



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

March 21, 2024

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

RE: **Notice of Exempt Modification for Verizon Wireless: 5000386237**
Crown Site ID# 876313
1394 Meiden Waterbury Tpk, Southington, CT 06489
Latitude: 41° 33' 51.39" / Longitude: -72° 53' 30.7"

Dear Ms. Bachman:

Verizon Wireless currently maintains twelve (12) antennas at the 138-foot mount on the existing 160-foot monopole tower located at 1394 Meiden Waterbury Tpk, Southington, CT. The property is owned Southington Tower Development LLC and the tower is owned by Crown Castle. Verizon now intends to add two (2) interference mitigation filters at the 138ft 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 Southington on September 17, 1998, via building permit.

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 Mark Sciota, Town Manager, Town of Southington and Jeremy DeCarli, Director of Planning, Town of Southington. Southington Tower Development LLC 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,



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

Attachments

cc:

Mark Sciota, Town Manager
Town of Southington
75 Main Street
Southington, CT 06489
860-276-6200

Jeremy DeCarli
Town of Southington
196 North Main Street
Southington, CT 06489
860-276-6248

Southington Tower Development LLC
754 Peachtree ST, NE
16th Floor
Atlanta, GA 30308
Crown Castle, Tower Owner

TOWN OF SOUTHTON, CONN.

BUILDING PERMIT

Estimated cost (structural, plumbing, wiring, painting, etc.) \$ 84,000.00

Fee \$ 9/17 58

Nº 43656 A

APPLICANTS PERMIT

Permission is hereby granted to Sprint PCS telecommunications monopole and assorted telecomm. equipment building on the side of Meriden-Waterbury Turnpike... as follows:—Size ft. wide, stories high; supported on walls to be; roof covered with; No. of house-keeping units; Distance from nearest building feet; distance from street line feet; distance from each side lot line feet; W feet; S feet; N feet.

Owner John A. Errichetti BUILDING LINE

The Building Line on the above described property on the side of feet back of street line.

The Building Line on the above described property on the side of feet back of street line.

The Veranda Line on the above described property on the side of feet back of street line.

FOR ADDITIONAL REQUIREMENTS TO THE BUILDING DEPARTMENT TOWN OF SOUTHTON, CONN. OF THIS PERMIT SEE OTHER SIDE

John A. Errichetti Building Inspector SMM

1394 MERIDEN WATERBURY TPKE

Location 1394 MERIDEN WATERBURY
TPKE

Mblu 032/ / 103/ 0004/

Acct# 18522

Owner SOUTHINGTON TOWER
DEVELOPMENT LLC

Assessment \$207,490

Appraisal \$296,420

PID 1752

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$0	\$296,420	\$296,420

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$0	\$207,490	\$207,490

Owner of Record

Owner SOUTHINGTON TOWER DEVELOPMENT LLC

Sale Price \$90,000

Co-Owner

Certificate

Address 754 PEACHTREE ST, NE
16TH FLOOR
ATLANTA, GA 30308

Book & Page 0997/1112

Sale Date 01/18/2005

Instrument 03

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
SOUTHINGTON TOWER DEVELOPMENT LLC	\$90,000		0997/1112	03	01/18/2005

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Building Percent Good:

Building Attributes	
Field	Description
Style	Vacant
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	

Building Photo



(https://images.vgsi.com/photos2/SouthingtonCTPhotos/10057IMG_2279)

Building Layout

(ParcelSketch.ashx?pid=1752&bid=1752)

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

AC Type:
 Total Bedrooms:
 Full Bthrms:
 Half Baths:
 Extra Fixtures
 Total Rooms:
 Bath Style:
 Kitchen Style:
 Total Kitchens
 Fireplaces
 Whirlpool Tubs
 Fin Bsmt Area
 Fin Bsmt Quality
 Bsmt Garages

 Bsmt Type
 Attic Type
 Cath Ceiling
 Fndtn Crdtn
 Basement

Extra Features

Extra Features

Legend

No Data for Extra Features

Land

Land Use

Land Line Valuation

Use Code 391
 Description Vac Com Lnd wAcc
 Zone B
 Alt Land Appr No
 Category

Size (Acres) 0.83
 Depth

Outbuildings

Outbuildings

Legend

No Data for Outbuildings

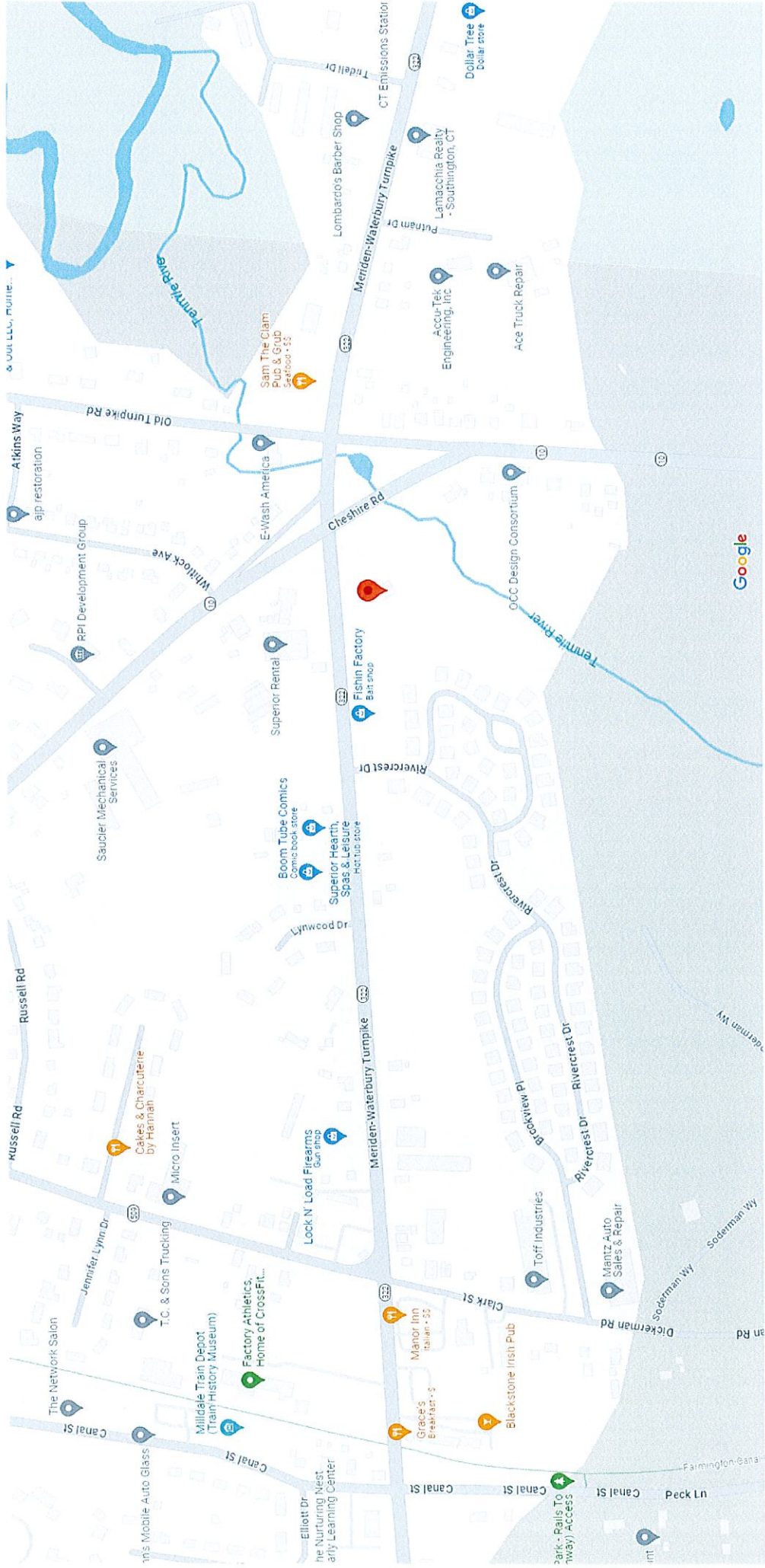
Valuation History

Appraisal

Valuation Year	Improvements	Land	Total
2023	\$0	\$296,420	\$296,420
2022	\$0	\$296,420	\$296,420
2021	\$0	\$296,420	\$296,420
2020	\$0	\$296,420	\$296,420
2019	\$0	\$204,320	\$204,320

Assessment

Valuation Year	Improvements	Land	Total
2023	\$0	\$207,490	\$207,490
2022	\$0	\$207,490	\$207,490
2021	\$0	\$207,490	\$207,490
2020	\$0	\$207,490	\$207,490
2019	\$0	\$143,020	\$143,020



Map data ©2024 Google 200 ft



1394 Meriden-Waterbury Turnpike Building

- Directions
- Save
- Nearby
- Send to phone
- Share

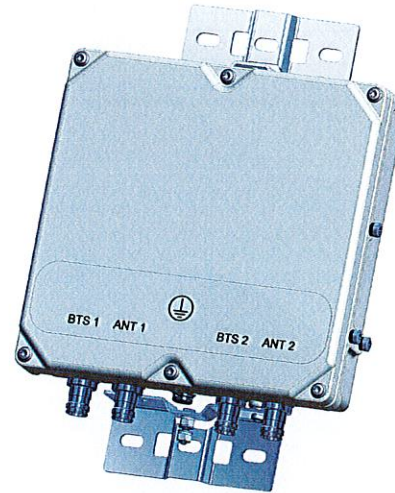
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

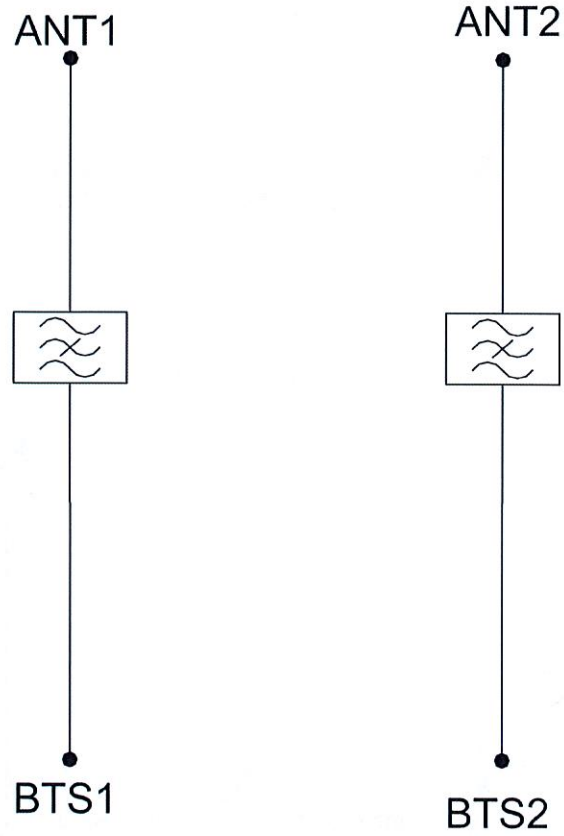
- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C | -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m | 8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
MECHANICAL		
Dimensions H x D x W	269 x 277 x 80mm | 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8.0 kg | 17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4.3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	

ELECTRICAL BLOCK DIAGRAM



Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, March 22, 2024 9:53 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775641127460: Your package has been delivered

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hi. Your package was
delivered Fri, 03/22/2024 at
9:45am.



Delivered to 75 MAIN ST, SOUTHTON, CT 06489

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	775641127460
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Southington Mark Sciota, Town Manager 75 Main Street SOUTHINGTON, CT, US, 06489
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/21/2024 05:53 PM
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	SOUTHINGTON, CT, US, 06489
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: Friday, March 22, 2024 10:01 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775641174101: Your package has been delivered
Attachments: DeliveryPicture.jpeg

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hi. Your package was
delivered Fri, 03/22/2024 at
9:51am.



Delivered to 196 N MAIN ST, SOUTHLINGTON, CT 06489

[OBTAIN PROOF OF DELIVERY](#)



Delivery picture not showing? [View](#) in browser.

How was your delivery ?



TRACKING NUMBER	775641174101
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Southington Jeremy DeCarli, Dir of Planning 196 North Main Street SOUTHINGTON, CT, US, 06489
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/21/2024 05:53 PM
DELIVERED TO	Residence
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	SOUTHINGTON, CT, US, 06489

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, March 22, 2024 1:33 PM
To: Barbadora, Jeff
Subject: FedEx Shipment 775641250839: Your package has been delivered

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hi. Your package was
delivered Fri, 03/22/2024 at
1:23pm.



Delivered to 754 PEACHTREE ST NE, ATLANTA, GA 30308
Received by W.SHAW

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	775641250839
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Southern Tower Dev LLC, Real Estate Southern Tower Dev LLC, Real Estate 754 Peachtree Street, NE 16th Fl ATLANTA, GA, US, 30308
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/21/2024 05:53 PM
DELIVERED TO	Mailroom
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	ATLANTA, GA, US, 30308
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Colliers Engineering & Design CT, PC
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 #: 10206807
Colliers Engineering & Design CT, PC Project #: 23777109

July 11, 2023

Site Information

Site ID: 5000386237-VZW / MILLDALE CT
Site Name: MILLDALE CT
Carrier Name: Verizon Wireless
Address: 250 Meriden Waterbury Rd.
Plantsville, Connecticut 06479
Hartford County
Latitude: 41.564275°
Longitude: -72.891861°

Structure Information

Tower Type: 161-Ft Monopole
Mount Type: 12.50-Ft Platform

FUZE ID # 17123893

Analysis Results

Platform: 58.4% Pass*

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

***Contractor PMI Requirements:

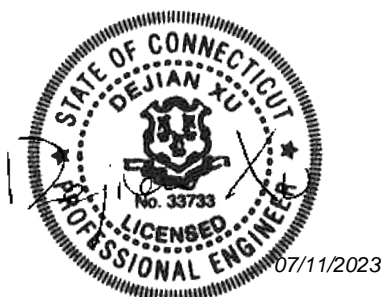
Included at the end of this MA report

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

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Carol Luengas



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
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 324376, dated May 28, 2021</i>
<i>Mount Mapping Report</i>	<i>Hudson Design Group, LLC, Site ID: 467473, dated March 24, 2021</i>
<i>Previous Post Modification Inspection</i>	<i>Maser Consulting Connecticut, Project #: 21777123A, dated October 31, 2022</i>
<i>Filter Add Scope</i>	<i>Provided by Verizon Wireless</i>

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} : 120 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 : 0.995
Seismic Parameters:	S_s : 0.196 g S_1 : 0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, L_v : 250 lbs. Maintenance Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
138.00	139.33	6	Andrew	NNHH-65B-R4	Retained
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Samsung	XXDWMM-12.5-65	
		3	Samsung	MT6407-77A	
		1	Raycap	RHSDC-6627-PF-48	
		1	-	GPS	Added
		2	Kaelus	BSF0020F3V1-1	

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design 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 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 is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Mount Pipe	58.4 %	Pass
Cross Arm	10.6 %	Pass
Standoff	17.2 %	Pass
Grating Angle	16.5 %	Pass
Standoff Plate	30.1 %	Pass
Cross Arm Plate	29.5 %	Pass
Kicker	7.8 %	Pass
Face Horizontal	15.1 %	Pass
Support Rail	40.9 %	Pass
Support Rail Corner	35.8 %	Pass
Light Pole	8.7 %	Pass
Threaded Rod	9.0 %	Pass
Mount Connection	11.1 %	Pass

Structure Rating – (Controlling Utilization of all Components)	58.4%
-----------------------------------------------------------------------	--------------

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	29.4	29.3	46.5	46.4
0.5	38.8	38.9	63.3	63.0
1	47.4	47.5	79.1	78.8

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

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

Install proposed filters on support rail. See Placement Diagram for reference.

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 #: 5000386237

SMART Project #: 10206807

Fuze Project ID: 17123893

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:

Install proposed filters on support rail. See Placement Diagram for reference.

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:

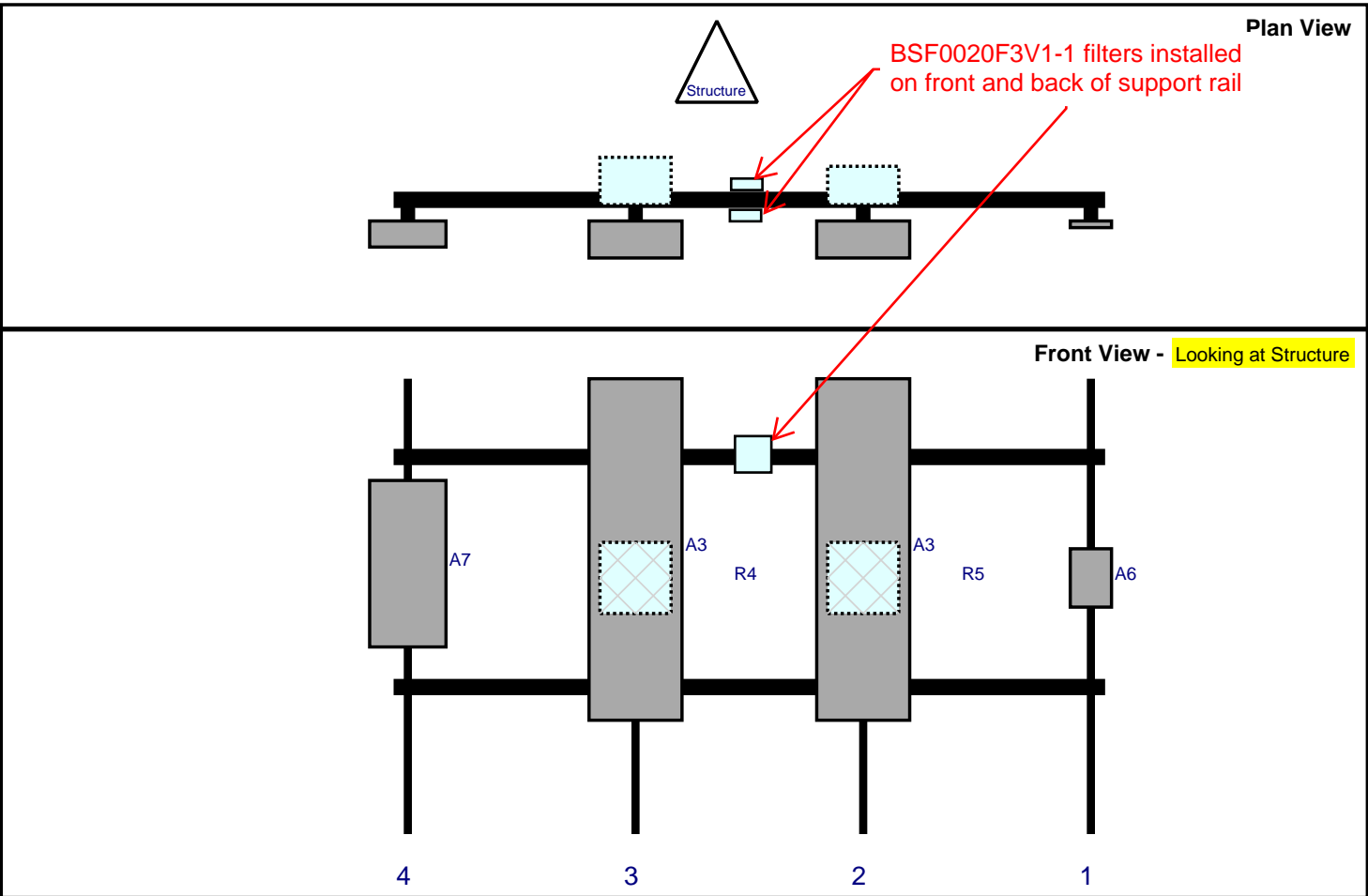
Yes No

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

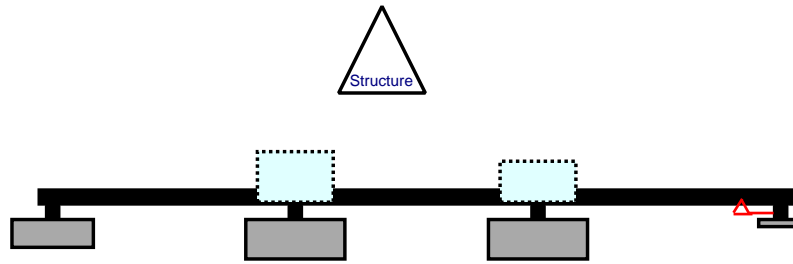
Certifying Individual:

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

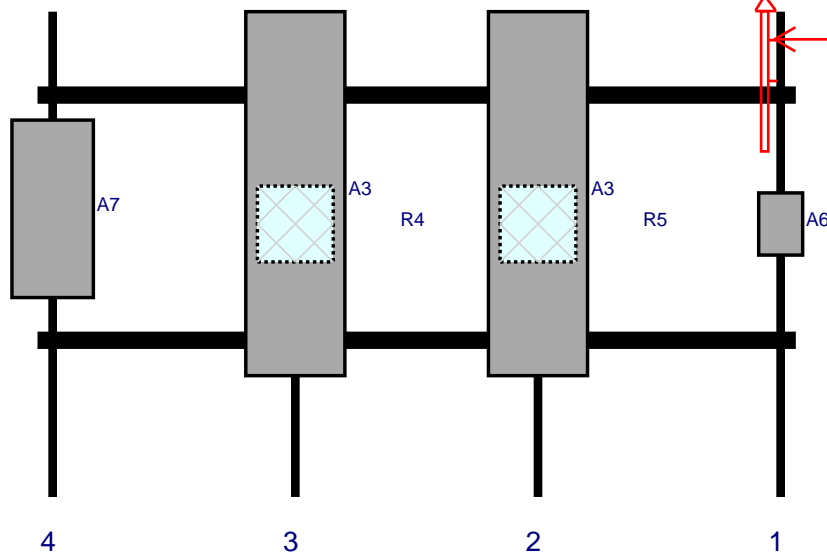


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	XXDWMM-12.5-65	12.3	8.7	147	1	a	Front	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	99	2	a	Front	36	0	Retained	10/10/2022
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	99	2	a	Behind	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	51	3	a	Front	36	0	Retained	10/10/2022
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	51	3	a	Behind	42	0	Retained	10/10/2022
A7	MT6407-77A	35.1	16.1	3	4	a	Front	39	0	Retained	10/10/2022
M64	BSF0020F3V1-1	10.6	10.9			Member				Added	
OVP	RHSDC-6627-PF-48	29.5	16.5			Member				Retained	10/10/2022
M64	BSF0020F3V1-1	10.6	10.9			Member				Added	

Plan View



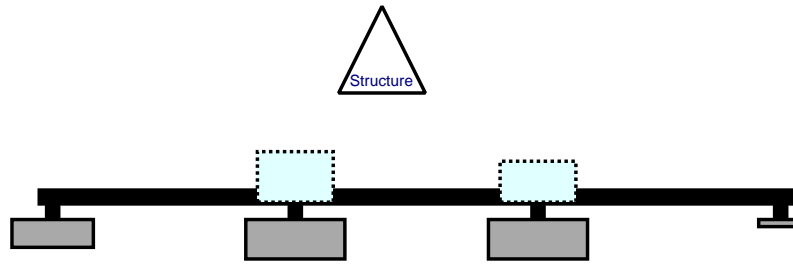
Front View - Looking at Structure



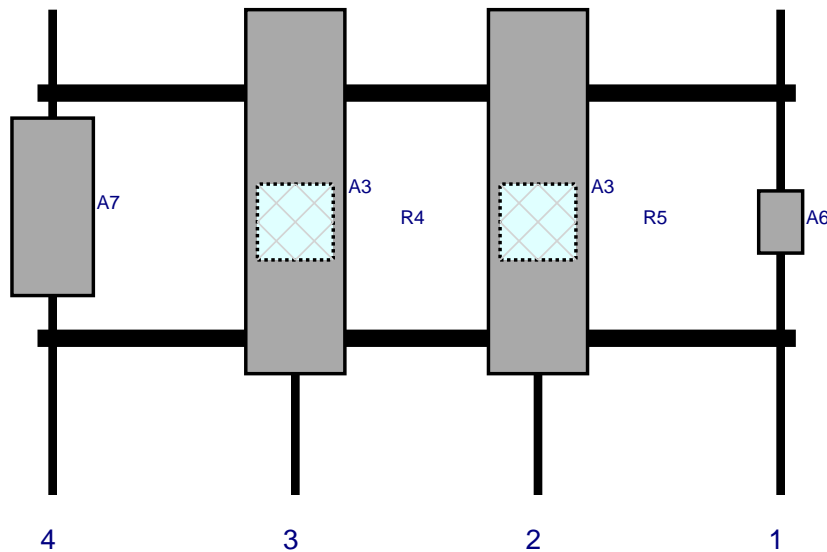
(1) GPS Antenna (Alcatel-Lucent KS-24019-L112A) in Beta Sector

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
A6	XXDWMM-12.5-65	12.3	8.7	147	1	a	Front	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	99	2	a	Front	36	0	Retained	10/10/2022
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	99	2	a	Behind	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	51	3	a	Front	36	0	Retained	10/10/2022
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	51	3	a	Behind	42	0	Retained	10/10/2022
A7	MT6407-77A	35.1	16.1	3	4	a	Front	39	0	Retained	10/10/2022

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
A6	XXDWMM-12.5-65	12.3	8.7	147	1	a	Front	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	99	2	a	Front	36	0	Retained	10/10/2022
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	99	2	a	Behind	42	0	Retained	10/10/2022
A3	NNHH-65B-R4	72	19.6	51	3	a	Front	36	0	Retained	10/10/2022
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	51	3	a	Behind	42	0	Retained	10/10/2022
A7	MT6407-77A	35.1	16.1	3	4	a	Front	39	0	Retained	10/10/2022

Oct 10, 2022 at 3:52:48 PM
1413-1415 Meriden Waterbury Rd
Plantsville CT 06479
United States

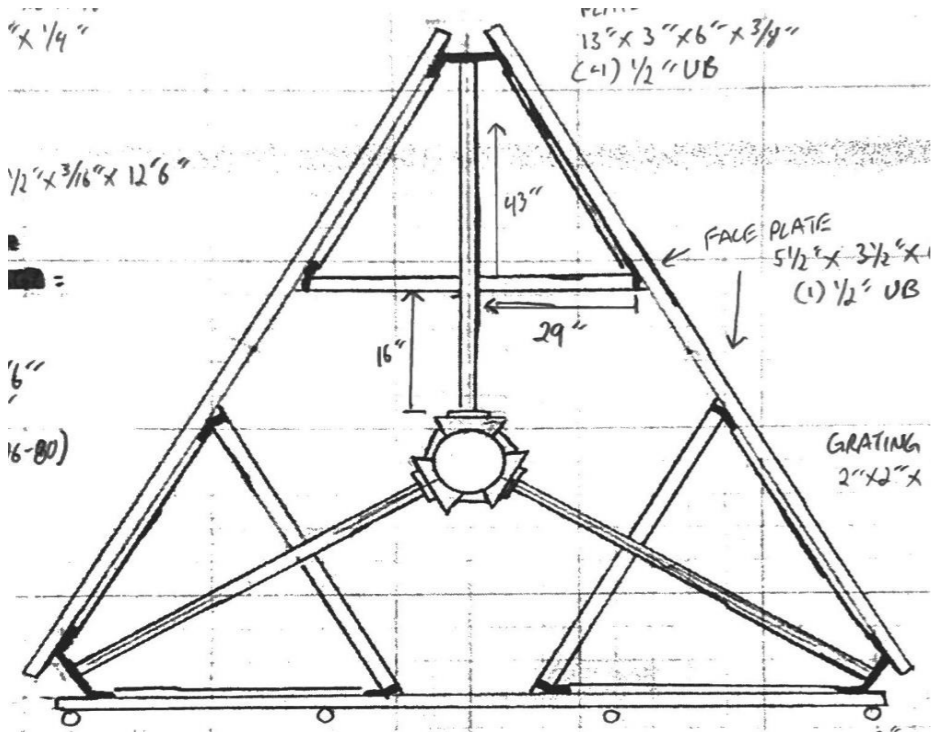


Oct 10, 2022 at 4:30:06 PM
1413-1415 Meriden Waterbury Rd
Plantsville CT 06479
United States



	Antenna Mount Mapping Form (PATENT PENDING)		FCC #	
	Tower Owner:	CROWN CASTLE	Mapping Date:	3/24/2021
	Site Name:	MILLDALE CT	Tower Type:	Monopole
	Site Number or ID:	467473	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	137	

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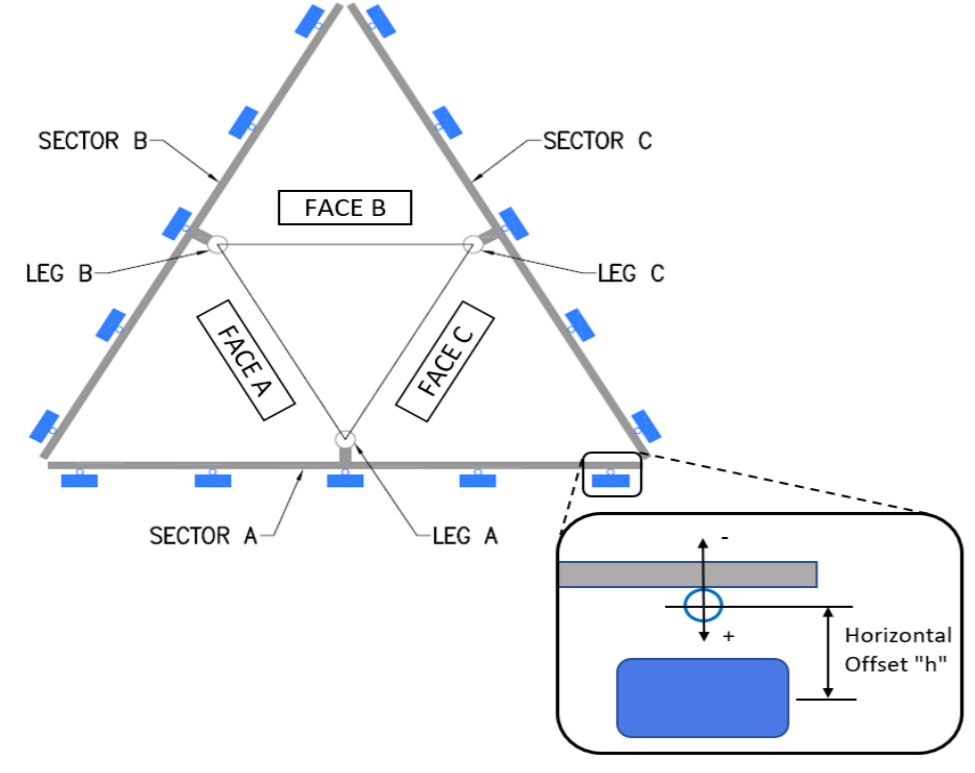
Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2-1/2"Ø x 3/16" X 96" LONG	65.00	3.00	C1	2-1/2"Ø x 3/16" X 96" LONG	65.00	3.00
A2	2-1/2"Ø x 3/16" X 96" LONG	65.00	51.00	C2	2-1/2"Ø x 3/16" X 96" LONG	65.00	51.00
A3	2-1/2"Ø x 3/16" X 96" LONG	65.00	99.00	C3	2-1/2"Ø x 3/16" X 96" LONG	65.00	99.00
A4	2-1/2"Ø x 3/16" X 96" LONG	65.00	147.00	C4	2-1/2"Ø x 3/16" X 96" LONG	65.00	147.00
A5				C5			
A6				C6			
B1	2-1/2"Ø x 3/16" X 96" LONG	65.00	3.00	D1			
B2	2-1/2"Ø x 3/16" X 96" LONG	65.00	51.00	D2			
B3	2-1/2"Ø x 3/16" X 96" LONG	65.00	99.00	D3			
B4	2-1/2"Ø x 3/16" X 96" LONG	65.00	147.00	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. :
 Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) : 5.5
 Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) : 4.41

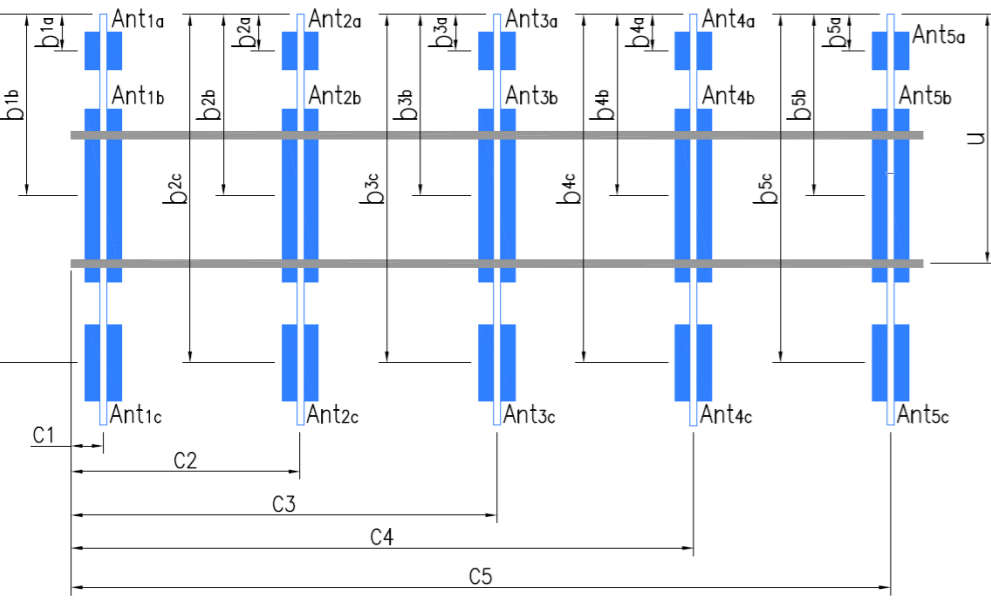
Please enter additional information or comments below.

MONOPOLE WALL THICKNESS: 0.210"

Tower Face Width at Mount Elev. (ft.):	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	25
----------------------------------------	-------------------------------------------------------------	----

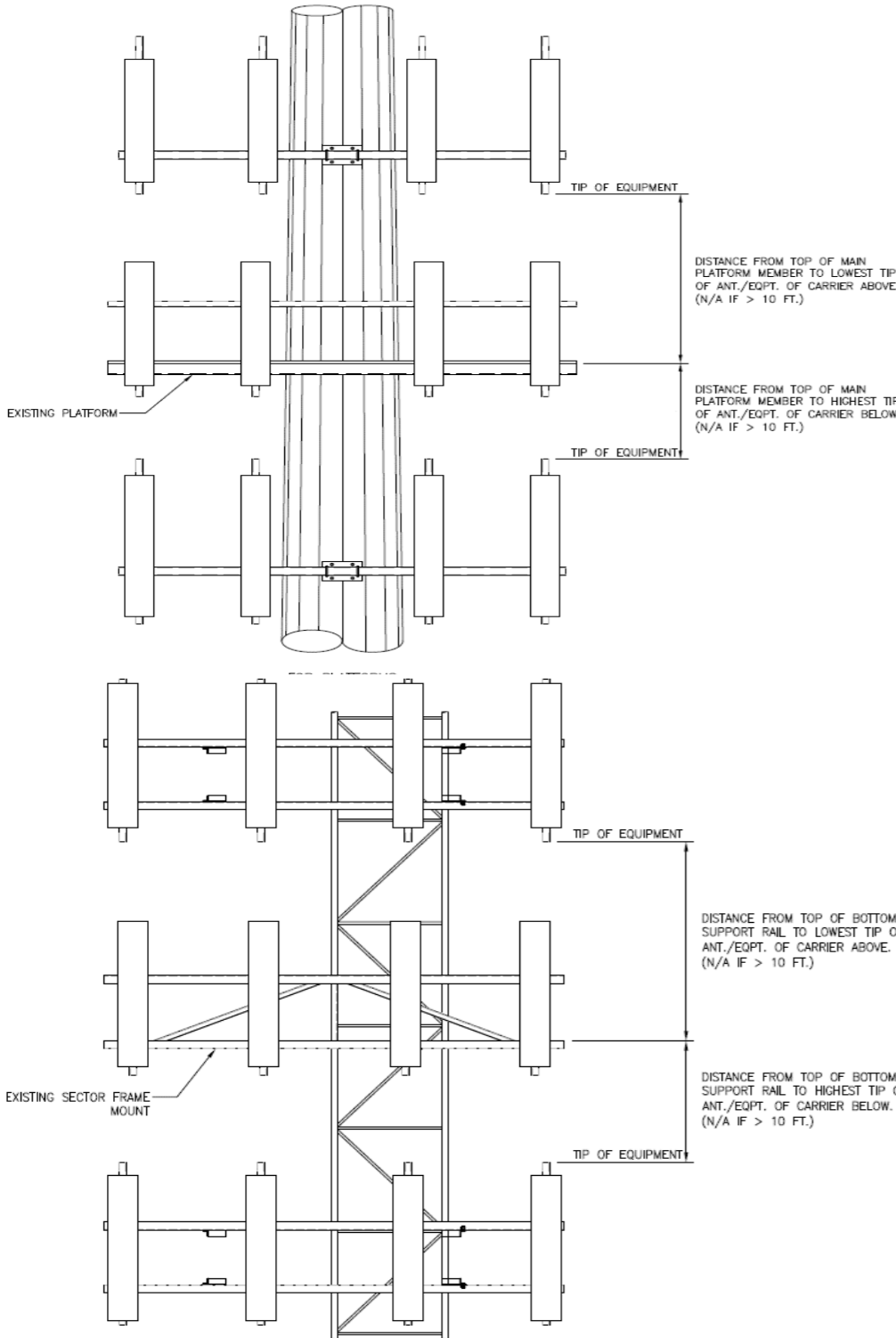


Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)		Photo Numbers
Sector A										
Ant _{1a}										
Ant _{1b}	LPA-80063-6CF	15.00	14.00	71.00		138.5	47.00	14.00	15.00	113,89
Ant _{1c}										
Ant _{2a}	RFV01U-D2A	16.00	10.00	16.00		139.167	39.00	-8.50		113,94
Ant _{2b}	NNHH-65B-R4-V1	20.00	8.00	72.00		138.75	44.00	10.00	15.00	113,91
Ant _{2c}										
Ant _{3a}	RFV01U-D1A	16.00	12.00	16.00		139.167	39.00	-10.00		114,96
Ant _{3b}	NNHH-65B-R4-V1	20.00	8.00	72.00		138.75	44.00	10.00	15.00	114,91
Ant _{3c}										
Ant _{4a}										
Ant _{4b}	LPA-80063-6CF	15.00	14.00	71.00		138.5	47.00	14.00	15.00	114,89
Ant _{4c}										
Ant _{5a}										
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector		Sector B												
Sector A:	10.00	Deg	Leg A:		Deg	Ant _{1a}	GPS						141.25	14.00				97-100
Sector B:	130.00	Deg	Leg B:		Deg	Ant _{1b}	LPA-80063-6CF	15.00	14.00	71.00			138.5	47.00	14.00	135.00		115,89
Sector C:	250.00	Deg	Leg C:		Deg	Ant _{1c}												
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	RFV01U-D2A	16.00	10.00	16.00			139.167	39.00	-8.50			115,94
Climbing Facility Information						Ant _{2b}	NNHH-65B-R4-V1	20.00	8.00	72.00			138.75	44.00	10.00	135.00		115,91
Location:	130.00	Deg	N/A			Ant _{2c}												
Climbing Facility	Corrosion Type:		Good condition.			Ant _{3a}	RFV01U-D1A	16.00	12.00	16.00			139.167	39.00	-10.00			96
	Access:		Climbing path was unobstructed.			Ant _{3b}	NNHH-65B-R4-V1	20.00	8.00	72.00			138.75	44.00	10.00	135.00		7,91
	Condition:		Good condition.			Ant _{3c}												
						Ant _{4a}												
						Ant _{4b}	LPA-80063-6CF	15.00	14.00	71.00			138.5	47.00	14.00	135.00		116,89
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}												
						Ant _{5c}												
						Ant on Standoff	RHSDC-6627-PF-48	15.00	10.00	28.00								106-111
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												
														Sector C				
						Ant _{1a}												
						Ant _{1b}	LPA-80063-6CF	15.00	14.00	71.00			138.5	47.00	14.00	255.00		8,89
						Ant _{1c}												
						Ant _{2a}	RFV01U-D2A	16.00	10.00	16.00			139.167	39.00	-8.50			94
						Ant _{2b}	NNHH-65B-R4-V1	20.00	8.00	72.00			138.75	44.00	10.00	205.00		9,91
						Ant _{2c}												
						Ant _{3a}	RFV01U-D1A	16.00	12.00	16.00			139.167	39.00	-10.00			112,96
						Ant _{3b}	NNHH-65B-R4-V1	20.00	8.00	72.00			138.75	44.00	10.00	205.00		112,91
						Ant _{3c}												
						Ant _{4a}												
						Ant _{4b}	LPA-80063-6CF	15.00	14.00	71.00			138.5	47.00	14.00	255.00		113,89
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}												
						Ant _{5c}												
						Ant on Standoff												
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												
														Sector D				
						Ant _{1a}												
						Ant _{1b}												
						Ant _{1c}												
						Ant _{2a}												
						Ant _{2b}												
						Ant _{2c}												
						Ant _{3a}												
						Ant _{3b}												
						Ant _{3c}												
						Ant _{4a}												
						Ant _{4b}												
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}												
						Ant _{5c}												
						Ant on Standoff												
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												



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

1		
2	(6) 1-5/8"Ø COAX, (1) 1-1/2" HYBRID, (1) 1/2"Ø COAX	168-173
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	CROWN CASTLE	Mapping Date:	3/24/2021
Site Name:	MILLDALE CT	Tower Type:	Monopole
Site Number or ID:	467473	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	137

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Please Insert Sketches of the Antenna Mount

MILLDALE CT

TOT =
 MOUNT CL = FACE PIPE = 137"
 TOWER D = 25"
 WALL = .210"

COLLAR = 9 1/2" x 5/8" PICS (22-35)
 - T ROD = (3) 5/8"
 - PLATE = 8" x 8" x 7/8" PICS (36-40)

HSS = 4" x 4" x 1/4"
 WALL =

T-F = 36"
 T-A = 68"

FACE PIPE = 3 1/2" x 3/16" x 12'6"
 WALL =

HANDRAIL
 2" x 3/16" x 12'6"
 V-SEP = 51"
 PICS (72-73, 76-80)

CORNER PLATE PICS (81-84)
 13" x 3" x 6" x 3/8"
 (1) 1/2" UB

FACE PLATE
 5 1/2" x 3 1/2" x 6" x 7/8"
 (1) 1/2" UB

GRATING ANGLE
 2" x 2" x 3/16"

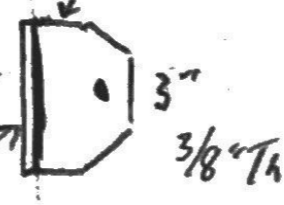
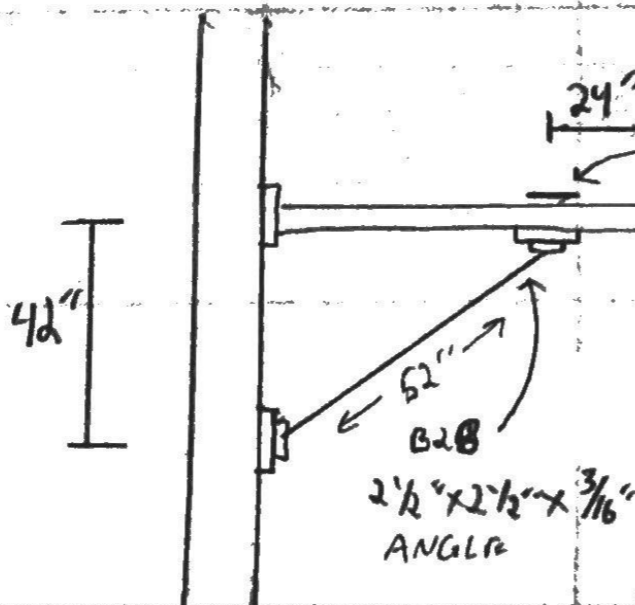
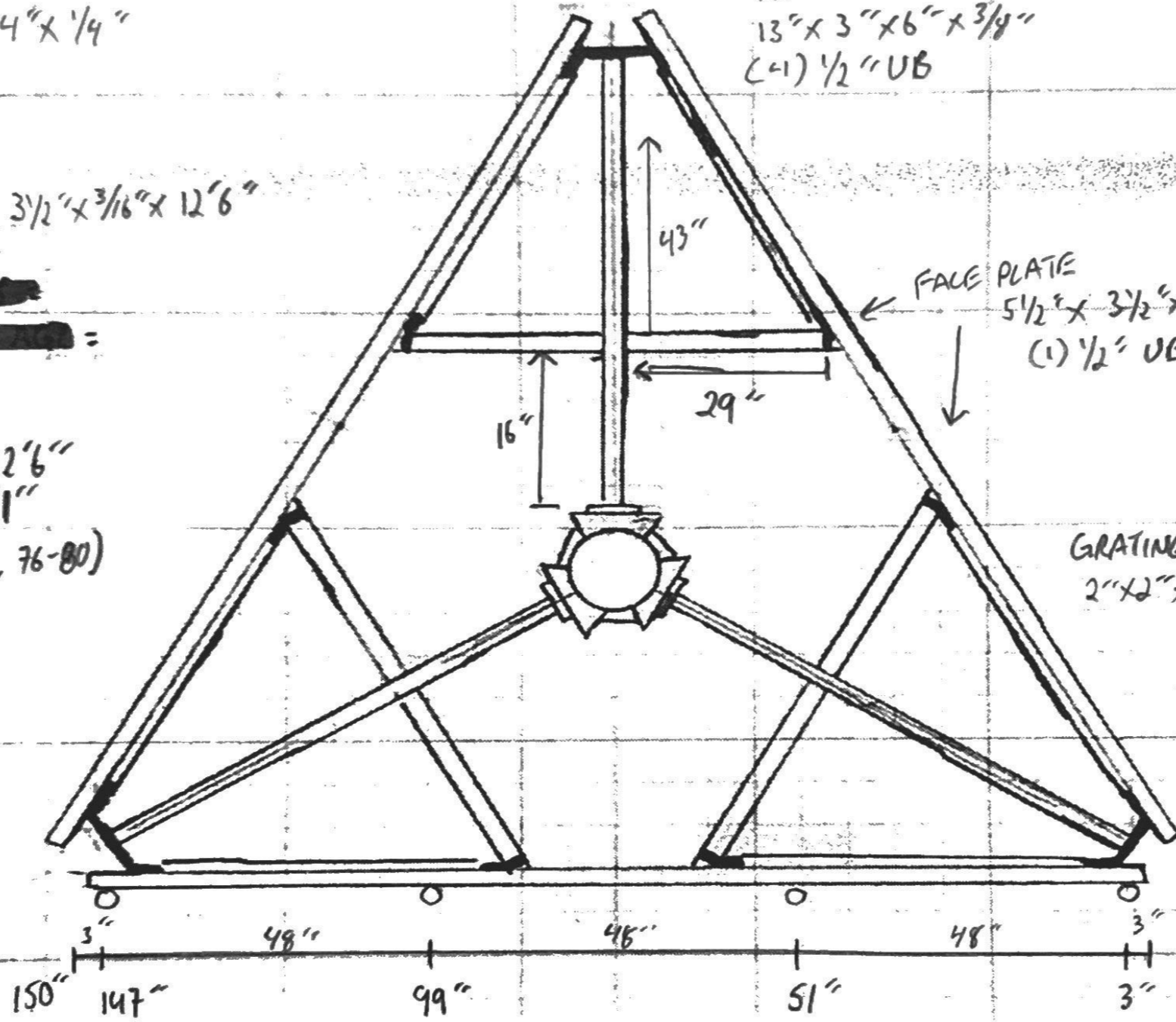
CROSS OVER PLATES
 8 1/2" x 7" x 3/8"
 1/2" UB

8 1/2" x 7" x 3/8" PLATE

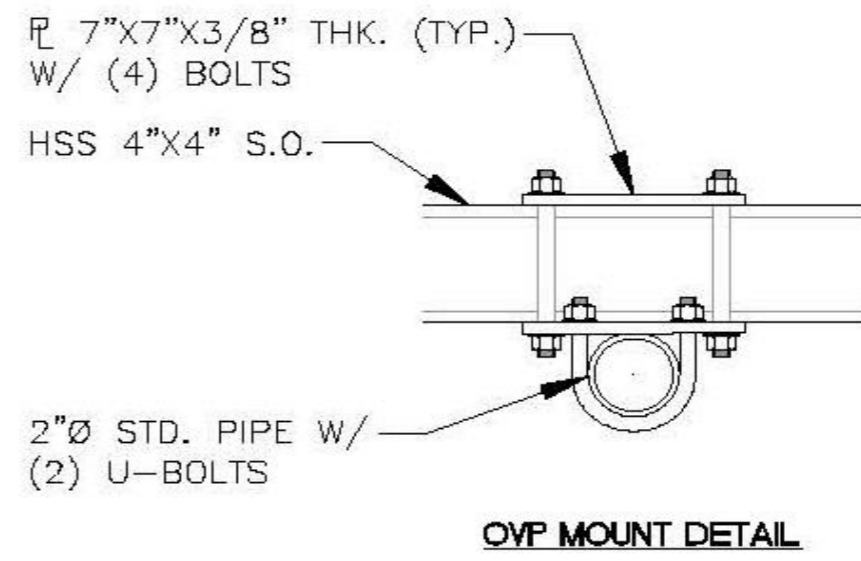
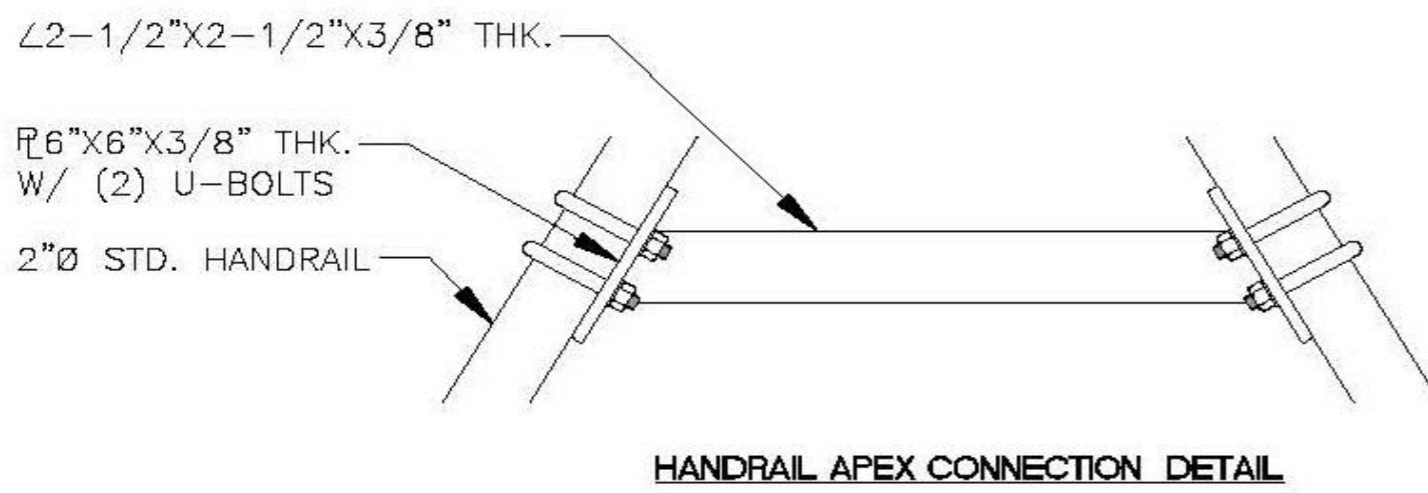
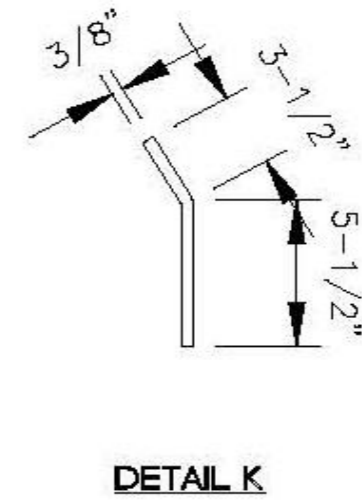
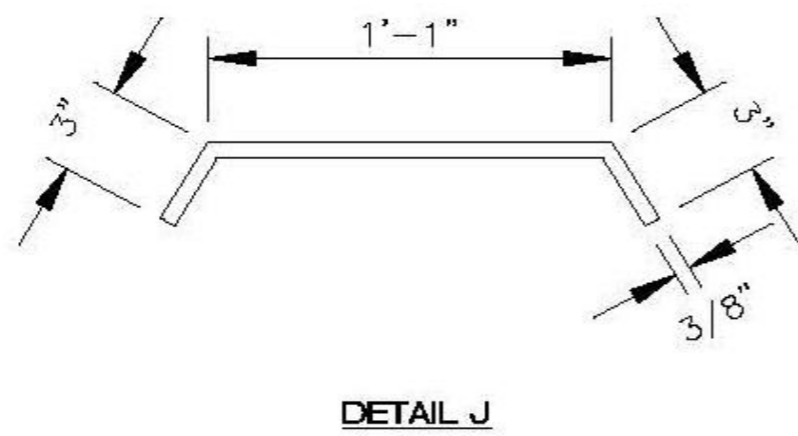
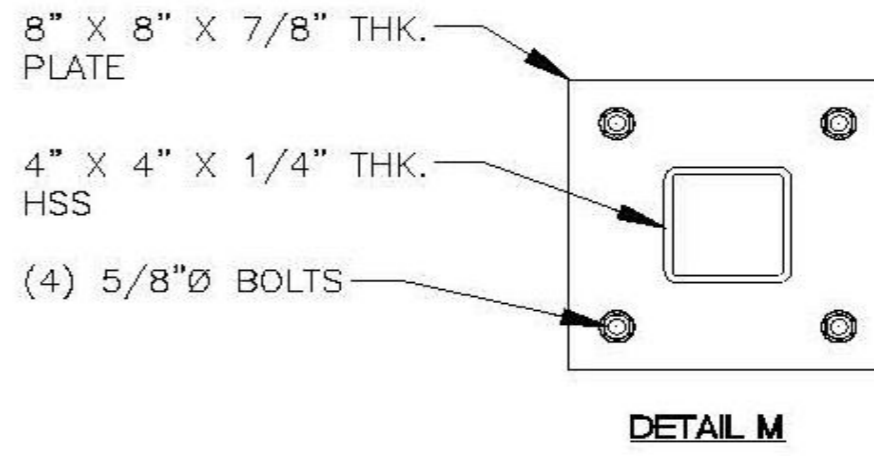
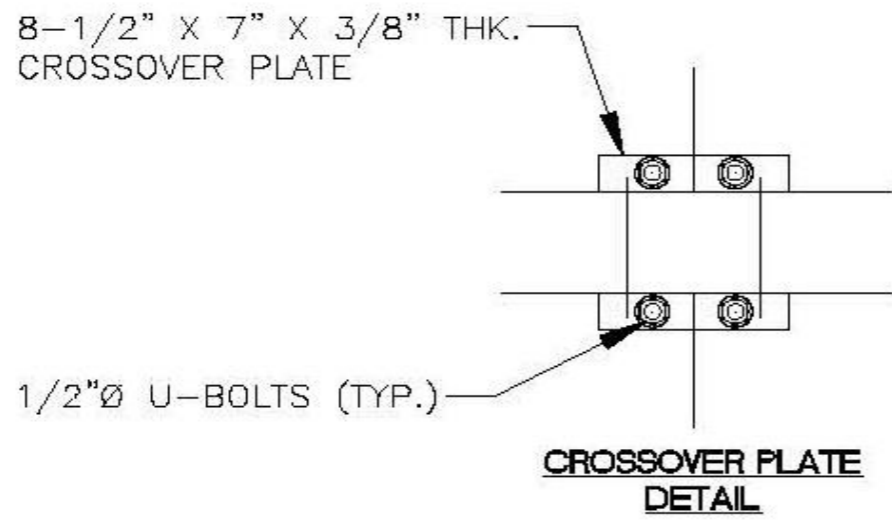
PICS (101-104, 121-131)

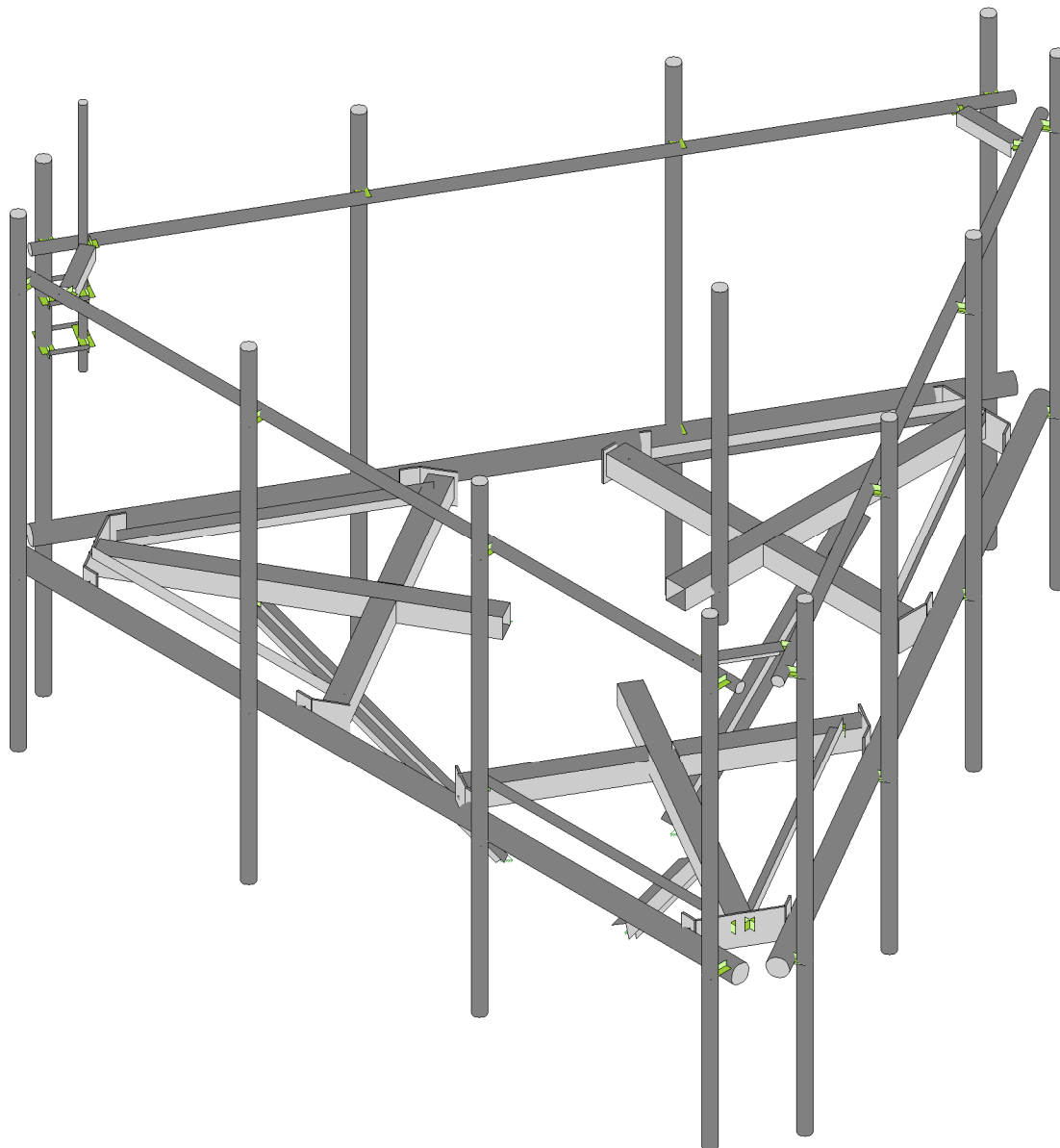
ICICER PLATE

8" x 6" x 3/8" PLATE
 3" x 3/8" TA



1578





Envelope Only Solution

Colliers Engineering & Des...

Project No. 10206807

5000386237-VZW_MT_LO_H

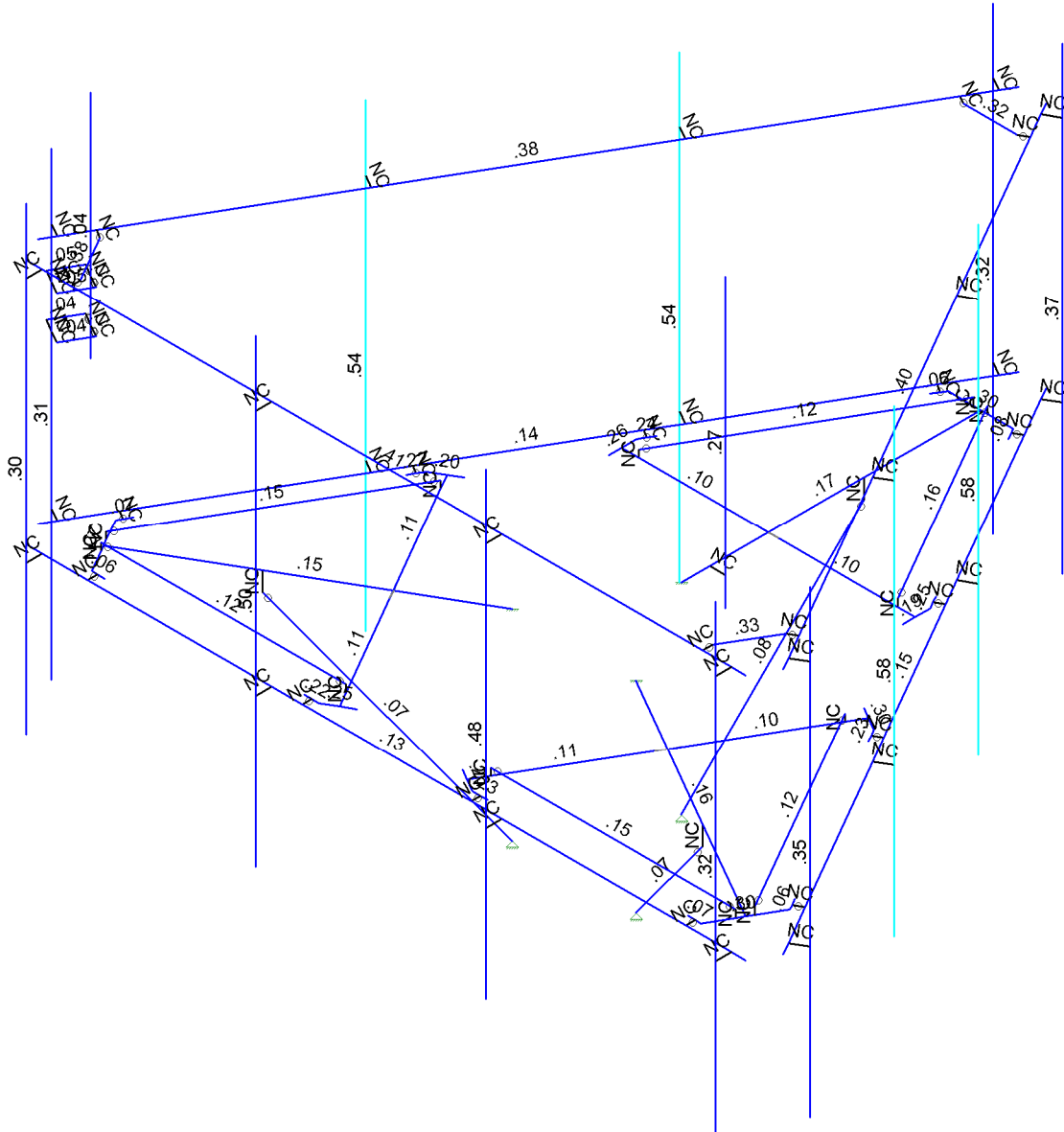
SK - 1

July 10, 2023 at 4:35 PM

5000386237-VZW_MT_LO_H.r3d



Code Check (ENR)
No Calc
> 1.0
50-1.0
75-90
50-75
0-.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & Des...

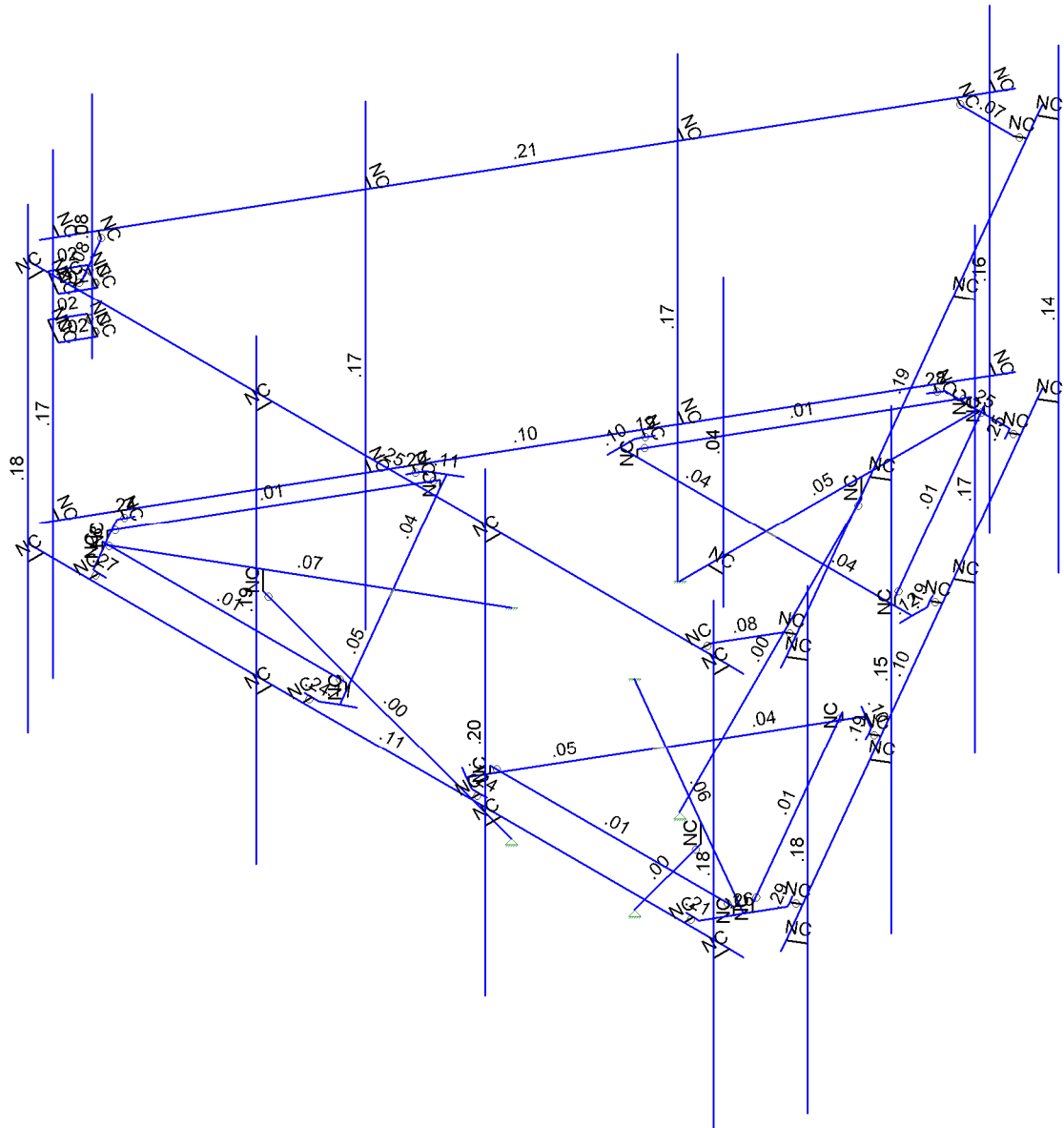
5000386237-VZW_MT_LO_H

SK - 2

July 10, 2023 at 4:35 PM

Project No. 10206807

5000386237-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & Des...	5000386237-VZW_MT_LO_H	SK - 3
Project No. 10206807		July 10, 2023 at 4:35 PM
		5000386237-VZW_MT_LO_H.r3d



Company : Colliers Engineering & Design
Designer :
Job Number : Project No. 10206807
Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
4:35 PM
Checked By: _____

Basic Load Cases

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1 Antenna D	None					102		
2 Antenna Di	None					102		
3 Antenna Wo (0 Deg)	None					102		
4 Antenna Wo (30 Deg)	None					102		
5 Antenna Wo (60 Deg)	None					102		
6 Antenna Wo (90 Deg)	None					102		
7 Antenna Wo (120 Deg)	None					102		
8 Antenna Wo (150 Deg)	None					102		
9 Antenna Wo (180 Deg)	None					102		
10 Antenna Wo (210 Deg)	None					102		
11 Antenna Wo (240 Deg)	None					102		
12 Antenna Wo (270 Deg)	None					102		
13 Antenna Wo (300 Deg)	None					102		
14 Antenna Wo (330 Deg)	None					102		
15 Antenna Wi (0 Deg)	None					102		
16 Antenna Wi (30 Deg)	None					102		
17 Antenna Wi (60 Deg)	None					102		
18 Antenna Wi (90 Deg)	None					102		
19 Antenna Wi (120 Deg)	None					102		
20 Antenna Wi (150 Deg)	None					102		
21 Antenna Wi (180 Deg)	None					102		
22 Antenna Wi (210 Deg)	None					102		
23 Antenna Wi (240 Deg)	None					102		
24 Antenna Wi (270 Deg)	None					102		
25 Antenna Wi (300 Deg)	None					102		
26 Antenna Wi (330 Deg)	None					102		
27 Antenna Wm (0 Deg)	None					102		
28 Antenna Wm (30 Deg)	None					102		
29 Antenna Wm (60 Deg)	None					102		
30 Antenna Wm (90 Deg)	None					102		
31 Antenna Wm (120 Deg)	None					102		
32 Antenna Wm (150 Deg)	None					102		
33 Antenna Wm (180 Deg)	None					102		
34 Antenna Wm (210 Deg)	None					102		
35 Antenna Wm (240 Deg)	None					102		
36 Antenna Wm (270 Deg)	None					102		
37 Antenna Wm (300 Deg)	None					102		
38 Antenna Wm (330 Deg)	None					102		
39 Structure D	None		-1					3
40 Structure Di	None						66	3
41 Structure Wo (0 Deg)	None						132	
42 Structure Wo (30 Deg)	None						132	
43 Structure Wo (60 Deg)	None						132	
44 Structure Wo (90 Deg)	None						132	
45 Structure Wo (120 D...	None						132	
46 Structure Wo (150 D...	None						132	
47 Structure Wo (180 D...	None						132	
48 Structure Wo (210 D...	None						132	
49 Structure Wo (240 D...	None						132	
50 Structure Wo (270 D...	None						132	
51 Structure Wo (300 D...	None						132	
52 Structure Wo (330 D...	None						132	
53 Structure Wi (0 Deg)	None						132	



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
54 Structure Wi (30 Deg)	None						132	
55 Structure Wi (60 Deg)	None						132	
56 Structure Wi (90 Deg)	None						132	
57 Structure Wi (120 De..)	None						132	
58 Structure Wi (150 De..)	None						132	
59 Structure Wi (180 De..)	None						132	
60 Structure Wi (210 De..)	None						132	
61 Structure Wi (240 De..)	None						132	
62 Structure Wi (270 De..)	None						132	
63 Structure Wi (300 De..)	None						132	
64 Structure Wi (330 De..)	None						132	
65 Structure Wm (0 Deg)	None						132	
66 Structure Wm (30 De..)	None						132	
67 Structure Wm (60 De..)	None						132	
68 Structure Wm (90 De..)	None						132	
69 Structure Wm (120 D..)	None						132	
70 Structure Wm (150 D..)	None						132	
71 Structure Wm (180 D..)	None						132	
72 Structure Wm (210 D..)	None						132	
73 Structure Wm (240 D..)	None						132	
74 Structure Wm (270 D..)	None						132	
75 Structure Wm (300 D..)	None						132	
76 Structure Wm (330 D..)	None						132	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					102		
82 Antenna Eh (0 Deg)	None					68		
83 Antenna Eh (90 Deg)	None					68		
84 Structure Ev	ELY		- .125					3
85 Structure Eh (0 Deg)	ELZ			- .314				3
86 Structure Eh (90 Deg)	ELX	.314						3
87 BLC 39 Transient Are..	None						30	
88 BLC 40 Transient Are..	None						30	
89 BLC 84 Transient Are..	None						30	
90 BLC 85 Transient Are..	None						30	
91 BLC 86 Transient Are..	None						30	

Load Combinations

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



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
 4:35 PM
 Checked By: _____

Load Combinations (Continued)

Id	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
15	1.2D + 1.0Di + 1.0Wi (6...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1						
16	1.2D + 1.0Di + 1.0Wi (9...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1						
17	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1						
18	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1						
19	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1						
20	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1						
21	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1						
22	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1						
23	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1						
24	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1						
25	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1								
26	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1								
27	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1								
28	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1								
29	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1								
30	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1								
31	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1								
32	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1								
33	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1								
34	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1								
35	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1								
36	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1								
37	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1								
38	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1								
39	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1								
40	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1								
41	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1								
42	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1								
43	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1								
44	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1								
45	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1								
46	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1								
47	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1								
48	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1								
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5												
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5												
51	1.4D	Yes	Y		1	1.4	39	1.4														
52	1.2D + 1.0Ev + 1.0Eh (0...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...			
53	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5		
54	1.2D + 1.0Ev + 1.0Eh (6...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866		
55	1.2D + 1.0Ev + 1.0Eh (9...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1		
56	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866		
57	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	.5	ELZ	-.866	E...	.5		
58	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...			
59	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	-.5	ELZ	-.866	E...	-.5		
60	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.866	ELZ	-.5	E...	-.866		
61	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1		
62	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.866	ELZ	.5	E...	-.866		
63	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5		
64	0.9D - 1.0Ev + 1.0Eh (0...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...			
65	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5		
66	0.9D - 1.0Ev + 1.0Eh (6...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866		
67	0.9D - 1.0Ev + 1.0Eh (9...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1		
68	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866		
69	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	.5	ELZ	-.866	E...	.5		
70	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...			
71	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	-.5	ELZ	-.866	E...	-.5		



Load Combinations (Continued)

Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
72 0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.866	ELZ	-.5	E...	-.866			
73 0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1			
74 0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.866	ELZ	.5	E...	-.866			
75 0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5			

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	SC	-0.	0	-1.243044	0	
2	N183	-0.	0	-6.451377	0	
3	N184	-2.557292	0	-2.758669	0	
4	N185	2.557292	0	-2.758669	0	
5	N186	-0.	0	-2.758669	0	
6	N187	-2.2541	.125	-2.758669	0	
7	N188	-0.122114	.125	-6.451377	0	
8	N189	2.2541	.125	-2.758669	0	
9	N190	0.122114	.125	-6.451377	0	
10	N191	-0.682668	0	-6.251839	0	
11	N192	-0.567464	0	-6.451377	0	
12	N193	0.567464	0	-6.451377	0	
13	N194	0.682668	0	-6.251839	0	
14	N195	-2.557292	0	-2.539898	0	
15	N196	-2.557292	0	-3.017583	0	
16	N197	-2.427076	0	-3.243124	0	
17	N198	2.557292	0	-2.539898	0	
18	N199	2.557292	0	-3.017583	0	
19	N200	2.427076	0	-3.243124	0	
20	N201	-2.489576	0	-3.13487	0	
21	N202	-2.628441	0	-3.215044	0	
22	N203	-0.614959	0	-6.369113	0	
23	N204	-0.759294	0	-6.452444	0	
24	N205	0.614959	0	-6.369113	0	
25	N206	0.759363	0	-6.452485	0	
26	N207	2.489576	0	-3.13487	0	
27	N208	2.628461	0	-3.215056	0	
28	N92	-0.	0	-1.743044	0	
29	N93	0.270833	0	-1.743044	0	
30	N30	1.076508	0	0.621522	0	
31	N31	5.587057	0	3.225689	0	
32	N32	3.667723	0	-0.835345	0	
33	N33	1.110432	0	3.594014	0	
34	N34	2.389078	0	1.379335	0	
35	N35	3.516128	.125	-0.572773	0	
36	N36	5.648114	.125	3.119935	0	
37	N37	1.262028	.125	3.331442	0	
38	N38	5.526	.125	3.331442	0	
39	N39	5.755585	0	2.534712	0	
40	N40	5.870789	0	2.734251	0	
41	N41	5.303325	0	3.717127	0	
42	N42	5.072917	0	3.717127	0	
43	N43	3.478262	0	-0.94473	0	
44	N44	3.891949	0	-0.705888	0	
45	N45	4.022165	0	-0.480347	0	
46	N46	0.920971	0	3.484629	0	
47	N47	1.334657	0	3.723471	0	
48	N48	1.59509	0	3.723471	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
49	N49	3.959665	0	-0.5886	0	
50	N50	4.098531	0	-0.668774	0	
51	N51	5.823293	0	2.651986	0	
52	N52	5.967628	0	2.568654	0	
53	N53	5.208334	0	3.717127	0	
54	N54	5.208334	0	3.883782	0	
55	N55	1.47009	0	3.723471	0	
56	N56	1.47009	0	3.883782	0	
57	N59	-1.076508	0	0.621522	0	
58	N60	-5.587057	0	3.225689	0	
59	N61	-1.110432	0	3.594014	0	
60	N62	-3.667723	0	-0.835345	0	
61	N63	-2.389078	0	1.379335	0	
62	N64	-1.262028	.125	3.331442	0	
63	N65	-5.526	.125	3.331442	0	
64	N66	-3.516128	.125	-0.572773	0	
65	N67	-5.648114	.125	3.119935	0	
66	N68	-5.072917	0	3.717127	0	
67	N69	-5.303325	0	3.717127	0	
68	N70	-5.870789	0	2.734251	0	
69	N71	-5.755585	0	2.534712	0	
70	N72	-0.920971	0	3.484629	0	
71	N73	-1.334657	0	3.723471	0	
72	N74	-1.59509	0	3.723471	0	
73	N75	-3.478262	0	-0.94473	0	
74	N76	-3.891949	0	-0.705888	0	
75	N77	-4.022165	0	-0.480347	0	
76	N78	-1.47009	0	3.723471	0	
77	N79	-1.47009	0	3.883782	0	
78	N80	-5.208334	0	3.717127	0	
79	N81	-5.208334	0	3.883782	0	
80	N82	-5.823293	0	2.651986	0	
81	N83	-5.967697	0	2.568614	0	
82	N84	-3.959665	0	-0.5886	0	
83	N85	-4.09855	0	-0.668786	0	
84	N86A	-0.	0	-4.425336	0	
85	N87A	-0.	-3.5	-1.243044	0	
86	N88	-0.	-0.333333	-4.425336	0	
87	N95	-6.25	0	3.883782	0	
88	N96	6.25	0	3.883878	0	
89	N97	-0.238454	0	-7.35455	0	
90	N98	-6.488537	0	3.47072	0	
91	N99	6.488454	0	3.470768	0	
92	N100	0.238537	0	-7.354598	0	
93	N101	6.	0	3.883782	0	
94	N102	6.	0	4.15992	0	
95	N109	-6.25	4.291667	3.883782	0	
96	N110	6.25	4.291667	3.883878	0	
97	N111	6.	4.291667	3.883782	0	
98	N112	6.	4.291667	4.15992	0	
99	N139	-0.238454	4.291667	-7.35455	0	
100	N140	-6.488537	4.291667	3.47072	0	
101	N169	6.488454	4.291667	3.470768	0	
102	N170	0.238537	4.291667	-7.354598	0	
103	N203A	0.270833	-.5	-1.743044	0	
104	N205A	0.270833	4.5	-1.743044	0	
105	N115	5.5	4.291667	3.883878	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
106	N116	-5.5	4.291667	3.883782	0	
107	N117	-6.113537	4.291667	2.821201	0	
108	N118	-0.613454	4.291667	-6.705031	0	
109	N119	0.613537	4.291667	-6.705079	0	
110	N120	6.113454	4.291667	2.821249	0	
111	N121	2.	0	3.883782	0	
112	N122	2.	0	4.15992	0	
113	N123	2.	4.291667	3.883782	0	
114	N124	2.	4.291667	4.15992	0	
115	N125	-2.	0	3.883782	0	
116	N126	-2.	0	4.15992	0	
117	N127	-2.	4.291667	3.883782	0	
118	N128	-2.	4.291667	4.15992	0	
119	N129	-6.	0	3.883782	0	
120	N130	-6.	0	4.15992	0	
121	N131	-6.	4.291667	3.883782	0	
122	N132	-6.	4.291667	4.15992	0	
123	N133	6.	5.416667	4.15992	0	
124	N134	2.	5.416667	4.15992	0	
125	N135	-2.	5.416667	4.15992	0	
126	N136	-6.	5.416667	4.15992	0	
127	N137	6.	-2.583333	4.15992	0	
128	N138	2.	-2.583333	4.15992	0	
129	N139A	-2.	-2.583333	4.15992	0	
130	N140A	-6.	-2.583333	4.15992	0	
131	N141	-6.363454	0	3.254261	0	
132	N142	-6.602596	0	3.116192	0	
133	N143	-6.363454	4.291667	3.254261	0	
134	N144	-6.602596	4.291667	3.116192	0	
135	N145	-4.363454	0	-0.20984	0	
136	N146	-4.602596	0	-0.347909	0	
137	N147	-4.363454	4.291667	-0.20984	0	
138	N148	-4.602596	4.291667	-0.347909	0	
139	N149	-2.363454	0	-3.673942	0	
140	N150	-2.602596	0	-3.812011	0	
141	N151	-2.363454	4.291667	-3.673942	0	
142	N152	-2.602596	4.291667	-3.812011	0	
143	N153	-0.363454	0	-7.138043	0	
144	N154	-0.602596	0	-7.276112	0	
145	N155	-0.363454	4.291667	-7.138043	0	
146	N156	-0.602596	4.291667	-7.276112	0	
147	N157	-6.602596	5.416667	3.116192	0	
148	N158	-4.602596	5.416667	-0.347909	0	
149	N159	-2.602596	5.416667	-3.812011	0	
150	N160	-0.602596	5.416667	-7.276112	0	
151	N161	-6.602596	-2.583333	3.116192	0	
152	N162	-4.602596	-2.583333	-0.347909	0	
153	N163	-2.602596	-2.583333	-3.812011	0	
154	N164	-0.602596	-2.583333	-7.276112	0	
155	N165	0.363454	0	-7.138043	0	
156	N166	0.602596	0	-7.276112	0	
157	N167	0.363454	4.291667	-7.138043	0	
158	N168	0.602596	4.291667	-7.276112	0	
159	N169A	2.363454	0	-3.673942	0	
160	N170A	2.602596	0	-3.812011	0	
161	N171	2.363454	4.291667	-3.673942	0	
162	N172	2.602596	4.291667	-3.812011	0	



Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Standoff	HSS4X4X4	None	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2	Cross Arm	HSS4X4X4	None	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	Grating Angle	L2x2x3	None	None	A36 Gr.36	Typical	.722	.271	.271	.009
4	Face Horizontal	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
5	Standoff Plate	PL3/8x6	None	None	A36 Gr.36	Typical	2.25	.026	6.75	.101
6	Cross Arm Plate	PL3/8x6	None	None	A36 Gr.36	Typical	2.25	.026	6.75	.101
7	Mount Pipe	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Support Rail	PIPE 1.5	None	None	A53 Gr.B	Typical	.749	.293	.293	.586
9	Support Rail Corner	L2.5x2.5x4	None	None	A36 Gr.36	Typical	1.19	.692	.692	.026
10	Kicker	LL2.5x2.5x3x3	None	None	A36 Gr.36	Typical	1.8	2.46	1.07	.023
11	Threaded Rod	SR 0.625	None	None	A36 Gr.36	Typical	.307	.007	.007	.015
12	Light Pole	PIPE 1.0	None	None	A53 Gr.B	Typical	.469	.083	.083	.166

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft^3]	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	OVP	N205A	N203A			Mount Pipe	None	None	A53 Gr.B	Typical
2	M18	N32	N34			Cross Arm	None	None	A500 Gr.B...	Typical
3	M19	N33	N34			Cross Arm	None	None	A500 Gr.B...	Typical
4	M20	N30	N31			Standoff	None	None	A500 Gr.B...	Typical
5	M21	N35	N36			Grating Angle	None	None	A36 Gr.36	Typical
6	M22	N37	N38		270	Grating Angle	None	None	A36 Gr.36	Typical
7	M23	N39	N40			Standoff Plate	None	None	A36 Gr.36	Typical
8	M24	N40	N41			Standoff Plate	None	None	A36 Gr.36	Typical
9	M25	N41	N42			Standoff Plate	None	None	A36 Gr.36	Typical
10	M26	N43	N44			Cross Arm Plate	None	None	A36 Gr.36	Typical
11	M27	N44	N45			Cross Arm Plate	None	None	A36 Gr.36	Typical
12	M28	N46	N47			Cross Arm Plate	None	None	A36 Gr.36	Typical
13	M29	N47	N48			Cross Arm Plate	None	None	A36 Gr.36	Typical
14	M30	N49	N50			RIGID	None	None	RIGID	Typical
15	M31	N51	N52			RIGID	None	None	RIGID	Typical
16	M32	N53	N54			RIGID	None	None	RIGID	Typical
17	M33	N55	N56			RIGID	None	None	RIGID	Typical
18	M35	N61	N63			Cross Arm	None	None	A500 Gr.B...	Typical
19	M36	N62	N63			Cross Arm	None	None	A500 Gr.B...	Typical
20	M37	N59	N60			Standoff	None	None	A500 Gr.B...	Typical
21	M38	N64	N65			Grating Angle	None	None	A36 Gr.36	Typical
22	M39	N66	N67		270	Grating Angle	None	None	A36 Gr.36	Typical
23	M40	N68	N69			Standoff Plate	None	None	A36 Gr.36	Typical
24	M41	N69	N70			Standoff Plate	None	None	A36 Gr.36	Typical
25	M42	N70	N71			Standoff Plate	None	None	A36 Gr.36	Typical
26	M43	N72	N73			Cross Arm Plate	None	None	A36 Gr.36	Typical
27	M44	N73	N74			Cross Arm Plate	None	None	A36 Gr.36	Typical
28	M45	N75	N76			Cross Arm Plate	None	None	A36 Gr.36	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
29	M46	N76	N77			Cross Arm Plate	None	None	A36 Gr.36	Typical
30	M47	N78	N79			RIGID	None	None	RIGID	Typical
31	M48	N80	N81			RIGID	None	None	RIGID	Typical
32	M49	N82	N83			RIGID	None	None	RIGID	Typical
33	M50	N84	N85			RIGID	None	None	RIGID	Typical
34	M51A	N86A	N88			RIGID	None	None	RIGID	Typical
35	M52	N88	N87A			Kicker	None	None	A36 Gr.36	Typical
36	M52A	N184	N186			Cross Arm	None	None	A500 Gr.B...	Typical
37	M53A	N185	N186			Cross Arm	None	None	A500 Gr.B...	Typical
38	M54	N93	N92			RIGID	None	None	RIGID	Typical
39	FACE	N95	N96			Face Horizontal	None	None	A53 Gr.B	Typical
40	M58	N97	N98			Face Horizontal	None	None	A53 Gr.B	Typical
41	M59	N99	N100			Face Horizontal	None	None	A53 Gr.B	Typical
42	M60	N101	N102			RIGID	None	None	RIGID	Typical
43	M64	N109	N110			Support Rail	None	None	A53 Gr.B	Typical
44	M65	N111	N112			RIGID	None	None	RIGID	Typical
45	M77	N139	N140			Support Rail	None	None	A53 Gr.B	Typical
46	M90	N169	N170			Support Rail	None	None	A53 Gr.B	Typical
47	M91	SC	N183			Standoff	None	None	A500 Gr.B...	Typical
48	M93	N187	N188			Grating Angle	None	None	A36 Gr.36	Typical
49	M94	N189	N190		270	Grating Angle	None	None	A36 Gr.36	Typical
50	M95	N191	N192			Standoff Plate	None	None	A36 Gr.36	Typical
51	M96	N192	N193			Standoff Plate	None	None	A36 Gr.36	Typical
52	M97	N193	N194			Standoff Plate	None	None	A36 Gr.36	Typical
53	M98	N195	N196			Cross Arm Plate	None	None	A36 Gr.36	Typical
54	M99	N196	N197			Cross Arm Plate	None	None	A36 Gr.36	Typical
55	M100	N198	N199			Cross Arm Plate	None	None	A36 Gr.36	Typical
56	M101	N199	N200			Cross Arm Plate	None	None	A36 Gr.36	Typical
57	M102	N201	N202			RIGID	None	None	RIGID	Typical
58	M103	N203	N204			RIGID	None	None	RIGID	Typical
59	M104	N205	N206			RIGID	None	None	RIGID	Typical
60	M105	N207	N208			RIGID	None	None	RIGID	Typical
61	M67	N221	N216		180	Support Rail C...	None	None	A36 Gr.36	Typical
62	LIVE1	N121	N122			RIGID	None	None	RIGID	Typical
63	M71	N123	N124			RIGID	None	None	RIGID	Typical
64	LIVE2	N125	N126			RIGID	None	None	RIGID	Typical
65	M73	N127	N128			RIGID	None	None	RIGID	Typical
66	M74	N129	N130			RIGID	None	None	RIGID	Typical
67	M75	N131	N132			RIGID	None	None	RIGID	Typical
68	MP1A	N133	N137			Mount Pipe	None	None	A53 Gr.B	Typical
69	MP2A	N134	N138			Mount Pipe	None	None	A53 Gr.B	Typical
70	MP3A	N135	N139A			Mount Pipe	None	None	A53 Gr.B	Typical
71	MP4A	N136	N140A			Mount Pipe	None	None	A53 Gr.B	Typical
72	M80	N141	N142			RIGID	None	None	RIGID	Typical
73	M81	N143	N144			RIGID	None	None	RIGID	Typical
74	M82	N145	N146			RIGID	None	None	RIGID	Typical
75	M83	N147	N148			RIGID	None	None	RIGID	Typical
76	M84	N149	N150			RIGID	None	None	RIGID	Typical
77	M85	N151	N152			RIGID	None	None	RIGID	Typical
78	M86	N153	N154			RIGID	None	None	RIGID	Typical
79	M87	N155	N156			RIGID	None	None	RIGID	Typical
80	MP1B	N157	N161			Mount Pipe	None	None	A53 Gr.B	Typical
81	MP2B	N158	N162			Mount Pipe	None	None	A53 Gr.B	Typical
82	MP3B	N159	N163			Mount Pipe	None	None	A53 Gr.B	Typical
83	MP4B	N160	N164			Mount Pipe	None	None	A53 Gr.B	Typical
84	M92	N165	N166			RIGID	None	None	RIGID	Typical
85	M93A	N167	N168			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
86	M94A	N169A	N170A			RIGID	None	None	RIGID	Typical
87	M95A	N171	N172			RIGID	None	None	RIGID	Typical
88	M96A	N173	N174			RIGID	None	None	RIGID	Typical
89	M97A	N175	N176			RIGID	None	None	RIGID	Typical
90	M98A	N177	N178			RIGID	None	None	RIGID	Typical
91	M99A	N179	N180			RIGID	None	None	RIGID	Typical
92	MP1C	N181	N185A			Mount Pipe	None	None	A53 Gr.B	Typical
93	MP2C	N182	N186A			Mount Pipe	None	None	A53 Gr.B	Typical
94	MP3C	N183A	N187A			Mount Pipe	None	None	A53 Gr.B	Typical
95	MP4C	N184A	N188A			Mount Pipe	None	None	A53 Gr.B	Typical
96	M100A	N183B	N185B			RIGID	None	None	RIGID	Typical
97	M101A	N185B	N184B			Kicker	None	None	A36 Gr.36	Typical
98	M102A	N186B	N188B			RIGID	None	None	RIGID	Typical
99	M103A	N188B	N187B			Kicker	None	None	A36 Gr.36	Typical
100	M104A	N65	N191A			RIGID	None	None	RIGID	Typical
101	M105A	N67	N193A			RIGID	None	None	RIGID	Typical
102	M106	N66	N192A			RIGID	None	None	RIGID	Typical
103	M107	N64	N190A			RIGID	None	None	RIGID	Typical
104	M108	N36	N199A			RIGID	None	None	RIGID	Typical
105	M109	N38	N201A			RIGID	None	None	RIGID	Typical
106	M110	N37	N200A			RIGID	None	None	RIGID	Typical
107	M111	N35	N198A			RIGID	None	None	RIGID	Typical
108	M112	N188	N207A			RIGID	None	None	RIGID	Typical
109	M113	N190	N209			RIGID	None	None	RIGID	Typical
110	M114	N189	N208A			RIGID	None	None	RIGID	Typical
111	M115	N187	N206B			RIGID	None	None	RIGID	Typical
112	LIGHT	N202A	N203B			Light Pole	None	None	A53 Gr.B	Typical
113	M117	N215	N211			RIGID	None	None	RIGID	Typical
114	M118	N211	N213			RIGID	None	None	RIGID	Typical
115	M119	N209A	N205B			RIGID	None	None	RIGID	Typical
116	M120	N205B	N207B			RIGID	None	None	RIGID	Typical
117	M121	N214	N210			RIGID	None	None	RIGID	Typical
118	M122	N210	N212			RIGID	None	None	RIGID	Typical
119	M123	N208B	N204B			RIGID	None	None	RIGID	Typical
120	M124	N204B	N206C			RIGID	None	None	RIGID	Typical
121	M125	N215	N209A			Threaded Rod	None	None	A36 Gr.36	Typical
122	M126	N213	N207B			Threaded Rod	None	None	A36 Gr.36	Typical
123	M127	N214	N208B			Threaded Rod	None	None	A36 Gr.36	Typical
124	M128	N212	N206C			Threaded Rod	None	None	A36 Gr.36	Typical
125	M129	N116	N217			RIGID	None	None	RIGID	Typical
126	M130	N115	N216			RIGID	None	None	RIGID	Typical
127	M131	N120	N221			RIGID	None	None	RIGID	Typical
128	M132	N119	N220			RIGID	None	None	RIGID	Typical
129	M133	N118	N225			RIGID	None	None	RIGID	Typical
130	M134	N117	N224			RIGID	None	None	RIGID	Typical
131	M133A	N225	N220		180	Support Rail C...	None	None	A36 Gr.36	Typical
132	M134A	N217	N224		180	Support Rail C...	None	None	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic...
1	OVP						Yes	** NA **			None
2	M18				2		Yes	** NA **			None
3	M19				2		Yes	** NA **			None
4	M20						Yes	** NA **			None
5	M21	OOOOOX	OOOOOX				Yes	** NA **			None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
6	M22	OOOOXO	OOOOXO				Yes	** NA **			None
7	M23						Yes	** NA **			None
8	M24						Yes	** NA **			None
9	M25						Yes	** NA **			None
10	M26						Yes	** NA **			None
11	M27						Yes	** NA **			None
12	M28						Yes	** NA **			None
13	M29						Yes	** NA **			None
14	M30		BenPIN				Yes	** NA **			None
15	M31		BenPIN				Yes	** NA **			None
16	M32		BenPIN				Yes	** NA **			None
17	M33		BenPIN				Yes	** NA **			None
18	M35				2		Yes	** NA **			None
19	M36				2		Yes	** NA **			None
20	M37						Yes	** NA **			None
21	M38	OOOOOX	OOOOOX				Yes	** NA **			None
22	M39	OOOOXO	OOOOXO				Yes	** NA **			None
23	M40						Yes	** NA **			None
24	M41						Yes	** NA **			None
25	M42						Yes	** NA **			None
26	M43						Yes	** NA **			None
27	M44						Yes	** NA **			None
28	M45						Yes	** NA **			None
29	M46						Yes	** NA **			None
30	M47		BenPIN				Yes	** NA **			None
31	M48		BenPIN				Yes	** NA **			None
32	M49		BenPIN				Yes	** NA **			None
33	M50		BenPIN				Yes	** NA **			None
34	M51A						Yes	** NA **			None
35	M52	BenPIN					Yes	** NA **			None
36	M52A				2		Yes	** NA **			None
37	M53A				2		Yes	** NA **			None
38	M54						Yes	** NA **			None
39	FACE						Yes	** NA **			None
40	M58						Yes	** NA **			None
41	M59						Yes	** NA **			None
42	M60						Yes	** NA **			None
43	M64						Yes	** NA **			None
44	M65						Yes	** NA **			None
45	M77						Yes	** NA **			None
46	M90						Yes	** NA **			None
47	M91						Yes	** NA **			None
48	M93	OOOOOX	OOOOOX				Yes	** NA **			None
49	M94	OOOOXO	OOOOXO				Yes	** NA **			None
50	M95						Yes	** NA **			None
51	M96						Yes	** NA **			None
52	M97						Yes	** NA **			None
53	M98						Yes	** NA **			None
54	M99						Yes	** NA **			None
55	M100						Yes	** NA **			None
56	M101						Yes	** NA **			None
57	M102		BenPIN				Yes	** NA **			None
58	M103		BenPIN				Yes	** NA **			None
59	M104		BenPIN				Yes	** NA **			None
60	M105		BenPIN				Yes	** NA **			None
61	M67						Yes	** NA **			None
62	LIVE1						Yes	** NA **			None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic..
63	M71						Yes	** NA **			None
64	LIVE2						Yes	** NA **			None
65	M73						Yes	** NA **			None
66	M74						Yes	** NA **			None
67	M75						Yes	** NA **			None
68	MP1A						Yes	** NA **			None
69	MP2A						Yes	** NA **			None
70	MP3A						Yes	** NA **			None
71	MP4A						Yes	** NA **			None
72	M80						Yes	** NA **			None
73	M81						Yes	** NA **			None
74	M82						Yes	** NA **			None
75	M83						Yes	** NA **			None
76	M84						Yes	** NA **			None
77	M85						Yes	** NA **			None
78	M86						Yes	** NA **			None
79	M87						Yes	** NA **			None
80	MP1B						Yes	** NA **			None
81	MP2B						Yes	** NA **			None
82	MP3B						Yes	** NA **			None
83	MP4B						Yes	** NA **			None
84	M92						Yes	** NA **			None
85	M93A						Yes	** NA **			None
86	M94A						Yes	** NA **			None
87	M95A						Yes	** NA **			None
88	M96A						Yes	** NA **			None
89	M97A						Yes	** NA **			None
90	M98A						Yes	** NA **			None
91	M99A						Yes	** NA **			None
92	MP1C						Yes	** NA **			None
93	MP2C						Yes	** NA **			None
94	MP3C						Yes	** NA **			None
95	MP4C						Yes	** NA **			None
96	M100A						Yes	** NA **			None
97	M101A	BenPIN					Yes	** NA **			None
98	M102A						Yes	** NA **			None
99	M103A	BenPIN					Yes	** NA **			None
100	M104A						Yes	** NA **			None
101	M105A						Yes	** NA **			None
102	M106						Yes	** NA **			None
103	M107						Yes	** NA **			None
104	M108						Yes	** NA **			None
105	M109						Yes	** NA **			None
106	M110						Yes	** NA **			None
107	M111						Yes	** NA **			None
108	M112						Yes	** NA **			None
109	M113						Yes	** NA **			None
110	M114						Yes	** NA **			None
111	M115						Yes	** NA **			None
112	LIGHT						Yes	** NA **			None
113	M117						Yes	** NA **			None
114	M118						Yes	** NA **			None
115	M119		OOOXOO				Yes	** NA **			None
116	M120	OOOXOX					Yes	** NA **			None
117	M121						Yes	** NA **			None
118	M122						Yes	** NA **			None
119	M123		OOOXOO				Yes	** NA **			None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
120	M124	OOOXOX					Yes	** NA **			None
121	M125						Yes	** NA **			None
122	M126						Yes	** NA **			None
123	M127						Yes	** NA **			None
124	M128						Yes	** NA **			None
125	M129	OOOOOX					Yes	** NA **			None
126	M130	OOOOOX					Yes	** NA **			None
127	M131	OOOOOX					Yes	** NA **			None
128	M132	OOOOOX					Yes	** NA **			None
129	M133	OOOOOX					Yes	** NA **			None
130	M134	OOOOOX					Yes	** NA **			None
131	M133A						Yes	** NA **			None
132	M134A						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-39.15	1
2	MP2A	My	-.019	1
3	MP2A	Mz	.003	1
4	MP2A	Y	-39.15	5
5	MP2A	My	-.019	5
6	MP2A	Mz	.003	5
7	MP2B	Y	-39.15	1
8	MP2B	My	.003	1
9	MP2B	Mz	-.019	1
10	MP2B	Y	-39.15	5
11	MP2B	My	.003	5
12	MP2B	Mz	-.019	5
13	MP2C	Y	-39.15	1
14	MP2C	My	.019	1
15	MP2C	Mz	.003	1
16	MP2C	Y	-39.15	5
17	MP2C	My	.019	5
18	MP2C	Mz	.003	5
19	MP3A	Y	-39.15	1
20	MP3A	My	-.019	1
21	MP3A	Mz	.003	1
22	MP3A	Y	-39.15	5
23	MP3A	My	-.019	5
24	MP3A	Mz	.003	5
25	MP3B	Y	-39.15	1
26	MP3B	My	.003	1
27	MP3B	Mz	-.019	1
28	MP3B	Y	-39.15	5
29	MP3B	My	.003	5
30	MP3B	Mz	-.019	5
31	MP3C	Y	-39.15	1
32	MP3C	My	.019	1
33	MP3C	Mz	.003	1
34	MP3C	Y	-39.15	5
35	MP3C	My	.019	5
36	MP3C	Mz	.003	5
37	MP3A	Y	-84.4	3.5
38	MP3A	My	.042	3.5
39	MP3A	Mz	-.007	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3B	Y	-84.4	3.5
41	MP3B	My	-.007	3.5
42	MP3B	Mz	.042	3.5
43	MP3C	Y	-84.4	3.5
44	MP3C	My	-.042	3.5
45	MP3C	Mz	-.007	3.5
46	MP2A	Y	-70.3	3.5
47	MP2A	My	.035	3.5
48	MP2A	Mz	-.006	3.5
49	MP2B	Y	-70.3	3.5
50	MP2B	My	-.006	3.5
51	MP2B	Mz	.035	3.5
52	MP2C	Y	-70.3	3.5
53	MP2C	My	-.035	3.5
54	MP2C	Mz	-.006	3.5
55	MP1A	Y	-2.2	3.5
56	MP1A	My	-.002	3.5
57	MP1A	Mz	.000318	3.5
58	MP1A	Y	-2.2	3.5
59	MP1A	My	-.002	3.5
60	MP1A	Mz	.000318	3.5
61	MP1B	Y	-2.2	3.5
62	MP1B	My	-.002	3.5
63	MP1B	Mz	.000318	3.5
64	MP1B	Y	-2.2	3.5
65	MP1B	My	-.002	3.5
66	MP1B	Mz	.000318	3.5
67	MP1C	Y	-2.2	3.5
68	MP1C	My	-.002	3.5
69	MP1C	Mz	.000318	3.5
70	MP1C	Y	-2.2	3.5
71	MP1C	My	-.002	3.5
72	MP1C	Mz	.000318	3.5
73	MP4A	Y	-43.55	2.5
74	MP4A	My	-.036	2.5
75	MP4A	Mz	.006	2.5
76	MP4A	Y	-43.55	4
77	MP4A	My	-.036	4
78	MP4A	Mz	.006	4
79	MP4B	Y	-43.55	2.5
80	MP4B	My	.006	2.5
81	MP4B	Mz	-.036	2.5
82	MP4B	Y	-43.55	4
83	MP4B	My	.006	4
84	MP4B	Mz	-.036	4
85	MP4C	Y	-43.55	2.5
86	MP4C	My	.036	2.5
87	MP4C	Mz	.006	2.5
88	MP4C	Y	-43.55	4
89	MP4C	My	.036	4
90	MP4C	Mz	.006	4
91	OVP	Y	-16	.75
92	OVP	My	-.008	.75
93	OVP	Mz	.001	.75
94	OVP	Y	-16	.75
95	OVP	My	-.008	.75
96	OVP	Mz	.001	.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
97	M64	Y	-17.6	6.25
98	M64	My	.003	6.25
99	M64	Mz	-.000509	6.25
100	M64	Y	-17.6	6.25
101	M64	My	.003	6.25
102	M64	Mz	-.000509	6.25

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-86.425	1
2	MP2A	My	-.043	1
3	MP2A	Mz	.008	1
4	MP2A	Y	-86.425	5
5	MP2A	My	-.043	5
6	MP2A	Mz	.008	5
7	MP2B	Y	-86.425	1
8	MP2B	My	.008	1
9	MP2B	Mz	-.043	1
10	MP2B	Y	-86.425	5
11	MP2B	My	.008	5
12	MP2B	Mz	-.043	5
13	MP2C	Y	-86.425	1
14	MP2C	My	.043	1
15	MP2C	Mz	.008	1
16	MP2C	Y	-86.425	5
17	MP2C	My	.043	5
18	MP2C	Mz	.008	5
19	MP3A	Y	-86.425	1
20	MP3A	My	-.043	1
21	MP3A	Mz	.008	1
22	MP3A	Y	-86.425	5
23	MP3A	My	-.043	5
24	MP3A	Mz	.008	5
25	MP3B	Y	-86.425	1
26	MP3B	My	.008	1
27	MP3B	Mz	-.043	1
28	MP3B	Y	-86.425	5
29	MP3B	My	.008	5
30	MP3B	Mz	-.043	5
31	MP3C	Y	-86.425	1
32	MP3C	My	.043	1
33	MP3C	Mz	.008	1
34	MP3C	Y	-86.425	5
35	MP3C	My	.043	5
36	MP3C	Mz	.008	5
37	MP3A	Y	-44.947	3.5
38	MP3A	My	.022	3.5
39	MP3A	Mz	-.004	3.5
40	MP3B	Y	-44.947	3.5
41	MP3B	My	-.004	3.5
42	MP3B	Mz	.022	3.5
43	MP3C	Y	-44.947	3.5
44	MP3C	My	-.022	3.5
45	MP3C	Mz	-.004	3.5
46	MP2A	Y	-40.421	3.5
47	MP2A	My	.02	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
48	MP2A	Mz	-.004	3.5
49	MP2B	Y	-40.421	3.5
50	MP2B	My	-.004	3.5
51	MP2B	Mz	.02	3.5
52	MP2C	Y	-40.421	3.5
53	MP2C	My	-.02	3.5
54	MP2C	Mz	-.004	3.5
55	MP1A	Y	-6.732	3.5
56	MP1A	My	-.006	3.5
57	MP1A	Mz	.000974	3.5
58	MP1A	Y	-6.732	3.5
59	MP1A	My	-.006	3.5
60	MP1A	Mz	.000974	3.5
61	MP1B	Y	-6.732	3.5
62	MP1B	My	-.006	3.5
63	MP1B	Mz	.000974	3.5
64	MP1B	Y	-6.732	3.5
65	MP1B	My	-.006	3.5
66	MP1B	Mz	.000974	3.5
67	MP1C	Y	-6.732	3.5
68	MP1C	My	-.006	3.5
69	MP1C	Mz	.000974	3.5
70	MP1C	Y	-6.732	3.5
71	MP1C	My	-.006	3.5
72	MP1C	Mz	.000974	3.5
73	MP4A	Y	-35.65	2.5
74	MP4A	My	-.029	2.5
75	MP4A	Mz	.005	2.5
76	MP4A	Y	-35.65	4
77	MP4A	My	-.029	4
78	MP4A	Mz	.005	4
79	MP4B	Y	-35.65	2.5
80	MP4B	My	.005	2.5
81	MP4B	Mz	-.029	2.5
82	MP4B	Y	-35.65	4
83	MP4B	My	.005	4
84	MP4B	Mz	-.029	4
85	MP4C	Y	-35.65	2.5
86	MP4C	My	.029	2.5
87	MP4C	Mz	.005	2.5
88	MP4C	Y	-35.65	4
89	MP4C	My	.029	4
90	MP4C	Mz	.005	4
91	OVP	Y	-44.001	.75
92	OVP	My	-.022	.75
93	OVP	Mz	.004	.75
94	OVP	Y	-44.001	.75
95	OVP	My	-.022	.75
96	OVP	Mz	.004	.75
97	M64	Y	-17.365	6.25
98	M64	My	.003	6.25
99	M64	Mz	-.000503	6.25
100	M64	Y	-17.365	6.25
101	M64	My	.003	6.25
102	M64	Mz	-.000503	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	1
2	MP2A	Z	-205.798	1
3	MP2A	Mx	-.018	1
4	MP2A	X	0	5
5	MP2A	Z	-205.798	5
6	MP2A	Mx	-.018	5
7	MP2B	X	0	1
8	MP2B	Z	-101.363	1
9	MP2B	Mx	.05	1
10	MP2B	X	0	5
11	MP2B	Z	-101.363	5
12	MP2B	Mx	.05	5
13	MP2C	X	0	1
14	MP2C	Z	-205.798	1
15	MP2C	Mx	-.018	1
16	MP2C	X	0	5
17	MP2C	Z	-205.798	5
18	MP2C	Mx	-.018	5
19	MP3A	X	0	1
20	MP3A	Z	-205.798	1
21	MP3A	Mx	-.018	1
22	MP3A	X	0	5
23	MP3A	Z	-205.798	5
24	MP3A	Mx	-.018	5
25	MP3B	X	0	1
26	MP3B	Z	-101.363	1
27	MP3B	Mx	.05	1
28	MP3B	X	0	5
29	MP3B	Z	-101.363	5
30	MP3B	Mx	.05	5
31	MP3C	X	0	1
32	MP3C	Z	-205.798	1
33	MP3C	Mx	-.018	1
34	MP3C	X	0	5
35	MP3C	Z	-205.798	5
36	MP3C	Mx	-.018	5
37	MP3A	X	0	3.5
38	MP3A	Z	-52.317	3.5
39	MP3A	Mx	.005	3.5
40	MP3B	X	0	3.5
41	MP3B	Z	-35.979	3.5
42	MP3B	Mx	-.018	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	-52.317	3.5
45	MP3C	Mx	.005	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	-52.122	3.5
48	MP2A	Mx	.005	3.5
49	MP2B	X	0	3.5
50	MP2B	Z	-29.697	3.5
51	MP2B	Mx	-.015	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	-52.122	3.5
54	MP2C	Mx	.005	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	-14.803	3.5
57	MP1A	Mx	-.002	3.5



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 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
58	MP1A	X	0	3.5
59	MP1A	Z	-14.803	3.5
60	MP1A	Mx	-.002	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	-14.803	3.5
63	MP1B	Mx	-.002	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	-14.803	3.5
66	MP1B	Mx	-.002	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	-14.803	3.5
69	MP1C	Mx	-.002	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	-14.803	3.5
72	MP1C	Mx	-.002	3.5
73	MP4A	X	0	2.5
74	MP4A	Z	-65.498	2.5
75	MP4A	Mx	-.009	2.5
76	MP4A	X	0	4
77	MP4A	Z	-65.498	4
78	MP4A	Mx	-.009	4
79	MP4B	X	0	2.5
80	MP4B	Z	-24.332	2.5
81	MP4B	Mx	.02	2.5
82	MP4B	X	0	4
83	MP4B	Z	-24.332	4
84	MP4B	Mx	.02	4
85	MP4C	X	0	2.5
86	MP4C	Z	-65.498	2.5
87	MP4C	Mx	-.009	2.5
88	MP4C	X	0	4
89	MP4C	Z	-65.498	4
90	MP4C	Mx	-.009	4
91	OVP	X	0	.75
92	OVP	Z	-53.644	.75
93	OVP	Mx	-.005	.75
94	OVP	X	0	.75
95	OVP	Z	-53.644	.75
96	OVP	Mx	-.005	.75
97	M64	X	0	6.25
98	M64	Z	-32.04	6.25
99	M64	Mx	.000927	6.25
100	M64	X	0	6.25
101	M64	Z	-32.04	6.25
102	M64	Mx	.000927	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	81.615	1
2	MP2A	Z	-141.361	1
3	MP2A	Mx	-.052	1
4	MP2A	X	81.615	5
5	MP2A	Z	-141.361	5
6	MP2A	Mx	-.052	5
7	MP2B	X	55.506	1
8	MP2B	Z	-96.14	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP2B	Mx	.052	1
10	MP2B	X	55.506	5
11	MP2B	Z	-96.14	5
12	MP2B	Mx	.052	5
13	MP2C	X	98.074	1
14	MP2C	Z	-169.869	1
15	MP2C	Mx	.034	1
16	MP2C	X	98.074	5
17	MP2C	Z	-169.869	5
18	MP2C	Mx	.034	5
19	MP3A	X	81.615	1
20	MP3A	Z	-141.361	1
21	MP3A	Mx	-.052	1
22	MP3A	X	81.615	5
23	MP3A	Z	-141.361	5
24	MP3A	Mx	-.052	5
25	MP3B	X	55.506	1
26	MP3B	Z	-96.14	1
27	MP3B	Mx	.052	1
28	MP3B	X	55.506	5
29	MP3B	Z	-96.14	5
30	MP3B	Mx	.052	5
31	MP3C	X	98.074	1
32	MP3C	Z	-169.869	1
33	MP3C	Mx	.034	1
34	MP3C	X	98.074	5
35	MP3C	Z	-169.869	5
36	MP3C	Mx	.034	5
37	MP3A	X	22.829	3.5
38	MP3A	Z	-39.541	3.5
39	MP3A	Mx	.015	3.5
40	MP3B	X	18.744	3.5
41	MP3B	Z	-32.466	3.5
42	MP3B	Mx	-.018	3.5
43	MP3C	X	25.404	3.5
44	MP3C	Z	-44	3.5
45	MP3C	Mx	-.009	3.5
46	MP2A	X	21.491	3.5
47	MP2A	Z	-37.223	3.5
48	MP2A	Mx	.014	3.5
49	MP2B	X	15.884	3.5
50	MP2B	Z	-27.513	3.5
51	MP2B	Mx	-.015	3.5
52	MP2C	X	25.025	3.5
53	MP2C	Z	-43.344	3.5
54	MP2C	Mx	-.009	3.5
55	MP1A	X	5.066	3.5
56	MP1A	Z	-8.774	3.5
57	MP1A	Mx	-.005	3.5
58	MP1A	X	5.066	3.5
59	MP1A	Z	-8.774	3.5
60	MP1A	Mx	-.005	3.5
61	MP1B	X	5.066	3.5
62	MP1B	Z	-8.774	3.5
63	MP1B	Mx	-.005	3.5
64	MP1B	X	5.066	3.5
65	MP1B	Z	-8.774	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	-.005	3.5
67	MP1C	X	5.066	3.5
68	MP1C	Z	-8.774	3.5
69	MP1C	Mx	-.005	3.5
70	MP1C	X	5.066	3.5
71	MP1C	Z	-8.774	3.5
72	MP1C	Mx	-.005	3.5
73	MP4A	X	24.359	2.5
74	MP4A	Z	-42.191	2.5
75	MP4A	Mx	-.026	2.5
76	MP4A	X	24.359	4
77	MP4A	Z	-42.191	4
78	MP4A	Mx	-.026	4
79	MP4B	X	14.068	2.5
80	MP4B	Z	-24.366	2.5
81	MP4B	Mx	.022	2.5
82	MP4B	X	14.068	4
83	MP4B	Z	-24.366	4
84	MP4B	Mx	.022	4
85	MP4C	X	30.847	2.5
86	MP4C	Z	-53.429	2.5
87	MP4C	Mx	.018	2.5
88	MP4C	X	30.847	4
89	MP4C	Z	-53.429	4
90	MP4C	Mx	.018	4
91	OVP	X	24.341	.75
92	OVP	Z	-42.16	.75
93	OVP	Mx	-.016	.75
94	OVP	X	24.341	.75
95	OVP	Z	-42.16	.75
96	OVP	Mx	-.016	.75
97	M64	X	11.653	6.25
98	M64	Z	-20.184	6.25
99	M64	Mx	.002	6.25
100	M64	X	11.653	6.25
101	M64	Z	-20.184	6.25
102	M64	Mx	.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	96.14	1
2	MP2A	Z	-55.506	1
3	MP2A	Mx	-.052	1
4	MP2A	X	96.14	5
5	MP2A	Z	-55.506	5
6	MP2A	Mx	-.052	5
7	MP2B	X	141.361	1
8	MP2B	Z	-81.615	1
9	MP2B	Mx	.052	1
10	MP2B	X	141.361	5
11	MP2B	Z	-81.615	5
12	MP2B	Mx	.052	5
13	MP2C	X	124.648	1
14	MP2C	Z	-71.966	1
15	MP2C	Mx	.055	1
16	MP2C	X	124.648	5



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 Designer :
 Job Number : Project No. 10206807
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Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	-71.966	5
18	MP2C	Mx	.055	5
19	MP3A	X	96.14	1
20	MP3A	Z	-55.506	1
21	MP3A	Mx	-.052	1
22	MP3A	X	96.14	5
23	MP3A	Z	-55.506	5
24	MP3A	Mx	-.052	5
25	MP3B	X	141.361	1
26	MP3B	Z	-81.615	1
27	MP3B	Mx	.052	1
28	MP3B	X	141.361	5
29	MP3B	Z	-81.615	5
30	MP3B	Mx	.052	5
31	MP3C	X	124.648	1
32	MP3C	Z	-71.966	1
33	MP3C	Mx	.055	1
34	MP3C	X	124.648	5
35	MP3C	Z	-71.966	5
36	MP3C	Mx	.055	5
37	MP3A	X	32.466	3.5
38	MP3A	Z	-18.744	3.5
39	MP3A	Mx	.018	3.5
40	MP3B	X	39.541	3.5
41	MP3B	Z	-22.829	3.5
42	MP3B	Mx	-.015	3.5
43	MP3C	X	36.926	3.5
44	MP3C	Z	-21.319	3.5
45	MP3C	Mx	-.016	3.5
46	MP2A	X	27.513	3.5
47	MP2A	Z	-15.884	3.5
48	MP2A	Mx	.015	3.5
49	MP2B	X	37.223	3.5
50	MP2B	Z	-21.491	3.5
51	MP2B	Mx	-.014	3.5
52	MP2C	X	33.634	3.5
53	MP2C	Z	-19.419	3.5
54	MP2C	Mx	-.015	3.5
55	MP1A	X	3.812	3.5
56	MP1A	Z	-2.201	3.5
57	MP1A	Mx	-.003	3.5
58	MP1A	X	3.812	3.5
59	MP1A	Z	-2.201	3.5
60	MP1A	Mx	-.003	3.5
61	MP1B	X	3.812	3.5
62	MP1B	Z	-2.201	3.5
63	MP1B	Mx	-.003	3.5
64	MP1B	X	3.812	3.5
65	MP1B	Z	-2.201	3.5
66	MP1B	Mx	-.003	3.5
67	MP1C	X	3.812	3.5
68	MP1C	Z	-2.201	3.5
69	MP1C	Mx	-.003	3.5
70	MP1C	X	3.812	3.5
71	MP1C	Z	-2.201	3.5
72	MP1C	Mx	-.003	3.5
73	MP4A	X	24.366	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP4A	Z	-14.068	2.5
75	MP4A	Mx	-.022	2.5
76	MP4A	X	24.366	4
77	MP4A	Z	-14.068	4
78	MP4A	Mx	-.022	4
79	MP4B	X	42.191	2.5
80	MP4B	Z	-24.359	2.5
81	MP4B	Mx	.026	2.5
82	MP4B	X	42.191	4
83	MP4B	Z	-24.359	4
84	MP4B	Mx	.026	4
85	MP4C	X	35.604	2.5
86	MP4C	Z	-20.556	2.5
87	MP4C	Mx	.026	2.5
88	MP4C	X	35.604	4
89	MP4C	Z	-20.556	4
90	MP4C	Mx	.026	4
91	OVP	X	36.889	.75
92	OVP	Z	-21.298	.75
93	OVP	Mx	-.02	.75
94	OVP	X	36.889	.75
95	OVP	Z	-21.298	.75
96	OVP	Mx	-.02	.75
97	M64	X	10.906	6.25
98	M64	Z	-6.297	6.25
99	M64	Mx	.002	6.25
100	M64	X	10.906	6.25
101	M64	Z	-6.297	6.25
102	M64	Mx	.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	101.363	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.05	1
4	MP2A	X	101.363	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.05	5
7	MP2B	X	205.798	1
8	MP2B	Z	0	1
9	MP2B	Mx	.018	1
10	MP2B	X	205.798	5
11	MP2B	Z	0	5
12	MP2B	Mx	.018	5
13	MP2C	X	101.363	1
14	MP2C	Z	0	1
15	MP2C	Mx	.05	1
16	MP2C	X	101.363	5
17	MP2C	Z	0	5
18	MP2C	Mx	.05	5
19	MP3A	X	101.363	1
20	MP3A	Z	0	1
21	MP3A	Mx	-.05	1
22	MP3A	X	101.363	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.05	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	205.798	1
26	MP3B	Z	0	1
27	MP3B	Mx	.018	1
28	MP3B	X	205.798	5
29	MP3B	Z	0	5
30	MP3B	Mx	.018	5
31	MP3C	X	101.363	1
32	MP3C	Z	0	1
33	MP3C	Mx	.05	1
34	MP3C	X	101.363	5
35	MP3C	Z	0	5
36	MP3C	Mx	.05	5
37	MP3A	X	35.979	3.5
38	MP3A	Z	0	3.5
39	MP3A	Mx	.018	3.5
40	MP3B	X	52.317	3.5
41	MP3B	Z	0	3.5
42	MP3B	Mx	-.005	3.5
43	MP3C	X	35.979	3.5
44	MP3C	Z	0	3.5
45	MP3C	Mx	-.018	3.5
46	MP2A	X	29.697	3.5
47	MP2A	Z	0	3.5
48	MP2A	Mx	.015	3.5
49	MP2B	X	52.122	3.5
50	MP2B	Z	0	3.5
51	MP2B	Mx	-.005	3.5
52	MP2C	X	29.697	3.5
53	MP2C	Z	0	3.5
54	MP2C	Mx	-.015	3.5
55	MP1A	X	3.343	3.5
56	MP1A	Z	0	3.5
57	MP1A	Mx	-.003	3.5
58	MP1A	X	3.343	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-.003	3.5
61	MP1B	X	3.343	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	-.003	3.5
64	MP1B	X	3.343	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	-.003	3.5
67	MP1C	X	3.343	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	-.003	3.5
70	MP1C	X	3.343	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-.003	3.5
73	MP4A	X	24.332	2.5
74	MP4A	Z	0	2.5
75	MP4A	Mx	-.02	2.5
76	MP4A	X	24.332	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.02	4
79	MP4B	X	65.498	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.009	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
82	MP4B	X	65.498	4
83	MP4B	Z	0	4
84	MP4B	Mx	.009	4
85	MP4C	X	24.332	2.5
86	MP4C	Z	0	2.5
87	MP4C	Mx	.02	2.5
88	MP4C	X	24.332	4
89	MP4C	Z	0	4
90	MP4C	Mx	.02	4
91	OVP	X	41.47	.75
92	OVP	Z	0	.75
93	OVP	Mx	-.02	.75
94	OVP	X	41.47	.75
95	OVP	Z	0	.75
96	OVP	Mx	-.02	.75
97	M64	X	10.614	6.25
98	M64	Z	0	6.25
99	M64	Mx	.002	6.25
100	M64	X	10.614	6.25
101	M64	Z	0	6.25
102	M64	Mx	.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	124.648	1
2	MP2A	Z	71.966	1
3	MP2A	Mx	-.055	1
4	MP2A	X	124.648	5
5	MP2A	Z	71.966	5
6	MP2A	Mx	-.055	5
7	MP2B	X	169.869	1
8	MP2B	Z	98.074	1
9	MP2B	Mx	-.034	1
10	MP2B	X	169.869	5
11	MP2B	Z	98.074	5
12	MP2B	Mx	-.034	5
13	MP2C	X	96.14	1
14	MP2C	Z	55.506	1
15	MP2C	Mx	.052	1
16	MP2C	X	96.14	5
17	MP2C	Z	55.506	5
18	MP2C	Mx	.052	5
19	MP3A	X	124.648	1
20	MP3A	Z	71.966	1
21	MP3A	Mx	-.055	1
22	MP3A	X	124.648	5
23	MP3A	Z	71.966	5
24	MP3A	Mx	-.055	5
25	MP3B	X	169.869	1
26	MP3B	Z	98.074	1
27	MP3B	Mx	-.034	1
28	MP3B	X	169.869	5
29	MP3B	Z	98.074	5
30	MP3B	Mx	-.034	5
31	MP3C	X	96.14	1
32	MP3C	Z	55.506	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP3C	Mx	.052	1
34	MP3C	X	96.14	5
35	MP3C	Z	55.506	5
36	MP3C	Mx	.052	5
37	MP3A	X	36.926	3.5
38	MP3A	Z	21.319	3.5
39	MP3A	Mx	.016	3.5
40	MP3B	X	44	3.5
41	MP3B	Z	25.404	3.5
42	MP3B	Mx	.009	3.5
43	MP3C	X	32.466	3.5
44	MP3C	Z	18.744	3.5
45	MP3C	Mx	-.018	3.5
46	MP2A	X	33.634	3.5
47	MP2A	Z	19.419	3.5
48	MP2A	Mx	.015	3.5
49	MP2B	X	43.344	3.5
50	MP2B	Z	25.025	3.5
51	MP2B	Mx	.009	3.5
52	MP2C	X	27.513	3.5
53	MP2C	Z	15.884	3.5
54	MP2C	Mx	-.015	3.5
55	MP1A	X	6.94	3.5
56	MP1A	Z	4.007	3.5
57	MP1A	Mx	-.005	3.5
58	MP1A	X	6.94	3.5
59	MP1A	Z	4.007	3.5
60	MP1A	Mx	-.005	3.5
61	MP1B	X	6.94	3.5
62	MP1B	Z	4.007	3.5
63	MP1B	Mx	-.005	3.5
64	MP1B	X	6.94	3.5
65	MP1B	Z	4.007	3.5
66	MP1B	Mx	-.005	3.5
67	MP1C	X	6.94	3.5
68	MP1C	Z	4.007	3.5
69	MP1C	Mx	-.005	3.5
70	MP1C	X	6.94	3.5
71	MP1C	Z	4.007	3.5
72	MP1C	Mx	-.005	3.5
73	MP4A	X	35.604	2.5
74	MP4A	Z	20.556	2.5
75	MP4A	Mx	-.026	2.5
76	MP4A	X	35.604	4
77	MP4A	Z	20.556	4
78	MP4A	Mx	-.026	4
79	MP4B	X	53.429	2.5
80	MP4B	Z	30.847	2.5
81	MP4B	Mx	-.018	2.5
82	MP4B	X	53.429	4
83	MP4B	Z	30.847	4
84	MP4B	Mx	-.018	4
85	MP4C	X	24.366	2.5
86	MP4C	Z	14.068	2.5
87	MP4C	Mx	.022	2.5
88	MP4C	X	24.366	4
89	MP4C	Z	14.068	4



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP4C	Mx	.022	4
91	OVP	X	40.212	.75
92	OVP	Z	23.216	.75
93	OVP	Mx	-.018	.75
94	OVP	X	40.212	.75
95	OVP	Z	23.216	.75
96	OVP	Mx	-.018	.75
97	M64	X	16.755	6.25
98	M64	Z	9.674	6.25
99	M64	Mx	.002	6.25
100	M64	X	16.755	6.25
101	M64	Z	9.674	6.25
102	M64	Mx	.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	98.074	1
2	MP2A	Z	169.869	1
3	MP2A	Mx	-.034	1
4	MP2A	X	98.074	5
5	MP2A	Z	169.869	5
6	MP2A	Mx	-.034	5
7	MP2B	X	71.966	1
8	MP2B	Z	124.648	1
9	MP2B	Mx	-.055	1
10	MP2B	X	71.966	5
11	MP2B	Z	124.648	5
12	MP2B	Mx	-.055	5
13	MP2C	X	81.615	1
14	MP2C	Z	141.361	1
15	MP2C	Mx	.052	1
16	MP2C	X	81.615	5
17	MP2C	Z	141.361	5
18	MP2C	Mx	.052	5
19	MP3A	X	98.074	1
20	MP3A	Z	169.869	1
21	MP3A	Mx	-.034	1
22	MP3A	X	98.074	5
23	MP3A	Z	169.869	5
24	MP3A	Mx	-.034	5
25	MP3B	X	71.966	1
26	MP3B	Z	124.648	1
27	MP3B	Mx	-.055	1
28	MP3B	X	71.966	5
29	MP3B	Z	124.648	5
30	MP3B	Mx	-.055	5
31	MP3C	X	81.615	1
32	MP3C	Z	141.361	1
33	MP3C	Mx	.052	1
34	MP3C	X	81.615	5
35	MP3C	Z	141.361	5
36	MP3C	Mx	.052	5
37	MP3A	X	25.404	3.5
38	MP3A	Z	44	3.5
39	MP3A	Mx	.009	3.5
40	MP3B	X	21.319	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
41	MP3B	Z	36.926	3.5
42	MP3B	Mx	.016	3.5
43	MP3C	X	22.829	3.5
44	MP3C	Z	39.541	3.5
45	MP3C	Mx	-.015	3.5
46	MP2A	X	25.025	3.5
47	MP2A	Z	43.344	3.5
48	MP2A	Mx	.009	3.5
49	MP2B	X	19.419	3.5
50	MP2B	Z	33.634	3.5
51	MP2B	Mx	.015	3.5
52	MP2C	X	21.491	3.5
53	MP2C	Z	37.223	3.5
54	MP2C	Mx	-.014	3.5
55	MP1A	X	6.872	3.5
56	MP1A	Z	11.903	3.5
57	MP1A	Mx	-.004	3.5
58	MP1A	X	6.872	3.5
59	MP1A	Z	11.903	3.5
60	MP1A	Mx	-.004	3.5
61	MP1B	X	6.872	3.5
62	MP1B	Z	11.903	3.5
63	MP1B	Mx	-.004	3.5
64	MP1B	X	6.872	3.5
65	MP1B	Z	11.903	3.5
66	MP1B	Mx	-.004	3.5
67	MP1C	X	6.872	3.5
68	MP1C	Z	11.903	3.5
69	MP1C	Mx	-.004	3.5
70	MP1C	X	6.872	3.5
71	MP1C	Z	11.903	3.5
72	MP1C	Mx	-.004	3.5
73	MP4A	X	30.847	2.5
74	MP4A	Z	53.429	2.5
75	MP4A	Mx	-.018	2.5
76	MP4A	X	30.847	4
77	MP4A	Z	53.429	4
78	MP4A	Mx	-.018	4
79	MP4B	X	20.556	2.5
80	MP4B	Z	35.604	2.5
81	MP4B	Mx	-.026	2.5
82	MP4B	X	20.556	4
83	MP4B	Z	35.604	4
84	MP4B	Mx	-.026	4
85	MP4C	X	24.359	2.5
86	MP4C	Z	42.191	2.5
87	MP4C	Mx	.026	2.5
88	MP4C	X	24.359	4
89	MP4C	Z	42.191	4
90	MP4C	Mx	.026	4
91	OVP	X	26.259	.75
92	OVP	Z	45.483	.75
93	OVP	Mx	-.009	.75
94	OVP	X	26.259	.75
95	OVP	Z	45.483	.75
96	OVP	Mx	-.009	.75
97	M64	X	15.03	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
98	M64	Z	26.033	6.25
99	M64	Mx	.002	6.25
100	M64	X	15.03	6.25
101	M64	Z	26.033	6.25
102	M64	Mx	.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	1
2	MP2A	Z	205.798	1
3	MP2A	Mx	.018	1
4	MP2A	X	0	5
5	MP2A	Z	205.798	5
6	MP2A	Mx	.018	5
7	MP2B	X	0	1
8	MP2B	Z	101.363	1
9	MP2B	Mx	-.05	1
10	MP2B	X	0	5
11	MP2B	Z	101.363	5
12	MP2B	Mx	-.05	5
13	MP2C	X	0	1
14	MP2C	Z	205.798	1
15	MP2C	Mx	.018	1
16	MP2C	X	0	5
17	MP2C	Z	205.798	5
18	MP2C	Mx	.018	5
19	MP3A	X	0	1
20	MP3A	Z	205.798	1
21	MP3A	Mx	.018	1
22	MP3A	X	0	5
23	MP3A	Z	205.798	5
24	MP3A	Mx	.018	5
25	MP3B	X	0	1
26	MP3B	Z	101.363	1
27	MP3B	Mx	-.05	1
28	MP3B	X	0	5
29	MP3B	Z	101.363	5
30	MP3B	Mx	-.05	5
31	MP3C	X	0	1
32	MP3C	Z	205.798	1
33	MP3C	Mx	.018	1
34	MP3C	X	0	5
35	MP3C	Z	205.798	5
36	MP3C	Mx	.018	5
37	MP3A	X	0	3.5
38	MP3A	Z	52.317	3.5
39	MP3A	Mx	-.005	3.5
40	MP3B	X	0	3.5
41	MP3B	Z	35.979	3.5
42	MP3B	Mx	.018	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	52.317	3.5
45	MP3C	Mx	-.005	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	52.122	3.5
48	MP2A	Mx	-.005	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP2B	X	0	3.5
50	MP2B	Z	29.697	3.5
51	MP2B	Mx	.015	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	52.122	3.5
54	MP2C	Mx	-.005	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	14.803	3.5
57	MP1A	Mx	.002	3.5
58	MP1A	X	0	3.5
59	MP1A	Z	14.803	3.5
60	MP1A	Mx	.002	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	14.803	3.5
63	MP1B	Mx	.002	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	14.803	3.5
66	MP1B	Mx	.002	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	14.803	3.5
69	MP1C	Mx	.002	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	14.803	3.5
72	MP1C	Mx	.002	3.5
73	MP4A	X	0	2.5
74	MP4A	Z	65.498	2.5
75	MP4A	Mx	.009	2.5
76	MP4A	X	0	4
77	MP4A	Z	65.498	4
78	MP4A	Mx	.009	4
79	MP4B	X	0	2.5
80	MP4B	Z	24.332	2.5
81	MP4B	Mx	-.02	2.5
82	MP4B	X	0	4
83	MP4B	Z	24.332	4
84	MP4B	Mx	-.02	4
85	MP4C	X	0	2.5
86	MP4C	Z	65.498	2.5
87	MP4C	Mx	.009	2.5
88	MP4C	X	0	4
89	MP4C	Z	65.498	4
90	MP4C	Mx	.009	4
91	OVP	X	0	.75
92	OVP	Z	53.644	.75
93	OVP	Mx	.005	.75
94	OVP	X	0	.75
95	OVP	Z	53.644	.75
96	OVP	Mx	.005	.75
97	M64	X	0	6.25
98	M64	Z	32.04	6.25
99	M64	Mx	-.000927	6.25
100	M64	X	0	6.25
101	M64	Z	32.04	6.25
102	M64	Mx	-.000927	6.25

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



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-81.615	1
2	MP2A	Z	141.361	1
3	MP2A	Mx	.052	1
4	MP2A	X	-81.615	5
5	MP2A	Z	141.361	5
6	MP2A	Mx	.052	5
7	MP2B	X	-55.506	1
8	MP2B	Z	96.14	1
9	MP2B	Mx	-.052	1
10	MP2B	X	-55.506	5
11	MP2B	Z	96.14	5
12	MP2B	Mx	-.052	5
13	MP2C	X	-98.074	1
14	MP2C	Z	169.869	1
15	MP2C	Mx	-.034	1
16	MP2C	X	-98.074	5
17	MP2C	Z	169.869	5
18	MP2C	Mx	-.034	5
19	MP3A	X	-81.615	1
20	MP3A	Z	141.361	1
21	MP3A	Mx	.052	1
22	MP3A	X	-81.615	5
23	MP3A	Z	141.361	5
24	MP3A	Mx	.052	5
25	MP3B	X	-55.506	1
26	MP3B	Z	96.14	1
27	MP3B	Mx	-.052	1
28	MP3B	X	-55.506	5
29	MP3B	Z	96.14	5
30	MP3B	Mx	-.052	5
31	MP3C	X	-98.074	1
32	MP3C	Z	169.869	1
33	MP3C	Mx	-.034	1
34	MP3C	X	-98.074	5
35	MP3C	Z	169.869	5
36	MP3C	Mx	-.034	5
37	MP3A	X	-22.829	3.5
38	MP3A	Z	39.541	3.5
39	MP3A	Mx	-.015	3.5
40	MP3B	X	-18.744	3.5
41	MP3B	Z	32.466	3.5
42	MP3B	Mx	.018	3.5
43	MP3C	X	-25.404	3.5
44	MP3C	Z	44	3.5
45	MP3C	Mx	.009	3.5
46	MP2A	X	-21.491	3.5
47	MP2A	Z	37.223	3.5
48	MP2A	Mx	-.014	3.5
49	MP2B	X	-15.884	3.5
50	MP2B	Z	27.513	3.5
51	MP2B	Mx	.015	3.5
52	MP2C	X	-25.025	3.5
53	MP2C	Z	43.344	3.5
54	MP2C	Mx	.009	3.5
55	MP1A	X	-5.066	3.5
56	MP1A	Z	8.774	3.5
57	MP1A	Mx	.005	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2B	Mx	-.052	1
10	MP2B	X	-141.361	5
11	MP2B	Z	81.615	5
12	MP2B	Mx	-.052	5
13	MP2C	X	-124.648	1
14	MP2C	Z	71.966	1
15	MP2C	Mx	-.055	1
16	MP2C	X	-124.648	5
17	MP2C	Z	71.966	5
18	MP2C	Mx	-.055	5
19	MP3A	X	-96.14	1
20	MP3A	Z	55.506	1
21	MP3A	Mx	.052	1
22	MP3A	X	-96.14	5
23	MP3A	Z	55.506	5
24	MP3A	Mx	.052	5
25	MP3B	X	-141.361	1
26	MP3B	Z	81.615	1
27	MP3B	Mx	-.052	1
28	MP3B	X	-141.361	5
29	MP3B	Z	81.615	5
30	MP3B	Mx	-.052	5
31	MP3C	X	-124.648	1
32	MP3C	Z	71.966	1
33	MP3C	Mx	-.055	1
34	MP3C	X	-124.648	5
35	MP3C	Z	71.966	5
36	MP3C	Mx	-.055	5
37	MP3A	X	-32.466	3.5
38	MP3A	Z	18.744	3.5
39	MP3A	Mx	-.018	3.5
40	MP3B	X	-39.541	3.5
41	MP3B	Z	22.829	3.5
42	MP3B	Mx	.015	3.5
43	MP3C	X	-36.926	3.5
44	MP3C	Z	21.319	3.5
45	MP3C	Mx	.016	3.5
46	MP2A	X	-27.513	3.5
47	MP2A	Z	15.884	3.5
48	MP2A	Mx	-.015	3.5
49	MP2B	X	-37.223	3.5
50	MP2B	Z	21.491	3.5
51	MP2B	Mx	.014	3.5
52	MP2C	X	-33.634	3.5
53	MP2C	Z	19.419	3.5
54	MP2C	Mx	.015	3.5
55	MP1A	X	-3.812	3.5
56	MP1A	Z	2.201	3.5
57	MP1A	Mx	.003	3.5
58	MP1A	X	-3.812	3.5
59	MP1A	Z	2.201	3.5
60	MP1A	Mx	.003	3.5
61	MP1B	X	-3.812	3.5
62	MP1B	Z	2.201	3.5
63	MP1B	Mx	.003	3.5
64	MP1B	X	-3.812	3.5
65	MP1B	Z	2.201	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	.003	3.5
67	MP1C	X	-3.812	3.5
68	MP1C	Z	2.201	3.5
69	MP1C	Mx	.003	3.5
70	MP1C	X	-3.812	3.5
71	MP1C	Z	2.201	3.5
72	MP1C	Mx	.003	3.5
73	MP4A	X	-24.366	2.5
74	MP4A	Z	14.068	2.5
75	MP4A	Mx	.022	2.5
76	MP4A	X	-24.366	4
77	MP4A	Z	14.068	4
78	MP4A	Mx	.022	4
79	MP4B	X	-42.191	2.5
80	MP4B	Z	24.359	2.5
81	MP4B	Mx	-.026	2.5
82	MP4B	X	-42.191	4
83	MP4B	Z	24.359	4
84	MP4B	Mx	-.026	4
85	MP4C	X	-35.604	2.5
86	MP4C	Z	20.556	2.5
87	MP4C	Mx	-.026	2.5
88	MP4C	X	-35.604	4
89	MP4C	Z	20.556	4
90	MP4C	Mx	-.026	4
91	OVP	X	-36.889	.75
92	OVP	Z	21.298	.75
93	OVP	Mx	.02	.75
94	OVP	X	-36.889	.75
95	OVP	Z	21.298	.75
96	OVP	Mx	.02	.75
97	M64	X	-10.906	6.25
98	M64	Z	6.297	6.25
99	M64	Mx	-.002	6.25
100	M64	X	-10.906	6.25
101	M64	Z	6.297	6.25
102	M64	Mx	-.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-101.363	1
2	MP2A	Z	0	1
3	MP2A	Mx	.05	1
4	MP2A	X	-101.363	5
5	MP2A	Z	0	5
6	MP2A	Mx	.05	5
7	MP2B	X	-205.798	1
8	MP2B	Z	0	1
9	MP2B	Mx	-.018	1
10	MP2B	X	-205.798	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.018	5
13	MP2C	X	-101.363	1
14	MP2C	Z	0	1
15	MP2C	Mx	-.05	1
16	MP2C	X	-101.363	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	0	5
18	MP2C	Mx	-.05	5
19	MP3A	X	-101.363	1
20	MP3A	Z	0	1
21	MP3A	Mx	.05	1
22	MP3A	X	-101.363	5
23	MP3A	Z	0	5
24	MP3A	Mx	.05	5
25	MP3B	X	-205.798	1
26	MP3B	Z	0	1
27	MP3B	Mx	-.018	1
28	MP3B	X	-205.798	5
29	MP3B	Z	0	5
30	MP3B	Mx	-.018	5
31	MP3C	X	-101.363	1
32	MP3C	Z	0	1
33	MP3C	Mx	-.05	1
34	MP3C	X	-101.363	5
35	MP3C	Z	0	5
36	MP3C	Mx	-.05	5
37	MP3A	X	-35.979	3.5
38	MP3A	Z	0	3.5
39	MP3A	Mx	-.018	3.5
40	MP3B	X	-52.317	3.5
41	MP3B	Z	0	3.5
42	MP3B	Mx	.005	3.5
43	MP3C	X	-35.979	3.5
44	MP3C	Z	0	3.5
45	MP3C	Mx	.018	3.5
46	MP2A	X	-29.697	3.5
47	MP2A	Z	0	3.5
48	MP2A	Mx	-.015	3.5
49	MP2B	X	-52.122	3.5
50	MP2B	Z	0	3.5
51	MP2B	Mx	.005	3.5
52	MP2C	X	-29.697	3.5
53	MP2C	Z	0	3.5
54	MP2C	Mx	.015	3.5
55	MP1A	X	-3.343	3.5
56	MP1A	Z	0	3.5
57	MP1A	Mx	.003	3.5
58	MP1A	X	-3.343	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	.003	3.5
61	MP1B	X	-3.343	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	.003	3.5
64	MP1B	X	-3.343	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	.003	3.5
67	MP1C	X	-3.343	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	.003	3.5
70	MP1C	X	-3.343	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	.003	3.5
73	MP4A	X	-24.332	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
25	MP3B	X	-169.869	1
26	MP3B	Z	-98.074	1
27	MP3B	Mx	.034	1
28	MP3B	X	-169.869	5
29	MP3B	Z	-98.074	5
30	MP3B	Mx	.034	5
31	MP3C	X	-96.14	1
32	MP3C	Z	-55.506	1
33	MP3C	Mx	-.052	1
34	MP3C	X	-96.14	5
35	MP3C	Z	-55.506	5
36	MP3C	Mx	-.052	5
37	MP3A	X	-36.926	3.5
38	MP3A	Z	-21.319	3.5
39	MP3A	Mx	-.016	3.5
40	MP3B	X	-44	3.5
41	MP3B	Z	-25.404	3.5
42	MP3B	Mx	-.009	3.5
43	MP3C	X	-32.466	3.5
44	MP3C	Z	-18.744	3.5
45	MP3C	Mx	.018	3.5
46	MP2A	X	-33.634	3.5
47	MP2A	Z	-19.419	3.5
48	MP2A	Mx	-.015	3.5
49	MP2B	X	-43.344	3.5
50	MP2B	Z	-25.025	3.5
51	MP2B	Mx	-.009	3.5
52	MP2C	X	-27.513	3.5
53	MP2C	Z	-15.884	3.5
54	MP2C	Mx	.015	3.5
55	MP1A	X	-6.94	3.5
56	MP1A	Z	-4.007	3.5
57	MP1A	Mx	.005	3.5
58	MP1A	X	-6.94	3.5
59	MP1A	Z	-4.007	3.5
60	MP1A	Mx	.005	3.5
61	MP1B	X	-6.94	3.5
62	MP1B	Z	-4.007	3.5
63	MP1B	Mx	.005	3.5
64	MP1B	X	-6.94	3.5
65	MP1B	Z	-4.007	3.5
66	MP1B	Mx	.005	3.5
67	MP1C	X	-6.94	3.5
68	MP1C	Z	-4.007	3.5
69	MP1C	Mx	.005	3.5
70	MP1C	X	-6.94	3.5
71	MP1C	Z	-4.007	3.5
72	MP1C	Mx	.005	3.5
73	MP4A	X	-35.604	2.5
74	MP4A	Z	-20.556	2.5
75	MP4A	Mx	.026	2.5
76	MP4A	X	-35.604	4
77	MP4A	Z	-20.556	4
78	MP4A	Mx	.026	4
79	MP4B	X	-53.429	2.5
80	MP4B	Z	-30.847	2.5
81	MP4B	Mx	.018	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
82	MP4B	X	-53.429	4
83	MP4B	Z	-30.847	4
84	MP4B	Mx	.018	4
85	MP4C	X	-24.366	2.5
86	MP4C	Z	-14.068	2.5
87	MP4C	Mx	-.022	2.5
88	MP4C	X	-24.366	4
89	MP4C	Z	-14.068	4
90	MP4C	Mx	-.022	4
91	OVP	X	-40.212	.75
92	OVP	Z	-23.216	.75
93	OVP	Mx	.018	.75
94	OVP	X	-40.212	.75
95	OVP	Z	-23.216	.75
96	OVP	Mx	.018	.75
97	M64	X	-16.755	6.25
98	M64	Z	-9.674	6.25
99	M64	Mx	-.002	6.25
100	M64	X	-16.755	6.25
101	M64	Z	-9.674	6.25
102	M64	Mx	-.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-98.074	1
2	MP2A	Z	-169.869	1
3	MP2A	Mx	.034	1
4	MP2A	X	-98.074	5
5	MP2A	Z	-169.869	5
6	MP2A	Mx	.034	5
7	MP2B	X	-71.966	1
8	MP2B	Z	-124.648	1
9	MP2B	Mx	.055	1
10	MP2B	X	-71.966	5
11	MP2B	Z	-124.648	5
12	MP2B	Mx	.055	5
13	MP2C	X	-81.615	1
14	MP2C	Z	-141.361	1
15	MP2C	Mx	-.052	1
16	MP2C	X	-81.615	5
17	MP2C	Z	-141.361	5
18	MP2C	Mx	-.052	5
19	MP3A	X	-98.074	1
20	MP3A	Z	-169.869	1
21	MP3A	Mx	.034	1
22	MP3A	X	-98.074	5
23	MP3A	Z	-169.869	5
24	MP3A	Mx	.034	5
25	MP3B	X	-71.966	1
26	MP3B	Z	-124.648	1
27	MP3B	Mx	.055	1
28	MP3B	X	-71.966	5
29	MP3B	Z	-124.648	5
30	MP3B	Mx	.055	5
31	MP3C	X	-81.615	1
32	MP3C	Z	-141.361	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP3C	Mx	-.052	1
34	MP3C	X	-81.615	5
35	MP3C	Z	-141.361	5
36	MP3C	Mx	-.052	5
37	MP3A	X	-25.404	3.5
38	MP3A	Z	-44	3.5
39	MP3A	Mx	-.009	3.5
40	MP3B	X	-21.319	3.5
41	MP3B	Z	-36.926	3.5
42	MP3B	Mx	-.016	3.5
43	MP3C	X	-22.829	3.5
44	MP3C	Z	-39.541	3.5
45	MP3C	Mx	.015	3.5
46	MP2A	X	-25.025	3.5
47	MP2A	Z	-43.344	3.5
48	MP2A	Mx	-.009	3.5
49	MP2B	X	-19.419	3.5
50	MP2B	Z	-33.634	3.5
51	MP2B	Mx	-.015	3.5
52	MP2C	X	-21.491	3.5
53	MP2C	Z	-37.223	3.5
54	MP2C	Mx	.014	3.5
55	MP1A	X	-6.872	3.5
56	MP1A	Z	-11.903	3.5
57	MP1A	Mx	.004	3.5
58	MP1A	X	-6.872	3.5
59	MP1A	Z	-11.903	3.5
60	MP1A	Mx	.004	3.5
61	MP1B	X	-6.872	3.5
62	MP1B	Z	-11.903	3.5
63	MP1B	Mx	.004	3.5
64	MP1B	X	-6.872	3.5
65	MP1B	Z	-11.903	3.5
66	MP1B	Mx	.004	3.5
67	MP1C	X	-6.872	3.5
68	MP1C	Z	-11.903	3.5
69	MP1C	Mx	.004	3.5
70	MP1C	X	-6.872	3.5
71	MP1C	Z	-11.903	3.5
72	MP1C	Mx	.004	3.5
73	MP4A	X	-30.847	2.5
74	MP4A	Z	-53.429	2.5
75	MP4A	Mx	.018	2.5
76	MP4A	X	-30.847	4
77	MP4A	Z	-53.429	4
78	MP4A	Mx	.018	4
79	MP4B	X	-20.556	2.5
80	MP4B	Z	-35.604	2.5
81	MP4B	Mx	.026	2.5
82	MP4B	X	-20.556	4
83	MP4B	Z	-35.604	4
84	MP4B	Mx	.026	4
85	MP4C	X	-24.359	2.5
86	MP4C	Z	-42.191	2.5
87	MP4C	Mx	-.026	2.5
88	MP4C	X	-24.359	4
89	MP4C	Z	-42.191	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP4C	Mx	-.026	4
91	OVP	X	-26.259	.75
92	OVP	Z	-45.483	.75
93	OVP	Mx	.009	.75
94	OVP	X	-26.259	.75
95	OVP	Z	-45.483	.75
96	OVP	Mx	.009	.75
97	M64	X	-15.03	6.25
98	M64	Z	-26.033	6.25
99	M64	Mx	-.002	6.25
100	M64	X	-15.03	6.25
101	M64	Z	-26.033	6.25
102	M64	Mx	-.002	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	-38.565	1
3	MP2A	Mx	-.003	1
4	MP2A	X	0	5
5	MP2A	Z	-38.565	5
6	MP2A	Mx	-.003	5
7	MP2B	X	0	1
8	MP2B	Z	-20.036	1
9	MP2B	Mx	.01	1
10	MP2B	X	0	5
11	MP2B	Z	-20.036	5
12	MP2B	Mx	.01	5
13	MP2C	X	0	1
14	MP2C	Z	-38.565	1
15	MP2C	Mx	-.003	1
16	MP2C	X	0	5
17	MP2C	Z	-38.565	5
18	MP2C	Mx	-.003	5
19	MP3A	X	0	1
20	MP3A	Z	-38.565	1
21	MP3A	Mx	-.003	1
22	MP3A	X	0	5
23	MP3A	Z	-38.565	5
24	MP3A	Mx	-.003	5
25	MP3B	X	0	1
26	MP3B	Z	-20.036	1
27	MP3B	Mx	.01	1
28	MP3B	X	0	5
29	MP3B	Z	-20.036	5
30	MP3B	Mx	.01	5
31	MP3C	X	0	1
32	MP3C	Z	-38.565	1
33	MP3C	Mx	-.003	1
34	MP3C	X	0	5
35	MP3C	Z	-38.565	5
36	MP3C	Mx	-.003	5
37	MP3A	X	0	3.5
38	MP3A	Z	-13.123	3.5
39	MP3A	Mx	.001	3.5
40	MP3B	X	0	3.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
41	MP3B	Z	-9.335	3.5
42	MP3B	Mx	-.005	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	-13.123	3.5
45	MP3C	Mx	.001	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	-13.077	3.5
48	MP2A	Mx	.001	3.5
49	MP2B	X	0	3.5
50	MP2B	Z	-7.849	3.5
51	MP2B	Mx	-.004	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	-13.077	3.5
54	MP2C	Mx	.001	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	-3.341	3.5
57	MP1A	Mx	-.000483	3.5
58	MP1A	X	0	3.5
59	MP1A	Z	-3.341	3.5
60	MP1A	Mx	-.000483	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	-3.341	3.5
63	MP1B	Mx	-.000483	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	-3.341	3.5
66	MP1B	Mx	-.000483	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	-3.341	3.5
69	MP1C	Mx	-.000483	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	-3.341	3.5
72	MP1C	Mx	-.000483	3.5
73	MP4A	X	0	2.5
74	MP4A	Z	-15.442	2.5
75	MP4A	Mx	-.002	2.5
76	MP4A	X	0	4
77	MP4A	Z	-15.442	4
78	MP4A	Mx	-.002	4
79	MP4B	X	0	2.5
80	MP4B	Z	-6.966	2.5
81	MP4B	Mx	.006	2.5
82	MP4B	X	0	4
83	MP4B	Z	-6.966	4
84	MP4B	Mx	.006	4
85	MP4C	X	0	2.5
86	MP4C	Z	-15.442	2.5
87	MP4C	Mx	-.002	2.5
88	MP4C	X	0	4
89	MP4C	Z	-15.442	4
90	MP4C	Mx	-.002	4
91	OVP	X	0	.75
92	OVP	Z	-13.52	.75
93	OVP	Mx	-.001	.75
94	OVP	X	0	.75
95	OVP	Z	-13.52	.75
96	OVP	Mx	-.001	.75
97	M64	X	0	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
98	M64	Z	-7.144	6.25
99	M64	Mx	.000207	6.25
100	M64	X	0	6.25
101	M64	Z	-7.144	6.25
102	M64	Mx	.000207	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	15.506	1
2	MP2A	Z	-26.858	1
3	MP2A	Mx	-.01	1
4	MP2A	X	15.506	5
5	MP2A	Z	-26.858	5
6	MP2A	Mx	-.01	5
7	MP2B	X	10.874	1
8	MP2B	Z	-18.834	1
9	MP2B	Mx	.01	1
10	MP2B	X	10.874	5
11	MP2B	Z	-18.834	5
12	MP2B	Mx	.01	5
13	MP2C	X	18.427	1
14	MP2C	Z	-31.916	1
15	MP2C	Mx	.006	1
16	MP2C	X	18.427	5
17	MP2C	Z	-31.916	5
18	MP2C	Mx	.006	5
19	MP3A	X	15.506	1
20	MP3A	Z	-26.858	1
21	MP3A	Mx	-.01	1
22	MP3A	X	15.506	5
23	MP3A	Z	-26.858	5
24	MP3A	Mx	-.01	5
25	MP3B	X	10.874	1
26	MP3B	Z	-18.834	1
27	MP3B	Mx	.01	1
28	MP3B	X	10.874	5
29	MP3B	Z	-18.834	5
30	MP3B	Mx	.01	5
31	MP3C	X	18.427	1
32	MP3C	Z	-31.916	1
33	MP3C	Mx	.006	1
34	MP3C	X	18.427	5
35	MP3C	Z	-31.916	5
36	MP3C	Mx	.006	5
37	MP3A	X	5.79	3.5
38	MP3A	Z	-10.028	3.5
39	MP3A	Mx	.004	3.5
40	MP3B	X	4.842	3.5
41	MP3B	Z	-8.387	3.5
42	MP3B	Mx	-.005	3.5
43	MP3C	X	6.387	3.5
44	MP3C	Z	-11.062	3.5
45	MP3C	Mx	-.002	3.5
46	MP2A	X	5.473	3.5
47	MP2A	Z	-9.48	3.5
48	MP2A	Mx	.004	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP2B	X	4.166	3.5
50	MP2B	Z	-7.216	3.5
51	MP2B	Mx	-.004	3.5
52	MP2C	X	6.297	3.5
53	MP2C	Z	-10.907	3.5
54	MP2C	Mx	-.002	3.5
55	MP1A	X	1.209	3.5
56	MP1A	Z	-2.094	3.5
57	MP1A	Mx	-.001	3.5
58	MP1A	X	1.209	3.5
59	MP1A	Z	-2.094	3.5
60	MP1A	Mx	-.001	3.5
61	MP1B	X	1.209	3.5
62	MP1B	Z	-2.094	3.5
63	MP1B	Mx	-.001	3.5
64	MP1B	X	1.209	3.5
65	MP1B	Z	-2.094	3.5
66	MP1B	Mx	-.001	3.5
67	MP1C	X	1.209	3.5
68	MP1C	Z	-2.094	3.5
69	MP1C	Mx	-.001	3.5
70	MP1C	X	1.209	3.5
71	MP1C	Z	-2.094	3.5
72	MP1C	Mx	-.001	3.5
73	MP4A	X	5.994	2.5
74	MP4A	Z	-10.381	2.5
75	MP4A	Mx	-.006	2.5
76	MP4A	X	5.994	4
77	MP4A	Z	-10.381	4
78	MP4A	Mx	-.006	4
79	MP4B	X	3.875	2.5
80	MP4B	Z	-6.711	2.5
81	MP4B	Mx	.006	2.5
82	MP4B	X	3.875	4
83	MP4B	Z	-6.711	4
84	MP4B	Mx	.006	4
85	MP4C	X	7.33	2.5
86	MP4C	Z	-12.695	2.5
87	MP4C	Mx	.004	2.5
88	MP4C	X	7.33	4
89	MP4C	Z	-12.695	4
90	MP4C	Mx	.004	4
91	OVP	X	6.192	.75
92	OVP	Z	-10.724	.75
93	OVP	Mx	-.004	.75
94	OVP	X	6.192	.75
95	OVP	Z	-10.724	.75
96	OVP	Mx	-.004	.75
97	M64	X	2.703	6.25
98	M64	Z	-4.682	6.25
99	M64	Mx	.000579	6.25
100	M64	X	2.703	6.25
101	M64	Z	-4.682	6.25
102	M64	Mx	.000579	6.25

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



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	18.834	1
2	MP2A	Z	-10.874	1
3	MP2A	Mx	-.01	1
4	MP2A	X	18.834	5
5	MP2A	Z	-10.874	5
6	MP2A	Mx	-.01	5
7	MP2B	X	26.858	1
8	MP2B	Z	-15.506	1
9	MP2B	Mx	.01	1
10	MP2B	X	26.858	5
11	MP2B	Z	-15.506	5
12	MP2B	Mx	.01	5
13	MP2C	X	23.892	1
14	MP2C	Z	-13.794	1
15	MP2C	Mx	.011	1
16	MP2C	X	23.892	5
17	MP2C	Z	-13.794	5
18	MP2C	Mx	.011	5
19	MP3A	X	18.834	1
20	MP3A	Z	-10.874	1
21	MP3A	Mx	-.01	1
22	MP3A	X	18.834	5
23	MP3A	Z	-10.874	5
24	MP3A	Mx	-.01	5
25	MP3B	X	26.858	1
26	MP3B	Z	-15.506	1
27	MP3B	Mx	.01	1
28	MP3B	X	26.858	5
29	MP3B	Z	-15.506	5
30	MP3B	Mx	.01	5
31	MP3C	X	23.892	1
32	MP3C	Z	-13.794	1
33	MP3C	Mx	.011	1
34	MP3C	X	23.892	5
35	MP3C	Z	-13.794	5
36	MP3C	Mx	.011	5
37	MP3A	X	8.387	3.5
38	MP3A	Z	-4.842	3.5
39	MP3A	Mx	.005	3.5
40	MP3B	X	10.028	3.5
41	MP3B	Z	-5.79	3.5
42	MP3B	Mx	-.004	3.5
43	MP3C	X	9.422	3.5
44	MP3C	Z	-5.44	3.5
45	MP3C	Mx	-.004	3.5
46	MP2A	X	7.216	3.5
47	MP2A	Z	-4.166	3.5
48	MP2A	Mx	.004	3.5
49	MP2B	X	9.48	3.5
50	MP2B	Z	-5.473	3.5
51	MP2B	Mx	-.004	3.5
52	MP2C	X	8.643	3.5
53	MP2C	Z	-4.99	3.5
54	MP2C	Mx	-.004	3.5
55	MP1A	X	1.113	3.5
56	MP1A	Z	-.643	3.5
57	MP1A	Mx	-.001	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP1A	X	1.113	3.5
59	MP1A	Z	-.643	3.5
60	MP1A	Mx	-.001	3.5
61	MP1B	X	1.113	3.5
62	MP1B	Z	-.643	3.5
63	MP1B	Mx	-.001	3.5
64	MP1B	X	1.113	3.5
65	MP1B	Z	-.643	3.5
66	MP1B	Mx	-.001	3.5
67	MP1C	X	1.113	3.5
68	MP1C	Z	-.643	3.5
69	MP1C	Mx	-.001	3.5
70	MP1C	X	1.113	3.5
71	MP1C	Z	-.643	3.5
72	MP1C	Mx	-.001	3.5
73	MP4A	X	6.711	2.5
74	MP4A	Z	-3.875	2.5
75	MP4A	Mx	-.006	2.5
76	MP4A	X	6.711	4
77	MP4A	Z	-3.875	4
78	MP4A	Mx	-.006	4
79	MP4B	X	10.381	2.5
80	MP4B	Z	-5.994	2.5
81	MP4B	Mx	.006	2.5
82	MP4B	X	10.381	4
83	MP4B	Z	-5.994	4
84	MP4B	Mx	.006	4
85	MP4C	X	9.025	2.5
86	MP4C	Z	-5.211	2.5
87	MP4C	Mx	.007	2.5
88	MP4C	X	9.025	4
89	MP4C	Z	-5.211	4
90	MP4C	Mx	.007	4
91	OVP	X	9.517	.75
92	OVP	Z	-5.495	.75
93	OVP	Mx	-.005	.75
94	OVP	X	9.517	.75
95	OVP	Z	-5.495	.75
96	OVP	Mx	-.005	.75
97	M64	X	2.836	6.25
98	M64	Z	-1.637	6.25
99	M64	Mx	.000513	6.25
100	M64	X	2.836	6.25
101	M64	Z	-1.637	6.25
102	M64	Mx	.000513	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	20.036	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.01	1
4	MP2A	X	20.036	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.01	5
7	MP2B	X	38.565	1
8	MP2B	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2B	Mx	.003	1
10	MP2B	X	38.565	5
11	MP2B	Z	0	5
12	MP2B	Mx	.003	5
13	MP2C	X	20.036	1
14	MP2C	Z	0	1
15	MP2C	Mx	.01	1
16	MP2C	X	20.036	5
17	MP2C	Z	0	5
18	MP2C	Mx	.01	5
19	MP3A	X	20.036	1
20	MP3A	Z	0	1
21	MP3A	Mx	-.01	1
22	MP3A	X	20.036	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.01	5
25	MP3B	X	38.565	1
26	MP3B	Z	0	1
27	MP3B	Mx	.003	1
28	MP3B	X	38.565	5
29	MP3B	Z	0	5
30	MP3B	Mx	.003	5
31	MP3C	X	20.036	1
32	MP3C	Z	0	1
33	MP3C	Mx	.01	1
34	MP3C	X	20.036	5
35	MP3C	Z	0	5
36	MP3C	Mx	.01	5
37	MP3A	X	9.335	3.5
38	MP3A	Z	0	3.5
39	MP3A	Mx	.005	3.5
40	MP3B	X	13.123	3.5
41	MP3B	Z	0	3.5
42	MP3B	Mx	-.001	3.5
43	MP3C	X	9.335	3.5
44	MP3C	Z	0	3.5
45	MP3C	Mx	-.005	3.5
46	MP2A	X	7.849	3.5
47	MP2A	Z	0	3.5
48	MP2A	Mx	.004	3.5
49	MP2B	X	13.077	3.5
50	MP2B	Z	0	3.5
51	MP2B	Mx	-.001	3.5
52	MP2C	X	7.849	3.5
53	MP2C	Z	0	3.5
54	MP2C	Mx	-.004	3.5
55	MP1A	X	1.076	3.5
56	MP1A	Z	0	3.5
57	MP1A	Mx	-.000883	3.5
58	MP1A	X	1.076	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-.000883	3.5
61	MP1B	X	1.076	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	-.000883	3.5
64	MP1B	X	1.076	3.5
65	MP1B	Z	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	-.000883	3.5
67	MP1C	X	1.076	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	-.000883	3.5
70	MP1C	X	1.076	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-.000883	3.5
73	MP4A	X	6.966	2.5
74	MP4A	Z	0	2.5
75	MP4A	Mx	-.006	2.5
76	MP4A	X	6.966	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.006	4
79	MP4B	X	15.442	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.002	2.5
82	MP4B	X	15.442	4
83	MP4B	Z	0	4
84	MP4B	Mx	.002	4
85	MP4C	X	6.966	2.5
86	MP4C	Z	0	2.5
87	MP4C	Mx	.006	2.5
88	MP4C	X	6.966	4
89	MP4C	Z	0	4
90	MP4C	Mx	.006	4
91	OVP	X	10.732	.75
92	OVP	Z	0	.75
93	OVP	Mx	-.005	.75
94	OVP	X	10.732	.75
95	OVP	Z	0	.75
96	OVP	Mx	-.005	.75
97	M64	X	2.881	6.25
98	M64	Z	0	6.25
99	M64	Mx	.000473	6.25
100	M64	X	2.881	6.25
101	M64	Z	0	6.25
102	M64	Mx	.000473	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	23.892	1
2	MP2A	Z	13.794	1
3	MP2A	Mx	-.011	1
4	MP2A	X	23.892	5
5	MP2A	Z	13.794	5
6	MP2A	Mx	-.011	5
7	MP2B	X	31.916	1
8	MP2B	Z	18.427	1
9	MP2B	Mx	-.006	1
10	MP2B	X	31.916	5
11	MP2B	Z	18.427	5
12	MP2B	Mx	-.006	5
13	MP2C	X	18.834	1
14	MP2C	Z	10.874	1
15	MP2C	Mx	.01	1
16	MP2C	X	18.834	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	10.874	5
18	MP2C	Mx	.01	5
19	MP3A	X	23.892	1
20	MP3A	Z	13.794	1
21	MP3A	Mx	-.011	1
22	MP3A	X	23.892	5
23	MP3A	Z	13.794	5
24	MP3A	Mx	-.011	5
25	MP3B	X	31.916	1
26	MP3B	Z	18.427	1
27	MP3B	Mx	-.006	1
28	MP3B	X	31.916	5
29	MP3B	Z	18.427	5
30	MP3B	Mx	-.006	5
31	MP3C	X	18.834	1
32	MP3C	Z	10.874	1
33	MP3C	Mx	.01	1
34	MP3C	X	18.834	5
35	MP3C	Z	10.874	5
36	MP3C	Mx	.01	5
37	MP3A	X	9.422	3.5
38	MP3A	Z	5.44	3.5
39	MP3A	Mx	.004	3.5
40	MP3B	X	11.062	3.5
41	MP3B	Z	6.387	3.5
42	MP3B	Mx	.002	3.5
43	MP3C	X	8.387	3.5
44	MP3C	Z	4.842	3.5
45	MP3C	Mx	-.005	3.5
46	MP2A	X	8.643	3.5
47	MP2A	Z	4.99	3.5
48	MP2A	Mx	.004	3.5
49	MP2B	X	10.907	3.5
50	MP2B	Z	6.297	3.5
51	MP2B	Mx	.002	3.5
52	MP2C	X	7.216	3.5
53	MP2C	Z	4.166	3.5
54	MP2C	Mx	-.004	3.5
55	MP1A	X	1.731	3.5
56	MP1A	Z	1	3.5
57	MP1A	Mx	-.001	3.5
58	MP1A	X	1.731	3.5
59	MP1A	Z	1	3.5
60	MP1A	Mx	-.001	3.5
61	MP1B	X	1.731	3.5
62	MP1B	Z	1	3.5
63	MP1B	Mx	-.001	3.5
64	MP1B	X	1.731	3.5
65	MP1B	Z	1	3.5
66	MP1B	Mx	-.001	3.5
67	MP1C	X	1.731	3.5
68	MP1C	Z	1	3.5
69	MP1C	Mx	-.001	3.5
70	MP1C	X	1.731	3.5
71	MP1C	Z	1	3.5
72	MP1C	Mx	-.001	3.5
73	MP4A	X	9.025	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP4A	Z	5.211	2.5
75	MP4A	Mx	-.007	2.5
76	MP4A	X	9.025	4
77	MP4A	Z	5.211	4
78	MP4A	Mx	-.007	4
79	MP4B	X	12.695	2.5
80	MP4B	Z	7.33	2.5
81	MP4B	Mx	-.004	2.5
82	MP4B	X	12.695	4
83	MP4B	Z	7.33	4
84	MP4B	Mx	-.004	4
85	MP4C	X	6.711	2.5
86	MP4C	Z	3.875	2.5
87	MP4C	Mx	.006	2.5
88	MP4C	X	6.711	4
89	MP4C	Z	3.875	4
90	MP4C	Mx	.006	4
91	OVP	X	10.278	.75
92	OVP	Z	5.934	.75
93	OVP	Mx	-.005	.75
94	OVP	X	10.278	.75
95	OVP	Z	5.934	.75
96	OVP	Mx	-.005	.75
97	M64	X	4	6.25
98	M64	Z	2.309	6.25
99	M64	Mx	.00059	6.25
100	M64	X	4	6.25
101	M64	Z	2.309	6.25
102	M64	Mx	.00059	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	18.427	1
2	MP2A	Z	31.916	1
3	MP2A	Mx	-.006	1
4	MP2A	X	18.427	5
5	MP2A	Z	31.916	5
6	MP2A	Mx	-.006	5
7	MP2B	X	13.794	1
8	MP2B	Z	23.892	1
9	MP2B	Mx	-.011	1
10	MP2B	X	13.794	5
11	MP2B	Z	23.892	5
12	MP2B	Mx	-.011	5
13	MP2C	X	15.506	1
14	MP2C	Z	26.858	1
15	MP2C	Mx	.01	1
16	MP2C	X	15.506	5
17	MP2C	Z	26.858	5
18	MP2C	Mx	.01	5
19	MP3A	X	18.427	1
20	MP3A	Z	31.916	1
21	MP3A	Mx	-.006	1
22	MP3A	X	18.427	5
23	MP3A	Z	31.916	5
24	MP3A	Mx	-.006	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	13.794	1
26	MP3B	Z	23.892	1
27	MP3B	Mx	-.011	1
28	MP3B	X	13.794	5
29	MP3B	Z	23.892	5
30	MP3B	Mx	-.011	5
31	MP3C	X	15.506	1
32	MP3C	Z	26.858	1
33	MP3C	Mx	.01	1
34	MP3C	X	15.506	5
35	MP3C	Z	26.858	5
36	MP3C	Mx	.01	5
37	MP3A	X	6.387	3.5
38	MP3A	Z	11.062	3.5
39	MP3A	Mx	.002	3.5
40	MP3B	X	5.44	3.5
41	MP3B	Z	9.422	3.5
42	MP3B	Mx	.004	3.5
43	MP3C	X	5.79	3.5
44	MP3C	Z	10.028	3.5
45	MP3C	Mx	-.004	3.5
46	MP2A	X	6.297	3.5
47	MP2A	Z	10.907	3.5
48	MP2A	Mx	.002	3.5
49	MP2B	X	4.99	3.5
50	MP2B	Z	8.643	3.5
51	MP2B	Mx	.004	3.5
52	MP2C	X	5.473	3.5
53	MP2C	Z	9.48	3.5
54	MP2C	Mx	-.004	3.5
55	MP1A	X	1.566	3.5
56	MP1A	Z	2.712	3.5
57	MP1A	Mx	-.000893	3.5
58	MP1A	X	1.566	3.5
59	MP1A	Z	2.712	3.5
60	MP1A	Mx	-.000893	3.5
61	MP1B	X	1.566	3.5
62	MP1B	Z	2.712	3.5
63	MP1B	Mx	-.000893	3.5
64	MP1B	X	1.566	3.5
65	MP1B	Z	2.712	3.5
66	MP1B	Mx	-.000893	3.5
67	MP1C	X	1.566	3.5
68	MP1C	Z	2.712	3.5
69	MP1C	Mx	-.000893	3.5
70	MP1C	X	1.566	3.5
71	MP1C	Z	2.712	3.5
72	MP1C	Mx	-.000893	3.5
73	MP4A	X	7.33	2.5
74	MP4A	Z	12.695	2.5
75	MP4A	Mx	-.004	2.5
76	MP4A	X	7.33	4
77	MP4A	Z	12.695	4
78	MP4A	Mx	-.004	4
79	MP4B	X	5.211	2.5
80	MP4B	Z	9.025	2.5
81	MP4B	Mx	-.007	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
82	MP4B	X	5.211	4
83	MP4B	Z	9.025	4
84	MP4B	Mx	-.007	4
85	MP4C	X	5.994	2.5
86	MP4C	Z	10.381	2.5
87	MP4C	Mx	.006	2.5
88	MP4C	X	5.994	4
89	MP4C	Z	10.381	4
90	MP4C	Mx	.006	4
91	OVP	X	6.631	.75
92	OVP	Z	11.485	.75
93	OVP	Mx	-.002	.75
94	OVP	X	6.631	.75
95	OVP	Z	11.485	.75
96	OVP	Mx	-.002	.75
97	M64	X	3.375	6.25
98	M64	Z	5.846	6.25
99	M64	Mx	.000385	6.25
100	M64	X	3.375	6.25
101	M64	Z	5.846	6.25
102	M64	Mx	.000385	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1
2	MP2A	Z	38.565	1
3	MP2A	Mx	.003	1
4	MP2A	X	0	5
5	MP2A	Z	38.565	5
6	MP2A	Mx	.003	5
7	MP2B	X	0	1
8	MP2B	Z	20.036	1
9	MP2B	Mx	-.01	1
10	MP2B	X	0	5
11	MP2B	Z	20.036	5
12	MP2B	Mx	-.01	5
13	MP2C	X	0	1
14	MP2C	Z	38.565	1
15	MP2C	Mx	.003	1
16	MP2C	X	0	5
17	MP2C	Z	38.565	5
18	MP2C	Mx	.003	5
19	MP3A	X	0	1
20	MP3A	Z	38.565	1
21	MP3A	Mx	.003	1
22	MP3A	X	0	5
23	MP3A	Z	38.565	5
24	MP3A	Mx	.003	5
25	MP3B	X	0	1
26	MP3B	Z	20.036	1
27	MP3B	Mx	-.01	1
28	MP3B	X	0	5
29	MP3B	Z	20.036	5
30	MP3B	Mx	-.01	5
31	MP3C	X	0	1
32	MP3C	Z	38.565	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP3C	Mx	.003	1
34	MP3C	X	0	5
35	MP3C	Z	38.565	5
36	MP3C	Mx	.003	5
37	MP3A	X	0	3.5
38	MP3A	Z	13.123	3.5
39	MP3A	Mx	-.001	3.5
40	MP3B	X	0	3.5
41	MP3B	Z	9.335	3.5
42	MP3B	Mx	.005	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	13.123	3.5
45	MP3C	Mx	-.001	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	13.077	3.5
48	MP2A	Mx	-.001	3.5
49	MP2B	X	0	3.5
50	MP2B	Z	7.849	3.5
51	MP2B	Mx	.004	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	13.077	3.5
54	MP2C	Mx	-.001	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	3.341	3.5
57	MP1A	Mx	.000483	3.5
58	MP1A	X	0	3.5
59	MP1A	Z	3.341	3.5
60	MP1A	Mx	.000483	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	3.341	3.5
63	MP1B	Mx	.000483	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	3.341	3.5
66	MP1B	Mx	.000483	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	3.341	3.5
69	MP1C	Mx	.000483	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	3.341	3.5
72	MP1C	Mx	.000483	3.5
73	MP4A	X	0	2.5
74	MP4A	Z	15.442	2.5
75	MP4A	Mx	.002	2.5
76	MP4A	X	0	4
77	MP4A	Z	15.442	4
78	MP4A	Mx	.002	4
79	MP4B	X	0	2.5
80	MP4B	Z	6.966	2.5
81	MP4B	Mx	-.006	2.5
82	MP4B	X	0	4
83	MP4B	Z	6.966	4
84	MP4B	Mx	-.006	4
85	MP4C	X	0	2.5
86	MP4C	Z	15.442	2.5
87	MP4C	Mx	.002	2.5
88	MP4C	X	0	4
89	MP4C	Z	15.442	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP4C	Mx	.002	4
91	OVP	X	0	.75
92	OVP	Z	13.52	.75
93	OVP	Mx	.001	.75
94	OVP	X	0	.75
95	OVP	Z	13.52	.75
96	OVP	Mx	.001	.75
97	M64	X	0	6.25
98	M64	Z	7.144	6.25
99	M64	Mx	-.000207	6.25
100	M64	X	0	6.25
101	M64	Z	7.144	6.25
102	M64	Mx	-.000207	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-15.506	1
2	MP2A	Z	26.858	1
3	MP2A	Mx	.01	1
4	MP2A	X	-15.506	5
5	MP2A	Z	26.858	5
6	MP2A	Mx	.01	5
7	MP2B	X	-10.874	1
8	MP2B	Z	18.834	1
9	MP2B	Mx	-.01	1
10	MP2B	X	-10.874	5
11	MP2B	Z	18.834	5
12	MP2B	Mx	-.01	5
13	MP2C	X	-18.427	1
14	MP2C	Z	31.916	1
15	MP2C	Mx	-.006	1
16	MP2C	X	-18.427	5
17	MP2C	Z	31.916	5
18	MP2C	Mx	-.006	5
19	MP3A	X	-15.506	1
20	MP3A	Z	26.858	1
21	MP3A	Mx	.01	1
22	MP3A	X	-15.506	5
23	MP3A	Z	26.858	5
24	MP3A	Mx	.01	5
25	MP3B	X	-10.874	1
26	MP3B	Z	18.834	1
27	MP3B	Mx	-.01	1
28	MP3B	X	-10.874	5
29	MP3B	Z	18.834	5
30	MP3B	Mx	-.01	5
31	MP3C	X	-18.427	1
32	MP3C	Z	31.916	1
33	MP3C	Mx	-.006	1
34	MP3C	X	-18.427	5
35	MP3C	Z	31.916	5
36	MP3C	Mx	-.006	5
37	MP3A	X	-5.79	3.5
38	MP3A	Z	10.028	3.5
39	MP3A	Mx	-.004	3.5
40	MP3B	X	-4.842	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
41	MP3B	Z	8.387	3.5
42	MP3B	Mx	.005	3.5
43	MP3C	X	-6.387	3.5
44	MP3C	Z	11.062	3.5
45	MP3C	Mx	.002	3.5
46	MP2A	X	-5.473	3.5
47	MP2A	Z	9.48	3.5
48	MP2A	Mx	-.004	3.5
49	MP2B	X	-4.166	3.5
50	MP2B	Z	7.216	3.5
51	MP2B	Mx	.004	3.5
52	MP2C	X	-6.297	3.5
53	MP2C	Z	10.907	3.5
54	MP2C	Mx	.002	3.5
55	MP1A	X	-1.209	3.5
56	MP1A	Z	2.094	3.5
57	MP1A	Mx	.001	3.5
58	MP1A	X	-1.209	3.5
59	MP1A	Z	2.094	3.5
60	MP1A	Mx	.001	3.5
61	MP1B	X	-1.209	3.5
62	MP1B	Z	2.094	3.5
63	MP1B	Mx	.001	3.5
64	MP1B	X	-1.209	3.5
65	MP1B	Z	2.094	3.5
66	MP1B	Mx	.001	3.5
67	MP1C	X	-1.209	3.5
68	MP1C	Z	2.094	3.5
69	MP1C	Mx	.001	3.5
70	MP1C	X	-1.209	3.5
71	MP1C	Z	2.094	3.5
72	MP1C	Mx	.001	3.5
73	MP4A	X	-5.994	2.5
74	MP4A	Z	10.381	2.5
75	MP4A	Mx	.006	2.5
76	MP4A	X	-5.994	4
77	MP4A	Z	10.381	4
78	MP4A	Mx	.006	4
79	MP4B	X	-3.875	2.5
80	MP4B	Z	6.711	2.5
81	MP4B	Mx	-.006	2.5
82	MP4B	X	-3.875	4
83	MP4B	Z	6.711	4
84	MP4B	Mx	-.006	4
85	MP4C	X	-7.33	2.5
86	MP4C	Z	12.695	2.5
87	MP4C	Mx	-.004	2.5
88	MP4C	X	-7.33	4
89	MP4C	Z	12.695	4
90	MP4C	Mx	-.004	4
91	OVP	X	-6.192	.75
92	OVP	Z	10.724	.75
93	OVP	Mx	.004	.75
94	OVP	X	-6.192	.75
95	OVP	Z	10.724	.75
96	OVP	Mx	.004	.75
97	M64	X	-2.703	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
98	M64	Z	4.682	6.25
99	M64	Mx	-.000579	6.25
100	M64	X	-2.703	6.25
101	M64	Z	4.682	6.25
102	M64	Mx	-.000579	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-18.834	1
2	MP2A	Z	10.874	1
3	MP2A	Mx	.01	1
4	MP2A	X	-18.834	5
5	MP2A	Z	10.874	5
6	MP2A	Mx	.01	5
7	MP2B	X	-26.858	1
8	MP2B	Z	15.506	1
9	MP2B	Mx	-.01	1
10	MP2B	X	-26.858	5
11	MP2B	Z	15.506	5
12	MP2B	Mx	-.01	5
13	MP2C	X	-23.892	1
14	MP2C	Z	13.794	1
15	MP2C	Mx	-.011	1
16	MP2C	X	-23.892	5
17	MP2C	Z	13.794	5
18	MP2C	Mx	-.011	5
19	MP3A	X	-18.834	1
20	MP3A	Z	10.874	1
21	MP3A	Mx	.01	1
22	MP3A	X	-18.834	5
23	MP3A	Z	10.874	5
24	MP3A	Mx	.01	5
25	MP3B	X	-26.858	1
26	MP3B	Z	15.506	1
27	MP3B	Mx	-.01	1
28	MP3B	X	-26.858	5
29	MP3B	Z	15.506	5
30	MP3B	Mx	-.01	5
31	MP3C	X	-23.892	1
32	MP3C	Z	13.794	1
33	MP3C	Mx	-.011	1
34	MP3C	X	-23.892	5
35	MP3C	Z	13.794	5
36	MP3C	Mx	-.011	5
37	MP3A	X	-8.387	3.5
38	MP3A	Z	4.842	3.5
39	MP3A	Mx	-.005	3.5
40	MP3B	X	-10.028	3.5
41	MP3B	Z	5.79	3.5
42	MP3B	Mx	.004	3.5
43	MP3C	X	-9.422	3.5
44	MP3C	Z	5.44	3.5
45	MP3C	Mx	.004	3.5
46	MP2A	X	-7.216	3.5
47	MP2A	Z	4.166	3.5
48	MP2A	Mx	-.004	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP2B	X	-9.48	3.5
50	MP2B	Z	5.473	3.5
51	MP2B	Mx	.004	3.5
52	MP2C	X	-8.643	3.5
53	MP2C	Z	4.99	3.5
54	MP2C	Mx	.004	3.5
55	MP1A	X	-1.113	3.5
56	MP1A	Z	.643	3.5
57	MP1A	Mx	.001	3.5
58	MP1A	X	-1.113	3.5
59	MP1A	Z	.643	3.5
60	MP1A	Mx	.001	3.5
61	MP1B	X	-1.113	3.5
62	MP1B	Z	.643	3.5
63	MP1B	Mx	.001	3.5
64	MP1B	X	-1.113	3.5
65	MP1B	Z	.643	3.5
66	MP1B	Mx	.001	3.5
67	MP1C	X	-1.113	3.5
68	MP1C	Z	.643	3.5
69	MP1C	Mx	.001	3.5
70	MP1C	X	-1.113	3.5
71	MP1C	Z	.643	3.5
72	MP1C	Mx	.001	3.5
73	MP4A	X	-6.711	2.5
74	MP4A	Z	3.875	2.5
75	MP4A	Mx	.006	2.5
76	MP4A	X	-6.711	4
77	MP4A	Z	3.875	4
78	MP4A	Mx	.006	4
79	MP4B	X	-10.381	2.5
80	MP4B	Z	5.994	2.5
81	MP4B	Mx	-.006	2.5
82	MP4B	X	-10.381	4
83	MP4B	Z	5.994	4
84	MP4B	Mx	-.006	4
85	MP4C	X	-9.025	2.5
86	MP4C	Z	5.211	2.5
87	MP4C	Mx	-.007	2.5
88	MP4C	X	-9.025	4
89	MP4C	Z	5.211	4
90	MP4C	Mx	-.007	4
91	OVP	X	-9.517	.75
92	OVP	Z	5.495	.75
93	OVP	Mx	.005	.75
94	OVP	X	-9.517	.75
95	OVP	Z	5.495	.75
96	OVP	Mx	.005	.75
97	M64	X	-2.836	6.25
98	M64	Z	1.637	6.25
99	M64	Mx	-.000513	6.25
100	M64	X	-2.836	6.25
101	M64	Z	1.637	6.25
102	M64	Mx	-.000513	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
58	MP1A	X	-1.076	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	.000883	3.5
61	MP1B	X	-1.076	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	.000883	3.5
64	MP1B	X	-1.076	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	.000883	3.5
67	MP1C	X	-1.076	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	.000883	3.5
70	MP1C	X	-1.076	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	.000883	3.5
73	MP4A	X	-6.966	2.5
74	MP4A	Z	0	2.5
75	MP4A	Mx	.006	2.5
76	MP4A	X	-6.966	4
77	MP4A	Z	0	4
78	MP4A	Mx	.006	4
79	MP4B	X	-15.442	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	-.002	2.5
82	MP4B	X	-15.442	4
83	MP4B	Z	0	4
84	MP4B	Mx	-.002	4
85	MP4C	X	-6.966	2.5
86	MP4C	Z	0	2.5
87	MP4C	Mx	-.006	2.5
88	MP4C	X	-6.966	4
89	MP4C	Z	0	4
90	MP4C	Mx	-.006	4
91	OVP	X	-10.732	.75
92	OVP	Z	0	.75
93	OVP	Mx	.005	.75
94	OVP	X	-10.732	.75
95	OVP	Z	0	.75
96	OVP	Mx	.005	.75
97	M64	X	-2.881	6.25
98	M64	Z	0	6.25
99	M64	Mx	-.000473	6.25
100	M64	X	-2.881	6.25
101	M64	Z	0	6.25
102	M64	Mx	-.000473	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-23.892	1
2	MP2A	Z	-13.794	1
3	MP2A	Mx	.011	1
4	MP2A	X	-23.892	5
5	MP2A	Z	-13.794	5
6	MP2A	Mx	.011	5
7	MP2B	X	-31.916	1
8	MP2B	Z	-18.427	1



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
 4:35 PM
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Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2B	Mx	.006	1
10	MP2B	X	-31.916	5
11	MP2B	Z	-18.427	5
12	MP2B	Mx	.006	5
13	MP2C	X	-18.834	1
14	MP2C	Z	-10.874	1
15	MP2C	Mx	-.01	1
16	MP2C	X	-18.834	5
17	MP2C	Z	-10.874	5
18	MP2C	Mx	-.01	5
19	MP3A	X	-23.892	1
20	MP3A	Z	-13.794	1
21	MP3A	Mx	.011	1
22	MP3A	X	-23.892	5
23	MP3A	Z	-13.794	5
24	MP3A	Mx	.011	5
25	MP3B	X	-31.916	1
26	MP3B	Z	-18.427	1
27	MP3B	Mx	.006	1
28	MP3B	X	-31.916	5
29	MP3B	Z	-18.427	5
30	MP3B	Mx	.006	5
31	MP3C	X	-18.834	1
32	MP3C	Z	-10.874	1
33	MP3C	Mx	-.01	1
34	MP3C	X	-18.834	5
35	MP3C	Z	-10.874	5
36	MP3C	Mx	-.01	5
37	MP3A	X	-9.422	3.5
38	MP3A	Z	-5.44	3.5
39	MP3A	Mx	-.004	3.5
40	MP3B	X	-11.062	3.5
41	MP3B	Z	-6.387	3.5
42	MP3B	Mx	-.002	3.5
43	MP3C	X	-8.387	3.5
44	MP3C	Z	-4.842	3.5
45	MP3C	Mx	.005	3.5
46	MP2A	X	-8.643	3.5
47	MP2A	Z	-4.99	3.5
48	MP2A	Mx	-.004	3.5
49	MP2B	X	-10.907	3.5
50	MP2B	Z	-6.297	3.5
51	MP2B	Mx	-.002	3.5
52	MP2C	X	-7.216	3.5
53	MP2C	Z	-4.166	3.5
54	MP2C	Mx	.004	3.5
55	MP1A	X	-1.731	3.5
56	MP1A	Z	-1	3.5
57	MP1A	Mx	.001	3.5
58	MP1A	X	-1.731	3.5
59	MP1A	Z	-1	3.5
60	MP1A	Mx	.001	3.5
61	MP1B	X	-1.731	3.5
62	MP1B	Z	-1	3.5
63	MP1B	Mx	.001	3.5
64	MP1B	X	-1.731	3.5
65	MP1B	Z	-1	3.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
 4:35 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	.001	3.5
67	MP1C	X	-1.731	3.5
68	MP1C	Z	-1	3.5
69	MP1C	Mx	.001	3.5
70	MP1C	X	-1.731	3.5
71	MP1C	Z	-1	3.5
72	MP1C	Mx	.001	3.5
73	MP4A	X	-9.025	2.5
74	MP4A	Z	-5.211	2.5
75	MP4A	Mx	.007	2.5
76	MP4A	X	-9.025	4
77	MP4A	Z	-5.211	4
78	MP4A	Mx	.007	4
79	MP4B	X	-12.695	2.5
80	MP4B	Z	-7.33	2.5
81	MP4B	Mx	.004	2.5
82	MP4B	X	-12.695	4
83	MP4B	Z	-7.33	4
84	MP4B	Mx	.004	4
85	MP4C	X	-6.711	2.5
86	MP4C	Z	-3.875	2.5
87	MP4C	Mx	-.006	2.5
88	MP4C	X	-6.711	4
89	MP4C	Z	-3.875	4
90	MP4C	Mx	-.006	4
91	OVP	X	-10.278	.75
92	OVP	Z	-5.934	.75
93	OVP	Mx	.005	.75
94	OVP	X	-10.278	.75
95	OVP	Z	-5.934	.75
96	OVP	Mx	.005	.75
97	M64	X	-4	6.25
98	M64	Z	-2.309	6.25
99	M64	Mx	-.00059	6.25
100	M64	X	-4	6.25
101	M64	Z	-2.309	6.25
102	M64	Mx	-.00059	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-18.427	1
2	MP2A	Z	-31.916	1
3	MP2A	Mx	.006	1
4	MP2A	X	-18.427	5
5	MP2A	Z	-31.916	5
6	MP2A	Mx	.006	5
7	MP2B	X	-13.794	1
8	MP2B	Z	-23.892	1
9	MP2B	Mx	.011	1
10	MP2B	X	-13.794	5
11	MP2B	Z	-23.892	5
12	MP2B	Mx	.011	5
13	MP2C	X	-15.506	1
14	MP2C	Z	-26.858	1
15	MP2C	Mx	-.01	1
16	MP2C	X	-15.506	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	-26.858	5
18	MP2C	Mx	-.01	5
19	MP3A	X	-18.427	1
20	MP3A	Z	-31.916	1
21	MP3A	Mx	.006	1
22	MP3A	X	-18.427	5
23	MP3A	Z	-31.916	5
24	MP3A	Mx	.006	5
25	MP3B	X	-13.794	1
26	MP3B	Z	-23.892	1
27	MP3B	Mx	.011	1
28	MP3B	X	-13.794	5
29	MP3B	Z	-23.892	5
30	MP3B	Mx	.011	5
31	MP3C	X	-15.506	1
32	MP3C	Z	-26.858	1
33	MP3C	Mx	-.01	1
34	MP3C	X	-15.506	5
35	MP3C	Z	-26.858	5
36	MP3C	Mx	-.01	5
37	MP3A	X	-6.387	3.5
38	MP3A	Z	-11.062	3.5
39	MP3A	Mx	-.002	3.5
40	MP3B	X	-5.44	3.5
41	MP3B	Z	-9.422	3.5
42	MP3B	Mx	-.004	3.5
43	MP3C	X	-5.79	3.5
44	MP3C	Z	-10.028	3.5
45	MP3C	Mx	.004	3.5
46	MP2A	X	-6.297	3.5
47	MP2A	Z	-10.907	3.5
48	MP2A	Mx	-.002	3.5
49	MP2B	X	-4.99	3.5
50	MP2B	Z	-8.643	3.5
51	MP2B	Mx	-.004	3.5
52	MP2C	X	-5.473	3.5
53	MP2C	Z	-9.48	3.5
54	MP2C	Mx	.004	3.5
55	MP1A	X	-1.566	3.5
56	MP1A	Z	-2.712	3.5
57	MP1A	Mx	.000893	3.5
58	MP1A	X	-1.566	3.5
59	MP1A	Z	-2.712	3.5
60	MP1A	Mx	.000893	3.5
61	MP1B	X	-1.566	3.5
62	MP1B	Z	-2.712	3.5
63	MP1B	Mx	.000893	3.5
64	MP1B	X	-1.566	3.5
65	MP1B	Z	-2.712	3.5
66	MP1B	Mx	.000893	3.5
67	MP1C	X	-1.566	3.5
68	MP1C	Z	-2.712	3.5
69	MP1C	Mx	.000893	3.5
70	MP1C	X	-1.566	3.5
71	MP1C	Z	-2.712	3.5
72	MP1C	Mx	.000893	3.5
73	MP4A	X	-7.33	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	0	1
26	MP3B	Z	-6.335	1
27	MP3B	Mx	.003	1
28	MP3B	X	0	5
29	MP3B	Z	-6.335	5
30	MP3B	Mx	.003	5
31	MP3C	X	0	1
32	MP3C	Z	-12.862	1
33	MP3C	Mx	-.001	1
34	MP3C	X	0	5
35	MP3C	Z	-12.862	5
36	MP3C	Mx	-.001	5
37	MP3A	X	0	3.5
38	MP3A	Z	-3.27	3.5
39	MP3A	Mx	.000284	3.5
40	MP3B	X	0	3.5
41	MP3B	Z	-2.249	3.5
42	MP3B	Mx	-.001	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	-3.27	3.5
45	MP3C	Mx	.000284	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	-3.258	3.5
48	MP2A	Mx	.000283	3.5
49	MP2B	X	0	3.5
50	MP2B	Z	-1.856	3.5
51	MP2B	Mx	-.000914	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	-3.258	3.5
54	MP2C	Mx	.000283	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	-.925	3.5
57	MP1A	Mx	-.000134	3.5
58	MP1A	X	0	3.5
59	MP1A	Z	-.925	3.5
60	MP1A	Mx	-.000134	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	-.925	3.5
63	MP1B	Mx	-.000134	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	-.925	3.5
66	MP1B	Mx	-.000134	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	-.925	3.5
69	MP1C	Mx	-.000134	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	-.925	3.5
72	MP1C	Mx	-.000134	3.5
73	MP4A	X	0	2.5
74	MP4A	Z	-4.094	2.5
75	MP4A	Mx	-.000592	2.5
76	MP4A	X	0	4
77	MP4A	Z	-4.094	4
78	MP4A	Mx	-.000592	4
79	MP4B	X	0	2.5
80	MP4B	Z	-1.521	2.5
81	MP4B	Mx	.001	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP3C	Mx	.002	1
34	MP3C	X	6.13	5
35	MP3C	Z	-10.617	5
36	MP3C	Mx	.002	5
37	MP3A	X	1.427	3.5
38	MP3A	Z	-2.471	3.5
39	MP3A	Mx	.000917	3.5
40	MP3B	X	1.172	3.5
41	MP3B	Z	-2.029	3.5
42	MP3B	Mx	-.001	3.5
43	MP3C	X	1.588	3.5
44	MP3C	Z	-2.75	3.5
45	MP3C	Mx	-.000543	3.5
46	MP2A	X	1.343	3.5
47	MP2A	Z	-2.326	3.5
48	MP2A	Mx	.000863	3.5
49	MP2B	X	.993	3.5
50	MP2B	Z	-1.72	3.5
51	MP2B	Mx	-.000933	3.5
52	MP2C	X	1.564	3.5
53	MP2C	Z	-2.709	3.5
54	MP2C	Mx	-.000535	3.5
55	MP1A	X	.317	3.5
56	MP1A	Z	-.548	3.5
57	MP1A	Mx	-.000339	3.5
58	MP1A	X	.317	3.5
59	MP1A	Z	-.548	3.5
60	MP1A	Mx	-.000339	3.5
61	MP1B	X	.317	3.5
62	MP1B	Z	-.548	3.5
63	MP1B	Mx	-.000339	3.5
64	MP1B	X	.317	3.5
65	MP1B	Z	-.548	3.5
66	MP1B	Mx	-.000339	3.5
67	MP1C	X	.317	3.5
68	MP1C	Z	-.548	3.5
69	MP1C	Mx	-.000339	3.5
70	MP1C	X	.317	3.5
71	MP1C	Z	-.548	3.5
72	MP1C	Mx	-.000339	3.5
73	MP4A	X	1.522	2.5
74	MP4A	Z	-2.637	2.5
75	MP4A	Mx	-.002	2.5
76	MP4A	X	1.522	4
77	MP4A	Z	-2.637	4
78	MP4A	Mx	-.002	4
79	MP4B	X	.879	2.5
80	MP4B	Z	-1.523	2.5
81	MP4B	Mx	.001	2.5
82	MP4B	X	.879	4
83	MP4B	Z	-1.523	4
84	MP4B	Mx	.001	4
85	MP4C	X	1.928	2.5
86	MP4C	Z	-3.339	2.5
87	MP4C	Mx	.001	2.5
88	MP4C	X	1.928	4
89	MP4C	Z	-3.339	4



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP4C	Mx	.001	4
91	OVP	X	1.521	.75
92	OVP	Z	-2.635	.75
93	OVP	Mx	-.000978	.75
94	OVP	X	1.521	.75
95	OVP	Z	-2.635	.75
96	OVP	Mx	-.000978	.75
97	M64	X	.728	6.25
98	M64	Z	-1.262	6.25
99	M64	Mx	.000156	6.25
100	M64	X	.728	6.25
101	M64	Z	-1.262	6.25
102	M64	Mx	.000156	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	6.009	1
2	MP2A	Z	-3.469	1
3	MP2A	Mx	-.003	1
4	MP2A	X	6.009	5
5	MP2A	Z	-3.469	5
6	MP2A	Mx	-.003	5
7	MP2B	X	8.835	1
8	MP2B	Z	-5.101	1
9	MP2B	Mx	.003	1
10	MP2B	X	8.835	5
11	MP2B	Z	-5.101	5
12	MP2B	Mx	.003	5
13	MP2C	X	7.79	1
14	MP2C	Z	-4.498	1
15	MP2C	Mx	.003	1
16	MP2C	X	7.79	5
17	MP2C	Z	-4.498	5
18	MP2C	Mx	.003	5
19	MP3A	X	6.009	1
20	MP3A	Z	-3.469	1
21	MP3A	Mx	-.003	1
22	MP3A	X	6.009	5
23	MP3A	Z	-3.469	5
24	MP3A	Mx	-.003	5
25	MP3B	X	8.835	1
26	MP3B	Z	-5.101	1
27	MP3B	Mx	.003	1
28	MP3B	X	8.835	5
29	MP3B	Z	-5.101	5
30	MP3B	Mx	.003	5
31	MP3C	X	7.79	1
32	MP3C	Z	-4.498	1
33	MP3C	Mx	.003	1
34	MP3C	X	7.79	5
35	MP3C	Z	-4.498	5
36	MP3C	Mx	.003	5
37	MP3A	X	2.029	3.5
38	MP3A	Z	-1.172	3.5
39	MP3A	Mx	.001	3.5
40	MP3B	X	2.471	3.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
41	MP3B	Z	-1.427	3.5
42	MP3B	Mx	-0.00917	3.5
43	MP3C	X	2.308	3.5
44	MP3C	Z	-1.332	3.5
45	MP3C	Mx	-.001	3.5
46	MP2A	X	1.72	3.5
47	MP2A	Z	-.993	3.5
48	MP2A	Mx	.000933	3.5
49	MP2B	X	2.326	3.5
50	MP2B	Z	-1.343	3.5
51	MP2B	Mx	-0.00863	3.5
52	MP2C	X	2.102	3.5
53	MP2C	Z	-1.214	3.5
54	MP2C	Mx	-.00093	3.5
55	MP1A	X	.238	3.5
56	MP1A	Z	-.138	3.5
57	MP1A	Mx	-0.00215	3.5
58	MP1A	X	.238	3.5
59	MP1A	Z	-.138	3.5
60	MP1A	Mx	-0.00215	3.5
61	MP1B	X	.238	3.5
62	MP1B	Z	-.138	3.5
63	MP1B	Mx	-0.00215	3.5
64	MP1B	X	.238	3.5
65	MP1B	Z	-.138	3.5
66	MP1B	Mx	-0.00215	3.5
67	MP1C	X	.238	3.5
68	MP1C	Z	-.138	3.5
69	MP1C	Mx	-0.00215	3.5
70	MP1C	X	.238	3.5
71	MP1C	Z	-.138	3.5
72	MP1C	Mx	-0.00215	3.5
73	MP4A	X	1.523	2.5
74	MP4A	Z	-.879	2.5
75	MP4A	Mx	-.001	2.5
76	MP4A	X	1.523	4
77	MP4A	Z	-.879	4
78	MP4A	Mx	-.001	4
79	MP4B	X	2.637	2.5
80	MP4B	Z	-1.522	2.5
81	MP4B	Mx	.002	2.5
82	MP4B	X	2.637	4
83	MP4B	Z	-1.522	4
84	MP4B	Mx	.002	4
85	MP4C	X	2.225	2.5
86	MP4C	Z	-1.285	2.5
87	MP4C	Mx	.002	2.5
88	MP4C	X	2.225	4
89	MP4C	Z	-1.285	4
90	MP4C	Mx	.002	4
91	OVP	X	2.306	.75
92	OVP	Z	-1.331	.75
93	OVP	Mx	-.001	.75
94	OVP	X	2.306	.75
95	OVP	Z	-1.331	.75
96	OVP	Mx	-.001	.75
97	M64	X	.682	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
49	MP2B	X	3.258	3.5
50	MP2B	Z	0	3.5
51	MP2B	Mx	-.000283	3.5
52	MP2C	X	1.856	3.5
53	MP2C	Z	0	3.5
54	MP2C	Mx	-.000914	3.5
55	MP1A	X	.209	3.5
56	MP1A	Z	0	3.5
57	MP1A	Mx	-.000172	3.5
58	MP1A	X	.209	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-.000172	3.5
61	MP1B	X	.209	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	-.000172	3.5
64	MP1B	X	.209	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	-.000172	3.5
67	MP1C	X	.209	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	-.000172	3.5
70	MP1C	X	.209	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-.000172	3.5
73	MP4A	X	1.521	2.5
74	MP4A	Z	0	2.5
75	MP4A	Mx	-.001	2.5
76	MP4A	X	1.521	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.001	4
79	MP4B	X	4.094	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	.000592	2.5
82	MP4B	X	4.094	4
83	MP4B	Z	0	4
84	MP4B	Mx	.000592	4
85	MP4C	X	1.521	2.5
86	MP4C	Z	0	2.5
87	MP4C	Mx	.001	2.5
88	MP4C	X	1.521	4
89	MP4C	Z	0	4
90	MP4C	Mx	.001	4
91	OVP	X	2.592	.75
92	OVP	Z	0	.75
93	OVP	Mx	-.001	.75
94	OVP	X	2.592	.75
95	OVP	Z	0	.75
96	OVP	Mx	-.001	.75
97	M64	X	.663	6.25
98	M64	Z	0	6.25
99	M64	Mx	.000109	6.25
100	M64	X	.663	6.25
101	M64	Z	0	6.25
102	M64	Mx	.000109	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
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Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	7.79	1
2	MP2A	Z	4.498	1
3	MP2A	Mx	-.003	1
4	MP2A	X	7.79	5
5	MP2A	Z	4.498	5
6	MP2A	Mx	-.003	5
7	MP2B	X	10.617	1
8	MP2B	Z	6.13	1
9	MP2B	Mx	-.002	1
10	MP2B	X	10.617	5
11	MP2B	Z	6.13	5
12	MP2B	Mx	-.002	5
13	MP2C	X	6.009	1
14	MP2C	Z	3.469	1
15	MP2C	Mx	.003	1
16	MP2C	X	6.009	5
17	MP2C	Z	3.469	5
18	MP2C	Mx	.003	5
19	MP3A	X	7.79	1
20	MP3A	Z	4.498	1
21	MP3A	Mx	-.003	1
22	MP3A	X	7.79	5
23	MP3A	Z	4.498	5
24	MP3A	Mx	-.003	5
25	MP3B	X	10.617	1
26	MP3B	Z	6.13	1
27	MP3B	Mx	-.002	1
28	MP3B	X	10.617	5
29	MP3B	Z	6.13	5
30	MP3B	Mx	-.002	5
31	MP3C	X	6.009	1
32	MP3C	Z	3.469	1
33	MP3C	Mx	.003	1
34	MP3C	X	6.009	5
35	MP3C	Z	3.469	5
36	MP3C	Mx	.003	5
37	MP3A	X	2.308	3.5
38	MP3A	Z	1.332	3.5
39	MP3A	Mx	.001	3.5
40	MP3B	X	2.75	3.5
41	MP3B	Z	1.588	3.5
42	MP3B	Mx	.000543	3.5
43	MP3C	X	2.029	3.5
44	MP3C	Z	1.172	3.5
45	MP3C	Mx	-.001	3.5
46	MP2A	X	2.102	3.5
47	MP2A	Z	1.214	3.5
48	MP2A	Mx	.00093	3.5
49	MP2B	X	2.709	3.5
50	MP2B	Z	1.564	3.5
51	MP2B	Mx	.000535	3.5
52	MP2C	X	1.72	3.5
53	MP2C	Z	.993	3.5
54	MP2C	Mx	-.000933	3.5
55	MP1A	X	.434	3.5
56	MP1A	Z	.25	3.5
57	MP1A	Mx	-.00032	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
58	MP1A	X	.434	3.5
59	MP1A	Z	.25	3.5
60	MP1A	Mx	-.00032	3.5
61	MP1B	X	.434	3.5
62	MP1B	Z	.25	3.5
63	MP1B	Mx	-.00032	3.5
64	MP1B	X	.434	3.5
65	MP1B	Z	.25	3.5
66	MP1B	Mx	-.00032	3.5
67	MP1C	X	.434	3.5
68	MP1C	Z	.25	3.5
69	MP1C	Mx	-.00032	3.5
70	MP1C	X	.434	3.5
71	MP1C	Z	.25	3.5
72	MP1C	Mx	-.00032	3.5
73	MP4A	X	2.225	2.5
74	MP4A	Z	1.285	2.5
75	MP4A	Mx	-.002	2.5
76	MP4A	X	2.225	4
77	MP4A	Z	1.285	4
78	MP4A	Mx	-.002	4
79	MP4B	X	3.339	2.5
80	MP4B	Z	1.928	2.5
81	MP4B	Mx	-.001	2.5
82	MP4B	X	3.339	4
83	MP4B	Z	1.928	4
84	MP4B	Mx	-.001	4
85	MP4C	X	1.523	2.5
86	MP4C	Z	.879	2.5
87	MP4C	Mx	.001	2.5
88	MP4C	X	1.523	4
89	MP4C	Z	.879	4
90	MP4C	Mx	.001	4
91	OVP	X	2.513	.75
92	OVP	Z	1.451	.75
93	OVP	Mx	-.001	.75
94	OVP	X	2.513	.75
95	OVP	Z	1.451	.75
96	OVP	Mx	-.001	.75
97	M64	X	1.047	6.25
98	M64	Z	.605	6.25
99	M64	Mx	.000154	6.25
100	M64	X	1.047	6.25
101	M64	Z	.605	6.25
102	M64	Mx	.000154	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	6.13	1
2	MP2A	Z	10.617	1
3	MP2A	Mx	-.002	1
4	MP2A	X	6.13	5
5	MP2A	Z	10.617	5
6	MP2A	Mx	-.002	5
7	MP2B	X	4.498	1
8	MP2B	Z	7.79	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP2B	Mx	-.003	1
10	MP2B	X	4.498	5
11	MP2B	Z	7.79	5
12	MP2B	Mx	-.003	5
13	MP2C	X	5.101	1
14	MP2C	Z	8.835	1
15	MP2C	Mx	.003	1
16	MP2C	X	5.101	5
17	MP2C	Z	8.835	5
18	MP2C	Mx	.003	5
19	MP3A	X	6.13	1
20	MP3A	Z	10.617	1
21	MP3A	Mx	-.002	1
22	MP3A	X	6.13	5
23	MP3A	Z	10.617	5
24	MP3A	Mx	-.002	5
25	MP3B	X	4.498	1
26	MP3B	Z	7.79	1
27	MP3B	Mx	-.003	1
28	MP3B	X	4.498	5
29	MP3B	Z	7.79	5
30	MP3B	Mx	-.003	5
31	MP3C	X	5.101	1
32	MP3C	Z	8.835	1
33	MP3C	Mx	.003	1
34	MP3C	X	5.101	5
35	MP3C	Z	8.835	5
36	MP3C	Mx	.003	5
37	MP3A	X	1.588	3.5
38	MP3A	Z	2.75	3.5
39	MP3A	Mx	.000543	3.5
40	MP3B	X	1.332	3.5
41	MP3B	Z	2.308	3.5
42	MP3B	Mx	.001	3.5
43	MP3C	X	1.427	3.5
44	MP3C	Z	2.471	3.5
45	MP3C	Mx	-.000917	3.5
46	MP2A	X	1.564	3.5
47	MP2A	Z	2.709	3.5
48	MP2A	Mx	.000535	3.5
49	MP2B	X	1.214	3.5
50	MP2B	Z	2.102	3.5
51	MP2B	Mx	.00093	3.5
52	MP2C	X	1.343	3.5
53	MP2C	Z	2.326	3.5
54	MP2C	Mx	-.000863	3.5
55	MP1A	X	.429	3.5
56	MP1A	Z	.744	3.5
57	MP1A	Mx	-.000244	3.5
58	MP1A	X	.429	3.5
59	MP1A	Z	.744	3.5
60	MP1A	Mx	-.000244	3.5
61	MP1B	X	.429	3.5
62	MP1B	Z	.744	3.5
63	MP1B	Mx	-.000244	3.5
64	MP1B	X	.429	3.5
65	MP1B	Z	.744	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	-.000244	3.5
67	MP1C	X	.429	3.5
68	MP1C	Z	.744	3.5
69	MP1C	Mx	-.000244	3.5
70	MP1C	X	.429	3.5
71	MP1C	Z	.744	3.5
72	MP1C	Mx	-.000244	3.5
73	MP4A	X	1.928	2.5
74	MP4A	Z	3.339	2.5
75	MP4A	Mx	-.001	2.5
76	MP4A	X	1.928	4
77	MP4A	Z	3.339	4
78	MP4A	Mx	-.001	4
79	MP4B	X	1.285	2.5
80	MP4B	Z	2.225	2.5
81	MP4B	Mx	-.002	2.5
82	MP4B	X	1.285	4
83	MP4B	Z	2.225	4
84	MP4B	Mx	-.002	4
85	MP4C	X	1.522	2.5
86	MP4C	Z	2.637	2.5
87	MP4C	Mx	.002	2.5
88	MP4C	X	1.522	4
89	MP4C	Z	2.637	4
90	MP4C	Mx	.002	4
91	OVP	X	1.641	.75
92	OVP	Z	2.843	.75
93	OVP	Mx	-.000561	.75
94	OVP	X	1.641	.75
95	OVP	Z	2.843	.75
96	OVP	Mx	-.000561	.75
97	M64	X	.939	6.25
98	M64	Z	1.627	6.25
99	M64	Mx	.000107	6.25
100	M64	X	.939	6.25
101	M64	Z	1.627	6.25
102	M64	Mx	.000107	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	12.862	1
3	MP2A	Mx	.001	1
4	MP2A	X	0	5
5	MP2A	Z	12.862	5
6	MP2A	Mx	.001	5
7	MP2B	X	0	1
8	MP2B	Z	6.335	1
9	MP2B	Mx	-.003	1
10	MP2B	X	0	5
11	MP2B	Z	6.335	5
12	MP2B	Mx	-.003	5
13	MP2C	X	0	1
14	MP2C	Z	12.862	1
15	MP2C	Mx	.001	1
16	MP2C	X	0	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	12.862	5
18	MP2C	Mx	.001	5
19	MP3A	X	0	1
20	MP3A	Z	12.862	1
21	MP3A	Mx	.001	1
22	MP3A	X	0	5
23	MP3A	Z	12.862	5
24	MP3A	Mx	.001	5
25	MP3B	X	0	1
26	MP3B	Z	6.335	1
27	MP3B	Mx	-.003	1
28	MP3B	X	0	5
29	MP3B	Z	6.335	5
30	MP3B	Mx	-.003	5
31	MP3C	X	0	1
32	MP3C	Z	12.862	1
33	MP3C	Mx	.001	1
34	MP3C	X	0	5
35	MP3C	Z	12.862	5
36	MP3C	Mx	.001	5
37	MP3A	X	0	3.5
38	MP3A	Z	3.27	3.5
39	MP3A	Mx	-.000284	3.5
40	MP3B	X	0	3.5
41	MP3B	Z	2.249	3.5
42	MP3B	Mx	.001	3.5
43	MP3C	X	0	3.5
44	MP3C	Z	3.27	3.5
45	MP3C	Mx	-.000284	3.5
46	MP2A	X	0	3.5
47	MP2A	Z	3.258	3.5
48	MP2A	Mx	-.000283	3.5
49	MP2B	X	0	3.5
50	MP2B	Z	1.856	3.5
51	MP2B	Mx	.000914	3.5
52	MP2C	X	0	3.5
53	MP2C	Z	3.258	3.5
54	MP2C	Mx	-.000283	3.5
55	MP1A	X	0	3.5
56	MP1A	Z	.925	3.5
57	MP1A	Mx	.000134	3.5
58	MP1A	X	0	3.5
59	MP1A	Z	.925	3.5
60	MP1A	Mx	.000134	3.5
61	MP1B	X	0	3.5
62	MP1B	Z	.925	3.5
63	MP1B	Mx	.000134	3.5
64	MP1B	X	0	3.5
65	MP1B	Z	.925	3.5
66	MP1B	Mx	.000134	3.5
67	MP1C	X	0	3.5
68	MP1C	Z	.925	3.5
69	MP1C	Mx	.000134	3.5
70	MP1C	X	0	3.5
71	MP1C	Z	.925	3.5
72	MP1C	Mx	.000134	3.5
73	MP4A	X	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP4A	Z	4.094	2.5
75	MP4A	Mx	.000592	2.5
76	MP4A	X	0	4
77	MP4A	Z	4.094	4
78	MP4A	Mx	.000592	4
79	MP4B	X	0	2.5
80	MP4B	Z	1.521	2.5
81	MP4B	Mx	-.001	2.5
82	MP4B	X	0	4
83	MP4B	Z	1.521	4
84	MP4B	Mx	-.001	4
85	MP4C	X	0	2.5
86	MP4C	Z	4.094	2.5
87	MP4C	Mx	.000592	2.5
88	MP4C	X	0	4
89	MP4C	Z	4.094	4
90	MP4C	Mx	.000592	4
91	OVP	X	0	.75
92	OVP	Z	3.353	.75
93	OVP	Mx	.000291	.75
94	OVP	X	0	.75
95	OVP	Z	3.353	.75
96	OVP	Mx	.000291	.75
97	M64	X	0	6.25
98	M64	Z	2.002	6.25
99	M64	Mx	-5.8e-5	6.25
100	M64	X	0	6.25
101	M64	Z	2.002	6.25
102	M64	Mx	-5.8e-5	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.101	1
2	MP2A	Z	8.835	1
3	MP2A	Mx	.003	1
4	MP2A	X	-5.101	5
5	MP2A	Z	8.835	5
6	MP2A	Mx	.003	5
7	MP2B	X	-3.469	1
8	MP2B	Z	6.009	1
9	MP2B	Mx	-.003	1
10	MP2B	X	-3.469	5
11	MP2B	Z	6.009	5
12	MP2B	Mx	-.003	5
13	MP2C	X	-6.13	1
14	MP2C	Z	10.617	1
15	MP2C	Mx	-.002	1
16	MP2C	X	-6.13	5
17	MP2C	Z	10.617	5
18	MP2C	Mx	-.002	5
19	MP3A	X	-5.101	1
20	MP3A	Z	8.835	1
21	MP3A	Mx	.003	1
22	MP3A	X	-5.101	5
23	MP3A	Z	8.835	5
24	MP3A	Mx	.003	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	-3.469	1
26	MP3B	Z	6.009	1
27	MP3B	Mx	-.003	1
28	MP3B	X	-3.469	5
29	MP3B	Z	6.009	5
30	MP3B	Mx	-.003	5
31	MP3C	X	-6.13	1
32	MP3C	Z	10.617	1
33	MP3C	Mx	-.002	1
34	MP3C	X	-6.13	5
35	MP3C	Z	10.617	5
36	MP3C	Mx	-.002	5
37	MP3A	X	-1.427	3.5
38	MP3A	Z	2.471	3.5
39	MP3A	Mx	-.000917	3.5
40	MP3B	X	-1.172	3.5
41	MP3B	Z	2.029	3.5
42	MP3B	Mx	.001	3.5
43	MP3C	X	-1.588	3.5
44	MP3C	Z	2.75	3.5
45	MP3C	Mx	.000543	3.5
46	MP2A	X	-1.343	3.5
47	MP2A	Z	2.326	3.5
48	MP2A	Mx	-.000863	3.5
49	MP2B	X	-.993	3.5
50	MP2B	Z	1.72	3.5
51	MP2B	Mx	.000933	3.5
52	MP2C	X	-1.564	3.5
53	MP2C	Z	2.709	3.5
54	MP2C	Mx	.000535	3.5
55	MP1A	X	-.317	3.5
56	MP1A	Z	.548	3.5
57	MP1A	Mx	.000339	3.5
58	MP1A	X	-.317	3.5
59	MP1A	Z	.548	3.5
60	MP1A	Mx	.000339	3.5
61	MP1B	X	-.317	3.5
62	MP1B	Z	.548	3.5
63	MP1B	Mx	.000339	3.5
64	MP1B	X	-.317	3.5
65	MP1B	Z	.548	3.5
66	MP1B	Mx	.000339	3.5
67	MP1C	X	-.317	3.5
68	MP1C	Z	.548	3.5
69	MP1C	Mx	.000339	3.5
70	MP1C	X	-.317	3.5
71	MP1C	Z	.548	3.5
72	MP1C	Mx	.000339	3.5
73	MP4A	X	-1.522	2.5
74	MP4A	Z	2.637	2.5
75	MP4A	Mx	.002	2.5
76	MP4A	X	-1.522	4
77	MP4A	Z	2.637	4
78	MP4A	Mx	.002	4
79	MP4B	X	-.879	2.5
80	MP4B	Z	1.523	2.5
81	MP4B	Mx	-.001	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
82	MP4B	X	- .879	4
83	MP4B	Z	1.523	4
84	MP4B	Mx	-.001	4
85	MP4C	X	-1.928	2.5
86	MP4C	Z	3.339	2.5
87	MP4C	Mx	-.001	2.5
88	MP4C	X	-1.928	4
89	MP4C	Z	3.339	4
90	MP4C	Mx	-.001	4
91	OVP	X	-1.521	.75
92	OVP	Z	2.635	.75
93	OVP	Mx	.000978	.75
94	OVP	X	-1.521	.75
95	OVP	Z	2.635	.75
96	OVP	Mx	.000978	.75
97	M64	X	-.728	6.25
98	M64	Z	1.262	6.25
99	M64	Mx	-.000156	6.25
100	M64	X	-.728	6.25
101	M64	Z	1.262	6.25
102	M64	Mx	-.000156	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-6.009	1
2	MP2A	Z	3.469	1
3	MP2A	Mx	.003	1
4	MP2A	X	-6.009	5
5	MP2A	Z	3.469	5
6	MP2A	Mx	.003	5
7	MP2B	X	-8.835	1
8	MP2B	Z	5.101	1
9	MP2B	Mx	-.003	1
10	MP2B	X	-8.835	5
11	MP2B	Z	5.101	5
12	MP2B	Mx	-.003	5
13	MP2C	X	-7.79	1
14	MP2C	Z	4.498	1
15	MP2C	Mx	-.003	1
16	MP2C	X	-7.79	5
17	MP2C	Z	4.498	5
18	MP2C	Mx	-.003	5
19	MP3A	X	-6.009	1
20	MP3A	Z	3.469	1
21	MP3A	Mx	.003	1
22	MP3A	X	-6.009	5
23	MP3A	Z	3.469	5
24	MP3A	Mx	.003	5
25	MP3B	X	-8.835	1
26	MP3B	Z	5.101	1
27	MP3B	Mx	-.003	1
28	MP3B	X	-8.835	5
29	MP3B	Z	5.101	5
30	MP3B	Mx	-.003	5
31	MP3C	X	-7.79	1
32	MP3C	Z	4.498	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
33	MP3C	Mx	-0.003 1
34	MP3C	X	-7.79 5
35	MP3C	Z	4.498 5
36	MP3C	Mx	-0.003 5
37	MP3A	X	-2.029 3.5
38	MP3A	Z	1.172 3.5
39	MP3A	Mx	-.001 3.5
40	MP3B	X	-2.471 3.5
41	MP3B	Z	1.427 3.5
42	MP3B	Mx	.000917 3.5
43	MP3C	X	-2.308 3.5
44	MP3C	Z	1.332 3.5
45	MP3C	Mx	.001 3.5
46	MP2A	X	-1.72 3.5
47	MP2A	Z	.993 3.5
48	MP2A	Mx	-.000933 3.5
49	MP2B	X	-2.326 3.5
50	MP2B	Z	1.343 3.5
51	MP2B	Mx	.000863 3.5
52	MP2C	X	-2.102 3.5
53	MP2C	Z	1.214 3.5
54	MP2C	Mx	.00093 3.5
55	MP1A	X	-.238 3.5
56	MP1A	Z	.138 3.5
57	MP1A	Mx	.000215 3.5
58	MP1A	X	-.238 3.5
59	MP1A	Z	.138 3.5
60	MP1A	Mx	.000215 3.5
61	MP1B	X	-.238 3.5
62	MP1B	Z	.138 3.5
63	MP1B	Mx	.000215 3.5
64	MP1B	X	-.238 3.5
65	MP1B	Z	.138 3.5
66	MP1B	Mx	.000215 3.5
67	MP1C	X	-.238 3.5
68	MP1C	Z	.138 3.5
69	MP1C	Mx	.000215 3.5
70	MP1C	X	-.238 3.5
71	MP1C	Z	.138 3.5
72	MP1C	Mx	.000215 3.5
73	MP4A	X	-1.523 2.5
74	MP4A	Z	.879 2.5
75	MP4A	Mx	.001 2.5
76	MP4A	X	-1.523 4
77	MP4A	Z	.879 4
78	MP4A	Mx	.001 4
79	MP4B	X	-2.637 2.5
80	MP4B	Z	1.522 2.5
81	MP4B	Mx	-.002 2.5
82	MP4B	X	-2.637 4
83	MP4B	Z	1.522 4
84	MP4B	Mx	-.002 4
85	MP4C	X	-2.225 2.5
86	MP4C	Z	1.285 2.5
87	MP4C	Mx	-.002 2.5
88	MP4C	X	-2.225 4
89	MP4C	Z	1.285 4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP4C	Mx	-.002	4
91	OVP	X	-2.306	.75
92	OVP	Z	1.331	.75
93	OVP	Mx	.001	.75
94	OVP	X	-2.306	.75
95	OVP	Z	1.331	.75
96	OVP	Mx	.001	.75
97	M64	X	-.682	6.25
98	M64	Z	.394	6.25
99	M64	Mx	-.000123	6.25
100	M64	X	-.682	6.25
101	M64	Z	.394	6.25
102	M64	Mx	-.000123	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-6.335	1
2	MP2A	Z	0	1
3	MP2A	Mx	.003	1
4	MP2A	X	-6.335	5
5	MP2A	Z	0	5
6	MP2A	Mx	.003	5
7	MP2B	X	-12.862	1
8	MP2B	Z	0	1
9	MP2B	Mx	-.001	1
10	MP2B	X	-12.862	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.001	5
13	MP2C	X	-6.335	1
14	MP2C	Z	0	1
15	MP2C	Mx	-.003	1
16	MP2C	X	-6.335	5
17	MP2C	Z	0	5
18	MP2C	Mx	-.003	5
19	MP3A	X	-6.335	1
20	MP3A	Z	0	1
21	MP3A	Mx	.003	1
22	MP3A	X	-6.335	5
23	MP3A	Z	0	5
24	MP3A	Mx	.003	5
25	MP3B	X	-12.862	1
26	MP3B	Z	0	1
27	MP3B	Mx	-.001	1
28	MP3B	X	-12.862	5
29	MP3B	Z	0	5
30	MP3B	Mx	-.001	5
31	MP3C	X	-6.335	1
32	MP3C	Z	0	1
33	MP3C	Mx	-.003	1
34	MP3C	X	-6.335	5
35	MP3C	Z	0	5
36	MP3C	Mx	-.003	5
37	MP3A	X	-2.249	3.5
38	MP3A	Z	0	3.5
39	MP3A	Mx	-.001	3.5
40	MP3B	X	-3.27	3.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
41	MP3B	Z	0	3.5
42	MP3B	Mx	.000284	3.5
43	MP3C	X	-2.249	3.5
44	MP3C	Z	0	3.5
45	MP3C	Mx	.001	3.5
46	MP2A	X	-1.856	3.5
47	MP2A	Z	0	3.5
48	MP2A	Mx	-.000914	3.5
49	MP2B	X	-3.258	3.5
50	MP2B	Z	0	3.5
51	MP2B	Mx	.000283	3.5
52	MP2C	X	-1.856	3.5
53	MP2C	Z	0	3.5
54	MP2C	Mx	.000914	3.5
55	MP1A	X	-.209	3.5
56	MP1A	Z	0	3.5
57	MP1A	Mx	.000172	3.5
58	MP1A	X	-.209	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	.000172	3.5
61	MP1B	X	-.209	3.5
62	MP1B	Z	0	3.5
63	MP1B	Mx	.000172	3.5
64	MP1B	X	-.209	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	.000172	3.5
67	MP1C	X	-.209	3.5
68	MP1C	Z	0	3.5
69	MP1C	Mx	.000172	3.5
70	MP1C	X	-.209	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	.000172	3.5
73	MP4A	X	-1.521	2.5
74	MP4A	Z	0	2.5
75	MP4A	Mx	.001	2.5
76	MP4A	X	-1.521	4
77	MP4A	Z	0	4
78	MP4A	Mx	.001	4
79	MP4B	X	-4.094	2.5
80	MP4B	Z	0	2.5
81	MP4B	Mx	-.000592	2.5
82	MP4B	X	-4.094	4
83	MP4B	Z	0	4
84	MP4B	Mx	-.000592	4
85	MP4C	X	-1.521	2.5
86	MP4C	Z	0	2.5
87	MP4C	Mx	-.001	2.5
88	MP4C	X	-1.521	4
89	MP4C	Z	0	4
90	MP4C	Mx	-.001	4
91	OVP	X	-2.592	.75
92	OVP	Z	0	.75
93	OVP	Mx	.001	.75
94	OVP	X	-2.592	.75
95	OVP	Z	0	.75
96	OVP	Mx	.001	.75
97	M64	X	-.663	6.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
98	M64	Z	0	6.25
99	M64	Mx	-.000109	6.25
100	M64	X	-.663	6.25
101	M64	Z	0	6.25
102	M64	Mx	-.000109	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-7.79	1
2	MP2A	Z	-4.498	1
3	MP2A	Mx	.003	1
4	MP2A	X	-7.79	5
5	MP2A	Z	-4.498	5
6	MP2A	Mx	.003	5
7	MP2B	X	-10.617	1
8	MP2B	Z	-6.13	1
9	MP2B	Mx	.002	1
10	MP2B	X	-10.617	5
11	MP2B	Z	-6.13	5
12	MP2B	Mx	.002	5
13	MP2C	X	-6.009	1
14	MP2C	Z	-3.469	1
15	MP2C	Mx	-.003	1
16	MP2C	X	-6.009	5
17	MP2C	Z	-3.469	5
18	MP2C	Mx	-.003	5
19	MP3A	X	-7.79	1
20	MP3A	Z	-4.498	1
21	MP3A	Mx	.003	1
22	MP3A	X	-7.79	5
23	MP3A	Z	-4.498	5
24	MP3A	Mx	.003	5
25	MP3B	X	-10.617	1
26	MP3B	Z	-6.13	1
27	MP3B	Mx	.002	1
28	MP3B	X	-10.617	5
29	MP3B	Z	-6.13	5
30	MP3B	Mx	.002	5
31	MP3C	X	-6.009	1
32	MP3C	Z	-3.469	1
33	MP3C	Mx	-.003	1
34	MP3C	X	-6.009	5
35	MP3C	Z	-3.469	5
36	MP3C	Mx	-.003	5
37	MP3A	X	-2.308	3.5
38	MP3A	Z	-1.332	3.5
39	MP3A	Mx	-.001	3.5
40	MP3B	X	-2.75	3.5
41	MP3B	Z	-1.588	3.5
42	MP3B	Mx	-.000543	3.5
43	MP3C	X	-2.029	3.5
44	MP3C	Z	-1.172	3.5
45	MP3C	Mx	.001	3.5
46	MP2A	X	-2.102	3.5
47	MP2A	Z	-1.214	3.5
48	MP2A	Mx	-.00093	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP2B	X	-2.709	3.5
50	MP2B	Z	-1.564	3.5
51	MP2B	Mx	-.000535	3.5
52	MP2C	X	-1.72	3.5
53	MP2C	Z	-.993	3.5
54	MP2C	Mx	.000933	3.5
55	MP1A	X	-.434	3.5
56	MP1A	Z	-.25	3.5
57	MP1A	Mx	.00032	3.5
58	MP1A	X	-.434	3.5
59	MP1A	Z	-.25	3.5
60	MP1A	Mx	.00032	3.5
61	MP1B	X	-.434	3.5
62	MP1B	Z	-.25	3.5
63	MP1B	Mx	.00032	3.5
64	MP1B	X	-.434	3.5
65	MP1B	Z	-.25	3.5
66	MP1B	Mx	.00032	3.5
67	MP1C	X	-.434	3.5
68	MP1C	Z	-.25	3.5
69	MP1C	Mx	.00032	3.5
70	MP1C	X	-.434	3.5
71	MP1C	Z	-.25	3.5
72	MP1C	Mx	.00032	3.5
73	MP4A	X	-2.225	2.5
74	MP4A	Z	-1.285	2.5
75	MP4A	Mx	.002	2.5
76	MP4A	X	-2.225	4
77	MP4A	Z	-1.285	4
78	MP4A	Mx	.002	4
79	MP4B	X	-3.339	2.5
80	MP4B	Z	-1.928	2.5
81	MP4B	Mx	.001	2.5
82	MP4B	X	-3.339	4
83	MP4B	Z	-1.928	4
84	MP4B	Mx	.001	4
85	MP4C	X	-1.523	2.5
86	MP4C	Z	-.879	2.5
87	MP4C	Mx	-.001	2.5
88	MP4C	X	-1.523	4
89	MP4C	Z	-.879	4
90	MP4C	Mx	-.001	4
91	OVP	X	-2.513	.75
92	OVP	Z	-1.451	.75
93	OVP	Mx	.001	.75
94	OVP	X	-2.513	.75
95	OVP	Z	-1.451	.75
96	OVP	Mx	.001	.75
97	M64	X	-1.047	6.25
98	M64	Z	-.605	6.25
99	M64	Mx	-.000154	6.25
100	M64	X	-1.047	6.25
101	M64	Z	-.605	6.25
102	M64	Mx	-.000154	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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 Designer :
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Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-6.13	1
2	MP2A	Z	-10.617	1
3	MP2A	Mx	.002	1
4	MP2A	X	-6.13	5
5	MP2A	Z	-10.617	5
6	MP2A	Mx	.002	5
7	MP2B	X	-4.498	1
8	MP2B	Z	-7.79	1
9	MP2B	Mx	.003	1
10	MP2B	X	-4.498	5
11	MP2B	Z	-7.79	5
12	MP2B	Mx	.003	5
13	MP2C	X	-5.101	1
14	MP2C	Z	-8.835	1
15	MP2C	Mx	-.003	1
16	MP2C	X	-5.101	5
17	MP2C	Z	-8.835	5
18	MP2C	Mx	-.003	5
19	MP3A	X	-6.13	1
20	MP3A	Z	-10.617	1
21	MP3A	Mx	.002	1
22	MP3A	X	-6.13	5
23	MP3A	Z	-10.617	5
24	MP3A	Mx	.002	5
25	MP3B	X	-4.498	1
26	MP3B	Z	-7.79	1
27	MP3B	Mx	.003	1
28	MP3B	X	-4.498	5
29	MP3B	Z	-7.79	5
30	MP3B	Mx	.003	5
31	MP3C	X	-5.101	1
32	MP3C	Z	-8.835	1
33	MP3C	Mx	-.003	1
34	MP3C	X	-5.101	5
35	MP3C	Z	-8.835	5
36	MP3C	Mx	-.003	5
37	MP3A	X	-1.588	3.5
38	MP3A	Z	-2.75	3.5
39	MP3A	Mx	-.000543	3.5
40	MP3B	X	-1.332	3.5
41	MP3B	Z	-2.308	3.5
42	MP3B	Mx	-.001	3.5
43	MP3C	X	-1.427	3.5
44	MP3C	Z	-2.471	3.5
45	MP3C	Mx	.000917	3.5
46	MP2A	X	-1.564	3.5
47	MP2A	Z	-2.709	3.5
48	MP2A	Mx	-.000535	3.5
49	MP2B	X	-1.214	3.5
50	MP2B	Z	-2.102	3.5
51	MP2B	Mx	-.00093	3.5
52	MP2C	X	-1.343	3.5
53	MP2C	Z	-2.326	3.5
54	MP2C	Mx	.000863	3.5
55	MP1A	X	-.429	3.5
56	MP1A	Z	-.744	3.5
57	MP1A	Mx	.000244	3.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP1A	X	-.429	3.5
59	MP1A	Z	-.744	3.5
60	MP1A	Mx	.000244	3.5
61	MP1B	X	-.429	3.5
62	MP1B	Z	-.744	3.5
63	MP1B	Mx	.000244	3.5
64	MP1B	X	-.429	3.5
65	MP1B	Z	-.744	3.5
66	MP1B	Mx	.000244	3.5
67	MP1C	X	-.429	3.5
68	MP1C	Z	-.744	3.5
69	MP1C	Mx	.000244	3.5
70	MP1C	X	-.429	3.5
71	MP1C	Z	-.744	3.5
72	MP1C	Mx	.000244	3.5
73	MP4A	X	-1.928	2.5
74	MP4A	Z	-3.339	2.5
75	MP4A	Mx	.001	2.5
76	MP4A	X	-1.928	4
77	MP4A	Z	-3.339	4
78	MP4A	Mx	.001	4
79	MP4B	X	-1.285	2.5
80	MP4B	Z	-2.225	2.5
81	MP4B	Mx	.002	2.5
82	MP4B	X	-1.285	4
83	MP4B	Z	-2.225	4
84	MP4B	Mx	.002	4
85	MP4C	X	-1.522	2.5
86	MP4C	Z	-2.637	2.5
87	MP4C	Mx	-.002	2.5
88	MP4C	X	-1.522	4
89	MP4C	Z	-2.637	4
90	MP4C	Mx	-.002	4
91	OVP	X	-1.641	.75
92	OVP	Z	-2.843	.75
93	OVP	Mx	.000561	.75
94	OVP	X	-1.641	.75
95	OVP	Z	-2.843	.75
96	OVP	Mx	.000561	.75
97	M64	X	-.939	6.25
98	M64	Z	-1.627	6.25
99	M64	Mx	-.000107	6.25
100	M64	X	-.939	6.25
101	M64	Z	-1.627	6.25
102	M64	Mx	-.000107	6.25

Member Point Loads (BLC 77 : Lm1)

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
1	LIVE1	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
1	LIVE2	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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Member Point Loads (BLC 79 : Lv1) (Continued)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Y	-4.911	1
2	MP2A	My	-.002	1
3	MP2A	Mz	.000426	1
4	MP2A	Y	-4.911	5
5	MP2A	My	-.002	5
6	MP2A	Mz	.000426	5
7	MP2B	Y	-4.911	1
8	MP2B	My	.000426	1
9	MP2B	Mz	-.002	1
10	MP2B	Y	-4.911	5
11	MP2B	My	.000426	5
12	MP2B	Mz	-.002	5
13	MP2C	Y	-4.911	1
14	MP2C	My	.002	1
15	MP2C	Mz	.000426	1
16	MP2C	Y	-4.911	5
17	MP2C	My	.002	5
18	MP2C	Mz	.000426	5
19	MP3A	Y	-4.911	1
20	MP3A	My	-.002	1
21	MP3A	Mz	.000426	1
22	MP3A	Y	-4.911	5
23	MP3A	My	-.002	5
24	MP3A	Mz	.000426	5
25	MP3B	Y	-4.911	1
26	MP3B	My	.000426	1
27	MP3B	Mz	-.002	1
28	MP3B	Y	-4.911	5
29	MP3B	My	.000426	5
30	MP3B	Mz	-.002	5
31	MP3C	Y	-4.911	1
32	MP3C	My	.002	1
33	MP3C	Mz	.000426	1
34	MP3C	Y	-4.911	5
35	MP3C	My	.002	5
36	MP3C	Mz	.000426	5
37	MP3A	Y	-10.587	3.5
38	MP3A	My	.005	3.5
39	MP3A	Mz	-.000919	3.5
40	MP3B	Y	-10.587	3.5
41	MP3B	My	-.000919	3.5
42	MP3B	Mz	.005	3.5
43	MP3C	Y	-10.587	3.5
44	MP3C	My	-.005	3.5
45	MP3C	Mz	-.000919	3.5
46	MP2A	Y	-8.818	3.5
47	MP2A	My	.004	3.5
48	MP2A	Mz	-.000766	3.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
49	MP2B	Y	-8.818	3.5
50	MP2B	My	-0.00766	3.5
51	MP2B	Mz	.004	3.5
52	MP2C	Y	-8.818	3.5
53	MP2C	My	-.004	3.5
54	MP2C	Mz	-0.00766	3.5
55	MP1A	Y	-.276	3.5
56	MP1A	My	-0.00226	3.5
57	MP1A	Mz	4e-5	3.5
58	MP1A	Y	-.276	3.5
59	MP1A	My	-0.00226	3.5
60	MP1A	Mz	4e-5	3.5
61	MP1B	Y	-.276	3.5
62	MP1B	My	-0.00226	3.5
63	MP1B	Mz	4e-5	3.5
64	MP1B	Y	-.276	3.5
65	MP1B	My	-0.00226	3.5
66	MP1B	Mz	4e-5	3.5
67	MP1C	Y	-.276	3.5
68	MP1C	My	-0.00226	3.5
69	MP1C	Mz	4e-5	3.5
70	MP1C	Y	-.276	3.5
71	MP1C	My	-0.00226	3.5
72	MP1C	Mz	4e-5	3.5
73	MP4A	Y	-5.463	2.5
74	MP4A	My	-.004	2.5
75	MP4A	Mz	.000791	2.5
76	MP4A	Y	-5.463	4
77	MP4A	My	-.004	4
78	MP4A	Mz	.000791	4
79	MP4B	Y	-5.463	2.5
80	MP4B	My	.000791	2.5
81	MP4B	Mz	-.004	2.5
82	MP4B	Y	-5.463	4
83	MP4B	My	.000791	4
84	MP4B	Mz	-.004	4
85	MP4C	Y	-5.463	2.5
86	MP4C	My	.004	2.5
87	MP4C	Mz	.000791	2.5
88	MP4C	Y	-5.463	4
89	MP4C	My	.004	4
90	MP4C	Mz	.000791	4
91	OVP	Y	-2.007	.75
92	OVP	My	-0.00988	.75
93	OVP	Mz	.000174	.75
94	OVP	Y	-2.007	.75
95	OVP	My	-0.00988	.75
96	OVP	Mz	.000174	.75
97	M64	Y	-2.208	6.25
98	M64	My	.000362	6.25
99	M64	Mz	-6.4e-5	6.25
100	M64	Y	-2.208	6.25
101	M64	My	.000362	6.25
102	M64	Mz	-6.4e-5	6.25

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

Member Label	Direction	Magnitude[lb.k.ft]	Location[ft.%]
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Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Z	-12.277	1
2	MP2A	Mx	-.001	1
3	MP2A	Z	-12.277	5
4	MP2A	Mx	-.001	5
5	MP2B	Z	-12.277	1
6	MP2B	Mx	.006	1
7	MP2B	Z	-12.277	5
8	MP2B	Mx	.006	5
9	MP2C	Z	-12.277	1
10	MP2C	Mx	-.001	1
11	MP2C	Z	-12.277	5
12	MP2C	Mx	-.001	5
13	MP3A	Z	-12.277	1
14	MP3A	Mx	-.001	1
15	MP3A	Z	-12.277	5
16	MP3A	Mx	-.001	5
17	MP3B	Z	-12.277	1
18	MP3B	Mx	.006	1
19	MP3B	Z	-12.277	5
20	MP3B	Mx	.006	5
21	MP3C	Z	-12.277	1
22	MP3C	Mx	-.001	1
23	MP3C	Z	-12.277	5
24	MP3C	Mx	-.001	5
25	MP3A	Z	-26.468	3.5
26	MP3A	Mx	.002	3.5
27	MP3B	Z	-26.468	3.5
28	MP3B	Mx	-.013	3.5
29	MP3C	Z	-26.468	3.5
30	MP3C	Mx	.002	3.5
31	MP2A	Z	-22.046	3.5
32	MP2A	Mx	.002	3.5
33	MP2B	Z	-22.046	3.5
34	MP2B	Mx	-.011	3.5
35	MP2C	Z	-22.046	3.5
36	MP2C	Mx	.002	3.5
37	MP1A	Z	-.69	3.5
38	MP1A	Mx	-.0001	3.5
39	MP1A	Z	-.69	3.5
40	MP1A	Mx	-.0001	3.5
41	MP1B	Z	-.69	3.5
42	MP1B	Mx	-.0001	3.5
43	MP1B	Z	-.69	3.5
44	MP1B	Mx	-.0001	3.5
45	MP1C	Z	-.69	3.5
46	MP1C	Mx	-.0001	3.5
47	MP1C	Z	-.69	3.5
48	MP1C	Mx	-.0001	3.5
49	MP4A	Z	-13.657	2.5
50	MP4A	Mx	-.002	2.5
51	MP4A	Z	-13.657	4
52	MP4A	Mx	-.002	4
53	MP4B	Z	-13.657	2.5
54	MP4B	Mx	.011	2.5
55	MP4B	Z	-13.657	4
56	MP4B	Mx	.011	4
57	MP4C	Z	-13.657	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
58	MP4C	Mx	-.002	2.5
59	MP4C	Z	-13.657	4
60	MP4C	Mx	-.002	4
61	OVP	Z	-5.018	.75
62	OVP	Mx	-.000436	.75
63	OVP	Z	-5.018	.75
64	OVP	Mx	-.000436	.75
65	M64	Z	-5.519	6.25
66	M64	Mx	.00016	6.25
67	M64	Z	-5.519	6.25
68	M64	Mx	.00016	6.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	12.277	1
2	MP2A	Mx	-.006	1
3	MP2A	X	12.277	5
4	MP2A	Mx	-.006	5
5	MP2B	X	12.277	1
6	MP2B	Mx	.001	1
7	MP2B	X	12.277	5
8	MP2B	Mx	.001	5
9	MP2C	X	12.277	1
10	MP2C	Mx	.006	1
11	MP2C	X	12.277	5
12	MP2C	Mx	.006	5
13	MP3A	X	12.277	1
14	MP3A	Mx	-.006	1
15	MP3A	X	12.277	5
16	MP3A	Mx	-.006	5
17	MP3B	X	12.277	1
18	MP3B	Mx	.001	1
19	MP3B	X	12.277	5
20	MP3B	Mx	.001	5
21	MP3C	X	12.277	1
22	MP3C	Mx	.006	1
23	MP3C	X	12.277	5
24	MP3C	Mx	.006	5
25	MP3A	X	26.468	3.5
26	MP3A	Mx	.013	3.5
27	MP3B	X	26.468	3.5
28	MP3B	Mx	-.002	3.5
29	MP3C	X	26.468	3.5
30	MP3C	Mx	-.013	3.5
31	MP2A	X	22.046	3.5
32	MP2A	Mx	.011	3.5
33	MP2B	X	22.046	3.5
34	MP2B	Mx	-.002	3.5
35	MP2C	X	22.046	3.5
36	MP2C	Mx	-.011	3.5
37	MP1A	X	.69	3.5
38	MP1A	Mx	-.000566	3.5
39	MP1A	X	.69	3.5
40	MP1A	Mx	-.000566	3.5
41	MP1B	X	.69	3.5
42	MP1B	Mx	-.000566	3.5



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
22	M43	Y	-10.099	-10.099	0	%100
23	M44	Y	-10.099	-10.099	0	%100
24	M45	Y	-10.099	-10.099	0	%100
25	M46	Y	-10.099	-10.099	0	%100
26	M52	Y	-9.201	-9.201	0	%100
27	M52A	Y	-9.599	-9.599	0	%100
28	M53A	Y	-9.599	-9.599	0	%100
29	FACE	Y	-6.559	-6.559	0	%100
30	M58	Y	-6.559	-6.559	0	%100
31	M59	Y	-6.559	-6.559	0	%100
32	M64	Y	-4.304	-4.304	0	%100
33	M77	Y	-4.304	-4.304	0	%100
34	M90	Y	-4.304	-4.304	0	%100
35	M91	Y	-9.599	-9.599	0	%100
36	M93	Y	-5.612	-5.612	0	%100
37	M94	Y	-5.612	-5.612	0	%100
38	M95	Y	-10.099	-10.099	0	%100
39	M96	Y	-10.099	-10.099	0	%100
40	M97	Y	-10.099	-10.099	0	%100
41	M98	Y	-10.099	-10.099	0	%100
42	M99	Y	-10.099	-10.099	0	%100
43	M100	Y	-10.099	-10.099	0	%100
44	M101	Y	-10.099	-10.099	0	%100
45	M67	Y	-6.609	-6.609	0	%100
46	MP1A	Y	-4.973	-4.973	0	%100
47	MP2A	Y	-4.973	-4.973	0	%100
48	MP3A	Y	-4.973	-4.973	0	%100
49	MP4A	Y	-4.973	-4.973	0	%100
50	MP1B	Y	-4.973	-4.973	0	%100
51	MP2B	Y	-4.973	-4.973	0	%100
52	MP3B	Y	-4.973	-4.973	0	%100
53	MP4B	Y	-4.973	-4.973	0	%100
54	MP1C	Y	-4.973	-4.973	0	%100
55	MP2C	Y	-4.973	-4.973	0	%100
56	MP3C	Y	-4.973	-4.973	0	%100
57	MP4C	Y	-4.973	-4.973	0	%100
58	M101A	Y	-9.201	-9.201	0	%100
59	M103A	Y	-9.201	-9.201	0	%100
60	LIGHT	Y	-3.479	-3.479	0	%100
61	M125	Y	-2.507	-2.507	0	%100
62	M126	Y	-2.507	-2.507	0	%100
63	M127	Y	-2.507	-2.507	0	%100
64	M128	Y	-2.507	-2.507	0	%100
65	M133A	Y	-6.609	-6.609	0	%100
66	M134A	Y	-6.609	-6.609	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	0	0	0	%100
2	OVP	Z	-8.067	-8.067	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	-2.585	-2.585	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	-2.585	-2.585	0	%100
7	M20	X	0	0	0	%100
8	M20	Z	-9.067	-9.067	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
9	M21	X	0	0	0	%100
10	M21	Z	-2.831	-2.831	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	-11.323	-11.323	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	-5.095	-5.095	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	-5.095	-5.095	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	-20.381	-20.381	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	-15.286	-15.286	0	%100
21	M27	X	0	0	0	%100
22	M27	Z	-5.095	-5.095	0	%100
23	M28	X	0	0	0	%100
24	M28	Z	-15.286	-15.286	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	-20.381	-20.381	0	%100
27	M35	X	0	0	0	%100
28	M35	Z	-2.585	-2.585	0	%100
29	M36	X	0	0	0	%100
30	M36	Z	-2.585	-2.585	0	%100
31	M37	X	0	0	0	%100
32	M37	Z	-9.067	-9.067	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	-11.323	-11.323	0	%100
35	M39	X	0	0	0	%100
36	M39	Z	-2.831	-2.831	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	-20.381	-20.381	0	%100
39	M41	X	0	0	0	%100
40	M41	Z	-5.095	-5.095	0	%100
41	M42	X	0	0	0	%100
42	M42	Z	-5.095	-5.095	0	%100
43	M43	X	0	0	0	%100
44	M43	Z	-15.286	-15.286	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-20.381	-20.381	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-15.286	-15.286	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-5.095	-5.095	0	%100
51	M52	X	0	0	0	%100
52	M52	Z	-11.361	-11.361	0	%100
53	M52A	X	0	0	0	%100
54	M52A	Z	-10.338	-10.338	0	%100
55	M53A	X	0	0	0	%100
56	M53A	Z	-10.338	-10.338	0	%100
57	FACE	X	0	0	0	%100
58	FACE	Z	-11.889	-11.889	0	%100
59	M58	X	0	0	0	%100
60	M58	Z	-2.972	-2.972	0	%100
61	M59	X	0	0	0	%100
62	M59	Z	-2.972	-2.972	0	%100
63	M64	X	0	0	0	%100
64	M64	Z	-6.454	-6.454	0	%100
65	M77	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
66	M77	Z	-1.614	-1.614	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	-1.613	-1.613	0 %100
69	M91	X	0	0	0 %100
70	M91	Z	0	0	0 %100
71	M93	X	0	0	0 %100
72	M93	Z	-2.831	-2.831	0 %100
73	M94	X	0	0	0 %100
74	M94	Z	-2.831	-2.831	0 %100
75	M95	X	0	0	0 %100
76	M95	Z	-5.095	-5.095	0 %100
77	M96	X	0	0	0 %100
78	M96	Z	-20.381	-20.381	0 %100
79	M97	X	0	0	0 %100
80	M97	Z	-5.095	-5.095	0 %100
81	M98	X	0	0	0 %100
82	M98	Z	0	0	0 %100
83	M99	X	0	0	0 %100
84	M99	Z	-5.095	-5.095	0 %100
85	M100	X	0	0	0 %100
86	M100	Z	0	0	0 %100
87	M101	X	0	0	0 %100
88	M101	Z	-5.095	-5.095	0 %100
89	M67	X	0	0	0 %100
90	M67	Z	-2.28	-2.28	0 %100
91	MP1A	X	0	0	0 %100
92	MP1A	Z	-8.067	-8.067	0 %100
93	MP2A	X	0	0	0 %100
94	MP2A	Z	-8.067	-8.067	0 %100
95	MP3A	X	0	0	0 %100
96	MP3A	Z	-8.067	-8.067	0 %100
97	MP4A	X	0	0	0 %100
98	MP4A	Z	-8.067	-8.067	0 %100
99	MP1B	X	0	0	0 %100
100	MP1B	Z	-8.067	-8.067	0 %100
101	MP2B	X	0	0	0 %100
102	MP2B	Z	-8.067	-8.067	0 %100
103	MP3B	X	0	0	0 %100
104	MP3B	Z	-8.067	-8.067	0 %100
105	MP4B	X	0	0	0 %100
106	MP4B	Z	-8.067	-8.067	0 %100
107	MP1C	X	0	0	0 %100
108	MP1C	Z	-8.067	-8.067	0 %100
109	MP2C	X	0	0	0 %100
110	MP2C	Z	-8.067	-8.067	0 %100
111	MP3C	X	0	0	0 %100
112	MP3C	Z	-8.067	-8.067	0 %100
113	MP4C	X	0	0	0 %100
114	MP4C	Z	-8.067	-8.067	0 %100
115	M101A	X	0	0	0 %100
116	M101A	Z	-12.845	-12.845	0 %100
117	M103A	X	0	0	0 %100
118	M103A	Z	-12.845	-12.845	0 %100
119	LIGHT	X	0	0	0 %100
120	LIGHT	Z	-4.467	-4.467	0 %100
121	M125	X	0	0	0 %100
122	M125	Z	-.379	-.379	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
123	M126	X	0	0	0	%100
124	M126	Z	-0.379	-0.379	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	-0.379	-0.379	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	-0.379	-0.379	0	%100
129	M133A	X	0	0	0	%100
130	M133A	Z	-9.122	-9.122	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	-2.281	-2.281	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	4.034	4.034	0	%100
2	OVP	Z	-6.987	-6.987	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	6.045	6.045	0	%100
8	M20	Z	-10.47	-10.47	0	%100
9	M21	X	4.246	4.246	0	%100
10	M21	Z	-7.354	-7.354	0	%100
11	M22	X	4.246	4.246	0	%100
12	M22	Z	-7.354	-7.354	0	%100
13	M23	X	7.643	7.643	0	%100
14	M23	Z	-13.238	-13.238	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	7.643	7.643	0	%100
18	M25	Z	-13.238	-13.238	0	%100
19	M26	X	10.191	10.191	0	%100
20	M26	Z	-17.65	-17.65	0	%100
21	M27	X	7.643	7.643	0	%100
22	M27	Z	-13.238	-13.238	0	%100
23	M28	X	10.191	10.191	0	%100
24	M28	Z	-17.65	-17.65	0	%100
25	M29	X	7.643	7.643	0	%100
26	M29	Z	-13.238	-13.238	0	%100
27	M35	X	3.877	3.877	0	%100
28	M35	Z	-6.715	-6.715	0	%100
29	M36	X	3.877	3.877	0	%100
30	M36	Z	-6.715	-6.715	0	%100
31	M37	X	1.511	1.511	0	%100
32	M37	Z	-2.617	-2.617	0	%100
33	M38	X	4.246	4.246	0	%100
34	M38	Z	-7.354	-7.354	0	%100
35	M39	X	0	0	0	%100
36	M39	Z	0	0	0	%100
37	M40	X	7.643	7.643	0	%100
38	M40	Z	-13.238	-13.238	0	%100
39	M41	X	7.643	7.643	0	%100
40	M41	Z	-13.238	-13.238	0	%100
41	M42	X	0	0	0	%100
42	M42	Z	0	0	0	%100
43	M43	X	2.548	2.548	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
 4:35 PM
 Checked By: _____

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

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
44	M43	Z	-4.413	-4.413	0 %100
45	M44	X	7.643	7.643	0 %100
46	M44	Z	-13.238	-13.238	0 %100
47	M45	X	2.548	2.548	0 %100
48	M45	Z	-4.413	-4.413	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	0	0	0 %100
51	M52	X	5.928	5.928	0 %100
52	M52	Z	-10.267	-10.267	0 %100
53	M52A	X	3.877	3.877	0 %100
54	M52A	Z	-6.715	-6.715	0 %100
55	M53A	X	3.877	3.877	0 %100
56	M53A	Z	-6.715	-6.715	0 %100
57	FACE	X	4.458	4.458	0 %100
58	FACE	Z	-7.722	-7.722	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	0	0	0 %100
61	M59	X	4.458	4.458	0 %100
62	M59	Z	-7.722	-7.722	0 %100
63	M64	X	2.42	2.42	0 %100
64	M64	Z	-4.192	-4.192	0 %100
65	M77	X	0	0	0 %100
66	M77	Z	0	0	0 %100
67	M90	X	2.42	2.42	0 %100
68	M90	Z	-4.192	-4.192	0 %100
69	M91	X	1.511	1.511	0 %100
70	M91	Z	-2.617	-2.617	0 %100
71	M93	X	0	0	0 %100
72	M93	Z	0	0	0 %100
73	M94	X	4.246	4.246	0 %100
74	M94	Z	-7.354	-7.354	0 %100
75	M95	X	0	0	0 %100
76	M95	Z	0	0	0 %100
77	M96	X	7.643	7.643	0 %100
78	M96	Z	-13.238	-13.238	0 %100
79	M97	X	7.643	7.643	0 %100
80	M97	Z	-13.238	-13.238	0 %100
81	M98	X	2.548	2.548	0 %100
82	M98	Z	-4.413	-4.413	0 %100
83	M99	X	0	0	0 %100
84	M99	Z	0	0	0 %100
85	M100	X	2.548	2.548	0 %100
86	M100	Z	-4.413	-4.413	0 %100
87	M101	X	7.643	7.643	0 %100
88	M101	Z	-13.238	-13.238	0 %100
89	M67	X	0	0	0 %100
90	M67	Z	0	0	0 %100
91	MP1A	X	4.034	4.034	0 %100
92	MP1A	Z	-6.987	-6.987	0 %100
93	MP2A	X	4.034	4.034	0 %100
94	MP2A	Z	-6.987	-6.987	0 %100
95	MP3A	X	4.034	4.034	0 %100
96	MP3A	Z	-6.987	-6.987	0 %100
97	MP4A	X	4.034	4.034	0 %100
98	MP4A	Z	-6.987	-6.987	0 %100
99	MP1B	X	4.034	4.034	0 %100
100	MP1B	Z	-6.987	-6.987	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
101	MP2B	X	4.034	4.034	0	%100
102	MP2B	Z	-6.987	-6.987	0	%100
103	MP3B	X	4.034	4.034	0	%100
104	MP3B	Z	-6.987	-6.987	0	%100
105	MP4B	X	4.034	4.034	0	%100
106	MP4B	Z	-6.987	-6.987	0	%100
107	MP1C	X	4.034	4.034	0	%100
108	MP1C	Z	-6.987	-6.987	0	%100
109	MP2C	X	4.034	4.034	0	%100
110	MP2C	Z	-6.987	-6.987	0	%100
111	MP3C	X	4.034	4.034	0	%100
112	MP3C	Z	-6.987	-6.987	0	%100
113	MP4C	X	4.034	4.034	0	%100
114	MP4C	Z	-6.987	-6.987	0	%100
115	M101A	X	5.928	5.928	0	%100
116	M101A	Z	-10.267	-10.267	0	%100
117	M103A	X	6.67	6.67	0	%100
118	M103A	Z	-11.552	-11.552	0	%100
119	LIGHT	X	2.233	2.233	0	%100
120	LIGHT	Z	-3.868	-3.868	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	3.421	3.421	0	%100
130	M133A	Z	-5.925	-5.925	0	%100
131	M134A	X	3.421	3.421	0	%100
132	M134A	Z	-5.926	-5.926	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	6.987	6.987	0	%100
2	OVP	Z	-4.034	-4.034	0	%100
3	M18	X	2.238	2.238	0	%100
4	M18	Z	-1.292	-1.292	0	%100
5	M19	X	2.238	2.238	0	%100
6	M19	Z	-1.292	-1.292	0	%100
7	M20	X	7.852	7.852	0	%100
8	M20	Z	-4.534	-4.534	0	%100
9	M21	X	9.806	9.806	0	%100
10	M21	Z	-5.661	-5.661	0	%100
11	M22	X	2.451	2.451	0	%100
12	M22	Z	-1.415	-1.415	0	%100
13	M23	X	17.65	17.65	0	%100
14	M23	Z	-10.191	-10.191	0	%100
15	M24	X	4.413	4.413	0	%100
16	M24	Z	-2.548	-2.548	0	%100
17	M25	X	4.413	4.413	0	%100
18	M25	Z	-2.548	-2.548	0	%100
19	M26	X	13.238	13.238	0	%100
20	M26	Z	-7.643	-7.643	0	%100
21	M27	X	17.65	17.65	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
79	M97	X	17.65	17.65	0 %100
80	M97	Z	-10.191	-10.191	0 %100
81	M98	X	13.238	13.238	0 %100
82	M98	Z	-7.643	-7.643	0 %100
83	M99	X	4.413	4.413	0 %100
84	M99	Z	-2.548	-2.548	0 %100
85	M100	X	13.238	13.238	0 %100
86	M100	Z	-7.643	-7.643	0 %100
87	M101	X	17.65	17.65	0 %100
88	M101	Z	-10.191	-10.191	0 %100
89	M67	X	1.975	1.975	0 %100
90	M67	Z	-1.14	-1.14	0 %100
91	MP1A	X	6.987	6.987	0 %100
92	MP1A	Z	-4.034	-4.034	0 %100
93	MP2A	X	6.987	6.987	0 %100
94	MP2A	Z	-4.034	-4.034	0 %100
95	MP3A	X	6.987	6.987	0 %100
96	MP3A	Z	-4.034	-4.034	0 %100
97	MP4A	X	6.987	6.987	0 %100
98	MP4A	Z	-4.034	-4.034	0 %100
99	MP1B	X	6.987	6.987	0 %100
100	MP1B	Z	-4.034	-4.034	0 %100
101	MP2B	X	6.987	6.987	0 %100
102	MP2B	Z	-4.034	-4.034	0 %100
103	MP3B	X	6.987	6.987	0 %100
104	MP3B	Z	-4.034	-4.034	0 %100
105	MP4B	X	6.987	6.987	0 %100
106	MP4B	Z	-4.034	-4.034	0 %100
107	MP1C	X	6.987	6.987	0 %100
108	MP1C	Z	-4.034	-4.034	0 %100
109	MP2C	X	6.987	6.987	0 %100
110	MP2C	Z	-4.034	-4.034	0 %100
111	MP3C	X	6.987	6.987	0 %100
112	MP3C	Z	-4.034	-4.034	0 %100
113	MP4C	X	6.987	6.987	0 %100
114	MP4C	Z	-4.034	-4.034	0 %100
115	M101A	X	9.839	9.839	0 %100
116	M101A	Z	-5.68	-5.68	0 %100
117	M103A	X	11.124	11.124	0 %100
118	M103A	Z	-6.422	-6.422	0 %100
119	LIGHT	X	3.868	3.868	0 %100
120	LIGHT	Z	-2.233	-2.233	0 %100
121	M125	X	.329	.329	0 %100
122	M125	Z	-.19	-.19	0 %100
123	M126	X	.329	.329	0 %100
124	M126	Z	-.19	-.19	0 %100
125	M127	X	.329	.329	0 %100
126	M127	Z	-.19	-.19	0 %100
127	M128	X	.329	.329	0 %100
128	M128	Z	-.19	-.19	0 %100
129	M133A	X	1.975	1.975	0 %100
130	M133A	Z	-1.14	-1.14	0 %100
131	M134A	X	7.9	7.9	0 %100
132	M134A	Z	-4.561	-4.561	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
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Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]	
1	OVP	X	8.067	8.067	0	%100
2	OVP	Z	0	0	0	%100
3	M18	X	7.754	7.754	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	7.754	7.754	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	3.022	3.022	0	%100
8	M20	Z	0	0	0	%100
9	M21	X	8.492	8.492	0	%100
10	M21	Z	0	0	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	0	0	0	%100
13	M23	X	15.286	15.286	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	15.286	15.286	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	5.095	5.095	0	%100
20	M26	Z	0	0	0	%100
21	M27	X	15.286	15.286	0	%100
22	M27	Z	0	0	0	%100
23	M28	X	5.095	5.095	0	%100
24	M28	Z	0	0	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	0	0	0	%100
27	M35	X	7.754	7.754	0	%100
28	M35	Z	0	0	0	%100
29	M36	X	7.754	7.754	0	%100
30	M36	Z	0	0	0	%100
31	M37	X	3.022	3.022	0	%100
32	M37	Z	0	0	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	0	0	0	%100
35	M39	X	8.492	8.492	0	%100
36	M39	Z	0	0	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	0	0	0	%100
39	M41	X	15.286	15.286	0	%100
40	M41	Z	0	0	0	%100
41	M42	X	15.286	15.286	0	%100
42	M42	Z	0	0	0	%100
43	M43	X	5.095	5.095	0	%100
44	M43	Z	0	0	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	5.095	5.095	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	15.286	15.286	0	%100
50	M46	Z	0	0	0	%100
51	M52	X	13.339	13.339	0	%100
52	M52	Z	0	0	0	%100
53	M52A	X	0	0	0	%100
54	M52A	Z	0	0	0	%100
55	M53A	X	0	0	0	%100
56	M53A	Z	0	0	0	%100
57	FACE	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	FACE	Z	0	0	%100
59	M58	X	8.917	8.917	%100
60	M58	Z	0	0	%100
61	M59	X	8.917	8.917	%100
62	M59	Z	0	0	%100
63	M64	X	0	0	%100
64	M64	Z	0	0	%100
65	M77	X	4.84	4.84	%100
66	M77	Z	0	0	%100
67	M90	X	4.841	4.841	%100
68	M90	Z	0	0	%100
69	M91	X	12.089	12.089	%100
70	M91	Z	0	0	%100
71	M93	X	8.492	8.492	%100
72	M93	Z	0	0	%100
73	M94	X	8.492	8.492	%100
74	M94	Z	0	0	%100
75	M95	X	15.286	15.286	%100
76	M95	Z	0	0	%100
77	M96	X	0	0	%100
78	M96	Z	0	0	%100
79	M97	X	15.286	15.286	%100
80	M97	Z	0	0	%100
81	M98	X	20.381	20.381	%100
82	M98	Z	0	0	%100
83	M99	X	15.286	15.286	%100
84	M99	Z	0	0	%100
85	M100	X	20.381	20.381	%100
86	M100	Z	0	0	%100
87	M101	X	15.286	15.286	%100
88	M101	Z	0	0	%100
89	M67	X	6.842	6.842	%100
90	M67	Z	0	0	%100
91	MP1A	X	8.067	8.067	%100
92	MP1A	Z	0	0	%100
93	MP2A	X	8.067	8.067	%100
94	MP2A	Z	0	0	%100
95	MP3A	X	8.067	8.067	%100
96	MP3A	Z	0	0	%100
97	MP4A	X	8.067	8.067	%100
98	MP4A	Z	0	0	%100
99	MP1B	X	8.067	8.067	%100
100	MP1B	Z	0	0	%100
101	MP2B	X	8.067	8.067	%100
102	MP2B	Z	0	0	%100
103	MP3B	X	8.067	8.067	%100
104	MP3B	Z	0	0	%100
105	MP4B	X	8.067	8.067	%100
106	MP4B	Z	0	0	%100
107	MP1C	X	8.067	8.067	%100
108	MP1C	Z	0	0	%100
109	MP2C	X	8.067	8.067	%100
110	MP2C	Z	0	0	%100
111	MP3C	X	8.067	8.067	%100
112	MP3C	Z	0	0	%100
113	MP4C	X	8.067	8.067	%100
114	MP4C	Z	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
115	M101A	X	11.855	11.855	0 %100
116	M101A	Z	0	0	0 %100
117	M103A	X	11.855	11.855	0 %100
118	M103A	Z	0	0	0 %100
119	LIGHT	X	4.467	4.467	0 %100
120	LIGHT	Z	0	0	0 %100
121	M125	X	1.138	1.138	0 %100
122	M125	Z	0	0	0 %100
123	M126	X	1.138	1.138	0 %100
124	M126	Z	0	0	0 %100
125	M127	X	1.138	1.138	0 %100
126	M127	Z	0	0	0 %100
127	M128	X	1.138	1.138	0 %100
128	M128	Z	0	0	0 %100
129	M133A	X	0	0	0 %100
130	M133A	Z	0	0	0 %100
131	M134A	X	6.841	6.841	0 %100
132	M134A	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	6.987	6.987	0 %100
2	OVP	Z	4.034	4.034	0 %100
3	M18	X	8.953	8.953	0 %100
4	M18	Z	5.169	5.169	0 %100
5	M19	X	8.953	8.953	0 %100
6	M19	Z	5.169	5.169	0 %100
7	M20	X	0	0	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	2.451	2.451	0 %100
10	M21	Z	1.415	1.415	0 %100
11	M22	X	2.451	2.451	0 %100
12	M22	Z	1.415	1.415	0 %100
13	M23	X	4.413	4.413	0 %100
14	M23	Z	2.548	2.548	0 %100
15	M24	X	17.65	17.65	0 %100
16	M24	Z	10.191	10.191	0 %100
17	M25	X	4.413	4.413	0 %100
18	M25	Z	2.548	2.548	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	4.413	4.413	0 %100
22	M27	Z	2.548	2.548	0 %100
23	M28	X	0	0	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	4.413	4.413	0 %100
26	M29	Z	2.548	2.548	0 %100
27	M35	X	2.238	2.238	0 %100
28	M35	Z	1.292	1.292	0 %100
29	M36	X	2.238	2.238	0 %100
30	M36	Z	1.292	1.292	0 %100
31	M37	X	7.852	7.852	0 %100
32	M37	Z	4.534	4.534	0 %100
33	M38	X	2.451	2.451	0 %100
34	M38	Z	1.415	1.415	0 %100
35	M39	X	9.806	9.806	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
36	M39	Z	5.661	5.661	0 %100
37	M40	X	4.413	4.413	0 %100
38	M40	Z	2.548	2.548	0 %100
39	M41	X	4.413	4.413	0 %100
40	M41	Z	2.548	2.548	0 %100
41	M42	X	17.65	17.65	0 %100
42	M42	Z	10.191	10.191	0 %100
43	M43	X	13.238	13.238	0 %100
44	M43	Z	7.643	7.643	0 %100
45	M44	X	4.413	4.413	0 %100
46	M44	Z	2.548	2.548	0 %100
47	M45	X	13.238	13.238	0 %100
48	M45	Z	7.643	7.643	0 %100
49	M46	X	17.65	17.65	0 %100
50	M46	Z	10.191	10.191	0 %100
51	M52	X	11.124	11.124	0 %100
52	M52	Z	6.422	6.422	0 %100
53	M52A	X	2.238	2.238	0 %100
54	M52A	Z	1.292	1.292	0 %100
55	M53A	X	2.238	2.238	0 %100
56	M53A	Z	1.292	1.292	0 %100
57	FACE	X	2.574	2.574	0 %100
58	FACE	Z	1.486	1.486	0 %100
59	M58	X	10.296	10.296	0 %100
60	M58	Z	5.944	5.944	0 %100
61	M59	X	2.574	2.574	0 %100
62	M59	Z	1.486	1.486	0 %100
63	M64	X	1.397	1.397	0 %100
64	M64	Z	.807	.807	0 %100
65	M77	X	5.589	5.589	0 %100
66	M77	Z	3.227	3.227	0 %100
67	M90	X	1.397	1.397	0 %100
68	M90	Z	.807	.807	0 %100
69	M91	X	7.852	7.852	0 %100
70	M91	Z	4.534	4.534	0 %100
71	M93	X	9.806	9.806	0 %100
72	M93	Z	5.661	5.661	0 %100
73	M94	X	2.451	2.451	0 %100
74	M94	Z	1.415	1.415	0 %100
75	M95	X	17.65	17.65	0 %100
76	M95	Z	10.191	10.191	0 %100
77	M96	X	4.413	4.413	0 %100
78	M96	Z	2.548	2.548	0 %100
79	M97	X	4.413	4.413	0 %100
80	M97	Z	2.548	2.548	0 %100
81	M98	X	13.238	13.238	0 %100
82	M98	Z	7.643	7.643	0 %100
83	M99	X	17.65	17.65	0 %100
84	M99	Z	10.191	10.191	0 %100
85	M100	X	13.238	13.238	0 %100
86	M100	Z	7.643	7.643	0 %100
87	M101	X	4.413	4.413	0 %100
88	M101	Z	2.548	2.548	0 %100
89	M67	X	7.9	7.9	0 %100
90	M67	Z	4.561	4.561	0 %100
91	MP1A	X	6.987	6.987	0 %100
92	MP1A	Z	4.034	4.034	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
14	M23	Z	0	0	%100
15	M24	X	7.643	7.643	0
16	M24	Z	13.238	13.238	0
17	M25	X	7.643	7.643	0
18	M25	Z	13.238	13.238	0
19	M26	X	2.548	2.548	0
20	M26	Z	4.413	4.413	0
21	M27	X	0	0	0
22	M27	Z	0	0	0
23	M28	X	2.548	2.548	0
24	M28	Z	4.413	4.413	0
25	M29	X	7.643	7.643	0
26	M29	Z	13.238	13.238	0
27	M35	X	0	0	0
28	M35	Z	0	0	0
29	M36	X	0	0	0
30	M36	Z	0	0	0
31	M37	X	6.045	6.045	0
32	M37	Z	10.47	10.47	0
33	M38	X	4.246	4.246	0
34	M38	Z	7.354	7.354	0
35	M39	X	4.246	4.246	0
36	M39	Z	7.354	7.354	0
37	M40	X	7.643	7.643	0
38	M40	Z	13.238	13.238	0
39	M41	X	0	0	0
40	M41	Z	0	0	0
41	M42	X	7.643	7.643	0
42	M42	Z	13.238	13.238	0
43	M43	X	10.191	10.191	0
44	M43	Z	17.65	17.65	0
45	M44	X	7.643	7.643	0
46	M44	Z	13.238	13.238	0
47	M45	X	10.191	10.191	0
48	M45	Z	17.65	17.65	0
49	M46	X	7.643	7.643	0
50	M46	Z	13.238	13.238	0
51	M52	X	5.928	5.928	0
52	M52	Z	10.267	10.267	0
53	M52A	X	3.877	3.877	0
54	M52A	Z	6.715	6.715	0
55	M53A	X	3.877	3.877	0
56	M53A	Z	6.715	6.715	0
57	FACE	X	4.458	4.458	0
58	FACE	Z	7.722	7.722	0
59	M58	X	4.458	4.458	0
60	M58	Z	7.722	7.722	0
61	M59	X	0	0	0
62	M59	Z	0	0	0
63	M64	X	2.42	2.42	0
64	M64	Z	4.192	4.192	0
65	M77	X	2.42	2.42	0
66	M77	Z	4.192	4.192	0
67	M90	X	0	0	0
68	M90	Z	0	0	0
69	M91	X	1.511	1.511	0
70	M91	Z	2.617	2.617	0



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
71	M93	X	4.246	4.246	0	%100
72	M93	Z	7.354	7.354	0	%100
73	M94	X	0	0	0	%100
74	M94	Z	0	0	0	%100
75	M95	X	7.643	7.643	0	%100
76	M95	Z	13.238	13.238	0	%100
77	M96	X	7.643	7.643	0	%100
78	M96	Z	13.238	13.238	0	%100
79	M97	X	0	0	0	%100
80	M97	Z	0	0	0	%100
81	M98	X	2.548	2.548	0	%100
82	M98	Z	4.413	4.413	0	%100
83	M99	X	7.643	7.643	0	%100
84	M99	Z	13.238	13.238	0	%100
85	M100	X	2.548	2.548	0	%100
86	M100	Z	4.413	4.413	0	%100
87	M101	X	0	0	0	%100
88	M101	Z	0	0	0	%100
89	M67	X	3.421	3.421	0	%100
90	M67	Z	5.925	5.925	0	%100
91	MP1A	X	4.034	4.034	0	%100
92	MP1A	Z	6.987	6.987	0	%100
93	MP2A	X	4.034	4.034	0	%100
94	MP2A	Z	6.987	6.987	0	%100
95	MP3A	X	4.034	4.034	0	%100
96	MP3A	Z	6.987	6.987	0	%100
97	MP4A	X	4.034	4.034	0	%100
98	MP4A	Z	6.987	6.987	0	%100
99	MP1B	X	4.034	4.034	0	%100
100	MP1B	Z	6.987	6.987	0	%100
101	MP2B	X	4.034	4.034	0	%100
102	MP2B	Z	6.987	6.987	0	%100
103	MP3B	X	4.034	4.034	0	%100
104	MP3B	Z	6.987	6.987	0	%100
105	MP4B	X	4.034	4.034	0	%100
106	MP4B	Z	6.987	6.987	0	%100
107	MP1C	X	4.034	4.034	0	%100
108	MP1C	Z	6.987	6.987	0	%100
109	MP2C	X	4.034	4.034	0	%100
110	MP2C	Z	6.987	6.987	0	%100
111	MP3C	X	4.034	4.034	0	%100
112	MP3C	Z	6.987	6.987	0	%100
113	MP4C	X	4.034	4.034	0	%100
114	MP4C	Z	6.987	6.987	0	%100
115	M101A	X	6.67	6.67	0	%100
116	M101A	Z	11.552	11.552	0	%100
117	M103A	X	5.928	5.928	0	%100
118	M103A	Z	10.267	10.267	0	%100
119	LIGHT	X	2.233	2.233	0	%100
120	LIGHT	Z	3.868	3.868	0	%100
121	M125	X	.569	.569	0	%100
122	M125	Z	.986	.986	0	%100
123	M126	X	.569	.569	0	%100
124	M126	Z	.986	.986	0	%100
125	M127	X	.569	.569	0	%100
126	M127	Z	.986	.986	0	%100
127	M128	X	.569	.569	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
128	M128	Z	.986	.986	0	%100
129	M133A	X	3.421	3.421	0	%100
130	M133A	Z	5.926	5.926	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	0	0	0	%100
2	OVP	Z	8.067	8.067	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	2.585	2.585	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	2.585	2.585	0	%100
7	M20	X	0	0	0	%100
8	M20	Z	9.067	9.067	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	2.831	2.831	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	11.323	11.323	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	5.095	5.095	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	5.095	5.095	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	20.381	20.381	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	15.286	15.286	0	%100
21	M27	X	0	0	0	%100
22	M27	Z	5.095	5.095	0	%100
23	M28	X	0	0	0	%100
24	M28	Z	15.286	15.286	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	20.381	20.381	0	%100
27	M35	X	0	0	0	%100
28	M35	Z	2.585	2.585	0	%100
29	M36	X	0	0	0	%100
30	M36	Z	2.585	2.585	0	%100
31	M37	X	0	0	0	%100
32	M37	Z	9.067	9.067	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	11.323	11.323	0	%100
35	M39	X	0	0	0	%100
36	M39	Z	2.831	2.831	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	20.381	20.381	0	%100
39	M41	X	0	0	0	%100
40	M41	Z	5.095	5.095	0	%100
41	M42	X	0	0	0	%100
42	M42	Z	5.095	5.095	0	%100
43	M43	X	0	0	0	%100
44	M43	Z	15.286	15.286	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	20.381	20.381	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	15.286	15.286	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
106	MP4B	Z	8.067	8.067	0 %100
107	MP1C	X	0	0	0 %100
108	MP1C	Z	8.067	8.067	0 %100
109	MP2C	X	0	0	0 %100
110	MP2C	Z	8.067	8.067	0 %100
111	MP3C	X	0	0	0 %100
112	MP3C	Z	8.067	8.067	0 %100
113	MP4C	X	0	0	0 %100
114	MP4C	Z	8.067	8.067	0 %100
115	M101A	X	0	0	0 %100
116	M101A	Z	12.845	12.845	0 %100
117	M103A	X	0	0	0 %100
118	M103A	Z	12.845	12.845	0 %100
119	LIGHT	X	0	0	0 %100
120	LIGHT	Z	4.467	4.467	0 %100
121	M125	X	0	0	0 %100
122	M125	Z	.379	.379	0 %100
123	M126	X	0	0	0 %100
124	M126	Z	.379	.379	0 %100
125	M127	X	0	0	0 %100
126	M127	Z	.379	.379	0 %100
127	M128	X	0	0	0 %100
128	M128	Z	.379	.379	0 %100
129	M133A	X	0	0	0 %100
130	M133A	Z	9.122	9.122	0 %100
131	M134A	X	0	0	0 %100
132	M134A	Z	2.281	2.281	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	OVP	X	-4.034	-4.034	0 %100
2	OVP	Z	6.987	6.987	0 %100
3	M18	X	0	0	0 %100
4	M18	Z	0	0	0 %100
5	M19	X	0	0	0 %100
6	M19	Z	0	0	0 %100
7	M20	X	-6.045	-6.045	0 %100
8	M20	Z	10.47	10.47	0 %100
9	M21	X	-4.246	-4.246	0 %100
10	M21	Z	7.354	7.354	0 %100
11	M22	X	-4.246	-4.246	0 %100
12	M22	Z	7.354	7.354	0 %100
13	M23	X	-7.643	-7.643	0 %100
14	M23	Z	13.238	13.238	0 %100
15	M24	X	0	0	0 %100
16	M24	Z	0	0	0 %100
17	M25	X	-7.643	-7.643	0 %100
18	M25	Z	13.238	13.238	0 %100
19	M26	X	-10.191	-10.191	0 %100
20	M26	Z	17.65	17.65	0 %100
21	M27	X	-7.643	-7.643	0 %100
22	M27	Z	13.238	13.238	0 %100
23	M28	X	-10.191	-10.191	0 %100
24	M28	Z	17.65	17.65	0 %100
25	M29	X	-7.643	-7.643	0 %100
26	M29	Z	13.238	13.238	0 %100



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 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M35	X	-3.877	-3.877	0 %100
28	M35	Z	6.715	6.715	0 %100
29	M36	X	-3.877	-3.877	0 %100
30	M36	Z	6.715	6.715	0 %100
31	M37	X	-1.511	-1.511	0 %100
32	M37	Z	2.617	2.617	0 %100
33	M38	X	-4.246	-4.246	0 %100
34	M38	Z	7.354	7.354	0 %100
35	M39	X	0	0	0 %100
36	M39	Z	0	0	0 %100
37	M40	X	-7.643	-7.643	0 %100
38	M40	Z	13.238	13.238	0 %100
39	M41	X	-7.643	-7.643	0 %100
40	M41	Z	13.238	13.238	0 %100
41	M42	X	0	0	0 %100
42	M42	Z	0	0	0 %100
43	M43	X	-2.548	-2.548	0 %100
44	M43	Z	4.413	4.413	0 %100
45	M44	X	-7.643	-7.643	0 %100
46	M44	Z	13.238	13.238	0 %100
47	M45	X	-2.548	-2.548	0 %100
48	M45	Z	4.413	4.413	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	0	0	0 %100
51	M52	X	-5.928	-5.928	0 %100
52	M52	Z	10.267	10.267	0 %100
53	M52A	X	-3.877	-3.877	0 %100
54	M52A	Z	6.715	6.715	0 %100
55	M53A	X	-3.877	-3.877	0 %100
56	M53A	Z	6.715	6.715	0 %100
57	FACE	X	-4.458	-4.458	0 %100
58	FACE	Z	7.722	7.722	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	0	0	0 %100
61	M59	X	-4.458	-4.458	0 %100
62	M59	Z	7.722	7.722	0 %100
63	M64	X	-2.42	-2.42	0 %100
64	M64	Z	4.192	4.192	0 %100
65	M77	X	0	0	0 %100
66	M77	Z	0	0	0 %100
67	M90	X	-2.42	-2.42	0 %100
68	M90	Z	4.192	4.192	0 %100
69	M91	X	-1.511	-1.511	0 %100
70	M91	Z	2.617	2.617	0 %100
71	M93	X	0	0	0 %100
72	M93	Z	0	0	0 %100
73	M94	X	-4.246	-4.246	0 %100
74	M94	Z	7.354	7.354	0 %100
75	M95	X	0	0	0 %100
76	M95	Z	0	0	0 %100
77	M96	X	-7.643	-7.643	0 %100
78	M96	Z	13.238	13.238	0 %100
79	M97	X	-7.643	-7.643	0 %100
80	M97	Z	13.238	13.238	0 %100
81	M98	X	-2.548	-2.548	0 %100
82	M98	Z	4.413	4.413	0 %100
83	M99	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
84	M99	Z	0	0	0	%100
85	M100	X	-2.548	-2.548	0	%100
86	M100	Z	4.413	4.413	0	%100
87	M101	X	-7.643	-7.643	0	%100
88	M101	Z	13.238	13.238	0	%100
89	M67	X	0	0	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	-4.034	-4.034	0	%100
92	MP1A	Z	6.987	6.987	0	%100
93	MP2A	X	-4.034	-4.034	0	%100
94	MP2A	Z	6.987	6.987	0	%100
95	MP3A	X	-4.034	-4.034	0	%100
96	MP3A	Z	6.987	6.987	0	%100
97	MP4A	X	-4.034	-4.034	0	%100
98	MP4A	Z	6.987	6.987	0	%100
99	MP1B	X	-4.034	-4.034	0	%100
100	MP1B	Z	6.987	6.987	0	%100
101	MP2B	X	-4.034	-4.034	0	%100
102	MP2B	Z	6.987	6.987	0	%100
103	MP3B	X	-4.034	-4.034	0	%100
104	MP3B	Z	6.987	6.987	0	%100
105	MP4B	X	-4.034	-4.034	0	%100
106	MP4B	Z	6.987	6.987	0	%100
107	MP1C	X	-4.034	-4.034	0	%100
108	MP1C	Z	6.987	6.987	0	%100
109	MP2C	X	-4.034	-4.034	0	%100
110	MP2C	Z	6.987	6.987	0	%100
111	MP3C	X	-4.034	-4.034	0	%100
112	MP3C	Z	6.987	6.987	0	%100
113	MP4C	X	-4.034	-4.034	0	%100
114	MP4C	Z	6.987	6.987	0	%100
115	M101A	X	-5.928	-5.928	0	%100
116	M101A	Z	10.267	10.267	0	%100
117	M103A	X	-6.67	-6.67	0	%100
118	M103A	Z	11.552	11.552	0	%100
119	LIGHT	X	-2.233	-2.233	0	%100
120	LIGHT	Z	3.868	3.868	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	-3.421	-3.421	0	%100
130	M133A	Z	5.925	5.925	0	%100
131	M134A	X	-3.421	-3.421	0	%100
132	M134A	Z	5.926	5.926	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	-6.987	-6.987	0	%100
2	OVP	Z	4.034	4.034	0	%100
3	M18	X	-2.238	-2.238	0	%100
4	M18	Z	1.292	1.292	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
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Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	M19	X	-2.238	-2.238	0 %100
6	M19	Z	1.292	1.292	0 %100
7	M20	X	-7.852	-7.852	0 %100
8	M20	Z	4.534	4.534	0 %100
9	M21	X	-9.806	-9.806	0 %100
10	M21	Z	5.661	5.661	0 %100
11	M22	X	-2.451	-2.451	0 %100
12	M22	Z	1.415	1.415	0 %100
13	M23	X	-17.65	-17.65	0 %100
14	M23	Z	10.191	10.191	0 %100
15	M24	X	-4.413	-4.413	0 %100
16	M24	Z	2.548	2.548	0 %100
17	M25	X	-4.413	-4.413	0 %100
18	M25	Z	2.548	2.548	0 %100
19	M26	X	-13.238	-13.238	0 %100
20	M26	Z	7.643	7.643	0 %100
21	M27	X	-17.65	-17.65	0 %100
22	M27	Z	10.191	10.191	0 %100
23	M28	X	-13.238	-13.238	0 %100
24	M28	Z	7.643	7.643	0 %100
25	M29	X	-4.413	-4.413	0 %100
26	M29	Z	2.548	2.548	0 %100
27	M35	X	-8.953	-8.953	0 %100
28	M35	Z	5.169	5.169	0 %100
29	M36	X	-8.953	-8.953	0 %100
30	M36	Z	5.169	5.169	0 %100
31	M37	X	0	0	0 %100
32	M37	Z	0	0	0 %100
33	M38	X	-2.451	-2.451	0 %100
34	M38	Z	1.415	1.415	0 %100
35	M39	X	-2.451	-2.451	0 %100
36	M39	Z	1.415	1.415	0 %100
37	M40	X	-4.413	-4.413	0 %100
38	M40	Z	2.548	2.548	0 %100
39	M41	X	-17.65	-17.65	0 %100
40	M41	Z	10.191	10.191	0 %100
41	M42	X	-4.413	-4.413	0 %100
42	M42	Z	2.548	2.548	0 %100
43	M43	X	0	0	0 %100
44	M43	Z	0	0	0 %100
45	M44	X	-4.413	-4.413	0 %100
46	M44	Z	2.548	2.548	0 %100
47	M45	X	0	0	0 %100
48	M45	Z	0	0	0 %100
49	M46	X	-4.413	-4.413	0 %100
50	M46	Z	2.548	2.548	0 %100
51	M52	X	-11.124	-11.124	0 %100
52	M52	Z	6.422	6.422	0 %100
53	M52A	X	-2.238	-2.238	0 %100
54	M52A	Z	1.292	1.292	0 %100
55	M53A	X	-2.238	-2.238	0 %100
56	M53A	Z	1.292	1.292	0 %100
57	FACE	X	-2.574	-2.574	0 %100
58	FACE	Z	1.486	1.486	0 %100
59	M58	X	-2.574	-2.574	0 %100
60	M58	Z	1.486	1.486	0 %100
61	M59	X	-10.296	-10.296	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
62	M59	Z	5.944	5.944	0 %100
63	M64	X	-1.397	-1.397	0 %100
64	M64	Z	.807	.807	0 %100
65	M77	X	-1.397	-1.397	0 %100
66	M77	Z	.807	.807	0 %100
67	M90	X	-5.589	-5.589	0 %100
68	M90	Z	3.227	3.227	0 %100
69	M91	X	-7.852	-7.852	0 %100
70	M91	Z	4.534	4.534	0 %100
71	M93	X	-2.451	-2.451	0 %100
72	M93	Z	1.415	1.415	0 %100
73	M94	X	-9.806	-9.806	0 %100
74	M94	Z	5.661	5.661	0 %100
75	M95	X	-4.413	-4.413	0 %100
76	M95	Z	2.548	2.548	0 %100
77	M96	X	-4.413	-4.413	0 %100
78	M96	Z	2.548	2.548	0 %100
79	M97	X	-17.65	-17.65	0 %100
80	M97	Z	10.191	10.191	0 %100
81	M98	X	-13.238	-13.238	0 %100
82	M98	Z	7.643	7.643	0 %100
83	M99	X	-4.413	-4.413	0 %100
84	M99	Z	2.548	2.548	0 %100
85	M100	X	-13.238	-13.238	0 %100
86	M100	Z	7.643	7.643	0 %100
87	M101	X	-17.65	-17.65	0 %100
88	M101	Z	10.191	10.191	0 %100
89	M67	X	-1.975	-1.975	0 %100
90	M67	Z	1.14	1.14	0 %100
91	MP1A	X	-6.987	-6.987	0 %100
92	MP1A	Z	4.034	4.034	0 %100
93	MP2A	X	-6.987	-6.987	0 %100
94	MP2A	Z	4.034	4.034	0 %100
95	MP3A	X	-6.987	-6.987	0 %100
96	MP3A	Z	4.034	4.034	0 %100
97	MP4A	X	-6.987	-6.987	0 %100
98	MP4A	Z	4.034	4.034	0 %100
99	MP1B	X	-6.987	-6.987	0 %100
100	MP1B	Z	4.034	4.034	0 %100
101	MP2B	X	-6.987	-6.987	0 %100
102	MP2B	Z	4.034	4.034	0 %100
103	MP3B	X	-6.987	-6.987	0 %100
104	MP3B	Z	4.034	4.034	0 %100
105	MP4B	X	-6.987	-6.987	0 %100
106	MP4B	Z	4.034	4.034	0 %100
107	MP1C	X	-6.987	-6.987	0 %100
108	MP1C	Z	4.034	4.034	0 %100
109	MP2C	X	-6.987	-6.987	0 %100
110	MP2C	Z	4.034	4.034	0 %100
111	MP3C	X	-6.987	-6.987	0 %100
112	MP3C	Z	4.034	4.034	0 %100
113	MP4C	X	-6.987	-6.987	0 %100
114	MP4C	Z	4.034	4.034	0 %100
115	M101A	X	-9.839	-9.839	0 %100
116	M101A	Z	5.68	5.68	0 %100
117	M103A	X	-11.124	-11.124	0 %100
118	M103A	Z	6.422	6.422	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]	
119	LIGHT	X	-3.868	-3.868	0	%100
120	LIGHT	Z	2.233	2.233	0	%100
121	M125	X	-.329	-.329	0	%100
122	M125	Z	.19	.19	0	%100
123	M126	X	-.329	-.329	0	%100
124	M126	Z	.19	.19	0	%100
125	M127	X	-.329	-.329	0	%100
126	M127	Z	.19	.19	0	%100
127	M128	X	-.329	-.329	0	%100
128	M128	Z	.19	.19	0	%100
129	M133A	X	-1.975	-1.975	0	%100
130	M133A	Z	1.14	1.14	0	%100
131	M134A	X	-7.9	-7.9	0	%100
132	M134A	Z	4.561	4.561	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]	
1	OVP	X	-8.067	-8.067	0	%100
2	OVP	Z	0	0	0	%100
3	M18	X	-7.754	-7.754	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	-7.754	-7.754	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	-3.022	-3.022	0	%100
8	M20	Z	0	0	0	%100
9	M21	X	-8.492	-8.492	0	%100
10	M21	Z	0	0	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	0	0	0	%100
13	M23	X	-15.286	-15.286	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-15.286	-15.286	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	-5.095	-5.095	0	%100
20	M26	Z	0	0	0	%100
21	M27	X	-15.286	-15.286	0	%100
22	M27	Z	0	0	0	%100
23	M28	X	-5.095	-5.095	0	%100
24	M28	Z	0	0	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	0	0	0	%100
27	M35	X	-7.754	-7.754	0	%100
28	M35	Z	0	0	0	%100
29	M36	X	-7.754	-7.754	0	%100
30	M36	Z	0	0	0	%100
31	M37	X	-3.022	-3.022	0	%100
32	M37	Z	0	0	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	0	0	0	%100
35	M39	X	-8.492	-8.492	0	%100
36	M39	Z	0	0	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	0	0	0	%100
39	M41	X	-15.286	-15.286	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.-%]	End Location[ft.-%]	
40	M41	Z	0	0	0	%100
41	M42	X	-15.286	-15.286	0	%100
42	M42	Z	0	0	0	%100
43	M43	X	-5.095	-5.095	0	%100
44	M43	Z	0	0	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-5.095	-5.095	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-15.286	-15.286	0	%100
50	M46	Z	0	0	0	%100
51	M52	X	-13.339	-13.339	0	%100
52	M52	Z	0	0	0	%100
53	M52A	X	0	0	0	%100
54	M52A	Z	0	0	0	%100
55	M53A	X	0	0	0	%100
56	M53A	Z	0	0	0	%100
57	FACE	X	0	0	0	%100
58	FACE	Z	0	0	0	%100
59	M58	X	-8.917	-8.917	0	%100
60	M58	Z	0	0	0	%100
61	M59	X	-8.917	-8.917	0	%100
62	M59	Z	0	0	0	%100
63	M64	X	0	0	0	%100
64	M64	Z	0	0	0	%100
65	M77	X	-4.84	-4.84	0	%100
66	M77	Z	0	0	0	%100
67	M90	X	-4.841	-4.841	0	%100
68	M90	Z	0	0	0	%100
69	M91	X	-12.089	-12.089	0	%100
70	M91	Z	0	0	0	%100
71	M93	X	-8.492	-8.492	0	%100
72	M93	Z	0	0	0	%100
73	M94	X	-8.492	-8.492	0	%100
74	M94	Z	0	0	0	%100
75	M95	X	-15.286	-15.286	0	%100
76	M95	Z	0	0	0	%100
77	M96	X	0	0	0	%100
78	M96	Z	0	0	0	%100
79	M97	X	-15.286	-15.286	0	%100
80	M97	Z	0	0	0	%100
81	M98	X	-20.381	-20.381	0	%100
82	M98	Z	0	0	0	%100
83	M99	X	-15.286	-15.286	0	%100
84	M99	Z	0	0	0	%100
85	M100	X	-20.381	-20.381	0	%100
86	M100	Z	0	0	0	%100
87	M101	X	-15.286	-15.286	0	%100
88	M101	Z	0	0	0	%100
89	M67	X	-6.842	-6.842	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	-8.067	-8.067	0	%100
92	MP1A	Z	0	0	0	%100
93	MP2A	X	-8.067	-8.067	0	%100
94	MP2A	Z	0	0	0	%100
95	MP3A	X	-8.067	-8.067	0	%100
96	MP3A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
97	MP4A	X	-8.067	-8.067	0	%100
98	MP4A	Z	0	0	0	%100
99	MP1B	X	-8.067	-8.067	0	%100
100	MP1B	Z	0	0	0	%100
101	MP2B	X	-8.067	-8.067	0	%100
102	MP2B	Z	0	0	0	%100
103	MP3B	X	-8.067	-8.067	0	%100
104	MP3B	Z	0	0	0	%100
105	MP4B	X	-8.067	-8.067	0	%100
106	MP4B	Z	0	0	0	%100
107	MP1C	X	-8.067	-8.067	0	%100
108	MP1C	Z	0	0	0	%100
109	MP2C	X	-8.067	-8.067	0	%100
110	MP2C	Z	0	0	0	%100
111	MP3C	X	-8.067	-8.067	0	%100
112	MP3C	Z	0	0	0	%100
113	MP4C	X	-8.067	-8.067	0	%100
114	MP4C	Z	0	0	0	%100
115	M101A	X	-11.855	-11.855	0	%100
116	M101A	Z	0	0	0	%100
117	M103A	X	-11.855	-11.855	0	%100
118	M103A	Z	0	0	0	%100
119	LIGHT	X	-4.467	-4.467	0	%100
120	LIGHT	Z	0	0	0	%100
121	M125	X	-1.138	-1.138	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	-1.138	-1.138	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	-1.138	-1.138	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	-1.138	-1.138	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	0	0	0	%100
130	M133A	Z	0	0	0	%100
131	M134A	X	-6.841	-6.841	0	%100
132	M134A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	-6.987	-6.987	0	%100
2	OVP	Z	-4.034	-4.034	0	%100
3	M18	X	-8.953	-8.953	0	%100
4	M18	Z	-5.169	-5.169	0	%100
5	M19	X	-8.953	-8.953	0	%100
6	M19	Z	-5.169	-5.169	0	%100
7	M20	X	0	0	0	%100
8	M20	Z	0	0	0	%100
9	M21	X	-2.451	-2.451	0	%100
10	M21	Z	-1.415	-1.415	0	%100
11	M22	X	-2.451	-2.451	0	%100
12	M22	Z	-1.415	-1.415	0	%100
13	M23	X	-4.413	-4.413	0	%100
14	M23	Z	-2.548	-2.548	0	%100
15	M24	X	-17.65	-17.65	0	%100
16	M24	Z	-10.191	-10.191	0	%100
17	M25	X	-4.413	-4.413	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	M25	Z	-2.548	-2.548	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	-4.413	-4.413	0 %100
22	M27	Z	-2.548	-2.548	0 %100
23	M28	X	0	0	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	-4.413	-4.413	0 %100
26	M29	Z	-2.548	-2.548	0 %100
27	M35	X	-2.238	-2.238	0 %100
28	M35	Z	-1.292	-1.292	0 %100
29	M36	X	-2.238	-2.238	0 %100
30	M36	Z	-1.292	-1.292	0 %100
31	M37	X	-7.852	-7.852	0 %100
32	M37	Z	-4.534	-4.534	0 %100
33	M38	X	-2.451	-2.451	0 %100
34	M38	Z	-1.415	-1.415	0 %100
35	M39	X	-9.806	-9.806	0 %100
36	M39	Z	-5.661	-5.661	0 %100
37	M40	X	-4.413	-4.413	0 %100
38	M40	Z	-2.548	-2.548	0 %100
39	M41	X	-4.413	-4.413	0 %100
40	M41	Z	-2.548	-2.548	0 %100
41	M42	X	-17.65	-17.65	0 %100
42	M42	Z	-10.191	-10.191	0 %100
43	M43	X	-13.238	-13.238	0 %100
44	M43	Z	-7.643	-7.643	0 %100
45	M44	X	-4.413	-4.413	0 %100
46	M44	Z	-2.548	-2.548	0 %100
47	M45	X	-13.238	-13.238	0 %100
48	M45	Z	-7.643	-7.643	0 %100
49	M46	X	-17.65	-17.65	0 %100
50	M46	Z	-10.191	-10.191	0 %100
51	M52	X	-11.124	-11.124	0 %100
52	M52	Z	-6.422	-6.422	0 %100
53	M52A	X	-2.238	-2.238	0 %100
54	M52A	Z	-1.292	-1.292	0 %100
55	M53A	X	-2.238	-2.238	0 %100
56	M53A	Z	-1.292	-1.292	0 %100
57	FACE	X	-2.574	-2.574	0 %100
58	FACE	Z	-1.486	-1.486	0 %100
59	M58	X	-10.296	-10.296	0 %100
60	M58	Z	-5.944	-5.944	0 %100
61	M59	X	-2.574	-2.574	0 %100
62	M59	Z	-1.486	-1.486	0 %100
63	M64	X	-1.397	-1.397	0 %100
64	M64	Z	-.807	-.807	0 %100
65	M77	X	-5.589	-5.589	0 %100
66	M77	Z	-3.227	-3.227	0 %100
67	M90	X	-1.397	-1.397	0 %100
68	M90	Z	-.807	-.807	0 %100
69	M91	X	-7.852	-7.852	0 %100
70	M91	Z	-4.534	-4.534	0 %100
71	M93	X	-9.806	-9.806	0 %100
72	M93	Z	-5.661	-5.661	0 %100
73	M94	X	-2.451	-2.451	0 %100
74	M94	Z	-1.415	-1.415	0 %100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.-%]	End Location[ft.-%]
75	M95	X	-17.65	-17.65	0 %100
76	M95	Z	-10.191	-10.191	0 %100
77	M96	X	-4.413	-4.413	0 %100
78	M96	Z	-2.548	-2.548	0 %100
79	M97	X	-4.413	-4.413	0 %100
80	M97	Z	-2.548	-2.548	0 %100
81	M98	X	-13.238	-13.238	0 %100
82	M98	Z	-7.643	-7.643	0 %100
83	M99	X	-17.65	-17.65	0 %100
84	M99	Z	-10.191	-10.191	0 %100
85	M100	X	-13.238	-13.238	0 %100
86	M100	Z	-7.643	-7.643	0 %100
87	M101	X	-4.413	-4.413	0 %100
88	M101	Z	-2.548	-2.548	0 %100
89	M67	X	-7.9	-7.9	0 %100
90	M67	Z	-4.561	-4.561	0 %100
91	MP1A	X	-6.987	-6.987	0 %100
92	MP1A	Z	-4.034	-4.034	0 %100
93	MP2A	X	-6.987	-6.987	0 %100
94	MP2A	Z	-4.034	-4.034	0 %100
95	MP3A	X	-6.987	-6.987	0 %100
96	MP3A	Z	-4.034	-4.034	0 %100
97	MP4A	X	-6.987	-6.987	0 %100
98	MP4A	Z	-4.034	-4.034	0 %100
99	MP1B	X	-6.987	-6.987	0 %100
100	MP1B	Z	-4.034	-4.034	0 %100
101	MP2B	X	-6.987	-6.987	0 %100
102	MP2B	Z	-4.034	-4.034	0 %100
103	MP3B	X	-6.987	-6.987	0 %100
104	MP3B	Z	-4.034	-4.034	0 %100
105	MP4B	X	-6.987	-6.987	0 %100
106	MP4B	Z	-4.034	-4.034	0 %100
107	MP1C	X	-6.987	-6.987	0 %100
108	MP1C	Z	-4.034	-4.034	0 %100
109	MP2C	X	-6.987	-6.987	0 %100
110	MP2C	Z	-4.034	-4.034	0 %100
111	MP3C	X	-6.987	-6.987	0 %100
112	MP3C	Z	-4.034	-4.034	0 %100
113	MP4C	X	-6.987	-6.987	0 %100
114	MP4C	Z	-4.034	-4.034	0 %100
115	M101A	X	-11.124	-11.124	0 %100
116	M101A	Z	-6.422	-6.422	0 %100
117	M103A	X	-9.839	-9.839	0 %100
118	M103A	Z	-5.68	-5.68	0 %100
119	LIGHT	X	-3.868	-3.868	0 %100
120	LIGHT	Z	-2.233	-2.233	0 %100
121	M125	X	-1.314	-1.314	0 %100
122	M125	Z	-.759	-.759	0 %100
123	M126	X	-1.314	-1.314	0 %100
124	M126	Z	-.759	-.759	0 %100
125	M127	X	-1.314	-1.314	0 %100
126	M127	Z	-.759	-.759	0 %100
127	M128	X	-1.314	-1.314	0 %100
128	M128	Z	-.759	-.759	0 %100
129	M133A	X	-1.975	-1.975	0 %100
130	M133A	Z	-1.14	-1.14	0 %100
131	M134A	X	-1.975	-1.975	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
132	M134A	Z	-1.14	-1.14	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	-4.034	-4.034	0 %100
2	OVP	Z	-6.987	-6.987	0 %100
3	M18	X	-3.877	-3.877	0 %100
4	M18	Z	-6.715	-6.715	0 %100
5	M19	X	-3.877	-3.877	0 %100
6	M19	Z	-6.715	-6.715	0 %100
7	M20	X	-1.511	-1.511	0 %100
8	M20	Z	-2.617	-2.617	0 %100
9	M21	X	0	0	0 %100
10	M21	Z	0	0	0 %100
11	M22	X	-4.246	-4.246	0 %100
12	M22	Z	-7.354	-7.354	0 %100
13	M23	X	0	0	0 %100
14	M23	Z	0	0	0 %100
15	M24	X	-7.643	-7.643	0 %100
16	M24	Z	-13.238	-13.238	0 %100
17	M25	X	-7.643	-7.643	0 %100
18	M25	Z	-13.238	-13.238	0 %100
19	M26	X	-2.548	-2.548	0 %100
20	M26	Z	-4.413	-4.413	0 %100
21	M27	X	0	0	0 %100
22	M27	Z	0	0	0 %100
23	M28	X	-2.548	-2.548	0 %100
24	M28	Z	-4.413	-4.413	0 %100
25	M29	X	-7.643	-7.643	0 %100
26	M29	Z	-13.238	-13.238	0 %100
27	M35	X	0	0	0 %100
28	M35	Z	0	0	0 %100
29	M36	X	0	0	0 %100
30	M36	Z	0	0	0 %100
31	M37	X	-6.045	-6.045	0 %100
32	M37	Z	-10.47	-10.47	0 %100
33	M38	X	-4.246	-4.246	0 %100
34	M38	Z	-7.354	-7.354	0 %100
35	M39	X	-4.246	-4.246	0 %100
36	M39	Z	-7.354	-7.354	0 %100
37	M40	X	-7.643	-7.643	0 %100
38	M40	Z	-13.238	-13.238	0 %100
39	M41	X	0	0	0 %100
40	M41	Z	0	0	0 %100
41	M42	X	-7.643	-7.643	0 %100
42	M42	Z	-13.238	-13.238	0 %100
43	M43	X	-10.191	-10.191	0 %100
44	M43	Z	-17.65	-17.65	0 %100
45	M44	X	-7.643	-7.643	0 %100
46	M44	Z	-13.238	-13.238	0 %100
47	M45	X	-10.191	-10.191	0 %100
48	M45	Z	-17.65	-17.65	0 %100
49	M46	X	-7.643	-7.643	0 %100
50	M46	Z	-13.238	-13.238	0 %100
51	M52	X	-5.928	-5.928	0 %100
52	M52	Z	-10.267	-10.267	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M52A	X	-3.877	-3.877	0 %100
54	M52A	Z	-6.715	-6.715	0 %100
55	M53A	X	-3.877	-3.877	0 %100
56	M53A	Z	-6.715	-6.715	0 %100
57	FACE	X	-4.458	-4.458	0 %100
58	FACE	Z	-7.722	-7.722	0 %100
59	M58	X	-4.458	-4.458	0 %100
60	M58	Z	-7.722	-7.722	0 %100
61	M59	X	0	0	0 %100
62	M59	Z	0	0	0 %100
63	M64	X	-2.42	-2.42	0 %100
64	M64	Z	-4.192	-4.192	0 %100
65	M77	X	-2.42	-2.42	0 %100
66	M77	Z	-4.192	-4.192	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	0	0	0 %100
69	M91	X	-1.511	-1.511	0 %100
70	M91	Z	-2.617	-2.617	0 %100
71	M93	X	-4.246	-4.246	0 %100
72	M93	Z	-7.354	-7.354	0 %100
73	M94	X	0	0	0 %100
74	M94	Z	0	0	0 %100
75	M95	X	-7.643	-7.643	0 %100
76	M95	Z	-13.238	-13.238	0 %100
77	M96	X	-7.643	-7.643	0 %100
78	M96	Z	-13.238	-13.238	0 %100
79	M97	X	0	0	0 %100
80	M97	Z	0	0	0 %100
81	M98	X	-2.548	-2.548	0 %100
82	M98	Z	-4.413	-4.413	0 %100
83	M99	X	-7.643	-7.643	0 %100
84	M99	Z	-13.238	-13.238	0 %100
85	M100	X	-2.548	-2.548	0 %100
86	M100	Z	-4.413	-4.413	0 %100
87	M101	X	0	0	0 %100
88	M101	Z	0	0	0 %100
89	M67	X	-3.421	-3.421	0 %100
90	M67	Z	-5.925	-5.925	0 %100
91	MP1A	X	-4.034	-4.034	0 %100
92	MP1A	Z	-6.987	-6.987	0 %100
93	MP2A	X	-4.034	-4.034	0 %100
94	MP2A	Z	-6.987	-6.987	0 %100
95	MP3A	X	-4.034	-4.034	0 %100
96	MP3A	Z	-6.987	-6.987	0 %100
97	MP4A	X	-4.034	-4.034	0 %100
98	MP4A	Z	-6.987	-6.987	0 %100
99	MP1B	X	-4.034	-4.034	0 %100
100	MP1B	Z	-6.987	-6.987	0 %100
101	MP2B	X	-4.034	-4.034	0 %100
102	MP2B	Z	-6.987	-6.987	0 %100
103	MP3B	X	-4.034	-4.034	0 %100
104	MP3B	Z	-6.987	-6.987	0 %100
105	MP4B	X	-4.034	-4.034	0 %100
106	MP4B	Z	-6.987	-6.987	0 %100
107	MP1C	X	-4.034	-4.034	0 %100
108	MP1C	Z	-6.987	-6.987	0 %100
109	MP2C	X	-4.034	-4.034	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
110	MP2C	Z	-6.987	-6.987	0	%100
111	MP3C	X	-4.034	-4.034	0	%100
112	MP3C	Z	-6.987	-6.987	0	%100
113	MP4C	X	-4.034	-4.034	0	%100
114	MP4C	Z	-6.987	-6.987	0	%100
115	M101A	X	-6.67	-6.67	0	%100
116	M101A	Z	-11.552	-11.552	0	%100
117	M103A	X	-5.928	-5.928	0	%100
118	M103A	Z	-10.267	-10.267	0	%100
119	LIGHT	X	-2.233	-2.233	0	%100
120	LIGHT	Z	-3.868	-3.868	0	%100
121	M125	X	-.569	-.569	0	%100
122	M125	Z	-.986	-.986	0	%100
123	M126	X	-.569	-.569	0	%100
124	M126	Z	-.986	-.986	0	%100
125	M127	X	-.569	-.569	0	%100
126	M127	Z	-.986	-.986	0	%100
127	M128	X	-.569	-.569	0	%100
128	M128	Z	-.986	-.986	0	%100
129	M133A	X	-3.421	-3.421	0	%100
130	M133A	Z	-5.926	-5.926	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	0	0	0	%100
2	OVP	Z	-2.771	-2.771	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	-.718	-.718	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	-.718	-.718	0	%100
7	M20	X	0	0	0	%100
8	M20	Z	-2.604	-2.604	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-.817	-.817	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	-3.267	-3.267	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	-1.087	-1.087	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	-1.108	-1.108	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	-4.348	-4.348	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	-3.261	-3.261	0	%100
21	M27	X	0	0	0	%100
22	M27	Z	-1.087	-1.087	0	%100
23	M28	X	0	0	0	%100
24	M28	Z	-3.261	-3.261	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	-4.348	-4.348	0	%100
27	M35	X	0	0	0	%100
28	M35	Z	-.718	-.718	0	%100
29	M36	X	0	0	0	%100
30	M36	Z	-.718	-.718	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
31	M37	X	0	0	0	%100
32	M37	Z	-2.604	-2.604	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	-3.267	-3.267	0	%100
35	M39	X	0	0	0	%100
36	M39	Z	-.817	-.817	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	-4.348	-4.348	0	%100
39	M41	X	0	0	0	%100
40	M41	Z	-1.108	-1.108	0	%100
41	M42	X	0	0	0	%100
42	M42	Z	-1.087	-1.087	0	%100
43	M43	X	0	0	0	%100
44	M43	Z	-3.261	-3.261	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-4.348	-4.348	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-3.261	-3.261	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-1.087	-1.087	0	%100
51	M52	X	0	0	0	%100
52	M52	Z	-2.638	-2.638	0	%100
53	M52A	X	0	0	0	%100
54	M52A	Z	-2.871	-2.871	0	%100
55	M53A	X	0	0	0	%100
56	M53A	Z	-2.871	-2.871	0	%100
57	FACE	X	0	0	0	%100
58	FACE	Z	-3.437	-3.437	0	%100
59	M58	X	0	0	0	%100
60	M58	Z	-.859	-.859	0	%100
61	M59	X	0	0	0	%100
62	M59	Z	-.859	-.859	0	%100
63	M64	X	0	0	0	%100
64	M64	Z	-2.49	-2.49	0	%100
65	M77	X	0	0	0	%100
66	M77	Z	-.623	-.623	0	%100
67	M90	X	0	0	0	%100
68	M90	Z	-.623	-.623	0	%100
69	M91	X	0	0	0	%100
70	M91	Z	0	0	0	%100
71	M93	X	0	0	0	%100
72	M93	Z	-.817	-.817	0	%100
73	M94	X	0	0	0	%100
74	M94	Z	-.817	-.817	0	%100
75	M95	X	0	0	0	%100
76	M95	Z	-1.087	-1.087	0	%100
77	M96	X	0	0	0	%100
78	M96	Z	-4.434	-4.434	0	%100
79	M97	X	0	0	0	%100
80	M97	Z	-1.087	-1.087	0	%100
81	M98	X	0	0	0	%100
82	M98	Z	0	0	0	%100
83	M99	X	0	0	0	%100
84	M99	Z	-1.087	-1.087	0	%100
85	M100	X	0	0	0	%100
86	M100	Z	0	0	0	%100
87	M101	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.F...	Start Location[ft.%,]	End Location[ft.%,]
88	M101	Z	-1.087	-1.087	0	%100
89	M67	X	0	0	0	%100
90	M67	Z	-.611	-.611	0	%100
91	MP1A	X	0	0	0	%100
92	MP1A	Z	-2.771	-2.771	0	%100
93	MP2A	X	0	0	0	%100
94	MP2A	Z	-2.771	-2.771	0	%100
95	MP3A	X	0	0	0	%100
96	MP3A	Z	-2.771	-2.771	0	%100
97	MP4A	X	0	0	0	%100
98	MP4A	Z	-2.771	-2.771	0	%100
99	MP1B	X	0	0	0	%100
100	MP1B	Z	-2.771	-2.771	0	%100
101	MP2B	X	0	0	0	%100
102	MP2B	Z	-2.771	-2.771	0	%100
103	MP3B	X	0	0	0	%100
104	MP3B	Z	-2.771	-2.771	0	%100
105	MP4B	X	0	0	0	%100
106	MP4B	Z	-2.771	-2.771	0	%100
107	MP1C	X	0	0	0	%100
108	MP1C	Z	-2.771	-2.771	0	%100
109	MP2C	X	0	0	0	%100
110	MP2C	Z	-2.771	-2.771	0	%100
111	MP3C	X	0	0	0	%100
112	MP3C	Z	-2.771	-2.771	0	%100
113	MP4C	X	0	0	0	%100
114	MP4C	Z	-2.771	-2.771	0	%100
115	M101A	X	0	0	0	%100
116	M101A	Z	-3.396	-3.396	0	%100
117	M103A	X	0	0	0	%100
118	M103A	Z	-3.396	-3.396	0	%100
119	LIGHT	X	0	0	0	%100
120	LIGHT	Z	-2.038	-2.038	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	-.266	-.266	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	-.266	-.266	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	-.266	-.266	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	-.266	-.266	0	%100
129	M133A	X	0	0	0	%100
130	M133A	Z	-2.446	-2.446	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	-.612	-.612	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	1.386	1.386	0	%100
2	OVP	Z	-2.4	-2.4	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	1.736	1.736	0	%100
8	M20	Z	-3.007	-3.007	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
9	M21	X	1.225	1.225	0 %100
10	M21	Z	-2.122	-2.122	0 %100
11	M22	X	1.225	1.225	0 %100
12	M22	Z	-2.122	-2.122	0 %100
13	M23	X	1.63	1.63	0 %100
14	M23	Z	-2.824	-2.824	0 %100
15	M24	X	0	0	0 %100
16	M24	Z	0	0	0 %100
17	M25	X	1.63	1.63	0 %100
18	M25	Z	-2.824	-2.824	0 %100
19	M26	X	2.174	2.174	0 %100
20	M26	Z	-3.765	-3.765	0 %100
21	M27	X	1.63	1.63	0 %100
22	M27	Z	-2.824	-2.824	0 %100
23	M28	X	2.174	2.174	0 %100
24	M28	Z	-3.765	-3.765	0 %100
25	M29	X	1.63	1.63	0 %100
26	M29	Z	-2.824	-2.824	0 %100
27	M35	X	1.077	1.077	0 %100
28	M35	Z	-1.865	-1.865	0 %100
29	M36	X	1.077	1.077	0 %100
30	M36	Z	-1.865	-1.865	0 %100
31	M37	X	.434	.434	0 %100
32	M37	Z	-.752	-.752	0 %100
33	M38	X	1.225	1.225	0 %100
34	M38	Z	-2.122	-2.122	0 %100
35	M39	X	0	0	0 %100
36	M39	Z	0	0	0 %100
37	M40	X	1.63	1.63	0 %100
38	M40	Z	-2.824	-2.824	0 %100
39	M41	X	1.663	1.663	0 %100
40	M41	Z	-2.88	-2.88	0 %100
41	M42	X	0	0	0 %100
42	M42	Z	0	0	0 %100
43	M43	X	.543	.543	0 %100
44	M43	Z	-.941	-.941	0 %100
45	M44	X	1.63	1.63	0 %100
46	M44	Z	-2.824	-2.824	0 %100
47	M45	X	.543	.543	0 %100
48	M45	Z	-.941	-.941	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	0	0	0 %100
51	M52	X	1.445	1.445	0 %100
52	M52	Z	-2.503	-2.503	0 %100
53	M52A	X	1.077	1.077	0 %100
54	M52A	Z	-1.865	-1.865	0 %100
55	M53A	X	1.077	1.077	0 %100
56	M53A	Z	-1.865	-1.865	0 %100
57	FACE	X	1.289	1.289	0 %100
58	FACE	Z	-2.232	-2.232	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	0	0	0 %100
61	M59	X	1.289	1.289	0 %100
62	M59	Z	-2.232	-2.232	0 %100
63	M64	X	.934	.934	0 %100
64	M64	Z	-1.617	-1.617	0 %100
65	M77	X	0	0	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
66	M77	Z	0	0	%100
67	M90	X	.934	.934	%100
68	M90	Z	-1.617	-1.617	%100
69	M91	X	.434	.434	%100
70	M91	Z	-.752	-.752	%100
71	M93	X	0	0	%100
72	M93	Z	0	0	%100
73	M94	X	1.225	1.225	%100
74	M94	Z	-2.122	-2.122	%100
75	M95	X	0	0	%100
76	M95	Z	0	0	%100
77	M96	X	1.663	1.663	%100
78	M96	Z	-2.88	-2.88	%100
79	M97	X	1.63	1.63	%100
80	M97	Z	-2.824	-2.824	%100
81	M98	X	.543	.543	%100
82	M98	Z	-.941	-.941	%100
83	M99	X	0	0	%100
84	M99	Z	0	0	%100
85	M100	X	.543	.543	%100
86	M100	Z	-.941	-.941	%100
87	M101	X	1.63	1.63	%100
88	M101	Z	-2.824	-2.824	%100
89	M67	X	0	0	%100
90	M67	Z	0	0	%100
91	MP1A	X	1.386	1.386	%100
92	MP1A	Z	-2.4	-2.4	%100
93	MP2A	X	1.386	1.386	%100
94	MP2A	Z	-2.4	-2.4	%100
95	MP3A	X	1.386	1.386	%100
96	MP3A	Z	-2.4	-2.4	%100
97	MP4A	X	1.386	1.386	%100
98	MP4A	Z	-2.4	-2.4	%100
99	MP1B	X	1.386	1.386	%100
100	MP1B	Z	-2.4	-2.4	%100
101	MP2B	X	1.386	1.386	%100
102	MP2B	Z	-2.4	-2.4	%100
103	MP3B	X	1.386	1.386	%100
104	MP3B	Z	-2.4	-2.4	%100
105	MP4B	X	1.386	1.386	%100
106	MP4B	Z	-2.4	-2.4	%100
107	MP1C	X	1.386	1.386	%100
108	MP1C	Z	-2.4	-2.4	%100
109	MP2C	X	1.386	1.386	%100
110	MP2C	Z	-2.4	-2.4	%100
111	MP3C	X	1.386	1.386	%100
112	MP3C	Z	-2.4	-2.4	%100
113	MP4C	X	1.386	1.386	%100
114	MP4C	Z	-2.4	-2.4	%100
115	M101A	X	1.445	1.445	%100
116	M101A	Z	-2.503	-2.503	%100
117	M103A	X	1.824	1.824	%100
118	M103A	Z	-3.159	-3.159	%100
119	LIGHT	X	1.019	1.019	%100
120	LIGHT	Z	-1.765	-1.765	%100
121	M125	X	0	0	%100
122	M125	Z	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
44	M43	Z	0	0	0	%100
45	M44	X	.941	.941	0	%100
46	M44	Z	-.543	-.543	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	.941	.941	0	%100
50	M46	Z	-.543	-.543	0	%100
51	M52	X	2.941	2.941	0	%100
52	M52	Z	-1.698	-1.698	0	%100
53	M52A	X	.622	.622	0	%100
54	M52A	Z	-.359	-.359	0	%100
55	M53A	X	.622	.622	0	%100
56	M53A	Z	-.359	-.359	0	%100
57	FACE	X	.744	.744	0	%100
58	FACE	Z	-.43	-.43	0	%100
59	M58	X	.744	.744	0	%100
60	M58	Z	-.43	-.43	0	%100
61	M59	X	2.977	2.977	0	%100
62	M59	Z	-1.719	-1.719	0	%100
63	M64	X	.539	.539	0	%100
64	M64	Z	-.311	-.311	0	%100
65	M77	X	.539	.539	0	%100
66	M77	Z	-.311	-.311	0	%100
67	M90	X	2.156	2.156	0	%100
68	M90	Z	-1.245	-1.245	0	%100
69	M91	X	2.255	2.255	0	%100
70	M91	Z	-1.302	-1.302	0	%100
71	M93	X	.707	.707	0	%100
72	M93	Z	-.408	-.408	0	%100
73	M94	X	2.829	2.829	0	%100
74	M94	Z	-1.634	-1.634	0	%100
75	M95	X	.941	.941	0	%100
76	M95	Z	-.543	-.543	0	%100
77	M96	X	.96	.96	0	%100
78	M96	Z	-.554	-.554	0	%100
79	M97	X	3.765	3.765	0	%100
80	M97	Z	-2.174	-2.174	0	%100
81	M98	X	2.824	2.824	0	%100
82	M98	Z	-1.63	-1.63	0	%100
83	M99	X	.941	.941	0	%100
84	M99	Z	-.543	-.543	0	%100
85	M100	X	2.824	2.824	0	%100
86	M100	Z	-1.63	-1.63	0	%100
87	M101	X	3.765	3.765	0	%100
88	M101	Z	-2.174	-2.174	0	%100
89	M67	X	.53	.53	0	%100
90	M67	Z	-.306	-.306	0	%100
91	MP1A	X	2.4	2.4	0	%100
92	MP1A	Z	-1.386	-1.386	0	%100
93	MP2A	X	2.4	2.4	0	%100
94	MP2A	Z	-1.386	-1.386	0	%100
95	MP3A	X	2.4	2.4	0	%100
96	MP3A	Z	-1.386	-1.386	0	%100
97	MP4A	X	2.4	2.4	0	%100
98	MP4A	Z	-1.386	-1.386	0	%100
99	MP1B	X	2.4	2.4	0	%100
100	MP1B	Z	-1.386	-1.386	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
101	MP2B	X	2.4	2.4	0 %100
102	MP2B	Z	-1.386	-1.386	0 %100
103	MP3B	X	2.4	2.4	0 %100
104	MP3B	Z	-1.386	-1.386	0 %100
105	MP4B	X	2.4	2.4	0 %100
106	MP4B	Z	-1.386	-1.386	0 %100
107	MP1C	X	2.4	2.4	0 %100
108	MP1C	Z	-1.386	-1.386	0 %100
109	MP2C	X	2.4	2.4	0 %100
110	MP2C	Z	-1.386	-1.386	0 %100
111	MP3C	X	2.4	2.4	0 %100
112	MP3C	Z	-1.386	-1.386	0 %100
113	MP4C	X	2.4	2.4	0 %100
114	MP4C	Z	-1.386	-1.386	0 %100
115	M101A	X	2.285	2.285	0 %100
116	M101A	Z	-1.319	-1.319	0 %100
117	M103A	X	2.941	2.941	0 %100
118	M103A	Z	-1.698	-1.698	0 %100
119	LIGHT	X	1.765	1.765	0 %100
120	LIGHT	Z	-1.019	-1.019	0 %100
121	M125	X	.23	.23	0 %100
122	M125	Z	-.133	-.133	0 %100
123	M126	X	.23	.23	0 %100
124	M126	Z	-.133	-.133	0 %100
125	M127	X	.23	.23	0 %100
126	M127	Z	-.133	-.133	0 %100
127	M128	X	.23	.23	0 %100
128	M128	Z	-.133	-.133	0 %100
129	M133A	X	.53	.53	0 %100
130	M133A	Z	-.306	-.306	0 %100
131	M134A	X	2.118	2.118	0 %100
132	M134A	Z	-1.223	-1.223	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	OVP	X	2.771	2.771	0 %100
2	OVP	Z	0	0	0 %100
3	M18	X	2.153	2.153	0 %100
4	M18	Z	0	0	0 %100
5	M19	X	2.153	2.153	0 %100
6	M19	Z	0	0	0 %100
7	M20	X	.868	.868	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	2.45	2.45	0 %100
10	M21	Z	0	0	0 %100
11	M22	X	0	0	0 %100
12	M22	Z	0	0	0 %100
13	M23	X	3.261	3.261	0 %100
14	M23	Z	0	0	0 %100
15	M24	X	3.325	3.325	0 %100
16	M24	Z	0	0	0 %100
17	M25	X	0	0	0 %100
18	M25	Z	0	0	0 %100
19	M26	X	1.087	1.087	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	3.261	3.261	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
22	M27	Z	0	0	%100
23	M28	X	1.087	1.087	%100
24	M28	Z	0	0	%100
25	M29	X	0	0	%100
26	M29	Z	0	0	%100
27	M35	X	2.153	2.153	%100
28	M35	Z	0	0	%100
29	M36	X	2.153	2.153	%100
30	M36	Z	0	0	%100
31	M37	X	.868	.868	%100
32	M37	Z	0	0	%100
33	M38	X	0	0	%100
34	M38	Z	0	0	%100
35	M39	X	2.45	2.45	%100
36	M39	Z	0	0	%100
37	M40	X	0	0	%100
38	M40	Z	0	0	%100
39	M41	X	3.325	3.325	%100
40	M41	Z	0	0	%100
41	M42	X	3.261	3.261	%100
42	M42	Z	0	0	%100
43	M43	X	1.087	1.087	%100
44	M43	Z	0	0	%100
45	M44	X	0	0	%100
46	M44	Z	0	0	%100
47	M45	X	1.087	1.087	%100
48	M45	Z	0	0	%100
49	M46	X	3.261	3.261	%100
50	M46	Z	0	0	%100
51	M52	X	3.648	3.648	%100
52	M52	Z	0	0	%100
53	M52A	X	0	0	%100
54	M52A	Z	0	0	%100
55	M53A	X	0	0	%100
56	M53A	Z	0	0	%100
57	FACE	X	0	0	%100
58	FACE	Z	0	0	%100
59	M58	X	2.578	2.578	%100
60	M58	Z	0	0	%100
61	M59	X	2.578	2.578	%100
62	M59	Z	0	0	%100
63	M64	X	0	0	%100
64	M64	Z	0	0	%100
65	M77	X	1.868	1.868	%100
66	M77	Z	0	0	%100
67	M90	X	1.868	1.868	%100
68	M90	Z	0	0	%100
69	M91	X	3.472	3.472	%100
70	M91	Z	0	0	%100
71	M93	X	2.45	2.45	%100
72	M93	Z	0	0	%100
73	M94	X	2.45	2.45	%100
74	M94	Z	0	0	%100
75	M95	X	3.261	3.261	%100
76	M95	Z	0	0	%100
77	M96	X	0	0	%100
78	M96	Z	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
14	M23	Z	1.087	1.087	0 %100
15	M24	X	0	0	0 %100
16	M24	Z	1.108	1.108	0 %100
17	M25	X	0	0	0 %100
18	M25	Z	4.348	4.348	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	3.261	3.261	0 %100
21	M27	X	0	0	0 %100
22	M27	Z	1.087	1.087	0 %100
23	M28	X	0	0	0 %100
24	M28	Z	3.261	3.261	0 %100
25	M29	X	0	0	0 %100
26	M29	Z	4.348	4.348	0 %100
27	M35	X	0	0	0 %100
28	M35	Z	.718	.718	0 %100
29	M36	X	0	0	0 %100
30	M36	Z	.718	.718	0 %100
31	M37	X	0	0	0 %100
32	M37	Z	2.604	2.604	0 %100
33	M38	X	0	0	0 %100
34	M38	Z	3.267	3.267	0 %100
35	M39	X	0	0	0 %100
36	M39	Z	.817	.817	0 %100
37	M40	X	0	0	0 %100
38	M40	Z	4.348	4.348	0 %100
39	M41	X	0	0	0 %100
40	M41	Z	1.108	1.108	0 %100
41	M42	X	0	0	0 %100
42	M42	Z	1.087	1.087	0 %100
43	M43	X	0	0	0 %100
44	M43	Z	3.261	3.261	0 %100
45	M44	X	0	0	0 %100
46	M44	Z	4.348	4.348	0 %100
47	M45	X	0	0	0 %100
48	M45	Z	3.261	3.261	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	1.087	1.087	0 %100
51	M52	X	0	0	0 %100
52	M52	Z	2.638	2.638	0 %100
53	M52A	X	0	0	0 %100
54	M52A	Z	2.871	2.871	0 %100
55	M53A	X	0	0	0 %100
56	M53A	Z	2.871	2.871	0 %100
57	FACE	X	0	0	0 %100
58	FACE	Z	3.437	3.437	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	.859	.859	0 %100
61	M59	X	0	0	0 %100
62	M59	Z	.859	.859	0 %100
63	M64	X	0	0	0 %100
64	M64	Z	2.49	2.49	0 %100
65	M77	X	0	0	0 %100
66	M77	Z	.623	.623	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	.623	.623	0 %100
69	M91	X	0	0	0 %100
70	M91	Z	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
106	MP4B	Z	2.4	2.4	0	%100
107	MP1C	X	-1.386	-1.386	0	%100
108	MP1C	Z	2.4	2.4	0	%100
109	MP2C	X	-1.386	-1.386	0	%100
110	MP2C	Z	2.4	2.4	0	%100
111	MP3C	X	-1.386	-1.386	0	%100
112	MP3C	Z	2.4	2.4	0	%100
113	MP4C	X	-1.386	-1.386	0	%100
114	MP4C	Z	2.4	2.4	0	%100
115	M101A	X	-1.445	-1.445	0	%100
116	M101A	Z	2.503	2.503	0	%100
117	M103A	X	-1.824	-1.824	0	%100
118	M103A	Z	3.159	3.159	0	%100
119	LIGHT	X	-1.019	-1.019	0	%100
120	LIGHT	Z	1.765	1.765	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	-0.917	-0.917	0	%100
130	M133A	Z	1.589	1.589	0	%100
131	M134A	X	-0.917	-0.917	0	%100
132	M134A	Z	1.589	1.589	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	OVP	X	-2.4	-2.4	0	%100
2	OVP	Z	1.386	1.386	0	%100
3	M18	X	-0.622	-0.622	0	%100
4	M18	Z	0.359	0.359	0	%100
5	M19	X	-0.622	-0.622	0	%100
6	M19	Z	0.359	0.359	0	%100
7	M20	X	-2.255	-2.255	0	%100
8	M20	Z	1.302	1.302	0	%100
9	M21	X	-2.829	-2.829	0	%100
10	M21	Z	1.634	1.634	0	%100
11	M22	X	-0.707	-0.707	0	%100
12	M22	Z	0.408	0.408	0	%100
13	M23	X	-3.765	-3.765	0	%100
14	M23	Z	2.174	2.174	0	%100
15	M24	X	-0.96	-0.96	0	%100
16	M24	Z	0.554	0.554	0	%100
17	M25	X	-0.941	-0.941	0	%100
18	M25	Z	0.543	0.543	0	%100
19	M26	X	-2.824	-2.824	0	%100
20	M26	Z	1.63	1.63	0	%100
21	M27	X	-3.765	-3.765	0	%100
22	M27	Z	2.174	2.174	0	%100
23	M28	X	-2.824	-2.824	0	%100
24	M28	Z	1.63	1.63	0	%100
25	M29	X	-0.941	-0.941	0	%100
26	M29	Z	0.543	0.543	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
84	M99	Z	.543	.543	0	%100
85	M100	X	-2.824	-2.824	0	%100
86	M100	Z	1.63	1.63	0	%100
87	M101	X	-3.765	-3.765	0	%100
88	M101	Z	2.174	2.174	0	%100
89	M67	X	-.53	-.53	0	%100
90	M67	Z	.306	.306	0	%100
91	MP1A	X	-2.4	-2.4	0	%100
92	MP1A	Z	1.386	1.386	0	%100
93	MP2A	X	-2.4	-2.4	0	%100
94	MP2A	Z	1.386	1.386	0	%100
95	MP3A	X	-2.4	-2.4	0	%100
96	MP3A	Z	1.386	1.386	0	%100
97	MP4A	X	-2.4	-2.4	0	%100
98	MP4A	Z	1.386	1.386	0	%100
99	MP1B	X	-2.4	-2.4	0	%100
100	MP1B	Z	1.386	1.386	0	%100
101	MP2B	X	-2.4	-2.4	0	%100
102	MP2B	Z	1.386	1.386	0	%100
103	MP3B	X	-2.4	-2.4	0	%100
104	MP3B	Z	1.386	1.386	0	%100
105	MP4B	X	-2.4	-2.4	0	%100
106	MP4B	Z	1.386	1.386	0	%100
107	MP1C	X	-2.4	-2.4	0	%100
108	MP1C	Z	1.386	1.386	0	%100
109	MP2C	X	-2.4	-2.4	0	%100
110	MP2C	Z	1.386	1.386	0	%100
111	MP3C	X	-2.4	-2.4	0	%100
112	MP3C	Z	1.386	1.386	0	%100
113	MP4C	X	-2.4	-2.4	0	%100
114	MP4C	Z	1.386	1.386	0	%100
115	M101A	X	-2.285	-2.285	0	%100
116	M101A	Z	1.319	1.319	0	%100
117	M103A	X	-2.941	-2.941	0	%100
118	M103A	Z	1.698	1.698	0	%100
119	LIGHT	X	-1.765	-1.765	0	%100
120	LIGHT	Z	1.019	1.019	0	%100
121	M125	X	-.23	-.23	0	%100
122	M125	Z	.133	.133	0	%100
123	M126	X	-.23	-.23	0	%100
124	M126	Z	.133	.133	0	%100
125	M127	X	-.23	-.23	0	%100
126	M127	Z	.133	.133	0	%100
127	M128	X	-.23	-.23	0	%100
128	M128	Z	.133	.133	0	%100
129	M133A	X	-.53	-.53	0	%100
130	M133A	Z	.306	.306	0	%100
131	M134A	X	-2.118	-2.118	0	%100
132	M134A	Z	1.223	1.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	-2.771	-2.771	0	%100
2	OVP	Z	0	0	0	%100
3	M18	X	-2.153	-2.153	0	%100
4	M18	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M19	X	-2.153	-2.153	0 %100
6	M19	Z	0	0	0 %100
7	M20	X	-.868	-.868	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	-2.45	-2.45	0 %100
10	M21	Z	0	0	0 %100
11	M22	X	0	0	0 %100
12	M22	Z	0	0	0 %100
13	M23	X	-3.261	-3.261	0 %100
14	M23	Z	0	0	0 %100
15	M24	X	-3.325	-3.325	0 %100
16	M24	Z	0	0	0 %100
17	M25	X	0	0	0 %100
18	M25	Z	0	0	0 %100
19	M26	X	-1.087	-1.087	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	-3.261	-3.261	0 %100
22	M27	Z	0	0	0 %100
23	M28	X	-1.087	-1.087	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	0	0	0 %100
26	M29	Z	0	0	0 %100
27	M35	X	-2.153	-2.153	0 %100
28	M35	Z	0	0	0 %100
29	M36	X	-2.153	-2.153	0 %100
30	M36	Z	0	0	0 %100
31	M37	X	-.868	-.868	0 %100
32	M37	Z	0	0	0 %100
33	M38	X	0	0	0 %100
34	M38	Z	0	0	0 %100
35	M39	X	-2.45	-2.45	0 %100
36	M39	Z	0	0	0 %100
37	M40	X	0	0	0 %100
38	M40	Z	0	0	0 %100
39	M41	X	-3.325	-3.325	0 %100
40	M41	Z	0	0	0 %100
41	M42	X	-3.261	-3.261	0 %100
42	M42	Z	0	0	0 %100
43	M43	X	-1.087	-1.087	0 %100
44	M43	Z	0	0	0 %100
45	M44	X	0	0	0 %100
46	M44	Z	0	0	0 %100
47	M45	X	-1.087	-1.087	0 %100
48	M45	Z	0	0	0 %100
49	M46	X	-3.261	-3.261	0 %100
50	M46	Z	0	0	0 %100
51	M52	X	-3.648	-3.648	0 %100
52	M52	Z	0	0	0 %100
53	M52A	X	0	0	0 %100
54	M52A	Z	0	0	0 %100
55	M53A	X	0	0	0 %100
56	M53A	Z	0	0	0 %100
57	FACE	X	0	0	0 %100
58	FACE	Z	0	0	0 %100
59	M58	X	-2.578	-2.578	0 %100
60	M58	Z	0	0	0 %100
61	M59	X	-2.578	-2.578	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
62	M59	Z	0	0	0	%100
63	M64	X	0	0	0	%100
64	M64	Z	0	0	0	%100
65	M77	X	-1.868	-1.868	0	%100
66	M77	Z	0	0	0	%100
67	M90	X	-1.868	-1.868	0	%100
68	M90	Z	0	0	0	%100
69	M91	X	-3.472	-3.472	0	%100
70	M91	Z	0	0	0	%100
71	M93	X	-2.45	-2.45	0	%100
72	M93	Z	0	0	0	%100
73	M94	X	-2.45	-2.45	0	%100
74	M94	Z	0	0	0	%100
75	M95	X	-3.261	-3.261	0	%100
76	M95	Z	0	0	0	%100
77	M96	X	0	0	0	%100
78	M96	Z	0	0	0	%100
79	M97	X	-3.261	-3.261	0	%100
80	M97	Z	0	0	0	%100
81	M98	X	-4.348	-4.348	0	%100
82	M98	Z	0	0	0	%100
83	M99	X	-3.261	-3.261	0	%100
84	M99	Z	0	0	0	%100
85	M100	X	-4.348	-4.348	0	%100
86	M100	Z	0	0	0	%100
87	M101	X	-3.261	-3.261	0	%100
88	M101	Z	0	0	0	%100
89	M67	X	-1.835	-1.835	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	-2.771	-2.771	0	%100
92	MP1A	Z	0	0	0	%100
93	MP2A	X	-2.771	-2.771	0	%100
94	MP2A	Z	0	0	0	%100
95	MP3A	X	-2.771	-2.771	0	%100
96	MP3A	Z	0	0	0	%100
97	MP4A	X	-2.771	-2.771	0	%100
98	MP4A	Z	0	0	0	%100
99	MP1B	X	-2.771	-2.771	0	%100
100	MP1B	Z	0	0	0	%100
101	MP2B	X	-2.771	-2.771	0	%100
102	MP2B	Z	0	0	0	%100
103	MP3B	X	-2.771	-2.771	0	%100
104	MP3B	Z	0	0	0	%100
105	MP4B	X	-2.771	-2.771	0	%100
106	MP4B	Z	0	0	0	%100
107	MP1C	X	-2.771	-2.771	0	%100
108	MP1C	Z	0	0	0	%100
109	MP2C	X	-2.771	-2.771	0	%100
110	MP2C	Z	0	0	0	%100
111	MP3C	X	-2.771	-2.771	0	%100
112	MP3C	Z	0	0	0	%100
113	MP4C	X	-2.771	-2.771	0	%100
114	MP4C	Z	0	0	0	%100
115	M101A	X	-2.891	-2.891	0	%100
116	M101A	Z	0	0	0	%100
117	M103A	X	-2.891	-2.891	0	%100
118	M103A	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.-%]	End Location[ft.-%]
119	LIGHT	X	-2.038	-2.038	0 %100
120	LIGHT	Z	0	0	0 %100
121	M125	X	-.798	-.798	0 %100
122	M125	Z	0	0	0 %100
123	M126	X	-.798	-.798	0 %100
124	M126	Z	0	0	0 %100
125	M127	X	-.798	-.798	0 %100
126	M127	Z	0	0	0 %100
127	M128	X	-.798	-.798	0 %100
128	M128	Z	0	0	0 %100
129	M133A	X	0	0	0 %100
130	M133A	Z	0	0	0 %100
131	M134A	X	-1.835	-1.835	0 %100
132	M134A	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.-%]	End Location[ft.-%]
1	OVP	X	-2.4	-2.4	0 %100
2	OVP	Z	-1.386	-1.386	0 %100
3	M18	X	-2.486	-2.486	0 %100
4	M18	Z	-1.436	-1.436	0 %100
5	M19	X	-2.486	-2.486	0 %100
6	M19	Z	-1.436	-1.436	0 %100
7	M20	X	0	0	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	-.707	-.707	0 %100
10	M21	Z	-.408	-.408	0 %100
11	M22	X	-.707	-.707	0 %100
12	M22	Z	-.408	-.408	0 %100
13	M23	X	-.941	-.941	0 %100
14	M23	Z	-.543	-.543	0 %100
15	M24	X	-3.84	-3.84	0 %100
16	M24	Z	-2.217	-2.217	0 %100
17	M25	X	-.941	-.941	0 %100
18	M25	Z	-.543	-.543	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	-.941	-.941	0 %100
22	M27	Z	-.543	-.543	0 %100
23	M28	X	0	0	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	-.941	-.941	0 %100
26	M29	Z	-.543	-.543	0 %100
27	M35	X	-.622	-.622	0 %100
28	M35	Z	-.359	-.359	0 %100
29	M36	X	-.622	-.622	0 %100
30	M36	Z	-.359	-.359	0 %100
31	M37	X	-2.255	-2.255	0 %100
32	M37	Z	-1.302	-1.302	0 %100
33	M38	X	-.707	-.707	0 %100
34	M38	Z	-.408	-.408	0 %100
35	M39	X	-2.829	-2.829	0 %100
36	M39	Z	-1.634	-1.634	0 %100
37	M40	X	-.941	-.941	0 %100
38	M40	Z	-.543	-.543	0 %100
39	M41	X	-.96	-.96	0 %100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
40	M41	Z	-.554	-.554	0	%100
41	M42	X	-3.765	-3.765	0	%100
42	M42	Z	-2.174	-2.174	0	%100
43	M43	X	-2.824	-2.824	0	%100
44	M43	Z	-1.63	-1.63	0	%100
45	M44	X	-.941	-.941	0	%100
46	M44	Z	-.543	-.543	0	%100
47	M45	X	-2.824	-2.824	0	%100
48	M45	Z	-1.63	-1.63	0	%100
49	M46	X	-3.765	-3.765	0	%100
50	M46	Z	-2.174	-2.174	0	%100
51	M52	X	-2.941	-2.941	0	%100
52	M52	Z	-1.698	-1.698	0	%100
53	M52A	X	-.622	-.622	0	%100
54	M52A	Z	-.359	-.359	0	%100
55	M53A	X	-.622	-.622	0	%100
56	M53A	Z	-.359	-.359	0	%100
57	FACE	X	-.744	-.744	0	%100
58	FACE	Z	-.43	-.43	0	%100
59	M58	X	-2.977	-2.977	0	%100
60	M58	Z	-1.719	-1.719	0	%100
61	M59	X	-.744	-.744	0	%100
62	M59	Z	-.43	-.43	0	%100
63	M64	X	-.539	-.539	0	%100
64	M64	Z	-.311	-.311	0	%100
65	M77	X	-2.156	-2.156	0	%100
66	M77	Z	-1.245	-1.245	0	%100
67	M90	X	-.539	-.539	0	%100
68	M90	Z	-.311	-.311	0	%100
69	M91	X	-2.255	-2.255	0	%100
70	M91	Z	-1.302	-1.302	0	%100
71	M93	X	-2.829	-2.829	0	%100
72	M93	Z	-1.634	-1.634	0	%100
73	M94	X	-.707	-.707	0	%100
74	M94	Z	-.408	-.408	0	%100
75	M95	X	-3.765	-3.765	0	%100
76	M95	Z	-2.174	-2.174	0	%100
77	M96	X	-.96	-.96	0	%100
78	M96	Z	-.554	-.554	0	%100
79	M97	X	-.941	-.941	0	%100
80	M97	Z	-.543	-.543	0	%100
81	M98	X	-2.824	-2.824	0	%100
82	M98	Z	-1.63	-1.63	0	%100
83	M99	X	-3.765	-3.765	0	%100
84	M99	Z	-2.174	-2.174	0	%100
85	M100	X	-2.824	-2.824	0	%100
86	M100	Z	-1.63	-1.63	0	%100
87	M101	X	-.941	-.941	0	%100
88	M101	Z	-.543	-.543	0	%100
89	M67	X	-2.118	-2.118	0	%100
90	M67	Z	-1.223	-1.223	0	%100
91	MP1A	X	-2.4	-2.4	0	%100
92	MP1A	Z	-1.386	-1.386	0	%100
93	MP2A	X	-2.4	-2.4	0	%100
94	MP2A	Z	-1.386	-1.386	0	%100
95	MP3A	X	-2.4	-2.4	0	%100
96	MP3A	Z	-1.386	-1.386	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
97	MP4A	X	-2.4	-2.4	0	%100
98	MP4A	Z	-1.386	-1.386	0	%100
99	MP1B	X	-2.4	-2.4	0	%100
100	MP1B	Z	-1.386	-1.386	0	%100
101	MP2B	X	-2.4	-2.4	0	%100
102	MP2B	Z	-1.386	-1.386	0	%100
103	MP3B	X	-2.4	-2.4	0	%100
104	MP3B	Z	-1.386	-1.386	0	%100
105	MP4B	X	-2.4	-2.4	0	%100
106	MP4B	Z	-1.386	-1.386	0	%100
107	MP1C	X	-2.4	-2.4	0	%100
108	MP1C	Z	-1.386	-1.386	0	%100
109	MP2C	X	-2.4	-2.4	0	%100
110	MP2C	Z	-1.386	-1.386	0	%100
111	MP3C	X	-2.4	-2.4	0	%100
112	MP3C	Z	-1.386	-1.386	0	%100
113	MP4C	X	-2.4	-2.4	0	%100
114	MP4C	Z	-1.386	-1.386	0	%100
115	M101A	X	-2.941	-2.941	0	%100
116	M101A	Z	-1.698	-1.698	0	%100
117	M103A	X	-2.285	-2.285	0	%100
118	M103A	Z	-1.319	-1.319	0	%100
119	LIGHT	X	-1.765	-1.765	0	%100
120	LIGHT	Z	-1.019	-1.019	0	%100
121	M125	X	-921	-921	0	%100
122	M125	Z	-532	-532	0	%100
123	M126	X	-921	-921	0	%100
124	M126	Z	-532	-532	0	%100
125	M127	X	-921	-921	0	%100
126	M127	Z	-532	-532	0	%100
127	M128	X	-921	-921	0	%100
128	M128	Z	-532	-532	0	%100
129	M133A	X	-53	-53	0	%100
130	M133A	Z	-306	-306	0	%100
131	M134A	X	-53	-53	0	%100
132	M134A	Z	-306	-306	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	-1.386	-1.386	0	%100
2	OVP	Z	-2.4	-2.4	0	%100
3	M18	X	-1.077	-1.077	0	%100
4	M18	Z	-1.865	-1.865	0	%100
5	M19	X	-1.077	-1.077	0	%100
6	M19	Z	-1.865	-1.865	0	%100
7	M20	X	-434	-434	0	%100
8	M20	Z	-752	-752	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M22	X	-1.225	-1.225	0	%100
12	M22	Z	-2.122	-2.122	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-1.663	-1.663	0	%100
16	M24	Z	-2.88	-2.88	0	%100
17	M25	X	-1.63	-1.63	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
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Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	M25	Z	-2.824	-2.824	0 %100
19	M26	X	-.543	-.543	0 %100
20	M26	Z	-.941	-.941	0 %100
21	M27	X	0	0	0 %100
22	M27	Z	0	0	0 %100
23	M28	X	-.543	-.543	0 %100
24	M28	Z	-.941	-.941	0 %100
25	M29	X	-1.63	-1.63	0 %100
26	M29	Z	-2.824	-2.824	0 %100
27	M35	X	0	0	0 %100
28	M35	Z	0	0	0 %100
29	M36	X	0	0	0 %100
30	M36	Z	0	0	0 %100
31	M37	X	-1.736	-1.736	0 %100
32	M37	Z	-3.007	-3.007	0 %100
33	M38	X	-1.225	-1.225	0 %100
34	M38	Z	-2.122	-2.122	0 %100
35	M39	X	-1.225	-1.225	0 %100
36	M39	Z	-2.122	-2.122	0 %100
37	M40	X	-1.63	-1.63	0 %100
38	M40	Z	-2.824	-2.824	0 %100
39	M41	X	0	0	0 %100
40	M41	Z	0	0	0 %100
41	M42	X	-1.63	-1.63	0 %100
42	M42	Z	-2.824	-2.824	0 %100
43	M43	X	-2.174	-2.174	0 %100
44	M43	Z	-3.765	-3.765	0 %100
45	M44	X	-1.63	-1.63	0 %100
46	M44	Z	-2.824	-2.824	0 %100
47	M45	X	-2.174	-2.174	0 %100
48	M45	Z	-3.765	-3.765	0 %100
49	M46	X	-1.63	-1.63	0 %100
50	M46	Z	-2.824	-2.824	0 %100
51	M52	X	-1.445	-1.445	0 %100
52	M52	Z	-2.503	-2.503	0 %100
53	M52A	X	-1.077	-1.077	0 %100
54	M52A	Z	-1.865	-1.865	0 %100
55	M53A	X	-1.077	-1.077	0 %100
56	M53A	Z	-1.865	-1.865	0 %100
57	FACE	X	-1.289	-1.289	0 %100
58	FACE	Z	-2.232	-2.232	0 %100
59	M58	X	-1.289	-1.289	0 %100
60	M58	Z	-2.232	-2.232	0 %100
61	M59	X	0	0	0 %100
62	M59	Z	0	0	0 %100
63	M64	X	-.934	-.934	0 %100
64	M64	Z	-1.617	-1.617	0 %100
65	M77	X	-.934	-.934	0 %100
66	M77	Z	-1.617	-1.617	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	0	0	0 %100
69	M91	X	-.434	-.434	0 %100
70	M91	Z	-.752	-.752	0 %100
71	M93	X	-1.225	-1.225	0 %100
72	M93	Z	-2.122	-2.122	0 %100
73	M94	X	0	0	0 %100
74	M94	Z	0	0	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
75	M95	X	-1.63	-1.63	0 %100
76	M95	Z	-2.824	-2.824	0 %100
77	M96	X	-1.663	-1.663	0 %100
78	M96	Z	-2.88	-2.88	0 %100
79	M97	X	0	0	0 %100
80	M97	Z	0	0	0 %100
81	M98	X	-.543	-.543	0 %100
82	M98	Z	-.941	-.941	0 %100
83	M99	X	-1.63	-1.63	0 %100
84	M99	Z	-2.824	-2.824	0 %100
85	M100	X	-.543	-.543	0 %100
86	M100	Z	-.941	-.941	0 %100
87	M101	X	0	0	0 %100
88	M101	Z	0	0	0 %100
89	M67	X	-.917	-.917	0 %100
90	M67	Z	-1.589	-1.589	0 %100
91	MP1A	X	-1.386	-1.386	0 %100
92	MP1A	Z	-2.4	-2.4	0 %100
93	MP2A	X	-1.386	-1.386	0 %100
94	MP2A	Z	-2.4	-2.4	0 %100
95	MP3A	X	-1.386	-1.386	0 %100
96	MP3A	Z	-2.4	-2.4	0 %100
97	MP4A	X	-1.386	-1.386	0 %100
98	MP4A	Z	-2.4	-2.4	0 %100
99	MP1B	X	-1.386	-1.386	0 %100
100	MP1B	Z	-2.4	-2.4	0 %100
101	MP2B	X	-1.386	-1.386	0 %100
102	MP2B	Z	-2.4	-2.4	0 %100
103	MP3B	X	-1.386	-1.386	0 %100
104	MP3B	Z	-2.4	-2.4	0 %100
105	MP4B	X	-1.386	-1.386	0 %100
106	MP4B	Z	-2.4	-2.4	0 %100
107	MP1C	X	-1.386	-1.386	0 %100
108	MP1C	Z	-2.4	-2.4	0 %100
109	MP2C	X	-1.386	-1.386	0 %100
110	MP2C	Z	-2.4	-2.4	0 %100
111	MP3C	X	-1.386	-1.386	0 %100
112	MP3C	Z	-2.4	-2.4	0 %100
113	MP4C	X	-1.386	-1.386	0 %100
114	MP4C	Z	-2.4	-2.4	0 %100
115	M101A	X	-1.824	-1.824	0 %100
116	M101A	Z	-3.159	-3.159	0 %100
117	M103A	X	-1.445	-1.445	0 %100
118	M103A	Z	-2.503	-2.503	0 %100
119	LIGHT	X	-1.019	-1.019	0 %100
120	LIGHT	Z	-1.765	-1.765	0 %100
121	M125	X	-.399	-.399	0 %100
122	M125	Z	-.691	-.691	0 %100
123	M126	X	-.399	-.399	0 %100
124	M126	Z	-.691	-.691	0 %100
125	M127	X	-.399	-.399	0 %100
126	M127	Z	-.691	-.691	0 %100
127	M128	X	-.399	-.399	0 %100
128	M128	Z	-.691	-.691	0 %100
129	M133A	X	-.917	-.917	0 %100
130	M133A	Z	-1.589	-1.589	0 %100
131	M134A	X	0	0	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
132 M134A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1 OVP	X	0	0	0	%100
2 OVP	Z	-.506	-.506	0	%100
3 M18	X	0	0	0	%100
4 M18	Z	-.162	-.162	0	%100
5 M19	X	0	0	0	%100
6 M19	Z	-.162	-.162	0	%100
7 M20	X	0	0	0	%100
8 M20	Z	-.569	-.569	0	%100
9 M21	X	0	0	0	%100
10 M21	Z	-.178	-.178	0	%100
11 M22	X	0	0	0	%100
12 M22	Z	-.71	-.71	0	%100
13 M23	X	0	0	0	%100
14 M23	Z	-.32	-.32	0	%100
15 M24	X	0	0	0	%100
16 M24	Z	-.32	-.32	0	%100
17 M25	X	0	0	0	%100
18 M25	Z	-1.278	-1.278	0	%100
19 M26	X	0	0	0	%100
20 M26	Z	-.959	-.959	0	%100
21 M27	X	0	0	0	%100
22 M27	Z	-.32	-.32	0	%100
23 M28	X	0	0	0	%100
24 M28	Z	-.959	-.959	0	%100
25 M29	X	0	0	0	%100
26 M29	Z	-1.278	-1.278	0	%100
27 M35	X	0	0	0	%100
28 M35	Z	-.162	-.162	0	%100
29 M36	X	0	0	0	%100
30 M36	Z	-.162	-.162	0	%100
31 M37	X	0	0	0	%100
32 M37	Z	-.569	-.569	0	%100
33 M38	X	0	0	0	%100
34 M38	Z	-.71	-.71	0	%100
35 M39	X	0	0	0	%100
36 M39	Z	-.178	-.178	0	%100
37 M40	X	0	0	0	%100
38 M40	Z	-1.278	-1.278	0	%100
39 M41	X	0	0	0	%100
40 M41	Z	-.32	-.32	0	%100
41 M42	X	0	0	0	%100
42 M42	Z	-.32	-.32	0	%100
43 M43	X	0	0	0	%100
44 M43	Z	-.959	-.959	0	%100
45 M44	X	0	0	0	%100
46 M44	Z	-1.278	-1.278	0	%100
47 M45	X	0	0	0	%100
48 M45	Z	-.959	-.959	0	%100
49 M46	X	0	0	0	%100
50 M46	Z	-.32	-.32	0	%100
51 M52	X	0	0	0	%100
52 M52	Z	-.713	-.713	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M52A	X	0	0	%100
54	M52A	Z	-.648	-.648	%100
55	M53A	X	0	0	%100
56	M53A	Z	-.648	-.648	%100
57	FACE	X	0	0	%100
58	FACE	Z	-.746	-.746	%100
59	M58	X	0	0	%100
60	M58	Z	-.186	-.186	%100
61	M59	X	0	0	%100
62	M59	Z	-.186	-.186	%100
63	M64	X	0	0	%100
64	M64	Z	-.405	-.405	%100
65	M77	X	0	0	%100
66	M77	Z	-.101	-.101	%100
67	M90	X	0	0	%100
68	M90	Z	-.101	-.101	%100
69	M91	X	0	0	%100
70	M91	Z	0	0	%100
71	M93	X	0	0	%100
72	M93	Z	-.178	-.178	%100
73	M94	X	0	0	%100
74	M94	Z	-.178	-.178	%100
75	M95	X	0	0	%100
76	M95	Z	-.32	-.32	%100
77	M96	X	0	0	%100
78	M96	Z	-1.278	-1.278	%100
79	M97	X	0	0	%100
80	M97	Z	-.32	-.32	%100
81	M98	X	0	0	%100
82	M98	Z	0	0	%100
83	M99	X	0	0	%100
84	M99	Z	-.32	-.32	%100
85	M100	X	0	0	%100
86	M100	Z	0	0	%100
87	M101	X	0	0	%100
88	M101	Z	-.32	-.32	%100
89	M67	X	0	0	%100
90	M67	Z	-.143	-.143	%100
91	MP1A	X	0	0	%100
92	MP1A	Z	-.506	-.506	%100
93	MP2A	X	0	0	%100
94	MP2A	Z	-.506	-.506	%100
95	MP3A	X	0	0	%100
96	MP3A	Z	-.506	-.506	%100
97	MP4A	X	0	0	%100
98	MP4A	Z	-.506	-.506	%100
99	MP1B	X	0	0	%100
100	MP1B	Z	-.506	-.506	%100
101	MP2B	X	0	0	%100
102	MP2B	Z	-.506	-.506	%100
103	MP3B	X	0	0	%100
104	MP3B	Z	-.506	-.506	%100
105	MP4B	X	0	0	%100
106	MP4B	Z	-.506	-.506	%100
107	MP1C	X	0	0	%100
108	MP1C	Z	-.506	-.506	%100
109	MP2C	X	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
110	MP2C	Z	-.506	-.506	0	%100
111	MP3C	X	0	0	0	%100
112	MP3C	Z	-.506	-.506	0	%100
113	MP4C	X	0	0	0	%100
114	MP4C	Z	-.506	-.506	0	%100
115	M101A	X	0	0	0	%100
116	M101A	Z	-.806	-.806	0	%100
117	M103A	X	0	0	0	%100
118	M103A	Z	-.806	-.806	0	%100
119	LIGHT	X	0	0	0	%100
120	LIGHT	Z	-.28	-.28	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	-.024	-.024	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	-.024	-.024	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	-.024	-.024	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	-.024	-.024	0	%100
129	M133A	X	0	0	0	%100
130	M133A	Z	-.572	-.572	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	-.143	-.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	OVP	X	.253	.253	0	%100
2	OVP	Z	-.438	-.438	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	.379	.379	0	%100
8	M20	Z	-.657	-.657	0	%100
9	M21	X	.266	.266	0	%100
10	M21	Z	-.461	-.461	0	%100
11	M22	X	.266	.266	0	%100
12	M22	Z	-.461	-.461	0	%100
13	M23	X	.479	.479	0	%100
14	M23	Z	-.83	-.83	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	.479	.479	0	%100
18	M25	Z	-.83	-.83	0	%100
19	M26	X	.639	.639	0	%100
20	M26	Z	-1.107	-1.107	0	%100
21	M27	X	.479	.479	0	%100
22	M27	Z	-.83	-.83	0	%100
23	M28	X	.639	.639	0	%100
24	M28	Z	-1.107	-1.107	0	%100
25	M29	X	.479	.479	0	%100
26	M29	Z	-.83	-.83	0	%100
27	M35	X	.243	.243	0	%100
28	M35	Z	-.421	-.421	0	%100
29	M36	X	.243	.243	0	%100
30	M36	Z	-.421	-.421	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
31	M37	X	.095	.095	0 %100
32	M37	Z	-.164	-.164	0 %100
33	M38	X	.266	.266	0 %100
34	M38	Z	-.461	-.461	0 %100
35	M39	X	0	0	0 %100
36	M39	Z	0	0	0 %100
37	M40	X	.479	.479	0 %100
38	M40	Z	-.83	-.83	0 %100
39	M41	X	.479	.479	0 %100
40	M41	Z	-.83	-.83	0 %100
41	M42	X	0	0	0 %100
42	M42	Z	0	0	0 %100
43	M43	X	.16	.16	0 %100
44	M43	Z	-.277	-.277	0 %100
45	M44	X	.479	.479	0 %100
46	M44	Z	-.83	-.83	0 %100
47	M45	X	.16	.16	0 %100
48	M45	Z	-.277	-.277	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	0	0	0 %100
51	M52	X	.372	.372	0 %100
52	M52	Z	-.644	-.644	0 %100
53	M52A	X	.243	.243	0 %100
54	M52A	Z	-.421	-.421	0 %100
55	M53A	X	.243	.243	0 %100
56	M53A	Z	-.421	-.421	0 %100
57	FACE	X	.28	.28	0 %100
58	FACE	Z	-.484	-.484	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	0	0	0 %100
61	M59	X	.28	.28	0 %100
62	M59	Z	-.484	-.484	0 %100
63	M64	X	.152	.152	0 %100
64	M64	Z	-.263	-.263	0 %100
65	M77	X	0	0	0 %100
66	M77	Z	0	0	0 %100
67	M90	X	.152	.152	0 %100
68	M90	Z	-.263	-.263	0 %100
69	M91	X	.095	.095	0 %100
70	M91	Z	-.164	-.164	0 %100
71	M93	X	0	0	0 %100
72	M93	Z	0	0	0 %100
73	M94	X	.266	.266	0 %100
74	M94	Z	-.461	-.461	0 %100
75	M95	X	0	0	0 %100
76	M95	Z	0	0	0 %100
77	M96	X	.479	.479	0 %100
78	M96	Z	-.83	-.83	0 %100
79	M97	X	.479	.479	0 %100
80	M97	Z	-.83	-.83	0 %100
81	M98	X	.16	.16	0 %100
82	M98	Z	-.277	-.277	0 %100
83	M99	X	0	0	0 %100
84	M99	Z	0	0	0 %100
85	M100	X	.16	.16	0 %100
86	M100	Z	-.277	-.277	0 %100
87	M101	X	.479	.479	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
88	M101	Z	-.83	-.83	0	%100
89	M67	X	0	0	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	.253	.253	0	%100
92	MP1A	Z	-.438	-.438	0	%100
93	MP2A	X	.253	.253	0	%100
94	MP2A	Z	-.438	-.438	0	%100
95	MP3A	X	.253	.253	0	%100
96	MP3A	Z	-.438	-.438	0	%100
97	MP4A	X	.253	.253	0	%100
98	MP4A	Z	-.438	-.438	0	%100
99	MP1B	X	.253	.253	0	%100
100	MP1B	Z	-.438	-.438	0	%100
101	MP2B	X	.253	.253	0	%100
102	MP2B	Z	-.438	-.438	0	%100
103	MP3B	X	.253	.253	0	%100
104	MP3B	Z	-.438	-.438	0	%100
105	MP4B	X	.253	.253	0	%100
106	MP4B	Z	-.438	-.438	0	%100
107	MP1C	X	.253	.253	0	%100
108	MP1C	Z	-.438	-.438	0	%100
109	MP2C	X	.253	.253	0	%100
110	MP2C	Z	-.438	-.438	0	%100
111	MP3C	X	.253	.253	0	%100
112	MP3C	Z	-.438	-.438	0	%100
113	MP4C	X	.253	.253	0	%100
114	MP4C	Z	-.438	-.438	0	%100
115	M101A	X	.372	.372	0	%100
116	M101A	Z	-.644	-.644	0	%100
117	M103A	X	.418	.418	0	%100
118	M103A	Z	-.725	-.725	0	%100
119	LIGHT	X	.14	.14	0	%100
120	LIGHT	Z	-.243	-.243	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	0	0	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	.215	.215	0	%100
130	M133A	Z	-.372	-.372	0	%100
131	M134A	X	.215	.215	0	%100
132	M134A	Z	-.372	-.372	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	OVP	X	.438	.438	0	%100
2	OVP	Z	-.253	-.253	0	%100
3	M18	X	.14	.14	0	%100
4	M18	Z	-.081	-.081	0	%100
5	M19	X	.14	.14	0	%100
6	M19	Z	-.081	-.081	0	%100
7	M20	X	.493	.493	0	%100
8	M20	Z	-.284	-.284	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
9	M21	X	.615	.615	0 %100
10	M21	Z	-.355	-.355	0 %100
11	M22	X	.154	.154	0 %100
12	M22	Z	-.089	-.089	0 %100
13	M23	X	1.107	1.107	0 %100
14	M23	Z	-.639	-.639	0 %100
15	M24	X	.277	.277	0 %100
16	M24	Z	-.16	-.16	0 %100
17	M25	X	.277	.277	0 %100
18	M25	Z	-.16	-.16	0 %100
19	M26	X	.83	.83	0 %100
20	M26	Z	-.479	-.479	0 %100
21	M27	X	1.107	1.107	0 %100
22	M27	Z	-.639	-.639	0 %100
23	M28	X	.83	.83	0 %100
24	M28	Z	-.479	-.479	0 %100
25	M29	X	.277	.277	0 %100
26	M29	Z	-.16	-.16	0 %100
27	M35	X	.562	.562	0 %100
28	M35	Z	-.324	-.324	0 %100
29	M36	X	.562	.562	0 %100
30	M36	Z	-.324	-.324	0 %100
31	M37	X	0	0	0 %100
32	M37	Z	0	0	0 %100
33	M38	X	.154	.154	0 %100
34	M38	Z	-.089	-.089	0 %100
35	M39	X	.154	.154	0 %100
36	M39	Z	-.089	-.089	0 %100
37	M40	X	.277	.277	0 %100
38	M40	Z	-.16	-.16	0 %100
39	M41	X	1.107	1.107	0 %100
40	M41	Z	-.639	-.639	0 %100
41	M42	X	.277	.277	0 %100
42	M42	Z	-.16	-.16	0 %100
43	M43	X	0	0	0 %100
44	M43	Z	0	0	0 %100
45	M44	X	.277	.277	0 %100
46	M44	Z	-.16	-.16	0 %100
47	M45	X	0	0	0 %100
48	M45	Z	0	0	0 %100
49	M46	X	.277	.277	0 %100
50	M46	Z	-.16	-.16	0 %100
51	M52	X	.698	.698	0 %100
52	M52	Z	-.403	-.403	0 %100
53	M52A	X	.14	.14	0 %100
54	M52A	Z	-.081	-.081	0 %100
55	M53A	X	.14	.14	0 %100
56	M53A	Z	-.081	-.081	0 %100
57	FACE	X	.161	.161	0 %100
58	FACE	Z	-.093	-.093	0 %100
59	M58	X	.161	.161	0 %100
60	M58	Z	-.093	-.093	0 %100
61	M59	X	.646	.646	0 %100
62	M59	Z	-.373	-.373	0 %100
63	M64	X	.088	.088	0 %100
64	M64	Z	-.051	-.051	0 %100
65	M77	X	.088	.088	0 %100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10206807
 Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
 4:35 PM
 Checked By: _____

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
66	M77	Z	-.051	-.051	0 %100
67	M90	X	.351	.351	0 %100
68	M90	Z	-.202	-.202	0 %100
69	M91	X	.493	.493	0 %100
70	M91	Z	-.284	-.284	0 %100
71	M93	X	.154	.154	0 %100
72	M93	Z	-.089	-.089	0 %100
73	M94	X	.615	.615	0 %100
74	M94	Z	-.355	-.355	0 %100
75	M95	X	.277	.277	0 %100
76	M95	Z	-.16	-.16	0 %100
77	M96	X	.277	.277	0 %100
78	M96	Z	-.16	-.16	0 %100
79	M97	X	1.107	1.107	0 %100
80	M97	Z	-.639	-.639	0 %100
81	M98	X	.83	.83	0 %100
82	M98	Z	-.479	-.479	0 %100
83	M99	X	.277	.277	0 %100
84	M99	Z	-.16	-.16	0 %100
85	M100	X	.83	.83	0 %100
86	M100	Z	-.479	-.479	0 %100
87	M101	X	1.107	1.107	0 %100
88	M101	Z	-.639	-.639	0 %100
89	M67	X	.124	.124	0 %100
90	M67	Z	-.072	-.072	0 %100
91	MP1A	X	.438	.438	0 %100
92	MP1A	Z	-.253	-.253	0 %100
93	MP2A	X	.438	.438	0 %100
94	MP2A	Z	-.253	-.253	0 %100
95	MP3A	X	.438	.438	0 %100
96	MP3A	Z	-.253	-.253	0 %100
97	MP4A	X	.438	.438	0 %100
98	MP4A	Z	-.253	-.253	0 %100
99	MP1B	X	.438	.438	0 %100
100	MP1B	Z	-.253	-.253	0 %100
101	MP2B	X	.438	.438	0 %100
102	MP2B	Z	-.253	-.253	0 %100
103	MP3B	X	.438	.438	0 %100
104	MP3B	Z	-.253	-.253	0 %100
105	MP4B	X	.438	.438	0 %100
106	MP4B	Z	-.253	-.253	0 %100
107	MP1C	X	.438	.438	0 %100
108	MP1C	Z	-.253	-.253	0 %100
109	MP2C	X	.438	.438	0 %100
110	MP2C	Z	-.253	-.253	0 %100
111	MP3C	X	.438	.438	0 %100
112	MP3C	Z	-.253	-.253	0 %100
113	MP4C	X	.438	.438	0 %100
114	MP4C	Z	-.253	-.253	0 %100
115	M101A	X	.617	.617	0 %100
116	M101A	Z	-.356	-.356	0 %100
117	M103A	X	.698	.698	0 %100
118	M103A	Z	-.403	-.403	0 %100
119	LIGHT	X	.243	.243	0 %100
120	LIGHT	Z	-.14	-.14	0 %100
121	M125	X	.021	.021	0 %100
122	M125	Z	-.012	-.012	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
123	M126	X	.021	.021	0 %100
124	M126	Z	-.012	-.012	0 %100
125	M127	X	.021	.021	0 %100
126	M127	Z	-.012	-.012	0 %100
127	M128	X	.021	.021	0 %100
128	M128	Z	-.012	-.012	0 %100
129	M133A	X	.124	.124	0 %100
130	M133A	Z	-.072	-.072	0 %100
131	M134A	X	.496	.496	0 %100
132	M134A	Z	-.286	-.286	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	.506	.506	0 %100
2	OVP	Z	0	0	0 %100
3	M18	X	.486	.486	0 %100
4	M18	Z	0	0	0 %100
5	M19	X	.486	.486	0 %100
6	M19	Z	0	0	0 %100
7	M20	X	.19	.19	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	.533	.533	0 %100
10	M21	Z	0	0	0 %100
11	M22	X	0	0	0 %100
12	M22	Z	0	0	0 %100
13	M23	X	.959	.959	0 %100
14	M23	Z	0	0	0 %100
15	M24	X	.959	.959	0 %100
16	M24	Z	0	0	0 %100
17	M25	X	0	0	0 %100
18	M25	Z	0	0	0 %100
19	M26	X	.32	.32	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	.959	.959	0 %100
22	M27	Z	0	0	0 %100
23	M28	X	.32	.32	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	0	0	0 %100
26	M29	Z	0	0	0 %100
27	M35	X	.486	.486	0 %100
28	M35	Z	0	0	0 %100
29	M36	X	.486	.486	0 %100
30	M36	Z	0	0	0 %100
31	M37	X	.19	.19	0 %100
32	M37	Z	0	0	0 %100
33	M38	X	0	0	0 %100
34	M38	Z	0	0	0 %100
35	M39	X	.533	.533	0 %100
36	M39	Z	0	0	0 %100
37	M40	X	0	0	0 %100
38	M40	Z	0	0	0 %100
39	M41	X	.959	.959	0 %100
40	M41	Z	0	0	0 %100
41	M42	X	.959	.959	0 %100
42	M42	Z	0	0	0 %100
43	M43	X	.32	.32	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
101	MP2B	X	.506	.506	0 %100
102	MP2B	Z	0	0	0 %100
103	MP3B	X	.506	.506	0 %100
104	MP3B	Z	0	0	0 %100
105	MP4B	X	.506	.506	0 %100
106	MP4B	Z	0	0	0 %100
107	MP1C	X	.506	.506	0 %100
108	MP1C	Z	0	0	0 %100
109	MP2C	X	.506	.506	0 %100
110	MP2C	Z	0	0	0 %100
111	MP3C	X	.506	.506	0 %100
112	MP3C	Z	0	0	0 %100
113	MP4C	X	.506	.506	0 %100
114	MP4C	Z	0	0	0 %100
115	M101A	X	.744	.744	0 %100
116	M101A	Z	0	0	0 %100
117	M103A	X	.744	.744	0 %100
118	M103A	Z	0	0	0 %100
119	LIGHT	X	.28	.28	0 %100
120	LIGHT	Z	0	0	0 %100
121	M125	X	.071	.071	0 %100
122	M125	Z	0	0	0 %100
123	M126	X	.071	.071	0 %100
124	M126	Z	0	0	0 %100
125	M127	X	.071	.071	0 %100
126	M127	Z	0	0	0 %100
127	M128	X	.071	.071	0 %100
128	M128	Z	0	0	0 %100
129	M133A	X	0	0	0 %100
130	M133A	Z	0	0	0 %100
131	M134A	X	.429	.429	0 %100
132	M134A	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.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	.438	.438	0 %100
2	OVP	Z	.253	.253	0 %100
3	M18	X	.562	.562	0 %100
4	M18	Z	.324	.324	0 %100
5	M19	X	.562	.562	0 %100
6	M19	Z	.324	.324	0 %100
7	M20	X	0	0	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	.154	.154	0 %100
10	M21	Z	.089	.089	0 %100
11	M22	X	.154	.154	0 %100
12	M22	Z	.089	.089	0 %100
13	M23	X	.277	.277	0 %100
14	M23	Z	.16	.16	0 %100
15	M24	X	1.107	1.107	0 %100
16	M24	Z	.639	.639	0 %100
17	M25	X	.277	.277	0 %100
18	M25	Z	.16	.16	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	.277	.277	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
22	M27	Z	.16	.16	0	%100
23	M28	X	0	0	0	%100
24	M28	Z	0	0	0	%100
25	M29	X	.277	.277	0	%100
26	M29	Z	.16	.16	0	%100
27	M35	X	.14	.14	0	%100
28	M35	Z	.081	.081	0	%100
29	M36	X	.14	.14	0	%100
30	M36	Z	.081	.081	0	%100
31	M37	X	.493	.493	0	%100
32	M37	Z	.284	.284	0	%100
33	M38	X	.154	.154	0	%100
34	M38	Z	.089	.089	0	%100
35	M39	X	.615	.615	0	%100
36	M39	Z	.355	.355	0	%100
37	M40	X	.277	.277	0	%100
38	M40	Z	.16	.16	0	%100
39	M41	X	.277	.277	0	%100
40	M41	Z	.16	.16	0	%100
41	M42	X	1.107	1.107	0	%100
42	M42	Z	.639	.639	0	%100
43	M43	X	.83	.83	0	%100
44	M43	Z	.479	.479	0	%100
45	M44	X	.277	.277	0	%100
46	M44	Z	.16	.16	0	%100
47	M45	X	.83	.83	0	%100
48	M45	Z	.479	.479	0	%100
49	M46	X	1.107	1.107	0	%100
50	M46	Z	.639	.639	0	%100
51	M52	X	.698	.698	0	%100
52	M52	Z	.403	.403	0	%100
53	M52A	X	.14	.14	0	%100
54	M52A	Z	.081	.081	0	%100
55	M53A	X	.14	.14	0	%100
56	M53A	Z	.081	.081	0	%100
57	FACE	X	.161	.161	0	%100
58	FACE	Z	.093	.093	0	%100
59	M58	X	.646	.646	0	%100
60	M58	Z	.373	.373	0	%100
61	M59	X	.161	.161	0	%100
62	M59	Z	.093	.093	0	%100
63	M64	X	.088	.088	0	%100
64	M64	Z	.051	.051	0	%100
65	M77	X	.351	.351	0	%100
66	M77	Z	.202	.202	0	%100
67	M90	X	.088	.088	0	%100
68	M90	Z	.051	.051	0	%100
69	M91	X	.493	.493	0	%100
70	M91	Z	.284	.284	0	%100
71	M93	X	.615	.615	0	%100
72	M93	Z	.355	.355	0	%100
73	M94	X	.154	.154	0	%100
74	M94	Z	.089	.089	0	%100
75	M95	X	1.107	1.107	0	%100
76	M95	Z	.639	.639	0	%100
77	M96	X	.277	.277	0	%100
78	M96	Z	.16	.16	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft, F...	Start Location[ft, %]	End Location[ft, %]
79	M97	X	.277	.277	0 %100
80	M97	Z	.16	.16	0 %100
81	M98	X	.83	.83	0 %100
82	M98	Z	.479	.479	0 %100
83	M99	X	1.107	1.107	0 %100
84	M99	Z	.639	.639	0 %100
85	M100	X	.83	.83	0 %100
86	M100	Z	.479	.479	0 %100
87	M101	X	.277	.277	0 %100
88	M101	Z	.16	.16	0 %100
89	M67	X	.496	.496	0 %100
90	M67	Z	.286	.286	0 %100
91	MP1A	X	.438	.438	0 %100
92	MP1A	Z	.253	.253	0 %100
93	MP2A	X	.438	.438	0 %100
94	MP2A	Z	.253	.253	0 %100
95	MP3A	X	.438	.438	0 %100
96	MP3A	Z	.253	.253	0 %100
97	MP4A	X	.438	.438	0 %100
98	MP4A	Z	.253	.253	0 %100
99	MP1B	X	.438	.438	0 %100
100	MP1B	Z	.253	.253	0 %100
101	MP2B	X	.438	.438	0 %100
102	MP2B	Z	.253	.253	0 %100
103	MP3B	X	.438	.438	0 %100
104	MP3B	Z	.253	.253	0 %100
105	MP4B	X	.438	.438	0 %100
106	MP4B	Z	.253	.253	0 %100
107	MP1C	X	.438	.438	0 %100
108	MP1C	Z	.253	.253	0 %100
109	MP2C	X	.438	.438	0 %100
110	MP2C	Z	.253	.253	0 %100
111	MP3C	X	.438	.438	0 %100
112	MP3C	Z	.253	.253	0 %100
113	MP4C	X	.438	.438	0 %100
114	MP4C	Z	.253	.253	0 %100
115	M101A	X	.698	.698	0 %100
116	M101A	Z	.403	.403	0 %100
117	M103A	X	.617	.617	0 %100
118	M103A	Z	.356	.356	0 %100
119	LIGHT	X	.243	.243	0 %100
120	LIGHT	Z	.14	.14	0 %100
121	M125	X	.082	.082	0 %100
122	M125	Z	.048	.048	0 %100
123	M126	X	.082	.082	0 %100
124	M126	Z	.048	.048	0 %100
125	M127	X	.082	.082	0 %100
126	M127	Z	.048	.048	0 %100
127	M128	X	.082	.082	0 %100
128	M128	Z	.048	.048	0 %100
129	M133A	X	.124	.124	0 %100
130	M133A	Z	.072	.072	0 %100
131	M134A	X	.124	.124	0 %100
132	M134A	Z	.072	.072	0 %100

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



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	.253	.253	0 %100
2	OVP	Z	.438	.438	0 %100
3	M18	X	.243	.243	0 %100
4	M18	Z	.421	.421	0 %100
5	M19	X	.243	.243	0 %100
6	M19	Z	.421	.421	0 %100
7	M20	X	.095	.095	0 %100
8	M20	Z	.164	.164	0 %100
9	M21	X	0	0	0 %100
10	M21	Z	0	0	0 %100
11	M22	X	.266	.266	0 %100
12	M22	Z	.461	.461	0 %100
13	M23	X	0	0	0 %100
14	M23	Z	0	0	0 %100
15	M24	X	.479	.479	0 %100
16	M24	Z	.83	.83	0 %100
17	M25	X	.479	.479	0 %100
18	M25	Z	.83	.83	0 %100
19	M26	X	.16	.16	0 %100
20	M26	Z	.277	.277	0 %100
21	M27	X	0	0	0 %100
22	M27	Z	0	0	0 %100
23	M28	X	.16	.16	0 %100
24	M28	Z	.277	.277	0 %100
25	M29	X	.479	.479	0 %100
26	M29	Z	.83	.83	0 %100
27	M35	X	0	0	0 %100
28	M35	Z	0	0	0 %100
29	M36	X	0	0	0 %100
30	M36	Z	0	0	0 %100
31	M37	X	.379	.379	0 %100
32	M37	Z	.657	.657	0 %100
33	M38	X	.266	.266	0 %100
34	M38	Z	.461	.461	0 %100
35	M39	X	.266	.266	0 %100
36	M39	Z	.461	.461	0 %100
37	M40	X	.479	.479	0 %100
38	M40	Z	.83	.83	0 %100
39	M41	X	0	0	0 %100
40	M41	Z	0	0	0 %100
41	M42	X	.479	.479	0 %100
42	M42	Z	.83	.83	0 %100
43	M43	X	.639	.639	0 %100
44	M43	Z	1.107	1.107	0 %100
45	M44	X	.479	.479	0 %100
46	M44	Z	.83	.83	0 %100
47	M45	X	.639	.639	0 %100
48	M45	Z	1.107	1.107	0 %100
49	M46	X	.479	.479	0 %100
50	M46	Z	.83	.83	0 %100
51	M52	X	.372	.372	0 %100
52	M52	Z	.644	.644	0 %100
53	M52A	X	.243	.243	0 %100
54	M52A	Z	.421	.421	0 %100
55	M53A	X	.243	.243	0 %100
56	M53A	Z	.421	.421	0 %100
57	FACE	X	.28	.28	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	FACE	Z	.484	.484	0 %100
59	M58	X	.28	.28	0 %100
60	M58	Z	.484	.484	0 %100
61	M59	X	0	0	0 %100
62	M59	Z	0	0	0 %100
63	M64	X	.152	.152	0 %100
64	M64	Z	.263	.263	0 %100
65	M77	X	.152	.152	0 %100
66	M77	Z	.263	.263	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	0	0	0 %100
69	M91	X	.095	.095	0 %100
70	M91	Z	.164	.164	0 %100
71	M93	X	.266	.266	0 %100
72	M93	Z	.461	.461	0 %100
73	M94	X	0	0	0 %100
74	M94	Z	0	0	0 %100
75	M95	X	.479	.479	0 %100
76	M95	Z	.83	.83	0 %100
77	M96	X	.479	.479	0 %100
78	M96	Z	.83	.83	0 %100
79	M97	X	0	0	0 %100
80	M97	Z	0	0	0 %100
81	M98	X	.16	.16	0 %100
82	M98	Z	.277	.277	0 %100
83	M99	X	.479	.479	0 %100
84	M99	Z	.83	.83	0 %100
85	M100	X	.16	.16	0 %100
86	M100	Z	.277	.277	0 %100
87	M101	X	0	0	0 %100
88	M101	Z	0	0	0 %100
89	M67	X	.215	.215	0 %100
90	M67	Z	.372	.372	0 %100
91	MP1A	X	.253	.253	0 %100
92	MP1A	Z	.438	.438	0 %100
93	MP2A	X	.253	.253	0 %100
94	MP2A	Z	.438	.438	0 %100
95	MP3A	X	.253	.253	0 %100
96	MP3A	Z	.438	.438	0 %100
97	MP4A	X	.253	.253	0 %100
98	MP4A	Z	.438	.438	0 %100
99	MP1B	X	.253	.253	0 %100
100	MP1B	Z	.438	.438	0 %100
101	MP2B	X	.253	.253	0 %100
102	MP2B	Z	.438	.438	0 %100
103	MP3B	X	.253	.253	0 %100
104	MP3B	Z	.438	.438	0 %100
105	MP4B	X	.253	.253	0 %100
106	MP4B	Z	.438	.438	0 %100
107	MP1C	X	.253	.253	0 %100
108	MP1C	Z	.438	.438	0 %100
109	MP2C	X	.253	.253	0 %100
110	MP2C	Z	.438	.438	0 %100
111	MP3C	X	.253	.253	0 %100
112	MP3C	Z	.438	.438	0 %100
113	MP4C	X	.253	.253	0 %100
114	MP4C	Z	.438	.438	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
115	M101A	X	.418	.418	0	%100
116	M101A	Z	.725	.725	0	%100
117	M103A	X	.372	.372	0	%100
118	M103A	Z	.644	.644	0	%100
119	LIGHT	X	.14	.14	0	%100
120	LIGHT	Z	.243	.243	0	%100
121	M125	X	.036	.036	0	%100
122	M125	Z	.062	.062	0	%100
123	M126	X	.036	.036	0	%100
124	M126	Z	.062	.062	0	%100
125	M127	X	.036	.036	0	%100
126	M127	Z	.062	.062	0	%100
127	M128	X	.036	.036	0	%100
128	M128	Z	.062	.062	0	%100
129	M133A	X	.215	.215	0	%100
130	M133A	Z	.372	.372	0	%100
131	M134A	X	0	0	0	%100
132	M134A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	0	0	0	%100
2	OVP	Z	.506	.506	0	%100
3	M18	X	0	0	0	%100
4	M18	Z	.162	.162	0	%100
5	M19	X	0	0	0	%100
6	M19	Z	.162	.162	0	%100
7	M20	X	0	0	0	%100
8	M20	Z	.569	.569	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	.178	.178	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	.71	.71	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	.32	.32	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	.32	.32	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	1.278	1.278	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	.959	.959	0	%100
21	M27	X	0	0	0	%100
22	M27	Z	.32	.32	0	%100
23	M28	X	0	0	0	%100
24	M28	Z	.959	.959	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	1.278	1.278	0	%100
27	M35	X	0	0	0	%100
28	M35	Z	.162	.162	0	%100
29	M36	X	0	0	0	%100
30	M36	Z	.162	.162	0	%100
31	M37	X	0	0	0	%100
32	M37	Z	.569	.569	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	.71	.71	0	%100
35	M39	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
36	M39	Z	.178	.178	0 %100
37	M40	X	0	0	0 %100
38	M40	Z	1.278	1.278	0 %100
39	M41	X	0	0	0 %100
40	M41	Z	.32	.32	0 %100
41	M42	X	0	0	0 %100
42	M42	Z	.32	.32	0 %100
43	M43	X	0	0	0 %100
44	M43	Z	.959	.959	0 %100
45	M44	X	0	0	0 %100
46	M44	Z	1.278	1.278	0 %100
47	M45	X	0	0	0 %100
48	M45	Z	.959	.959	0 %100
49	M46	X	0	0	0 %100
50	M46	Z	.32	.32	0 %100
51	M52	X	0	0	0 %100
52	M52	Z	.713	.713	0 %100
53	M52A	X	0	0	0 %100
54	M52A	Z	.648	.648	0 %100
55	M53A	X	0	0	0 %100
56	M53A	Z	.648	.648	0 %100
57	FACE	X	0	0	0 %100
58	FACE	Z	.746	.746	0 %100
59	M58	X	0	0	0 %100
60	M58	Z	.186	.186	0 %100
61	M59	X	0	0	0 %100
62	M59	Z	.186	.186	0 %100
63	M64	X	0	0	0 %100
64	M64	Z	.405	.405	0 %100
65	M77	X	0	0	0 %100
66	M77	Z	.101	.101	0 %100
67	M90	X	0	0	0 %100
68	M90	Z	.101	.101	0 %100
69	M91	X	0	0	0 %100
70	M91	Z	0	0	0 %100
71	M93	X	0	0	0 %100
72	M93	Z	.178	.178	0 %100
73	M94	X	0	0	0 %100
74	M94	Z	.178	.178	0 %100
75	M95	X	0	0	0 %100
76	M95	Z	.32	.32	0 %100
77	M96	X	0	0	0 %100
78	M96	Z	1.278	1.278	0 %100
79	M97	X	0	0	0 %100
80	M97	Z	.32	.32	0 %100
81	M98	X	0	0	0 %100
82	M98	Z	0	0	0 %100
83	M99	X	0	0	0 %100
84	M99	Z	.32	.32	0 %100
85	M100	X	0	0	0 %100
86	M100	Z	0	0	0 %100
87	M101	X	0	0	0 %100
88	M101	Z	.32	.32	0 %100
89	M67	X	0	0	0 %100
90	M67	Z	.143	.143	0 %100
91	MP1A	X	0	0	0 %100
92	MP1A	Z	.506	.506	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
14	M23	Z	.83	.83	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	-.479	-.479	0	%100
18	M25	Z	.83	.83	0	%100
19	M26	X	-.639	-.639	0	%100
20	M26	Z	1.107	1.107	0	%100
21	M27	X	-.479	-.479	0	%100
22	M27	Z	.83	.83	0	%100
23	M28	X	-.639	-.639	0	%100
24	M28	Z	1.107	1.107	0	%100
25	M29	X	-.479	-.479	0	%100
26	M29	Z	.83	.83	0	%100
27	M35	X	-.243	-.243	0	%100
28	M35	Z	.421	.421	0	%100
29	M36	X	-.243	-.243	0	%100
30	M36	Z	.421	.421	0	%100
31	M37	X	-.095	-.095	0	%100
32	M37	Z	.164	.164	0	%100
33	M38	X	-.266	-.266	0	%100
34	M38	Z	.461	.461	0	%100
35	M39	X	0	0	0	%100
36	M39	Z	0	0	0	%100
37	M40	X	-.479	-.479	0	%100
38	M40	Z	.83	.83	0	%100
39	M41	X	-.479	-.479	0	%100
40	M41	Z	.83	.83	0	%100
41	M42	X	0	0	0	%100
42	M42	Z	0	0	0	%100
43	M43	X	-.16	-.16	0	%100
44	M43	Z	.277	.277	0	%100
45	M44	X	-.479	-.479	0	%100
46	M44	Z	.83	.83	0	%100
47	M45	X	-.16	-.16	0	%100
48	M45	Z	.277	.277	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	0	0	0	%100
51	M52	X	-.372	-.372	0	%100
52	M52	Z	.644	.644	0	%100
53	M52A	X	-.243	-.243	0	%100
54	M52A	Z	.421	.421	0	%100
55	M53A	X	-.243	-.243	0	%100
56	M53A	Z	.421	.421	0	%100
57	FACE	X	-.28	-.28	0	%100
58	FACE	Z	.484	.484	0	%100
59	M58	X	0	0	0	%100
60	M58	Z	0	0	0	%100
61	M59	X	-.28	-.28	0	%100
62	M59	Z	.484	.484	0	%100
63	M64	X	-.152	-.152	0	%100
64	M64	Z	.263	.263	0	%100
65	M77	X	0	0	0	%100
66	M77	Z	0	0	0	%100
67	M90	X	-.152	-.152	0	%100
68	M90	Z	.263	.263	0	%100
69	M91	X	-.095	-.095	0	%100
70	M91	Z	.164	.164	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
71	M93	X	0	0	0	%100
72	M93	Z	0	0	0	%100
73	M94	X	-.266	-.266	0	%100
74	M94	Z	.461	.461	0	%100
75	M95	X	0	0	0	%100
76	M95	Z	0	0	0	%100
77	M96	X	-.479	-.479	0	%100
78	M96	Z	.83	.83	0	%100
79	M97	X	-.479	-.479	0	%100
80	M97	Z	.83	.83	0	%100
81	M98	X	-.16	-.16	0	%100
82	M98	Z	.277	.277	0	%100
83	M99	X	0	0	0	%100
84	M99	Z	0	0	0	%100
85	M100	X	-.16	-.16	0	%100
86	M100	Z	.277	.277	0	%100
87	M101	X	-.479	-.479	0	%100
88	M101	Z	.83	.83	0	%100
89	M67	X	0	0	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	-.253	-.253	0	%100
92	MP1A	Z	.438	.438	0	%100
93	MP2A	X	-.253	-.253	0	%100
94	MP2A	Z	.438	.438	0	%100
95	MP3A	X	-.253	-.253	0	%100
96	MP3A	Z	.438	.438	0	%100
97	MP4A	X	-.253	-.253	0	%100
98	MP4A	Z	.438	.438	0	%100
99	MP1B	X	-.253	-.253	0	%100
100	MP1B	Z	.438	.438	0	%100
101	MP2B	X	-.253	-.253	0	%100
102	MP2B	Z	.438	.438	0	%100
103	MP3B	X	-.253	-.253	0	%100
104	MP3B	Z	.438	.438	0	%100
105	MP4B	X	-.253	-.253	0	%100
106	MP4B	Z	.438	.438	0	%100
107	MP1C	X	-.253	-.253	0	%100
108	MP1C	Z	.438	.438	0	%100
109	MP2C	X	-.253	-.253	0	%100
110	MP2C	Z	.438	.438	0	%100
111	MP3C	X	-.253	-.253	0	%100
112	MP3C	Z	.438	.438	0	%100
113	MP4C	X	-.253	-.253	0	%100
114	MP4C	Z	.438	.438	0	%100
115	M101A	X	-.372	-.372	0	%100
116	M101A	Z	.644	.644	0	%100
117	M103A	X	-.418	-.418	0	%100
118	M103A	Z	.725	.725	0	%100
119	LIGHT	X	-.14	-.14	0	%100
120	LIGHT	Z	.243	.243	0	%100
121	M125	X	0	0	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	0	0	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	0	0	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M46	X	-.277	-.277	0 %100
50	M46	Z	.16	.16	0 %100
51	M52	X	-.698	-.698	0 %100
52	M52	Z	.403	.403	0 %100
53	M52A	X	-.14	-.14	0 %100
54	M52A	Z	.081	.081	0 %100
55	M53A	X	-.14	-.14	0 %100
56	M53A	Z	.081	.081	0 %100
57	FACE	X	-.161	-.161	0 %100
58	FACE	Z	.093	.093	0 %100
59	M58	X	-.161	-.161	0 %100
60	M58	Z	.093	.093	0 %100
61	M59	X	-.646	-.646	0 %100
62	M59	Z	.373	.373	0 %100
63	M64	X	-.088	-.088	0 %100
64	M64	Z	.051	.051	0 %100
65	M77	X	-.088	-.088	0 %100
66	M77	Z	.051	.051	0 %100
67	M90	X	-.351	-.351	0 %100
68	M90	Z	.202	.202	0 %100
69	M91	X	-.493	-.493	0 %100
70	M91	Z	.284	.284	0 %100
71	M93	X	-.154	-.154	0 %100
72	M93	Z	.089	.089	0 %100
73	M94	X	-.615	-.615	0 %100
74	M94	Z	.355	.355	0 %100
75	M95	X	-.277	-.277	0 %100
76	M95	Z	.16	.16	0 %100
77	M96	X	-.277	-.277	0 %100
78	M96	Z	.16	.16	0 %100
79	M97	X	-1.107	-1.107	0 %100
80	M97	Z	.639	.639	0 %100
81	M98	X	-.83	-.83	0 %100
82	M98	Z	.479	.479	0 %100
83	M99	X	-.277	-.277	0 %100
84	M99	Z	.16	.16	0 %100
85	M100	X	-.83	-.83	0 %100
86	M100	Z	.479	.479	0 %100
87	M101	X	-1.107	-1.107	0 %100
88	M101	Z	.639	.639	0 %100
89	M67	X	-.124	-.124	0 %100
90	M67	Z	.072	.072	0 %100
91	MP1A	X	-.438	-.438	0 %100
92	MP1A	Z	.253	.253	0 %100
93	MP2A	X	-.438	-.438	0 %100
94	MP2A	Z	.253	.253	0 %100
95	MP3A	X	-.438	-.438	0 %100
96	MP3A	Z	.253	.253	0 %100
97	MP4A	X	-.438	-.438	0 %100
98	MP4A	Z	.253	.253	0 %100
99	MP1B	X	-.438	-.438	0 %100
100	MP1B	Z	.253	.253	0 %100
101	MP2B	X	-.438	-.438	0 %100
102	MP2B	Z	.253	.253	0 %100
103	MP3B	X	-.438	-.438	0 %100
104	MP3B	Z	.253	.253	0 %100
105	MP4B	X	-.438	-.438	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
106	MP4B	Z	.253	.253	0	%100
107	MP1C	X	-.438	-.438	0	%100
108	MP1C	Z	.253	.253	0	%100
109	MP2C	X	-.438	-.438	0	%100
110	MP2C	Z	.253	.253	0	%100
111	MP3C	X	-.438	-.438	0	%100
112	MP3C	Z	.253	.253	0	%100
113	MP4C	X	-.438	-.438	0	%100
114	MP4C	Z	.253	.253	0	%100
115	M101A	X	-.617	-.617	0	%100
116	M101A	Z	.356	.356	0	%100
117	M103A	X	-.698	-.698	0	%100
118	M103A	Z	.403	.403	0	%100
119	LIGHT	X	-.243	-.243	0	%100
120	LIGHT	Z	.14	.14	0	%100
121	M125	X	-.021	-.021	0	%100
122	M125	Z	.012	.012	0	%100
123	M126	X	-.021	-.021	0	%100
124	M126	Z	.012	.012	0	%100
125	M127	X	-.021	-.021	0	%100
126	M127	Z	.012	.012	0	%100
127	M128	X	-.021	-.021	0	%100
128	M128	Z	.012	.012	0	%100
129	M133A	X	-.124	-.124	0	%100
130	M133A	Z	.072	.072	0	%100
131	M134A	X	-.496	-.496	0	%100
132	M134A	Z	.286	.286	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	OVP	X	-.506	-.506	0	%100
2	OVP	Z	0	0	0	%100
3	M18	X	-.486	-.486	0	%100
4	M18	Z	0	0	0	%100
5	M19	X	-.486	-.486	0	%100
6	M19	Z	0	0	0	%100
7	M20	X	-.19	-.19	0	%100
8	M20	Z	0	0	0	%100
9	M21	X	-.533	-.533	0	%100
10	M21	Z	0	0	0	%100
11	M22	X	0	0	0	%100
12	M22	Z	0	0	0	%100
13	M23	X	-.959	-.959	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-.959	-.959	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	-.32	-.32	0	%100
20	M26	Z	0	0	0	%100
21	M27	X	-.959	-.959	0	%100
22	M27	Z	0	0	0	%100
23	M28	X	-.32	-.32	0	%100
24	M28	Z	0	0	0	%100
25	M29	X	0	0	0	%100
26	M29	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M35	X	-486	-486	0	%100
28	M35	Z	0	0	0	%100
29	M36	X	-486	-486	0	%100
30	M36	Z	0	0	0	%100
31	M37	X	-19	-19	0	%100
32	M37	Z	0	0	0	%100
33	M38	X	0	0	0	%100
34	M38	Z	0	0	0	%100
35	M39	X	-533	-533	0	%100
36	M39	Z	0	0	0	%100
37	M40	X	0	0	0	%100
38	M40	Z	0	0	0	%100
39	M41	X	-959	-959	0	%100
40	M41	Z	0	0	0	%100
41	M42	X	-959	-959	0	%100
42	M42	Z	0	0	0	%100
43	M43	X	-32	-32	0	%100
44	M43	Z	0	0	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-32	-32	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-959	-959	0	%100
50	M46	Z	0	0	0	%100
51	M52	X	-837	-837	0	%100
52	M52	Z	0	0	0	%100
53	M52A	X	0	0	0	%100
54	M52A	Z	0	0	0	%100
55	M53A	X	0	0	0	%100
56	M53A	Z	0	0	0	%100
57	FACE	X	0	0	0	%100
58	FACE	Z	0	0	0	%100
59	M58	X	-559	-559	0	%100
60	M58	Z	0	0	0	%100
61	M59	X	-559	-559	0	%100
62	M59	Z	0	0	0	%100
63	M64	X	0	0	0	%100
64	M64	Z	0	0	0	%100
65	M77	X	-304	-304	0	%100
66	M77	Z	0	0	0	%100
67	M90	X	-304	-304	0	%100
68	M90	Z	0	0	0	%100
69	M91	X	-758	-758	0	%100
70	M91	Z	0	0	0	%100
71	M93	X	-533	-533	0	%100
72	M93	Z	0	0	0	%100
73	M94	X	-533	-533	0	%100
74	M94	Z	0	0	0	%100
75	M95	X	-959	-959	0	%100
76	M95	Z	0	0	0	%100
77	M96	X	0	0	0	%100
78	M96	Z	0	0	0	%100
79	M97	X	-959	-959	0	%100
80	M97	Z	0	0	0	%100
81	M98	X	-1,278	-1,278	0	%100
82	M98	Z	0	0	0	%100
83	M99	X	-959	-959	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
84	M99	Z	0	0	0	%100
85	M100	X	-1.278	-1.278	0	%100
86	M100	Z	0	0	0	%100
87	M101	X	-.959	-.959	0	%100
88	M101	Z	0	0	0	%100
89	M67	X	-.429	-.429	0	%100
90	M67	Z	0	0	0	%100
91	MP1A	X	-.506	-.506	0	%100
92	MP1A	Z	0	0	0	%100
93	MP2A	X	-.506	-.506	0	%100
94	MP2A	Z	0	0	0	%100
95	MP3A	X	-.506	-.506	0	%100
96	MP3A	Z	0	0	0	%100
97	MP4A	X	-.506	-.506	0	%100
98	MP4A	Z	0	0	0	%100
99	MP1B	X	-.506	-.506	0	%100
100	MP1B	Z	0	0	0	%100
101	MP2B	X	-.506	-.506	0	%100
102	MP2B	Z	0	0	0	%100
103	MP3B	X	-.506	-.506	0	%100
104	MP3B	Z	0	0	0	%100
105	MP4B	X	-.506	-.506	0	%100
106	MP4B	Z	0	0	0	%100
107	MP1C	X	-.506	-.506	0	%100
108	MP1C	Z	0	0	0	%100
109	MP2C	X	-.506	-.506	0	%100
110	MP2C	Z	0	0	0	%100
111	MP3C	X	-.506	-.506	0	%100
112	MP3C	Z	0	0	0	%100
113	MP4C	X	-.506	-.506	0	%100
114	MP4C	Z	0	0	0	%100
115	M101A	X	-.744	-.744	0	%100
116	M101A	Z	0	0	0	%100
117	M103A	X	-.744	-.744	0	%100
118	M103A	Z	0	0	0	%100
119	LIGHT	X	-.28	-.28	0	%100
120	LIGHT	Z	0	0	0	%100
121	M125	X	-.071	-.071	0	%100
122	M125	Z	0	0	0	%100
123	M126	X	-.071	-.071	0	%100
124	M126	Z	0	0	0	%100
125	M127	X	-.071	-.071	0	%100
126	M127	Z	0	0	0	%100
127	M128	X	-.071	-.071	0	%100
128	M128	Z	0	0	0	%100
129	M133A	X	0	0	0	%100
130	M133A	Z	0	0	0	%100
131	M134A	X	-.429	-.429	0	%100
132	M134A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	-.438	-.438	0	%100
2	OVP	Z	-.253	-.253	0	%100
3	M18	X	-.562	-.562	0	%100
4	M18	Z	-.324	-.324	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	M19	X	-.562	-.562	0 %100
6	M19	Z	-.324	-.324	0 %100
7	M20	X	0	0	0 %100
8	M20	Z	0	0	0 %100
9	M21	X	-.154	-.154	0 %100
10	M21	Z	-.089	-.089	0 %100
11	M22	X	-.154	-.154	0 %100
12	M22	Z	-.089	-.089	0 %100
13	M23	X	-.277	-.277	0 %100
14	M23	Z	-.16	-.16	0 %100
15	M24	X	-1.107	-1.107	0 %100
16	M24	Z	-.639	-.639	0 %100
17	M25	X	-.277	-.277	0 %100
18	M25	Z	-.16	-.16	0 %100
19	M26	X	0	0	0 %100
20	M26	Z	0	0	0 %100
21	M27	X	-.277	-.277	0 %100
22	M27	Z	-.16	-.16	0 %100
23	M28	X	0	0	0 %100
24	M28	Z	0	0	0 %100
25	M29	X	-.277	-.277	0 %100
26	M29	Z	-.16	-.16	0 %100
27	M35	X	-.14	-.14	0 %100
28	M35	Z	-.081	-.081	0 %100
29	M36	X	-.14	-.14	0 %100
30	M36	Z	-.081	-.081	0 %100
31	M37	X	-.493	-.493	0 %100
32	M37	Z	-.284	-.284	0 %100
33	M38	X	-.154	-.154	0 %100
34	M38	Z	-.089	-.089	0 %100
35	M39	X	-.615	-.615	0 %100
36	M39	Z	-.355	-.355	0 %100
37	M40	X	-.277	-.277	0 %100
38	M40	Z	-.16	-.16	0 %100
39	M41	X	-.277	-.277	0 %100
40	M41	Z	-.16	-.16	0 %100
41	M42	X	-1.107	-1.107	0 %100
42	M42	Z	-.639	-.639	0 %100
43	M43	X	-.83	-.83	0 %100
44	M43	Z	-.479	-.479	0 %100
45	M44	X	-.277	-.277	0 %100
46	M44	Z	-.16	-.16	0 %100
47	M45	X	-.83	-.83	0 %100
48	M45	Z	-.479	-.479	0 %100
49	M46	X	-1.107	-1.107	0 %100
50	M46	Z	-.639	-.639	0 %100
51	M52	X	-.698	-.698	0 %100
52	M52	Z	-.403	-.403	0 %100
53	M52A	X	-.14	-.14	0 %100
54	M52A	Z	-.081	-.081	0 %100
55	M53A	X	-.14	-.14	0 %100
56	M53A	Z	-.081	-.081	0 %100
57	FACE	X	-.161	-.161	0 %100
58	FACE	Z	-.093	-.093	0 %100
59	M58	X	-.646	-.646	0 %100
60	M58	Z	-.373	-.373	0 %100
61	M59	X	-.161	-.161	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
62	M59	Z	-0.093	-0.093	0 %100
63	M64	X	-0.088	-0.088	0 %100
64	M64	Z	-0.051	-0.051	0 %100
65	M77	X	-0.351	-0.351	0 %100
66	M77	Z	-0.202	-0.202	0 %100
67	M90	X	-0.088	-0.088	0 %100
68	M90	Z	-0.051	-0.051	0 %100
69	M91	X	-0.493	-0.493	0 %100
70	M91	Z	-0.284	-0.284	0 %100
71	M93	X	-0.615	-0.615	0 %100
72	M93	Z	-0.355	-0.355	0 %100
73	M94	X	-0.154	-0.154	0 %100
74	M94	Z	-0.089	-0.089	0 %100
75	M95	X	-1.107	-1.107	0 %100
76	M95	Z	-0.639	-0.639	0 %100
77	M96	X	-0.277	-0.277	0 %100
78	M96	Z	-0.16	-0.16	0 %100
79	M97	X	-0.277	-0.277	0 %100
80	M97	Z	-0.16	-0.16	0 %100
81	M98	X	-0.83	-0.83	0 %100
82	M98	Z	-0.479	-0.479	0 %100
83	M99	X	-1.107	-1.107	0 %100
84	M99	Z	-0.639	-0.639	0 %100
85	M100	X	-0.83	-0.83	0 %100
86	M100	Z	-0.479	-0.479	0 %100
87	M101	X	-0.277	-0.277	0 %100
88	M101	Z	-0.16	-0.16	0 %100
89	M67	X	-0.496	-0.496	0 %100
90	M67	Z	-0.286	-0.286	0 %100
91	MP1A	X	-0.438	-0.438	0 %100
92	MP1A	Z	-0.253	-0.253	0 %100
93	MP2A	X	-0.438	-0.438	0 %100
94	MP2A	Z	-0.253	-0.253	0 %100
95	MP3A	X	-0.438	-0.438	0 %100
96	MP3A	Z	-0.253	-0.253	0 %100
97	MP4A	X	-0.438	-0.438	0 %100
98	MP4A	Z	-0.253	-0.253	0 %100
99	MP1B	X	-0.438	-0.438	0 %100
100	MP1B	Z	-0.253	-0.253	0 %100
101	MP2B	X	-0.438	-0.438	0 %100
102	MP2B	Z	-0.253	-0.253	0 %100
103	MP3B	X	-0.438	-0.438	0 %100
104	MP3B	Z	-0.253	-0.253	0 %100
105	MP4B	X	-0.438	-0.438	0 %100
106	MP4B	Z	-0.253	-0.253	0 %100
107	MP1C	X	-0.438	-0.438	0 %100
108	MP1C	Z	-0.253	-0.253	0 %100
109	MP2C	X	-0.438	-0.438	0 %100
110	MP2C	Z	-0.253	-0.253	0 %100
111	MP3C	X	-0.438	-0.438	0 %100
112	MP3C	Z	-0.253	-0.253	0 %100
113	MP4C	X	-0.438	-0.438	0 %100
114	MP4C	Z	-0.253	-0.253	0 %100
115	M101A	X	-0.698	-0.698	0 %100
116	M101A	Z	-0.403	-0.403	0 %100
117	M103A	X	-0.617	-0.617	0 %100
118	M103A	Z	-0.356	-0.356	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
119	LIGHT	X	-.243	-.243	0	%100
120	LIGHT	Z	-.14	-.14	0	%100
121	M125	X	-.082	-.082	0	%100
122	M125	Z	-.048	-.048	0	%100
123	M126	X	-.082	-.082	0	%100
124	M126	Z	-.048	-.048	0	%100
125	M127	X	-.082	-.082	0	%100
126	M127	Z	-.048	-.048	0	%100
127	M128	X	-.082	-.082	0	%100
128	M128	Z	-.048	-.048	0	%100
129	M133A	X	-.124	-.124	0	%100
130	M133A	Z	-.072	-.072	0	%100
131	M134A	X	-.124	-.124	0	%100
132	M134A	Z	-.072	-.072	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	OVP	X	-.253	-.253	0	%100
2	OVP	Z	-.438	-.438	0	%100
3	M18	X	-.243	-.243	0	%100
4	M18	Z	-.421	-.421	0	%100
5	M19	X	-.243	-.243	0	%100
6	M19	Z	-.421	-.421	0	%100
7	M20	X	-.095	-.095	0	%100
8	M20	Z	-.164	-.164	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M22	X	-.266	-.266	0	%100
12	M22	Z	-.461	-.461	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-.479	-.479	0	%100
16	M24	Z	-.83	-.83	0	%100
17	M25	X	-.479	-.479	0	%100
18	M25	Z	-.83	-.83	0	%100
19	M26	X	-.16	-.16	0	%100
20	M26	Z	-.277	-.277	0	%100
21	M27	X	0	0	0	%100
22	M27	Z	0	0	0	%100
23	M28	X	-.16	-.16	0	%100
24	M28	Z	-.277	-.277	0	%100
25	M29	X	-.479	-.479	0	%100
26	M29	Z	-.83	-.83	0	%100
27	M35	X	0	0	0	%100
28	M35	Z	0	0	0	%100
29	M36	X	0	0	0	%100
30	M36	Z	0	0	0	%100
31	M37	X	-.379	-.379	0	%100
32	M37	Z	-.657	-.657	0	%100
33	M38	X	-.266	-.266	0	%100
34	M38	Z	-.461	-.461	0	%100
35	M39	X	-.266	-.266	0	%100
36	M39	Z	-.461	-.461	0	%100
37	M40	X	-.479	-.479	0	%100
38	M40	Z	-.83	-.83	0	%100
39	M41	X	0	0	0	%100



Company : Colliers Engineering & Design
Designer :
Job Number : Project No. 10206807
Model Name : 5000386237-VZW_MT_LO_H

July 10, 2023
4:35 PM
Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
40	M41	Z	0	0	0	%100
41	M42	X	-479	-479	0	%100
42	M42	Z	-83	-83	0	%100
43	M43	X	-639	-639	0	%100
44	M43	Z	-1.107	-1.107	0	%100
45	M44	X	-479	-479	0	%100
46	M44	Z	-83	-83	0	%100
47	M45	X	-639	-639	0	%100
48	M45	Z	-1.107	-1.107	0	%100
49	M46	X	-479	-479	0	%100
50	M46	Z	-83	-83	0	%100
51	M52	X	-372	-372	0	%100
52	M52	Z	-644	-644	0	%100
53	M52A	X	-243	-243	0	%100
54	M52A	Z	-421	-421	0	%100
55	M53A	X	-243	-243	0	%100
56	M53A	Z	-421	-421	0	%100
57	FACE	X	-28	-28	0	%100
58	FACE	Z	-484	-484	0	%100
59	M58	X	-28	-28	0	%100
60	M58	Z	-484	-484	0	%100
61	M59	X	0	0	0	%100
62	M59	Z	0	0	0	%100
63	M64	X	-152	-152	0	%100
64	M64	Z	-263	-263	0	%100
65	M77	X	-152	-152	0	%100
66	M77	Z	-263	-263	0	%100
67	M90	X	0	0	0	%100
68	M90	Z	0	0	0	%100
69	M91	X	-095	-095	0	%100
70	M91	Z	-164	-164	0	%100
71	M93	X	-266	-266	0	%100
72	M93	Z	-461	-461	0	%100
73	M94	X	0	0	0	%100
74	M94	Z	0	0	0	%100
75	M95	X	-479	-479	0	%100
76	M95	Z	-83	-83	0	%100
77	M96	X	-479	-479	0	%100
78	M96	Z	-83	-83	0	%100
79	M97	X	0	0	0	%100
80	M97	Z	0	0	0	%100
81	M98	X	-16	-16	0	%100
82	M98	Z	-277	-277	0	%100
83	M99	X	-479	-479	0	%100
84	M99	Z	-83	-83	0	%100
85	M100	X	-16	-16	0	%100
86	M100	Z	-277	-277	0	%100
87	M101	X	0	0	0	%100
88	M101	Z	0	0	0	%100
89	M67	X	-215	-215	0	%100
90	M67	Z	-372	-372	0	%100
91	MP1A	X	-253	-253	0	%100
92	MP1A	Z	-438	-438	0	%100
93	MP2A	X	-253	-253	0	%100
94	MP2A	Z	-438	-438	0	%100
95	MP3A	X	-253	-253	0	%100
96	MP3A	Z	-438	-438	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
18	M22	Y	-8.576	-7.087	1.706	2.558
19	M22	Y	-7.087	-3.228	2.558	3.411
20	M22	Y	-3.228	-.981	3.411	4.264
21	M38	Y	-1.126	-7.218	0	.853
22	M38	Y	-7.218	-8.895	.853	1.706
23	M38	Y	-8.895	-6.055	1.706	2.558
24	M38	Y	-6.055	-3.561	2.558	3.411
25	M38	Y	-3.561	-1.515	3.411	4.264
26	M39	Y	-2.624	-5.76	0	.853
27	M39	Y	-5.76	-8.576	.853	1.706
28	M39	Y	-8.576	-7.087	1.706	2.558
29	M39	Y	-7.087	-3.228	2.558	3.411
30	M39	Y	-3.228	-.981	3.411	4.264

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M93	Y	-5.068	-11.131	0	.853
2	M93	Y	-11.131	-16.56	.853	1.706
3	M93	Y	-16.56	-13.671	1.706	2.558
4	M93	Y	-13.671	-6.22	2.558	3.411
5	M93	Y	-6.22	-1.89	3.411	4.264
6	M94	Y	-2.175	-13.965	0	.853
7	M94	Y	-13.965	-17.213	.853	1.706
8	M94	Y	-17.213	-11.723	1.706	2.558
9	M94	Y	-11.723	-6.895	2.558	3.411
10	M94	Y	-6.895	-2.923	3.411	4.264
11	M21	Y	-2.177	-13.951	0	.853
12	M21	Y	-13.951	-17.192	.853	1.706
13	M21	Y	-17.192	-11.703	1.706	2.558
14	M21	Y	-11.703	-6.883	2.558	3.411
15	M21	Y	-6.883	-2.928	3.411	4.264
16	M22	Y	-5.07	-11.133	0	.853
17	M22	Y	-11.133	-16.574	.853	1.706
18	M22	Y	-16.574	-13.697	1.706	2.558
19	M22	Y	-13.697	-6.239	2.558	3.411
20	M22	Y	-6.239	-1.895	3.411	4.264
21	M38	Y	-2.177	-13.951	0	.853
22	M38	Y	-13.951	-17.192	.853	1.706
23	M38	Y	-17.192	-11.703	1.706	2.558
24	M38	Y	-11.703	-6.883	2.558	3.411
25	M38	Y	-6.883	-2.928	3.411	4.264
26	M39	Y	-5.07	-11.133	0	.853
27	M39	Y	-11.133	-16.574	.853	1.706
28	M39	Y	-16.574	-13.697	1.706	2.558
29	M39	Y	-13.697	-6.239	2.558	3.411
30	M39	Y	-6.239	-1.895	3.411	4.264

Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M93	Y	-.329	-.722	0	.853
2	M93	Y	-.722	-1.074	.853	1.706
3	M93	Y	-1.074	-.887	1.706	2.558
4	M93	Y	-.887	-.404	2.558	3.411
5	M93	Y	-.404	-.123	3.411	4.264
6	M94	Y	-.141	-.906	0	.853
7	M94	Y	-.906	-1.117	.853	1.706



Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
8	M94	Y	-1.117	-.761	1.706	2.558
9	M94	Y	-.761	-.447	2.558	3.411
10	M94	Y	-.447	-.19	3.411	4.264
11	M21	Y	-.141	-.905	0	.853
12	M21	Y	-.905	-1.115	.853	1.706
13	M21	Y	-1.115	-.759	1.706	2.558
14	M21	Y	-.759	-.447	2.558	3.411
15	M21	Y	-.447	-.19	3.411	4.264
16	M22	Y	-.329	-.722	0	.853
17	M22	Y	-.722	-1.075	.853	1.706
18	M22	Y	-1.075	-.889	1.706	2.558
19	M22	Y	-.889	-.405	2.558	3.411
20	M22	Y	-.405	-.123	3.411	4.264
21	M38	Y	-.141	-.905	0	.853
22	M38	Y	-.905	-1.115	.853	1.706
23	M38	Y	-1.115	-.759	1.706	2.558
24	M38	Y	-.759	-.447	2.558	3.411
25	M38	Y	-.447	-.19	3.411	4.264
26	M39	Y	-.329	-.722	0	.853
27	M39	Y	-.722	-1.075	.853	1.706
28	M39	Y	-1.075	-.889	1.706	2.558
29	M39	Y	-.889	-.405	2.558	3.411
30	M39	Y	-.405	-.123	3.411	4.264

Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M93	Z	-.823	-1.807	0	.853
2	M93	Z	-1.807	-2.687	.853	1.706
3	M93	Z	-2.687	-2.219	1.706	2.558
4	M93	Z	-2.219	-1.009	2.558	3.411
5	M93	Z	-1.009	-.307	3.411	4.264
6	M94	Z	-.353	-2.266	0	.853
7	M94	Z	-2.266	-2.793	.853	1.706
8	M94	Z	-2.793	-1.903	1.706	2.558
9	M94	Z	-1.903	-1.119	2.558	3.411
10	M94	Z	-1.119	-.474	3.411	4.264
11	M21	Z	-.353	-2.264	0	.853
12	M21	Z	-2.264	-2.79	.853	1.706
13	M21	Z	-2.79	-1.899	1.706	2.558
14	M21	Z	-1.899	-1.117	2.558	3.411
15	M21	Z	-1.117	-.475	3.411	4.264
16	M22	Z	-.823	-1.807	0	.853
17	M22	Z	-1.807	-2.69	.853	1.706
18	M22	Z	-2.69	-2.223	1.706	2.558
19	M22	Z	-2.223	-1.013	2.558	3.411
20	M22	Z	-1.013	-.308	3.411	4.264
21	M38	Z	-.353	-2.264	0	.853
22	M38	Z	-2.264	-2.79	.853	1.706
23	M38	Z	-2.79	-1.899	1.706	2.558
24	M38	Z	-1.899	-1.117	2.558	3.411
25	M38	Z	-1.117	-.475	3.411	4.264
26	M39	Z	-.823	-1.807	0	.853
27	M39	Z	-1.807	-2.69	.853	1.706
28	M39	Z	-2.69	-2.223	1.706	2.558
29	M39	Z	-2.223	-1.013	2.558	3.411
30	M39	Z	-1.013	-.308	3.411	4.264



Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M93	X	.823	1.807	0	.853
2	M93	X	1.807	2.687	.853	1.706
3	M93	X	2.687	2.219	1.706	2.558
4	M93	X	2.219	1.009	2.558	3.411
5	M93	X	1.009	.307	3.411	4.264
6	M94	X	.353	2.266	0	.853
7	M94	X	2.266	2.793	.853	1.706
8	M94	X	2.793	1.903	1.706	2.558
9	M94	X	1.903	1.119	2.558	3.411
10	M94	X	1.119	.474	3.411	4.264
11	M21	X	.353	2.264	0	.853
12	M21	X	2.264	2.79	.853	1.706
13	M21	X	2.79	1.899	1.706	2.558
14	M21	X	1.899	1.117	2.558	3.411
15	M21	X	1.117	.475	3.411	4.264
16	M22	X	.823	1.807	0	.853
17	M22	X	1.807	2.69	.853	1.706
18	M22	X	2.69	2.223	1.706	2.558
19	M22	X	2.223	1.013	2.558	3.411
20	M22	X	1.013	.308	3.411	4.264
21	M38	X	.353	2.264	0	.853
22	M38	X	2.264	2.79	.853	1.706
23	M38	X	2.79	1.899	1.706	2.558
24	M38	X	1.899	1.117	2.558	3.411
25	M38	X	1.117	.475	3.411	4.264
26	M39	X	.823	1.807	0	.853
27	M39	X	1.807	2.69	.853	1.706
28	M39	X	2.69	2.223	1.706	2.558
29	M39	X	2.223	1.013	2.558	3.411
30	M39	X	1.013	.308	3.411	4.264

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N187	N188	N190	N189	Y	Two Way	-.005
2	N37	N35	N36	N38	Y	Two Way	-.005
3	N65	N67	N66	N64	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N187	N188	N190	N189	Y	Two Way	-.01
2	N37	N35	N36	N38	Y	Two Way	-.01
3	N65	N67	N66	N64	Y	Two Way	-.01

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N187	N188	N190	N189	Y	Two Way	-.000652
2	N37	N35	N36	N38	Y	Two Way	-.000652
3	N65	N67	N66	N64	Y	Two Way	-.000652

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N187	N188	N190	N189	Z	Two Way	-.002
2	N37	N35	N36	N38	Z	Two Way	-.002
3	N65	N67	N66	N64	Z	Two Way	-.002

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N187	N188	N190	N189	X	Two Way	.002
2	N37	N35	N36	N38	X	Two Way	.002
3	N65	N67	N66	N64	X	Two Way	.002

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 SC	m... 877.676	10	883.788	7	4788.746	1	.506	7	1.193	4	.122	4
2	m... -888.103	4	-467.06	1	-3075.57	7	-.123	1	-1.204	10	-.144	10
3 N30	m... 2166.317	11	704.045	11	1398.444	12	.248	6	1.196	8	.63	11
4	m... -3662.47	5	-367.52	5	-2263.541	6	-.848	36	-1.226	2	-.283	5
5 N59	m... 3530.057	9	653.84	3	1227.052	3	.192	8	1.07	12	.277	9
6	m... -1968.391	3	-338.716	9	-2117.233	9	-.894	38	-1.079	6	-.549	3
7 N87A	m... 29.302	10	2470.125	1	667.316	7	0	75	0	75	0	75
8	m... -29.288	4	-672.888	7	-2440.331	1	0	1	0	1	0	1
9 N184B	m... 266.893	3	2263.482	21	1115.845	21	0	75	0	75	0	75
10	m... -1932.579	21	-315.476	3	-153.986	3	0	1	0	1	0	1
11 N187B	m... 1924.572	5	2252.935	5	1110.612	5	0	75	0	75	0	75
12	m... -377.385	11	-442.531	11	-217.99	11	0	1	0	1	0	1
13 Totals:	m... 3987.64	10	6803.956	21	4660.755	1						
14	m... -3987.65	4	2113.111	66	-4660.739	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear Check	L... Dir	LC	phi*Pn...	phi*P...	phi*Mn y...	phi*Mn	Eqn
1	OVP PIPE ...	.271	4.479	7	.037	4...	4	8922.0...	32130	1.872	1.872	H1-...
2	M18 HSS4...	.100	2.391	16	.037	.... z	5	13622...	139518	16.181	16.181	H1-...
3	M19 HSS4...	.108	2.391	18	.047	2... y	36	13622...	139518	16.181	16.181	H1-...
4	M20 HSS4...	.157	3.201	5	.062	0 y	25	12454...	139518	16.181	16.181	H1-...
5	M21 L2x2x3	.117	0	6	.010	0 y	13	15720...	23392...	.558	1.072	H2-1
6	M22 L2x2x3	.154	3.598	6	.011	0 z	23	15720...	23392...	.558	1.213	H2-1
7	M23 PL3/8x6	.060	.137	6	.293	.23 y	6	70404...	72900	.57	9.113	H1-...
8	M24 PL3/8x6	.300	.567	6	.262	.... y	12	31314...	72900	.57	9.113	H1-...
9	M25 PL3/8x6	.072	.094	6	.213	0 y	4	70404...	72900	.57	9.113	H1-...
10	M26 PL3/8x6	.300	.219	1	.104	.... y	12	62764...	72900	.57	9.113	H1-...
11	M27 PL3/8x6	.231	.133	12	.193	0 y	14	69727...	72900	.57	9.113	H1-...
12	M28 PL3/8x6	.255	.219	8	.110	.... y	11	62764...	72900	.57	9.113	H1-...
13	M29 PL3/8x6	.230	.133	12	.244	0 y	31	69727...	72900	.57	9.113	H1-...
14	M35 HSS4...	.106	2.391	20	.047	2... y	40	13622...	139518	16.181	16.181	H1-...
15	M36 HSS4...	.106	2.391	22	.038	.... z	9	13622...	139518	16.181	16.181	H1-...
16	M37 HSS4...	.153	3.201	9	.066	0 y	37	12454...	139518	16.181	16.181	H1-...
17	M38 L2x2x3	.116	0	8	.010	0 y	17	15720...	23392...	.558	1.084	H2-1
18	M39 L2x2x3	.148	4.264	9	.011	0 z	14	15720...	23392...	.558	1.222	H2-1
19	M40 PL3/8x6	.057	.137	9	.265	.23 y	11	70404...	72900	.57	9.113	H1-...
20	M41 PL3/8x6	.266	.567	9	.227	.... y	4	31314...	72900	.57	9.113	H1-...
21	M42 PL3/8x6	.070	.094	9	.239	0 y	8	70404...	72900	.57	9.113	H1-...
22	M43 PL3/8x6	.249	.219	6	.108	.... y	45	62764...	72900	.57	9.113	H1-...
23	M44 PL3/8x6	.223	.133	2	.239	0 y	42	69727...	72900	.57	9.113	H1-...
24	M45 PL3/8x6	.203	.219	12	.113	.... y	2	62764...	72900	.57	9.113	H1-...
25	M46 PL3/8x6	.223	.133	9	.202	0 y	23	69727...	72900	.57	9.113	H1-...
26	M52 LL2.5x...	.078	0	1	.002	4... y	13	44408...	58320	3.954	2.55	1H1-...
27	M52A HSS4...	.099	2.391	24	.039	.... z	1	13622...	139518	16.181	16.181	H1-...
28	M53A HSS4...	.102	2.391	13	.041	.... z	1	13622...	139518	16.181	16.181	H1-...
29	FACE PIPE...	.130	4.297	4	.109	1...	7	28250...	65205	5.749	5.749	H1-...
30	M58 PIPE...	.143	4.297	8	.098	1...	10	28250...	65205	5.749	5.749	H1-...
31	M59 PIPE...	.153	4.297	12	.102	1...	2	28250...	65205	5.749	5.749	H1-...



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

Member	Shape	Code Check	Loc[ft]	LC	Shear Check	L...	Dir	LC	phi*Pn...	phi*P...	phi*Mn v...	phi*Mn	Egn
32	M64	PIPE_...	.414	8.333	7	.245	....	7	2941.88	23593...	1.105	1.105	...H1-...
33	M77	PIPE_...	.379	11.719	1	.214	....	11	2941.88	23593...	1.105	1.105	...H1-...
34	M90	PIPE_...	.400	4.167	1	.190	1...	2	2941.88	23593...	1.105	1.105	...H1-...
35	M91	HSS4...	.174	3.201	1	.046	3... y	3	12454...	139518	16.181	16.181	...H1-...
36	M93	L2x2x3	.122	0	1	.009	0 y	20	15720...	23392...	.558	1.073	...H2-1
37	M94	L2x2x3	.165	4.264	1	.011	0 z	19	15720...	23392...	.558	1.221	...H2-1
38	M95	PL3/8x6	.064	.137	1	.277	.23 y	2	70404...	72900	.57	9.113	...H1-...
39	M96	PL3/8x6	.302	.567	1	.248	.... y	7	31314...	72900	.57	9.113	...H1-...
40	M97	PL3/8x6	.080	.094	1	.252	0 y	12	70404...	72900	.57	9.113	...H1-...
41	M98	PL3/8x6	.257	.219	10	.103	.... y	1	62764...	72900	.57	9.113	...H1-...
42	M99	PL3/8x6	.244	.133	7	.186	0 y	22	69727...	72900	.57	9.113	...H1-...
43	M100	PL3/8x6	.185	.219	4	.120	.... y	7	62764...	72900	.57	9.113	...H1-...
44	M101	PL3/8x6	.255	.133	1	.192	0 y	15	69727...	72900	.57	9.113	...H1-...
45	M67	L2.5x2...	.333	0	7	.077	0 z	8	37464...	38556	1.114	2.537	...H2-1
46	MP1A	PIPE_...	.321	5.417	5	.178	1...	7	14916...	32130	1.872	1.872	...H1-...
47	MP2A	PIPE_...	.481	5.417	5	.198	5...	6	14916...	32130	1.872	1.872	...H1-...
48	MP3A	PIPE_...	.498	5.417	11	.191	5...	7	14916...	32130	1.872	1.872	...H1-...
49	MP4A	PIPE_...	.304	5.417	5	.183	1...	6	14916...	32130	1.872	1.872	...H1-...
50	MP1B	PIPE_...	.314	5.417	8	.169	2...	12	14916...	32130	1.872	1.872	...H1-...
51	MP2B	PIPE_...	.536	5.417	8	.172	5...	10	14916...	32130	1.872	1.872	...H1-...
52	MP3B	PIPE_...	.540	5.417	8	.172	5...	12	14916...	32130	1.872	1.872	...H1-...
53	MP4B	PIPE_...	.322	5.417	8	.155	4...	11	14916...	32130	1.872	1.872	...H1-...
54	MP1C	PIPE_...	.369	5.417	1	.145	5...	11	14916...	32130	1.872	1.872	...H1-...
55	MP2C	PIPE_...	.582	5.417	12	.174	5...	1	14916...	32130	1.872	1.872	...H1-...
56	MP3C	PIPE_...	.584	5.417	12	.151	5...	3	14916...	32130	1.872	1.872	...H1-...
57	MP4C	PIPE_...	.351	5.417	12	.182	5...	8	14916...	32130	1.872	1.872	...H1-...
58	M101A	LL2.5x...	.072	4.489	21	.002	0 y	21	44408...	58320	3.954	2.55	1H1-...
59	M103A	LL2.5x...	.072	0	5	.002	0 y	17	44408...	58320	3.954	2.55	1H1-...
60	LIGHT	PIPE_...	.037	2.75	7	.081	2...	6	7587.4...	14773...	.465	.465	...H1-...
61	M125	SR_0...	.048	0	11	.021	0	13	9197.7...	9940...	.104	.104	...H1-...
62	M126	SR_0...	.048	0	11	.021	0	13	9197.7...	9940...	.104	.104	...H1-...
63	M127	SR_0...	.038	0	19	.024	0	19	9197.7...	9940...	.104	.104	...H1-...
64	M128	SR_0...	.038	0	19	.024	0	19	9197.7...	9940...	.104	.104	...H1-...
65	M133A	L2.5x2...	.316	.938	11	.068	.... z	4	37464...	38556	1.114	2.537	...H2-1
66	M134A	L2.5x2...	.380	.938	7	.081	.02 z	12	37464...	38556	1.114	2.537	...H2-1

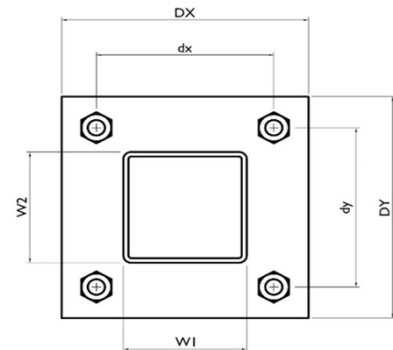
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

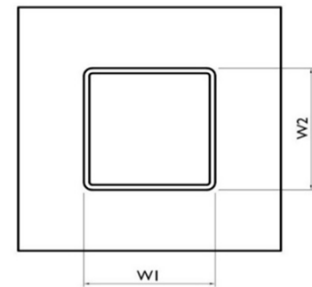
Bolt Orientation

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch) :	6
d_y (in) (Delta Y of typ. bolt config. sketch) :	6
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	1.8
Required Shear Strength / bolt (kips):	0.1
Tensile Capacity / bolt (kips):	20.7
Shear Capacity / bolt (kips):	12.4
Bolt Overall Utilization:	8.7%



Tower Connection Baseplate Checks

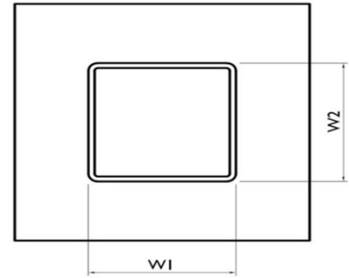
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	8
Plate Height, D_y (in):	8
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.75
Length of Yield Line, L_y (in):	5.85
Bolt Eccentricity, e (in):	1.65
M_u (kip-in):	2.98
$\Phi * M_n$ (kip-in):	26.65
Plate Bending Utilization:	11.2%



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Weld Size (1/16 in):
 W1 (in):
 W2 (in):
 Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
 Required combined strength (kip/in):
 Weld Capacity (kip/in):
 Weld Utilization:

Yes
Rectangle
None
4
4
4
16.00
21.33
21.33
85.33
2.25
2.25
0.60
5.57
10.7%



Date: **January 12, 2024**



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

Subject: **Structural Analysis Report**

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 5000386237
Site Name: MILLDALE CT

Crown Castle Designation: **BU Number:** 876313
Site Name: WEST JOHNSON AVE. BURNT HOUSE
JDE Job Number: 751357
Work Order Number: 2278133
Order Number: 654590 Rev. 0

Engineering Firm Designation: **Crown Castle Project Number** 2278133

Site Data: **1394 Meriden Waterbury Tpk, Southington, Hartford County, CT**
Latitude: 41° 33' 51.39" Longitude: -72° 53' 30.7"
160 ft - Monopole 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:

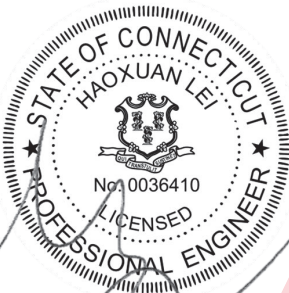
LC7: Proposed Equipment Configuration **Sufficient Capacity - 89.7%**

This analysis has been performed in accordance with the 2022 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 118 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, P.E.
Project Engineer



**Digitally
signed by
Haoxuan Lei
Date:
2024.01.19
15:40:24 -06'00'**

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1) INTRODUCTION

This tower is a 160 ft Monopole Tower designed by Summit. 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: 118 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)
138	142	1	lucent	KS24019-L112A w/ Mount Pipe	1 6 1	1/2 1-5/8 2-1/4
	139	1	raycap	RVZDC-6627-PF-48		
		1	samsung telecommunications	RFV01U-D1A		
		1	samsung telecommunications	RFV01U-D2A		
	138	6	commscope	NNHH-65B-R4 w/ Mount Pipe		
		2	kaelus	BSF0020F3V1		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		2	samsung telecommunications	RFV01U-D1A		
		2	samsung telecommunications	RFV01U-D2A		
		3	samsung telecommunications	XXDWMM-12.5-65-8T-CBRS w/ Mount Pipe		
		1	tower mounts	Platform Mount [LP 303-1_KCKR-HR-1]		

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)
157	160	3	ericsson	AIR 6419 B77G_CCIV3 w/ Mount Pipe	6 3 8	1-5/8 3/8 13/16
	158	3	cci antennas	TPA65R-BU8DA-K w/ Mount Pipe		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	ericsson	RRUS 8843 B2/B66A		
		3	ericsson	RRUS-32 B30		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		3	kathrein	80010966 w/ Mount Pipe		
		4	raycap	DC6-48-60-18-8F		
	157	1	tower mounts	Pipe Mount [PM 601-3]		
		1	tower mounts	Sector Mount [SM 503-3]		
		3	tower mounts	Side Arm Mount [SO 309-3]		
	156	3	ericsson	AIR 6449 B77D_CCVI2 w/ Mount Pipe		
149	149	1	tower mounts	Miscellaneous [NA 507-1]	3	1-5/8
		1	tower mounts	Platform Mount [LP 1201-1_HR-1]		
	148	3	commscope	VV-65B-R1_TMO w/ Mount Pipe		
		3	ericsson	AIR 6419 B41_TMO w/ Mount Pipe		
		3	ericsson	RADIO 4460 B2/B25 B66 TMO		
		3	ericsson	Radio 4480 TMOV2		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
126	128	3	ericsson	RRUS 11 B12	6 1	1-5/8 1-1/4
	127	3	commscope	LNx-6515DS-VTM w/ Mount Pipe		
		3	ericsson	ERICSSON AIR 21 B2A B4P w/ Mount Pipe		
		3	ericsson	ERICSSON AIR 21 B4A B2P w/ Mount Pipe		
		3	ericsson	KRY 112 144/1		
	126	1	tower mounts	Platform Mount [LP 1201-1]		
116	120	3	fujitsu	TA08025-B604	1	1-1/2
		3	fujitsu	TA08025-B605		
	119	3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
	116	1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Sabre C10801018-32788		
48	49	1	lucent	KS24019-L112A	1	1/2
	48	1	tower mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	5939573	CCISITES
4-POST-MODIFICATION INSPECTION	3846956	CCISITES
4-POST-MODIFICATION INSPECTION	4077468	CCISITES
4-POST-MODIFICATION INSPECTION	4600286	CCISITES
4-POST-MODIFICATION INSPECTION	5380973	CCISITES
4-POST-MODIFICATION INSPECTION	5617077	CCISITES
4-POST-MODIFICATION INSPECTION	10476190	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	1633746	CCISITES
4-TOWER MANUFACTURER DRAWINGS	2134246	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3348783	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	4077469	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	4094328	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5105790	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5266558	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	10158802	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)

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
160 - 155	Pole	TP10.75x10.75x0.349	Pole	19.0	Pass
155 - 150	Pole	TP10.75x10.75x0.349	Pole	53.7	Pass
150 - 148.5	Pole	TP10.75x10.75x0.349	Pole	66.7	Pass
148.5 - 148	Pole	TP23x23x0.349	Pole	16.4	Pass
148 - 143	Pole	TP23.81x23x0.25	Pole	22.0	Pass
143 - 138	Pole	TP24.62x23.81x0.25	Pole	30.3	Pass
138 - 133	Pole	TP25.43x24.62x0.25	Pole	40.9	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
133 - 128	Pole	TP26.24x25.43x0.25	Pole	50.2	Pass
128 - 123	Pole	TP27.05x26.24x0.25	Pole	60.0	Pass
123 - 118	Pole	TP27.86x27.05x0.25	Pole	69.0	Pass
118 - 114.75	Pole	TP28.994x27.86x0.25	Pole	75.4	Pass
114.75 - 109.75	Pole	TP28.696x27.887x0.3125	Pole	67.5	Pass
109.75 - 105.33	Pole	TP29.412x28.696x0.3125	Pole	72.9	Pass
105.33 - 105.08	Pole + Reinf.	TP29.452x29.412x0.4688	Reinf. 5 Tension Rupture	69.3	Pass
105.08 - 100.08	Pole + Reinf.	TP30.262x29.452x0.4625	Reinf. 5 Tension Rupture	75.1	Pass
100.08 - 95.08	Pole + Reinf.	TP31.072x30.262x0.4625	Reinf. 5 Tension Rupture	80.4	Pass
95.08 - 92.5	Pole + Reinf.	TP31.491x31.072x0.4563	Reinf. 5 Tension Rupture	82.9	Pass
92.5 - 92.25	Pole + Reinf.	TP31.531x31.491x0.6375	Reinf. 9 Tension Rupture	73.6	Pass
92.25 - 87.25	Pole + Reinf.	TP32.341x31.531x0.625	Reinf. 9 Tension Rupture	78.2	Pass
87.25 - 82.25	Pole + Reinf.	TP33.151x32.341x0.6125	Reinf. 9 Tension Rupture	82.5	Pass
82.25 - 81	Pole + Reinf.	TP34.042x33.151x0.6125	Reinf. 9 Tension Rupture	83.5	Pass
81 - 75.75	Pole	TP33.579x32.729x0.375	Pole	78.8	Pass
75.75 - 70.75	Pole	TP34.389x33.579x0.375	Pole	81.0	Pass
70.75 - 70.58	Pole	TP34.416x34.389x0.375	Pole	81.1	Pass
70.58 - 70.33	Pole + Reinf.	TP34.456x34.416x0.675	Reinf. 4 Tension Rupture	70.9	Pass
70.33 - 70	Pole + Reinf.	TP34.51x34.456x0.675	Reinf. 4 Tension Rupture	71.1	Pass
70 - 69.75	Pole	TP34.551x34.51x0.375	Pole	81.5	Pass
69.75 - 64.75	Pole	TP35.361x34.551x0.375	Pole	83.4	Pass
64.75 - 59.75	Pole	TP36.171x35.361x0.375	Pole	85.3	Pass
59.75 - 54.75	Pole	TP36.981x36.171x0.375	Pole	87.3	Pass
54.75 - 49.75	Pole	TP37.791x36.981x0.375	Pole	89.1	Pass
49.75 - 48	Pole	TP38.884x37.791x0.375	Pole	89.7	Pass
48 - 42	Pole	TP38.296x37.324x0.4375	Pole	80.5	Pass
42 - 37	Pole	TP39.106x38.296x0.4375	Pole	81.3	Pass
37 - 32	Pole	TP39.916x39.106x0.4375	Pole	82.0	Pass
32 - 27.91	Pole	TP40.578x39.916x0.4375	Pole	82.5	Pass
27.91 - 27.66	Pole + Reinf.	TP40.619x40.578x0.675	Reinf. 6 Tension Rupture	80.4	Pass
27.66 - 27.25	Pole + Reinf.	TP40.686x40.619x0.675	Reinf. 6 Tension Rupture	80.5	Pass
27.25 - 27.08	Pole	TP40.713x40.686x0.4375	Pole	82.5	Pass
27.08 - 26.83	Pole + Reinf.	TP40.753x40.713x0.6625	Reinf. 1 Tension Rupture	78.8	Pass
26.83 - 21.83	Pole + Reinf.	TP41.563x40.753x0.6625	Reinf. 1 Tension Rupture	79.8	Pass
21.83 - 16.83	Pole + Reinf.	TP42.373x41.563x0.6625	Reinf. 1 Tension Rupture	80.7	Pass
16.83 - 16	Pole + Reinf.	TP42.508x42.373x0.6625	Reinf. 1 Tension Rupture	80.8	Pass
16 - 15.75	Pole + Reinf.	TP42.549x42.508x0.8125	Reinf. 7 Tension Rupture	72.4	Pass
15.75 - 14.75	Pole + Reinf.	TP42.711x42.549x0.8125	Reinf. 7 Tension Rupture	72.6	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
14.75 - 14.5	Pole + Reinf.	TP42.752x42.711x0.4875	Pole	82.4	Pass
14.5 - 12.08	Pole + Reinf.	TP43.143x42.752x0.4875	Pole	82.8	Pass
12.08 - 11.83	Pole + Reinf.	TP43.183x43.143x0.7375	Reinf. 1 Tension Rupture	74.1	Pass
11.83 - 10	Pole + Reinf.	TP43.48x43.183x0.7375	Reinf. 1 Tension Rupture	74.4	Pass
10 - 9.75	Pole + Reinf.	TP43.521x43.48x0.7375	Reinf. 1 Tension Rupture	74.4	Pass
9.75 - 4.75	Pole + Reinf.	TP44.331x43.521x0.725	Reinf. 1 Tension Rupture	75.2	Pass
4.75 - 0	Pole + Reinf.	TP45.1x44.331x0.7125	Reinf. 1 Tension Rupture	75.8	Pass
				Summary	
			Pole	89.7	Pass
			Reinforcement	83.5	Pass
			Overall	89.7	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	68.8	Pass
1	Base Plate	0	56.9	Pass
1	Base Foundation (Structural)	0	71.0	Pass
1	Base Foundation (Soil)	0	71.0	Pass
1	Flange Connection	148	73.1	Pass

Structure Rating (max from all components) =	89.7%
-----------------------------------------------------	--------------

Notes:

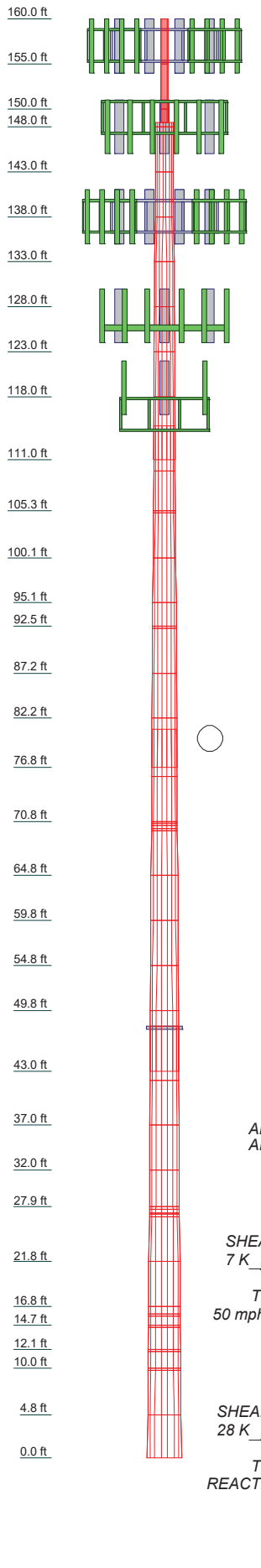
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed

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

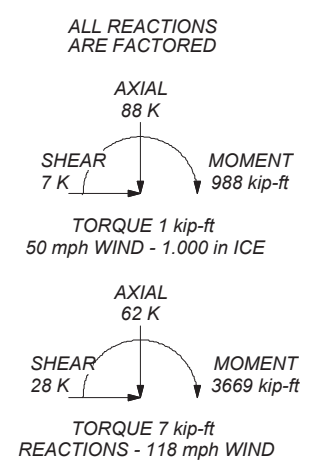
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1								
2								
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4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
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MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-B-35	35 ksi	60 ksi	A607-65	65 ksi	80 ksi
A607-60	60 ksi	75 ksi			

- ### TOWER DESIGN NOTES
1. Tower is located in Hartford County, Connecticut.
 2. Tower designed for Exposure B to the TIA-222-H Standard.
 3. Tower designed for a 118 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 0.000 ft
 8. TOWER RATING: 89.7%



 CROWN CASTLE The Pathway to Possible	Crown Castle 2000 Corporate Drive Canonsburg, PA 15317 Phone: (724) 416-2000 FAX:		Job: 876313
	Project: Client: Crown Castle Code: TIA-222-H Path:	Drawn by: SHu Date: 01/12/24	App'd: Scale: NTS Dwg No. E-1

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower is located in Hartford County, Connecticut.

Tower base elevation above sea level: 133.000 ft.

Basic wind speed of 118 mph.

Risk Category II.

Exposure Category B.

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

Topographic Category: 1.

Crest Height: 0.000 ft.

Nominal ice thickness of 1.000 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

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

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 60 mph.

TOWER RATING: 90.2%.

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

Pressures are calculated at each section.

Stress ratio used in pole 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 Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification ✓ Use Code Stress Ratios ✓ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric Distribute Leg Loads As Uniform	Assume Legs Pinned ✓ Assume Rigid Index Plate ✓ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension ✓ Bypass Mast Stability Checks ✓ Use Azimuth Dish Coefficients ✓ Project Wind Area of Appurtenances Alternative Appurt. EPA Calculation Autocalc Torque Arm Areas Add IBC .6D+W Combination Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs Use ASCE 10 X-Brace Ly Rules	Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation ✓ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <div style="background-color: #e0e0e0; text-align: center; padding: 2px;">Poles</div> ✓ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known
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Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	160.000-155.000	5.000	0.000	Round	10.750	10.750	0.349		A53-B-35 (35 ksi)
L2	155.000-150.000	5.000	0.000	Round	10.750	10.750	0.349		A53-B-35 (35 ksi)
L3	150.000-148.500	1.500	0.000	Round	10.750	10.750	0.349		A53-B-35 (35 ksi)
L4	148.500-148.000	0.500	0.000	Round	23.000	23.000	0.349		A53-B-35 (35 ksi)
L5	148.000-143.000	5.000	0.000	18	23.000	23.810	0.250	1.000	A607-60 (60 ksi)
L6	143.000-138.000	5.000	0.000	18	23.810	24.620	0.250	1.000	A607-60 (60 ksi)
L7	138.000-133.000	5.000	0.000	18	24.620	25.430	0.250	1.000	A607-60 (60 ksi)
L8	133.000-128.000	5.000	0.000	18	25.430	26.240	0.250	1.000	A607-60 (60 ksi)
L9	128.000-123.000	5.000	0.000	18	26.240	27.050	0.250	1.000	A607-60 (60 ksi)
L10	123.000-118.000	5.000	0.000	18	27.050	27.860	0.250	1.000	A607-60 (60 ksi)
L11	118.000-111.000	7.000	3.750	18	27.860	28.994	0.250	1.000	A607-60 (60 ksi)
L12	111.000-109.750	5.000	0.000	18	27.887	28.696	0.312	1.250	A607-60 (60 ksi)
L13	109.750-105.333	4.417	0.000	18	28.696	29.412	0.312	1.250	A607-60 (60 ksi)
L14	105.333-105.083	0.250	0.000	18	29.412	29.452	0.469	1.875	A607-60 (60 ksi)
L15	105.083-100.083	5.000	0.000	18	29.452	30.262	0.463	1.850	A607-60 (60 ksi)
L16	100.083-95.083	5.000	0.000	18	30.262	31.072	0.463	1.850	A607-60 (60 ksi)
L17	95.083-92.500	2.583	0.000	18	31.072	31.491	0.456	1.825	A607-60 (60 ksi)
L18	92.500-92.250	0.250	0.000	18	31.491	31.531	0.637	2.550	A607-60 (60 ksi)
L19	92.250-87.250	5.000	0.000	18	31.531	32.341	0.625	2.500	A607-60 (60 ksi)
L20	87.250-82.250	5.000	0.000	18	32.341	33.151	0.613	2.450	A607-60 (60 ksi)
L21	82.250-76.750	5.500	4.250	18	33.151	34.042	0.613	2.450	A607-60 (60 ksi)
L22	76.750-75.750	5.250	0.000	18	32.729	33.579	0.375	1.500	A607-65 (65 ksi)
L23	75.750-70.750	5.000	0.000	18	33.579	34.389	0.375	1.500	A607-65 (65 ksi)
L24	70.750-70.583	0.167	0.000	18	34.389	34.416	0.375	1.500	A607-65 (65 ksi)
L25	70.583-70.333	0.250	0.000	18	34.416	34.456	0.675	2.700	A607-65 (65 ksi)
L26	70.333-70.000	0.333	0.000	18	34.456	34.510	0.675	2.700	A607-65 (65 ksi)
L27	70.000-69.750	0.250	0.000	18	34.510	34.551	0.375	1.500	A607-65 (65 ksi)
L28	69.750-64.750	5.000	0.000	18	34.551	35.361	0.375	1.500	A607-65 (65 ksi)
L29	64.750-59.750	5.000	0.000	18	35.361	36.171	0.375	1.500	A607-65 (65 ksi)
L30	59.750-54.750	5.000	0.000	18	36.171	36.981	0.375	1.500	A607-65 (65 ksi)
L31	54.750-49.750	5.000	0.000	18	36.981	37.791	0.375	1.500	A607-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L32	49.750-43.000	6.750	5.000	18	37.791	38.884	0.375	1.500	(65 ksi) A607-65
L33	43.000-42.000	6.000	0.000	18	37.324	38.296	0.438	1.750	(65 ksi) A607-65
L34	42.000-37.000	5.000	0.000	18	38.296	39.106	0.438	1.750	(65 ksi) A607-65
L35	37.000-32.000	5.000	0.000	18	39.106	39.916	0.438	1.750	(65 ksi) A607-65
L36	32.000-27.913	4.087	0.000	18	39.916	40.578	0.438	1.750	(65 ksi) A607-65
L37	27.913-27.663	0.250	0.000	18	40.578	40.619	0.675	2.700	(65 ksi) A607-65
L38	27.663-27.250	0.413	0.000	18	40.619	40.686	0.675	2.700	(65 ksi) A607-65
L39	27.250-27.083	0.167	0.000	18	40.686	40.713	0.438	1.750	(65 ksi) A607-65
L40	27.083-26.833	0.250	0.000	18	40.713	40.753	0.662	2.650	(65 ksi) A607-65
L41	26.833-21.833	5.000	0.000	18	40.753	41.563	0.662	2.650	(65 ksi) A607-65
L42	21.833-16.833	5.000	0.000	18	41.563	42.373	0.662	2.650	(65 ksi) A607-65
L43	16.833-16.000	0.833	0.000	18	42.373	42.508	0.662	2.650	(65 ksi) A607-65
L44	16.000-15.750	0.250	0.000	18	42.508	42.549	0.812	3.250	(65 ksi) A607-65
L45	15.750-14.747	1.003	0.000	18	42.549	42.711	0.812	3.250	(65 ksi) A607-65
L46	14.747-14.497	0.250	0.000	18	42.711	42.752	0.487	1.950	(65 ksi) A607-65
L47	14.497-12.083	2.414	0.000	18	42.752	43.143	0.487	1.950	(65 ksi) A607-65
L48	12.083-11.833	0.250	0.000	18	43.143	43.183	0.738	2.950	(65 ksi) A607-65
L49	11.833-10.000	1.833	0.000	18	43.183	43.480	0.738	2.950	(65 ksi) A607-65
L50	10.000-9.750	0.250	0.000	18	43.480	43.521	0.738	2.950	(65 ksi) A607-65
L51	9.750-4.750	5.000	0.000	18	43.521	44.331	0.725	2.900	(65 ksi) A607-65
L52	4.750-0.000	4.750		18	44.331	45.100	0.713	2.850	(65 ksi) A607-65

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
L2	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
L3	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
	10.750	11.404	154.383	3.679	5.375	28.722	308.766	5.699	0.000	0
L4	23.000	24.835	1593.128	8.009	11.500	138.533	3186.255	12.410	0.000	0
	23.000	24.835	1593.128	8.009	11.500	138.533	3186.255	12.410	0.000	0
L5	23.316	18.052	1180.398	8.076	11.684	101.027	2362.350	9.028	3.608	14.432
	24.139	18.695	1311.023	8.364	12.095	108.389	2623.771	9.349	3.751	15.002

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L6	24.139	18.695	1311.023	8.364	12.095	108.389	2623.771	9.349	3.751	15.002
	24.961	19.338	1450.945	8.651	12.507	116.011	2903.799	9.671	3.893	15.572
L7	24.961	19.338	1450.945	8.651	12.507	116.011	2903.799	9.671	3.893	15.572
	25.784	19.980	1600.485	8.939	12.918	123.891	3203.076	9.992	4.036	16.143
L8	25.784	19.980	1600.485	8.939	12.918	123.891	3203.076	9.992	4.036	16.143
	26.606	20.623	1759.962	9.226	13.330	132.031	3522.239	10.313	4.178	16.713
L9	26.606	20.623	1759.962	9.226	13.330	132.031	3522.239	10.313	4.178	16.713
	27.429	21.266	1929.695	9.514	13.741	140.429	3861.930	10.635	4.321	17.283
L10	27.429	21.266	1929.695	9.514	13.741	140.429	3861.930	10.635	4.321	17.283
	28.251	21.909	2110.006	9.802	14.153	149.087	4222.788	10.956	4.463	17.853
L11	28.251	21.909	2110.006	9.802	14.153	149.087	4222.788	10.956	4.463	17.853
	29.403	22.808	2380.817	10.204	14.729	161.642	4764.767	11.406	4.663	18.652
L12	28.885	27.350	2627.203	9.789	14.166	185.454	5257.864	13.678	4.358	13.946
	29.091	28.153	2865.578	10.076	14.578	196.571	5734.926	14.079	4.501	14.402
L13	29.091	28.153	2865.578	10.076	14.578	196.571	5734.926	14.079	4.501	14.402
	29.817	28.863	3087.791	10.330	14.941	206.662	6179.644	14.434	4.626	14.805
L14	29.793	43.062	4557.476	10.275	14.941	305.026	9120.949	21.535	4.351	9.283
	29.834	43.122	4576.633	10.289	14.962	305.887	9159.288	21.565	4.359	9.298
L15	29.835	42.556	4518.533	10.291	14.962	302.004	9043.012	21.282	4.370	9.448
	30.658	43.745	4907.935	10.579	15.373	319.251	9822.329	21.877	4.512	9.756
L16	30.658	43.745	4907.935	10.579	15.373	319.251	9822.329	21.877	4.512	9.756
	31.480	44.934	5319.091	10.866	15.785	336.977	10645.180	22.471	4.655	10.064
L17	31.481	44.336	5250.426	10.869	15.785	332.627	10507.760	22.172	4.666	10.226
	31.906	44.942	5468.645	11.017	15.997	341.848	10944.485	22.475	4.739	10.388
L18	31.878	62.429	7508.022	10.953	15.997	469.331	15025.922	31.221	4.420	6.934
	31.919	62.511	7537.625	10.967	16.018	470.577	15085.167	31.261	4.427	6.945
L19	31.921	61.310	7398.802	10.972	16.018	461.910	14807.339	30.661	4.449	7.119
	32.744	62.917	7995.862	11.259	16.429	486.683	16002.245	31.464	4.592	7.347
L20	32.746	61.683	7845.213	11.264	16.429	477.514	15700.750	30.847	4.614	7.533
	33.568	63.257	8461.473	11.551	16.841	502.441	16934.079	31.635	4.757	7.766
L21	33.568	63.257	8461.473	11.551	16.841	502.441	16934.079	31.635	4.757	7.766
	34.473	64.989	9175.719	11.867	17.293	530.593	18363.512	32.501	4.913	8.022
L22	33.875	38.509	5092.625	11.486	16.626	306.303	10191.951	19.258	5.100	13.601
	34.039	39.521	5504.857	11.787	17.058	322.712	11016.957	19.764	5.250	14
L23	34.039	39.521	5504.857	11.787	17.058	322.712	11016.957	19.764	5.250	14
	34.862	40.485	5917.594	12.075	17.470	338.737	11842.974	20.246	5.392	14.38
L24	34.862	40.485	5917.594	12.075	17.470	338.737	11842.974	20.246	5.392	14.38
	34.889	40.517	5931.724	12.085	17.483	339.279	11871.253	20.262	5.397	14.393
L25	34.843	72.288	10397.295	11.978	17.483	594.698	20808.270	36.151	4.869	7.214
	34.884	72.375	10434.777	11.992	17.504	596.141	20883.284	36.194	4.876	7.224
L26	34.884	72.375	10434.777	11.992	17.504	596.141	20883.284	36.194	4.876	7.224
	34.939	72.491	10484.842	12.012	17.531	598.065	20983.481	36.252	4.886	7.238
L27	34.985	40.630	5981.229	12.118	17.531	341.175	11970.328	20.319	5.414	14.437
	35.026	40.678	6002.542	12.132	17.552	341.989	12012.982	20.343	5.421	14.456
L28	35.026	40.678	6002.542	12.132	17.552	341.989	12012.982	20.343	5.421	14.456
	35.848	41.642	6439.494	12.420	17.963	358.481	12887.461	20.825	5.564	14.836
L29	35.848	41.642	6439.494	12.420	17.963	358.481	12887.461	20.825	5.564	14.836
	36.671	42.606	6897.153	12.707	18.375	375.361	13803.381	21.307	5.706	15.216
L30	36.671	42.606	6897.153	12.707	18.375	375.361	13803.381	21.307	5.706	15.216
	37.493	43.570	7375.998	12.995	18.786	392.629	14761.701	21.789	5.849	15.596
L31	37.493	43.570	7375.998	12.995	18.786	392.629	14761.701	21.789	5.849	15.596
	38.316	44.534	7876.508	13.283	19.198	410.286	15763.381	22.271	5.991	15.976
L32	38.316	44.534	7876.508	13.283	19.198	410.286	15763.381	22.271	5.991	15.976
	39.426	45.835	8587.413	13.671	19.753	434.738	17186.126	22.922	6.184	16.49
L33	38.655	51.222	8804.959	13.095	18.961	464.381	17621.505	25.616	5.799	13.255
	38.819	52.571	9519.515	13.440	19.454	489.325	19051.557	26.291	5.970	13.646
L34	38.819	52.571	9519.515	13.440	19.454	489.325	19051.557	26.291	5.970	13.646
	39.642	53.696	10143.698	13.727	19.866	510.609	20300.743	26.853	6.113	13.972
L35	39.642	53.696	10143.698	13.727	19.866	510.609	20300.743	26.853	6.113	13.972
	40.464	54.821	10794.585	14.015	20.277	532.347	21603.375	27.416	6.255	14.298
L36	40.464	54.821	10794.585	14.015	20.277	532.347	21603.375	27.416	6.255	14.298
	41.137	55.740	11346.847	14.250	20.614	550.452	22708.624	27.875	6.372	14.564
L37	41.100	85.490	17197.656	14.166	20.614	834.283	34417.940	42.753	5.954	8.82

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L38	41.141	85.577	17250.073	14.180	20.634	835.992	34522.844	42.797	5.961	8.831
	41.141	85.577	17250.073	14.180	20.634	835.992	34522.844	42.797	5.961	8.831
L39	41.209	85.721	17336.900	14.204	20.668	838.818	34696.612	42.868	5.973	8.848
	41.246	55.889	11438.174	14.288	20.668	553.417	22891.398	27.950	6.391	14.607
L40	41.273	55.927	11461.255	14.298	20.682	554.166	22937.590	27.969	6.395	14.618
	41.238	84.216	17066.361	14.218	20.682	825.179	34155.177	42.116	5.999	9.056
L41	41.280	84.302	17118.187	14.232	20.703	826.863	34258.898	42.159	6.007	9.066
	41.280	84.302	17118.187	14.232	20.703	826.863	34258.898	42.159	6.007	9.066
L42	42.102	86.005	18176.861	14.520	21.114	860.889	36377.640	43.011	6.149	9.282
	42.102	86.005	18176.861	14.520	21.114	860.889	36377.640	43.011	6.149	9.282
L43	42.925	87.708	19278.309	14.807	21.526	895.602	38581.984	43.862	6.292	9.497
	42.925	87.708	19278.309	14.807	21.526	895.602	38581.984	43.862	6.292	9.497
L44	43.062	87.992	19466.026	14.855	21.594	901.452	38957.666	44.004	6.315	9.533
	43.038	107.528	23617.616	14.802	21.594	1093.708	47266.309	53.774	6.051	7.448
L45	43.080	107.632	23686.504	14.816	21.615	1095.854	47404.175	53.826	6.059	7.457
	43.080	107.632	23686.504	14.816	21.615	1095.854	47404.175	53.826	6.059	7.457
L46	43.245	108.051	23964.227	14.874	21.697	1104.485	47959.987	54.036	6.087	7.492
	43.295	65.333	14715.735	14.989	21.697	678.232	29450.832	32.673	6.659	13.66
L47	43.336	65.396	14758.120	15.004	21.718	679.541	29535.659	32.704	6.666	13.674
	43.336	65.396	14758.120	15.004	21.718	679.541	29535.659	32.704	6.666	13.674
L48	43.733	66.001	15171.588	15.143	21.916	692.247	30363.139	33.007	6.735	13.816
	43.694	99.263	22550.689	15.054	21.916	1028.940	45131.052	49.641	6.295	8.536
L49	43.735	99.358	22615.363	15.068	21.937	1030.923	45260.485	49.688	6.302	8.545
	43.735	99.358	22615.363	15.068	21.937	1030.923	45260.485	49.688	6.302	8.545
L50	44.037	100.053	23093.333	15.174	22.088	1045.522	46217.053	50.036	6.354	8.616
	44.037	100.053	23093.333	15.174	22.088	1045.522	46217.053	50.036	6.354	8.616
L51	44.078	100.148	23159.040	15.188	22.108	1047.521	46348.553	50.083	6.362	8.626
	44.080	98.479	22786.475	15.192	22.108	1030.669	45602.933	49.249	6.384	8.805
L52	44.903	100.343	24104.960	15.480	22.520	1070.385	48241.637	50.181	6.526	9.002
	44.904	98.641	23709.735	15.484	22.520	1052.835	47450.668	49.330	6.548	9.19
	45.686	100.381	24986.838	15.758	22.911	1090.614	50006.554	50.200	6.684	9.38

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L1 160.000- 155.000				1	1	1			
L2 155.000- 150.000				1	1	1			
L3 150.000- 148.500				1	1	1			
L4 148.500- 148.000				1	1	1			
L5 148.000- 143.000				1	1	1			
L6 143.000- 138.000				1	1	1			
L7 138.000- 133.000				1	1	1			
L8 133.000- 128.000				1	1	1			
L9 128.000- 123.000				1	1	1			
L10 123.000- 118.000				1	1	1			
L11 118.000- 111.000				1	1	1			
L12 111.000- 109.750				1	1	1			
L13 109.750- 105.333				1	1	1			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	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
ft	ft ²	in							
L14 105.333-105.083				1	1	0.957593			
L15 105.083-100.083				1	1	0.962316			
L16 100.083-95.083				1	1	0.954732			
L17 95.083-92.500				1	1	0.963802			
L18 92.500-92.250				1	1	0.933531			
L19 92.250-87.250				1	1	0.940278			
L20 87.250-82.250				1	1	0.947916			
L21 82.250-76.750				1	1	0.945209			
L22 76.750-75.750				1	1	1			
L23 75.750-70.750				1	1	1			
L24 70.750-70.583				1	1	1			
L25 70.583-70.333				1	1	1.04341			
L26 70.333-70.000				1	1	1.04263			
L27 70.000-69.750				1	1	1			
L28 69.750-64.750				1	1	1			
L29 64.750-59.750				1	1	1			
L30 59.750-54.750				1	1	1			
L31 54.750-49.750				1	1	1			
L32 49.750-43.000				1	1	1			
L33 43.000-42.000				1	1	1			
L34 42.000-37.000				1	1	1			
L35 37.000-32.000				1	1	1			
L36 32.000-27.913				1	1	1			
L37 27.913-27.663				1	1	1.03582			
L38 27.663-27.250				1	1	1.03517			
L39 27.250-27.083				1	1	1			
L40 27.083-26.833				1	1	0.965513			
L41 26.833-21.833				1	1	0.95947			
L42 21.833-16.833				1	1	0.953662			
L43 16.833-16.000				1	1	0.952716			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L44 16.000-15.750				1	1	0.946633			
L45 15.750-14.747				1	1	0.94505			
L46 14.747-14.497				1	1	1.15754			
L47 14.497-12.083				1	1	1.15516			
L48 12.083-11.833				1	1	0.938416			
L49 11.833-10.000				1	1	0.936018			
L50 10.000-9.750				1	1	0.935693			
L51 9.750-4.750				1	1	0.945082			
L52 4.750-0.000				1	1	0.955365			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
LDF7-50A(1-5/8)	A	No	Surface Ar (CaAa)	126.000 - 0.000	6	6	0.000 0.300	1.980		0.001
*										
CU12PSM9P6XXX(1-1/2)	B	No	Surface Ar (CaAa)	116.000 - 0.000	1	1	-0.230 -0.200	1.600		0.002
*										
MP306	B	No	Surface Af (CaAa)	15.500 - 0.500	1	1	0.000 0.050	6.890	19.000	0.000
MP306	C	No	Surface Af (CaAa)	15.500 - 0.500	1	1	-0.350 -0.300	6.890	19.000	0.000
*										
MP306	A	No	Surface Af (CaAa)	30.500 - 0.500	1	1	0.350 0.400	6.890	19.000	0.000
MP306	C	No	Surface Af (CaAa)	30.500 - 0.500	1	1	0.350 0.400	6.890	19.000	0.000
*										
MP306	B	No	Surface Af (CaAa)	31.330 - 11.330	1	1	0.350 0.400	6.890	19.000	0.000
*										
MP305	A	No	Surface Af (CaAa)	73.000 - 43.000	1	1	0.350 0.400	5.330	14.840	0.000
MP305	B	No	Surface Af (CaAa)	73.000 - 43.000	1	1	0.350 0.400	5.330	14.840	0.000
MP305	C	No	Surface Af (CaAa)	73.000 - 43.000	1	1	0.350 0.400	5.330	14.840	0.000
*										
MP304	A	No	Surface Af (CaAa)	106.750 - 76.750	1	1	0.350 0.400	4.780	12.780	0.000
MP304	B	No	Surface Af (CaAa)	106.750 - 76.750	1	1	0.350 0.400	4.780	12.780	0.000
MP304	C	No	Surface Af	106.750 -	1	1	0.350	4.780	12.780	0.000

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
			(CaAa)	76.750			0.400			
* 6.5"x1.25" Flat Reinforcement	A	No	Surface Af (CaAa)	49.500 - 24.500	1	1	-0.200 -0.150	6.500	15.500	0.000
6.5"x1.25" Flat Reinforcement	B	No	Surface Af (CaAa)	49.500 - 24.500	1	1	-0.200 -0.150	6.500	15.500	0.000
6.5"x1.25" Flat Reinforcement	C	No	Surface Af (CaAa)	49.500 - 24.500	1	1	-0.200 -0.150	6.500	15.500	0.000
* 6"x1" Flat Reinforcement	A	No	Surface Af (CaAa)	18.000 - 8.000	1	1	-0.200 -0.150	6.000	14.000	0.000
6"x1" Flat Reinforcement	B	No	Surface Af (CaAa)	18.000 - 8.000	1	1	-0.200 -0.150	6.000	14.000	0.000
6"x1" Flat Reinforcement	C	No	Surface Af (CaAa)	18.000 - 8.000	1	1	-0.200 -0.150	6.000	14.000	0.000
* 6"x1" Flat Reinforcement	A	No	Surface Af (CaAa)	82.500 - 67.500	1	1	-0.350 -0.300	6.000	14.000	0.000
6"x1" Flat Reinforcement	B	No	Surface Af (CaAa)	82.500 - 67.500	1	1	0.000 0.050	6.000	14.000	0.000
6"x1" Flat Reinforcement	C	No	Surface Af (CaAa)	82.500 - 67.500	1	1	-0.350 -0.300	6.000	14.000	0.000
* HSS6x6	A	No	Surface Af (CaAa)	155.500 - 140.000	1	1	-0.100 0.000	6.000	24.000	0.035
HSS6x6	B	No	Surface Af (CaAa)	155.500 - 140.000	1	1	-0.100 0.000	6.000	24.000	0.035
HSS6x6	C	No	Surface Af (CaAa)	155.500 - 140.000	1	1	-0.100 0.000	6.000	24.000	0.035
* 4"x1.25" Flat Reinforcement	A	No	Surface Af (CaAa)	94.000 - 79.000	1	1	-0.200 -0.150	4.000	10.500	0.000
4"x1.25" Flat Reinforcement	B	No	Surface Af (CaAa)	94.000 - 79.000	1	1	-0.200 -0.150	4.000	10.500	0.000
4"x1.25" Flat Reinforcement	C	No	Surface Af (CaAa)	94.000 - 79.000	1	1	-0.200 -0.150	4.000	10.500	0.000

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight klf
LD7-50A(1-5/8)	C	No	No	Inside Pole	157.000 - 0.000	6	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
FB-L98B-002-75000(3/8)	C	No	No	Inside Pole	157.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
FB-L98B-034-XXX(3/8)	C	No	No	Inside Pole	157.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
2" Rigid Conduit	C	No	No	Inside Pole	157.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.003 0.003 0.003
PWRT-608-S(13/16)	C	No	No	Inside Pole	157.000 - 0.000	8	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight klf
*									
HB158-21U6S24- xxM_TMO(1-5/8)	B	No	No	Inside Pole	149.000 - 0.000	3	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.003 0.003 0.003
*									
AL7-50(1-5/8)	B	No	No	Inside Pole	138.000 - 0.000	6	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
LDF4-50A(1/2)	B	No	No	Inside Pole	138.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
LCF214-50JA(2-1/4)	B	No	No	Inside Pole	138.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
*									
LDF7-50A(1-5/8)	A	No	No	Inside Pole	126.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
*									
LDF4-50A(1/2)	B	No	No	Inside Pole	48.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
*									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	160.000-155.000	A	0.000	0.000	0.474	0.000	0.018
		B	0.000	0.000	0.474	0.000	0.018
		C	0.000	0.000	0.474	0.000	0.049
L2	155.000-150.000	A	0.000	0.000	4.743	0.000	0.176
		B	0.000	0.000	4.743	0.000	0.176
		C	0.000	0.000	4.743	0.000	0.255
L3	150.000-148.500	A	0.000	0.000	1.423	0.000	0.053
		B	0.000	0.000	1.423	0.000	0.057
		C	0.000	0.000	1.423	0.000	0.076
L4	148.500-148.000	A	0.000	0.000	0.474	0.000	0.018
		B	0.000	0.000	0.474	0.000	0.021
		C	0.000	0.000	0.474	0.000	0.025
L5	148.000-143.000	A	0.000	0.000	4.743	0.000	0.176
		B	0.000	0.000	4.743	0.000	0.214
		C	0.000	0.000	4.743	0.000	0.255
L6	143.000-138.000	A	0.000	0.000	2.846	0.000	0.106
		B	0.000	0.000	2.846	0.000	0.143
		C	0.000	0.000	2.846	0.000	0.184
L7	138.000-133.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.060
		C	0.000	0.000	0.000	0.000	0.078
L8	133.000-128.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.060
		C	0.000	0.000	0.000	0.000	0.078
L9	128.000-123.000	A	0.000	0.000	3.564	0.000	0.017
		B	0.000	0.000	0.000	0.000	0.060
		C	0.000	0.000	0.000	0.000	0.078

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L10	123.000-118.000	A	0.000	0.000	5.940	0.000	0.029
		B	0.000	0.000	0.000	0.000	0.060
		C	0.000	0.000	0.000	0.000	0.078
L11	118.000-111.000	A	0.000	0.000	8.316	0.000	0.040
		B	0.000	0.000	0.800	0.000	0.095
		C	0.000	0.000	0.000	0.000	0.110
L12	111.000-109.750	A	0.000	0.000	1.485	0.000	0.007
		B	0.000	0.000	0.200	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.020
L13	109.750-105.333	A	0.000	0.000	6.376	0.000	0.025
		B	0.000	0.000	1.836	0.000	0.063
		C	0.000	0.000	1.129	0.000	0.069
L14	105.333-105.083	A	0.000	0.000	0.496	0.000	0.001
		B	0.000	0.000	0.239	0.000	0.004
		C	0.000	0.000	0.199	0.000	0.004
L15	105.083-100.083	A	0.000	0.000	9.923	0.000	0.029
		B	0.000	0.000	4.783	0.000	0.071
		C	0.000	0.000	3.983	0.000	0.078
L16	100.083-95.083	A	0.000	0.000	9.923	0.000	0.029
		B	0.000	0.000	4.783	0.000	0.071
		C	0.000	0.000	3.983	0.000	0.078
L17	95.083-92.500	A	0.000	0.000	6.126	0.000	0.015
		B	0.000	0.000	3.471	0.000	0.037
		C	0.000	0.000	3.058	0.000	0.040
L18	92.500-92.250	A	0.000	0.000	0.663	0.000	0.001
		B	0.000	0.000	0.406	0.000	0.004
		C	0.000	0.000	0.366	0.000	0.004
L19	92.250-87.250	A	0.000	0.000	13.257	0.000	0.029
		B	0.000	0.000	8.117	0.000	0.071
		C	0.000	0.000	7.317	0.000	0.078
L20	87.250-82.250	A	0.000	0.000	13.507	0.000	0.029
		B	0.000	0.000	8.367	0.000	0.071
		C	0.000	0.000	7.567	0.000	0.078
L21	82.250-76.750	A	0.000	0.000	18.582	0.000	0.032
		B	0.000	0.000	12.928	0.000	0.078
		C	0.000	0.000	12.048	0.000	0.086
L22	76.750-75.750	A	0.000	0.000	2.188	0.000	0.006
		B	0.000	0.000	1.160	0.000	0.014
		C	0.000	0.000	1.000	0.000	0.016
L23	75.750-70.750	A	0.000	0.000	12.939	0.000	0.029
		B	0.000	0.000	7.799	0.000	0.071
		C	0.000	0.000	6.999	0.000	0.078
L24	70.750-70.583	A	0.000	0.000	0.514	0.000	0.001
		B	0.000	0.000	0.342	0.000	0.002
		C	0.000	0.000	0.315	0.000	0.003
L25	70.583-70.333	A	0.000	0.000	0.769	0.000	0.001
		B	0.000	0.000	0.512	0.000	0.004
		C	0.000	0.000	0.472	0.000	0.004
L26	70.333-70.000	A	0.000	0.000	1.024	0.000	0.002
		B	0.000	0.000	0.682	0.000	0.005
		C	0.000	0.000	0.629	0.000	0.005
L27	70.000-69.750	A	0.000	0.000	0.769	0.000	0.001
		B	0.000	0.000	0.512	0.000	0.004
		C	0.000	0.000	0.472	0.000	0.004
L28	69.750-64.750	A	0.000	0.000	12.632	0.000	0.029
		B	0.000	0.000	7.492	0.000	0.071
		C	0.000	0.000	6.692	0.000	0.078
L29	64.750-59.750	A	0.000	0.000	10.382	0.000	0.029
		B	0.000	0.000	5.242	0.000	0.071
		C	0.000	0.000	4.442	0.000	0.078
L30	59.750-54.750	A	0.000	0.000	10.382	0.000	0.029
		B	0.000	0.000	5.242	0.000	0.071

Tower Section	Tower Elevation ft	Face	A_R	A_F	C_{AA} In Face	C_{AA} Out Face	Weight K
			ft ²	ft ²	ft ²	ft ²	
L31	54.750-49.750	C	0.000	0.000	4.442	0.000	0.078
		A	0.000	0.000	10.382	0.000	0.029
		B	0.000	0.000	5.242	0.000	0.071
L32	49.750-43.000	C	0.000	0.000	4.442	0.000	0.078
		A	0.000	0.000	21.057	0.000	0.039
		B	0.000	0.000	14.118	0.000	0.097
L33	43.000-42.000	C	0.000	0.000	13.038	0.000	0.106
		A	0.000	0.000	2.271	0.000	0.006
		B	0.000	0.000	1.243	0.000	0.014
L34	42.000-37.000	C	0.000	0.000	1.083	0.000	0.016
		A	0.000	0.000	11.357	0.000	0.029
		B	0.000	0.000	6.217	0.000	0.072
L35	37.000-32.000	C	0.000	0.000	5.417	0.000	0.078
		A	0.000	0.000	11.357	0.000	0.029
		B	0.000	0.000	6.217	0.000	0.072
L36	32.000-27.913	C	0.000	0.000	5.417	0.000	0.078
		A	0.000	0.000	12.254	0.000	0.023
		B	0.000	0.000	9.005	0.000	0.059
L37	27.913-27.663	C	0.000	0.000	7.398	0.000	0.064
		A	0.000	0.000	0.855	0.000	0.001
		B	0.000	0.000	0.598	0.000	0.004
L38	27.663-27.250	C	0.000	0.000	0.558	0.000	0.004
		A	0.000	0.000	1.412	0.000	0.002
		B	0.000	0.000	0.988	0.000	0.006
L39	27.250-27.083	C	0.000	0.000	0.922	0.000	0.006
		A	0.000	0.000	0.571	0.000	0.001
		B	0.000	0.000	0.399	0.000	0.002
L40	27.083-26.833	C	0.000	0.000	0.373	0.000	0.003
		A	0.000	0.000	0.855	0.000	0.001
		B	0.000	0.000	0.598	0.000	0.004
L41	26.833-21.833	C	0.000	0.000	0.558	0.000	0.004
		A	0.000	0.000	14.209	0.000	0.029
		B	0.000	0.000	9.069	0.000	0.072
L42	21.833-16.833	C	0.000	0.000	8.269	0.000	0.078
		A	0.000	0.000	12.746	0.000	0.029
		B	0.000	0.000	7.606	0.000	0.072
L43	16.833-16.000	C	0.000	0.000	6.806	0.000	0.078
		A	0.000	0.000	2.706	0.000	0.005
		B	0.000	0.000	1.850	0.000	0.012
L44	16.000-15.750	C	0.000	0.000	1.716	0.000	0.013
		A	0.000	0.000	0.812	0.000	0.001
		B	0.000	0.000	0.555	0.000	0.004
L45	15.750-14.747	C	0.000	0.000	0.515	0.000	0.004
		A	0.000	0.000	3.258	0.000	0.006
		B	0.000	0.000	3.084	0.000	0.014
L46	14.747-14.497	C	0.000	0.000	2.923	0.000	0.016
		A	0.000	0.000	0.812	0.000	0.001
		B	0.000	0.000	0.839	0.000	0.004
L47	14.497-12.083	C	0.000	0.000	0.799	0.000	0.004
		A	0.000	0.000	7.842	0.000	0.014
		B	0.000	0.000	8.106	0.000	0.035
L48	12.083-11.833	C	0.000	0.000	7.720	0.000	0.038
		A	0.000	0.000	0.812	0.000	0.001
		B	0.000	0.000	0.839	0.000	0.004
L49	11.833-10.000	C	0.000	0.000	0.799	0.000	0.004
		A	0.000	0.000	5.954	0.000	0.011
		B	0.000	0.000	4.628	0.000	0.026
L50	10.000-9.750	C	0.000	0.000	5.862	0.000	0.029
		A	0.000	0.000	0.812	0.000	0.001
		B	0.000	0.000	0.552	0.000	0.004
L51	9.750-4.750	C	0.000	0.000	0.799	0.000	0.004
		A	0.000	0.000	13.278	0.000	0.029

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L52	4.750-0.000	B	0.000	0.000	8.083	0.000	0.072
		C	0.000	0.000	13.025	0.000	0.078
		A	0.000	0.000	10.523	0.000	0.027
		B	0.000	0.000	5.594	0.000	0.068
		C	0.000	0.000	9.715	0.000	0.074

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 _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	160.000-155.000	A	0.994	0.000	0.000	0.537	0.000	0.023
		B		0.000	0.000	0.537	0.000	0.023
		C		0.000	0.000	0.537	0.000	0.054
L2	155.000-150.000	A	0.991	0.000	0.000	5.370	0.000	0.230
		B		0.000	0.000	5.370	0.000	0.230
		C		0.000	0.000	5.370	0.000	0.308
L3	150.000-148.500	A	0.988	0.000	0.000	1.611	0.000	0.069
		B		0.000	0.000	1.611	0.000	0.073
		C		0.000	0.000	1.611	0.000	0.092
L4	148.500-148.000	A	0.988	0.000	0.000	0.537	0.000	0.023
		B		0.000	0.000	0.537	0.000	0.027
		C		0.000	0.000	0.537	0.000	0.031
L5	148.000-143.000	A	0.986	0.000	0.000	5.367	0.000	0.230
		B		0.000	0.000	5.367	0.000	0.267
		C		0.000	0.000	5.367	0.000	0.308
L6	143.000-138.000	A	0.982	0.000	0.000	3.219	0.000	0.138
		B		0.000	0.000	3.219	0.000	0.175
		C		0.000	0.000	3.219	0.000	0.216
L7	138.000-133.000	A	0.979	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.060
		C		0.000	0.000	0.000	0.000	0.078
L8	133.000-128.000	A	0.975	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.060
		C		0.000	0.000	0.000	0.000	0.078
L9	128.000-123.000	A	0.971	0.000	0.000	5.184	0.000	0.055
		B		0.000	0.000	0.000	0.000	0.060
		C		0.000	0.000	0.000	0.000	0.078
L10	123.000-118.000	A	0.968	0.000	0.000	8.634	0.000	0.092
		B		0.000	0.000	0.000	0.000	0.060
		C		0.000	0.000	0.000	0.000	0.078
L11	118.000-111.000	A	0.963	0.000	0.000	12.080	0.000	0.128
		B		0.000	0.000	1.763	0.000	0.110
		C		0.000	0.000	0.000	0.000	0.110
L12	111.000-109.750	A	0.959	0.000	0.000	2.157	0.000	0.023
		B		0.000	0.000	0.441	0.000	0.022
		C		0.000	0.000	0.000	0.000	0.020
L13	109.750-105.333	A	0.957	0.000	0.000	9.016	0.000	0.089
		B		0.000	0.000	2.952	0.000	0.085
		C		0.000	0.000	1.400	0.000	0.078
L14	105.333-105.083	A	0.954	0.000	0.000	0.678	0.000	0.006
		B		0.000	0.000	0.335	0.000	0.006
		C		0.000	0.000	0.247	0.000	0.005
L15	105.083-100.083	A	0.952	0.000	0.000	13.550	0.000	0.121
		B		0.000	0.000	6.687	0.000	0.116
		C		0.000	0.000	4.935	0.000	0.109
L16	100.083-95.083	A	0.947	0.000	0.000	13.540	0.000	0.120
		B		0.000	0.000	6.678	0.000	0.116
		C		0.000	0.000	4.931	0.000	0.108
L17	95.083-92.500	A	0.944	0.000	0.000	8.273	0.000	0.070

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight K
		B		0.000	0.000	4.729	0.000	0.068
		C		0.000	0.000	3.828	0.000	0.064
L18	92.500-92.250	A	0.942	0.000	0.000	0.890	0.000	0.007
		B		0.000	0.000	0.547	0.000	0.007
		C		0.000	0.000	0.460	0.000	0.007
L19	92.250-87.250	A	0.939	0.000	0.000	17.795	0.000	0.145
		B		0.000	0.000	10.935	0.000	0.141
		C		0.000	0.000	9.196	0.000	0.134
L20	87.250-82.250	A	0.934	0.000	0.000	18.071	0.000	0.146
		B		0.000	0.000	11.213	0.000	0.142
		C		0.000	0.000	9.479	0.000	0.135
L21	82.250-76.750	A	0.928	0.000	0.000	24.075	0.000	0.182
		B		0.000	0.000	16.533	0.000	0.178
		C		0.000	0.000	14.632	0.000	0.170
L22	76.750-75.750	A	0.924	0.000	0.000	2.892	0.000	0.024
		B		0.000	0.000	1.520	0.000	0.023
		C		0.000	0.000	1.175	0.000	0.022
L23	75.750-70.750	A	0.921	0.000	0.000	16.857	0.000	0.135
		B		0.000	0.000	10.002	0.000	0.132
		C		0.000	0.000	8.281	0.000	0.124
L24	70.750-70.583	A	0.917	0.000	0.000	0.661	0.000	0.005
		B		0.000	0.000	0.432	0.000	0.005
		C		0.000	0.000	0.375	0.000	0.005
L25	70.583-70.333	A	0.917	0.000	0.000	0.990	0.000	0.008
		B		0.000	0.000	0.647	0.000	0.007
		C		0.000	0.000	0.561	0.000	0.007
L26	70.333-70.000	A	0.917	0.000	0.000	1.318	0.000	0.010
		B		0.000	0.000	0.862	0.000	0.010
		C		0.000	0.000	0.748	0.000	0.009
L27	70.000-69.750	A	0.916	0.000	0.000	0.990	0.000	0.008
		B		0.000	0.000	0.647	0.000	0.007
		C		0.000	0.000	0.561	0.000	0.007
L28	69.750-64.750	A	0.913	0.000	0.000	16.559	0.000	0.135
		B		0.000	0.000	9.706	0.000	0.132
		C		0.000	0.000	7.993	0.000	0.125
L29	64.750-59.750	A	0.906	0.000	0.000	13.904	0.000	0.120
		B		0.000	0.000	7.053	0.000	0.117
		C		0.000	0.000	5.347	0.000	0.110
L30	59.750-54.750	A	0.898	0.000	0.000	13.887	0.000	0.119
		B		0.000	0.000	7.038	0.000	0.117
		C		0.000	0.000	5.340	0.000	0.110
L31	54.750-49.750	A	0.890	0.000	0.000	13.869	0.000	0.118
		B		0.000	0.000	7.022	0.000	0.116
		C		0.000	0.000	5.332	0.000	0.110
L32	49.750-43.000	A	0.879	0.000	0.000	26.876	0.000	0.200
		B		0.000	0.000	17.635	0.000	0.199
		C		0.000	0.000	15.368	0.000	0.189
L33	43.000-42.000	A	0.872	0.000	0.000	2.964	0.000	0.024
		B		0.000	0.000	1.595	0.000	0.024
		C		0.000	0.000	1.259	0.000	0.022
L34	42.000-37.000	A	0.865	0.000	0.000	14.789	0.000	0.117
		B		0.000	0.000	7.947	0.000	0.117
		C		0.000	0.000	6.282	0.000	0.110
L35	37.000-32.000	A	0.854	0.000	0.000	14.763	0.000	0.116
		B		0.000	0.000	7.924	0.000	0.116
		C		0.000	0.000	6.270	0.000	0.109
L36	32.000-27.913	A	0.842	0.000	0.000	15.451	0.000	0.112
		B		0.000	0.000	10.957	0.000	0.119
		C		0.000	0.000	8.522	0.000	0.108
L37	27.913-27.663	A	0.836	0.000	0.000	1.065	0.000	0.007
		B		0.000	0.000	0.723	0.000	0.008
		C		0.000	0.000	0.641	0.000	0.007

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L38	27.663-27.250	A	0.835	0.000	0.000	1.759	0.000	0.012
		B		0.000	0.000	1.195	0.000	0.012
		C		0.000	0.000	1.060	0.000	0.012
L39	27.250-27.083	A	0.834	0.000	0.000	0.711	0.000	0.005
		B		0.000	0.000	0.483	0.000	0.005
		C		0.000	0.000	0.428	0.000	0.005
L40	27.083-26.833	A	0.833	0.000	0.000	1.065	0.000	0.007
		B		0.000	0.000	0.723	0.000	0.008
		C		0.000	0.000	0.641	0.000	0.007
L41	26.833-21.833	A	0.824	0.000	0.000	17.934	0.000	0.132
		B		0.000	0.000	11.103	0.000	0.134
		C		0.000	0.000	9.478	0.000	0.128
L42	21.833-16.833	A	0.806	0.000	0.000	16.145	0.000	0.122
		B		0.000	0.000	9.319	0.000	0.125
		C		0.000	0.000	7.713	0.000	0.119
L43	16.833-16.000	A	0.793	0.000	0.000	3.322	0.000	0.023
		B		0.000	0.000	2.185	0.000	0.024
		C		0.000	0.000	1.920	0.000	0.023
L44	16.000-15.750	A	0.790	0.000	0.000	0.997	0.000	0.007
		B		0.000	0.000	0.655	0.000	0.007
		C		0.000	0.000	0.576	0.000	0.007
L45	15.750-14.747	A	0.787	0.000	0.000	3.996	0.000	0.028
		B		0.000	0.000	3.551	0.000	0.034
		C		0.000	0.000	3.232	0.000	0.033
L46	14.747-14.497	A	0.784	0.000	0.000	0.996	0.000	0.007
		B		0.000	0.000	0.961	0.000	0.009
		C		0.000	0.000	0.882	0.000	0.009
L47	14.497-12.083	A	0.776	0.000	0.000	9.604	0.000	0.067
		B		0.000	0.000	9.267	0.000	0.085
		C		0.000	0.000	8.506	0.000	0.082
L48	12.083-11.833	A	0.768	0.000	0.000	0.993	0.000	0.007
		B		0.000	0.000	0.958	0.000	0.009
		C		0.000	0.000	0.880	0.000	0.008
L49	11.833-10.000	A	0.761	0.000	0.000	7.277	0.000	0.050
		B		0.000	0.000	5.290	0.000	0.055
		C		0.000	0.000	6.447	0.000	0.062
L50	10.000-9.750	A	0.753	0.000	0.000	0.991	0.000	0.007
		B		0.000	0.000	0.631	0.000	0.007
		C		0.000	0.000	0.879	0.000	0.008
L51	9.750-4.750	A	0.730	0.000	0.000	16.544	0.000	0.116
		B		0.000	0.000	9.360	0.000	0.122
		C		0.000	0.000	14.302	0.000	0.148
L52	4.750-0.000	A	0.653	0.000	0.000	13.265	0.000	0.092
		B		0.000	0.000	6.526	0.000	0.100
		C		0.000	0.000	10.581	0.000	0.121

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
L1	160.000-155.000	0.000	0.000	0.000	0.000
L2	155.000-150.000	0.000	0.000	0.000	0.000
L3	150.000-148.500	0.000	0.000	0.000	0.000
L4	148.500-148.000	0.000	0.000	0.000	0.000
L5	148.000-143.000	0.000	0.000	0.000	0.000
L6	143.000-138.000	0.000	0.000	0.000	0.000
L7	138.000-133.000	0.000	0.000	0.000	0.000

Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
L8	133.000-128.000	0.000	0.000	0.000	0.000
L9	128.000-123.000	-2.913	-3.236	-2.362	-2.623
L10	123.000-118.000	-4.060	-4.509	-3.274	-3.637
L11	118.000-111.000	-3.638	-4.859	-2.783	-4.086
L12	111.000-109.750	-3.469	-4.980	-2.592	-4.244
L13	109.750-105.333	-2.805	-4.026	-2.237	-3.660
L14	105.333-105.083	-1.998	-2.868	-1.731	-2.831
L15	105.083-100.083	-2.015	-2.893	-1.746	-2.855
L16	100.083-95.083	-2.048	-2.940	-1.775	-2.900
L17	95.083-92.500	-1.720	-2.469	-1.538	-2.511
L18	92.500-92.250	-1.540	-2.211	-1.400	-2.286
L19	92.250-87.250	-1.554	-2.231	-1.413	-2.307
L20	87.250-82.250	-1.427	-2.146	-1.318	-2.245
L21	82.250-76.750	0.724	-0.508	0.441	-0.887
L22	76.750-75.750	1.124	-0.789	0.644	-1.293
L23	75.750-70.750	0.958	-0.671	0.565	-1.132
L24	70.750-70.583	0.812	-0.567	0.493	-0.984
L25	70.583-70.333	0.813	-0.568	0.493	-0.984
L26	70.333-70.000	0.814	-0.568	0.494	-0.985
L27	70.000-69.750	0.814	-0.568	0.494	-0.986
L28	69.750-64.750	-0.510	-1.689	-0.620	-1.956
L29	64.750-59.750	-2.142	-3.077	-1.890	-3.068
L30	59.750-54.750	-2.171	-3.118	-1.915	-3.106
L31	54.750-49.750	-2.199	-3.158	-1.940	-3.142
L32	49.750-43.000	-1.497	-2.150	-1.435	-2.320
L33	43.000-42.000	-2.040	-2.930	-1.855	-2.999
L34	42.000-37.000	-2.056	-2.953	-1.870	-3.017
L35	37.000-32.000	-2.082	-2.990	-1.894	-3.050
L36	32.000-27.913	-1.159	-1.763	-1.178	-2.032
L37	27.913-27.663	-1.425	-2.047	-1.401	-2.249
L38	27.663-27.250	-1.426	-2.049	-1.402	-2.251
L39	27.250-27.083	-1.427	-2.050	-1.403	-2.252
L40	27.083-26.833	-1.428	-2.052	-1.404	-2.253
L41	26.833-21.833	-1.721	-2.473	-1.641	-2.630
L42	21.833-16.833	-1.934	-2.779	-1.815	-2.899
L43	16.833-16.000	-1.545	-2.220	-1.525	-2.430
L44	16.000-15.750	-1.548	-2.224	-1.527	-2.433
L45	15.750-14.747	1.960	-1.940	1.331	-2.177
L46	14.747-14.497	2.914	-1.865	2.139	-2.106
L47	14.497-12.083	2.925	-1.872	2.147	-2.112
L48	12.083-11.833	2.937	-1.879	2.155	-2.118
L49	11.833-10.000	1.868	-3.570	1.188	-3.584
L50	10.000-9.750	1.425	-4.283	0.792	-4.192
L51	9.750-4.750	1.702	-5.114	0.918	-4.836
L52	4.750-0.000	1.598	-5.748	0.748	-5.253

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	55	HSS6x6	155.00 - 155.50	1.0000	1.0000
L1	56	HSS6x6	155.00 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_g No Ice	K_g Ice
			155.50		
L1	57	HSS6x6	155.00 - 155.50	1.0000	1.0000
L2	55	HSS6x6	150.00 - 155.00	1.0000	1.0000
L2	56	HSS6x6	150.00 - 155.00	1.0000	1.0000
L2	57	HSS6x6	150.00 - 155.00	1.0000	1.0000
L3	55	HSS6x6	148.50 - 150.00	1.0000	1.0000
L3	56	HSS6x6	148.50 - 150.00	1.0000	1.0000
L3	57	HSS6x6	148.50 - 150.00	1.0000	1.0000
L4	55	HSS6x6	148.00 - 148.50	1.0000	1.0000
L4	56	HSS6x6	148.00 - 148.50	1.0000	1.0000
L4	57	HSS6x6	148.00 - 148.50	1.0000	1.0000
L5	55	HSS6x6	143.00 - 148.00	1.0000	1.0000
L5	56	HSS6x6	143.00 - 148.00	1.0000	1.0000
L5	57	HSS6x6	143.00 - 148.00	1.0000	1.0000
L6	55	HSS6x6	140.00 - 143.00	1.0000	1.0000
L6	56	HSS6x6	140.00 - 143.00	1.0000	1.0000
L6	57	HSS6x6	140.00 - 143.00	1.0000	1.0000
L9	17	LDF7-50A(1-5/8)	123.00 - 126.00	1.0000	1.0000
L10	17	LDF7-50A(1-5/8)	118.00 - 123.00	1.0000	1.0000
L11	17	LDF7-50A(1-5/8)	111.00 - 118.00	1.0000	1.0000
L11	21	CU12PSM9P6XXX(1-1/2)	111.00 - 116.00	1.0000	1.0000
L12	17	LDF7-50A(1-5/8)	109.75 - 111.00	1.0000	1.0000
L12	21	CU12PSM9P6XXX(1-1/2)	109.75 - 111.00	1.0000	1.0000
L13	17	LDF7-50A(1-5/8)	105.33 - 109.75	1.0000	1.0000
L13	21	CU12PSM9P6XXX(1-1/2)	105.33 - 109.75	1.0000	1.0000
L13	39	MP304	105.33 - 106.75	1.0000	1.0000
L13	40	MP304	105.33 - 106.75	1.0000	1.0000
L13	41	MP304	105.33 - 106.75	1.0000	1.0000
L14	17	LDF7-50A(1-5/8)	105.08 - 105.33	1.0000	1.0000
L14	21	CU12PSM9P6XXX(1-1/2)	105.08 - 105.33	1.0000	1.0000
L14	39	MP304	105.08 - 105.33	1.0000	1.0000
L14	40	MP304	105.08 - 105.33	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L14	41	MP304	105.08 - 105.33	1.0000	1.0000
L15	17	LDF7-50A(1-5/8)	100.08 - 105.08	1.0000	1.0000
L15	21	CU12PSM9P6XXX(1-1/2)	100.08 - 105.08	1.0000	1.0000
L15	39	MP304	100.08 - 105.08	1.0000	1.0000
L15	40	MP304	100.08 - 105.08	1.0000	1.0000
L15	41	MP304	100.08 - 105.08	1.0000	1.0000
L16	17	LDF7-50A(1-5/8)	95.08 - 100.08	1.0000	1.0000
L16	21	CU12PSM9P6XXX(1-1/2)	95.08 - 100.08	1.0000	1.0000
L16	39	MP304	95.08 - 100.08	1.0000	1.0000
L16	40	MP304	95.08 - 100.08	1.0000	1.0000
L16	41	MP304	95.08 - 100.08	1.0000	1.0000
L17	17	LDF7-50A(1-5/8)	92.50 - 95.08	1.0000	1.0000
L17	21	CU12PSM9P6XXX(1-1/2)	92.50 - 95.08	1.0000	1.0000
L17	39	MP304	92.50 - 95.08	1.0000	1.0000
L17	40	MP304	92.50 - 95.08	1.0000	1.0000
L17	41	MP304	92.50 - 95.08	1.0000	1.0000
L17	59	4"x1.25" Flat Reinforcement	92.50 - 94.00	1.0000	1.0000
L17	60	4"x1.25" Flat Reinforcement	92.50 - 94.00	1.0000	1.0000
L17	61	4"x1.25" Flat Reinforcement	92.50 - 94.00	1.0000	1.0000
L18	17	LDF7-50A(1-5/8)	92.25 - 92.50	1.0000	1.0000
L18	21	CU12PSM9P6XXX(1-1/2)	92.25 - 92.50	1.0000	1.0000
L18	39	MP304	92.25 - 92.50	1.0000	1.0000
L18	40	MP304	92.25 - 92.50	1.0000	1.0000
L18	41	MP304	92.25 - 92.50	1.0000	1.0000
L18	59	4"x1.25" Flat Reinforcement	92.25 - 92.50	1.0000	1.0000
L18	60	4"x1.25" Flat Reinforcement	92.25 - 92.50	1.0000	1.0000
L18	61	4"x1.25" Flat Reinforcement	92.25 - 92.50	1.0000	1.0000
L19	17	LDF7-50A(1-5/8)	87.25 - 92.25	1.0000	1.0000
L19	21	CU12PSM9P6XXX(1-1/2)	87.25 - 92.25	1.0000	1.0000
L19	39	MP304	87.25 - 92.25	1.0000	1.0000
L19	40	MP304	87.25 - 92.25	1.0000	1.0000
L19	41	MP304	87.25 - 92.25	1.0000	1.0000
L19	59	4"x1.25" Flat Reinforcement	87.25 - 92.25	1.0000	1.0000
L19	60	4"x1.25" Flat Reinforcement	87.25 - 92.25	1.0000	1.0000
L19	61	4"x1.25" Flat Reinforcement	87.25 - 92.25	1.0000	1.0000
L20	17	LDF7-50A(1-5/8)	82.25 - 87.25	1.0000	1.0000
L20	21	CU12PSM9P6XXX(1-1/2)	82.25 - 87.25	1.0000	1.0000
L20	39	MP304	82.25 - 87.25	1.0000	1.0000
L20	40	MP304	82.25 - 87.25	1.0000	1.0000
L20	41	MP304	82.25 - 87.25	1.0000	1.0000
L20	51	6"x1" Flat Reinforcement	82.25 - 82.50	1.0000	1.0000
L20	52	6"x1" Flat Reinforcement	82.25 - 82.50	1.0000	1.0000
L20	53	6"x1" Flat Reinforcement	82.25 - 82.50	1.0000	1.0000
L20	59	4"x1.25" Flat Reinforcement	82.25 - 87.25	1.0000	1.0000
L20	60	4"x1.25" Flat Reinforcement	82.25 - 87.25	1.0000	1.0000
L20	61	4"x1.25" Flat Reinforcement	82.25 - 87.25	1.0000	1.0000
L21	17	LDF7-50A(1-5/8)	76.75 - 82.25	1.0000	1.0000
L21	21	CU12PSM9P6XXX(1-1/2)	76.75 - 82.25	1.0000	1.0000
L21	39	MP304	76.75 - 82.25	1.0000	1.0000
L21	40	MP304	76.75 - 82.25	1.0000	1.0000
L21	41	MP304	76.75 - 82.25	1.0000	1.0000
L21	51	6"x1" Flat Reinforcement	76.75 - 82.25	1.0000	1.0000
L21	52	6"x1" Flat Reinforcement	76.75 - 82.25	1.0000	1.0000
L21	53	6"x1" Flat Reinforcement	76.75 - 82.25	1.0000	1.0000
L21	59	4"x1.25" Flat Reinforcement	79.00 - 82.25	1.0000	1.0000
L21	60	4"x1.25" Flat Reinforcement	79.00 - 82.25	1.0000	1.0000
L21	61	4"x1.25" Flat Reinforcement	79.00 - 82.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L22	17	LDF7-50A(1-5/8)	75.75 - 76.75	1.0000	1.0000
L22	21	CU12PSM9P6XXX(1-1/2)	75.75 - 76.75	1.0000	1.0000
L22	51	6"x1" Flat Reinforcement	75.75 - 76.75	1.0000	1.0000
L22	52	6"x1" Flat Reinforcement	75.75 - 76.75	1.0000	1.0000
L22	53	6"x1" Flat Reinforcement	75.75 - 76.75	1.0000	1.0000
L23	17	LDF7-50A(1-5/8)	70.75 - 75.75	1.0000	1.0000
L23	21	CU12PSM9P6XXX(1-1/2)	70.75 - 75.75	1.0000	1.0000
L23	35	MP305	70.75 - 73.00	1.0000	1.0000
L23	36	MP305	70.75 - 73.00	1.0000	1.0000
L23	37	MP305	70.75 - 73.00	1.0000	1.0000
L23	51	6"x1" Flat Reinforcement	70.75 - 75.75	1.0000	1.0000
L23	52	6"x1" Flat Reinforcement	70.75 - 75.75	1.0000	1.0000
L23	53	6"x1" Flat Reinforcement	70.75 - 75.75	1.0000	1.0000
L24	17	LDF7-50A(1-5/8)	70.58 - 70.75	1.0000	1.0000
L24	21	CU12PSM9P6XXX(1-1/2)	70.58 - 70.75	1.0000	1.0000
L24	35	MP305	70.58 - 70.75	1.0000	1.0000
L24	36	MP305	70.58 - 70.75	1.0000	1.0000
L24	37	MP305	70.58 - 70.75	1.0000	1.0000
L24	51	6"x1" Flat Reinforcement	70.58 - 70.75	1.0000	1.0000
L24	52	6"x1" Flat Reinforcement	70.58 - 70.75	1.0000	1.0000
L24	53	6"x1" Flat Reinforcement	70.58 - 70.75	1.0000	1.0000
L25	17	LDF7-50A(1-5/8)	70.33 - 70.58	1.0000	1.0000
L25	21	CU12PSM9P6XXX(1-1/2)	70.33 - 70.58	1.0000	1.0000
L25	35	MP305	70.33 - 70.58	1.0000	1.0000
L25	36	MP305	70.33 - 70.58	1.0000	1.0000
L25	37	MP305	70.33 - 70.58	1.0000	1.0000
L25	51	6"x1" Flat Reinforcement	70.33 - 70.58	1.0000	1.0000
L25	52	6"x1" Flat Reinforcement	70.33 - 70.58	1.0000	1.0000
L25	53	6"x1" Flat Reinforcement	70.33 - 70.58	1.0000	1.0000
L26	17	LDF7-50A(1-5/8)	70.00 - 70.33	1.0000	1.0000
L26	21	CU12PSM9P6XXX(1-1/2)	70.00 - 70.33	1.0000	1.0000
L26	35	MP305	70.00 - 70.33	1.0000	1.0000
L26	36	MP305	70.00 - 70.33	1.0000	1.0000
L26	37	MP305	70.00 - 70.33	1.0000	1.0000
L26	51	6"x1" Flat Reinforcement	70.00 - 70.33	1.0000	1.0000
L26	52	6"x1" Flat Reinforcement	70.00 - 70.33	1.0000	1.0000
L26	53	6"x1" Flat Reinforcement	70.00 - 70.33	1.0000	1.0000
L27	17	LDF7-50A(1-5/8)	69.75 - 70.00	1.0000	1.0000
L27	21	CU12PSM9P6XXX(1-1/2)	69.75 - 70.00	1.0000	1.0000
L27	35	MP305	69.75 - 70.00	1.0000	1.0000
L27	36	MP305	69.75 - 70.00	1.0000	1.0000
L27	37	MP305	69.75 - 70.00	1.0000	1.0000
L27	51	6"x1" Flat Reinforcement	69.75 - 70.00	1.0000	1.0000
L27	52	6"x1" Flat Reinforcement	69.75 - 70.00	1.0000	1.0000
L27	53	6"x1" Flat Reinforcement	69.75 - 70.00	1.0000	1.0000
L28	17	LDF7-50A(1-5/8)	64.75 - 69.75	1.0000	1.0000
L28	21	CU12PSM9P6XXX(1-1/2)	64.75 - 69.75	1.0000	1.0000
L28	35	MP305	64.75 - 69.75	1.0000	1.0000
L28	36	MP305	64.75 - 69.75	1.0000	1.0000
L28	37	MP305	64.75 - 69.75	1.0000	1.0000
L28	51	6"x1" Flat Reinforcement	67.50 - 69.75	1.0000	1.0000
L28	52	6"x1" Flat Reinforcement	67.50 - 69.75	1.0000	1.0000
L28	53	6"x1" Flat Reinforcement	67.50 - 69.75	1.0000	1.0000
L29	17	LDF7-50A(1-5/8)	59.75 - 64.75	1.0000	1.0000
L29	21	CU12PSM9P6XXX(1-1/2)	59.75 - 64.75	1.0000	1.0000
L29	35	MP305	59.75 - 64.75	1.0000	1.0000
L29	36	MP305	59.75 - 64.75	1.0000	1.0000
L29	37	MP305	59.75 - 64.75	1.0000	1.0000
L30	17	LDF7-50A(1-5/8)	54.75 - 59.75	1.0000	1.0000
L30	21	CU12PSM9P6XXX(1-1/2)	54.75 - 59.75	1.0000	1.0000
L30	35	MP305	54.75 - 59.75	1.0000	1.0000
L30	36	MP305	54.75 - 59.75	1.0000	1.0000
L30	37	MP305	54.75 - 59.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _o No Ice	K _o Ice
L31	17	LDF7-50A(1-5/8)	49.75 - 54.75	1.0000	1.0000
L31	21	CU12PSM9P6XXX(1-1/2)	49.75 - 54.75	1.0000	1.0000
L31	35	MP305	49.75 - 54.75	1.0000	1.0000
L31	36	MP305	49.75 - 54.75	1.0000	1.0000
L31	37	MP305	49.75 - 54.75	1.0000	1.0000
L32	17	LDF7-50A(1-5/8)	43.00 - 49.75	1.0000	1.0000
L32	21	CU12PSM9P6XXX(1-1/2)	43.00 - 49.75	1.0000	1.0000
L32	35	MP305	43.00 - 49.75	1.0000	1.0000
L32	36	MP305	43.00 - 49.75	1.0000	1.0000
L32	37	MP305	43.00 - 49.75	1.0000	1.0000
L32	43	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	1.0000	1.0000
L32	44	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	1.0000	1.0000
L32	45	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	1.0000	1.0000
L33	17	LDF7-50A(1-5/8)	42.00 - 43.00	1.0000	1.0000
L33	21	CU12PSM9P6XXX(1-1/2)	42.00 - 43.00	1.0000	1.0000
L33	43	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	1.0000	1.0000
L33	44	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	1.0000	1.0000
L33	45	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	1.0000	1.0000
L34	17	LDF7-50A(1-5/8)	37.00 - 42.00	1.0000	1.0000
L34	21	CU12PSM9P6XXX(1-1/2)	37.00 - 42.00	1.0000	1.0000
L34	43	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	1.0000	1.0000
L34	44	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	1.0000	1.0000
L34	45	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	1.0000	1.0000
L35	17	LDF7-50A(1-5/8)	32.00 - 37.00	1.0000	1.0000
L35	21	CU12PSM9P6XXX(1-1/2)	32.00 - 37.00	1.0000	1.0000
L35	43	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	1.0000	1.0000
L35	44	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	1.0000	1.0000
L35	45	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	1.0000	1.0000
L36	17	LDF7-50A(1-5/8)	27.91 - 32.00	1.0000	1.0000
L36	21	CU12PSM9P6XXX(1-1/2)	27.91 - 32.00	1.0000	1.0000
L36	30	MP306	27.91 - 30.50	1.0000	1.0000
L36	31	MP306	27.91 - 30.50	1.0000	1.0000
L36	33	MP306	27.91 - 31.33	1.0000	1.0000
L36	43	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	1.0000	1.0000
L36	44	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	1.0000	1.0000
L36	45	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	1.0000	1.0000
L37	17	LDF7-50A(1-5/8)	27.66 - 27.91	1.0000	1.0000
L37	21	CU12PSM9P6XXX(1-1/2)	27.66 - 27.91	1.0000	1.0000
L37	30	MP306	27.66 - 27.91	1.0000	1.0000
L37	31	MP306	27.66 - 27.91	1.0000	1.0000
L37	33	MP306	27.66 - 27.91	1.0000	1.0000
L37	43	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	1.0000	1.0000
L37	44	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	1.0000	1.0000
L37	45	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	1.0000	1.0000
L38	17	LDF7-50A(1-5/8)	27.25 - 27.66	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L38	21	CU12PSM9P6XXX(1-1/2)	27.25 - 27.66	1.0000	1.0000
L38	30	MP306	27.25 - 27.66	1.0000	1.0000
L38	31	MP306	27.25 - 27.66	1.0000	1.0000
L38	33	MP306	27.25 - 27.66	1.0000	1.0000
L38	43	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	1.0000	1.0000
L38	44	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	1.0000	1.0000
L38	45	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	1.0000	1.0000
L39	17	LDF7-50A(1-5/8)	27.08 - 27.25	1.0000	1.0000
L39	21	CU12PSM9P6XXX(1-1/2)	27.08 - 27.25	1.0000	1.0000
L39	30	MP306	27.08 - 27.25	1.0000	1.0000
L39	31	MP306	27.08 - 27.25	1.0000	1.0000
L39	33	MP306	27.08 - 27.25	1.0000	1.0000
L39	43	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	1.0000	1.0000
L39	44	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	1.0000	1.0000
L39	45	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	1.0000	1.0000
L40	17	LDF7-50A(1-5/8)	26.83 - 27.08	1.0000	1.0000
L40	21	CU12PSM9P6XXX(1-1/2)	26.83 - 27.08	1.0000	1.0000
L40	30	MP306	26.83 - 27.08	1.0000	1.0000
L40	31	MP306	26.83 - 27.08	1.0000	1.0000
L40	33	MP306	26.83 - 27.08	1.0000	1.0000
L40	43	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	1.0000	1.0000
L40	44	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	1.0000	1.0000
L40	45	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	1.0000	1.0000
L41	17	LDF7-50A(1-5/8)	21.83 - 26.83	1.0000	1.0000
L41	21	CU12PSM9P6XXX(1-1/2)	21.83 - 26.83	1.0000	1.0000
L41	30	MP306	21.83 - 26.83	1.0000	1.0000
L41	31	MP306	21.83 - 26.83	1.0000	1.0000
L41	33	MP306	21.83 - 26.83	1.0000	1.0000
L41	43	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	1.0000	1.0000
L41	44	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	1.0000	1.0000
L41	45	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	1.0000	1.0000
L42	17	LDF7-50A(1-5/8)	16.83 - 21.83	1.0000	1.0000
L42	21	CU12PSM9P6XXX(1-1/2)	16.83 - 21.83	1.0000	1.0000
L42	30	MP306	16.83 - 21.83	1.0000	1.0000
L42	31	MP306	16.83 - 21.83	1.0000	1.0000
L42	33	MP306	16.83 - 21.83	1.0000	1.0000
L42	47	6"x1" Flat Reinforcement	16.83 - 18.00	1.0000	1.0000
L42	48	6"x1" Flat Reinforcement	16.83 - 18.00	1.0000	1.0000
L42	49	6"x1" Flat Reinforcement	16.83 - 18.00	1.0000	1.0000
L43	17	LDF7-50A(1-5/8)	16.00 - 16.83	1.0000	1.0000
L43	21	CU12PSM9P6XXX(1-1/2)	16.00 - 16.83	1.0000	1.0000
L43	30	MP306	16.00 - 16.83	1.0000	1.0000
L43	31	MP306	16.00 - 16.83	1.0000	1.0000
L43	33	MP306	16.00 - 16.83	1.0000	1.0000
L43	47	6"x1" Flat Reinforcement	16.00 - 16.83	1.0000	1.0000
L43	48	6"x1" Flat Reinforcement	16.00 - 16.83	1.0000	1.0000
L43	49	6"x1" Flat Reinforcement	16.00 - 16.83	1.0000	1.0000
L44	17	LDF7-50A(1-5/8)	15.75 - 16.00	1.0000	1.0000
L44	21	CU12PSM9P6XXX(1-1/2)	15.75 - 16.00	1.0000	1.0000
L44	30	MP306	15.75 - 16.00	1.0000	1.0000
L44	31	MP306	15.75 - 16.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _o No Ice	K _o Ice
L44	33	MP306	15.75 - 16.00	1.0000	1.0000
L44	47	6"x1" Flat Reinforcement	15.75 - 16.00	1.0000	1.0000
L44	48	6"x1" Flat Reinforcement	15.75 - 16.00	1.0000	1.0000
L44	49	6"x1" Flat Reinforcement	15.75 - 16.00	1.0000	1.0000
L45	17	LDF7-50A(1-5/8)	14.75 - 15.75	1.0000	1.0000
L45	21	CU12PSM9P6XXX(1-1/2)	14.75 - 15.75	1.0000	1.0000
L45	27	MP306	14.75 - 15.50	1.0000	1.0000
L45	28	MP306	14.75 - 15.50	1.0000	1.0000
L45	30	MP306	14.75 - 15.75	1.0000	1.0000
L45	31	MP306	14.75 - 15.75	1.0000	1.0000
L45	33	MP306	14.75 - 15.75	1.0000	1.0000
L45	47	6"x1" Flat Reinforcement	14.75 - 15.75	1.0000	1.0000
L45	48	6"x1" Flat Reinforcement	14.75 - 15.75	1.0000	1.0000
L45	49	6"x1" Flat Reinforcement	14.75 - 15.75	1.0000	1.0000
L46	17	LDF7-50A(1-5/8)	14.50 - 14.75	1.0000	1.0000
L46	21	CU12PSM9P6XXX(1-1/2)	14.50 - 14.75	1.0000	1.0000
L46	27	MP306	14.50 - 14.75	1.0000	1.0000
L46	28	MP306	14.50 - 14.75	1.0000	1.0000
L46	30	MP306	14.50 - 14.75	1.0000	1.0000
L46	31	MP306	14.50 - 14.75	1.0000	1.0000
L46	33	MP306	14.50 - 14.75	1.0000	1.0000
L46	47	6"x1" Flat Reinforcement	14.50 - 14.75	1.0000	1.0000
L46	48	6"x1" Flat Reinforcement	14.50 - 14.75	1.0000	1.0000
L46	49	6"x1" Flat Reinforcement	14.50 - 14.75	1.0000	1.0000
L47	17	LDF7-50A(1-5/8)	12.08 - 14.50	1.0000	1.0000
L47	21	CU12PSM9P6XXX(1-1/2)	12.08 - 14.50	1.0000	1.0000
L47	27	MP306	12.08 - 14.50	1.0000	1.0000
L47	28	MP306	12.08 - 14.50	1.0000	1.0000
L47	30	MP306	12.08 - 14.50	1.0000	1.0000
L47	31	MP306	12.08 - 14.50	1.0000	1.0000
L47	33	MP306	12.08 - 14.50	1.0000	1.0000
L47	47	6"x1" Flat Reinforcement	12.08 - 14.50	1.0000	1.0000
L47	48	6"x1" Flat Reinforcement	12.08 - 14.50	1.0000	1.0000
L47	49	6"x1" Flat Reinforcement	12.08 - 14.50	1.0000	1.0000
L48	17	LDF7-50A(1-5/8)	11.83 - 12.08	1.0000	1.0000
L48	21	CU12PSM9P6XXX(1-1/2)	11.83 - 12.08	1.0000	1.0000
L48	27	MP306	11.83 - 12.08	1.0000	1.0000
L48	28	MP306	11.83 - 12.08	1.0000	1.0000
L48	30	MP306	11.83 - 12.08	1.0000	1.0000
L48	31	MP306	11.83 - 12.08	1.0000	1.0000
L48	33	MP306	11.83 - 12.08	1.0000	1.0000
L48	47	6"x1" Flat Reinforcement	11.83 - 12.08	1.0000	1.0000
L48	48	6"x1" Flat Reinforcement	11.83 - 12.08	1.0000	1.0000
L48	49	6"x1" Flat Reinforcement	11.83 - 12.08	1.0000	1.0000
L49	17	LDF7-50A(1-5/8)	10.00 - 11.83	1.0000	1.0000
L49	21	CU12PSM9P6XXX(1-1/2)	10.00 - 11.83	1.0000	1.0000
L49	27	MP306	10.00 - 11.83	1.0000	1.0000
L49	28	MP306	10.00 - 11.83	1.0000	1.0000
L49	30	MP306	10.00 - 11.83	1.0000	1.0000
L49	31	MP306	10.00 - 11.83	1.0000	1.0000
L49	33	MP306	11.33 - 11.83	1.0000	1.0000
L49	47	6"x1" Flat Reinforcement	10.00 - 11.83	1.0000	1.0000
L49	48	6"x1" Flat Reinforcement	10.00 - 11.83	1.0000	1.0000
L49	49	6"x1" Flat Reinforcement	10.00 - 11.83	1.0000	1.0000
L50	17	LDF7-50A(1-5/8)	9.75 - 10.00	1.0000	1.0000
L50	21	CU12PSM9P6XXX(1-1/2)	9.75 - 10.00	1.0000	1.0000
L50	27	MP306	9.75 - 10.00	1.0000	1.0000
L50	28	MP306	9.75 - 10.00	1.0000	1.0000
L50	30	MP306	9.75 - 10.00	1.0000	1.0000
L50	31	MP306	9.75 - 10.00	1.0000	1.0000
L50	47	6"x1" Flat Reinforcement	9.75 - 10.00	1.0000	1.0000
L50	48	6"x1" Flat Reinforcement	9.75 - 10.00	1.0000	1.0000
L50	49	6"x1" Flat Reinforcement	9.75 - 10.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L51	17	LDF7-50A(1-5/8)	4.75 - 9.75	1.0000	1.0000
L51	21	CU12PSM9P6XXX(1-1/2)	4.75 - 9.75	1.0000	1.0000
L51	27	MP306	4.75 - 9.75	1.0000	1.0000
L51	28	MP306	4.75 - 9.75	1.0000	1.0000
L51	30	MP306	4.75 - 9.75	1.0000	1.0000
L51	31	MP306	4.75 - 9.75	1.0000	1.0000
L51	47	6"x1" Flat Reinforcement	8.00 - 9.75	1.0000	1.0000
L51	48	6"x1" Flat Reinforcement	8.00 - 9.75	1.0000	1.0000
L51	49	6"x1" Flat Reinforcement	8.00 - 9.75	1.0000	1.0000
L52	17	LDF7-50A(1-5/8)	0.00 - 4.75	1.0000	1.0000
L52	21	CU12PSM9P6XXX(1-1/2)	0.00 - 4.75	1.0000	1.0000
L52	27	MP306	0.50 - 4.75	1.0000	1.0000
L52	28	MP306	0.50 - 4.75	1.0000	1.0000
L52	30	MP306	0.50 - 4.75	1.0000	1.0000
L52	31	MP306	0.50 - 4.75	1.0000	1.0000

Effective Width of Flat Linear Attachments / Feed Lines

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L1	55	HSS6x6	155.00 - 155.50	Auto	1.0000
L1	56	HSS6x6	155.00 - 155.50	Auto	1.0000
L1	57	HSS6x6	155.00 - 155.50	Auto	1.0000
L2	55	HSS6x6	150.00 - 155.00	Auto	1.0000
L2	56	HSS6x6	150.00 - 155.00	Auto	1.0000
L2	57	HSS6x6	150.00 - 155.00	Auto	1.0000
L3	55	HSS6x6	148.50 - 150.00	Auto	1.0000
L3	56	HSS6x6	148.50 - 150.00	Auto	1.0000
L3	57	HSS6x6	148.50 - 150.00	Auto	1.0000
L4	55	HSS6x6	148.00 - 148.50	Auto	1.0000
L4	56	HSS6x6	148.00 - 148.50	Auto	1.0000
L4	57	HSS6x6	148.00 - 148.50	Auto	1.0000
L5	55	HSS6x6	143.00 - 148.00	Auto	0.3868
L5	56	HSS6x6	143.00 - 148.00	Auto	0.3868
L5	57	HSS6x6	143.00 - 148.00	Auto	0.3868
L6	55	HSS6x6	140.00 - 143.00	Auto	0.3678
L6	56	HSS6x6	140.00 - 143.00	Auto	0.3678

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L6	57	HSS6x6	140.00 - 143.00	Auto	0.3678
L13	39	MP304	105.33 - 106.75	Auto	0.0363
L13	40	MP304	105.33 - 106.75	Auto	0.0363
L13	41	MP304	105.33 - 106.75	Auto	0.0363
L14	39	MP304	105.08 - 105.33	Auto	0.0889
L14	40	MP304	105.08 - 105.33	Auto	0.0889
L14	41	MP304	105.08 - 105.33	Auto	0.0889
L15	39	MP304	100.08 - 105.08	Auto	0.0709
L15	40	MP304	100.08 - 105.08	Auto	0.0709
L15	41	MP304	100.08 - 105.08	Auto	0.0709
L16	39	MP304	95.08 - 100.08	Auto	0.0411
L16	40	MP304	95.08 - 100.08	Auto	0.0411
L16	41	MP304	95.08 - 100.08	Auto	0.0411
L17	39	MP304	92.50 - 95.08	Auto	0.0162
L17	40	MP304	92.50 - 95.08	Auto	0.0162
L17	41	MP304	92.50 - 95.08	Auto	0.0162
L17	59	4"x1.25" Flat Reinforcement	92.50 - 94.00	Auto	0.0000
L17	60	4"x1.25" Flat Reinforcement	92.50 - 94.00	Auto	0.0000
L17	61	4"x1.25" Flat Reinforcement	92.50 - 94.00	Auto	0.0000
L18	39	MP304	92.25 - 92.50	Auto	0.0745
L18	40	MP304	92.25 - 92.50	Auto	0.0745
L18	41	MP304	92.25 - 92.50	Auto	0.0745
L18	59	4"x1.25" Flat Reinforcement	92.25 - 92.50	Auto	0.0000
L18	60	4"x1.25" Flat Reinforcement	92.25 - 92.50	Auto	0.0000
L18	61	4"x1.25" Flat Reinforcement	92.25 - 92.50	Auto	0.0000
L19	39	MP304	87.25 - 92.25	Auto	0.0542
L19	40	MP304	87.25 - 92.25	Auto	0.0542
L19	41	MP304	87.25 - 92.25	Auto	0.0542
L19	59	4"x1.25" Flat Reinforcement	87.25 - 92.25	Auto	0.0000
L19	60	4"x1.25" Flat Reinforcement	87.25 - 92.25	Auto	0.0000
L19	61	4"x1.25" Flat Reinforcement	87.25 - 92.25	Auto	0.0000
L20	39	MP304	82.25 - 87.25	Auto	0.0198
L20	40	MP304	82.25 - 87.25	Auto	0.0198
L20	41	MP304	82.25 - 87.25	Auto	0.0198
L20	51	6"x1" Flat Reinforcement	82.25 - 82.50	Auto	0.2078
L20	52	6"x1" Flat Reinforcement	82.25 - 82.50	Auto	0.2078
L20	53	6"x1" Flat Reinforcement	82.25 - 82.50	Auto	0.2078
L20	59	4"x1.25" Flat Reinforcement	82.25 - 87.25	Auto	0.0000
L20	60	4"x1.25" Flat Reinforcement	82.25 - 87.25	Auto	0.0000
L20	61	4"x1.25" Flat Reinforcement	82.25 - 87.25	Auto	0.0000
L21	39	MP304	76.75 - 82.25	Auto	0.0004
L21	40	MP304	76.75 - 82.25	Auto	0.0004
L21	41	MP304	76.75 - 82.25	Auto	0.0004
L21	51	6"x1" Flat Reinforcement	76.75 - 82.25	Auto	0.1942
L21	52	6"x1" Flat Reinforcement	76.75 - 82.25	Auto	0.1942
L21	53	6"x1" Flat Reinforcement	76.75 - 82.25	Auto	0.1942
L21	59	4"x1.25" Flat Reinforcement	79.00 - 82.25	Auto	0.0000
L21	60	4"x1.25" Flat Reinforcement	79.00 - 82.25	Auto	0.0000
L21	61	4"x1.25" Flat Reinforcement	79.00 - 82.25	Auto	0.0000
L22	51	6"x1" Flat Reinforcement	75.75 - 76.75	Auto	0.1274
L22	52	6"x1" Flat Reinforcement	75.75 - 76.75	Auto	0.1274
L22	53	6"x1" Flat Reinforcement	75.75 - 76.75	Auto	0.1274

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L23	35	MP305	70.75 - 73.00	Auto	0.0000
L23	36	MP305	70.75 - 73.00	Auto	0.0000
L23	37	MP305	70.75 - 73.00	Auto	0.0000
L23	51	6"x1" Flat Reinforcement	70.75 - 75.75	Auto	0.1131
L23	52	6"x1" Flat Reinforcement	70.75 - 75.75	Auto	0.1131
L23	53	6"x1" Flat Reinforcement	70.75 - 75.75	Auto	0.1131
L24	35	MP305	70.58 - 70.75	Auto	0.0000
L24	36	MP305	70.58 - 70.75	Auto	0.0000
L24	37	MP305	70.58 - 70.75	Auto	0.0000
L24	51	6"x1" Flat Reinforcement	70.58 - 70.75	Auto	0.1009
L24	52	6"x1" Flat Reinforcement	70.58 - 70.75	Auto	0.1009
L24	53	6"x1" Flat Reinforcement	70.58 - 70.75	Auto	0.1009
L25	35	MP305	70.33 - 70.58	Auto	0.0858
L25	36	MP305	70.33 - 70.58	Auto	0.0858
L25	37	MP305	70.33 - 70.58	Auto	0.0858
L25	51	6"x1" Flat Reinforcement	70.33 - 70.58	Auto	0.1879
L25	52	6"x1" Flat Reinforcement	70.33 - 70.58	Auto	0.1879
L25	53	6"x1" Flat Reinforcement	70.33 - 70.58	Auto	0.1879
L26	35	MP305	70.00 - 70.33	Auto	0.0842
L26	36	MP305	70.00 - 70.33	Auto	0.0842
L26	37	MP305	70.00 - 70.33	Auto	0.0842
L26	51	6"x1" Flat Reinforcement	70.00 - 70.33	Auto	0.1865
L26	52	6"x1" Flat Reinforcement	70.00 - 70.33	Auto	0.1865
L26	53	6"x1" Flat Reinforcement	70.00 - 70.33	Auto	0.1865
L27	35	MP305	69.75 - 70.00	Auto	0.0000
L27	36	MP305	69.75 - 70.00	Auto	0.0000
L27	37	MP305	69.75 - 70.00	Auto	0.0000
L27	51	6"x1" Flat Reinforcement	69.75 - 70.00	Auto	0.0971
L27	52	6"x1" Flat Reinforcement	69.75 - 70.00	Auto	0.0971
L27	53	6"x1" Flat Reinforcement	69.75 - 70.00	Auto	0.0971
L28	35	MP305	64.75 - 69.75	Auto	0.0000
L28	36	MP305	64.75 - 69.75	Auto	0.0000
L28	37	MP305	64.75 - 69.75	Auto	0.0000
L28	51	6"x1" Flat Reinforcement	67.50 - 69.75	Auto	0.0912
L28	52	6"x1" Flat Reinforcement	67.50 - 69.75	Auto	0.0912
L28	53	6"x1" Flat Reinforcement	67.50 - 69.75	Auto	0.0912
L29	35	MP305	59.75 - 64.75	Auto	0.0000
L29	36	MP305	59.75 - 64.75	Auto	0.0000
L29	37	MP305	59.75 - 64.75	Auto	0.0000
L30	35	MP305	54.75 - 59.75	Auto	0.0000
L30	36	MP305	54.75 - 59.75	Auto	0.0000
L30	37	MP305	54.75 - 59.75	Auto	0.0000
L31	35	MP305	49.75 - 54.75	Auto	0.0000
L31	36	MP305	49.75 - 54.75	Auto	0.0000
L31	37	MP305	49.75 - 54.75	Auto	0.0000
L32	35	MP305	43.00 - 49.75	Auto	0.0000
L32	36	MP305	43.00 - 49.75	Auto	0.0000
L32	37	MP305	43.00 - 49.75	Auto	0.0000
L32	43	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	Auto	0.0629
L32	44	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	Auto	0.0629
L32	45	6.5"x1.25" Flat Reinforcement	43.00 - 49.50	Auto	0.0629
L33	43	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	Auto	0.0837
L33	44	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	Auto	0.0837
L33	45	6.5"x1.25" Flat Reinforcement	42.00 - 43.00	Auto	0.0837
L34	43	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	Auto	0.0706

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L34	44	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	Auto	0.0706
L34	45	6.5"x1.25" Flat Reinforcement	37.00 - 42.00	Auto	0.0706
L35	43	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	Auto	0.0486
L35	44	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	Auto	0.0486
L35	45	6.5"x1.25" Flat Reinforcement	32.00 - 37.00	Auto	0.0486
L36	30	MP306	27.91 - 30.50	Auto	0.0806
L36	31	MP306	27.91 - 30.50	Auto	0.0806
L36	33	MP306	27.91 - 31.33	Auto	0.0823
L36	43	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	Auto	0.0287
L36	44	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	Auto	0.0287
L36	45	6.5"x1.25" Flat Reinforcement	27.91 - 32.00	Auto	0.0287
L37	30	MP306	27.66 - 27.91	Auto	0.1354
L37	31	MP306	27.66 - 27.91	Auto	0.1354
L37	33	MP306	27.66 - 27.91	Auto	0.1354
L37	43	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	Auto	0.0835
L37	44	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	Auto	0.0835
L37	45	6.5"x1.25" Flat Reinforcement	27.66 - 27.91	Auto	0.0835
L38	30	MP306	27.25 - 27.66	Auto	0.1340
L38	31	MP306	27.25 - 27.66	Auto	0.1340
L38	33	MP306	27.25 - 27.66	Auto	0.1340
L38	43	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	Auto	0.0820
L38	44	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	Auto	0.0820
L38	45	6.5"x1.25" Flat Reinforcement	27.25 - 27.66	Auto	0.0820
L39	30	MP306	27.08 - 27.25	Auto	0.0721
L39	31	MP306	27.08 - 27.25	Auto	0.0721
L39	33	MP306	27.08 - 27.25	Auto	0.0721
L39	43	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	Auto	0.0165
L39	44	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	Auto	0.0165
L39	45	6.5"x1.25" Flat Reinforcement	27.08 - 27.25	Auto	0.0165
L40	30	MP306	26.83 - 27.08	Auto	0.1287
L40	31	MP306	26.83 - 27.08	Auto	0.1287
L40	33	MP306	26.83 - 27.08	Auto	0.1287
L40	43	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	Auto	0.0765
L40	44	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	Auto	0.0765
L40	45	6.5"x1.25" Flat Reinforcement	26.83 - 27.08	Auto	0.0765
L41	30	MP306	21.83 - 26.83	Auto	0.1179
L41	31	MP306	21.83 - 26.83	Auto	0.1179
L41	33	MP306	21.83 - 26.83	Auto	0.1179
L41	43	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	Auto	0.0708
L41	44	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	Auto	0.0708

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L41	45	6.5"x1.25" Flat Reinforcement	24.50 - 26.83	Auto	0.0708
L42	30	MP306	16.83 - 21.83	Auto	0.0972
L42	31	MP306	16.83 - 21.83	Auto	0.0972
L42	33	MP306	16.83 - 21.83	Auto	0.0972
L42	47	6"x1" Flat Reinforcement	16.83 - 18.00	Auto	0.0000
L42	48	6"x1" Flat Reinforcement	16.83 - 18.00	Auto	0.0000
L42	49	6"x1" Flat Reinforcement	16.83 - 18.00	Auto	0.0000
L43	30	MP306	16.00 - 16.83	Auto	0.0851
L43	31	MP306	16.00 - 16.83	Auto	0.0851
L43	33	MP306	16.00 - 16.83	Auto	0.0851
L43	47	6"x1" Flat Reinforcement	16.00 - 16.83	Auto	0.0000
L43	48	6"x1" Flat Reinforcement	16.00 - 16.83	Auto	0.0000
L43	49	6"x1" Flat Reinforcement	16.00 - 16.83	Auto	0.0000
L44	30	MP306	15.75 - 16.00	Auto	0.1212
L44	31	MP306	15.75 - 16.00	Auto	0.1212
L44	33	MP306	15.75 - 16.00	Auto	0.1212
L44	47	6"x1" Flat Reinforcement	15.75 - 16.00	Auto	0.0000
L44	48	6"x1" Flat Reinforcement	15.75 - 16.00	Auto	0.0000
L44	49	6"x1" Flat Reinforcement	15.75 - 16.00	Auto	0.0000
L45	27	MP306	14.75 - 15.50	Auto	0.1181
L45	28	MP306	14.75 - 15.50	Auto	0.1181
L45	30	MP306	14.75 - 15.75	Auto	0.1186
L45	31	MP306	14.75 - 15.75	Auto	0.1186
L45	33	MP306	14.75 - 15.75	Auto	0.1186
L45	47	6"x1" Flat Reinforcement	14.75 - 15.75	Auto	0.0000
L45	48	6"x1" Flat Reinforcement	14.75 - 15.75	Auto	0.0000
L45	49	6"x1" Flat Reinforcement	14.75 - 15.75	Auto	0.0000
L46	27	MP306	14.50 - 14.75	Auto	0.0330
L46	28	MP306	14.50 - 14.75	Auto	0.0330
L46	30	MP306	14.50 - 14.75	Auto	0.0330
L46	31	MP306	14.50 - 14.75	Auto	0.0330
L46	33	MP306	14.50 - 14.75	Auto	0.0330
L46	47	6"x1" Flat Reinforcement	14.50 - 14.75	Auto	0.0000
L46	48	6"x1" Flat Reinforcement	14.50 - 14.75	Auto	0.0000
L46	49	6"x1" Flat Reinforcement	14.50 - 14.75	Auto	0.0000
L47	27	MP306	12.08 - 14.50	Auto	0.0275
L47	28	MP306	12.08 - 14.50	Auto	0.0275
L47	30	MP306	12.08 - 14.50	Auto	0.0275
L47	31	MP306	12.08 - 14.50	Auto	0.0275
L47	33	MP306	12.08 - 14.50	Auto	0.0275
L47	47	6"x1" Flat Reinforcement	12.08 - 14.50	Auto	0.0000
L47	48	6"x1" Flat Reinforcement	12.08 - 14.50	Auto	0.0000
L47	49	6"x1" Flat Reinforcement	12.08 - 14.50	Auto	0.0000
L48	27	MP306	11.83 - 12.08	Auto	0.0858
L48	28	MP306	11.83 - 12.08	Auto	0.0858
L48	30	MP306	11.83 - 12.08	Auto	0.0858
L48	31	MP306	11.83 - 12.08	Auto	0.0858
L48	33	MP306	11.83 - 12.08	Auto	0.0858
L48	47	6"x1" Flat Reinforcement	11.83 - 12.08	Auto	0.0000
L48	48	6"x1" Flat Reinforcement	11.83 - 12.08	Auto	0.0000
L48	49	6"x1" Flat Reinforcement	11.83 - 12.08	Auto	0.0000
L49	27	MP306	10.00 - 11.83	Auto	0.0815
L49	28	MP306	10.00 - 11.83	Auto	0.0815
L49	30	MP306	10.00 - 11.83	Auto	0.0815
L49	31	MP306	10.00 - 11.83	Auto	0.0815
L49	33	MP306	11.33 - 11.83	Auto	0.0843
L49	47	6"x1" Flat Reinforcement	10.00 - 11.83	Auto	0.0000
L49	48	6"x1" Flat Reinforcement	10.00 - 11.83	Auto	0.0000
L49	49	6"x1" Flat Reinforcement	10.00 - 11.83	Auto	0.0000
L50	27	MP306	9.75 - 10.00	Auto	0.0772
L50	28	MP306	9.75 - 10.00	Auto	0.0772

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L50	30	MP306	9.75 - 10.00	Auto	0.0772
L50	31	MP306	9.75 - 10.00	Auto	0.0772
L50	47	6"x1" Flat Reinforcement	9.75 - 10.00	Auto	0.0000
L50	48	6"x1" Flat Reinforcement	9.75 - 10.00	Auto	0.0000
L50	49	6"x1" Flat Reinforcement	9.75 - 10.00	Auto	0.0000
L51	27	MP306	4.75 - 9.75	Auto	0.0632
L51	28	MP306	4.75 - 9.75	Auto	0.0632
L51	30	MP306	4.75 - 9.75	Auto	0.0632
L51	31	MP306	4.75 - 9.75	Auto	0.0632
L51	47	6"x1" Flat Reinforcement	8.00 - 9.75	Auto	0.0000
L51	48	6"x1" Flat Reinforcement	8.00 - 9.75	Auto	0.0000
L51	49	6"x1" Flat Reinforcement	8.00 - 9.75	Auto	0.0000
L52	27	MP306	0.50 - 4.75	Auto	0.0408
L52	28	MP306	0.50 - 4.75	Auto	0.0408
L52	30	MP306	0.50 - 4.75	Auto	0.0408
L52	31	MP306	0.50 - 4.75	Auto	0.0408

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment	Placement ft
80010966 w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	157.000
80010966 w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	157.000
80010966 w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	157.000
(2) DC6-48-60-18-8F	A	From Leg	4.000 0.000 1.000	0.000	157.000
DC6-48-60-18-8F	B	From Leg	4.000 0.000 1.000	0.000	157.000
DC6-48-60-18-8F	C	From Leg	4.000 0.000 1.000	0.000	157.000
RRUS 8843 B2/B66A	A	From Leg	4.000 0.000 1.000	0.000	157.000
RRUS 8843 B2/B66A	B	From Leg	4.000 0.000 1.000	0.000	157.000
RRUS 8843 B2/B66A	C	From Leg	4.000 0.000 1.000	0.000	157.000
RRUS 4478 B14	A	From Leg	4.000 0.000	0.000	157.000

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	ft	°	ft
RRUS 4478 B14	B	From Leg	1.000	4.000	0.000		157.000
			0.000				
RRUS 4478 B14	C	From Leg	1.000	4.000	0.000		157.000
			0.000				
RRUS 4449 B5/B12	A	From Leg	1.000	4.000	0.000		157.000
			0.000				
RRUS 4449 B5/B12	B	From Leg	1.000	4.000	0.000		157.000
			0.000				
RRUS 4449 B5/B12	C	From Leg	1.000	4.000	0.000		157.000
			0.000				
TPA65R-BU8DA-K w/ Mount Pipe	A	From Leg	1.000	4.000	0.000		157.000
			0.000				
TPA65R-BU8DA-K w/ Mount Pipe	B	From Leg	1.000	4.000	0.000		157.000
			0.000				
TPA65R-BU8DA-K w/ Mount Pipe	C	From Leg	1.000	4.000	0.000		157.000
			0.000				
AIR 6419 B77G_CCIV3 w/ Mount Pipe	A	From Leg	1.000	4.000	0.000		157.000
			0.000				
AIR 6419 B77G_CCIV3 w/ Mount Pipe	B	From Leg	3.000	4.000	0.000		157.000
			0.000				
AIR 6419 B77G_CCIV3 w/ Mount Pipe	C	From Leg	3.000	4.000	0.000		157.000
			0.000				
AIR 6449 B77D_CCIV2 w/ Mount Pipe	A	From Leg	3.000	4.000	0.000		157.000
			0.000				
AIR 6449 B77D_CCIV2 w/ Mount Pipe	B	From Leg	-1.000	4.000	0.000		157.000
			0.000				
AIR 6449 B77D_CCIV2 w/ Mount Pipe	C	From Leg	-1.000	4.000	0.000		157.000
			0.000				
RRUS-32 B30	A	From Leg	-1.000	4.000	0.000		157.000
			0.000				
RRUS-32 B30	B	From Leg	1.000	4.000	0.000		157.000
			0.000				
RRUS-32 B30	C	From Leg	1.000	4.000	0.000		157.000
			0.000				
(3) Side Arm Mount [SO 309- 3]	C	None	1.000		0.000		157.000
Sector Mount [SM 503-3]	C	None			0.000		157.000
Pipe Mount [PM 601-3]	C	None			0.000		157.000
*							
*							

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	ft	°	ft
VV-65B-R1_TMO w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
VV-65B-R1_TMO w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
VV-65B-R1_TMO w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
AIR 6419 B41_TMO w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
AIR 6419 B41_TMO w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
AIR 6419 B41_TMO w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
Radio 4480_TMOV2	A	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
Radio 4480_TMOV2	B	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
Radio 4480_TMOV2	C	From Leg	4.000	0.000	0.000	0.000	149.000
			0.000	-1.000			
(2) L3x3x1/4x6'	A	From Leg	2.000	0.000	0.000	0.000	149.000
			0.000	0.000			
(2) L3x3x1/4x6'	B	From Leg	2.000	0.000	0.000	0.000	149.000
			0.000	0.000			
(2) L3x3x1/4x6'	C	From Leg	2.000	0.000	0.000	0.000	149.000
			0.000	0.000			
Miscellaneous [NA 507-1]	C	None				0.000	149.000
Platform Mount [LP 1201-1_HR-1]	C	None				0.000	149.000
*							

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert ft	ft		
(2) BSF0020F3V1	A	From Leg	4.000	0.000	0.000	0.000	138.000
(2) NNHH-65B-R4 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	138.000
(2) NNHH-65B-R4 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	138.000
(2) NNHH-65B-R4 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	138.000
KS24019-L112A w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	138.000
MT6407-77A w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	138.000
MT6407-77A w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	138.000
MT6407-77A w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	138.000
XXDWMM-12.5-65-8T-CBRS w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	138.000
XXDWMM-12.5-65-8T-CBRS w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	138.000
XXDWMM-12.5-65-8T-CBRS w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	138.000
RVZDC-6627-PF-48	B	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D1A	A	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D1A	B	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D1A	C	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D2A	A	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D2A	B	From Leg	4.000	0.000	0.000	0.000	138.000
RFV01U-D2A	C	From Leg	4.000	0.000	0.000	0.000	138.000
Platform Mount [LP 303- 1_KCKR-HR-1] *	C	None				0.000	138.000
ERICSSON AIR 21 B2A B4P w/	A	From Leg	4.000	0.000	0.000	0.000	126.000

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	°	ft	
Mount Pipe			0.000				
			1.000				
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
LNX-6515DS-VTM w/ Mount Pipe	A	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
LNX-6515DS-VTM w/ Mount Pipe	B	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
LNX-6515DS-VTM w/ Mount Pipe	C	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	A	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	B	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	C	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
KRY 112 144/1	A	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
KRY 112 144/1	B	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
KRY 112 144/1	C	From Leg	4.000		0.000	126.000	
			0.000				
			1.000				
RRUS 11 B12	A	From Leg	4.000		0.000	126.000	
			0.000				
			2.000				
RRUS 11 B12	B	From Leg	4.000		0.000	126.000	
			0.000				
			2.000				
RRUS 11 B12	C	From Leg	4.000		0.000	126.000	
			0.000				
			2.000				
Platform Mount [LP 1201-1] *	C	None			0.000	126.000	
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.000		0.000	116.000	
			0.000				
			3.000				
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.000		0.000	116.000	
			0.000				
			3.000				
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.000		0.000	116.000	
			0.000				
			3.000				
TA08025-B605	A	From Leg	4.000		0.000	116.000	
			0.000				
			4.000				

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz	Lateral	Vert		
			ft	ft	ft	°	ft
TA08025-B605	B	From Leg	4.000	0.000	0.000	0.000	116.000
TA08025-B605	C	From Leg	4.000	0.000	0.000	0.000	116.000
TA08025-B604	A	From Leg	4.000	0.000	0.000	0.000	116.000
TA08025-B604	B	From Leg	4.000	0.000	0.000	0.000	116.000
TA08025-B604	C	From Leg	4.000	0.000	0.000	0.000	116.000
RDIDC-9181-PF-48	A	From Leg	4.000	0.000	0.000	0.000	116.000
(2) 8' x 2" Mount Pipe	A	From Leg	4.000	0.000	0.000	0.000	116.000
(2) 8' x 2" Mount Pipe	B	From Leg	4.000	0.000	0.000	0.000	116.000
(2) 8' x 2" Mount Pipe	C	From Leg	4.000	0.000	0.000	0.000	116.000
Sabre_C10801018-32788	C	None				0.000	116.000
* KS24019-L112A	A	From Leg	3.000	0.000	0.000	0.000	48.000
2' x 2" Pipe Mount	A	From Leg	3.000	0.000	0.000	0.000	48.000
Side Arm Mount [SO 701-1]	A	From Leg	1.500	0.000	0.000	0.000	48.000
**							

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

Comb. No.	Description
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
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
L1	160 - 155	Pole	Max Tension	39	0.000	0.000	-0.000
			Max. Compression	26	-10.316	-0.000	0.270
			Max. Mx	20	-4.750	17.901	0.432
			Max. My	2	-4.731	-0.001	18.036
			Max. Vy	20	-6.855	17.901	0.432
			Max. Vx	14	6.870	-0.001	-17.824
			Max. Torque	24			-2.399
L2	155 - 150	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-11.509	-0.001	0.281
			Max. Mx	20	-5.673	53.514	0.389
			Max. My	2	-5.646	-0.004	53.808
			Max. Vy	20	-7.389	53.514	0.389
			Max. Vx	14	7.470	-0.004	-53.676
			Max. Torque	24			-2.399

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L3	150 - 148.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-21.028	-0.001	0.285
			Max. Mx	20	-10.948	64.690	0.651
			Max. My	2	-10.907	-0.005	65.076
			Max. Vy	20	-12.017	64.690	0.651
			Max. Vx	14	12.132	-0.005	-64.997
			Max. Torque	17			-4.159
L4	148.5 - 148	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-21.186	-0.001	0.289
			Max. Mx	20	-11.083	70.711	0.643
			Max. My	2	-11.042	-0.006	71.135
			Max. Vy	20	-12.085	70.711	0.643
			Max. Vx	14	12.209	-0.006	-71.078
			Max. Torque	17			-4.159
L5	148 - 143	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-22.644	-0.003	0.306
			Max. Mx	20	-12.151	133.023	0.594
			Max. My	14	-12.088	-0.010	-134.173
			Max. Vy	20	-12.845	133.023	0.594
			Max. Vx	14	13.036	-0.010	-134.173
			Max. Torque	17			-4.158
L6	143 - 138	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-23.800	-0.004	0.324
			Max. Mx	20	-13.039	198.290	0.547
			Max. My	14	-12.935	-0.015	-201.055
			Max. Vy	20	-13.269	198.290	0.547
			Max. Vx	14	13.726	-0.015	-201.055
			Max. Torque	17			-4.157
L7	138 - 133	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-31.448	-0.572	0.385
			Max. Mx	20	-17.150	283.769	0.795
			Max. My	14	-17.035	-0.180	-289.104
			Max. Vy	20	-17.252	283.769	0.795
			Max. Vx	14	17.742	-0.180	-289.104
			Max. Torque	24			-5.867
L8	133 - 128	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-32.189	-0.572	0.409
			Max. Mx	20	-17.766	370.726	0.750
			Max. My	14	-17.653	-0.185	-378.512
			Max. Vy	20	-17.546	370.726	0.750
			Max. Vx	14	18.037	-0.185	-378.512
			Max. Torque	24			-5.863
L9	128 - 123	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-39.308	-0.512	0.468
			Max. Mx	20	-22.006	467.422	0.779
			Max. My	14	-21.890	-0.171	-477.661
			Max. Vy	20	-20.146	467.422	0.779
			Max. Vx	14	20.647	-0.171	-477.661
			Max. Torque	24			-6.307
L10	123 - 118	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-40.181	-0.411	0.552
			Max. Mx	20	-22.729	568.742	0.762
			Max. My	14	-22.618	-0.143	-581.432
			Max. Vy	20	-20.396	568.742	0.762
			Max. Vx	14	20.896	-0.143	-581.432
			Max. Torque	24			-6.303
L11	118 - 111	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.272	-0.358	0.941
			Max. Mx	20	-25.876	641.001	0.949
			Max. My	14	-25.760	-0.131	-655.185
			Max. Vy	20	-23.029	641.001	0.949
			Max. Vx	14	23.560	-0.131	-655.185

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L12	111 - 109.75	Pole	Max. Torque	24			-7.061
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.775	-0.277	1.043
			Max. Mx	20	-27.049	756.985	0.940
			Max. My	14	-26.936	-0.113	-773.775
			Max. Vy	20	-23.370	756.985	0.940
			Max. Vx	14	23.901	-0.113	-773.775
L13	109.75 - 105.333	Pole	Max. Torque	24			-7.055
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.729	-0.210	1.137
			Max. Mx	20	-27.857	860.563	0.942
			Max. My	14	-27.749	-0.100	-879.653
			Max. Vy	20	-23.564	860.563	0.942
			Max. Vx	14	24.094	-0.100	-879.653
L14	105.333 - 105.083	Pole	Max. Torque	24			-7.053
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.799	-0.204	1.152
			Max. Mx	20	-27.929	866.451	0.940
			Max. My	14	-27.822	-0.101	-885.673
			Max. Vy	20	-23.563	866.451	0.940
			Max. Vx	14	24.101	-0.101	-885.673
L15	105.083 - 100.083	Pole	Max. Torque	24			-7.046
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.209	-0.127	1.249
			Max. Mx	20	-29.056	985.000	0.946
			Max. My	14	-28.953	-0.083	-1006.820
			Max. Vy	20	-23.868	985.000	0.946
			Max. Vx	14	24.398	-0.083	-1006.820
L16	100.083 - 95.083	Pole	Max. Torque	24			-7.046
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.639	-0.047	1.357
			Max. Mx	20	-30.217	1104.999	0.954
			Max. My	14	-30.118	-0.067	-1129.414
			Max. Vy	20	-24.154	1104.999	0.954
			Max. Vx	14	24.683	-0.067	-1129.414
L17	95.083 - 92.5	Pole	Max. Torque	24			-7.040
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-51.409	-0.006	1.412
			Max. Mx	20	-30.823	1167.541	0.960
			Max. My	14	-30.727	-0.058	-1193.294
			Max. Vy	20	-24.301	1167.541	0.960
			Max. Vx	14	24.829	-0.058	-1193.294
L18	92.5 - 92.25	Pole	Max. Torque	24			-7.034
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-51.501	0.002	1.432
			Max. Mx	20	-30.910	1173.614	0.958
			Max. My	14	-30.815	-0.058	-1199.498
			Max. Vy	20	-24.302	1173.614	0.958
			Max. Vx	14	24.839	-0.058	-1199.498
L19	92.25 - 87.25	Pole	Max. Torque	24			-7.031
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-53.340	0.076	1.508
			Max. Mx	20	-32.369	1295.962	0.972
			Max. My	14	-32.276	-0.039	-1324.436
			Max. Vy	20	-24.647	1295.962	0.972
			Max. Vx	14	25.177	-0.039	-1324.436
L20	87.25 - 82.25	Pole	Max. Torque	24			-7.031
			Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L21	82.25 - 76.75	Pole	Max. Compression	26	-55.203	0.153	1.592
			Max. Mx	20	-33.858	1419.968	0.986
			Max. My	14	-33.769	-0.021	-1451.033
			Max. Vy	20	-24.974	1419.968	0.986
			Max. Vx	14	25.503	-0.021	-1451.033
			Max. Torque	24			-7.026
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.687	0.169	1.607
			Max. Mx	20	-34.232	1451.222	0.990
			Max. My	14	-34.144	-0.016	-1482.934
L22	76.75 - 75.75	Pole	Max. Vy	20	-25.057	1451.222	0.990
			Max. Vx	14	25.586	-0.016	-1482.934
			Max. Torque	24			-7.021
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-58.469	0.236	1.670
			Max. Mx	20	-36.397	1583.882	1.007
			Max. My	14	-36.312	0.004	-1618.317
			Max. Vy	20	-25.470	1583.882	1.007
			Max. Vx	14	26.000	0.004	-1618.317
			Max. Torque	24			-7.017
L23	75.75 - 70.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-59.910	0.300	1.731
			Max. Mx	20	-37.580	1711.498	1.032
			Max. My	14	-37.502	0.024	-1748.519
			Max. Vy	20	-25.621	1711.498	1.032
			Max. Vx	14	26.148	0.024	-1748.519
			Max. Torque	24			-7.015
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-59.960	0.305	1.745
			Max. Mx	20	-37.636	1715.773	1.032
L24	70.75 - 70.583	Pole	Max. My	14	-37.559	0.024	-1752.882
			Max. Vy	20	-25.607	1715.773	1.032
			Max. Vx	14	26.157	0.024	-1752.882
			Max. Torque	24			-7.008
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.071	0.309	1.750
			Max. Mx	20	-37.728	1722.175	1.033
			Max. My	14	-37.651	0.024	-1759.413
			Max. Vy	20	-25.620	1722.175	1.033
			Max. Vx	14	26.156	0.024	-1759.413
L25	70.583 - 70.333	Pole	Max. Torque	24			-7.008
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.219	0.312	1.750
			Max. Mx	20	-37.849	1730.710	1.035
			Max. My	14	-37.772	0.026	-1768.118
			Max. Vy	20	-25.641	1730.710	1.035
			Max. Vx	14	26.173	0.026	-1768.118
			Max. Torque	24			-7.007
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.295	0.315	1.750
L26	70.333 - 70	Pole	Max. Mx	20	-37.908	1737.120	1.037
			Max. My	14	-37.831	0.027	-1774.658
			Max. Vy	20	-25.650	1737.120	1.037
			Max. Vx	14	26.187	0.027	-1774.658
			Max. Torque	24			-7.007
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-61.764	0.388	1.820
			Max. Mx	20	-39.106	1865.686	1.066
			Max. My	14	-39.036	0.049	-1905.787
			Max. Vy	20	-25.803	1865.686	1.066
L27	70 - 69.75	Pole	Max. Vx	14	26.326	0.049	-1905.787
			Max. Vy	20	-25.803	1865.686	1.066
			Max. My	14	-39.036	0.049	-1905.787
			Max. Mx	20	-39.106	1865.686	1.066
			Max. Compression	26	-61.764	0.388	1.820
L28	69.75 - 64.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-61.764	0.388	1.820
			Max. Mx	20	-39.106	1865.686	1.066
			Max. My	14	-39.036	0.049	-1905.787
			Max. Vy	20	-25.803	1865.686	1.066

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L29	64.75 - 59.75	Pole	Max. Torque	25			-7.006
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-63.212	0.471	1.912
			Max. Mx	20	-40.341	1994.881	1.099
			Max. My	14	-40.279	0.070	-2037.524
			Max. Vy	20	-25.922	1994.881	1.099
			Max. Vx	14	26.441	0.070	-2037.524
L30	59.75 - 54.75	Pole	Max. Torque	25			-6.999
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.681	0.555	2.004
			Max. Mx	20	-41.600	2124.631	1.134
			Max. My	14	-41.544	0.092	-2169.794
			Max. Vy	20	-26.027	2124.631	1.134
			Max. Vx	14	26.541	0.092	-2169.794
L31	54.75 - 49.75	Pole	Max. Torque	25			-6.993
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.171	0.640	2.098
			Max. Mx	20	-42.881	2254.860	1.172
			Max. My	14	-42.833	0.115	-2302.517
			Max. Vy	20	-26.115	2254.860	1.172
			Max. Vx	14	26.624	0.115	-2302.517
L32	49.75 - 43	Pole	Max. Torque	25			-6.987
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.730	0.670	2.131
			Max. Mx	20	-43.320	2300.539	1.185
			Max. My	14	-43.274	0.123	-2349.063
			Max. Vy	20	-26.164	2300.539	1.185
			Max. Vx	14	26.671	0.123	-2349.063
L33	43 - 42	Pole	Max. Torque	25			-6.982
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-70.062	0.775	2.650
			Max. Mx	20	-45.985	2458.537	1.528
			Max. My	14	-45.944	0.150	-2509.578
			Max. Vy	20	-26.485	2458.537	1.528
			Max. Vx	14	26.967	0.150	-2509.578
L34	42 - 37	Pole	Max. Torque	25			-7.037
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.737	0.862	2.745
			Max. Mx	20	-47.441	2591.010	1.570
			Max. My	14	-47.407	0.174	-2644.384
			Max. Vy	20	-26.554	2591.010	1.570
			Max. Vx	14	27.031	0.174	-2644.384
L35	37 - 32	Pole	Max. Torque	25			-7.036
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-73.435	0.950	2.842
			Max. Mx	20	-48.921	2723.776	1.613
			Max. My	14	-48.893	0.198	-2779.457
			Max. Vy	20	-26.603	2723.776	1.613
			Max. Vx	14	27.075	0.198	-2779.457
L36	32 - 27.913	Pole	Max. Torque	25			-7.033
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.900	1.009	2.920
			Max. Mx	20	-50.148	2832.449	1.650
			Max. My	14	-50.125	0.218	-2889.996
			Max. Vy	20	-26.629	2832.449	1.650
			Max. Vx	14	27.096	0.218	-2889.996
L37	27.913 - 27.663	Pole	Max. Torque	25			-7.030
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.025	1.014	2.930
			Max. Mx	20	-50.268	2839.101	1.653
			Max. My	14	-50.246	0.219	-2896.761

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L38	27.663 - 27.25	Pole	Max. Vy	20	-26.610	2839.101	1.653
			Max. Vx	14	27.082	0.219	-2896.761
			Max. Torque	25			-7.028
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.232	1.021	2.936
			Max. Mx	20	-50.442	2850.093	1.656
			Max. My	14	-50.420	0.221	-2907.940
			Max. Vy	20	-26.626	2850.093	1.656
			Max. Vx	14	27.093	0.221	-2907.940
			Max. Torque	25			-7.028
L39	27.25 - 27.083	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.293	1.025	2.942
			Max. Mx	20	-50.494	2854.539	1.658
			Max. My	14	-50.473	0.222	-2912.462
			Max. Vy	20	-26.624	2854.539	1.658
			Max. Vx	14	27.101	0.222	-2912.462
			Max. Torque	25			-7.028
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.411	1.029	2.946
			Max. Mx	20	-50.593	2861.195	1.660
L40	27.083 - 26.833	Pole	Max. My	14	-50.572	0.223	-2919.232
			Max. Vy	20	-26.631	2861.195	1.660
			Max. Vx	14	27.101	0.223	-2919.232
			Max. Torque	25			-7.028
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-77.722	1.118	3.040
			Max. Mx	20	-52.571	2994.686	1.703
			Max. My	14	-52.554	0.248	-3054.978
			Max. Vy	20	-26.782	2994.686	1.703
			Max. Vx	14	27.245	0.248	-3054.978
L41	26.833 - 21.833	Pole	Max. Torque	25			-7.028
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.028	1.208	3.139
			Max. Mx	20	-54.581	3128.841	1.748
			Max. My	14	-54.568	0.273	-3191.370
			Max. Vy	20	-26.913	3128.841	1.748
			Max. Vx	14	27.372	0.273	-3191.370
			Max. Torque	25			-7.027
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.424	1.223	3.156
L42	21.833 - 16.833	Pole	Max. Mx	20	-54.921	3151.254	1.755
			Max. My	14	-54.909	0.277	-3214.154
			Max. Vy	20	-26.930	3151.254	1.755
			Max. Vx	14	27.388	0.277	-3214.154
			Max. Torque	25			-7.026
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.561	1.228	3.164
			Max. Mx	20	-55.047	3157.984	1.758
			Max. My	14	-55.035	0.279	-3220.995
			Max. Vy	20	-26.925	3157.984	1.758
L43	16.833 - 16	Pole	Max. Vx	14	27.386	0.279	-3220.995
			Max. Torque	25			-7.026
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.123	1.231	3.175
			Max. Mx	20	-55.518	3185.007	1.767
			Max. My	14	-55.506	0.284	-3248.464
			Max. Vy	20	-26.972	3185.007	1.767
			Max. Vx	14	27.430	0.284	-3248.464
			Max. Torque	25			-7.026
			Max Tension	1	0.000	0.000	0.000
L44	16 - 15.75	Pole	Max. Vy	20	-26.972	3185.007	1.767
			Max. Vx	14	27.430	0.284	-3248.464
			Max. Torque	25			-7.026
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.123	1.231	3.175
			Max. Mx	20	-55.518	3185.007	1.767
			Max. My	14	-55.506	0.284	-3248.464
			Max. Vy	20	-26.972	3185.007	1.767
			Max. Vx	14	27.430	0.284	-3248.464
			Max. Torque	25			-7.026
L45	15.75 - 14.747	Pole	Max. Vy	20	-26.972	3185.007	1.767
			Max. Vx	14	27.430	0.284	-3248.464
			Max. Torque	25			-7.026
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.123	1.231	3.175
			Max. Mx	20	-55.518	3185.007	1.767
			Max. My	14	-55.506	0.284	-3248.464
			Max. Vy	20	-26.972	3185.007	1.767
			Max. Vx	14	27.430	0.284	-3248.464
			Max. Torque	25			-7.026

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L46	14.747 - 14.497	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.237	1.231	3.180
			Max. Mx	20	-55.618	3191.747	1.769
			Max. My	14	-55.607	0.285	-3255.315
			Max. Vy	20	-26.964	3191.747	1.769
			Max. Vx	14	27.424	0.285	-3255.315
L47	14.497 - 12.083	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.337	1.228	3.209
			Max. Mx	20	-56.524	3256.858	1.792
			Max. My	14	-56.515	0.298	-3321.493
			Max. Vy	20	-27.014	3256.858	1.792
			Max. Vx	14	27.469	0.298	-3321.493
L48	12.083 - 11.833	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.468	1.229	3.215
			Max. Mx	20	-56.649	3263.605	1.795
			Max. My	14	-56.641	0.299	-3328.350
			Max. Vy	20	-26.990	3263.605	1.795
			Max. Vx	14	27.446	0.299	-3328.350
L49	11.833 - 10	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-83.422	1.247	3.238
			Max. Mx	20	-57.446	3313.126	1.811
			Max. My	14	-57.438	0.308	-3378.678
			Max. Vy	20	-27.075	3313.126	1.811
			Max. Vx	14	27.528	0.308	-3378.678
L50	10 - 9.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-83.552	1.251	3.244
			Max. Mx	20	-57.572	3319.887	1.814
			Max. My	14	-57.565	0.310	-3385.549
			Max. Vy	20	-27.050	3319.887	1.814
			Max. Vx	14	27.504	0.310	-3385.549
L51	9.75 - 4.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-86.094	1.322	3.314
			Max. Mx	20	-59.793	3455.474	1.861
			Max. My	14	-59.789	0.336	-3523.320
			Max. Vy	20	-27.200	3455.474	1.861
			Max. Vx	14	27.649	0.336	-3523.320
L52	4.75 - 0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-88.458	1.390	3.383
			Max. Mx	20	-61.932	3584.882	1.907
			Max. My	14	-61.931	0.361	-3654.784
			Max. Vy	20	-27.324	3584.882	1.907
			Max. Vx	14	27.769	0.361	-3654.784
			Max. Torque	25			-7.024

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	27	88.458	0.000	7.238

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Max. H _x	20	61.943	27.297	-0.000
	Max. H _z	2	61.943	-0.000	27.688
	Max. M _x	2	3649.113	-0.000	27.688
	Max. M _z	8	3578.926	-27.265	-0.000
	Max. Torsion	13	7.024	-13.671	-23.679
	Min. Vert	25	46.457	13.655	23.651
	Min. H _x	8	61.943	-27.265	-0.000
	Min. H _z	14	61.943	-0.000	-27.742
	Min. M _x	14	-3654.784	-0.000	-27.742
	Min. M _z	20	-3584.882	27.297	-0.000
	Min. Torsion	25	-7.024	13.655	23.651

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	51.619	0.000	0.000	-1.234	0.282	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	61.943	0.000	-27.688	-3649.113	0.361	0.445
0.9 Dead+1.0 Wind 0 deg - No Ice	46.457	0.000	-27.688	-3551.469	0.269	0.437
1.2 Dead+1.0 Wind 30 deg - No Ice	61.943	13.683	-23.699	-3111.215	-1795.271	-6.253
0.9 Dead+1.0 Wind 30 deg - No Ice	46.457	13.683	-23.699	-3028.014	-1747.487	-6.268
1.2 Dead+1.0 Wind 60 deg - No Ice	61.943	24.328	-14.046	-1835.693	-3176.322	-0.129
0.9 Dead+1.0 Wind 60 deg - No Ice	46.457	24.328	-14.046	-1786.473	-3091.928	-0.122
1.2 Dead+1.0 Wind 90 deg - No Ice	61.943	27.265	0.000	-1.908	-3578.926	6.032
0.9 Dead+1.0 Wind 90 deg - No Ice	46.457	27.265	0.000	-1.381	-3483.685	6.058
1.2 Dead+1.0 Wind 120 deg - No Ice	61.943	24.043	13.881	1824.138	-3161.970	-0.573
0.9 Dead+1.0 Wind 120 deg - No Ice	46.457	24.043	13.881	1775.953	-3077.838	-0.559
1.2 Dead+1.0 Wind 150 deg - No Ice	61.943	13.671	23.679	3108.241	-1794.811	-7.023
0.9 Dead+1.0 Wind 150 deg - No Ice	46.457	13.671	23.679	3025.804	-1747.150	-7.024
1.2 Dead+1.0 Wind 180 deg - No Ice	61.943	0.000	27.742	3654.784	0.361	-0.445
0.9 Dead+1.0 Wind 180 deg - No Ice	46.457	0.000	27.742	3557.768	0.269	-0.437
1.2 Dead+1.0 Wind 210 deg - No Ice	61.943	-13.667	23.672	3103.643	1792.879	6.254
0.9 Dead+1.0 Wind 210 deg - No Ice	46.457	-13.667	23.672	3021.377	1745.132	6.268
1.2 Dead+1.0 Wind 240 deg - No Ice	61.943	-24.281	14.019	1827.943	3169.282	0.129
0.9 Dead+1.0 Wind 240 deg - No Ice	46.457	-24.281	14.019	1779.739	3084.931	0.122
1.2 Dead+1.0 Wind 270 deg - No Ice	61.943	-27.297	0.000	-1.908	3584.882	-6.031
0.9 Dead+1.0 Wind 270 deg - No Ice	46.457	-27.297	0.000	-1.382	3489.316	-6.057
1.2 Dead+1.0 Wind 300 deg - No Ice	61.943	-24.089	-13.908	-1831.858	3170.401	0.574

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
No Ice						
0.9 Dead+1.0 Wind 300 deg - No Ice	46.457	-24.089	-13.908	-1782.666	3085.871	0.559
1.2 Dead+1.0 Wind 330 deg - No Ice	61.943	-13.655	-23.651	-3106.656	1793.361	7.023
0.9 Dead+1.0 Wind 330 deg - No Ice	46.457	-13.655	-23.651	-3023.553	1745.448	7.024
1.2 Dead+1.0 Ice+1.0 Temp	88.458	-0.000	-0.000	-3.383	1.390	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	88.458	-0.000	-7.238	-986.830	1.490	0.118
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	88.458	3.595	-6.226	-847.713	-485.836	-1.207
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	88.458	6.274	-3.623	-495.660	-850.626	-0.054
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	88.458	7.184	-0.000	-3.716	-971.629	1.113
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	88.458	6.270	3.620	487.728	-849.671	-0.172
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	88.458	3.597	6.231	841.152	-486.250	-1.411
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	88.458	-0.000	7.249	981.470	1.490	-0.118
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	88.458	-3.591	6.220	839.331	488.179	1.207
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	88.458	-6.265	3.617	487.268	851.855	0.054
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	88.458	-7.191	-0.000	-3.716	975.789	-1.113
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	88.458	-6.279	-3.625	-496.116	854.397	0.172
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	88.458	-3.594	-6.225	-847.479	488.682	1.411
Dead+Wind 0 deg - Service	51.619	0.000	-6.756	-878.988	0.287	0.110
Dead+Wind 30 deg - Service	51.619	3.339	-5.783	-749.542	-431.698	-1.567
Dead+Wind 60 deg - Service	51.619	5.936	-3.427	-442.668	-764.102	-0.034
Dead+Wind 90 deg - Service	51.619	6.653	0.000	-1.361	-860.879	1.508
Dead+Wind 120 deg - Service	51.619	5.866	3.387	437.967	-760.627	-0.144
Dead+Wind 150 deg - Service	51.619	3.336	5.778	746.865	-431.678	-1.757
Dead+Wind 180 deg - Service	51.619	0.000	6.769	878.452	0.287	-0.110
Dead+Wind 210 deg - Service	51.619	-3.335	5.776	745.758	431.614	1.567
Dead+Wind 240 deg - Service	51.619	-5.924	3.420	438.893	762.805	0.034
Dead+Wind 270 deg - Service	51.619	-6.661	0.000	-1.361	862.724	-1.508
Dead+Wind 300 deg - Service	51.619	-5.878	-3.394	-441.741	763.071	0.144
Dead+Wind 330 deg - Service	51.619	-3.332	-5.771	-748.442	431.638	1.757

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-51.619	0.000	0.000	51.619	0.000	0.000%
2	0.000	-61.943	-27.688	-0.000	61.943	27.688	0.000%
3	0.000	-46.457	-27.688	0.000	46.457	27.688	0.000%
4	13.683	-61.943	-23.699	-13.683	61.943	23.699	0.000%
5	13.683	-46.457	-23.699	-13.683	46.457	23.699	0.000%
6	24.328	-61.943	-14.046	-24.328	61.943	14.046	0.000%
7	24.328	-46.457	-14.046	-24.328	46.457	14.046	0.000%
8	27.265	-61.943	0.000	-27.265	61.943	-0.000	0.000%
9	27.265	-46.457	0.000	-27.265	46.457	0.000	0.000%
10	24.043	-61.943	13.881	-24.043	61.943	-13.881	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
11	24.043	-46.457	13.881	-24.043	46.457	-13.881	0.000%
12	13.671	-61.943	23.679	-13.671	61.943	-23.679	0.000%
13	13.671	-46.457	23.679	-13.671	46.457	-23.679	0.000%
14	0.000	-61.943	27.742	-0.000	61.943	-27.742	0.000%
15	0.000	-46.457	27.742	0.000	46.457	-27.742	0.000%
16	-13.667	-61.943	23.672	13.667	61.943	-23.672	0.000%
17	-13.667	-46.457	23.672	13.667	46.457	-23.672	0.000%
18	-24.281	-61.943	14.019	24.281	61.943	-14.019	0.000%
19	-24.281	-46.457	14.019	24.281	46.457	-14.019	0.000%
20	-27.297	-61.943	0.000	27.297	61.943	-0.000	0.000%
21	-27.297	-46.457	0.000	27.297	46.457	0.000	0.000%
22	-24.089	-61.943	-13.908	24.089	61.943	13.908	0.000%
23	-24.089	-46.457	-13.908	24.089	46.457	13.908	0.000%
24	-13.655	-61.943	-23.651	13.655	61.943	23.651	0.000%
25	-13.655	-46.457	-23.651	13.655	46.457	23.651	0.000%
26	0.000	-88.458	0.000	0.000	88.458	0.000	0.000%
27	0.000	-88.458	-7.238	0.000	88.458	7.238	0.000%
28	3.595	-88.458	-6.226	-3.595	88.458	6.226	0.000%
29	6.274	-88.458	-3.623	-6.274	88.458	3.623	0.000%
30	7.184	-88.458	0.000	-7.184	88.458	0.000	0.000%
31	6.270	-88.458	3.620	-6.270	88.458	-3.620	0.000%
32	3.597	-88.458	6.231	-3.597	88.458	-6.231	0.000%
33	0.000	-88.458	7.249	0.000	88.458	-7.249	0.000%
34	-3.591	-88.458	6.220	3.591	88.458	-6.220	0.000%
35	-6.265	-88.458	3.617	6.265	88.458	-3.617	0.000%
36	-7.191	-88.458	0.000	7.191	88.458	0.000	0.000%
37	-6.279	-88.458	-3.625	6.279	88.458	3.625	0.000%
38	-3.594	-88.458	-6.225	3.594	88.458	6.225	0.000%
39	0.000	-51.619	-6.756	0.000	51.619	6.756	0.000%
40	3.339	-51.619	-5.783	-3.339	51.619	5.783	0.000%
41	5.936	-51.619	-3.427	-5.936	51.619	3.427	0.000%
42	6.653	-51.619	0.000	-6.653	51.619	0.000	0.000%
43	5.866	-51.619	3.387	-5.866	51.619	-3.387	0.000%
44	3.336	-51.619	5.778	-3.336	51.619	-5.778	0.000%
45	0.000	-51.619	6.769	0.000	51.619	-6.769	0.000%
46	-3.335	-51.619	5.776	3.335	51.619	-5.776	0.000%
47	-5.924	-51.619	3.420	5.924	51.619	-3.420	0.000%
48	-6.661	-51.619	0.000	6.661	51.619	0.000	0.000%
49	-5.878	-51.619	-3.394	5.878	51.619	3.394	0.000%
50	-3.332	-51.619	-5.771	3.332	51.619	5.771	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	6	0.00000001	0.00069164
3	Yes	6	0.00000001	0.00021751
4	Yes	8	0.00000001	0.00074752
5	Yes	8	0.00000001	0.00013073
6	Yes	8	0.00000001	0.00082000
7	Yes	8	0.00000001	0.00014377
8	Yes	7	0.00000001	0.00072133
9	Yes	7	0.00000001	0.00019853
10	Yes	8	0.00000001	0.00081062
11	Yes	8	0.00000001	0.00014230
12	Yes	8	0.00000001	0.00085967
13	Yes	8	0.00000001	0.00015472

14	Yes	6	0.00000001	0.00069159
15	Yes	6	0.00000001	0.00021736
16	Yes	8	0.00000001	0.00084963
17	Yes	8	0.00000001	0.00015283
18	Yes	8	0.00000001	0.00081498
19	Yes	8	0.00000001	0.00014316
20	Yes	7	0.00000001	0.00072122
21	Yes	7	0.00000001	0.00019839
22	Yes	8	0.00000001	0.00082317
23	Yes	8	0.00000001	0.00014448
24	Yes	8	0.00000001	0.00074132
25	Yes	8	0.00000001	0.00012957
26	Yes	4	0.00000001	0.00074477
27	Yes	8	0.00000001	0.00045886
28	Yes	8	0.00000001	0.00068206
29	Yes	8	0.00000001	0.00070594
30	Yes	8	0.00000001	0.00045635
31	Yes	8	0.00000001	0.00069433
32	Yes	8	0.00000001	0.00070759
33	Yes	8	0.00000001	0.00045623
34	Yes	8	0.00000001	0.00070301
35	Yes	8	0.00000001	0.00069571
36	Yes	8	0.00000001	0.00045748
37	Yes	8	0.00000001	0.00070975
38	Yes	8	0.00000001	0.00068229
39	Yes	5	0.00000001	0.00093141
40	Yes	6	0.00000001	0.00075102
41	Yes	6	0.00000001	0.00089187
42	Yes	6	0.00000001	0.00032688
43	Yes	6	0.00000001	0.00086475
44	Yes	7	0.00000001	0.00011389
45	Yes	5	0.00000001	0.00093089
46	Yes	7	0.00000001	0.00011041
47	Yes	6	0.00000001	0.00087614
48	Yes	6	0.00000001	0.00032736
49	Yes	6	0.00000001	0.00090188
50	Yes	6	0.00000001	0.00074715

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	160 - 155	38.807	41	2.242	0.032
L2	155 - 150	36.462	41	2.231	0.029
L3	150 - 148.5	34.161	41	2.151	0.022
L4	148.5 - 148	33.492	41	2.112	0.019
L5	148 - 143	33.271	41	2.110	0.019
L6	143 - 138	31.075	41	2.082	0.018
L7	138 - 133	28.916	41	2.041	0.016
L8	133 - 128	26.808	41	1.986	0.015
L9	128 - 123	24.764	41	1.918	0.013
L10	123 - 118	22.797	41	1.838	0.012
L11	118 - 111	20.918	41	1.749	0.010
L12	114.75 - 109.75	19.750	41	1.686	0.009
L13	109.75 - 105.333	18.011	41	1.627	0.009
L14	105.333 - 105.083	16.544	41	1.544	0.008
L15	105.083 - 100.083	16.463	41	1.540	0.008
L16	100.083 - 95.083	14.886	41	1.472	0.007
L17	95.083 - 92.5	13.382	41	1.401	0.006
L18	92.5 - 92.25	12.634	41	1.363	0.006

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L19	92.25 - 87.25	12.563	41	1.360	0.006
L20	87.25 - 82.25	11.168	41	1.304	0.005
L21	82.25 - 76.75	9.833	41	1.246	0.005
L22	81 - 75.75	9.509	41	1.231	0.005
L23	75.75 - 70.75	8.178	41	1.180	0.005
L24	70.75 - 70.583	6.995	41	1.079	0.004
L25	70.583 - 70.333	6.957	41	1.076	0.004
L26	70.333 - 70	6.901	41	1.073	0.004
L27	70 - 69.75	6.826	41	1.069	0.004
L28	69.75 - 64.75	6.770	41	1.064	0.004
L29	64.75 - 59.75	5.708	41	0.964	0.004
L30	59.75 - 54.75	4.752	41	0.863	0.003
L31	54.75 - 49.75	3.902	41	0.762	0.003
L32	49.75 - 43	3.156	41	0.662	0.002
L33	48 - 42	2.920	41	0.627	0.002
L34	42 - 37	2.168	41	0.562	0.002
L35	37 - 32	1.627	41	0.472	0.001
L36	32 - 27.913	1.179	41	0.383	0.001
L37	27.913 - 27.663	0.882	41	0.312	0.001
L38	27.663 - 27.25	0.866	41	0.309	0.001
L39	27.25 - 27.083	0.839	41	0.304	0.001
L40	27.083 - 26.833	0.829	41	0.301	0.001
L41	26.833 - 21.833	0.813	41	0.298	0.001
L42	21.833 - 16.833	0.531	41	0.240	0.001
L43	16.833 - 16	0.309	41	0.183	0.001
L44	16 - 15.75	0.278	41	0.174	0.000
L45	15.75 - 14.747	0.269	41	0.171	0.000
L46	14.747 - 14.497	0.234	41	0.162	0.000
L47	14.497 - 12.083	0.226	41	0.158	0.000
L48	12.083 - 11.833	0.155	41	0.122	0.000
L49	11.833 - 10	0.148	41	0.119	0.000
L50	10 - 9.75	0.106	41	0.101	0.000
L51	9.75 - 4.75	0.101	41	0.099	0.000
L52	4.75 - 0	0.024	41	0.048	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
157.000	80010966 w/ Mount Pipe	41	37.398	2.239	0.031	6806
149.000	VV-65B-R1_TMO w/ Mount Pipe	41	33.714	2.121	0.020	3712
138.000	(2) BSF0020F3V1	41	28.916	2.041	0.016	5969
126.000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	41	23.967	1.887	0.012	3707
116.000	MX08FRO665-21 w/ Mount Pipe	41	20.195	1.708	0.010	3645
48.000	KS24019-L112A	41	2.920	0.627	0.002	3977

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	160 - 155	161.143	14	9.333	0.129

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L2	155 - 150	151.431	14	9.292	0.118
L3	150 - 148.5	141.895	14	8.963	0.089
L4	148.5 - 148	139.118	14	8.799	0.078
L5	148 - 143	138.202	14	8.793	0.078
L6	143 - 138	129.094	14	8.677	0.072
L7	138 - 133	120.146	6	8.505	0.066
L8	133 - 128	111.409	6	8.276	0.059
L9	128 - 123	102.936	6	7.994	0.053
L10	123 - 118	94.778	6	7.665	0.047
L11	118 - 111	86.983	6	7.292	0.041
L12	114.75 - 109.75	82.130	6	7.029	0.037
L13	109.75 - 105.333	74.908	6	6.785	0.034
L14	105.333 - 105.083	68.815	6	6.437	0.030
L15	105.083 - 100.083	68.479	6	6.423	0.030
L16	100.083 - 95.083	61.925	6	6.137	0.027
L17	95.083 - 92.5	55.672	6	5.840	0.025
L18	92.5 - 92.25	52.565	6	5.681	0.024
L19	92.25 - 87.25	52.269	6	5.670	0.024
L20	87.25 - 82.25	46.469	6	5.437	0.022
L21	82.25 - 76.75	40.915	6	5.195	0.020
L22	81 - 75.75	39.567	6	5.134	0.020
L23	75.75 - 70.75	34.028	6	4.919	0.019
L24	70.75 - 70.583	29.106	6	4.499	0.017
L25	70.583 - 70.333	28.950	6	4.485	0.016
L26	70.333 - 70	28.715	6	4.473	0.016
L27	70 - 69.75	28.405	6	4.458	0.016
L28	69.75 - 64.75	28.172	6	4.437	0.016
L29	64.75 - 59.75	23.754	6	4.015	0.014
L30	59.75 - 54.75	19.774	6	3.594	0.012
L31	54.75 - 49.75	16.234	6	3.175	0.010
L32	49.75 - 43	13.131	6	2.757	0.009
L33	48 - 42	12.148	6	2.611	0.008
L34	42 - 37	9.020	6	2.339	0.007
L35	37 - 32	6.768	6	1.965	0.006
L36	32 - 27.913	4.904	6	1.595	0.005
L37	27.913 - 27.663	3.667	6	1.297	0.004
L38	27.663 - 27.25	3.599	6	1.285	0.004
L39	27.25 - 27.083	3.489	6	1.265	0.004
L40	27.083 - 26.833	3.445	6	1.253	0.003
L41	26.833 - 21.833	3.380	6	1.241	0.003
L42	21.833 - 16.833	2.207	6	1.000	0.003
L43	16.833 - 16	1.285	6	0.762	0.002
L44	16 - 15.75	1.156	6	0.723	0.002
L45	15.75 - 14.747	1.118	6	0.713	0.002
L46	14.747 - 14.497	0.972	6	0.674	0.002
L47	14.497 - 12.083	0.937	6	0.659	0.002
L48	12.083 - 11.833	0.643	6	0.507	0.001
L49	11.833 - 10	0.616	6	0.497	0.001
L50	10 - 9.75	0.440	6	0.421	0.001
L51	9.75 - 4.75	0.419	6	0.410	0.001
L52	4.75 - 0	0.099	6	0.200	0.001

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
157.000	80010966 w/ Mount Pipe	14	155.308	9.322	0.123	1754
149.000	VV-65B-R1_TMO w/ Mount Pipe	14	140.039	8.836	0.081	945

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
138.000	(2) BSF0020F3V1	6	120.146	8.505	0.066	1500
126.000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	6	99.633	7.866	0.050	923
116.000	MX08FRO665-21 w/ Mount Pipe	6	83.979	7.121	0.039	901
48.000	KS24019-L112A	6	12.148	2.611	0.008	958

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	KI/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	160 - 155 (1)	TP10.75x10.75x0.349	5.000	0.000	0.0	11.404	-4.749	359.220	0.013
L2	155 - 150 (2)	TP10.75x10.75x0.349	5.000	0.000	0.0	11.404	-5.671	359.220	0.016
L3	150 - 148.5 (3)	TP10.75x10.75x0.349	1.500	0.000	0.0	11.404	-10.945	359.220	0.030
L4	148.5 - 148 (4)	TP23x23x0.349	0.500	0.000	0.0	24.835	-11.080	782.300	0.014
L5	148 - 143 (5)	TP23.81x23x0.25	5.000	0.000	0.0	18.695	-12.086	1009.520	0.012
L6	143 - 138 (6)	TP24.62x23.81x0.25	5.000	0.000	0.0	19.338	-12.933	1044.230	0.012
L7	138 - 133 (7)	TP25.43x24.62x0.25	5.000	0.000	0.0	19.980	-17.037	1078.940	0.016
L8	133 - 128 (8)	TP26.24x25.43x0.25	5.000	0.000	0.0	20.623	-17.655	1113.650	0.016
L9	128 - 123 (9)	TP27.05x26.24x0.25	5.000	0.000	0.0	21.266	-21.888	1148.350	0.019
L10	123 - 118 (10)	TP27.86x27.05x0.25	5.000	0.000	0.0	21.909	-22.616	1183.060	0.019
L11	118 - 111 (11)	TP28.994x27.86x0.25	7.000	0.000	0.0	22.326	-25.760	1205.620	0.021
L12	111 - 109.75 (12)	TP28.696x27.887x0.313	5.000	0.000	0.0	28.153	-26.936	1520.280	0.018
L13	109.75 - 105.333 (13)	TP29.412x28.696x0.313	4.417	0.000	0.0	28.863	-27.749	1558.600	0.018
L14	105.333 - 105.083 (14)	TP29.452x29.412x0.469	0.250	0.000	0.0	43.122	-27.821	2328.600	0.012
L15	105.083 - 100.083 (15)	TP30.262x29.452x0.463	5.000	0.000	0.0	43.745	-28.953	2362.250	0.012
L16	100.083 - 95.083 (16)	TP31.072x30.262x0.463	5.000	0.000	0.0	44.934	-30.117	2426.460	0.012
L17	95.083 - 92.5 (17)	TP31.491x31.072x0.456	2.583	0.000	0.0	44.942	-30.726	2426.880	0.013
L18	92.5 - 92.25 (18)	TP31.531x31.491x0.638	0.250	0.000	0.0	62.511	-30.814	3375.600	0.009
L19	92.25 - 87.25 (19)	TP32.341x31.531x0.625	5.000	0.000	0.0	62.917	-32.273	3397.510	0.009
L20	87.25 - 82.25 (20)	TP33.151x32.341x0.613	5.000	0.000	0.0	63.257	-33.763	3415.900	0.010
L21	82.25 - 76.75 (21)	TP34.042x33.151x0.613	5.500	0.000	0.0	63.651	-34.138	3437.160	0.010
L22	76.75 - 75.75 (22)	TP33.579x32.729x0.375	5.250	0.000	0.0	39.521	-36.307	2311.980	0.016
L23	75.75 - 70.75 (23)	TP34.389x33.579x0.375	5.000	0.000	0.0	40.485	-37.497	2368.380	0.016
L24	70.75 - 70.583 (24)	TP34.416x34.389x0.375	0.167	0.000	0.0	40.517	-37.553	2370.260	0.016
L25	70.583 - 70.333 (25)	TP34.456x34.416x0.675	0.250	0.000	0.0	72.375	-37.646	4233.940	0.009
L26	70.333 - 70 (26)	TP34.51x34.456x0.675	0.333	0.000	0.0	72.491	-37.767	4240.700	0.009
L27	70 - 69.75 (27)	TP34.551x34.51x0.375	0.250	0.000	0.0	40.678	-37.826	2379.650	0.016
L28	69.75 - 64.75	TP35.361x34.551x0.375	5.000	0.000	0.0	41.642	-39.031	2436.050	0.016

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u φP _n
L29	(28) 64.75 - 59.75	TP36.171x35.361x0.375	5.000	0.000	0.0	42.606	-40.268	2492.440	0.016
L30	(29) 59.75 - 54.75	TP36.981x36.171x0.375	5.000	0.000	0.0	43.570	-41.535	2548.840	0.016
L31	(30) 54.75 - 49.75	TP37.791x36.981x0.375	5.000	0.000	0.0	44.534	-42.824	2605.230	0.016
L32	(31) 49.75 - 43 (32)	TP38.884x37.791x0.375	6.750	0.000	0.0	44.871	-43.266	2624.970	0.016
L33	43 - 42 (33)	TP38.296x37.324x0.438	6.000	0.000	0.0	52.571	-45.935	3075.420	0.015
L34	42 - 37 (34)	TP39.106x38.296x0.438	5.000	0.000	0.0	53.696	-47.399	3141.220	0.015
L35	37 - 32 (35)	TP39.916x39.106x0.438	5.000	0.000	0.0	54.821	-48.887	3207.020	0.015
L36	32 - 27.913 (36)	TP40.578x39.916x0.438	4.087	0.000	0.0	55.740	-50.120	3260.810	0.015
L37	27.913 - 27.663 (37)	TP40.619x40.578x0.675	0.250	0.000	0.0	85.577	-50.241	5006.270	0.010
L38	27.663 - 27.25 (38)	TP40.686x40.619x0.675	0.413	0.000	0.0	85.721	-50.415	5014.650	0.010
L39	27.25 - 27.083 (39)	TP40.713x40.686x0.438	0.167	0.000	0.0	55.927	-50.468	3271.730	0.015
L40	27.083 - 26.833 (40)	TP40.753x40.713x0.663	0.250	0.000	0.0	84.301	-50.567	4931.640	0.010
L41	26.833 - 21.833 (41)	TP41.563x40.753x0.663	5.000	0.000	0.0	86.005	-52.550	5031.280	0.010
L42	21.833 - 16.833 (42)	TP42.373x41.563x0.663	5.000	0.000	0.0	87.708	-54.565	5130.920	0.011
L43	16.833 - 16 (43)	TP42.508x42.373x0.663	0.833	0.000	0.0	87.992	-54.905	5147.520	0.011
L44	16 - 15.75 (44)	TP42.549x42.508x0.813	0.250	0.000	0.0	107.632	-55.031	6296.470	0.009
L45	15.75 - 14.747 (45)	TP42.711x42.549x0.813	1.003	0.000	0.0	108.051	-55.502	6320.980	0.009
L46	14.747 - 14.497 (46)	TP42.752x42.711x0.488	0.250	0.000	0.0	65.396	-55.603	3825.680	0.015
L47	14.497 - 12.083 (47)	TP43.143x42.752x0.488	2.414	0.000	0.0	66.001	-56.512	3861.070	0.015
L48	12.083 - 11.833 (48)	TP43.183x43.143x0.738	0.250	0.000	0.0	99.358	-56.638	5812.420	0.010
L49	11.833 - 10 (49)	TP43.48x43.183x0.738	1.833	0.000	0.0	100.053	-57.435	5853.090	0.010
L50	10 - 9.75 (50)	TP43.521x43.48x0.738	0.250	0.000	0.0	100.148	-57.562	5858.630	0.010
L51	9.75 - 4.75 (51)	TP44.331x43.521x0.725	5.000	0.000	0.0	100.343	-59.788	5870.050	0.010
L52	4.75 - 0 (52)	TP45.1x44.331x0.713	4.750	0.000	0.0	100.381	-61.931	5872.300	0.011

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{rx} kip-ft	Ratio M _{ux} φM _{rx}	M _{uy} kip-ft	φM _{ry} kip-ft	Ratio M _{uy} φM _{ry}
L1	160 - 155 (1)	TP10.75x10.75x0.349	17.998	99.144	0.182	0.000	99.144	0.000
L2	155 - 150 (2)	TP10.75x10.75x0.349	53.616	99.144	0.541	0.000	99.144	0.000
L3	150 - 148.5 (3)	TP10.75x10.75x0.349	64.796	99.144	0.654	0.000	99.144	0.000
L4	148.5 - 148 (4)	TP23x23x0.349	70.820	458.290	0.155	0.000	458.290	0.000
L5	148 - 143 (5)	TP23.81x23x0.25	134.352	619.446	0.217	0.000	619.446	0.000
L6	143 - 138 (6)	TP24.62x23.81x0.25	201.243	663.003	0.304	0.000	663.003	0.000
L7	138 - 133 (7)	TP25.43x24.62x0.25	289.483	704.731	0.411	0.000	704.731	0.000
L8	133 - 128 (8)	TP26.24x25.43x0.25	378.748	745.141	0.508	0.000	745.141	0.000
L9	128 - 123 (9)	TP27.05x26.24x0.25	477.839	786.274	0.608	0.000	786.274	0.000
L10	123 - 118 (10)	TP27.86x27.05x0.25	581.669	828.096	0.702	0.000	828.096	0.000
L11	118 - 111 (11)	TP28.994x27.86x0.25	655.643	855.633	0.766	0.000	855.633	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L12	111 - 109.75 (12)	TP28.696x27.887x0.313	774.206	1123.408	0.689	0.000	1123.408	0.000
L13	109.75 - 105.333 (13)	TP29.412x28.696x0.313	880.058	1181.075	0.745	0.000	1181.075	0.000
L14	105.333 - 105.083 (14)	TP29.452x29.412x0.469	886.083	1748.142	0.507	0.000	1748.142	0.000
L15	105.083 - 100.083 (15)	TP30.262x29.452x0.463	1007.200	1824.517	0.552	0.000	1824.517	0.000
L16	100.083 - 95.083 (16)	TP31.072x30.262x0.463	1129.775	1925.825	0.587	0.000	1925.825	0.000
L17	95.083 - 92.5 (17)	TP31.491x31.072x0.456	1193.650	1953.667	0.611	0.000	1953.667	0.000
L18	92.5 - 92.25 (18)	TP31.531x31.491x0.638	1199.850	2689.342	0.446	0.000	2689.342	0.000
L19	92.25 - 87.25 (19)	TP32.341x31.531x0.625	1324.858	2781.392	0.476	0.000	2781.392	0.000
L20	87.25 - 82.25 (20)	TP33.151x32.341x0.613	1451.625	2871.450	0.506	0.000	2871.450	0.000
L21	82.25 - 76.75 (21)	TP34.042x33.151x0.613	1483.583	2907.625	0.510	0.000	2907.625	0.000
L22	76.75 - 75.75 (22)	TP33.579x32.729x0.375	1619.217	1997.992	0.810	0.000	1997.992	0.000
L23	75.75 - 70.75 (23)	TP34.389x33.579x0.375	1749.658	2097.208	0.834	0.000	2097.208	0.000
L24	70.75 - 70.583 (24)	TP34.416x34.389x0.375	1754.025	2100.567	0.835	0.000	2100.567	0.000
L25	70.583 - 70.333 (25)	TP34.456x34.416x0.675	1760.575	3690.858	0.477	0.000	3690.858	0.000
L26	70.333 - 70 (26)	TP34.51x34.456x0.675	1769.292	3702.767	0.478	0.000	3702.767	0.000
L27	70 - 69.75 (27)	TP34.551x34.51x0.375	1775.842	2117.342	0.839	0.000	2117.342	0.000
L28	69.75 - 64.75 (28)	TP35.361x34.551x0.375	1907.217	2219.442	0.859	0.000	2219.442	0.000
L29	64.75 - 59.75 (29)	TP36.171x35.361x0.375	2039.292	2321.658	0.878	0.000	2321.658	0.000
L30	59.75 - 54.75 (30)	TP36.981x36.171x0.375	2172.183	2415.300	0.899	0.000	2415.300	0.000
L31	54.75 - 49.75 (31)	TP37.791x36.981x0.375	2305.525	2510.158	0.918	0.000	2510.158	0.000
L32	49.75 - 43 (32)	TP38.884x37.791x0.375	2352.292	2543.642	0.925	0.000	2543.642	0.000
L33	43 - 42 (33)	TP38.296x37.324x0.438	2514.233	3029.533	0.830	0.000	3029.533	0.000
L34	42 - 37 (34)	TP39.106x38.296x0.438	2649.892	3161.308	0.838	0.000	3161.308	0.000
L35	37 - 32 (35)	TP39.916x39.106x0.438	2785.808	3295.892	0.845	0.000	3295.892	0.000
L36	32 - 27.913 (36)	TP40.578x39.916x0.438	2897.050	3407.983	0.850	0.000	3407.983	0.000
L37	27.913 - 27.663 (37)	TP40.619x40.578x0.675	2903.858	5175.833	0.561	0.000	5175.833	0.000
L38	27.663 - 27.25 (38)	TP40.686x40.619x0.675	2915.117	5193.333	0.561	0.000	5193.333	0.000
L39	27.25 - 27.083 (39)	TP40.713x40.686x0.438	2919.667	3430.975	0.851	0.000	3430.975	0.000
L40	27.083 - 26.833 (40)	TP40.753x40.713x0.663	2926.483	5119.317	0.572	0.000	5119.317	0.000
L41	26.833 - 21.833 (41)	TP41.563x40.753x0.663	3063.150	5329.983	0.575	0.000	5329.983	0.000
L42	21.833 - 16.833 (42)	TP42.373x41.563x0.663	3200.492	5544.900	0.577	0.000	5544.900	0.000
L43	16.833 - 16 (43)	TP42.508x42.373x0.663	3223.433	5581.117	0.578	0.000	5581.117	0.000
L44	16 - 15.75 (44)	TP42.549x42.508x0.813	3230.325	6784.708	0.476	0.000	6784.708	0.000
L45	15.75 - 14.747 (45)	TP42.711x42.549x0.813	3257.992	6838.141	0.476	0.000	6838.141	0.000

Section No.	Elevation ft	Size	M_{ux}	ϕM_{nx}	Ratio	M_{uy}	ϕM_{ny}	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{nx}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{ny}}$
L46	14.747 - 14.497 (46)	TP42.752x42.711x0.488	3264.900	4207.208	0.776	0.000	4207.208	0.000
L47	14.497 - 12.083 (47)	TP43.143x42.752x0.488	3331.617	4285.875	0.777	0.000	4285.875	0.000
L48	12.083 - 11.833 (48)	TP43.183x43.143x0.738	3338.533	6382.700	0.523	0.000	6382.700	0.000
L49	11.833 - 10 (49)	TP43.48x43.183x0.738	3389.333	6473.092	0.524	0.000	6473.092	0.000
L50	10 - 9.75 (50)	TP43.521x43.48x0.738	3396.267	6485.467	0.524	0.000	6485.467	0.000
L51	9.75 - 4.75 (51)	TP44.331x43.521x0.725	3535.533	6627.017	0.534	0.000	6627.017	0.000
L52	4.75 - 0 (52)	TP45.1x44.331x0.713	3668.625	6752.267	0.543	0.000	6752.267	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual	ϕV_n	Ratio	Actual	ϕT_n	Ratio
			V_u K	K	$\frac{V_u}{\phi V_n}$	T_u kip-ft	kip-ft	$\frac{T_u}{\phi T_n}$
L1	160 - 155 (1)	TP10.75x10.75x0.349	6.857	107.766	0.064	2.399	98.546	0.024
L2	155 - 150 (2)	TP10.75x10.75x0.349	7.391	107.766	0.069	2.397	98.546	0.024
L3	150 - 148.5 (3)	TP10.75x10.75x0.349	12.019	107.766	0.112	4.157	98.546	0.042
L4	148.5 - 148 (4)	TP23x23x0.349	12.092	234.690	0.052	4.157	467.371	0.009
L5	148 - 143 (5)	TP23.81x23x0.25	13.038	302.857	0.043	0.117	624.874	0.000
L6	143 - 138 (6)	TP24.62x23.81x0.25	13.728	313.269	0.044	0.117	668.579	0.000
L7	138 - 133 (7)	TP25.43x24.62x0.25	17.715	323.681	0.055	0.188	713.762	0.000
L8	133 - 128 (8)	TP26.24x25.43x0.25	18.009	334.094	0.054	0.188	760.422	0.000
L9	128 - 123 (9)	TP27.05x26.24x0.25	20.649	344.506	0.060	0.264	808.558	0.000
L10	123 - 118 (10)	TP27.86x27.05x0.25	20.897	354.918	0.059	0.263	858.175	0.000
L11	118 - 111 (11)	TP28.994x27.86x0.25	23.543	361.686	0.065	0.444	891.217	0.000
L12	111 - 109.75 (12)	TP28.696x27.887x0.313	23.885	456.084	0.052	0.444	1133.700	0.000
L13	109.75 - 105.333 (13)	TP29.412x28.696x0.313	24.078	467.581	0.051	0.444	1191.575	0.000
L14	105.333 - 105.083 (14)	TP29.452x29.412x0.469	24.096	698.581	0.034	0.443	1773.167	0.000
L15	105.083 - 100.083 (15)	TP30.262x29.452x0.463	24.382	708.676	0.034	0.443	1849.450	0.000
L16	100.083 - 95.083 (16)	TP31.072x30.262x0.463	24.667	727.938	0.034	0.443	1951.350	0.000
L17	95.083 - 92.5 (17)	TP31.491x31.072x0.456	24.818	728.063	0.034	0.443	1978.758	0.000
L18	92.5 - 92.25 (18)	TP31.531x31.491x0.638	24.843	1012.680	0.025	0.442	2739.817	0.000
L19	92.25 - 87.25 (19)	TP32.341x31.531x0.625	25.189	1019.250	0.025	0.442	2831.017	0.000
L20	87.25 - 82.25 (20)	TP33.151x32.341x0.613	25.536	1024.770	0.025	0.442	2920.150	0.000
L21	82.25 - 76.75 (21)	TP34.042x33.151x0.613	25.619	1031.150	0.025	0.442	2956.608	0.000
L22	76.75 - 75.75 (22)	TP33.579x32.729x0.375	26.035	693.594	0.038	0.441	2016.858	0.000
L23	75.75 - 70.75 (23)	TP34.389x33.579x0.375	26.183	710.513	0.037	0.441	2116.450	0.000
L24	70.75 - 70.583 (24)	TP34.416x34.389x0.375	26.186	711.078	0.037	0.441	2119.817	0.000
L25	70.583 - 70.333 (25)	TP34.456x34.416x0.675	26.196	1270.180	0.021	0.441	3757.717	0.000
L26	70.333 - 70 (26)	TP34.51x34.456x0.675	26.210	1272.210	0.021	0.441	3769.733	0.000

Section No.	Elevation ft	Size	Actual	ϕV_n	Ratio	Actual	ϕT_n	Ratio
			V_u K	K	V_u ϕV_n	T_u kip-ft	T_u ϕT_n	
L27	70 - 69.75 (27)	TP34.551x34.51x0.375	26.219	713.896	0.037	0.441	2136.658	0.000
L28	69.75 - 64.75 (28)	TP35.361x34.551x0.375	26.361	730.815	0.036	0.440	2239.133	0.000
L29	64.75 - 59.75 (29)	TP36.171x35.361x0.375	26.558	747.733	0.036	0.007	2344.000	0.000
L30	59.75 - 54.75 (30)	TP36.981x36.171x0.375	26.657	764.652	0.035	0.007	2451.275	0.000
L31	54.75 - 49.75 (31)	TP37.791x36.981x0.375	26.741	781.570	0.034	0.007	2560.950	0.000
L32	49.75 - 43 (32)	TP38.884x37.791x0.375	26.795	787.492	0.034	0.007	2599.900	0.000
L33	43 - 42 (33)	TP38.296x37.324x0.438	27.130	922.627	0.029	0.129	3058.933	0.000
L34	42 - 37 (34)	TP39.106x38.296x0.438	27.193	942.367	0.029	0.129	3191.233	0.000
L35	37 - 32 (35)	TP39.916x39.106x0.438	27.236	962.107	0.028	0.129	3326.325	0.000
L36	32 - 27.913 (36)	TP40.578x39.916x0.438	27.264	978.242	0.028	0.129	3438.833	0.000
L37	27.913 - 27.663 (37)	TP40.619x40.578x0.675	27.246	1501.880	0.018	0.129	5253.675	0.000
L38	27.663 - 27.25 (38)	TP40.686x40.619x0.675	27.263	1504.400	0.018	0.129	5271.283	0.000
L39	27.25 - 27.083 (39)	TP40.713x40.686x0.438	27.262	981.519	0.028	0.129	3461.908	0.000
L40	27.083 - 26.833 (40)	TP40.753x40.713x0.663	27.269	1479.490	0.018	0.129	5194.392	0.000
L41	26.833 - 21.833 (41)	TP41.563x40.753x0.663	27.427	1509.380	0.018	0.129	5406.408	0.000
L42	21.833 - 16.833 (42)	TP42.373x41.563x0.663	27.554	1539.270	0.018	0.129	5622.667	0.000
L43	16.833 - 16 (43)	TP42.508x42.373x0.663	27.573	1544.250	0.018	0.129	5659.108	0.000
L44	16 - 15.75 (44)	TP42.549x42.508x0.813	27.568	1888.940	0.015	0.129	6904.141	0.000
L45	15.75 - 14.747 (45)	TP42.711x42.549x0.813	27.626	1896.300	0.015	0.129	6958.000	0.000
L46	14.747 - 14.497 (46)	TP42.752x42.711x0.488	27.621	1147.700	0.024	0.129	4247.958	0.000
L47	14.497 - 12.083 (47)	TP43.143x42.752x0.488	27.702	1158.320	0.024	0.129	4326.933	0.000
L48	12.083 - 11.833 (48)	TP43.183x43.143x0.738	27.680	1743.730	0.016	0.129	6481.725	0.000
L49	11.833 - 10 (49)	TP43.48x43.183x0.738	27.789	1755.930	0.016	0.129	6572.733	0.000
L50	10 - 9.75 (50)	TP43.521x43.48x0.738	27.767	1757.590	0.016	0.129	6585.200	0.000
L51	9.75 - 4.75 (51)	TP44.331x43.521x0.725	27.967	1761.020	0.016	0.129	6724.883	0.000
L52	4.75 - 0 (52)	TP45.1x44.331x0.713	28.118	1761.690	0.016	0.129	6848.100	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		P_u ϕP_n	M_{ux} ϕM_{nx}	M_{uy} ϕM_{ny}	V_u ϕV_n	T_u ϕT_n			
L1	160 - 155 (1)	0.013	0.182	0.000	0.064	0.024	0.202	1.050	
L2	155 - 150 (2)	0.016	0.541	0.000	0.069	0.024	0.565	1.050	
L3	150 - 148.5 (3)	0.030	0.654	0.000	0.112	0.042	0.708	1.050	
L4	148.5 - 148 (4)	0.014	0.155	0.000	0.052	0.009	0.172	1.050	
L5	148 - 143 (5)	0.012	0.217	0.000	0.043	0.000	0.231	1.050	
L6	143 - 138 (6)	0.012	0.304	0.000	0.044	0.000	0.318	1.050	
L7	138 - 133 (7)	0.016	0.411	0.000	0.055	0.000	0.430	1.050	
L8	133 - 128 (8)	0.016	0.508	0.000	0.054	0.000	0.527	1.050	

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		P_u	M_{ux}	M_{uy}	V_u	T_u			
		ϕP_n	ϕM_{nx}	ϕM_{ny}	ϕV_n	ϕT_n			
L9	128 - 123 (9)	0.019	0.608	0.000	0.060	0.000	0.630	1.050	
L10	123 - 118 (10)	0.019	0.702	0.000	0.059	0.000	0.725	1.050	
L11	118 - 111 (11)	0.021	0.766	0.000	0.065	0.000	0.792	1.050	
L12	111 - 109.75 (12)	0.018	0.689	0.000	0.052	0.000	0.710	1.050	
L13	109.75 - 105.333 (13)	0.018	0.745	0.000	0.051	0.000	0.766	1.050	
L14	105.333 - 105.083 (14)	0.012	0.507	0.000	0.034	0.000	0.520	1.050	
L15	105.083 - 100.083 (15)	0.012	0.552	0.000	0.034	0.000	0.565	1.050	
L16	100.083 - 95.083 (16)	0.012	0.587	0.000	0.034	0.000	0.600	1.050	
L17	95.083 - 92.5 (17)	0.013	0.611	0.000	0.034	0.000	0.625	1.050	
L18	92.5 - 92.25 (18)	0.009	0.446	0.000	0.025	0.000	0.456	1.050	
L19	92.25 - 87.25 (19)	0.009	0.476	0.000	0.025	0.000	0.486	1.050	
L20	87.25 - 82.25 (20)	0.010	0.506	0.000	0.025	0.000	0.516	1.050	
L21	82.25 - 76.75 (21)	0.010	0.510	0.000	0.025	0.000	0.521	1.050	
L22	76.75 - 75.75 (22)	0.016	0.810	0.000	0.038	0.000	0.828	1.050	
L23	75.75 - 70.75 (23)	0.016	0.834	0.000	0.037	0.000	0.851	1.050	
L24	70.75 - 70.583 (24)	0.016	0.835	0.000	0.037	0.000	0.852	1.050	
L25	70.583 - 70.333 (25)	0.009	0.477	0.000	0.021	0.000	0.486	1.050	
L26	70.333 - 70 (26)	0.009	0.478	0.000	0.021	0.000	0.487	1.050	
L27	70 - 69.75 (27)	0.016	0.839	0.000	0.037	0.000	0.856	1.050	
L28	69.75 - 64.75 (28)	0.016	0.859	0.000	0.036	0.000	0.877	1.050	
L29	64.75 - 59.75 (29)	0.016	0.878	0.000	0.036	0.000	0.896	1.050	
L30	59.75 - 54.75 (30)	0.016	0.899	0.000	0.035	0.000	0.917	1.050	
L31	54.75 - 49.75 (31)	0.016	0.918	0.000	0.034	0.000	0.936	1.050	
L32	49.75 - 43 (32)	0.016	0.925	0.000	0.034	0.000	0.942	1.050	
L33	43 - 42 (33)	0.015	0.830	0.000	0.029	0.000	0.846	1.050	
L34	42 - 37 (34)	0.015	0.838	0.000	0.029	0.000	0.854	1.050	
L35	37 - 32 (35)	0.015	0.845	0.000	0.028	0.000	0.861	1.050	
L36	32 - 27.913 (36)	0.015	0.850	0.000	0.028	0.000	0.866	1.050	
L37	27.913 - 27.663 (37)	0.010	0.561	0.000	0.018	0.000	0.571	1.050	
L38	27.663 - 27.25 (38)	0.010	0.561	0.000	0.018	0.000	0.572	1.050	
L39	27.25 - 27.083 (39)	0.015	0.851	0.000	0.028	0.000	0.867	1.050	
L40	27.083 - 26.833 (40)	0.010	0.572	0.000	0.018	0.000	0.582	1.050	
L41	26.833 - 21.833 (41)	0.010	0.575	0.000	0.018	0.000	0.585	1.050	
L42	21.833 - 16.833 (42)	0.011	0.577	0.000	0.018	0.000	0.588	1.050	
L43	16.833 - 16 (43)	0.011	0.578	0.000	0.018	0.000	0.589	1.050	

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		P_u	M_{ux}	M_{uy}	V_u	T_u			
L44	16 - 15.75 (44)	0.009	0.476	0.000	0.015	0.000	0.485	1.050	
L45	15.75 - 14.747 (45)	0.009	0.476	0.000	0.015	0.000	0.485	1.050	
L46	14.747 - 14.497 (46)	0.015	0.776	0.000	0.024	0.000	0.791	1.050	
L47	14.497 - 12.083 (47)	0.015	0.777	0.000	0.024	0.000	0.793	1.050	
L48	12.083 - 11.833 (48)	0.010	0.523	0.000	0.016	0.000	0.533	1.050	
L49	11.833 - 10 (49)	0.010	0.524	0.000	0.016	0.000	0.534	1.050	
L50	10 - 9.75 (50)	0.010	0.524	0.000	0.016	0.000	0.534	1.050	
L51	9.75 - 4.75 (51)	0.010	0.534	0.000	0.016	0.000	0.544	1.050	
L52	4.75 - 0 (52)	0.011	0.543	0.000	0.016	0.000	0.554	1.050	

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	160 - 155	Pole	TP10.75x10.75x0.349	1	-4.749	377.181	19.3	Pass
L2	155 - 150	Pole	TP10.75x10.75x0.349	2	-5.671	377.181	53.8	Pass
L3	150 - 148.5	Pole	TP10.75x10.75x0.349	3	-10.945	377.181	67.4	Pass
L4	148.5 - 148	Pole	TP23x23x0.349	4	-11.080	821.415	16.4	Pass
L5	148 - 143	Pole	TP23.81x23x0.25	5	-12.086	1059.996	22.0	Pass
L6	143 - 138	Pole	TP24.62x23.81x0.25	6	-12.933	1096.441	30.3	Pass
L7	138 - 133	Pole	TP25.43x24.62x0.25	7	-17.037	1132.887	40.9	Pass
L8	133 - 128	Pole	TP26.24x25.43x0.25	8	-17.655	1169.332	50.2	Pass
L9	128 - 123	Pole	TP27.05x26.24x0.25	9	-21.888	1205.767	60.0	Pass
L10	123 - 118	Pole	TP27.86x27.05x0.25	10	-22.616	1242.213	69.1	Pass
L11	118 - 111	Pole	TP28.994x27.86x0.25	11	-25.760	1265.901	75.4	Pass
L12	111 - 109.75	Pole	TP28.696x27.887x0.313	12	-26.936	1596.294	67.6	Pass
L13	109.75 - 105.333	Pole	TP29.412x28.696x0.313	13	-27.749	1636.530	72.9	Pass
L14	105.333 - 105.083	Pole	TP29.452x29.412x0.469	14	-27.821	2445.030	49.5	Pass
L15	105.083 - 100.083	Pole	TP30.262x29.452x0.463	15	-28.953	2480.363	53.9	Pass
L16	100.083 - 95.083	Pole	TP31.072x30.262x0.463	16	-30.117	2547.783	57.2	Pass
L17	95.083 - 92.5	Pole	TP31.491x31.072x0.456	17	-30.726	2548.224	59.5	Pass
L18	92.5 - 92.25	Pole	TP31.531x31.491x0.638	18	-30.814	3544.380	43.4	Pass
L19	92.25 - 87.25	Pole	TP32.341x31.531x0.625	19	-32.273	3567.385	46.3	Pass
L20	87.25 - 82.25	Pole	TP33.151x32.341x0.613	20	-33.763	3586.695	49.1	Pass
L21	82.25 - 76.75	Pole	TP34.042x33.151x0.613	21	-34.138	3609.018	49.6	Pass
L22	76.75 - 75.75	Pole	TP33.579x32.729x0.375	22	-36.307	2427.579	78.8	Pass
L23	75.75 - 70.75	Pole	TP34.389x33.579x0.375	23	-37.497	2486.799	81.1	Pass
L24	70.75 - 70.583	Pole	TP34.416x34.389x0.375	24	-37.553	2488.773	81.2	Pass
L25	70.583 - 70.333	Pole	TP34.456x34.416x0.675	25	-37.646	4445.637	46.3	Pass
L26	70.333 - 70	Pole	TP34.51x34.456x0.675	26	-37.767	4452.735	46.4	Pass
L27	70 - 69.75	Pole	TP34.551x34.51x0.375	27	-37.826	2498.633	81.5	Pass
L28	69.75 - 64.75	Pole	TP35.361x34.551x0.375	28	-39.031	2557.852	83.5	Pass
L29	64.75 - 59.75	Pole	TP36.171x35.361x0.375	29	-40.268	2617.062	85.3	Pass
L30	59.75 - 54.75	Pole	TP36.981x36.171x0.375	30	-41.535	2676.282	87.3	Pass
L31	54.75 - 49.75	Pole	TP37.791x36.981x0.375	31	-42.824	2735.492	89.2	Pass
L32	49.75 - 43	Pole	TP38.884x37.791x0.375	32	-43.266	2756.218	89.8	Pass
L33	43 - 42	Pole	TP38.296x37.324x0.438	33	-45.935	3229.191	80.5	Pass
L34	42 - 37	Pole	TP39.106x38.296x0.438	34	-47.399	3298.281	81.3	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
L35	37 - 32	Pole	TP39.916x39.106x0.438	35	-48.887	3367.371	82.0	Pass	
L36	32 - 27.913	Pole	TP40.578x39.916x0.438	36	-50.120	3423.850	82.5	Pass	
L37	27.913 - 27.663	Pole	TP40.619x40.578x0.675	37	-50.241	5256.583	54.4	Pass	
L38	27.663 - 27.25	Pole	TP40.686x40.619x0.675	38	-50.415	5265.382	54.4	Pass	
L39	27.25 - 27.083	Pole	TP40.713x40.686x0.438	39	-50.468	3435.316	82.6	Pass	
L40	27.083 - 26.833	Pole	TP40.753x40.713x0.663	40	-50.567	5178.222	55.5	Pass	
L41	26.833 - 21.833	Pole	TP41.563x40.753x0.663	41	-52.550	5282.844	55.8	Pass	
L42	21.833 - 16.833	Pole	TP42.373x41.563x0.663	42	-54.565	5387.466	56.0	Pass	
L43	16.833 - 16	Pole	TP42.508x42.373x0.663	43	-54.905	5404.896	56.1	Pass	
L44	16 - 15.75	Pole	TP42.549x42.508x0.813	44	-55.031	6611.293	46.2	Pass	
L45	15.75 - 14.747	Pole	TP42.711x42.549x0.813	45	-55.502	6637.029	46.2	Pass	
L46	14.747 - 14.497	Pole	TP42.752x42.711x0.488	46	-55.603	4016.964	75.3	Pass	
L47	14.497 - 12.083	Pole	TP43.143x42.752x0.488	47	-56.512	4054.123	75.5	Pass	
L48	12.083 - 11.833	Pole	TP43.183x43.143x0.738	48	-56.638	6103.041	50.8	Pass	
L49	11.833 - 10	Pole	TP43.48x43.183x0.738	49	-57.435	6145.744	50.8	Pass	
L50	10 - 9.75	Pole	TP43.521x43.48x0.738	50	-57.562	6151.561	50.8	Pass	
L51	9.75 - 4.75	Pole	TP44.331x43.521x0.725	51	-59.788	6163.552	51.8	Pass	
L52	4.75 - 0	Pole	TP45.1x44.331x0.713	52	-61.931	6165.914	52.8	Pass	
							Summary		
							Pole (L32)	89.8	Pass
							RATING =	89.8	Pass

***NOTE: Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.**

APPENDIX B
BASE LEVEL DRAWING



(OTHER CONSIDERED EQUIPMENT)
(1) 1-1/4" TO 126 FT LEVEL
(6) 1-5/8" TO 126 FT LEVEL

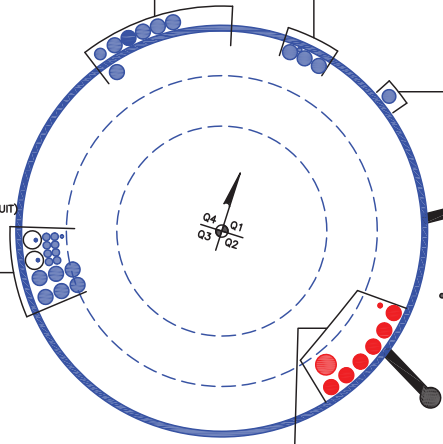
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 48 FT LEVEL
(3) 1-5/8" TO 149 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(1) 1-1/2" TO 116 FT LEVEL

(OTHER CONSIDERED EQUIPMENT—IN CONDUIT)
(2) 3/8" TO 157 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 3/8" TO 157 FT LEVEL
(8) 13/16" TO 157 FT LEVEL
(6) 1-5/8" TO 157 FT LEVEL

CLIMBING PEGS
W/ SAFETY CLIMB

(PROPOSED EQUIPMENT CONFIGURATION)
(1) 1/2" TO 138 FT LEVEL
(6) 1-5/8" TO 138 FT LEVEL
(1) 2-1/4" TO 138 FT LEVEL



APPENDIX C
ADDITIONAL CALCULATIONS

Bolted Extension Connection

TIA Rev. H



1. PARAMETERS

Elevation: 148'

1.1 tnxTower Reactions

Apply TIA-222-H Section 15.5?

No
Yes

Moment: $M := 71.25 \text{ kip}\cdot\text{ft}$

Axial Load: $P := 11.03 \text{ kip}$

Shear Load: $V := 12.21 \text{ kip}$

1.2 HSS Jump Properties

HSS Member: **6x6x1/2**

Number of HSS: $N_{\text{exist}} := 3$

HSS Grade: $F_{y_{\text{Ex}}} := 46 \text{ ksi}$ $F_{u_{\text{Ex}}} := 62 \text{ ksi}$

Diameter to the centroid of HSS: $BC_{\text{exist}} := 39.5 \text{ in}$

Thickness of HSS: $t_{\text{exist}} := 0.465 \text{ in}$

HSS Width: $w_{\text{exist}} := 6 \text{ in}$

Gross Area of One HSS: $A_{g_{\text{exist}}} := 9.74 \text{ in}^2$

Radius of Gyration of HSS: $r_{x2} := 2.23 \text{ in}$

Plastic Modulus: $Z_{\text{HSS}} := 19.8 \text{ in}^3$

Moment of Inertia of HSS: $I_{\text{exist}} := \frac{N_{\text{exist}} \cdot BC_{\text{exist}}^2 \cdot A_{g_{\text{exist}}}}{8} = 5698.81 \cdot \text{in}^4$

1.3 Reactions to HSS

(HSS Group to take full load)

Moment Reaction to HSS Group: $M_{\text{exist}} := M = 71.25 \cdot \text{kip}\cdot\text{ft}$

Axial Reaction to HSS Group: $P_{\text{exist}} := P = 11.03 \cdot \text{kip}$

Shear Reaction HSS Group: $V_{\text{exist}} := V = 12.21 \cdot \text{kip}$

2. HSS Checks

2.1 Maximum Axial Forces in Single HSS

Outer Radius of HSS Circle: $C := \frac{BC_{\text{exist}}}{2} = 19.75 \cdot \text{in}$

Critical Compression Bending Stress: $P_{\text{comp}} := \frac{M_{\text{exist}} \cdot C}{I_{\text{exist}}} \cdot A_{g_ \text{exist}} + \frac{P_{\text{exist}}}{N_{\text{exist}}} = 32.54 \cdot \text{kip}$

Critical Tension Bending Stress: $P_{\text{tens}} := \frac{M_{\text{exist}} \cdot C}{I_{\text{exist}}} \cdot A_{g_ \text{exist}} - \frac{P_{\text{exist}}}{N_{\text{exist}}} = 25.18 \cdot \text{kip}$

2.2 Available Compression Strength

[AISC 15th Edition E3-1]

Resistance Factor: $\phi_c := 0.9$

Unbraced Length: $L_u := 94 \text{in}$

Effective Length Factor: $K := 1.0$

Effective Length of Member: $L_c := K \cdot L_u = 94 \cdot \text{in}$ [AISC 15th Edition E3-2]

Strength of Bridge Stiffener: $F_{yEx} = 46 \cdot \text{ksi}$ $F_{uEx} = 62 \cdot \text{ksi}$

Elastic Buckling Stress: $F_e := \frac{\pi^2 \cdot 29000 \text{ksi}}{\left(\frac{L_c}{r_{x2}}\right)^2} = 161.08 \cdot \text{ksi}$
[AISC 15th Ed., Eq. E3-4]

Determination of Critical Stress: $F_{cr} := \begin{cases} \left(0.658 \frac{F_{yEx}}{F_e}\right) \cdot F_{yEx} & \text{if } 4.71 \cdot \sqrt{\frac{E}{F_{yEx}}} \geq \frac{L_c}{r_{x2}} \\ (0.877 \cdot F_e) & \text{otherwise} \end{cases}$
[AISC 15th Ed., Eqs. E3-2 and E3-3]

$F_{cr} = 40.82 \cdot \text{ksi}$

Allowable Compressive Strength: $\phi P_n := \begin{cases} (\phi_c \cdot F_{yEx} \cdot A_{g_ \text{exist}}) & \text{if } \frac{L_c}{r_{x2}} \leq 25 \\ (\phi_c \cdot F_{cr} \cdot A_{g_ \text{exist}}) & \text{otherwise} \end{cases}$
[AISC 15th Ed., Eqs. J4-6 and E3-1]

$\phi P_n = 357.81 \cdot \text{kip}$

Check Compressive Strength:

$$\text{Capacity}_{\text{comp}} := \begin{cases} \frac{P_{\text{comp}}}{\phi P_n} & \text{if S15Allowable} = \text{"No"} \\ \frac{P_{\text{comp}}}{\phi P_n} \cdot \left(\frac{1}{1.05}\right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} = 8.66\%$$

$\text{Capacity}_{\text{comp}} = 8.66\%$

2.3 Available Tension Strength

Gross Section Yield

[AISC 15th Edition Ch. D2]

Available Tension Yield Strength:

$$\phi P_{ty} := 0.9 \cdot F_y \cdot A_{g_exist} = 403.24 \cdot \text{kip}$$

Net Section Fracture

Bolt Hole Diameter:

$$\text{BH} := 1.0625 \text{ in}$$

Thickness:

$$T := t_{\text{exist}} = 0.47 \cdot \text{in}$$

Net Area:

$$A_{\text{net}} := A_{g_exist} - 2 \left(\text{BH} + \frac{1}{16} \text{ in} \right) \cdot T = 8.69 \cdot \text{in}^2$$

Net Area Limitation:

$$A_e := A_{\text{net}} = 8.69 \cdot \text{in}^2$$

Available Fractile Strength:

$$\phi P_{tr} := 0.75 \cdot F_u \cdot A_e = 404.26 \cdot \text{kip}$$

Tension Check

Controlling Mode of Failure:

$$\text{Check}_{\text{mode}} := \begin{cases} \text{"Fracture Controls"} & \text{if } \frac{P_{\text{tens}}}{\phi P_{tr}} > \frac{P_{\text{tens}}}{\phi P_{ty}} \\ \text{"Yield Controls"} & \text{otherwise} \end{cases}$$

$\text{Check}_{\text{mode}} = \text{"Yield Controls"}$

$$\phi P_{nt} := \begin{cases} \phi P_{tr} & \text{if } \text{Check}_{\text{mode}} = \text{"Fracture Controls"} \\ \phi P_{ty} & \text{otherwise} \end{cases}$$

Controlling Tension Mode Check:

$$\text{Capacity}_{\text{tension}} := \begin{cases} \frac{P_{\text{tens}}}{\phi P_{nt}} & \text{if S15Allowable} = \text{"No"} \\ \frac{P_{\text{tens}}}{\phi P_{nt}} \cdot \left(\frac{1}{1.05}\right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} = 5.95\%$$

$\text{Capacity}_{\text{tension}} = 5.95\%$

2.4 Available Shear Strength

[AISC 15th Edition Ch. G]

Resistance Factor: $\phi_v := 0.9$

Width Resisting Shear Load: $h_{inner} := w_{exist} - 3 \cdot t_{exist} = 4.6 \text{ in}$

Design Wall Thickness: $t_w := 0.93 \cdot t_{exist} = 0.432 \text{ in}$

Effective Shear Area: $A_w := 2 \cdot h_{inner} \cdot t_w = 3.98 \text{ in}^2$

Shear Buckling Coefficient: $k_v := 5$

$$\frac{h_{inner}}{t_w} = 10.65 < 1.1 \cdot \sqrt{\frac{k_v \cdot E}{F_{yEX}}} = 61.76 \rightarrow C_v := 1.0$$

Available Shear Strength: $\phi V_n := \phi_v \cdot 0.6 \cdot F_{yEX} \cdot A_w \cdot C_v = 98.93 \text{ kip}$

Shear Load Per HSS: $V_u := \frac{V_{exist}}{N_{exist}} = 4.07 \text{ kip}$

Check Shear Strength:

$$\text{Capacity}_{shear} := \begin{cases} \frac{V_u}{\phi V_n} & \text{if S15Allowable} = \text{"No"} \\ \frac{V_u}{\phi V_n} \cdot \left(\frac{1}{1.05}\right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} = 3.92\%$$

Capacity_{shear} = 3.92.%

2.4 Available Flexural Strength

[AISC 15th Edition Ch. F7]

Resistance Factor: $\phi_f := 0.9$

$$\frac{h_{inner}}{t_w} = 10.65 < 1.12 \cdot \sqrt{\frac{E}{F_{yEX}}} = 28.12 \rightarrow \text{Compact}$$

Available Flexural Strength: $\phi M_n := \phi_f \cdot F_{yEX} \cdot Z_{HSS} = 68.31 \text{ ft}\cdot\text{kip}$

Flexural Load Per HSS: $M_u := V_u \cdot (L_u + 42\text{in}) = 46.13 \text{ ft}\cdot\text{kip}$

Check Flexural Strength:

$$\text{Capacity}_{flexure} := \begin{cases} \frac{M_u}{\phi M_n} & \text{if S15Allowable} = \text{"No"} \\ \frac{M_u}{\phi M_n} \cdot \left(\frac{1}{1.05}\right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} = 64.31\%$$

Capacity_{flexure} = 64.31.%

2.5 Combined Stresses

[AISC 15th Edition Ch. H]

Combined Flexure and Compression:
$$\text{Combined}_1 := \left[\begin{array}{l} \left[\frac{P_{\text{comp}}}{\phi P_n} + \frac{8}{9} \left(\frac{M_u}{\phi M_n} \right) \right] \text{ if } \frac{P_{\text{comp}}}{\phi P_n} \geq 0.2 \\ \left(\frac{P_{\text{comp}}}{2 \cdot \phi P_n} + \frac{M_u}{\phi M_n} \right) \text{ otherwise} \end{array} \right]$$

$$\text{Combined}_{\text{flex_comp}} := \left\{ \begin{array}{l} \text{Combined}_1 \text{ if S15Allowable} = \text{"No"} \\ \text{Combined}_1 \cdot \left(\frac{1}{1.05} \right) \text{ if S15Allowable} = \text{"Yes"} \end{array} \right. = 68.64\%$$

Combined_{flex_comp} = 68.64%

Combined Flexure and Tension:
$$\text{Combined}_2 := \left[\begin{array}{l} \left[\frac{P_{\text{tens}}}{\phi P_{nt}} + \frac{8}{9} \left(\frac{M_u}{\phi M_n} \right) \right] \text{ if } \frac{P_{\text{tens}}}{\phi P_{nt}} \geq 0.2 \\ \left(\frac{P_{\text{tens}}}{2 \cdot \phi P_{nt}} + \frac{M_u}{\phi M_n} \right) \text{ otherwise} \end{array} \right]$$

$$\text{Combined}_{\text{flex_tens}} := \left\{ \begin{array}{l} \text{Combined}_2 \text{ if S15Allowable} = \text{"No"} \\ \text{Combined}_2 \cdot \left(\frac{1}{1.05} \right) \text{ if S15Allowable} = \text{"Yes"} \end{array} \right. = 67.28\%$$

Combined_{flex_tens} = 67.28%

Combined Flexure, Compression, Shear:
$$\text{Combined}_3 := \left\{ \begin{array}{l} \frac{P_{\text{comp}}}{\phi P_n} + \frac{M_u}{\phi M_n} + \left(\frac{V_u}{\phi V_n} \right)^2 \text{ if S15Allowable} = \text{"No"} \\ \left[\frac{P_{\text{comp}}}{\phi P_n} + \frac{M_u}{\phi M_n} + \left(\frac{V_u}{\phi V_n} \right)^2 \right] \cdot \left(\frac{1}{1.05} \right) \text{ if S15Allowable} = \text{"Yes"} \end{array} \right.$$

Combined₃ = 73.13%

Combined Flexure, Tension, Shear:
$$\text{Combined}_4 := \left\{ \begin{array}{l} \frac{P_{\text{tens}}}{\phi P_{nt}} + \frac{M_u}{\phi M_n} + \left(\frac{V_u}{\phi V_n} \right)^2 \text{ if S15Allowable} = \text{"No"} \\ \left[\frac{P_{\text{tens}}}{\phi P_{nt}} + \frac{M_u}{\phi M_n} + \left(\frac{V_u}{\phi V_n} \right)^2 \right] \cdot \left(\frac{1}{1.05} \right) \text{ if S15Allowable} = \text{"Yes"} \end{array} \right. =$$

Combined₄ = 70.42%

3. Bolt Checks

Checked to applied loads

3.1 Bolt Properties

Number of Bolts:	$N_b := 16$
Intermediate Bolt Spacing:	$L_b := 3\text{ in}$
Bolt Diameter:	$D_b := 20\text{mm} = 0.79\text{ in}$
Bolt Hole Diameter:	$D_h := 30\text{mm} = 1.1811\text{ in}$
Length of One Bolt Group:	$L_{\text{group}} := L_b \cdot (N_b - 1) = 45\text{ in}$
Washer Diameter:	$D_w := 42\text{mm} = 1.65\text{ in}$
Ultimate Strength:	$F_{u\text{bolt}} := 120\text{ksi}$
Gross Area:	$A_{gb} := 0.486947835\text{ in}^2$
Allowable Shear:	$\phi R_{nv} := 46.4\text{ kip}$

3.1 Bolt Shear

Bolt Shear Resistance Factor:	$\phi_b := 0.75$	[TIA-222-H Section 4.9.6.3]
Connection Length Reduction Factor:	$R_b := \begin{cases} 1 & \text{if } L_{\text{group}} \leq 16\text{ in} \\ 0.9 & \text{if } 16\text{ in} \leq L_{\text{group}} \leq 38\text{ in} \\ 0.75 & \text{if } L_{\text{group}} > 38\text{ in} \end{cases} = 0.75$	
Allowable Bolt Shear:	$\phi R_{nv} := R_b \cdot \phi R_{nv} = 34.8\text{ kip}$	
Bolt Shear Capacity:	$\phi R_{nv1} := \begin{cases} \phi R_{nv} & \text{if } N_b \cdot L_b \leq 38\text{ in} \\ (\phi R_{nv} \cdot 0.833) & \text{if } N_b \cdot L_b > 38\text{ in} \end{cases}$ $\phi R_{nv1} = 28.99\text{ kip}$	[AISC 15th Edition Table J3.2 Note (b)]
Applied Bolt Shear:	$V_{\text{max}} := \frac{P_{\text{comp}}}{N_b} = 2.03\text{ kip}$	

$$\text{Capacity}_{\text{shear.eccentric}} := \frac{V_{\text{max}}}{\phi R_{nv1}} \cdot \frac{1}{1.05} = 6.68\%$$

3.1 Bolt Tension

Neutral Axis:

$$NA := \frac{51\text{in}}{6} = 8.5\text{in}$$

Load Eccentricity:

$$e_x := 14.6875\text{in}$$

Distance from Neutral Axis to Most Remote Bolt in Group:

$$c_x := 51\text{in} - (8.5\text{in} + 3\text{in}) = 39.5\text{in}$$

$$I_{cbolt} := 16 \frac{\pi \cdot D_b^4}{64} + A_{gb} \cdot (y_{sum}) = 3724.24 \cdot \text{in}^4$$

$$I_{ccomp} := \frac{10\text{in} \cdot (8.5\text{in})^3}{12} + \left[10\text{in} \cdot NA \cdot \left(\frac{NA}{2} \right)^2 \right] = 2047.08 \cdot \text{in}^4$$

$$I_{NA} := I_{cbolt} + I_{ccomp} = 5771.32 \cdot \text{in}^4$$

Applied Bolt Tension:

$$r_{ut} := \frac{(P_{comp} \cdot e_x \cdot c_x \cdot A_{gb})}{I_{NA}} = 1.59 \cdot \text{kip}$$

Design Tensile Strength:

$$\phi R_{nt} := 0.75 \cdot (0.75 F_{u_{bolt}} \cdot A_{gb}) = 32.87 \cdot \text{kip}$$

$$\text{Capacity}_{tension.eccentric} := \begin{cases} \frac{r_{ut}}{\phi R_{nt}} & \text{if S15Allowable} = \text{"No"} \\ \frac{r_{ut}}{\phi R_{nt}} \cdot \left(\frac{1}{1.05} \right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} = 4.61\%$$

Combined Shear and Tension Check:

[TIA-222-H Section 4.9.6.4]

$$\text{Capacity}_{interaction} := \left[\begin{cases} \left(\frac{V_{max}}{\phi R_{nv1}} \right)^2 + \left(\frac{r_{ut}}{\phi R_{nt}} \right)^2 & \text{if S15Allowable} = \text{"No"} \\ \left[\left(\frac{V_{max}}{\phi R_{nv1}} \right)^2 + \left(\frac{r_{ut}}{\phi R_{nt}} \right)^2 \right] \cdot \left(\frac{1}{1.05} \right) & \text{if S15Allowable} = \text{"Yes"} \end{cases} \right]$$

$$\text{Capacity}_{interaction} = 0.69\%$$

4. Pole/ Shaft Checks

4.1 Shaft Bearing

[AISC 15th Ed., Eqs. J3-6a]

Minimum Thickness to Bear On: $t := \min(t_1, t_2) = 0.25 \cdot \text{in}$

Clear Distance from Edge of Hole to Edge of Adjacent Hole: $L_{\text{clear}} := L_b - D_h = 1.82 \cdot \text{in}$

Bearing By Tear-out:
 $R_{n_{\text{shaft}1}} := 1.2 \cdot L_c \cdot t_2 \cdot F_{u_{\text{shaft}}} = 57.13 \cdot \text{kip}$
 $R_{n_{\text{ext}1}} := 1.2 L_c \cdot t_1 \cdot F_{u_{\text{ext}}} = 32.74 \cdot \text{kip}$

Bearing By Hole Deformation:
 $R_{n_{\text{shaft}2}} := 2.4 \cdot D_b \cdot t_2 \cdot F_{u_{\text{shaft}}} = 49.46 \cdot \text{kip}$
 $R_{n_{\text{ext}2}} := 2.4 \cdot D_b \cdot t_1 \cdot F_{u_{\text{ext}}} = 28.35 \cdot \text{kip}$

Bearing Capacity: $\phi R_{n_{\text{shaft}}} := 0.75 \cdot \min(R_{n_{\text{shaft}1}}, R_{n_{\text{shaft}2}}, R_{n_{\text{ext}1}}, R_{n_{\text{ext}2}}) = 21.26 \cdot \text{kip}$

$$\text{Capacity}_{\text{shaft.bearing}} := \frac{V_{\text{max}}}{\phi R_{n_{\text{shaft}}}} \cdot \frac{1}{1.05} = 9.11 \cdot \%$$

4.2 Pull-Out Check (through shaft wall)

Reduction Factor: $\phi := 0.67$

Hollow Member Pull-Out Capacity: $\phi R_n := \phi \cdot (0.6 \cdot \pi D_w \cdot t) \cdot F_{u_{\text{shaft}}} = 39.16 \cdot \text{kip}$

$r_{\text{ut}} = 1.59 \cdot \text{kip}$

$$\text{Capacity}_{\text{pullout}} := \left[\frac{r_{\text{ut}}}{\phi R_n} \cdot \left(\frac{1}{1.05} \right) \right] = 3.87 \cdot \%$$

5. Weld Checks

Weld Sizing

Length of vertical weld

$$l_{\text{weld}} := 15 \cdot \text{in}$$

Electrode Strength

$$F_{\text{EXX}} := 70 \cdot \text{ksi}$$

Vertical fillet weld size - jump plate to leg
(in sixteenths of an inch):

$$D_{\text{vplate}} := 8$$

$$\text{Weldsize} := \frac{D_{\text{vplate}}}{16} = 0.5$$

Horizontal component of eccentricity with respect to centroid of the weld group

$$e_{\text{xxv}} := 10.5625 \cdot \text{in}$$

Load Not in Plane with Weld Group

$$k := 0$$

$$a := \frac{e_x}{l_{\text{weld}}} = 0.7$$

Electrode Strength Coefficient

$$C_1 := 1$$

Coefficient for eccentrically Loaded Weld Groups

$$C_2 := 1.76$$

(Linearly interpolated from AISC, 15th Edition, Table 8-4)

Weld Capacity

Design Strength

$$\phi_w := 0.75$$

$$\phi R_{\text{nweld2}} := \phi_w \cdot C \cdot \text{ksi} \cdot \text{in} \cdot C_1 \cdot D_{\text{vplate}} \cdot l_{\text{weld}} = 158.4 \cdot \text{kip}$$

$$\text{Check}_{\text{weld3}} := \begin{cases} \text{"OK"} & \text{if } \phi R_{\text{nweld2}} \geq P_{\text{comp}} \\ \text{"N/G"} & \text{otherwise} \end{cases}$$

$$\text{Check}_{\text{weld3}} = \text{"OK"}$$

Rating _{weld} :=	$\frac{P_{\text{comp}}}{\phi R_{\text{nweld2}}}$ if S15Allowable = "No" = 19.56%
	$\frac{P_{\text{comp}}}{\phi R_{\text{nweld2}}} \cdot \left(\frac{1}{1.05}\right)$ if S15Allowable = "Yes"

Site BU: 876313
Work Order: 2278133



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Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	160	11.5	0	0	10.75	10.75	0.349		A53-B-35
2	148.5	0.5	0	0	23.00	23	0.349		A53-B-35
3	148	37	3.75	18	23.00	28.994	0.25	Auto	A607-60
4	114.75	38	4.25	18	27.89	34.042	0.3125	Auto	A607-60
5	81	38	5	18	32.73	38.884	0.375	Auto	A607-65
6	48	48	0	18	37.32	45.1	0.4375	Auto	A607-65

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	27.083	channel	MP3-06 (1.1875in)	2			E1						E1									
2	0	12.083	channel	MP3-06 (1.1875in)	2												E1					E1	
3	14.747	27.913	channel	MP3-06 (1.1875in)	1															E1			
4	45.417	70.583	channel	MP3-05 (1.1875in)	3			E1						E1						E1			
5	78.167	105.333	channel	MP3-04 (1.1875in)	3			E1						E1						E1			
6	27.25	46.75	plate	CCI-SFP-065125	3						E3						E3						E3
7	10	16	plate	CCI-SFP-060100	3						E4						E4						E4
8	70	80	plate	CCI-AFP-060100	3	E5						E5					E5						
9	80.5	92.5	plate	CCI-SFP-040125	3				P						P							P	
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in ²)	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in ²)	Bolt Hole Size (in)	Reinforcement Material
1	6.89	2.61	8.47	0.93	PC 8.8 - M20 (100)	41	PC 8.8 - M20 (100)	41.000	24.000	7.670	1.1875	A572-65
2	6.89	2.61	8.47	0.93	PC 8.8 - M20 (100)	41	PC 8.8 - M20 (100)	41.000	24.000	7.670	1.1875	A572-65
3	6.89	2.61	8.47	0.93	PC 8.8 - M20 (100)	41	PC 8.8 - M20 (100)	41.000	24.000	7.670	1.1875	A572-65
4	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
5	4.78	1.61	4.13	0.61	PC 8.8 - M20 (100)	17	PC 8.8 - M20 (100)	17.000	18.000	3.593	1.1875	A572-65
6	6.5	1.25	8.125	0.625	PC 8.8 - M20 (100)	33	PC 8.8 - M20 (100)	33.000	19.000	6.563	1.1875	A572-65
7	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
8	6	1	6	0.5	PC 8.8 - M20 (100)	30	PC 8.8 - M20 (100)	30.000	16.000	4.750	1.1875	A572-65
9	4	1.25	5	0.625	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	27.000	3.438	1.1875	A572-65

TNX Geometry Input

Increment (ft): 5 [Export to TNX](#)

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	160 - 155	5		0	10.750	10.750	0.349	A53-B-35	1.000
2	155 - 150	5		0	10.750	10.750	0.349	A53-B-35	1.000
3	150 - 148.5	1.5	0	0	10.750	10.750	0.349	A53-B-35	1.000
4	148.5 - 148	0.5	0	0	23.000	23.000	0.349	A53-B-35	1.000
5	148 - 143	5		18	23.000	23.810	0.25	A607-60	1.000
6	143 - 138	5		18	23.810	24.620	0.25	A607-60	1.000
7	138 - 133	5		18	24.620	25.430	0.25	A607-60	1.000
8	133 - 128	5		18	25.430	26.240	0.25	A607-60	1.000
9	128 - 123	5		18	26.240	27.050	0.25	A607-60	1.000
10	123 - 118	5		18	27.050	27.860	0.25	A607-60	1.000
11	118 - 114.75	7	3.75	18	27.860	28.994	0.25	A607-60	1.000
12	114.75 - 109.75	5		18	27.887	28.696	0.3125	A607-60	1.000
13	109.75 - 105.333	4.417		18	28.696	29.412	0.3125	A607-60	1.000
14	105.333 - 105.083	0.25		18	29.412	29.452	0.46875	A607-60	0.958
15	105.083 - 100.083	5		18	29.452	30.262	0.4625	A607-60	0.962
16	100.083 - 95.083	5		18	30.262	31.072	0.4625	A607-60	0.955
17	95.083 - 92.5	2.583		18	31.072	31.491	0.45625	A607-60	0.964
18	92.5 - 92.25	0.25		18	31.491	31.531	0.6375	A607-60	0.934
19	92.25 - 87.25	5		18	31.531	32.341	0.625	A607-60	0.940
20	87.25 - 82.25	5		18	32.341	33.151	0.6125	A607-60	0.948
21	82.25 - 81	5.5	4.25	18	33.151	34.042	0.6125	A607-60	0.945
22	81 - 75.75	5.25		18	32.729	33.579	0.375	A607-65	1.000
23	75.75 - 70.75	5		18	33.579	34.389	0.375	A607-65	1.000
24	70.75 - 70.583	0.167		18	34.389	34.416	0.375	A607-65	1.000
25	70.583 - 70.333	0.25		18	34.416	34.456	0.675	A607-65	1.043
26	70.333 - 70	0.333		18	34.456	34.510	0.675	A607-65	1.043
27	70 - 69.75	0.25		18	34.510	34.551	0.375	A607-65	1.000
28	69.75 - 64.75	5		18	34.551	35.361	0.375	A607-65	1.000
29	64.75 - 59.75	5		18	35.361	36.171	0.375	A607-65	1.000
30	59.75 - 54.75	5		18	36.171	36.981	0.375	A607-65	1.000
31	54.75 - 49.75	5		18	36.981	37.791	0.375	A607-65	1.000
32	49.75 - 48	6.75	5	18	37.791	38.884	0.375	A607-65	1.000
33	48 - 42	6		18	37.324	38.296	0.4375	A607-65	1.000
34	42 - 37	5		18	38.296	39.106	0.4375	A607-65	1.000
35	37 - 32	5		18	39.106	39.916	0.4375	A607-65	1.000
36	32 - 27.913	4.087		18	39.916	40.578	0.4375	A607-65	1.000
37	27.913 - 27.663	0.25		18	40.578	40.619	0.675	A607-65	1.036
38	27.663 - 27.25	0.413		18	40.619	40.686	0.675	A607-65	1.035
39	27.25 - 27.083	0.167		18	40.686	40.713	0.4375	A607-65	1.000
40	27.083 - 26.833	0.25		18	40.713	40.753	0.6625	A607-65	0.966
41	26.833 - 21.833	5		18	40.753	41.563	0.6625	A607-65	0.959
42	21.833 - 16.833	5		18	41.563	42.373	0.6625	A607-65	0.954
43	16.833 - 16	0.833		18	42.373	42.508	0.6625	A607-65	0.953
44	16 - 15.75	0.25		18	42.508	42.549	0.8125	A607-65	0.947
45	15.75 - 14.747	1.003		18	42.549	42.711	0.8125	A607-65	0.945
46	14.747 - 14.497	0.25		18	42.711	42.752	0.4875	A607-65	1.158
47	14.497 - 12.083	2.414		18	42.752	43.143	0.4875	A607-65	1.155
48	12.083 - 11.833	0.25		18	43.143	43.183	0.7375	A607-65	0.938
49	11.833 - 10	1.833		18	43.183	43.480	0.7375	A607-65	0.936
50	10 - 9.75	0.25		18	43.480	43.521	0.7375	A607-65	0.936
51	9.75 - 4.75	5		18	43.521	44.331	0.725	A607-65	0.945
52	4.75 - 0	4.75		18	44.331	45.100	0.7125	A607-65	0.955

TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P _u (K)	M _{ux} (kip-ft)	V _u (K)
1	160 - 155		4.73	18.04	6.87
2	155 - 150		5.64	53.84	7.47
3	150 - 148.5		10.90	65.17	12.13
4	148.5 - 148		11.03	71.25	12.21
5	148 - 143		12.09	134.35	13.04
6	143 - 138		12.93	201.24	13.73
7	138 - 133		17.04	289.48	17.71
8	133 - 128		17.65	378.75	18.01
9	128 - 123		21.89	477.84	20.65
10	123 - 118		22.62	581.67	20.90
11	118 - 114.75		25.76	655.64	23.54
12	114.75 - 109.75		26.94	774.21	23.88
13	109.75 - 105.333		27.75	880.06	24.08
14	105.333 - 105.083		27.82	886.08	24.10
15	105.083 - 100.083		28.95	1007.20	24.38
16	100.083 - 95.083		30.12	1129.77	24.67
17	95.083 - 92.5		30.73	1193.65	24.82
18	92.5 - 92.25		30.81	1199.85	24.84
19	92.25 - 87.25		32.27	1324.86	25.19
20	87.25 - 82.25		33.76	1451.63	25.54
21	82.25 - 81		34.14	1483.58	25.62
22	81 - 75.75		36.31	1619.21	26.04
23	75.75 - 70.75		37.50	1749.66	26.18
24	70.75 - 70.583		37.55	1754.03	26.19
25	70.583 - 70.333		37.65	1760.57	26.20
26	70.333 - 70		37.77	1769.29	26.21
27	70 - 69.75		37.83	1775.84	26.22
28	69.75 - 64.75		39.03	1907.22	26.36
29	64.75 - 59.75		40.27	2039.29	26.56
30	59.75 - 54.75		41.53	2172.18	26.66
31	54.75 - 49.75		42.82	2305.53	26.74
32	49.75 - 48		43.27	2352.30	26.80
33	48 - 42		45.93	2514.24	27.13
34	42 - 37		47.40	2649.89	27.19
35	37 - 32		48.89	2785.81	27.24
36	32 - 27.913		50.12	2897.05	27.26
37	27.913 - 27.663		50.24	2903.86	27.25
38	27.663 - 27.25		50.41	2915.11	27.26
39	27.25 - 27.083		50.47	2919.67	27.26
40	27.083 - 26.833		50.57	2926.48	27.27
41	26.833 - 21.833		52.55	3063.15	27.43
42	21.833 - 16.833		54.56	3200.49	27.55
43	16.833 - 16		54.91	3223.44	27.57
44	16 - 15.75		55.03	3230.33	27.57
45	15.75 - 14.747		55.50	3257.99	27.63
46	14.747 - 14.497		55.60	3264.90	27.62
47	14.497 - 12.083		56.51	3331.62	27.70
48	12.083 - 11.833		56.64	3338.53	27.68
49	11.833 - 10		57.44	3389.33	27.79
50	10 - 9.75		57.56	3396.27	27.77
51	9.75 - 4.75		59.79	3535.54	27.97
52	4.75 - 0		61.93	3668.62	28.12

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
160 - 155	Pole	TP10.75x10.75x0.349	Pole	19.0%	Pass
155 - 150	Pole	TP10.75x10.75x0.349	Pole	53.7%	Pass
150 - 148.5	Pole	TP10.75x10.75x0.349	Pole	66.7%	Pass
148.5 - 148	Pole	TP23x23x0.349	Pole	16.4%	Pass
148 - 143	Pole	TP23.81x23x0.25	Pole	22.0%	Pass
143 - 138	Pole	TP24.62x23.81x0.25	Pole	30.3%	Pass
138 - 133	Pole	TP25.43x24.62x0.25	Pole	40.9%	Pass
133 - 128	Pole	TP26.24x25.43x0.25	Pole	50.2%	Pass
128 - 123	Pole	TP27.05x26.24x0.25	Pole	60.0%	Pass
123 - 118	Pole	TP27.86x27.05x0.25	Pole	69.0%	Pass
118 - 114.75	Pole	TP28.99x27.86x0.25	Pole	75.4%	Pass
114.75 - 109.75	Pole	TP28.696x27.887x0.3125	Pole	67.5%	Pass
109.75 - 105.33	Pole	TP29.412x28.696x0.3125	Pole	72.9%	Pass
105.33 - 105.08	Pole + Reinf.	TP29.452x29.412x0.4688	Reinf. 5 Tension Rupture	69.3%	Pass
105.08 - 100.08	Pole + Reinf.	TP30.262x29.452x0.4625	Reinf. 5 Tension Rupture	75.1%	Pass
100.08 - 95.08	Pole + Reinf.	TP31.072x30.262x0.4625	Reinf. 5 Tension Rupture	80.4%	Pass
95.08 - 92.5	Pole + Reinf.	TP31.491x31.072x0.4563	Reinf. 5 Tension Rupture	82.9%	Pass
92.5 - 92.25	Pole + Reinf.	TP31.531x31.491x0.6375	Reinf. 9 Tension Rupture	73.6%	Pass
92.25 - 87.25	Pole + Reinf.	TP32.341x31.531x0.625	Reinf. 9 Tension Rupture	78.2%	Pass
87.25 - 82.25	Pole + Reinf.	TP33.151x32.341x0.6125	Reinf. 9 Tension Rupture	82.5%	Pass
82.25 - 81	Pole + Reinf.	TP34.042x33.151x0.6125	Reinf. 9 Tension Rupture	83.5%	Pass
81 - 75.75	Pole	TP33.579x32.729x0.375	Pole	78.8%	Pass
75.75 - 70.75	Pole	TP34.389x33.579x0.375	Pole	81.0%	Pass
70.75 - 70.58	Pole	TP34.416x34.389x0.375	Pole	81.1%	Pass
70.58 - 70.33	Pole + Reinf.	TP34.456x34.416x0.675	Reinf. 4 Tension Rupture	70.9%	Pass
70.33 - 70	Pole + Reinf.	TP34.51x34.456x0.675	Reinf. 4 Tension Rupture	71.1%	Pass
70 - 69.75	Pole	TP34.551x34.51x0.375	Pole	81.5%	Pass
69.75 - 64.75	Pole	TP35.361x34.551x0.375	Pole	83.4%	Pass
64.75 - 59.75	Pole	TP36.171x35.361x0.375	Pole	85.3%	Pass
59.75 - 54.75	Pole	TP36.981x36.171x0.375	Pole	87.3%	Pass
54.75 - 49.75	Pole	TP37.791x36.981x0.375	Pole	89.1%	Pass
49.75 - 48	Pole	TP38.884x37.791x0.375	Pole	89.7%	Pass
48 - 42	Pole	TP38.296x37.324x0.4375	Pole	80.5%	Pass
42 - 37	Pole	TP39.106x38.296x0.4375	Pole	81.3%	Pass
37 - 32	Pole	TP39.916x39.106x0.4375	Pole	82.0%	Pass
32 - 27.91	Pole	TP40.578x39.916x0.4375	Pole	82.5%	Pass
27.91 - 27.66	Pole + Reinf.	TP40.619x40.578x0.675	Reinf. 6 Tension Rupture	80.4%	Pass
27.66 - 27.25	Pole + Reinf.	TP40.686x40.619x0.675	Reinf. 6 Tension Rupture	80.5%	Pass
27.25 - 27.08	Pole	TP40.713x40.686x0.4375	Pole	82.5%	Pass
27.08 - 26.83	Pole + Reinf.	TP40.753x40.713x0.6625	Reinf. 1 Tension Rupture	78.8%	Pass
26.83 - 21.83	Pole + Reinf.	TP41.563x40.753x0.6625	Reinf. 1 Tension Rupture	79.8%	Pass
21.83 - 16.83	Pole + Reinf.	TP42.373x41.563x0.6625	Reinf. 1 Tension Rupture	80.7%	Pass
16.83 - 16	Pole + Reinf.	TP42.508x42.373x0.6625	Reinf. 1 Tension Rupture	80.8%	Pass
16 - 15.75	Pole + Reinf.	TP42.549x42.508x0.8125	Reinf. 7 Tension Rupture	72.4%	Pass
15.75 - 14.75	Pole + Reinf.	TP42.711x42.549x0.8125	Reinf. 7 Tension Rupture	72.6%	Pass
14.75 - 14.5	Pole + Reinf.	TP42.752x42.711x0.4875	Pole	82.4%	Pass
14.5 - 12.08	Pole + Reinf.	TP43.143x42.752x0.4875	Pole	82.8%	Pass
12.08 - 11.83	Pole + Reinf.	TP43.183x43.143x0.7375	Reinf. 1 Tension Rupture	74.1%	Pass
11.83 - 10	Pole + Reinf.	TP43.48x43.183x0.7375	Reinf. 1 Tension Rupture	74.4%	Pass
10 - 9.75	Pole + Reinf.	TP43.521x43.48x0.7375	Reinf. 1 Tension Rupture	74.4%	Pass
9.75 - 4.75	Pole + Reinf.	TP44.331x43.521x0.725	Reinf. 1 Tension Rupture	75.2%	Pass
4.75 - 0	Pole + Reinf.	TP45.1x44.331x0.7125	Reinf. 1 Tension Rupture	75.8%	Pass
				Summary	
			Pole	89.7%	Pass
			Reinforcement	83.5%	Pass
			Overall	89.7%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in ⁴)			Area (in ²)			% Capacity*									
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4	R5	R6	R7	R8	R9
160 - 155	154	n/a	154	11.40	n/a	11.40	19.0%									
155 - 150	154	n/a	154	11.40	n/a	11.40	53.7%									
150 - 148.5	154	n/a	154	11.40	n/a	11.40	66.7%									
148.5 - 148	1593	n/a	1593	24.83	n/a	24.83	16.4%									
148 - 143	1311	n/a	1311	18.69	n/a	18.69	22.0%									
143 - 138	1450	n/a	1450	19.34	n/a	19.34	30.3%									
138 - 133	1600	n/a	1600	19.98	n/a	19.98	40.9%									
133 - 128	1759	n/a	1759	20.62	n/a	20.62	50.2%									
128 - 123	1929	n/a	1929	21.27	n/a	21.27	60.0%									
123 - 118	2109	n/a	2109	21.91	n/a	21.91	69.0%									
118 - 114.75	2232	n/a	2232	22.33	n/a	22.33	75.4%									
114.75 - 109.75	2865	n/a	2865	28.15	n/a	28.15	67.5%									
109.75 - 105.33	3087	n/a	3087	28.86	n/a	28.86	72.9%									
105.33 - 105.08	3100	1464	4563	28.90	12.39	41.29	48.9%					69.3%				
105.08 - 100.08	3365	1542	4907	29.71	12.39	42.10	53.1%					75.1%				
100.08 - 95.08	3646	1622	5268	30.51	12.39	42.90	56.9%					80.4%				
95.08 - 92.5	3797	1664	5460	30.92	12.39	43.31	58.9%					82.9%				
92.5 - 92.25	3811	3694	7505	30.96	27.39	58.35	43.2%					60.8%				73.6%
92.25 - 87.25	4116	3878	7994	31.77	27.39	59.16	46.1%					64.5%				78.2%
87.25 - 82.25	4436	4066	8502	32.57	27.39	59.96	49.0%					68.1%				82.5%
82.25 - 81	4519	4114	8633	32.77	27.39	60.16	49.7%					68.9%				83.5%
81 - 75.75	5503	n/a	5503	39.52	n/a	39.52	78.8%									
75.75 - 70.75	5916	n/a	5916	40.48	n/a	40.48	81.0%									
70.75 - 70.58	5930	n/a	5930	40.52	n/a	40.52	81.1%									
70.58 - 70.33	5976	4418	10394	40.56	34.95	75.51	48.3%				70.9%				66.2%	
70.33 - 70	6005	4431	10436	40.63	34.95	75.58	48.5%				71.1%				66.4%	
70 - 69.75	6000	n/a	6000	40.68	n/a	40.68	81.5%									
69.75 - 64.75	6437	n/a	6437	41.64	n/a	41.64	83.4%									
64.75 - 59.75	6895	n/a	6895	42.60	n/a	42.60	85.3%									
59.75 - 54.75	7373	n/a	7373	43.57	n/a	43.57	87.3%									
54.75 - 49.75	7874	n/a	7874	44.53	n/a	44.53	89.1%									
49.75 - 48	8054	n/a	8054	44.87	n/a	44.87	89.7%									
48 - 42	9516	n/a	9516	52.57	n/a	52.57	80.5%									
42 - 37	10140	n/a	10140	53.69	n/a	53.69	81.3%									
37 - 32	10791	n/a	10791	54.82	n/a	54.82	82.0%									
32 - 27.91	11343	n/a	11343	55.74	n/a	55.74	82.5%									
27.91 - 27.66	11404	5776	17180	55.79	32.85	88.64	56.4%			60.4%			80.4%			
27.66 - 27.25	11461	5795	17256	55.89	32.85	88.73	56.5%			60.5%			80.5%			
27.25 - 27.08	11457	n/a	11457	55.92	n/a	55.92	82.5%									
27.08 - 26.83	11492	5793	17285	55.98	25.41	81.39	54.1%	78.8%		78.8%						
26.83 - 21.83	12199	6015	18213	57.11	25.41	82.52	54.8%	79.8%		79.8%						
21.83 - 16.83	12934	6240	19174	58.23	25.41	83.64	55.6%	80.7%		80.7%						
16.83 - 16	13059	6278	19337	58.42	25.41	83.83	55.8%	80.8%		80.8%						
16 - 15.75	13097	10584	23681	58.47	43.41	101.88	45.7%	66.2%		66.2%				72.4%		
15.75 - 14.75	13249	10662	23911	58.70	43.41	102.11	45.9%	66.4%		66.4%				72.6%		
14.75 - 14.5	13650	1331	14981	58.76	16.94	75.70	82.4%	82.2%								
14.5 - 12.08	14026	1359	15386	59.30	16.94	76.24	82.8%	82.6%								
12.08 - 11.83	13727	8795	22521	59.36	33.88	93.24	53.0%	74.1%	72.2%							
11.83 - 10	14014	8911	22925	59.77	33.88	93.65	53.3%	74.4%	72.5%							
10 - 9.75	14054	8927	22981	59.82	33.88	93.70	53.3%	74.4%	72.5%							
9.75 - 4.75	14861	9248	24108	60.95	33.88	94.83	54.1%	75.2%	73.3%							
4.75 - 0	15655	9558	25213	62.02	33.88	95.90	54.9%	75.8%	74.0%							

Note: Section capacity checked using 5 degree increments.
Rating per TIA-222-H Section 15.5.

Monopole Base Plate Connection

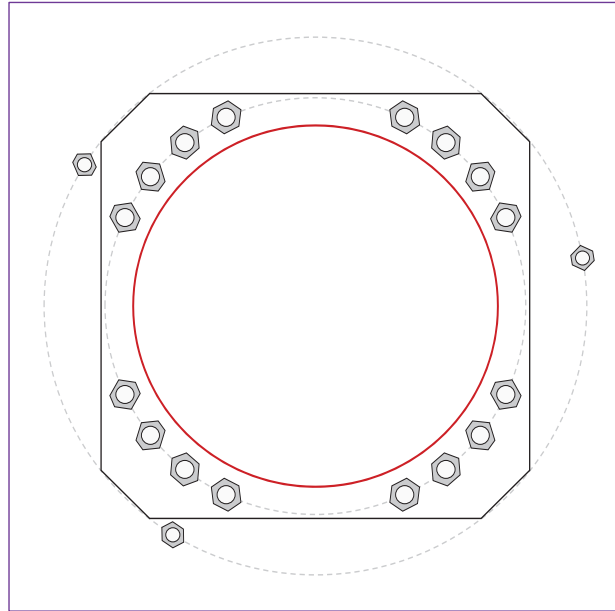


Site Info	
BU #	876313
Site Name	OHNSON AVE. BURNT
Order #	654590 REV. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
I_{ar} (in)	See Custom Sheet

Applied Loads	
Moment (kip-ft)	3668.62
Axial Force (kips)	61.93
Shear Force (kips)	28.12

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
GROUP 1: (16) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 52" BC <i>Anchor Spacing: 6 in</i>
GROUP 2: (3) 1-3/4" ϕ bolts (Williams R71 N; $F_y=120$ ksi, $F_u=125$ ksi) on 67.1" BC <i>pos. (deg): 10.3, 148.3, 238.3</i>
Base Plate Data
53" W x 3" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi); Clip: 6 in
Stiffener Data
N/A
Pole Data
45.1" x 0.4375" 18-sided pole (A607-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary	<i>(units of kips, kip-in)</i>		
GROUP 1:	$Pu_t = 176.12$	$\phi Pn_t = 243.75$	Stress Rating
	$Vu = 1.76$	$\phi Vn = 149.1$	68.8%
	$Mu = n/a$	$\phi Mn = n/a$	Pass
GROUP 2:	$Pu_t = 175.21$	$\phi Pn_t = 243.75$	Stress Rating
	$Vu = 0$	$\phi Vn = 121.88$	68.5%
	$Mu = n/a$	$\phi Mn = n/a$	Pass
Base Plate Summary			
Max Stress (ksi):	26.88	(Flexural)	
Allowable Stress (ksi):	45		
Stress Rating:	56.9%		Pass

CCIplate

Elevation (ft) 0 (Base)

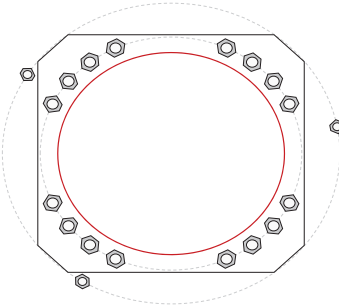
note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending	Grout Considered	Apply at BARB Elevation	BARB CL Elevation (ft)
1	Yes	Yes	Yes	No	No	
2	No	No	No	No	No	

Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η :	l_{ar} (in):	Thread Type	Area Override, in ²	Tension Only
1	1	25.1225713	2.25	A615-75	52	0.5	2.25	N-Included		No
2	1	38.3741904	2.25	A615-75	52	0.5	2.25	N-Included		No
3	1	51.6258096	2.25	A615-75	52	0.5	2.25	N-Included		No
4	1	64.8774287	2.25	A615-75	52	0.5	2.25	N-Included		No
5	1	115.122571	2.25	A615-75	52	0.5	2.25	N-Included		No
6	1	128.37419	2.25	A615-75	52	0.5	2.25	N-Included		No
7	1	141.62581	2.25	A615-75	52	0.5	2.25	N-Included		No
8	1	154.877429	2.25	A615-75	52	0.5	2.25	N-Included		No
9	1	205.122571	2.25	A615-75	52	0.5	2.25	N-Included		No
10	1	218.37419	2.25	A615-75	52	0.5	2.25	N-Included		No
11	1	231.62581	2.25	A615-75	52	0.5	2.25	N-Included		No
12	1	244.877429	2.25	A615-75	52	0.5	2.25	N-Included		No
13	1	295.122571	2.25	A615-75	52	0.5	2.25	N-Included		No
14	1	308.37419	2.25	A615-75	52	0.5	2.25	N-Included		No
15	1	321.62581	2.25	A615-75	52	0.5	2.25	N-Included		No
16	1	334.877429	2.25	A615-75	52	0.5	2.25	N-Included		No
17	2	10.3	1.75	Williams R71	67.1	0.5	0	N-Included	2.6	No
18	2	148.3	1.75	Williams R71	67.1	0.5	0	N-Included	2.6	No
19	2	238.3	1.75	Williams R71	67.1	0.5	0	N-Included	2.6	No

Plot Graphic



Drilled Pier Foundation

BU # :	876313
Site Name:	WEST JOHNSON AVE. BU
Order Number:	654590 REV. 0
TIA-222 Revision:	H
Tower Type:	Monopole



Check Limitation	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
	N/A
Design Options	
Input Effective Depths (else Actual):	<input type="checkbox"/>
Consider non-tapered moment capacity:	<input type="checkbox"/>
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>
Override Critical Depth:	<input type="checkbox"/>

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	3668.62	
Axial Force (kips)	61.94	
Shear Force (kips)	28.09	

Material Properties	
Concrete Strength, f _c :	3 ksi
Rebar Strength, F _y :	60 ksi
Tie Yield Strength, F _y :	40 ksi

Pier Design Data	
Depth	25.5 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 6.5' below grade</i>	
Pier Diameter	11 ft
Rebar Quantity	20
Rebar Size	11
Rebar Cage Diameter	73.34 in
Tie Size	5
Tie Spacing	18 in

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

Pier Section 2	
<i>From 6.5' below grade to 25.5' below grade</i>	
Pier Diameter	7 ft
Rebar Quantity	20
Rebar Size	11
Clear Cover to Ties	4 in
Tie Size	5
Tie Spacing	18 in

Analysis Results

Soil Lateral Check	Compression	Uplift
D _{v=0} (ft from TOC)	5.24	-
Soil Safety Factor	2.01	-
Max Moment (kip-ft)	3800.00	-
Rating*	62.9%	-

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	236.44	-
End Bearing (kips)	123.82	-
Weight of Concrete (kips)	206.61	-
Total Capacity (kips)	360.27	-
Axial (kips)	268.55	-
Rating*	71.0%	-

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	7.01	-
Critical Moment (kip-ft)	3744.23	-
Critical Moment Capacity	5123.11	-
Rating*	69.6%	-

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	12.42	-
Critical Shear (kip)	371.88	-
Critical Shear Capacity	498.49	-
Rating*	71.0%	-

Structural Foundation Rating*	71.0%
Soil Interaction Rating*	71.0%

*Rating per TIA-222-H Section 15.5

[Go to Soil Calculations](#)

Soil Profile

Groundwater Depth	10	# of Layers	10
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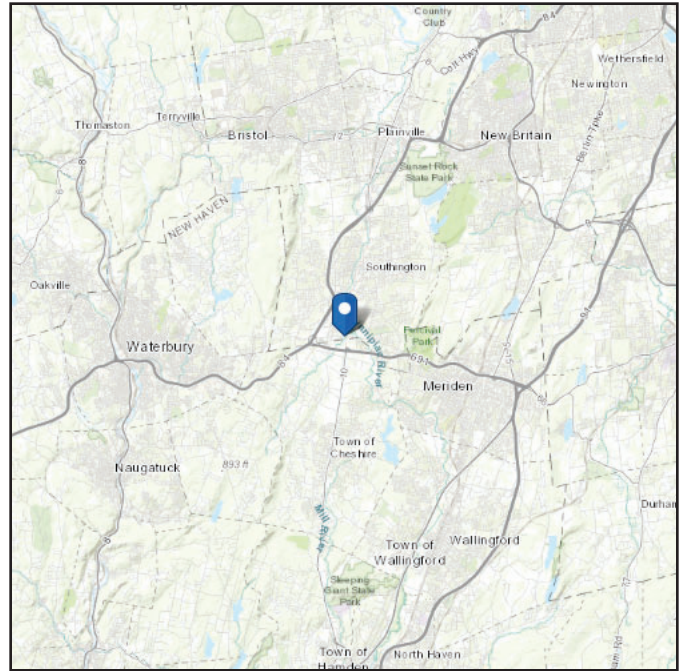
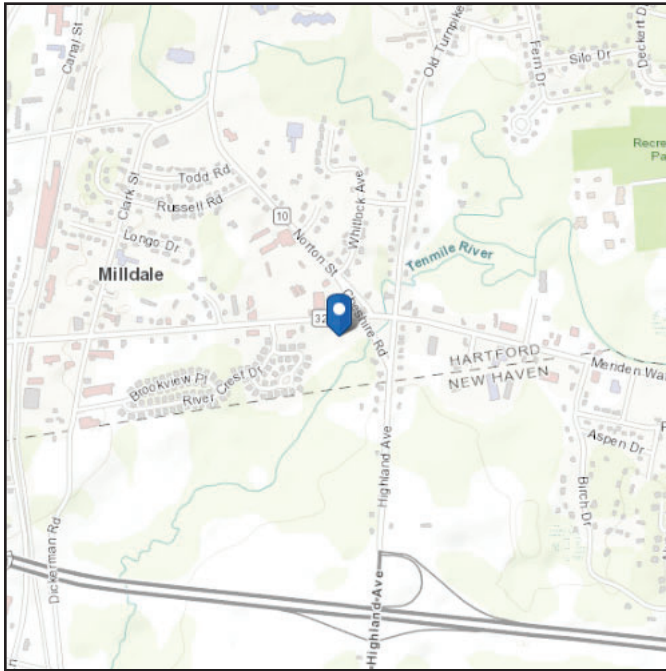
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	2	2	105	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	2	3.5	1.5	110	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
3	3.5	4	0.5	110	150	0	31	0.000	0.000	0.00	0.00			Cohesionless
4	4	4.7	0.7	110	150	0	31	0.000	0.000	0.00	0.00			Cohesionless
5	4.7	6	1.3	110	150	0	31	0.000	0.000	0.10	0.80			Cohesionless
6	6	8	2	120	150	2.5	0	1.375	1.375	1.48	1.48			Cohesive
7	8	10	2	115	150	2.25	0	1.24	1.24	1.23	1.23			Cohesive
8	10	15	5	48	87.6	1	0	0.55	0.55	0.55	0.55			Cohesive
9	15	20	5	48	87.6	1.25	0	0.69	0.69	0.66	0.66			Cohesive
10	20	25.5	5.5	43	87.6	0.75	0	0.41	0.41	0.41	0.41	4.29		Cohesive

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: 133.13 ft (NAVD 88)
Latitude: 41.564275
Longitude: -72.891861



Wind

Results:

Wind Speed	118 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 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 Aug 30 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).

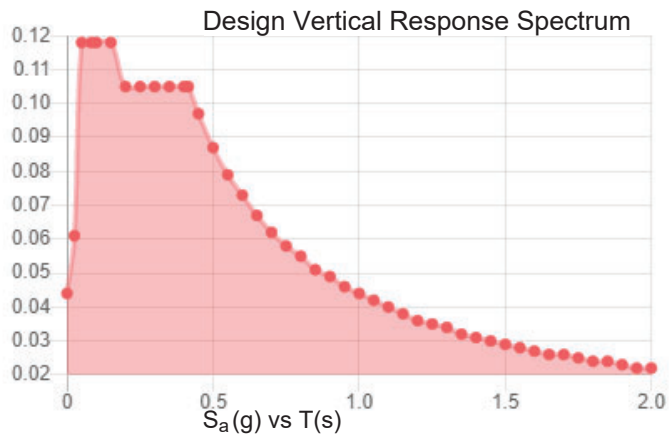
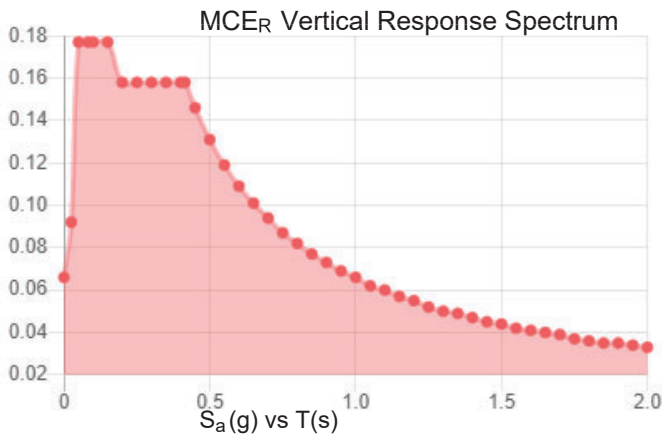
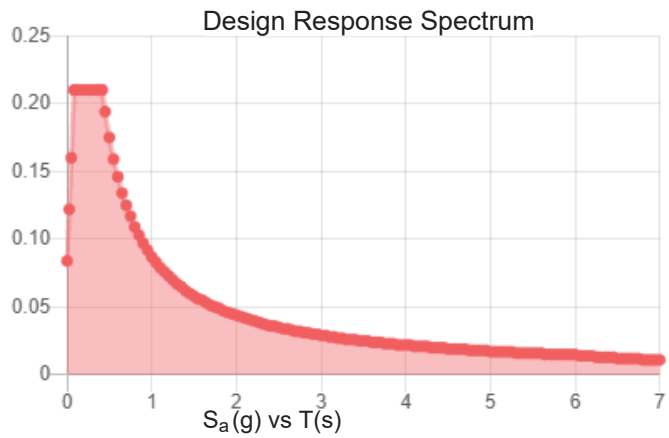
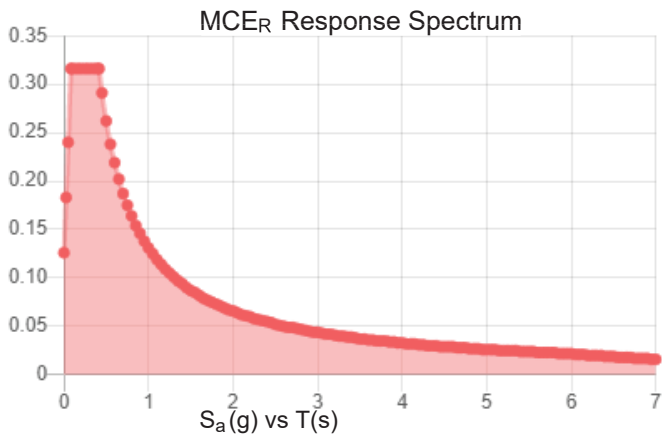
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

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

Results:

S_s :	0.197	S_{D1} :	0.087
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.109
F_v :	2.4	PGA _M :	0.172
S_{MS} :	0.316	F_{PGA} :	1.583
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.21	C_v :	0.7

Seismic Design Category B



Data Accessed: Tue Aug 30 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 Aug 30 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.

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

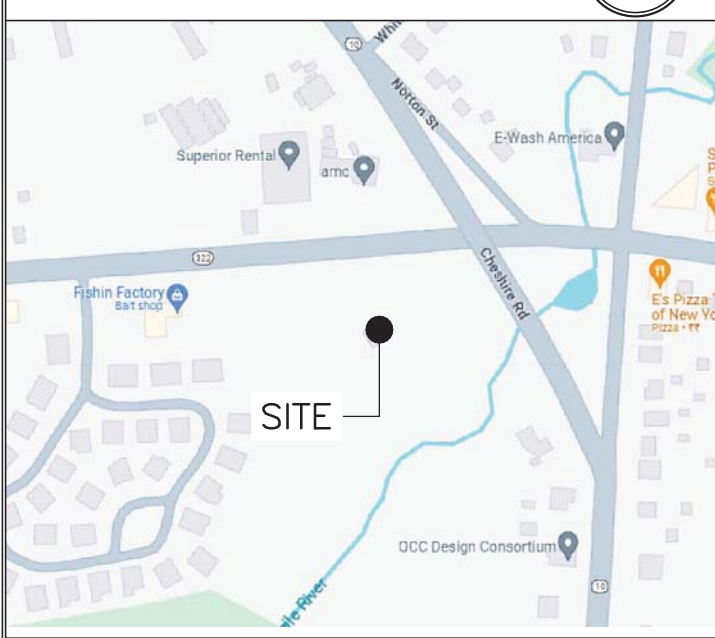
ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting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

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

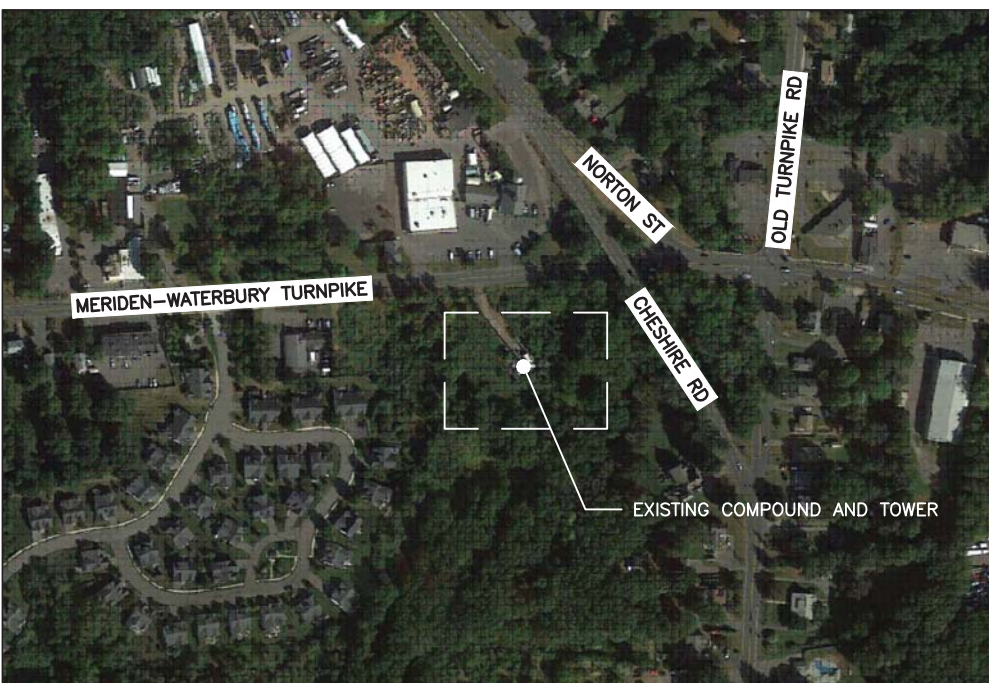
NOTE:
AN ANALYSIS OF THE CAPACITY OF THE STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY CROWN CASTLE DATED JANUARY 19, 2024.

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.

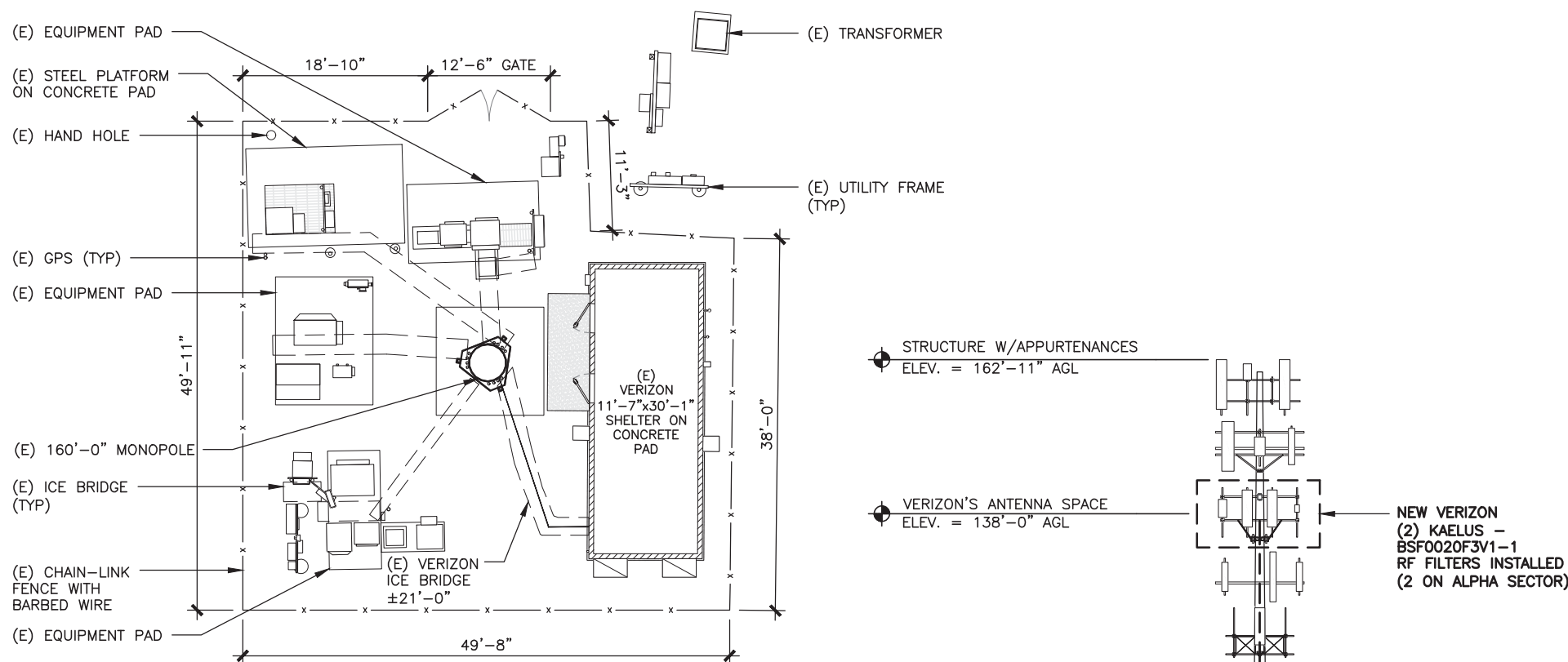
**LOCATION MAP
N.T.S.**



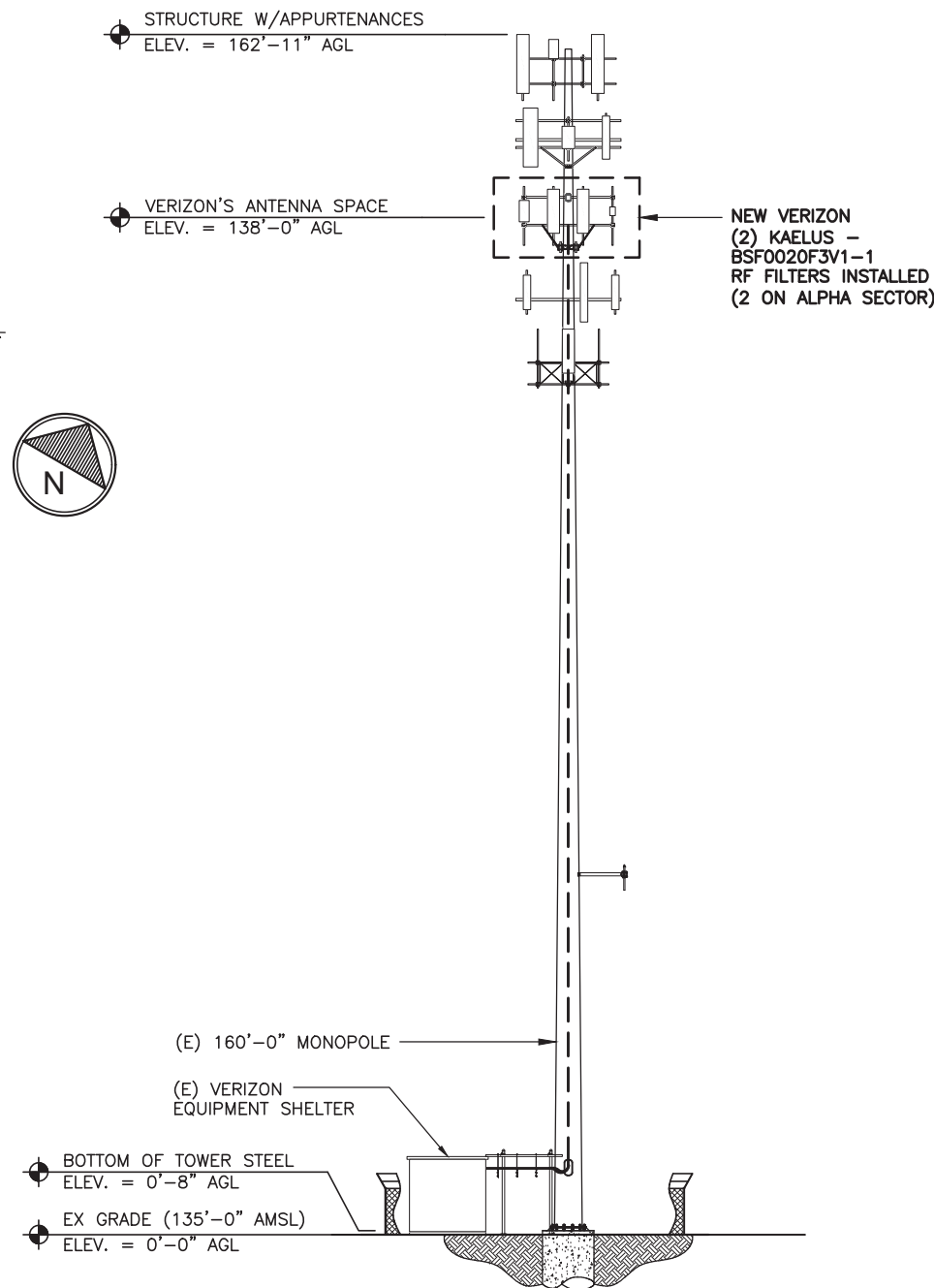
APPROXIMATE COORDINATES: LATITUDE: 41° 33' 51.39" N 41.564275° N
LONGITUDE: 72° 53' 30.70" W 72.891861° W



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



2 SITE PLAN
SCALE: 0' 8' 16' 32' 48'



3 TOWER ELEVATION
SCALE: N.T.S.



20 ALEXANDER DRIVE
WALLINGFORD, CT 06492



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

MILDDALE CT

1394 MERIDEN WATERBURY TPK
SOUTHINGTON, CT 06489
EXISTING MONOPOLE

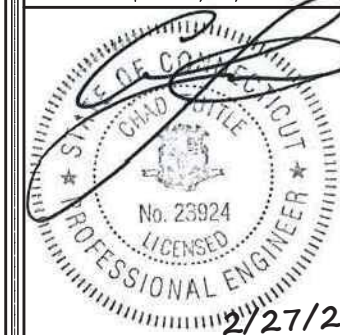
PROJECT NO: 137177.020.01

CHECKED BY: LR

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	2/27/24	RMC	CONSTRUCTION

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




IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **LE-1** REVISION: **0**

137177.020.01:0001_876313_WEST JOHNSON AVE. BURNT HOUSE.dwg - Sheet:LE-1 - User: lisarider - Feb 27, 2024 - 11:45am



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

MILDDALE CT

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SOUTHINGTON, CT 06489
EXISTING MONOPOLE

PROJECT NO: 137177.020.01
CHECKED BY: LR

ISSUED FOR:

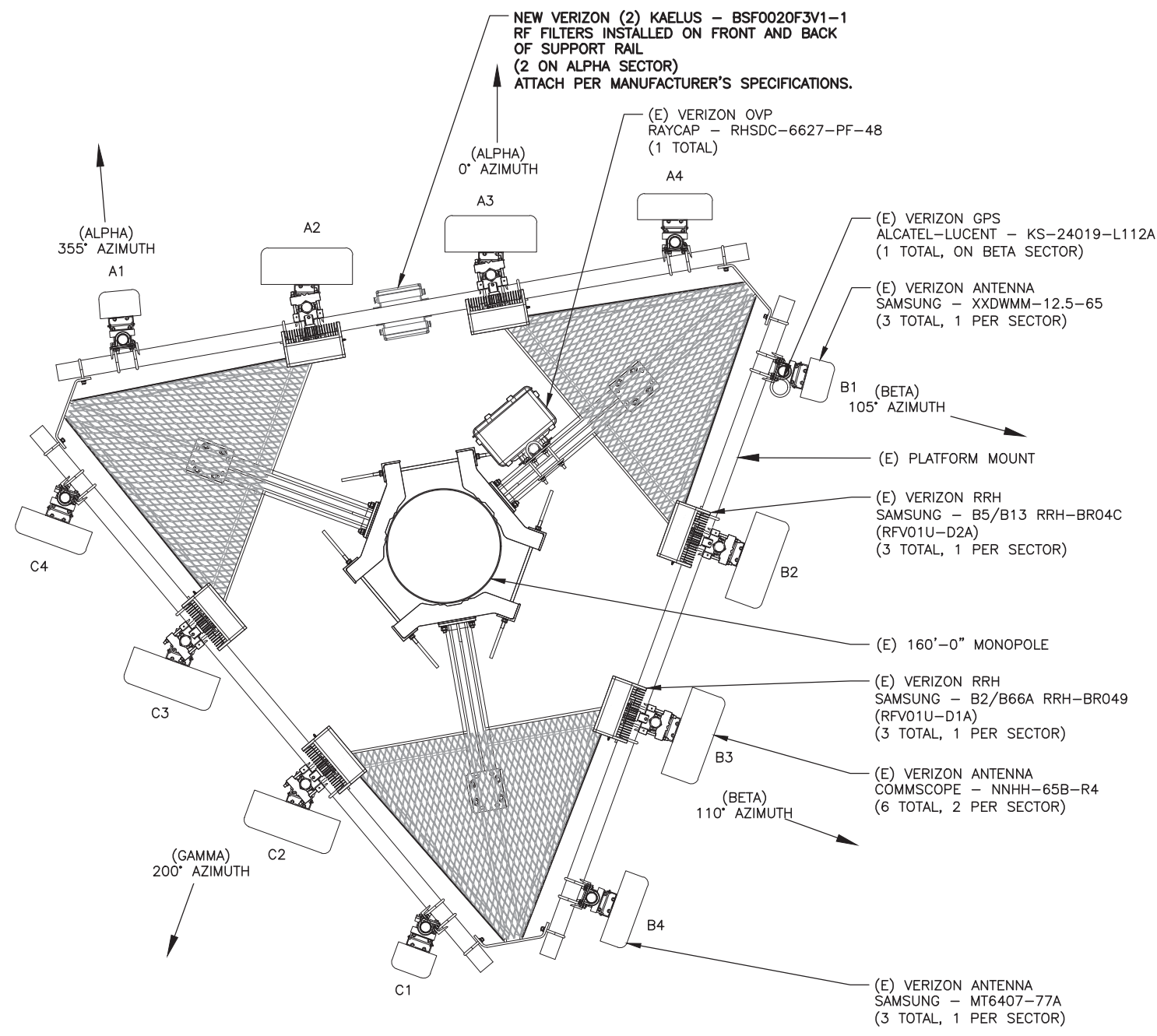
REV	DATE	DRWN	DESCRIPTION
0	2/27/24	RMC	CONSTRUCTION

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



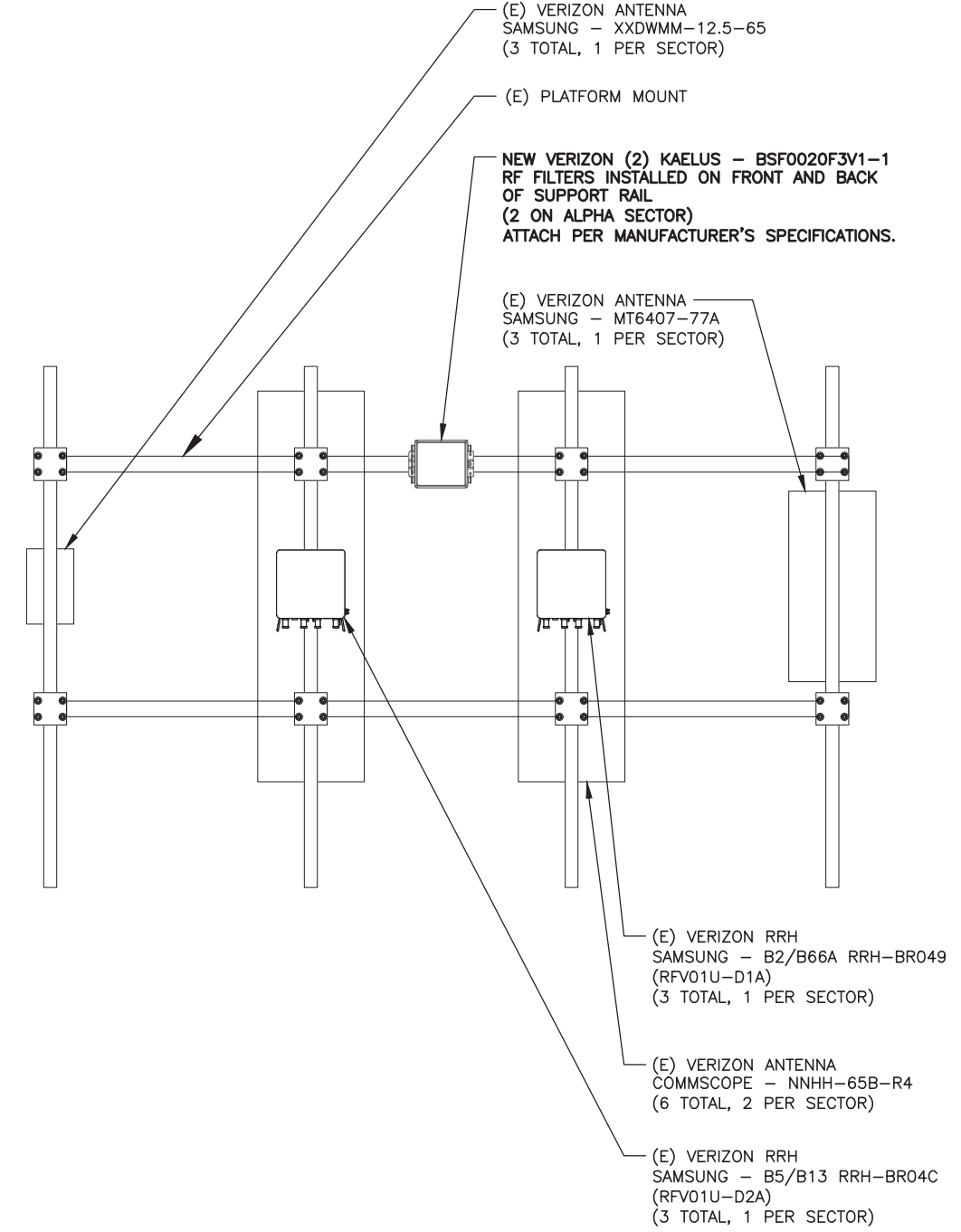
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SHEET NUMBER: **LE-2** REVISION: **0**



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'

137177.020.01.0001...876313.WEST JOHNSON AVE. BURNT HOUSE.DWG - Sheet:LE-2 - User: lisa.rider - Feb 27, 2024 - 11:46am