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.

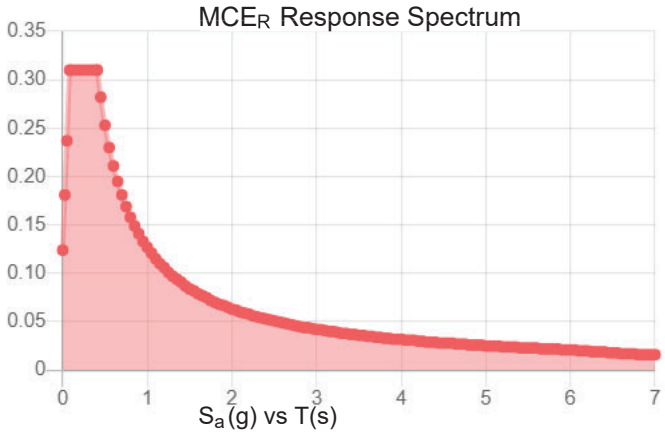
Seismic

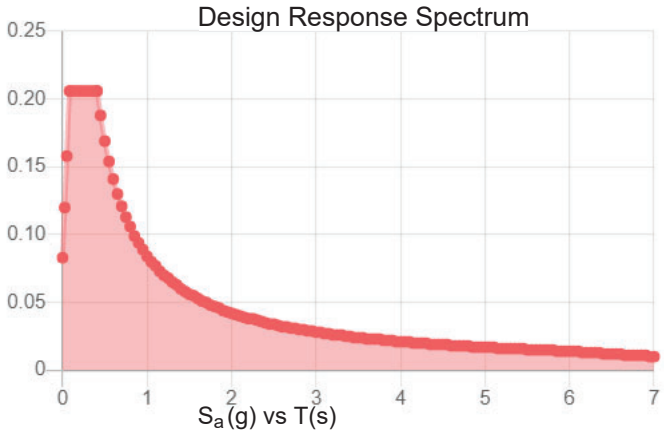
Site Soil Class: D - Default (see Section 11.4.3)

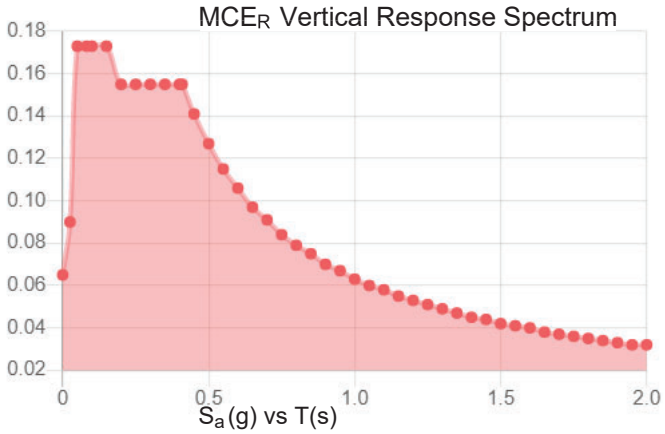
Results:

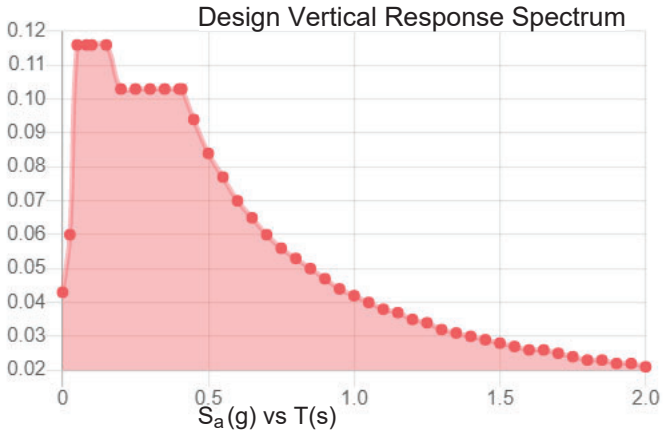
S_S :	0.194	S_{D1} :	0.084
S_1 :	0.053	T_L :	6
F_a :	1.6	PGA :	0.107
F_v :	2.4	PGA_M :	0.17
S_{MS} :	0.31	F_{PGA} :	1.586
S_{M1} :	0.127	I_e :	1
S_{DS} :	0.206	C_v :	0.7

Seismic Design Category B









Data Accessed: **Tue Nov 01 2022**

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

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:	Tue Nov 01 2022

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.

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Stub 1 of 1

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			625.00		625.00