

August 29, 2023

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

**RE: Notice of Exempt Modification for Verizon  
Crown #881364\_Crown\_VZW  
123 Costello Road, Newington, CT 06111  
Latitude: 41° 39' 18.72"/ Longitude: -72° 43' 17.19"**

Dear Ms. Bachman:

Verizon Wireless is requesting to file an exempt modification for an existing tower located at 123 Costello Road, Newington, CT 06111. The property is owned by Costello Industries Inc. and the tower is owned by Crown Castle. Verizon now intends to add one (1) interference mitigation filter to be installed at the 114-foot level of the tower of the 145-foot monopole. This modification may include B2, B5, B17, B14, B29, B30, B66 & n77 hardware that is 4G(LTE) and/or 5GNR capable through remote software configuration and either or both services may be turned on or off at various times.

**Panned Modification:**

**Tower:**

Installed New:

(1) Kaelus BSF0020F3V1-1 Twin Bandstop 900MHZ Interference Mitigation Filter

The facility was approved by the Town of Newington Zoning Commission on April 16, 2001. Please see attached.

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-SOj-73, a copy of this letter is being sent to Mayor Beth DelBuono and Town Planner Paul Dickson for the municipality. A copy is also being sent to Costello Industries Inc. as the property owner and Crown Castle is the tower owner. The proposed modifications will not result in an increase in the height of the existing tower.

1. The proposed modifications will not require the extension of the site boundary.
2. 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.
3. 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.

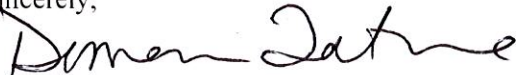
Melanie A. Bachman

Page 2

4. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
5. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, Verizon 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: Domenica Tatasciore.

Sincerely,



Domenica Tatasciore  
Site Acquisition Specialist  
1800 W. Park Drive  
Westborough, MA 01581  
(508) 621-9161/ Domenica.Tatasciore@crowncastle.com

Attachments

cc:

Mayor Beth DelBuono  
Town of Newington  
200 Garfield Street  
Newington, CT 06111  
860-665-8510

Town Planner Paul Dickson  
Town of Newington  
200 Garfield Street  
Newington, CT 06111  
860-665-8510

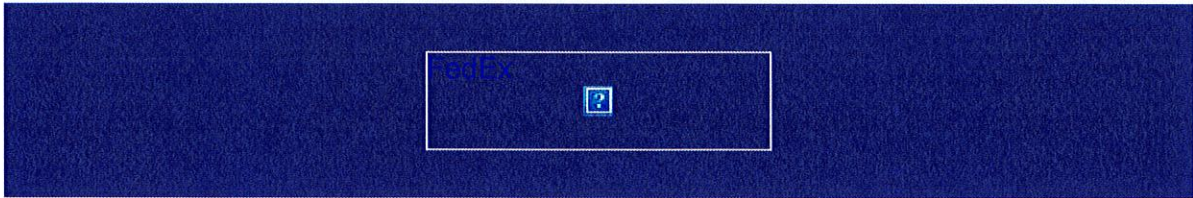
Costello Industries Inc., Property Owner  
123 Costello Road  
Newington, CT 06111  
860-250-2936

Crown Castle, Tower Owner

**From:** [TrackingUpdates@fedex.com](mailto:TrackingUpdates@fedex.com)  
**To:** [Tatasciore, Domenica](#)  
**Subject:** FedEx Shipment 773118475958: Your package has been delivered  
**Date:** Tuesday, August 29, 2023 9:17:05 AM

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**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 Tue, 08/29/2023 at  
9:09am.



Delivered to 198 GARFIELD ST, NEWINGTON, CT 06111  
Received by J.AMES

**OBTAIN PROOF OF DELIVERY**

TRACKING NUMBER [773118475958](#)

FROM Crown Castle  
1800 West Park Drive

Suite 200  
WESTBOROUGH, MA, US, 01581

**TO** Town of Newington  
Mayor Beth DelBuono  
200 Garfield Street  
NEWINGTON, CT, US, 06111

**REFERENCE** 799001.7680

**SHIPPER REFERENCE** 799001.7680

**SHIP DATE** Mon 8/28/2023 06:04 PM

**DELIVERED TO** Receptionist/Front Desk

**PACKAGING TYPE** FedEx Envelope

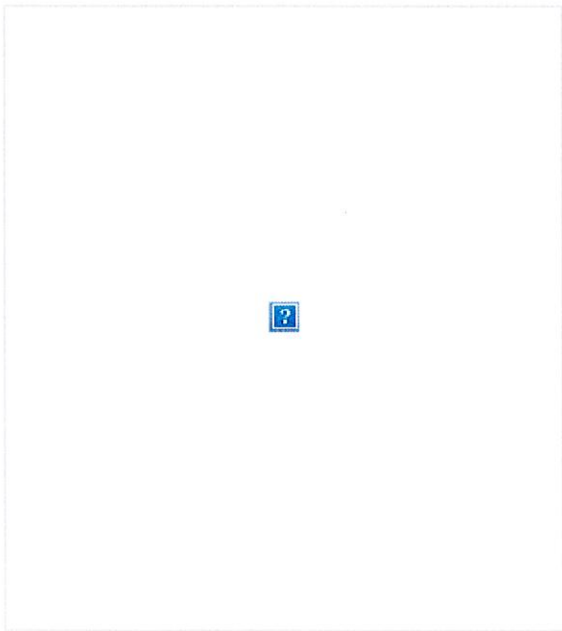
**ORIGIN** WESTBOROUGH, MA, US, 01581

**DESTINATION** NEWINGTON, CT, US, 06111

**NUMBER OF PIECES** 1

**TOTAL SHIPMENT WEIGHT** 0.50 LB

**SERVICE TYPE** FedEx Priority Overnight



## Wondering when a package will arrive?

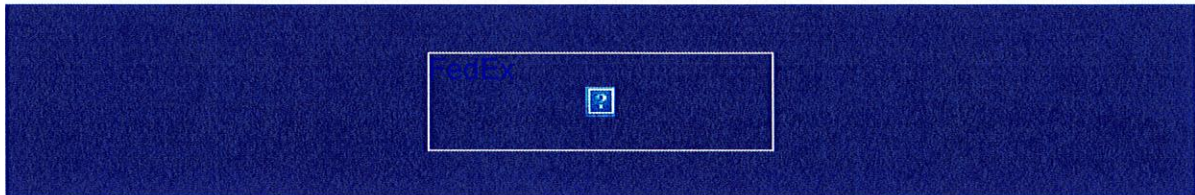
Enter your tracking number to see your estimated delivery time within a 4-hour window.

[TRACK A PACKAGE](#)

**From:** [TrackingUpdates@fedex.com](mailto:TrackingUpdates@fedex.com)  
**To:** [Tatascore, Domenica](#)  
**Subject:** FedEx Shipment 773118490101: Your package has been delivered  
**Date:** Tuesday, August 29, 2023 9:16:55 AM

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**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 Tue, 08/29/2023 at  
9:09am.



Delivered to 198 GARFIELD ST, NEWINGTON, CT 06111  
Received by J.AMES

**OBTAIN PROOF OF DELIVERY**

TRACKING NUMBER [773118490101](#)

FROM Crown Castle  
1800 West Park Drive

Suite 200  
WESTBOROUGH, MA, US, 01581

**TO** Town of Newington  
Town Planner Paul Dickson  
200 Garfield Street  
NEWINGTON, CT, US, 06111

**REFERENCE** 799001.7680

**SHIPPER REFERENCE** 799001.7680

**SHIP DATE** Mon 8/28/2023 06:04 PM

**DELIVERED TO** Receptionist/Front Desk

**PACKAGING TYPE** FedEx Envelope

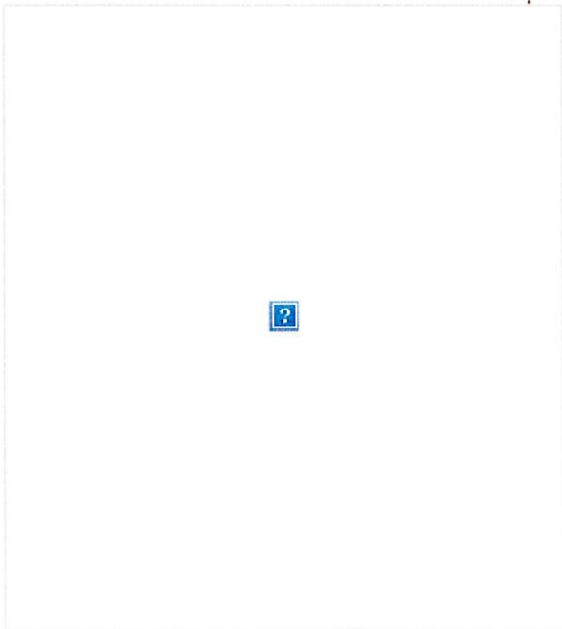
**ORIGIN** WESTBOROUGH, MA, US, 01581

**DESTINATION** NEWINGTON, CT, US, 06111

**NUMBER OF PIECES** 1

**TOTAL SHIPMENT WEIGHT** 0.50 LB

**SERVICE TYPE** FedEx Priority Overnight



## Wondering when a package will arrive?

Enter your tracking number to see your estimated delivery time within a 4-hour window.

[TRACK A PACKAGE](#)

**From:** [Tatasciore.Domenica](mailto:Tatasciore.Domenica)  
**To:** [Tatasciore.Domenica](mailto:Tatasciore.Domenica)  
**Subject:** FW: FedEx Shipment 773223711442: Your package has been delivered  
**Date:** Tuesday, August 29, 2023 9:22:43 AM

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**From:** [TrackingUpdates@fedex.com](mailto:TrackingUpdates@fedex.com) <[TrackingUpdates@fedex.com](mailto:TrackingUpdates@fedex.com)>  
**Sent:** Tuesday, August 29, 2023 9:13 AM  
**To:** Barbadora, Jeff <[Jeff.Barbadora@crowncastle.com](mailto:Jeff.Barbadora@crowncastle.com)>  
**Subject:** FedEx Shipment 773223711442: 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 Tue, 08/29/2023 at  
9:05am.



Delivered to 123 COSTELLO RD, NEWINGTON, CT 06111  
Received by G.CHAMBERLAND

[\*\*OBTAIN PROOF OF DELIVERY\*\*](#)

TRACKING NUMBER	<a href="#"><u>773223711442</u></a>
FROM	Jeff Barbadora 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Costello Industries Inc Property Owner

123 Costello Road  
NEWINGTON, CT, US, 06111

**REFERENCE** 799001.7680

**SHIPPER REFERENCE** 799001.7680

**SHIP DATE** Mon 8/28/2023 06:04 PM

**DELIVERED TO** Receptionist/Front Desk

**PACKAGING TYPE** FedEx Envelope

**ORIGIN** WESTBOROUGH, MA, US, 01581

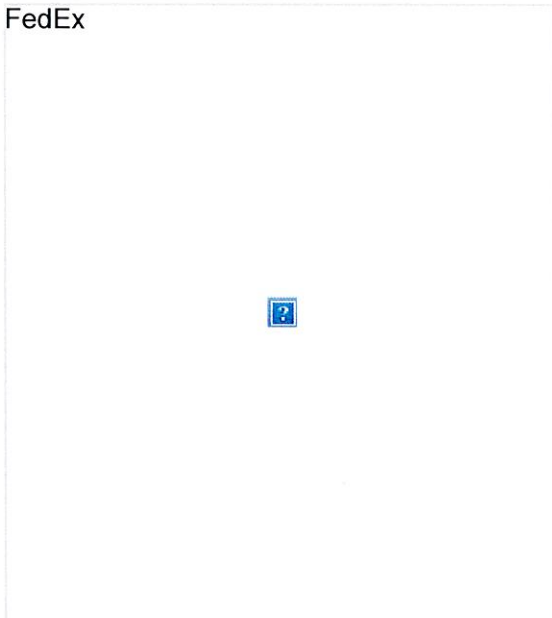
**DESTINATION** NEWINGTON, CT, US, 06111

**NUMBER OF PIECES** 1

**TOTAL SHIPMENT WEIGHT** 0.50 LB

**SERVICE TYPE** FedEx Priority Overnight

FedEx



## Wondering when a package will arrive?

Enter your tracking number to see your estimated delivery time within a 4-hour window.

[TRACK A PACKAGE](#)

FOLLOW FEDEX





29196

VOL. 1408 PAGE 97

# TOWN OF NEWINGTON



Town Hall • 131 Cedar Street, Newington, Connecticut 06111  
Central Telephone (860) 665-8500  
Department Telephone (860)  
Department Fax No. (860) 665-8575  
665-8577

Certified Mail No. 7106 4575 1292 0696 1614  
OFFICE OF THE TOWN PLANNER

RECEIVED & RECORDED IN  
NEWINGTON LAND RECORDS

## CERTIFICATE OF ACTION

APR 20 10 55 AM '01  
1408 97  
BY *Janice J. [Signature]*  
TOWN CLERK

TO: Anthony B. Gioffre III  
Cuddy, Feder & Worby LLC  
90 Maple Avenue  
White Plains, New York 10601

DATE: April 16, 2001

SUBJECT: PETITION 10-01 123 Costello Road, AT & T Wireless Services PCS LLC 12 Omega Drive, 2<sup>nd</sup> floor Stamford, CT 06902 applicant, represented by Anthony B. Gioffre III, Cuddy, Feder & Worby LLC 90 Maple Avenue, White Plains, New York 10601, Costello Industries, Inc. property owner, requests Special Exception Section 3.2.7 for co location of antennae on existing monopole. I Zone.

At a meeting held April 11, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of AT&T Wireless PCS antenna as a co-locator on the existing monopole and on the existing platform at approximately 145' elevation as shown on plans prepared by URS Corporation AES entitled "Existing Monopole Co-Locate Compound Plan and Tower Elevation" sheet Z01 site plan scale 1"=30' and sheet Z02 compound plan and tower elevation, scale 1"=10' dated 12/14/00.
2. All ground equipment shall be located within the existing 8' chain link fence.
3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the applicant, AT&T Wireless Services PCS, LLC.
4. Prior to the installation of the AT&T Wireless antenna building permits shall be obtained.
5. Prior to the issuance of building permits a revised site plan mylar shall be submitted to the Town Planner for the Chairman's signature.

Certified by:

*Edmund J. Meehan (Signature)*  
Edmund J. Meehan  
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.  
CA411-3

4362

VOL 1478 PAGE 241

# TOWN OF NEWINGTON



Town Hall • 131 Cedar Street, Newington, Connecticut 06111  
Central Telephone (860) 865-8500  
Department Telephone (860) 865-8575  
Department Fax No. (860) 865-8577

Certified Mail No. 7106 4575 1292 0696 5209  
OFFICE OF THE TOWN PLANNER

## CERTIFICATE OF ACTION

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

DATE: December 3, 2001

SUBJECT: PETITION 65-01 123 Costello Road, Costello Industries owner, Cellco Partnership d/b/a Verizon Wireless applicant, represented by Kenneth C. Baldwin, Robinson & Cole LLP, 280 Trumbull Street Hartford, CT 06103-3597 requests Special Exception Section 3.2.7 PCS antenna co location and ground base equipment, PD Zone District.

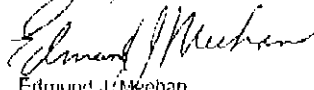
At a meeting held November 28, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of Verizon Wireless PCS platform and antenna as a co-locator on the existing monopole at the elevation of 125' as shown on plans prepared by URS Corporation AES, 795 Brook Street Rocky Hill, CT, dated 10-11-01. Sheets T-1, Z-1 and Z-2, entitled "123 Costello Road", Newington, Connecticut.
2. All ground equipment shall be located within an 8' fence enclosure, no equipment shall be placed within 10' side setback area.
3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the Verizon Wireless.
4. Prior to the installation of the Verizon Wireless antenna building permits shall be obtained.

-1-(Continued on Page 2)

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Certified by:



Edmund J. Meehan  
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.

This Site Plan Modification will not become effective until 1) a transparency of the Certificate of Action is affixed to the original site plan mylar, 2) the modification is incorporated into the site plan and noted as a revision and 3) a mylar copy of the modified signed site plan original mylar is filed in the Town Plan and Zoning Office.

An Autocad DXF File shall be provided to the Town Planner for incorporation into the Town's GIS database at the time of submission of the plan mylar.

-2-

ca1128-2/3

RECEIVED & RECORDED IN  
NEWINGTON LAND RECORDS

Dec. 10, 2001 at 11:00 A.M.

VOLUME 1478 PAGE 241

BY Jeri A. Hanson  
TOWN CLERK

VOL. 1394 PAGE 43

TOWN OF NEWINGTON

28148



Town Hall • 131 Cedar Street, Newington, Connecticut 06111  
Central Telephone (860) 665-8500  
Department Telephone (860)  
Department Fax No. (860) 665-8575  
665-8577

Certified Mail No. P 972 914 104  
OFFICE OF THE TOWN PLANNER

CERTIFICATE OF ACTION

TO: Attorney John W. Knuff  
Hurwitz & Saganin, LLC  
147 Broad ST  
Milford CT 06460

DATE: February 16, 2001

SUBJECT: PETITION 01-2001 123 Costello Road, Costello Industries owner, Nextel Communications of the Mid-Atlantic, Inc. 100 Corporate Place, Rocky Hill, applicant represented by John W. Knuff, Hurwitz & Saganin, LLC 147 Broad Street Milford, CT 06460 request Special Exception Section 3.2.7 to add antenna to existing monopole, PD Zone.

At a meeting held February 14, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of Nextel PCS platform and antenna as a co-locator on the existing monopole at the elevation of 135' as shown on plans prepared by URS Corporation AES, 500 Enterprise Drive Rocky Hill, CT, dated 11-15-00, Sheets T-1, Z-1 and Z-2, entitled "Site No. CT-2517, 123 Costello Road, Newington, Connecticut."
2. All ground equipment shall be located within an 8' fence enclosure, no equipment shall be placed within 10' side yard setback area.
3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the applicant, Nextel Communications.
4. Prior to the installation of the Nextel antenna building permits shall be obtained.

Certified by:

*Edmund J. Meehan*  
Edmund J. Meehan  
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.

Cs216-1

RECEIVED & RECORDED IN  
NEWINGTON LAND RECORDS

FEB 21 2 03 PM '01

VOL. 1394 PAGE 43  
BY *Carla G. F...*  
TOWN CLERK

Unique ID: C0685500

<b>Location:</b> 123 COSTELLO RD		<b>Map Id:</b> 32/018/00A	<b>Zone:</b> PD	<b>Date Printed:</b> 8/21/2023
<b>Owner Of Record:</b> COSTELLO INDUSTRIES INC		<b>Neighborhood:</b> 301		<b>Last Update:</b> 8/21/2023
<b>Volume/Page:</b> 1304/0147		<b>Date:</b> 9/3/1999	<b>Sales Type:</b> Quit Claim	<b>Valid:</b> No
<b>Exempt:</b>				<b>Sale Price:</b> 0
<b>Prior Owner History:</b>				
		1304/0144	9/3/1999	No
		0573/0098	3/31/1986	No
		0399/0332	8/18/1980	No
		0385/0280	12/18/1979	No
		0385/0278	12/18/1979	No
<b>Permit Number:</b>	<b>Date:</b>	<b>Permit Description:</b>		
B-22-885	11/15/2022	Verizon Wireless to replace (3) existing antenna and add (3) antenna with (1) hybrid line. This appol		
B-22-575	7/27/2022	Temporary fuel tank - Install one above ground 1,000 gallon LPG storage tank. Temporary installation		
B-22-194	3/28/2022	Modify Eligible Wireless Facility. &nbsp;Remove (12) antennas. (6) TMA. (18) triplexers. (6) coax. I		
21147	3/31/2021	pipe and wire generator and transfer switch for T-Mobile		
21008	3/14/2021	Install 25 KW AC Generator on the existing concrete pad inside the cell tower compound. Please not		
20254	10/22/2020	**this EP is associated with BP application IB-20-664** -install new 20A 1-pole breaker in PPC -I		
<b>Supplemental Data:</b>		<b>Appraised Value</b>		
Census/Tract	494202	VisionPID	3013	Total Land Value
Dev Map ID	S/E 2020 & 2815	Solar		Total Building Value
GIS ID				Total Outldg Value
Route				Total Market Value
District				118,400
Utilities				1,013,080
				25,000
				1,156,480
<b>States Item Codes</b>				
<b>Land Type</b>	<b>Acres</b>	<b>490</b>	<b>Total Value</b>	<b>Quantity</b>
Ind Excess	1.84	0.00	18,400	2.00
Industrial Prime Site	1.00	0.00	100,000	2.84
				1.00
<b>Total</b>	<b>2.8400</b>	<b>0.00</b>	<b>118,400</b>	<b>Value</b>
				709,160
				82,880
				17,500
<b>Assessment History (Prior Years as of Oct/1)</b>				
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
<b>Land</b>	82,880	82,880	82,880	82,890
<b>Building</b>	709,160	709,160	709,160	519,630
<b>Outbuilding</b>	17,500	17,500	17,500	207,020
<b>Total</b>	<b>809,540</b>	<b>809,540</b>	<b>809,540</b>	<b>809,540</b>
<b>Comments</b>				
10/7/2021	2021: MOVED CELL TOWER FROM 123 COSTELLO RD TO 123T COSTELLO RD/SK			
<b>Application Date:</b>				
				<b>Expiration Date:</b>
				0

Information may be deemed reliable, but not guaranteed.

Revaluation Date: 10/1/2020



<b>Location:</b> 123 COSTELLO RD		<b>Map Id:</b> 32/018/00A	<b>Zone:</b> PD	<b>Date Printed:</b> 8/21/2023	
<b>Owner Of Record</b>		<b>Neighborhood:</b> 301	<b>Sales Type</b>	<b>Last Update:</b> 8/21/2023	
COSTELLO INDUSTRIES INC		<b>Volume/Page</b>	<b>Date</b>	<b>Valid</b>	
PO BOX 370125, WEST HARTFORD, CT 06137-0125		1304/0147	9/3/1999	No	
		<b>Exempt</b>			
		<b>Quit Claim</b>			
		<b>Quit Claim</b>			
		1304/0144	9/3/1999	No	
		0573/0098	3/31/1986	No	
		0399/0332	8/18/1980	No	
		0385/0280	12/18/1979	No	
		0385/0278	12/18/1979	No	
<b>Prior Owner History</b>					
<b>Permit Number</b>	<b>Date</b>	<b>Permit Description</b>			
B-22-885	11/15/2022	Verizon Wireless to replace (3) existing antenna and add (3) antenna with (1) hybrid line. This appo			
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20254	10/22/2020	**this EP is associated with BP application TB-20-664** -install new 20A 1-pole breaker in PPC-i			
<b>Supplemental Data</b>					
<b>Census/Tract</b>	494202	<b>VisionPID</b>	3013	<b>Total Land Value</b> 118,400	
<b>Dev Map ID</b>	S/E 2020 & 2815	<b>Solar</b>		<b>Total Building Value</b> 1,013,080	
<b>GIS ID</b>				<b>Total Outbldg Value</b> 25,000	
<b>Route</b>				<b>Total Market Value</b> 1,156,480	
<b>District</b>					
<b>Utilities</b>					
<b>State Item Codes</b>					
<b>Land Type</b>	<b>Acres</b>	<b>490</b>	<b>Total Value</b>	<b>Quantity</b> <b>Value</b>	
Ind Excess	1.84	0.00	18,400	2.00 709,160	
Industrial Prime Site	1.00	0.00	100,000	2.84 82,880	
				1.00 17,500	
<b>Total</b>	<b>2.8400</b>	<b>0.00</b>	<b>118,400</b>		
<b>Assessment History (Prior Years as of Oct 1)</b>					
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
<b>Land</b>	82,880	82,880	82,880	82,890	267,750
<b>Building</b>	709,160	709,160	709,160	519,630	148,870
<b>Outbuilding</b>	17,500	17,500	17,500	207,020	201,250
<b>Total</b>	<b>809,540</b>	<b>809,540</b>	<b>809,540</b>	<b>809,540</b>	<b>617,870</b>
<b>490 Appraised Totals</b>					
	<b>Acres</b>	<b>Value</b>	<b>Type</b>	<b>Acres</b>	<b>Value</b>
				<b>Totals</b>	<b>0.00 0</b>
<b>Application Date:</b>					
<b>Expiration Date:</b>					
<b>Comments</b>					
<b>10/7/2021</b>	2021: MOVED CELL TOWER FROM 123 COSTELLO RD TO 123T COSTELLO RD/SK				







145 FT TIP OF TOWER STEEL

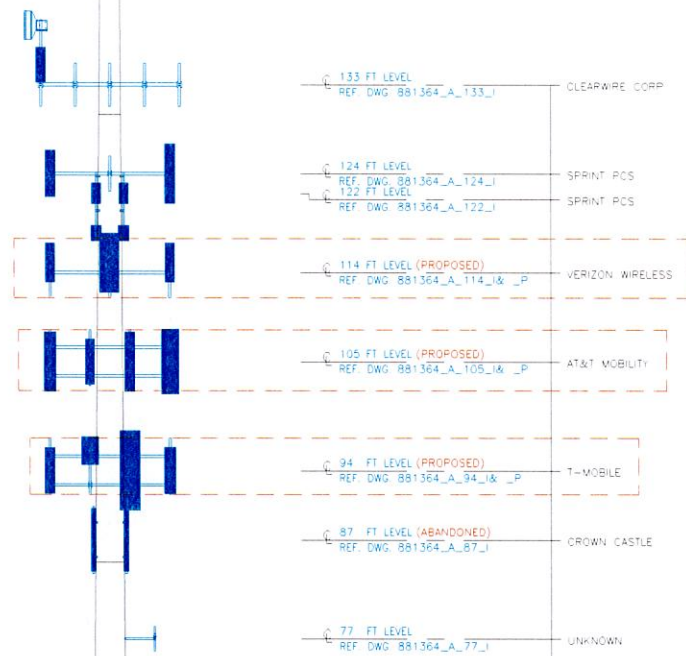
145'-7" (AGL)

145'-0"

MODIFICATION  
DOC ID: 5976614

7"  
(FND)

29'-6"



BOTTOM OF TOWER STEEL  
BASE PLATE ELEV 0'-0"

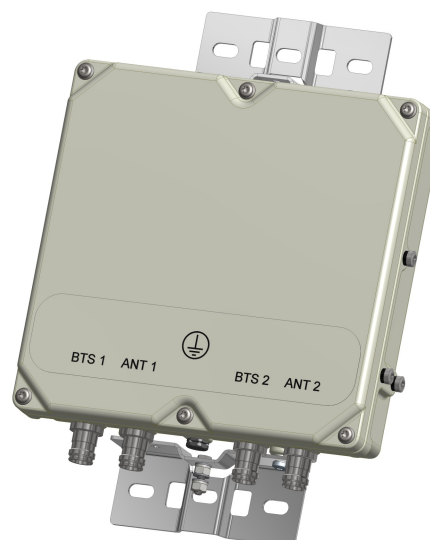
# BSF0020F3V1-1

## TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

### FEATURES

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



### TECHNICAL SPECIFICATIONS

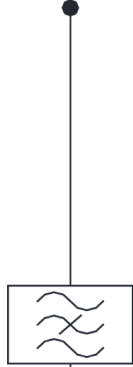
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum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

## ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM

ANT1



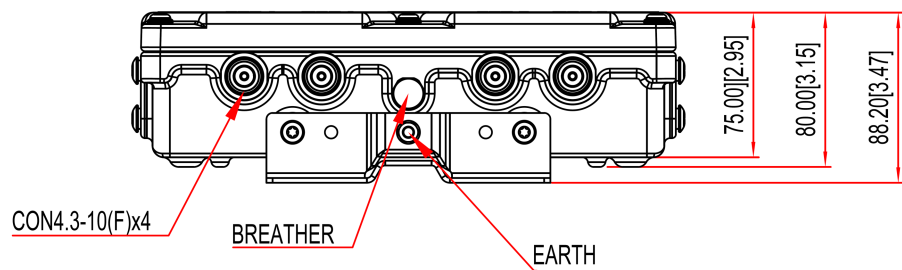
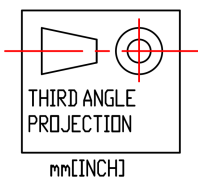
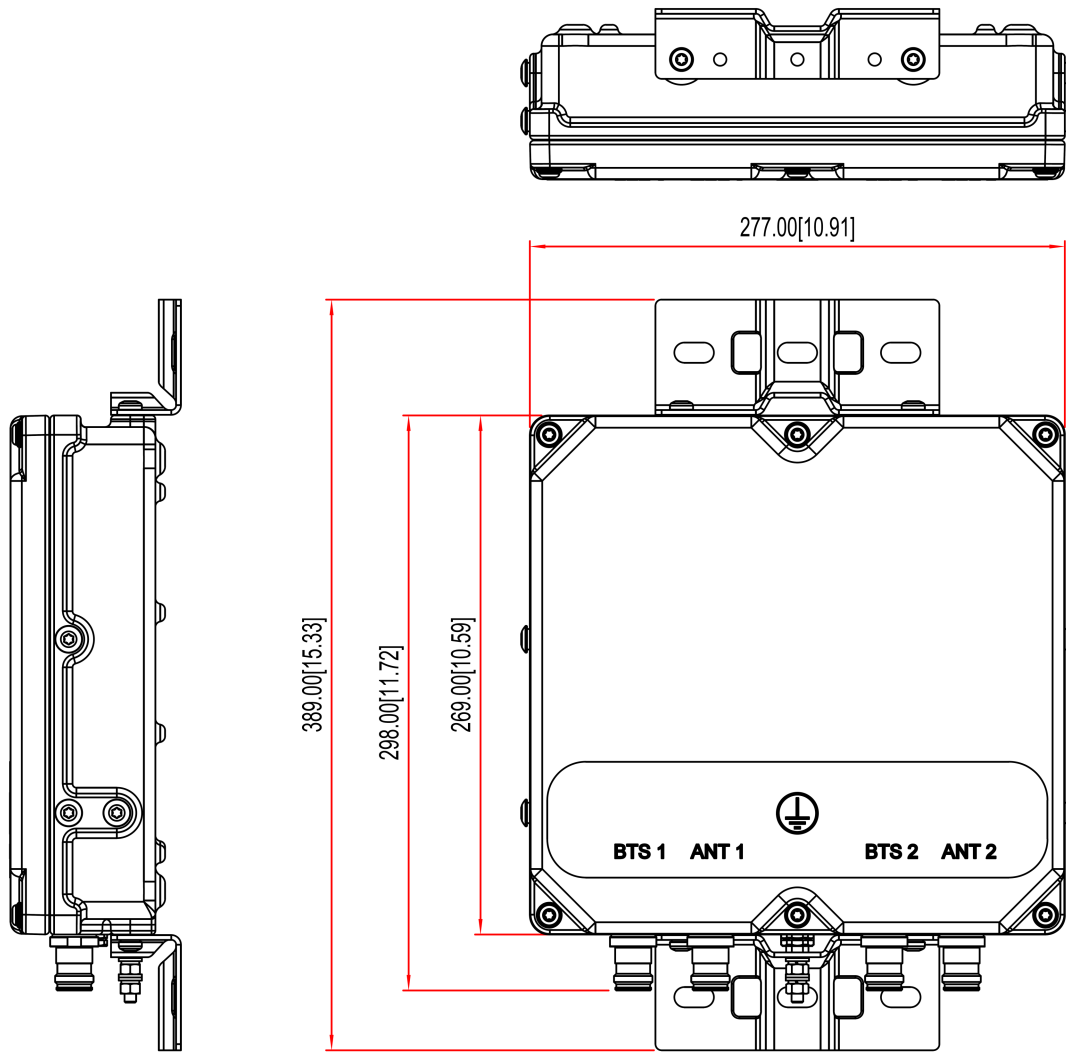
BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM





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

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## Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis□

SMART Tool Project #: 10206421  
Colliers Engineering & Design Project #: 23777068

July 10, 2023

### Site Information

Site ID: 5000387740-VZW / NEWINGTON 2 CT  
Site Name: NEWINGTON 2 CT  
Carrier Name: Verizon Wireless  
Address: 123 Costello Rd  
Newington, Connecticut 06111  
Hartford County  
Latitude: 41.655197°  
Longitude: -72.721904°

### Structure Information

Tower Type: Monopole  
Mount Type: 14.17-Ft Platform

FUZE ID # 17123734

### Analysis Results

Platform: 52.7% 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](mailto: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
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 324494, dated September 2, 2020
Mount Mapping Report	Structural Components, Site ID: 16231999, dated February 23, 2021
Previous Mount Analysis	Maser Consulting Connecticut, Project #: 21777016A, dated March 10, 2021
Filter Add Scope	Provided by Verizon Wireless

**Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ult}$ 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, $K_e$ : 0.995
Seismic Parameters:	$S_s$ : 0.195 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
14.17	14.17	1	?	?	
	14.17	1	?	?	
		1	?	?	
		1	?	?	
		1	?	?	
		1	?	?	
		1	?	?	
	14.17	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

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>52.7%</b>
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**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	37.7	37.7	50.6	50.6
0.5	46.4	46.4	64.6	64.6
1	54.7	54.7	78.3	78.3

- 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



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

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

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

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

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

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MDG #: 5000387740

SMART Project #: 10206421

Fuze Project ID: 17123734

**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:**

Contractor to verify that all equipment per previous mount analysis report by Maser Consulting Connecticut, Project #: 21777016A, dated March 10, 2021, has been installed.

Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

Contractor to install HSS3x2 ½x1/4 galvanized shim tubes under top plate of each kicker kit (6 in total required).

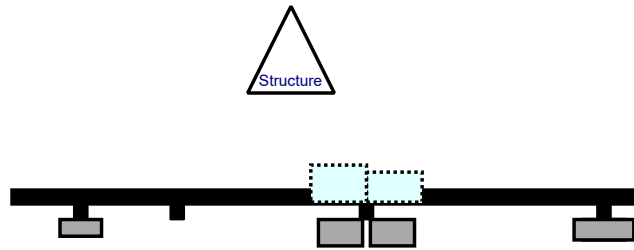
**Response:**

**Special Instruction Confirmation:**

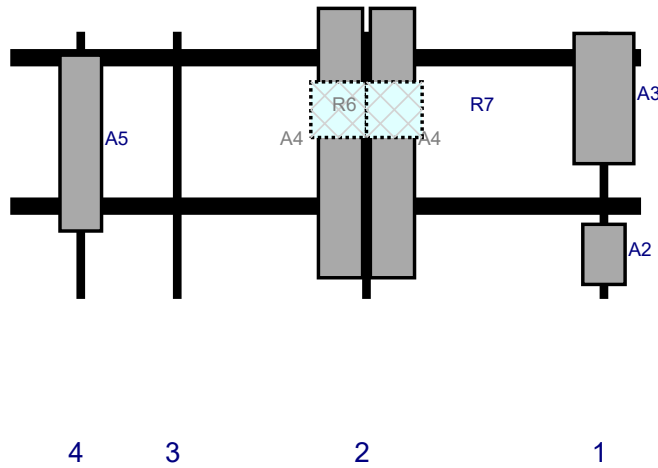
- The contractor has read and acknowledges the above special instructions.
- All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.



Plan View

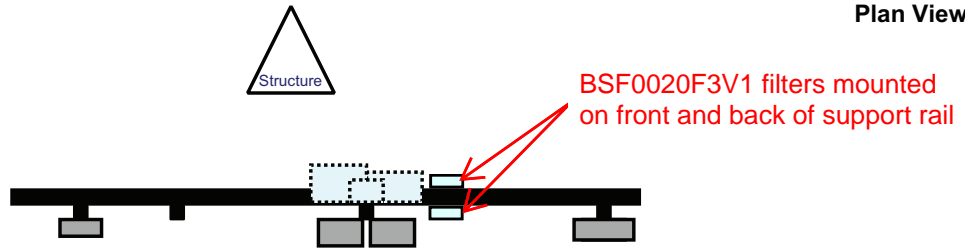


Front View - Looking at Structure

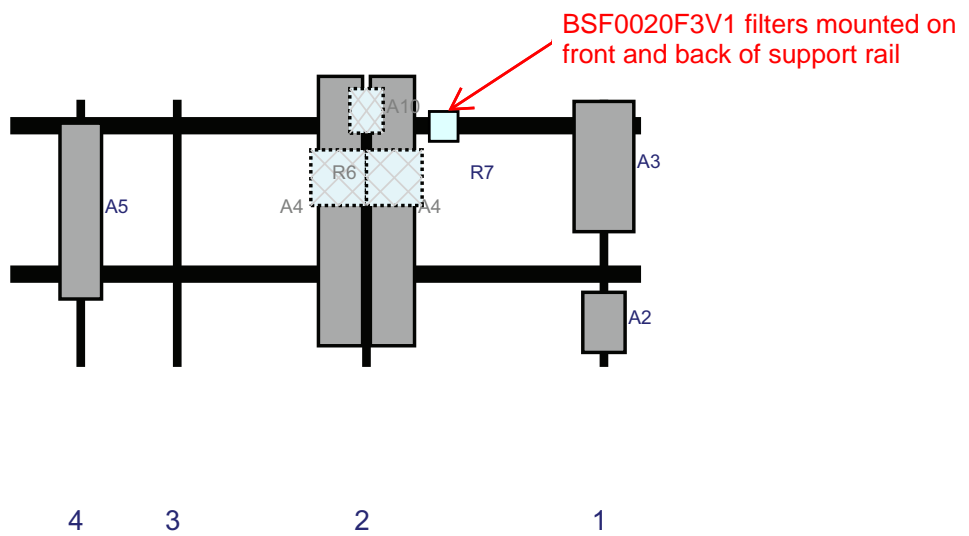


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	160	1	a	Front	60	0	Retained	
A3	VZS01	35.1	16.1	160	1	a	Front	18	0	Retained	
A4	SBNHH-1D65B	72.6	11.9	96	2	a	Front	30	-7	Retained	02/23/2021
A4	SBNHH-1D65B	72.6	11.9	96	2	b	Front	30	7	Retained	02/23/2021
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	96	2	a	Behind	21	-7.5	Retained	02/23/2021
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	96	2	b	Behind	21	7.5	Retained	02/23/2021
A5	BXA-80063/4CF 5	47.4	11.2	19	4	a	Front	30	0	Retained	02/23/2021
OVP2	RRFDC-3315-PF-48	19.1	15.7			Member				Retained	02/23/2021
OVP1	RRFDC-3315-PF-48	19.1	15.7			Member				Retained	02/23/2021

Plan View



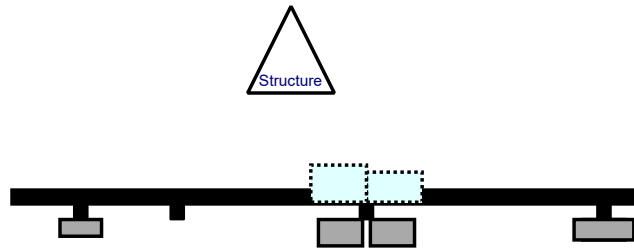
Front View - Looking at Structure



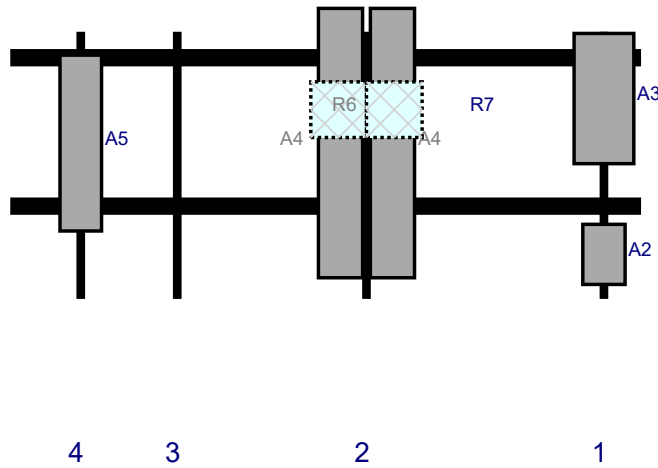
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	160	1	a	Front	60	0	Retained	
A3	VZS01	35.1	16.1	160	1	a	Front	18	0	Retained	
A4	SBNHH-1D65B	72.6	11.9	96	2	a	Front	30	-7	Retained	02/23/2021
A4	SBNHH-1D65B	72.6	11.9	96	2	b	Front	30	7	Retained	02/23/2021
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	96	2	a	Behind	21	-7.5	Retained	02/23/2021
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	96	2	b	Behind	21	7.5	Retained	02/23/2021
A10	GPS	12	9	96	2	a	Behind	3	0	Retained	
A5	BXA-80063/4CF 5	47.4	11.2	19	4	a	Front	30	0	Retained	02/23/2021
M49	BSF0020F3V1-1	10.6	10.9			Member				Added	



Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	160	1	a	Front	60	0	Retained	
A3	VZS01	35.1	16.1	160	1	a	Front	18	0	Retained	
A4	SBNHH-1D65B	72.6	11.9	96	2	a	Front	30	-7	Retained	02/23/2021
A4	SBNHH-1D65B	72.6	11.9	96	2	b	Front	30	7	Retained	02/23/2021
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	96	2	a	Behind	21	-7.5	Retained	02/23/2021
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	96	2	b	Behind	21	7.5	Retained	02/23/2021
A5	BXA-80063/4CF 5	47.4	11.2	19	4	a	Front	30	0	Retained	02/23/2021

□  
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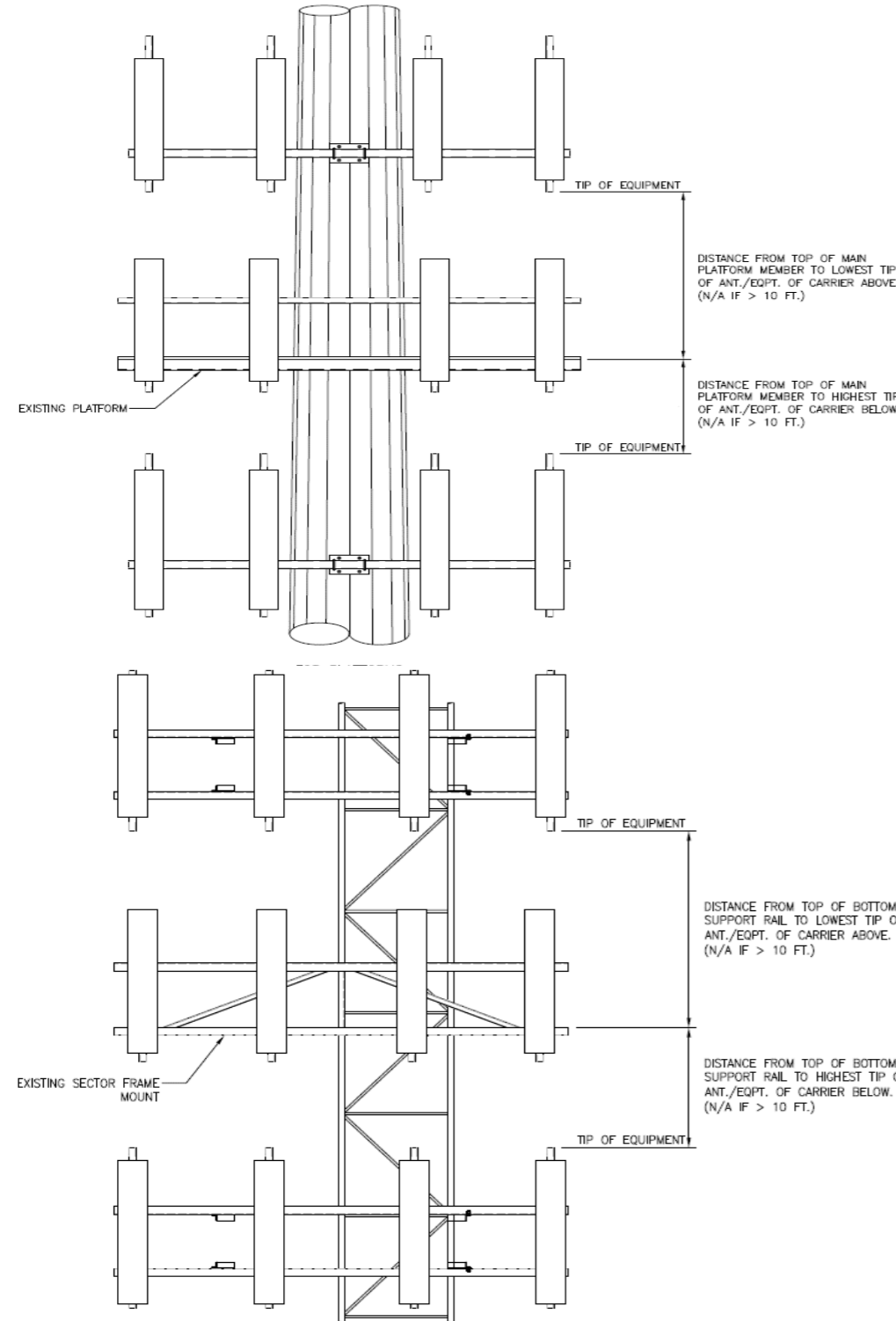
?

?

?



Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B										
Sector A:	110.00	Deg	Leg A:		Deg	Ant <sub>1a</sub>	Amphenol BXA17106	6.00	4.00	48.00	DEAD	115.583	40.00	8.00	220.00	282		
Sector B:	230.00	Deg	Leg B:		Deg	Ant <sub>1b</sub>												
Sector C:	350.00	Deg	Leg C:		Deg	Ant <sub>1c</sub>												
Sector D:		Deg	Leg D:		Deg	Ant <sub>2a</sub>	(2) Commscope SBNH	12.00	7.00	73.00	Jumper	114.333	55.00	8.00	220.00	287		
<b>Climbing Facility Information</b>								Ant <sub>2b</sub>	(2) Samsung RFV01U-	15.50	12.00	15.50	Jumper	116.667	27.00	0.00	220.00	287
Location:	0.00	Deg					Ant <sub>2c</sub>	GPS Antenna	3.00	3.00	5.00	1/2" TX	113.667	63.00	3.00	220.00	287	
Climbing Facility	Corrosion Type:		Good condition.				Ant <sub>3a</sub>	Empty Pipe									300	
	Access:		Climbing path was obstructed.				Ant <sub>3b</sub>											
	Condition:		Good condition.				Ant <sub>3c</sub>											
								Ant <sub>4a</sub>	Amphenol BXA80063	11.00	5.00	48.00	(2) 1-5/8	116.167	33.00	13.50	210.00	300
								Ant <sub>4b</sub>										
								Ant <sub>4c</sub>										
								Ant <sub>5a</sub>										
								Ant <sub>5b</sub>										
								Ant <sub>5c</sub>										
								Ant on Standoff										
								Ant on Standoff										
								Ant on Tower	Raycap RRFDC-3315-F	14.50	10.00	19.00	1/4" TX H	119.54	54.50	0.00	230.00	275
								Ant on Tower										
								<b>Sector C</b>										
								Ant <sub>1a</sub>	Amphenol BXA17106	6.00	4.00	48.00	DEAD	116.083	34.00	8.00	340.00	308
								Ant <sub>1b</sub>										
								Ant <sub>1c</sub>										
								Ant <sub>2a</sub>	(2) Commscope SBNH	12.00	7.00	73.00	Jumper	114.333	55.00	8.00	340.00	309
								Ant <sub>2b</sub>	(2) Samsung RFV01U-	15.50	12.00	15.50	Jumper	116.667	27.00	0.00	340.00	309
								Ant <sub>2c</sub>										
								Ant <sub>3a</sub>	Empty Pipe								318	
								Ant <sub>3b</sub>										
								Ant <sub>3c</sub>										
								Ant <sub>4a</sub>	Amphenol BXA80063	11.00	5.00	48.00	(2) 1-5/8	116.167	33.00	13.50	330.00	317
								Ant <sub>4b</sub>										
								Ant <sub>4c</sub>										
								Ant <sub>5a</sub>										
								Ant <sub>5b</sub>										
								Ant <sub>5c</sub>										
								Ant on Standoff										
								Ant on Standoff										
								Ant on Tower										
								Ant on Tower										
								<b>Sector D</b>										
								Ant <sub>1a</sub>										
								Ant <sub>1b</sub>										
								Ant <sub>1c</sub>										
								Ant <sub>2a</sub>										
								Ant <sub>2b</sub>										
								Ant <sub>2c</sub>										
								Ant <sub>3a</sub>										
								Ant <sub>3b</sub>										
								Ant <sub>3c</sub>										
								Ant <sub>4a</sub>										
								Ant <sub>4b</sub>										
								Ant <sub>4c</sub>										
								Ant <sub>5a</sub>										
								Ant <sub>5b</sub>										
								Ant <sub>5c</sub>										
								Ant on Standoff										
								Ant on Standoff										
								Ant on Tower										
								Ant on Tower										



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

1	Safety climb cable is rubbing on the Verizon sector mount at 115'.	104
2	Strut connection is crooked on beta / gamma corner.	305, 306
3	(6) DEAD 1-5/8" TX run to the Verizon sector mount and are cut just past the jumper.	136-138
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.



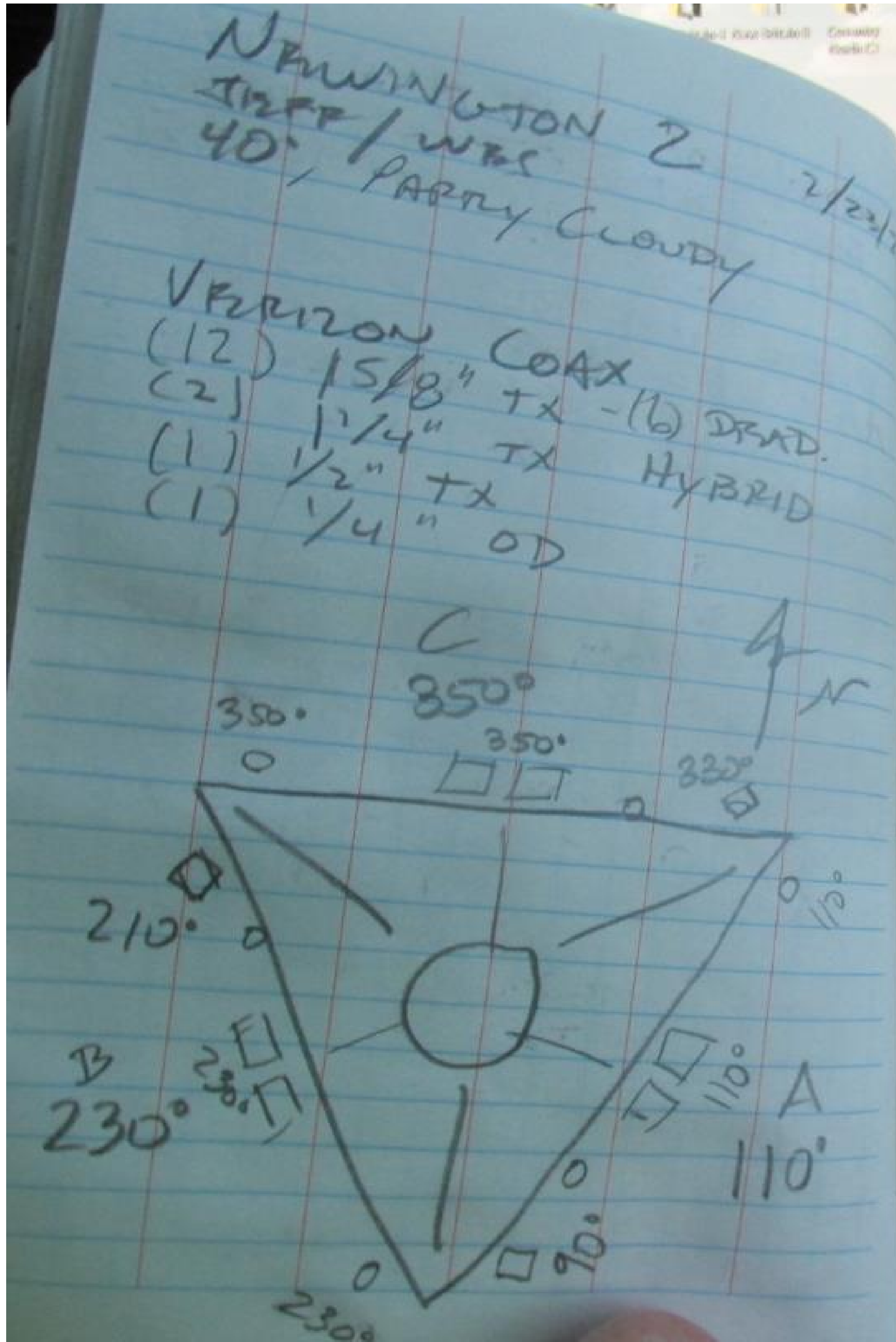
### Antenna Mount Mapping Form (PATENT PENDING)

FCC #

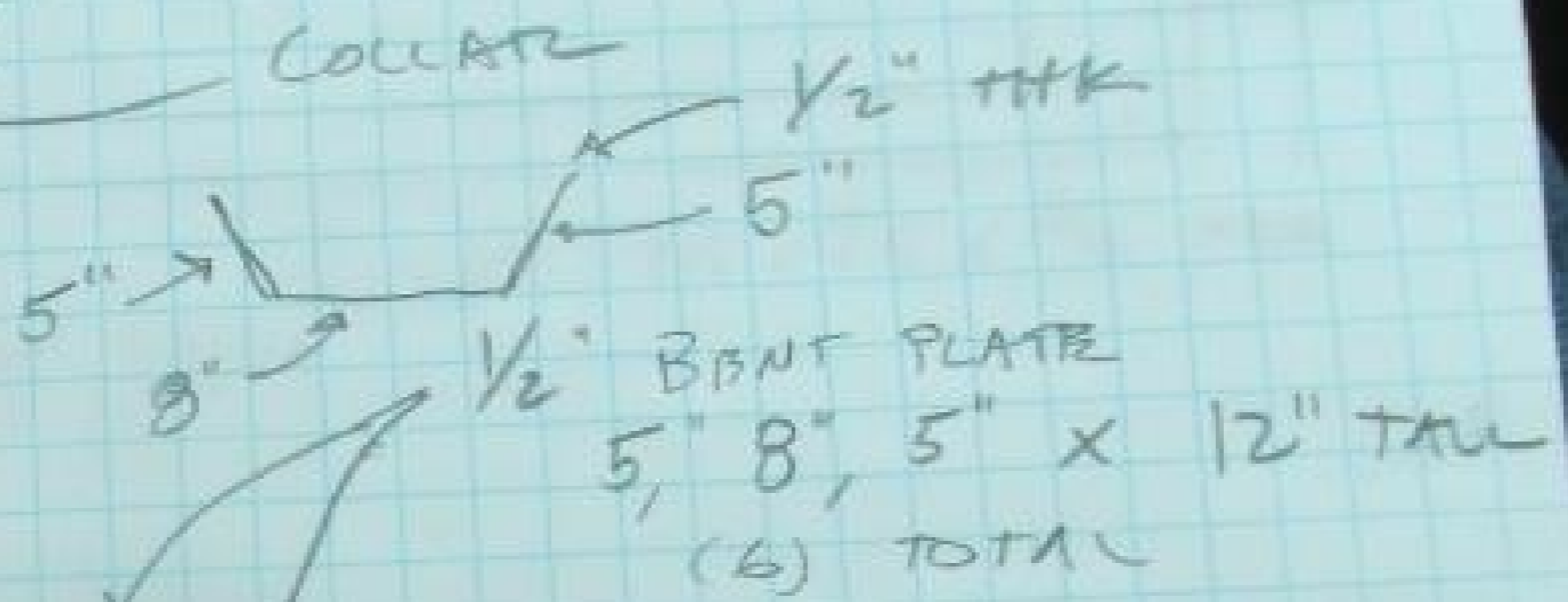
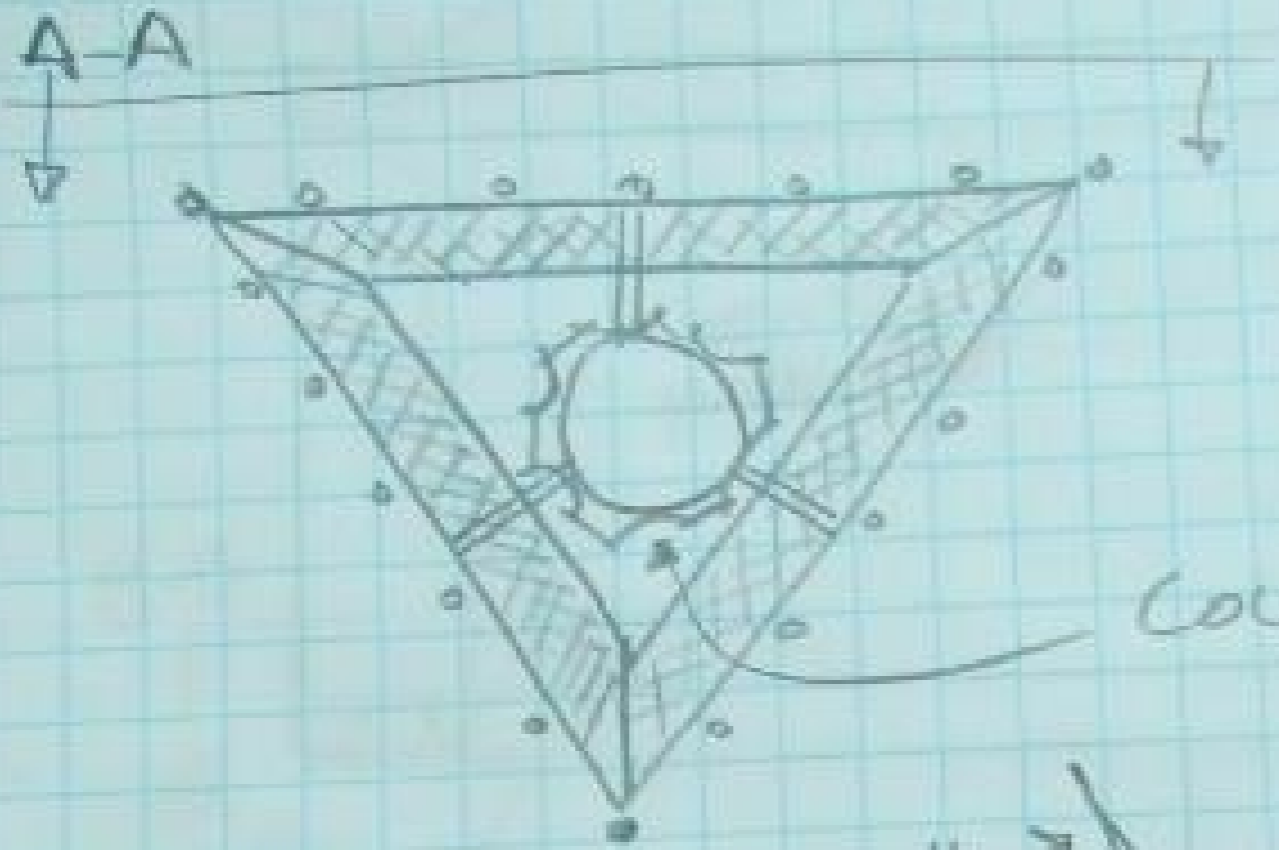
Tower Owner:	Crown Castle	Mapping Date:	Platform
Site Name:	Newington 2	Tower Type:	Monopole
Site Number or ID:	16231999	Tower Height (Ft.):	
Mapping Contractor:	Structural Components	Mount Elevation (Ft.):	115

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

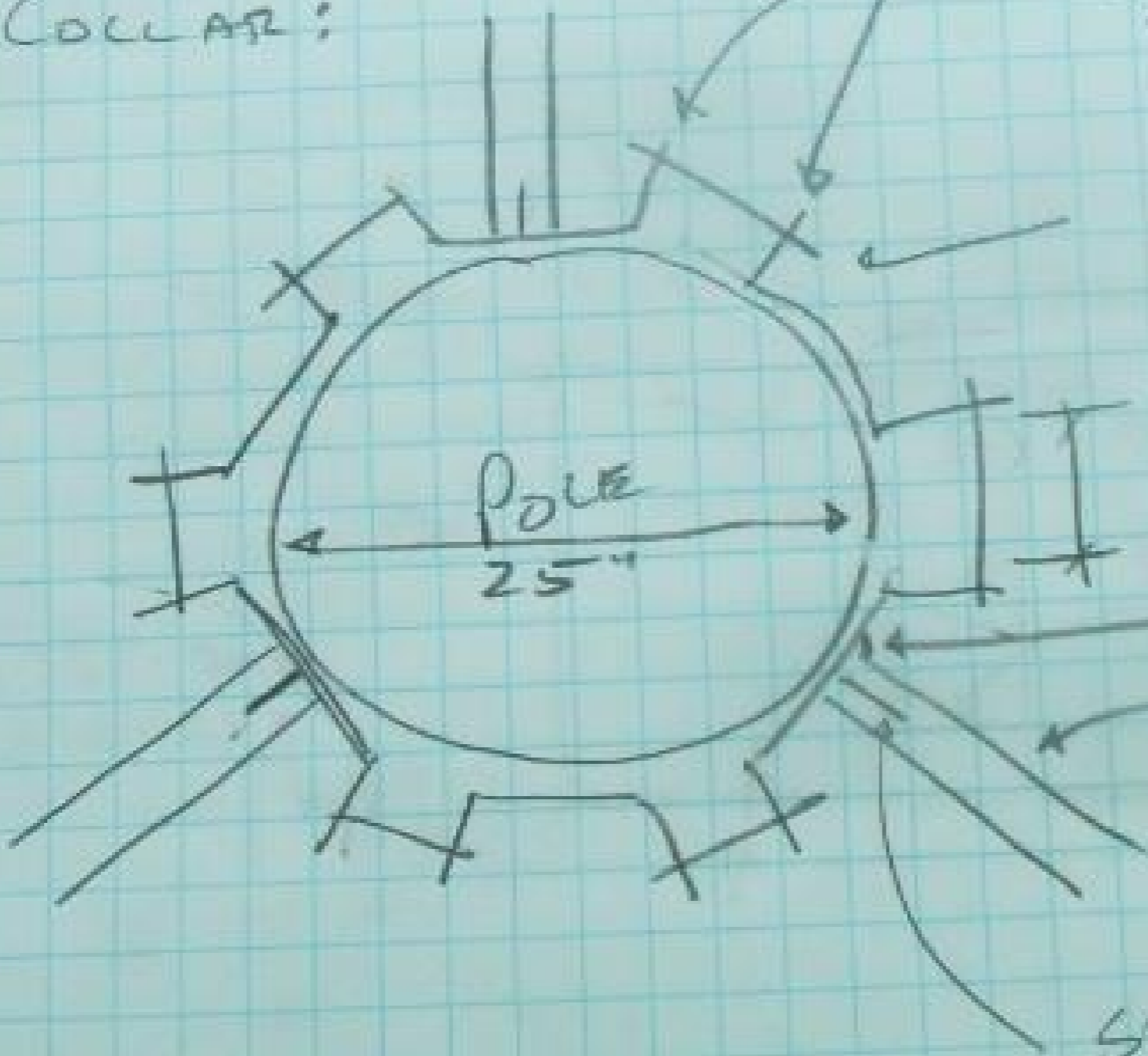
Please Insert Sketches of the Antenna Mount



21777015 - NEWINGTON CT

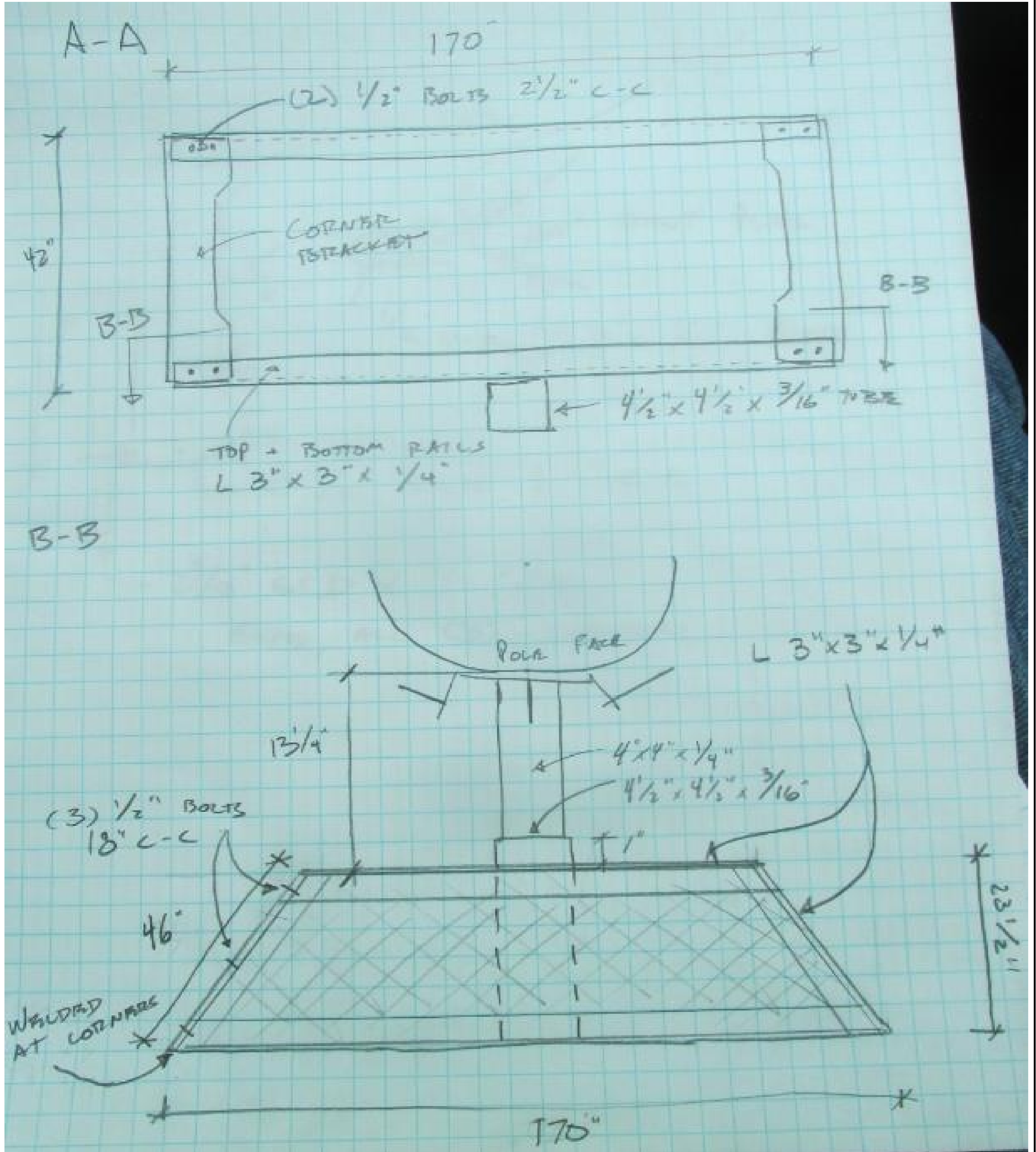


COLLAR:

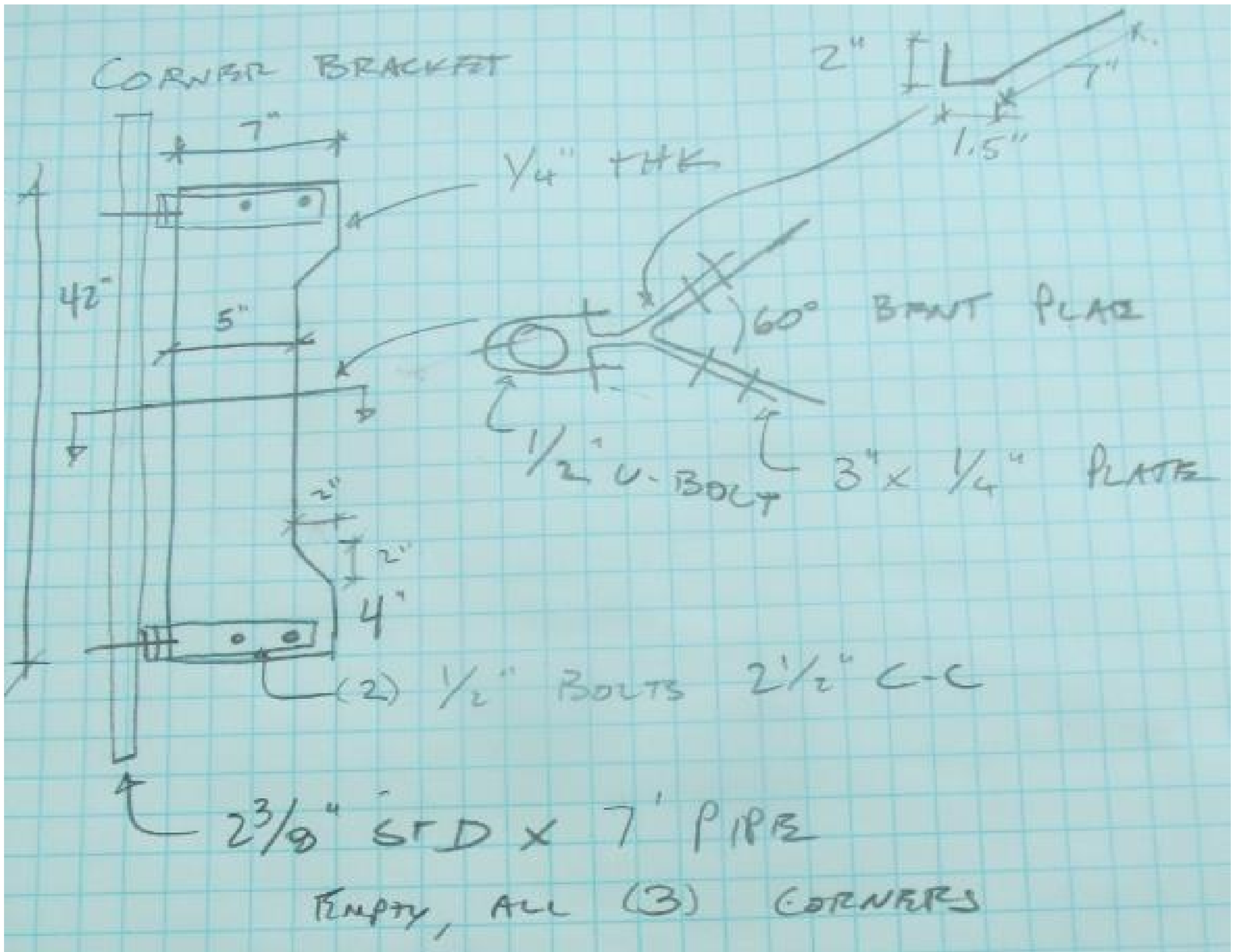


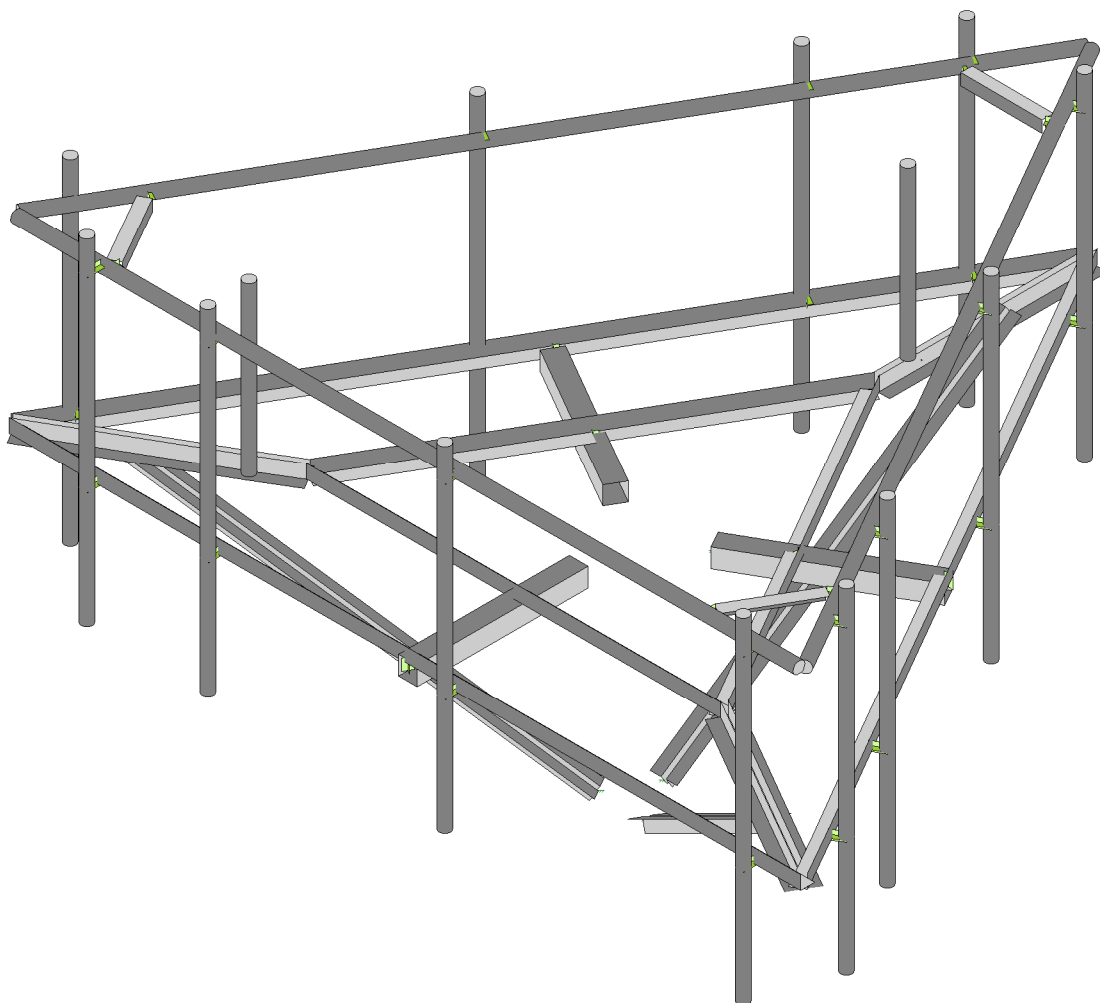
SUPPORTERS TOP + BOTTOM

4 1/2" x 4" x 3/8"







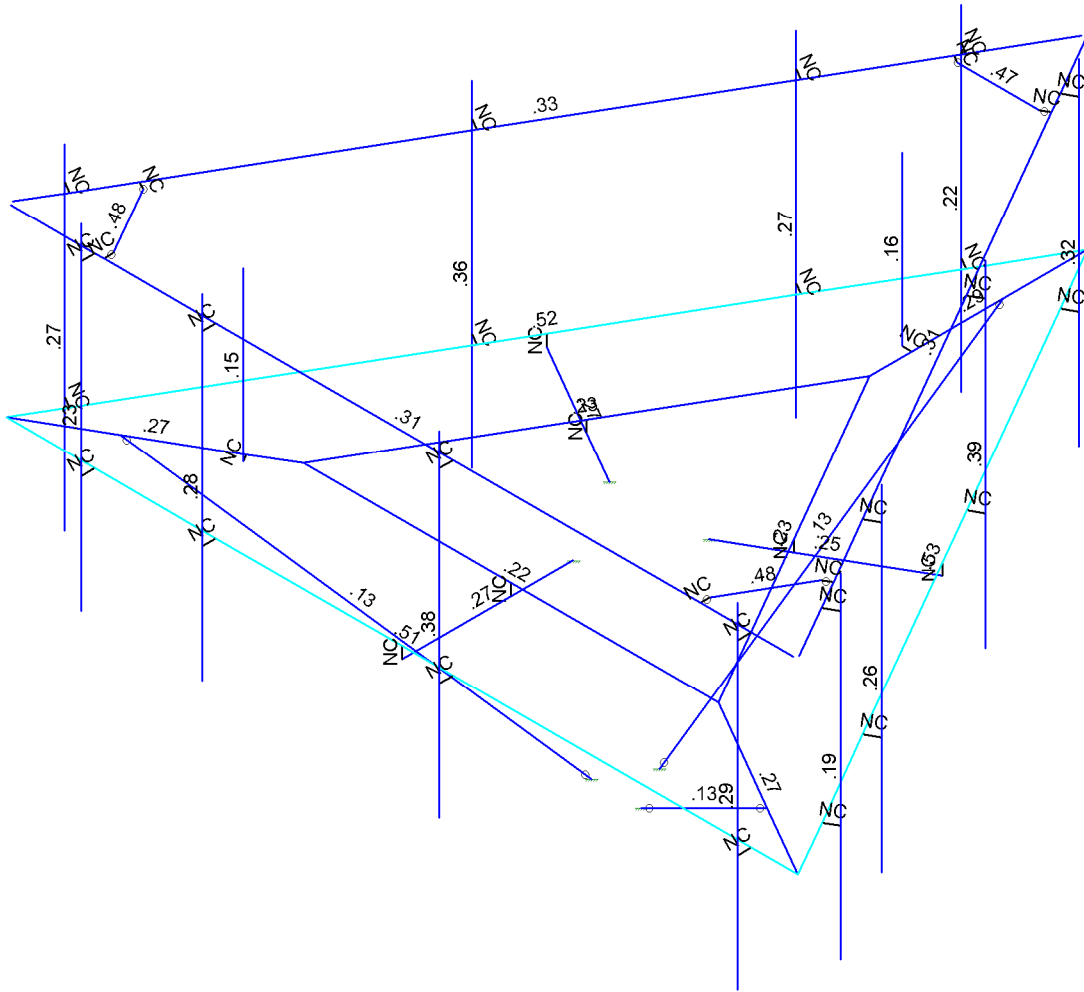


Envelope Only Solution

Colliers Engineering & Des...		SK - 1
	5000387740-VZW_MT_LO_H	July 10, 2023 at 3:54 PM
		5000387740-VZW_MT_LO_H.r3d

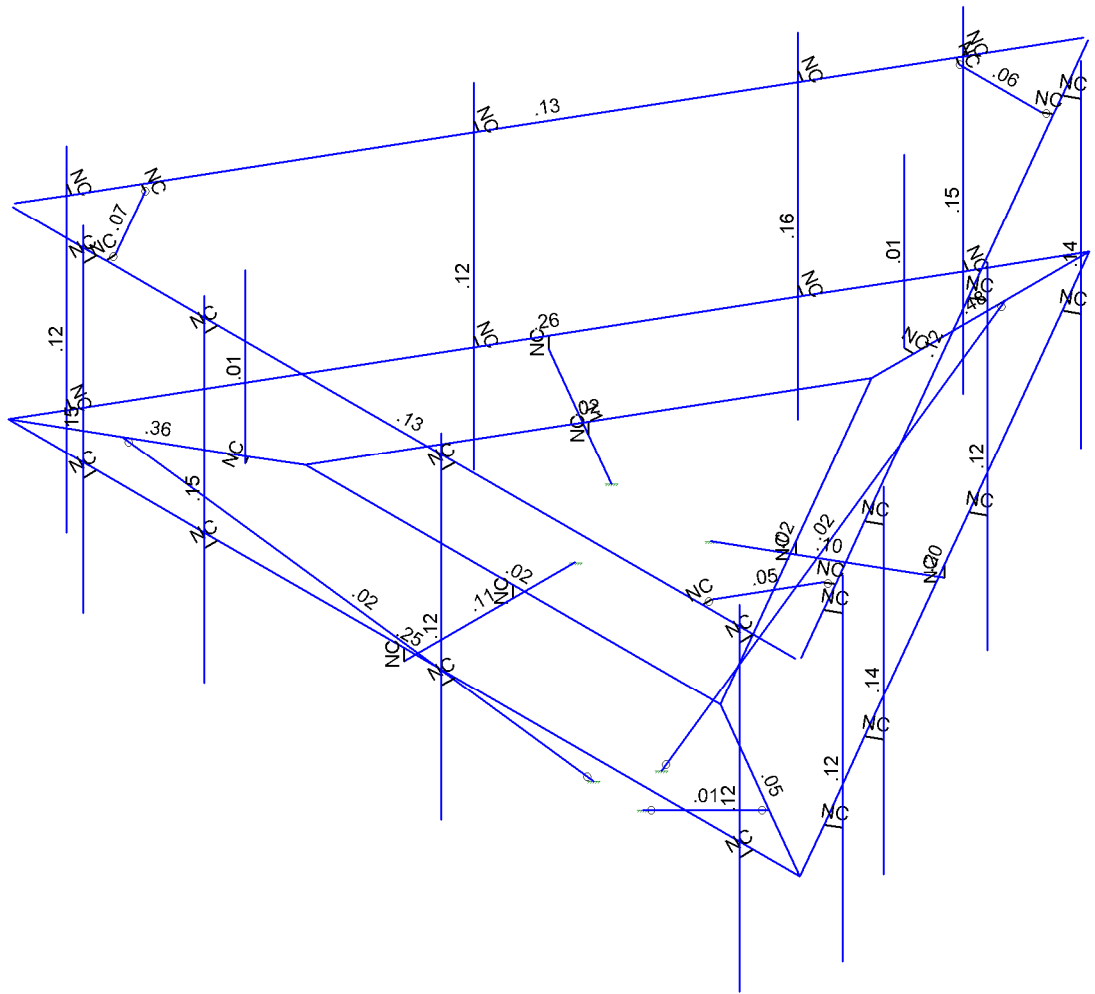


Code Check (ENR)	
■	No Calc
■	> 1.0
■	50-1.0
■	75-90
■	50-75
■	0-50



Member Code Checks Displayed (Enveloped)  
Envelope Only Solution

Colliers Engineering & Des...	5000387740-VZW_MT_LO_H	SK - 2
		July 10, 2023 at 3:54 PM
		5000387740-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)  
Envelope Only Solution

Colliers Engineering & Des...	5000387740-VZW_MT_LO_H	SK - 3
		July 10, 2023 at 3:54 PM
		5000387740-VZW_MT_LO_H.r3d



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

July 10, 2023  
 3:54 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					114		
2	Antenna Di	None					114		
3	Antenna Wo (0 Deg)	None					114		
4	Antenna Wo (30 Deg)	None					114		
5	Antenna Wo (60 Deg)	None					114		
6	Antenna Wo (90 Deg)	None					114		
7	Antenna Wo (120 Deg)	None					114		
8	Antenna Wo (150 Deg)	None					114		
9	Antenna Wo (180 Deg)	None					114		
10	Antenna Wo (210 Deg)	None					114		
11	Antenna Wo (240 Deg)	None					114		
12	Antenna Wo (270 Deg)	None					114		
13	Antenna Wo (300 Deg)	None					114		
14	Antenna Wo (330 Deg)	None					114		
15	Antenna Wi (0 Deg)	None					114		
16	Antenna Wi (30 Deg)	None					114		
17	Antenna Wi (60 Deg)	None					114		
18	Antenna Wi (90 Deg)	None					114		
19	Antenna Wi (120 Deg)	None					114		
20	Antenna Wi (150 Deg)	None					114		
21	Antenna Wi (180 Deg)	None					114		
22	Antenna Wi (210 Deg)	None					114		
23	Antenna Wi (240 Deg)	None					114		
24	Antenna Wi (270 Deg)	None					114		
25	Antenna Wi (300 Deg)	None					114		
26	Antenna Wi (330 Deg)	None					114		
27	Antenna Wm (0 Deg)	None					114		
28	Antenna Wm (30 Deg)	None					114		
29	Antenna Wm (60 Deg)	None					114		
30	Antenna Wm (90 Deg)	None					114		
31	Antenna Wm (120 Deg)	None					114		
32	Antenna Wm (150 Deg)	None					114		
33	Antenna Wm (180 Deg)	None					114		
34	Antenna Wm (210 Deg)	None					114		
35	Antenna Wm (240 Deg)	None					114		
36	Antenna Wm (270 Deg)	None					114		
37	Antenna Wm (300 Deg)	None					114		
38	Antenna Wm (330 Deg)	None					114		
39	Structure D	None		-1					3
40	Structure Di	None						35	3
41	Structure Wo (0 Deg)	None						70	
42	Structure Wo (30 Deg)	None						70	
43	Structure Wo (60 Deg)	None						70	
44	Structure Wo (90 Deg)	None						70	
45	Structure Wo (120 D...	None						70	
46	Structure Wo (150 D...	None						70	
47	Structure Wo (180 D...	None						70	
48	Structure Wo (210 D...	None						70	
49	Structure Wo (240 D...	None						70	
50	Structure Wo (270 D...	None						70	
51	Structure Wo (300 D...	None						70	
52	Structure Wo (330 D...	None						70	
53	Structure Wi (0 Deg)	None						70	



**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						70	
55 Structure Wi (60 Deg)	None						70	
56 Structure Wi (90 Deg)	None						70	
57 Structure Wi (120 De..)	None						70	
58 Structure Wi (150 De..)	None						70	
59 Structure Wi (180 De..)	None						70	
60 Structure Wi (210 De..)	None						70	
61 Structure Wi (240 De..)	None						70	
62 Structure Wi (270 De..)	None						70	
63 Structure Wi (300 De..)	None						70	
64 Structure Wi (330 De..)	None						70	
65 Structure Wm (0 Deg)	None						70	
66 Structure Wm (30 De..)	None						70	
67 Structure Wm (60 De..)	None						70	
68 Structure Wm (90 De..)	None						70	
69 Structure Wm (120 D..)	None						70	
70 Structure Wm (150 D..)	None						70	
71 Structure Wm (180 D..)	None						70	
72 Structure Wm (210 D..)	None						70	
73 Structure Wm (240 D..)	None						70	
74 Structure Wm (270 D..)	None						70	
75 Structure Wm (300 D..)	None						70	
76 Structure Wm (330 D..)	None						70	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					114		
82 Antenna Eh (0 Deg)	None					76		
83 Antenna Eh (90 Deg)	None					76		
84 Structure Ev	ELY		-0.042					3
85 Structure Eh (0 Deg)	ELZ			-0.104				3
86 Structure Eh (90 Deg)	ELX	.104						3
87 BLC 39 Transient Are..	None						50	
88 BLC 40 Transient Are..	None						50	
89 BLC 84 Transient Are..	None						50	
90 BLC 85 Transient Are..	None						50	
91 BLC 86 Transient Are..	None						50	

**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							



**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...	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	N6	3.583586	0.208333	2.128198	0	
2	N8	6.958586	0.208333	4.076756	0	
3	N14	-3.836659	0.208333	2.128198	0	
4	N19A	-7.211659	0.208333	4.076756	0	
5	N19	-0.126537	0	2.128198	0	
6	N20	-0.126537	0	4.076756	0	
7	N21	-0.126537	0	1.014256	0	
8	N22	-0.126537	0.208333	2.128198	0	
9	N23	-0.126537	0.208333	4.076756	0	
10	N13	-0.128326	0.208333	-4.294823	0	
11	N14A	-0.128326	0.208333	-8.191938	0	
12	N15	-1.983387	0	-1.081763	0	
13	N16	-3.670887	0	-2.056042	0	
14	N17	-1.018684	0	-0.524792	0	
15	N18	-1.983387	0.208333	-1.081763	0	
16	N19B	-3.670887	0.208333	-2.056042	0	
17	N24	1.730314	0	-1.081763	0	
18	N25	3.417814	0	-2.056042	0	
19	N26	0.765611	0	-0.524792	0	
20	N27	1.728525	0.208333	-1.081763	0	
21	N28	3.417366	0.208333	-2.056816	0	
22	CP	-0.126471	0	-0.011767	0	
23	N23A	6.125252	0.208333	4.076756	0	
24	N24A	6.125252	0.208333	4.326756	0	
25	N26A	-0.126537	-4	-0.524792	0	
26	N28A	-0.128326	0.208333	-6.691907	0	
27	N27A	-0.570811	-4	0.244674	0	
28	N28B	-5.917862	0.208333	3.329781	0	
29	N29	0.317703	-4	0.244694	0	
30	N30	5.659455	0.208333	3.326702	0	
31	N31	6.125252	4.125	4.326756	0	
32	N32	6.125252	-1.875	4.326756	0	
33	N33	0.791919	0.208333	4.076756	0	
34	N34	0.791919	0.208333	4.326756	0	
35	N35	0.791919	4.125	4.326756	0	
36	N36	0.791919	-1.875	4.326756	0	
37	N37	-3.458081	0.208333	4.076756	0	
38	N38	-3.458081	0.208333	4.326756	0	
39	N39	-3.458081	4.125	4.326756	0	
40	N40	-3.458081	-1.875	4.326756	0	
41	N41	-5.624748	0.208333	4.076756	0	
42	N42	-5.624748	0.208333	4.326756	0	
43	N43	-5.624748	4.125	4.326756	0	
44	N44	-5.624748	-1.875	4.326756	0	
45	N45	0.541002	0.208333	-7.038826	0	
46	N46	0.754857	0.208333	-7.162295	0	
47	N47	0.754857	4.125	-7.162295	0	
48	N48	0.754857	-1.875	-7.162295	0	





Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
49	N49	2.832669	0.208333	-3.069542	0	
50	N50	3.046524	0.208333	-3.193012	0	
51	N51	3.046524	4.125	-3.193012	0	
52	N52	3.046524	-1.875	-3.193012	0	
53	N53	5.374335	0.208333	1.332753	0	
54	N54	5.588191	0.208333	1.209284	0	
55	N55	5.588191	4.125	1.209284	0	
56	N56	5.588191	-1.875	1.209284	0	
57	N57	6.374335	0.208333	3.064804	0	
58	N58	6.588191	0.208333	2.941335	0	
59	N59	6.588191	4.125	2.941335	0	
60	N60	6.588191	-1.875	2.941335	0	
61	N61	-6.795882	0.208333	3.356608	0	
62	N62	-7.009755	0.208333	3.233129	0	
63	N63	-7.009755	4.125	3.233129	0	
64	N64	-7.009755	-1.875	3.233129	0	
65	N65	-4.129215	0.208333	-1.262194	0	
66	N66	-4.343088	0.208333	-1.385673	0	
67	N67	-4.343088	4.125	-1.385673	0	
68	N68	-4.343088	-1.875	-1.385673	0	
69	N69	-2.004215	0.208333	-4.942802	0	
70	N70	-2.218088	0.208333	-5.066281	0	
71	N71	-2.218088	4.125	-5.066281	0	
72	N72	-2.218088	-1.875	-5.066281	0	
73	N73	-0.920882	0.208333	-6.81919	0	
74	N74	-1.134755	0.208333	-6.94267	0	
75	N75	-1.134755	4.125	-6.94267	0	
76	N76	-1.134755	-1.875	-6.94267	0	
77	N77	6.875252	3.541667	4.076756	0	
78	N78	-7.128326	3.541667	4.076756	0	
79	N79	6.125252	3.541667	4.076756	0	
80	N80	6.125252	3.541667	4.326756	0	
81	N81	0.791919	3.541667	4.076756	0	
82	N82	0.791919	3.541667	4.326756	0	
83	N83	-3.458081	3.541667	4.076756	0	
84	N84	-3.458081	3.541667	4.326756	0	
85	N85	-5.624748	3.541667	4.076756	0	
86	N86	-5.624748	3.541667	4.326756	0	
87	N87	-0.086715	3.541667	-8.119749	0	
88	N88	6.915075	3.541667	4.007706	0	
89	N89	0.538285	3.541667	-7.037217	0	
90	N90	0.754857	3.541667	-7.162295	0	
91	N91	2.82991	3.541667	-3.068006	0	
92	N92	3.046524	3.541667	-3.193012	0	
93	N93	5.371577	3.541667	1.334289	0	
94	N94	5.588191	3.541667	1.209284	0	
95	N95	6.371602	3.541667	3.066384	0	
96	N96	6.588191	3.541667	2.941335	0	
97	N97	-7.168214	3.541667	4.007743	0	
98	N98	-0.166425	3.541667	-8.119711	0	
99	N99	-6.793214	3.541667	3.358224	0	
100	N100	-7.009755	3.541667	3.233129	0	
101	N101	-4.126547	3.541667	-1.260578	0	
102	N102	-4.343088	3.541667	-1.385673	0	
103	N103	-2.001547	3.541667	-4.941186	0	
104	N104	-2.218088	3.541667	-5.066281	0	
105	N105	-0.918214	3.541667	-6.817574	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
106	N106	-1.134755	3.541667	-6.94267	0	
107	N107	5.208586	3.541667	4.076756	0	
108	N108	-5.461659	3.541667	4.076756	0	
109	N109	0.746619	3.541667	-6.676373	0	
110	N110	6.081741	3.541667	2.56433	0	
111	N111	-6.334881	3.541667	2.564368	0	
112	N112	-0.999758	3.541667	-6.676335	0	
113	N113	5.208586	3.541667	3.910089	0	
114	N114	-5.461659	3.541667	3.910089	0	
115	N117	0.602281	3.541667	-6.59304	0	
116	N118	5.937404	3.541667	2.647663	0	
117	N121	-6.190543	3.541667	2.647701	0	
118	N122	-0.855421	3.541667	-6.593002	0	
119	N120	-0.128326	0.208333	-5.044823	0	
120	N121A	-0.294993	0.208333	-5.044823	0	
121	N122A	-0.294993	3.208333	-5.044823	0	
122	N123	-4.486228	0.208333	2.503227	0	
123	N124	-4.401111	0.208333	2.650655	0	
124	N125	-4.401111	3.208333	2.650655	0	

**Hot Rolled Steel Section Sets**

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Support Rail	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	Inner Face Horizontal	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
4	Face Horizontal	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
5	Standoff Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr. B 46	Typical	3.37	7.8	7.8	12.8
6	Platform Connection A...	LL3x3x4x0	Beam	Double Angle (3/...	A36 Gr.36	Typical	2.88	4.5	2.46	.063
7	Kicker	LL2.5x2.5x3x6	Beam	Double Angle (3/...	A36 Gr.36	Typical	1.8	3.09	1.07	.023
8	TES Kicker	L5X5X5	Beam	Double Angle (3/...	A36 Gr.36	Typical	3.07	7.44	7.44	.108
9	Support Rail Angle	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	.901	.535	.535	.011

**Hot Rolled Steel Properties**

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

**Member Primary Data**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M7	N14	N6		270	Inner Face Hor...	Beam	Single Angle	A36 Gr.36	Typical
2	FACE	N19A	N8		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
3	M10	N14	N19A		180	Platform Conn...	Beam	Double Angle (...)	A36 Gr.36	Typical
4	M14	N21	N20			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
5	M15	N19	N22		60	RIGID	None	None	RIGID	Typical
6	M16	N20	N23		60	RIGID	None	None	RIGID	Typical
7	M47	N6	N8		180	Platform Conn...	Beam	Double Angle (...)	A36 Gr.36	Typical
8	M8	N13	N14		270	Inner Face Hor...	Beam	Single Angle	A36 Gr.36	Typical
9	M9	N14A	N19A		270	Face Horizontal	Beam	Single Angle	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
10	M10A	N13	N14A		180	Platform Conn...	Beam	Double Angle (...	A36 Gr.36	Typical
11	M11	N17	N16			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
12	M12	N15	N18		60	RIGID	None	None	RIGID	Typical
13	M13A	N16	N19B		60	RIGID	None	None	RIGID	Typical
14	M15A	N6	N13		270	Inner Face Hor...	Beam	Single Angle	A36 Gr.36	Typical
15	M16A	N8	N14A		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
16	M18	N26	N25			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
17	M19	N24	N27		60	RIGID	None	None	RIGID	Typical
18	M20	N25	N28		60	RIGID	None	None	RIGID	Typical
19	M22	N23A	N24A			RIGID	None	None	RIGID	Typical
20	M23	N26A	N28A			Kicker	Beam	Double Angle (...	A36 Gr.36	Typical
21	M24	N27A	N28B			Kicker	Beam	Double Angle (...	A36 Gr.36	Typical
22	M25	N29	N30			Kicker	Beam	Double Angle (...	A36 Gr.36	Typical
23	MP1A	N31	N32			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
24	LIVE1	N33	N34			RIGID	None	None	RIGID	Typical
25	MP2A	N35	N36			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
26	M29	N37	N38			RIGID	None	None	RIGID	Typical
27	MP3A	N39	N40			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
28	LIVE2	N41	N42			RIGID	None	None	RIGID	Typical
29	MP4A	N43	N44			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
30	M33	N45	N46			RIGID	None	None	RIGID	Typical
31	MP1C	N47	N48			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
32	M35	N49	N50			RIGID	None	None	RIGID	Typical
33	MP2C	N51	N52			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
34	M37	N53	N54			RIGID	None	None	RIGID	Typical
35	MP3C	N55	N56			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
36	M39	N57	N58			RIGID	None	None	RIGID	Typical
37	MP4C	N59	N60			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
38	M41	N61	N62			RIGID	None	None	RIGID	Typical
39	MP1B	N63	N64			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
40	M43	N65	N66			RIGID	None	None	RIGID	Typical
41	MP2B	N67	N68			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
42	M45	N69	N70			RIGID	None	None	RIGID	Typical
43	MP3B	N71	N72			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
44	M47A	N73	N74			RIGID	None	None	RIGID	Typical
45	MP4B	N75	N76			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
46	M49	N78	N77		270	Support Rail	Beam	Pipe	A53 Gr. B	Typical
47	M50	N79	N80			RIGID	None	None	RIGID	Typical
48	M51	N81	N82			RIGID	None	None	RIGID	Typical
49	M52	N83	N84			RIGID	None	None	RIGID	Typical
50	M53	N85	N86			RIGID	None	None	RIGID	Typical
51	M54	N88	N87		270	Support Rail	Beam	Pipe	A53 Gr. B	Typical
52	M55	N89	N90			RIGID	None	None	RIGID	Typical
53	M56	N91	N92			RIGID	None	None	RIGID	Typical
54	M57	N93	N94			RIGID	None	None	RIGID	Typical
55	M58	N95	N96			RIGID	None	None	RIGID	Typical
56	M59	N98	N97		270	Support Rail	Beam	Pipe	A53 Gr. B	Typical
57	M60	N99	N100			RIGID	None	None	RIGID	Typical
58	M61	N101	N102			RIGID	None	None	RIGID	Typical
59	M62	N103	N104			RIGID	None	None	RIGID	Typical
60	M63	N105	N106			RIGID	None	None	RIGID	Typical
61	M64	N108	N114			RIGID	None	None	RIGID	Typical
62	M65	N107	N113			RIGID	None	None	RIGID	Typical
63	M66	N110	N118			RIGID	None	None	RIGID	Typical
64	M67	N109	N117			RIGID	None	None	RIGID	Typical
65	M68	N112	N122			RIGID	None	None	RIGID	Typical
66	M69	N111	N121			RIGID	None	None	RIGID	Typical



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
67	M70	N121	N114		90	Support Rail A...	Beam	Single Angle	A36 Gr.36	Typical
68	M77	N113	N118		90	Support Rail A...	Beam	Single Angle	A36 Gr.36	Typical
69	M84	N117	N122		90	Support Rail A...	Beam	Single Angle	A36 Gr.36	Typical
70	M70A	N120	N121A			RIGID	None	None	RIGID	Typical
71	OVP1	N122A	N121A			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
72	M72	N123	N124			RIGID	None	None	RIGID	Typical
73	OVP2	N125	N124			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical

**Member Advanced Data**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic...
1	M7						Yes				None
2	FACE						Yes				None
3	M10						Yes				None
4	M14						Yes				None
5	M15						Yes	** NA **			None
6	M16						Yes	** NA **			None
7	M47						Yes				None
8	M8						Yes				None
9	M9						Yes				None
10	M10A						Yes				None
11	M11						Yes				None
12	M12						Yes	** NA **			None
13	M13A						Yes	** NA **			None
14	M15A						Yes				None
15	M16A						Yes				None
16	M18						Yes				None
17	M19						Yes	** NA **			None
18	M20						Yes	** NA **			None
19	M22						Yes	** NA **			None
20	M23	BenPIN	BenPIN				Yes				None
21	M24	BenPIN	BenPIN				Yes				None
22	M25	BenPIN	BenPIN				Yes				None
23	MP1A						Yes				None
24	LIVE1						Yes	** NA **			None
25	MP2A						Yes				None
26	M29						Yes	** NA **			None
27	MP3A						Yes				None
28	LIVE2						Yes	** NA **			None
29	MP4A						Yes				None
30	M33						Yes	** NA **			None
31	MP1C						Yes				None
32	M35						Yes	** NA **			None
33	MP2C						Yes				None
34	M37						Yes	** NA **			None
35	MP3C						Yes				None
36	M39						Yes	** NA **			None
37	MP4C						Yes				None
38	M41						Yes	** NA **			None
39	MP1B						Yes				None
40	M43						Yes	** NA **			None
41	MP2B						Yes				None
42	M45						Yes	** NA **			None
43	MP3B						Yes				None
44	M47A						Yes	** NA **			None
45	MP4B						Yes				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...
46	M49						Yes				None
47	M50						Yes	** NA **			None
48	M51						Yes	** NA **			None
49	M52						Yes	** NA **			None
50	M53						Yes	** NA **			None
51	M54						Yes				None
52	M55						Yes	** NA **			None
53	M56						Yes	** NA **			None
54	M57						Yes	** NA **			None
55	M58						Yes	** NA **			None
56	M59						Yes				None
57	M60						Yes	** NA **			None
58	M61						Yes	** NA **			None
59	M62						Yes	** NA **			None
60	M63						Yes	** NA **			None
61	M64	OOOOOX					Yes	** NA **			None
62	M65	OOOOOX					Yes	** NA **			None
63	M66	OOOOOX					Yes	** NA **			None
64	M67	OOOOOX					Yes	** NA **			None
65	M68	OOOOOX					Yes	** NA **			None
66	M69	OOOOOX					Yes	** NA **			None
67	M70						Yes				None
68	M77						Yes				None
69	M84						Yes				None
70	M70A						Yes	** NA **			None
71	OVP1						Yes				None
72	M72						Yes	** NA **			None
73	OVP2						Yes				None

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	Y	-17.6	9
2	M49	My	-.000509	9
3	M49	Mz	.003	9
4	M49	Y	-17.6	9
5	M49	My	.000509	9
6	M49	Mz	-.003	9
7	MP1A	Y	-23.2	5
8	MP1A	My	.011	5
9	MP1A	Mz	-.004	5
10	MP1B	Y	-23.2	5
11	MP1B	My	-.002	5
12	MP1B	Mz	.011	5
13	MP1C	Y	-23.2	5
14	MP1C	My	-.009	5
15	MP1C	Mz	-.007	5
16	MP1A	Y	-43.55	.5
17	MP1A	My	-.02	.5
18	MP1A	Mz	.007	.5
19	MP1A	Y	-43.55	2.5
20	MP1A	My	-.02	2.5
21	MP1A	Mz	.007	2.5
22	MP1B	Y	-43.55	.5
23	MP1B	My	.004	.5
24	MP1B	Mz	-.021	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP1B	Y	-43.55	2.5
26	MP1B	My	.004	2.5
27	MP1B	Mz	-.021	2.5
28	MP1C	Y	-43.55	.5
29	MP1C	My	.017	.5
30	MP1C	Mz	.014	.5
31	MP1C	Y	-43.55	2.5
32	MP1C	My	.017	2.5
33	MP1C	Mz	.014	2.5
34	MP2A	Y	-20	.5
35	MP2A	My	-.013	.5
36	MP2A	Mz	-.008	.5
37	MP2A	Y	-20	4.5
38	MP2A	My	-.013	4.5
39	MP2A	Mz	-.008	4.5
40	MP2B	Y	-20	.5
41	MP2B	My	.013	.5
42	MP2B	Mz	-.008	.5
43	MP2B	Y	-20	4.5
44	MP2B	My	.013	4.5
45	MP2B	Mz	-.008	4.5
46	MP2C	Y	-20	.5
47	MP2C	My	.000161	.5
48	MP2C	Mz	.015	.5
49	MP2C	Y	-20	4.5
50	MP2C	My	.000161	4.5
51	MP2C	Mz	.015	4.5
52	MP2A	Y	-20	.5
53	MP2A	My	-.005	.5
54	MP2A	Mz	.014	.5
55	MP2A	Y	-20	4.5
56	MP2A	My	-.005	4.5
57	MP2A	Mz	.014	4.5
58	MP2B	Y	-20	.5
59	MP2B	My	-.01	.5
60	MP2B	Mz	-.012	.5
61	MP2B	Y	-20	4.5
62	MP2B	My	-.01	4.5
63	MP2B	Mz	-.012	4.5
64	MP2C	Y	-20	.5
65	MP2C	My	.015	.5
66	MP2C	Mz	-.003	.5
67	MP2C	Y	-20	4.5
68	MP2C	My	.015	4.5
69	MP2C	Mz	-.003	4.5
70	MP4A	Y	-4.95	.5
71	MP4A	My	-.002	.5
72	MP4A	Mz	.000846	.5
73	MP4A	Y	-4.95	4.5
74	MP4A	My	-.002	4.5
75	MP4A	Mz	.000846	4.5
76	MP4B	Y	-4.95	.5
77	MP4B	My	.00043	.5
78	MP4B	Mz	-.002	.5
79	MP4B	Y	-4.95	4.5
80	MP4B	My	.00043	4.5
81	MP4B	Mz	-.002	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
82	MP4C	Y	-4.95	.5
83	MP4C	My	.002	.5
84	MP4C	Mz	.002	.5
85	MP4C	Y	-4.95	4.5
86	MP4C	My	.002	4.5
87	MP4C	Mz	.002	4.5
88	MP2A	Y	-84.4	1.75
89	MP2A	My	-.018	1.75
90	MP2A	Mz	-.05	1.75
91	MP2B	Y	-84.4	1.75
92	MP2B	My	.052	1.75
93	MP2B	Mz	.009	1.75
94	MP2C	Y	-84.4	1.75
95	MP2C	My	-.034	1.75
96	MP2C	Mz	.04	1.75
97	MP2A	Y	-70.3	1.75
98	MP2A	My	.015	1.75
99	MP2A	Mz	.041	1.75
100	MP2B	Y	-70.3	1.75
101	MP2B	My	-.043	1.75
102	MP2B	Mz	-.008	1.75
103	MP2C	Y	-70.3	1.75
104	MP2C	My	.028	1.75
105	MP2C	Mz	-.034	1.75
106	OVP2	Y	-26.9	.5
107	OVP2	My	0	.5
108	OVP2	Mz	0	.5
109	OVP1	Y	-26.9	.5
110	OVP1	My	0	.5
111	OVP1	Mz	0	.5
112	MP2B	Y	-10	.25
113	MP2B	My	-.000868	.25
114	MP2B	Mz	.005	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	Y	-28.17	9
2	M49	My	-.000815	9
3	M49	Mz	.005	9
4	M49	Y	-28.17	9
5	M49	My	.000815	9
6	M49	Mz	-.005	9
7	MP1A	Y	-47.36	5
8	MP1A	My	.022	5
9	MP1A	Mz	-.008	5
10	MP1B	Y	-47.36	5
11	MP1B	My	-.004	5
12	MP1B	Mz	.023	5
13	MP1C	Y	-47.36	5
14	MP1C	My	-.018	5
15	MP1C	Mz	-.015	5
16	MP1A	Y	-55.189	.5
17	MP1A	My	-.026	.5
18	MP1A	Mz	.009	.5
19	MP1A	Y	-55.189	2.5
20	MP1A	My	-.026	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP1A	Mz	.009	2.5
22	MP1B	Y	-55.189	.5
23	MP1B	My	.005	.5
24	MP1B	Mz	-.027	.5
25	MP1B	Y	-55.189	2.5
26	MP1B	My	.005	2.5
27	MP1B	Mz	-.027	2.5
28	MP1C	Y	-55.189	.5
29	MP1C	My	.021	.5
30	MP1C	Mz	.018	.5
31	MP1C	Y	-55.189	2.5
32	MP1C	My	.021	2.5
33	MP1C	Mz	.018	2.5
34	MP2A	Y	-94.234	.5
35	MP2A	My	-.063	.5
36	MP2A	Mz	-.036	.5
37	MP2A	Y	-94.234	4.5
38	MP2A	My	-.063	4.5
39	MP2A	Mz	-.036	4.5
40	MP2B	Y	-94.234	.5
41	MP2B	My	.062	.5
42	MP2B	Mz	-.037	.5
43	MP2B	Y	-94.234	4.5
44	MP2B	My	.062	4.5
45	MP2B	Mz	-.037	4.5
46	MP2C	Y	-94.234	.5
47	MP2C	My	.00076	.5
48	MP2C	Mz	.072	.5
49	MP2C	Y	-94.234	4.5
50	MP2C	My	.00076	4.5
51	MP2C	Mz	.072	4.5
52	MP2A	Y	-94.234	.5
53	MP2A	My	-.025	.5
54	MP2A	Mz	.068	.5
55	MP2A	Y	-94.234	4.5
56	MP2A	My	-.025	4.5
57	MP2A	Mz	.068	4.5
58	MP2B	Y	-94.234	.5
59	MP2B	My	-.046	.5
60	MP2B	Mz	-.056	.5
61	MP2B	Y	-94.234	4.5
62	MP2B	My	-.046	4.5
63	MP2B	Mz	-.056	4.5
64	MP2C	Y	-94.234	.5
65	MP2C	My	.071	.5
66	MP2C	Mz	-.012	.5
67	MP2C	Y	-94.234	4.5
68	MP2C	My	.071	4.5
69	MP2C	Mz	-.012	4.5
70	MP4A	Y	-53.261	.5
71	MP4A	My	-.025	.5
72	MP4A	Mz	.009	.5
73	MP4A	Y	-53.261	4.5
74	MP4A	My	-.025	4.5
75	MP4A	Mz	.009	4.5
76	MP4B	Y	-53.261	.5
77	MP4B	My	.005	.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
78	MP4B	Mz	-.026	.5
79	MP4B	Y	-53.261	4.5
80	MP4B	My	.005	4.5
81	MP4B	Mz	-.026	4.5
82	MP4C	Y	-53.261	.5
83	MP4C	My	.02	.5
84	MP4C	Mz	.017	.5
85	MP4C	Y	-53.261	4.5
86	MP4C	My	.02	4.5
87	MP4C	Mz	.017	4.5
88	MP2A	Y	-70.111	1.75
89	MP2A	My	-.015	1.75
90	MP2A	Mz	-.041	1.75
91	MP2B	Y	-70.111	1.75
92	MP2B	My	.043	1.75
93	MP2B	Mz	.008	1.75
94	MP2C	Y	-70.111	1.75
95	MP2C	My	-.028	1.75
96	MP2C	Mz	.034	1.75
97	MP2A	Y	-63.286	1.75
98	MP2A	My	.014	1.75
99	MP2A	Mz	.037	1.75
100	MP2B	Y	-63.286	1.75
101	MP2B	My	-.039	1.75
102	MP2B	Mz	-.007	1.75
103	MP2C	Y	-63.286	1.75
104	MP2C	My	.025	1.75
105	MP2C	Mz	-.03	1.75
106	OVP2	Y	-85.851	.5
107	OVP2	My	0	.5
108	OVP2	Mz	0	.5
109	OVP1	Y	-85.851	.5
110	OVP1	My	0	.5
111	OVP1	Mz	0	.5
112	MP2B	Y	-20.501	.25
113	MP2B	My	-.002	.25
114	MP2B	Mz	.01	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	0	9
2	M49	Z	-12.683	9
3	M49	Mx	-.002	9
4	M49	X	0	9
5	M49	Z	-12.683	9
6	M49	Mx	.002	9
7	MP1A	X	0	5
8	MP1A	Z	-58.631	5
9	MP1A	Mx	.01	5
10	MP1B	X	0	5
11	MP1B	Z	-31.697	5
12	MP1B	Mx	-.016	5
13	MP1C	X	0	5
14	MP1C	Z	-49.277	5
15	MP1C	Mx	.016	5
16	MP1A	X	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP1A	Z	-88.914	.5
18	MP1A	Mx	-.015	.5
19	MP1A	X	0	2.5
20	MP1A	Z	-88.914	2.5
21	MP1A	Mx	-.015	2.5
22	MP1B	X	0	.5
23	MP1B	Z	-39.234	.5
24	MP1B	Mx	.019	.5
25	MP1B	X	0	2.5
26	MP1B	Z	-39.234	2.5
27	MP1B	Mx	.019	2.5
28	MP1C	X	0	.5
29	MP1C	Z	-71.66	.5
30	MP1C	Mx	-.023	.5
31	MP1C	X	0	2.5
32	MP1C	Z	-71.66	2.5
33	MP1C	Mx	-.023	2.5
34	MP2A	X	0	.5
35	MP2A	Z	-104.744	.5
36	MP2A	Mx	.04	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-104.744	4.5
39	MP2A	Mx	.04	4.5
40	MP2B	X	0	.5
41	MP2B	Z	-50.2	.5
42	MP2B	Mx	.02	.5
43	MP2B	X	0	4.5
44	MP2B	Z	-50.2	4.5
45	MP2B	Mx	.02	4.5
46	MP2C	X	0	.5
47	MP2C	Z	-85.801	.5
48	MP2C	Mx	-.066	.5
49	MP2C	X	0	4.5
50	MP2C	Z	-85.801	4.5
51	MP2C	Mx	-.066	4.5
52	MP2A	X	0	.5
53	MP2A	Z	-104.744	.5
54	MP2A	Mx	-.075	.5
55	MP2A	X	0	4.5
56	MP2A	Z	-104.744	4.5
57	MP2A	Mx	-.075	4.5
58	MP2B	X	0	.5
59	MP2B	Z	-50.2	.5
60	MP2B	Mx	.03	.5
61	MP2B	X	0	4.5
62	MP2B	Z	-50.2	4.5
63	MP2B	Mx	.03	4.5
64	MP2C	X	0	.5
65	MP2C	Z	-85.801	.5
66	MP2C	Mx	.011	.5
67	MP2C	X	0	4.5
68	MP2C	Z	-85.801	4.5
69	MP2C	Mx	.011	4.5
70	MP4A	X	0	.5
71	MP4A	Z	-90.246	.5
72	MP4A	Mx	-.015	.5
73	MP4A	X	0	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
74	MP4A	Z	-90.246	4.5
75	MP4A	Mx	-.015	4.5
76	MP4B	X	0	.5
77	MP4B	Z	-47.309	.5
78	MP4B	Mx	.023	.5
79	MP4B	X	0	4.5
80	MP4B	Z	-47.309	4.5
81	MP4B	Mx	.023	4.5
82	MP4C	X	0	.5
83	MP4C	Z	-75.334	.5
84	MP4C	Mx	-.024	.5
85	MP4C	X	0	4.5
86	MP4C	Z	-75.334	4.5
87	MP4C	Mx	-.024	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	-60.709	1.75
90	MP2A	Mx	.036	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	-42.991	1.75
93	MP2B	Mx	-.005	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	-54.556	1.75
96	MP2C	Mx	-.026	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	-59.804	1.75
99	MP2A	Mx	-.035	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	-35.485	1.75
102	MP2B	Mx	.004	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	-51.358	1.75
105	MP2C	Mx	.025	1.75
106	OVP2	X	0	.5
107	OVP2	Z	-70.31	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	-70.31	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	-24.932	.25
114	MP2B	Mx	-.012	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	7.524	9
2	M49	Z	-13.032	9
3	M49	Mx	-.002	9
4	M49	X	7.524	9
5	M49	Z	-13.032	9
6	M49	Mx	.002	9
7	MP1A	X	21.897	5
8	MP1A	Z	-37.926	5
9	MP1A	Mx	.017	5
10	MP1B	X	17.22	5
11	MP1B	Z	-29.825	5
12	MP1B	Mx	-.016	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP1C	X	30.686	5
14	MP1C	Z	-53.15	5
15	MP1C	Mx	.005	5
16	MP1A	X	30.773	.5
17	MP1A	Z	-53.3	.5
18	MP1A	Mx	-.024	.5
19	MP1A	X	30.773	2.5
20	MP1A	Z	-53.3	2.5
21	MP1A	Mx	-.024	2.5
22	MP1B	X	22.146	.5
23	MP1B	Z	-38.357	.5
24	MP1B	Mx	.021	.5
25	MP1B	X	22.146	2.5
26	MP1B	Z	-38.357	2.5
27	MP1B	Mx	.021	2.5
28	MP1C	X	46.986	.5
29	MP1C	Z	-81.382	.5
30	MP1C	Mx	-.008	.5
31	MP1C	X	46.986	2.5
32	MP1C	Z	-81.382	2.5
33	MP1C	Mx	-.008	2.5
34	MP2A	X	37.348	.5
35	MP2A	Z	-64.688	.5
36	MP2A	Mx	-.000603	.5
37	MP2A	X	37.348	4.5
38	MP2A	Z	-64.688	4.5
39	MP2A	Mx	-.000603	4.5
40	MP2B	X	27.876	.5
41	MP2B	Z	-48.283	.5
42	MP2B	Mx	.037	.5
43	MP2B	X	27.876	4.5
44	MP2B	Z	-48.283	4.5
45	MP2B	Mx	.037	4.5
46	MP2C	X	55.149	.5
47	MP2C	Z	-95.52	.5
48	MP2C	Mx	-.073	.5
49	MP2C	X	55.149	4.5
50	MP2C	Z	-95.52	4.5
51	MP2C	Mx	-.073	4.5
52	MP2A	X	37.348	.5
53	MP2A	Z	-64.688	.5
54	MP2A	Mx	-.057	.5
55	MP2A	X	37.348	4.5
56	MP2A	Z	-64.688	4.5
57	MP2A	Mx	-.057	4.5
58	MP2B	X	27.876	.5
59	MP2B	Z	-48.283	.5
60	MP2B	Mx	.015	.5
61	MP2B	X	27.876	4.5
62	MP2B	Z	-48.283	4.5
63	MP2B	Mx	.015	4.5
64	MP2C	X	55.149	.5
65	MP2C	Z	-95.52	.5
66	MP2C	Mx	.054	.5
67	MP2C	X	55.149	4.5
68	MP2C	Z	-95.52	4.5
69	MP2C	Mx	.054	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
70	MP4A	X	33.296	.5
71	MP4A	Z	-57.67	.5
72	MP4A	Mx	-.026	.5
73	MP4A	X	33.296	4.5
74	MP4A	Z	-57.67	4.5
75	MP4A	Mx	-.026	4.5
76	MP4B	X	25.84	.5
77	MP4B	Z	-44.756	.5
78	MP4B	Mx	.024	.5
79	MP4B	X	25.84	4.5
80	MP4B	Z	-44.756	4.5
81	MP4B	Mx	.024	4.5
82	MP4C	X	47.309	.5
83	MP4C	Z	-81.941	.5
84	MP4C	Mx	-.008	.5
85	MP4C	X	47.309	4.5
86	MP4C	Z	-81.941	4.5
87	MP4C	Mx	-.008	4.5
88	MP2A	X	25.474	1.75
89	MP2A	Z	-44.123	1.75
90	MP2A	Mx	.02	1.75
91	MP2B	X	22.397	1.75
92	MP2B	Z	-38.794	1.75
93	MP2B	Mx	.01	1.75
94	MP2C	X	31.257	1.75
95	MP2C	Z	-54.138	1.75
96	MP2C	Mx	-.038	1.75
97	MP2A	X	23.203	1.75
98	MP2A	Z	-40.189	1.75
99	MP2A	Mx	-.019	1.75
100	MP2B	X	18.98	1.75
101	MP2B	Z	-32.875	1.75
102	MP2B	Mx	-.008	1.75
103	MP2C	X	31.14	1.75
104	MP2C	Z	-53.936	1.75
105	MP2C	Mx	.038	1.75
106	OVP2	X	43.543	.5
107	OVP2	Z	-75.419	.5
108	OVP2	Mx	0	.5
109	OVP1	X	43.543	.5
110	OVP1	Z	-75.419	.5
111	OVP1	Mx	0	.5
112	MP2B	X	13.174	.25
113	MP2B	Z	-22.817	.25
114	MP2B	Mx	-.012	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	24.118	9
2	M49	Z	-13.924	9
3	M49	Mx	-.003	9
4	M49	X	24.118	9
5	M49	Z	-13.924	9
6	M49	Mx	.003	9
7	MP1A	X	27.451	5
8	MP1A	Z	-15.849	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP1A	Mx	.016	5
10	MP1B	X	42.675	5
11	MP1B	Z	-24.638	5
12	MP1B	Mx	-.016	5
13	MP1C	X	50.776	5
14	MP1C	Z	-29.315	5
15	MP1C	Mx	-.01	5
16	MP1A	X	33.977	.5
17	MP1A	Z	-19.617	.5
18	MP1A	Mx	-.019	.5
19	MP1A	X	33.977	2.5
20	MP1A	Z	-19.617	2.5
21	MP1A	Mx	-.019	2.5
22	MP1B	X	62.06	.5
23	MP1B	Z	-35.83	.5
24	MP1B	Mx	.023	.5
25	MP1B	X	62.06	2.5
26	MP1B	Z	-35.83	2.5
27	MP1B	Mx	.023	2.5
28	MP1C	X	77.002	.5
29	MP1C	Z	-44.457	.5
30	MP1C	Mx	.015	.5
31	MP1C	X	77.002	2.5
32	MP1C	Z	-44.457	2.5
33	MP1C	Mx	.015	2.5
34	MP2A	X	43.474	.5
35	MP2A	Z	-25.1	.5
36	MP2A	Mx	-.02	.5
37	MP2A	X	43.474	4.5
38	MP2A	Z	-25.1	4.5
39	MP2A	Mx	-.02	4.5
40	MP2B	X	74.306	.5
41	MP2B	Z	-42.901	.5
42	MP2B	Mx	.066	.5
43	MP2B	X	74.306	4.5
44	MP2B	Z	-42.901	4.5
45	MP2B	Mx	.066	4.5
46	MP2C	X	90.711	.5
47	MP2C	Z	-52.372	.5
48	MP2C	Mx	-.04	.5
49	MP2C	X	90.711	4.5
50	MP2C	Z	-52.372	4.5
51	MP2C	Mx	-.04	4.5
52	MP2A	X	43.474	.5
53	MP2A	Z	-25.1	.5
54	MP2A	Mx	-.03	.5
55	MP2A	X	43.474	4.5
56	MP2A	Z	-25.1	4.5
57	MP2A	Mx	-.03	4.5
58	MP2B	X	74.306	.5
59	MP2B	Z	-42.901	.5
60	MP2B	Mx	-.011	.5
61	MP2B	X	74.306	4.5
62	MP2B	Z	-42.901	4.5
63	MP2B	Mx	-.011	4.5
64	MP2C	X	90.711	.5
65	MP2C	Z	-52.372	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2C	Mx	.075	.5
67	MP2C	X	90.711	4.5
68	MP2C	Z	-52.372	4.5
69	MP2C	Mx	.075	4.5
70	MP4A	X	40.971	.5
71	MP4A	Z	-23.654	.5
72	MP4A	Mx	-.023	.5
73	MP4A	X	40.971	4.5
74	MP4A	Z	-23.654	4.5
75	MP4A	Mx	-.023	4.5
76	MP4B	X	65.241	.5
77	MP4B	Z	-37.667	.5
78	MP4B	Mx	.024	.5
79	MP4B	X	65.241	4.5
80	MP4B	Z	-37.667	4.5
81	MP4B	Mx	.024	4.5
82	MP4C	X	78.155	.5
83	MP4C	Z	-45.123	.5
84	MP4C	Mx	.015	.5
85	MP4C	X	78.155	4.5
86	MP4C	Z	-45.123	4.5
87	MP4C	Mx	.015	4.5
88	MP2A	X	37.231	1.75
89	MP2A	Z	-21.496	1.75
90	MP2A	Mx	.005	1.75
91	MP2B	X	47.247	1.75
92	MP2B	Z	-27.278	1.75
93	MP2B	Mx	.026	1.75
94	MP2C	X	52.576	1.75
95	MP2C	Z	-30.355	1.75
96	MP2C	Mx	-.036	1.75
97	MP2A	X	30.731	1.75
98	MP2A	Z	-17.742	1.75
99	MP2A	Mx	-.004	1.75
100	MP2B	X	44.477	1.75
101	MP2B	Z	-25.679	1.75
102	MP2B	Mx	-.025	1.75
103	MP2C	X	51.792	1.75
104	MP2C	Z	-29.902	1.75
105	MP2C	Mx	.035	1.75
106	OVP2	X	87.262	.5
107	OVP2	Z	-50.381	.5
108	OVP2	Mx	0	.5
109	OVP1	X	87.262	.5
110	OVP1	Z	-50.381	.5
111	OVP1	Mx	0	.5
112	MP2B	X	29.447	.25
113	MP2B	Z	-17.001	.25
114	MP2B	Mx	-.011	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	38.284	9
2	M49	Z	0	9
3	M49	Mx	-.001	9
4	M49	X	38.284	9



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	M49	Z	0	9
6	M49	Mx	.001	9
7	MP1A	X	34.439	5
8	MP1A	Z	0	5
9	MP1A	Mx	.016	5
10	MP1B	X	61.373	5
11	MP1B	Z	0	5
12	MP1B	Mx	-.005	5
13	MP1C	X	43.793	5
14	MP1C	Z	0	5
15	MP1C	Mx	-.017	5
16	MP1A	X	44.291	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	-.021	.5
19	MP1A	X	44.291	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.021	2.5
22	MP1B	X	93.971	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	.008	.5
25	MP1B	X	93.971	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	.008	2.5
28	MP1C	X	61.545	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	.024	.5
31	MP1C	X	61.545	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	.024	2.5
34	MP2A	X	55.753	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.037	.5
37	MP2A	X	55.753	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.037	4.5
40	MP2B	X	110.297	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	.073	.5
43	MP2B	X	110.297	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	.073	4.5
46	MP2C	X	74.696	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	.000602	.5
49	MP2C	X	74.696	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	.000602	4.5
52	MP2A	X	55.753	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	-.015	.5
55	MP2A	X	55.753	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	-.015	4.5
58	MP2B	X	110.297	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	-.054	.5
61	MP2B	X	110.297	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
62	MP2B	Z	0	4.5
63	MP2B	Mx	-.054	4.5
64	MP2C	X	74.696	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	.057	.5
67	MP2C	X	74.696	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	.057	4.5
70	MP4A	X	51.68	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	-.024	.5
73	MP4A	X	51.68	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	-.024	4.5
76	MP4B	X	94.617	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	.008	.5
79	MP4B	X	94.617	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	.008	4.5
82	MP4C	X	66.592	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	.026	.5
85	MP4C	X	66.592	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	.026	4.5
88	MP2A	X	44.795	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	-.01	1.75
91	MP2B	X	62.513	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	.038	1.75
94	MP2C	X	50.948	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	-.02	1.75
97	MP2A	X	37.961	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	.008	1.75
100	MP2B	X	62.28	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	-.038	1.75
103	MP2C	X	46.407	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	.019	1.75
106	OVP2	X	97.662	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	97.662	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	40.244	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	-.003	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
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**Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	31.107	9
2	M49	Z	17.959	9
3	M49	Mx	.002	9
4	M49	X	31.107	9
5	M49	Z	17.959	9
6	M49	Mx	-.002	9
7	MP1A	X	42.675	5
8	MP1A	Z	24.638	5
9	MP1A	Mx	.016	5
10	MP1B	X	50.776	5
11	MP1B	Z	29.315	5
12	MP1B	Mx	.01	5
13	MP1C	X	27.451	5
14	MP1C	Z	15.849	5
15	MP1C	Mx	-.016	5
16	MP1A	X	62.06	.5
17	MP1A	Z	35.83	.5
18	MP1A	Mx	-.023	.5
19	MP1A	X	62.06	2.5
20	MP1A	Z	35.83	2.5
21	MP1A	Mx	-.023	2.5
22	MP1B	X	77.002	.5
23	MP1B	Z	44.457	.5
24	MP1B	Mx	-.015	.5
25	MP1B	X	77.002	2.5
26	MP1B	Z	44.457	2.5
27	MP1B	Mx	-.015	2.5
28	MP1C	X	33.977	.5
29	MP1C	Z	19.617	.5
30	MP1C	Mx	.019	.5
31	MP1C	X	33.977	2.5
32	MP1C	Z	19.617	2.5
33	MP1C	Mx	.019	2.5
34	MP2A	X	74.306	.5
35	MP2A	Z	42.901	.5
36	MP2A	Mx	-.066	.5
37	MP2A	X	74.306	4.5
38	MP2A	Z	42.901	4.5
39	MP2A	Mx	-.066	4.5
40	MP2B	X	90.711	.5
41	MP2B	Z	52.372	.5
42	MP2B	Mx	.04	.5
43	MP2B	X	90.711	4.5
44	MP2B	Z	52.372	4.5
45	MP2B	Mx	.04	4.5
46	MP2C	X	43.474	.5
47	MP2C	Z	25.1	.5
48	MP2C	Mx	.02	.5
49	MP2C	X	43.474	4.5
50	MP2C	Z	25.1	4.5
51	MP2C	Mx	.02	4.5
52	MP2A	X	74.306	.5
53	MP2A	Z	42.901	.5
54	MP2A	Mx	.011	.5
55	MP2A	X	74.306	4.5
56	MP2A	Z	42.901	4.5
57	MP2A	Mx	.011	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	90.711	.5
59	MP2B	Z	52.372	.5
60	MP2B	Mx	-.075	.5
61	MP2B	X	90.711	4.5
62	MP2B	Z	52.372	4.5
63	MP2B	Mx	-.075	4.5
64	MP2C	X	43.474	.5
65	MP2C	Z	25.1	.5
66	MP2C	Mx	.03	.5
67	MP2C	X	43.474	4.5
68	MP2C	Z	25.1	4.5
69	MP2C	Mx	.03	4.5
70	MP4A	X	65.241	.5
71	MP4A	Z	37.667	.5
72	MP4A	Mx	-.024	.5
73	MP4A	X	65.241	4.5
74	MP4A	Z	37.667	4.5
75	MP4A	Mx	-.024	4.5
76	MP4B	X	78.155	.5
77	MP4B	Z	45.123	.5
78	MP4B	Mx	-.015	.5
79	MP4B	X	78.155	4.5
80	MP4B	Z	45.123	4.5
81	MP4B	Mx	-.015	4.5
82	MP4C	X	40.971	.5
83	MP4C	Z	23.654	.5
84	MP4C	Mx	.023	.5
85	MP4C	X	40.971	4.5
86	MP4C	Z	23.654	4.5
87	MP4C	Mx	.023	4.5
88	MP2A	X	47.247	1.75
89	MP2A	Z	27.278	1.75
90	MP2A	Mx	-.026	1.75
91	MP2B	X	52.576	1.75
92	MP2B	Z	30.355	1.75
93	MP2B	Mx	.036	1.75
94	MP2C	X	37.231	1.75
95	MP2C	Z	21.496	1.75
96	MP2C	Mx	-.005	1.75
97	MP2A	X	44.477	1.75
98	MP2A	Z	25.679	1.75
99	MP2A	Mx	.025	1.75
100	MP2B	X	51.792	1.75
101	MP2B	Z	29.902	1.75
102	MP2B	Mx	-.035	1.75
103	MP2C	X	30.731	1.75
104	MP2C	Z	17.742	1.75
105	MP2C	Mx	.004	1.75
106	OVP2	X	70.049	.5
107	OVP2	Z	40.443	.5
108	OVP2	Mx	0	.5
109	OVP1	X	70.049	.5
110	OVP1	Z	40.443	.5
111	OVP1	Mx	0	.5
112	MP2B	X	33.627	.25
113	MP2B	Z	19.415	.25
114	MP2B	Mx	.007	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	11.559	9
2	M49	Z	20.021	9
3	M49	Mx	.003	9
4	M49	X	11.559	9
5	M49	Z	20.021	9
6	M49	Mx	-.003	9
7	MP1A	X	30.686	5
8	MP1A	Z	53.15	5
9	MP1A	Mx	.005	5
10	MP1B	X	21.897	5
11	MP1B	Z	37.926	5
12	MP1B	Mx	.017	5
13	MP1C	X	17.22	5
14	MP1C	Z	29.825	5
15	MP1C	Mx	-.016	5
16	MP1A	X	46.986	.5
17	MP1A	Z	81.382	.5
18	MP1A	Mx	-.008	.5
19	MP1A	X	46.986	2.5
20	MP1A	Z	81.382	2.5
21	MP1A	Mx	-.008	2.5
22	MP1B	X	30.773	.5
23	MP1B	Z	53.3	.5
24	MP1B	Mx	-.024	.5
25	MP1B	X	30.773	2.5
26	MP1B	Z	53.3	2.5
27	MP1B	Mx	-.024	2.5
28	MP1C	X	22.146	.5
29	MP1C	Z	38.357	.5
30	MP1C	Mx	.021	.5
31	MP1C	X	22.146	2.5
32	MP1C	Z	38.357	2.5
33	MP1C	Mx	.021	2.5
34	MP2A	X	55.149	.5
35	MP2A	Z	95.52	.5
36	MP2A	Mx	-.073	.5
37	MP2A	X	55.149	4.5
38	MP2A	Z	95.52	4.5
39	MP2A	Mx	-.073	4.5
40	MP2B	X	37.348	.5
41	MP2B	Z	64.688	.5
42	MP2B	Mx	-.000602	.5
43	MP2B	X	37.348	4.5
44	MP2B	Z	64.688	4.5
45	MP2B	Mx	-.000602	4.5
46	MP2C	X	27.876	.5
47	MP2C	Z	48.283	.5
48	MP2C	Mx	.037	.5
49	MP2C	X	27.876	4.5
50	MP2C	Z	48.283	4.5
51	MP2C	Mx	.037	4.5
52	MP2A	X	55.149	.5
53	MP2A	Z	95.52	.5
54	MP2A	Mx	.054	.5
55	MP2A	X	55.149	4.5
56	MP2A	Z	95.52	4.5
57	MP2A	Mx	.054	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	37.348	.5
59	MP2B	Z	64.688	.5
60	MP2B	Mx	-.057	.5
61	MP2B	X	37.348	4.5
62	MP2B	Z	64.688	4.5
63	MP2B	Mx	-.057	4.5
64	MP2C	X	27.876	.5
65	MP2C	Z	48.283	.5
66	MP2C	Mx	.015	.5
67	MP2C	X	27.876	4.5
68	MP2C	Z	48.283	4.5
69	MP2C	Mx	.015	4.5
70	MP4A	X	47.309	.5
71	MP4A	Z	81.941	.5
72	MP4A	Mx	-.008	.5
73	MP4A	X	47.309	4.5
74	MP4A	Z	81.941	4.5
75	MP4A	Mx	-.008	4.5
76	MP4B	X	33.296	.5
77	MP4B	Z	57.67	.5
78	MP4B	Mx	-.026	.5
79	MP4B	X	33.296	4.5
80	MP4B	Z	57.67	4.5
81	MP4B	Mx	-.026	4.5
82	MP4C	X	25.84	.5
83	MP4C	Z	44.756	.5
84	MP4C	Mx	.024	.5
85	MP4C	X	25.84	4.5
86	MP4C	Z	44.756	4.5
87	MP4C	Mx	.024	4.5
88	MP2A	X	31.257	1.75
89	MP2A	Z	54.138	1.75
90	MP2A	Mx	-.038	1.75
91	MP2B	X	25.474	1.75
92	MP2B	Z	44.123	1.75
93	MP2B	Mx	.02	1.75
94	MP2C	X	22.397	1.75
95	MP2C	Z	38.794	1.75
96	MP2C	Mx	.01	1.75
97	MP2A	X	31.14	1.75
98	MP2A	Z	53.936	1.75
99	MP2A	Mx	.038	1.75
100	MP2B	X	23.203	1.75
101	MP2B	Z	40.189	1.75
102	MP2B	Mx	-.019	1.75
103	MP2C	X	18.98	1.75
104	MP2C	Z	32.875	1.75
105	MP2C	Mx	-.008	1.75
106	OVP2	X	33.605	.5
107	OVP2	Z	58.206	.5
108	OVP2	Mx	0	.5
109	OVP1	X	33.605	.5
110	OVP1	Z	58.206	.5
111	OVP1	Mx	0	.5
112	MP2B	X	15.587	.25
113	MP2B	Z	26.997	.25
114	MP2B	Mx	.012	.25



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

July 10, 2023  
 3:54 PM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	0	9
2	M49	Z	12.683	9
3	M49	Mx	.002	9
4	M49	X	0	9
5	M49	Z	12.683	9
6	M49	Mx	-.002	9
7	MP1A	X	0	5
8	MP1A	Z	58.631	5
9	MP1A	Mx	-.01	5
10	MP1B	X	0	5
11	MP1B	Z	31.697	5
12	MP1B	Mx	.016	5
13	MP1C	X	0	5
14	MP1C	Z	49.277	5
15	MP1C	Mx	-.016	5
16	MP1A	X	0	.5
17	MP1A	Z	88.914	.5
18	MP1A	Mx	.015	.5
19	MP1A	X	0	2.5
20	MP1A	Z	88.914	2.5
21	MP1A	Mx	.015	2.5
22	MP1B	X	0	.5
23	MP1B	Z	39.234	.5
24	MP1B	Mx	-.019	.5
25	MP1B	X	0	2.5
26	MP1B	Z	39.234	2.5
27	MP1B	Mx	-.019	2.5
28	MP1C	X	0	.5
29	MP1C	Z	71.66	.5
30	MP1C	Mx	.023	.5
31	MP1C	X	0	2.5
32	MP1C	Z	71.66	2.5
33	MP1C	Mx	.023	2.5
34	MP2A	X	0	.5
35	MP2A	Z	104.744	.5
36	MP2A	Mx	-.04	.5
37	MP2A	X	0	4.5
38	MP2A	Z	104.744	4.5
39	MP2A	Mx	-.04	4.5
40	MP2B	X	0	.5
41	MP2B	Z	50.2	.5
42	MP2B	Mx	-.02	.5
43	MP2B	X	0	4.5
44	MP2B	Z	50.2	4.5
45	MP2B	Mx	-.02	4.5
46	MP2C	X	0	.5
47	MP2C	Z	85.801	.5
48	MP2C	Mx	.066	.5
49	MP2C	X	0	4.5
50	MP2C	Z	85.801	4.5
51	MP2C	Mx	.066	4.5
52	MP2A	X	0	.5
53	MP2A	Z	104.744	.5
54	MP2A	Mx	.075	.5
55	MP2A	X	0	4.5
56	MP2A	Z	104.744	4.5
57	MP2A	Mx	.075	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	0	.5
59	MP2B	Z	50.2	.5
60	MP2B	Mx	-.03	.5
61	MP2B	X	0	4.5
62	MP2B	Z	50.2	4.5
63	MP2B	Mx	-.03	4.5
64	MP2C	X	0	.5
65	MP2C	Z	85.801	.5
66	MP2C	Mx	-.011	.5
67	MP2C	X	0	4.5
68	MP2C	Z	85.801	4.5
69	MP2C	Mx	-.011	4.5
70	MP4A	X	0	.5
71	MP4A	Z	90.246	.5
72	MP4A	Mx	.015	.5
73	MP4A	X	0	4.5
74	MP4A	Z	90.246	4.5
75	MP4A	Mx	.015	4.5
76	MP4B	X	0	.5
77	MP4B	Z	47.309	.5
78	MP4B	Mx	-.023	.5
79	MP4B	X	0	4.5
80	MP4B	Z	47.309	4.5
81	MP4B	Mx	-.023	4.5
82	MP4C	X	0	.5
83	MP4C	Z	75.334	.5
84	MP4C	Mx	.024	.5
85	MP4C	X	0	4.5
86	MP4C	Z	75.334	4.5
87	MP4C	Mx	.024	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	60.709	1.75
90	MP2A	Mx	-.036	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	42.991	1.75
93	MP2B	Mx	.005	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	54.556	1.75
96	MP2C	Mx	.026	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	59.804	1.75
99	MP2A	Mx	.035	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	35.485	1.75
102	MP2B	Mx	-.004	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	51.358	1.75
105	MP2C	Mx	-.025	1.75
106	OVP2	X	0	.5
107	OVP2	Z	70.31	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	70.31	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	24.932	.25
114	MP2B	Mx	.012	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-7.524	9
2	M49	Z	13.032	9
3	M49	Mx	.002	9
4	M49	X	-7.524	9
5	M49	Z	13.032	9
6	M49	Mx	-.002	9
7	MP1A	X	-21.897	5
8	MP1A	Z	37.926	5
9	MP1A	Mx	-.017	5
10	MP1B	X	-17.22	5
11	MP1B	Z	29.825	5
12	MP1B	Mx	.016	5
13	MP1C	X	-30.686	5
14	MP1C	Z	53.15	5
15	MP1C	Mx	-.005	5
16	MP1A	X	-30.773	.5
17	MP1A	Z	53.3	.5
18	MP1A	Mx	.024	.5
19	MP1A	X	-30.773	2.5
20	MP1A	Z	53.3	2.5
21	MP1A	Mx	.024	2.5
22	MP1B	X	-22.146	.5
23	MP1B	Z	38.357	.5
24	MP1B	Mx	-.021	.5
25	MP1B	X	-22.146	2.5
26	MP1B	Z	38.357	2.5
27	MP1B	Mx	-.021	2.5
28	MP1C	X	-46.986	.5
29	MP1C	Z	81.382	.5
30	MP1C	Mx	.008	.5
31	MP1C	X	-46.986	2.5
32	MP1C	Z	81.382	2.5
33	MP1C	Mx	.008	2.5
34	MP2A	X	-37.348	.5
35	MP2A	Z	64.688	.5
36	MP2A	Mx	.000603	.5
37	MP2A	X	-37.348	4.5
38	MP2A	Z	64.688	4.5
39	MP2A	Mx	.000603	4.5
40	MP2B	X	-27.876	.5
41	MP2B	Z	48.283	.5
42	MP2B	Mx	-.037	.5
43	MP2B	X	-27.876	4.5
44	MP2B	Z	48.283	4.5
45	MP2B	Mx	-.037	4.5
46	MP2C	X	-55.149	.5
47	MP2C	Z	95.52	.5
48	MP2C	Mx	.073	.5
49	MP2C	X	-55.149	4.5
50	MP2C	Z	95.52	4.5
51	MP2C	Mx	.073	4.5
52	MP2A	X	-37.348	.5
53	MP2A	Z	64.688	.5
54	MP2A	Mx	.057	.5
55	MP2A	X	-37.348	4.5
56	MP2A	Z	64.688	4.5
57	MP2A	Mx	.057	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-27.876	.5
59	MP2B	Z	48.283	.5
60	MP2B	Mx	-.015	.5
61	MP2B	X	-27.876	4.5
62	MP2B	Z	48.283	4.5
63	MP2B	Mx	-.015	4.5
64	MP2C	X	-55.149	.5
65	MP2C	Z	95.52	.5
66	MP2C	Mx	-.054	.5
67	MP2C	X	-55.149	4.5
68	MP2C	Z	95.52	4.5
69	MP2C	Mx	-.054	4.5
70	MP4A	X	-33.296	.5
71	MP4A	Z	57.67	.5
72	MP4A	Mx	.026	.5
73	MP4A	X	-33.296	4.5
74	MP4A	Z	57.67	4.5
75	MP4A	Mx	.026	4.5
76	MP4B	X	-25.84	.5
77	MP4B	Z	44.756	.5
78	MP4B	Mx	-.024	.5
79	MP4B	X	-25.84	4.5
80	MP4B	Z	44.756	4.5
81	MP4B	Mx	-.024	4.5
82	MP4C	X	-47.309	.5
83	MP4C	Z	81.941	.5
84	MP4C	Mx	.008	.5
85	MP4C	X	-47.309	4.5
86	MP4C	Z	81.941	4.5
87	MP4C	Mx	.008	4.5
88	MP2A	X	-25.474	1.75
89	MP2A	Z	44.123	1.75
90	MP2A	Mx	-.02	1.75
91	MP2B	X	-22.397	1.75
92	MP2B	Z	38.794	1.75
93	MP2B	Mx	-.01	1.75
94	MP2C	X	-31.257	1.75
95	MP2C	Z	54.138	1.75
96	MP2C	Mx	.038	1.75
97	MP2A	X	-23.203	1.75
98	MP2A	Z	40.189	1.75
99	MP2A	Mx	.019	1.75
100	MP2B	X	-18.98	1.75
101	MP2B	Z	32.875	1.75
102	MP2B	Mx	.008	1.75
103	MP2C	X	-31.14	1.75
104	MP2C	Z	53.936	1.75
105	MP2C	Mx	-.038	1.75
106	OVP2	X	-43.543	.5
107	OVP2	Z	75.419	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-43.543	.5
110	OVP1	Z	75.419	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-13.174	.25
113	MP2B	Z	22.817	.25
114	MP2B	Mx	.012	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-24.118	9
2	M49	Z	13.924	9
3	M49	Mx	.003	9
4	M49	X	-24.118	9
5	M49	Z	13.924	9
6	M49	Mx	-.003	9
7	MP1A	X	-27.451	5
8	MP1A	Z	15.849	5
9	MP1A	Mx	-.016	5
10	MP1B	X	-42.675	5
11	MP1B	Z	24.638	5
12	MP1B	Mx	.016	5
13	MP1C	X	-50.776	5
14	MP1C	Z	29.315	5
15	MP1C	Mx	.01	5
16	MP1A	X	-33.977	.5
17	MP1A	Z	19.617	.5
18	MP1A	Mx	.019	.5
19	MP1A	X	-33.977	2.5
20	MP1A	Z	19.617	2.5
21	MP1A	Mx	.019	2.5
22	MP1B	X	-62.06	.5
23	MP1B	Z	35.83	.5
24	MP1B	Mx	-.023	.5
25	MP1B	X	-62.06	2.5
26	MP1B	Z	35.83	2.5
27	MP1B	Mx	-.023	2.5
28	MP1C	X	-77.002	.5
29	MP1C	Z	44.457	.5
30	MP1C	Mx	-.015	.5
31	MP1C	X	-77.002	2.5
32	MP1C	Z	44.457	2.5
33	MP1C	Mx	-.015	2.5
34	MP2A	X	-43.474	.5
35	MP2A	Z	25.1	.5
36	MP2A	Mx	.02	.5
37	MP2A	X	-43.474	4.5
38	MP2A	Z	25.1	4.5
39	MP2A	Mx	.02	4.5
40	MP2B	X	-74.306	.5
41	MP2B	Z	42.901	.5
42	MP2B	Mx	-.066	.5
43	MP2B	X	-74.306	4.5
44	MP2B	Z	42.901	4.5
45	MP2B	Mx	-.066	4.5
46	MP2C	X	-90.711	.5
47	MP2C	Z	52.372	.5
48	MP2C	Mx	.04	.5
49	MP2C	X	-90.711	4.5
50	MP2C	Z	52.372	4.5
51	MP2C	Mx	.04	4.5
52	MP2A	X	-43.474	.5
53	MP2A	Z	25.1	.5
54	MP2A	Mx	.03	.5
55	MP2A	X	-43.474	4.5
56	MP2A	Z	25.1	4.5
57	MP2A	Mx	.03	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-74.306	.5
59	MP2B	Z	42.901	.5
60	MP2B	Mx	.011	.5
61	MP2B	X	-74.306	4.5
62	MP2B	Z	42.901	4.5
63	MP2B	Mx	.011	4.5
64	MP2C	X	-90.711	.5
65	MP2C	Z	52.372	.5
66	MP2C	Mx	-.075	.5
67	MP2C	X	-90.711	4.5
68	MP2C	Z	52.372	4.5
69	MP2C	Mx	-.075	4.5
70	MP4A	X	-40.971	.5
71	MP4A	Z	23.654	.5
72	MP4A	Mx	.023	.5
73	MP4A	X	-40.971	4.5
74	MP4A	Z	23.654	4.5
75	MP4A	Mx	.023	4.5
76	MP4B	X	-65.241	.5
77	MP4B	Z	37.667	.5
78	MP4B	Mx	-.024	.5
79	MP4B	X	-65.241	4.5
80	MP4B	Z	37.667	4.5
81	MP4B	Mx	-.024	4.5
82	MP4C	X	-78.155	.5
83	MP4C	Z	45.123	.5
84	MP4C	Mx	-.015	.5
85	MP4C	X	-78.155	4.5
86	MP4C	Z	45.123	4.5
87	MP4C	Mx	-.015	4.5
88	MP2A	X	-37.231	1.75
89	MP2A	Z	21.496	1.75
90	MP2A	Mx	-.005	1.75
91	MP2B	X	-47.247	1.75
92	MP2B	Z	27.278	1.75
93	MP2B	Mx	-.026	1.75
94	MP2C	X	-52.576	1.75
95	MP2C	Z	30.355	1.75
96	MP2C	Mx	.036	1.75
97	MP2A	X	-30.731	1.75
98	MP2A	Z	17.742	1.75
99	MP2A	Mx	.004	1.75
100	MP2B	X	-44.477	1.75
101	MP2B	Z	25.679	1.75
102	MP2B	Mx	.025	1.75
103	MP2C	X	-51.792	1.75
104	MP2C	Z	29.902	1.75
105	MP2C	Mx	-.035	1.75
106	OVP2	X	-87.262	.5
107	OVP2	Z	50.381	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-87.262	.5
110	OVP1	Z	50.381	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-29.447	.25
113	MP2B	Z	17.001	.25
114	MP2B	Mx	.011	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-38.284	9
2	M49	Z	0	9
3	M49	Mx	.001	9
4	M49	X	-38.284	9
5	M49	Z	0	9
6	M49	Mx	-.001	9
7	MP1A	X	-34.439	5
8	MP1A	Z	0	5
9	MP1A	Mx	-.016	5
10	MP1B	X	-61.373	5
11	MP1B	Z	0	5
12	MP1B	Mx	.005	5
13	MP1C	X	-43.793	5
14	MP1C	Z	0	5
15	MP1C	Mx	.017	5
16	MP1A	X	-44.291	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	.021	.5
19	MP1A	X	-44.291	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.021	2.5
22	MP1B	X	-93.971	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	-.008	.5
25	MP1B	X	-93.971	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	-.008	2.5
28	MP1C	X	-61.545	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	-.024	.5
31	MP1C	X	-61.545	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	-.024	2.5
34	MP2A	X	-55.753	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.037	.5
37	MP2A	X	-55.753	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.037	4.5
40	MP2B	X	-110.297	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	-.073	.5
43	MP2B	X	-110.297	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	-.073	4.5
46	MP2C	X	-74.696	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	-.000602	.5
49	MP2C	X	-74.696	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	-.000602	4.5
52	MP2A	X	-55.753	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	.015	.5
55	MP2A	X	-55.753	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	.015	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-110.297	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	.054	.5
61	MP2B	X	-110.297	4.5
62	MP2B	Z	0	4.5
63	MP2B	Mx	.054	4.5
64	MP2C	X	-74.696	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	-.057	.5
67	MP2C	X	-74.696	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	-.057	4.5
70	MP4A	X	-51.68	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	.024	.5
73	MP4A	X	-51.68	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	.024	4.5
76	MP4B	X	-94.617	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	-.008	.5
79	MP4B	X	-94.617	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	-.008	4.5
82	MP4C	X	-66.592	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	-.026	.5
85	MP4C	X	-66.592	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	-.026	4.5
88	MP2A	X	-44.795	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	.01	1.75
91	MP2B	X	-62.513	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	-.038	1.75
94	MP2C	X	-50.948	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	.02	1.75
97	MP2A	X	-37.961	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	-.008	1.75
100	MP2B	X	-62.28	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	.038	1.75
103	MP2C	X	-46.407	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	-.019	1.75
106	OVP2	X	-97.662	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-97.662	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-40.244	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-31.107	9
2	M49	Z	-17.959	9
3	M49	Mx	-.002	9
4	M49	X	-31.107	9
5	M49	Z	-17.959	9
6	M49	Mx	.002	9
7	MP1A	X	-42.675	5
8	MP1A	Z	-24.638	5
9	MP1A	Mx	-.016	5
10	MP1B	X	-50.776	5
11	MP1B	Z	-29.315	5
12	MP1B	Mx	-.01	5
13	MP1C	X	-27.451	5
14	MP1C	Z	-15.849	5
15	MP1C	Mx	.016	5
16	MP1A	X	-62.06	.5
17	MP1A	Z	-35.83	.5
18	MP1A	Mx	.023	.5
19	MP1A	X	-62.06	2.5
20	MP1A	Z	-35.83	2.5
21	MP1A	Mx	.023	2.5
22	MP1B	X	-77.002	.5
23	MP1B	Z	-44.457	.5
24	MP1B	Mx	.015	.5
25	MP1B	X	-77.002	2.5
26	MP1B	Z	-44.457	2.5
27	MP1B	Mx	.015	2.5
28	MP1C	X	-33.977	.5
29	MP1C	Z	-19.617	.5
30	MP1C	Mx	-.019	.5
31	MP1C	X	-33.977	2.5
32	MP1C	Z	-19.617	2.5
33	MP1C	Mx	-.019	2.5
34	MP2A	X	-74.306	.5
35	MP2A	Z	-42.901	.5
36	MP2A	Mx	.066	.5
37	MP2A	X	-74.306	4.5
38	MP2A	Z	-42.901	4.5
39	MP2A	Mx	.066	4.5
40	MP2B	X	-90.711	.5
41	MP2B	Z	-52.372	.5
42	MP2B	Mx	-.04	.5
43	MP2B	X	-90.711	4.5
44	MP2B	Z	-52.372	4.5
45	MP2B	Mx	-.04	4.5
46	MP2C	X	-43.474	.5
47	MP2C	Z	-25.1	.5
48	MP2C	Mx	-.02	.5
49	MP2C	X	-43.474	4.5
50	MP2C	Z	-25.1	4.5
51	MP2C	Mx	-.02	4.5
52	MP2A	X	-74.306	.5
53	MP2A	Z	-42.901	.5
54	MP2A	Mx	-.011	.5
55	MP2A	X	-74.306	4.5
56	MP2A	Z	-42.901	4.5
57	MP2A	Mx	-.011	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-90.711	.5
59	MP2B	Z	-52.372	.5
60	MP2B	Mx	.075	.5
61	MP2B	X	-90.711	4.5
62	MP2B	Z	-52.372	4.5
63	MP2B	Mx	.075	4.5
64	MP2C	X	-43.474	.5
65	MP2C	Z	-25.1	.5
66	MP2C	Mx	-.03	.5
67	MP2C	X	-43.474	4.5
68	MP2C	Z	-25.1	4.5
69	MP2C	Mx	-.03	4.5
70	MP4A	X	-65.241	.5
71	MP4A	Z	-37.667	.5
72	MP4A	Mx	.024	.5
73	MP4A	X	-65.241	4.5
74	MP4A	Z	-37.667	4.5
75	MP4A	Mx	.024	4.5
76	MP4B	X	-78.155	.5
77	MP4B	Z	-45.123	.5
78	MP4B	Mx	.015	.5
79	MP4B	X	-78.155	4.5
80	MP4B	Z	-45.123	4.5
81	MP4B	Mx	.015	4.5
82	MP4C	X	-40.971	.5
83	MP4C	Z	-23.654	.5
84	MP4C	Mx	-.023	.5
85	MP4C	X	-40.971	4.5
86	MP4C	Z	-23.654	4.5
87	MP4C	Mx	-.023	4.5
88	MP2A	X	-47.247	1.75
89	MP2A	Z	-27.278	1.75
90	MP2A	Mx	.026	1.75
91	MP2B	X	-52.576	1.75
92	MP2B	Z	-30.355	1.75
93	MP2B	Mx	-.036	1.75
94	MP2C	X	-37.231	1.75
95	MP2C	Z	-21.496	1.75
96	MP2C	Mx	.005	1.75
97	MP2A	X	-44.477	1.75
98	MP2A	Z	-25.679	1.75
99	MP2A	Mx	-.025	1.75
100	MP2B	X	-51.792	1.75
101	MP2B	Z	-29.902	1.75
102	MP2B	Mx	.035	1.75
103	MP2C	X	-30.731	1.75
104	MP2C	Z	-17.742	1.75
105	MP2C	Mx	-.004	1.75
106	OVP2	X	-70.049	.5
107	OVP2	Z	-40.443	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-70.049	.5
110	OVP1	Z	-40.443	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-33.627	.25
113	MP2B	Z	-19.415	.25
114	MP2B	Mx	-.007	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-11.559	9
2	M49	Z	-20.021	9
3	M49	Mx	-.003	9
4	M49	X	-11.559	9
5	M49	Z	-20.021	9
6	M49	Mx	.003	9
7	MP1A	X	-30.686	5
8	MP1A	Z	-53.15	5
9	MP1A	Mx	-.005	5
10	MP1B	X	-21.897	5
11	MP1B	Z	-37.926	5
12	MP1B	Mx	-.017	5
13	MP1C	X	-17.22	5
14	MP1C	Z	-29.825	5
15	MP1C	Mx	.016	5
16	MP1A	X	-46.986	.5
17	MP1A	Z	-81.382	.5
18	MP1A	Mx	.008	.5
19	MP1A	X	-46.986	2.5
20	MP1A	Z	-81.382	2.5
21	MP1A	Mx	.008	2.5
22	MP1B	X	-30.773	.5
23	MP1B	Z	-53.3	.5
24	MP1B	Mx	.024	.5
25	MP1B	X	-30.773	2.5
26	MP1B	Z	-53.3	2.5
27	MP1B	Mx	.024	2.5
28	MP1C	X	-22.146	.5
29	MP1C	Z	-38.357	.5
30	MP1C	Mx	-.021	.5
31	MP1C	X	-22.146	2.5
32	MP1C	Z	-38.357	2.5
33	MP1C	Mx	-.021	2.5
34	MP2A	X	-55.149	.5
35	MP2A	Z	-95.52	.5
36	MP2A	Mx	.073	.5
37	MP2A	X	-55.149	4.5
38	MP2A	Z	-95.52	4.5
39	MP2A	Mx	.073	4.5
40	MP2B	X	-37.348	.5
41	MP2B	Z	-64.688	.5
42	MP2B	Mx	.000602	.5
43	MP2B	X	-37.348	4.5
44	MP2B	Z	-64.688	4.5
45	MP2B	Mx	.000602	4.5
46	MP2C	X	-27.876	.5
47	MP2C	Z	-48.283	.5
48	MP2C	Mx	-.037	.5
49	MP2C	X	-27.876	4.5
50	MP2C	Z	-48.283	4.5
51	MP2C	Mx	-.037	4.5
52	MP2A	X	-55.149	.5
53	MP2A	Z	-95.52	.5
54	MP2A	Mx	-.054	.5
55	MP2A	X	-55.149	4.5
56	MP2A	Z	-95.52	4.5
57	MP2A	Mx	-.054	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-37.348	.5
59	MP2B	Z	-64.688	.5
60	MP2B	Mx	.057	.5
61	MP2B	X	-37.348	4.5
62	MP2B	Z	-64.688	4.5
63	MP2B	Mx	.057	4.5
64	MP2C	X	-27.876	.5
65	MP2C	Z	-48.283	.5
66	MP2C	Mx	-.015	.5
67	MP2C	X	-27.876	4.5
68	MP2C	Z	-48.283	4.5
69	MP2C	Mx	-.015	4.5
70	MP4A	X	-47.309	.5
71	MP4A	Z	-81.941	.5
72	MP4A	Mx	.008	.5
73	MP4A	X	-47.309	4.5
74	MP4A	Z	-81.941	4.5
75	MP4A	Mx	.008	4.5
76	MP4B	X	-33.296	.5
77	MP4B	Z	-57.67	.5
78	MP4B	Mx	.026	.5
79	MP4B	X	-33.296	4.5
80	MP4B	Z	-57.67	4.5
81	MP4B	Mx	.026	4.5
82	MP4C	X	-25.84	.5
83	MP4C	Z	-44.756	.5
84	MP4C	Mx	-.024	.5
85	MP4C	X	-25.84	4.5
86	MP4C	Z	-44.756	4.5
87	MP4C	Mx	-.024	4.5
88	MP2A	X	-31.257	1.75
89	MP2A	Z	-54.138	1.75
90	MP2A	Mx	.038	1.75
91	MP2B	X	-25.474	1.75
92	MP2B	Z	-44.123	1.75
93	MP2B	Mx	-.02	1.75
94	MP2C	X	-22.397	1.75
95	MP2C	Z	-38.794	1.75
96	MP2C	Mx	-.01	1.75
97	MP2A	X	-31.14	1.75
98	MP2A	Z	-53.936	1.75
99	MP2A	Mx	-.038	1.75
100	MP2B	X	-23.203	1.75
101	MP2B	Z	-40.189	1.75
102	MP2B	Mx	.019	1.75
103	MP2C	X	-18.98	1.75
104	MP2C	Z	-32.875	1.75
105	MP2C	Mx	.008	1.75
106	OVP2	X	-33.605	.5
107	OVP2	Z	-58.206	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-33.605	.5
110	OVP1	Z	-58.206	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-15.587	.25
113	MP2B	Z	-26.997	.25
114	MP2B	Mx	-.012	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	0	9
2	M49	Z	-4.177	9
3	M49	Mx	-.000686	9
4	M49	X	0	9
5	M49	Z	-4.177	9
6	M49	Mx	.000686	9
7	MP1A	X	0	5
8	MP1A	Z	-13.76	5
9	MP1A	Mx	.002	5
10	MP1B	X	0	5
11	MP1B	Z	-8.369	5
12	MP1B	Mx	-.004	5
13	MP1C	X	0	5
14	MP1C	Z	-11.887	5
15	MP1C	Mx	.004	5
16	MP1A	X	0	.5
17	MP1A	Z	-18.544	.5
18	MP1A	Mx	-.003	.5
19	MP1A	X	0	2.5
20	MP1A	Z	-18.544	2.5
21	MP1A	Mx	-.003	2.5
22	MP1B	X	0	.5
23	MP1B	Z	-9.122	.5
24	MP1B	Mx	.004	.5
25	MP1B	X	0	2.5
26	MP1B	Z	-9.122	2.5
27	MP1B	Mx	.004	2.5
28	MP1C	X	0	.5
29	MP1C	Z	-15.272	.5
30	MP1C	Mx	-.005	.5
31	MP1C	X	0	2.5
32	MP1C	Z	-15.272	2.5
33	MP1C	Mx	-.005	2.5
34	MP2A	X	0	.5
35	MP2A	Z	-32.154	.5
36	MP2A	Mx	.012	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-32.154	4.5
39	MP2A	Mx	.012	4.5
40	MP2B	X	0	.5
41	MP2B	Z	-23.698	.5
42	MP2B	Mx	.009	.5
43	MP2B	X	0	4.5
44	MP2B	Z	-23.698	4.5
45	MP2B	Mx	.009	4.5
46	MP2C	X	0	.5
47	MP2C	Z	-29.217	.5
48	MP2C	Mx	-.022	.5
49	MP2C	X	0	4.5
50	MP2C	Z	-29.217	4.5
51	MP2C	Mx	-.022	4.5
52	MP2A	X	0	.5
53	MP2A	Z	-32.154	.5
54	MP2A	Mx	-.023	.5
55	MP2A	X	0	4.5
56	MP2A	Z	-32.154	4.5
57	MP2A	Mx	-.023	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	0	.5
59	MP2B	Z	-23.698	.5
60	MP2B	Mx	.014	.5
61	MP2B	X	0	4.5
62	MP2B	Z	-23.698	4.5
63	MP2B	Mx	.014	4.5
64	MP2C	X	0	.5
65	MP2C	Z	-29.217	.5
66	MP2C	Mx	.004	.5
67	MP2C	X	0	4.5
68	MP2C	Z	-29.217	4.5
69	MP2C	Mx	.004	4.5
70	MP4A	X	0	.5
71	MP4A	Z	-18.874	.5
72	MP4A	Mx	-.003	.5
73	MP4A	X	0	4.5
74	MP4A	Z	-18.874	4.5
75	MP4A	Mx	-.003	4.5
76	MP4B	X	0	.5
77	MP4B	Z	-11.104	.5
78	MP4B	Mx	.005	.5
79	MP4B	X	0	4.5
80	MP4B	Z	-11.104	4.5
81	MP4B	Mx	.005	4.5
82	MP4C	X	0	.5
83	MP4C	Z	-16.175	.5
84	MP4C	Mx	-.005	.5
85	MP4C	X	0	4.5
86	MP4C	Z	-16.175	4.5
87	MP4C	Mx	-.005	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	-16.57	1.75
90	MP2A	Mx	.01	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	-12.303	1.75
93	MP2B	Mx	-.001	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	-15.088	1.75
96	MP2C	Mx	-.007	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	-16.348	1.75
99	MP2A	Mx	-.01	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	-10.459	1.75
102	MP2B	Mx	.001	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	-14.302	1.75
105	MP2C	Mx	.007	1.75
106	OVP2	X	0	.5
107	OVP2	Z	-16.094	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	-16.094	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	-6.813	.25
114	MP2B	Mx	-.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	2.336	9
2	M49	Z	-4.046	9
3	M49	Mx	-.000732	9
4	M49	X	2.336	9
5	M49	Z	-4.046	9
6	M49	Mx	.000732	9
7	MP1A	X	5.395	5
8	MP1A	Z	-9.344	5
9	MP1A	Mx	.004	5
10	MP1B	X	4.459	5
11	MP1B	Z	-7.723	5
12	MP1B	Mx	-.004	5
13	MP1C	X	7.154	5
14	MP1C	Z	-12.392	5
15	MP1C	Mx	.001	5
16	MP1A	X	6.677	.5
17	MP1A	Z	-11.564	.5
18	MP1A	Mx	-.005	.5
19	MP1A	X	6.677	2.5
20	MP1A	Z	-11.564	2.5
21	MP1A	Mx	-.005	2.5
22	MP1B	X	5.04	.5
23	MP1B	Z	-8.73	.5
24	MP1B	Mx	.005	.5
25	MP1B	X	5.04	2.5
26	MP1B	Z	-8.73	2.5
27	MP1B	Mx	.005	2.5
28	MP1C	X	9.751	.5
29	MP1C	Z	-16.89	.5
30	MP1C	Mx	-.002	.5
31	MP1C	X	9.751	2.5
32	MP1C	Z	-16.89	2.5
33	MP1C	Mx	-.002	2.5
34	MP2A	X	13.748	.5
35	MP2A	Z	-23.812	.5
36	MP2A	Mx	-.000222	.5
37	MP2A	X	13.748	4.5
38	MP2A	Z	-23.812	4.5
39	MP2A	Mx	-.000222	4.5
40	MP2B	X	12.279	.5
41	MP2B	Z	-21.268	.5
42	MP2B	Mx	.016	.5
43	MP2B	X	12.279	4.5
44	MP2B	Z	-21.268	4.5
45	MP2B	Mx	.016	4.5
46	MP2C	X	16.507	.5
47	MP2C	Z	-28.592	.5
48	MP2C	Mx	-.022	.5
49	MP2C	X	16.507	4.5
50	MP2C	Z	-28.592	4.5
51	MP2C	Mx	-.022	4.5
52	MP2A	X	13.748	.5
53	MP2A	Z	-23.812	.5
54	MP2A	Mx	-.021	.5
55	MP2A	X	13.748	4.5
56	MP2A	Z	-23.812	4.5
57	MP2A	Mx	-.021	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	12.279	.5
59	MP2B	Z	-21.268	.5
60	MP2B	Mx	.007	.5
61	MP2B	X	12.279	4.5
62	MP2B	Z	-21.268	4.5
63	MP2B	Mx	.007	4.5
64	MP2C	X	16.507	.5
65	MP2C	Z	-28.592	.5
66	MP2C	Mx	.016	.5
67	MP2C	X	16.507	4.5
68	MP2C	Z	-28.592	4.5
69	MP2C	Mx	.016	4.5
70	MP4A	X	7.297	.5
71	MP4A	Z	-12.638	.5
72	MP4A	Mx	-.006	.5
73	MP4A	X	7.297	4.5
74	MP4A	Z	-12.638	4.5
75	MP4A	Mx	-.006	4.5
76	MP4B	X	5.947	.5
77	MP4B	Z	-10.301	.5
78	MP4B	Mx	.006	.5
79	MP4B	X	5.947	4.5
80	MP4B	Z	-10.301	4.5
81	MP4B	Mx	.006	4.5
82	MP4C	X	9.833	.5
83	MP4C	Z	-17.03	.5
84	MP4C	Mx	-.002	.5
85	MP4C	X	9.833	4.5
86	MP4C	Z	-17.03	4.5
87	MP4C	Mx	-.002	4.5
88	MP2A	X	7.11	1.75
89	MP2A	Z	-12.314	1.75
90	MP2A	Mx	.006	1.75
91	MP2B	X	6.369	1.75
92	MP2B	Z	-11.031	1.75
93	MP2B	Mx	.003	1.75
94	MP2C	X	8.502	1.75
95	MP2C	Z	-14.726	1.75
96	MP2C	Mx	-.01	1.75
97	MP2A	X	6.552	1.75
98	MP2A	Z	-11.348	1.75
99	MP2A	Mx	-.005	1.75
100	MP2B	X	5.529	1.75
101	MP2B	Z	-9.577	1.75
102	MP2B	Mx	-.002	1.75
103	MP2C	X	8.474	1.75
104	MP2C	Z	-14.677	1.75
105	MP2C	Mx	.01	1.75
106	OVP2	X	9.652	.5
107	OVP2	Z	-16.718	.5
108	OVP2	Mx	0	.5
109	OVP1	X	9.652	.5
110	OVP1	Z	-16.718	.5
111	OVP1	Mx	0	.5
112	MP2B	X	3.514	.25
113	MP2B	Z	-6.086	.25
114	MP2B	Mx	-.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	6.369	9
2	M49	Z	-3.677	9
3	M49	Mx	-.000788	9
4	M49	X	6.369	9
5	M49	Z	-3.677	9
6	M49	Mx	.000788	9
7	MP1A	X	7.247	5
8	MP1A	Z	-4.184	5
9	MP1A	Mx	.004	5
10	MP1B	X	10.295	5
11	MP1B	Z	-5.944	5
12	MP1B	Mx	-.004	5
13	MP1C	X	11.916	5
14	MP1C	Z	-6.88	5
15	MP1C	Mx	-.002	5
16	MP1A	X	7.9	.5
17	MP1A	Z	-4.561	.5
18	MP1A	Mx	-.004	.5
19	MP1A	X	7.9	2.5
20	MP1A	Z	-4.561	2.5
21	MP1A	Mx	-.004	2.5
22	MP1B	X	13.226	.5
23	MP1B	Z	-7.636	.5
24	MP1B	Mx	.005	.5
25	MP1B	X	13.226	2.5
26	MP1B	Z	-7.636	2.5
27	MP1B	Mx	.005	2.5
28	MP1C	X	16.059	.5
29	MP1C	Z	-9.272	.5
30	MP1C	Mx	.003	.5
31	MP1C	X	16.059	2.5
32	MP1C	Z	-9.272	2.5
33	MP1C	Mx	.003	2.5
34	MP2A	X	20.523	.5
35	MP2A	Z	-11.849	.5
36	MP2A	Mx	-.009	.5
37	MP2A	X	20.523	4.5
38	MP2A	Z	-11.849	4.5
39	MP2A	Mx	-.009	4.5
40	MP2B	X	25.303	.5
41	MP2B	Z	-14.609	.5
42	MP2B	Mx	.022	.5
43	MP2B	X	25.303	4.5
44	MP2B	Z	-14.609	4.5
45	MP2B	Mx	.022	4.5
46	MP2C	X	27.846	.5
47	MP2C	Z	-16.077	.5
48	MP2C	Mx	-.012	.5
49	MP2C	X	27.846	4.5
50	MP2C	Z	-16.077	4.5
51	MP2C	Mx	-.012	4.5
52	MP2A	X	20.523	.5
53	MP2A	Z	-11.849	.5
54	MP2A	Mx	-.014	.5
55	MP2A	X	20.523	4.5
56	MP2A	Z	-11.849	4.5
57	MP2A	Mx	-.014	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	25.303	.5
59	MP2B	Z	-14.609	.5
60	MP2B	Mx	-.004	.5
61	MP2B	X	25.303	4.5
62	MP2B	Z	-14.609	4.5
63	MP2B	Mx	-.004	4.5
64	MP2C	X	27.846	.5
65	MP2C	Z	-16.077	.5
66	MP2C	Mx	.023	.5
67	MP2C	X	27.846	4.5
68	MP2C	Z	-16.077	4.5
69	MP2C	Mx	.023	4.5
70	MP4A	X	9.616	.5
71	MP4A	Z	-5.552	.5
72	MP4A	Mx	-.005	.5
73	MP4A	X	9.616	4.5
74	MP4A	Z	-5.552	4.5
75	MP4A	Mx	-.005	4.5
76	MP4B	X	14.008	.5
77	MP4B	Z	-8.088	.5
78	MP4B	Mx	.005	.5
79	MP4B	X	14.008	4.5
80	MP4B	Z	-8.088	4.5
81	MP4B	Mx	.005	4.5
82	MP4C	X	16.345	.5
83	MP4C	Z	-9.437	.5
84	MP4C	Mx	.003	.5
85	MP4C	X	16.345	4.5
86	MP4C	Z	-9.437	4.5
87	MP4C	Mx	.003	4.5
88	MP2A	X	10.655	1.75
89	MP2A	Z	-6.151	1.75
90	MP2A	Mx	.001	1.75
91	MP2B	X	13.067	1.75
92	MP2B	Z	-7.544	1.75
93	MP2B	Mx	.007	1.75
94	MP2C	X	14.35	1.75
95	MP2C	Z	-8.285	1.75
96	MP2C	Mx	-.01	1.75
97	MP2A	X	9.058	1.75
98	MP2A	Z	-5.229	1.75
99	MP2A	Mx	-.001	1.75
100	MP2B	X	12.386	1.75
101	MP2B	Z	-7.151	1.75
102	MP2B	Mx	-.007	1.75
103	MP2C	X	14.157	1.75
104	MP2C	Z	-8.174	1.75
105	MP2C	Mx	.01	1.75
106	OVP2	X	18.985	.5
107	OVP2	Z	-10.961	.5
108	OVP2	Mx	0	.5
109	OVP1	X	18.985	.5
110	OVP1	Z	-10.961	.5
111	OVP1	Mx	0	.5
112	MP2B	X	7.092	.25
113	MP2B	Z	-4.094	.25
114	MP2B	Mx	-.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	9.541	9
2	M49	Z	0	9
3	M49	Mx	-.000276	9
4	M49	X	9.541	9
5	M49	Z	0	9
6	M49	Mx	.000276	9
7	MP1A	X	8.917	5
8	MP1A	Z	0	5
9	MP1A	Mx	.004	5
10	MP1B	X	14.308	5
11	MP1B	Z	0	5
12	MP1B	Mx	-.001	5
13	MP1C	X	10.79	5
14	MP1C	Z	0	5
15	MP1C	Mx	-.004	5
16	MP1A	X	10.081	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	-.005	.5
19	MP1A	X	10.081	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.005	2.5
22	MP1B	X	19.503	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	.002	.5
25	MP1B	X	19.503	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	.002	2.5
28	MP1C	X	13.353	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	.005	.5
31	MP1C	X	13.353	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	.005	2.5
34	MP2A	X	24.558	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.016	.5
37	MP2A	X	24.558	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.016	4.5
40	MP2B	X	33.015	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	.022	.5
43	MP2B	X	33.015	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	.022	4.5
46	MP2C	X	27.495	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	.000222	.5
49	MP2C	X	27.495	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	.000222	4.5
52	MP2A	X	24.558	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	-.007	.5
55	MP2A	X	24.558	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	-.007	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	33.015	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	-.016	.5
61	MP2B	X	33.015	4.5
62	MP2B	Z	0	4.5
63	MP2B	Mx	-.016	4.5
64	MP2C	X	27.495	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	.021	.5
67	MP2C	X	27.495	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	.021	4.5
70	MP4A	X	11.895	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	-.006	.5
73	MP4A	X	11.895	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	-.006	4.5
76	MP4B	X	19.665	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	.002	.5
79	MP4B	X	19.665	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	.002	4.5
82	MP4C	X	14.593	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	.006	.5
85	MP4C	X	14.593	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	.006	4.5
88	MP2A	X	12.737	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	-.003	1.75
91	MP2B	X	17.004	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	.01	1.75
94	MP2C	X	14.219	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	-.006	1.75
97	MP2A	X	11.058	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	.002	1.75
100	MP2B	X	16.947	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	-.01	1.75
103	MP2C	X	13.104	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	.005	1.75
106	OVP2	X	21.328	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	21.328	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	9.136	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	-.000793	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	7.833	9
2	M49	Z	4.523	9
3	M49	Mx	.000516	9
4	M49	X	7.833	9
5	M49	Z	4.523	9
6	M49	Mx	-.000516	9
7	MP1A	X	10.295	5
8	MP1A	Z	5.944	5
9	MP1A	Mx	.004	5
10	MP1B	X	11.916	5
11	MP1B	Z	6.88	5
12	MP1B	Mx	.002	5
13	MP1C	X	7.247	5
14	MP1C	Z	4.184	5
15	MP1C	Mx	-.004	5
16	MP1A	X	13.226	.5
17	MP1A	Z	7.636	.5
18	MP1A	Mx	-.005	.5
19	MP1A	X	13.226	2.5
20	MP1A	Z	7.636	2.5
21	MP1A	Mx	-.005	2.5
22	MP1B	X	16.059	.5
23	MP1B	Z	9.272	.5
24	MP1B	Mx	-.003	.5
25	MP1B	X	16.059	2.5
26	MP1B	Z	9.272	2.5
27	MP1B	Mx	-.003	2.5
28	MP1C	X	7.9	.5
29	MP1C	Z	4.561	.5
30	MP1C	Mx	.004	.5
31	MP1C	X	7.9	2.5
32	MP1C	Z	4.561	2.5
33	MP1C	Mx	.004	2.5
34	MP2A	X	25.303	.5
35	MP2A	Z	14.609	.5
36	MP2A	Mx	-.022	.5
37	MP2A	X	25.303	4.5
38	MP2A	Z	14.609	4.5
39	MP2A	Mx	-.022	4.5
40	MP2B	X	27.846	.5
41	MP2B	Z	16.077	.5
42	MP2B	Mx	.012	.5
43	MP2B	X	27.846	4.5
44	MP2B	Z	16.077	4.5
45	MP2B	Mx	.012	4.5
46	MP2C	X	20.523	.5
47	MP2C	Z	11.849	.5
48	MP2C	Mx	.009	.5
49	MP2C	X	20.523	4.5
50	MP2C	Z	11.849	4.5
51	MP2C	Mx	.009	4.5
52	MP2A	X	25.303	.5
53	MP2A	Z	14.609	.5
54	MP2A	Mx	.004	.5
55	MP2A	X	25.303	4.5
56	MP2A	Z	14.609	4.5
57	MP2A	Mx	.004	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	27.846	.5
59	MP2B	Z	16.077	.5
60	MP2B	Mx	-.023	.5
61	MP2B	X	27.846	4.5
62	MP2B	Z	16.077	4.5
63	MP2B	Mx	-.023	4.5
64	MP2C	X	20.523	.5
65	MP2C	Z	11.849	.5
66	MP2C	Mx	.014	.5
67	MP2C	X	20.523	4.5
68	MP2C	Z	11.849	4.5
69	MP2C	Mx	.014	4.5
70	MP4A	X	14.008	.5
71	MP4A	Z	8.088	.5
72	MP4A	Mx	-.005	.5
73	MP4A	X	14.008	4.5
74	MP4A	Z	8.088	4.5
75	MP4A	Mx	-.005	4.5
76	MP4B	X	16.345	.5
77	MP4B	Z	9.437	.5
78	MP4B	Mx	-.003	.5
79	MP4B	X	16.345	4.5
80	MP4B	Z	9.437	4.5
81	MP4B	Mx	-.003	4.5
82	MP4C	X	9.616	.5
83	MP4C	Z	5.552	.5
84	MP4C	Mx	.005	.5
85	MP4C	X	9.616	4.5
86	MP4C	Z	5.552	4.5
87	MP4C	Mx	.005	4.5
88	MP2A	X	13.067	1.75
89	MP2A	Z	7.544	1.75
90	MP2A	Mx	-.007	1.75
91	MP2B	X	14.35	1.75
92	MP2B	Z	8.285	1.75
93	MP2B	Mx	.01	1.75
94	MP2C	X	10.655	1.75
95	MP2C	Z	6.151	1.75
96	MP2C	Mx	-.001	1.75
97	MP2A	X	12.386	1.75
98	MP2A	Z	7.151	1.75
99	MP2A	Mx	.007	1.75
100	MP2B	X	14.157	1.75
101	MP2B	Z	8.174	1.75
102	MP2B	Mx	-.01	1.75
103	MP2C	X	9.058	1.75
104	MP2C	Z	5.229	1.75
105	MP2C	Mx	.001	1.75
106	OVP2	X	15.691	.5
107	OVP2	Z	9.059	.5
108	OVP2	Mx	0	.5
109	OVP1	X	15.691	.5
110	OVP1	Z	9.059	.5
111	OVP1	Mx	0	.5
112	MP2B	X	7.726	.25
113	MP2B	Z	4.461	.25
114	MP2B	Mx	.002	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	3.182	9
2	M49	Z	5.511	9
3	M49	Mx	.000812	9
4	M49	X	3.182	9
5	M49	Z	5.511	9
6	M49	Mx	-.000812	9
7	MP1A	X	7.154	5
8	MP1A	Z	12.392	5
9	MP1A	Mx	.001	5
10	MP1B	X	5.395	5
11	MP1B	Z	9.344	5
12	MP1B	Mx	.004	5
13	MP1C	X	4.459	5
14	MP1C	Z	7.723	5
15	MP1C	Mx	-.004	5
16	MP1A	X	9.751	.5
17	MP1A	Z	16.89	.5
18	MP1A	Mx	-.002	.5
19	MP1A	X	9.751	2.5
20	MP1A	Z	16.89	2.5
21	MP1A	Mx	-.002	2.5
22	MP1B	X	6.677	.5
23	MP1B	Z	11.564	.5
24	MP1B	Mx	-.005	.5
25	MP1B	X	6.677	2.5
26	MP1B	Z	11.564	2.5
27	MP1B	Mx	-.005	2.5
28	MP1C	X	5.04	.5
29	MP1C	Z	8.73	.5
30	MP1C	Mx	.005	.5
31	MP1C	X	5.04	2.5
32	MP1C	Z	8.73	2.5
33	MP1C	Mx	.005	2.5
34	MP2A	X	16.507	.5
35	MP2A	Z	28.592	.5
36	MP2A	Mx	-.022	.5
37	MP2A	X	16.507	4.5
38	MP2A	Z	28.592	4.5
39	MP2A	Mx	-.022	4.5
40	MP2B	X	13.748	.5
41	MP2B	Z	23.812	.5
42	MP2B	Mx	-.000222	.5
43	MP2B	X	13.748	4.5
44	MP2B	Z	23.812	4.5
45	MP2B	Mx	-.000222	4.5
46	MP2C	X	12.279	.5
47	MP2C	Z	21.268	.5
48	MP2C	Mx	.016	.5
49	MP2C	X	12.279	4.5
50	MP2C	Z	21.268	4.5
51	MP2C	Mx	.016	4.5
52	MP2A	X	16.507	.5
53	MP2A	Z	28.592	.5
54	MP2A	Mx	.016	.5
55	MP2A	X	16.507	4.5
56	MP2A	Z	28.592	4.5
57	MP2A	Mx	.016	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	13.748	.5
59	MP2B	Z	23.812	.5
60	MP2B	Mx	-.021	.5
61	MP2B	X	13.748	4.5
62	MP2B	Z	23.812	4.5
63	MP2B	Mx	-.021	4.5
64	MP2C	X	12.279	.5
65	MP2C	Z	21.268	.5
66	MP2C	Mx	.007	.5
67	MP2C	X	12.279	4.5
68	MP2C	Z	21.268	4.5
69	MP2C	Mx	.007	4.5
70	MP4A	X	9.833	.5
71	MP4A	Z	17.03	.5
72	MP4A	Mx	-.002	.5
73	MP4A	X	9.833	4.5
74	MP4A	Z	17.03	4.5
75	MP4A	Mx	-.002	4.5
76	MP4B	X	7.297	.5
77	MP4B	Z	12.638	.5
78	MP4B	Mx	-.006	.5
79	MP4B	X	7.297	4.5
80	MP4B	Z	12.638	4.5
81	MP4B	Mx	-.006	4.5
82	MP4C	X	5.947	.5
83	MP4C	Z	10.301	.5
84	MP4C	Mx	.006	.5
85	MP4C	X	5.947	4.5
86	MP4C	Z	10.301	4.5
87	MP4C	Mx	.006	4.5
88	MP2A	X	8.502	1.75
89	MP2A	Z	14.726	1.75
90	MP2A	Mx	-.01	1.75
91	MP2B	X	7.11	1.75
92	MP2B	Z	12.314	1.75
93	MP2B	Mx	.006	1.75
94	MP2C	X	6.369	1.75
95	MP2C	Z	11.031	1.75
96	MP2C	Mx	.003	1.75
97	MP2A	X	8.474	1.75
98	MP2A	Z	14.677	1.75
99	MP2A	Mx	.01	1.75
100	MP2B	X	6.552	1.75
101	MP2B	Z	11.348	1.75
102	MP2B	Mx	-.005	1.75
103	MP2C	X	5.529	1.75
104	MP2C	Z	9.577	1.75
105	MP2C	Mx	-.002	1.75
106	OVP2	X	7.751	.5
107	OVP2	Z	13.424	.5
108	OVP2	Mx	0	.5
109	OVP1	X	7.751	.5
110	OVP1	Z	13.424	.5
111	OVP1	Mx	0	.5
112	MP2B	X	3.88	.25
113	MP2B	Z	6.72	.25
114	MP2B	Mx	.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	0	9
2	M49	Z	4.177	9
3	M49	Mx	.000686	9
4	M49	X	0	9
5	M49	Z	4.177	9
6	M49	Mx	-.000686	9
7	MP1A	X	0	5
8	MP1A	Z	13.76	5
9	MP1A	Mx	-.002	5
10	MP1B	X	0	5
11	MP1B	Z	8.369	5
12	MP1B	Mx	.004	5
13	MP1C	X	0	5
14	MP1C	Z	11.887	5
15	MP1C	Mx	-.004	5
16	MP1A	X	0	.5
17	MP1A	Z	18.544	.5
18	MP1A	Mx	.003	.5
19	MP1A	X	0	2.5
20	MP1A	Z	18.544	2.5
21	MP1A	Mx	.003	2.5
22	MP1B	X	0	.5
23	MP1B	Z	9.122	.5
24	MP1B	Mx	-.004	.5
25	MP1B	X	0	2.5
26	MP1B	Z	9.122	2.5
27	MP1B	Mx	-.004	2.5
28	MP1C	X	0	.5
29	MP1C	Z	15.272	.5
30	MP1C	Mx	.005	.5
31	MP1C	X	0	2.5
32	MP1C	Z	15.272	2.5
33	MP1C	Mx	.005	2.5
34	MP2A	X	0	.5
35	MP2A	Z	32.154	.5
36	MP2A	Mx	-.012	.5
37	MP2A	X	0	4.5
38	MP2A	Z	32.154	4.5
39	MP2A	Mx	-.012	4.5
40	MP2B	X	0	.5
41	MP2B	Z	23.698	.5
42	MP2B	Mx	-.009	.5
43	MP2B	X	0	4.5
44	MP2B	Z	23.698	4.5
45	MP2B	Mx	-.009	4.5
46	MP2C	X	0	.5
47	MP2C	Z	29.217	.5
48	MP2C	Mx	.022	.5
49	MP2C	X	0	4.5
50	MP2C	Z	29.217	4.5
51	MP2C	Mx	.022	4.5
52	MP2A	X	0	.5
53	MP2A	Z	32.154	.5
54	MP2A	Mx	.023	.5
55	MP2A	X	0	4.5
56	MP2A	Z	32.154	4.5
57	MP2A	Mx	.023	4.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP2B	X	0	.5
59	MP2B	Z	23.698	.5
60	MP2B	Mx	-.014	.5
61	MP2B	X	0	4.5
62	MP2B	Z	23.698	4.5
63	MP2B	Mx	-.014	4.5
64	MP2C	X	0	.5
65	MP2C	Z	29.217	.5
66	MP2C	Mx	-.004	.5
67	MP2C	X	0	4.5
68	MP2C	Z	29.217	4.5
69	MP2C	Mx	-.004	4.5
70	MP4A	X	0	.5
71	MP4A	Z	18.874	.5
72	MP4A	Mx	.003	.5
73	MP4A	X	0	4.5
74	MP4A	Z	18.874	4.5
75	MP4A	Mx	.003	4.5
76	MP4B	X	0	.5
77	MP4B	Z	11.104	.5
78	MP4B	Mx	-.005	.5
79	MP4B	X	0	4.5
80	MP4B	Z	11.104	4.5
81	MP4B	Mx	-.005	4.5
82	MP4C	X	0	.5
83	MP4C	Z	16.175	.5
84	MP4C	Mx	.005	.5
85	MP4C	X	0	4.5
86	MP4C	Z	16.175	4.5
87	MP4C	Mx	.005	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	16.57	1.75
90	MP2A	Mx	-.01	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	12.303	1.75
93	MP2B	Mx	.001	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	15.088	1.75
96	MP2C	Mx	.007	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	16.348	1.75
99	MP2A	Mx	.01	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	10.459	1.75
102	MP2B	Mx	-.001	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	14.302	1.75
105	MP2C	Mx	-.007	1.75
106	OVP2	X	0	.5
107	OVP2	Z	16.094	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	16.094	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	6.813	.25
114	MP2B	Mx	.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-2.336	9
2	M49	Z	4.046	9
3	M49	Mx	.000732	9
4	M49	X	-2.336	9
5	M49	Z	4.046	9
6	M49	Mx	-.000732	9
7	MP1A	X	-5.395	5
8	MP1A	Z	9.344	5
9	MP1A	Mx	-.004	5
10	MP1B	X	-4.459	5
11	MP1B	Z	7.723	5
12	MP1B	Mx	.004	5
13	MP1C	X	-7.154	5
14	MP1C	Z	12.392	5
15	MP1C	Mx	-.001	5
16	MP1A	X	-6.677	.5
17	MP1A	Z	11.564	.5
18	MP1A	Mx	.005	.5
19	MP1A	X	-6.677	2.5
20	MP1A	Z	11.564	2.5
21	MP1A	Mx	.005	2.5
22	MP1B	X	-5.04	.5
23	MP1B	Z	8.73	.5
24	MP1B	Mx	-.005	.5
25	MP1B	X	-5.04	2.5
26	MP1B	Z	8.73	2.5
27	MP1B	Mx	-.005	2.5
28	MP1C	X	-9.751	.5
29	MP1C	Z	16.89	.5
30	MP1C	Mx	.002	.5
31	MP1C	X	-9.751	2.5
32	MP1C	Z	16.89	2.5
33	MP1C	Mx	.002	2.5
34	MP2A	X	-13.748	.5
35	MP2A	Z	23.812	.5
36	MP2A	Mx	.000222	.5
37	MP2A	X	-13.748	4.5
38	MP2A	Z	23.812	4.5
39	MP2A	Mx	.000222	4.5
40	MP2B	X	-12.279	.5
41	MP2B	Z	21.268	.5
42	MP2B	Mx	-.016	.5
43	MP2B	X	-12.279	4.5
44	MP2B	Z	21.268	4.5
45	MP2B	Mx	-.016	4.5
46	MP2C	X	-16.507	.5
47	MP2C	Z	28.592	.5
48	MP2C	Mx	.022	.5
49	MP2C	X	-16.507	4.5
50	MP2C	Z	28.592	4.5
51	MP2C	Mx	.022	4.5
52	MP2A	X	-13.748	.5
53	MP2A	Z	23.812	.5
54	MP2A	Mx	.021	.5
55	MP2A	X	-13.748	4.5
56	MP2A	Z	23.812	4.5
57	MP2A	Mx	.021	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-12.279	.5
59	MP2B	Z	21.268	.5
60	MP2B	Mx	-.007	.5
61	MP2B	X	-12.279	4.5
62	MP2B	Z	21.268	4.5
63	MP2B	Mx	-.007	4.5
64	MP2C	X	-16.507	.5
65	MP2C	Z	28.592	.5
66	MP2C	Mx	-.016	.5
67	MP2C	X	-16.507	4.5
68	MP2C	Z	28.592	4.5
69	MP2C	Mx	-.016	4.5
70	MP4A	X	-7.297	.5
71	MP4A	Z	12.638	.5
72	MP4A	Mx	.006	.5
73	MP4A	X	-7.297	4.5
74	MP4A	Z	12.638	4.5
75	MP4A	Mx	.006	4.5
76	MP4B	X	-5.947	.5
77	MP4B	Z	10.301	.5
78	MP4B	Mx	-.006	.5
79	MP4B	X	-5.947	4.5
80	MP4B	Z	10.301	4.5
81	MP4B	Mx	-.006	4.5
82	MP4C	X	-9.833	.5
83	MP4C	Z	17.03	.5
84	MP4C	Mx	.002	.5
85	MP4C	X	-9.833	4.5
86	MP4C	Z	17.03	4.5
87	MP4C	Mx	.002	4.5
88	MP2A	X	-7.11	1.75
89	MP2A	Z	12.314	1.75
90	MP2A	Mx	-.006	1.75
91	MP2B	X	-6.369	1.75
92	MP2B	Z	11.031	1.75
93	MP2B	Mx	-.003	1.75
94	MP2C	X	-8.502	1.75
95	MP2C	Z	14.726	1.75
96	MP2C	Mx	.01	1.75
97	MP2A	X	-6.552	1.75
98	MP2A	Z	11.348	1.75
99	MP2A	Mx	.005	1.75
100	MP2B	X	-5.529	1.75
101	MP2B	Z	9.577	1.75
102	MP2B	Mx	.002	1.75
103	MP2C	X	-8.474	1.75
104	MP2C	Z	14.677	1.75
105	MP2C	Mx	-.01	1.75
106	OVP2	X	-9.652	.5
107	OVP2	Z	16.718	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-9.652	.5
110	OVP1	Z	16.718	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-3.514	.25
113	MP2B	Z	6.086	.25
114	MP2B	Mx	.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-6.369	9
2	M49	Z	3.677	9
3	M49	Mx	.000788	9
4	M49	X	-6.369	9
5	M49	Z	3.677	9
6	M49	Mx	-.000788	9
7	MP1A	X	-7.247	5
8	MP1A	Z	4.184	5
9	MP1A	Mx	-.004	5
10	MP1B	X	-10.295	5
11	MP1B	Z	5.944	5
12	MP1B	Mx	.004	5
13	MP1C	X	-11.916	5
14	MP1C	Z	6.88	5
15	MP1C	Mx	.002	5
16	MP1A	X	-7.9	.5
17	MP1A	Z	4.561	.5
18	MP1A	Mx	.004	.5
19	MP1A	X	-7.9	2.5
20	MP1A	Z	4.561	2.5
21	MP1A	Mx	.004	2.5
22	MP1B	X	-13.226	.5
23	MP1B	Z	7.636	.5
24	MP1B	Mx	-.005	.5
25	MP1B	X	-13.226	2.5
26	MP1B	Z	7.636	2.5
27	MP1B	Mx	-.005	2.5
28	MP1C	X	-16.059	.5
29	MP1C	Z	9.272	.5
30	MP1C	Mx	-.003	.5
31	MP1C	X	-16.059	2.5
32	MP1C	Z	9.272	2.5
33	MP1C	Mx	-.003	2.5
34	MP2A	X	-20.523	.5
35	MP2A	Z	11.849	.5
36	MP2A	Mx	.009	.5
37	MP2A	X	-20.523	4.5
38	MP2A	Z	11.849	4.5
39	MP2A	Mx	.009	4.5
40	MP2B	X	-25.303	.5
41	MP2B	Z	14.609	.5
42	MP2B	Mx	-.022	.5
43	MP2B	X	-25.303	4.5
44	MP2B	Z	14.609	4.5
45	MP2B	Mx	-.022	4.5
46	MP2C	X	-27.846	.5
47	MP2C	Z	16.077	.5
48	MP2C	Mx	.012	.5
49	MP2C	X	-27.846	4.5
50	MP2C	Z	16.077	4.5
51	MP2C	Mx	.012	4.5
52	MP2A	X	-20.523	.5
53	MP2A	Z	11.849	.5
54	MP2A	Mx	.014	.5
55	MP2A	X	-20.523	4.5
56	MP2A	Z	11.849	4.5
57	MP2A	Mx	.014	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-25.303	.5
59	MP2B	Z	14.609	.5
60	MP2B	Mx	.004	.5
61	MP2B	X	-25.303	4.5
62	MP2B	Z	14.609	4.5
63	MP2B	Mx	.004	4.5
64	MP2C	X	-27.846	.5
65	MP2C	Z	16.077	.5
66	MP2C	Mx	-.023	.5
67	MP2C	X	-27.846	4.5
68	MP2C	Z	16.077	4.5
69	MP2C	Mx	-.023	4.5
70	MP4A	X	-9.616	.5
71	MP4A	Z	5.552	.5
72	MP4A	Mx	.005	.5
73	MP4A	X	-9.616	4.5
74	MP4A	Z	5.552	4.5
75	MP4A	Mx	.005	4.5
76	MP4B	X	-14.008	.5
77	MP4B	Z	8.088	.5
78	MP4B	Mx	-.005	.5
79	MP4B	X	-14.008	4.5
80	MP4B	Z	8.088	4.5
81	MP4B	Mx	-.005	4.5
82	MP4C	X	-16.345	.5
83	MP4C	Z	9.437	.5
84	MP4C	Mx	-.003	.5
85	MP4C	X	-16.345	4.5
86	MP4C	Z	9.437	4.5
87	MP4C	Mx	-.003	4.5
88	MP2A	X	-10.655	1.75
89	MP2A	Z	6.151	1.75
90	MP2A	Mx	-.001	1.75
91	MP2B	X	-13.067	1.75
92	MP2B	Z	7.544	1.75
93	MP2B	Mx	-.007	1.75
94	MP2C	X	-14.35	1.75
95	MP2C	Z	8.285	1.75
96	MP2C	Mx	.01	1.75
97	MP2A	X	-9.058	1.75
98	MP2A	Z	5.229	1.75
99	MP2A	Mx	.001	1.75
100	MP2B	X	-12.386	1.75
101	MP2B	Z	7.151	1.75
102	MP2B	Mx	.007	1.75
103	MP2C	X	-14.157	1.75
104	MP2C	Z	8.174	1.75
105	MP2C	Mx	-.01	1.75
106	OVP2	X	-18.985	.5
107	OVP2	Z	10.961	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-18.985	.5
110	OVP1	Z	10.961	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-7.092	.25
113	MP2B	Z	4.094	.25
114	MP2B	Mx	.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-9.541	9
2	M49	Z	0	9
3	M49	Mx	.000276	9
4	M49	X	-9.541	9
5	M49	Z	0	9
6	M49	Mx	-.000276	9
7	MP1A	X	-8.917	5
8	MP1A	Z	0	5
9	MP1A	Mx	-.004	5
10	MP1B	X	-14.308	5
11	MP1B	Z	0	5
12	MP1B	Mx	.001	5
13	MP1C	X	-10.79	5
14	MP1C	Z	0	5
15	MP1C	Mx	.004	5
16	MP1A	X	-10.081	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	.005	.5
19	MP1A	X	-10.081	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.005	2.5
22	MP1B	X	-19.503	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	-.002	.5
25	MP1B	X	-19.503	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	-.002	2.5
28	MP1C	X	-13.353	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	-.005	.5
31	MP1C	X	-13.353	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	-.005	2.5
34	MP2A	X	-24.558	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.016	.5
37	MP2A	X	-24.558	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.016	4.5
40	MP2B	X	-33.015	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	-.022	.5
43	MP2B	X	-33.015	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	-.022	4.5
46	MP2C	X	-27.495	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	-.000222	.5
49	MP2C	X	-27.495	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	-.000222	4.5
52	MP2A	X	-24.558	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	.007	.5
55	MP2A	X	-24.558	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	.007	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-33.015	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	.016	.5
61	MP2B	X	-33.015	4.5
62	MP2B	Z	0	4.5
63	MP2B	Mx	.016	4.5
64	MP2C	X	-27.495	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	-.021	.5
67	MP2C	X	-27.495	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	-.021	4.5
70	MP4A	X	-11.895	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	.006	.5
73	MP4A	X	-11.895	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	.006	4.5
76	MP4B	X	-19.665	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	-.002	.5
79	MP4B	X	-19.665	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	-.002	4.5
82	MP4C	X	-14.593	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	-.006	.5
85	MP4C	X	-14.593	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	-.006	4.5
88	MP2A	X	-12.737	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	.003	1.75
91	MP2B	X	-17.004	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	-.01	1.75
94	MP2C	X	-14.219	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	.006	1.75
97	MP2A	X	-11.058	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	-.002	1.75
100	MP2B	X	-16.947	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	.01	1.75
103	MP2C	X	-13.104	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	-.005	1.75
106	OVP2	X	-21.328	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-21.328	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-9.136	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	.000793	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-7.833	9
2	M49	Z	-4.523	9
3	M49	Mx	-.000516	9
4	M49	X	-7.833	9
5	M49	Z	-4.523	9
6	M49	Mx	.000516	9
7	MP1A	X	-10.295	5
8	MP1A	Z	-5.944	5
9	MP1A	Mx	-.004	5
10	MP1B	X	-11.916	5
11	MP1B	Z	-6.88	5
12	MP1B	Mx	-.002	5
13	MP1C	X	-7.247	5
14	MP1C	Z	-4.184	5
15	MP1C	Mx	.004	5
16	MP1A	X	-13.226	.5
17	MP1A	Z	-7.636	.5
18	MP1A	Mx	.005	.5
19	MP1A	X	-13.226	2.5
20	MP1A	Z	-7.636	2.5
21	MP1A	Mx	.005	2.5
22	MP1B	X	-16.059	.5
23	MP1B	Z	-9.272	.5
24	MP1B	Mx	.003	.5
25	MP1B	X	-16.059	2.5
26	MP1B	Z	-9.272	2.5
27	MP1B	Mx	.003	2.5
28	MP1C	X	-7.9	.5
29	MP1C	Z	-4.561	.5
30	MP1C	Mx	-.004	.5
31	MP1C	X	-7.9	2.5
32	MP1C	Z	-4.561	2.5
33	MP1C	Mx	-.004	2.5
34	MP2A	X	-25.303	.5
35	MP2A	Z	-14.609	.5
36	MP2A	Mx	.022	.5
37	MP2A	X	-25.303	4.5
38	MP2A	Z	-14.609	4.5
39	MP2A	Mx	.022	4.5
40	MP2B	X	-27.846	.5
41	MP2B	Z	-16.077	.5
42	MP2B	Mx	-.012	.5
43	MP2B	X	-27.846	4.5
44	MP2B	Z	-16.077	4.5
45	MP2B	Mx	-.012	4.5
46	MP2C	X	-20.523	.5
47	MP2C	Z	-11.849	.5
48	MP2C	Mx	-.009	.5
49	MP2C	X	-20.523	4.5
50	MP2C	Z	-11.849	4.5
51	MP2C	Mx	-.009	4.5
52	MP2A	X	-25.303	.5
53	MP2A	Z	-14.609	.5
54	MP2A	Mx	-.004	.5
55	MP2A	X	-25.303	4.5
56	MP2A	Z	-14.609	4.5
57	MP2A	Mx	-.004	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-27.846	.5
59	MP2B	Z	-16.077	.5
60	MP2B	Mx	.023	.5
61	MP2B	X	-27.846	4.5
62	MP2B	Z	-16.077	4.5
63	MP2B	Mx	.023	4.5
64	MP2C	X	-20.523	.5
65	MP2C	Z	-11.849	.5
66	MP2C	Mx	-.014	.5
67	MP2C	X	-20.523	4.5
68	MP2C	Z	-11.849	4.5
69	MP2C	Mx	-.014	4.5
70	MP4A	X	-14.008	.5
71	MP4A	Z	-8.088	.5
72	MP4A	Mx	.005	.5
73	MP4A	X	-14.008	4.5
74	MP4A	Z	-8.088	4.5
75	MP4A	Mx	.005	4.5
76	MP4B	X	-16.345	.5
77	MP4B	Z	-9.437	.5
78	MP4B	Mx	.003	.5
79	MP4B	X	-16.345	4.5
80	MP4B	Z	-9.437	4.5
81	MP4B	Mx	.003	4.5
82	MP4C	X	-9.616	.5
83	MP4C	Z	-5.552	.5
84	MP4C	Mx	-.005	.5
85	MP4C	X	-9.616	4.5
86	MP4C	Z	-5.552	4.5
87	MP4C	Mx	-.005	4.5
88	MP2A	X	-13.067	1.75
89	MP2A	Z	-7.544	1.75
90	MP2A	Mx	.007	1.75
91	MP2B	X	-14.35	1.75
92	MP2B	Z	-8.285	1.75
93	MP2B	Mx	-.01	1.75
94	MP2C	X	-10.655	1.75
95	MP2C	Z	-6.151	1.75
96	MP2C	Mx	.001	1.75
97	MP2A	X	-12.386	1.75
98	MP2A	Z	-7.151	1.75
99	MP2A	Mx	-.007	1.75
100	MP2B	X	-14.157	1.75
101	MP2B	Z	-8.174	1.75
102	MP2B	Mx	.01	1.75
103	MP2C	X	-9.058	1.75
104	MP2C	Z	-5.229	1.75
105	MP2C	Mx	-.001	1.75
106	OVP2	X	-15.691	.5
107	OVP2	Z	-9.059	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-15.691	.5
110	OVP1	Z	-9.059	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-7.726	.25
113	MP2B	Z	-4.461	.25
114	MP2B	Mx	-.002	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-3.182	9
2	M49	Z	-5.511	9
3	M49	Mx	-.000812	9
4	M49	X	-3.182	9
5	M49	Z	-5.511	9
6	M49	Mx	.000812	9
7	MP1A	X	-7.154	5
8	MP1A	Z	-12.392	5
9	MP1A	Mx	-.001	5
10	MP1B	X	-5.395	5
11	MP1B	Z	-9.344	5
12	MP1B	Mx	-.004	5
13	MP1C	X	-4.459	5
14	MP1C	Z	-7.723	5
15	MP1C	Mx	.004	5
16	MP1A	X	-9.751	.5
17	MP1A	Z	-16.89	.5
18	MP1A	Mx	.002	.5
19	MP1A	X	-9.751	2.5
20	MP1A	Z	-16.89	2.5
21	MP1A	Mx	.002	2.5
22	MP1B	X	-6.677	.5
23	MP1B	Z	-11.564	.5
24	MP1B	Mx	.005	.5
25	MP1B	X	-6.677	2.5
26	MP1B	Z	-11.564	2.5
27	MP1B	Mx	.005	2.5
28	MP1C	X	-5.04	.5
29	MP1C	Z	-8.73	.5
30	MP1C	Mx	-.005	.5
31	MP1C	X	-5.04	2.5
32	MP1C	Z	-8.73	2.5
33	MP1C	Mx	-.005	2.5
34	MP2A	X	-16.507	.5
35	MP2A	Z	-28.592	.5
36	MP2A	Mx	.022	.5
37	MP2A	X	-16.507	4.5
38	MP2A	Z	-28.592	4.5
39	MP2A	Mx	.022	4.5
40	MP2B	X	-13.748	.5
41	MP2B	Z	-23.812	.5
42	MP2B	Mx	.000222	.5
43	MP2B	X	-13.748	4.5
44	MP2B	Z	-23.812	4.5
45	MP2B	Mx	.000222	4.5
46	MP2C	X	-12.279	.5
47	MP2C	Z	-21.268	.5
48	MP2C	Mx	-.016	.5
49	MP2C	X	-12.279	4.5
50	MP2C	Z	-21.268	4.5
51	MP2C	Mx	-.016	4.5
52	MP2A	X	-16.507	.5
53	MP2A	Z	-28.592	.5
54	MP2A	Mx	-.016	.5
55	MP2A	X	-16.507	4.5
56	MP2A	Z	-28.592	4.5
57	MP2A	Mx	-.016	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-13.748	.5
59	MP2B	Z	-23.812	.5
60	MP2B	Mx	.021	.5
61	MP2B	X	-13.748	4.5
62	MP2B	Z	-23.812	4.5
63	MP2B	Mx	.021	4.5
64	MP2C	X	-12.279	.5
65	MP2C	Z	-21.268	.5
66	MP2C	Mx	-.007	.5
67	MP2C	X	-12.279	4.5
68	MP2C	Z	-21.268	4.5
69	MP2C	Mx	-.007	4.5
70	MP4A	X	-9.833	.5
71	MP4A	Z	-17.03	.5
72	MP4A	Mx	.002	.5
73	MP4A	X	-9.833	4.5
74	MP4A	Z	-17.03	4.5
75	MP4A	Mx	.002	4.5
76	MP4B	X	-7.297	.5
77	MP4B	Z	-12.638	.5
78	MP4B	Mx	.006	.5
79	MP4B	X	-7.297	4.5
80	MP4B	Z	-12.638	4.5
81	MP4B	Mx	.006	4.5
82	MP4C	X	-5.947	.5
83	MP4C	Z	-10.301	.5
84	MP4C	Mx	-.006	.5
85	MP4C	X	-5.947	4.5
86	MP4C	Z	-10.301	4.5
87	MP4C	Mx	-.006	4.5
88	MP2A	X	-8.502	1.75
89	MP2A	Z	-14.726	1.75
90	MP2A	Mx	.01	1.75
91	MP2B	X	-7.11	1.75
92	MP2B	Z	-12.314	1.75
93	MP2B	Mx	-.006	1.75
94	MP2C	X	-6.369	1.75
95	MP2C	Z	-11.031	1.75
96	MP2C	Mx	-.003	1.75
97	MP2A	X	-8.474	1.75
98	MP2A	Z	-14.677	1.75
99	MP2A	Mx	-.01	1.75
100	MP2B	X	-6.552	1.75
101	MP2B	Z	-11.348	1.75
102	MP2B	Mx	.005	1.75
103	MP2C	X	-5.529	1.75
104	MP2C	Z	-9.577	1.75
105	MP2C	Mx	.002	1.75
106	OVP2	X	-7.751	.5
107	OVP2	Z	-13.424	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-7.751	.5
110	OVP1	Z	-13.424	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-3.88	.25
113	MP2B	Z	-6.72	.25
114	MP2B	Mx	-.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	0	9
2	M49	Z	-.793	9
3	M49	Mx	-.00013	9
4	M49	X	0	9
5	M49	Z	-.793	9
6	M49	Mx	.00013	9
7	MP1A	X	0	5
8	MP1A	Z	-3.664	5
9	MP1A	Mx	.000627	5
10	MP1B	X	0	5
11	MP1B	Z	-1.981	5
12	MP1B	Mx	-.000975	5
13	MP1C	X	0	5
14	MP1C	Z	-3.08	5
15	MP1C	Mx	.00099	5
16	MP1A	X	0	.5
17	MP1A	Z	-5.557	.5
18	MP1A	Mx	-.00095	.5
19	MP1A	X	0	2.5
20	MP1A	Z	-5.557	2.5
21	MP1A	Mx	-.00095	2.5
22	MP1B	X	0	.5
23	MP1B	Z	-2.452	.5
24	MP1B	Mx	.001	.5
25	MP1B	X	0	2.5
26	MP1B	Z	-2.452	2.5
27	MP1B	Mx	.001	2.5
28	MP1C	X	0	.5
29	MP1C	Z	-4.479	.5
30	MP1C	Mx	-.001	.5
31	MP1C	X	0	2.5
32	MP1C	Z	-4.479	2.5
33	MP1C	Mx	-.001	2.5
34	MP2A	X	0	.5
35	MP2A	Z	-6.547	.5
36	MP2A	Mx	.002	.5
37	MP2A	X	0	4.5
38	MP2A	Z	-6.547	4.5
39	MP2A	Mx	.002	4.5
40	MP2B	X	0	.5
41	MP2B	Z	-3.137	.5
42	MP2B	Mx	.001	.5
43	MP2B	X	0	4.5
44	MP2B	Z	-3.137	4.5
45	MP2B	Mx	.001	4.5
46	MP2C	X	0	.5
47	MP2C	Z	-5.363	.5
48	MP2C	Mx	-.004	.5
49	MP2C	X	0	4.5
50	MP2C	Z	-5.363	4.5
51	MP2C	Mx	-.004	4.5
52	MP2A	X	0	.5
53	MP2A	Z	-6.547	.5
54	MP2A	Mx	-.005	.5
55	MP2A	X	0	4.5
56	MP2A	Z	-6.547	4.5
57	MP2A	Mx	-.005	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	0	.5
59	MP2B	Z	-3.137	.5
60	MP2B	Mx	.002	.5
61	MP2B	X	0	4.5
62	MP2B	Z	-3.137	4.5
63	MP2B	Mx	.002	4.5
64	MP2C	X	0	.5
65	MP2C	Z	-5.363	.5
66	MP2C	Mx	.000673	.5
67	MP2C	X	0	4.5
68	MP2C	Z	-5.363	4.5
69	MP2C	Mx	.000673	4.5
70	MP4A	X	0	.5
71	MP4A	Z	-5.64	.5
72	MP4A	Mx	-.000964	.5
73	MP4A	X	0	4.5
74	MP4A	Z	-5.64	4.5
75	MP4A	Mx	-.000964	4.5
76	MP4B	X	0	.5
77	MP4B	Z	-2.957	.5
78	MP4B	Mx	.001	.5
79	MP4B	X	0	4.5
80	MP4B	Z	-2.957	4.5
81	MP4B	Mx	.001	4.5
82	MP4C	X	0	.5
83	MP4C	Z	-4.708	.5
84	MP4C	Mx	-.002	.5
85	MP4C	X	0	4.5
86	MP4C	Z	-4.708	4.5
87	MP4C	Mx	-.002	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	-3.794	1.75
90	MP2A	Mx	.002	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	-2.687	1.75
93	MP2B	Mx	-.000292	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	-3.41	1.75
96	MP2C	Mx	-.002	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	-3.738	1.75
99	MP2A	Mx	-.002	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	-2.218	1.75
102	MP2B	Mx	.000241	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	-3.21	1.75
105	MP2C	Mx	.002	1.75
106	OVP2	X	0	.5
107	OVP2	Z	-4.394	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	-4.394	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	-1.558	.25
114	MP2B	Mx	-.000767	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	.47	9
2	M49	Z	-.814	9
3	M49	Mx	-.000147	9
4	M49	X	.47	9
5	M49	Z	-.814	9
6	M49	Mx	.000147	9
7	MP1A	X	1.369	5
8	MP1A	Z	-2.37	5
9	MP1A	Mx	.001	5
10	MP1B	X	1.076	5
11	MP1B	Z	-1.864	5
12	MP1B	Mx	-.001	5
13	MP1C	X	1.918	5
14	MP1C	Z	-3.322	5
15	MP1C	Mx	.000333	5
16	MP1A	X	1.923	.5
17	MP1A	Z	-3.331	.5
18	MP1A	Mx	-.001	.5
19	MP1A	X	1.923	2.5
20	MP1A	Z	-3.331	2.5
21	MP1A	Mx	-.001	2.5
22	MP1B	X	1.384	.5
23	MP1B	Z	-2.397	.5
24	MP1B	Mx	.001	.5
25	MP1B	X	1.384	2.5
26	MP1B	Z	-2.397	2.5
27	MP1B	Mx	.001	2.5
28	MP1C	X	2.937	.5
29	MP1C	Z	-5.086	.5
30	MP1C	Mx	-.00051	.5
31	MP1C	X	2.937	2.5
32	MP1C	Z	-5.086	2.5
33	MP1C	Mx	-.00051	2.5
34	MP2A	X	2.334	.5
35	MP2A	Z	-4.043	.5
36	MP2A	Mx	-3.7e-5	.5
37	MP2A	X	2.334	4.5
38	MP2A	Z	-4.043	4.5
39	MP2A	Mx	-3.7e-5	4.5
40	MP2B	X	1.742	.5
41	MP2B	Z	-3.018	.5
42	MP2B	Mx	.002	.5
43	MP2B	X	1.742	4.5
44	MP2B	Z	-3.018	4.5
45	MP2B	Mx	.002	4.5
46	MP2C	X	3.447	.5
47	MP2C	Z	-5.97	.5
48	MP2C	Mx	-.005	.5
49	MP2C	X	3.447	4.5
50	MP2C	Z	-5.97	4.5
51	MP2C	Mx	-.005	4.5
52	MP2A	X	2.334	.5
53	MP2A	Z	-4.043	.5
54	MP2A	Mx	-.004	.5
55	MP2A	X	2.334	4.5
56	MP2A	Z	-4.043	4.5
57	MP2A	Mx	-.004	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	1.742	.5
59	MP2B	Z	-3.018	.5
60	MP2B	Mx	.000942	.5
61	MP2B	X	1.742	4.5
62	MP2B	Z	-3.018	4.5
63	MP2B	Mx	.000942	4.5
64	MP2C	X	3.447	.5
65	MP2C	Z	-5.97	.5
66	MP2C	Mx	.003	.5
67	MP2C	X	3.447	4.5
68	MP2C	Z	-5.97	4.5
69	MP2C	Mx	.003	4.5
70	MP4A	X	2.081	.5
71	MP4A	Z	-3.604	.5
72	MP4A	Mx	-.002	.5
73	MP4A	X	2.081	4.5
74	MP4A	Z	-3.604	4.5
75	MP4A	Mx	-.002	4.5
76	MP4B	X	1.615	.5
77	MP4B	Z	-2.797	.5
78	MP4B	Mx	.002	.5
79	MP4B	X	1.615	4.5
80	MP4B	Z	-2.797	4.5
81	MP4B	Mx	.002	4.5
82	MP4C	X	2.957	.5
83	MP4C	Z	-5.121	.5
84	MP4C	Mx	-.000513	.5
85	MP4C	X	2.957	4.5
86	MP4C	Z	-5.121	4.5
87	MP4C	Mx	-.000513	4.5
88	MP2A	X	1.592	1.75
89	MP2A	Z	-2.758	1.75
90	MP2A	Mx	.001	1.75
91	MP2B	X	1.4	1.75
92	MP2B	Z	-2.425	1.75
93	MP2B	Mx	.000599	1.75
94	MP2C	X	1.954	1.75
95	MP2C	Z	-3.384	1.75
96	MP2C	Mx	-.002	1.75
97	MP2A	X	1.45	1.75
98	MP2A	Z	-2.512	1.75
99	MP2A	Mx	-.001	1.75
100	MP2B	X	1.186	1.75
101	MP2B	Z	-2.055	1.75
102	MP2B	Mx	-.000507	1.75
103	MP2C	X	1.946	1.75
104	MP2C	Z	-3.371	1.75
105	MP2C	Mx	.002	1.75
106	OVP2	X	2.721	.5
107	OVP2	Z	-4.714	.5
108	OVP2	Mx	0	.5
109	OVP1	X	2.721	.5
110	OVP1	Z	-4.714	.5
111	OVP1	Mx	0	.5
112	MP2B	X	.823	.25
113	MP2B	Z	-1.426	.25
114	MP2B	Mx	-.000774	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	1.507	9
2	M49	Z	- .87	9
3	M49	Mx	-.000186	9
4	M49	X	1.507	9
5	M49	Z	- .87	9
6	M49	Mx	.000186	9
7	MP1A	X	1.716	5
8	MP1A	Z	- .991	5
9	MP1A	Mx	.000976	5
10	MP1B	X	2.667	5
11	MP1B	Z	-1.54	5
12	MP1B	Mx	-.00099	5
13	MP1C	X	3.173	5
14	MP1C	Z	-1.832	5
15	MP1C	Mx	-.000627	5
16	MP1A	X	2.124	.5
17	MP1A	Z	-1.226	.5
18	MP1A	Mx	-.001	.5
19	MP1A	X	2.124	2.5
20	MP1A	Z	-1.226	2.5
21	MP1A	Mx	-.001	2.5
22	MP1B	X	3.879	.5
23	MP1B	Z	-2.239	.5
24	MP1B	Mx	.001	.5
25	MP1B	X	3.879	2.5
26	MP1B	Z	-2.239	2.5
27	MP1B	Mx	.001	2.5
28	MP1C	X	4.813	.5
29	MP1C	Z	-2.779	.5
30	MP1C	Mx	.00095	.5
31	MP1C	X	4.813	2.5
32	MP1C	Z	-2.779	2.5
33	MP1C	Mx	.00095	2.5
34	MP2A	X	2.717	.5
35	MP2A	Z	-1.569	.5
36	MP2A	Mx	-.001	.5
37	MP2A	X	2.717	4.5
38	MP2A	Z	-1.569	4.5
39	MP2A	Mx	-.001	4.5
40	MP2B	X	4.644	.5
41	MP2B	Z	-2.681	.5
42	MP2B	Mx	.004	.5
43	MP2B	X	4.644	4.5
44	MP2B	Z	-2.681	4.5
45	MP2B	Mx	.004	4.5
46	MP2C	X	5.669	.5
47	MP2C	Z	-3.273	.5
48	MP2C	Mx	-.002	.5
49	MP2C	X	5.669	4.5
50	MP2C	Z	-3.273	4.5
51	MP2C	Mx	-.002	4.5
52	MP2A	X	2.717	.5
53	MP2A	Z	-1.569	.5
54	MP2A	Mx	-.002	.5
55	MP2A	X	2.717	4.5
56	MP2A	Z	-1.569	4.5
57	MP2A	Mx	-.002	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	4.644	.5
59	MP2B	Z	-2.681	.5
60	MP2B	Mx	-.000673	.5
61	MP2B	X	4.644	4.5
62	MP2B	Z	-2.681	4.5
63	MP2B	Mx	-.000673	4.5
64	MP2C	X	5.669	.5
65	MP2C	Z	-3.273	.5
66	MP2C	Mx	.005	.5
67	MP2C	X	5.669	4.5
68	MP2C	Z	-3.273	4.5
69	MP2C	Mx	.005	4.5
70	MP4A	X	2.561	.5
71	MP4A	Z	-1.478	.5
72	MP4A	Mx	-.001	.5
73	MP4A	X	2.561	4.5
74	MP4A	Z	-1.478	4.5
75	MP4A	Mx	-.001	4.5
76	MP4B	X	4.078	.5
77	MP4B	Z	-2.354	.5
78	MP4B	Mx	.002	.5
79	MP4B	X	4.078	4.5
80	MP4B	Z	-2.354	4.5
81	MP4B	Mx	.002	4.5
82	MP4C	X	4.885	.5
83	MP4C	Z	-2.82	.5
84	MP4C	Mx	.000965	.5
85	MP4C	X	4.885	4.5
86	MP4C	Z	-2.82	4.5
87	MP4C	Mx	.000965	4.5
88	MP2A	X	2.327	1.75
89	MP2A	Z	-1.343	1.75
90	MP2A	Mx	.000291	1.75
91	MP2B	X	2.953	1.75
92	MP2B	Z	-1.705	1.75
93	MP2B	Mx	.002	1.75
94	MP2C	X	3.286	1.75
95	MP2C	Z	-1.897	1.75
96	MP2C	Mx	-.002	1.75
97	MP2A	X	1.921	1.75
98	MP2A	Z	-1.109	1.75
99	MP2A	Mx	-.000241	1.75
100	MP2B	X	2.78	1.75
101	MP2B	Z	-1.605	1.75
102	MP2B	Mx	-.002	1.75
103	MP2C	X	3.237	1.75
104	MP2C	Z	-1.869	1.75
105	MP2C	Mx	.002	1.75
106	OVP2	X	5.454	.5
107	OVP2	Z	-3.149	.5
108	OVP2	Mx	0	.5
109	OVP1	X	5.454	.5
110	OVP1	Z	-3.149	.5
111	OVP1	Mx	0	.5
112	MP2B	X	1.84	.25
113	MP2B	Z	-1.063	.25
114	MP2B	Mx	-.000683	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	2.393	9
2	M49	Z	0	9
3	M49	Mx	-6.9e-5	9
4	M49	X	2.393	9
5	M49	Z	0	9
6	M49	Mx	6.9e-5	9
7	MP1A	X	2.152	5
8	MP1A	Z	0	5
9	MP1A	Mx	.001	5
10	MP1B	X	3.836	5
11	MP1B	Z	0	5
12	MP1B	Mx	-.000333	5
13	MP1C	X	2.737	5
14	MP1C	Z	0	5
15	MP1C	Mx	-.001	5
16	MP1A	X	2.768	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	-.001	.5
19	MP1A	X	2.768	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.001	2.5
22	MP1B	X	5.873	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	.00051	.5
25	MP1B	X	5.873	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	.00051	2.5
28	MP1C	X	3.847	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	.001	.5
31	MP1C	X	3.847	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	.001	2.5
34	MP2A	X	3.485	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	-.002	.5
37	MP2A	X	3.485	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	-.002	4.5
40	MP2B	X	6.894	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	.005	.5
43	MP2B	X	6.894	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	.005	4.5
46	MP2C	X	4.668	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	3.8e-5	.5
49	MP2C	X	4.668	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	3.8e-5	4.5
52	MP2A	X	3.485	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	-.000942	.5
55	MP2A	X	3.485	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	-.000942	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	6.894	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	-.003	.5
61	MP2B	X	6.894	4.5
62	MP2B	Z	0	4.5
63	MP2B	Mx	-.003	4.5
64	MP2C	X	4.668	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	.004	.5
67	MP2C	X	4.668	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	.004	4.5
70	MP4A	X	3.23	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	-.002	.5
73	MP4A	X	3.23	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	-.002	4.5
76	MP4B	X	5.914	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	.000513	.5
79	MP4B	X	5.914	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	.000513	4.5
82	MP4C	X	4.162	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	.002	.5
85	MP4C	X	4.162	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	.002	4.5
88	MP2A	X	2.8	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	-.000599	1.75
91	MP2B	X	3.907	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	.002	1.75
94	MP2C	X	3.184	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	-.001	1.75
97	MP2A	X	2.373	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	.000507	1.75
100	MP2B	X	3.892	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	-.002	1.75
103	MP2C	X	2.9	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	.001	1.75
106	OVP2	X	6.104	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	6.104	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	2.515	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	-.000218	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	1.944	9
2	M49	Z	1.122	9
3	M49	Mx	.000128	9
4	M49	X	1.944	9
5	M49	Z	1.122	9
6	M49	Mx	-.000128	9
7	MP1A	X	2.667	5
8	MP1A	Z	1.54	5
9	MP1A	Mx	.00099	5
10	MP1B	X	3.173	5
11	MP1B	Z	1.832	5
12	MP1B	Mx	.000627	5
13	MP1C	X	1.716	5
14	MP1C	Z	.991	5
15	MP1C	Mx	-.000976	5
16	MP1A	X	3.879	.5
17	MP1A	Z	2.239	.5
18	MP1A	Mx	-.001	.5
19	MP1A	X	3.879	2.5
20	MP1A	Z	2.239	2.5
21	MP1A	Mx	-.001	2.5
22	MP1B	X	4.813	.5
23	MP1B	Z	2.779	.5
24	MP1B	Mx	-.000951	.5
25	MP1B	X	4.813	2.5
26	MP1B	Z	2.779	2.5
27	MP1B	Mx	-.000951	2.5
28	MP1C	X	2.124	.5
29	MP1C	Z	1.226	.5
30	MP1C	Mx	.001	.5
31	MP1C	X	2.124	2.5
32	MP1C	Z	1.226	2.5
33	MP1C	Mx	.001	2.5
34	MP2A	X	4.644	.5
35	MP2A	Z	2.681	.5
36	MP2A	Mx	-.004	.5
37	MP2A	X	4.644	4.5
38	MP2A	Z	2.681	4.5
39	MP2A	Mx	-.004	4.5
40	MP2B	X	5.669	.5
41	MP2B	Z	3.273	.5
42	MP2B	Mx	.002	.5
43	MP2B	X	5.669	4.5
44	MP2B	Z	3.273	4.5
45	MP2B	Mx	.002	4.5
46	MP2C	X	2.717	.5
47	MP2C	Z	1.569	.5
48	MP2C	Mx	.001	.5
49	MP2C	X	2.717	4.5
50	MP2C	Z	1.569	4.5
51	MP2C	Mx	.001	4.5
52	MP2A	X	4.644	.5
53	MP2A	Z	2.681	.5
54	MP2A	Mx	.000673	.5
55	MP2A	X	4.644	4.5
56	MP2A	Z	2.681	4.5
57	MP2A	Mx	.000673	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	5.669	.5
59	MP2B	Z	3.273	.5
60	MP2B	Mx	-.005	.5
61	MP2B	X	5.669	4.5
62	MP2B	Z	3.273	4.5
63	MP2B	Mx	-.005	4.5
64	MP2C	X	2.717	.5
65	MP2C	Z	1.569	.5
66	MP2C	Mx	.002	.5
67	MP2C	X	2.717	4.5
68	MP2C	Z	1.569	4.5
69	MP2C	Mx	.002	4.5
70	MP4A	X	4.078	.5
71	MP4A	Z	2.354	.5
72	MP4A	Mx	-.002	.5
73	MP4A	X	4.078	4.5
74	MP4A	Z	2.354	4.5
75	MP4A	Mx	-.002	4.5
76	MP4B	X	4.885	.5
77	MP4B	Z	2.82	.5
78	MP4B	Mx	-.000964	.5
79	MP4B	X	4.885	4.5
80	MP4B	Z	2.82	4.5
81	MP4B	Mx	-.000964	4.5
82	MP4C	X	2.561	.5
83	MP4C	Z	1.478	.5
84	MP4C	Mx	.001	.5
85	MP4C	X	2.561	4.5
86	MP4C	Z	1.478	4.5
87	MP4C	Mx	.001	4.5
88	MP2A	X	2.953	1.75
89	MP2A	Z	1.705	1.75
90	MP2A	Mx	-.002	1.75
91	MP2B	X	3.286	1.75
92	MP2B	Z	1.897	1.75
93	MP2B	Mx	.002	1.75
94	MP2C	X	2.327	1.75
95	MP2C	Z	1.343	1.75
96	MP2C	Mx	-.000292	1.75
97	MP2A	X	2.78	1.75
98	MP2A	Z	1.605	1.75
99	MP2A	Mx	.002	1.75
100	MP2B	X	3.237	1.75
101	MP2B	Z	1.869	1.75
102	MP2B	Mx	-.002	1.75
103	MP2C	X	1.921	1.75
104	MP2C	Z	1.109	1.75
105	MP2C	Mx	.000241	1.75
106	OVP2	X	4.378	.5
107	OVP2	Z	2.528	.5
108	OVP2	Mx	0	.5
109	OVP1	X	4.378	.5
110	OVP1	Z	2.528	.5
111	OVP1	Mx	0	.5
112	MP2B	X	2.102	.25
113	MP2B	Z	1.213	.25
114	MP2B	Mx	.000415	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	.722	9
2	M49	Z	1.251	9
3	M49	Mx	.000184	9
4	M49	X	.722	9
5	M49	Z	1.251	9
6	M49	Mx	-.000184	9
7	MP1A	X	1.918	5
8	MP1A	Z	3.322	5
9	MP1A	Mx	.000333	5
10	MP1B	X	1.369	5
11	MP1B	Z	2.37	5
12	MP1B	Mx	.001	5
13	MP1C	X	1.076	5
14	MP1C	Z	1.864	5
15	MP1C	Mx	-.001	5
16	MP1A	X	2.937	.5
17	MP1A	Z	5.086	.5
18	MP1A	Mx	-.00051	.5
19	MP1A	X	2.937	2.5
20	MP1A	Z	5.086	2.5
21	MP1A	Mx	-.00051	2.5
22	MP1B	X	1.923	.5
23	MP1B	Z	3.331	.5
24	MP1B	Mx	-.001	.5
25	MP1B	X	1.923	2.5
26	MP1B	Z	3.331	2.5
27	MP1B	Mx	-.001	2.5
28	MP1C	X	1.384	.5
29	MP1C	Z	2.397	.5
30	MP1C	Mx	.001	.5
31	MP1C	X	1.384	2.5
32	MP1C	Z	2.397	2.5
33	MP1C	Mx	.001	2.5
34	MP2A	X	3.447	.5
35	MP2A	Z	5.97	.5
36	MP2A	Mx	-.005	.5
37	MP2A	X	3.447	4.5
38	MP2A	Z	5.97	4.5
39	MP2A	Mx	-.005	4.5
40	MP2B	X	2.334	.5
41	MP2B	Z	4.043	.5
42	MP2B	Mx	-3.8e-5	.5
43	MP2B	X	2.334	4.5
44	MP2B	Z	4.043	4.5
45	MP2B	Mx	-3.8e-5	4.5
46	MP2C	X	1.742	.5
47	MP2C	Z	3.018	.5
48	MP2C	Mx	.002	.5
49	MP2C	X	1.742	4.5
50	MP2C	Z	3.018	4.5
51	MP2C	Mx	.002	4.5
52	MP2A	X	3.447	.5
53	MP2A	Z	5.97	.5
54	MP2A	Mx	.003	.5
55	MP2A	X	3.447	4.5
56	MP2A	Z	5.97	4.5
57	MP2A	Mx	.003	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	2.334	.5
59	MP2B	Z	4.043	.5
60	MP2B	Mx	-.004	.5
61	MP2B	X	2.334	4.5
62	MP2B	Z	4.043	4.5
63	MP2B	Mx	-.004	4.5
64	MP2C	X	1.742	.5
65	MP2C	Z	3.018	.5
66	MP2C	Mx	.000942	.5
67	MP2C	X	1.742	4.5
68	MP2C	Z	3.018	4.5
69	MP2C	Mx	.000942	4.5
70	MP4A	X	2.957	.5
71	MP4A	Z	5.121	.5
72	MP4A	Mx	-.000514	.5
73	MP4A	X	2.957	4.5
74	MP4A	Z	5.121	4.5
75	MP4A	Mx	-.000514	4.5
76	MP4B	X	2.081	.5
77	MP4B	Z	3.604	.5
78	MP4B	Mx	-.002	.5
79	MP4B	X	2.081	4.5
80	MP4B	Z	3.604	4.5
81	MP4B	Mx	-.002	4.5
82	MP4C	X	1.615	.5
83	MP4C	Z	2.797	.5
84	MP4C	Mx	.002	.5
85	MP4C	X	1.615	4.5
86	MP4C	Z	2.797	4.5
87	MP4C	Mx	.002	4.5
88	MP2A	X	1.954	1.75
89	MP2A	Z	3.384	1.75
90	MP2A	Mx	-.002	1.75
91	MP2B	X	1.592	1.75
92	MP2B	Z	2.758	1.75
93	MP2B	Mx	.001	1.75
94	MP2C	X	1.4	1.75
95	MP2C	Z	2.425	1.75
96	MP2C	Mx	.000599	1.75
97	MP2A	X	1.946	1.75
98	MP2A	Z	3.371	1.75
99	MP2A	Mx	.002	1.75
100	MP2B	X	1.45	1.75
101	MP2B	Z	2.512	1.75
102	MP2B	Mx	-.001	1.75
103	MP2C	X	1.186	1.75
104	MP2C	Z	2.055	1.75
105	MP2C	Mx	-.000507	1.75
106	OVP2	X	2.1	.5
107	OVP2	Z	3.638	.5
108	OVP2	Mx	0	.5
109	OVP1	X	2.1	.5
110	OVP1	Z	3.638	.5
111	OVP1	Mx	0	.5
112	MP2B	X	.974	.25
113	MP2B	Z	1.687	.25
114	MP2B	Mx	.000746	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	0	9
2	M49	Z	.793	9
3	M49	Mx	.00013	9
4	M49	X	0	9
5	M49	Z	.793	9
6	M49	Mx	-.00013	9
7	MP1A	X	0	5
8	MP1A	Z	3.664	5
9	MP1A	Mx	-.000627	5
10	MP1B	X	0	5
11	MP1B	Z	1.981	5
12	MP1B	Mx	.000975	5
13	MP1C	X	0	5
14	MP1C	Z	3.08	5
15	MP1C	Mx	-.00099	5
16	MP1A	X	0	.5
17	MP1A	Z	5.557	.5
18	MP1A	Mx	.00095	.5
19	MP1A	X	0	2.5
20	MP1A	Z	5.557	2.5
21	MP1A	Mx	.00095	2.5
22	MP1B	X	0	.5
23	MP1B	Z	2.452	.5
24	MP1B	Mx	-.001	.5
25	MP1B	X	0	2.5
26	MP1B	Z	2.452	2.5
27	MP1B	Mx	-.001	2.5
28	MP1C	X	0	.5
29	MP1C	Z	4.479	.5
30	MP1C	Mx	.001	.5
31	MP1C	X	0	2.5
32	MP1C	Z	4.479	2.5
33	MP1C	Mx	.001	2.5
34	MP2A	X	0	.5
35	MP2A	Z	6.547	.5
36	MP2A	Mx	-.002	.5
37	MP2A	X	0	4.5
38	MP2A	Z	6.547	4.5
39	MP2A	Mx	-.002	4.5
40	MP2B	X	0	.5
41	MP2B	Z	3.137	.5
42	MP2B	Mx	-.001	.5
43	MP2B	X	0	4.5
44	MP2B	Z	3.137	4.5
45	MP2B	Mx	-.001	4.5
46	MP2C	X	0	.5
47	MP2C	Z	5.363	.5
48	MP2C	Mx	.004	.5
49	MP2C	X	0	4.5
50	MP2C	Z	5.363	4.5
51	MP2C	Mx	.004	4.5
52	MP2A	X	0	.5
53	MP2A	Z	6.547	.5
54	MP2A	Mx	.005	.5
55	MP2A	X	0	4.5
56	MP2A	Z	6.547	4.5
57	MP2A	Mx	.005	4.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP2B	X	0	.5
59	MP2B	Z	3.137	.5
60	MP2B	Mx	-.002	.5
61	MP2B	X	0	4.5
62	MP2B	Z	3.137	4.5
63	MP2B	Mx	-.002	4.5
64	MP2C	X	0	.5
65	MP2C	Z	5.363	.5
66	MP2C	Mx	-.000673	.5
67	MP2C	X	0	4.5
68	MP2C	Z	5.363	4.5
69	MP2C	Mx	-.000673	4.5
70	MP4A	X	0	.5
71	MP4A	Z	5.64	.5
72	MP4A	Mx	.000964	.5
73	MP4A	X	0	4.5
74	MP4A	Z	5.64	4.5
75	MP4A	Mx	.000964	4.5
76	MP4B	X	0	.5
77	MP4B	Z	2.957	.5
78	MP4B	Mx	-.001	.5
79	MP4B	X	0	4.5
80	MP4B	Z	2.957	4.5
81	MP4B	Mx	-.001	4.5
82	MP4C	X	0	.5
83	MP4C	Z	4.708	.5
84	MP4C	Mx	.002	.5
85	MP4C	X	0	4.5
86	MP4C	Z	4.708	4.5
87	MP4C	Mx	.002	4.5
88	MP2A	X	0	1.75
89	MP2A	Z	3.794	1.75
90	MP2A	Mx	-.002	1.75
91	MP2B	X	0	1.75
92	MP2B	Z	2.687	1.75
93	MP2B	Mx	.000292	1.75
94	MP2C	X	0	1.75
95	MP2C	Z	3.41	1.75
96	MP2C	Mx	.002	1.75
97	MP2A	X	0	1.75
98	MP2A	Z	3.738	1.75
99	MP2A	Mx	.002	1.75
100	MP2B	X	0	1.75
101	MP2B	Z	2.218	1.75
102	MP2B	Mx	-.000241	1.75
103	MP2C	X	0	1.75
104	MP2C	Z	3.21	1.75
105	MP2C	Mx	-.002	1.75
106	OVP2	X	0	.5
107	OVP2	Z	4.394	.5
108	OVP2	Mx	0	.5
109	OVP1	X	0	.5
110	OVP1	Z	4.394	.5
111	OVP1	Mx	0	.5
112	MP2B	X	0	.25
113	MP2B	Z	1.558	.25
114	MP2B	Mx	.000767	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-47	9
2	M49	Z	.814	9
3	M49	Mx	.000147	9
4	M49	X	-47	9
5	M49	Z	.814	9
6	M49	Mx	-.000147	9
7	MP1A	X	-1.369	5
8	MP1A	Z	2.37	5
9	MP1A	Mx	-.001	5
10	MP1B	X	-1.076	5
11	MP1B	Z	1.864	5
12	MP1B	Mx	.001	5
13	MP1C	X	-1.918	5
14	MP1C	Z	3.322	5
15	MP1C	Mx	-.000333	5
16	MP1A	X	-1.923	.5
17	MP1A	Z	3.331	.5
18	MP1A	Mx	.001	.5
19	MP1A	X	-1.923	2.5
20	MP1A	Z	3.331	2.5
21	MP1A	Mx	.001	2.5
22	MP1B	X	-1.384	.5
23	MP1B	Z	2.397	.5
24	MP1B	Mx	-.001	.5
25	MP1B	X	-1.384	2.5
26	MP1B	Z	2.397	2.5
27	MP1B	Mx	-.001	2.5
28	MP1C	X	-2.937	.5
29	MP1C	Z	5.086	.5
30	MP1C	Mx	.00051	.5
31	MP1C	X	-2.937	2.5
32	MP1C	Z	5.086	2.5
33	MP1C	Mx	.00051	2.5
34	MP2A	X	-2.334	.5
35	MP2A	Z	4.043	.5
36	MP2A	Mx	3.7e-5	.5
37	MP2A	X	-2.334	4.5
38	MP2A	Z	4.043	4.5
39	MP2A	Mx	3.7e-5	4.5
40	MP2B	X	-1.742	.5
41	MP2B	Z	3.018	.5
42	MP2B	Mx	-.002	.5
43	MP2B	X	-1.742	4.5
44	MP2B	Z	3.018	4.5
45	MP2B	Mx	-.002	4.5
46	MP2C	X	-3.447	.5
47	MP2C	Z	5.97	.5
48	MP2C	Mx	.005	.5
49	MP2C	X	-3.447	4.5
50	MP2C	Z	5.97	4.5
51	MP2C	Mx	.005	4.5
52	MP2A	X	-2.334	.5
53	MP2A	Z	4.043	.5
54	MP2A	Mx	.004	.5
55	MP2A	X	-2.334	4.5
56	MP2A	Z	4.043	4.5
57	MP2A	Mx	.004	4.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-1.742	.5
59	MP2B	Z	3.018	.5
60	MP2B	Mx	-.000942	.5
61	MP2B	X	-1.742	4.5
62	MP2B	Z	3.018	4.5
63	MP2B	Mx	-.000942	4.5
64	MP2C	X	-3.447	.5
65	MP2C	Z	5.97	.5
66	MP2C	Mx	-.003	.5
67	MP2C	X	-3.447	4.5
68	MP2C	Z	5.97	4.5
69	MP2C	Mx	-.003	4.5
70	MP4A	X	-2.081	.5
71	MP4A	Z	3.604	.5
72	MP4A	Mx	.002	.5
73	MP4A	X	-2.081	4.5
74	MP4A	Z	3.604	4.5
75	MP4A	Mx	.002	4.5
76	MP4B	X	-1.615	.5
77	MP4B	Z	2.797	.5
78	MP4B	Mx	-.002	.5
79	MP4B	X	-1.615	4.5
80	MP4B	Z	2.797	4.5
81	MP4B	Mx	-.002	4.5
82	MP4C	X	-2.957	.5
83	MP4C	Z	5.121	.5
84	MP4C	Mx	.000513	.5
85	MP4C	X	-2.957	4.5
86	MP4C	Z	5.121	4.5
87	MP4C	Mx	.000513	4.5
88	MP2A	X	-1.592	1.75
89	MP2A	Z	2.758	1.75
90	MP2A	Mx	-.001	1.75
91	MP2B	X	-1.4	1.75
92	MP2B	Z	2.425	1.75
93	MP2B	Mx	-.000599	1.75
94	MP2C	X	-1.954	1.75
95	MP2C	Z	3.384	1.75
96	MP2C	Mx	.002	1.75
97	MP2A	X	-1.45	1.75
98	MP2A	Z	2.512	1.75
99	MP2A	Mx	.001	1.75
100	MP2B	X	-1.186	1.75
101	MP2B	Z	2.055	1.75
102	MP2B	Mx	.000507	1.75
103	MP2C	X	-1.946	1.75
104	MP2C	Z	3.371	1.75
105	MP2C	Mx	-.002	1.75
106	OVP2	X	-2.721	.5
107	OVP2	Z	4.714	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-2.721	.5
110	OVP1	Z	4.714	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-.823	.25
113	MP2B	Z	1.426	.25
114	MP2B	Mx	.000774	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	-1.507	9
2	M49	Z	.87	9
3	M49	Mx	.000186	9
4	M49	X	-1.507	9
5	M49	Z	.87	9
6	M49	Mx	-.000186	9
7	MP1A	X	-1.716	5
8	MP1A	Z	.991	5
9	MP1A	Mx	-.000976	5
10	MP1B	X	-2.667	5
11	MP1B	Z	1.54	5
12	MP1B	Mx	.00099	5
13	MP1C	X	-3.173	5
14	MP1C	Z	1.832	5
15	MP1C	Mx	.000627	5
16	MP1A	X	-2.124	.5
17	MP1A	Z	1.226	.5
18	MP1A	Mx	.001	.5
19	MP1A	X	-2.124	2.5
20	MP1A	Z	1.226	2.5
21	MP1A	Mx	.001	2.5
22	MP1B	X	-3.879	.5
23	MP1B	Z	2.239	.5
24	MP1B	Mx	-.001	.5
25	MP1B	X	-3.879	2.5
26	MP1B	Z	2.239	2.5
27	MP1B	Mx	-.001	2.5
28	MP1C	X	-4.813	.5
29	MP1C	Z	2.779	.5
30	MP1C	Mx	-.00095	.5
31	MP1C	X	-4.813	2.5
32	MP1C	Z	2.779	2.5
33	MP1C	Mx	-.00095	2.5
34	MP2A	X	-2.717	.5
35	MP2A	Z	1.569	.5
36	MP2A	Mx	.001	.5
37	MP2A	X	-2.717	4.5
38	MP2A	Z	1.569	4.5
39	MP2A	Mx	.001	4.5
40	MP2B	X	-4.644	.5
41	MP2B	Z	2.681	.5
42	MP2B	Mx	-.004	.5
43	MP2B	X	-4.644	4.5
44	MP2B	Z	2.681	4.5
45	MP2B	Mx	-.004	4.5
46	MP2C	X	-5.669	.5
47	MP2C	Z	3.273	.5
48	MP2C	Mx	.002	.5
49	MP2C	X	-5.669	4.5
50	MP2C	Z	3.273	4.5
51	MP2C	Mx	.002	4.5
52	MP2A	X	-2.717	.5
53	MP2A	Z	1.569	.5
54	MP2A	Mx	.002	.5
55	MP2A	X	-2.717	4.5
56	MP2A	Z	1.569	4.5
57	MP2A	Mx	.002	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-4.644	.5
59	MP2B	Z	2.681	.5
60	MP2B	Mx	.000673	.5
61	MP2B	X	-4.644	4.5
62	MP2B	Z	2.681	4.5
63	MP2B	Mx	.000673	4.5
64	MP2C	X	-5.669	.5
65	MP2C	Z	3.273	.5
66	MP2C	Mx	-.005	.5
67	MP2C	X	-5.669	4.5
68	MP2C	Z	3.273	4.5
69	MP2C	Mx	-.005	4.5
70	MP4A	X	-2.561	.5
71	MP4A	Z	1.478	.5
72	MP4A	Mx	.001	.5
73	MP4A	X	-2.561	4.5
74	MP4A	Z	1.478	4.5
75	MP4A	Mx	.001	4.5
76	MP4B	X	-4.078	.5
77	MP4B	Z	2.354	.5
78	MP4B	Mx	-.002	.5
79	MP4B	X	-4.078	4.5
80	MP4B	Z	2.354	4.5
81	MP4B	Mx	-.002	4.5
82	MP4C	X	-4.885	.5
83	MP4C	Z	2.82	.5
84	MP4C	Mx	-.000965	.5
85	MP4C	X	-4.885	4.5
86	MP4C	Z	2.82	4.5
87	MP4C	Mx	-.000965	4.5
88	MP2A	X	-2.327	1.75
89	MP2A	Z	1.343	1.75
90	MP2A	Mx	-.000291	1.75
91	MP2B	X	-2.953	1.75
92	MP2B	Z	1.705	1.75
93	MP2B	Mx	-.002	1.75
94	MP2C	X	-3.286	1.75
95	MP2C	Z	1.897	1.75
96	MP2C	Mx	.002	1.75
97	MP2A	X	-1.921	1.75
98	MP2A	Z	1.109	1.75
99	MP2A	Mx	.000241	1.75
100	MP2B	X	-2.78	1.75
101	MP2B	Z	1.605	1.75
102	MP2B	Mx	.002	1.75
103	MP2C	X	-3.237	1.75
104	MP2C	Z	1.869	1.75
105	MP2C	Mx	-.002	1.75
106	OVP2	X	-5.454	.5
107	OVP2	Z	3.149	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-5.454	.5
110	OVP1	Z	3.149	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-1.84	.25
113	MP2B	Z	1.063	.25
114	MP2B	Mx	.000683	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-2.393	9
2	M49	Z	0	9
3	M49	Mx	6.9e-5	9
4	M49	X	-2.393	9
5	M49	Z	0	9
6	M49	Mx	-6.9e-5	9
7	MP1A	X	-2.152	5
8	MP1A	Z	0	5
9	MP1A	Mx	-.001	5
10	MP1B	X	-3.836	5
11	MP1B	Z	0	5
12	MP1B	Mx	.000333	5
13	MP1C	X	-2.737	5
14	MP1C	Z	0	5
15	MP1C	Mx	.001	5
16	MP1A	X	-2.768	.5
17	MP1A	Z	0	.5
18	MP1A	Mx	.001	.5
19	MP1A	X	-2.768	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.001	2.5
22	MP1B	X	-5.873	.5
23	MP1B	Z	0	.5
24	MP1B	Mx	-.00051	.5
25	MP1B	X	-5.873	2.5
26	MP1B	Z	0	2.5
27	MP1B	Mx	-.00051	2.5
28	MP1C	X	-3.847	.5
29	MP1C	Z	0	.5
30	MP1C	Mx	-.001	.5
31	MP1C	X	-3.847	2.5
32	MP1C	Z	0	2.5
33	MP1C	Mx	-.001	2.5
34	MP2A	X	-3.485	.5
35	MP2A	Z	0	.5
36	MP2A	Mx	.002	.5
37	MP2A	X	-3.485	4.5
38	MP2A	Z	0	4.5
39	MP2A	Mx	.002	4.5
40	MP2B	X	-6.894	.5
41	MP2B	Z	0	.5
42	MP2B	Mx	-.005	.5
43	MP2B	X	-6.894	4.5
44	MP2B	Z	0	4.5
45	MP2B	Mx	-.005	4.5
46	MP2C	X	-4.668	.5
47	MP2C	Z	0	.5
48	MP2C	Mx	-3.8e-5	.5
49	MP2C	X	-4.668	4.5
50	MP2C	Z	0	4.5
51	MP2C	Mx	-3.8e-5	4.5
52	MP2A	X	-3.485	.5
53	MP2A	Z	0	.5
54	MP2A	Mx	.000942	.5
55	MP2A	X	-3.485	4.5
56	MP2A	Z	0	4.5
57	MP2A	Mx	.000942	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-6.894	.5
59	MP2B	Z	0	.5
60	MP2B	Mx	.003	.5
61	MP2B	X	-6.894	4.5
62	MP2B	Z	0	4.5
63	MP2B	Mx	.003	4.5
64	MP2C	X	-4.668	.5
65	MP2C	Z	0	.5
66	MP2C	Mx	-.004	.5
67	MP2C	X	-4.668	4.5
68	MP2C	Z	0	4.5
69	MP2C	Mx	-.004	4.5
70	MP4A	X	-3.23	.5
71	MP4A	Z	0	.5
72	MP4A	Mx	.002	.5
73	MP4A	X	-3.23	4.5
74	MP4A	Z	0	4.5
75	MP4A	Mx	.002	4.5
76	MP4B	X	-5.914	.5
77	MP4B	Z	0	.5
78	MP4B	Mx	-.000513	.5
79	MP4B	X	-5.914	4.5
80	MP4B	Z	0	4.5
81	MP4B	Mx	-.000513	4.5
82	MP4C	X	-4.162	.5
83	MP4C	Z	0	.5
84	MP4C	Mx	-.002	.5
85	MP4C	X	-4.162	4.5
86	MP4C	Z	0	4.5
87	MP4C	Mx	-.002	4.5
88	MP2A	X	-2.8	1.75
89	MP2A	Z	0	1.75
90	MP2A	Mx	.000599	1.75
91	MP2B	X	-3.907	1.75
92	MP2B	Z	0	1.75
93	MP2B	Mx	-.002	1.75
94	MP2C	X	-3.184	1.75
95	MP2C	Z	0	1.75
96	MP2C	Mx	.001	1.75
97	MP2A	X	-2.373	1.75
98	MP2A	Z	0	1.75
99	MP2A	Mx	-.000507	1.75
100	MP2B	X	-3.892	1.75
101	MP2B	Z	0	1.75
102	MP2B	Mx	.002	1.75
103	MP2C	X	-2.9	1.75
104	MP2C	Z	0	1.75
105	MP2C	Mx	-.001	1.75
106	OVP2	X	-6.104	.5
107	OVP2	Z	0	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-6.104	.5
110	OVP1	Z	0	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-2.515	.25
113	MP2B	Z	0	.25
114	MP2B	Mx	.000218	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	X	-1.944	9
2	M49	Z	-1.122	9
3	M49	Mx	-.000128	9
4	M49	X	-1.944	9
5	M49	Z	-1.122	9
6	M49	Mx	.000128	9
7	MP1A	X	-2.667	5
8	MP1A	Z	-1.54	5
9	MP1A	Mx	-.00099	5
10	MP1B	X	-3.173	5
11	MP1B	Z	-1.832	5
12	MP1B	Mx	-.000627	5
13	MP1C	X	-1.716	5
14	MP1C	Z	-.991	5
15	MP1C	Mx	.000976	5
16	MP1A	X	-3.879	.5
17	MP1A	Z	-2.239	.5
18	MP1A	Mx	.001	.5
19	MP1A	X	-3.879	2.5
20	MP1A	Z	-2.239	2.5
21	MP1A	Mx	.001	2.5
22	MP1B	X	-4.813	.5
23	MP1B	Z	-2.779	.5
24	MP1B	Mx	.000951	.5
25	MP1B	X	-4.813	2.5
26	MP1B	Z	-2.779	2.5
27	MP1B	Mx	.000951	2.5
28	MP1C	X	-2.124	.5
29	MP1C	Z	-1.226	.5
30	MP1C	Mx	-.001	.5
31	MP1C	X	-2.124	2.5
32	MP1C	Z	-1.226	2.5
33	MP1C	Mx	-.001	2.5
34	MP2A	X	-4.644	.5
35	MP2A	Z	-2.681	.5
36	MP2A	Mx	.004	.5
37	MP2A	X	-4.644	4.5
38	MP2A	Z	-2.681	4.5
39	MP2A	Mx	.004	4.5
40	MP2B	X	-5.669	.5
41	MP2B	Z	-3.273	.5
42	MP2B	Mx	-.002	.5
43	MP2B	X	-5.669	4.5
44	MP2B	Z	-3.273	4.5
45	MP2B	Mx	-.002	4.5
46	MP2C	X	-2.717	.5
47	MP2C	Z	-1.569	.5
48	MP2C	Mx	-.001	.5
49	MP2C	X	-2.717	4.5
50	MP2C	Z	-1.569	4.5
51	MP2C	Mx	-.001	4.5
52	MP2A	X	-4.644	.5
53	MP2A	Z	-2.681	.5
54	MP2A	Mx	-.000673	.5
55	MP2A	X	-4.644	4.5
56	MP2A	Z	-2.681	4.5
57	MP2A	Mx	-.000673	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP2B	X	-5.669	.5
59	MP2B	Z	-3.273	.5
60	MP2B	Mx	.005	.5
61	MP2B	X	-5.669	4.5
62	MP2B	Z	-3.273	4.5
63	MP2B	Mx	.005	4.5
64	MP2C	X	-2.717	.5
65	MP2C	Z	-1.569	.5
66	MP2C	Mx	-.002	.5
67	MP2C	X	-2.717	4.5
68	MP2C	Z	-1.569	4.5
69	MP2C	Mx	-.002	4.5
70	MP4A	X	-4.078	.5
71	MP4A	Z	-2.354	.5
72	MP4A	Mx	.002	.5
73	MP4A	X	-4.078	4.5
74	MP4A	Z	-2.354	4.5
75	MP4A	Mx	.002	4.5
76	MP4B	X	-4.885	.5
77	MP4B	Z	-2.82	.5
78	MP4B	Mx	.000964	.5
79	MP4B	X	-4.885	4.5
80	MP4B	Z	-2.82	4.5
81	MP4B	Mx	.000964	4.5
82	MP4C	X	-2.561	.5
83	MP4C	Z	-1.478	.5
84	MP4C	Mx	-.001	.5
85	MP4C	X	-2.561	4.5
86	MP4C	Z	-1.478	4.5
87	MP4C	Mx	-.001	4.5
88	MP2A	X	-2.953	1.75
89	MP2A	Z	-1.705	1.75
90	MP2A	Mx	.002	1.75
91	MP2B	X	-3.286	1.75
92	MP2B	Z	-1.897	1.75
93	MP2B	Mx	-.002	1.75
94	MP2C	X	-2.327	1.75
95	MP2C	Z	-1.343	1.75
96	MP2C	Mx	.000292	1.75
97	MP2A	X	-2.78	1.75
98	MP2A	Z	-1.605	1.75
99	MP2A	Mx	-.002	1.75
100	MP2B	X	-3.237	1.75
101	MP2B	Z	-1.869	1.75
102	MP2B	Mx	.002	1.75
103	MP2C	X	-1.921	1.75
104	MP2C	Z	-1.109	1.75
105	MP2C	Mx	-.000241	1.75
106	OVP2	X	-4.378	.5
107	OVP2	Z	-2.528	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-4.378	.5
110	OVP1	Z	-2.528	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-2.102	.25
113	MP2B	Z	-1.213	.25
114	MP2B	Mx	-.000415	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	- .722	9
2	M49	Z	-1.251	9
3	M49	Mx	-.000184	9
4	M49	X	-.722	9
5	M49	Z	-1.251	9
6	M49	Mx	.000184	9
7	MP1A	X	-1.918	5
8	MP1A	Z	-3.322	5
9	MP1A	Mx	-.000333	5
10	MP1B	X	-1.369	5
11	MP1B	Z	-2.37	5
12	MP1B	Mx	-.001	5
13	MP1C	X	-1.076	5
14	MP1C	Z	-1.864	5
15	MP1C	Mx	.001	5
16	MP1A	X	-2.937	.5
17	MP1A	Z	-5.086	.5
18	MP1A	Mx	.00051	.5
19	MP1A	X	-2.937	2.5
20	MP1A	Z	-5.086	2.5
21	MP1A	Mx	.00051	2.5
22	MP1B	X	-1.923	.5
23	MP1B	Z	-3.331	.5
24	MP1B	Mx	.001	.5
25	MP1B	X	-1.923	2.5
26	MP1B	Z	-3.331	2.5
27	MP1B	Mx	.001	2.5
28	MP1C	X	-1.384	.5
29	MP1C	Z	-2.397	.5
30	MP1C	Mx	-.001	.5
31	MP1C	X	-1.384	2.5
32	MP1C	Z	-2.397	2.5
33	MP1C	Mx	-.001	2.5
34	MP2A	X	-3.447	.5
35	MP2A	Z	-5.97	.5
36	MP2A	Mx	.005	.5
37	MP2A	X	-3.447	4.5
38	MP2A	Z	-5.97	4.5
39	MP2A	Mx	.005	4.5
40	MP2B	X	-2.334	.5
41	MP2B	Z	-4.043	.5
42	MP2B	Mx	3.8e-5	.5
43	MP2B	X	-2.334	4.5
44	MP2B	Z	-4.043	4.5
45	MP2B	Mx	3.8e-5	4.5
46	MP2C	X	-1.742	.5
47	MP2C	Z	-3.018	.5
48	MP2C	Mx	-.002	.5
49	MP2C	X	-1.742	4.5
50	MP2C	Z	-3.018	4.5
51	MP2C	Mx	-.002	4.5
52	MP2A	X	-3.447	.5
53	MP2A	Z	-5.97	.5
54	MP2A	Mx	-.003	.5
55	MP2A	X	-3.447	4.5
56	MP2A	Z	-5.97	4.5
57	MP2A	Mx	-.003	4.5





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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP2B	X	-2.334	.5
59	MP2B	Z	-4.043	.5
60	MP2B	Mx	.004	.5
61	MP2B	X	-2.334	4.5
62	MP2B	Z	-4.043	4.5
63	MP2B	Mx	.004	4.5
64	MP2C	X	-1.742	.5
65	MP2C	Z	-3.018	.5
66	MP2C	Mx	-.000942	.5
67	MP2C	X	-1.742	4.5
68	MP2C	Z	-3.018	4.5
69	MP2C	Mx	-.000942	4.5
70	MP4A	X	-2.957	.5
71	MP4A	Z	-5.121	.5
72	MP4A	Mx	.000514	.5
73	MP4A	X	-2.957	4.5
74	MP4A	Z	-5.121	4.5
75	MP4A	Mx	.000514	4.5
76	MP4B	X	-2.081	.5
77	MP4B	Z	-3.604	.5
78	MP4B	Mx	.002	.5
79	MP4B	X	-2.081	4.5
80	MP4B	Z	-3.604	4.5
81	MP4B	Mx	.002	4.5
82	MP4C	X	-1.615	.5
83	MP4C	Z	-2.797	.5
84	MP4C	Mx	-.002	.5
85	MP4C	X	-1.615	4.5
86	MP4C	Z	-2.797	4.5
87	MP4C	Mx	-.002	4.5
88	MP2A	X	-1.954	1.75
89	MP2A	Z	-3.384	1.75
90	MP2A	Mx	.002	1.75
91	MP2B	X	-1.592	1.75
92	MP2B	Z	-2.758	1.75
93	MP2B	Mx	-.001	1.75
94	MP2C	X	-1.4	1.75
95	MP2C	Z	-2.425	1.75
96	MP2C	Mx	-.000599	1.75
97	MP2A	X	-1.946	1.75
98	MP2A	Z	-3.371	1.75
99	MP2A	Mx	-.002	1.75
100	MP2B	X	-1.45	1.75
101	MP2B	Z	-2.512	1.75
102	MP2B	Mx	.001	1.75
103	MP2C	X	-1.186	1.75
104	MP2C	Z	-2.055	1.75
105	MP2C	Mx	.000507	1.75
106	OVP2	X	-2.1	.5
107	OVP2	Z	-3.638	.5
108	OVP2	Mx	0	.5
109	OVP1	X	-2.1	.5
110	OVP1	Z	-3.638	.5
111	OVP1	Mx	0	.5
112	MP2B	X	-.974	.25
113	MP2B	Z	-1.687	.25
114	MP2B	Mx	-.000746	.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.%]
1	FACE	Y	-250	%50

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	FACE	Y	-250	%100

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M49	Y	-.732	9
2	M49	My	-2.1e-5	9
3	M49	Mz	.00012	9
4	M49	Y	-.732	9
5	M49	Mv	2.1e-5	9
6	M49	Mz	-.00012	9
7	MP1A	Y	-.965	5
8	MP1A	My	.000453	5
9	MP1A	Mz	-.000165	5
10	MP1B	Y	-.965	5
11	MP1B	Mv	-8.4e-5	5
12	MP1B	Mz	.000475	5
13	MP1C	Y	-.965	5
14	MP1C	My	-.00037	5
15	MP1C	Mz	-.00031	5
16	MP1A	Y	-1.812	.5
17	MP1A	Mv	-.000851	.5
18	MP1A	Mz	.00031	.5
19	MP1A	Y	-1.812	2.5
20	MP1A	My	-.000851	2.5
21	MP1A	Mz	.00031	2.5
22	MP1B	Y	-1.812	.5
23	MP1B	Mv	.000157	.5
24	MP1B	Mz	-.000892	.5
25	MP1B	Y	-1.812	2.5
26	MP1B	My	.000157	2.5
27	MP1B	Mz	-.000892	2.5
28	MP1C	Y	-1.812	.5
29	MP1C	Mv	.000694	.5
30	MP1C	Mz	.000582	.5
31	MP1C	Y	-1.812	2.5
32	MP1C	My	.000694	2.5
33	MP1C	Mz	.000582	2.5
34	MP2A	Y	-.832	.5
35	MP2A	Mv	-.000557	.5
36	MP2A	Mz	-.000314	.5
37	MP2A	Y	-.832	4.5
38	MP2A	My	-.000557	4.5
39	MP2A	Mz	-.000314	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP2B	Y	-.832	.5
41	MP2B	My	.00055	.5
42	MP2B	Mz	-.000325	.5
43	MP2B	Y	-.832	4.5
44	MP2B	My	.00055	4.5
45	MP2B	Mz	-.000325	4.5
46	MP2C	Y	-.832	.5
47	MP2C	My	7e-6	.5
48	MP2C	Mz	.000639	.5
49	MP2C	Y	-.832	4.5
50	MP2C	My	7e-6	4.5
51	MP2C	Mz	.000639	4.5
52	MP2A	Y	-.832	.5
53	MP2A	My	-.000225	.5
54	MP2A	Mz	.000598	.5
55	MP2A	Y	-.832	4.5
56	MP2A	My	-.000225	4.5
57	MP2A	Mz	.000598	4.5
58	MP2B	Y	-.832	.5
59	MP2B	My	-.000406	.5
60	MP2B	Mz	-.000494	.5
61	MP2B	Y	-.832	4.5
62	MP2B	My	-.000406	4.5
63	MP2B	Mz	-.000494	4.5
64	MP2C	Y	-.832	.5
65	MP2C	My	.000631	.5
66	MP2C	Mz	-.000104	.5
67	MP2C	Y	-.832	4.5
68	MP2C	My	.000631	4.5
69	MP2C	Mz	-.000104	4.5
70	MP4A	Y	-.206	.5
71	MP4A	My	-9.7e-5	.5
72	MP4A	Mz	3.5e-5	.5
73	MP4A	Y	-.206	4.5
74	MP4A	My	-9.7e-5	4.5
75	MP4A	Mz	3.5e-5	4.5
76	MP4B	Y	-.206	.5
77	MP4B	My	1.8e-5	.5
78	MP4B	Mz	-.000101	.5
79	MP4B	Y	-.206	4.5
80	MP4B	My	1.8e-5	4.5
81	MP4B	Mz	-.000101	4.5
82	MP4C	Y	-.206	.5
83	MP4C	My	7.9e-5	.5
84	MP4C	Mz	6.6e-5	.5
85	MP4C	Y	-.206	4.5
86	MP4C	My	7.9e-5	4.5
87	MP4C	Mz	6.6e-5	4.5
88	MP2A	Y	-3.511	1.75
89	MP2A	My	-.000751	1.75
90	MP2A	Mz	-.002	1.75
91	MP2B	Y	-3.511	1.75
92	MP2B	My	.002	1.75
93	MP2B	Mz	.000381	1.75
94	MP2C	Y	-3.511	1.75
95	MP2C	My	-.001	1.75
96	MP2C	Mz	.002	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
97	MP2A	Y	-2.924	1.75
98	MP2A	My	.000625	1.75
99	MP2A	Mz	.002	1.75
100	MP2B	Y	-2.924	1.75
101	MP2B	My	-.002	1.75
102	MP2B	Mz	-.000317	1.75
103	MP2C	Y	-2.924	1.75
104	MP2C	My	.001	1.75
105	MP2C	Mz	-.001	1.75
106	OVP2	Y	-1.119	.5
107	OVP2	My	0	.5
108	OVP2	Mz	0	.5
109	OVP1	Y	-1.119	.5
110	OVP1	My	0	.5
111	OVP1	Mz	0	.5
112	MP2B	Y	-.416	.25
113	MP2B	My	-3.6e-5	.25
114	MP2B	Mz	.000205	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	Z	-1.83	9
2	M49	Mx	-.0003	9
3	M49	Z	-1.83	9
4	M49	Mx	.0003	9
5	MP1A	Z	-2.413	5
6	MP1A	Mx	.000413	5
7	MP1B	Z	-2.413	5
8	MP1B	Mx	-.001	5
9	MP1C	Z	-2.413	5
10	MP1C	Mx	.000775	5
11	MP1A	Z	-4.529	.5
12	MP1A	Mx	-.000775	.5
13	MP1A	Z	-4.529	2.5
14	MP1A	Mx	-.000775	2.5
15	MP1B	Z	-4.529	.5
16	MP1B	Mx	.002	.5
17	MP1B	Z	-4.529	2.5
18	MP1B	Mx	.002	2.5
19	MP1C	Z	-4.529	.5
20	MP1C	Mx	-.001	.5
21	MP1C	Z	-4.529	2.5
22	MP1C	Mx	-.001	2.5
23	MP2A	Z	-2.08	.5
24	MP2A	Mx	.000784	.5
25	MP2A	Z	-2.08	4.5
26	MP2A	Mx	.000784	4.5
27	MP2B	Z	-2.08	.5
28	MP2B	Mx	.000814	.5
29	MP2B	Z	-2.08	4.5
30	MP2B	Mx	.000814	4.5
31	MP2C	Z	-2.08	.5
32	MP2C	Mx	-.002	.5
33	MP2C	Z	-2.08	4.5
34	MP2C	Mx	-.002	4.5
35	MP2A	Z	-2.08	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
36	MP2A	Mx	-.001	.5
37	MP2A	Z	-2.08	4.5
38	MP2A	Mx	-.001	4.5
39	MP2B	Z	-2.08	.5
40	MP2B	Mx	.001	.5
41	MP2B	Z	-2.08	4.5
42	MP2B	Mx	.001	4.5
43	MP2C	Z	-2.08	.5
44	MP2C	Mx	.000261	.5
45	MP2C	Z	-2.08	4.5
46	MP2C	Mx	.000261	4.5
47	MP4A	Z	-.515	.5
48	MP4A	Mx	-8.8e-5	.5
49	MP4A	Z	-.515	4.5
50	MP4A	Mx	-8.8e-5	4.5
51	MP4B	Z	-.515	.5
52	MP4B	Mx	.000253	.5
53	MP4B	Z	-.515	4.5
54	MP4B	Mx	.000253	4.5
55	MP4C	Z	-.515	.5
56	MP4C	Mx	-.000165	.5
57	MP4C	Z	-.515	4.5
58	MP4C	Mx	-.000165	4.5
59	MP2A	Z	-8.778	1.75
60	MP2A	Mx	.005	1.75
61	MP2B	Z	-8.778	1.75
62	MP2B	Mx	-.000953	1.75
63	MP2C	Z	-8.778	1.75
64	MP2C	Mx	-.004	1.75
65	MP2A	Z	-7.311	1.75
66	MP2A	Mx	-.004	1.75
67	MP2B	Z	-7.311	1.75
68	MP2B	Mx	.000793	1.75
69	MP2C	Z	-7.311	1.75
70	MP2C	Mx	.004	1.75
71	OVP2	Z	-2.798	.5
72	OVP2	Mx	0	.5
73	OVP1	Z	-2.798	.5
74	OVP1	Mx	0	.5
75	MP2B	Z	-1.04	.25
76	MP2B	Mx	-.000512	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M49	X	1.83	9
2	M49	Mx	-5.3e-5	9
3	M49	X	1.83	9
4	M49	Mx	5.3e-5	9
5	MP1A	X	2.413	5
6	MP1A	Mx	.001	5
7	MP1B	X	2.413	5
8	MP1B	Mx	-.000209	5
9	MP1C	X	2.413	5
10	MP1C	Mx	-.000924	5
11	MP1A	X	4.529	.5
12	MP1A	Mx	-.002	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP1A	X	4.529	2.5
14	MP1A	Mx	-.002	2.5
15	MP1B	X	4.529	.5
16	MP1B	Mx	.000393	.5
17	MP1B	X	4.529	2.5
18	MP1B	Mx	.000393	2.5
19	MP1C	X	4.529	.5
20	MP1C	Mx	.002	.5
21	MP1C	X	4.529	2.5
22	MP1C	Mx	.002	2.5
23	MP2A	X	2.08	.5
24	MP2A	Mx	-.001	.5
25	MP2A	X	2.08	4.5
26	MP2A	Mx	-.001	4.5
27	MP2B	X	2.08	.5
28	MP2B	Mx	.001	.5
29	MP2B	X	2.08	4.5
30	MP2B	Mx	.001	4.5
31	MP2C	X	2.08	.5
32	MP2C	Mx	1.7e-5	.5
33	MP2C	X	2.08	4.5
34	MP2C	Mx	1.7e-5	4.5
35	MP2A	X	2.08	.5
36	MP2A	Mx	-.000562	.5
37	MP2A	X	2.08	4.5
38	MP2A	Mx	-.000562	4.5
39	MP2B	X	2.08	.5
40	MP2B	Mx	-.001	.5
41	MP2B	X	2.08	4.5
42	MP2B	Mx	-.001	4.5
43	MP2C	X	2.08	.5
44	MP2C	Mx	.002	.5
45	MP2C	X	2.08	4.5
46	MP2C	Mx	.002	4.5
47	MP4A	X	.515	.5
48	MP4A	Mx	-.000242	.5
49	MP4A	X	.515	4.5
50	MP4A	Mx	-.000242	4.5
51	MP4B	X	.515	.5
52	MP4B	Mx	4.5e-5	.5
53	MP4B	X	.515	4.5
54	MP4B	Mx	4.5e-5	4.5
55	MP4C	X	.515	.5
56	MP4C	Mx	.000197	.5
57	MP4C	X	.515	4.5
58	MP4C	Mx	.000197	4.5
59	MP2A	X	8.778	1.75
60	MP2A	Mx	-.002	1.75
61	MP2B	X	8.778	1.75
62	MP2B	Mx	.005	1.75
63	MP2C	X	8.778	1.75
64	MP2C	Mx	-.004	1.75
65	MP2A	X	7.311	1.75
66	MP2A	Mx	.002	1.75
67	MP2B	X	7.311	1.75
68	MP2B	Mx	-.004	1.75
69	MP2C	X	7.311	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
70	MP2C	Mx	.003	1.75
71	OVP2	X	2.798	.5
72	OVP2	Mx	0	.5
73	OVP1	X	2.798	.5
74	OVP1	Mx	0	.5
75	MP2B	X	1.04	.25
76	MP2B	Mx	-9e-5	.25

**Joint Loads and Enforced Displacements**

Joint Label	L,D,M	Direction	Magnitude[(lb.k-ft), (in.rad), (lb*s^2/...]
No Data to Print ...			

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M7	Y	-12.31	-12.31	0	%100
2	FACE	Y	-12.31	-12.31	0	%100
3	M10	Y	-15.952	-15.952	0	%100
4	M14	Y	-15.241	-15.241	0	%100
5	M47	Y	-15.952	-15.952	0	%100
6	M8	Y	-12.31	-12.31	0	%100
7	M9	Y	-12.31	-12.31	0	%100
8	M10A	Y	-15.952	-15.952	0	%100
9	M11	Y	-15.241	-15.241	0	%100
10	M15A	Y	-12.31	-12.31	0	%100
11	M16A	Y	-12.31	-12.31	0	%100
12	M18	Y	-15.241	-15.241	0	%100
13	M23	Y	-18.172	-18.172	0	%100
14	M24	Y	-18.172	-18.172	0	%100
15	M25	Y	-18.172	-18.172	0	%100
16	MP1A	Y	-8.439	-8.439	0	%100
17	MP2A	Y	-8.439	-8.439	0	%100
18	MP3A	Y	-8.439	-8.439	0	%100
19	MP4A	Y	-8.439	-8.439	0	%100
20	MP1C	Y	-8.439	-8.439	0	%100
21	MP2C	Y	-8.439	-8.439	0	%100
22	MP3C	Y	-8.439	-8.439	0	%100
23	MP4C	Y	-8.439	-8.439	0	%100
24	MP1B	Y	-8.439	-8.439	0	%100
25	MP2B	Y	-8.439	-8.439	0	%100
26	MP3B	Y	-8.439	-8.439	0	%100
27	MP4B	Y	-8.439	-8.439	0	%100
28	M49	Y	-8.439	-8.439	0	%100
29	M54	Y	-8.439	-8.439	0	%100
30	M59	Y	-8.439	-8.439	0	%100
31	M70	Y	-10.844	-10.844	0	%100
32	M77	Y	-10.844	-10.844	0	%100
33	M84	Y	-10.844	-10.844	0	%100
34	OVP1	Y	-8.439	-8.439	0	%100
35	OVP2	Y	-8.439	-8.439	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	M7	X	0	0	0	%100



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 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
2	M7	Z	-20.368	-20.368	0 %100
3	FACE	X	0	0	0 %100
4	FACE	Z	-20.368	-20.368	0 %100
5	M10	X	0	0	0 %100
6	M10	Z	-12.88	-12.88	0 %100
7	M14	X	0	0	0 %100
8	M14	Z	0	0	0 %100
9	M47	X	0	0	0 %100
10	M47	Z	-12.88	-12.88	0 %100
11	M8	X	0	0	0 %100
12	M8	Z	-5.092	-5.092	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	-5.092	-5.092	0 %100
15	M10A	X	0	0	0 %100
16	M10A	Z	0	0	0 %100
17	M11	X	0	0	0 %100
18	M11	Z	-9.599	-9.599	0 %100
19	M15A	X	0	0	0 %100
20	M15A	Z	-5.099	-5.099	0 %100
21	M16A	X	0	0	0 %100
22	M16A	Z	-5.096	-5.096	0 %100
23	M18	X	0	0	0 %100
24	M18	Z	-9.599	-9.599	0 %100
25	M23	X	0	0	0 %100
26	M23	Z	-9.512	-9.512	0 %100
27	M24	X	0	0	0 %100
28	M24	Z	-24.84	-24.84	0 %100
29	M25	X	0	0	0 %100
30	M25	Z	-24.838	-24.838	0 %100
31	MP1A	X	0	0	0 %100
32	MP1A	Z	-9.675	-9.675	0 %100
33	MP2A	X	0	0	0 %100
34	MP2A	Z	-9.675	-9.675	0 %100
35	MP3A	X	0	0	0 %100
36	MP3A	Z	-9.675	-9.675	0 %100
37	MP4A	X	0	0	0 %100
38	MP4A	Z	-9.675	-9.675	0 %100
39	MP1C	X	0	0	0 %100
40	MP1C	Z	-9.675	-9.675	0 %100
41	MP2C	X	0	0	0 %100
42	MP2C	Z	-9.675	-9.675	0 %100
43	MP3C	X	0	0	0 %100
44	MP3C	Z	-9.675	-9.675	0 %100
45	MP4C	X	0	0	0 %100
46	MP4C	Z	-9.675	-9.675	0 %100
47	MP1B	X	0	0	0 %100
48	MP1B	Z	-9.675	-9.675	0 %100
49	MP2B	X	0	0	0 %100
50	MP2B	Z	-9.675	-9.675	0 %100
51	MP3B	X	0	0	0 %100
52	MP3B	Z	-9.675	-9.675	0 %100
53	MP4B	X	0	0	0 %100
54	MP4B	Z	-9.675	-9.675	0 %100
55	M49	X	0	0	0 %100
56	M49	Z	-9.675	-9.675	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	-2.419	-2.419	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.%,]
59	M59	X	0	0	0	%100
60	M59	Z	-2.419	-2.419	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	-2.97	-2.97	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	-2.97	-2.97	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	-11.88	-11.88	0	%100
67	OVP1	X	0	0	0	%100
68	OVP1	Z	-7.911	-7.911	0	%100
69	OVP2	X	0	0	0	%100
70	OVP2	Z	-7.911	-7.911	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	M7	X	7.638	7.638	0	%100
2	M7	Z	-13.229	-13.229	0	%100
3	FACE	X	7.638	7.638	0	%100
4	FACE	Z	-13.229	-13.229	0	%100
5	M10	X	2.147	2.147	0	%100
6	M10	Z	-3.718	-3.718	0	%100
7	M14	X	1.6	1.6	0	%100
8	M14	Z	-2.771	-2.771	0	%100
9	M47	X	8.586	8.586	0	%100
10	M47	Z	-14.872	-14.872	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	2.147	2.147	0	%100
16	M10A	Z	-3.718	-3.718	0	%100
17	M11	X	6.399	6.399	0	%100
18	M11	Z	-11.084	-11.084	0	%100
19	M15A	X	7.642	7.642	0	%100
20	M15A	Z	-13.236	-13.236	0	%100
21	M16A	X	7.64	7.64	0	%100
22	M16A	Z	-13.233	-13.233	0	%100
23	M18	X	1.6	1.6	0	%100
24	M18	Z	-2.771	-2.771	0	%100
25	M23	X	7.312	7.312	0	%100
26	M23	Z	-12.665	-12.665	0	%100
27	M24	X	7.309	7.309	0	%100
28	M24	Z	-12.659	-12.659	0	%100
29	M25	X	14.97	14.97	0	%100
30	M25	Z	-25.929	-25.929	0	%100
31	MP1A	X	4.837	4.837	0	%100
32	MP1A	Z	-8.378	-8.378	0	%100
33	MP2A	X	4.837	4.837	0	%100
34	MP2A	Z	-8.378	-8.378	0	%100
35	MP3A	X	4.837	4.837	0	%100
36	MP3A	Z	-8.378	-8.378	0	%100
37	MP4A	X	4.837	4.837	0	%100
38	MP4A	Z	-8.378	-8.378	0	%100
39	MP1C	X	4.837	4.837	0	%100
40	MP1C	Z	-8.378	-8.378	0	%100
41	MP2C	X	4.837	4.837	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.%]
42	MP2C	Z	-8.378	-8.378	0	%100
43	MP3C	X	4.837	4.837	0	%100
44	MP3C	Z	-8.378	-8.378	0	%100
45	MP4C	X	4.837	4.837	0	%100
46	MP4C	Z	-8.378	-8.378	0	%100
47	MP1B	X	4.837	4.837	0	%100
48	MP1B	Z	-8.378	-8.378	0	%100
49	MP2B	X	4.837	4.837	0	%100
50	MP2B	Z	-8.378	-8.378	0	%100
51	MP3B	X	4.837	4.837	0	%100
52	MP3B	Z	-8.378	-8.378	0	%100
53	MP4B	X	4.837	4.837	0	%100
54	MP4B	Z	-8.378	-8.378	0	%100
55	M49	X	3.628	3.628	0	%100
56	M49	Z	-6.284	-6.284	0	%100
57	M54	X	3.628	3.628	0	%100
58	M54	Z	-6.284	-6.284	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	4.455	4.455	0	%100
62	M70	Z	-7.717	-7.717	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	4.455	4.455	0	%100
66	M84	Z	-7.716	-7.716	0	%100
67	OVP1	X	3.956	3.956	0	%100
68	OVP1	Z	-6.851	-6.851	0	%100
69	OVP2	X	3.956	3.956	0	%100
70	OVP2	Z	-6.851	-6.851	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	M7	X	4.41	4.41	0	%100
2	M7	Z	-2.546	-2.546	0	%100
3	FACE	X	4.41	4.41	0	%100
4	FACE	Z	-2.546	-2.546	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	8.313	8.313	0	%100
8	M14	Z	-4.799	-4.799	0	%100
9	M47	X	11.154	11.154	0	%100
10	M47	Z	-6.44	-6.44	0	%100
11	M8	X	4.41	4.41	0	%100
12	M8	Z	-2.546	-2.546	0	%100
13	M9	X	4.41	4.41	0	%100
14	M9	Z	-2.546	-2.546	0	%100
15	M10A	X	11.154	11.154	0	%100
16	M10A	Z	-6.44	-6.44	0	%100
17	M11	X	8.313	8.313	0	%100
18	M11	Z	-4.799	-4.799	0	%100
19	M15A	X	17.639	17.639	0	%100
20	M15A	Z	-10.184	-10.184	0	%100
21	M16A	X	17.639	17.639	0	%100
22	M16A	Z	-10.184	-10.184	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M23	X	21.51	21.51	0	%100
26	M23	Z	-12.419	-12.419	0	%100
27	M24	X	8.228	8.228	0	%100
28	M24	Z	-4.751	-4.751	0	%100
29	M25	X	21.501	21.501	0	%100
30	M25	Z	-12.414	-12.414	0	%100
31	MP1A	X	8.378	8.378	0	%100
32	MP1A	Z	-4.837	-4.837	0	%100
33	MP2A	X	8.378	8.378	0	%100
34	MP2A	Z	-4.837	-4.837	0	%100
35	MP3A	X	8.378	8.378	0	%100
36	MP3A	Z	-4.837	-4.837	0	%100
37	MP4A	X	8.378	8.378	0	%100
38	MP4A	Z	-4.837	-4.837	0	%100
39	MP1C	X	8.378	8.378	0	%100
40	MP1C	Z	-4.837	-4.837	0	%100
41	MP2C	X	8.378	8.378	0	%100
42	MP2C	Z	-4.837	-4.837	0	%100
43	MP3C	X	8.378	8.378	0	%100
44	MP3C	Z	-4.837	-4.837	0	%100
45	MP4C	X	8.378	8.378	0	%100
46	MP4C	Z	-4.837	-4.837	0	%100
47	MP1B	X	8.378	8.378	0	%100
48	MP1B	Z	-4.837	-4.837	0	%100
49	MP2B	X	8.378	8.378	0	%100
50	MP2B	Z	-4.837	-4.837	0	%100
51	MP3B	X	8.378	8.378	0	%100
52	MP3B	Z	-4.837	-4.837	0	%100
53	MP4B	X	8.378	8.378	0	%100
54	MP4B	Z	-4.837	-4.837	0	%100
55	M49	X	2.095	2.095	0	%100
56	M49	Z	-1.209	-1.209	0	%100
57	M54	X	8.378	8.378	0	%100
58	M54	Z	-4.837	-4.837	0	%100
59	M59	X	2.095	2.095	0	%100
60	M59	Z	-1.209	-1.209	0	%100
61	M70	X	10.288	10.288	0	%100
62	M70	Z	-5.94	-5.94	0	%100
63	M77	X	2.572	2.572	0	%100
64	M77	Z	-1.485	-1.485	0	%100
65	M84	X	2.572	2.572	0	%100
66	M84	Z	-1.485	-1.485	0	%100
67	OVP1	X	6.851	6.851	0	%100
68	OVP1	Z	-3.956	-3.956	0	%100
69	OVP2	X	6.851	6.851	0	%100
70	OVP2	Z	-3.956	-3.956	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	4.293	4.293	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	12.798	12.798	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.%]
8	M14	Z	0	0	0	%100
9	M47	X	4.293	4.293	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	15.276	15.276	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	15.276	15.276	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	17.173	17.173	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	3.2	3.2	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	15.268	15.268	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	15.272	15.272	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	3.2	3.2	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	29.94	29.94	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	14.608	14.608	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	14.614	14.614	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	9.675	9.675	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	9.675	9.675	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	9.675	9.675	0	%100
36	MP3A	Z	0	0	0	%100
37	MP4A	X	9.675	9.675	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	9.675	9.675	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	9.675	9.675	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	9.675	9.675	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	9.675	9.675	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	9.675	9.675	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	9.675	9.675	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	9.675	9.675	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	9.675	9.675	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	7.256	7.256	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	7.256	7.256	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	8.91	8.91	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	8.91	8.91	0	%100
64	M77	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	7.911	7.911	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	7.911	7.911	0	%100
70	OVP2	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	M7	X	4.41	4.41	0	%100
2	M7	Z	2.546	2.546	0	%100
3	FACE	X	4.41	4.41	0	%100
4	FACE	Z	2.546	2.546	0	%100
5	M10	X	11.154	11.154	0	%100
6	M10	Z	6.44	6.44	0	%100
7	M14	X	8.313	8.313	0	%100
8	M14	Z	4.799	4.799	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	17.639	17.639	0	%100
12	M8	Z	10.184	10.184	0	%100
13	M9	X	17.639	17.639	0	%100
14	M9	Z	10.184	10.184	0	%100
15	M10A	X	11.154	11.154	0	%100
16	M10A	Z	6.44	6.44	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	4.403	4.403	0	%100
20	M15A	Z	2.542	2.542	0	%100
21	M16A	X	4.406	4.406	0	%100
22	M16A	Z	2.544	2.544	0	%100
23	M18	X	8.313	8.313	0	%100
24	M18	Z	4.799	4.799	0	%100
25	M23	X	21.501	21.501	0	%100
26	M23	Z	12.414	12.414	0	%100
27	M24	X	21.504	21.504	0	%100
28	M24	Z	12.415	12.415	0	%100
29	M25	X	8.238	8.238	0	%100
30	M25	Z	4.756	4.756	0	%100
31	MP1A	X	8.378	8.378	0	%100
32	MP1A	Z	4.837	4.837	0	%100
33	MP2A	X	8.378	8.378	0	%100
34	MP2A	Z	4.837	4.837	0	%100
35	MP3A	X	8.378	8.378	0	%100
36	MP3A	Z	4.837	4.837	0	%100
37	MP4A	X	8.378	8.378	0	%100
38	MP4A	Z	4.837	4.837	0	%100
39	MP1C	X	8.378	8.378	0	%100
40	MP1C	Z	4.837	4.837	0	%100
41	MP2C	X	8.378	8.378	0	%100
42	MP2C	Z	4.837	4.837	0	%100
43	MP3C	X	8.378	8.378	0	%100
44	MP3C	Z	4.837	4.837	0	%100
45	MP4C	X	8.378	8.378	0	%100
46	MP4C	Z	4.837	4.837	0	%100
47	MP1B	X	8.378	8.378	0	%100



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 Job Number :  
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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, %]
48	MP1B	Z	4.837	4.837	0	%100
49	MP2B	X	8.378	8.378	0	%100
50	MP2B	Z	4.837	4.837	0	%100
51	MP3B	X	8.378	8.378	0	%100
52	MP3B	Z	4.837	4.837	0	%100
53	MP4B	X	8.378	8.378	0	%100
54	MP4B	Z	4.837	4.837	0	%100
55	M49	X	2.095	2.095	0	%100
56	M49	Z	1.209	1.209	0	%100
57	M54	X	2.095	2.095	0	%100
58	M54	Z	1.209	1.209	0	%100
59	M59	X	8.378	8.378	0	%100
60	M59	Z	4.837	4.837	0	%100
61	M70	X	2.572	2.572	0	%100
62	M70	Z	1.485	1.485	0	%100
63	M77	X	10.288	10.288	0	%100
64	M77	Z	5.94	5.94	0	%100
65	M84	X	2.572	2.572	0	%100
66	M84	Z	1.485	1.485	0	%100
67	OVP1	X	6.851	6.851	0	%100
68	OVP1	Z	3.956	3.956	0	%100
69	OVP2	X	6.851	6.851	0	%100
70	OVP2	Z	3.956	3.956	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M7	X	7.638	7.638	0	%100
2	M7	Z	13.229	13.229	0	%100
3	FACE	X	7.638	7.638	0	%100
4	FACE	Z	13.229	13.229	0	%100
5	M10	X	8.586	8.586	0	%100
6	M10	Z	14.872	14.872	0	%100
7	M14	X	1.6	1.6	0	%100
8	M14	Z	2.771	2.771	0	%100
9	M47	X	2.147	2.147	0	%100
10	M47	Z	3.718	3.718	0	%100
11	M8	X	7.638	7.638	0	%100
12	M8	Z	13.229	13.229	0	%100
13	M9	X	7.638	7.638	0	%100
14	M9	Z	13.229	13.229	0	%100
15	M10A	X	2.147	2.147	0	%100
16	M10A	Z	3.718	3.718	0	%100
17	M11	X	1.6	1.6	0	%100
18	M11	Z	2.771	2.771	0	%100
19	M15A	X	2e-6	2e-6	0	%100
20	M15A	Z	3e-6	3e-6	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	1e-6	1e-6	0	%100
23	M18	X	6.399	6.399	0	%100
24	M18	Z	11.084	11.084	0	%100
25	M23	X	7.307	7.307	0	%100
26	M23	Z	12.656	12.656	0	%100
27	M24	X	14.973	14.973	0	%100
28	M24	Z	25.935	25.935	0	%100
29	M25	X	7.312	7.312	0	%100
30	M25	Z	12.665	12.665	0	%100



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**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.%]
31	MP1A	X	4.837	4.837	0	%100
32	MP1A	Z	8.378	8.378	0	%100
33	MP2A	X	4.837	4.837	0	%100
34	MP2A	Z	8.378	8.378	0	%100
35	MP3A	X	4.837	4.837	0	%100
36	MP3A	Z	8.378	8.378	0	%100
37	MP4A	X	4.837	4.837	0	%100
38	MP4A	Z	8.378	8.378	0	%100
39	MP1C	X	4.837	4.837	0	%100
40	MP1C	Z	8.378	8.378	0	%100
41	MP2C	X	4.837	4.837	0	%100
42	MP2C	Z	8.378	8.378	0	%100
43	MP3C	X	4.837	4.837	0	%100
44	MP3C	Z	8.378	8.378	0	%100
45	MP4C	X	4.837	4.837	0	%100
46	MP4C	Z	8.378	8.378	0	%100
47	MP1B	X	4.837	4.837	0	%100
48	MP1B	Z	8.378	8.378	0	%100
49	MP2B	X	4.837	4.837	0	%100
50	MP2B	Z	8.378	8.378	0	%100
51	MP3B	X	4.837	4.837	0	%100
52	MP3B	Z	8.378	8.378	0	%100
53	MP4B	X	4.837	4.837	0	%100
54	MP4B	Z	8.378	8.378	0	%100
55	M49	X	3.628	3.628	0	%100
56	M49	Z	6.284	6.284	0	%100
57	M54	X	0	0	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	3.628	3.628	0	%100
60	M59	Z	6.284	6.284	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	4.455	4.455	0	%100
64	M77	Z	7.716	7.716	0	%100
65	M84	X	4.455	4.455	0	%100
66	M84	Z	7.717	7.717	0	%100
67	OVP1	X	3.956	3.956	0	%100
68	OVP1	Z	6.851	6.851	0	%100
69	OVP2	X	3.956	3.956	0	%100
70	OVP2	Z	6.851	6.851	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	M7	X	0	0	0	%100
2	M7	Z	20.368	20.368	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	20.368	20.368	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	12.88	12.88	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	12.88	12.88	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	5.092	5.092	0	%100
13	M9	X	0	0	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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**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, %]
14	M9	Z	5.092	5.092	0 %100
15	M10A	X	0	0	0 %100
16	M10A	Z	0	0	0 %100
17	M11	X	0	0	0 %100
18	M11	Z	9.599	9.599	0 %100
19	M15A	X	0	0	0 %100
20	M15A	Z	5.099	5.099	0 %100
21	M16A	X	0	0	0 %100
22	M16A	Z	5.096	5.096	0 %100
23	M18	X	0	0	0 %100
24	M18	Z	9.599	9.599	0 %100
25	M23	X	0	0	0 %100
26	M23	Z	9.512	9.512	0 %100
27	M24	X	0	0	0 %100
28	M24	Z	24.84	24.84	0 %100
29	M25	X	0	0	0 %100
30	M25	Z	24.838	24.838	0 %100
31	MP1A	X	0	0	0 %100
32	MP1A	Z	9.675	9.675	0 %100
33	MP2A	X	0	0	0 %100
34	MP2A	Z	9.675	9.675	0 %100
35	MP3A	X	0	0	0 %100
36	MP3A	Z	9.675	9.675	0 %100
37	MP4A	X	0	0	0 %100
38	MP4A	Z	9.675	9.675	0 %100
39	MP1C	X	0	0	0 %100
40	MP1C	Z	9.675	9.675	0 %100
41	MP2C	X	0	0	0 %100
42	MP2C	Z	9.675	9.675	0 %100
43	MP3C	X	0	0	0 %100
44	MP3C	Z	9.675	9.675	0 %100
45	MP4C	X	0	0	0 %100
46	MP4C	Z	9.675	9.675	0 %100
47	MP1B	X	0	0	0 %100
48	MP1B	Z	9.675	9.675	0 %100
49	MP2B	X	0	0	0 %100
50	MP2B	Z	9.675	9.675	0 %100
51	MP3B	X	0	0	0 %100
52	MP3B	Z	9.675	9.675	0 %100
53	MP4B	X	0	0	0 %100
54	MP4B	Z	9.675	9.675	0 %100
55	M49	X	0	0	0 %100
56	M49	Z	9.675	9.675	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	2.419	2.419	0 %100
59	M59	X	0	0	0 %100
60	M59	Z	2.419	2.419	0 %100
61	M70	X	0	0	0 %100
62	M70	Z	2.97	2.97	0 %100
63	M77	X	0	0	0 %100
64	M77	Z	2.97	2.97	0 %100
65	M84	X	0	0	0 %100
66	M84	Z	11.88	11.88	0 %100
67	OVP1	X	0	0	0 %100
68	OVP1	Z	7.911	7.911	0 %100
69	OVP2	X	0	0	0 %100
70	OVP2	Z	7.911	7.911	0 %100





Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

July 10, 2023  
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**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	M7	X	-7.638	-7.638	0 %100
2	M7	Z	13.229	13.229	0 %100
3	FACE	X	-7.638	-7.638	0 %100
4	FACE	Z	13.229	13.229	0 %100
5	M10	X	-2.147	-2.147	0 %100
6	M10	Z	3.718	3.718	0 %100
7	M14	X	-1.6	-1.6	0 %100
8	M14	Z	2.771	2.771	0 %100
9	M47	X	-8.586	-8.586	0 %100
10	M47	Z	14.872	14.872	0 %100
11	M8	X	0	0	0 %100
12	M8	Z	0	0	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	0	0	0 %100
15	M10A	X	-2.147	-2.147	0 %100
16	M10A	Z	3.718	3.718	0 %100
17	M11	X	-6.399	-6.399	0 %100
18	M11	Z	11.084	11.084	0 %100
19	M15A	X	-7.642	-7.642	0 %100
20	M15A	Z	13.236	13.236	0 %100
21	M16A	X	-7.64	-7.64	0 %100
22	M16A	Z	13.233	13.233	0 %100
23	M18	X	-1.6	-1.6	0 %100
24	M18	Z	2.771	2.771	0 %100
25	M23	X	-7.312	-7.312	0 %100
26	M23	Z	12.665	12.665	0 %100
27	M24	X	-7.309	-7.309	0 %100
28	M24	Z	12.659	12.659	0 %100
29	M25	X	-14.97	-14.97	0 %100
30	M25	Z	25.929	25.929	0 %100
31	MP1A	X	-4.837	-4.837	0 %100
32	MP1A	Z	8.378	8.378	0 %100
33	MP2A	X	-4.837	-4.837	0 %100
34	MP2A	Z	8.378	8.378	0 %100
35	MP3A	X	-4.837	-4.837	0 %100
36	MP3A	Z	8.378	8.378	0 %100
37	MP4A	X	-4.837	-4.837	0 %100
38	MP4A	Z	8.378	8.378	0 %100
39	MP1C	X	-4.837	-4.837	0 %100
40	MP1C	Z	8.378	8.378	0 %100
41	MP2C	X	-4.837	-4.837	0 %100
42	MP2C	Z	8.378	8.378	0 %100
43	MP3C	X	-4.837	-4.837	0 %100
44	MP3C	Z	8.378	8.378	0 %100
45	MP4C	X	-4.837	-4.837	0 %100
46	MP4C	Z	8.378	8.378	0 %100
47	MP1B	X	-4.837	-4.837	0 %100
48	MP1B	Z	8.378	8.378	0 %100
49	MP2B	X	-4.837	-4.837	0 %100
50	MP2B	Z	8.378	8.378	0 %100
51	MP3B	X	-4.837	-4.837	0 %100
52	MP3B	Z	8.378	8.378	0 %100
53	MP4B	X	-4.837	-4.837	0 %100
54	MP4B	Z	8.378	8.378	0 %100
55	M49	X	-3.628	-3.628	0 %100
56	M49	Z	6.284	6.284	0 %100
57	M54	X	-3.628	-3.628	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, %]
58	M54	Z	6.284	6.284	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-4.455	-4.455	0	%100
62	M70	Z	7.717	7.717	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	-4.455	-4.455	0	%100
66	M84	Z	7.716	7.716	0	%100
67	OVP1	X	-3.956	-3.956	0	%100
68	OVP1	Z	6.851	6.851	0	%100
69	OVP2	X	-3.956	-3.956	0	%100
70	OVP2	Z	6.851	6.851	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	M7	X	-4.41	-4.41	0	%100
2	M7	Z	2.546	2.546	0	%100
3	FACE	X	-4.41	-4.41	0	%100
4	FACE	Z	2.546	2.546	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-8.313	-8.313	0	%100
8	M14	Z	4.799	4.799	0	%100
9	M47	X	-11.154	-11.154	0	%100
10	M47	Z	6.44	6.44	0	%100
11	M8	X	-4.41	-4.41	0	%100
12	M8	Z	2.546	2.546	0	%100
13	M9	X	-4.41	-4.41	0	%100
14	M9	Z	2.546	2.546	0	%100
15	M10A	X	-11.154	-11.154	0	%100
16	M10A	Z	6.44	6.44	0	%100
17	M11	X	-8.313	-8.313	0	%100
18	M11	Z	4.799	4.799	0	%100
19	M15A	X	-17.639	-17.639	0	%100
20	M15A	Z	10.184	10.184	0	%100
21	M16A	X	-17.639	-17.639	0	%100
22	M16A	Z	10.184	10.184	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	-21.51	-21.51	0	%100
26	M23	Z	12.419	12.419	0	%100
27	M24	X	-8.228	-8.228	0	%100
28	M24	Z	4.751	4.751	0	%100
29	M25	X	-21.501	-21.501	0	%100
30	M25	Z	12.414	12.414	0	%100
31	MP1A	X	-8.378	-8.378	0	%100
32	MP1A	Z	4.837	4.837	0	%100
33	MP2A	X	-8.378	-8.378	0	%100
34	MP2A	Z	4.837	4.837	0	%100
35	MP3A	X	-8.378	-8.378	0	%100
36	MP3A	Z	4.837	4.837	0	%100
37	MP4A	X	-8.378	-8.378	0	%100
38	MP4A	Z	4.837	4.837	0	%100
39	MP1C	X	-8.378	-8.378	0	%100
40	MP1C	Z	4.837	4.837	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, %]
41	MP2C	X	-8.378	-8.378	0	%100
42	MP2C	Z	4.837	4.837	0	%100
43	MP3C	X	-8.378	-8.378	0	%100
44	MP3C	Z	4.837	4.837	0	%100
45	MP4C	X	-8.378	-8.378	0	%100
46	MP4C	Z	4.837	4.837	0	%100
47	MP1B	X	-8.378	-8.378	0	%100
48	MP1B	Z	4.837	4.837	0	%100
49	MP2B	X	-8.378	-8.378	0	%100
50	MP2B	Z	4.837	4.837	0	%100
51	MP3B	X	-8.378	-8.378	0	%100
52	MP3B	Z	4.837	4.837	0	%100
53	MP4B	X	-8.378	-8.378	0	%100
54	MP4B	Z	4.837	4.837	0	%100
55	M49	X	-2.095	-2.095	0	%100
56	M49	Z	1.209	1.209	0	%100
57	M54	X	-8.378	-8.378	0	%100
58	M54	Z	4.837	4.837	0	%100
59	M59	X	-2.095	-2.095	0	%100
60	M59	Z	1.209	1.209	0	%100
61	M70	X	-10.288	-10.288	0	%100
62	M70	Z	5.94	5.94	0	%100
63	M77	X	-2.572	-2.572	0	%100
64	M77	Z	1.485	1.485	0	%100
65	M84	X	-2.572	-2.572	0	%100
66	M84	Z	1.485	1.485	0	%100
67	OVP1	X	-6.851	-6.851	0	%100
68	OVP1	Z	3.956	3.956	0	%100
69	OVP2	X	-6.851	-6.851	0	%100
70	OVP2	Z	3.956	3.956	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	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	-4.293	-4.293	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-12.798	-12.798	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	-4.293	-4.293	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	-15.276	-15.276	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-15.276	-15.276	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	-17.173	-17.173	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	-3.2	-3.2	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	-15.268	-15.268	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	-15.272	-15.272	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	-3.2	-3.2	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.%]
24	M18	Z	0	0	0	%100
25	M23	X	-29.94	-29.94	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	-14.608	-14.608	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-14.614	-14.614	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	-9.675	-9.675	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	-9.675	-9.675	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	-9.675	-9.675	0	%100
36	MP3A	Z	0	0	0	%100
37	MP4A	X	-9.675	-9.675	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	-9.675	-9.675	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	-9.675	-9.675	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	-9.675	-9.675	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	-9.675	-9.675	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	-9.675	-9.675	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	-9.675	-9.675	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	-9.675	-9.675	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	-9.675	-9.675	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	-7.256	-7.256	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	-7.256	-7.256	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-8.91	-8.91	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	-8.91	-8.91	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	-7.911	-7.911	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	-7.911	-7.911	0	%100
70	OVP2	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	M7	X	-4.41	-4.41	0	%100
2	M7	Z	-2.546	-2.546	0	%100
3	FACE	X	-4.41	-4.41	0	%100
4	FACE	Z	-2.546	-2.546	0	%100
5	M10	X	-11.154	-11.154	0	%100
6	M10	Z	-6.44	-6.44	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.%,]
7	M14	X	-8.313	-8.313	0	%100
8	M14	Z	-4.799	-4.799	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	-17.639	-17.639	0	%100
12	M8	Z	-10.184	-10.184	0	%100
13	M9	X	-17.639	-17.639	0	%100
14	M9	Z	-10.184	-10.184	0	%100
15	M10A	X	-11.154	-11.154	0	%100
16	M10A	Z	-6.44	-6.44	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	-4.403	-4.403	0	%100
20	M15A	Z	-2.542	-2.542	0	%100
21	M16A	X	-4.406	-4.406	0	%100
22	M16A	Z	-2.544	-2.544	0	%100
23	M18	X	-8.313	-8.313	0	%100
24	M18	Z	-4.799	-4.799	0	%100
25	M23	X	-21.501	-21.501	0	%100
26	M23	Z	-12.414	-12.414	0	%100
27	M24	X	-21.504	-21.504	0	%100
28	M24	Z	-12.415	-12.415	0	%100
29	M25	X	-8.238	-8.238	0	%100
30	M25	Z	-4.756	-4.756	0	%100
31	MP1A	X	-8.378	-8.378	0	%100
32	MP1A	Z	-4.837	-4.837	0	%100
33	MP2A	X	-8.378	-8.378	0	%100
34	MP2A	Z	-4.837	-4.837	0	%100
35	MP3A	X	-8.378	-8.378	0	%100
36	MP3A	Z	-4.837	-4.837	0	%100
37	MP4A	X	-8.378	-8.378	0	%100
38	MP4A	Z	-4.837	-4.837	0	%100
39	MP1C	X	-8.378	-8.378	0	%100
40	MP1C	Z	-4.837	-4.837	0	%100
41	MP2C	X	-8.378	-8.378	0	%100
42	MP2C	Z	-4.837	-4.837	0	%100
43	MP3C	X	-8.378	-8.378	0	%100
44	MP3C	Z	-4.837	-4.837	0	%100
45	MP4C	X	-8.378	-8.378	0	%100
46	MP4C	Z	-4.837	-4.837	0	%100
47	MP1B	X	-8.378	-8.378	0	%100
48	MP1B	Z	-4.837	-4.837	0	%100
49	MP2B	X	-8.378	-8.378	0	%100
50	MP2B	Z	-4.837	-4.837	0	%100
51	MP3B	X	-8.378	-8.378	0	%100
52	MP3B	Z	-4.837	-4.837	0	%100
53	MP4B	X	-8.378	-8.378	0	%100
54	MP4B	Z	-4.837	-4.837	0	%100
55	M49	X	-2.095	-2.095	0	%100
56	M49	Z	-1.209	-1.209	0	%100
57	M54	X	-2.095	-2.095	0	%100
58	M54	Z	-1.209	-1.209	0	%100
59	M59	X	-8.378	-8.378	0	%100
60	M59	Z	-4.837	-4.837	0	%100
61	M70	X	-2.572	-2.572	0	%100
62	M70	Z	-1.485	-1.485	0	%100
63	M77	X	-10.288	-10.288	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.%]
64	M77	Z	-5.94	-5.94	0	%100
65	M84	X	-2.572	-2.572	0	%100
66	M84	Z	-1.485	-1.485	0	%100
67	OVP1	X	-6.851	-6.851	0	%100
68	OVP1	Z	-3.956	-3.956	0	%100
69	OVP2	X	-6.851	-6.851	0	%100
70	OVP2	Z	-3.956	-3.956	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	M7	X	-7.638	-7.638	0	%100
2	M7	Z	-13.229	-13.229	0	%100
3	FACE	X	-7.638	-7.638	0	%100
4	FACE	Z	-13.229	-13.229	0	%100
5	M10	X	-8.586	-8.586	0	%100
6	M10	Z	-14.872	-14.872	0	%100
7	M14	X	-1.6	-1.6	0	%100
8	M14	Z	-2.771	-2.771	0	%100
9	M47	X	-2.147	-2.147	0	%100
10	M47	Z	-3.718	-3.718	0	%100
11	M8	X	-7.638	-7.638	0	%100
12	M8	Z	-13.229	-13.229	0	%100
13	M9	X	-7.638	-7.638	0	%100
14	M9	Z	-13.229	-13.229	0	%100
15	M10A	X	-2.147	-2.147	0	%100
16	M10A	Z	-3.718	-3.718	0	%100
17	M11	X	-1.6	-1.6	0	%100
18	M11	Z	-2.771	-2.771	0	%100
19	M15A	X	-2e-6	-2e-6	0	%100
20	M15A	Z	-3e-6	-3e-6	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	-1e-6	-1e-6	0	%100
23	M18	X	-6.399	-6.399	0	%100
24	M18	Z	-11.084	-11.084	0	%100
25	M23	X	-7.307	-7.307	0	%100
26	M23	Z	-12.656	-12.656	0	%100
27	M24	X	-14.973	-14.973	0	%100
28	M24	Z	-25.935	-25.935	0	%100
29	M25	X	-7.312	-7.312	0	%100
30	M25	Z	-12.665	-12.665	0	%100
31	MP1A	X	-4.837	-4.837	0	%100
32	MP1A	Z	-8.378	-8.378	0	%100
33	MP2A	X	-4.837	-4.837	0	%100
34	MP2A	Z	-8.378	-8.378	0	%100
35	MP3A	X	-4.837	-4.837	0	%100
36	MP3A	Z	-8.378	-8.378	0	%100
37	MP4A	X	-4.837	-4.837	0	%100
38	MP4A	Z	-8.378	-8.378	0	%100
39	MP1C	X	-4.837	-4.837	0	%100
40	MP1C	Z	-8.378	-8.378	0	%100
41	MP2C	X	-4.837	-4.837	0	%100
42	MP2C	Z	-8.378	-8.378	0	%100
43	MP3C	X	-4.837	-4.837	0	%100
44	MP3C	Z	-8.378	-8.378	0	%100
45	MP4C	X	-4.837	-4.837	0	%100
46	MP4C	Z	-8.378	-8.378	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.%]
47	MP1B	X	-4.837	-4.837	0	%100
48	MP1B	Z	-8.378	-8.378	0	%100
49	MP2B	X	-4.837	-4.837	0	%100
50	MP2B	Z	-8.378	-8.378	0	%100
51	MP3B	X	-4.837	-4.837	0	%100
52	MP3B	Z	-8.378	-8.378	0	%100
53	MP4B	X	-4.837	-4.837	0	%100
54	MP4B	Z	-8.378	-8.378	0	%100
55	M49	X	-3.628	-3.628	0	%100
56	M49	Z	-6.284	-6.284	0	%100
57	M54	X	0	0	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	-3.628	-3.628	0	%100
60	M59	Z	-6.284	-6.284	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	-4.455	-4.455	0	%100
64	M77	Z	-7.716	-7.716	0	%100
65	M84	X	-4.455	-4.455	0	%100
66	M84	Z	-7.717	-7.717	0	%100
67	OVP1	X	-3.956	-3.956	0	%100
68	OVP1	Z	-6.851	-6.851	0	%100
69	OVP2	X	-3.956	-3.956	0	%100
70	OVP2	Z	-6.851	-6.851	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	M7	X	0	0	0	%100
2	M7	Z	-5.936	-5.936	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	-5.936	-5.936	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	-3.662	-3.662	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	-3.662	-3.662	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-1.484	-1.484	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-1.484	-1.484	0	%100
15	M10A	X	0	0	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-2.994	-2.994	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	-1.486	-1.486	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	-1.485	-1.485	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	-2.994	-2.994	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-2.414	-2.414	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-6.303	-6.303	0	%100
29	M25	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.%,]
30	M25	Z	-6.303	-6.303	0 %100
31	MP1A	X	0	0	0 %100
32	MP1A	Z	-3.911	-3.911	0 %100
33	MP2A	X	0	0	0 %100
34	MP2A	Z	-3.911	-3.911	0 %100
35	MP3A	X	0	0	0 %100
36	MP3A	Z	-3.911	-3.911	0 %100
37	MP4A	X	0	0	0 %100
38	MP4A	Z	-3.911	-3.911	0 %100
39	MP1C	X	0	0	0 %100
40	MP1C	Z	-3.911	-3.911	0 %100
41	MP2C	X	0	0	0 %100
42	MP2C	Z	-3.911	-3.911	0 %100
43	MP3C	X	0	0	0 %100
44	MP3C	Z	-3.911	-3.911	0 %100
45	MP4C	X	0	0	0 %100
46	MP4C	Z	-3.911	-3.911	0 %100
47	MP1B	X	0	0	0 %100
48	MP1B	Z	-3.911	-3.911	0 %100
49	MP2B	X	0	0	0 %100
50	MP2B	Z	-3.911	-3.911	0 %100
51	MP3B	X	0	0	0 %100
52	MP3B	Z	-3.911	-3.911	0 %100
53	MP4B	X	0	0	0 %100
54	MP4B	Z	-3.911	-3.911	0 %100
55	M49	X	0	0	0 %100
56	M49	Z	-4.079	-4.079	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	-1.02	-1.02	0 %100
59	M59	X	0	0	0 %100
60	M59	Z	-1.02	-1.02	0 %100
61	M70	X	0	0	0 %100
62	M70	Z	-.895	-.895	0 %100
63	M77	X	0	0	0 %100
64	M77	Z	-.895	-.895	0 %100
65	M84	X	0	0	0 %100
66	M84	Z	-3.58	-3.58	0 %100
67	OVP1	X	0	0	0 %100
68	OVP1	Z	-3.134	-3.134	0 %100
69	OVP2	X	0	0	0 %100
70	OVP2	Z	-3.134	-3.134	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	M7	X	2.226	2.226	0 %100
2	M7	Z	-3.855	-3.855	0 %100
3	FACE	X	2.226	2.226	0 %100
4	FACE	Z	-3.855	-3.855	0 %100
5	M10	X	.61	.61	0 %100
6	M10	Z	-1.057	-1.057	0 %100
7	M14	X	.499	.499	0 %100
8	M14	Z	-.864	-.864	0 %100
9	M47	X	2.441	2.441	0 %100
10	M47	Z	-4.228	-4.228	0 %100
11	M8	X	0	0	0 %100
12	M8	Z	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, %]	
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	.61	.61	0	%100
16	M10A	Z	-1.057	-1.057	0	%100
17	M11	X	1.996	1.996	0	%100
18	M11	Z	-3.457	-3.457	0	%100
19	M15A	X	2.227	2.227	0	%100
20	M15A	Z	-3.857	-3.857	0	%100
21	M16A	X	2.226	2.226	0	%100
22	M16A	Z	-3.856	-3.856	0	%100
23	M18	X	.499	.499	0	%100
24	M18	Z	-.864	-.864	0	%100
25	M23	X	1.855	1.855	0	%100
26	M23	Z	-3.214	-3.214	0	%100
27	M24	X	1.855	1.855	0	%100
28	M24	Z	-3.212	-3.212	0	%100
29	M25	X	3.799	3.799	0	%100
30	M25	Z	-6.58	-6.58	0	%100
31	MP1A	X	1.956	1.956	0	%100
32	MP1A	Z	-3.387	-3.387	0	%100
33	MP2A	X	1.956	1.956	0	%100
34	MP2A	Z	-3.387	-3.387	0	%100
35	MP3A	X	1.956	1.956	0	%100
36	MP3A	Z	-3.387	-3.387	0	%100
37	MP4A	X	1.956	1.956	0	%100
38	MP4A	Z	-3.387	-3.387	0	%100
39	MP1C	X	1.956	1.956	0	%100
40	MP1C	Z	-3.387	-3.387	0	%100
41	MP2C	X	1.956	1.956	0	%100
42	MP2C	Z	-3.387	-3.387	0	%100
43	MP3C	X	1.956	1.956	0	%100
44	MP3C	Z	-3.387	-3.387	0	%100
45	MP4C	X	1.956	1.956	0	%100
46	MP4C	Z	-3.387	-3.387	0	%100
47	MP1B	X	1.956	1.956	0	%100
48	MP1B	Z	-3.387	-3.387	0	%100
49	MP2B	X	1.956	1.956	0	%100
50	MP2B	Z	-3.387	-3.387	0	%100
51	MP3B	X	1.956	1.956	0	%100
52	MP3B	Z	-3.387	-3.387	0	%100
53	MP4B	X	1.956	1.956	0	%100
54	MP4B	Z	-3.387	-3.387	0	%100
55	M49	X	1.53	1.53	0	%100
56	M49	Z	-2.649	-2.649	0	%100
57	M54	X	1.53	1.53	0	%100
58	M54	Z	-2.649	-2.649	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	1.343	1.343	0	%100
62	M70	Z	-2.325	-2.325	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	1.343	1.343	0	%100
66	M84	Z	-2.325	-2.325	0	%100
67	OVP1	X	1.567	1.567	0	%100
68	OVP1	Z	-2.714	-2.714	0	%100
69	OVP2	X	1.567	1.567	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.%]
70	OVP2	Z	-2.714	-2.714	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M7	X	1.285	1.285	0	%100
2	M7	Z	-0.742	-0.742	0	%100
3	FACE	X	1.285	1.285	0	%100
4	FACE	Z	-0.742	-0.742	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	2.593	2.593	0	%100
8	M14	Z	-1.497	-1.497	0	%100
9	M47	X	3.171	3.171	0	%100
10	M47	Z	-1.831	-1.831	0	%100
11	M8	X	1.285	1.285	0	%100
12	M8	Z	-0.742	-0.742	0	%100
13	M9	X	1.285	1.285	0	%100
14	M9	Z	-0.742	-0.742	0	%100
15	M10A	X	3.171	3.171	0	%100
16	M10A	Z	-1.831	-1.831	0	%100
17	M11	X	2.593	2.593	0	%100
18	M11	Z	-1.497	-1.497	0	%100
19	M15A	X	5.14	5.14	0	%100
20	M15A	Z	-2.968	-2.968	0	%100
21	M16A	X	5.14	5.14	0	%100
22	M16A	Z	-2.968	-2.968	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	5.458	5.458	0	%100
26	M23	Z	-3.151	-3.151	0	%100
27	M24	X	2.088	2.088	0	%100
28	M24	Z	-1.205	-1.205	0	%100
29	M25	X	5.456	5.456	0	%100
30	M25	Z	-3.15	-3.15	0	%100
31	MP1A	X	3.387	3.387	0	%100
32	MP1A	Z	-1.956	-1.956	0	%100
33	MP2A	X	3.387	3.387	0	%100
34	MP2A	Z	-1.956	-1.956	0	%100
35	MP3A	X	3.387	3.387	0	%100
36	MP3A	Z	-1.956	-1.956	0	%100
37	MP4A	X	3.387	3.387	0	%100
38	MP4A	Z	-1.956	-1.956	0	%100
39	MP1C	X	3.387	3.387	0	%100
40	MP1C	Z	-1.956	-1.956	0	%100
41	MP2C	X	3.387	3.387	0	%100
42	MP2C	Z	-1.956	-1.956	0	%100
43	MP3C	X	3.387	3.387	0	%100
44	MP3C	Z	-1.956	-1.956	0	%100
45	MP4C	X	3.387	3.387	0	%100
46	MP4C	Z	-1.956	-1.956	0	%100
47	MP1B	X	3.387	3.387	0	%100
48	MP1B	Z	-1.956	-1.956	0	%100
49	MP2B	X	3.387	3.387	0	%100
50	MP2B	Z	-1.956	-1.956	0	%100
51	MP3B	X	3.387	3.387	0	%100
52	MP3B	Z	-1.956	-1.956	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.%]
53	MP4B	X	3.387	3.387	0	%100
54	MP4B	Z	-1.956	-1.956	0	%100
55	M49	X	.883	.883	0	%100
56	M49	Z	-.51	-.51	0	%100
57	M54	X	3.533	3.533	0	%100
58	M54	Z	-2.04	-2.04	0	%100
59	M59	X	.883	.883	0	%100
60	M59	Z	-.51	-.51	0	%100
61	M70	X	3.101	3.101	0	%100
62	M70	Z	-1.79	-1.79	0	%100
63	M77	X	.775	.775	0	%100
64	M77	Z	-.448	-.448	0	%100
65	M84	X	.775	.775	0	%100
66	M84	Z	-.447	-.447	0	%100
67	OVP1	X	2.714	2.714	0	%100
68	OVP1	Z	-1.567	-1.567	0	%100
69	OVP2	X	2.714	2.714	0	%100
70	OVP2	Z	-1.567	-1.567	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	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	1.221	1.221	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	3.992	3.992	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	1.221	1.221	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	4.452	4.452	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	4.452	4.452	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	4.882	4.882	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	.998	.998	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	4.45	4.45	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	4.451	4.451	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	.998	.998	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	7.597	7.597	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	3.707	3.707	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	3.708	3.708	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	3.911	3.911	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	3.911	3.911	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	3.911	3.911	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
36	MP3A	Z	0	0	0	%100
37	MP4A	X	3.911	3.911	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	3.911	3.911	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	3.911	3.911	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	3.911	3.911	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	3.911	3.911	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	3.911	3.911	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	3.911	3.911	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	3.911	3.911	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	3.911	3.911	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	3.059	3.059	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	3.059	3.059	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	2.685	2.685	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	2.685	2.685	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	3.134	3.134	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	3.134	3.134	0	%100
70	OVP2	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M7	X	1.285	1.285	0	%100
2	M7	Z	.742	.742	0	%100
3	FACE	X	1.285	1.285	0	%100
4	FACE	Z	.742	.742	0	%100
5	M10	X	3.171	3.171	0	%100
6	M10	Z	1.831	1.831	0	%100
7	M14	X	2.593	2.593	0	%100
8	M14	Z	1.497	1.497	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	5.14	5.14	0	%100
12	M8	Z	2.968	2.968	0	%100
13	M9	X	5.14	5.14	0	%100
14	M9	Z	2.968	2.968	0	%100
15	M10A	X	3.171	3.171	0	%100
16	M10A	Z	1.831	1.831	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
19	M15A	X	1.283	1.283	0	%100
20	M15A	Z	.741	.741	0	%100
21	M16A	X	1.284	1.284	0	%100
22	M16A	Z	.741	.741	0	%100
23	M18	X	2.593	2.593	0	%100
24	M18	Z	1.497	1.497	0	%100
25	M23	X	5.456	5.456	0	%100
26	M23	Z	3.15	3.15	0	%100
27	M24	X	5.456	5.456	0	%100
28	M24	Z	3.15	3.15	0	%100
29	M25	X	2.09	2.09	0	%100
30	M25	Z	1.207	1.207	0	%100
31	MP1A	X	3.387	3.387	0	%100
32	MP1A	Z	1.956	1.956	0	%100
33	MP2A	X	3.387	3.387	0	%100
34	MP2A	Z	1.956	1.956	0	%100
35	MP3A	X	3.387	3.387	0	%100
36	MP3A	Z	1.956	1.956	0	%100
37	MP4A	X	3.387	3.387	0	%100
38	MP4A	Z	1.956	1.956	0	%100
39	MP1C	X	3.387	3.387	0	%100
40	MP1C	Z	1.956	1.956	0	%100
41	MP2C	X	3.387	3.387	0	%100
42	MP2C	Z	1.956	1.956	0	%100
43	MP3C	X	3.387	3.387	0	%100
44	MP3C	Z	1.956	1.956	0	%100
45	MP4C	X	3.387	3.387	0	%100
46	MP4C	Z	1.956	1.956	0	%100
47	MP1B	X	3.387	3.387	0	%100
48	MP1B	Z	1.956	1.956	0	%100
49	MP2B	X	3.387	3.387	0	%100
50	MP2B	Z	1.956	1.956	0	%100
51	MP3B	X	3.387	3.387	0	%100
52	MP3B	Z	1.956	1.956	0	%100
53	MP4B	X	3.387	3.387	0	%100
54	MP4B	Z	1.956	1.956	0	%100
55	M49	X	.883	.883	0	%100
56	M49	Z	.51	.51	0	%100
57	M54	X	.883	.883	0	%100
58	M54	Z	.51	.51	0	%100
59	M59	X	3.533	3.533	0	%100
60	M59	Z	2.04	2.04	0	%100
61	M70	X	.775	.775	0	%100
62	M70	Z	.447	.447	0	%100
63	M77	X	3.101	3.101	0	%100
64	M77	Z	1.79	1.79	0	%100
65	M84	X	.775	.775	0	%100
66	M84	Z	.448	.448	0	%100
67	OVP1	X	2.714	2.714	0	%100
68	OVP1	Z	1.567	1.567	0	%100
69	OVP2	X	2.714	2.714	0	%100
70	OVP2	Z	1.567	1.567	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M7	X	2.226	2.226	0	%100



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 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
2	M7	Z	3.855	3.855	0 %100
3	FACE	X	2.226	2.226	0 %100
4	FACE	Z	3.855	3.855	0 %100
5	M10	X	2.441	2.441	0 %100
6	M10	Z	4.228	4.228	0 %100
7	M14	X	.499	.499	0 %100
8	M14	Z	.864	.864	0 %100
9	M47	X	.61	.61	0 %100
10	M47	Z	1.057	1.057	0 %100
11	M8	X	2.226	2.226	0 %100
12	M8	Z	3.855	3.855	0 %100
13	M9	X	2.226	2.226	0 %100
14	M9	Z	3.855	3.855	0 %100
15	M10A	X	.61	.61	0 %100
16	M10A	Z	1.057	1.057	0 %100
17	M11	X	.499	.499	0 %100
18	M11	Z	.864	.864	0 %100
19	M15A	X	1e-6	1e-6	0 %100
20	M15A	Z	1e-6	1e-6	0 %100
21	M16A	X	0	0	0 %100
22	M16A	Z	0	0	0 %100
23	M18	X	1.996	1.996	0 %100
24	M18	Z	3.457	3.457	0 %100
25	M23	X	1.854	1.854	0 %100
26	M23	Z	3.212	3.212	0 %100
27	M24	X	3.799	3.799	0 %100
28	M24	Z	6.581	6.581	0 %100
29	M25	X	1.855	1.855	0 %100
30	M25	Z	3.214	3.214	0 %100
31	MP1A	X	1.956	1.956	0 %100
32	MP1A	Z	3.387	3.387	0 %100
33	MP2A	X	1.956	1.956	0 %100
34	MP2A	Z	3.387	3.387	0 %100
35	MP3A	X	1.956	1.956	0 %100
36	MP3A	Z	3.387	3.387	0 %100
37	MP4A	X	1.956	1.956	0 %100
38	MP4A	Z	3.387	3.387	0 %100
39	MP1C	X	1.956	1.956	0 %100
40	MP1C	Z	3.387	3.387	0 %100
41	MP2C	X	1.956	1.956	0 %100
42	MP2C	Z	3.387	3.387	0 %100
43	MP3C	X	1.956	1.956	0 %100
44	MP3C	Z	3.387	3.387	0 %100
45	MP4C	X	1.956	1.956	0 %100
46	MP4C	Z	3.387	3.387	0 %100
47	MP1B	X	1.956	1.956	0 %100
48	MP1B	Z	3.387	3.387	0 %100
49	MP2B	X	1.956	1.956	0 %100
50	MP2B	Z	3.387	3.387	0 %100
51	MP3B	X	1.956	1.956	0 %100
52	MP3B	Z	3.387	3.387	0 %100
53	MP4B	X	1.956	1.956	0 %100
54	MP4B	Z	3.387	3.387	0 %100
55	M49	X	1.53	1.53	0 %100
56	M49	Z	2.649	2.649	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
59	M59	X	1.53	1.53	0	%100
60	M59	Z	2.649	2.649	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	1.343	1.343	0	%100
64	M77	Z	2.325	2.325	0	%100
65	M84	X	1.343	1.343	0	%100
66	M84	Z	2.325	2.325	0	%100
67	OVP1	X	1.567	1.567	0	%100
68	OVP1	Z	2.714	2.714	0	%100
69	OVP2	X	1.567	1.567	0	%100
70	OVP2	Z	2.714	2.714	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M7	X	0	0	0	%100
2	M7	Z	5.936	5.936	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	5.936	5.936	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	3.662	3.662	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	3.662	3.662	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	1.484	1.484	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	1.484	1.484	0	%100
15	M10A	X	0	0	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	2.994	2.994	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	1.486	1.486	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	1.485	1.485	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	2.994	2.994	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.414	2.414	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	6.303	6.303	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	6.303	6.303	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	3.911	3.911	0	%100
33	MP2A	X	0	0	0	%100
34	MP2A	Z	3.911	3.911	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	3.911	3.911	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	3.911	3.911	0	%100
39	MP1C	X	0	0	0	%100
40	MP1C	Z	3.911	3.911	0	%100
41	MP2C	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
42	MP2C	Z	3.911	3.911	0	%100
43	MP3C	X	0	0	0	%100
44	MP3C	Z	3.911	3.911	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	3.911	3.911	0	%100
47	MP1B	X	0	0	0	%100
48	MP1B	Z	3.911	3.911	0	%100
49	MP2B	X	0	0	0	%100
50	MP2B	Z	3.911	3.911	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	3.911	3.911	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	3.911	3.911	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	4.079	4.079	0	%100
57	M54	X	0	0	0	%100
58	M54	Z	1.02	1.02	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	1.02	1.02	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	.895	.895	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	.895	.895	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	3.58	3.58	0	%100
67	OVP1	X	0	0	0	%100
68	OVP1	Z	3.134	3.134	0	%100
69	OVP2	X	0	0	0	%100
70	OVP2	Z	3.134	3.134	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M7	X	-2.226	-2.226	0	%100
2	M7	Z	3.855	3.855	0	%100
3	FACE	X	-2.226	-2.226	0	%100
4	FACE	Z	3.855	3.855	0	%100
5	M10	X	-.61	-.61	0	%100
6	M10	Z	1.057	1.057	0	%100
7	M14	X	-.499	-.499	0	%100
8	M14	Z	.864	.864	0	%100
9	M47	X	-2.441	-2.441	0	%100
10	M47	Z	4.228	4.228	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	-.61	-.61	0	%100
16	M10A	Z	1.057	1.057	0	%100
17	M11	X	-1.996	-1.996	0	%100
18	M11	Z	3.457	3.457	0	%100
19	M15A	X	-2.227	-2.227	0	%100
20	M15A	Z	3.857	3.857	0	%100
21	M16A	X	-2.226	-2.226	0	%100
22	M16A	Z	3.856	3.856	0	%100
23	M18	X	-.499	-.499	0	%100
24	M18	Z	.864	.864	0	%100





Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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**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.%,]
25	M23	X	-1.855	-1.855	0	%100
26	M23	Z	3.214	3.214	0	%100
27	M24	X	-1.855	-1.855	0	%100
28	M24	Z	3.212	3.212	0	%100
29	M25	X	-3.799	-3.799	0	%100
30	M25	Z	6.58	6.58	0	%100
31	MP1A	X	-1.956	-1.956	0	%100
32	MP1A	Z	3.387	3.387	0	%100
33	MP2A	X	-1.956	-1.956	0	%100
34	MP2A	Z	3.387	3.387	0	%100
35	MP3A	X	-1.956	-1.956	0	%100
36	MP3A	Z	3.387	3.387	0	%100
37	MP4A	X	-1.956	-1.956	0	%100
38	MP4A	Z	3.387	3.387	0	%100
39	MP1C	X	-1.956	-1.956	0	%100
40	MP1C	Z	3.387	3.387	0	%100
41	MP2C	X	-1.956	-1.956	0	%100
42	MP2C	Z	3.387	3.387	0	%100
43	MP3C	X	-1.956	-1.956	0	%100
44	MP3C	Z	3.387	3.387	0	%100
45	MP4C	X	-1.956	-1.956	0	%100
46	MP4C	Z	3.387	3.387	0	%100
47	MP1B	X	-1.956	-1.956	0	%100
48	MP1B	Z	3.387	3.387	0	%100
49	MP2B	X	-1.956	-1.956	0	%100
50	MP2B	Z	3.387	3.387	0	%100
51	MP3B	X	-1.956	-1.956	0	%100
52	MP3B	Z	3.387	3.387	0	%100
53	MP4B	X	-1.956	-1.956	0	%100
54	MP4B	Z	3.387	3.387	0	%100
55	M49	X	-1.53	-1.53	0	%100
56	M49	Z	2.649	2.649	0	%100
57	M54	X	-1.53	-1.53	0	%100
58	M54	Z	2.649	2.649	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-1.343	-1.343	0	%100
62	M70	Z	2.325	2.325	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	-1.343	-1.343	0	%100
66	M84	Z	2.325	2.325	0	%100
67	OVP1	X	-1.567	-1.567	0	%100
68	OVP1	Z	2.714	2.714	0	%100
69	OVP2	X	-1.567	-1.567	0	%100
70	OVP2	Z	2.714	2.714	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	M7	X	-1.285	-1.285	0	%100
2	M7	Z	.742	.742	0	%100
3	FACE	X	-1.285	-1.285	0	%100
4	FACE	Z	.742	.742	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-2.593	-2.593	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
8	M14	Z	1.497	1.497	0	%100
9	M47	X	-3.171	-3.171	0	%100
10	M47	Z	1.831	1.831	0	%100
11	M8	X	-1.285	-1.285	0	%100
12	M8	Z	.742	.742	0	%100
13	M9	X	-1.285	-1.285	0	%100
14	M9	Z	.742	.742	0	%100
15	M10A	X	-3.171	-3.171	0	%100
16	M10A	Z	1.831	1.831	0	%100
17	M11	X	-2.593	-2.593	0	%100
18	M11	Z	1.497	1.497	0	%100
19	M15A	X	-5.14	-5.14	0	%100
20	M15A	Z	2.968	2.968	0	%100
21	M16A	X	-5.14	-5.14	0	%100
22	M16A	Z	2.968	2.968	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	-5.458	-5.458	0	%100
26	M23	Z	3.151	3.151	0	%100
27	M24	X	-2.088	-2.088	0	%100
28	M24	Z	1.205	1.205	0	%100
29	M25	X	-5.456	-5.456	0	%100
30	M25	Z	3.15	3.15	0	%100
31	MP1A	X	-3.387	-3.387	0	%100
32	MP1A	Z	1.956	1.956	0	%100
33	MP2A	X	-3.387	-3.387	0	%100
34	MP2A	Z	1.956	1.956	0	%100
35	MP3A	X	-3.387	-3.387	0	%100
36	MP3A	Z	1.956	1.956	0	%100
37	MP4A	X	-3.387	-3.387	0	%100
38	MP4A	Z	1.956	1.956	0	%100
39	MP1C	X	-3.387	-3.387	0	%100
40	MP1C	Z	1.956	1.956	0	%100
41	MP2C	X	-3.387	-3.387	0	%100
42	MP2C	Z	1.956	1.956	0	%100
43	MP3C	X	-3.387	-3.387	0	%100
44	MP3C	Z	1.956	1.956	0	%100
45	MP4C	X	-3.387	-3.387	0	%100
46	MP4C	Z	1.956	1.956	0	%100
47	MP1B	X	-3.387	-3.387	0	%100
48	MP1B	Z	1.956	1.956	0	%100
49	MP2B	X	-3.387	-3.387	0	%100
50	MP2B	Z	1.956	1.956	0	%100
51	MP3B	X	-3.387	-3.387	0	%100
52	MP3B	Z	1.956	1.956	0	%100
53	MP4B	X	-3.387	-3.387	0	%100
54	MP4B	Z	1.956	1.956	0	%100
55	M49	X	-.883	-.883	0	%100
56	M49	Z	.51	.51	0	%100
57	M54	X	-3.533	-3.533	0	%100
58	M54	Z	2.04	2.04	0	%100
59	M59	X	-.883	-.883	0	%100
60	M59	Z	.51	.51	0	%100
61	M70	X	-3.101	-3.101	0	%100
62	M70	Z	1.79	1.79	0	%100
63	M77	X	-.775	-.775	0	%100
64	M77	Z	.448	.448	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
65	M84	X	-.775	-.775	0	%100
66	M84	Z	.447	.447	0	%100
67	OVP1	X	-2.714	-2.714	0	%100
68	OVP1	Z	1.567	1.567	0	%100
69	OVP2	X	-2.714	-2.714	0	%100
70	OVP2	Z	1.567	1.567	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	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	-1.221	-1.221	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-3.992	-3.992	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	-1.221	-1.221	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	-4.452	-4.452	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-4.452	-4.452	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	-4.882	-4.882	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	-.998	-.998	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	-4.45	-4.45	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	-4.451	-4.451	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	-.998	-.998	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	-7.597	-7.597	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	-3.707	-3.707	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-3.708	-3.708	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	-3.911	-3.911	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	-3.911	-3.911	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	-3.911	-3.911	0	%100
36	MP3A	Z	0	0	0	%100
37	MP4A	X	-3.911	-3.911	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	-3.911	-3.911	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	-3.911	-3.911	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	-3.911	-3.911	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	-3.911	-3.911	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	-3.911	-3.911	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

July 10, 2023  
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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.%,]
48	MP1B	Z	0	0	0	%100
49	MP2B	X	-3.911	-3.911	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	-3.911	-3.911	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	-3.911	-3.911	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	-3.059	-3.059	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	-3.059	-3.059	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-2.685	-2.685	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	-2.685	-2.685	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	-3.134	-3.134	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	-3.134	-3.134	0	%100
70	OVP2	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	M7	X	-1.285	-1.285	0	%100
2	M7	Z	-.742	-.742	0	%100
3	FACE	X	-1.285	-1.285	0	%100
4	FACE	Z	-.742	-.742	0	%100
5	M10	X	-3.171	-3.171	0	%100
6	M10	Z	-1.831	-1.831	0	%100
7	M14	X	-2.593	-2.593	0	%100
8	M14	Z	-1.497	-1.497	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	-5.14	-5.14	0	%100
12	M8	Z	-2.968	-2.968	0	%100
13	M9	X	-5.14	-5.14	0	%100
14	M9	Z	-2.968	-2.968	0	%100
15	M10A	X	-3.171	-3.171	0	%100
16	M10A	Z	-1.831	-1.831	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	-1.283	-1.283	0	%100
20	M15A	Z	-.741	-.741	0	%100
21	M16A	X	-1.284	-1.284	0	%100
22	M16A	Z	-.741	-.741	0	%100
23	M18	X	-2.593	-2.593	0	%100
24	M18	Z	-1.497	-1.497	0	%100
25	M23	X	-5.456	-5.456	0	%100
26	M23	Z	-3.15	-3.15	0	%100
27	M24	X	-5.456	-5.456	0	%100
28	M24	Z	-3.15	-3.15	0	%100
29	M25	X	-2.09	-2.09	0	%100
30	M25	Z	-1.207	-1.207	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.%]
31	MP1A	X	-3.387	-3.387	0	%100
32	MP1A	Z	-1.956	-1.956	0	%100
33	MP2A	X	-3.387	-3.387	0	%100
34	MP2A	Z	-1.956	-1.956	0	%100
35	MP3A	X	-3.387	-3.387	0	%100
36	MP3A	Z	-1.956	-1.956	0	%100
37	MP4A	X	-3.387	-3.387	0	%100
38	MP4A	Z	-1.956	-1.956	0	%100
39	MP1C	X	-3.387	-3.387	0	%100
40	MP1C	Z	-1.956	-1.956	0	%100
41	MP2C	X	-3.387	-3.387	0	%100
42	MP2C	Z	-1.956	-1.956	0	%100
43	MP3C	X	-3.387	-3.387	0	%100
44	MP3C	Z	-1.956	-1.956	0	%100
45	MP4C	X	-3.387	-3.387	0	%100
46	MP4C	Z	-1.956	-1.956	0	%100
47	MP1B	X	-3.387	-3.387	0	%100
48	MP1B	Z	-1.956	-1.956	0	%100
49	MP2B	X	-3.387	-3.387	0	%100
50	MP2B	Z	-1.956	-1.956	0	%100
51	MP3B	X	-3.387	-3.387	0	%100
52	MP3B	Z	-1.956	-1.956	0	%100
53	MP4B	X	-3.387	-3.387	0	%100
54	MP4B	Z	-1.956	-1.956	0	%100
55	M49	X	-0.883	-0.883	0	%100
56	M49	Z	-0.51	-0.51	0	%100
57	M54	X	-0.883	-0.883	0	%100
58	M54	Z	-0.51	-0.51	0	%100
59	M59	X	-3.533	-3.533	0	%100
60	M59	Z	-2.04	-2.04	0	%100
61	M70	X	-0.775	-0.775	0	%100
62	M70	Z	-0.447	-0.447	0	%100
63	M77	X	-3.101	-3.101	0	%100
64	M77	Z	-1.79	-1.79	0	%100
65	M84	X	-0.775	-0.775	0	%100
66	M84	Z	-0.448	-0.448	0	%100
67	OVP1	X	-2.714	-2.714	0	%100
68	OVP1	Z	-1.567	-1.567	0	%100
69	OVP2	X	-2.714	-2.714	0	%100
70	OVP2	Z	-1.567	-1.567	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	M7	X	-2.226	-2.226	0	%100
2	M7	Z	-3.855	-3.855	0	%100
3	FACE	X	-2.226	-2.226	0	%100
4	FACE	Z	-3.855	-3.855	0	%100
5	M10	X	-2.441	-2.441	0	%100
6	M10	Z	-4.228	-4.228	0	%100
7	M14	X	-0.499	-0.499	0	%100
8	M14	Z	-0.864	-0.864	0	%100
9	M47	X	-0.61	-0.61	0	%100
10	M47	Z	-1.057	-1.057	0	%100
11	M8	X	-2.226	-2.226	0	%100
12	M8	Z	-3.855	-3.855	0	%100
13	M9	X	-2.226	-2.226	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.%]
14	M9	Z	-3.855	-3.855	0 %100
15	M10A	X	-61	-61	0 %100
16	M10A	Z	-1.057	-1.057	0 %100
17	M11	X	-499	-499	0 %100
18	M11	Z	-864	-864	0 %100
19	M15A	X	-1e-6	-1e-6	0 %100
20	M15A	Z	-1e-6	-1e-6	0 %100
21	M16A	X	0	0	0 %100
22	M16A	Z	0	0	0 %100
23	M18	X	-1.996	-1.996	0 %100
24	M18	Z	-3.457	-3.457	0 %100
25	M23	X	-1.854	-1.854	0 %100
26	M23	Z	-3.212	-3.212	0 %100
27	M24	X	-3.799	-3.799	0 %100
28	M24	Z	-6.581	-6.581	0 %100
29	M25	X	-1.855	-1.855	0 %100
30	M25	Z	-3.214	-3.214	0 %100
31	MP1A	X	-1.956	-1.956	0 %100
32	MP1A	Z	-3.387	-3.387	0 %100
33	MP2A	X	-1.956	-1.956	0 %100
34	MP2A	Z	-3.387	-3.387	0 %100
35	MP3A	X	-1.956	-1.956	0 %100
36	MP3A	Z	-3.387	-3.387	0 %100
37	MP4A	X	-1.956	-1.956	0 %100
38	MP4A	Z	-3.387	-3.387	0 %100
39	MP1C	X	-1.956	-1.956	0 %100
40	MP1C	Z	-3.387	-3.387	0 %100
41	MP2C	X	-1.956	-1.956	0 %100
42	MP2C	Z	-3.387	-3.387	0 %100
43	MP3C	X	-1.956	-1.956	0 %100
44	MP3C	Z	-3.387	-3.387	0 %100
45	MP4C	X	-1.956	-1.956	0 %100
46	MP4C	Z	-3.387	-3.387	0 %100
47	MP1B	X	-1.956	-1.956	0 %100
48	MP1B	Z	-3.387	-3.387	0 %100
49	MP2B	X	-1.956	-1.956	0 %100
50	MP2B	Z	-3.387	-3.387	0 %100
51	MP3B	X	-1.956	-1.956	0 %100
52	MP3B	Z	-3.387	-3.387	0 %100
53	MP4B	X	-1.956	-1.956	0 %100
54	MP4B	Z	-3.387	-3.387	0 %100
55	M49	X	-1.53	-1.53	0 %100
56	M49	Z	-2.649	-2.649	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	0	0	0 %100
59	M59	X	-1.53	-1.53	0 %100
60	M59	Z	-2.649	-2.649	0 %100
61	M70	X	0	0	0 %100
62	M70	Z	0	0	0 %100
63	M77	X	-1.343	-1.343	0 %100
64	M77	Z	-2.325	-2.325	0 %100
65	M84	X	-1.343	-1.343	0 %100
66	M84	Z	-2.325	-2.325	0 %100
67	OVP1	X	-1.567	-1.567	0 %100
68	OVP1	Z	-2.714	-2.714	0 %100
69	OVP2	X	-1.567	-1.567	0 %100
70	OVP2	Z	-2.714	-2.714	0 %100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

July 10, 2023  
 3:54 PM  
 Checked By: \_\_\_\_\_

**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	M7	X	0	0	0	%100
2	M7	Z	-1.273	-1.273	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	-1.273	-1.273	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	-.805	-.805	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	-.805	-.805	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.318	-.318	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.318	-.318	0	%100
15	M10A	X	0	0	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-.6	-.6	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	-.319	-.319	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	-.318	-.318	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	-.6	-.6	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-.595	-.595	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.553	-1.553	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.552	-1.552	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	-.605	-.605	0	%100
33	MP2A	X	0	0	0	%100
34	MP2A	Z	-.605	-.605	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	-.605	-.605	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-.605	-.605	0	%100
39	MP1C	X	0	0	0	%100
40	MP1C	Z	-.605	-.605	0	%100
41	MP2C	X	0	0	0	%100
42	MP2C	Z	-.605	-.605	0	%100
43	MP3C	X	0	0	0	%100
44	MP3C	Z	-.605	-.605	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	-.605	-.605	0	%100
47	MP1B	X	0	0	0	%100
48	MP1B	Z	-.605	-.605	0	%100
49	MP2B	X	0	0	0	%100
50	MP2B	Z	-.605	-.605	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	-.605	-.605	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	-.605	-.605	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	-.605	-.605	0	%100
57	M54	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M54	Z	-.151	-.151	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	-.151	-.151	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	-.186	-.186	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	-.186	-.186	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	-.742	-.742	0	%100
67	OVP1	X	0	0	0	%100
68	OVP1	Z	-.494	-.494	0	%100
69	OVP2	X	0	0	0	%100
70	OVP2	Z	-.494	-.494	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	M7	X	.477	.477	0	%100
2	M7	Z	-.827	-.827	0	%100
3	FACE	X	.477	.477	0	%100
4	FACE	Z	-.827	-.827	0	%100
5	M10	X	.134	.134	0	%100
6	M10	Z	-.232	-.232	0	%100
7	M14	X	.1	.1	0	%100
8	M14	Z	-.173	-.173	0	%100
9	M47	X	.537	.537	0	%100
10	M47	Z	-.93	-.93	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	.134	.134	0	%100
16	M10A	Z	-.232	-.232	0	%100
17	M11	X	.4	.4	0	%100
18	M11	Z	-.693	-.693	0	%100
19	M15A	X	.478	.478	0	%100
20	M15A	Z	-.827	-.827	0	%100
21	M16A	X	.477	.477	0	%100
22	M16A	Z	-.827	-.827	0	%100
23	M18	X	.1	.1	0	%100
24	M18	Z	-.173	-.173	0	%100
25	M23	X	.457	.457	0	%100
26	M23	Z	-.792	-.792	0	%100
27	M24	X	.457	.457	0	%100
28	M24	Z	-.791	-.791	0	%100
29	M25	X	.936	.936	0	%100
30	M25	Z	-1.621	-1.621	0	%100
31	MP1A	X	.302	.302	0	%100
32	MP1A	Z	-.524	-.524	0	%100
33	MP2A	X	.302	.302	0	%100
34	MP2A	Z	-.524	-.524	0	%100
35	MP3A	X	.302	.302	0	%100
36	MP3A	Z	-.524	-.524	0	%100
37	MP4A	X	.302	.302	0	%100
38	MP4A	Z	-.524	-.524	0	%100
39	MP1C	X	.302	.302	0	%100
40	MP1C	Z	-.524	-.524	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.%]
41	MP2C	X	.302	.302	0	%100
42	MP2C	Z	-.524	-.524	0	%100
43	MP3C	X	.302	.302	0	%100
44	MP3C	Z	-.524	-.524	0	%100
45	MP4C	X	.302	.302	0	%100
46	MP4C	Z	-.524	-.524	0	%100
47	MP1B	X	.302	.302	0	%100
48	MP1B	Z	-.524	-.524	0	%100
49	MP2B	X	.302	.302	0	%100
50	MP2B	Z	-.524	-.524	0	%100
51	MP3B	X	.302	.302	0	%100
52	MP3B	Z	-.524	-.524	0	%100
53	MP4B	X	.302	.302	0	%100
54	MP4B	Z	-.524	-.524	0	%100
55	M49	X	.227	.227	0	%100
56	M49	Z	-.393	-.393	0	%100
57	M54	X	.227	.227	0	%100
58	M54	Z	-.393	-.393	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	.278	.278	0	%100
62	M70	Z	-.482	-.482	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	.278	.278	0	%100
66	M84	Z	-.482	-.482	0	%100
67	OVP1	X	.247	.247	0	%100
68	OVP1	Z	-.428	-.428	0	%100
69	OVP2	X	.247	.247	0	%100
70	OVP2	Z	-.428	-.428	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	M7	X	.276	.276	0	%100
2	M7	Z	-.159	-.159	0	%100
3	FACE	X	.276	.276	0	%100
4	FACE	Z	-.159	-.159	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	.52	.52	0	%100
8	M14	Z	-.3	-.3	0	%100
9	M47	X	.697	.697	0	%100
10	M47	Z	-.402	-.402	0	%100
11	M8	X	.276	.276	0	%100
12	M8	Z	-.159	-.159	0	%100
13	M9	X	.276	.276	0	%100
14	M9	Z	-.159	-.159	0	%100
15	M10A	X	.697	.697	0	%100
16	M10A	Z	-.402	-.402	0	%100
17	M11	X	.52	.52	0	%100
18	M11	Z	-.3	-.3	0	%100
19	M15A	X	1.102	1.102	0	%100
20	M15A	Z	-.636	-.636	0	%100
21	M16A	X	1.102	1.102	0	%100
22	M16A	Z	-.636	-.636	0	%100
23	M18	X	0	0	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.%,]
24	M18	Z	0	0	0	%100
25	M23	X	1.344	1.344	0	%100
26	M23	Z	-.776	-.776	0	%100
27	M24	X	.514	.514	0	%100
28	M24	Z	-.297	-.297	0	%100
29	M25	X	1.344	1.344	0	%100
30	M25	Z	-.776	-.776	0	%100
31	MP1A	X	.524	.524	0	%100
32	MP1A	Z	-.302	-.302	0	%100
33	MP2A	X	.524	.524	0	%100
34	MP2A	Z	-.302	-.302	0	%100
35	MP3A	X	.524	.524	0	%100
36	MP3A	Z	-.302	-.302	0	%100
37	MP4A	X	.524	.524	0	%100
38	MP4A	Z	-.302	-.302	0	%100
39	MP1C	X	.524	.524	0	%100
40	MP1C	Z	-.302	-.302	0	%100
41	MP2C	X	.524	.524	0	%100
42	MP2C	Z	-.302	-.302	0	%100
43	MP3C	X	.524	.524	0	%100
44	MP3C	Z	-.302	-.302	0	%100
45	MP4C	X	.524	.524	0	%100
46	MP4C	Z	-.302	-.302	0	%100
47	MP1B	X	.524	.524	0	%100
48	MP1B	Z	-.302	-.302	0	%100
49	MP2B	X	.524	.524	0	%100
50	MP2B	Z	-.302	-.302	0	%100
51	MP3B	X	.524	.524	0	%100
52	MP3B	Z	-.302	-.302	0	%100
53	MP4B	X	.524	.524	0	%100
54	MP4B	Z	-.302	-.302	0	%100
55	M49	X	.131	.131	0	%100
56	M49	Z	-.076	-.076	0	%100
57	M54	X	.524	.524	0	%100
58	M54	Z	-.302	-.302	0	%100
59	M59	X	.131	.131	0	%100
60	M59	Z	-.076	-.076	0	%100
61	M70	X	.643	.643	0	%100
62	M70	Z	-.371	-.371	0	%100
63	M77	X	.161	.161	0	%100
64	M77	Z	-.093	-.093	0	%100
65	M84	X	.161	.161	0	%100
66	M84	Z	-.093	-.093	0	%100
67	OVP1	X	.428	.428	0	%100
68	OVP1	Z	-.247	-.247	0	%100
69	OVP2	X	.428	.428	0	%100
70	OVP2	Z	-.247	-.247	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	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	.268	.268	0	%100
6	M10	Z	0	0	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.%]
7	M14	X	.8	.8	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	.268	.268	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	.955	.955	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.955	.955	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	1.073	1.073	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	.2	.2	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	.954	.954	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	.954	.954	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	.2	.2	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	1.871	1.871	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	.913	.913	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.913	.913	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	.605	.605	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	.605	.605	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	.605	.605	0	%100
36	MP3A	Z	0	0	0	%100
37	MP4A	X	.605	.605	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	.605	.605	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	.605	.605	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	.605	.605	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	.605	.605	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	.605	.605	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	.605	.605	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	.605	.605	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	.605	.605	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	.453	.453	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	.453	.453	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	.557	.557	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	.557	.557	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.%]
64	M77	Z	0	0	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	.494	.494	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	.494	.494	0	%100
70	OVP2	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	M7	X	.276	.276	0	%100
2	M7	Z	.159	.159	0	%100
3	FACE	X	.276	.276	0	%100
4	FACE	Z	.159	.159	0	%100
5	M10	X	.697	.697	0	%100
6	M10	Z	.402	.402	0	%100
7	M14	X	.52	.52	0	%100
8	M14	Z	.3	.3	0	%100
9	M47	X	0	0	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	1.102	1.102	0	%100
12	M8	Z	.636	.636	0	%100
13	M9	X	1.102	1.102	0	%100
14	M9	Z	.636	.636	0	%100
15	M10A	X	.697	.697	0	%100
16	M10A	Z	.402	.402	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15A	X	.275	.275	0	%100
20	M15A	Z	.159	.159	0	%100
21	M16A	X	.275	.275	0	%100
22	M16A	Z	.159	.159	0	%100
23	M18	X	.52	.52	0	%100
24	M18	Z	.3	.3	0	%100
25	M23	X	1.344	1.344	0	%100
26	M23	Z	.776	.776	0	%100
27	M24	X	1.344	1.344	0	%100
28	M24	Z	.776	.776	0	%100
29	M25	X	.515	.515	0	%100
30	M25	Z	.297	.297	0	%100
31	MP1A	X	.524	.524	0	%100
32	MP1A	Z	.302	.302	0	%100
33	MP2A	X	.524	.524	0	%100
34	MP2A	Z	.302	.302	0	%100
35	MP3A	X	.524	.524	0	%100
36	MP3A	Z	.302	.302	0	%100
37	MP4A	X	.524	.524	0	%100
38	MP4A	Z	.302	.302	0	%100
39	MP1C	X	.524	.524	0	%100
40	MP1C	Z	.302	.302	0	%100
41	MP2C	X	.524	.524	0	%100
42	MP2C	Z	.302	.302	0	%100
43	MP3C	X	.524	.524	0	%100
44	MP3C	Z	.302	.302	0	%100
45	MP4C	X	.524	.524	0	%100
46	MP4C	Z	.302	.302	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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**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.%]
47	MP1B	X	.524	.524	0	%100
48	MP1B	Z	.302	.302	0	%100
49	MP2B	X	.524	.524	0	%100
50	MP2B	Z	.302	.302	0	%100
51	MP3B	X	.524	.524	0	%100
52	MP3B	Z	.302	.302	0	%100
53	MP4B	X	.524	.524	0	%100
54	MP4B	Z	.302	.302	0	%100
55	M49	X	.131	.131	0	%100
56	M49	Z	.076	.076	0	%100
57	M54	X	.131	.131	0	%100
58	M54	Z	.076	.076	0	%100
59	M59	X	.524	.524	0	%100
60	M59	Z	.302	.302	0	%100
61	M70	X	.161	.161	0	%100
62	M70	Z	.093	.093	0	%100
63	M77	X	.643	.643	0	%100
64	M77	Z	.371	.371	0	%100
65	M84	X	.161	.161	0	%100
66	M84	Z	.093	.093	0	%100
67	OVP1	X	.428	.428	0	%100
68	OVP1	Z	.247	.247	0	%100
69	OVP2	X	.428	.428	0	%100
70	OVP2	Z	.247	.247	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M7	X	.477	.477	0	%100
2	M7	Z	.827	.827	0	%100
3	FACE	X	.477	.477	0	%100
4	FACE	Z	.827	.827	0	%100
5	M10	X	.537	.537	0	%100
6	M10	Z	.93	.93	0	%100
7	M14	X	.1	.1	0	%100
8	M14	Z	.173	.173	0	%100
9	M47	X	.134	.134	0	%100
10	M47	Z	.232	.232	0	%100
11	M8	X	.477	.477	0	%100
12	M8	Z	.827	.827	0	%100
13	M9	X	.477	.477	0	%100
14	M9	Z	.827	.827	0	%100
15	M10A	X	.134	.134	0	%100
16	M10A	Z	.232	.232	0	%100
17	M11	X	.1	.1	0	%100
18	M11	Z	.173	.173	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	.4	.4	0	%100
24	M18	Z	.693	.693	0	%100
25	M23	X	.457	.457	0	%100
26	M23	Z	.791	.791	0	%100
27	M24	X	.936	.936	0	%100
28	M24	Z	1.621	1.621	0	%100
29	M25	X	.457	.457	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.%,]
30	M25	Z	.792	.792	0 %100
31	MP1A	X	.302	.302	0 %100
32	MP1A	Z	.524	.524	0 %100
33	MP2A	X	.302	.302	0 %100
34	MP2A	Z	.524	.524	0 %100
35	MP3A	X	.302	.302	0 %100
36	MP3A	Z	.524	.524	0 %100
37	MP4A	X	.302	.302	0 %100
38	MP4A	Z	.524	.524	0 %100
39	MP1C	X	.302	.302	0 %100
40	MP1C	Z	.524	.524	0 %100
41	MP2C	X	.302	.302	0 %100
42	MP2C	Z	.524	.524	0 %100
43	MP3C	X	.302	.302	0 %100
44	MP3C	Z	.524	.524	0 %100
45	MP4C	X	.302	.302	0 %100
46	MP4C	Z	.524	.524	0 %100
47	MP1B	X	.302	.302	0 %100
48	MP1B	Z	.524	.524	0 %100
49	MP2B	X	.302	.302	0 %100
50	MP2B	Z	.524	.524	0 %100
51	MP3B	X	.302	.302	0 %100
52	MP3B	Z	.524	.524	0 %100
53	MP4B	X	.302	.302	0 %100
54	MP4B	Z	.524	.524	0 %100
55	M49	X	.227	.227	0 %100
56	M49	Z	.393	.393	0 %100
57	M54	X	0	0	0 %100
58	M54	Z	0	0	0 %100
59	M59	X	.227	.227	0 %100
60	M59	Z	.393	.393	0 %100
61	M70	X	0	0	0 %100
62	M70	Z	0	0	0 %100
63	M77	X	.278	.278	0 %100
64	M77	Z	.482	.482	0 %100
65	M84	X	.278	.278	0 %100
66	M84	Z	.482	.482	0 %100
67	OVP1	X	.247	.247	0 %100
68	OVP1	Z	.428	.428	0 %100
69	OVP2	X	.247	.247	0 %100
70	OVP2	Z	.428	.428	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	M7	X	0	0	0 %100
2	M7	Z	1.273	1.273	0 %100
3	FACE	X	0	0	0 %100
4	FACE	Z	1.273	1.273	0 %100
5	M10	X	0	0	0 %100
6	M10	Z	.805	.805	0 %100
7	M14	X	0	0	0 %100
8	M14	Z	0	0	0 %100
9	M47	X	0	0	0 %100
10	M47	Z	.805	.805	0 %100
11	M8	X	0	0	0 %100
12	M8	Z	.318	.318	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]	
13	M9	X	0	0	0	%100
14	M9	Z	.318	.318	0	%100
15	M10A	X	0	0	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	.6	.6	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	.319	.319	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	.318	.318	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	.6	.6	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.595	.595	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.553	1.553	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.552	1.552	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	.605	.605	0	%100
33	MP2A	X	0	0	0	%100
34	MP2A	Z	.605	.605	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	.605	.605	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	.605	.605	0	%100
39	MP1C	X	0	0	0	%100
40	MP1C	Z	.605	.605	0	%100
41	MP2C	X	0	0	0	%100
42	MP2C	Z	.605	.605	0	%100
43	MP3C	X	0	0	0	%100
44	MP3C	Z	.605	.605	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	.605	.605	0	%100
47	MP1B	X	0	0	0	%100
48	MP1B	Z	.605	.605	0	%100
49	MP2B	X	0	0	0	%100
50	MP2B	Z	.605	.605	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	.605	.605	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	.605	.605	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	.605	.605	0	%100
57	M54	X	0	0	0	%100
58	M54	Z	.151	.151	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	.151	.151	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	.186	.186	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	.186	.186	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	.742	.742	0	%100
67	OVP1	X	0	0	0	%100
68	OVP1	Z	.494	.494	0	%100
69	OVP2	X	0	0	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number :  
 Model Name : 5000387740-VZW\_MT\_LO\_H

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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.%]
70	OVP2	Z	.494	.494	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M7	X	-.477	-.477	0	%100
2	M7	Z	.827	.827	0	%100
3	FACE	X	-.477	-.477	0	%100
4	FACE	Z	.827	.827	0	%100
5	M10	X	-.134	-.134	0	%100
6	M10	Z	.232	.232	0	%100
7	M14	X	-.1	-.1	0	%100
8	M14	Z	.173	.173	0	%100
9	M47	X	-.537	-.537	0	%100
10	M47	Z	.93	.93	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	-.134	-.134	0	%100
16	M10A	Z	.232	.232	0	%100
17	M11	X	-.4	-.4	0	%100
18	M11	Z	.693	.693	0	%100
19	M15A	X	-.478	-.478	0	%100
20	M15A	Z	.827	.827	0	%100
21	M16A	X	-.477	-.477	0	%100
22	M16A	Z	.827	.827	0	%100
23	M18	X	-.1	-.1	0	%100
24	M18	Z	.173	.173	0	%100
25	M23	X	-.457	-.457	0	%100
26	M23	Z	.792	.792	0	%100
27	M24	X	-.457	-.457	0	%100
28	M24	Z	.791	.791	0	%100
29	M25	X	-.936	-.936	0	%100
30	M25	Z	1.621	1.621	0	%100
31	MP1A	X	-.302	-.302	0	%100
32	MP1A	Z	.524	.524	0	%100
33	MP2A	X	-.302	-.302	0	%100
34	MP2A	Z	.524	.524	0	%100
35	MP3A	X	-.302	-.302	0	%100
36	MP3A	Z	.524	.524	0	%100
37	MP4A	X	-.302	-.302	0	%100
38	MP4A	Z	.524	.524	0	%100
39	MP1C	X	-.302	-.302	0	%100
40	MP1C	Z	.524	.524	0	%100
41	MP2C	X	-.302	-.302	0	%100
42	MP2C	Z	.524	.524	0	%100
43	MP3C	X	-.302	-.302	0	%100
44	MP3C	Z	.524	.524	0	%100
45	MP4C	X	-.302	-.302	0	%100
46	MP4C	Z	.524	.524	0	%100
47	MP1B	X	-.302	-.302	0	%100
48	MP1B	Z	.524	.524	0	%100
49	MP2B	X	-.302	-.302	0	%100
50	MP2B	Z	.524	.524	0	%100
51	MP3B	X	-.302	-.302	0	%100
52	MP3B	Z	.524	.524	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.%]
53	MP4B	X	-.302	-.302	0	%100
54	MP4B	Z	.524	.524	0	%100
55	M49	X	-.227	-.227	0	%100
56	M49	Z	.393	.393	0	%100
57	M54	X	-.227	-.227	0	%100
58	M54	Z	.393	.393	0	%100
59	M59	X	0	0	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-.278	-.278	0	%100
62	M70	Z	.482	.482	0	%100
63	M77	X	0	0	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	-.278	-.278	0	%100
66	M84	Z	.482	.482	0	%100
67	OVP1	X	-.247	-.247	0	%100
68	OVP1	Z	.428	.428	0	%100
69	OVP2	X	-.247	-.247	0	%100
70	OVP2	Z	.428	.428	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M7	X	-.276	-.276	0	%100
2	M7	Z	.159	.159	0	%100
3	FACE	X	-.276	-.276	0	%100
4	FACE	Z	.159	.159	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-.52	-.52	0	%100
8	M14	Z	.3	.3	0	%100
9	M47	X	-.697	-.697	0	%100
10	M47	Z	.402	.402	0	%100
11	M8	X	-.276	-.276	0	%100
12	M8	Z	.159	.159	0	%100
13	M9	X	-.276	-.276	0	%100
14	M9	Z	.159	.159	0	%100
15	M10A	X	-.697	-.697	0	%100
16	M10A	Z	.402	.402	0	%100
17	M11	X	-.52	-.52	0	%100
18	M11	Z	.3	.3	0	%100
19	M15A	X	-1.102	-1.102	0	%100
20	M15A	Z	.636	.636	0	%100
21	M16A	X	-1.102	-1.102	0	%100
22	M16A	Z	.636	.636	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	-1.344	-1.344	0	%100
26	M23	Z	.776	.776	0	%100
27	M24	X	-.514	-.514	0	%100
28	M24	Z	.297	.297	0	%100
29	M25	X	-1.344	-1.344	0	%100
30	M25	Z	.776	.776	0	%100
31	MP1A	X	-.524	-.524	0	%100
32	MP1A	Z	.302	.302	0	%100
33	MP2A	X	-.524	-.524	0	%100
34	MP2A	Z	.302	.302	0	%100
35	MP3A	X	-.524	-.524	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.%]
36	MP3A	Z	.302	.302	0	%100
37	MP4A	X	-.524	-.524	0	%100
38	MP4A	Z	.302	.302	0	%100
39	MP1C	X	-.524	-.524	0	%100
40	MP1C	Z	.302	.302	0	%100
41	MP2C	X	-.524	-.524	0	%100
42	MP2C	Z	.302	.302	0	%100
43	MP3C	X	-.524	-.524	0	%100
44	MP3C	Z	.302	.302	0	%100
45	MP4C	X	-.524	-.524	0	%100
46	MP4C	Z	.302	.302	0	%100
47	MP1B	X	-.524	-.524	0	%100
48	MP1B	Z	.302	.302	0	%100
49	MP2B	X	-.524	-.524	0	%100
50	MP2B	Z	.302	.302	0	%100
51	MP3B	X	-.524	-.524	0	%100
52	MP3B	Z	.302	.302	0	%100
53	MP4B	X	-.524	-.524	0	%100
54	MP4B	Z	.302	.302	0	%100
55	M49	X	-.131	-.131	0	%100
56	M49	Z	.076	.076	0	%100
57	M54	X	-.524	-.524	0	%100
58	M54	Z	.302	.302	0	%100
59	M59	X	-.131	-.131	0	%100
60	M59	Z	.076	.076	0	%100
61	M70	X	-.643	-.643	0	%100
62	M70	Z	.371	.371	0	%100
63	M77	X	-.161	-.161	0	%100
64	M77	Z	.093	.093	0	%100
65	M84	X	-.161	-.161	0	%100
66	M84	Z	.093	.093	0	%100
67	OVP1	X	-.428	-.428	0	%100
68	OVP1	Z	.247	.247	0	%100
69	OVP2	X	-.428	-.428	0	%100
70	OVP2	Z	.247	.247	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	M7	X	0	0	0	%100
2	M7	Z	0	0	0	%100
3	FACE	X	0	0	0	%100
4	FACE	Z	0	0	0	%100
5	M10	X	-.268	-.268	0	%100
6	M10	Z	0	0	0	%100
7	M14	X	-.8	-.8	0	%100
8	M14	Z	0	0	0	%100
9	M47	X	-.268	-.268	0	%100
10	M47	Z	0	0	0	%100
11	M8	X	-.955	-.955	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.955	-.955	0	%100
14	M9	Z	0	0	0	%100
15	M10A	X	-1.073	-1.073	0	%100
16	M10A	Z	0	0	0	%100
17	M11	X	-.2	-.2	0	%100
18	M11	Z	0	0	0	%100



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 Designer :  
 Job Number :  
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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, %]
19	M15A	X	-0.954	-0.954	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	-0.954	-0.954	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	-0.2	-0.2	0	%100
24	M18	Z	0	0	0	%100
25	M23	X	-1.871	-1.871	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	-0.913	-0.913	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-0.913	-0.913	0	%100
30	M25	Z	0	0	0	%100
31	MP1A	X	-0.605	-0.605	0	%100
32	MP1A	Z	0	0	0	%100
33	MP2A	X	-0.605	-0.605	0	%100
34	MP2A	Z	0	0	0	%100
35	MP3A	X	-0.605	-0.605	0	%100
36	MP3A	Z	0	0	0	%100
37	MP4A	X	-0.605	-0.605	0	%100
38	MP4A	Z	0	0	0	%100
39	MP1C	X	-0.605	-0.605	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	-0.605	-0.605	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	-0.605	-0.605	0	%100
44	MP3C	Z	0	0	0	%100
45	MP4C	X	-0.605	-0.605	0	%100
46	MP4C	Z	0	0	0	%100
47	MP1B	X	-0.605	-0.605	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	-0.605	-0.605	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	-0.605	-0.605	0	%100
52	MP3B	Z	0	0	0	%100
53	MP4B	X	-0.605	-0.605	0	%100
54	MP4B	Z	0	0	0	%100
55	M49	X	0	0	0	%100
56	M49	Z	0	0	0	%100
57	M54	X	-0.453	-0.453	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	-0.453	-0.453	0	%100
60	M59	Z	0	0	0	%100
61	M70	X	-0.557	-0.557	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	-0.557	-0.557	0	%100
64	M77	Z	0	0	0	%100
65	M84	X	0	0	0	%100
66	M84	Z	0	0	0	%100
67	OVP1	X	-0.494	-0.494	0	%100
68	OVP1	Z	0	0	0	%100
69	OVP2	X	-0.494	-0.494	0	%100
70	OVP2	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	M7	X	-0.276	-0.276	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.%]
2	M7	Z	-159	-159	0 %100
3	FACE	X	-276	-276	0 %100
4	FACE	Z	-159	-159	0 %100
5	M10	X	-697	-697	0 %100
6	M10	Z	-402	-402	0 %100
7	M14	X	-52	-52	0 %100
8	M14	Z	-3	-3	0 %100
9	M47	X	0	0	0 %100
10	M47	Z	0	0	0 %100
11	M8	X	-1102	-1102	0 %100
12	M8	Z	-636	-636	0 %100
13	M9	X	-1102	-1102	0 %100
14	M9	Z	-636	-636	0 %100
15	M10A	X	-697	-697	0 %100
16	M10A	Z	-402	-402	0 %100
17	M11	X	0	0	0 %100
18	M11	Z	0	0	0 %100
19	M15A	X	-275	-275	0 %100
20	M15A	Z	-159	-159	0 %100
21	M16A	X	-275	-275	0 %100
22	M16A	Z	-159	-159	0 %100
23	M18	X	-52	-52	0 %100
24	M18	Z	-3	-3	0 %100
25	M23	X	-1344	-1344	0 %100
26	M23	Z	-776	-776	0 %100
27	M24	X	-1344	-1344	0 %100
28	M24	Z	-776	-776	0 %100
29	M25	X	-515	-515	0 %100
30	M25	Z	-297	-297	0 %100
31	MP1A	X	-524	-524	0 %100
32	MP1A	Z	-302	-302	0 %100
33	MP2A	X	-524	-524	0 %100
34	MP2A	Z	-302	-302	0 %100
35	MP3A	X	-524	-524	0 %100
36	MP3A	Z	-302	-302	0 %100
37	MP4A	X	-524	-524	0 %100
38	MP4A	Z	-302	-302	0 %100
39	MP1C	X	-524	-524	0 %100
40	MP1C	Z	-302	-302	0 %100
41	MP2C	X	-524	-524	0 %100
42	MP2C	Z	-302	-302	0 %100
43	MP3C	X	-524	-524	0 %100
44	MP3C	Z	-302	-302	0 %100
45	MP4C	X	-524	-524	0 %100
46	MP4C	Z	-302	-302	0 %100
47	MP1B	X	-524	-524	0 %100
48	MP1B	Z	-302	-302	0 %100
49	MP2B	X	-524	-524	0 %100
50	MP2B	Z	-302	-302	0 %100
51	MP3B	X	-524	-524	0 %100
52	MP3B	Z	-302	-302	0 %100
53	MP4B	X	-524	-524	0 %100
54	MP4B	Z	-302	-302	0 %100
55	M49	X	-131	-131	0 %100
56	M49	Z	-076	-076	0 %100
57	M54	X	-131	-131	0 %100
58	M54	Z	-076	-076	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.%]
59	M59	X	-.524	-.524	0	%100
60	M59	Z	-.302	-.302	0	%100
61	M70	X	-.161	-.161	0	%100
62	M70	Z	-.093	-.093	0	%100
63	M77	X	-.643	-.643	0	%100
64	M77	Z	-.371	-.371	0	%100
65	M84	X	-.161	-.161	0	%100
66	M84	Z	-.093	-.093	0	%100
67	OVP1	X	-.428	-.428	0	%100
68	OVP1	Z	-.247	-.247	0	%100
69	OVP2	X	-.428	-.428	0	%100
70	OVP2	Z	-.247	-.247	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	M7	X	-.477	-.477	0	%100
2	M7	Z	-.827	-.827	0	%100
3	FACE	X	-.477	-.477	0	%100
4	FACE	Z	-.827	-.827	0	%100
5	M10	X	-.537	-.537	0	%100
6	M10	Z	-.93	-.93	0	%100
7	M14	X	-.1	-.1	0	%100
8	M14	Z	-.173	-.173	0	%100
9	M47	X	-.134	-.134	0	%100
10	M47	Z	-.232	-.232	0	%100
11	M8	X	-.477	-.477	0	%100
12	M8	Z	-.827	-.827	0	%100
13	M9	X	-.477	-.477	0	%100
14	M9	Z	-.827	-.827	0	%100
15	M10A	X	-.134	-.134	0	%100
16	M10A	Z	-.232	-.232	0	%100
17	M11	X	-.1	-.1	0	%100
18	M11	Z	-.173	-.173	0	%100
19	M15A	X	0	0	0	%100
20	M15A	Z	0	0	0	%100
21	M16A	X	0	0	0	%100
22	M16A	Z	0	0	0	%100
23	M18	X	-.4	-.4	0	%100
24	M18	Z	-.693	-.693	0	%100
25	M23	X	-.457	-.457	0	%100
26	M23	Z	-.791	-.791	0	%100
27	M24	X	-.936	-.936	0	%100
28	M24	Z	-1.621	-1.621	0	%100
29	M25	X	-.457	-.457	0	%100
30	M25	Z	-.792	-.792	0	%100
31	MP1A	X	-.302	-.302	0	%100
32	MP1A	Z	-.524	-.524	0	%100
33	MP2A	X	-.302	-.302	0	%100
34	MP2A	Z	-.524	-.524	0	%100
35	MP3A	X	-.302	-.302	0	%100
36	MP3A	Z	-.524	-.524	0	%100
37	MP4A	X	-.302	-.302	0	%100
38	MP4A	Z	-.524	-.524	0	%100
39	MP1C	X	-.302	-.302	0	%100
40	MP1C	Z	-.524	-.524	0	%100
41	MP2C	X	-.302	-.302	0	%100



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**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.%]
42	MP2C	Z	-.524	-.524	0	%100
43	MP3C	X	-.302	-.302	0	%100
44	MP3C	Z	-.524	-.524	0	%100
45	MP4C	X	-.302	-.302	0	%100
46	MP4C	Z	-.524	-.524	0	%100
47	MP1B	X	-.302	-.302	0	%100
48	MP1B	Z	-.524	-.524	0	%100
49	MP2B	X	-.302	-.302	0	%100
50	MP2B	Z	-.524	-.524	0	%100
51	MP3B	X	-.302	-.302	0	%100
52	MP3B	Z	-.524	-.524	0	%100
53	MP4B	X	-.302	-.302	0	%100
54	MP4B	Z	-.524	-.524	0	%100
55	M49	X	-.227	-.227	0	%100
56	M49	Z	-.393	-.393	0	%100
57	M54	X	0	0	0	%100
58	M54	Z	0	0	0	%100
59	M59	X	-.227	-.227	0	%100
60	M59	Z	-.393	-.393	0	%100
61	M70	X	0	0	0	%100
62	M70	Z	0	0	0	%100
63	M77	X	-.278	-.278	0	%100
64	M77	Z	-.482	-.482	0	%100
65	M84	X	-.278	-.278	0	%100
66	M84	Z	-.482	-.482	0	%100
67	OVP1	X	-.247	-.247	0	%100
68	OVP1	Z	-.428	-.428	0	%100
69	OVP2	X	-.247	-.247	0	%100
70	OVP2	Z	-.428	-.428	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M7	Y	-5.593	-4.614	0	1.484
2	M7	Y	-4.614	-4.306	1.484	2.968
3	M7	Y	-4.306	-3.779	2.968	4.452
4	M7	Y	-3.779	-4.842	4.452	5.936
5	M7	Y	-4.842	-8.39	5.936	7.42
6	FACE	Y	-1.302	-2.783	0	2.024
7	FACE	Y	-2.783	-4.769	2.024	4.049
8	FACE	Y	-4.769	-5.257	4.049	6.073
9	FACE	Y	-5.257	-4.775	6.073	8.097
10	FACE	Y	-4.775	-5.258	8.097	10.122
11	FACE	Y	-5.258	-3.146	10.122	12.146
12	FACE	Y	-3.146	-.105	12.146	14.17
13	M10	Y	-1.196	-2.026	0	.779
14	M10	Y	-2.026	-2.593	.779	1.559
15	M10	Y	-2.593	-1.964	1.559	2.338
16	M10	Y	-1.964	-.613	2.338	3.118
17	M10	Y	-.613	-.042	3.118	3.897
18	M47	Y	-8.937	-4.966	0	1.949
19	M47	Y	-4.966	-.994	1.949	3.897
20	M72	Y	-34.307	-2.494	0	.17
21	M10	Y	-4.504	-2.495	0	1.949
22	M10	Y	-2.495	-.486	1.949	3.897
23	M8	Y	-5.911	-4.94	0	1.483
24	M8	Y	-4.94	-4.64	1.483	2.967



**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.%]
25	M8	Y	-4.64	-5.813	2.967	4.45
26	M8	Y	-5.813	-5.195	4.45	5.933
27	M8	Y	-5.195	-1.983	5.933	7.417
28	M9	Y	-1.358	-2.796	0	2.024
29	M9	Y	-2.796	-4.761	2.024	4.048
30	M9	Y	-4.761	-5.253	4.048	6.071
31	M9	Y	-5.253	-4.779	6.071	8.095
32	M9	Y	-4.779	-5.264	8.095	10.119
33	M9	Y	-5.264	-3.147	10.119	12.143
34	M9	Y	-3.147	-.103	12.143	14.167
35	M10A	Y	-1.187	-2.01	0	.779
36	M10A	Y	-2.01	-2.554	.779	1.559
37	M10A	Y	-2.554	-1.933	1.559	2.338
38	M10A	Y	-1.933	-.611	2.338	3.118
39	M10A	Y	-.611	-.041	3.118	3.897
40	M70A	Y	-35.387	-2.01	0	.167
41	M10A	Y	-4.439	-2.473	0	1.949
42	M10A	Y	-2.473	-.508	1.949	3.897
43	M15A	Y	-5.14	-5.14	.013	7.405
44	M16A	Y	-.103	-3.067	0	2.024
45	M16A	Y	-3.067	-5.014	2.024	4.048
46	M16A	Y	-5.014	-4.734	4.048	6.072
47	M16A	Y	-4.734	-4.735	6.072	8.096
48	M16A	Y	-4.735	-5.018	8.096	10.12
49	M16A	Y	-5.018	-3.069	10.12	12.144
50	M16A	Y	-3.069	-.103	12.144	14.168

**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	M7	Y	-13.536	-11.165	0	1.484
2	M7	Y	-11.165	-10.421	1.484	2.968
3	M7	Y	-10.421	-9.144	2.968	4.452
4	M7	Y	-9.144	-11.719	4.452	5.936
5	M7	Y	-11.719	-20.304	5.936	7.42
6	FACE	Y	-3.152	-6.735	0	2.024
7	FACE	Y	-6.735	-11.542	2.024	4.049
8	FACE	Y	-11.542	-12.721	4.049	6.073
9	FACE	Y	-12.721	-11.556	6.073	8.097
10	FACE	Y	-11.556	-12.723	8.097	10.122
11	FACE	Y	-12.723	-7.613	10.122	12.146
12	FACE	Y	-7.613	-.253	12.146	14.17
13	M10	Y	-2.894	-4.904	0	.779
14	M10	Y	-4.904	-6.275	.779	1.559
15	M10	Y	-6.275	-4.754	1.559	2.338
16	M10	Y	-4.754	-1.483	2.338	3.118
17	M10	Y	-1.483	-.101	3.118	3.897
18	M47	Y	-21.629	-12.017	0	1.949
19	M47	Y	-12.017	-2.406	1.949	3.897
20	M72	Y	-83.022	-6.036	0	.17
21	M10	Y	-10.9	-6.038	0	1.949
22	M10	Y	-6.038	-1.175	1.949	3.897
23	M8	Y	-14.304	-11.954	0	1.483
24	M8	Y	-11.954	-11.228	1.483	2.967
25	M8	Y	-11.228	-14.067	2.967	4.45
26	M8	Y	-14.067	-12.572	4.45	5.933
27	M8	Y	-12.572	-4.798	5.933	7.417



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
28	M9	Y	-3.287	-6.765	0	2.024
29	M9	Y	-6.765	-11.521	2.024	4.048
30	M9	Y	-11.521	-12.711	4.048	6.071
31	M9	Y	-12.711	-11.566	6.071	8.095
32	M9	Y	-11.566	-12.739	8.095	10.119
33	M9	Y	-12.739	-7.616	10.119	12.143
34	M9	Y	-7.616	-.249	12.143	14.167
35	M10A	Y	-2.874	-4.865	0	.779
36	M10A	Y	-4.865	-6.18	.779	1.559
37	M10A	Y	-6.18	-4.678	1.559	2.338
38	M10A	Y	-4.678	-1.478	2.338	3.118
39	M10A	Y	-1.478	-.1	3.118	3.897
40	M70A	Y	-85.637	-4.865	0	.167
41	M10A	Y	-10.742	-5.985	0	1.949
42	M10A	Y	-5.985	-1.228	1.949	3.897
43	M15A	Y	-12.439	-12.439	.013	7.405
44	M16A	Y	-.25	-7.421	0	2.024
45	M16A	Y	-7.421	-12.134	2.024	4.048
46	M16A	Y	-12.134	-11.455	4.048	6.072
47	M16A	Y	-11.455	-11.46	6.072	8.096
48	M16A	Y	-11.46	-12.144	8.096	10.12
49	M16A	Y	-12.144	-7.427	10.12	12.144
50	M16A	Y	-7.427	-.25	12.144	14.168

**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	M7	Y	-.232	-.192	0	1.484
2	M7	Y	-.192	-.179	1.484	2.968
3	M7	Y	-.179	-.157	2.968	4.452
4	M7	Y	-.157	-.201	4.452	5.936
5	M7	Y	-.201	-.349	5.936	7.42
6	FACE	Y	-.054	-.116	0	2.024
7	FACE	Y	-.116	-.198	2.024	4.049
8	FACE	Y	-.198	-.218	4.049	6.073
9	FACE	Y	-.218	-.198	6.073	8.097
10	FACE	Y	-.198	-.218	8.097	10.122
11	FACE	Y	-.218	-.131	10.122	12.146
12	FACE	Y	-.131	-.004	12.146	14.17
13	M10	Y	-.05	-.084	0	.779
14	M10	Y	-.084	-.108	.779	1.559
15	M10	Y	-.108	-.082	1.559	2.338
16	M10	Y	-.082	-.025	2.338	3.118
17	M10	Y	-.025	-.002	3.118	3.897
18	M47	Y	-.371	-.206	0	1.949
19	M47	Y	-.206	-.041	1.949	3.897
20	M72	Y	-1.425	-.104	0	.17
21	M10	Y	-.187	-.104	0	1.949
22	M10	Y	-.104	-.02	1.949	3.897
23	M8	Y	-.246	-.205	0	1.483
24	M8	Y	-.205	-.193	1.483	2.967
25	M8	Y	-.193	-.241	2.967	4.45
26	M8	Y	-.241	-.216	4.45	5.933
27	M8	Y	-.216	-.082	5.933	7.417
28	M9	Y	-.056	-.116	0	2.024
29	M9	Y	-.116	-.198	2.024	4.048
30	M9	Y	-.198	-.218	4.048	6.071





**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.%]
31	M9	Y	-218	-199	6.071	8.095
32	M9	Y	-199	-219	8.095	10.119
33	M9	Y	-219	-131	10.119	12.143
34	M9	Y	-131	-004	12.143	14.167
35	M10A	Y	-049	-084	0	.779
36	M10A	Y	-084	-106	.779	1.559
37	M10A	Y	-106	-08	1.559	2.338
38	M10A	Y	-08	-025	2.338	3.118
39	M10A	Y	-025	-002	3.118	3.897
40	M70A	Y	-1.47	-084	0	.167
41	M10A	Y	-184	-103	0	1.949
42	M10A	Y	-103	-021	1.949	3.897
43	M15A	Y	-214	-214	.013	7.405
44	M16A	Y	-004	-127	0	2.024
45	M16A	Y	-127	-208	2.024	4.048
46	M16A	Y	-208	-197	4.048	6.072
47	M16A	Y	-197	-197	6.072	8.096
48	M16A	Y	-197	-208	8.096	10.12
49	M16A	Y	-208	-127	10.12	12.144
50	M16A	Y	-127	-004	12.144	14.168

**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	M7	Z	-582	-48	0	1.484
2	M7	Z	-48	-448	1.484	2.968
3	M7	Z	-448	-393	2.968	4.452
4	M7	Z	-393	-504	4.452	5.936
5	M7	Z	-504	-873	5.936	7.42
6	FACE	Z	-135	-29	0	2.024
7	FACE	Z	-29	-496	2.024	4.049
8	FACE	Z	-496	-547	4.049	6.073
9	FACE	Z	-547	-497	6.073	8.097
10	FACE	Z	-497	-547	8.097	10.122
11	FACE	Z	-547	-327	10.122	12.146
12	FACE	Z	-327	-011	12.146	14.17
13	M10	Z	-124	-211	0	.779
14	M10	Z	-211	-27	.779	1.559
15	M10	Z	-27	-204	1.559	2.338
16	M10	Z	-204	-064	2.338	3.118
17	M10	Z	-064	-004	3.118	3.897
18	M47	Z	-93	-517	0	1.949
19	M47	Z	-517	-103	1.949	3.897
20	M72	Z	-3.569	-259	0	.17
21	M10	Z	-469	-26	0	1.949
22	M10	Z	-26	-051	1.949	3.897
23	M8	Z	-615	-514	0	1.483
24	M8	Z	-514	-483	1.483	2.967
25	M8	Z	-483	-605	2.967	4.45
26	M8	Z	-605	-.54	4.45	5.933
27	M8	Z	-.54	-206	5.933	7.417
28	M9	Z	-141	-291	0	2.024
29	M9	Z	-291	-495	2.024	4.048
30	M9	Z	-495	-546	4.048	6.071
31	M9	Z	-546	-497	6.071	8.095
32	M9	Z	-497	-548	8.095	10.119
33	M9	Z	-548	-327	10.119	12.143



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
34	M9	Z	-.327	-.011	12.143	14.167
35	M10A	Z	-.124	-.209	0	.779
36	M10A	Z	-.209	-.266	.779	1.559
37	M10A	Z	-.266	-.201	1.559	2.338
38	M10A	Z	-.201	-.064	2.338	3.118
39	M10A	Z	-.064	-.004	3.118	3.897
40	M70A	Z	-3.682	-.209	0	.167
41	M10A	Z	-.462	-.257	0	1.949
42	M10A	Z	-.257	-.053	1.949	3.897
43	M15A	Z	-.535	-.535	.013	7.405
44	M16A	Z	-.011	-.319	0	2.024
45	M16A	Z	-.319	-.522	2.024	4.048
46	M16A	Z	-.522	-.492	4.048	6.072
47	M16A	Z	-.492	-.493	6.072	8.096
48	M16A	Z	-.493	-.522	8.096	10.12
49	M16A	Z	-.522	-.319	10.12	12.144
50	M16A	Z	-.319	-.011	12.144	14.168

**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	M7	X	.582	.48	0	1.484
2	M7	X	.48	.448	1.484	2.968
3	M7	X	.448	.393	2.968	4.452
4	M7	X	.393	.504	4.452	5.936
5	M7	X	.504	.873	5.936	7.42
6	FACE	X	.135	.29	0	2.024
7	FACE	X	.29	.496	2.024	4.049
8	FACE	X	.496	.547	4.049	6.073
9	FACE	X	.547	.497	6.073	8.097
10	FACE	X	.497	.547	8.097	10.122
11	FACE	X	.547	.327	10.122	12.146
12	FACE	X	.327	.011	12.146	14.17
13	M10	X	.124	.211	0	.779
14	M10	X	.211	.27	.779	1.559
15	M10	X	.27	.204	1.559	2.338
16	M10	X	.204	.064	2.338	3.118
17	M10	X	.064	.004	3.118	3.897
18	M47	X	.93	.517	0	1.949
19	M47	X	.517	.103	1.949	3.897
20	M72	X	3.569	.259	0	.17
21	M10	X	.469	.26	0	1.949
22	M10	X	.26	.051	1.949	3.897
23	M8	X	.615	.514	0	1.483
24	M8	X	.514	.483	1.483	2.967
25	M8	X	.483	.605	2.967	4.45
26	M8	X	.605	.54	4.45	5.933
27	M8	X	.54	.206	5.933	7.417
28	M9	X	.141	.291	0	2.024
29	M9	X	.291	.495	2.024	4.048
30	M9	X	.495	.546	4.048	6.071
31	M9	X	.546	.497	6.071	8.095
32	M9	X	.497	.548	8.095	10.119
33	M9	X	.548	.327	10.119	12.143
34	M9	X	.327	.011	12.143	14.167
35	M10A	X	.124	.209	0	.779
36	M10A	X	.209	.266	.779	1.559

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
37	M10A	X	.266	.201	1.559	2.338
38	M10A	X	.201	.064	2.338	3.118
39	M10A	X	.064	.004	3.118	3.897
40	M70A	X	3.682	.209	0	.167
41	M10A	X	.462	.257	0	1.949
42	M10A	X	.257	.053	1.949	3.897
43	M15A	X	.535	.535	.013	7.405
44	M16A	X	.011	.319	0	2.024
45	M16A	X	.319	.522	2.024	4.048
46	M16A	X	.522	.492	4.048	6.072
47	M16A	X	.492	.493	6.072	8.096
48	M16A	X	.493	.522	8.096	10.12
49	M16A	X	.522	.319	10.12	12.144
50	M16A	X	.319	.011	12.144	14.168

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19A	N14	N6	N8	Y	Two Way	-.005
2	N14A	N13	N14	N19A	Y	Two Way	-.005
3	N8	N6	N13	N14A	Y	Two Way	-.005

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19A	N14	N6	N8	Y	Two Way	-.013
2	N14A	N13	N14	N19A	Y	Two Way	-.013
3	N8	N6	N13	N14A	Y	Two Way	-.013

**Member Area Loads (BLC 84 : Structure Ev)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19A	N14	N6	N8	Y	Two Way	-.000216
2	N14A	N13	N14	N19A	Y	Two Way	-.000216
3	N8	N6	N13	N14A	Y	Two Way	-.000216

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19A	N14	N6	N8	Z	Two Way	-.000541
2	N14A	N13	N14	N19A	Z	Two Way	-.000541
3	N8	N6	N13	N14A	Z	Two Way	-.000541

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19A	N14	N6	N8	X	Two Way	.000541
2	N14A	N13	N14	N19A	X	Two Way	.000541
3	N8	N6	N13	N14A	X	Two Way	.000541

**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	N21	m... 3086.872	11	1359.442	15	845.473	1	-893	73	2.643	11	.381	4
2		m... -3084.897	5	308.772	10	-809.368	7	-3.749	16	-2.611	5	-.206	10
3	N17	m... 1847.942	9	1324.443	20	2563.389	3	1.58	14	2.627	3	-.708	3
4		m... -1881.731	3	315.131	64	-2602.852	9	.366	71	-2.616	9	-3.256	21
5	N26	m... 1470.926	10	1230.332	21	2698.798	1	2.04	24	2.485	7	2.7	18



**Envelope Joint Reactions (Continued)**

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
6	m... -1421.743	4	299.819	65	-2698.188	7	.485	69	-2.486	1	.66	64
7	N29 m... 2296.706	17	1909.828	17	1324.893	17	0	4	0	4	0	4
8	m... 11.711	11	12.427	11	6.764	11	0	34	0	34	0	34
9	N26A m... 111.332	10	1972.994	13	101.821	7	0	75	.002	10	.003	4
10	m... -111.294	4	-66.331	7	-2744.212	13	0	1	-.002	4	-.003	10
11	N27A m... 77.242	3	1964.76	21	1366.829	21	.002	1	.001	7	.001	7
12	m... -2368.679	21	-57.575	3	-44.535	3	-.002	7	-.001	1	0	1
13	Totals: m... 4778.394	10	9072.712	24	4657.989	1						
14	m... -4778.392	4	2228.607	68	-4657.994	7						

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

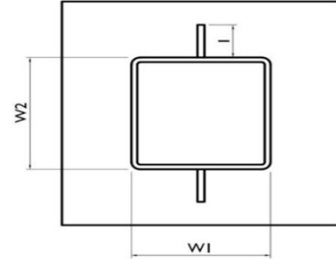
Member	Shape	Code Check	Loc[ft]	LC	Shear Check	L... Dir	LC	phi*Pn...	phi*P...	phi*Mn y...	phi*Mn .....	Eqn	
1	M7	L3X3X4	.222	0	4	.016	7... z	17	14041...	46656	1.688	3.352	H2-1
2	FACE	L3X3X4	.507	0	9	.250	7... y	7	3850.32	46656	1.688	3.091	H2-1
3	M10	LL3x3...	.268	3.897	20	.361	0 z	6	76393...	93312	6.48	4.362	H1...
4	M14	HSS4...	.274	0	17	.106	0 z	5	13414...	139518	16.181	16.181	H1...
5	M47	LL3x3...	.274	3.897	19	.048	2... y	17	76393...	93312	6.48	4.362	H1...
6	M8	L3X3X4	.225	3.786	3	.016	3... z	21	14055...	46656	1.688	3.454	H2-1
7	M9	L3X3X4	.523	0	1	.261	7... y	5	3852.2...	46656	1.688	3.137	H2-1
8	M10A	LL3x3...	.290	3.897	15	.485	0 z	10	76393...	93312	6.48	4.362	H1...
9	M11	HSS4...	.267	0	21	.107	0 z	9	13414...	139518	16.181	16.181	H1...
10	M15A	L3X3X4	.228	3.709	7	.015	7... z	11	14048...	46656	1.688	3.351	H2-1
11	M16A	L3X3X4	.527	14.168	1	.201	7... y	9	3851.2...	46656	1.688	3.084	H2-1
12	M18	HSS4...	.250	0	13	.103	0 z	1	13414...	139518	16.181	16.181	H1...
13	M23	LL2.5x...	.127	3.733	15	.020	7... z	4	28647...	58320	4.643	2.517	H1...
14	M24	LL2.5x...	.127	3.736	23	.016	7... z	6	28619...	58320	4.643	2.517	H1...
15	M25	LL2.5x...	.125	3.733	19	.007	7... z	2	28647...	58320	4.643	2.517	H1...
16	MP1A	PIPE_...	.286	3.875	5	.119	3...	6	20866...	32130	1.872	1.872	H1...
17	MP2A	PIPE_...	.376	3.875	10	.117	3...	5	20866...	32130	1.872	1.872	H1...
18	MP3A	PIPE_...	.277	3.875	10	.148	3...	7	20866...	32130	1.872	1.872	H1...
19	MP4A	PIPE_...	.235	3.875	10	.147	3...	12	20866...	32130	1.872	1.872	H1...
20	MP1C	PIPE_...	.317	3.875	1	.139	....	3	20866...	32130	1.872	1.872	H1...
21	MP2C	PIPE_...	.387	3.875	6	.120	3...	1	20866...	32130	1.872	1.872	H1...
22	MP3C	PIPE_...	.261	3.875	6	.137	3...	3	20866...	32130	1.872	1.872	H1...
23	MP4C	PIPE_...	.190	3.875	6	.116	3...	8	20866...	32130	1.872	1.872	H1...
24	MP1B	PIPE_...	.267	3.875	9	.121	....	11	20866...	32130	1.872	1.872	H1...
25	MP2B	PIPE_...	.364	3.875	3	.117	3...	9	20866...	32130	1.872	1.872	H1...
26	MP3B	PIPE_...	.268	3.875	2	.157	3...	11	20866...	32130	1.872	1.872	H1...
27	MP4B	PIPE_...	.223	3.875	2	.149	3...	4	20866...	32130	1.872	1.872	H1...
28	M49	PIPE_...	.313	8.023	7	.129	1...	6	5016.1...	32130	1.872	1.872	H1...
29	M54	PIPE_...	.312	8.315	3	.125	1...	2	5016.1...	32130	1.872	1.872	H1...
30	M59	PIPE_...	.329	8.023	11	.129	1...	10	5016.1...	32130	1.872	1.872	H1...
31	M70	L2.5x2...	.475	1.458	11	.065	1... y	11	27112...	29192...	.873	1.972	H2-1
32	M77	L2.5x2...	.481	1.458	7	.055	1... y	7	27112...	29192...	.873	1.972	H2-1
33	M84	L2.5x2...	.475	1.458	3	.060	1... y	9	27112...	29192...	.873	1.972	H2-1
34	OVP1	PIPE_...	.156	3	9	.013	3	9	28843...	32130	1.872	1.872	H1...
35	OVP2	PIPE_...	.155	3	3	.013	3	3	28843...	32130	1.872	1.872	H1...



Tower Connection Weld Checks

Weld Shape:  
 Weld Stiffener Configuration:  
 Stiffener Notch Present?  
 Stiffener Length, l (in):  
 Stiffener Spacing/Width, s (in):  
 Weld Size (1/16 in):  
 W1 (in):  
 W2 (in):  
 Weld Total Length (in):  
 $Z_x$  (in<sup>3</sup>/in):  
 $Z_y$  (in<sup>3</sup>/in):  
 $J_p$  (in<sup>4</sup>/in):  
 $c_x$  (in)  
 $c_y$  (in)  
 Required combined strength (kip/in):  
 Weld Capacity (kip/in):  
 Weld Utilization:

Yes
Rectangle
(1) Stiffener on top/bottom
No
3.5
4
4
4
30.00
59.73
21.33
296.50
5.5
5.5
1.32
5.57
<b>23.7%</b>



Date: **July 31, 2023**



Tower Engineering Professionals  
326 Tryon Road  
Raleigh, NC 27603  
(919) 661-6351

**Subject: Structural Analysis Report**

**Carrier Designation:** **Verizon Wireless Co-Locate**  
**Site Number:** 5000387740  
**Site Name:** Newington 2 CT

**Crown Castle Designation:** **BU Number:** 881364  
**Site Name:** Newington  
**JDE Job Number:** 751379  
**Work Order Number:** 2246493  
**Order Number:** 654631 Rev. 0

**Engineering Firm Designation:** **TEP Project Number:** 65292.872006

**Site Data:** **123 Costelo Road, Newington, Hartford County, CT 06111**  
**Latitude 41° 39' 18.72", Longitude -72° 43' 17.19"**  
**145 Foot - Monopole Tower**

*Tower Engineering Professionals* 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 – 72.2%**

This analysis utilizes an ultimate 3-second gust windspeed of 118 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Gautam Sopal, E.I. / CLT

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

07/31/2023

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## 1) INTRODUCTION

This tower is a 145-ft monopole tower designed by Summit. The tower has been modified per reinforcement drawings prepared by Paul J. Ford and Company in November of 2015.

## 2) ANALYSIS CRITERIA

<b>TIA-222 Revision:</b>	TIA-222-H
<b>Risk Category:</b>	II
<b>Wind Speed:</b>	118 mph
<b>Exposure Category:</b>	C
<b>Topographic Factor:</b>	1.0
<b>Ice Thickness:</b>	1.5 in
<b>Wind Speed with Ice:</b>	50 mph
<b>Service Wind Speed:</b>	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)
114.0	116.0	3	Samsung Telecom.	MT6407-77A w/ Mount Pipe	1 8	1/2 1-5/8
	114.0	6	Andrew	SBNHH-1D65B w/ Mount Pipe		
		3	Andrew	LNx-6513DS-A1M w/ Mount Pipe		
		1	Lucent	KS24019-L112A		
		1	Kaelus	BSF0020F3V1		
		1	RFS Celwave	DB-T1-6Z-8AB-0Z		
		3	Samsung Telecom.	RFV01U-D1A		
		3	Samsung Telecom.	RFV01U-D2A		
		1	Tower Mounts	Platform Mount [LP 1201-1_KCKR-HR-1]		
	113.0	3	Samsung Telecom.	XXDWMM-12.5-65-8T-CBRS w/ Mount Pipe		

**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)
133.0	139.0	2	Andrew	VHLP2.5-11	6 2	5/16 1/2
		2	Dragonwave	Horizon Compact		
	135.0	3	Argus Technologies	LLPX310R-V1 w/ Mount Pipe		
		1	Motorola	TIMING 2000		
		3	Samsung Telecom.	WIMAX DAP HEAD		
	133.0	1	Tower Mounts	Platform Mount [LP 1201-1]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
124.0	124.0	3	RFS Celwave	APXVSPP18-C-A20 w/ Mount Pipe	4	1-1/4
		3	RFS Celwave	APXVTM14-C-120 w/ Mount Pipe		
		3	Alcatel Lucent	TD-RRH8x20-25		
		3	RFS Celwave	IBC1900HG-2A		
		3	RFS Celwave	IBC1900BB-1		
		1	Tower Mounts	Platform Mount [LP 1201-1]		
122.0	122.0	3	Alcatel Lucent	PCS 1900MHz 4x45W-65MHz	-	-
		1	Tower Mounts	Pipe Mount [PM 601-3]		
	118.0	3	Alcatel Lucent	800MHz 2X50W RRH W/FILTER		
105.0	105.0	3	Ericsson	AIR 6419 B77G w/ Mount Pipe	6 6 2	13/16 1-5/8 3/8
		3	CCI Antennas	DMP65R-BU6D w/ Mount Pipe		
		3	Quintel Technology	QD6616-7 w/ Mount Pipe		
		3	Ericsson	AIR 6449 B77D w/ Mount Pipe		
		2	Raycap	DC6-48-60-18-8F		
		1	Raycap	DC6-48-60-0-8F		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 4478 B14		
		3	Ericsson	RRUS 32 B30		
		1	Tower Mounts	Pipe Mount [PM 601-3]		
		3	Site Pro 1	VFA14-HD Sector Mount		
94.0	95.0	3	Ericsson	AIR -32 B2A/B66AA	13	1-5/8
		3	RFS Celwave	APXVAARR24_43-U-NA20		
		3	Ericsson	AIR 3246 B66		
		3	Ericsson	Radio 4449 B12/B71		
	94.0	3	Ericsson	KRY 112 144/1		
		1	Tower Mounts	Platform Mount [LP 302-1]		
87.0	87.0	3	Kathrein	742 213	6	1-5/8
		1	Tower Mounts	Pipe Mount [PM 601-3]		
80.0	80.0	2	Tower Mounts	Side Arm Mount [SO 701-1]	-	-
77.0	77.0	1	Symmetricom	58532A	1	1/2
		1	Tower Mounts	Side Arm Mount [SO 701-1]		

### 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided**

Document	Reference	Source
Geotechnical Report	1425352	CCISites
Tower Foundation Drawings	1425473	CCISites
Tower Manufacturer Drawings	1425417	CCISites
Tower Reinforcement Drawings	5976614	CCISites
Post-Modification Inspection	6120832	CCISites
Tower Structural Analysis Report	2700302	CCISites

#### 3.1) Analysis Method

tnxTower (version 8.1.1.0), 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 pole and in the reinforcing elements. These calculations are presented in Appendix C.

#### 3.2) Assumptions

- 1) The 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.
- 3) The flange bolt diameter and grade were assumed per the previous analysis by Crown Castle dated August 11, 2010 (CCI Doc ID# 2700302).

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

### 4) ANALYSIS RESULTS

**Table 4 - Section Capacity (Summary)<sup>1,2</sup>**

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
145 - 140	Pole	TP24.923x24x0.1875	Pole	0.2%	Pass
140 - 135	Pole	TP25.847x24.923x0.1875	Pole	1.3%	Pass
135 - 130	Pole	TP26.77x25.847x0.1875	Pole	4.3%	Pass
130 - 125	Pole	TP27.825x26.9x0.25	Pole	5.1%	Pass
125 - 120	Pole	TP28.75x27.825x0.25	Pole	8.6%	Pass
120 - 115	Pole	TP29.675x28.75x0.25	Pole	12.3%	Pass
115 - 110	Pole	TP30.599x29.675x0.25	Pole	17.8%	Pass
110 - 105	Pole	TP31.524x30.599x0.25	Pole	22.9%	Pass
105 - 100	Pole	TP32.449x31.524x0.25	Pole	30.4%	Pass
100 - 95	Pole	TP33.374x32.449x0.25	Pole	36.9%	Pass
95 - 90	Pole	TP34.299x33.374x0.25	Pole	44.5%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
90 - 89.25	Pole	TP35.27x34.299x0.25	Pole	45.6%	Pass
89.25 - 84.25	Pole	TP34.862x33.938x0.3125	Pole	40.2%	Pass
84.25 - 79.25	Pole	TP35.787x34.862x0.3125	Pole	45.1%	Pass
79.25 - 74.25	Pole	TP36.712x35.787x0.3125	Pole	49.8%	Pass
74.25 - 69.25	Pole	TP37.636x36.712x0.3125	Pole	54.1%	Pass
69.25 - 64.25	Pole	TP38.561x37.636x0.3125	Pole	58.1%	Pass
64.25 - 59.25	Pole	TP39.486x38.561x0.3125	Pole	62.0%	Pass
59.25 - 54.25	Pole	TP40.411x39.486x0.3125	Pole	65.6%	Pass
54.25 - 50.08	Pole	TP41.181x40.411x0.3125	Pole	68.5%	Pass
50.08 - 49.83	Pole + Reinf.	TP41.227x41.181x0.4375	Reinf. 2 Tension Rupture	68.0%	Pass
49.83 - 49.5	Pole + Reinf.	TP42.26x41.227x0.4375	Reinf. 2 Tension Rupture	68.3%	Pass
49.5 - 43.25	Pole + Reinf.	TP41.695x40.664x0.5	Reinf. 2 Tension Rupture	65.5%	Pass
43.25 - 38.25	Pole + Reinf.	TP42.52x41.695x0.5	Reinf. 2 Tension Rupture	68.4%	Pass
38.25 - 33.25	Pole + Reinf.	TP43.345x42.52x0.4938	Reinf. 2 Tension Rupture	71.1%	Pass
33.25 - 31.25	Pole + Reinf.	TP43.675x43.345x0.4875	Reinf. 2 Tension Rupture	72.2%	Pass
31.25 - 31	Pole + Reinf.	TP43.716x43.675x0.5875	Reinf. 1 Compression	56.3%	Pass
31 - 26	Pole + Reinf.	TP44.541x43.716x0.5875	Reinf. 1 Compression	58.4%	Pass
26 - 21	Pole + Reinf.	TP45.366x44.541x0.575	Reinf. 1 Compression	60.4%	Pass
21 - 16	Pole + Reinf.	TP46.191x45.366x0.575	Reinf. 1 Compression	62.3%	Pass
16 - 11	Pole + Reinf.	TP47.015x46.191x0.575	Reinf. 1 Compression	64.1%	Pass
11 - 6	Pole + Reinf.	TP47.84x47.015x0.5625	Reinf. 1 Compression	65.9%	Pass
6 - 1	Pole + Reinf.	TP48.665x47.84x0.5625	Reinf. 1 Compression	67.5%	Pass
1 - 0	Pole + Reinf.	TP48.83x48.665x0.5625	Reinf. 1 Compression	67.9%	Pass
				Summary	
			Pole	68.5%	Pass
			Reinforcement	72.2%	Pass
			<b>Overall</b>	<b>72.2%</b>	<b>Pass</b>

**Table 5 - Tower Component Stresses vs. Capacity - LC7**

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Flange Connection	130.0	5.8	Pass
1,2	Anchor Rods	-	63.5	Pass
1,2	Base Plate	-	67.7	Pass
1,2	Base Foundation Structural	-	60.1	Pass
1,2	Base Foundation Soil Interaction	-	45.8	Pass

<b>Structure Rating (max from all components) =</b>	<b>72.2%</b>
---	--------------

Notes:

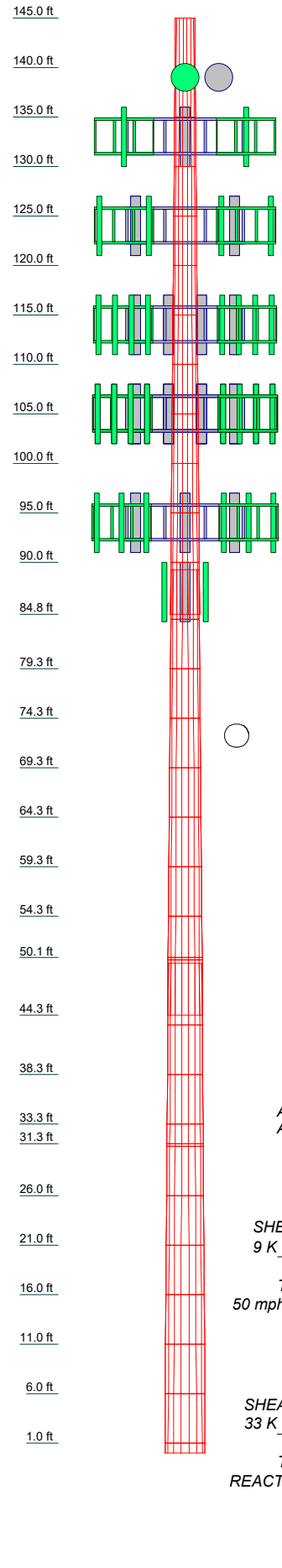
- 1) See additional documentation in "Appendix C - Additional Calculations" for calculations supporting the % capacity listed.
- 2) Rating per TIA-222-H Section 15.5

**4.1) Recommendations**

- 1) The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

**APPENDIX A**  
**TNXTOWER OUTPUT**

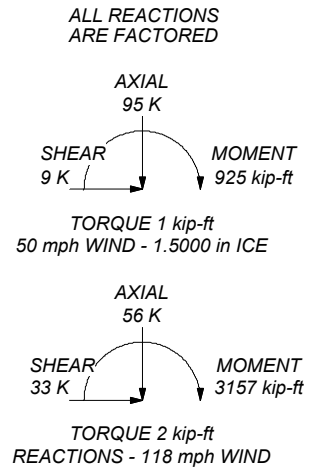
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.00	18	0.1875	4.50	34.8333	35.7870	0.3	0.2
2	5.00	18	0.1875	4.50	34.8333	35.7870	0.3	0.3
3	5.00	18	0.1875	4.50	34.8333	35.7870	0.3	0.3
4	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
5	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
6	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
7	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
8	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
9	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
10	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
11	5.00	18	0.2500	4.50	34.8333	35.7870	0.4	0.4
12	5.00	18	0.2500	4.50	34.8333	35.7870	0.5	0.5
13	5.00	18	0.2500	4.50	34.8333	35.7870	0.5	0.5
14	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
15	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
16	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
17	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
18	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
19	5.00	18	0.3125	5.25	34.8333	35.7870	0.7	0.7
20	5.00	18	0.3125	5.25	34.8333	35.7870	0.7	0.7
21	5.00	18	0.3125	5.25	34.8333	35.7870	0.7	0.7
22	5.00	18	0.3125	5.25	34.8333	35.7870	0.6	0.6
23	5.00	18	0.3125	5.25	34.8333	35.7870	1.1	1.1
24	5.00	18	0.5000	5.25	34.8333	35.7870	1.1	1.1
25	5.00	18	0.5000	5.25	34.8333	35.7870	1.2	1.2
26	5.00	18	0.5000	5.25	34.8333	35.7870	1.2	1.2
27	5.00	18	0.5000	5.25	34.8333	35.7870	1.2	1.2
28	5.00	18	0.5875	5.25	34.8333	35.7870	1.4	1.4
29	5.00	18	0.5750	5.25	34.8333	35.7870	1.4	1.4
30	5.00	18	0.5750	5.25	34.8333	35.7870	1.5	1.5
31	5.00	18	0.5750	5.25	34.8333	35.7870	1.5	1.5
32	5.00	18	0.5625	5.25	34.8333	35.7870	1.5	1.5
33	5.00	18	0.5625	5.25	34.8333	35.7870	1.5	1.5
34	1.00	18	0.5625	5.25	34.8333	35.7870	1.5	1.5



GRADE	Fy	Fu	GRADE	Fy	Fu
A607-65	65 ksi	80 ksi			

**TOWER DESIGN NOTES**

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure C 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 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 72.2%



 <p>Tower Engineering Professionals</p>	<p><b>Tower Engineering Professionals</b></p> <p>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>		<p>Job: <b>Newington (BU 881364)</b></p>	
	<p>Project: <b>TEP No. 65292.872006</b></p>			
	Client: Crown Castle	Drawn by: myoung	App'd:	
	Code: TIA-222-H	Date: 07/31/23	Scale: NTS	
	Path: C:\Users\myoung\Desktop\TNP\881364-Newington\881364_2246493_LC7.dwg	Dwg No. E-1		

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b> Newington (BU 881364)	<b>Page</b> 1 of 30
	<b>Project</b> TEP No. 65292.872006	<b>Date</b> 16:06:58 07/31/23
	<b>Client</b> Crown Castle	<b>Designed by</b> myoung

## 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: 135.00 ft.
- Basic wind speed of 118 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.5000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in 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

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>Consider Moments - Legs</li> <li>Consider Moments - Horizontals</li> <li>Consider Moments - Diagonals</li> <li>Use Moment Magnification</li> <li>√ Use Code Stress Ratios</li> <li>√ Use Code Safety Factors - Guys</li> <li>Escalate Ice</li> <li>Always Use Max Kz</li> <li>Use Special Wind Profile</li> <li>Include Bolts In Member Capacity</li> <li>Leg Bolts Are At Top Of Section</li> <li>Secondary Horizontal Braces Leg</li> <li>Use Diamond Inner Bracing (4 Sided)</li> <li>SR Members Have Cut Ends</li> <li>SR Members Are Concentric</li> </ul> | <ul style="list-style-type: none"> <li>Distribute Leg Loads As Uniform</li> <li>Assume Legs Pinned</li> <li>√ Assume Rigid Index Plate</li> <li>√ Use Clear Spans For Wind Area</li> <li>Use Clear Spans For <math>KL/r</math></li> <li>Retension Guys To Initial Tension</li> <li>√ Bypass Mast Stability Checks</li> <li>√ Use Azimuth Dish Coefficients</li> <li>√ Project Wind Area of Appurt.</li> <li>Autocalc Torque Arm Areas</li> <li>Add IBC .6D+W Combination</li> <li>√ Sort Capacity Reports By Component</li> <li>Triangulate Diamond Inner Bracing</li> <li>Treat Feed Line Bundles As Cylinder</li> <li>Ignore <math>KL/ry</math> For 60 Deg. Angle Legs</li> </ul> | <ul style="list-style-type: none"> <li>Use ASCE 10 X-Brace Ly Rules</li> <li>Calculate Redundant Bracing Forces</li> <li>Ignore Redundant Members in FEA</li> <li>SR Leg Bolts Resist Compression</li> <li>All Leg Panels Have Same Allowable</li> <li>Offset Girt At Foundation</li> <li>√ Consider Feed Line Torque</li> <li>Include Angle Block Shear Check</li> <li>Use TIA-222-H Bracing Resist. Exemption</li> <li>Use TIA-222-H Tension Splice Exemption</li> <li style="text-align: center;">Poles</li> <li>√ Include Shear-Torsion Interaction</li> <li>Always Use Sub-Critical Flow</li> <li>Use Top Mounted Sockets</li> <li>Pole Without Linear Attachments</li> <li>Pole With Shroud Or No Appurtenances</li> <li>Outside and Inside Corner Radii Are Known</li> </ul> |
|--|---|---|

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b>	Newington (BU 881364)	<b>Page</b>	2 of 30
	<b>Project</b>	TEP No. 65292.872006	<b>Date</b>	16:06:58 07/31/23
	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

## 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	145.00-140.00	5.00	0.00	18	24.0000	24.9233	0.1875	0.7500	A607-65 (65 ksi)
L2	140.00-135.00	5.00	0.00	18	24.9233	25.8467	0.1875	0.7500	A607-65 (65 ksi)
L3	135.00-130.00	5.00	0.00	18	25.8467	26.7700	0.1875	0.7500	A607-65 (65 ksi)
L4	130.00-125.00	5.00	0.00	18	26.9000	27.8249	0.2500	1.0000	A607-65 (65 ksi)
L5	125.00-120.00	5.00	0.00	18	27.8249	28.7497	0.2500	1.0000	A607-65 (65 ksi)
L6	120.00-115.00	5.00	0.00	18	28.7497	29.6746	0.2500	1.0000	A607-65 (65 ksi)
L7	115.00-110.00	5.00	0.00	18	29.6746	30.5994	0.2500	1.0000	A607-65 (65 ksi)
L8	110.00-105.00	5.00	0.00	18	30.5994	31.5243	0.2500	1.0000	A607-65 (65 ksi)
L9	105.00-100.00	5.00	0.00	18	31.5243	32.4492	0.2500	1.0000	A607-65 (65 ksi)
L10	100.00-95.00	5.00	0.00	18	32.4492	33.3740	0.2500	1.0000	A607-65 (65 ksi)
L11	95.00-90.00	5.00	0.00	18	33.3740	34.2989	0.2500	1.0000	A607-65 (65 ksi)
L12	90.00-84.75	5.25	4.50	18	34.2989	35.2700	0.2500	1.0000	A607-65 (65 ksi)
L13	84.75-84.25	5.00	0.00	18	33.9376	34.8623	0.3125	1.2500	A607-65 (65 ksi)
L14	84.25-79.25	5.00	0.00	18	34.8623	35.7870	0.3125	1.2500	A607-65 (65 ksi)
L15	79.25-74.25	5.00	0.00	18	35.7870	36.7118	0.3125	1.2500	A607-65 (65 ksi)
L16	74.25-69.25	5.00	0.00	18	36.7118	37.6365	0.3125	1.2500	A607-65 (65 ksi)
L17	69.25-64.25	5.00	0.00	18	37.6365	38.5612	0.3125	1.2500	A607-65 (65 ksi)
L18	64.25-59.25	5.00	0.00	18	38.5612	39.4859	0.3125	1.2500	A607-65 (65 ksi)
L19	59.25-54.25	5.00	0.00	18	39.4859	40.4106	0.3125	1.2500	A607-65 (65 ksi)
L20	54.25-50.08	4.17	0.00	18	40.4106	41.1812	0.3125	1.2500	A607-65 (65 ksi)
L21	50.08-49.83	0.25	0.00	18	41.1812	41.2275	0.4375	1.7500	A607-65 (65 ksi)
L22	49.83-44.25	5.58	5.25	18	41.2275	42.2600	0.4375	1.7500	A607-65 (65 ksi)
L23	44.25-43.25	6.25	0.00	18	40.6641	41.6951	0.5000	2.0000	A607-65 (65 ksi)
L24	43.25-38.25	5.00	0.00	18	41.6951	42.5200	0.5000	2.0000	A607-65 (65 ksi)
L25	38.25-33.25	5.00	0.00	18	42.5200	43.3448	0.4938	1.9750	A607-65 (65 ksi)
L26	33.25-31.25	2.00	0.00	18	43.3448	43.6747	0.4875	1.9500	A607-65 (65 ksi)
L27	31.25-31.00	0.25	0.00	18	43.6747	43.7160	0.5875	2.3500	A607-65 (65 ksi)
L28	31.00-26.00	5.00	0.00	18	43.7160	44.5408	0.5875	2.3500	A607-65 (65 ksi)
L29	26.00-21.00	5.00	0.00	18	44.5408	45.3657	0.5750	2.3000	A607-65 (65 ksi)



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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
L30	21.00-16.00	5.00	0.00	18	45.3657	46.1905	0.5750	2.3000	A607-65 (65 ksi)
L31	16.00-11.00	5.00	0.00	18	46.1905	47.0153	0.5750	2.3000	A607-65 (65 ksi)
L32	11.00-6.00	5.00	0.00	18	47.0153	47.8402	0.5625	2.2500	A607-65 (65 ksi)
L33	6.00-1.00	5.00	0.00	18	47.8402	48.6650	0.5625	2.2500	A607-65 (65 ksi)
L34	1.00-0.00	1.00		18	48.6650	48.8300	0.5625	2.2500	A607-65 (65 ksi)

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	I/Q in <sup>2</sup>	w in	w/t
L1	24.3413	14.1714	1015.2211	8.4534	12.1920	83.2694	2031.7780	7.0871	3.8940	20.768
	25.2789	14.7209	1137.9555	8.7812	12.6611	89.8784	2277.4083	7.3619	4.0565	21.635
L2	25.2789	14.7209	1137.9555	8.7812	12.6611	89.8784	2277.4083	7.3619	4.0565	21.635
	26.2165	15.2704	1270.2035	9.1090	13.1301	96.7398	2542.0784	7.6367	4.2190	22.501
L3	26.2165	15.2704	1270.2035	9.1090	13.1301	96.7398	2542.0784	7.6367	4.2190	22.501
	27.1540	15.8199	1412.3200	9.4368	13.5992	103.8535	2826.4984	7.9115	4.3815	23.368
L4	27.2764	21.1468	1897.4748	9.4608	13.6652	138.8545	3797.4464	10.5754	4.2944	17.178
	28.2155	21.8807	2101.9599	9.7891	14.1350	148.7057	4206.6856	10.9424	4.4572	17.829
L5	28.2155	21.8807	2101.9599	9.7891	14.1350	148.7057	4206.6856	10.9424	4.4572	17.829
	29.1547	22.6145	2320.6324	10.1174	14.6049	158.8945	4644.3183	11.3094	4.6200	18.48
L6	29.1547	22.6145	2320.6324	10.1174	14.6049	158.8945	4644.3183	11.3094	4.6200	18.48
	30.0938	23.3484	2553.9681	10.4457	15.0747	169.4209	5111.2967	11.6764	4.7827	19.131
L7	30.0938	23.3484	2553.9681	10.4457	15.0747	169.4209	5111.2967	11.6764	4.7827	19.131
	31.0329	24.0823	2802.4429	10.7741	15.5445	180.2849	5608.5733	12.0434	4.9455	19.782
L8	31.0329	24.0823	2802.4429	10.7741	15.5445	180.2849	5608.5733	12.0434	4.9455	19.782
	31.9721	24.8162	3066.5323	11.1024	16.0143	191.4865	6137.0997	12.4104	5.1083	20.433
L9	31.9721	24.8162	3066.5323	11.1024	16.0143	191.4865	6137.0997	12.4104	5.1083	20.433
	32.9112	25.5500	3346.7129	11.4307	16.4842	203.0258	6697.8294	12.7774	5.2711	21.084
L10	32.9112	25.5500	3346.7129	11.4307	16.4842	203.0258	6697.8294	12.7774	5.2711	21.084
	33.8503	26.2839	3643.4600	11.7590	16.9540	214.9026	7291.7142	13.1445	5.4338	21.735
L11	33.8503	26.2839	3643.4600	11.7590	16.9540	214.9026	7291.7142	13.1445	5.4338	21.735
	34.7894	27.0178	3957.2496	12.0874	17.4238	227.1170	7919.7063	13.5115	5.5966	22.386
L12	34.7894	27.0178	3957.2496	12.0874	17.4238	227.1170	7919.7063	13.5115	5.5966	22.386
	35.7755	27.7884	4305.5913	12.4321	17.9172	240.3055	8616.8481	13.8968	5.7675	23.07
L13	35.2580	33.3519	4764.1571	11.9369	17.2403	276.3382	9534.5831	16.6791	5.4230	17.354
	35.3519	34.2691	5168.1160	12.2652	17.7101	291.8180	10343.0323	17.1378	5.5858	17.874
L14	35.3519	34.2691	5168.1160	12.2652	17.7101	291.8180	10343.0323	17.1378	5.5858	17.874
	36.2909	35.1863	5594.2871	12.5935	18.1798	307.7197	11195.9353	17.5965	5.7485	18.395
L15	36.2909	35.1863	5594.2871	12.5935	18.1798	307.7197	11195.9353	17.5965	5.7485	18.395
	37.2299	36.1035	6043.2659	12.9217	18.6496	324.0432	12094.4836	18.0552	5.9113	18.916
L16	37.2299	36.1035	6043.2659	12.9217	18.6496	324.0432	12094.4836	18.0552	5.9113	18.916
	38.1689	37.0207	6515.6458	13.2500	19.1193	340.7886	13039.8651	18.5139	6.0740	19.437
L17	38.1689	37.0207	6515.6458	13.2500	19.1193	340.7886	13039.8651	18.5139	6.0740	19.437
	39.1078	37.9379	7012.0220	13.5783	19.5891	357.9558	14033.2707	18.9726	6.2368	19.958
L18	39.1078	37.9379	7012.0220	13.5783	19.5891	357.9558	14033.2707	18.9726	6.2368	19.958
	40.0468	38.8551	7532.9895	13.9065	20.0588	375.5449	15075.8912	19.4312	6.3995	20.478
L19	40.0468	38.8551	7532.9895	13.9065	20.0588	375.5449	15075.8912	19.4312	6.3995	20.478
	40.9858	39.7723	8079.1417	14.2348	20.5286	393.5559	16168.9142	19.8899	6.5623	20.999
L20	40.9858	39.7723	8079.1417	14.2348	20.5286	393.5559	16168.9142	19.8899	6.5623	20.999
	41.7683	40.5367	8553.9751	14.5084	20.9201	408.8885	17119.2057	20.2722	6.6979	21.433
L21	41.7683	40.5367	8553.9751	14.5084	20.9201	408.8885	17119.2057	20.2722	6.6979	21.433
	41.7490	56.5778	11866.0164	14.4640	20.9201	567.2074	23747.6465	28.2943	6.4779	14.807



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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 <sup>2</sup>	in							
L15				1	1	1			
79.25-74.25									
L16				1	1	1			
74.25-69.25									
L17				1	1	1			
69.25-64.25									
L18				1	1	1			
64.25-59.25									
L19				1	1	1			
59.25-54.25									
L20				1	1	1			
54.25-50.08									
L21				1	1	1.03427			
50.08-49.83									
L22				1	1	1.03379			
49.83-44.25									
L23				1	1	1.02761			
44.25-43.25									
L24				1	1	1.02216			
43.25-38.25									
L25				1	1	1.02965			
38.25-33.25									
L26				1	1	1.04061			
33.25-31.25									
L27				1	1	1.0378			
31.25-31.00									
L28				1	1	1.0303			
31.00-26.00									
L29				1	1	1.04503			
26.00-21.00									
L30				1	1	1.03793			
21.00-16.00									
L31				1	1	1.03108			
16.00-11.00									
L32 11.00-6.00				1	1	1.04695			
L33 6.00-1.00				1	1	1.04043			
L34 1.00-0.00				1	1	1.03915			

### 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 plf
<b>**94**</b>										
HJ7-50A(1-5/8)	A	No	Surface Ar (CaAa)	94.00 - 0.00	10	7	-0.250 -0.250	1.9800		1.04
<b>**87**</b>										
AVA7-50(1-5/8")	B	No	Surface Ar (CaAa)	87.00 - 0.00	6	6	0.250 0.250	1.9800		0.72
<b>**77**</b>										
LDF4-50A(1/2)	A	No	Surface Ar (CaAa)	77.00 - 0.00	1	1	0.250 0.250	0.6250		0.15
<b>***</b>										
Safety Line 3/8	A	No	Surface Ar	145.00 -	1	1	0.500	0.3750		0.22

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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 plf
***			(CaAa)	0.00			0.500			
(Area) CCI-65FP-085125 (H)	A	No	Surface Af (CaAa)	35.50 - 0.50	1	1	0.167 0.167	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	B	No	Surface Af (CaAa)	35.50 - 0.50	1	1	0.330 0.330	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	C	No	Surface Af (CaAa)	35.50 - 0.50	1	1	0.167 0.167	8.5000	19.5000	0.00
(Area) CCI-65FP-060100 (H)	A	No	Surface Af (CaAa)	60.58 - 35.50	1	1	0.167 0.167	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	B	No	Surface Af (CaAa)	60.58 - 35.50	1	1	0.330 0.330	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	C	No	Surface Af (CaAa)	60.58 - 35.50	1	1	0.167 0.167	6.0000	14.0000	0.00
***										

### Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C <sub>A</sub> A <sub>A</sub> ft <sup>2</sup> /ft	Weight plf
***133**									
ATCB-B01-005(5/16")	C	No	No	Inside Pole	133.00 - 0.00	6	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.07 0.07 0.07 0.07
FSJ4-50B(1/2)	C	No	No	Inside Pole	133.00 - 0.00	2	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.14 0.14 0.14 0.14
2" Flexible Conduit	C	No	No	Inside Pole	133.00 - 0.00	2	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.34 0.34 0.34 0.34
***124**									
HB114-1-08U4-M5J (1 1/4")	C	No	No	Inside Pole	124.00 - 0.00	4	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	1.08 1.08 1.08 1.08
***114**									
LDF4-50A(1/2)	C	No	No	Inside Pole	114.00 - 0.00	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.15 0.15 0.15 0.15
LDF7-50A(1-5/8)	C	No	No	Inside Pole	114.00 - 0.00	8	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.82 0.82 0.82 0.82
***105**									
PWRT-608-S(13/16)	C	No	No	Inside Pole	105.00 - 0.00	6	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.62 0.62 0.62 0.62
LCF158-50A(1-5/8)	C	No	No	Inside Pole	105.00 - 0.00	6	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.80 0.80 0.80

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Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C <sub>AA</sub>	Weight	
							ft <sup>2</sup> /ft	plf	
FB-L98B-002-75000 (3/8)	C	No	No	Inside Pole	105.00 - 0.00	2	2" Ice	0.80	
							No Ice	0.06	
							1/2" Ice	0.06	
							1" Ice	0.06	
2" Flexible Conduit	C	No	No	Inside Pole	105.00 - 0.00	2	2" Ice	0.06	
							No Ice	0.34	
							1/2" Ice	0.34	
							1" Ice	0.34	
HJ7-50A(1-5/8)	A	No	No	Inside Pole	94.00 - 0.00	3	2" Ice	0.34	
							No Ice	1.04	
							1/2" Ice	1.04	
							1" Ice	1.04	
							2" Ice	0.00	1.04

\*\*\*

### Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L1	145.00-140.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	140.00-135.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L3	135.00-130.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L4	130.00-125.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.01
L5	125.00-120.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.02
L6	120.00-115.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.03
L7	115.00-110.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.06
L8	110.00-105.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.06
L9	105.00-100.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.11
L10	100.00-95.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.11
L11	95.00-90.00	A	0.000	0.000	5.731	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.11
L12	90.00-84.75	A	0.000	0.000	7.473	0.000	0.07

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<i>Tower Section</i>	<i>Tower Elevation</i> <i>ft</i>	<i>Face</i>	<i>A<sub>R</sub></i> <i>ft<sup>2</sup></i>	<i>A<sub>F</sub></i> <i>ft<sup>2</sup></i>	<i>C<sub>A<sub>A</sub></sub></i> <i>In Face</i> <i>ft<sup>2</sup></i>	<i>C<sub>A<sub>A</sub></sub></i> <i>Out Face</i> <i>ft<sup>2</sup></i>	<i>Weight</i> <i>K</i>
		B	0.000	0.000	2.673	0.000	0.01
		C	0.000	0.000	0.000	0.000	0.11
L13	84.75-84.25	A	0.000	0.000	0.712	0.000	0.01
		B	0.000	0.000	0.594	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.01
L14	84.25-79.25	A	0.000	0.000	7.117	0.000	0.07
		B	0.000	0.000	5.940	0.000	0.02
		C	0.000	0.000	0.000	0.000	0.11
L15	79.25-74.25	A	0.000	0.000	7.289	0.000	0.07
		B	0.000	0.000	5.940	0.000	0.02
		C	0.000	0.000	0.000	0.000	0.11
L16	74.25-69.25	A	0.000	0.000	7.430	0.000	0.07
		B	0.000	0.000	5.940	0.000	0.02
		C	0.000	0.000	0.000	0.000	0.11
L17	69.25-64.25	A	0.000	0.000	7.430	0.000	0.07
		B	0.000	0.000	5.940	0.000	0.02
		C	0.000	0.000	0.000	0.000	0.11
L18	64.25-59.25	A	0.000	0.000	8.763	0.000	0.07
		B	0.000	0.000	7.273	0.000	0.02
		C	0.000	0.000	1.333	0.000	0.11
L19	59.25-54.25	A	0.000	0.000	12.430	0.000	0.07
		B	0.000	0.000	10.940	0.000	0.02
		C	0.000	0.000	5.000	0.000	0.11
L20	54.25-50.08	A	0.000	0.000	10.359	0.000	0.06
		B	0.000	0.000	9.117	0.000	0.02
		C	0.000	0.000	4.167	0.000	0.09
L21	50.08-49.83	A	0.000	0.000	0.622	0.000	0.00
		B	0.000	0.000	0.547	0.000	0.00
		C	0.000	0.000	0.250	0.000	0.01
L22	49.83-44.25	A	0.000	0.000	13.879	0.000	0.08
		B	0.000	0.000	12.216	0.000	0.02
		C	0.000	0.000	5.583	0.000	0.12
L23	44.25-43.25	A	0.000	0.000	2.486	0.000	0.01
		B	0.000	0.000	2.188	0.000	0.00
		C	0.000	0.000	1.000	0.000	0.02
L24	43.25-38.25	A	0.000	0.000	12.430	0.000	0.07
		B	0.000	0.000	10.940	0.000	0.02
		C	0.000	0.000	5.000	0.000	0.11
L25	38.25-33.25	A	0.000	0.000	13.368	0.000	0.07
		B	0.000	0.000	11.878	0.000	0.02
		C	0.000	0.000	5.938	0.000	0.11
L26	33.25-31.25	A	0.000	0.000	5.805	0.000	0.03
		B	0.000	0.000	5.209	0.000	0.01
		C	0.000	0.000	2.833	0.000	0.04
L27	31.25-31.00	A	0.000	0.000	0.726	0.000	0.00
		B	0.000	0.000	0.651	0.000	0.00
		C	0.000	0.000	0.354	0.000	0.01
L28	31.00-26.00	A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02
		C	0.000	0.000	7.083	0.000	0.11
L29	26.00-21.00	A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02
		C	0.000	0.000	7.083	0.000	0.11
L30	21.00-16.00	A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02
		C	0.000	0.000	7.083	0.000	0.11
L31	16.00-11.00	A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02
		C	0.000	0.000	7.083	0.000	0.11
L32	11.00-6.00	A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02

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Tower Section	Tower Elevation ft	Face	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{AA}$ In Face ft <sup>2</sup>	$C_{AA}$ Out Face ft <sup>2</sup>	Weight K
L33	6.00-1.00	C	0.000	0.000	7.083	0.000	0.11
		A	0.000	0.000	14.513	0.000	0.07
		B	0.000	0.000	13.023	0.000	0.02
L34	1.00-0.00	C	0.000	0.000	7.083	0.000	0.11
		A	0.000	0.000	2.194	0.000	0.01
		B	0.000	0.000	1.896	0.000	0.00
		C	0.000	0.000	0.708	0.000	0.02

### Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{AA}$ In Face ft <sup>2</sup>	$C_{AA}$ Out Face ft <sup>2</sup>	Weight K
L1	145.00-140.00	A	1.476	0.000	0.000	1.663	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L2	140.00-135.00	A	1.471	0.000	0.000	1.658	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L3	135.00-130.00	A	1.465	0.000	0.000	1.653	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L4	130.00-125.00	A	1.460	0.000	0.000	1.647	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.01
L5	125.00-120.00	A	1.454	0.000	0.000	1.641	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.02
L6	120.00-115.00	A	1.448	0.000	0.000	1.635	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.03
L7	115.00-110.00	A	1.441	0.000	0.000	1.629	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.06
L8	110.00-105.00	A	1.435	0.000	0.000	1.622	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.06
L9	105.00-100.00	A	1.428	0.000	0.000	1.615	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.11
L10	100.00-95.00	A	1.421	0.000	0.000	1.608	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.11
L11	95.00-90.00	A	1.413	0.000	0.000	9.944	0.000	0.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.11
L12	90.00-84.75	A	1.405	0.000	0.000	12.613	0.000	0.21
		B		0.000	0.000	4.132	0.000	0.05
		C		0.000	0.000	0.000	0.000	0.11
L13	84.75-84.25	A	1.401	0.000	0.000	1.201	0.000	0.02
		B		0.000	0.000	0.918	0.000	0.01
		C		0.000	0.000	0.000	0.000	0.01
L14	84.25-79.25	A	1.396	0.000	0.000	11.991	0.000	0.20
		B		0.000	0.000	9.170	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.11
L15	79.25-74.25	A	1.387	0.000	0.000	12.906	0.000	0.21
		B		0.000	0.000	9.159	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.11

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	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{AA}$ In Face ft <sup>2</sup>	$C_{AA}$ Out Face ft <sup>2</sup>	Weight K
L16	74.25-69.25	A	1.378	0.000	0.000	13.641	0.000	0.22
		B		0.000	0.000	9.147	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.11
L17	69.25-64.25	A	1.368	0.000	0.000	13.609	0.000	0.21
		B		0.000	0.000	9.135	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.11
L18	64.25-59.25	A	1.357	0.000	0.000	15.269	0.000	0.23
		B		0.000	0.000	10.817	0.000	0.12
		C		0.000	0.000	1.695	0.000	0.12
L19	59.25-54.25	A	1.346	0.000	0.000	19.883	0.000	0.26
		B		0.000	0.000	15.454	0.000	0.16
		C		0.000	0.000	6.346	0.000	0.16
L20	54.25-50.08	A	1.335	0.000	0.000	16.531	0.000	0.22
		B		0.000	0.000	12.858	0.000	0.13
		C		0.000	0.000	5.279	0.000	0.13
L21	50.08-49.83	A	1.329	0.000	0.000	0.991	0.000	0.01
		B		0.000	0.000	0.771	0.000	0.01
		C		0.000	0.000	0.316	0.000	0.01
L22	49.83-44.25	A	1.321	0.000	0.000	22.083	0.000	0.29
		B		0.000	0.000	17.193	0.000	0.17
		C		0.000	0.000	7.058	0.000	0.18
L23	44.25-43.25	A	1.311	0.000	0.000	3.955	0.000	0.05
		B		0.000	0.000	3.079	0.000	0.03
		C		0.000	0.000	1.264	0.000	0.03
L24	43.25-38.25	A	1.302	0.000	0.000	19.697	0.000	0.25
		B		0.000	0.000	15.355	0.000	0.15
		C		0.000	0.000	6.302	0.000	0.16
L25	38.25-33.25	A	1.285	0.000	0.000	20.562	0.000	0.26
		B		0.000	0.000	16.254	0.000	0.16
		C		0.000	0.000	7.223	0.000	0.16
L26	33.25-31.25	A	1.272	0.000	0.000	8.661	0.000	0.11
		B		0.000	0.000	6.948	0.000	0.07
		C		0.000	0.000	3.342	0.000	0.07
L27	31.25-31.00	A	1.268	0.000	0.000	1.082	0.000	0.01
		B		0.000	0.000	0.868	0.000	0.01
		C		0.000	0.000	0.418	0.000	0.01
L28	31.00-26.00	A	1.256	0.000	0.000	21.586	0.000	0.26
		B		0.000	0.000	17.335	0.000	0.16
		C		0.000	0.000	8.340	0.000	0.17
L29	26.00-21.00	A	1.232	0.000	0.000	21.484	0.000	0.26
		B		0.000	0.000	17.281	0.000	0.16
		C		0.000	0.000	8.316	0.000	0.17
L30	21.00-16.00	A	1.203	0.000	0.000	21.360	0.000	0.25
		B		0.000	0.000	17.216	0.000	0.16
		C		0.000	0.000	8.287	0.000	0.17
L31	16.00-11.00	A	1.166	0.000	0.000	21.201	0.000	0.25
		B		0.000	0.000	17.132	0.000	0.15
		C		0.000	0.000	8.249	0.000	0.16
L32	11.00-6.00	A	1.113	0.000	0.000	20.977	0.000	0.24
		B		0.000	0.000	17.013	0.000	0.14
		C		0.000	0.000	8.197	0.000	0.16
L33	6.00-1.00	A	1.019	0.000	0.000	20.575	0.000	0.22
		B		0.000	0.000	16.800	0.000	0.13
		C		0.000	0.000	8.102	0.000	0.16
L34	1.00-0.00	A	0.839	0.000	0.000	3.170	0.000	0.03
		B		0.000	0.000	2.487	0.000	0.02
		C		0.000	0.000	0.792	0.000	0.03



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### Feed Line Center of Pressure

Section	Elevation ft	CP <sub>x</sub>	CP <sub>z</sub>	CP <sub>x</sub> Ice	CP <sub>z</sub> Ice
		in	in	in	in
L1	145.00-140.00	0.0000	-0.3011	0.0000	-1.3288
L2	140.00-135.00	0.0000	-0.3012	0.0000	-1.3345
L3	135.00-130.00	0.0000	-0.3012	0.0000	-1.3395
L4	130.00-125.00	0.0000	-0.3014	0.0000	-1.3453
L5	125.00-120.00	0.0000	-0.3015	0.0000	-1.3488
L6	120.00-115.00	0.0000	-0.3016	0.0000	-1.3518
L7	115.00-110.00	0.0000	-0.3016	0.0000	-1.3541
L8	110.00-105.00	0.0000	-0.3017	0.0000	-1.3558
L9	105.00-100.00	0.0000	-0.3017	0.0000	-1.3569
L10	100.00-95.00	0.0000	-0.3018	0.0000	-1.3575
L11	95.00-90.00	-6.4951	-0.1983	-5.1118	-0.8856
L12	90.00-84.75	-4.0393	-0.1529	-3.2839	-0.7130
L13	84.75-84.25	-0.9646	-0.1269	-0.7155	-0.6062
L14	84.25-79.25	-0.9702	-0.1282	-0.7190	-0.6088
L15	79.25-74.25	-1.0340	-0.2339	-0.8920	-0.9178
L16	74.25-69.25	-1.0887	-0.3220	-1.0316	-1.1660
L17	69.25-64.25	-1.1002	-0.3275	-1.0408	-1.1779
L18	64.25-59.25	-1.1034	0.2716	-1.0538	-0.6707
L19	59.25-54.25	-1.1019	1.3390	-1.0726	0.3598
L20	54.25-50.08	-1.1166	1.3613	-1.0845	0.3698
L21	50.08-49.83	-1.1238	1.3720	-1.0903	0.3748
L22	49.83-44.25	-1.1331	1.3861	-1.0977	0.3815
L23	44.25-43.25	-1.1309	1.3827	-1.0960	0.3808
L24	43.25-38.25	-1.1394	1.3955	-1.1020	0.3919
L25	38.25-33.25	-1.1540	1.6221	-1.1161	0.5771
L26	33.25-31.25	-1.1643	1.8574	-1.1274	0.7820
L27	31.25-31.00	-1.1677	1.8638	-1.1301	0.7864
L28	31.00-26.00	-1.1756	1.8785	-1.1360	0.7970
L29	26.00-21.00	-1.1904	1.9063	-1.1469	0.8185
L30	21.00-16.00	-1.2051	1.9340	-1.1574	0.8428
L31	16.00-11.00	-1.2197	1.9615	-1.1672	0.8714
L32	11.00-6.00	-1.2343	1.9887	-1.1758	0.9083
L33	6.00-1.00	-1.2487	2.0158	-1.1817	0.9679
L34	1.00-0.00	-1.2443	1.1529	-1.1432	0.2380

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 <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	28	Safety Line 3/8	140.00 - 145.00	1.0000	1.0000
L2	28	Safety Line 3/8	135.00 - 140.00	1.0000	1.0000
L3	28	Safety Line 3/8	130.00 - 135.00	1.0000	1.0000
L4	28	Safety Line 3/8	125.00 - 130.00	1.0000	1.0000
L5	28	Safety Line 3/8	120.00 - 125.00	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L6	28	Safety Line 3/8	115.00 - 120.00	1.0000	1.0000
L7	28	Safety Line 3/8	110.00 - 115.00	1.0000	1.0000
L8	28	Safety Line 3/8	105.00 - 110.00	1.0000	1.0000
L9	28	Safety Line 3/8	100.00 - 105.00	1.0000	1.0000
L10	28	Safety Line 3/8	95.00 - 100.00	1.0000	1.0000
L11	20	HJ7-50A(1-5/8)	90.00 - 94.00	1.0000	1.0000
L11	28	Safety Line 3/8	90.00 - 95.00	1.0000	1.0000
L12	20	HJ7-50A(1-5/8)	84.75 - 90.00	1.0000	1.0000
L12	24	AVA7-50(1-5/8")	84.75 - 87.00	1.0000	1.0000
L12	28	Safety Line 3/8	84.75 - 90.00	1.0000	1.0000
L13	20	HJ7-50A(1-5/8)	84.25 - 84.75	1.0000	1.0000
L13	24	AVA7-50(1-5/8")	84.25 - 84.75	1.0000	1.0000
L13	28	Safety Line 3/8	84.25 - 84.75	1.0000	1.0000
L14	20	HJ7-50A(1-5/8)	79.25 - 84.25	1.0000	1.0000
L14	24	AVA7-50(1-5/8")	79.25 - 84.25	1.0000	1.0000
L14	28	Safety Line 3/8	79.25 - 84.25	1.0000	1.0000
L15	20	HJ7-50A(1-5/8)	74.25 - 79.25	1.0000	1.0000
L15	24	AVA7-50(1-5/8")	74.25 - 79.25	1.0000	1.0000
L15	26	LDF4-50A(1/2)	74.25 - 77.00	1.0000	1.0000
L15	28	Safety Line 3/8	74.25 - 79.25	1.0000	1.0000
L16	20	HJ7-50A(1-5/8)	69.25 - 74.25	1.0000	1.0000
L16	24	AVA7-50(1-5/8")	69.25 - 74.25	1.0000	1.0000
L16	26	LDF4-50A(1/2)	69.25 - 74.25	1.0000	1.0000
L16	28	Safety Line 3/8	69.25 - 74.25	1.0000	1.0000
L17	20	HJ7-50A(1-5/8)	64.25 - 69.25	1.0000	1.0000
L17	24	AVA7-50(1-5/8")	64.25 - 69.25	1.0000	1.0000
L17	26	LDF4-50A(1/2)	64.25 - 69.25	1.0000	1.0000
L17	28	Safety Line 3/8	64.25 - 69.25	1.0000	1.0000
L18	20	HJ7-50A(1-5/8)	59.25 - 64.25	1.0000	1.0000
L18	24	AVA7-50(1-5/8")	59.25 - 64.25	1.0000	1.0000
L18	26	LDF4-50A(1/2)	59.25 - 64.25	1.0000	1.0000
L18	28	Safety Line 3/8	59.25 - 64.25	1.0000	1.0000
L18	33	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	1.0000	1.0000
L18	34	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	1.0000	1.0000
L18	35	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	1.0000	1.0000
L19	20	HJ7-50A(1-5/8)	54.25 - 59.25	1.0000	1.0000
L19	24	AVA7-50(1-5/8")	54.25 - 59.25	1.0000	1.0000
L19	26	LDF4-50A(1/2)	54.25 - 59.25	1.0000	1.0000
L19	28	Safety Line 3/8	54.25 - 59.25	1.0000	1.0000
L19	33	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	1.0000	1.0000
L19	34	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	1.0000	1.0000
L19	35	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	1.0000	1.0000
L20	20	HJ7-50A(1-5/8)	50.08 - 54.25	1.0000	1.0000
L20	24	AVA7-50(1-5/8")	50.08 - 54.25	1.0000	1.0000
L20	26	LDF4-50A(1/2)	50.08 - 54.25	1.0000	1.0000
L20	28	Safety Line 3/8	50.08 - 54.25	1.0000	1.0000
L20	33	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	1.0000	1.0000
L20	34	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	1.0000	1.0000
L20	35	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	1.0000	1.0000
L21	20	HJ7-50A(1-5/8)	49.83 - 50.08	1.0000	1.0000
L21	24	AVA7-50(1-5/8")	49.83 - 50.08	1.0000	1.0000
L21	26	LDF4-50A(1/2)	49.83 - 50.08	1.0000	1.0000
L21	28	Safety Line 3/8	49.83 - 50.08	1.0000	1.0000
L21	33	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	1.0000	1.0000
L21	34	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	1.0000	1.0000
L21	35	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	1.0000	1.0000
L22	20	HJ7-50A(1-5/8)	44.25 - 49.83	1.0000	1.0000
L22	24	AVA7-50(1-5/8")	44.25 - 49.83	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L22	26	LDF4-50A(1/2)	44.25 - 49.83	1.0000	1.0000
L22	28	Safety Line 3/8	44.25 - 49.83	1.0000	1.0000
L22	33	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	1.0000	1.0000
L22	34	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	1.0000	1.0000
L22	35	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	1.0000	1.0000
L23	20	HJ7-50A(1-5/8)	43.25 - 44.25	1.0000	1.0000
L23	24	AVA7-50(1-5/8")	43.25 - 44.25	1.0000	1.0000
L23	26	LDF4-50A(1/2)	43.25 - 44.25	1.0000	1.0000
L23	28	Safety Line 3/8	43.25 - 44.25	1.0000	1.0000
L23	33	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	1.0000	1.0000
L23	34	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	1.0000	1.0000
L23	35	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	1.0000	1.0000
L24	20	HJ7-50A(1-5/8)	38.25 - 43.25	1.0000	1.0000
L24	24	AVA7-50(1-5/8")	38.25 - 43.25	1.0000	1.0000
L24	26	LDF4-50A(1/2)	38.25 - 43.25	1.0000	1.0000
L24	28	Safety Line 3/8	38.25 - 43.25	1.0000	1.0000
L24	33	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	1.0000	1.0000
L24	34	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	1.0000	1.0000
L24	35	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	1.0000	1.0000
L25	20	HJ7-50A(1-5/8)	33.25 - 38.25	1.0000	1.0000
L25	24	AVA7-50(1-5/8")	33.25 - 38.25	1.0000	1.0000
L25	26	LDF4-50A(1/2)	33.25 - 38.25	1.0000	1.0000
L25	28	Safety Line 3/8	33.25 - 38.25	1.0000	1.0000
L25	30	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	1.0000	1.0000
L25	31	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	1.0000	1.0000
L25	32	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	1.0000	1.0000
L25	33	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	1.0000	1.0000
L25	34	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	1.0000	1.0000
L25	35	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	1.0000	1.0000
L26	20	HJ7-50A(1-5/8)	31.25 - 33.25	1.0000	1.0000
L26	24	AVA7-50(1-5/8")	31.25 - 33.25	1.0000	1.0000
L26	26	LDF4-50A(1/2)	31.25 - 33.25	1.0000	1.0000
L26	28	Safety Line 3/8	31.25 - 33.25	1.0000	1.0000
L26	30	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	1.0000	1.0000
L26	31	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	1.0000	1.0000
L26	32	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	1.0000	1.0000
L27	20	HJ7-50A(1-5/8)	31.00 - 31.25	1.0000	1.0000
L27	24	AVA7-50(1-5/8")	31.00 - 31.25	1.0000	1.0000
L27	26	LDF4-50A(1/2)	31.00 - 31.25	1.0000	1.0000
L27	28	Safety Line 3/8	31.00 - 31.25	1.0000	1.0000
L27	30	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	1.0000	1.0000
L27	31	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	1.0000	1.0000
L27	32	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	1.0000	1.0000
L28	20	HJ7-50A(1-5/8)	26.00 - 31.00	1.0000	1.0000
L28	24	AVA7-50(1-5/8")	26.00 - 31.00	1.0000	1.0000
L28	26	LDF4-50A(1/2)	26.00 - 31.00	1.0000	1.0000
L28	28	Safety Line 3/8	26.00 - 31.00	1.0000	1.0000
L28	30	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	1.0000	1.0000
L28	31	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	1.0000	1.0000
L28	32	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	1.0000	1.0000
L29	20	HJ7-50A(1-5/8)	21.00 - 26.00	1.0000	1.0000
L29	24	AVA7-50(1-5/8")	21.00 - 26.00	1.0000	1.0000
L29	26	LDF4-50A(1/2)	21.00 - 26.00	1.0000	1.0000
L29	28	Safety Line 3/8	21.00 - 26.00	1.0000	1.0000
L29	30	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	1.0000	1.0000
L29	31	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	1.0000	1.0000
L29	32	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	1.0000	1.0000
L30	20	HJ7-50A(1-5/8)	16.00 - 21.00	1.0000	1.0000
L30	24	AVA7-50(1-5/8")	16.00 - 21.00	1.0000	1.0000
L30	26	LDF4-50A(1/2)	16.00 - 21.00	1.0000	1.0000
L30	28	Safety Line 3/8	16.00 - 21.00	1.0000	1.0000
L30	30	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L30	31	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	1.0000	1.0000
L30	32	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	1.0000	1.0000
L31	20	HJ7-50A(1-5/8)	11.00 - 16.00	1.0000	1.0000
L31	24	AVA7-50(1-5/8")	11.00 - 16.00	1.0000	1.0000
L31	26	LDF4-50A(1/2)	11.00 - 16.00	1.0000	1.0000
L31	28	Safety Line 3/8	11.00 - 16.00	1.0000	1.0000
L31	30	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	1.0000	1.0000
L31	31	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	1.0000	1.0000
L31	32	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	1.0000	1.0000
L32	20	HJ7-50A(1-5/8)	6.00 - 11.00	1.0000	1.0000
L32	24	AVA7-50(1-5/8")	6.00 - 11.00	1.0000	1.0000
L32	26	LDF4-50A(1/2)	6.00 - 11.00	1.0000	1.0000
L32	28	Safety Line 3/8	6.00 - 11.00	1.0000	1.0000
L32	30	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	1.0000	1.0000
L32	31	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	1.0000	1.0000
L32	32	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	1.0000	1.0000
L33	20	HJ7-50A(1-5/8)	1.00 - 6.00	1.0000	1.0000
L33	24	AVA7-50(1-5/8")	1.00 - 6.00	1.0000	1.0000
L33	26	LDF4-50A(1/2)	1.00 - 6.00	1.0000	1.0000
L33	28	Safety Line 3/8	1.00 - 6.00	1.0000	1.0000
L33	30	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	1.0000	1.0000
L33	31	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	1.0000	1.0000
L33	32	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	1.0000	1.0000
L34	20	HJ7-50A(1-5/8)	0.00 - 1.00	1.0000	1.0000
L34	24	AVA7-50(1-5/8")	0.00 - 1.00	1.0000	1.0000
L34	26	LDF4-50A(1/2)	0.00 - 1.00	1.0000	1.0000
L34	28	Safety Line 3/8	0.00 - 1.00	1.0000	1.0000
L34	30	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	1.0000	1.0000
L34	31	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	1.0000	1.0000
L34	32	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	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
L18	33	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	Auto	0.0000
L18	34	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	Auto	0.0000
L18	35	(Area) CCI-65FP-060100 (H)	59.25 - 60.58	Auto	0.0000
L19	33	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	Auto	0.0000
L19	34	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	Auto	0.0000
L19	35	(Area) CCI-65FP-060100 (H)	54.25 - 59.25	Auto	0.0000
L20	33	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	Auto	0.0000
L20	34	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	Auto	0.0000
L20	35	(Area) CCI-65FP-060100 (H)	50.08 - 54.25	Auto	0.0000
L21	33	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	Auto	0.0000
L21	34	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	Auto	0.0000
L21	35	(Area) CCI-65FP-060100 (H)	49.83 - 50.08	Auto	0.0000
L22	33	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	Auto	0.0000
L22	34	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	Auto	0.0000
L22	35	(Area) CCI-65FP-060100 (H)	44.25 - 49.83	Auto	0.0000
L23	33	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	Auto	0.0000
L23	34	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	Auto	0.0000
L23	35	(Area) CCI-65FP-060100 (H)	43.25 - 44.25	Auto	0.0000

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Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L24	33	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	Auto	0.0000
L24	34	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	Auto	0.0000
L24	35	(Area) CCI-65FP-060100 (H)	38.25 - 43.25	Auto	0.0000
L25	30	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	Auto	0.2086
L25	31	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	Auto	0.2086
L25	32	(Area) CCI-65FP-085125 (H)	33.25 - 35.50	Auto	0.2086
L25	33	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	Auto	0.0000
L25	34	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	Auto	0.0000
L25	35	(Area) CCI-65FP-060100 (H)	35.50 - 38.25	Auto	0.0000
L26	30	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	Auto	0.2000
L26	31	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	Auto	0.2000
L26	32	(Area) CCI-65FP-085125 (H)	31.25 - 33.25	Auto	0.2000
L27	30	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	Auto	0.2169
L27	31	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	Auto	0.2169
L27	32	(Area) CCI-65FP-085125 (H)	31.00 - 31.25	Auto	0.2169
L28	30	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	Auto	0.2079
L28	31	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	Auto	0.2079
L28	32	(Area) CCI-65FP-085125 (H)	26.00 - 31.00	Auto	0.2079
L29	30	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	Auto	0.1883
L29	31	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	Auto	0.1883
L29	32	(Area) CCI-65FP-085125 (H)	21.00 - 26.00	Auto	0.1883
L30	30	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	Auto	0.1712
L30	31	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	Auto	0.1712
L30	32	(Area) CCI-65FP-085125 (H)	16.00 - 21.00	Auto	0.1712
L31	30	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	Auto	0.1541
L31	31	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	Auto	0.1541
L31	32	(Area) CCI-65FP-085125 (H)	11.00 - 16.00	Auto	0.1541
L32	30	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	Auto	0.1344
L32	31	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	Auto	0.1344
L32	32	(Area) CCI-65FP-085125 (H)	6.00 - 11.00	Auto	0.1344
L33	30	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	Auto	0.1174
L33	31	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	Auto	0.1174
L33	32	(Area) CCI-65FP-085125 (H)	1.00 - 6.00	Auto	0.1174
L34	30	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	Auto	0.1080
L34	31	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	Auto	0.1080
L34	32	(Area) CCI-65FP-085125 (H)	0.50 - 1.00	Auto	0.1080

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horiz Lateral Vert	Azimuth Adjustment	Placement	C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight	
			ft ft ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
**133**									
LLPX310R-V1 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 2.00	0.0000	133.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.88 4.29 4.72 5.61	2.36 2.73 3.12 3.94	0.06 0.09 0.13 0.24
LLPX310R-V1 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 2.00	0.0000	133.00	No Ice 1/2" Ice 1" Ice	3.88 4.29 4.72	2.36 2.73 3.12	0.06 0.09 0.13

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
LLPX310R-V1 w/ Mount Pipe	C	From Centroid-Face	4.00	0.00	0.0000	133.00	2" Ice	5.61	3.94	0.24
			0.00	2.00			No Ice	3.88	2.36	0.06
			0.00	2.00			1/2" Ice	4.29	2.73	0.09
			0.00	2.00			1" Ice	4.72	3.12	0.13
			0.00	2.00			2" Ice	5.61	3.94	0.24
TIMING 2000	B	From Centroid-Face	4.00	0.00	0.0000	133.00	No Ice	0.13	0.11	0.00
			0.00	2.00			1/2" Ice	0.18	0.15	0.00
			0.00	2.00			1" Ice	0.24	0.20	0.01
			0.00	2.00			2" Ice	0.37	0.33	0.01
			0.00	2.00			No Ice	1.55	0.68	0.03
WIMAX DAP HEAD	A	From Centroid-Face	4.00	0.00	0.0000	133.00	1/2" Ice	1.70	0.80	0.04
			0.00	2.00			1" Ice	1.87	0.92	0.06
			0.00	2.00			2" Ice	2.22	1.19	0.09
			0.00	2.00			No Ice	1.55	0.68	0.03
			0.00	2.00			1/2" Ice	1.70	0.80	0.04
WIMAX DAP HEAD	B	From Centroid-Face	4.00	0.00	0.0000	133.00	1" Ice	1.87	0.92	0.06
			0.00	2.00			2" Ice	2.22	1.19	0.09
			0.00	2.00			No Ice	1.55	0.68	0.03
			0.00	2.00			1/2" Ice	1.70	0.80	0.04
			0.00	2.00			1" Ice	1.87	0.92	0.06
WIMAX DAP HEAD	C	From Centroid-Face	4.00	0.00	0.0000	133.00	2" Ice	2.22	1.19	0.09
			0.00	2.00			No Ice	1.55	0.68	0.03
			0.00	2.00			1/2" Ice	1.70	0.80	0.04
			0.00	2.00			1" Ice	1.87	0.92	0.06
			0.00	2.00			2" Ice	2.22	1.19	0.09
HORIZON COMPACT	B	From Centroid-Face	4.00	0.00	0.0000	133.00	No Ice	0.72	0.37	0.01
			0.00	6.00			1/2" Ice	0.83	0.45	0.02
			0.00	6.00			1" Ice	0.94	0.54	0.03
			0.00	6.00			2" Ice	1.19	0.74	0.05
			0.00	6.00			No Ice	0.72	0.37	0.01
HORIZON COMPACT	C	From Centroid-Face	4.00	0.00	0.0000	133.00	1/2" Ice	0.83	0.45	0.02
			0.00	6.00			1" Ice	0.94	0.54	0.03
			0.00	6.00			2" Ice	1.19	0.74	0.05
			0.00	6.00			No Ice	0.72	0.37	0.01
			0.00	6.00			1/2" Ice	0.83	0.45	0.02
(3) 2.375" OD x 6' Mount Pipe	A	From Centroid-Face	4.00	0.00	0.0000	133.00	1" Ice	2.29	2.29	0.05
			0.00	0.00			2" Ice	3.06	3.06	0.09
			0.00	0.00			No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
(3) 2.375" OD x 6' Mount Pipe	B	From Centroid-Face	4.00	0.00	0.0000	133.00	2" Ice	3.06	3.06	0.09
			0.00	0.00			No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
			0.00	0.00			2" Ice	3.06	3.06	0.09
(3) 2.375" OD x 6' Mount Pipe	C	From Centroid-Face	4.00	0.00	0.0000	133.00	No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
			0.00	0.00			2" Ice	3.06	3.06	0.09
			0.00	0.00			No Ice	18.38	18.38	2.10
Platform Mount [LP 1201-1]	C	None			0.0000	133.00	1/2" Ice	22.11	22.11	2.65
							1" Ice	25.87	25.87	3.26
							2" Ice	33.47	33.47	4.66
							No Ice	4.60	4.01	0.10
							1/2" Ice	5.05	4.45	0.16
**124**						1" Ice	5.50	4.89	0.23	
APXVSPP18-C-A20 w/ Mount Pipe	A	From Centroid-Log	4.00	0.00	0.0000	124.00	2" Ice	6.44	5.82	0.42
			0.00	0.00			No Ice	4.60	4.01	0.10
			0.00	0.00			1/2" Ice	5.05	4.45	0.16
			0.00	0.00			1" Ice	5.50	4.89	0.23
			0.00	0.00			2" Ice	6.44	5.82	0.42
APXVSPP18-C-A20 w/ Mount Pipe	B	From Centroid-Log	4.00	0.00	0.0000	124.00	No Ice	4.60	4.01	0.10
			0.00	0.00			1/2" Ice	5.05	4.45	0.16
			0.00	0.00			1" Ice	5.50	4.89	0.23
			0.00	0.00			2" Ice	6.44	5.82	0.42
			0.00	0.00			No Ice	4.60	4.01	0.10
APXVSPP18-C-A20 w/ Mount Pipe	C	From Centroid-Log	4.00	0.00	0.0000	124.00	1/2" Ice	5.05	4.45	0.16
			0.00	0.00			1" Ice	5.50	4.89	0.23
			0.00	0.00			2" Ice	6.44	5.82	0.42
			0.00	0.00			No Ice	4.60	4.01	0.10
			0.00	0.00			1/2" Ice	5.05	4.45	0.16

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b>	Newington (BU 881364)	<b>Page</b>	17 of 30
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	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
APXVTM14-C-120 w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	6.44	5.82	0.42
			0.00	0.00			No Ice	4.09	2.86	0.08
			0.00	0.00			1/2" Ice	4.48	3.23	0.13
			0.00	0.00			1" Ice	4.88	3.61	0.19
APXVTM14-C-120 w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	5.71	4.40	0.33
			0.00	0.00			No Ice	4.09	2.86	0.08
			0.00	0.00			1/2" Ice	4.48	3.23	0.13
			0.00	0.00			1" Ice	4.88	3.61	0.19
APXVTM14-C-120 w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	5.71	4.40	0.33
			0.00	0.00			No Ice	4.09	2.86	0.08
			0.00	0.00			1/2" Ice	4.48	3.23	0.13
			0.00	0.00			1" Ice	4.88	3.61	0.19
TD-RRH8x20-25	A	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	5.71	4.40	0.33
			0.00	0.00			No Ice	3.70	1.29	0.07
			0.00	0.00			1/2" Ice	3.95	1.46	0.09
			0.00	0.00			1" Ice	4.20	1.64	0.12
TD-RRH8x20-25	B	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	4.72	2.02	0.18
			0.00	0.00			No Ice	3.70	1.29	0.07
			0.00	0.00			1/2" Ice	3.95	1.46	0.09
			0.00	0.00			1" Ice	4.20	1.64	0.12
TD-RRH8x20-25	C	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	4.72	2.02	0.18
			0.00	0.00			No Ice	3.70	1.29	0.07
			0.00	0.00			1/2" Ice	3.95	1.46	0.09
			0.00	0.00			1" Ice	4.20	1.64	0.12
IBC1900HG-2A	A	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	4.72	2.02	0.18
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
IBC1900HG-2A	B	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
IBC1900HG-2A	C	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
IBC1900BB-1	A	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
IBC1900BB-1	B	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
IBC1900BB-1	C	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	0.97	0.46	0.02
			0.00	0.00			1/2" Ice	1.09	0.56	0.03
			0.00	0.00			1" Ice	1.22	0.66	0.04
2.375" OD x 6' Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	1.51	0.89	0.06
			0.00	0.00			No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
2.375" OD x 6' Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.0000	124.00	2" Ice	3.06	3.06	0.09
			0.00	0.00			No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
							2" Ice	3.06	3.06	0.09

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	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
2.375" OD x 6' Mount Pipe	C	From Centroid- Leg	4.00	0.00	0.0000	124.00	No Ice	1.43	1.43	0.03
			0.00	0.00			1/2" Ice	1.92	1.92	0.04
			0.00	0.00			1" Ice	2.29	2.29	0.05
							2" Ice	3.06	3.06	0.09
Platform Mount [LP 1201-1]	C	None			0.0000	124.00	No Ice	18.38	18.38	2.10
							1/2" Ice	22.11	22.11	2.65
							1" Ice	25.87	25.87	3.26
							2" Ice	33.47	33.47	4.66
**122**										
800MHz 2X50W RRH W/FILTER	A	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.06	1.93	0.06
			0.00	0.00			1/2" Ice	2.24	2.11	0.09
			-4.00	0.00			1" Ice	2.43	2.29	0.11
				0.00			2" Ice	2.83	2.68	0.17
800MHz 2X50W RRH W/FILTER	B	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.06	1.93	0.06
			0.00	0.00			1/2" Ice	2.24	2.11	0.09
			-4.00	0.00			1" Ice	2.43	2.29	0.11
				0.00			2" Ice	2.83	2.68	0.17
800MHz 2X50W RRH W/FILTER	C	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.06	1.93	0.06
			0.00	0.00			1/2" Ice	2.24	2.11	0.09
			-4.00	0.00			1" Ice	2.43	2.29	0.11
				0.00			2" Ice	2.83	2.68	0.17
PCS 1900MHz 4x45W-65MHz	A	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.32	2.24	0.06
			0.00	0.00			1/2" Ice	2.53	2.44	0.08
			0.00	0.00			1" Ice	2.74	2.65	0.11
				0.00			2" Ice	3.19	3.09	0.17
PCS 1900MHz 4x45W-65MHz	B	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.32	2.24	0.06
			0.00	0.00			1/2" Ice	2.53	2.44	0.08
			0.00	0.00			1" Ice	2.74	2.65	0.11
				0.00			2" Ice	3.19	3.09	0.17
PCS 1900MHz 4x45W-65MHz	C	From Leg	1.00	0.00	0.0000	122.00	No Ice	2.32	2.24	0.06
			0.00	0.00			1/2" Ice	2.53	2.44	0.08
			0.00	0.00			1" Ice	2.74	2.65	0.11
				0.00			2" Ice	3.19	3.09	0.17
Pipe Mount [PM 601-3]	C	None			0.0000	122.00	No Ice	3.17	3.17	0.20
							1/2" Ice	3.79	3.79	0.23
							1" Ice	4.42	4.42	0.28
							2" Ice	5.76	5.76	0.40
**114**										
LNX-6513DS-A1M w/ Mount Pipe	A	From Centroid- Face	4.00	0.00	0.0000	114.00	No Ice	2.84	2.29	0.06
			0.00	0.00			1/2" Ice	3.12	2.57	0.11
			0.00	0.00			1" Ice	3.41	2.85	0.17
				0.00			2" Ice	4.02	3.44	0.31
LNX-6513DS-A1M w/ Mount Pipe	B	From Centroid- Face	4.00	0.00	0.0000	114.00	No Ice	2.84	2.29	0.06
			0.00	0.00			1/2" Ice	3.12	2.57	0.11
			0.00	0.00			1" Ice	3.41	2.85	0.17
				0.00			2" Ice	4.02	3.44	0.31
LNX-6513DS-A1M w/ Mount Pipe	C	From Centroid- Face	4.00	0.00	0.0000	114.00	No Ice	2.84	2.29	0.06
			0.00	0.00			1/2" Ice	3.12	2.57	0.11
			0.00	0.00			1" Ice	3.41	2.85	0.17
				0.00			2" Ice	4.02	3.44	0.31
(2) SBNHH-1D65B w/ Mount Pipe	A	From Centroid- Face	4.00	0.00	0.0000	114.00	No Ice	4.09	3.30	0.07
			0.00	0.00			1/2" Ice	4.49	3.68	0.13
			0.00	0.00			1" Ice	4.89	4.07	0.20
				0.00			2" Ice	5.72	4.87	0.39
(2) SBNHH-1D65B w/ Mount Pipe	B	From Centroid- Face	4.00	0.00	0.0000	114.00	No Ice	4.09	3.30	0.07
			0.00	0.00			1/2" Ice	4.49	3.68	0.13
			0.00	0.00			1" Ice	4.89	4.07	0.20
				0.00			2" Ice	5.72	4.87	0.39



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	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
(2) SBNHH-1D65B w/ Mount Pipe	C	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	5.72	4.87	0.39
			0.00	0.00			No Ice	4.09	3.30	0.07
			0.00	0.00			1/2" Ice	4.49	3.68	0.13
			0.00	0.00			1" Ice	4.89	4.07	0.20
KS24019-L112A	B	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	5.72	4.87	0.39
			0.00	0.00			No Ice	0.08	0.08	0.01
			0.00	0.00			1/2" Ice	0.13	0.13	0.01
			0.00	0.00			1" Ice	0.19	0.19	0.01
MT6407-77A w/ Mount Pipe	A	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	0.35	0.35	0.02
			0.00	2.00			No Ice	5.94	3.10	0.10
			0.00	2.00			1/2" Ice	6.47	3.55	0.13
			0.00	2.00			1" Ice	7.02	4.02	0.18
MT6407-77A w/ Mount Pipe	B	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	8.17	5.01	0.28
			0.00	2.00			No Ice	5.94	3.10	0.10
			0.00	2.00			1/2" Ice	6.47	3.55	0.13
			0.00	2.00			1" Ice	7.02	4.02	0.18
MT6407-77A w/ Mount Pipe	C	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	8.17	5.01	0.28
			0.00	2.00			No Ice	5.94	3.10	0.10
			0.00	2.00			1/2" Ice	6.47	3.55	0.13
			0.00	2.00			1" Ice	7.02	4.02	0.18
XXDWMM-12.5-65-8T-CBR S w/ Mount Pipe	A	From Centroid-Face	4.00	-1.00	0.0000	114.00	2" Ice	8.17	5.01	0.28
			0.00	-1.00			No Ice	1.18	1.03	0.03
			0.00	-1.00			1/2" Ice	1.38	1.28	0.05
			0.00	-1.00			1" Ice	1.58	1.55	0.06
XXDWMM-12.5-65-8T-CBR S w/ Mount Pipe	B	From Centroid-Face	4.00	-1.00	0.0000	114.00	2" Ice	2.03	2.13	0.11
			0.00	-1.00			No Ice	1.18	1.03	0.03
			0.00	-1.00			1/2" Ice	1.38	1.28	0.05
			0.00	-1.00			1" Ice	1.58	1.55	0.06
XXDWMM-12.5-65-8T-CBR S w/ Mount Pipe	C	From Centroid-Face	4.00	-1.00	0.0000	114.00	2" Ice	2.03	2.13	0.11
			0.00	-1.00			No Ice	1.18	1.03	0.03
			0.00	-1.00			1/2" Ice	1.38	1.28	0.05
			0.00	-1.00			1" Ice	1.58	1.55	0.06
BSF0020F3V1	B	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	2.03	2.13	0.11
			0.00	0.00			No Ice	0.96	0.29	0.02
			0.00	0.00			1/2" Ice	1.09	0.36	0.02
			0.00	0.00			1" Ice	1.22	0.45	0.03
DB-T1-6Z-8AB-0Z	B	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	1.50	0.64	0.06
			0.00	0.00			No Ice	4.80	2.00	0.04
			0.00	0.00			1/2" Ice	5.07	2.19	0.08
			0.00	0.00			1" Ice	5.35	2.39	0.12
(2) RFV01U-D1A	A	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	5.93	2.81	0.21
			0.00	0.00			No Ice	1.88	1.25	0.08
			0.00	0.00			1/2" Ice	2.05	1.39	0.10
			0.00	0.00			1" Ice	2.22	1.54	0.12
RFV01U-D1A	C	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	2.60	1.86	0.18
			0.00	0.00			No Ice	1.88	1.25	0.08
			0.00	0.00			1/2" Ice	2.05	1.39	0.10
			0.00	0.00			1" Ice	2.22	1.54	0.12
(2) RFV01U-D2A	B	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	2.60	1.86	0.18
			0.00	0.00			No Ice	1.88	1.01	0.07
			0.00	0.00			1/2" Ice	2.05	1.14	0.09
			0.00	0.00			1" Ice	2.22	1.28	0.11
RFV01U-D2A	C	From Centroid-Face	4.00	0.00	0.0000	114.00	2" Ice	2.60	1.59	0.15
			0.00	0.00			No Ice	1.88	1.01	0.07
			0.00	0.00			1/2" Ice	2.05	1.14	0.09
			0.00	0.00			1" Ice	2.22	1.28	0.11
						2" Ice	2.60	1.59	0.15	

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b>	Newington (BU 881364)	<b>Page</b>	20 of 30
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	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz Lateral	Vert					
2.4" Dia x 4-ft Mount Pipe	A	From Centroid-Face	2.00	0.0000	114.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice	1.37	1.37	0.03
						2" Ice	1.91	1.91	0.06
2.4" Dia x 4-ft Mount Pipe	B	From Centroid-Face	2.00	0.0000	114.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice	1.37	1.37	0.03
						2" Ice	1.91	1.91	0.06
2.4" Dia x 7-ft Mount Pipe	B	From Centroid-Face	4.00	0.0000	114.00	No Ice	1.68	1.68	0.03
			0.00			1/2" Ice	2.41	2.41	0.04
			0.00			1" Ice	2.83	2.83	0.06
						2" Ice	3.72	3.72	0.11
Platform Mount [LP 1201-1_KCKR-HR-1]	C	None		0.0000	114.00	No Ice	37.61	37.61	2.63
						1/2" Ice	45.62	45.62	3.48
						1" Ice	53.59	53.59	4.46
						2" Ice	69.65	69.65	6.85
*** **105**									
AIR 6419 B77G w/ Mount Pipe	A	From Leg	4.00	0.0000	105.00	No Ice	4.32	2.49	0.08
			0.00			1/2" Ice	4.74	2.84	0.11
			0.00			1" Ice	5.17	3.21	0.15
						2" Ice	6.09	4.00	0.24
AIR 6419 B77G w/ Mount Pipe	B	From Leg	4.00	0.0000	105.00	No Ice	4.32	2.49	0.08
			0.00			1/2" Ice	4.74	2.84	0.11
			0.00			1" Ice	5.17	3.21	0.15
						2" Ice	6.09	4.00	0.24
AIR 6419 B77G w/ Mount Pipe	C	From Leg	4.00	0.0000	105.00	No Ice	4.32	2.49	0.08
			0.00			1/2" Ice	4.74	2.84	0.11
			0.00			1" Ice	5.17	3.21	0.15
						2" Ice	6.09	4.00	0.24
DMP65R-BU6D w/ Mount Pipe	A	From Leg	4.00	0.0000	105.00	No Ice	11.96	5.97	0.11
			0.00			1/2" Ice	12.70	6.63	0.20
			0.00			1" Ice	13.46	7.30	0.30
						2" Ice	15.02	8.69	0.53
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.00	0.0000	105.00	No Ice	11.96	5.97	0.11
			0.00			1/2" Ice	12.70	6.63	0.20
			0.00			1" Ice	13.46	7.30	0.30
						2" Ice	15.02	8.69	0.53
DMP65R-BU6D w/ Mount Pipe	C	From Leg	4.00	0.0000	105.00	No Ice	11.96	5.97	0.11
			0.00			1/2" Ice	12.70	6.63	0.20
			0.00			1" Ice	13.46	7.30	0.30
						2" Ice	15.02	8.69	0.53
QD6616-7 w/ Mount Pipe	A	From Leg	4.00	0.0000	105.00	No Ice	12.56	6.93	0.16
			0.00			1/2" Ice	13.30	7.60	0.25
			0.00			1" Ice	14.06	8.28	0.36
						2" Ice	15.63	9.68	0.61
QD6616-7 w/ Mount Pipe	B	From Leg	4.00	0.0000	105.00	No Ice	12.56	6.93	0.16
			0.00			1/2" Ice	13.30	7.60	0.25
			0.00			1" Ice	14.06	8.28	0.36
						2" Ice	15.63	9.68	0.61
QD6616-7 w/ Mount Pipe	C	From Leg	4.00	0.0000	105.00	No Ice	12.56	6.93	0.16
			0.00			1/2" Ice	13.30	7.60	0.25
			0.00			1" Ice	14.06	8.28	0.36
						2" Ice	15.63	9.68	0.61
AIR 6449 B77D w/ Mount Pipe	A	From Leg	4.00	0.0000	105.00	No Ice	3.58	2.31	0.09
			0.00			1/2" Ice	3.92	2.60	0.13
			0.00			1" Ice	4.27	2.91	0.17

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
AIR 6449 B77D w/ Mount Pipe	B	From Leg	4.00	0.0000	105.00	2" Ice	5.02	3.57	0.28
			0.00	No Ice		3.58	2.31	0.09	
			0.00	1/2" Ice		3.92	2.60	0.13	
			0.00	1" Ice		4.27	2.91	0.17	
AIR 6449 B77D w/ Mount Pipe	C	From Leg	4.00	0.0000	105.00	2" Ice	5.02	3.57	0.28
			0.00	No Ice		3.58	2.31	0.09	
			0.00	1/2" Ice		3.92	2.60	0.13	
			0.00	1" Ice		4.27	2.91	0.17	
(2) DC6-48-60-18-8F	A	From Leg	4.00	0.0000	105.00	2" Ice	5.02	3.57	0.28
			0.00	No Ice		0.85	0.85	0.02	
			0.00	1/2" Ice		1.36	1.36	0.04	
			0.00	1" Ice		1.53	1.53	0.05	
DC6-48-60-0-8F	A	From Leg	4.00	0.0000	105.00	2" Ice	1.91	1.91	0.10
			0.00	No Ice		0.92	0.92	0.03	
			0.00	1/2" Ice		1.46	1.46	0.05	
			0.00	1" Ice		1.64	1.64	0.07	
RRUS 8843 B2/B66A	A	From Leg	4.00	0.0000	105.00	2" Ice	2.04	2.04	0.12
			0.00	No Ice		1.64	1.35	0.07	
			0.00	1/2" Ice		1.80	1.50	0.09	
			0.00	1" Ice		1.97	1.65	0.11	
RRUS 8843 B2/B66A	B	From Leg	4.00	0.0000	105.00	2" Ice	2.32	1.99	0.16
			0.00	No Ice		1.64	1.35	0.07	
			0.00	1/2" Ice		1.80	1.50	0.09	
			0.00	1" Ice		1.97	1.65	0.11	
RRUS 8843 B2/B66A	C	From Leg	4.00	0.0000	105.00	2" Ice	2.32	1.99	0.16
			0.00	No Ice		1.64	1.35	0.07	
			0.00	1/2" Ice		1.80	1.50	0.09	
			0.00	1" Ice		1.97	1.65	0.11	
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000	105.00	2" Ice	2.32	1.99	0.16
			0.00	No Ice		1.97	1.41	0.07	
			0.00	1/2" Ice		2.14	1.56	0.09	
			0.00	1" Ice		2.33	1.73	0.11	
RRUS 4449 B5/B12	B	From Leg	4.00	0.0000	105.00	2" Ice	2.72	2.07	0.16
			0.00	No Ice		1.97	1.41	0.07	
			0.00	1/2" Ice		2.14	1.56	0.09	
			0.00	1" Ice		2.33	1.73	0.11	
RRUS 4449 B5/B12	C	From Leg	4.00	0.0000	105.00	2" Ice	2.72	2.07	0.16
			0.00	No Ice		1.97	1.41	0.07	
			0.00	1/2" Ice		2.14	1.56	0.09	
			0.00	1" Ice		2.33	1.73	0.11	
RRUS 4478 B14	A	From Leg	4.00	0.0000	105.00	2" Ice	2.72	2.07	0.16
			0.00	No Ice		1.84	1.06	0.06	
			0.00	1/2" Ice		2.01	1.20	0.08	
			0.00	1" Ice		2.19	1.34	0.09	
RRUS 4478 B14	B	From Leg	4.00	0.0000	105.00	2" Ice	2.57	1.66	0.14
			0.00	No Ice		1.84	1.06	0.06	
			0.00	1/2" Ice		2.01	1.20	0.08	
			0.00	1" Ice		2.19	1.34	0.09	
RRUS 4478 B14	C	From Leg	4.00	0.0000	105.00	2" Ice	2.57	1.66	0.14
			0.00	No Ice		1.84	1.06	0.06	
			0.00	1/2" Ice		2.01	1.20	0.08	
			0.00	1" Ice		2.19	1.34	0.09	
RRUS 32 B30	A	From Leg	4.00	0.0000	105.00	2" Ice	2.57	1.66	0.14
			0.00	No Ice		2.73	1.67	0.05	
			0.00	1/2" Ice		2.95	1.86	0.07	
			0.00	1" Ice		3.18	2.05	0.10	
						2" Ice	3.66	2.46	0.16

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
RRUS 32 B30	B	From Leg	4.00	0.0000	105.00	No Ice	2.73	1.67	0.05
			0.00			1/2" Ice	2.95	1.86	0.07
			0.00			1" Ice	3.18	2.05	0.10
						2" Ice	3.66	2.46	0.16
RRUS 32 B30	C	From Leg	4.00	0.0000	105.00	No Ice	2.73	1.67	0.05
			0.00			1/2" Ice	2.95	1.86	0.07
			0.00			1" Ice	3.18	2.05	0.10
						2" Ice	3.66	2.46	0.16
Pipe Mount [PM 601-3]	C	None		0.0000	105.00	No Ice	3.17	3.17	0.20
						1/2" Ice	3.79	3.79	0.23
						1" Ice	4.42	4.42	0.28
						2" Ice	5.76	5.76	0.40
Site Pro VFA14-HD	A	From Leg	2.00	0.0000	105.00	No Ice	14.40	9.20	0.67
			0.00			1/2" Ice	21.40	14.60	0.83
			0.00			1" Ice	27.70	19.50	1.05
						2" Ice	42.40	30.80	1.29
Site Pro VFA14-HD	B	From Leg	2.00	0.0000	105.00	No Ice	14.40	9.20	0.67
			0.00			1/2" Ice	21.40	14.60	0.83
			0.00			1" Ice	27.70	19.50	1.05
						2" Ice	42.40	30.80	1.29
Site Pro VFA14-HD	C	From Leg	2.00	0.0000	105.00	No Ice	14.40	9.20	0.67
			0.00			1/2" Ice	21.40	14.60	0.83
			0.00			1" Ice	27.70	19.50	1.05
						2" Ice	42.40	30.80	1.29
***									
**94**									
AIR -32 B2A/B66AA	A	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	3.86	2.51	0.17
			0.00			1/2" Ice	4.23	2.86	0.22
			1.00			1" Ice	4.61	3.22	0.27
						2" Ice	5.41	3.97	0.40
AIR -32 B2A/B66AA	B	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	3.86	2.51	0.17
			0.00			1/2" Ice	4.23	2.86	0.22
			1.00			1" Ice	4.61	3.22	0.27
						2" Ice	5.41	3.97	0.40
AIR -32 B2A/B66AA	C	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	3.86	2.51	0.17
			0.00			1/2" Ice	4.23	2.86	0.22
			1.00			1" Ice	4.61	3.22	0.27
						2" Ice	5.41	3.97	0.40
APXVAARR24_43-U-NA20	A	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	14.67	5.32	0.15
			0.00			1/2" Ice	15.43	5.99	0.27
			1.00			1" Ice	16.21	6.68	0.39
						2" Ice	17.81	8.08	0.66
APXVAARR24_43-U-NA20	B	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	14.67	5.32	0.15
			0.00			1/2" Ice	15.43	5.99	0.27
			1.00			1" Ice	16.21	6.68	0.39
						2" Ice	17.81	8.08	0.66
APXVAARR24_43-U-NA20	C	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	14.67	5.32	0.15
			0.00			1/2" Ice	15.43	5.99	0.27
			1.00			1" Ice	16.21	6.68	0.39
						2" Ice	17.81	8.08	0.66
AIR 3246 B66	A	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	7.31	4.30	0.18
			0.00			1/2" Ice	7.90	4.84	0.23
			1.00			1" Ice	8.51	5.40	0.30
						2" Ice	9.77	6.56	0.43
AIR 3246 B66	B	From Centroid-Fa ce	4.00	0.0000	94.00	No Ice	7.31	4.30	0.18
			0.00			1/2" Ice	7.90	4.84	0.23
			1.00			1" Ice	8.51	5.40	0.30

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
AIR 3246 B66	C	From Centroid-Face	4.00	0.0000	94.00	2" Ice	9.77	6.56	0.43
			0.00			No Ice	7.31	4.30	0.18
			1.00			1/2" Ice	7.90	4.84	0.23
						1" Ice	8.51	5.40	0.30
RADIO 4449 B12/B71	A	From Centroid-Face	4.00	0.0000	94.00	2" Ice	9.77	6.56	0.43
			0.00			No Ice	1.64	1.15	0.08
			1.00			1/2" Ice	1.80	1.29	0.09
						1" Ice	1.97	1.44	0.11
RADIO 4449 B12/B71	B	From Centroid-Face	4.00	0.0000	94.00	2" Ice	2.33	1.75	0.16
			0.00			No Ice	1.64	1.15	0.08
			1.00			1/2" Ice	1.80	1.29	0.09
						1" Ice	1.97	1.44	0.11
RADIO 4449 B12/B71	C	From Centroid-Face	4.00	0.0000	94.00	2" Ice	2.33	1.75	0.16
			0.00			No Ice	1.64	1.15	0.08
			1.00			1/2" Ice	1.80	1.29	0.09
						1" Ice	1.97	1.44	0.11
KRY 112 144/1	A	From Centroid-Face	4.00	0.0000	94.00	2" Ice	2.33	1.75	0.16
			0.00			No Ice	0.35	0.17	0.01
			0.00			1/2" Ice	0.43	0.23	0.01
						1" Ice	0.51	0.30	0.02
KRY 112 144/1	B	From Centroid-Face	4.00	0.0000	94.00	2" Ice	0.70	0.46	0.03
			0.00			No Ice	0.35	0.17	0.01
			0.00			1/2" Ice	0.43	0.23	0.01
						1" Ice	0.51	0.30	0.02
KRY 112 144/1	C	From Centroid-Face	4.00	0.0000	94.00	2" Ice	0.70	0.46	0.03
			0.00			No Ice	0.35	0.17	0.01
			0.00			1/2" Ice	0.43	0.23	0.01
						1" Ice	0.51	0.30	0.02
Platform Mount [LP 302-1]	C	None		0.0000	94.00	2" Ice	0.70	0.46	0.03
						No Ice	26.56	26.56	1.71
						1/2" Ice	33.67	33.67	2.26
						1" Ice	40.39	40.39	2.95
					2" Ice	53.23	53.23	4.70	
*** **87**									
742 213	A	From Leg	1.00	0.0000	87.00	No Ice	3.57	1.60	0.02
			0.00			1/2" Ice	4.21	2.21	0.05
			0.00			1" Ice	4.86	2.83	0.08
						2" Ice	6.21	4.13	0.16
742 213	B	From Leg	1.00	0.0000	87.00	No Ice	3.57	1.60	0.02
			0.00			1/2" Ice	4.21	2.21	0.05
			0.00			1" Ice	4.86	2.83	0.08
						2" Ice	6.21	4.13	0.16
742 213	C	From Leg	1.00	0.0000	87.00	No Ice	3.57	1.60	0.02
			0.00			1/2" Ice	4.21	2.21	0.05
			0.00			1" Ice	4.86	2.83	0.08
						2" Ice	6.21	4.13	0.16
Pipe Mount [PM 601-3]	C	None		0.0000	87.00	No Ice	3.17	3.17	0.20
						1/2" Ice	3.79	3.79	0.23
						1" Ice	4.42	4.42	0.28
						2" Ice	5.76	5.76	0.40
***80**									
Side Arm Mount [SO 701-1]	A	From Leg	1.50	0.0000	80.00	No Ice	0.85	1.67	0.07
			0.00			1/2" Ice	1.14	2.34	0.08
			0.00			1" Ice	1.43	3.01	0.09
						2" Ice	2.01	4.35	0.12
Side Arm Mount [SO 701-1]	C	From Face	1.50	0.0000	80.00	No Ice	0.85	1.67	0.07

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			ft ft ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
			0.00		1/2" Ice	1.14	2.34	0.08
			0.00		1" Ice	1.43	3.01	0.09
					2" Ice	2.01	4.35	0.12
**77**								
58532A	A	From Leg	3.00	0.0000	77.00	No Ice	0.19	0.19
			0.00			1/2" Ice	0.25	0.25
			0.00			1" Ice	0.31	0.31
						2" Ice	0.47	0.47
Side Arm Mount [SO 701-1]	A	From Leg	1.50	0.0000	77.00	No Ice	0.85	1.67
			0.00			1/2" Ice	1.14	2.34
			0.00			1" Ice	1.43	3.01
						2" Ice	2.01	4.35
***								

### Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight	
				ft	°	°	ft	ft	ft <sup>2</sup>	K	
VHLP2.5-11	B	Paraboloid w/Shroud (HP)	From Centroid -Face	4.00 0.00 6.00	-47.0000		133.00	2.92	No Ice 1/2" Ice 1" Ice 2" Ice	6.68 7.07 7.46 8.23	0.05 0.08 0.12 0.19
VHLP2.5-11	C	Paraboloid w/Shroud (HP)	From Centroid -Face	4.00 0.00 6.00	23.0000		133.00	2.92	No Ice 1/2" Ice 1" Ice 2" Ice	6.68 7.07 7.46 8.23	0.05 0.08 0.12 0.19

### Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice

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Comb. No.	Description
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 Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	145 - 140	18.924	39	1.0310	0.0048
L2	140 - 135	17.844	39	1.0309	0.0048
L3	135 - 130	16.765	39	1.0300	0.0044
L4	130 - 125	15.688	39	1.0267	0.0040
L5	125 - 120	14.615	39	1.0211	0.0037
L6	120 - 115	13.550	39	1.0120	0.0034
L7	115 - 110	12.497	39	0.9983	0.0032
L8	110 - 105	11.462	39	0.9792	0.0029
L9	105 - 100	10.449	39	0.9540	0.0026
L10	100 - 95	9.466	39	0.9220	0.0023
L11	95 - 90	8.520	39	0.8830	0.0020
L12	90 - 84.75	7.619	39	0.8376	0.0018
L13	89.25 - 84.25	7.488	39	0.8302	0.0017
L14	84.25 - 79.25	6.631	39	0.8039	0.0016
L15	79.25 - 74.25	5.815	39	0.7550	0.0014
L16	74.25 - 69.25	5.051	39	0.7022	0.0012
L17	69.25 - 64.25	4.345	39	0.6460	0.0011

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Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L18	64.25 - 59.25	3.699	39	0.5871	0.0009
L19	59.25 - 54.25	3.116	39	0.5259	0.0008
L20	54.25 - 50.083	2.598	39	0.4629	0.0006
L21	50.083 - 49.833	2.218	39	0.4091	0.0005
L22	49.833 - 44.25	2.197	39	0.4067	0.0005
L23	49.5 - 43.25	2.168	39	0.4036	0.0005
L24	43.25 - 38.25	1.659	39	0.3708	0.0005
L25	38.25 - 33.25	1.294	39	0.3258	0.0004
L26	33.25 - 31.25	0.977	39	0.2795	0.0003
L27	31.25 - 31	0.864	39	0.2605	0.0003
L28	31 - 26	0.850	39	0.2585	0.0003
L29	26 - 21	0.601	39	0.2186	0.0002
L30	21 - 16	0.393	39	0.1774	0.0002
L31	16 - 11	0.229	39	0.1359	0.0001
L32	11 - 6	0.109	39	0.0942	0.0001
L33	6 - 1	0.032	39	0.0514	0.0001
L34	1 - 0	0.001	39	0.0085	0.0000

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

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
139.00	VHLP2.5-11	39	17.628	1.0308	0.0049	425706
133.00	LLPX310R-V1 w/ Mount Pipe	39	16.334	1.0290	0.0043	92076
124.00	APXVSP18-C-A20 w/ Mount Pipe	39	14.402	1.0197	0.0036	35352
122.00	800MHz 2X50W RRH W/FILTER	39	13.975	1.0162	0.0035	29337
114.00	LNx-6513DS-A1M w/ Mount Pipe	39	12.289	0.9949	0.0031	16369
105.00	AIR 6419 B77G w/ Mount Pipe	39	10.449	0.9540	0.0026	10003
94.00	AIR -32 B2A/B66AA	39	8.336	0.8746	0.0020	6560
87.00	742 213	39	7.099	0.8163	0.0017	8731
80.00	Side Arm Mount [SO 701-1]	39	5.934	0.7633	0.0015	5749
77.00	58532A	39	5.464	0.7310	0.0013	5375

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	145 - 140	78.185	2	4.2651	0.0190
L2	140 - 135	73.723	2	4.2647	0.0190
L3	135 - 130	69.262	2	4.2609	0.0172
L4	130 - 125	64.810	2	4.2469	0.0152
L5	125 - 120	60.378	2	4.2235	0.0138
L6	120 - 115	55.978	2	4.1855	0.0126
L7	115 - 110	51.627	2	4.1281	0.0117
L8	110 - 105	47.347	2	4.0490	0.0107
L9	105 - 100	43.163	2	3.9444	0.0097
L10	100 - 95	39.102	2	3.8121	0.0086
L11	95 - 90	35.195	2	3.6509	0.0077
L12	90 - 84.75	31.470	2	3.4627	0.0067
L13	89.25 - 84.25	30.929	2	3.4321	0.0066



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Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L14	84.25 - 79.25	27.388	2	3.3234	0.0062
L15	79.25 - 74.25	24.014	2	3.1208	0.0055
L16	74.25 - 69.25	20.861	2	2.9021	0.0049
L17	69.25 - 64.25	17.944	2	2.6698	0.0043
L18	64.25 - 59.25	15.276	2	2.4261	0.0037
L19	59.25 - 54.25	12.867	2	2.1730	0.0031
L20	54.25 - 50.083	10.728	2	1.9121	0.0026
L21	50.083 - 49.833	9.156	2	1.6897	0.0022
L22	49.833 - 44.25	9.068	2	1.6800	0.0022
L23	49.5 - 43.25	8.952	2	1.6670	0.0021
L24	43.25 - 38.25	6.848	2	1.5313	0.0019
L25	38.25 - 33.25	5.342	2	1.3453	0.0016
L26	33.25 - 31.25	4.033	2	1.1538	0.0013
L27	31.25 - 31	3.566	2	1.0755	0.0012
L28	31 - 26	3.510	2	1.0673	0.0012
L29	26 - 21	2.479	2	0.9023	0.0010
L30	21 - 16	1.623	2	0.7323	0.0008
L31	16 - 11	0.945	2	0.5610	0.0006
L32	11 - 6	0.448	2	0.3887	0.0004
L33	6 - 1	0.133	2	0.2122	0.0002
L34	1 - 0	0.004	2	0.0352	0.0000

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

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
139.00	VHLP2.5-11	2	72.830	4.2644	0.0206	111260
133.00	LLPX310R-V1 w/ Mount Pipe	2	67.480	4.2565	0.0183	23119
124.00	APXVSPP18-C-A20 w/ Mount Pipe	2	59.495	4.2173	0.0158	8667
122.00	800MHz 2X50W RRH W/FILTER	2	57.733	4.2029	0.0153	7179
114.00	LNx-6513DS-A1M w/ Mount Pipe	2	50.764	4.1141	0.0134	3998
105.00	AIR 6419 B77G w/ Mount Pipe	2	43.163	3.9444	0.0110	2447
94.00	AIR -32 B2A/B66AA	2	34.434	3.6160	0.0081	1600
87.00	742 213	2	29.320	3.3747	0.0068	2126
80.00	Side Arm Mount [SO 701-1]	2	24.507	3.1553	0.0059	1398
77.00	58532A	2	22.567	3.0214	0.0054	1307

### Compression Checks

### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
L1	145 - 140 (1)	TP24.9233x24x0.1875	5.00	0.00	0.0	14.7209	-0.27	861.17	0.000
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	5.00	0.00	0.0	15.2704	-0.61	893.32	0.001
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	5.00	0.00	0.0	15.8199	-3.94	925.47	0.004
L4	130 - 125 (4)	TP27.8249x26.9x0.25	5.00	0.00	0.0	21.8807	-4.36	1280.02	0.003
L5	125 - 120 (5)	TP28.7497x27.8249x0.25	5.00	0.00	0.0	22.6145	-8.91	1322.95	0.007

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Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
L6	120 - 115 (6)	TP29.6746x28.7497x0.25	5.00	0.00	0.0	23.3484	-9.39	1365.88	0.007
L7	115 - 110 (7)	TP30.5994x29.6746x0.25	5.00	0.00	0.0	24.0823	-14.61	1408.81	0.010
L8	110 - 105 (8)	TP31.5243x30.5994x0.25	5.00	0.00	0.0	24.8162	-15.18	1451.75	0.010
L9	105 - 100 (9)	TP32.4492x31.5243x0.25	5.00	0.00	0.0	25.5500	-20.72	1494.68	0.014
L10	100 - 95 (10)	TP33.374x32.4492x0.25	5.00	0.00	0.0	26.2839	-21.40	1537.61	0.014
L11	95 - 90 (11)	TP34.2989x33.374x0.25	5.00	0.00	0.0	27.0178	-26.16	1580.54	0.017
L12	90 - 84.75 (12)	TP35.27x34.2989x0.25	5.25	0.00	0.0	27.1279	-26.29	1586.98	0.017
L13	84.75 - 84.25 (13)	TP34.8623x33.9376x0.3125	5.00	0.00	0.0	34.2691	-28.02	2004.74	0.014
L14	84.25 - 79.25 (14)	TP35.787x34.8623x0.3125	5.00	0.00	0.0	35.1863	-29.18	2058.40	0.014
L15	79.25 - 74.25 (15)	TP36.7118x35.787x0.3125	5.00	0.00	0.0	36.1035	-30.29	2112.06	0.014
L16	74.25 - 69.25 (16)	TP37.6365x36.7118x0.3125	5.00	0.00	0.0	37.0207	-31.36	2165.71	0.014
L17	69.25 - 64.25 (17)	TP38.5612x37.6365x0.3125	5.00	0.00	0.0	37.9379	-32.43	2219.37	0.015
L18	64.25 - 59.25 (18)	TP39.4859x38.5612x0.3125	5.00	0.00	0.0	38.8551	-33.55	2273.02	0.015
L19	59.25 - 54.25 (19)	TP40.4106x39.4859x0.3125	5.00	0.00	0.0	39.7723	-34.70	2326.68	0.015
L20	54.25 - 50.083 (20)	TP41.1812x40.4106x0.3125	4.17	0.00	0.0	40.5367	-35.68	2371.40	0.015
L21	50.083 - 49.833 (21)	TP41.2275x41.1812x0.4375	0.25	0.00	0.0	56.6420	-35.76	3313.56	0.011
L22	49.833 - 44.25 (22)	TP42.26x41.2275x0.4375	5.58	0.00	0.0	56.7275	-35.86	3318.56	0.011
L23	44.25 - 43.25 (23)	TP41.6951x40.6641x0.5	6.25	0.00	0.0	65.3766	-39.17	3824.53	0.010
L24	43.25 - 38.25 (24)	TP42.52x41.6951x0.5	5.00	0.00	0.0	66.6857	-40.87	3901.11	0.010
L25	38.25 - 33.25 (25)	TP43.3448x42.52x0.4938	5.00	0.00	0.0	67.1545	-42.59	3928.54	0.011
L26	33.25 - 31.25 (26)	TP43.6747x43.3448x0.4875	2.00	0.00	0.0	66.8247	-43.29	3909.24	0.011
L27	31.25 - 31 (27)	TP43.716x43.6747x0.5875	0.25	0.00	0.0	80.4227	-43.40	4704.73	0.009
L28	31 - 26 (28)	TP44.5408x43.716x0.5875	5.00	0.00	0.0	81.9608	-45.42	4794.71	0.009
L29	26 - 21 (29)	TP45.3657x44.5408x0.575	5.00	0.00	0.0	81.7452	-47.47	4782.09	0.010
L30	21 - 16 (30)	TP46.1905x45.3657x0.575	5.00	0.00	0.0	83.2506	-49.55	4870.16	0.010
L31	16 - 11 (31)	TP47.0153x46.1905x0.575	5.00	0.00	0.0	84.7560	-51.64	4958.22	0.010
L32	11 - 6 (32)	TP47.8402x47.0153x0.5625	5.00	0.00	0.0	84.4084	-53.77	4937.89	0.011
L33	6 - 1 (33)	TP48.665x47.8402x0.5625	5.00	0.00	0.0	85.8811	-55.92	5024.04	0.011
L34	1 - 0 (34)	TP48.83x48.665x0.5625	1.00	0.00	0.0	86.1756	-56.35	5041.27	0.011

### Pole Bending Design Data

Section No.	Elevation ft	Size	M <sub>ux</sub> kip-ft	φM <sub>ux</sub> kip-ft	Ratio M <sub>ux</sub> / φM <sub>ux</sub>	M <sub>uy</sub> kip-ft	φM <sub>uy</sub> kip-ft	Ratio M <sub>uy</sub> / φM <sub>uy</sub>
L1	145 - 140 (1)	TP24.9233x24x0.1875	0.95	505.02	0.002	0.00	505.02	0.000
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	6.82	536.18	0.013	0.00	536.18	0.000
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	22.91	567.67	0.040	0.00	567.67	0.000
L4	130 - 125 (4)	TP27.8249x26.9x0.25	44.11	885.50	0.050	0.00	885.50	0.000
L5	125 - 120 (5)	TP28.7497x27.8249x0.25	78.28	937.04	0.084	0.00	937.04	0.000
L6	120 - 115 (6)	TP29.6746x28.7497x0.25	120.11	989.38	0.121	0.00	989.38	0.000
L7	115 - 110 (7)	TP30.5994x29.6746x0.25	183.05	1042.47	0.176	0.00	1042.47	0.000

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Section No.	Elevation ft	Size	$M_{ux}$	$\phi M_{ux}$	Ratio	$M_{uy}$	$\phi M_{uy}$	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{ux}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{uy}}$
L8	110 - 105 (8)	TP31.5243x30.5994x0.25	251.46	1096.25	0.229	0.00	1096.25	0.000
L9	105 - 100 (9)	TP32.4492x31.5243x0.25	348.60	1150.65	0.303	0.00	1150.65	0.000
L10	100 - 95 (10)	TP33.374x32.4492x0.25	447.52	1205.62	0.371	0.00	1205.62	0.000
L11	95 - 90 (11)	TP34.2989x33.374x0.25	565.17	1261.10	0.448	0.00	1261.10	0.000
L12	90 - 84.75 (12)	TP35.27x34.2989x0.25	583.22	1269.46	0.459	0.00	1269.46	0.000
L13	84.75 - 84.25 (13)	TP34.8623x33.9376x0.3125	706.12	1736.51	0.407	0.00	1736.51	0.000
L14	84.25 - 79.25 (14)	TP35.787x34.8623x0.3125	832.32	1816.99	0.458	0.00	1816.99	0.000
L15	79.25 - 74.25 (15)	TP36.7118x35.787x0.3125	961.36	1898.49	0.506	0.00	1898.49	0.000
L16	74.25 - 69.25 (16)	TP37.6365x36.7118x0.3125	1092.34	1980.94	0.551	0.00	1980.94	0.000
L17	69.25 - 64.25 (17)	TP38.5612x37.6365x0.3125	1225.88	2064.29	0.594	0.00	2064.29	0.000
L18	64.25 - 59.25 (18)	TP39.4859x38.5612x0.3125	1362.50	2148.47	0.634	0.00	2148.47	0.000
L19	59.25 - 54.25 (19)	TP40.4106x39.4859x0.3125	1501.43	2233.43	0.672	0.00	2233.43	0.000
L20	54.25 - 50.083 (20)	TP41.1812x40.4106x0.3125	1618.96	2304.79	0.702	0.00	2304.79	0.000
L21	50.083 - 49.833 (21)	TP41.2275x41.1812x0.4375	1626.06	3519.74	0.462	0.00	3519.74	0.000
L22	49.833 - 44.25 (22)	TP42.26x41.2275x0.4375	1635.53	3530.43	0.463	0.00	3530.43	0.000
L23	44.25 - 43.25 (23)	TP41.6951x40.6641x0.5	1815.62	4097.14	0.443	0.00	4097.14	0.000
L24	43.25 - 38.25 (24)	TP42.52x41.6951x0.5	1962.61	4263.86	0.460	0.00	4263.86	0.000
L25	38.25 - 33.25 (25)	TP43.3448x42.52x0.4938	2111.90	4380.40	0.482	0.00	4380.40	0.000
L26	33.25 - 31.25 (26)	TP43.6747x43.3448x0.4875	2172.23	4394.09	0.494	0.00	4394.09	0.000
L27	31.25 - 31 (27)	TP43.716x43.6747x0.5875	2179.81	5268.89	0.414	0.00	5268.89	0.000
L28	31 - 26 (28)	TP44.5408x43.716x0.5875	2332.32	5473.73	0.426	0.00	5473.73	0.000
L29	26 - 21 (29)	TP45.3657x44.5408x0.575	2486.97	5566.24	0.447	0.00	5566.24	0.000
L30	21 - 16 (30)	TP46.1905x45.3657x0.575	2643.63	5774.47	0.458	0.00	5774.47	0.000
L31	16 - 11 (31)	TP47.0153x46.1905x0.575	2802.12	5986.51	0.468	0.00	5986.51	0.000
L32	11 - 6 (32)	TP47.8402x47.0153x0.5625	2962.34	6072.36	0.488	0.00	6072.36	0.000
L33	6 - 1 (33)	TP48.665x47.8402x0.5625	3124.27	6287.36	0.497	0.00	6287.36	0.000
L34	1 - 0 (34)	TP48.83x48.665x0.5625	3156.84	6330.81	0.499	0.00	6330.81	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual $V_u$	$\phi V_n$	Ratio	Actual $T_u$	$\phi T_n$	Ratio
			K	K	$\frac{V_u}{\phi V_n}$	kip-ft	kip-ft	$\frac{T_u}{\phi T_n}$
L1	145 - 140 (1)	TP24.9233x24x0.1875	0.38	258.35	0.001	0.00	559.65	0.000
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	1.49	268.00	0.006	1.51	602.21	0.003
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	4.03	277.64	0.015	1.75	646.33	0.003
L4	130 - 125 (4)	TP27.8249x26.9x0.25	4.46	384.01	0.012	1.75	927.33	0.002
L5	125 - 120 (5)	TP28.7497x27.8249x0.25	8.15	396.88	0.021	1.75	990.57	0.002
L6	120 - 115 (6)	TP29.6746x28.7497x0.25	8.59	409.76	0.021	1.75	1055.91	0.002
L7	115 - 110 (7)	TP30.5994x29.6746x0.25	13.46	422.64	0.032	1.76	1123.33	0.002
L8	110 - 105 (8)	TP31.5243x30.5994x0.25	13.91	435.52	0.032	1.76	1192.83	0.001
L9	105 - 100 (9)	TP32.4492x31.5243x0.25	19.57	448.40	0.044	1.49	1264.43	0.001

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b>	Newington (BU 881364)	<b>Page</b>	30 of 30
	<b>Project</b>	TEP No. 65292.872006	<b>Date</b>	16:06:58 07/31/23
	<b>Client</b>	Crown Castle	<b>Designed by</b>	myoung

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L10	100 - 95 (10)	TP33.374x32.4492x0.25	20.01	461.28	0.043	1.49	1338.11	0.001
L11	95 - 90 (11)	TP34.2989x33.374x0.25	24.04	474.16	0.051	1.49	1413.88	0.001
L12	90 - 84.75 (12)	TP35.27x34.2989x0.25	24.10	476.09	0.051	1.49	1425.42	0.001
L13	84.75 - 84.25 (13)	TP34.8623x33.9376x0.3125	25.02	601.42	0.042	1.49	1819.72	0.001
L14	84.25 - 79.25 (14)	TP35.787x34.8623x0.3125	25.54	617.52	0.041	1.49	1918.44	0.001
L15	79.25 - 74.25 (15)	TP36.7118x35.787x0.3125	26.00	633.62	0.041	1.37	2019.76	0.001
L16	74.25 - 69.25 (16)	TP37.6365x36.7118x0.3125	26.40	649.71	0.041	1.37	2123.68	0.001
L17	69.25 - 64.25 (17)	TP38.5612x37.6365x0.3125	27.09	665.81	0.041	2.03	2230.22	0.001
L18	64.25 - 59.25 (18)	TP39.4859x38.5612x0.3125	27.55	681.91	0.040	2.03	2339.36	0.001
L19	59.25 - 54.25 (19)	TP40.4106x39.4859x0.3125	28.02	698.00	0.040	2.03	2451.10	0.001
L20	54.25 - 50.083 (20)	TP41.1812x40.4106x0.3125	28.39	711.42	0.040	2.03	2546.22	0.001
L21	50.083 - 49.833 (21)	TP41.2275x41.1812x0.4375	28.40	994.07	0.029	2.03	3550.98	0.001
L22	49.833 - 44.25 (22)	TP42.26x41.2275x0.4375	28.44	995.57	0.029	2.03	3561.72	0.001
L23	44.25 - 43.25 (23)	TP41.6951x40.6641x0.5	29.16	1147.36	0.025	2.03	4139.28	0.000
L24	43.25 - 38.25 (24)	TP42.52x41.6951x0.5	29.63	1170.33	0.025	2.03	4306.71	0.000
L25	38.25 - 33.25 (25)	TP43.3448x42.52x0.4938	30.08	1178.56	0.026	2.03	4422.77	0.000
L26	33.25 - 31.25 (26)	TP43.6747x43.3448x0.4875	30.25	1172.77	0.026	2.03	4435.57	0.000
L27	31.25 - 31 (27)	TP43.716x43.6747x0.5875	30.27	1411.42	0.021	2.03	5330.89	0.000
L28	31 - 26 (28)	TP44.5408x43.716x0.5875	30.72	1438.41	0.021	2.03	5536.75	0.000
L29	26 - 21 (29)	TP45.3657x44.5408x0.575	31.14	1434.63	0.022	2.03	5627.38	0.000
L30	21 - 16 (30)	TP46.1905x45.3657x0.575	31.52	1461.05	0.022	2.03	5836.56	0.000
L31	16 - 11 (31)	TP47.0153x46.1905x0.575	31.87	1487.47	0.021	2.03	6049.55	0.000
L32	11 - 6 (32)	TP47.8402x47.0153x0.5625	32.21	1481.37	0.022	2.03	6133.37	0.000
L33	6 - 1 (33)	TP48.665x47.8402x0.5625	32.55	1507.21	0.022	2.03	6349.25	0.000
L34	1 - 0 (34)	TP48.83x48.665x0.5625	32.61	1512.38	0.022	2.03	6392.87	0.000

**APPENDIX B**  
**BASE LEVEL DRAWING**



(OTHER CONSIDERED EQUIPMENT)

(1) 1/2" TO 77 FT LEVEL

(OTHER CONSIDERED EQUIPMENT—IN (2) 2" CONDUITS)

(6) 5/16" TO 133 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(2) 1/2" TO 133 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(13) 1-5/8" TO 94 FT LEVEL

(OTHER CONSIDERED EQUIPMENT—IN CONDUITS)

(2) 3/8" TO 105 FT LEVEL

(6) 13/16" TO 105 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(6) 1-5/8" TO 105 FT LEVEL

(PROPOSED EQUIPMENT CONFIGURATION)

(5) 1-5/8" TO 114 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(4) 1-1/4" TO 124 FT LEVEL

CLIMBING PEGS  
W/ SAFETY CLIMB

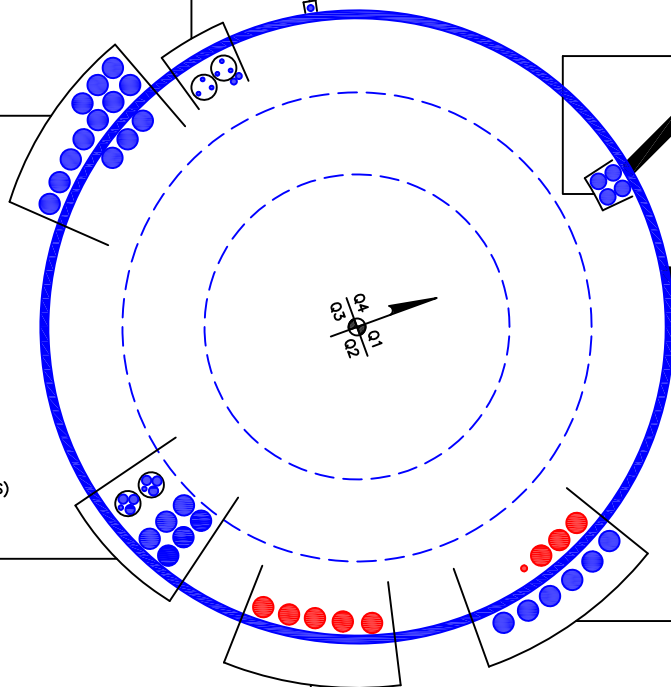
(PROPOSED EQUIPMENT CONFIGURATION)

(1) 1/2" TO 114 FT LEVEL

(3) 1-5/8" TO 114 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(6) 1-5/8" TO 87 FT LEVEL



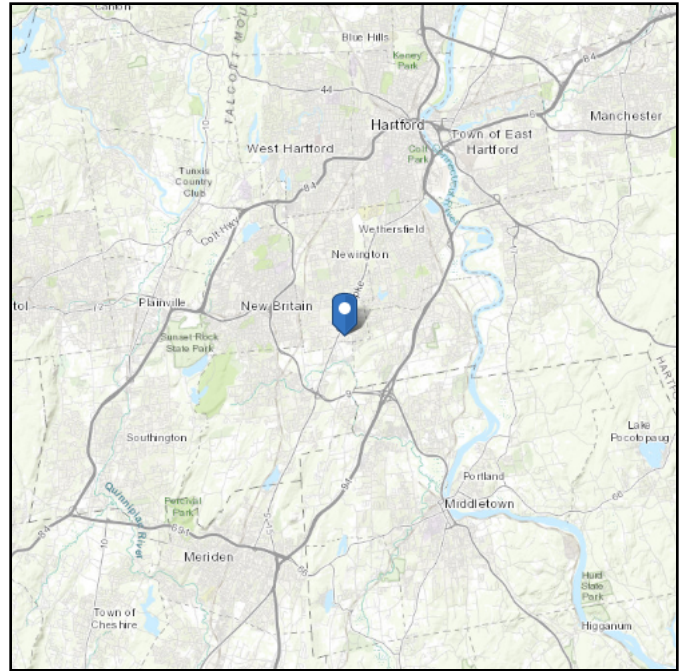
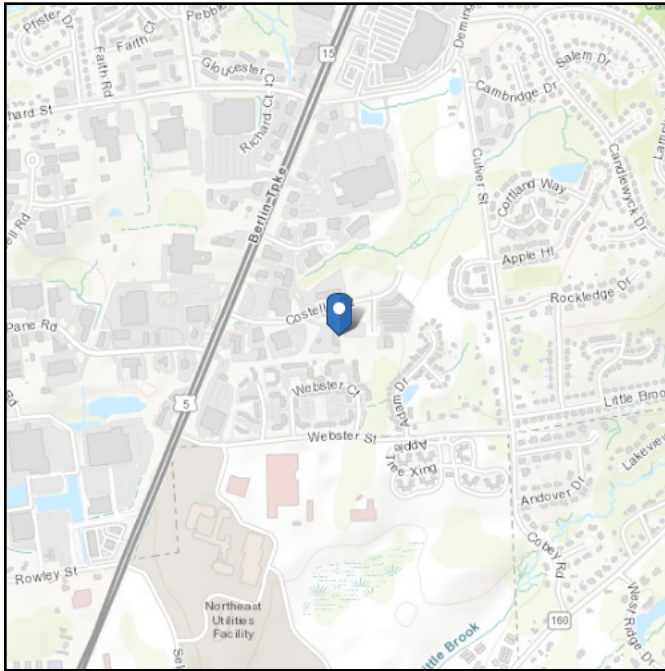
**APPENDIX C**  
**ADDITIONAL CALCULATIONS**

# 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)

**Latitude:** 41.6552  
**Longitude:** -72.721442  
**Elevation:** 135.48498512292096 ft (NAVD 88)



## Wind

### Results:

Wind Speed	118 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	98 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: Mon Jul 31 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 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.

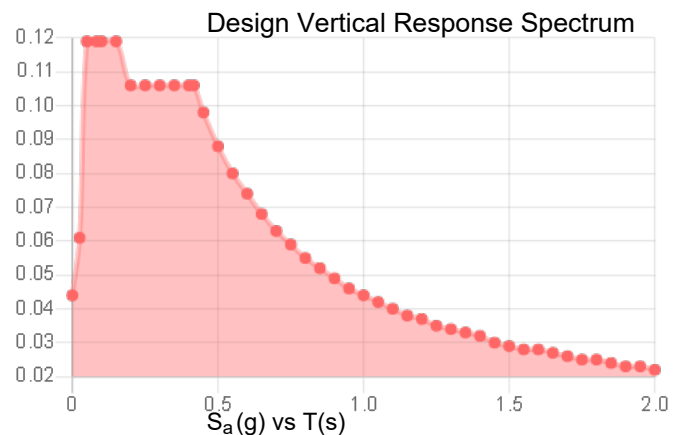
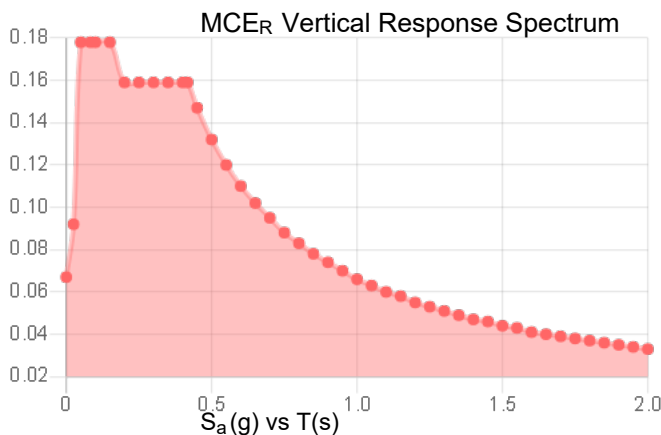
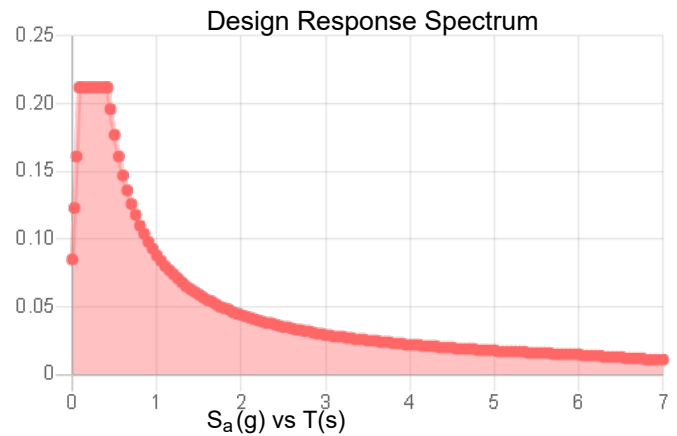
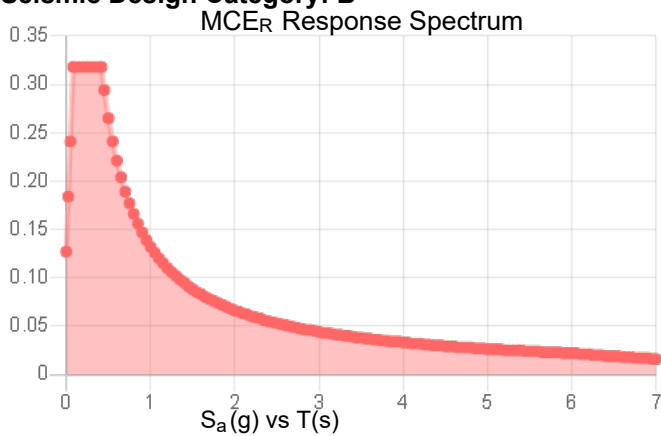


**Site Soil Class:**

**Results:**

$S_s$ :	0.198	$S_{D1}$ :	0.088
$S_1$ :	0.055	$T_L$ :	6
$F_a$ :	1.6	PGA :	0.109
$F_v$ :	2.4	PGA <sub>M</sub> :	0.172
$S_{MS}$ :	0.318	$F_{PGA}$ :	1.582
$S_{M1}$ :	0.132	$I_e$ :	1
$S_{DS}$ :	0.212	$C_v$ :	0.7

**Seismic Design Category: B**



**Data Accessed:**

**Mon Jul 31 2023**

**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: 1.50 in.  
Concurrent Temperature: 15 F  
Gust Speed 50 mph

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

**Date Accessed:** Mon Jul 31 2023

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

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

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# TNX Geometry Input

Increment (ft):  [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	145 - 140	5		18	24.000	24.923	0.1875	A607-65	1.000
2	140 - 135	5		18	24.923	25.847	0.1875	A607-65	1.000
3	135 - 130	5	0	18	25.847	26.770	0.1875	A607-65	1.000
4	130 - 125	5		18	26.900	27.825	0.25	A607-65	1.000
5	125 - 120	5		18	27.825	28.750	0.25	A607-65	1.000
6	120 - 115	5		18	28.750	29.675	0.25	A607-65	1.000
7	115 - 110	5		18	29.675	30.599	0.25	A607-65	1.000
8	110 - 105	5		18	30.599	31.524	0.25	A607-65	1.000
9	105 - 100	5		18	31.524	32.449	0.25	A607-65	1.000
10	100 - 95	5		18	32.449	33.374	0.25	A607-65	1.000
11	95 - 90	5		18	33.374	34.299	0.25	A607-65	1.000
12	90 - 89.25	5.25	4.5	18	34.299	35.270	0.25	A607-65	1.000
13	89.25 - 84.25	5		18	33.938	34.862	0.3125	A607-65	1.000
14	84.25 - 79.25	5		18	34.862	35.787	0.3125	A607-65	1.000
15	79.25 - 74.25	5		18	35.787	36.712	0.3125	A607-65	1.000
16	74.25 - 69.25	5		18	36.712	37.636	0.3125	A607-65	1.000
17	69.25 - 64.25	5		18	37.636	38.561	0.3125	A607-65	1.000
18	64.25 - 59.25	5		18	38.561	39.486	0.3125	A607-65	1.000
19	59.25 - 54.25	5		18	39.486	40.411	0.3125	A607-65	1.000
20	54.25 - 50.083	4.167		18	40.411	41.181	0.3125	A607-65	1.000
21	50.083 - 49.833	0.25		18	41.181	41.227	0.4375	A607-65	1.034
22	49.833 - 49.5	5.583	5.25	18	41.227	42.260	0.4375	A607-65	1.034
23	49.5 - 43.25	6.25		18	40.664	41.695	0.5	A607-65	1.028
24	43.25 - 38.25	5		18	41.695	42.520	0.5	A607-65	1.022
25	38.25 - 33.25	5		18	42.520	43.345	0.49375	A607-65	1.030
26	33.25 - 31.25	2		18	43.345	43.675	0.4875	A607-65	1.041
27	31.25 - 31	0.25		18	43.675	43.716	0.5875	A607-65	1.038
28	31 - 26	5		18	43.716	44.541	0.5875	A607-65	1.030
29	26 - 21	5		18	44.541	45.366	0.575	A607-65	1.045
30	21 - 16	5		18	45.366	46.191	0.575	A607-65	1.038
31	16 - 11	5		18	46.191	47.015	0.575	A607-65	1.031
32	11 - 6	5		18	47.015	47.840	0.5625	A607-65	1.047
33	6 - 1	5		18	47.840	48.665	0.5625	A607-65	1.040
34	1 - 0	1		18	48.665	48.830	0.5625	A607-65	1.039

## TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P <sub>u</sub> (K)	M <sub>ux</sub> (kip-ft)	V <sub>u</sub> (K)
1	145 - 140	0.27	0.95	0.38	
2	140 - 135	0.61	6.82	1.49	
3	135 - 130	3.94	22.91	4.02	
4	130 - 125	4.36	44.11	4.46	
5	125 - 120	8.91	78.28	8.15	
6	120 - 115	9.39	120.11	8.59	
7	115 - 110	14.61	183.05	13.46	
8	110 - 105	15.18	251.46	13.91	
9	105 - 100	20.72	348.60	19.57	
10	100 - 95	21.40	447.52	20.01	
11	95 - 90	26.16	565.17	24.04	
12	90 - 89.25	26.29	583.22	24.10	
13	89.25 - 84.25	28.02	706.12	25.02	
14	84.25 - 79.25	29.18	832.32	25.54	
15	79.25 - 74.25	30.29	961.36	26.00	
16	74.25 - 69.25	31.36	1092.34	26.40	
17	69.25 - 64.25	32.43	1225.88	27.09	
18	64.25 - 59.25	33.55	1362.50	27.55	
19	59.25 - 54.25	34.70	1501.43	28.02	
20	54.25 - 50.083	35.68	1618.96	28.39	
21	50.083 - 49.833	35.76	1626.06	28.40	
22	49.833 - 49.5	35.86	1635.52	28.44	
23	49.5 - 43.25	39.17	1815.62	29.16	
24	43.25 - 38.25	40.87	1962.61	29.63	
25	38.25 - 33.25	42.59	2111.90	30.08	
26	33.25 - 31.25	43.29	2172.24	30.25	
27	31.25 - 31	43.40	2179.80	30.27	
28	31 - 26	45.42	2332.32	30.72	
29	26 - 21	47.47	2486.98	31.14	
30	21 - 16	49.55	2643.63	31.52	
31	16 - 11	51.64	2802.12	31.87	
32	11 - 6	53.77	2962.35	32.21	
33	6 - 1	55.92	3124.26	32.55	
34	1 - 0	56.35	3156.84	32.61	

# Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
145 - 140	Pole	TP24.923x24x0.1875	Pole	0.2%	Pass
140 - 135	Pole	TP25.847x24.923x0.1875	Pole	1.3%	Pass
135 - 130	Pole	TP26.77x25.847x0.1875	Pole	4.3%	Pass
130 - 125	Pole	TP27.825x26.9x0.25	Pole	5.1%	Pass
125 - 120	Pole	TP28.75x27.825x0.25	Pole	8.6%	Pass
120 - 115	Pole	TP29.675x28.75x0.25	Pole	12.3%	Pass
115 - 110	Pole	TP30.599x29.675x0.25	Pole	17.8%	Pass
110 - 105	Pole	TP31.524x30.599x0.25	Pole	22.9%	Pass
105 - 100	Pole	TP32.449x31.524x0.25	Pole	30.4%	Pass
100 - 95	Pole	TP33.374x32.449x0.25	Pole	36.9%	Pass
95 - 90	Pole	TP34.299x33.374x0.25	Pole	44.5%	Pass
90 - 89.25	Pole	TP35.27x34.299x0.25	Pole	45.6%	Pass
89.25 - 84.25	Pole	TP34.862x33.938x0.3125	Pole	40.2%	Pass
84.25 - 79.25	Pole	TP35.787x34.862x0.3125	Pole	45.1%	Pass
79.25 - 74.25	Pole	TP36.712x35.787x0.3125	Pole	49.8%	Pass
74.25 - 69.25	Pole	TP37.636x36.712x0.3125	Pole	54.1%	Pass
69.25 - 64.25	Pole	TP38.561x37.636x0.3125	Pole	58.1%	Pass
64.25 - 59.25	Pole	TP39.486x38.561x0.3125	Pole	62.0%	Pass
59.25 - 54.25	Pole	TP40.411x39.486x0.3125	Pole	65.6%	Pass
54.25 - 50.08	Pole	TP41.181x40.411x0.3125	Pole	68.5%	Pass
50.08 - 49.83	Pole + Reinf.	TP41.227x41.181x0.4375	Reinf. 2 Tension Rupture	68.0%	Pass
49.83 - 49.5	Pole + Reinf.	TP42.26x41.227x0.4375	Reinf. 2 Tension Rupture	68.3%	Pass
49.5 - 43.25	Pole + Reinf.	TP41.695x40.664x0.5	Reinf. 2 Tension Rupture	65.5%	Pass
43.25 - 38.25	Pole + Reinf.	TP42.52x41.695x0.5	Reinf. 2 Tension Rupture	68.4%	Pass
38.25 - 33.25	Pole + Reinf.	TP43.345x42.52x0.4938	Reinf. 2 Tension Rupture	71.1%	Pass
33.25 - 31.25	Pole + Reinf.	TP43.675x43.345x0.4875	Reinf. 2 Tension Rupture	72.2%	Pass
31.25 - 31	Pole + Reinf.	TP43.716x43.675x0.5875	Reinf. 1 Compression	56.3%	Pass
31 - 26	Pole + Reinf.	TP44.541x43.716x0.5875	Reinf. 1 Compression	58.4%	Pass
26 - 21	Pole + Reinf.	TP45.366x44.541x0.575	Reinf. 1 Compression	60.4%	Pass
21 - 16	Pole + Reinf.	TP46.191x45.366x0.575	Reinf. 1 Compression	62.3%	Pass
16 - 11	Pole + Reinf.	TP47.015x46.191x0.575	Reinf. 1 Compression	64.1%	Pass
11 - 6	Pole + Reinf.	TP47.84x47.015x0.5625	Reinf. 1 Compression	65.9%	Pass
6 - 1	Pole + Reinf.	TP48.665x47.84x0.5625	Reinf. 1 Compression	67.5%	Pass
1 - 0	Pole + Reinf.	TP48.83x48.665x0.5625	Reinf. 1 Compression	67.9%	Pass
				Summary	
			Pole	68.5%	Pass
			Reinforcement	72.2%	Pass
			Overall	72.2%	Pass

## Additional Calculations

Section Elevation (ft)	Moment of Inertia (in <sup>4</sup> )			Area (in <sup>2</sup> )			% Capacity* (100% Max. Allowable)		
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2
145 - 140	1138	n/a	1138	14.72	n/a	14.72	0.2%		
140 - 135	1270	n/a	1270	15.27	n/a	15.27	1.3%		
135 - 130	1412	n/a	1412	15.82	n/a	15.82	4.3%		
130 - 125	2101	n/a	2101	21.88	n/a	21.88	5.1%		
125 - 120	2320	n/a	2320	22.61	n/a	22.61	8.6%		
120 - 115	2553	n/a	2553	23.35	n/a	23.35	12.3%		
115 - 110	2801	n/a	2801	24.08	n/a	24.08	17.8%		
110 - 105	3065	n/a	3065	24.82	n/a	24.82	22.9%		
105 - 100	3346	n/a	3346	25.55	n/a	25.55	30.4%		
100 - 95	3642	n/a	3642	26.28	n/a	26.28	36.9%		
95 - 90	3956	n/a	3956	27.02	n/a	27.02	44.5%		
90 - 89.25	4004	n/a	4004	27.13	n/a	27.13	45.6%		
89.25 - 84.25	5166	n/a	5166	34.27	n/a	34.27	40.2%		
84.25 - 79.25	5592	n/a	5592	35.19	n/a	35.19	45.1%		
79.25 - 74.25	6041	n/a	6041	36.10	n/a	36.10	49.8%		
74.25 - 69.25	6513	n/a	6513	37.02	n/a	37.02	54.1%		
69.25 - 64.25	7010	n/a	7010	37.94	n/a	37.94	58.1%		
64.25 - 59.25	7530	n/a	7530	38.85	n/a	38.85	62.0%		
59.25 - 54.25	8076	n/a	8076	39.77	n/a	39.77	65.6%		
54.25 - 50.08	8551	n/a	8551	40.54	n/a	40.54	68.5%		
50.08 - 49.83	8599	3298	11896	40.58	18.00	58.58	50.9%		68.0%
49.83 - 49.5	8638	3307	11945	40.64	18.00	58.64	51.1%		68.3%
49.5 - 43.25	10623	3375	13998	49.18	18.00	67.18	46.0%		65.5%
43.25 - 38.25	11271	3506	14777	50.16	18.00	68.16	48.3%		68.4%
38.25 - 33.25	11945	3640	15585	51.14	18.00	69.14	50.5%		71.1%
33.25 - 31.25	12222	3694	15916	51.54	18.00	69.54	51.3%		72.2%
31.25 - 31	12280	6654	18934	51.58	31.88	83.46	43.9%	56.3%	
31 - 26	12994	6897	19890	52.57	31.88	84.44	45.8%	58.4%	
26 - 21	13734	7145	20879	53.55	31.88	85.42	47.6%	60.4%	
21 - 16	14502	7397	21899	54.53	31.88	86.40	49.4%	62.3%	
16 - 11	15299	7653	22952	55.51	31.88	87.39	51.1%	64.1%	
11 - 6	16124	7914	24038	56.49	31.88	88.37	52.8%	65.9%	
6 - 1	16978	8179	25157	57.48	31.88	89.35	54.4%	67.5%	
1 - 0	17152	8233	25385	57.67	31.88	89.55	54.8%	67.9%	

Note: Section capacity checked assuming all reinforcements are effective and using 5 degree increments.

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

# Monopole Flange Plate Connection

Elevation = 130 ft.



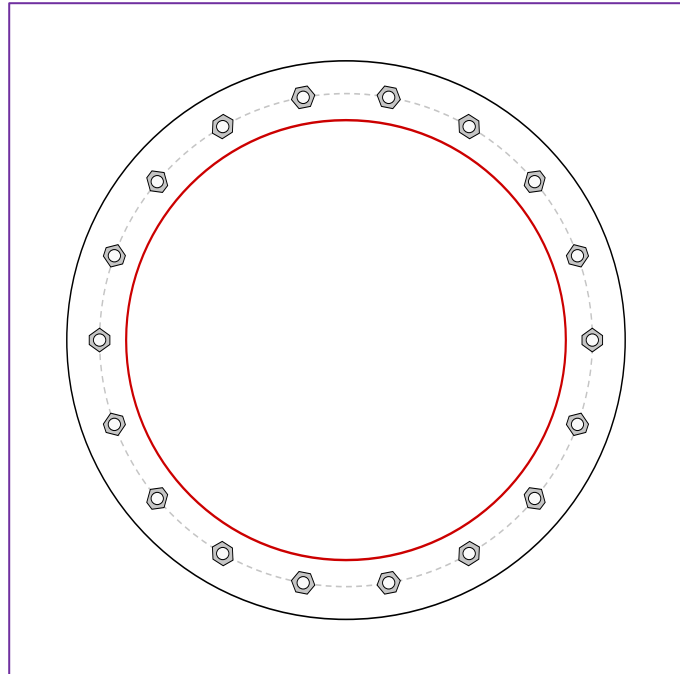
BU #	881364
Site Name	Newington
Order #	654631 Rev. 0

Applied Loads	
Moment (kip-ft)	22.91
Axial Force (kips)	3.94
Shear Force (kips)	4.03

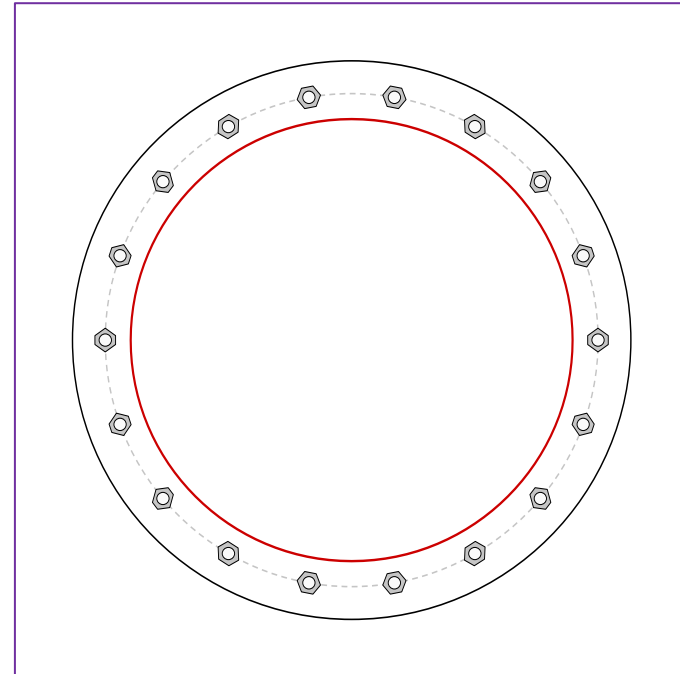
TIA-222 Revision	H
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\*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - External



### Connection Properties

#### Bolt Data

(18) 3/4"  $\phi$  bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 30" BC

#### Top Plate Data

34" OD x 1.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

#### Top Stiffener Data

N/A

#### Top Pole Data

26.77" x 0.1875" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

#### Bottom Plate Data

34" OD x 1.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

#### Bottom Stiffener Data

N/A

#### Bottom Pole Data

26.9" x 0.25" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

### Analysis Results

#### Bolt Capacity

Max Load (kips)	1.82
Allowable (kips)	30.06
Stress Rating:	<b>5.8% Pass</b>

#### Top Plate Capacity

Max Stress (ksi):	0.88	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	<b>1.9%</b>	<b>Pass</b>
Tension Side Stress Rating:	<b>0.8%</b>	<b>Pass</b>

#### Bottom Plate Capacity

Max Stress (ksi):	0.84	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	<b>1.8%</b>	<b>Pass</b>
Tension Side Stress Rating:	<b>0.7%</b>	<b>Pass</b>



# Monopole Base Plate Connection

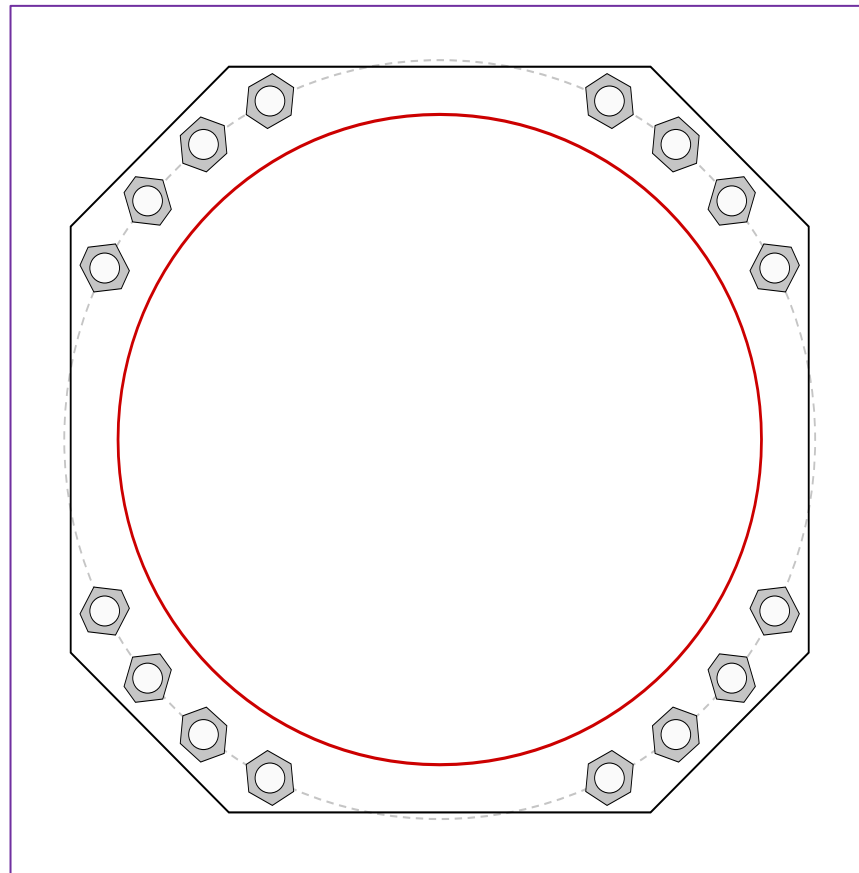


Site Info	
BU #	881364
Site Name	Newington
Order #	654631 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
$l_{ar}$ (in)	1.375

Applied Loads	
Moment (kip-ft)	3157.00
Axial Force (kips)	56.00
Shear Force (kips)	33.00

\*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
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Anchor Rod Data
(16) 2-1/4" $\phi$ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 57" BC <i>Anchor Spacing: 6 in</i>
Base Plate Data
56" W x 3" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi); Clip: 12 in
Stiffener Data
N/A
Pole Data
48.83" x 0.375" 18-sided pole (A607-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary	(units of kips, kip-in)	
$P_{u,t} = 162.55$	$\phi P_{n,t} = 243.75$	<b>Stress Rating</b>
$V_u = 2.06$	$\phi V_n = 149.1$	<b>63.5%</b>
$M_u = n/a$	$\phi M_n = n/a$	<b>Pass</b>
Base Plate Summary		
Max Stress (ksi):	31.99	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	<b>67.7%</b>	<b>Pass</b>

## Drilled Pier Foundation

BU #:	881364
Site Name:	Newington
Order Number:	654631 Rev. 0
TIA-222 Revision:	H
Tower Type:	Monopole

Report File:



Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	3157	
Axial Force (kips)	56	
Shear Force (kips)	33	

Material Properties		
Concrete Strength, f <sub>c</sub> :	3	ksi
Rebar Strength, F <sub>y</sub> :	60	ksi
Tie Yield Strength, F <sub>y</sub> t:	40	ksi

Pier Design Data	
Depth	25 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 25' below grade</i>	
Pier Diameter	7 ft
Rebar Quantity	28
Rebar Size	11
Clear Cover to Ties	4 in
Tie Size	5
Tie Spacing	18 in

Rebar 2, F<sub>y</sub> Override (ksi)

Rebar 3, F<sub>y</sub> Override (ksi)

[Rebar & Pier Options](#)

[Embedded Pole Inputs](#)

[Belled Pier Inputs](#)

Analysis Results		
Soil Lateral Check	Compression	Uplift
D <sub>ve0</sub> (ft from TOC)	6.15	-
Soil Safety Factor	2.77	-
Max Moment (kip-ft)	3365.62	-
Rating*	45.8%	-

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	349.66	-
End Bearing (kips)	346.36	-
Weight of Concrete (kips)	133.40	-
Total Capacity (kips)	696.02	-
Axial (kips)	189.40	-
Rating*	25.9%	-

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	6.06	-
Critical Moment (kip-ft)	3365.55	-
Critical Moment Capacity	6700.82	-
Rating*	47.8%	-

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	17.47	-
Critical Shear (kip)	359.10	-
Critical Shear Capacity	568.80	-
Rating*	60.1%	-

Structural Foundation Rating*	60.1%
Soil Interaction Rating*	45.8%

\*Rating per TIA-222-H Section 15.5

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

[Go to Soil Calculations](#)

Soil Profile												
Groundwater Depth	10	# of Layers		5								

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ <sub>soil</sub> (pcf)	γ <sub>concrete</sub> (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	3.5	3.5	125	150	0		0.000	0.000	0.00	0.00			Cohesionless
2	3.5	10	6.5	125	150		34	0.000	0.000	0.80	0.80			Cohesionless
3	10	12	2	65	87.6		34	0.000	0.000	0.80	0.80			Cohesionless
4	12	15	3	65	87.6		30	0.000	0.000	0.80	0.80			Cohesionless
5	15	25	10	65	87.6		30	0.000	0.000	1.20	1.20	12		Cohesionless