



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

March 14, 2024

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

**RE: Notice of Exempt Modification for Verizon Wireless: 5000382649
Crown Site ID# 876316
21 Acorn Road, Branford, CT 06405
Latitude: 41° 17' 35.06" / Longitude: -72° 45' 46.4"**

Dear Ms. Bachman:

Verizon Wireless currently maintains fifteen (12) antennas at the 116-foot mount on the existing 147-foot monopole tower located at 21 Acorn Road, Branford, CT. The property is owned by 21 Acorn Road LLC and the tower is owned by Crown Castle. Verizon now intends to add two (2) interference mitigation filters at the 116ft level. This modification/proposal includes hardware that is both 4G (LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Panned Modification:

Tower:

Install New:

(2) Kaelus BSF0020F3V1- Interference Mitigation Filters

The facility was approved by the Town of Branford Planning & Zoning Commission, on September 4, 1997.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to James Cosgrove, First Selectman, Town of Branford, Harry Smith, Town Planner, Town of Branford. 21 Acorn Road LLC is the property owner and Crown Castle is the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modification will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

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

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

Sincerely,



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

Attachments

cc:

James Cosgrove, First Selectman
Town of Branford
1019 Main Street
Branford, CT 06405
203-315-0620

Harry Smith, Town Planner
Town of Branford
1019 Main Street
Branford, CT 06405
203-315-2188

21 Acorn Road LLC – Land Owner
21 Acorn Rd
Branford, CT 06405

Crown Castle - Tower Owner

H5/3/10

PLANNING AND ZONING COMMISSION
TOWN OF BRANFORD TOWN HALL DRIVE P.O. BOX 150
Branford, Connecticut 06405 488-1255

NOTICE OF DECISION

September 5, 1997

Sprint PCS
9 Barnes Industrial Road
Wallingford, Connecticut 06492

SUBJECT: Special Exception

APPLICATION: #97-5.1

LOCATION: 21 Acorn Road

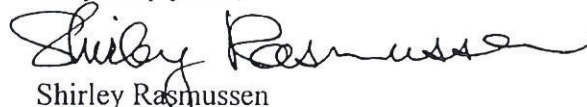
OWNER OF RECORD: Altrio Investment Group

Dear Sir:

At a meeting of the Branford Planning & Zoning Commission held on Thursday, September 4, 1997, the Commission voted to:

Approve your above subject application with the conditions noted below.

Very truly yours,


Shirley Rasmussen
Town Planner

NOTE: This Special Exception shall become effective only after it is filed on the Land Records in the office of the Town Clerk.

1. Prior to issuance of a building permit, revise landscape plan to show plantings 5 to 6 feet in height on all four sides of the equipment area. *36" only*
8 plants on two sides only
2. All users of the telecommunications facility must demonstrate compliance with current FCC regulations for electromagnetic frequency emissions and any future changes in these standards.
3. The owner of the telecommunications facility shall provide for and encourage co-location of other antennae on the facility.

NOTE: Special Exception shall become null and void in the event the applicant fails to obtain a building permit within one (1) year of date of approval.
(Per Section 31.7 of the Branford Zoning Regulations)

CC: Attorney John Knuff

CURRENT OWNER		UTILITIES		STRT / ROAD		LOCATION		CURRENT ASSESSMENT	
Level	Address	Public Water	Public Sewer	Paved	Industrial	Description	Code	Appraised	Assessed
1	Level					COM LAND	2-1	258,610	181,060
2	Above Street					COM BLDG	2-2	595,980	417,230
						COM OUTBL	2-5	30,580	21,450
						UTL LAND	4-1	226,600	158,620
21 ACORN RD		H05/000/003/00010/		HLDG TK					
BRANFORD CT 06405		H05/000/003/00010		SEPTIC					
PARCEL D		Assoc Pld#		SEWER					
GIS ID		1846		DISTRICT					
				CENSUS					

RECORD OF OWNERSHIP		BK-VOL/PAGE		SALE DATE		QU / VI		SALE PRICE		VC	
21 ACORN ROAD LLC	1279	0300	03-17-2020	U	1	0	3	2021	2-1	181,060	2021
ALTRIO INVESTMENT GROUP LLC	0568	0731	04-08-1994					2021	2-2	417,230	2021
								2021	2-5	21,450	2021
								2021	4-1	158,620	2021
Total		0.00						Total	Total	778,360	Total

EXEMPTIONS		OTHER ASSESSMENTS	
Year	Code	Description	Amount
Total		0.00	

ASSESSING NEIGHBORHOOD		APPRaised VALUE SUMMARY	
Nbhd	Nbhd Name	Appraised Bldg Value (Card)	Appraised Xf (B) Value (Bldg)
350	B	538,120	57,860
NOTES		Appraised Ob (B) Value (Bldg)	30,580
A SECONDINO + SON		Appraised Land Value (Bldg)	485,210
CONTRACTORS (R E OWNER + BUS = RELATED		Special Land Value	
NO DUCT HEAT IN 29X83 BAS		Total Appraised Parcel Value	1,111,770
GEN & GAS TANK FOR TWR OWNED BY VERIZON		Valuation Method	C
REAR OF BLDG			
56X62=AOF			

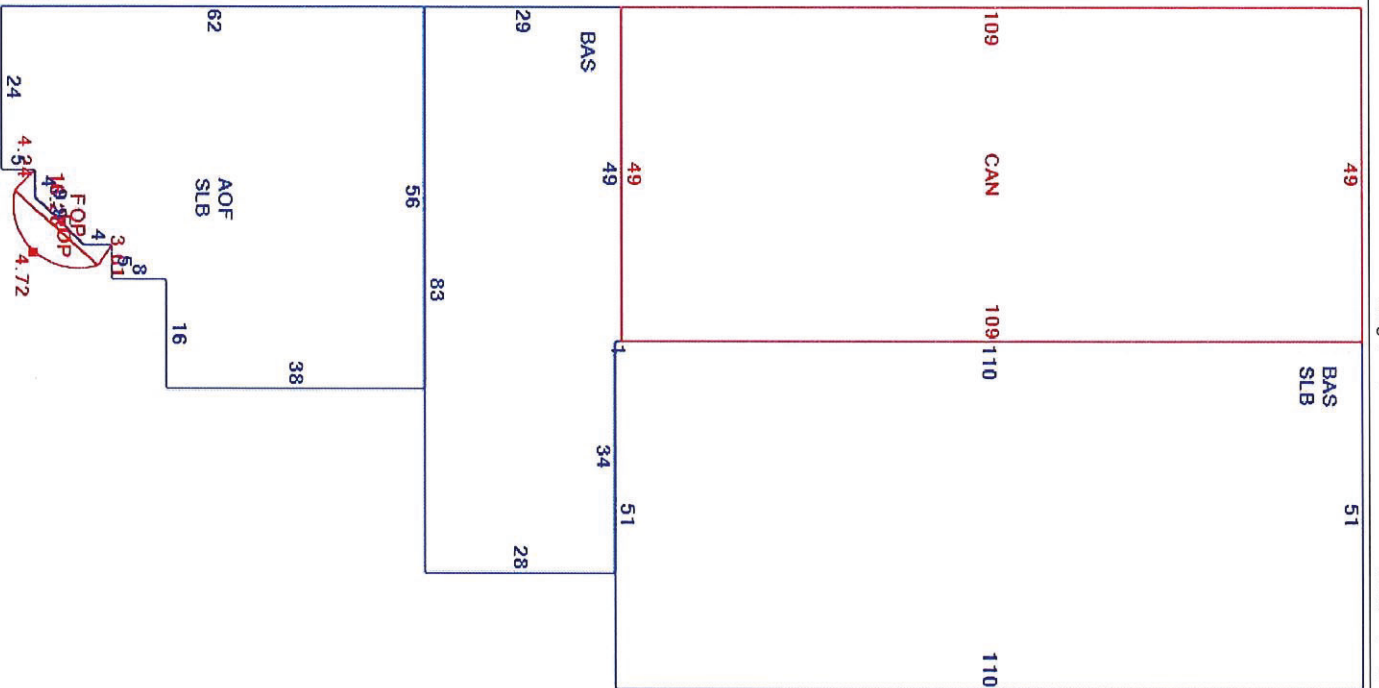
BUILDING PERMIT RECORD		VISIT/CHANGE HISTORY	
Permit Id	Issue Date	Date	Purpose/Result
22-01361-2	11-21-2023	09-25-2019	11 Field Review
01280-17	05-16-2018	02-05-2019	09 Refusal
17-01280-1	12-21-2017	07-26-2018	37 Bldg Permit
17-01280	12-04-2017	08-15-2014	11 Field Review
0900083	02-12-2009	01-21-2010	41 Change
2005469	04-05-2005	10-21-2009	16 Reval Review
19008	11-14-2002	05-14-2009	00 Measur-I listed

LAND LINE VALUATION SECTION		APPRaised VALUE SUMMARY	
Use Code	Description	Zone	LA
B	COMM WHS MD	IG-2	
1	3160 COMM WHS MD	1.380 AC	236,100.00
1	3160 COMM WHS MD	0.180 AC	77,300.00
1	4310 TEL REL TW MD	1.000 BL	206,000.00
Total Card Land Units		1.561 AC	441,100
Total Card Land Area		1.56 AC	441,100

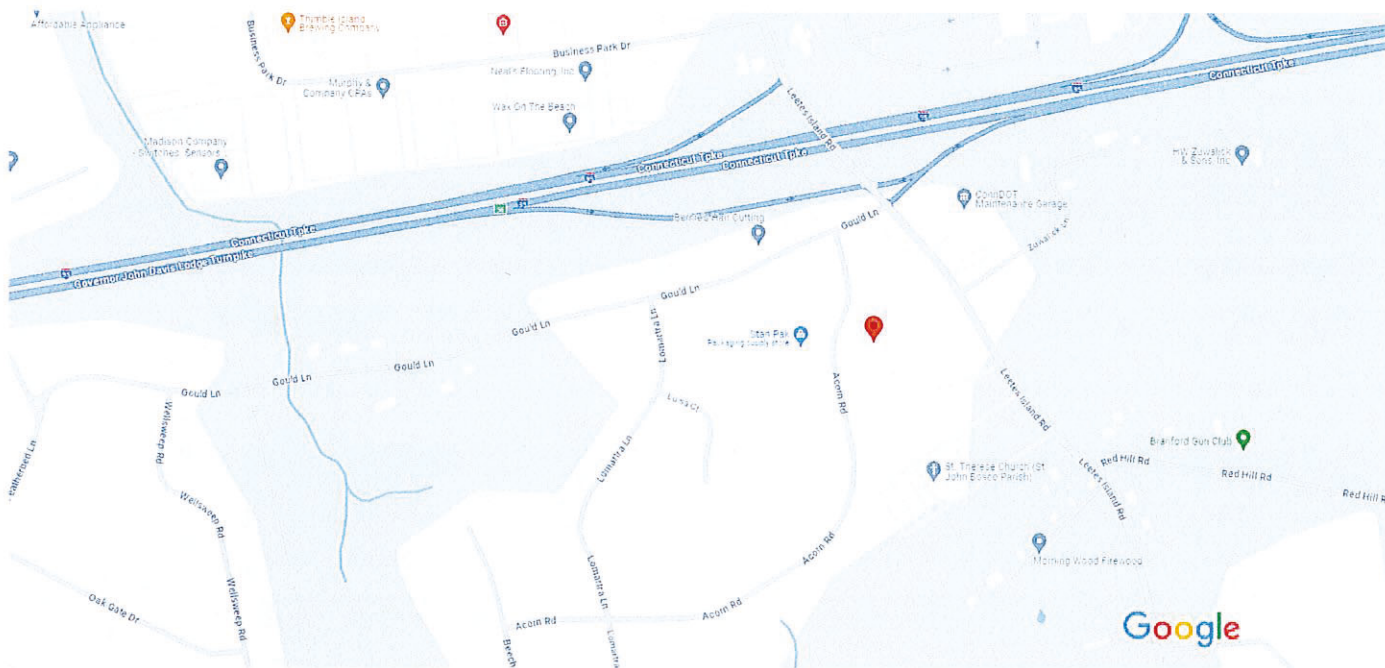
LAND LINE VALUATION SECTION		APPRaised VALUE SUMMARY	
Use Code	Description	Zone	LA
B	COMM WHS MD	IG-2	
1	3160 COMM WHS MD	1.380 AC	236,100.00
1	3160 COMM WHS MD	0.180 AC	77,300.00
1	4310 TEL REL TW MD	1.000 BL	206,000.00
Total Card Land Units		1.561 AC	441,100
Total Card Land Area		1.56 AC	441,100

LAND LINE VALUATION SECTION		APPRaised VALUE SUMMARY	
Use Code	Description	Zone	LA
B	COMM WHS MD	IG-2	
1	3160 COMM WHS MD	1.380 AC	236,100.00
1	3160 COMM WHS MD	0.180 AC	77,300.00
1	4310 TEL REL TW MD	1.000 BL	206,000.00
Total Card Land Units		1.561 AC	441,100
Total Card Land Area		1.56 AC	441,100





21 Acorn Rd



Map data ©2024 Google 200 ft



21 Acorn Rd

Building



Directions



Save



Nearby



Send to phone



Share



21 Acorn Rd, Branford, CT 06405

Photos

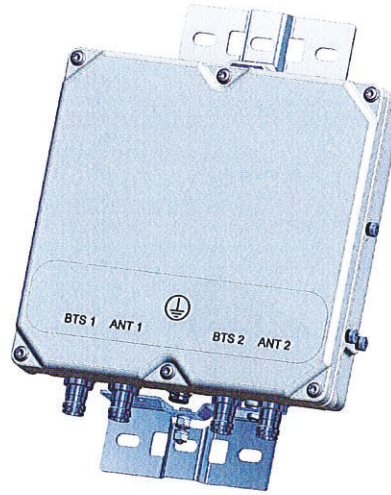
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



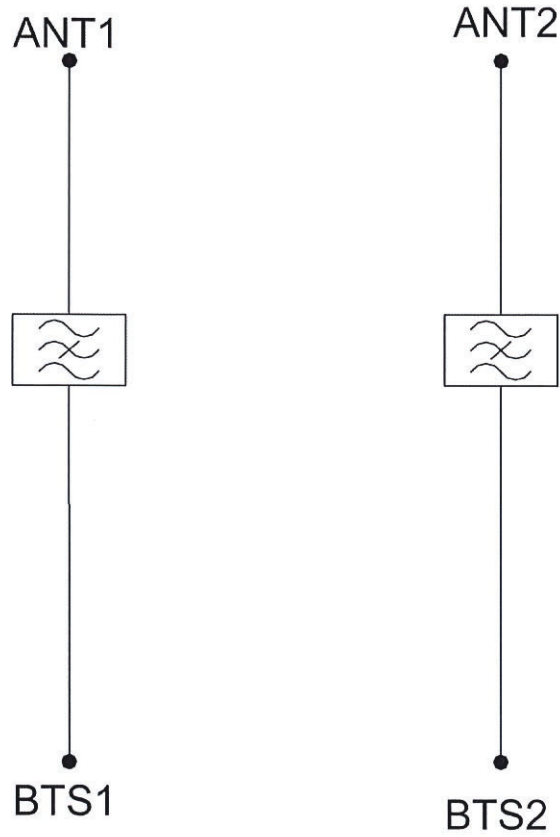
TECHNICAL SPECIFICATIONS

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

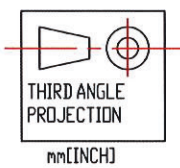
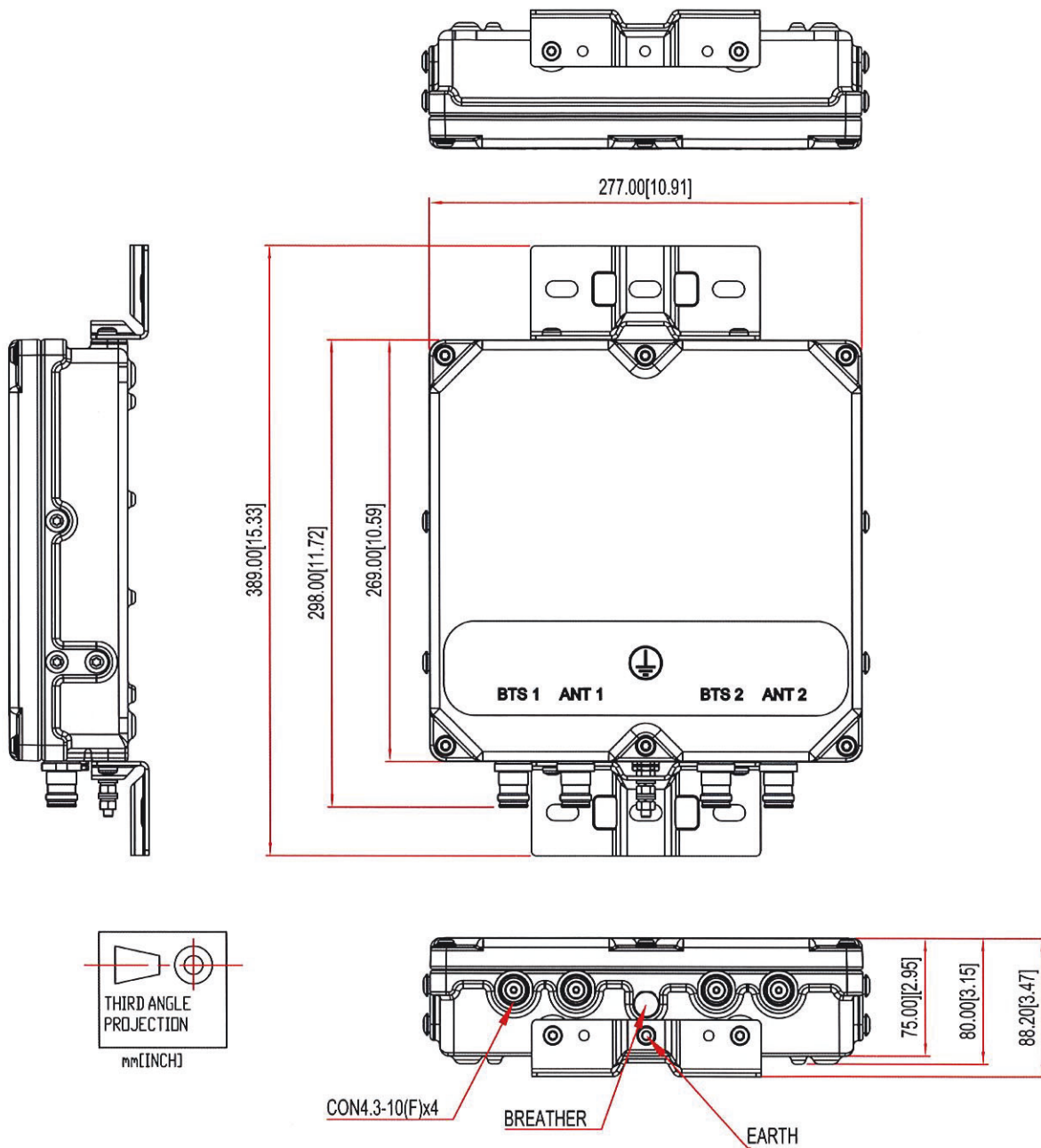
ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, March 15, 2024 9:45 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775547273169: Your package has been delivered

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



Hi. Your package was
delivered Fri, 03/15/2024 at
9:36am.



Delivered to 1019 MAIN ST, BRANFORD, CT 06405
Received by T.TRISTA

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	775547273169
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Branford James Cosgrove, First Selectman 1019 Main Street BRANFORD, CT, US, 06405
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/14/2024 06:46 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	BRANFORD, CT, US, 06405
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, March 15, 2024 9:46 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775547326512: Your package has been delivered

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



Hi. Your package was
delivered Fri, 03/15/2024 at
9:36am.



Delivered to 1019 MAIN ST, BRANFORD, CT 06405
Received by T.TRISTA

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	775547326512
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Branford Harry Smith, Town Planner 1019 Main Street BRANFORD, CT, US, 06405
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/14/2024 06:46 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	BRANFORD, CT, US, 06405
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, March 15, 2024 11:33 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 775547422623: Your package has been delivered

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



Hi. Your package was
delivered Fri, 03/15/2024 at
11:25am.



Delivered to 21 ACORN RD, BRANFORD, CT 06405
Received by L.CALABTO

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	775547422623
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	21 Acorn Road LLC 21 Acorn Road LLC 21 Acorn Road BRANFORD, CT, US, 06405
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 3/14/2024 06:46 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	BRANFORD, CT, US, 06405
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Date: **January 10, 2024**



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

Subject: **Structural Analysis Report**

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 5000382649
Site Name: BRANFORD 3 CT

Crown Castle Designation: **BU Number:** 876316
Site Name: SECONDINO PROPERTY
JDE Job Number: 751359
Work Order Number: 2277715
Order Number: 654580 Rev. 0

Engineering Firm Designation: **Crown Castle Project Number** 2277715

Site Data: **21 Acorn Road, Branford, New Haven County, CT**
Latitude: 41° 17' 35.06" Longitude: -72° 45' 46.4"
147 ft - Monopole Tower

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

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

LC7: Proposed Equipment Configuration

Sufficient Capacity

This analysis utilizes an ultimate 3-second gust wind speed of 122 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: Mitchell Prust

Respectfully submitted by:

Digitally signed by Sudarshan C
Kasera
Date: 2024.01.16 16:31:11
-05'00'

Sudarshan C Kasera, P.E.
Senior Project Engineer

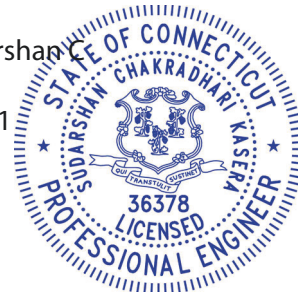


TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

Table 2 - Other Considered Equipment

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Table 5 - Tower Component Stresses vs. Capacity - LC7

4.1) Recommendations

5) APPENDIX A

tnxTower Output

6) APPENDIX B

Base Level Drawing

7) APPENDIX C

Additional Calculations

1) INTRODUCTION

This tower is a 147 ft Monopole Tower designed by Summit. The tower has been modified in the past to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision: TIA-222-H
Risk Category: II
Wind Speed: 122 mph
Exposure Category: C
Topographic Factor: 1
Ice Thickness: 1.00 in
Wind Speed with Ice: 50 mph
Service Wind Speed: 60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
118	118	2	raycap	RRFDC-3315-PF-48	-	-
		1	tower mounts	Side Arm Mount [SO 102-3]		
116	117	3	commscope	CBC78T-DS-43-2X	6 2	1-5/8 1-1/4
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
	116	2	antel	LPA-80063/6CF w/ Mount Pipe		
		2	antel	LPA-80080/4CF w/ Mount Pipe		
		6	commscope	JAHH-65B-R3B w/ Mount Pipe		
		2	kaelus	BSF0020F3V1		
		2	rfs celwave	APL868013-42T0 w/ Mount Pipe		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		1	tower mounts	Platform Mount [LP 1201-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
147	147	3	alcatel lucent	1900MHZ RRH (65MHZ)	1 3	5/8 1-1/4
		3	alcatel lucent	800 EXTERNAL NOTCH FILTER		
		3	alcatel lucent	800MHZ RRH		
		3	alcatel lucent	TD-RRH8X20-25		
		9	rfs celwave	ACU-A20-N		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
		1	tower mounts	Platform Mount [LP 1201-1_HR-1]		
136	137	3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe	3	1-5/8
		3	ericsson	RADIO 4415 B66A		
		3	ericsson	RADIO 4424 B25_TMOV1		
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	rfs celwave	APX16DWV-16DWV-S-E-A20 w/ Mount Pipe		
	3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe			
	136	1	tower mounts	RMQP-496-HK		
126	126	3	fujitsu	TA08025-B604	1	1-1/2
		3	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MC-PK8-DSH		
106	106	3	ericsson	AIR 6449 B77D_CCIV2 w/ Mount Pipe	12 2 6 1 2 1	1-1/4 7/8 13/16 3/8 17/64 Conduit
		1	tower mounts	Platform Mount [LP 1201-1_KCKR-HR-1]		
	105	3	cci antennas	DMP65R-BU4D w/ Mount Pipe		
		3	cci antennas	TPA65R-BU4D w/ Mount Pipe		
		3	ericsson	RADIO 4449 B5/B12		
		3	ericsson	RRUS 32 B2_CCIV2		
		3	ericsson	RRUS 32 B30		
		3	ericsson	RRUS 4426 B66		
		3	ericsson	RRUS 4478 B14		
	4	raycap	DC6-48-60-18-8F			
104	3	ericsson	AIR 6419 B77G w/ Mount Pipe			
76	77	1	kathrein	OG-860/1920/GPS-A	-	-
		1	lucent	KS24019-L112A		
	76	1	tower mounts	Side Arm Mount [SO 701-3]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1529736	CCISITES
4-POST-MODIFICATION INSPECTION	2031904	CCISITES
4-POST-MODIFICATION INSPECTION	2417887	CCISITES
4-POST-MODIFICATION INSPECTION	7151513	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	1632435	CCISITES
4-TOWER MANUFACTURER DRAWINGS	1632399	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2251030	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	6823303	CCISITES

3.1) Analysis Method

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

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

3.2) Assumptions

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

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
147 - 142	Pole	TP22.85x22x0.25	Pole	4.2	Pass
142 - 137	Pole	TP23.7x22.85x0.25	Pole	7.8	Pass
137 - 132	Pole	TP24.55x23.7x0.25	Pole	14.9	Pass
132 - 127	Pole	TP25.4x24.55x0.25	Pole	21.3	Pass
127 - 122	Pole	TP26.251x25.4x0.25	Pole	29.5	Pass
122 - 117	Pole	TP27.101x26.251x0.25	Pole	37.2	Pass
117 - 112	Pole	TP27.951x27.101x0.25	Pole	47.4	Pass
112 - 108.75	Pole	TP29.141x27.951x0.25	Pole	53.6	Pass
108.75 - 103.75	Pole	TP28.854x28.003x0.3125	Pole	51.1	Pass
103.75 - 98.75	Pole	TP29.704x28.854x0.3125	Pole	59.4	Pass
98.75 - 93.75	Pole	TP30.554x29.704x0.3125	Pole	66.9	Pass
93.75 - 89.67	Pole	TP31.249x30.554x0.3125	Pole	72.5	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
89.67 - 89.42	Pole	TP31.291x31.249x0.3125	Pole	72.8	Pass
89.42 - 88.08	Pole	TP31.518x31.291x0.3125	Pole	74.6	Pass
88.08 - 87.83	Pole + Reinf.	TP31.56x31.518x0.5125	Reinf. 5 Tension Rupture	63.4	Pass
87.83 - 85.83	Pole + Reinf.	TP31.9x31.56x0.5125	Reinf. 5 Tension Rupture	65.7	Pass
85.83 - 85.58	Pole + Reinf.	TP31.943x31.9x0.5125	Reinf. 3 Tension Rupture	66.0	Pass
85.58 - 84.5	Pole + Reinf.	TP32.127x31.943x0.5125	Reinf. 5 Tension Rupture	67.3	Pass
84.5 - 84.25	Pole + Reinf.	TP32.17x32.127x0.475	Reinf. 3 Tension Rupture	69.5	Pass
84.25 - 79.25	Pole + Reinf.	TP33.02x32.17x0.4625	Reinf. 3 Tension Rupture	75.1	Pass
79.25 - 78	Pole + Reinf.	TP33.955x33.02x0.4625	Reinf. 3 Tension Rupture	76.4	Pass
78 - 72.75	Pole + Reinf.	TP33.5x32.607x0.5625	Reinf. 2 Tension Rupture	73.2	Pass
72.75 - 67.75	Pole + Reinf.	TP34.35x33.5x0.5625	Reinf. 2 Tension Rupture	77.4	Pass
67.75 - 63.08	Pole + Reinf.	TP35.144x34.35x0.55	Reinf. 3 Tension Rupture	81.0	Pass
63.08 - 62.83	Pole + Reinf.	TP35.186x35.144x0.7125	Reinf. 8 Tension Rupture	66.4	Pass
62.83 - 57.83	Pole + Reinf.	TP36.036x35.186x0.7	Reinf. 8 Tension Rupture	69.7	Pass
57.83 - 52.83	Pole + Reinf.	TP36.887x36.036x0.6875	Reinf. 8 Tension Rupture	72.8	Pass
52.83 - 47.83	Pole + Reinf.	TP37.737x36.887x0.6875	Reinf. 8 Tension Rupture	75.7	Pass
47.83 - 47.5	Pole + Reinf.	TP38.601x37.737x0.675	Reinf. 8 Tension Rupture	75.9	Pass
47.5 - 42.5	Pole + Reinf.	TP37.894x37.043x0.75	Reinf. 8 Tension Rupture	74.5	Pass
42.5 - 37.5	Pole + Reinf.	TP38.744x37.894x0.7375	Reinf. 8 Tension Rupture	76.9	Pass
37.5 - 32.75	Pole + Reinf.	TP39.551x38.744x0.7375	Reinf. 8 Tension Rupture	79.0	Pass
32.75 - 32.5	Pole + Reinf.	TP39.594x39.551x0.7875	Reinf. 3 Tension Rupture	72.8	Pass
32.5 - 27.5	Pole + Reinf.	TP40.444x39.594x0.775	Reinf. 3 Tension Rupture	74.7	Pass
27.5 - 22.5	Pole + Reinf.	TP41.294x40.444x0.7625	Reinf. 6 Tension Rupture	76.6	Pass
22.5 - 17.5	Pole + Reinf.	TP42.144x41.294x0.7625	Reinf. 6 Tension Rupture	78.3	Pass
17.5 - 12.5	Pole + Reinf.	TP42.995x42.144x0.75	Reinf. 6 Tension Rupture	79.9	Pass
12.5 - 8.08	Pole + Reinf.	TP43.746x42.995x0.7375	Reinf. 6 Tension Rupture	81.3	Pass
8.08 - 7.83	Pole + Reinf.	TP43.788x43.746x0.8	Reinf. 3 Tension Rupture	79.2	Pass
7.83 - 6.42	Pole + Reinf.	TP44.029x43.788x0.7875	Reinf. 3 Tension Rupture	79.6	Pass
6.42 - 6.17	Pole + Reinf.	TP44.071x44.029x0.775	Reinf. 3 Tension Rupture	79.9	Pass
6.17 - 1.17	Pole + Reinf.	TP44.922x44.071x0.7625	Reinf. 3 Tension Rupture	81.3	Pass
1.17 - 0	Pole + Reinf.	TP45.12x44.922x0.7625	Reinf. 3 Tension Rupture	81.6	Pass
				Summary	
			Pole	74.6	Pass
			Reinforcement	81.6	Pass
			Overall	81.6	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	88.2	Pass
1	Base Plate	0	74.1	Pass
1	Base Foundation (Structural)	0	81.4	Pass
1	Base Foundation (Soil)	0	56.0	Pass

Structure Rating (max from all components) =	88.2%
---	--------------

Notes:

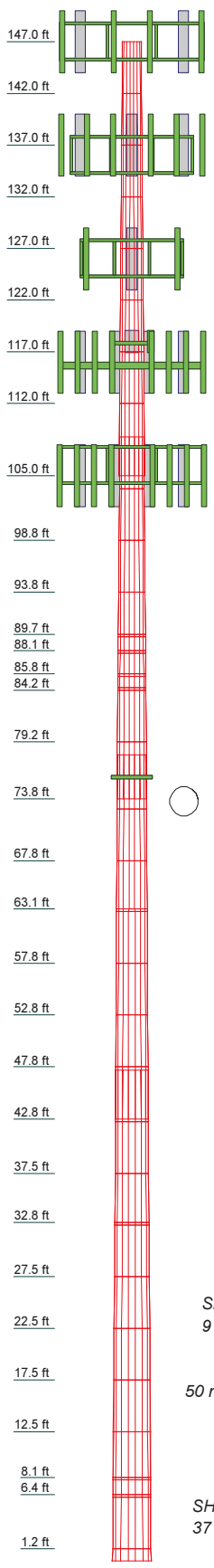
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed

4.1) Recommendations

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

APPENDIX A
TNXTOWER OUTPUT

Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.000	18	0.250	3.750	22.000	22.850	A607-60	0.3
2	5.000	18	0.250	3.750	23.700	24.550	A607-60	0.3
3	5.000	18	0.250	3.750	24.550	25.400	A607-60	0.3
4	5.000	18	0.250	3.750	25.400	26.251	A607-60	0.3
5	5.000	18	0.250	3.750	26.251	27.101	A607-60	0.3
6	5.000	18	0.250	3.750	27.101	27.951	A607-60	0.4
7	5.000	18	0.250	3.750	27.951	28.801	A607-60	0.4
8	5.000	18	0.250	3.750	28.801	29.651	A607-60	0.5
9	5.000	18	0.250	3.750	29.651	30.501	A607-60	0.5
10	5.000	18	0.250	3.750	30.501	31.351	A607-60	0.5
11	5.000	18	0.250	3.750	31.351	32.201	A607-60	0.5
12	5.000	18	0.250	3.750	32.201	33.051	A607-60	0.4
13	5.000	18	0.250	3.750	33.051	33.901	A607-60	0.4
14	5.000	18	0.250	3.750	33.901	34.751	A607-60	0.4
15	5.000	18	0.250	3.750	34.751	35.601	A607-60	0.4
16	5.000	18	0.250	3.750	35.601	36.451	A607-60	0.4
17	5.000	18	0.250	3.750	36.451	37.301	A607-60	0.4
18	5.000	18	0.250	3.750	37.301	38.151	A607-60	0.4
19	5.000	18	0.250	3.750	38.151	39.001	A607-60	0.4
20	5.000	18	0.250	3.750	39.001	39.851	A607-60	0.4
21	5.000	18	0.250	3.750	40.701	41.551	A607-60	0.9
22	5.000	18	0.250	3.750	41.551	42.901	A607-60	0.9
23	5.000	18	0.250	3.750	42.901	44.251	A607-60	0.9
24	5.000	18	0.250	3.750	44.251	45.601	A607-60	0.9
25	5.000	18	0.250	3.750	45.601	46.951	A607-60	0.9
26	5.000	18	0.250	3.750	46.951	48.301	A607-60	0.9
27	5.000	18	0.250	3.750	48.301	49.651	A607-60	1.3
28	5.000	18	0.250	3.750	49.651	51.001	A607-60	1.3
29	5.000	18	0.250	3.750	51.001	52.351	A607-60	1.3
30	5.000	18	0.250	3.750	52.351	53.701	A607-60	1.3
31	5.000	18	0.250	3.750	53.701	55.051	A607-60	1.4
32	5.000	18	0.250	3.750	55.051	56.401	A607-60	1.4
33	5.000	18	0.250	3.750	56.401	57.751	A607-60	1.4
34	5.000	18	0.250	3.750	57.751	59.101	A607-60	1.4
35	5.000	18	0.250	3.750	59.101	60.451	A607-60	1.7
36	5.000	18	0.250	3.750	60.451	61.801	A607-60	1.7
37	5.000	18	0.250	3.750	61.801	63.151	A607-60	1.7
38	5.000	18	0.250	3.750	63.151	64.501	A607-60	1.7
39	5.000	18	0.250	3.750	64.501	65.851	A607-60	1.5
40	5.000	18	0.250	3.750	65.851	67.201	A607-60	1.5
41	5.000	18	0.250	3.750	67.201	68.551	A607-60	1.5
42	5.000	18	0.250	3.750	68.551	69.901	A607-60	1.8
43	5.000	18	0.250	3.750	69.901	71.251	A607-60	1.8



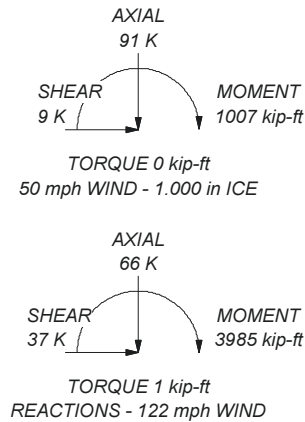
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi			

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 122 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. TOWER RATING: 81.6%

ALL REACTIONS
ARE FACTORED



CROWN CASTLE
The Pathway to Possible

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

Job: BU 876316		
Project:	Client: Crown Castle	App'd:
Code: TIA-222-H	Drawn by: MPrust	Scale: NTS
Path: C:\SAPI Work Area\876316\WO 2277715 - SAPIProd\876316.er	Date: 01/10/24	Dwg No. E-1

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower is located in New Haven County, Connecticut.

Tower base elevation above sea level: 115.000 ft.

Basic wind speed of 122 mph.

Risk Category II.

Exposure Category C.

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

Topographic Category: 1.

Crest Height: 0.000 ft.

Nominal ice thickness of 1.000 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

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

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 60 mph.

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

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Tower analysis based on target reliabilities in accordance with Annex S.

Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.

Maximum demand-capacity ratio is: 1.05.

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

Options

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

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	147.000-142.000	5.000	0.000	18	22.000	22.850	0.250	1.000	A607-60 (60 ksi)
L2	142.000-137.000	5.000	0.000	18	22.850	23.700	0.250	1.000	A607-60 (60 ksi)
L3	137.000-132.000	5.000	0.000	18	23.700	24.550	0.250	1.000	A607-60 (60 ksi)
L4	132.000-127.000	5.000	0.000	18	24.550	25.400	0.250	1.000	A607-60 (60 ksi)
L5	127.000-122.000	5.000	0.000	18	25.400	26.251	0.250	1.000	A607-60 (60 ksi)
L6	122.000-117.000	5.000	0.000	18	26.251	27.101	0.250	1.000	A607-60 (60 ksi)
L7	117.000-112.000	5.000	0.000	18	27.101	27.951	0.250	1.000	A607-60 (60 ksi)
L8	112.000-105.000	7.000	3.750	18	27.951	29.141	0.250	1.000	A607-60 (60 ksi)
L9	105.000-103.750	5.000	0.000	18	28.003	28.854	0.312	1.250	A607-60 (60 ksi)
L10	103.750-98.750	5.000	0.000	18	28.854	29.704	0.312	1.250	A607-60 (60 ksi)
L11	98.750-93.750	5.000	0.000	18	29.704	30.554	0.312	1.250	A607-60 (60 ksi)
L12	93.750-89.666	4.084	0.000	18	30.554	31.249	0.312	1.250	A607-60 (60 ksi)
L13	89.666-89.416	0.250	0.000	18	31.249	31.291	0.312	1.250	A607-60 (60 ksi)
L14	89.416-88.083	1.333	0.000	18	31.291	31.518	0.312	1.250	A607-60 (60 ksi)
L15	88.083-87.833	0.250	0.000	18	31.518	31.560	0.512	2.050	A607-60 (60 ksi)
L16	87.833-85.833	2.000	0.000	18	31.560	31.900	0.512	2.050	A607-60 (60 ksi)
L17	85.833-85.583	0.250	0.000	18	31.900	31.943	0.512	2.050	A607-60 (60 ksi)
L18	85.583-84.500	1.083	0.000	18	31.943	32.127	0.512	2.050	A607-60 (60 ksi)
L19	84.500-84.250	0.250	0.000	18	32.127	32.170	0.475	1.900	A607-60 (60 ksi)
L20	84.250-79.250	5.000	0.000	18	32.170	33.020	0.463	1.850	A607-60 (60 ksi)
L21	79.250-73.750	5.500	4.250	18	33.020	33.955	0.463	1.850	A607-60 (60 ksi)
L22	73.750-72.750	5.250	0.000	18	32.607	33.500	0.562	2.250	A607-60 (60 ksi)
L23	72.750-67.750	5.000	0.000	18	33.500	34.350	0.562	2.250	A607-60 (60 ksi)
L24	67.750-63.083	4.667	0.000	18	34.350	35.144	0.550	2.200	A607-60 (60 ksi)
L25	63.083-62.833	0.250	0.000	18	35.144	35.186	0.713	2.850	A607-60 (60 ksi)
L26	62.833-57.833	5.000	0.000	18	35.186	36.036	0.700	2.800	A607-60 (60 ksi)
L27	57.833-52.833	5.000	0.000	18	36.036	36.887	0.688	2.750	A607-60 (60 ksi)
L28	52.833-47.833	5.000	0.000	18	36.887	37.737	0.688	2.750	A607-60 (60 ksi)
L29	47.833-42.750	5.083	4.750	18	37.737	38.601	0.675	2.700	A607-60 (60 ksi)
L30	42.750-42.500	5.000	0.000	18	37.043	37.894	0.750	3.000	A607-60 (60 ksi)
L31	42.500-37.500	5.000	0.000	18	37.894	38.744	0.738	2.950	A607-60 (60 ksi)

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L32	37.500-32.750	4.750	0.000	18	38.744	39.551	0.738	2.950	A607-60 (60 ksi)
L33	32.750-32.500	0.250	0.000	18	39.551	39.594	0.787	3.150	A607-60 (60 ksi)
L34	32.500-27.500	5.000	0.000	18	39.594	40.444	0.775	3.100	A607-60 (60 ksi)
L35	27.500-22.500	5.000	0.000	18	40.444	41.294	0.762	3.050	A607-60 (60 ksi)
L36	22.500-17.500	5.000	0.000	18	41.294	42.144	0.762	3.050	A607-60 (60 ksi)
L37	17.500-12.500	5.000	0.000	18	42.144	42.995	0.750	3.000	A607-60 (60 ksi)
L38	12.500-8.083	4.417	0.000	18	42.995	43.746	0.738	2.950	A607-60 (60 ksi)
L39	8.083-7.833	0.250	0.000	18	43.746	43.788	0.800	3.200	A607-60 (60 ksi)
L40	7.833-6.417	1.416	0.000	18	43.788	44.029	0.787	3.150	A607-60 (60 ksi)
L41	6.417-6.167	0.250	0.000	18	44.029	44.071	0.775	3.100	A607-60 (60 ksi)
L42	6.167-1.167	5.000	0.000	18	44.071	44.922	0.762	3.050	A607-60 (60 ksi)
L43	1.167-0.000	1.167		18	44.922	45.120	0.762	3.050	A607-60 (60 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	22.301	17.259	1031.483	7.721	11.176	92.294	2064.324	8.631	3.432	13.728
	23.164	17.933	1157.222	8.023	11.608	99.693	2315.966	8.968	3.582	14.326
L2	23.164	17.933	1157.222	8.023	11.608	99.693	2315.966	8.968	3.582	14.326
	24.027	18.608	1292.785	8.325	12.040	107.377	2587.270	9.306	3.731	14.925
L3	24.027	18.608	1292.785	8.325	12.040	107.377	2587.270	9.306	3.731	14.925
	24.891	19.282	1438.541	8.627	12.472	115.346	2878.976	9.643	3.881	15.523
L4	24.891	19.282	1438.541	8.627	12.472	115.346	2878.976	9.643	3.881	15.523
	25.754	19.957	1594.862	8.928	12.903	123.600	3191.822	9.980	4.030	16.122
L5	25.754	19.957	1594.862	8.928	12.903	123.600	3191.822	9.980	4.030	16.122
	26.617	20.631	1762.115	9.230	13.335	132.139	3526.549	10.318	4.180	16.72
L6	26.617	20.631	1762.115	9.230	13.335	132.139	3526.549	10.318	4.180	16.72
	27.480	21.306	1940.671	9.532	13.767	140.964	3883.896	10.655	4.330	17.319
L7	27.480	21.306	1940.671	9.532	13.767	140.964	3883.896	10.655	4.330	17.319
	28.343	21.981	2130.899	9.834	14.199	150.074	4264.602	10.992	4.479	17.917
L8	28.343	21.981	2130.899	9.834	14.199	150.074	4264.602	10.992	4.479	17.917
	29.552	22.925	2417.531	10.256	14.804	163.307	4838.244	11.465	4.689	18.755
L9	29.552	22.925	2417.531	10.256	14.804	163.307	4838.244	11.465	4.689	18.755
	29.035	27.466	2660.763	9.830	14.226	187.039	5325.026	13.736	4.379	14.012
L10	29.035	27.466	2660.763	9.830	14.226	187.039	5325.026	13.736	4.379	14.012
	29.251	28.309	2913.454	10.132	14.658	198.767	5830.743	14.157	4.528	14.49
L11	29.251	28.309	2913.454	10.132	14.658	198.767	5830.743	14.157	4.528	14.49
	30.114	29.153	3181.659	10.434	15.090	210.852	6367.505	14.579	4.678	14.969
L12	30.114	29.153	3181.659	10.434	15.090	210.852	6367.505	14.579	4.678	14.969
	30.977	29.996	3465.839	10.736	15.521	223.293	6936.238	15.001	4.828	15.448
L13	30.977	29.996	3465.839	10.736	15.521	223.293	6936.238	15.001	4.828	15.448
	31.682	30.685	3710.131	10.982	15.874	233.720	7425.145	15.345	4.950	15.839
L14	31.682	30.685	3710.131	10.982	15.874	233.720	7425.145	15.345	4.950	15.839
	31.726	30.727	3725.447	10.997	15.896	234.366	7455.797	15.366	4.957	15.863
L15	31.726	30.727	3725.447	10.997	15.896	234.366	7455.797	15.366	4.957	15.863
	31.956	30.952	3807.825	11.078	16.011	237.825	7620.660	15.479	4.997	15.991
L15	31.925	50.435	6125.528	11.007	16.011	382.582	12259.115	25.223	4.645	9.064

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L16	31.968	50.505	6150.758	11.022	16.033	383.641	12309.610	25.257	4.653	9.078
	31.968	50.505	6150.758	11.022	16.033	383.641	12309.610	25.257	4.653	9.078
L17	32.313	51.058	6355.103	11.143	16.205	392.160	12718.568	25.534	4.712	9.195
	32.313	51.058	6355.103	11.143	16.205	392.160	12718.568	25.534	4.712	9.195
L18	32.357	51.127	6380.960	11.158	16.227	393.232	12770.316	25.568	4.720	9.21
	32.357	51.127	6380.960	11.158	16.227	393.232	12770.316	25.568	4.720	9.21
L19	32.544	51.427	6493.782	11.223	16.321	397.891	12996.108	25.718	4.752	9.273
	32.549	47.720	6040.070	11.236	16.321	370.090	12088.087	23.865	4.818	10.144
L20	32.593	47.784	6064.439	11.252	16.342	371.093	12136.858	23.897	4.826	10.16
	32.594	46.545	5911.838	11.256	16.342	361.755	11831.455	23.277	4.848	10.482
L21	33.458	47.793	6400.284	11.558	16.774	381.559	12808.990	23.901	4.997	10.805
	33.458	47.793	6400.284	11.558	16.774	381.559	12808.990	23.901	4.997	10.805
L22	34.407	49.166	6967.850	11.890	17.249	403.953	13944.869	24.588	5.162	11.161
	33.757	57.212	7422.324	11.376	16.565	448.086	14854.414	28.611	4.749	8.442
L23	33.930	58.806	8060.058	11.693	17.018	473.620	16130.723	29.408	4.906	8.722
	33.930	58.806	8060.058	11.693	17.018	473.620	16130.723	29.408	4.906	8.722
L24	34.793	60.324	8700.436	11.995	17.450	498.596	17412.320	30.168	5.056	8.988
	34.795	59.005	8516.538	11.999	17.450	488.057	17044.283	29.508	5.078	9.232
L25	35.601	60.390	9130.576	12.281	17.853	511.431	18273.166	30.201	5.217	9.486
	35.576	77.865	11662.342	12.223	17.853	653.243	23340.030	38.940	4.931	6.921
L26	35.619	77.961	11705.590	12.238	17.875	654.873	23426.583	38.988	4.939	6.932
	35.621	76.621	11512.744	12.243	17.875	644.084	23040.636	38.318	4.961	7.087
L27	36.484	78.510	12385.358	12.544	18.306	676.556	24787.013	39.263	5.110	7.301
	36.486	77.136	12177.104	12.549	18.306	665.180	24370.232	38.575	5.132	7.465
L28	37.350	78.991	13077.013	12.851	18.738	697.874	26171.233	39.503	5.282	7.683
	37.350	78.991	13077.013	12.851	18.738	697.874	26171.233	39.503	5.282	7.683
L29	38.213	80.846	14020.200	13.152	19.170	731.352	28058.848	40.431	5.432	7.901
	38.215	79.403	13779.225	13.157	19.170	718.782	27576.581	39.709	5.454	8.079
L30	39.092	81.255	14765.878	13.464	19.609	753.004	29551.185	40.635	5.606	8.305
	38.319	86.396	14377.601	12.884	18.818	764.034	28774.120	43.206	5.200	6.933
L31	38.362	88.420	15411.844	13.186	19.250	800.619	30843.967	44.218	5.349	7.132
	38.364	86.976	15170.285	13.190	19.250	788.071	30360.532	43.496	5.371	7.283
L32	39.228	88.966	16235.638	13.492	19.682	824.906	32492.640	44.491	5.521	7.486
	39.228	88.966	16235.638	13.492	19.682	824.906	32492.640	44.491	5.521	7.486
L33	40.048	90.856	17292.856	13.779	20.092	860.680	34608.467	45.437	5.663	7.679
	40.040	96.891	18393.984	13.761	20.092	915.484	36812.172	48.455	5.075	7.079
L34	40.083	96.997	18454.564	13.776	20.114	917.513	36933.411	48.508	5.583	7.089
	40.085	95.489	18179.190	13.781	20.114	903.822	36382.301	47.753	5.605	7.232
L35	40.948	97.580	19399.972	14.083	20.546	944.241	38825.471	48.799	5.754	7.425
	40.950	96.036	19105.118	14.087	20.546	929.890	38235.375	48.027	5.776	7.575
L36	41.814	98.094	20359.594	14.389	20.977	970.546	40745.977	49.056	5.926	7.772
	41.814	98.094	20359.594	14.389	20.977	970.546	40745.977	49.056	5.926	7.772
L37	42.677	100.151	21667.815	14.691	21.409	1012.073	43364.142	50.085	6.075	7.968
	42.679	98.539	21331.925	14.695	21.409	996.384	42691.918	49.279	6.097	8.13
L38	43.542	100.563	22673.476	14.997	21.841	1038.104	45376.786	50.291	6.247	8.329
	43.544	98.916	22315.382	15.001	21.841	1021.709	44660.127	49.468	6.269	8.5
L39	44.307	100.674	23526.504	15.268	22.223	1058.667	47083.964	50.347	6.401	8.68
	44.297	109.047	25409.178	15.246	22.223	1143.385	50851.789	54.534	6.291	7.864
L40	44.340	109.155	25484.704	15.261	22.244	1145.670	51002.942	54.588	6.299	7.873
	44.342	107.481	25108.396	15.265	22.244	1128.753	50249.830	53.751	6.321	8.026
L41	44.587	108.083	25532.524	15.351	22.367	1141.543	51098.644	54.052	6.363	8.08
	44.589	106.398	25149.043	15.355	22.367	1124.398	50331.177	53.209	6.385	8.239
L42	44.632	106.503	25223.263	15.370	22.388	1126.629	50479.715	53.261	6.393	8.248
	44.634	104.815	24837.936	15.375	22.388	1109.417	49708.555	52.418	6.415	8.413
L43	45.497	106.873	26329.581	15.676	22.820	1153.786	52693.808	53.446	6.564	8.609
	45.497	106.873	26329.581	15.676	22.820	1153.786	52693.808	53.446	6.564	8.609
	45.698	107.353	26686.118	15.747	22.921	1164.267	53407.351	53.687	6.599	8.655

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adj. Factor A _r	Adj. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L1 147.000-142.000				1	1	1			
L2 142.000-137.000				1	1	1			
L3 137.000-132.000				1	1	1			
L4 132.000-127.000				1	1	1			
L5 127.000-122.000				1	1	1			
L6 122.000-117.000				1	1	1			
L7 117.000-112.000				1	1	1			
L8 112.000-105.000				1	1	1			
L9 105.000-103.750				1	1	1			
L10 103.750-98.750				1	1	1			
L11 98.750-93.750				1	1	1			
L12 93.750-89.666				1	1	1			
L13 89.666-89.416				1	1	1			
L14 89.416-88.083				1	1	1			
L15 88.083-87.833				1	1	0.949309			
L16 87.833-85.833				1	1	0.94563			
L17 85.833-85.583				1	1	0.945176			
L18 85.583-84.500				1	1	0.943222			
L19 84.500-84.250				1	1	1.016			
L20 84.250-79.250				1	1	1.03345			
L21 79.250-73.750				1	1	1.03113			
L22 73.750-72.750				1	1	0.958709			
L23 72.750-67.750				1	1	0.951361			
L24 67.750-63.083				1	1	0.965952			
L25 63.083-62.833				1	1	0.979783			
L26 62.833-57.833				1	1	0.985822			
L27 57.833-52.833				1	1	0.992636			
L28 52.833-47.833				1	1	0.982374			
L29 47.833-42.750				1	1	0.99955			
L30 42.750-42.500				1	1	0.983527			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L31 42.500-37.500				1	1	0.990764			
L32 37.500-32.750				1	1	0.982492			
L33 32.750-32.500				1	1	0.986624			
L34 32.500-27.500				1	1	0.992833			
L35 27.500-22.500				1	1	0.999667			
L36 22.500-17.500				1	1	0.990917			
L37 17.500-12.500				1	1	0.998599			
L38 12.500-8.083				1	1	1.00785			
L39 8.083-7.833				1	1	1.03361			
L40 7.833-6.417				1	1	1.04696			
L41 6.417-6.167				1	1	1.01			
L42 6.167-1.167				1	1	1.01755			
L43 1.167-0.000				1	1	1.01557			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
HB058-M12-XXXF(5/8)	A	No	Surface Ar (CaAa)	147.000 - 0.000	1	1	-0.120 -0.100	0.840		0.000
*										
HB158-21U6S24-xxM_TMO(1-5/8)	B	No	Surface Ar (CaAa)	136.000 - 0.000	3	3	-0.400 -0.300	1.996		0.003
*										
CU12PSM9P6XXX(1-1/2)	B	No	Surface Ar (CaAa)	126.000 - 0.000	1	1	-0.500 -0.470	1.600		0.002
*										
Safety Line 3/8	A	No	Surface Ar (CaAa)	147.000 - 0.000	1	1	0.490 0.500	0.375		0.000
*										
MP3-05 (Surface Af)	B	No	Surface Af (CaAa)	10.500 - 0.000	1	1	0.000 0.050	5.330	14.840	0.000
MP3-05 (Surface Af)	B	No	Surface Af (CaAa)	10.500 - 0.000	1	1	0.150 0.200	5.330	14.840	0.000
*										
MP3-05 (Surface Af)	B	No	Surface Af (CaAa)	79.000 - 4.000	1	1	0.050 0.100	5.330	14.840	0.000
*										
MP3-05 (Surface Af)	A	No	Surface Af (CaAa)	90.500 - 0.000	1	1	0.050 0.100	5.330	14.840	0.000
MP3-05 (Surface Af)	C	No	Surface Af (CaAa)	90.500 - 0.000	1	1	0.050 0.100	5.330	14.840	0.000

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
*										
MP3-05 (Surface Af)	B	No	Surface Af (CaAa)	88.250 - 73.250	1	1	0.000 0.050	5.330	14.840	0.000
MP3-05 (Surface Af)	B	No	Surface Af (CaAa)	92.083 - 82.083	1	1	0.050 0.100	5.330	14.840	0.000
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	35.500 - 0.000	1	1	-0.200 -0.150	6.500	15.500	0.000
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	35.500 - 0.000	1	1	-0.400 -0.350	6.500	15.500	0.000
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	35.500 - 0.000	1	1	-0.400 -0.350	6.500	15.500	0.000
*										
CCI 6" x 1" Plate	A	No	Surface Af (CaAa)	65.583 - 35.583	1	1	-0.200 -0.150	6.000	14.000	0.000
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	65.583 - 35.583	1	1	-0.400 -0.350	6.000	14.000	0.000
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	65.583 - 35.583	1	1	-0.400 -0.350	6.000	14.000	0.000
*										

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A	Weight	
								ft ² /ft	klf	
HB114-1-0813U4-M5J(1-1/4)	A	No	No	Inside Pole	147.000 - 0.000	3	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
*										
HFT1208-24S26(1-1/4)	B	No	No	Inside Pole	116.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
*										
LDF7-50A(1-5/8)	B	No	No	Inside Pole	116.000 - 0.000	6	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
*										
LDF6-50A(1-1/4)	C	No	No	Inside Pole	106.000 - 0.000	12	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
A-DQZNB2YN1750 N(17/64)	C	No	No	Inside Pole	106.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000	
2-1/4" Rigid Conduit	C	No	No	Inside Pole	106.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.003 0.003 0.003	
PWRT-606-S(7/8)	C	No	No	Inside Pole	106.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
PWRT-608-S(13/16)	C	No	No	Inside Pole	106.000 - 0.000	6	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001	
RFFT-36SM-001-XXM(3/8)	C	No	No	Inside Pole	106.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000	
*										

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight K
L1	147.000-142.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000
L2	142.000-137.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000
L3	137.000-132.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	2.395	0.000	0.030
		C	0.000	0.000	0.000	0.000	0.000
L4	132.000-127.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	2.994	0.000	0.037
		C	0.000	0.000	0.000	0.000	0.000
L5	127.000-122.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	3.634	0.000	0.047
		C	0.000	0.000	0.000	0.000	0.000
L6	122.000-117.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	3.794	0.000	0.049
		C	0.000	0.000	0.000	0.000	0.000
L7	117.000-112.000	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	3.794	0.000	0.078
		C	0.000	0.000	0.000	0.000	0.000
L8	112.000-105.000	A	0.000	0.000	0.850	0.000	0.028
		B	0.000	0.000	5.312	0.000	0.120
		C	0.000	0.000	0.000	0.000	0.016
L9	105.000-103.750	A	0.000	0.000	0.152	0.000	0.005
		B	0.000	0.000	0.949	0.000	0.021
		C	0.000	0.000	0.000	0.000	0.020
L10	103.750-98.750	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	3.794	0.000	0.086
		C	0.000	0.000	0.000	0.000	0.079
L11	98.750-93.750	A	0.000	0.000	0.608	0.000	0.020
		B	0.000	0.000	3.794	0.000	0.086
		C	0.000	0.000	0.000	0.000	0.079
L12	93.750-89.666	A	0.000	0.000	1.237	0.000	0.017
		B	0.000	0.000	5.101	0.000	0.070
		C	0.000	0.000	0.741	0.000	0.065
L13	89.666-89.416	A	0.000	0.000	0.252	0.000	0.001
		B	0.000	0.000	0.397	0.000	0.004
		C	0.000	0.000	0.222	0.000	0.004
L14	89.416-88.083	A	0.000	0.000	1.346	0.000	0.005
		B	0.000	0.000	2.264	0.000	0.023
		C	0.000	0.000	1.184	0.000	0.021
L15	88.083-87.833	A	0.000	0.000	0.252	0.000	0.001
		B	0.000	0.000	0.619	0.000	0.004
		C	0.000	0.000	0.222	0.000	0.004
L16	87.833-85.833	A	0.000	0.000	2.020	0.000	0.008
		B	0.000	0.000	4.951	0.000	0.034
		C	0.000	0.000	1.777	0.000	0.032
L17	85.833-85.583	A	0.000	0.000	0.252	0.000	0.001
		B	0.000	0.000	0.619	0.000	0.004
		C	0.000	0.000	0.222	0.000	0.004
L18	85.583-84.500	A	0.000	0.000	1.094	0.000	0.004
		B	0.000	0.000	2.681	0.000	0.019
		C	0.000	0.000	0.962	0.000	0.017

Tower Section	Tower Elevation ft	Face	A_R	A_F	C_{AA} In Face	C_{AA} Out Face	Weight K
			ft ²	ft ²	ft ²	ft ²	
L19	84.500-84.250	A	0.000	0.000	0.252	0.000	0.001
		B	0.000	0.000	0.619	0.000	0.004
		C	0.000	0.000	0.222	0.000	0.004
L20	84.250-79.250	A	0.000	0.000	5.049	0.000	0.020
		B	0.000	0.000	10.031	0.000	0.086
		C	0.000	0.000	4.442	0.000	0.079
L21	79.250-73.750	A	0.000	0.000	5.554	0.000	0.022
		B	0.000	0.000	13.723	0.000	0.094
		C	0.000	0.000	4.886	0.000	0.087
L22	73.750-72.750	A	0.000	0.000	1.010	0.000	0.004
		B	0.000	0.000	2.091	0.000	0.017
		C	0.000	0.000	0.888	0.000	0.016
L23	72.750-67.750	A	0.000	0.000	5.049	0.000	0.020
		B	0.000	0.000	8.236	0.000	0.086
		C	0.000	0.000	4.442	0.000	0.079
L24	67.750-63.083	A	0.000	0.000	7.213	0.000	0.019
		B	0.000	0.000	10.187	0.000	0.080
		C	0.000	0.000	6.646	0.000	0.074
L25	63.083-62.833	A	0.000	0.000	0.502	0.000	0.001
		B	0.000	0.000	0.662	0.000	0.004
		C	0.000	0.000	0.472	0.000	0.004
L26	62.833-57.833	A	0.000	0.000	10.049	0.000	0.020
		B	0.000	0.000	13.236	0.000	0.086
		C	0.000	0.000	9.442	0.000	0.079
L27	57.833-52.833	A	0.000	0.000	10.049	0.000	0.020
		B	0.000	0.000	13.236	0.000	0.086
		C	0.000	0.000	9.442	0.000	0.079
L28	52.833-47.833	A	0.000	0.000	10.049	0.000	0.020
		B	0.000	0.000	13.236	0.000	0.086
		C	0.000	0.000	9.442	0.000	0.079
L29	47.833-42.750	A	0.000	0.000	10.216	0.000	0.021
		B	0.000	0.000	13.455	0.000	0.087
		C	0.000	0.000	9.598	0.000	0.081
L30	42.750-42.500	A	0.000	0.000	0.502	0.000	0.001
		B	0.000	0.000	0.662	0.000	0.004
		C	0.000	0.000	0.472	0.000	0.004
L31	42.500-37.500	A	0.000	0.000	10.049	0.000	0.020
		B	0.000	0.000	13.236	0.000	0.086
		C	0.000	0.000	9.442	0.000	0.079
L32	37.500-32.750	A	0.000	0.000	9.693	0.000	0.019
		B	0.000	0.000	12.720	0.000	0.081
		C	0.000	0.000	9.116	0.000	0.075
L33	32.750-32.500	A	0.000	0.000	0.523	0.000	0.001
		B	0.000	0.000	0.683	0.000	0.004
		C	0.000	0.000	0.493	0.000	0.004
L34	32.500-27.500	A	0.000	0.000	10.466	0.000	0.020
		B	0.000	0.000	13.652	0.000	0.086
		C	0.000	0.000	9.858	0.000	0.079
L35	27.500-22.500	A	0.000	0.000	10.466	0.000	0.020
		B	0.000	0.000	13.652	0.000	0.086
		C	0.000	0.000	9.858	0.000	0.079
L36	22.500-17.500	A	0.000	0.000	10.466	0.000	0.020
		B	0.000	0.000	13.652	0.000	0.086
		C	0.000	0.000	9.858	0.000	0.079
L37	17.500-12.500	A	0.000	0.000	10.466	0.000	0.020
		B	0.000	0.000	13.652	0.000	0.086
		C	0.000	0.000	9.858	0.000	0.079
L38	12.500-8.083	A	0.000	0.000	9.246	0.000	0.018
		B	0.000	0.000	16.141	0.000	0.076
		C	0.000	0.000	8.709	0.000	0.070
L39	8.083-7.833	A	0.000	0.000	0.523	0.000	0.001
		B	0.000	0.000	1.105	0.000	0.004

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L40	7.833-6.417	C	0.000	0.000	0.493	0.000	0.004
		A	0.000	0.000	2.964	0.000	0.006
		B	0.000	0.000	6.257	0.000	0.024
L41	6.417-6.167	C	0.000	0.000	2.792	0.000	0.022
		A	0.000	0.000	0.523	0.000	0.001
		B	0.000	0.000	1.105	0.000	0.004
L42	6.167-1.167	C	0.000	0.000	0.493	0.000	0.004
		A	0.000	0.000	10.466	0.000	0.020
		B	0.000	0.000	19.576	0.000	0.086
L43	1.167-0.000	C	0.000	0.000	9.858	0.000	0.079
		A	0.000	0.000	2.443	0.000	0.005
		B	0.000	0.000	4.120	0.000	0.020
		C	0.000	0.000	2.301	0.000	0.018

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	147.000-142.000	A	0.985	0.000	0.000	2.578	0.000	0.039
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000
L2	142.000-137.000	A	0.982	0.000	0.000	2.571	0.000	0.039
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000
L3	137.000-132.000	A	0.978	0.000	0.000	2.564	0.000	0.039
		B		0.000	0.000	3.972	0.000	0.059
		C		0.000	0.000	0.000	0.000	0.000
L4	132.000-127.000	A	0.975	0.000	0.000	2.557	0.000	0.039
		B		0.000	0.000	4.961	0.000	0.074
		C		0.000	0.000	0.000	0.000	0.000
L5	127.000-122.000	A	0.971	0.000	0.000	2.549	0.000	0.039
		B		0.000	0.000	6.372	0.000	0.095
		C		0.000	0.000	0.000	0.000	0.000
L6	122.000-117.000	A	0.967	0.000	0.000	2.541	0.000	0.039
		B		0.000	0.000	6.718	0.000	0.100
		C		0.000	0.000	0.000	0.000	0.000
L7	117.000-112.000	A	0.963	0.000	0.000	2.533	0.000	0.039
		B		0.000	0.000	6.708	0.000	0.129
		C		0.000	0.000	0.000	0.000	0.000
L8	112.000-105.000	A	0.957	0.000	0.000	3.531	0.000	0.054
		B		0.000	0.000	9.375	0.000	0.190
		C		0.000	0.000	0.000	0.000	0.016
L9	105.000-103.750	A	0.954	0.000	0.000	0.631	0.000	0.010
		B		0.000	0.000	1.674	0.000	0.034
		C		0.000	0.000	0.000	0.000	0.020
L10	103.750-98.750	A	0.951	0.000	0.000	2.509	0.000	0.038
		B		0.000	0.000	6.682	0.000	0.136
		C		0.000	0.000	0.000	0.000	0.079
L11	98.750-93.750	A	0.946	0.000	0.000	2.500	0.000	0.038
		B		0.000	0.000	6.671	0.000	0.135
		C		0.000	0.000	0.000	0.000	0.079
L12	93.750-89.666	A	0.941	0.000	0.000	2.932	0.000	0.037
		B		0.000	0.000	7.694	0.000	0.127
		C		0.000	0.000	0.898	0.000	0.070
L13	89.666-89.416	A	0.939	0.000	0.000	0.393	0.000	0.004
		B		0.000	0.000	0.566	0.000	0.008
		C		0.000	0.000	0.269	0.000	0.006
L14	89.416-88.083	A	0.938	0.000	0.000	2.097	0.000	0.019
		B		0.000	0.000	3.195	0.000	0.046

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
L15	88.083-87.833	C	0.938	0.000	0.000	1.434	0.000	0.030
		A		0.000	0.000	0.393	0.000	0.004
		B		0.000	0.000	0.834	0.000	0.010
L16	87.833-85.833	C	0.936	0.000	0.000	0.269	0.000	0.006
		A		0.000	0.000	3.143	0.000	0.029
		B		0.000	0.000	6.667	0.000	0.081
L17	85.833-85.583	C	0.935	0.000	0.000	2.151	0.000	0.045
		A		0.000	0.000	0.393	0.000	0.004
		B		0.000	0.000	0.833	0.000	0.010
L18	85.583-84.500	C	0.934	0.000	0.000	0.269	0.000	0.006
		A		0.000	0.000	1.701	0.000	0.015
		B		0.000	0.000	3.609	0.000	0.044
L19	84.500-84.250	C	0.934	0.000	0.000	1.164	0.000	0.024
		A		0.000	0.000	0.393	0.000	0.004
		B		0.000	0.000	0.833	0.000	0.010
L20	84.250-79.250	C	0.931	0.000	0.000	0.269	0.000	0.006
		A		0.000	0.000	7.841	0.000	0.071
		B		0.000	0.000	14.009	0.000	0.182
L21	79.250-73.750	C	0.925	0.000	0.000	5.372	0.000	0.112
		A		0.000	0.000	8.605	0.000	0.078
		B		0.000	0.000	18.804	0.000	0.218
L22	73.750-72.750	C	0.921	0.000	0.000	5.903	0.000	0.123
		A		0.000	0.000	1.565	0.000	0.014
		B		0.000	0.000	2.933	0.000	0.037
L23	72.750-67.750	C	0.917	0.000	0.000	1.073	0.000	0.022
		A		0.000	0.000	7.799	0.000	0.070
		B		0.000	0.000	11.963	0.000	0.166
L24	67.750-63.083	C	0.910	0.000	0.000	5.358	0.000	0.112
		A		0.000	0.000	10.217	0.000	0.080
		B		0.000	0.000	14.102	0.000	0.170
L25	63.083-62.833	C	0.907	0.000	0.000	7.951	0.000	0.120
		A		0.000	0.000	0.684	0.000	0.005
		B		0.000	0.000	0.892	0.000	0.010
L26	62.833-57.833	C	0.903	0.000	0.000	0.563	0.000	0.007
		A		0.000	0.000	13.661	0.000	0.100
		B		0.000	0.000	17.821	0.000	0.195
L27	57.833-52.833	C	0.895	0.000	0.000	11.247	0.000	0.142
		A		0.000	0.000	13.629	0.000	0.099
		B		0.000	0.000	17.788	0.000	0.194
L28	52.833-47.833	C	0.887	0.000	0.000	11.232	0.000	0.141
		A		0.000	0.000	13.596	0.000	0.098
		B		0.000	0.000	17.752	0.000	0.193
L29	47.833-42.750	C	0.877	0.000	0.000	11.215	0.000	0.141
		A		0.000	0.000	13.784	0.000	0.098
		B		0.000	0.000	18.007	0.000	0.195
L30	42.750-42.500	C	0.872	0.000	0.000	11.382	0.000	0.142
		A		0.000	0.000	0.678	0.000	0.005
		B		0.000	0.000	0.886	0.000	0.010
L31	42.500-37.500	C	0.866	0.000	0.000	0.560	0.000	0.007
		A		0.000	0.000	13.515	0.000	0.096
		B		0.000	0.000	17.667	0.000	0.190
L32	37.500-32.750	C	0.855	0.000	0.000	11.175	0.000	0.139
		A		0.000	0.000	12.929	0.000	0.091
		B		0.000	0.000	16.870	0.000	0.180
L33	32.750-32.500	C	0.849	0.000	0.000	10.727	0.000	0.132
		A		0.000	0.000	0.693	0.000	0.005
		B		0.000	0.000	0.900	0.000	0.010
L34	32.500-27.500	C	0.842	0.000	0.000	0.578	0.000	0.007
		A		0.000	0.000	13.833	0.000	0.095
		B		0.000	0.000	17.979	0.000	0.189
L35	27.500-22.500	C	0.827	0.000	0.000	11.542	0.000	0.139
		A		0.000	0.000	13.773	0.000	0.094

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
		B		0.000	0.000	17.914	0.000	0.187
		C		0.000	0.000	11.512	0.000	0.138
L36	22.500-17.500	A	0.808	0.000	0.000	13.700	0.000	0.092
		B		0.000	0.000	17.837	0.000	0.184
		C		0.000	0.000	11.475	0.000	0.137
L37	17.500-12.500	A	0.786	0.000	0.000	13.608	0.000	0.089
		B		0.000	0.000	17.739	0.000	0.181
		C		0.000	0.000	11.429	0.000	0.135
L38	12.500-8.083	A	0.756	0.000	0.000	11.919	0.000	0.076
		B		0.000	0.000	20.048	0.000	0.182
		C		0.000	0.000	10.045	0.000	0.117
L39	8.083-7.833	A	0.737	0.000	0.000	0.671	0.000	0.004
		B		0.000	0.000	1.340	0.000	0.011
		C		0.000	0.000	0.567	0.000	0.007
L40	7.833-6.417	A	0.729	0.000	0.000	3.790	0.000	0.024
		B		0.000	0.000	7.576	0.000	0.063
		C		0.000	0.000	3.205	0.000	0.037
L41	6.417-6.167	A	0.720	0.000	0.000	0.667	0.000	0.004
		B		0.000	0.000	1.335	0.000	0.011
		C		0.000	0.000	0.565	0.000	0.006
L42	6.167-1.167	A	0.682	0.000	0.000	13.195	0.000	0.078
		B		0.000	0.000	23.598	0.000	0.200
		C		0.000	0.000	11.223	0.000	0.126
L43	1.167-0.000	A	0.568	0.000	0.000	2.973	0.000	0.016
		B		0.000	0.000	4.874	0.000	0.040
		C		0.000	0.000	2.566	0.000	0.027

Feed Line Center of Pressure

Section	Elevation ft	CP_x in	CP_z in	CP_x Ice in	CP_z Ice in
L1	147.000-142.000	-0.625	-0.472	-1.058	-1.212
L2	142.000-137.000	-0.626	-0.473	-1.064	-1.219
L3	137.000-132.000	0.446	-3.223	-0.036	-3.169
L4	132.000-127.000	0.642	-3.746	0.139	-3.538
L5	127.000-122.000	0.636	-4.300	0.157	-4.149
L6	122.000-117.000	0.638	-4.461	0.164	-4.335
L7	117.000-112.000	0.643	-4.500	0.166	-4.389
L8	112.000-105.000	0.649	-4.546	0.169	-4.452
L9	105.000-103.750	0.650	-4.555	0.170	-4.466
L10	103.750-98.750	0.653	-4.578	0.173	-4.493
L11	98.750-93.750	0.658	-4.613	0.176	-4.541
L12	93.750-89.666	1.887	-3.874	0.966	-4.085
L13	89.666-89.416	0.163	-2.375	-0.154	-2.918
L14	89.416-88.083	0.468	-2.472	0.080	-2.985
L15	88.083-87.833	2.298	-3.026	1.533	-3.368
L16	87.833-85.833	2.306	-3.038	1.539	-3.380
L17	85.833-85.583	2.315	-3.050	1.545	-3.392
L18	85.583-84.500	2.320	-3.056	1.548	-3.399
L19	84.500-84.250	2.325	-3.063	1.552	-3.406
L20	84.250-79.250	1.169	-3.021	0.692	-3.404
L21	79.250-73.750	2.432	-3.145	1.742	-3.492
L22	73.750-72.750	1.515	-2.840	1.014	-3.278
L23	72.750-67.750	0.356	-2.508	0.124	-3.061
L24	67.750-63.083	-0.066	-3.016	-0.165	-3.372
L25	63.083-62.833	-0.309	-3.305	-0.349	-3.564
L26	62.833-57.833	-0.312	-3.335	-0.351	-3.592

Section	Elevation	CP _x	CP _z	CP _x Ice	CP _z Ice
	ft	in	in	in	in
L27	57.833-52.833	-0.318	-3.392	-0.356	-3.647
L28	52.833-47.833	-0.324	-3.448	-0.361	-3.699
L29	47.833-42.750	-0.330	-3.504	-0.366	-3.751
L30	42.750-42.500	-0.328	-3.485	-0.364	-3.732
L31	42.500-37.500	-0.331	-3.514	-0.365	-3.755
L32	37.500-32.750	-0.352	-3.588	-0.378	-3.815
L33	32.750-32.500	-0.379	-3.647	-0.398	-3.859
L34	32.500-27.500	-0.382	-3.676	-0.400	-3.884
L35	27.500-22.500	-0.389	-3.730	-0.403	-3.929
L36	22.500-17.500	-0.395	-3.784	-0.406	-3.971
L37	17.500-12.500	-0.401	-3.838	-0.408	-4.009
L38	12.500-8.083	1.610	-3.783	1.182	-3.946
L39	8.083-7.833	3.033	-3.733	2.348	-3.890
L40	7.833-6.417	3.040	-3.742	2.356	-3.894
L41	6.417-6.167	3.046	-3.751	2.364	-3.897
L42	6.167-1.167	2.131	-3.709	1.575	-3.846
L43	1.167-0.000	1.371	-3.683	0.965	-3.754

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	1	HB058-M12-XXXF(5/8)	142.00 - 147.00	1.0000	1.0000
L1	22	Safety Line 3/8	142.00 - 147.00	1.0000	1.0000
L2	1	HB058-M12-XXXF(5/8)	137.00 - 142.00	1.0000	1.0000
L2	22	Safety Line 3/8	137.00 - 142.00	1.0000	1.0000
L3	1	HB058-M12-XXXF(5/8)	132.00 - 137.00	1.0000	1.0000
L3	4	HB158-21U6S24-xxM_TMO(1-5/8)	132.00 - 136.00	1.0000	1.0000
L3	22	Safety Line 3/8	132.00 - 137.00	1.0000	1.0000
L4	1	HB058-M12-XXXF(5/8)	127.00 - 132.00	1.0000	1.0000
L4	4	HB158-21U6S24-xxM_TMO(1-5/8)	127.00 - 132.00	1.0000	1.0000
L4	22	Safety Line 3/8	127.00 - 132.00	1.0000	1.0000
L5	1	HB058-M12-XXXF(5/8)	122.00 - 127.00	1.0000	1.0000
L5	4	HB158-21U6S24-xxM_TMO(1-5/8)	122.00 - 127.00	1.0000	1.0000
L5	10	CU12PSM9P6XXX(1-1/2)	122.00 - 126.00	1.0000	1.0000
L5	22	Safety Line 3/8	122.00 - 127.00	1.0000	1.0000
L6	1	HB058-M12-XXXF(5/8)	117.00 - 122.00	1.0000	1.0000
L6	4	HB158-21U6S24-	117.00 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
		xxM_TMO(1-5/8)	122.00		
L6	10	CU12PSM9P6XXX(1-1/2)	117.00 - 122.00	1.0000	1.0000
L6	22	Safety Line 3/8	117.00 - 122.00	1.0000	1.0000
L7	1	HB058-M12-XXXF(5/8)	112.00 - 117.00	1.0000	1.0000
L7	4	HB158-21U6S24-xxM_TMO(1-5/8)	112.00 - 117.00	1.0000	1.0000
L7	10	CU12PSM9P6XXX(1-1/2)	112.00 - 117.00	1.0000	1.0000
L7	22	Safety Line 3/8	112.00 - 117.00	1.0000	1.0000
L8	1	HB058-M12-XXXF(5/8)	105.00 - 112.00	1.0000	1.0000
L8	4	HB158-21U6S24-xxM_TMO(1-5/8)	105.00 - 112.00	1.0000	1.0000
L8	10	CU12PSM9P6XXX(1-1/2)	105.00 - 112.00	1.0000	1.0000
L8	22	Safety Line 3/8	105.00 - 112.00	1.0000	1.0000
L9	1	HB058-M12-XXXF(5/8)	103.75 - 105.00	1.0000	1.0000
L9	4	HB158-21U6S24-xxM_TMO(1-5/8)	103.75 - 105.00	1.0000	1.0000
L9	10	CU12PSM9P6XXX(1-1/2)	103.75 - 105.00	1.0000	1.0000
L9	22	Safety Line 3/8	103.75 - 105.00	1.0000	1.0000
L10	1	HB058-M12-XXXF(5/8)	98.75 - 103.75	1.0000	1.0000
L10	4	HB158-21U6S24-xxM_TMO(1-5/8)	98.75 - 103.75	1.0000	1.0000
L10	10	CU12PSM9P6XXX(1-1/2)	98.75 - 103.75	1.0000	1.0000
L10	22	Safety Line 3/8	98.75 - 103.75	1.0000	1.0000
L11	1	HB058-M12-XXXF(5/8)	93.75 - 98.75	1.0000	1.0000
L11	4	HB158-21U6S24-xxM_TMO(1-5/8)	93.75 - 98.75	1.0000	1.0000
L11	10	CU12PSM9P6XXX(1-1/2)	93.75 - 98.75	1.0000	1.0000
L11	22	Safety Line 3/8	93.75 - 98.75	1.0000	1.0000
L12	1	HB058-M12-XXXF(5/8)	89.67 - 93.75	1.0000	1.0000
L12	4	HB158-21U6S24-xxM_TMO(1-5/8)	89.67 - 93.75	1.0000	1.0000
L12	10	CU12PSM9P6XXX(1-1/2)	89.67 - 93.75	1.0000	1.0000
L12	22	Safety Line 3/8	89.67 - 93.75	1.0000	1.0000
L12	29	MP3-05 (Surface Af)	89.67 - 90.50	1.0000	1.0000
L12	30	MP3-05 (Surface Af)	89.67 - 90.50	1.0000	1.0000
L12	33	MP3-05 (Surface Af)	89.67 - 92.08	1.0000	1.0000
L13	1	HB058-M12-XXXF(5/8)	89.42 - 89.67	1.0000	1.0000
L13	4	HB158-21U6S24-xxM_TMO(1-5/8)	89.42 - 89.67	1.0000	1.0000
L13	10	CU12PSM9P6XXX(1-1/2)	89.42 - 89.67	1.0000	1.0000
L13	22	Safety Line 3/8	89.42 - 89.67	1.0000	1.0000
L13	29	MP3-05 (Surface Af)	89.42 - 89.67	1.0000	1.0000
L13	30	MP3-05 (Surface Af)	89.42 - 89.67	1.0000	1.0000
L13	33	MP3-05 (Surface Af)	89.42 - 89.67	1.0000	1.0000
L14	1	HB058-M12-XXXF(5/8)	88.08 - 89.42	1.0000	1.0000
L14	4	HB158-21U6S24-xxM_TMO(1-5/8)	88.08 - 89.42	1.0000	1.0000
L14	10	CU12PSM9P6XXX(1-1/2)	88.08 - 89.42	1.0000	1.0000
L14	22	Safety Line 3/8	88.08 - 89.42	1.0000	1.0000
L14	29	MP3-05 (Surface Af)	88.08 - 89.42	1.0000	1.0000
L14	30	MP3-05 (Surface Af)	88.08 - 89.42	1.0000	1.0000
L14	32	MP3-05 (Surface Af)	88.08 - 88.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L14	33	MP3-05 (Surface Af)	88.08 - 89.42	1.0000	1.0000
L15	1	HB058-M12-XXXF(5/8)	87.83 - 88.08	1.0000	1.0000
L15	4	HB158-21U6S24-xxM_TMO(1-5/8)	87.83 - 88.08	1.0000	1.0000
L15	10	CU12PSM9P6XXX(1-1/2)	87.83 - 88.08	1.0000	1.0000
L15	22	Safety Line 3/8	87.83 - 88.08	1.0000	1.0000
L15	29	MP3-05 (Surface Af)	87.83 - 88.08	1.0000	1.0000
L15	30	MP3-05 (Surface Af)	87.83 - 88.08	1.0000	1.0000
L15	32	MP3-05 (Surface Af)	87.83 - 88.08	1.0000	1.0000
L15	33	MP3-05 (Surface Af)	87.83 - 88.08	1.0000	1.0000
L16	1	HB058-M12-XXXF(5/8)	85.83 - 87.83	1.0000	1.0000
L16	4	HB158-21U6S24-xxM_TMO(1-5/8)	85.83 - 87.83	1.0000	1.0000
L16	10	CU12PSM9P6XXX(1-1/2)	85.83 - 87.83	1.0000	1.0000
L16	22	Safety Line 3/8	85.83 - 87.83	1.0000	1.0000
L16	29	MP3-05 (Surface Af)	85.83 - 87.83	1.0000	1.0000
L16	30	MP3-05 (Surface Af)	85.83 - 87.83	1.0000	1.0000
L16	32	MP3-05 (Surface Af)	85.83 - 87.83	1.0000	1.0000
L16	33	MP3-05 (Surface Af)	85.83 - 87.83	1.0000	1.0000
L17	1	HB058-M12-XXXF(5/8)	85.58 - 85.83	1.0000	1.0000
L17	4	HB158-21U6S24-xxM_TMO(1-5/8)	85.58 - 85.83	1.0000	1.0000
L17	10	CU12PSM9P6XXX(1-1/2)	85.58 - 85.83	1.0000	1.0000
L17	22	Safety Line 3/8	85.58 - 85.83	1.0000	1.0000
L17	29	MP3-05 (Surface Af)	85.58 - 85.83	1.0000	1.0000
L17	30	MP3-05 (Surface Af)	85.58 - 85.83	1.0000	1.0000
L17	32	MP3-05 (Surface Af)	85.58 - 85.83	1.0000	1.0000
L17	33	MP3-05 (Surface Af)	85.58 - 85.83	1.0000	1.0000
L18	1	HB058-M12-XXXF(5/8)	84.50 - 85.58	1.0000	1.0000
L18	4	HB158-21U6S24-xxM_TMO(1-5/8)	84.50 - 85.58	1.0000	1.0000
L18	10	CU12PSM9P6XXX(1-1/2)	84.50 - 85.58	1.0000	1.0000
L18	22	Safety Line 3/8	84.50 - 85.58	1.0000	1.0000
L18	29	MP3-05 (Surface Af)	84.50 - 85.58	1.0000	1.0000
L18	30	MP3-05 (Surface Af)	84.50 - 85.58	1.0000	1.0000
L18	32	MP3-05 (Surface Af)	84.50 - 85.58	1.0000	1.0000
L18	33	MP3-05 (Surface Af)	84.50 - 85.58	1.0000	1.0000
L19	1	HB058-M12-XXXF(5/8)	84.25 - 84.50	1.0000	1.0000
L19	4	HB158-21U6S24-xxM_TMO(1-5/8)	84.25 - 84.50	1.0000	1.0000
L19	10	CU12PSM9P6XXX(1-1/2)	84.25 - 84.50	1.0000	1.0000
L19	22	Safety Line 3/8	84.25 - 84.50	1.0000	1.0000
L19	29	MP3-05 (Surface Af)	84.25 - 84.50	1.0000	1.0000
L19	30	MP3-05 (Surface Af)	84.25 - 84.50	1.0000	1.0000
L19	32	MP3-05 (Surface Af)	84.25 - 84.50	1.0000	1.0000
L19	33	MP3-05 (Surface Af)	84.25 - 84.50	1.0000	1.0000
L20	1	HB058-M12-XXXF(5/8)	79.25 - 84.25	1.0000	1.0000
L20	4	HB158-21U6S24-xxM_TMO(1-5/8)	79.25 - 84.25	1.0000	1.0000
L20	10	CU12PSM9P6XXX(1-1/2)	79.25 - 84.25	1.0000	1.0000
L20	22	Safety Line 3/8	79.25 - 84.25	1.0000	1.0000
L20	29	MP3-05 (Surface Af)	79.25 - 84.25	1.0000	1.0000
L20	30	MP3-05 (Surface Af)	79.25 - 84.25	1.0000	1.0000
L20	32	MP3-05 (Surface Af)	79.25 - 84.25	1.0000	1.0000
L20	33	MP3-05 (Surface Af)	82.08 - 84.25	1.0000	1.0000
L21	1	HB058-M12-XXXF(5/8)	73.75 - 79.25	1.0000	1.0000
L21	4	HB158-21U6S24-xxM_TMO(1-5/8)	73.75 - 79.25	1.0000	1.0000
L21	10	CU12PSM9P6XXX(1-1/2)	73.75 - 79.25	1.0000	1.0000
L21	22	Safety Line 3/8	73.75 - 79.25	1.0000	1.0000
L21	27	MP3-05 (Surface Af)	73.75 - 79.00	1.0000	1.0000
L21	29	MP3-05 (Surface Af)	73.75 - 79.25	1.0000	1.0000
L21	30	MP3-05 (Surface Af)	73.75 - 79.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L21	32	MP3-05 (Surface Af)	73.75 - 79.25	1.0000	1.0000
L22	1	HB058-M12-XXXF(5/8)	72.75 - 73.75	1.0000	1.0000
L22	4	HB158-21U6S24-xxM_TMO(1-5/8)	72.75 - 73.75	1.0000	1.0000
L22	10	CU12PSM9P6XXX(1-1/2)	72.75 - 73.75	1.0000	1.0000
L22	22	Safety Line 3/8	72.75 - 73.75	1.0000	1.0000
L22	27	MP3-05 (Surface Af)	72.75 - 73.75	1.0000	1.0000
L22	29	MP3-05 (Surface Af)	72.75 - 73.75	1.0000	1.0000
L22	30	MP3-05 (Surface Af)	72.75 - 73.75	1.0000	1.0000
L22	32	MP3-05 (Surface Af)	73.25 - 73.75	1.0000	1.0000
L23	1	HB058-M12-XXXF(5/8)	67.75 - 72.75	1.0000	1.0000
L23	4	HB158-21U6S24-xxM_TMO(1-5/8)	67.75 - 72.75	1.0000	1.0000
L23	10	CU12PSM9P6XXX(1-1/2)	67.75 - 72.75	1.0000	1.0000
L23	22	Safety Line 3/8	67.75 - 72.75	1.0000	1.0000
L23	27	MP3-05 (Surface Af)	67.75 - 72.75	1.0000	1.0000
L23	29	MP3-05 (Surface Af)	67.75 - 72.75	1.0000	1.0000
L23	30	MP3-05 (Surface Af)	67.75 - 72.75	1.0000	1.0000
L24	1	HB058-M12-XXXF(5/8)	63.08 - 67.75	1.0000	1.0000
L24	4	HB158-21U6S24-xxM_TMO(1-5/8)	63.08 - 67.75	1.0000	1.0000
L24	10	CU12PSM9P6XXX(1-1/2)	63.08 - 67.75	1.0000	1.0000
L24	22	Safety Line 3/8	63.08 - 67.75	1.0000	1.0000
L24	27	MP3-05 (Surface Af)	63.08 - 67.75	1.0000	1.0000
L24	29	MP3-05 (Surface Af)	63.08 - 67.75	1.0000	1.0000
L24	30	MP3-05 (Surface Af)	63.08 - 67.75	1.0000	1.0000
L24	39	CCI 6" x 1" Plate	63.08 - 65.58	1.0000	1.0000
L24	40	CCI 6" x 1" Plate	63.08 - 65.58	1.0000	1.0000
L24	41	CCI 6" x 1" Plate	63.08 - 65.58	1.0000	1.0000
L25	1	HB058-M12-XXXF(5/8)	62.83 - 63.08	1.0000	1.0000
L25	4	HB158-21U6S24-xxM_TMO(1-5/8)	62.83 - 63.08	1.0000	1.0000
L25	10	CU12PSM9P6XXX(1-1/2)	62.83 - 63.08	1.0000	1.0000
L25	22	Safety Line 3/8	62.83 - 63.08	1.0000	1.0000
L25	27	MP3-05 (Surface Af)	62.83 - 63.08	1.0000	1.0000
L25	29	MP3-05 (Surface Af)	62.83 - 63.08	1.0000	1.0000
L25	30	MP3-05 (Surface Af)	62.83 - 63.08	1.0000	1.0000
L25	39	CCI 6" x 1" Plate	62.83 - 63.08	1.0000	1.0000
L25	40	CCI 6" x 1" Plate	62.83 - 63.08	1.0000	1.0000
L25	41	CCI 6" x 1" Plate	62.83 - 63.08	1.0000	1.0000
L26	1	HB058-M12-XXXF(5/8)	57.83 - 62.83	1.0000	1.0000
L26	4	HB158-21U6S24-xxM_TMO(1-5/8)	57.83 - 62.83	1.0000	1.0000
L26	10	CU12PSM9P6XXX(1-1/2)	57.83 - 62.83	1.0000	1.0000
L26	22	Safety Line 3/8	57.83 - 62.83	1.0000	1.0000
L26	27	MP3-05 (Surface Af)	57.83 - 62.83	1.0000	1.0000
L26	29	MP3-05 (Surface Af)	57.83 - 62.83	1.0000	1.0000
L26	30	MP3-05 (Surface Af)	57.83 - 62.83	1.0000	1.0000
L26	39	CCI 6" x 1" Plate	57.83 - 62.83	1.0000	1.0000
L26	40	CCI 6" x 1" Plate	57.83 - 62.83	1.0000	1.0000
L26	41	CCI 6" x 1" Plate	57.83 - 62.83	1.0000	1.0000
L27	1	HB058-M12-XXXF(5/8)	52.83 - 57.83	1.0000	1.0000
L27	4	HB158-21U6S24-xxM_TMO(1-5/8)	52.83 - 57.83	1.0000	1.0000
L27	10	CU12PSM9P6XXX(1-1/2)	52.83 - 57.83	1.0000	1.0000
L27	22	Safety Line 3/8	52.83 - 57.83	1.0000	1.0000
L27	27	MP3-05 (Surface Af)	52.83 - 57.83	1.0000	1.0000
L27	29	MP3-05 (Surface Af)	52.83 - 57.83	1.0000	1.0000
L27	30	MP3-05 (Surface Af)	52.83 - 57.83	1.0000	1.0000
L27	39	CCI 6" x 1" Plate	52.83 - 57.83	1.0000	1.0000
L27	40	CCI 6" x 1" Plate	52.83 - 57.83	1.0000	1.0000
L27	41	CCI 6" x 1" Plate	52.83 - 57.83	1.0000	1.0000
L28	1	HB058-M12-XXXF(5/8)	47.83 - 52.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_g No Ice	K_g Ice
L28	4	HB158-21U6S24-xxM_TMO(1-5/8)	47.83 - 52.83	1.0000	1.0000
L28	10	CU12PSM9P6XXX(1-1/2)	47.83 - 52.83	1.0000	1.0000
L28	22	Safety Line 3/8	47.83 - 52.83	1.0000	1.0000
L28	27	MP3-05 (Surface Af)	47.83 - 52.83	1.0000	1.0000
L28	29	MP3-05 (Surface Af)	47.83 - 52.83	1.0000	1.0000
L28	30	MP3-05 (Surface Af)	47.83 - 52.83	1.0000	1.0000
L28	39	CCI 6" x 1" Plate	47.83 - 52.83	1.0000	1.0000
L28	40	CCI 6" x 1" Plate	47.83 - 52.83	1.0000	1.0000
L28	41	CCI 6" x 1" Plate	47.83 - 52.83	1.0000	1.0000
L29	1	HB058-M12-XXXF(5/8)	42.75 - 47.83	1.0000	1.0000
L29	4	HB158-21U6S24-xxM_TMO(1-5/8)	42.75 - 47.83	1.0000	1.0000
L29	10	CU12PSM9P6XXX(1-1/2)	42.75 - 47.83	1.0000	1.0000
L29	22	Safety Line 3/8	42.75 - 47.83	1.0000	1.0000
L29	27	MP3-05 (Surface Af)	42.75 - 47.83	1.0000	1.0000
L29	29	MP3-05 (Surface Af)	42.75 - 47.83	1.0000	1.0000
L29	30	MP3-05 (Surface Af)	42.75 - 47.83	1.0000	1.0000
L29	39	CCI 6" x 1" Plate	42.75 - 47.83	1.0000	1.0000
L29	40	CCI 6" x 1" Plate	42.75 - 47.83	1.0000	1.0000
L29	41	CCI 6" x 1" Plate	42.75 - 47.83	1.0000	1.0000
L30	1	HB058-M12-XXXF(5/8)	42.50 - 42.75	1.0000	1.0000
L30	4	HB158-21U6S24-xxM_TMO(1-5/8)	42.50 - 42.75	1.0000	1.0000
L30	10	CU12PSM9P6XXX(1-1/2)	42.50 - 42.75	1.0000	1.0000
L30	22	Safety Line 3/8	42.50 - 42.75	1.0000	1.0000
L30	27	MP3-05 (Surface Af)	42.50 - 42.75	1.0000	1.0000
L30	29	MP3-05 (Surface Af)	42.50 - 42.75	1.0000	1.0000
L30	30	MP3-05 (Surface Af)	42.50 - 42.75	1.0000	1.0000
L30	39	CCI 6" x 1" Plate	42.50 - 42.75	1.0000	1.0000
L30	40	CCI 6" x 1" Plate	42.50 - 42.75	1.0000	1.0000
L30	41	CCI 6" x 1" Plate	42.50 - 42.75	1.0000	1.0000
L31	1	HB058-M12-XXXF(5/8)	37.50 - 42.50	1.0000	1.0000
L31	4	HB158-21U6S24-xxM_TMO(1-5/8)	37.50 - 42.50	1.0000	1.0000
L31	10	CU12PSM9P6XXX(1-1/2)	37.50 - 42.50	1.0000	1.0000
L31	22	Safety Line 3/8	37.50 - 42.50	1.0000	1.0000
L31	27	MP3-05 (Surface Af)	37.50 - 42.50	1.0000	1.0000
L31	29	MP3-05 (Surface Af)	37.50 - 42.50	1.0000	1.0000
L31	30	MP3-05 (Surface Af)	37.50 - 42.50	1.0000	1.0000
L31	39	CCI 6" x 1" Plate	37.50 - 42.50	1.0000	1.0000
L31	40	CCI 6" x 1" Plate	37.50 - 42.50	1.0000	1.0000
L31	41	CCI 6" x 1" Plate	37.50 - 42.50	1.0000	1.0000
L32	1	HB058-M12-XXXF(5/8)	32.75 - 37.50	1.0000	1.0000
L32	4	HB158-21U6S24-xxM_TMO(1-5/8)	32.75 - 37.50	1.0000	1.0000
L32	10	CU12PSM9P6XXX(1-1/2)	32.75 - 37.50	1.0000	1.0000
L32	22	Safety Line 3/8	32.75 - 37.50	1.0000	1.0000
L32	27	MP3-05 (Surface Af)	32.75 - 37.50	1.0000	1.0000
L32	29	MP3-05 (Surface Af)	32.75 - 37.50	1.0000	1.0000
L32	30	MP3-05 (Surface Af)	32.75 - 37.50	1.0000	1.0000
L32	35	CCI 6.5" x 1.25" Plate	32.75 - 35.50	1.0000	1.0000
L32	36	CCI 6.5" x 1.25" Plate	32.75 - 35.50	1.0000	1.0000
L32	37	CCI 6.5" x 1.25" Plate	32.75 - 35.50	1.0000	1.0000
L32	39	CCI 6" x 1" Plate	35.58 - 37.50	1.0000	1.0000
L32	40	CCI 6" x 1" Plate	35.58 - 37.50	1.0000	1.0000
L32	41	CCI 6" x 1" Plate	35.58 - 37.50	1.0000	1.0000
L33	1	HB058-M12-XXXF(5/8)	32.50 - 32.75	1.0000	1.0000
L33	4	HB158-21U6S24-xxM_TMO(1-5/8)	32.50 - 32.75	1.0000	1.0000
L33	10	CU12PSM9P6XXX(1-1/2)	32.50 - 32.75	1.0000	1.0000
L33	22	Safety Line 3/8	32.50 - 32.75	1.0000	1.0000
L33	27	MP3-05 (Surface Af)	32.50 - 32.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L33	29	MP3-05 (Surface Af)	32.50 - 32.75	1.0000	1.0000
L33	30	MP3-05 (Surface Af)	32.50 - 32.75	1.0000	1.0000
L33	35	CCI 6.5" x 1.25" Plate	32.50 - 32.75	1.0000	1.0000
L33	36	CCI 6.5" x 1.25" Plate	32.50 - 32.75	1.0000	1.0000
L33	37	CCI 6.5" x 1.25" Plate	32.50 - 32.75	1.0000	1.0000
L34	1	HB058-M12-XXXF(5/8)	27.50 - 32.50	1.0000	1.0000
L34	4	HB158-21U6S24- xxM_TMO(1-5/8)	27.50 - 32.50	1.0000	1.0000
L34	10	CU12PSM9P6XXX(1-1/2)	27.50 - 32.50	1.0000	1.0000
L34	22	Safety Line 3/8	27.50 - 32.50	1.0000	1.0000
L34	27	MP3-05 (Surface Af)	27.50 - 32.50	1.0000	1.0000
L34	29	MP3-05 (Surface Af)	27.50 - 32.50	1.0000	1.0000
L34	30	MP3-05 (Surface Af)	27.50 - 32.50	1.0000	1.0000
L34	35	CCI 6.5" x 1.25" Plate	27.50 - 32.50	1.0000	1.0000
L34	36	CCI 6.5" x 1.25" Plate	27.50 - 32.50	1.0000	1.0000
L34	37	CCI 6.5" x 1.25" Plate	27.50 - 32.50	1.0000	1.0000
L35	1	HB058-M12-XXXF(5/8)	22.50 - 27.50	1.0000	1.0000
L35	4	HB158-21U6S24- xxM_TMO(1-5/8)	22.50 - 27.50	1.0000	1.0000
L35	10	CU12PSM9P6XXX(1-1/2)	22.50 - 27.50	1.0000	1.0000
L35	22	Safety Line 3/8	22.50 - 27.50	1.0000	1.0000
L35	27	MP3-05 (Surface Af)	22.50 - 27.50	1.0000	1.0000
L35	29	MP3-05 (Surface Af)	22.50 - 27.50	1.0000	1.0000
L35	30	MP3-05 (Surface Af)	22.50 - 27.50	1.0000	1.0000
L35	35	CCI 6.5" x 1.25" Plate	22.50 - 27.50	1.0000	1.0000
L35	36	CCI 6.5" x 1.25" Plate	22.50 - 27.50	1.0000	1.0000
L35	37	CCI 6.5" x 1.25" Plate	22.50 - 27.50	1.0000	1.0000
L36	1	HB058-M12-XXXF(5/8)	17.50 - 22.50	1.0000	1.0000
L36	4	HB158-21U6S24- xxM_TMO(1-5/8)	17.50 - 22.50	1.0000	1.0000
L36	10	CU12PSM9P6XXX(1-1/2)	17.50 - 22.50	1.0000	1.0000
L36	22	Safety Line 3/8	17.50 - 22.50	1.0000	1.0000
L36	27	MP3-05 (Surface Af)	17.50 - 22.50	1.0000	1.0000
L36	29	MP3-05 (Surface Af)	17.50 - 22.50	1.0000	1.0000
L36	30	MP3-05 (Surface Af)	17.50 - 22.50	1.0000	1.0000
L36	35	CCI 6.5" x 1.25" Plate	17.50 - 22.50	1.0000	1.0000
L36	36	CCI 6.5" x 1.25" Plate	17.50 - 22.50	1.0000	1.0000
L36	37	CCI 6.5" x 1.25" Plate	17.50 - 22.50	1.0000	1.0000
L37	1	HB058-M12-XXXF(5/8)	12.50 - 17.50	1.0000	1.0000
L37	4	HB158-21U6S24- xxM_TMO(1-5/8)	12.50 - 17.50	1.0000	1.0000
L37	10	CU12PSM9P6XXX(1-1/2)	12.50 - 17.50	1.0000	1.0000
L37	22	Safety Line 3/8	12.50 - 17.50	1.0000	1.0000
L37	27	MP3-05 (Surface Af)	12.50 - 17.50	1.0000	1.0000
L37	29	MP3-05 (Surface Af)	12.50 - 17.50	1.0000	1.0000
L37	30	MP3-05 (Surface Af)	12.50 - 17.50	1.0000	1.0000
L37	35	CCI 6.5" x 1.25" Plate	12.50 - 17.50	1.0000	1.0000
L37	36	CCI 6.5" x 1.25" Plate	12.50 - 17.50	1.0000	1.0000
L37	37	CCI 6.5" x 1.25" Plate	12.50 - 17.50	1.0000	1.0000
L38	1	HB058-M12-XXXF(5/8)	8.08 - 12.50	1.0000	1.0000
L38	4	HB158-21U6S24- xxM_TMO(1-5/8)	8.08 - 12.50	1.0000	1.0000
L38	10	CU12PSM9P6XXX(1-1/2)	8.08 - 12.50	1.0000	1.0000
L38	22	Safety Line 3/8	8.08 - 12.50	1.0000	1.0000
L38	24	MP3-05 (Surface Af)	8.08 - 10.50	1.0000	1.0000
L38	25	MP3-05 (Surface Af)	8.08 - 10.50	1.0000	1.0000
L38	27	MP3-05 (Surface Af)	8.08 - 12.50	1.0000	1.0000
L38	29	MP3-05 (Surface Af)	8.08 - 12.50	1.0000	1.0000
L38	30	MP3-05 (Surface Af)	8.08 - 12.50	1.0000	1.0000
L38	35	CCI 6.5" x 1.25" Plate	8.08 - 12.50	1.0000	1.0000
L38	36	CCI 6.5" x 1.25" Plate	8.08 - 12.50	1.0000	1.0000
L38	37	CCI 6.5" x 1.25" Plate	8.08 - 12.50	1.0000	1.0000
L39	1	HB058-M12-XXXF(5/8)	7.83 - 8.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _g No Ice	K _g Ice
L39	4	HB158-21U6S24-xxM_TMO(1-5/8)	7.83 - 8.08	1.0000	1.0000
L39	10	CU12PSM9P6XXX(1-1/2)	7.83 - 8.08	1.0000	1.0000
L39	22	Safety Line 3/8	7.83 - 8.08	1.0000	1.0000
L39	24	MP3-05 (Surface Af)	7.83 - 8.08	1.0000	1.0000
L39	25	MP3-05 (Surface Af)	7.83 - 8.08	1.0000	1.0000
L39	27	MP3-05 (Surface Af)	7.83 - 8.08	1.0000	1.0000
L39	29	MP3-05 (Surface Af)	7.83 - 8.08	1.0000	1.0000
L39	30	MP3-05 (Surface Af)	7.83 - 8.08	1.0000	1.0000
L39	35	CCI 6.5" x 1.25" Plate	7.83 - 8.08	1.0000	1.0000
L39	36	CCI 6.5" x 1.25" Plate	7.83 - 8.08	1.0000	1.0000
L39	37	CCI 6.5" x 1.25" Plate	7.83 - 8.08	1.0000	1.0000
L40	1	HB058-M12-XXXF(5/8)	6.42 - 7.83	1.0000	1.0000
L40	4	HB158-21U6S24-xxM_TMO(1-5/8)	6.42 - 7.83	1.0000	1.0000
L40	10	CU12PSM9P6XXX(1-1/2)	6.42 - 7.83	1.0000	1.0000
L40	22	Safety Line 3/8	6.42 - 7.83	1.0000	1.0000
L40	24	MP3-05 (Surface Af)	6.42 - 7.83	1.0000	1.0000
L40	25	MP3-05 (Surface Af)	6.42 - 7.83	1.0000	1.0000
L40	27	MP3-05 (Surface Af)	6.42 - 7.83	1.0000	1.0000
L40	29	MP3-05 (Surface Af)	6.42 - 7.83	1.0000	1.0000
L40	30	MP3-05 (Surface Af)	6.42 - 7.83	1.0000	1.0000
L40	35	CCI 6.5" x 1.25" Plate	6.42 - 7.83	1.0000	1.0000
L40	36	CCI 6.5" x 1.25" Plate	6.42 - 7.83	1.0000	1.0000
L40	37	CCI 6.5" x 1.25" Plate	6.42 - 7.83	1.0000	1.0000
L41	1	HB058-M12-XXXF(5/8)	6.17 - 6.42	1.0000	1.0000
L41	4	HB158-21U6S24-xxM_TMO(1-5/8)	6.17 - 6.42	1.0000	1.0000
L41	10	CU12PSM9P6XXX(1-1/2)	6.17 - 6.42	1.0000	1.0000
L41	22	Safety Line 3/8	6.17 - 6.42	1.0000	1.0000
L41	24	MP3-05 (Surface Af)	6.17 - 6.42	1.0000	1.0000
L41	25	MP3-05 (Surface Af)	6.17 - 6.42	1.0000	1.0000
L41	27	MP3-05 (Surface Af)	6.17 - 6.42	1.0000	1.0000
L41	29	MP3-05 (Surface Af)	6.17 - 6.42	1.0000	1.0000
L41	30	MP3-05 (Surface Af)	6.17 - 6.42	1.0000	1.0000
L41	35	CCI 6.5" x 1.25" Plate	6.17 - 6.42	1.0000	1.0000
L41	36	CCI 6.5" x 1.25" Plate	6.17 - 6.42	1.0000	1.0000
L41	37	CCI 6.5" x 1.25" Plate	6.17 - 6.42	1.0000	1.0000
L42	1	HB058-M12-XXXF(5/8)	1.17 - 6.17	1.0000	1.0000
L42	4	HB158-21U6S24-xxM_TMO(1-5/8)	1.17 - 6.17	1.0000	1.0000
L42	10	CU12PSM9P6XXX(1-1/2)	1.17 - 6.17	1.0000	1.0000
L42	22	Safety Line 3/8	1.17 - 6.17	1.0000	1.0000
L42	24	MP3-05 (Surface Af)	1.17 - 6.17	1.0000	1.0000
L42	25	MP3-05 (Surface Af)	1.17 - 6.17	1.0000	1.0000
L42	27	MP3-05 (Surface Af)	4.00 - 6.17	1.0000	1.0000
L42	29	MP3-05 (Surface Af)	1.17 - 6.17	1.0000	1.0000
L42	30	MP3-05 (Surface Af)	1.17 - 6.17	1.0000	1.0000
L42	35	CCI 6.5" x 1.25" Plate	1.17 - 6.17	1.0000	1.0000
L42	36	CCI 6.5" x 1.25" Plate	1.17 - 6.17	1.0000	1.0000
L42	37	CCI 6.5" x 1.25" Plate	1.17 - 6.17	1.0000	1.0000
L43	1	HB058-M12-XXXF(5/8)	0.00 - 1.17	1.0000	1.0000
L43	4	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 1.17	1.0000	1.0000
L43	10	CU12PSM9P6XXX(1-1/2)	0.00 - 1.17	1.0000	1.0000
L43	22	Safety Line 3/8	0.00 - 1.17	1.0000	1.0000
L43	24	MP3-05 (Surface Af)	0.00 - 1.17	1.0000	1.0000
L43	25	MP3-05 (Surface Af)	0.00 - 1.17	1.0000	1.0000
L43	29	MP3-05 (Surface Af)	0.00 - 1.17	1.0000	1.0000
L43	30	MP3-05 (Surface Af)	0.00 - 1.17	1.0000	1.0000
L43	35	CCI 6.5" x 1.25" Plate	0.00 - 1.17	1.0000	1.0000
L43	36	CCI 6.5" x 1.25" Plate	0.00 - 1.17	1.0000	1.0000
L43	37	CCI 6.5" x 1.25" Plate	0.00 - 1.17	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
L12	29	MP3-05 (Surface Af)	89.67 - 90.50	Auto	0.0737
L12	30	MP3-05 (Surface Af)	89.67 - 90.50	Auto	0.0737
L12	33	MP3-05 (Surface Af)	89.67 - 92.08	Auto	0.0781
L13	29	MP3-05 (Surface Af)	89.42 - 89.67	Auto	0.0706
L13	30	MP3-05 (Surface Af)	89.42 - 89.67	Auto	0.0706
L13	33	MP3-05 (Surface Af)	89.42 - 89.67	Auto	0.0706
L14	29	MP3-05 (Surface Af)	88.08 - 89.42	Auto	0.0662
L14	30	MP3-05 (Surface Af)	88.08 - 89.42	Auto	0.0662
L14	32	MP3-05 (Surface Af)	88.08 - 88.25	Auto	0.0629
L14	33	MP3-05 (Surface Af)	88.08 - 89.42	Auto	0.0662
L15	29	MP3-05 (Surface Af)	87.83 - 88.08	Auto	0.1278
L15	30	MP3-05 (Surface Af)	87.83 - 88.08	Auto	0.1278
L15	32	MP3-05 (Surface Af)	87.83 - 88.08	Auto	0.1278
L15	33	MP3-05 (Surface Af)	87.83 - 88.08	Auto	0.1278
L16	29	MP3-05 (Surface Af)	85.83 - 87.83	Auto	0.1215
L16	30	MP3-05 (Surface Af)	85.83 - 87.83	Auto	0.1215
L16	32	MP3-05 (Surface Af)	85.83 - 87.83	Auto	0.1215
L16	33	MP3-05 (Surface Af)	85.83 - 87.83	Auto	0.1215
L17	29	MP3-05 (Surface Af)	85.58 - 85.83	Auto	0.1152
L17	30	MP3-05 (Surface Af)	85.58 - 85.83	Auto	0.1152
L17	32	MP3-05 (Surface Af)	85.58 - 85.83	Auto	0.1152
L17	33	MP3-05 (Surface Af)	85.58 - 85.83	Auto	0.1152
L18	29	MP3-05 (Surface Af)	84.50 - 85.58	Auto	0.1114
L18	30	MP3-05 (Surface Af)	84.50 - 85.58	Auto	0.1114
L18	32	MP3-05 (Surface Af)	84.50 - 85.58	Auto	0.1114
L18	33	MP3-05 (Surface Af)	84.50 - 85.58	Auto	0.1114
L19	29	MP3-05 (Surface Af)	84.25 - 84.50	Auto	0.0953
L19	30	MP3-05 (Surface Af)	84.25 - 84.50	Auto	0.0953
L19	32	MP3-05 (Surface Af)	84.25 - 84.50	Auto	0.0953
L19	33	MP3-05 (Surface Af)	84.25 - 84.50	Auto	0.0953
L20	29	MP3-05 (Surface Af)	79.25 - 84.25	Auto	0.0764
L20	30	MP3-05 (Surface Af)	79.25 - 84.25	Auto	0.0764
L20	32	MP3-05 (Surface Af)	79.25 - 84.25	Auto	0.0764
L20	33	MP3-05 (Surface Af)	82.08 - 84.25	Auto	0.0844
L21	27	MP3-05 (Surface Af)	73.75 - 79.00	Auto	0.0462
L21	29	MP3-05 (Surface Af)	73.75 - 79.25	Auto	0.0469
L21	30	MP3-05 (Surface Af)	73.75 - 79.25	Auto	0.0469
L21	32	MP3-05 (Surface Af)	73.75 - 79.25	Auto	0.0469
L22	27	MP3-05 (Surface Af)	72.75 - 73.75	Auto	0.0824
L22	29	MP3-05 (Surface Af)	72.75 - 73.75	Auto	0.0824
L22	30	MP3-05 (Surface Af)	72.75 - 73.75	Auto	0.0824
L22	32	MP3-05 (Surface Af)	73.25 - 73.75	Auto	0.0838
L23	27	MP3-05 (Surface Af)	67.75 - 72.75	Auto	0.0655
L23	29	MP3-05 (Surface Af)	67.75 - 72.75	Auto	0.0655
L23	30	MP3-05 (Surface Af)	67.75 - 72.75	Auto	0.0655
L24	27	MP3-05 (Surface Af)	63.08 - 67.75	Auto	0.0342
L24	29	MP3-05 (Surface Af)	63.08 - 67.75	Auto	0.0342
L24	30	MP3-05 (Surface Af)	63.08 - 67.75	Auto	0.0342
L24	39	CCI 6" x 1" Plate	63.08 - 65.58	Auto	0.1367
L24	40	CCI 6" x 1" Plate	63.08 - 65.58	Auto	0.1367
L24	41	CCI 6" x 1" Plate	63.08 - 65.58	Auto	0.1367

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L25	27	MP3-05 (Surface Af)	62.83 - 63.08	Auto	0.0741
L25	29	MP3-05 (Surface Af)	62.83 - 63.08	Auto	0.0741
L25	30	MP3-05 (Surface Af)	62.83 - 63.08	Auto	0.0741
L25	39	CCI 6" x 1" Plate	62.83 - 63.08	Auto	0.1775
L25	40	CCI 6" x 1" Plate	62.83 - 63.08	Auto	0.1775
L25	41	CCI 6" x 1" Plate	62.83 - 63.08	Auto	0.1775
L26	27	MP3-05 (Surface Af)	57.83 - 62.83	Auto	0.0552
L26	29	MP3-05 (Surface Af)	57.83 - 62.83	Auto	0.0552
L26	30	MP3-05 (Surface Af)	57.83 - 62.83	Auto	0.0552
L26	39	CCI 6" x 1" Plate	57.83 - 62.83	Auto	0.1607
L26	40	CCI 6" x 1" Plate	57.83 - 62.83	Auto	0.1607
L26	41	CCI 6" x 1" Plate	57.83 - 62.83	Auto	0.1607
L27	27	MP3-05 (Surface Af)	52.83 - 57.83	Auto	0.0230
L27	29	MP3-05 (Surface Af)	52.83 - 57.83	Auto	0.0230
L27	30	MP3-05 (Surface Af)	52.83 - 57.83	Auto	0.0230
L27	39	CCI 6" x 1" Plate	52.83 - 57.83	Auto	0.1321
L27	40	CCI 6" x 1" Plate	52.83 - 57.83	Auto	0.1321
L27	41	CCI 6" x 1" Plate	52.83 - 57.83	Auto	0.1321
L28	27	MP3-05 (Surface Af)	47.83 - 52.83	Auto	0.0014
L28	29	MP3-05 (Surface Af)	47.83 - 52.83	Auto	0.0014
L28	30	MP3-05 (Surface Af)	47.83 - 52.83	Auto	0.0014
L28	39	CCI 6" x 1" Plate	47.83 - 52.83	Auto	0.1072
L28	40	CCI 6" x 1" Plate	47.83 - 52.83	Auto	0.1072
L28	41	CCI 6" x 1" Plate	47.83 - 52.83	Auto	0.1072
L29	27	MP3-05 (Surface Af)	42.75 - 47.83	Auto	0.0000
L29	29	MP3-05 (Surface Af)	42.75 - 47.83	Auto	0.0000
L29	30	MP3-05 (Surface Af)	42.75 - 47.83	Auto	0.0000
L29	39	CCI 6" x 1" Plate	42.75 - 47.83	Auto	0.0784
L29	40	CCI 6" x 1" Plate	42.75 - 47.83	Auto	0.0784
L29	41	CCI 6" x 1" Plate	42.75 - 47.83	Auto	0.0784
L30	27	MP3-05 (Surface Af)	42.50 - 42.75	Auto	0.0000
L30	29	MP3-05 (Surface Af)	42.50 - 42.75	Auto	0.0000
L30	30	MP3-05 (Surface Af)	42.50 - 42.75	Auto	0.0000
L30	39	CCI 6" x 1" Plate	42.50 - 42.75	Auto	0.1091
L30	40	CCI 6" x 1" Plate	42.50 - 42.75	Auto	0.1091
L30	41	CCI 6" x 1" Plate	42.50 - 42.75	Auto	0.1091
L31	27	MP3-05 (Surface Af)	37.50 - 42.50	Auto	0.0000
L31	29	MP3-05 (Surface Af)	37.50 - 42.50	Auto	0.0000
L31	30	MP3-05 (Surface Af)	37.50 - 42.50	Auto	0.0000
L31	39	CCI 6" x 1" Plate	37.50 - 42.50	Auto	0.0923
L31	40	CCI 6" x 1" Plate	37.50 - 42.50	Auto	0.0923
L31	41	CCI 6" x 1" Plate	37.50 - 42.50	Auto	0.0923
L32	27	MP3-05 (Surface Af)	32.75 - 37.50	Auto	0.0000
L32	29	MP3-05 (Surface Af)	32.75 - 37.50	Auto	0.0000
L32	30	MP3-05 (Surface Af)	32.75 - 37.50	Auto	0.0000
L32	35	CCI 6.5" x 1.25" Plate	32.75 - 35.50	Auto	0.1351
L32	36	CCI 6.5" x 1.25" Plate	32.75 - 35.50	Auto	0.1351
L32	37	CCI 6.5" x 1.25" Plate	32.75 - 35.50	Auto	0.1351
L32	39	CCI 6" x 1" Plate	35.58 - 37.50	Auto	0.0751
L32	40	CCI 6" x 1" Plate	35.58 - 37.50	Auto	0.0751
L32	41	CCI 6" x 1" Plate	35.58 - 37.50	Auto	0.0751
L33	27	MP3-05 (Surface Af)	32.50 - 32.75	Auto	0.0000
L33	29	MP3-05 (Surface Af)	32.50 - 32.75	Auto	0.0000
L33	30	MP3-05 (Surface Af)	32.50 - 32.75	Auto	0.0000
L33	35	CCI 6.5" x 1.25" Plate	32.50 - 32.75	Auto	0.1417
L33	36	CCI 6.5" x 1.25" Plate	32.50 - 32.75	Auto	0.1417
L33	37	CCI 6.5" x 1.25" Plate	32.50 - 32.75	Auto	0.1417
L34	27	MP3-05 (Surface Af)	27.50 - 32.50	Auto	0.0000
L34	29	MP3-05 (Surface Af)	27.50 - 32.50	Auto	0.0000
L34	30	MP3-05 (Surface Af)	27.50 - 32.50	Auto	0.0000
L34	35	CCI 6.5" x 1.25" Plate	27.50 - 32.50	Auto	0.1263
L34	36	CCI 6.5" x 1.25" Plate	27.50 - 32.50	Auto	0.1263

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L34	37	CCI 6.5" x 1.25" Plate	27.50 - 32.50	Auto	0.1263
L35	27	MP3-05 (Surface Af)	22.50 - 27.50	Auto	0.0000
L35	29	MP3-05 (Surface Af)	22.50 - 27.50	Auto	0.0000
L35	30	MP3-05 (Surface Af)	22.50 - 27.50	Auto	0.0000
L35	35	CCI 6.5" x 1.25" Plate	22.50 - 27.50	Auto	0.0999
L35	36	CCI 6.5" x 1.25" Plate	22.50 - 27.50	Auto	0.0999
L35	37	CCI 6.5" x 1.25" Plate	22.50 - 27.50	Auto	0.0999
L36	27	MP3-05 (Surface Af)	17.50 - 22.50	Auto	0.0000
L36	29	MP3-05 (Surface Af)	17.50 - 22.50	Auto	0.0000
L36	30	MP3-05 (Surface Af)	17.50 - 22.50	Auto	0.0000
L36	35	CCI 6.5" x 1.25" Plate	17.50 - 22.50	Auto	0.0768
L36	36	CCI 6.5" x 1.25" Plate	17.50 - 22.50	Auto	0.0768
L36	37	CCI 6.5" x 1.25" Plate	17.50 - 22.50	Auto	0.0768
L37	27	MP3-05 (Surface Af)	12.50 - 17.50	Auto	0.0000
L37	29	MP3-05 (Surface Af)	12.50 - 17.50	Auto	0.0000
L37	30	MP3-05 (Surface Af)	12.50 - 17.50	Auto	0.0000
L37	35	CCI 6.5" x 1.25" Plate	12.50 - 17.50	Auto	0.0504
L37	36	CCI 6.5" x 1.25" Plate	12.50 - 17.50	Auto	0.0504
L37	37	CCI 6.5" x 1.25" Plate	12.50 - 17.50	Auto	0.0504
L38	24	MP3-05 (Surface Af)	8.08 - 10.50	Auto	0.0000
L38	25	MP3-05 (Surface Af)	8.08 - 10.50	Auto	0.0000
L38	27	MP3-05 (Surface Af)	8.08 - 12.50	Auto	0.0000
L38	29	MP3-05 (Surface Af)	8.08 - 12.50	Auto	0.0000
L38	30	MP3-05 (Surface Af)	8.08 - 12.50	Auto	0.0000
L38	35	CCI 6.5" x 1.25" Plate	8.08 - 12.50	Auto	0.0254
L38	36	CCI 6.5" x 1.25" Plate	8.08 - 12.50	Auto	0.0254
L38	37	CCI 6.5" x 1.25" Plate	8.08 - 12.50	Auto	0.0254
L39	24	MP3-05 (Surface Af)	7.83 - 8.08	Auto	0.0000
L39	25	MP3-05 (Surface Af)	7.83 - 8.08	Auto	0.0000
L39	27	MP3-05 (Surface Af)	7.83 - 8.08	Auto	0.0000
L39	29	MP3-05 (Surface Af)	7.83 - 8.08	Auto	0.0000
L39	30	MP3-05 (Surface Af)	7.83 - 8.08	Auto	0.0000
L39	35	CCI 6.5" x 1.25" Plate	7.83 - 8.08	Auto	0.0315
L39	36	CCI 6.5" x 1.25" Plate	7.83 - 8.08	Auto	0.0315
L39	37	CCI 6.5" x 1.25" Plate	7.83 - 8.08	Auto	0.0315
L40	24	MP3-05 (Surface Af)	6.42 - 7.83	Auto	0.0000
L40	25	MP3-05 (Surface Af)	6.42 - 7.83	Auto	0.0000
L40	27	MP3-05 (Surface Af)	6.42 - 7.83	Auto	0.0000
L40	29	MP3-05 (Surface Af)	6.42 - 7.83	Auto	0.0000
L40	30	MP3-05 (Surface Af)	6.42 - 7.83	Auto	0.0000
L40	35	CCI 6.5" x 1.25" Plate	6.42 - 7.83	Auto	0.0243
L40	36	CCI 6.5" x 1.25" Plate	6.42 - 7.83	Auto	0.0243
L40	37	CCI 6.5" x 1.25" Plate	6.42 - 7.83	Auto	0.0243
L41	24	MP3-05 (Surface Af)	6.17 - 6.42	Auto	0.0000
L41	25	MP3-05 (Surface Af)	6.17 - 6.42	Auto	0.0000
L41	27	MP3-05 (Surface Af)	6.17 - 6.42	Auto	0.0000
L41	29	MP3-05 (Surface Af)	6.17 - 6.42	Auto	0.0000
L41	30	MP3-05 (Surface Af)	6.17 - 6.42	Auto	0.0000
L41	35	CCI 6.5" x 1.25" Plate	6.17 - 6.42	Auto	0.0171
L41	36	CCI 6.5" x 1.25" Plate	6.17 - 6.42	Auto	0.0171
L41	37	CCI 6.5" x 1.25" Plate	6.17 - 6.42	Auto	0.0171
L42	24	MP3-05 (Surface Af)	1.17 - 6.17	Auto	0.0000
L42	25	MP3-05 (Surface Af)	1.17 - 6.17	Auto	0.0000
L42	27	MP3-05 (Surface Af)	4.00 - 6.17	Auto	0.0000
L42	29	MP3-05 (Surface Af)	1.17 - 6.17	Auto	0.0000
L42	30	MP3-05 (Surface Af)	1.17 - 6.17	Auto	0.0000
L42	35	CCI 6.5" x 1.25" Plate	1.17 - 6.17	Auto	0.0038
L42	36	CCI 6.5" x 1.25" Plate	1.17 - 6.17	Auto	0.0038
L42	37	CCI 6.5" x 1.25" Plate	1.17 - 6.17	Auto	0.0038
L43	24	MP3-05 (Surface Af)	0.00 - 1.17	Auto	0.0000
L43	25	MP3-05 (Surface Af)	0.00 - 1.17	Auto	0.0000
L43	29	MP3-05 (Surface Af)	0.00 - 1.17	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L43	30	MP3-05 (Surface Af)	0.00 - 1.17	Auto	0.0000
L43	35	CCI 6.5" x 1.25" Plate	0.00 - 1.17	Auto	0.0000
L43	36	CCI 6.5" x 1.25" Plate	0.00 - 1.17	Auto	0.0000
L43	37	CCI 6.5" x 1.25" Plate	0.00 - 1.17	Auto	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment	Placement ft
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	147.000
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	147.000
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	147.000
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	147.000
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	147.000
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	147.000
800 EXTERNAL NOTCH FILTER	A	From Leg	4.000 0.000 0.000	0.000	147.000
800 EXTERNAL NOTCH FILTER	B	From Leg	4.000 0.000 0.000	0.000	147.000
800 EXTERNAL NOTCH FILTER	C	From Leg	4.000 0.000 0.000	0.000	147.000
800MHZ RRH	A	From Leg	4.000 0.000 0.000	0.000	147.000
800MHZ RRH	B	From Leg	4.000 0.000 0.000	0.000	147.000
800MHZ RRH	C	From Leg	4.000 0.000 0.000	0.000	147.000
1900MHZ RRH (65MHZ)	A	From Leg	4.000 0.000 0.000	0.000	147.000
1900MHZ RRH (65MHZ)	B	From Leg	4.000 0.000 0.000	0.000	147.000

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz ft	Lateral ft	Vert ft		
1900MHZ RRH (65MHZ)	C	From Leg	0.000			0.000	147.000
			4.000			0.000	
(3) ACU-A20-N	A	From Leg	0.000			0.000	147.000
			4.000			0.000	
(3) ACU-A20-N	B	From Leg	0.000			0.000	147.000
			4.000			0.000	
(3) ACU-A20-N	C	From Leg	0.000			0.000	147.000
			4.000			0.000	
TD-RRH8X20-25	A	From Leg	0.000			0.000	147.000
			4.000			0.000	
TD-RRH8X20-25	B	From Leg	0.000			0.000	147.000
			4.000			0.000	
TD-RRH8X20-25	C	From Leg	0.000			0.000	147.000
			4.000			0.000	
(2) 6' x 2" Mount Pipe	A	From Leg	0.000			0.000	147.000
			4.000			0.000	
(2) 6' x 2" Mount Pipe	B	From Leg	0.000			0.000	147.000
			4.000			0.000	
(2) 6' x 2" Mount Pipe	C	From Leg	0.000			0.000	147.000
			4.000			0.000	
Platform Mount [LP 1201- 1_HR-1] *	C	None	0.000			0.000	147.000
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.000			0.000	136.000
			0.000			1.000	
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.000			0.000	136.000
			0.000			1.000	
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.000			0.000	136.000
			0.000			1.000	
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	A	From Leg	4.000			0.000	136.000
			0.000			1.000	
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	B	From Leg	4.000			0.000	136.000
			0.000			1.000	
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	C	From Leg	4.000			0.000	136.000
			0.000			1.000	
APX16DWV-16DWV-S-E-A20 w/ Mount Pipe	A	From Leg	4.000			0.000	136.000
			0.000			1.000	
APX16DWV-16DWV-S-E-A20 w/ Mount Pipe	B	From Leg	4.000			0.000	136.000
			0.000			1.000	

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert	ft		
			ft	ft	°	ft	
APX16DWV-16DWV-S-E-A20 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4449 B71 B85A_T- MOBILE	A	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4449 B71 B85A_T- MOBILE	B	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4449 B71 B85A_T- MOBILE	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4415 B66A	A	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4415 B66A	B	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4415 B66A	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4424 B25_TMOV1	A	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4424 B25_TMOV1	B	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
RADIO 4424 B25_TMOV1	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			1.000				
8' x 2" Mount Pipe	A	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
8' x 2" Mount Pipe	B	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
8' x 2" Mount Pipe	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
4' x 2" Pipe Mount	A	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
4' x 2" Pipe Mount	B	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
4' x 2" Pipe Mount	C	From Leg	4.000	0.000	0.000	136.000	
			0.000				
			0.000				
RMQP-496-HK *	C	None			0.000	136.000	
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	126.000	
			0.000				
			0.000				
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	126.000	
			0.000				
			0.000				
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	126.000	
			0.000				

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert ft	ft		
			ft	ft	°	ft	
TA08025-B604	A	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
TA08025-B604	B	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
TA08025-B604	C	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
TA08025-B605	A	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
TA08025-B605	B	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
TA08025-B605	C	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
RDIDC-9181-PF-48	A	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
(2) 8' x 2" Mount Pipe	A	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
(2) 8' x 2" Mount Pipe	B	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
(2) 8' x 2" Mount Pipe	C	From Leg	0.000	4.000	0.000	126.000	
			0.000	0.000			
Commscope MC-PK8-DSH *	C	None			0.000	126.000	
RRFDC-3315-PF-48	A	From Leg	1.000	0.000	0.000	118.000	
			0.000	0.000			
RRFDC-3315-PF-48	B	From Leg	1.000	0.000	0.000	118.000	
			0.000	0.000			
Side Arm Mount [SO 102-3] *	C	None			0.000	118.000	
(2) BSF0020F3V1	C	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			
(2) LPA-80080/4CF w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			
(2) LPA-80063/6CF w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			
(2) APL868013-42T0 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			
(2) JAHH-65B-R3B w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			
(2) JAHH-65B-R3B w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	116.000	
			0.000	0.000			

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert ft	ft		
(2) JAHH-65B-R3B w/ Mount Pipe	C	From Leg	0.000	4.000	0.000	0.000	116.000
MT6407-77A w/ Mount Pipe	A	From Leg	0.000	4.000	0.000	0.000	116.000
MT6407-77A w/ Mount Pipe	B	From Leg	0.000	4.000	0.000	0.000	116.000
MT6407-77A w/ Mount Pipe	C	From Leg	0.000	4.000	0.000	0.000	116.000
CBC78T-DS-43-2X	A	From Leg	0.000	4.000	0.000	0.000	116.000
CBC78T-DS-43-2X	B	From Leg	1.000	4.000	0.000	0.000	116.000
CBC78T-DS-43-2X	C	From Leg	0.000	4.000	0.000	0.000	116.000
RFV01U-D1A	A	From Leg	0.000	4.000	0.000	0.000	116.000
RFV01U-D1A	B	From Leg	1.000	4.000	0.000	0.000	116.000
RFV01U-D1A	C	From Leg	0.000	4.000	0.000	0.000	116.000
RFV01U-D2A	A	From Leg	1.000	4.000	0.000	0.000	116.000
RFV01U-D2A	B	From Leg	0.000	4.000	0.000	0.000	116.000
RFV01U-D2A	C	From Leg	1.000	4.000	0.000	0.000	116.000
(2) 4' x 2" Pipe Mount	A	From Leg	0.000	4.000	0.000	0.000	116.000
(2) 4' x 2" Pipe Mount	B	From Leg	1.000	4.000	0.000	0.000	116.000
(2) 4' x 2" Pipe Mount	C	From Leg	0.000	4.000	0.000	0.000	116.000
Platform Mount [LP 1201-1] *	C	None	1.000		0.000	0.000	116.000
DMP65R-BU4D w/ Mount Pipe	A	From Leg	0.000	4.000	0.000	0.000	106.000
DMP65R-BU4D w/ Mount Pipe	B	From Leg	-1.000	4.000	0.000	0.000	106.000
DMP65R-BU4D w/ Mount	C	From Leg	0.000	4.000	0.000	0.000	106.000

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral ft	Vert ft	ft		
Pipe			0.000				
RADIO 4449 B5/B12	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RADIO 4449 B5/B12	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RADIO 4449 B5/B12	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4478 B14	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4478 B14	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4478 B14	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B2_CCIV2	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B2_CCIV2	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B2_CCIV2	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B30	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B30	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 32 B30	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4426 B66	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4426 B66	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
RRUS 4426 B66	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
DC6-48-60-18-8F	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
DC6-48-60-18-8F	B	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
DC6-48-60-18-8F	C	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				
AIR 6449 B77D_CCIV2 w/ Mount Pipe	A	From Leg	-1.000			0.000	106.000
			4.000				
			0.000				

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz ft	Lateral ft	Vert ft		
AIR 6449 B77D_CCVI2 w/ Mount Pipe	B	From Leg	0.000	4.000	0.000	106.000	
AIR 6449 B77D_CCVI2 w/ Mount Pipe	C	From Leg	0.000	4.000	0.000	106.000	
AIR 6419 B77G w/ Mount Pipe	A	From Leg	0.000	4.000	0.000	106.000	
AIR 6419 B77G w/ Mount Pipe	B	From Leg	-2.000	4.000	0.000	106.000	
AIR 6419 B77G w/ Mount Pipe	C	From Leg	0.000	4.000	0.000	106.000	
TPA65R-BU4D w/ Mount Pipe	A	From Leg	-2.000	4.000	0.000	106.000	
TPA65R-BU4D w/ Mount Pipe	B	From Leg	0.000	4.000	0.000	106.000	
TPA65R-BU4D w/ Mount Pipe	C	From Leg	-1.000	4.000	0.000	106.000	
DC6-48-60-18-8F	A	From Leg	0.000	4.000	0.000	106.000	
6' x 2" Mount Pipe	A	From Leg	-1.000	4.000	0.000	106.000	
6' x 2" Mount Pipe	B	From Leg	0.000	4.000	0.000	106.000	
6' x 2" Mount Pipe	C	From Leg	0.000	4.000	0.000	106.000	
9' x 2" Pipe Mount	A	From Leg	0.000	4.000	0.000	106.000	
9' x 2" Pipe Mount	B	From Leg	0.000	4.000	0.000	106.000	
9' x 2" Pipe Mount	C	From Leg	0.000	4.000	0.000	106.000	
4' x 2" Pipe Mount	A	From Leg	0.000	3.000	0.000	106.000	
Platform Mount [LP 1201- 1_KCKR-HR-1] *	C	None	0.000	0.000	0.000	106.000	
OG-860/1920/GPS-A	B	From Leg	0.000	3.000	0.000	76.000	
KS24019-L112A	C	From Leg	1.000	3.000	0.000	76.000	

Comb. No.	Description
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	147 - 142	Pole	Max Tension	26	0.000	0.000	-0.000
			Max. Compression	26	-7.724	0.011	0.015
			Max. Mx	20	-4.195	22.722	0.007
			Max. My	2	-4.201	0.001	22.693
			Max. Vy	8	4.743	-22.721	0.000
			Max. Vx	2	-4.737	0.001	22.693
			Max. Torque	12			-0.000
L2	142 - 137	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-8.287	0.022	0.030
			Max. Mx	20	-4.553	47.443	0.014
			Max. My	2	-4.560	0.002	47.383
			Max. Vy	8	5.148	-47.440	0.001
			Max. Vx	2	-5.141	0.002	47.383
			Max. Torque	12			-0.000
L3	137 - 132	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-16.346	-0.035	0.086
			Max. Mx	8	-9.136	-96.977	0.020
			Max. My	2	-9.153	-0.032	96.846
			Max. Vy	8	10.505	-96.977	0.020
			Max. Vx	2	-10.491	-0.032	96.846
			Max. Torque	12			-0.001
L4	132 - 127	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-17.027	-0.110	0.152
			Max. Mx	8	-9.584	-150.575	0.044
			Max. My	2	-9.601	-0.076	150.357
			Max. Vy	8	10.922	-150.575	0.044
			Max. Vx	2	-10.908	-0.076	150.357
			Max. Torque	12			-0.001
L5	127 - 122	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-22.642	-0.215	0.556
			Max. Mx	8	-12.930	-220.861	0.183
			Max. My	2	-12.953	-0.134	220.729
			Max. Vy	8	14.997	-220.861	0.183
			Max. Vx	2	-14.983	-0.134	220.729
			Max. Torque	8			0.250
L6	122 - 117	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-23.730	-0.508	0.749
			Max. Mx	8	-13.569	-297.528	0.220
			Max. My	2	-13.594	-0.222	297.206
			Max. Vy	8	15.899	-297.528	0.220
			Max. Vx	2	-15.875	-0.222	297.206

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L7	117 - 112	Pole	Max. Torque	22			-0.421
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-32.602	-1.598	0.219
			Max. Mx	8	-18.472	-398.583	-0.117
			Max. My	2	-18.527	-0.139	396.807
			Max. Vy	8	21.251	-398.583	-0.117
			Max. Vx	2	-20.973	-0.139	396.807
L8	112 - 105	Pole	Max. Torque	2			-1.226
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-33.146	-1.680	0.282
			Max. Mx	8	-18.895	-468.096	-0.256
			Max. My	2	-18.952	-0.020	465.371
			Max. Vy	8	21.521	-468.096	-0.256
			Max. Vx	2	-21.224	-0.020	465.371
L9	105 - 103.75	Pole	Max. Torque	2			-1.225
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.282	-1.808	0.893
			Max. Mx	8	-25.378	-587.193	-0.226
			Max. My	2	-25.445	0.164	583.133
			Max. Vy	8	27.992	-587.193	-0.226
			Max. Vx	2	-27.657	0.164	583.133
L10	103.75 - 98.75	Pole	Max. Torque	24			-1.254
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.336	-1.941	0.996
			Max. Mx	8	-26.297	-728.106	-0.441
			Max. My	2	-26.364	0.348	722.282
			Max. Vy	8	28.377	-728.106	-0.441
			Max. Vx	2	-28.016	0.348	722.282
L11	98.75 - 93.75	Pole	Max. Torque	24			-1.254
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.411	-2.073	1.099
			Max. Mx	8	-27.252	-870.899	-0.656
			Max. My	2	-27.318	0.532	863.191
			Max. Vy	8	28.744	-870.899	-0.656
			Max. Vx	2	-28.361	0.532	863.191
L12	93.75 - 89.666	Pole	Max. Torque	24			-1.253
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.332	-2.195	1.190
			Max. Mx	8	-28.058	-988.884	-0.831
			Max. My	2	-28.124	0.682	979.534
			Max. Vy	8	29.044	-988.884	-0.831
			Max. Vx	2	-28.632	0.682	979.534
L13	89.666 - 89.416	Pole	Max. Torque	24			-1.252
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.393	-2.202	1.195
			Max. Mx	8	-28.123	-996.147	-0.842
			Max. My	2	-28.189	0.690	986.692
			Max. Vy	8	29.057	-996.147	-0.842
			Max. Vx	2	-28.641	0.690	986.692
L14	89.416 - 88.083	Pole	Max. Torque	24			-1.252
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.715	-2.238	1.224
			Max. Mx	8	-28.370	-1034.957	-0.899
			Max. My	2	-28.436	0.740	1024.923
			Max. Vy	8	29.183	-1034.957	-0.899
			Max. Vx	2	-28.740	0.740	1024.923
L15	88.083 - 87.833	Pole	Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.795	-2.248	1.231

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L16	87.833 - 85.833	Pole	Max. Mx	8	-28.456	-1042.254	-0.909
			Max. My	2	-28.523	0.747	1032.107
			Max. Vy	8	29.193	-1042.254	-0.909
			Max. Vx	2	-28.745	0.747	1032.107
			Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-48.432	-2.317	1.281
			Max. Mx	8	-28.962	-1100.851	-0.995
			Max. My	2	-29.030	0.822	1089.760
			Max. Vy	8	29.400	-1100.851	-0.995
L17	85.833 - 85.583	Pole	Max. Vx	2	-28.913	0.822	1089.760
			Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-48.512	-2.326	1.287
			Max. Mx	8	-29.036	-1108.205	-1.005
			Max. My	2	-29.104	0.829	1096.990
			Max. Vy	8	29.422	-1108.205	-1.005
			Max. Vx	2	-28.930	0.829	1096.990
			Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
L18	85.583 - 84.5	Pole	Max. Compression	26	-48.858	-2.363	1.315
			Max. Mx	8	-29.306	-1140.132	-1.051
			Max. My	2	-29.376	0.870	1128.368
			Max. Vy	8	29.535	-1140.132	-1.051
			Max. Vx	2	-29.023	0.870	1128.368
			Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-48.938	-2.373	1.321
			Max. Mx	8	-29.382	-1147.519	-1.062
			Max. My	2	-29.451	0.878	1135.625
L19	84.5 - 84.25	Pole	Max. Vy	8	29.556	-1147.519	-1.062
			Max. Vx	2	-29.039	0.878	1135.625
			Max. Torque	24			-1.251
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.529	-2.522	1.439
			Max. Mx	8	-30.697	-1296.520	-1.274
			Max. My	2	-30.769	1.060	1281.781
			Max. Vy	8	30.042	-1296.520	-1.274
			Max. Vx	2	-29.431	1.060	1281.781
			Max. Torque	24			-1.251
L20	84.25 - 79.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.935	-2.566	1.471
			Max. Mx	8	-31.030	-1334.143	-1.326
			Max. My	2	-31.102	1.105	1318.621
			Max. Vy	8	30.162	-1334.143	-1.326
			Max. Vx	2	-29.530	1.105	1318.621
			Max. Torque	24			-1.250
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-54.212	-2.733	1.546
			Max. Mx	8	-33.654	-1494.919	-1.561
L21	79.25 - 73.75	Pole	Max. My	2	-33.729	1.300	1475.798
			Max. Vy	8	31.009	-1494.919	-1.561
			Max. Vx	2	-30.284	1.300	1475.798
			Max. Torque	24			-1.267
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.952	-2.847	1.640
			Max. Mx	8	-35.146	-1651.111	-1.766
			Max. My	2	-35.221	1.474	1628.131
			Max. Vy	8	31.471	-1651.111	-1.766
			Max. Vx	2	-30.662	1.474	1628.131
L22	73.75 - 72.75	Pole	Max. Mx	8	-35.146	-1651.111	-1.766
			Max. My	2	-35.221	1.474	1628.131
			Max. Vy	8	31.471	-1651.111	-1.766
			Max. Vx	2	-30.662	1.474	1628.131
			Max. Torque	24			-1.267
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.952	-2.847	1.640
			Max. Mx	8	-35.146	-1651.111	-1.766
			Max. My	2	-35.221	1.474	1628.131
			Max. Vy	8	31.471	-1651.111	-1.766
L23	72.75 - 67.75	Pole	Max. Vx	2	-30.662	1.474	1628.131
			Max. Torque	24			-1.267
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.952	-2.847	1.640
			Max. Mx	8	-35.146	-1651.111	-1.766
			Max. My	2	-35.221	1.474	1628.131
			Max. Vy	8	31.471	-1651.111	-1.766
			Max. Vx	2	-30.662	1.474	1628.131
			Max. Torque	24			-1.267
			Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L24	67.75 - 63.083	Pole	Max. Torque	24			-1.267
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-57.642	-2.960	1.737
			Max. Mx	8	-36.564	-1798.967	-1.955
			Max. My	2	-36.639	1.634	1771.988
			Max. Vy	8	31.899	-1798.967	-1.955
			Max. Vx	2	-31.005	1.634	1771.988
L25	63.083 - 62.833	Pole	Max. Torque	24			-1.266
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-57.754	-2.967	1.743
			Max. Mx	8	-36.673	-1806.944	-1.965
			Max. My	2	-36.747	1.642	1779.739
			Max. Vy	8	31.913	-1806.944	-1.965
			Max. Vx	2	-31.014	1.642	1779.739
L26	62.833 - 57.833	Pole	Max. Torque	24			-1.266
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-59.992	-3.093	1.856
			Max. Mx	8	-38.545	-1967.787	-2.167
			Max. My	2	-38.619	1.813	1935.818
			Max. Vy	8	32.419	-1967.787	-2.167
			Max. Vx	2	-31.423	1.813	1935.818
L27	57.833 - 52.833	Pole	Max. Torque	24			-1.265
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-62.252	-3.223	1.971
			Max. Mx	8	-40.456	-2131.085	-2.367
			Max. My	2	-40.527	1.982	2093.878
			Max. Vy	8	32.901	-2131.085	-2.367
			Max. Vx	2	-31.813	1.982	2093.878
L28	52.833 - 47.833	Pole	Max. Torque	24			-1.265
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.532	-3.356	2.089
			Max. Mx	8	-42.392	-2296.737	-2.566
			Max. My	2	-42.461	2.148	2253.848
			Max. Vy	8	33.363	-2296.737	-2.566
			Max. Vx	2	-32.188	2.148	2253.848
L29	47.833 - 42.75	Pole	Max. Torque	24			-1.265
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.685	-3.365	2.097
			Max. Mx	8	-42.532	-2307.852	-2.579
			Max. My	2	-42.600	2.159	2264.568
			Max. Vy	8	33.384	-2307.852	-2.579
			Max. Vx	2	-32.204	2.159	2264.568
L30	42.75 - 42.5	Pole	Max. Torque	24			-1.264
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-68.873	-3.500	2.216
			Max. Mx	8	-46.120	-2476.284	-2.776
			Max. My	2	-46.187	2.324	2426.866
			Max. Vy	8	33.967	-2476.284	-2.776
			Max. Vx	2	-32.704	2.324	2426.866
L31	42.5 - 37.5	Pole	Max. Torque	24			-1.264
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.324	-3.634	2.333
			Max. Mx	8	-48.231	-2647.184	-2.973
			Max. My	2	-48.294	2.489	2591.229
			Max. Vy	8	34.390	-2647.184	-2.973
			Max. Vx	2	-33.050	2.489	2591.229
L32	37.5 - 32.75	Pole	Max. Torque	24			-1.264
			Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L33	32.75 - 32.5	Pole	Max. Compression	26	-73.676	-3.764	2.447
			Max. Mx	8	-50.271	-2811.414	-3.159
			Max. My	2	-50.328	2.644	2748.896
			Max. Vy	8	34.770	-2811.414	-3.159
			Max. Vx	2	-33.357	2.644	2748.896
			Max. Torque	24			-1.264
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-73.807	-3.771	2.454
			Max. Mx	8	-50.399	-2820.107	-3.168
			Max. My	2	-50.455	2.652	2757.235
L34	32.5 - 27.5	Pole	Max. Vy	8	34.775	-2820.107	-3.168
			Max. Vx	2	-33.360	2.652	2757.235
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-76.437	-3.910	2.576
			Max. Mx	8	-52.689	-2994.978	-3.362
			Max. My	2	-52.740	2.813	2924.817
			Max. Vy	8	35.169	-2994.978	-3.362
			Max. Vx	2	-33.681	2.813	2924.817
			Max. Torque	24			-1.263
L35	27.5 - 22.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.086	-4.051	2.699
			Max. Mx	8	-55.019	-3171.688	-3.553
			Max. My	2	-55.062	2.971	3093.890
			Max. Vy	8	35.521	-3171.688	-3.553
			Max. Vx	2	-33.967	2.971	3093.890
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.754	-4.194	2.823
			Max. Mx	8	-57.376	-3350.071	-3.743
L36	22.5 - 17.5	Pole	Max. My	2	-57.411	3.127	3264.323
			Max. Vy	8	35.840	-3350.071	-3.743
			Max. Vx	2	-34.226	3.127	3264.323
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-84.436	-4.339	2.947
			Max. Mx	8	-59.762	-3529.941	-3.930
			Max. My	2	-59.787	3.281	3435.960
			Max. Vy	8	36.117	-3529.941	-3.930
			Max. Vx	2	-34.450	3.281	3435.960
L37	17.5 - 12.5	Pole	Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-86.839	-4.513	3.072
			Max. Mx	8	-61.892	-3689.961	-4.094
			Max. My	2	-61.909	3.415	3588.494
			Max. Vy	8	36.352	-3689.961	-4.094
			Max. Vx	2	-34.641	3.415	3588.494
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-86.988	-4.525	3.080
L38	12.5 - 8.083	Pole	Max. Mx	8	-62.037	-3699.049	-4.103
			Max. My	2	-62.053	3.423	3597.152
			Max. Vy	8	36.347	-3699.049	-4.103
			Max. Vx	2	-34.634	3.423	3597.152
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-87.831	-4.592	3.123
			Max. Mx	8	-62.773	-3750.587	-4.156
			Max. My	2	-62.788	3.465	3646.246
			Max. Vy	8	36.449	-3750.587	-4.156
L39	8.083 - 7.833	Pole	Max. Vx	2	-34.722	3.465	3646.246
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-87.831	-4.592	3.123
			Max. Mx	8	-62.773	-3750.587	-4.156
			Max. My	2	-62.788	3.465	3646.246
			Max. Vy	8	36.449	-3750.587	-4.156
			Max. Vx	2	-34.722	3.465	3646.246
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
L40	7.833 - 6.417	Pole	Max. Compression	26	-87.831	-4.592	3.123
			Max. Mx	8	-62.773	-3750.587	-4.156
			Max. My	2	-62.788	3.465	3646.246
			Max. Vy	8	36.449	-3750.587	-4.156
			Max. Vx	2	-34.722	3.465	3646.246
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-87.831	-4.592	3.123
			Max. Mx	8	-62.773	-3750.587	-4.156
			Max. My	2	-62.788	3.465	3646.246

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L41	6.417 - 6.167	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-87.975	-4.604	3.131
			Max. M _x	8	-62.916	-3759.697	-4.165
			Max. M _y	2	-62.929	3.473	3654.923
			Max. V _y	8	36.437	-3759.697	-4.165
			Max. V _x	2	-34.709	3.473	3654.923
L42	6.167 - 1.167	Pole	Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-90.806	-4.810	3.270
			Max. M _x	8	-65.462	-3942.590	-4.347
			Max. M _y	2	-65.466	3.621	3829.025
			Max. V _y	8	36.712	-3942.590	-4.347
L43	1.167 - 0	Pole	Max. V _x	2	-34.938	3.621	3829.025
			Max. Torque	24			-1.263
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-91.453	-4.850	3.298
			Max. M _x	8	-66.062	-3985.462	-4.389
			Max. M _y	2	-66.063	3.656	3869.813
			Max. V _y	8	36.775	-3985.462	-4.389
			Max. V _x	2	-34.991	3.656	3869.813
			Max. Torque	24			-1.263

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	30	91.453	-8.974	-0.008
	Max. H _x	20	66.078	36.747	0.048
	Max. H _z	2	66.078	0.048	34.963
	Max. M _x	2	3869.813	0.048	34.963
	Max. M _z	8	3985.462	-36.747	-0.048
	Max. Torsion	14	1.261	-0.048	-34.963
	Min. Vert	17	49.558	17.514	-30.255
	Min. H _x	8	66.078	-36.747	-0.048
	Min. H _z	15	49.558	-0.048	-34.963
	Min. M _x	14	-3866.608	-0.048	-34.963
	Min. M _z	20	-3980.765	36.747	0.048
	Min. Torsion	24	-1.263	17.628	30.355

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	55.065	0.000	0.000	-1.261	-1.849	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	66.078	-0.048	-34.963	-3869.813	3.656	1.262
0.9 Dead+1.0 Wind 0 deg - No Ice	49.558	-0.048	-34.963	-3814.846	4.184	1.257
1.2 Dead+1.0 Wind 30 deg - No Ice	66.078	17.514	-30.255	-3348.584	-1940.196	0.923
0.9 Dead+1.0 Wind 30 deg - No Ice	49.558	17.514	-30.255	-3300.963	-1912.260	0.918
1.2 Dead+1.0 Wind 60 deg - No Ice	66.078	30.384	-17.440	-1930.512	-3364.781	0.337

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Ice						
0.9 Dead+1.0 Wind 60 deg - No Ice	49.558	30.384	-17.440	-1902.889	-3316.759	0.333
1.2 Dead+1.0 Wind 90 deg - No Ice	66.078	36.747	0.048	4.389	-3985.462	-0.338
0.9 Dead+1.0 Wind 90 deg - No Ice	49.558	36.747	0.048	4.726	-3929.194	-0.339
1.2 Dead+1.0 Wind 120 deg - No Ice	66.078	30.432	17.523	1937.669	-3370.749	-0.922
0.9 Dead+1.0 Wind 120 deg - No Ice	49.558	30.432	17.523	1910.743	-3322.645	-0.920
1.2 Dead+1.0 Wind 150 deg - No Ice	66.078	17.628	30.355	3355.323	-1952.864	-1.260
0.9 Dead+1.0 Wind 150 deg - No Ice	49.558	17.628	30.355	3308.423	-1924.761	-1.255
1.2 Dead+1.0 Wind 180 deg - No Ice	66.078	0.048	34.963	3866.608	-8.335	-1.261
0.9 Dead+1.0 Wind 180 deg - No Ice	49.558	0.048	34.963	3812.479	-7.638	-1.255
1.2 Dead+1.0 Wind 210 deg - No Ice	66.078	-17.514	30.255	3345.366	1935.514	-0.924
0.9 Dead+1.0 Wind 210 deg - No Ice	49.558	-17.514	30.255	3298.589	1908.803	-0.919
1.2 Dead+1.0 Wind 240 deg - No Ice	66.078	-30.384	17.440	1927.293	3360.090	-0.340
0.9 Dead+1.0 Wind 240 deg - No Ice	49.558	-30.384	17.440	1900.514	3313.296	-0.336
1.2 Dead+1.0 Wind 270 deg - No Ice	66.078	-36.747	-0.048	-7.601	3980.765	0.336
0.9 Dead+1.0 Wind 270 deg - No Ice	49.558	-36.747	-0.048	-7.095	3925.727	0.337
1.2 Dead+1.0 Wind 300 deg - No Ice	66.078	-30.432	-17.523	-1940.872	3366.055	0.923
0.9 Dead+1.0 Wind 300 deg - No Ice	49.558	-30.432	-17.523	-1913.106	3319.180	0.921
1.2 Dead+1.0 Wind 330 deg - No Ice	66.078	-17.628	-30.355	-3358.525	1948.179	1.263
0.9 Dead+1.0 Wind 330 deg - No Ice	49.558	-17.628	-30.355	-3310.785	1921.302	1.258
1.2 Dead+1.0 Ice+1.0 Temp	91.453	0.000	-0.000	-3.298	-4.850	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	91.453	-0.008	-8.948	-1002.485	-4.012	0.248
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	91.453	4.480	-7.745	-868.115	-505.301	0.176
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	91.453	7.768	-4.467	-502.054	-872.551	0.056
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	91.453	8.974	0.008	-2.388	-1007.356	-0.079
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	91.453	7.776	4.481	496.997	-873.597	-0.193
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	91.453	4.494	7.753	862.293	-507.113	-0.254
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	91.453	0.008	8.948	995.618	-6.105	-0.248
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	91.453	-4.480	7.745	861.247	495.185	-0.175
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	91.453	-7.768	4.467	495.186	862.434	-0.055
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	91.453	-8.974	-0.008	-4.480	997.239	0.079
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	91.453	-7.776	-4.481	-503.865	863.479	0.193

Load Combination	Vertical	Shear _x	Shear _y	Overturning Moment, M _x	Overturning Moment, M _y	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	91.453	-4.494	-7.753	-869.160	496.996	0.255
Dead+Wind 0 deg - Service	55.065	-0.011	-7.968	-875.841	-0.591	0.290
Dead+Wind 30 deg - Service	55.065	3.992	-6.895	-758.001	-440.048	0.210
Dead+Wind 60 deg - Service	55.065	6.925	-3.975	-437.412	-762.116	0.073
Dead+Wind 90 deg - Service	55.065	8.374	0.011	0.025	-902.530	-0.083
Dead+Wind 120 deg - Service	55.065	6.935	3.994	437.099	-763.471	-0.216
Dead+Wind 150 deg - Service	55.065	4.017	6.918	757.599	-442.916	-0.292
Dead+Wind 180 deg - Service	55.065	0.011	7.968	873.181	-3.300	-0.290
Dead+Wind 210 deg - Service	55.065	-3.992	6.895	755.341	436.157	-0.210
Dead+Wind 240 deg - Service	55.065	-6.925	3.975	434.752	758.225	-0.074
Dead+Wind 270 deg - Service	55.065	-8.374	-0.011	-2.685	898.638	0.082
Dead+Wind 300 deg - Service	55.065	-6.935	-3.994	-439.758	759.579	0.216
Dead+Wind 330 deg - Service	55.065	-4.017	-6.918	-760.259	439.025	0.292

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-55.065	0.000	0.000	55.065	0.000	0.000%
2	-0.048	-66.078	-34.963	0.048	66.078	34.963	0.000%
3	-0.048	-49.558	-34.963	0.048	49.558	34.963	0.000%
4	17.514	-66.078	-30.255	-17.514	66.078	30.255	0.000%
5	17.514	-49.558	-30.255	-17.514	49.558	30.255	0.000%
6	30.384	-66.078	-17.440	-30.384	66.078	17.440	0.000%
7	30.384	-49.558	-17.440	-30.384	49.558	17.440	0.000%
8	36.747	-66.078	0.048	-36.747	66.078	-0.048	0.000%
9	36.747	-49.558	0.048	-36.747	49.558	-0.048	0.000%
10	30.432	-66.078	17.523	-30.432	66.078	-17.523	0.000%
11	30.432	-49.558	17.523	-30.432	49.558	-17.523	0.000%
12	17.628	-66.078	30.355	-17.628	66.078	-30.355	0.000%
13	17.628	-49.558	30.355	-17.628	49.558	-30.355	0.000%
14	0.048	-66.078	34.963	-0.048	66.078	-34.963	0.000%
15	0.048	-49.558	34.963	-0.048	49.558	-34.963	0.000%
16	-17.514	-66.078	30.255	17.514	66.078	-30.255	0.000%
17	-17.514	-49.558	30.255	17.514	49.558	-30.255	0.000%
18	-30.384	-66.078	17.440	30.384	66.078	-17.440	0.000%
19	-30.384	-49.558	17.440	30.384	49.558	-17.440	0.000%
20	-36.747	-66.078	-0.048	36.747	66.078	0.048	0.000%
21	-36.747	-49.558	-0.048	36.747	49.558	0.048	0.000%
22	-30.432	-66.078	-17.523	30.432	66.078	17.523	0.000%
23	-30.432	-49.558	-17.523	30.432	49.558	17.523	0.000%
24	-17.628	-66.078	-30.355	17.628	66.078	30.355	0.000%
25	-17.628	-49.558	-30.355	17.628	49.558	30.355	0.000%
26	0.000	-91.453	0.000	-0.000	91.453	0.000	0.000%
27	-0.008	-91.453	-8.948	0.008	91.453	8.948	0.000%
28	4.480	-91.453	-7.745	-4.480	91.453	7.745	0.000%
29	7.768	-91.453	-4.467	-7.768	91.453	4.467	0.000%
30	8.974	-91.453	0.008	-8.974	91.453	-0.008	0.000%
31	7.776	-91.453	4.481	-7.776	91.453	-4.481	0.000%
32	4.494	-91.453	7.753	-4.494	91.453	-7.753	0.000%
33	0.008	-91.453	8.948	-0.008	91.453	-8.948	0.000%
34	-4.480	-91.453	7.745	4.480	91.453	-7.745	0.000%
35	-7.768	-91.453	4.467	7.768	91.453	-4.467	0.000%
36	-8.974	-91.453	-0.008	8.974	91.453	0.008	0.000%
37	-7.776	-91.453	-4.481	7.776	91.453	4.481	0.000%
38	-4.494	-91.453	-7.753	4.494	91.453	7.753	0.000%
39	-0.011	-55.065	-7.968	0.011	55.065	7.968	0.000%
40	3.992	-55.065	-6.895	-3.992	55.065	6.895	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
41	6.925	-55.065	-3.975	-6.925	55.065	3.975	0.000%
42	8.374	-55.065	0.011	-8.374	55.065	-0.011	0.000%
43	6.935	-55.065	3.994	-6.935	55.065	-3.994	0.000%
44	4.017	-55.065	6.918	-4.017	55.065	-6.918	0.000%
45	0.011	-55.065	7.968	-0.011	55.065	-7.968	0.000%
46	-3.992	-55.065	6.895	3.992	55.065	-6.895	0.000%
47	-6.925	-55.065	3.975	6.925	55.065	-3.975	0.000%
48	-8.374	-55.065	-0.011	8.374	55.065	0.011	0.000%
49	-6.935	-55.065	-3.994	6.935	55.065	3.994	0.000%
50	-4.017	-55.065	-6.918	4.017	55.065	6.918	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	5	0.00000001	0.00090580
3	Yes	5	0.00000001	0.00041525
4	Yes	7	0.00000001	0.00013240
5	Yes	6	0.00000001	0.00066992
6	Yes	7	0.00000001	0.00013022
7	Yes	6	0.00000001	0.00065825
8	Yes	5	0.00000001	0.00045680
9	Yes	5	0.00000001	0.00017172
10	Yes	7	0.00000001	0.00012977
11	Yes	6	0.00000001	0.00065577
12	Yes	7	0.00000001	0.00013388
13	Yes	6	0.00000001	0.00067744
14	Yes	6	0.00000001	0.00007572
15	Yes	5	0.00000001	0.00051569
16	Yes	7	0.00000001	0.00012863
17	Yes	6	0.00000001	0.00065083
18	Yes	7	0.00000001	0.00013094
19	Yes	6	0.00000001	0.00066268
20	Yes	5	0.00000001	0.00057867
21	Yes	5	0.00000001	0.00023973
22	Yes	7	0.00000001	0.00013309
23	Yes	6	0.00000001	0.00067335
24	Yes	7	0.00000001	0.00012922
25	Yes	6	0.00000001	0.00065312
26	Yes	4	0.00000001	0.00039561
27	Yes	6	0.00000001	0.00076476
28	Yes	6	0.00000001	0.00093474
29	Yes	6	0.00000001	0.00093406
30	Yes	6	0.00000001	0.00076886
31	Yes	6	0.00000001	0.00092855
32	Yes	6	0.00000001	0.00093088
33	Yes	6	0.00000001	0.00075892
34	Yes	6	0.00000001	0.00091332
35	Yes	6	0.00000001	0.00091578
36	Yes	6	0.00000001	0.00075885
37	Yes	6	0.00000001	0.00092657
38	Yes	6	0.00000001	0.00092241
39	Yes	5	0.00000001	0.0009270
40	Yes	5	0.00000001	0.00043148
41	Yes	5	0.00000001	0.00041350
42	Yes	5	0.00000001	0.00008392
43	Yes	5	0.00000001	0.00040525

44	Yes	5	0.00000001	0.00043934
45	Yes	5	0.00000001	0.00009360
46	Yes	5	0.00000001	0.00039811
47	Yes	5	0.00000001	0.00041553
48	Yes	5	0.00000001	0.00008397
49	Yes	5	0.00000001	0.00043268
50	Yes	5	0.00000001	0.00040068

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
L1	147 - 142 (1)	TP22.85x22x0.25	5.000	0.000	0.0	17.933	-4.195	968.392	0.004
L2	142 - 137 (2)	TP23.7x22.85x0.25	5.000	0.000	0.0	18.608	-4.553	1004.820	0.005
L3	137 - 132 (3)	TP24.55x23.7x0.25	5.000	0.000	0.0	19.282	-9.136	1041.250	0.009
L4	132 - 127 (4)	TP25.4x24.55x0.25	5.000	0.000	0.0	19.957	-9.584	1077.670	0.009
L5	127 - 122 (5)	TP26.251x25.4x0.25	5.000	0.000	0.0	20.632	-12.930	1114.100	0.012
L6	122 - 117 (6)	TP27.101x26.251x0.25	5.000	0.000	0.0	21.306	-13.569	1150.530	0.012
L7	117 - 112 (7)	TP27.951x27.101x0.25	5.000	0.000	0.0	21.981	-18.472	1186.950	0.016
L8	112 - 105 (8)	TP29.141x27.951x0.25	7.000	0.000	0.0	22.419	-18.895	1210.630	0.016
L9	105 - 103.75 (9)	TP28.854x28.003x0.313	5.000	0.000	0.0	28.309	-25.378	1528.700	0.017
L10	103.75 - 98.75 (10)	TP29.704x28.854x0.313	5.000	0.000	0.0	29.153	-26.297	1574.240	0.017
L11	98.75 - 93.75 (11)	TP30.554x29.704x0.313	5.000	0.000	0.0	29.996	-27.252	1619.780	0.017
L12	93.75 - 89.666 (12)	TP31.249x30.554x0.313	4.084	0.000	0.0	30.685	-28.058	1656.970	0.017
L13	89.666 - 89.416 (13)	TP31.291x31.249x0.313	0.250	0.000	0.0	30.727	-28.123	1659.250	0.017
L14	89.416 - 88.083 (14)	TP31.518x31.291x0.313	1.333	0.000	0.0	30.952	-28.369	1671.390	0.017
L15	88.083 - 87.833 (15)	TP31.56x31.518x0.513	0.250	0.000	0.0	50.505	-28.456	2727.250	0.010
L16	87.833 - 85.833 (16)	TP31.9x31.56x0.513	2.000	0.000	0.0	51.058	-28.962	2757.120	0.011
L17	85.833 - 85.583 (17)	TP31.943x31.9x0.513	0.250	0.000	0.0	51.127	-29.036	2760.860	0.011
L18	85.583 - 84.5 (18)	TP32.127x31.943x0.513	1.083	0.000	0.0	51.426	-29.306	2777.030	0.011
L19	84.5 - 84.25 (19)	TP32.17x32.127x0.475	0.250	0.000	0.0	47.784	-29.382	2580.350	0.011
L20	84.25 - 79.25 (20)	TP33.02x32.17x0.463	5.000	0.000	0.0	47.793	-30.697	2580.830	0.012
L21	79.25 - 73.75 (21)	TP33.955x33.02x0.463	5.500	0.000	0.0	48.105	-31.030	2597.680	0.012
L22	73.75 - 72.75 (22)	TP33.5x32.607x0.563	5.250	0.000	0.0	58.806	-33.654	3175.510	0.011
L23	72.75 - 67.75 (23)	TP34.35x33.5x0.563	5.000	0.000	0.0	60.324	-35.146	3257.480	0.011
L24	67.75 - 63.083 (24)	TP35.144x34.35x0.55	4.667	0.000	0.0	60.390	-36.565	3261.070	0.011
L25	63.083 - 62.833 (25)	TP35.186x35.144x0.713	0.250	0.000	0.0	77.961	-36.673	4209.920	0.009
L26	62.833 - 57.833 (26)	TP36.036x35.186x0.7	5.000	0.000	0.0	78.510	-38.545	4239.560	0.009

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u φP _n
L27	57.833 - 52.833 (27)	TP36.887x36.036x0.688	5.000	0.000	0.0	78.991	-40.456	4265.510	0.009
L28	52.833 - 47.833 (28)	TP37.737x36.887x0.688	5.000	0.000	0.0	80.846	-42.392	4365.690	0.010
L29	47.833 - 42.75 (29)	TP38.601x37.737x0.675	5.083	0.000	0.0	79.524	-42.532	4294.310	0.010
L30	42.75 - 42.5 (30)	TP37.894x37.043x0.75	5.000	0.000	0.0	88.420	-46.120	4774.690	0.010
L31	42.5 - 37.5 (31)	TP38.744x37.894x0.738	5.000	0.000	0.0	88.966	-48.231	4804.160	0.010
L32	37.5 - 32.75 (32)	TP39.551x38.744x0.738	4.750	0.000	0.0	90.856	-50.271	4906.250	0.010
L33	32.75 - 32.5 (33)	TP39.594x39.551x0.788	0.250	0.000	0.0	96.997	-50.399	5237.860	0.010
L34	32.5 - 27.5 (34)	TP40.444x39.594x0.775	5.000	0.000	0.0	97.580	-52.689	5269.310	0.010
L35	27.5 - 22.5 (35)	TP41.294x40.444x0.763	5.000	0.000	0.0	98.094	-55.019	5297.070	0.010
L36	22.5 - 17.5 (36)	TP42.144x41.294x0.763	5.000	0.000	0.0	100.151	-57.376	5408.180	0.011
L37	17.5 - 12.5 (37)	TP42.995x42.144x0.75	5.000	0.000	0.0	100.563	-59.762	5430.410	0.011
L38	12.5 - 8.083 (38)	TP43.746x42.995x0.738	4.417	0.000	0.0	100.674	-61.892	5436.420	0.011
L39	8.083 - 7.833 (39)	TP43.788x43.746x0.8	0.250	0.000	0.0	109.155	-62.037	5894.390	0.011
L40	7.833 - 6.417 (40)	TP44.029x43.788x0.788	1.416	0.000	0.0	108.083	-62.773	5836.480	0.011
L41	6.417 - 6.167 (41)	TP44.071x44.029x0.775	0.250	0.000	0.0	106.503	-62.916	5751.140	0.011
L42	6.167 - 1.167 (42)	TP44.922x44.071x0.763	5.000	0.000	0.0	106.873	-65.462	5771.120	0.011
L43	1.167 - 0 (43)	TP45.12x44.922x0.763	1.167	0.000	0.0	107.353	-66.062	5797.060	0.011

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{nx} kip-ft	Ratio M _{ux} φM _{nx}	M _{uy} kip-ft	φM _{ny} kip-ft	Ratio M _{uy} φM _{ny}
L1	147 - 142 (1)	TP22.85x22x0.25	22.722	569.745	0.040	0.000	569.745	0.000
L2	142 - 137 (2)	TP23.7x22.85x0.25	47.443	613.658	0.077	0.000	613.658	0.000
L3	137 - 132 (3)	TP24.55x23.7x0.25	96.977	659.200	0.147	0.000	659.200	0.000
L4	132 - 127 (4)	TP25.4x24.55x0.25	150.575	703.273	0.214	0.000	703.273	0.000
L5	127 - 122 (5)	TP26.251x25.4x0.25	220.861	745.674	0.296	0.000	745.674	0.000
L6	122 - 117 (6)	TP27.101x26.251x0.25	297.527	788.872	0.377	0.000	788.872	0.000
L7	117 - 112 (7)	TP27.951x27.101x0.25	398.583	832.827	0.479	0.000	832.827	0.000
L8	112 - 105 (8)	TP29.141x27.951x0.25	468.097	861.783	0.543	0.000	861.783	0.000
L9	105 - 103.75 (9)	TP28.854x28.003x0.313	587.192	1135.950	0.517	0.000	1135.950	0.000
L10	103.75 - 98.75 (10)	TP29.704x28.854x0.313	728.107	1205.017	0.604	0.000	1205.017	0.000
L11	98.75 - 93.75 (11)	TP30.554x29.704x0.313	870.900	1276.117	0.682	0.000	1276.117	0.000
L12	93.75 - 89.666 (12)	TP31.249x30.554x0.313	988.883	1335.017	0.741	0.000	1335.017	0.000
L13	89.666 - 89.416 (13)	TP31.291x31.249x0.313	996.150	1338.267	0.744	0.000	1338.267	0.000
L14	89.416 - 88.083 (14)	TP31.518x31.291x0.313	1034.958	1355.650	0.763	0.000	1355.650	0.000
L15	88.083 - 87.833 (15)	TP31.56x31.518x0.513	1042.258	2192.508	0.475	0.000	2192.508	0.000
L16	87.833 - 85.833 (16)	TP31.9x31.56x0.513	1100.850	2241.192	0.491	0.000	2241.192	0.000

Section No.	Elevation ft	Size	M_{ux}	ϕM_{nx}	Ratio	M_{uy}	ϕM_{ny}	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{nx}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{ny}}$
L17	85.833 - 85.583 (17)	TP31.943x31.9x0.513	1108.208	2247.317	0.493	0.000	2247.317	0.000
L18	85.583 - 84.5 (18)	TP32.127x31.943x0.513	1140.133	2273.942	0.501	0.000	2273.942	0.000
L19	84.5 - 84.25 (19)	TP32.17x32.127x0.475	1147.517	2120.792	0.541	0.000	2120.792	0.000
L20	84.25 - 79.25 (20)	TP33.02x32.17x0.463	1296.517	2180.608	0.595	0.000	2180.608	0.000
L21	79.25 - 73.75 (21)	TP33.955x33.02x0.463	1334.142	2209.375	0.604	0.000	2209.375	0.000
L22	73.75 - 72.75 (22)	TP33.5x32.607x0.563	1494.917	2706.733	0.552	0.000	2706.733	0.000
L23	72.75 - 67.75 (23)	TP34.35x33.5x0.563	1651.108	2849.475	0.579	0.000	2849.475	0.000
L24	67.75 - 63.083 (24)	TP35.144x34.35x0.55	1798.967	2922.825	0.615	0.000	2922.825	0.000
L25	63.083 - 62.833 (25)	TP35.186x35.144x0.713	1806.942	3742.600	0.483	0.000	3742.600	0.000
L26	62.833 - 57.833 (26)	TP36.036x35.186x0.7	1967.792	3866.517	0.509	0.000	3866.517	0.000
L27	57.833 - 52.833 (27)	TP36.887x36.036x0.688	2131.083	3988.350	0.534	0.000	3988.350	0.000
L28	52.833 - 47.833 (28)	TP37.737x36.887x0.688	2296.742	4179.675	0.550	0.000	4179.675	0.000
L29	47.833 - 42.75 (29)	TP38.601x37.737x0.675	2307.850	4120.508	0.560	0.000	4120.508	0.000
L30	42.75 - 42.5 (30)	TP37.894x37.043x0.75	2476.283	4575.542	0.541	0.000	4575.542	0.000
L31	42.5 - 37.5 (31)	TP38.744x37.894x0.738	2647.183	4714.342	0.562	0.000	4714.342	0.000
L32	37.5 - 32.75 (32)	TP39.551x38.744x0.738	2811.417	4918.783	0.572	0.000	4918.783	0.000
L33	32.75 - 32.5 (33)	TP39.594x39.551x0.788	2820.108	5243.583	0.538	0.000	5243.583	0.000
L34	32.5 - 27.5 (34)	TP40.444x39.594x0.775	2994.983	5396.342	0.555	0.000	5396.342	0.000
L35	27.5 - 22.5 (35)	TP41.294x40.444x0.763	3171.692	5546.675	0.572	0.000	5546.675	0.000
L36	22.5 - 17.5 (36)	TP42.144x41.294x0.763	3350.075	5783.992	0.579	0.000	5783.992	0.000
L37	17.5 - 12.5 (37)	TP42.995x42.144x0.75	3529.942	5932.767	0.595	0.000	5932.767	0.000
L38	12.5 - 8.083 (38)	TP43.746x42.995x0.738	3689.967	6050.283	0.610	0.000	6050.283	0.000
L39	8.083 - 7.833 (39)	TP43.788x43.746x0.8	3699.050	6547.508	0.565	0.000	6547.508	0.000
L40	7.833 - 6.417 (40)	TP44.029x43.788x0.788	3750.592	6523.917	0.575	0.000	6523.917	0.000
L41	6.417 - 6.167 (41)	TP44.071x44.029x0.775	3759.700	6438.683	0.584	0.000	6438.683	0.000
L42	6.167 - 1.167 (42)	TP44.922x44.071x0.763	3942.592	6593.892	0.598	0.000	6593.892	0.000
L43	1.167 - 0 (43)	TP45.12x44.922x0.763	3985.467	6653.783	0.599	0.000	6653.783	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u	ϕV_n	Ratio	Actual T_u	ϕT_n	Ratio
			K	K	$\frac{V_u}{\phi V_n}$	kip-ft	kip-ft	$\frac{T_u}{\phi T_n}$
L1	147 - 142 (1)	TP22.85x22x0.25	4.743	290.518	0.016	0.000	574.994	0.000
L2	142 - 137 (2)	TP23.7x22.85x0.25	5.147	301.446	0.017	0.000	619.065	0.000
L3	137 - 132 (3)	TP24.55x23.7x0.25	10.505	312.374	0.034	0.000	664.763	0.000
L4	132 - 127 (4)	TP25.4x24.55x0.25	10.922	323.302	0.034	0.000	712.089	0.000

Section No.	Elevation ft	Size	Actual	ϕV_n	Ratio	Actual	ϕT_n	Ratio
			V_u K	K	V_u ϕV_n	T_u kip-ft	T_u ϕT_n	
L5	127 - 122 (5)	TP26.251x25.4x0.25	14.997	334.230	0.045	0.250	761.042	0.000
L6	122 - 117 (6)	TP27.101x26.251x0.25	15.899	345.158	0.046	0.368	811.622	0.000
L7	117 - 112 (7)	TP27.951x27.101x0.25	21.251	356.086	0.060	0.094	863.825	0.000
L8	112 - 105 (8)	TP29.141x27.951x0.25	21.521	363.189	0.059	0.093	898.633	0.000
L9	105 - 103.75 (9)	TP28.854x28.003x0.313	27.992	458.610	0.061	0.386	1146.292	0.000
L10	103.75 - 98.75 (10)	TP29.704x28.854x0.313	28.377	472.271	0.060	0.386	1215.600	0.000
L11	98.75 - 93.75 (11)	TP30.554x29.704x0.313	28.744	485.933	0.059	0.386	1286.950	0.000
L12	93.75 - 89.666 (12)	TP31.249x30.554x0.313	29.044	497.092	0.058	0.385	1346.733	0.000
L13	89.666 - 89.416 (13)	TP31.291x31.249x0.313	29.057	497.775	0.058	0.385	1350.442	0.000
L14	89.416 - 88.083 (14)	TP31.518x31.291x0.313	29.183	501.418	0.058	0.385	1370.275	0.000
L15	88.083 - 87.833 (15)	TP31.56x31.518x0.513	29.193	818.174	0.036	0.385	2224.625	0.000
L16	87.833 - 85.833 (16)	TP31.9x31.56x0.513	29.400	827.137	0.036	0.385	2273.625	0.000
L17	85.833 - 85.583 (17)	TP31.943x31.9x0.513	29.422	828.257	0.036	0.385	2279.783	0.000
L18	85.583 - 84.5 (18)	TP32.127x31.943x0.513	29.535	833.110	0.035	0.385	2306.583	0.000
L19	84.5 - 84.25 (19)	TP32.17x32.127x0.475	29.556	774.105	0.038	0.385	2148.642	0.000
L20	84.25 - 79.25 (20)	TP33.02x32.17x0.463	30.042	774.250	0.039	0.385	2207.542	0.000
L21	79.25 - 73.75 (21)	TP33.955x33.02x0.463	30.162	779.305	0.039	0.385	2236.458	0.000
L22	73.75 - 72.75 (22)	TP33.5x32.607x0.563	31.009	952.653	0.033	0.339	2747.925	0.000
L23	72.75 - 67.75 (23)	TP34.35x33.5x0.563	31.471	977.243	0.032	0.339	2891.617	0.000
L24	67.75 - 63.083 (24)	TP35.144x34.35x0.55	31.899	978.322	0.033	0.339	2963.867	0.000
L25	63.083 - 62.833 (25)	TP35.186x35.144x0.713	31.913	1262.980	0.025	0.339	3812.967	0.000
L26	62.833 - 57.833 (26)	TP36.036x35.186x0.7	32.419	1271.870	0.025	0.339	3935.900	0.000
L27	57.833 - 52.833 (27)	TP36.887x36.036x0.688	32.901	1279.650	0.026	0.339	4056.667	0.000
L28	52.833 - 47.833 (28)	TP37.737x36.887x0.688	33.363	1309.710	0.025	0.339	4249.450	0.000
L29	47.833 - 42.75 (29)	TP38.601x37.737x0.675	33.384	1288.290	0.026	0.339	4187.767	0.000
L30	42.75 - 42.5 (30)	TP37.894x37.043x0.75	33.967	1432.410	0.024	0.338	4659.392	0.000
L31	42.5 - 37.5 (31)	TP38.744x37.894x0.738	34.390	1441.250	0.024	0.338	4797.033	0.000
L32	37.5 - 32.75 (32)	TP39.551x38.744x0.738	34.770	1471.870	0.024	0.338	5003.083	0.000
L33	32.75 - 32.5 (33)	TP39.594x39.551x0.788	34.775	1571.360	0.022	0.338	5340.208	0.000
L34	32.5 - 27.5 (34)	TP40.444x39.594x0.775	35.169	1580.790	0.022	0.338	5491.700	0.000
L35	27.5 - 22.5 (35)	TP41.294x40.444x0.763	35.521	1589.120	0.022	0.338	5640.683	0.000
L36	22.5 - 17.5 (36)	TP42.144x41.294x0.763	35.840	1622.450	0.022	0.338	5879.800	0.000
L37	17.5 - 12.5 (37)	TP42.995x42.144x0.75	36.117	1629.120	0.022	0.338	6027.050	0.000
L38	12.5 - 8.083 (38)	TP43.746x42.995x0.738	36.352	1630.930	0.022	0.338	6142.775	0.000
L39	8.083 - 7.833 (39)	TP43.788x43.746x0.8	36.347	1768.320	0.021	0.338	6657.159	0.000
L40	7.833 - 6.417	TP44.029x43.788x0.788	36.449	1750.940	0.021	0.338	6630.583	0.000

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L41	6.417 - 6.167 (40)	TP44.071x44.029x0.775	36.438	1725.340	0.021	0.338	6541.950	0.000
L42	6.167 - 1.167 (41)	TP44.922x44.071x0.763	36.712	1731.340	0.021	0.338	6695.475	0.000
L43	1.167 - 0 (43)	TP45.12x44.922x0.763	36.776	1739.120	0.021	0.338	6755.783	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio P_u ϕP_n	Ratio M_{ux} ϕM_{nx}	Ratio M_{uy} ϕM_{ny}	Ratio V_u ϕV_n	Ratio T_u ϕT_n	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	147 - 142 (1)	0.004	0.040	0.000	0.016	0.000	0.044	1.050	
L2	142 - 137 (2)	0.005	0.077	0.000	0.017	0.000	0.082	1.050	
L3	137 - 132 (3)	0.009	0.147	0.000	0.034	0.000	0.157	1.050	
L4	132 - 127 (4)	0.009	0.214	0.000	0.034	0.000	0.224	1.050	
L5	127 - 122 (5)	0.012	0.296	0.000	0.045	0.000	0.310	1.050	
L6	122 - 117 (6)	0.012	0.377	0.000	0.046	0.000	0.391	1.050	
L7	117 - 112 (7)	0.016	0.479	0.000	0.060	0.000	0.498	1.050	
L8	112 - 105 (8)	0.016	0.543	0.000	0.059	0.000	0.562	1.050	
L9	105 - 103.75 (9)	0.017	0.517	0.000	0.061	0.000	0.537	1.050	
L10	103.75 - 98.75 (10)	0.017	0.604	0.000	0.060	0.000	0.625	1.050	
L11	98.75 - 93.75 (11)	0.017	0.682	0.000	0.059	0.000	0.703	1.050	
L12	93.75 - 89.666 (12)	0.017	0.741	0.000	0.058	0.000	0.761	1.050	
L13	89.666 - 89.416 (13)	0.017	0.744	0.000	0.058	0.000	0.765	1.050	
L14	89.416 - 88.083 (14)	0.017	0.763	0.000	0.058	0.000	0.784	1.050	
L15	88.083 - 87.833 (15)	0.010	0.475	0.000	0.036	0.000	0.487	1.050	
L16	87.833 - 85.833 (16)	0.011	0.491	0.000	0.036	0.000	0.503	1.050	
L17	85.833 - 85.583 (17)	0.011	0.493	0.000	0.036	0.000	0.505	1.050	
L18	85.583 - 84.5 (18)	0.011	0.501	0.000	0.035	0.000	0.513	1.050	
L19	84.5 - 84.25 (19)	0.011	0.541	0.000	0.038	0.000	0.554	1.050	
L20	84.25 - 79.25 (20)	0.012	0.595	0.000	0.039	0.000	0.608	1.050	
L21	79.25 - 73.75 (21)	0.012	0.604	0.000	0.039	0.000	0.617	1.050	
L22	73.75 - 72.75 (22)	0.011	0.552	0.000	0.033	0.000	0.564	1.050	
L23	72.75 - 67.75 (23)	0.011	0.579	0.000	0.032	0.000	0.591	1.050	
L24	67.75 - 63.083 (24)	0.011	0.615	0.000	0.033	0.000	0.628	1.050	
L25	63.083 - 62.833 (25)	0.009	0.483	0.000	0.025	0.000	0.492	1.050	
L26	62.833 - 57.833 (26)	0.009	0.509	0.000	0.025	0.000	0.519	1.050	
L27	57.833 -	0.009	0.534	0.000	0.026	0.000	0.544	1.050	

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		P_u	M_{ux}	M_{uy}	V_u	T_u			
		ϕP_n	ϕM_{nx}	ϕM_{ny}	ϕV_n	ϕT_n			
L28	52.833 (27) 52.833 - 47.833 (28)	0.010	0.550	0.000	0.025	0.000	0.560	1.050	
L29	47.833 - 42.75 (29)	0.010	0.560	0.000	0.026	0.000	0.571	1.050	
L30	42.75 - 42.5 (30)	0.010	0.541	0.000	0.024	0.000	0.551	1.050	
L31	42.5 - 37.5 (31)	0.010	0.562	0.000	0.024	0.000	0.572	1.050	
L32	37.5 - 32.75 (32)	0.010	0.572	0.000	0.024	0.000	0.582	1.050	
L33	32.75 - 32.5 (33)	0.010	0.538	0.000	0.022	0.000	0.548	1.050	
L34	32.5 - 27.5 (34)	0.010	0.555	0.000	0.022	0.000	0.565	1.050	
L35	27.5 - 22.5 (35)	0.010	0.572	0.000	0.022	0.000	0.583	1.050	
L36	22.5 - 17.5 (36)	0.011	0.579	0.000	0.022	0.000	0.590	1.050	
L37	17.5 - 12.5 (37)	0.011	0.595	0.000	0.022	0.000	0.606	1.050	
L38	12.5 - 8.083 (38)	0.011	0.610	0.000	0.022	0.000	0.622	1.050	
L39	8.083 - 7.833 (39)	0.011	0.565	0.000	0.021	0.000	0.576	1.050	
L40	7.833 - 6.417 (40)	0.011	0.575	0.000	0.021	0.000	0.586	1.050	
L41	6.417 - 6.167 (41)	0.011	0.584	0.000	0.021	0.000	0.595	1.050	
L42	6.167 - 1.167 (42)	0.011	0.598	0.000	0.021	0.000	0.610	1.050	
L43	1.167 - 0 (43)	0.011	0.599	0.000	0.021	0.000	0.611	1.050	

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	147 - 142	Pole	TP22.85x22x0.25	1	-4.195	1016.812	4.2	Pass
L2	142 - 137	Pole	TP23.7x22.85x0.25	2	-4.553	1055.061	7.8	Pass
L3	137 - 132	Pole	TP24.55x23.7x0.25	3	-9.136	1093.312	15.0	Pass
L4	132 - 127	Pole	TP25.4x24.55x0.25	4	-9.584	1131.553	21.3	Pass
L5	127 - 122	Pole	TP26.251x25.4x0.25	5	-12.930	1169.805	29.5	Pass
L6	122 - 117	Pole	TP27.101x26.251x0.25	6	-13.569	1208.056	37.2	Pass
L7	117 - 112	Pole	TP27.951x27.101x0.25	7	-18.472	1246.297	47.4	Pass
L8	112 - 105	Pole	TP29.141x27.951x0.25	8	-18.895	1271.161	53.6	Pass
L9	105 - 103.75	Pole	TP28.854x28.003x0.313	9	-25.378	1605.135	51.2	Pass
L10	103.75 - 98.75	Pole	TP29.704x28.854x0.313	10	-26.297	1652.952	59.5	Pass
L11	98.75 - 93.75	Pole	TP30.554x29.704x0.313	11	-27.252	1700.769	66.9	Pass
L12	93.75 - 89.666	Pole	TP31.249x30.554x0.313	12	-28.058	1739.818	72.5	Pass
L13	89.666 - 89.416	Pole	TP31.291x31.249x0.313	13	-28.123	1742.212	72.8	Pass
L14	89.416 - 88.083	Pole	TP31.518x31.291x0.313	14	-28.369	1754.959	74.7	Pass
L15	88.083 - 87.833	Pole	TP31.56x31.518x0.513	15	-28.456	2863.612	46.4	Pass
L16	87.833 - 85.833	Pole	TP31.9x31.56x0.513	16	-28.962	2894.976	47.9	Pass
L17	85.833 - 85.583	Pole	TP31.943x31.9x0.513	17	-29.036	2898.903	48.1	Pass
L18	85.583 - 84.5	Pole	TP32.127x31.943x0.513	18	-29.306	2915.881	48.9	Pass
L19	84.5 - 84.25	Pole	TP32.17x32.127x0.475	19	-29.382	2709.367	52.8	Pass
L20	84.25 - 79.25	Pole	TP33.02x32.17x0.463	20	-30.697	2709.872	57.9	Pass
L21	79.25 - 73.75	Pole	TP33.955x33.02x0.463	21	-31.030	2727.564	58.8	Pass
L22	73.75 - 72.75	Pole	TP33.5x32.607x0.563	22	-33.654	3334.285	53.7	Pass
L23	72.75 - 67.75	Pole	TP34.35x33.5x0.563	23	-35.146	3420.354	56.3	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
L24	67.75 - 63.083	Pole	TP35.144x34.35x0.55	24	-36.565	3424.123	59.8	Pass	
L25	63.083 - 62.833	Pole	TP35.186x35.144x0.713	25	-36.673	4420.416	46.9	Pass	
L26	62.833 - 57.833	Pole	TP36.036x35.186x0.7	26	-38.545	4451.538	49.4	Pass	
L27	57.833 - 52.833	Pole	TP36.887x36.036x0.688	27	-40.456	4478.785	51.9	Pass	
L28	52.833 - 47.833	Pole	TP37.737x36.887x0.688	28	-42.392	4583.975	53.3	Pass	
L29	47.833 - 42.75	Pole	TP38.601x37.737x0.675	29	-42.532	4509.025	54.3	Pass	
L30	42.75 - 42.5	Pole	TP37.894x37.043x0.75	30	-46.120	5013.425	52.5	Pass	
L31	42.5 - 37.5	Pole	TP38.744x37.894x0.738	31	-48.231	5044.368	54.5	Pass	
L32	37.5 - 32.75	Pole	TP39.551x38.744x0.738	32	-50.271	5151.562	55.5	Pass	
L33	32.75 - 32.5	Pole	TP39.594x39.551x0.788	33	-50.399	5499.753	52.2	Pass	
L34	32.5 - 27.5	Pole	TP40.444x39.594x0.775	34	-52.689	5532.775	53.9	Pass	
L35	27.5 - 22.5	Pole	TP41.294x40.444x0.763	35	-55.019	5561.923	55.5	Pass	
L36	22.5 - 17.5	Pole	TP42.144x41.294x0.763	36	-57.376	5678.588	56.2	Pass	
L37	17.5 - 12.5	Pole	TP42.995x42.144x0.75	37	-59.762	5701.930	57.8	Pass	
L38	12.5 - 8.083	Pole	TP43.746x42.995x0.738	38	-61.892	5708.240	59.2	Pass	
L39	8.083 - 7.833	Pole	TP43.788x43.746x0.8	39	-62.037	6189.109	54.8	Pass	
L40	7.833 - 6.417	Pole	TP44.029x43.788x0.788	40	-62.773	6128.303	55.8	Pass	
L41	6.417 - 6.167	Pole	TP44.071x44.029x0.775	41	-62.916	6038.697	56.7	Pass	
L42	6.167 - 1.167	Pole	TP44.922x44.071x0.763	42	-65.462	6059.676	58.1	Pass	
L43	1.167 - 0	Pole	TP45.12x44.922x0.763	43	-66.062	6086.913	58.2	Pass	
							Summary		
							Pole (L14)	74.7	Pass
							RATING =	74.7	Pass

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

APPENDIX B
BASE LEVEL DRAWING

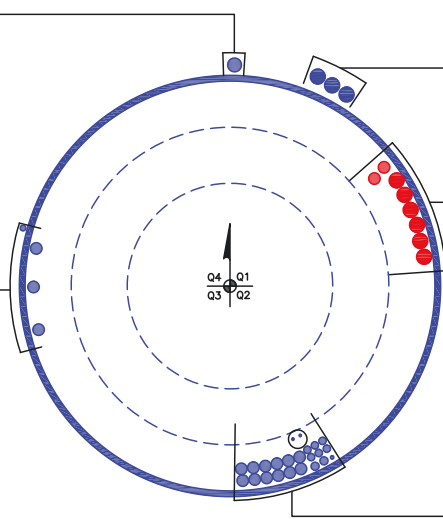


(OTHER CONSIDERED EQUIPMENT)
(1) 1-1/2" TO 126 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(3) 1-5/8" TO 136 FT LEVEL

(PROPOSED EQUIPMENT CONFIGURATION)
(2) 1-1/4" TO 116 FT LEVEL
(6) 1-5/8" TO 116 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(1) 5/8" TO 147 FT LEVEL
(3) 1-1/4" TO 147 FT LEVEL



(OTHER CONSIDERED EQUIPMENT—IN CONDUIT)
(2) 17/64" TO 106 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 3/8" TO 106 FT LEVEL
(6) 13/16" TO 106 FT LEVEL
(2) 7/8" TO 106 FT LEVEL
(12) 1-1/4" TO 106 FT LEVEL

APPENDIX C
ADDITIONAL CALCULATIONS

Site BU: 876316
Work Order: 2277715



Copyright © 2019 Crown Castle

Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	147	42	3.75	18	22	29.141	0.25	Auto	A607-60
2	108.75	35	4.25	18	28.00	33.955	0.3125	Auto	A607-60
3	78	35.25	4.75	18	32.61	38.601	0.375	Auto	A607-60
4	47.5	47.5	0	18	37.04	45.12	0.4375	Auto	A607-60

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	8.083	channel	MP3-05 (1.25in Welded)	2						E1	E1											
2	6.417	76.583	channel	MP3-05 (1.25in)	1						E1												
3	0	88.083	channel	MP3-05 (1.25in Welded)	2												E1						E1
4	75.667	85.833	channel	MP3-05 (1.25in)	1							E1											
5	84.5	89.666	channel	MP3-05 (1.25in)	1						E1												
6	0	32.75	plate	CCI-SFP-065125	2			E2						E2									
7	0	32.75	plate	CCI-WCFP-065125	1																	E2	
8	32.75	63.083	plate	CCI-AFP-060100	3			E2						E2								E2	
9																							
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in ²)	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in ²)	Bolt Hole Size (in)	Reinforcement Material
1	5.33	2.09	5.65	0.79	Welded	n/a	PC 8.8 - M20 (100)	29.000	18.000	4.994	1.2500	A572-65
2	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	4.994	1.2500	A572-65
3	5.33	2.09	5.65	0.79	Welded	n/a	PC 8.8 - M20 (100)	29.000	18.000	4.994	1.2500	A572-65
4	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	4.994	1.2500	A572-65
5	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	4.994	1.2500	A572-65
6	6.5	1.25	8.125	0.625	PC 8.8 - M20 (100)	33	PC 8.8 - M20 (100)	33.000	19.000	6.563	1.1875	A572-65
7	6.5	1.25	8.125	0.625	Welded	n/a	PC 8.8 - M20 (100)	33.000	19.000	6.563	1.1875	A572-65
8	6	1	6	0.5	PC 8.8 - M20 (100)	30	PC 8.8 - M20 (100)	30.000	16.000	4.750	1.1875	A572-65

Connection Details for Custom Reinforcements

Reinforcement	End	# Bolts	N or X	Bolt Spacing (in)	Edge Dist (in)	Weld Grade (ksi)	Transverse (Horiz.) Weld Type	Horiz. Weld Length (in)	Horiz. Groove Depth (in)	Horiz. Groove Angle (deg)	Horiz. Fillet Size (in)	Vertical Weld Length (in)	Vertical Fillet Size (in)	Rev H Connection Capacity (kip)
MP3-05 (1.25in Welded)	Top	10	N	3	2	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	18	0.375	-
CCI-WCFP-065125	Top	11	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	80	None	-	-	-	-	66	0.375	-

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	147 - 142	5		18	22.000	22.850	0.25	A607-60	1.000
2	142 - 137	5		18	22.850	23.700	0.25	A607-60	1.000
3	137 - 132	5		18	23.700	24.550	0.25	A607-60	1.000
4	132 - 127	5		18	24.550	25.400	0.25	A607-60	1.000
5	127 - 122	5		18	25.400	26.251	0.25	A607-60	1.000
6	122 - 117	5		18	26.251	27.101	0.25	A607-60	1.000
7	117 - 112	5		18	27.101	27.951	0.25	A607-60	1.000
8	112 - 108.75	7	3.75	18	27.951	29.141	0.25	A607-60	1.000
9	108.75 - 103.75	5		18	28.003	28.854	0.3125	A607-60	1.000
10	103.75 - 98.75	5		18	28.854	29.704	0.3125	A607-60	1.000
11	98.75 - 93.75	5		18	29.704	30.554	0.3125	A607-60	1.000
12	93.75 - 89.666	4.084		18	30.554	31.249	0.3125	A607-60	1.000
13	89.666 - 89.416	0.25		18	31.249	31.291	0.3125	A607-60	1.000
14	89.416 - 88.083	1.333		18	31.291	31.518	0.3125	A607-60	1.000
15	88.083 - 87.833	0.25		18	31.518	31.560	0.5125	A607-60	0.949
16	87.833 - 85.833	2		18	31.560	31.900	0.5125	A607-60	0.946
17	85.833 - 85.583	0.25		18	31.900	31.943	0.5125	A607-60	0.945
18	85.583 - 84.5	1.083		18	31.943	32.127	0.5125	A607-60	0.943
19	84.5 - 84.25	0.25		18	32.127	32.170	0.475	A607-60	1.016
20	84.25 - 79.25	5		18	32.170	33.020	0.4625	A607-60	1.033
21	79.25 - 78	5.5	4.25	18	33.020	33.955	0.4625	A607-60	1.031
22	78 - 72.75	5.25		18	32.607	33.500	0.5625	A607-60	0.959
23	72.75 - 67.75	5		18	33.500	34.350	0.5625	A607-60	0.951
24	67.75 - 63.083	4.667		18	34.350	35.144	0.55	A607-60	0.966
25	63.083 - 62.833	0.25		18	35.144	35.186	0.7125	A607-60	0.980
26	62.833 - 57.833	5		18	35.186	36.036	0.7	A607-60	0.986
27	57.833 - 52.833	5		18	36.036	36.887	0.6875	A607-60	0.993
28	52.833 - 47.833	5		18	36.887	37.737	0.6875	A607-60	0.982
29	47.833 - 47.5	5.083	4.75	18	37.737	38.601	0.675	A607-60	1.000
30	47.5 - 42.5	5		18	37.043	37.894	0.75	A607-60	0.984
31	42.5 - 37.5	5		18	37.894	38.744	0.7375	A607-60	0.991
32	37.5 - 32.75	4.75		18	38.744	39.551	0.7375	A607-60	0.982
33	32.75 - 32.5	0.25		18	39.551	39.594	0.7875	A607-60	0.987
34	32.5 - 27.5	5		18	39.594	40.444	0.775	A607-60	0.993
35	27.5 - 22.5	5		18	40.444	41.294	0.7625	A607-60	1.000
36	22.5 - 17.5	5		18	41.294	42.144	0.7625	A607-60	0.991
37	17.5 - 12.5	5		18	42.144	42.995	0.75	A607-60	0.999
38	12.5 - 8.083	4.417		18	42.995	43.746	0.7375	A607-60	1.008
39	8.083 - 7.833	0.25		18	43.746	43.788	0.8	A607-60	1.034
40	7.833 - 6.417	1.416		18	43.788	44.029	0.7875	A607-60	1.047
41	6.417 - 6.167	0.25		18	44.029	44.071	0.775	A607-60	1.010
42	6.167 - 1.167	5		18	44.071	44.922	0.7625	A607-60	1.018
43	1.167 - 0	1.167		18	44.922	45.120	0.7625	A607-60	1.016

TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P _u (K)	M _{ux} (kip-ft)	V _u (K)
1	147 - 142		4.19	22.72	4.74
2	142 - 137		4.55	47.44	5.15
3	137 - 132		9.14	96.98	10.51
4	132 - 127		9.58	150.57	10.92
5	127 - 122		12.93	220.86	15.00
6	122 - 117		13.57	297.53	15.90
7	117 - 112		18.47	398.58	21.25
8	112 - 108.75		18.89	468.10	21.52
9	108.75 - 103.75		25.38	587.19	27.99
10	103.75 - 98.75		26.30	728.11	28.38
11	98.75 - 93.75		27.25	870.90	28.74
12	93.75 - 89.666		28.06	988.88	29.04
13	89.666 - 89.416		28.12	996.15	29.06
14	89.416 - 88.083		28.37	1034.96	29.18
15	88.083 - 87.833		28.46	1042.25	29.19
16	87.833 - 85.833		28.96	1100.85	29.40
17	85.833 - 85.583		29.04	1108.21	29.42
18	85.583 - 84.5		29.31	1140.13	29.54
19	84.5 - 84.25		29.38	1147.52	29.56
20	84.25 - 79.25		30.70	1296.52	30.04
21	79.25 - 78		31.03	1334.14	30.16
22	78 - 72.75		33.65	1494.92	31.01
23	72.75 - 67.75		35.15	1651.11	31.47
24	67.75 - 63.083		36.56	1798.97	31.90
25	63.083 - 62.833		36.67	1806.94	31.91
26	62.833 - 57.833		38.55	1967.79	32.42
27	57.833 - 52.833		40.46	2131.09	32.90
28	52.833 - 47.833		42.39	2296.74	33.36
29	47.833 - 47.5		42.53	2307.85	33.38
30	47.5 - 42.5		46.12	2476.29	33.97
31	42.5 - 37.5		48.23	2647.19	34.39
32	37.5 - 32.75		50.27	2811.42	34.77
33	32.75 - 32.5		50.40	2820.11	34.78
34	32.5 - 27.5		52.69	2994.98	35.17
35	27.5 - 22.5		55.02	3171.69	35.52
36	22.5 - 17.5		57.38	3350.07	35.84
37	17.5 - 12.5		59.76	3529.94	36.12
38	12.5 - 8.083		61.89	3689.96	36.35
39	8.083 - 7.833		62.04	3699.05	36.35
40	7.833 - 6.417		62.77	3750.59	36.45
41	6.417 - 6.167		62.92	3759.70	36.44
42	6.167 - 1.167		65.46	3942.59	36.71
43	1.167 - 0		66.06	3985.46	36.78

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
147 - 142	Pole	TP22.85x22x0.25	Pole	4.2%	Pass
142 - 137	Pole	TP23.7x22.85x0.25	Pole	7.8%	Pass
137 - 132	Pole	TP24.55x23.7x0.25	Pole	14.9%	Pass
132 - 127	Pole	TP25.4x24.55x0.25	Pole	21.3%	Pass
127 - 122	Pole	TP26.251x25.4x0.25	Pole	29.5%	Pass
122 - 117	Pole	TP27.101x26.251x0.25	Pole	37.2%	Pass
117 - 112	Pole	TP27.951x27.101x0.25	Pole	47.4%	Pass
112 - 108.75	Pole	TP29.141x27.951x0.25	Pole	53.6%	Pass
108.75 - 103.75	Pole	TP28.854x28.003x0.3125	Pole	51.1%	Pass
103.75 - 98.75	Pole	TP29.704x28.854x0.3125	Pole	59.4%	Pass
98.75 - 93.75	Pole	TP30.554x29.704x0.3125	Pole	66.9%	Pass
93.75 - 89.67	Pole	TP31.249x30.554x0.3125	Pole	72.5%	Pass
89.67 - 89.42	Pole	TP31.291x31.249x0.3125	Pole	72.8%	Pass
89.42 - 88.08	Pole	TP31.518x31.291x0.3125	Pole	74.6%	Pass
88.08 - 87.83	Pole + Reinf.	TP31.56x31.518x0.5125	Reinf. 5 Tension Rupture	63.4%	Pass
87.83 - 85.83	Pole + Reinf.	TP31.9x31.56x0.5125	Reinf. 5 Tension Rupture	65.7%	Pass
85.83 - 85.58	Pole + Reinf.	TP31.943x31.9x0.5125	Reinf. 3 Tension Rupture	66.0%	Pass
85.58 - 84.5	Pole + Reinf.	TP32.127x31.943x0.5125	Reinf. 5 Tension Rupture	67.3%	Pass
84.5 - 84.25	Pole + Reinf.	TP32.17x32.127x0.475	Reinf. 3 Tension Rupture	69.5%	Pass
84.25 - 79.25	Pole + Reinf.	TP33.02x32.17x0.4625	Reinf. 3 Tension Rupture	75.1%	Pass
79.25 - 78	Pole + Reinf.	TP33.955x33.02x0.4625	Reinf. 3 Tension Rupture	76.4%	Pass
78 - 72.75	Pole + Reinf.	TP33.5x32.607x0.5625	Reinf. 2 Tension Rupture	73.2%	Pass
72.75 - 67.75	Pole + Reinf.	TP34.35x33.5x0.5625	Reinf. 2 Tension Rupture	77.4%	Pass
67.75 - 63.08	Pole + Reinf.	TP35.144x34.35x0.55	Reinf. 3 Tension Rupture	81.0%	Pass
63.08 - 62.83	Pole + Reinf.	TP35.186x35.144x0.7125	Reinf. 8 Tension Rupture	66.4%	Pass
62.83 - 57.83	Pole + Reinf.	TP36.036x35.186x0.7	Reinf. 8 Tension Rupture	69.7%	Pass
57.83 - 52.83	Pole + Reinf.	TP36.887x36.036x0.6875	Reinf. 8 Tension Rupture	72.8%	Pass
52.83 - 47.83	Pole + Reinf.	TP37.737x36.887x0.6875	Reinf. 8 Tension Rupture	75.7%	Pass
47.83 - 47.5	Pole + Reinf.	TP38.601x37.737x0.675	Reinf. 8 Tension Rupture	75.9%	Pass
47.5 - 42.5	Pole + Reinf.	TP37.894x37.043x0.75	Reinf. 8 Tension Rupture	74.5%	Pass
42.5 - 37.5	Pole + Reinf.	TP38.744x37.894x0.7375	Reinf. 8 Tension Rupture	76.9%	Pass
37.5 - 32.75	Pole + Reinf.	TP39.551x38.744x0.7375	Reinf. 8 Tension Rupture	79.0%	Pass
32.75 - 32.5	Pole + Reinf.	TP39.594x39.551x0.7875	Reinf. 3 Tension Rupture	72.8%	Pass
32.5 - 27.5	Pole + Reinf.	TP40.444x39.594x0.775	Reinf. 3 Tension Rupture	74.7%	Pass
27.5 - 22.5	Pole + Reinf.	TP41.294x40.444x0.7625	Reinf. 6 Tension Rupture	76.6%	Pass
22.5 - 17.5	Pole + Reinf.	TP42.144x41.294x0.7625	Reinf. 6 Tension Rupture	78.3%	Pass
17.5 - 12.5	Pole + Reinf.	TP42.995x42.144x0.75	Reinf. 6 Tension Rupture	79.9%	Pass
12.5 - 8.08	Pole + Reinf.	TP43.746x42.995x0.7375	Reinf. 6 Tension Rupture	81.3%	Pass
8.08 - 7.83	Pole + Reinf.	TP43.788x43.746x0.8	Reinf. 3 Tension Rupture	79.2%	Pass
7.83 - 6.42	Pole + Reinf.	TP44.029x43.788x0.7875	Reinf. 3 Tension Rupture	79.6%	Pass
6.42 - 6.17	Pole + Reinf.	TP44.071x44.029x0.775	Reinf. 3 Tension Rupture	79.9%	Pass
6.17 - 1.17	Pole + Reinf.	TP44.922x44.071x0.7625	Reinf. 3 Tension Rupture	81.3%	Pass
1.17 - 0	Pole + Reinf.	TP45.12x44.922x0.7625	Reinf. 3 Tension Rupture	81.6%	Pass
				Summary	
			Pole	74.6%	Pass
			Reinforcement	81.6%	Pass
			Overall	81.6%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in ⁴)			Area (in ²)			% Capacity*								
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4	R5	R6	R7	R8
147 - 142	1157	n/a	1157	17.93	n/a	17.93	4.2%								
142 - 137	1292	n/a	1292	18.61	n/a	18.61	7.8%								
137 - 132	1438	n/a	1438	19.28	n/a	19.28	14.9%								
132 - 127	1594	n/a	1594	19.96	n/a	19.96	21.3%								
127 - 122	1761	n/a	1761	20.63	n/a	20.63	29.5%								
122 - 117	1940	n/a	1940	21.31	n/a	21.31	37.2%								
117 - 112	2130	n/a	2130	21.98	n/a	21.98	47.4%								
112 - 108.75	2260	n/a	2260	22.42	n/a	22.42	53.6%								
108.75 - 103.75	2912	n/a	2912	28.31	n/a	28.31	51.1%								
103.75 - 98.75	3181	n/a	3181	29.15	n/a	29.15	59.4%								
98.75 - 93.75	3465	n/a	3465	29.99	n/a	29.99	66.9%								
93.75 - 89.67	3709	n/a	3709	30.68	n/a	30.68	72.5%								
89.67 - 89.42	3724	n/a	3724	30.73	n/a	30.73	72.8%								
89.42 - 88.08	3807	n/a	3807	30.95	n/a	30.95	74.6%								
88.08 - 87.83	3822	2338	6160	30.99	16.95	47.94	45.8%			63.4%		63.4%			
87.83 - 85.83	3948	2386	6334	31.33	16.95	48.28	47.6%			65.7%		65.7%			
85.83 - 85.58	3964	2392	6356	31.37	16.95	48.32	47.8%			66.0%		66.0%			
85.58 - 84.5	4034	2418	6452	31.55	16.95	48.50	48.8%			67.3%		67.3%			
84.5 - 84.25	4062	1973	6035	31.60	16.95	48.55	55.1%			69.5%	66.5%				
84.25 - 79.25	4396	2074	6469	32.44	16.95	49.39	59.9%			75.1%	71.9%				
79.25 - 78	4482	2099	6581	32.65	16.95	49.60	61.0%			76.4%	73.2%				
78 - 72.75	5464	2618	8082	39.43	16.95	56.38	52.8%		73.2%	73.2%					
72.75 - 67.75	5895	2746	8641	40.44	16.95	57.39	55.8%		77.4%	77.4%					
67.75 - 63.08	6318	2868	9186	41.38	16.95	58.33	58.5%		81.0%	81.0%					
63.08 - 62.83	6350	5315	11665	41.43	34.95	76.38	48.0%		62.4%	65.4%					66.4%
62.83 - 57.83	6826	5564	12390	42.44	34.95	77.39	50.4%		65.5%	68.6%					69.7%
57.83 - 52.83	7326	5818	13144	43.46	34.95	78.41	52.6%		68.4%	71.6%					72.8%
52.83 - 47.83	7849	6079	13928	44.47	34.95	79.42	54.8%		71.1%	74.4%					75.7%
47.83 - 47.5	7885	6096	13981	44.54	34.95	79.49	55.0%		71.3%	74.6%					75.9%
47.5 - 42.5	9225	6129	15354	52.01	34.95	86.96	53.6%		70.0%	72.9%					74.5%
42.5 - 37.5	9868	6396	16263	53.19	34.95	88.14	55.3%		72.2%	75.1%					76.9%
37.5 - 32.75	10505	6655	17159	54.31	34.95	89.26	56.8%		74.1%	77.1%					79.0%
32.75 - 32.5	10545	7805	18350	54.37	41.33	95.70	53.7%		69.2%	72.8%			72.7%	70.4%	
32.5 - 27.5	11246	8130	19376	55.55	41.33	96.88	55.1%		71.0%	74.7%			74.7%	72.4%	
27.5 - 22.5	11978	8461	20440	56.73	41.33	98.06	56.5%		72.8%	76.5%			76.6%	74.2%	
22.5 - 17.5	12741	8799	21541	57.91	41.33	99.24	57.8%		74.4%	78.2%			78.3%	75.9%	
17.5 - 12.5	13536	9144	22680	59.09	41.33	100.42	59.0%		76.0%	79.8%			79.9%	77.5%	
12.5 - 8.08	14265	9455	23719	60.14	41.33	101.46	60.0%		77.2%	81.1%			81.3%	78.8%	
8.08 - 7.83	14441	11059	25500	60.20	52.63	112.82	57.9%	62.3%	59.2%	79.2%			73.0%	73.3%	
7.83 - 6.42	14682	11177	25859	60.53	52.63	113.15	58.2%	62.6%	59.5%	79.6%			73.4%	73.7%	
6.42 - 6.17	14649	10631	25280	60.59	46.98	107.56	59.3%	70.5%		79.9%			76.6%	76.7%	
6.17 - 1.17	15520	11032	26552	61.77	46.98	108.74	60.6%	71.8%		81.3%			77.9%	78.1%	
1.17 - 0	15728	11126	26854	62.05	46.98	109.02	60.9%	72.1%		81.6%			78.2%	78.4%	

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

Monopole Base Plate Connection

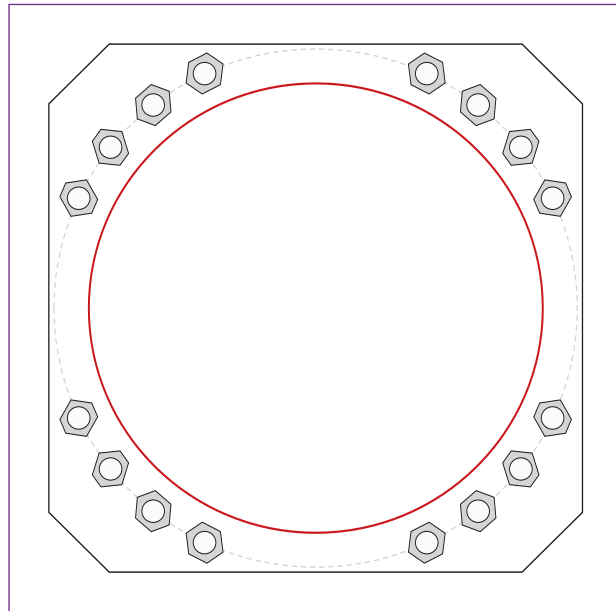


Site Info	
BU #	876316
Site Name	CONDINO PROPERTY, CA
Order #	654580 REV. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
I_{ar} (in)	0

Applied Loads	
Moment (kip-ft)	3985.46
Axial Force (kips)	66.06
Shear Force (kips)	36.78

*TIA-222-H Section 15.5 Applied



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

Anchor Rod Data	
(16) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 52" BC	
Anchor Spacing: 6 in	

Base Plate Data	
53" W x 3" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi); Clip: 6 in	

Stiffener Data	
N/A	

Pole Data	
45.12" x 0.4375" 18-sided pole (A607-60; $F_y=60$ ksi, $F_u=75$ ksi)	

Anchor Rod Summary		<i>(units of kips, kip-in)</i>	
$Pu_t = 225.63$	$\phi Pn_t = 243.75$	Stress Rating	
$Vu = 2.3$	$\phi Vn = 149.1$	88.2%	
$Mu = n/a$	$\phi Mn = n/a$	Pass	

Base Plate Summary		
Max Stress (ksi):	35.02	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	74.1%	Pass

Drilled Pier Foundation

BU # :	876316
Site Name:	SECONDINO PROPERTY,
Order Number:	654580 REV. 0
TIA-222 Revision:	H
Tower Type:	Monopole



Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	3985.46	
Axial Force (kips)	66.08	
Shear Force (kips)	36.75	

Material Properties		
Concrete Strength, fc:	3	ksi
Rebar Strength, Fy:	60	ksi
Tie Yield Strength, Fyt:	40	ksi

Pier Design Data	
Depth	22.5 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 22.5' below grade</i>	
Pier Diameter	7 ft
Rebar Quantity	32
Rebar Size	11
Clear Cover to Ties	4 in
Tie Size	5
Tie Spacing	18 in

[Rebar & Pier Options](#)

[Embedded Pole Inputs](#)

[Belled Pier Inputs](#)

Analysis Results

Soil Lateral Check	Compression	Uplift
D _{reqd} (ft from TOC)	5.80	-
Soil Safety Factor	2.26	-
Max Moment (kip-ft)	4261.11	-
Rating*	56.0%	-

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	202.37	-
End Bearing (kips)	1723.17	-
Weight of Concrete (kips)	111.77	-
Total Capacity (kips)	1925.54	-
Axial (kips)	177.85	-
Rating*	8.8%	-

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	5.59	-
Critical Moment (kip-ft)	4260.54	-
Critical Moment Capacity	7553.26	-
Rating*	53.7%	-

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	16.28	-
Critical Shear (kip)	535.10	-
Critical Shear Capacity	626.09	-
Rating*	81.4%	-

Structural Foundation Rating*	81.4%
Soil Interaction Rating*	56.0%

*Rating per TIA-222-H Section 15.5

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

[Go to Soil Calculations](#)

Soil Profile	
Groundwater Depth	6
# of Layers	9

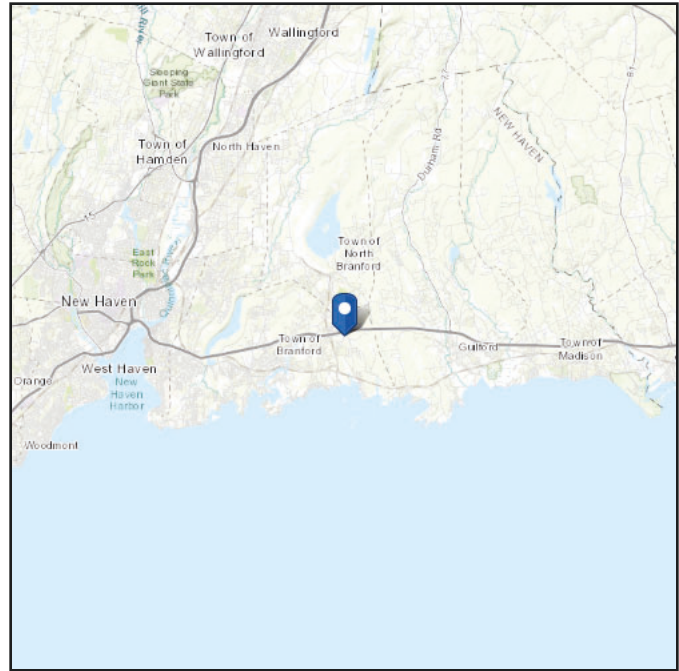
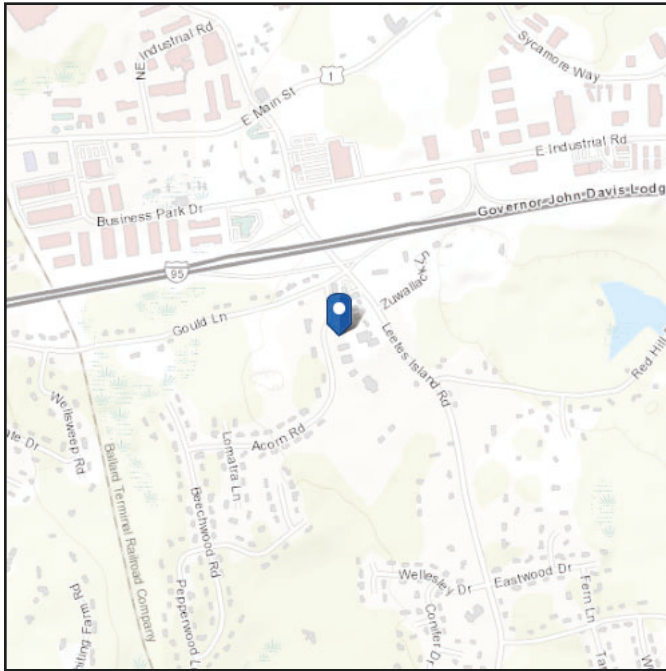
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Net Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	3	3	116	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	3	3.5	0.5	115	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
3	3.5	5	1.5	115	150	0	38	0.000	0.000	0.18	0.18			Cohesionless
4	5	6	1	116.4	150	0	41	0.000	0.000	0.28	0.28			Cohesionless
5	6	7	1	54	87.6	0	41	0.000	0.000	0.28	0.28			Cohesionless
6	7	10	3	55	87.6	0	45	0.000	0.000	0.38	0.38			Cohesionless
7	10	15	5	55	87.6	0	45	0.00	0.00	0.48	0.48			Cohesionless
8	15	20	5	55	87.6	3.25	0	1.78	1.78	1.20	1.20			Cohesive
9	20	22.5	2.5	55	87.6	0	45	0.00	0.00	0.76	0.76	58.1		Cohesionless

ASCE 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: 41.293072
Longitude: -72.762889
Elevation: 115.43440750295605 ft (NAVD 88)



Wind

Results:

Wind Speed	122 Vmph
10-year MRI	75 Vmph
25-year MRI	85 Vmph
50-year MRI	93 Vmph
100-year MRI	99 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Tue Jan 09 2024

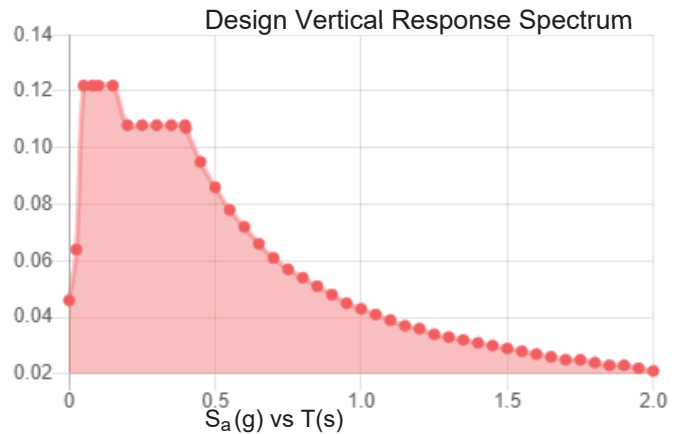
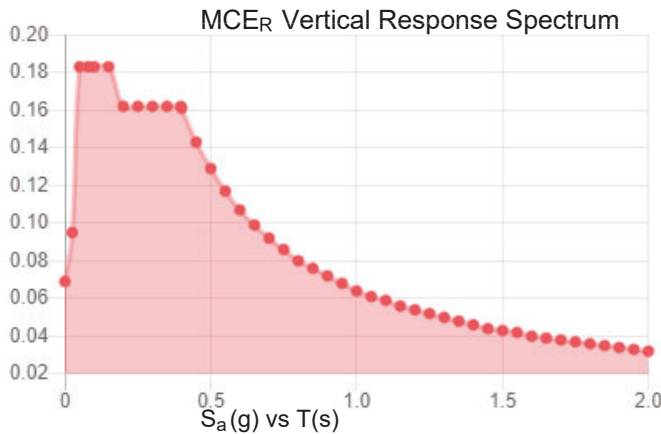
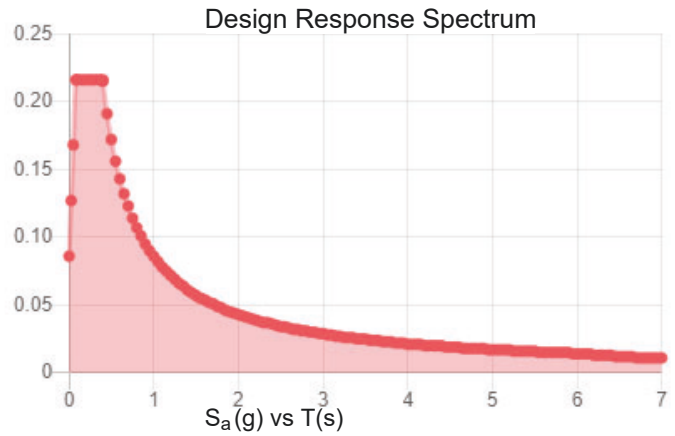
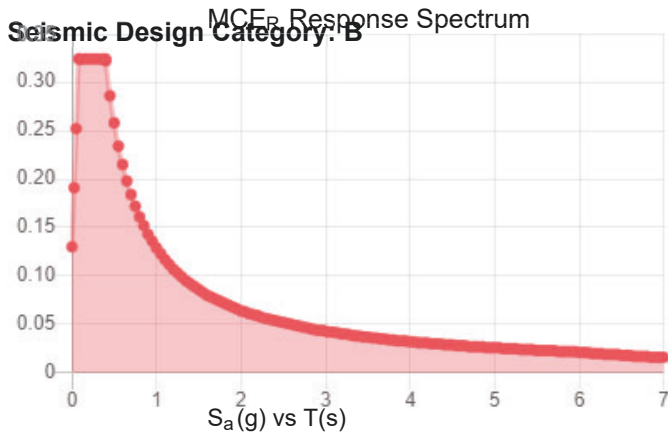
Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

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

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

Results:

S_s :	0.203	S_{D1} :	0.086
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.113
F_v :	2.4	PGA _M :	0.178
S_{MS} :	0.324	F_{PGA} :	1.573
S_{M1} :	0.129	I_e :	1
S_{DS} :	0.216	C_v :	0.705



Data Accessed: Tue Jan 09 2024

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.

Results:

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

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

Date Accessed: Tue Jan 09 2024

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

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

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

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

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

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

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10206796
Colliers Engineering & Design CT. P.C. Project #: 23777098

July 10, 2023

Site Information

Site ID: 5000382649-VZW / BRANFORD 3 CT
Site Name: BRANFORD 3 CT
Carrier Name: Verizon Wireless
Address: 21 Acorn Rd
Branford, Connecticut 06405
New Haven County
Latitude: 41.293072°
Longitude: -72.762889°

Structure Information

Tower Type: 150-Ft Self Support
Mount Type: 13.35-Ft Platform

FUZE ID # 17123753

Analysis Results

Platform: 54.1% Pass*

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

***Contractor PMI Requirements:

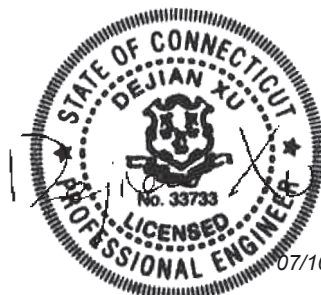
Included at the end of this MA report

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

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Andy Hanes



07/10/2023

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 323464, dated May 25, 2021
Mount Mapping Report	Structural Components, Site ID: 16244072, dated February 24, 2021
Previous Mount Analysis	GPD Engineering and Architecture Professional Corporation, Project #: 2021740.467642.01, dated June 25, 2021
PMI Report	Colliers Engineering & Design, Project #: 21777110, dated February 21, 2023
Filter Add Scope	Provided by Verizon Wireless

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 125 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.996
Seismic Parameters:	S_s : 0.201 g S_1 : 0.053 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
115.50	116.00	2	KAelus	BSF0020F3V1-1	Added
		3	Samsung	B5/B13 RRH-BR04C	Retained
		6	Commscope	JAHH-65B-R3B	
		3	Samsung	MT6407-77A	
		3	Commscope	CB78T-DS-43-2X	
		3	Samsung	B2/B66A RRH-BR049	
		2	Antel	LPA-80063/6CF	
		2	Amphenol Antel	LPA-80080-4CF	
		2	RFS	APL868013	
115.50	126.00	2	Raycap	RRFDC-3315-PF-48*	

* Equipment is mounted directly to the Self Support tower. They are not mounted on the platform mounts and are not included in this mount analysis.

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design CT. P.C. and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design CT. P.C. to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design CT. P.C. is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Connection Check	23.6 %	Pass
Standoff Horizontal	54.1 %	Pass
Toe rail	25.3 %	Pass
Grating Angle	5.9 %	Pass
Mount Pipe	24.5 %	Pass
Mount Pipe Dual	28.5 %	Pass
Structure Rating – (Controlling Utilization of all Components)		54.1%

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

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	15.0	15.0	39.6	39.6
0.5	19.0	19.0	53.6	53.6
1	22.8	22.8	67.4	67.4

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 6 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

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

N/A

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

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

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

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

MDG #: 5000382649

SMART Project #: 10206796

Fuze Project ID: 17123753

Purpose – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built mount drawings” showing contractor’s name, contact information, preparer’s signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

Photo Requirements:

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

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

Antenna & equipment placement and Geometry Confirmation:

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.
 - The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

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

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

Issue:

N/A

Response:

Special Instruction Confirmation:

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

OR

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

Comments:

--

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

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

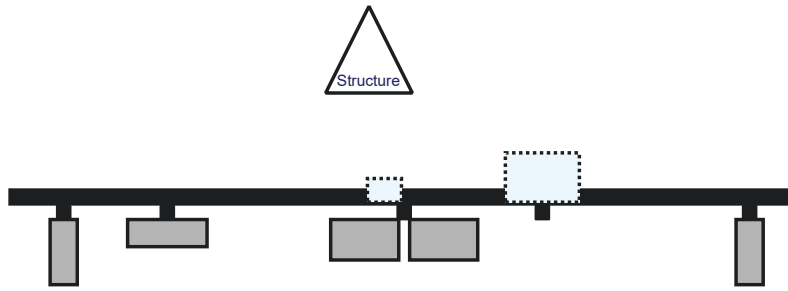
Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

Safety Climb in Good Condition Safety Climb Damaged

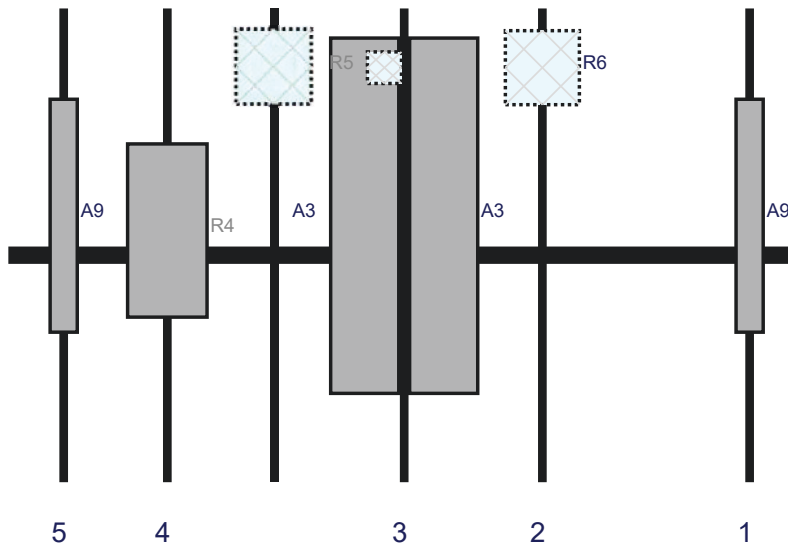
Certifying Individual:

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

Plan View

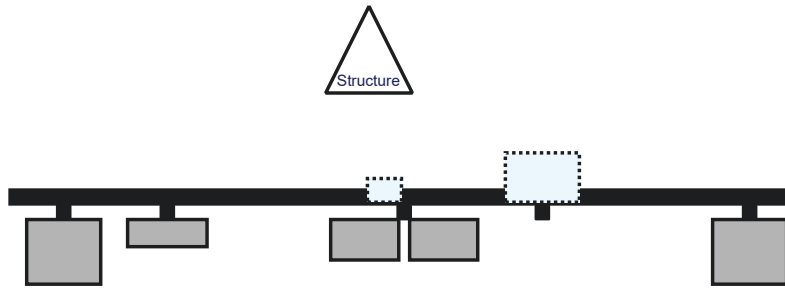


Front View - Looking at Structure

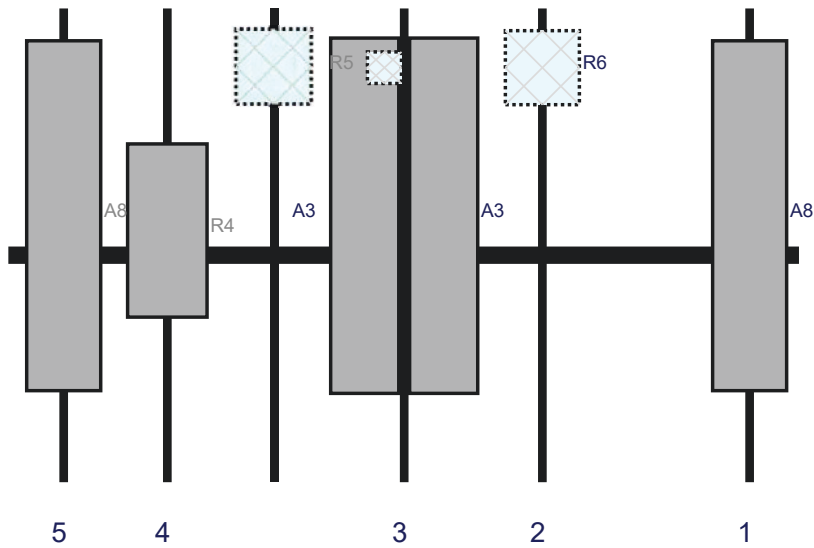


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A9	LPA-80080-4CF	47.2	5.5	150.215	1	a	Front	42	0	Retained	11/04/2022
R6	B2/B66A RRH-BR049	15	15	108.215	2	a	Behind	12	0	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	a	Front	42	8	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	b	Front	42	-8	Retained	11/04/2022
R5	CB78T-DS-43-2X	6.4	6.9	80.215	3	b	Behind	12	-4	Retained	11/04/2022
R4	MT6407-77A	35.1	16.1	32.215	4	a	Front	45	0	Retained	11/04/2022
A9	LPA-80080-4CF	47.2	5.5	11.215	5	a	Front	42	0	Retained	11/04/2022
	MRRUB5/B13 RRH-BR04C	15	15				Member			Retained	11/04/2022
	MRRUB5/B13 RRH-BR04C	15	15				Member			Retained	11/04/2022
	MRRUB5/B13 RRH-BR04C	15	15				Member			Retained	11/04/2022
OVP	RRFDC-3315-PF-48	19.1	15.7				Member			Retained	11/04/2022

Plan View

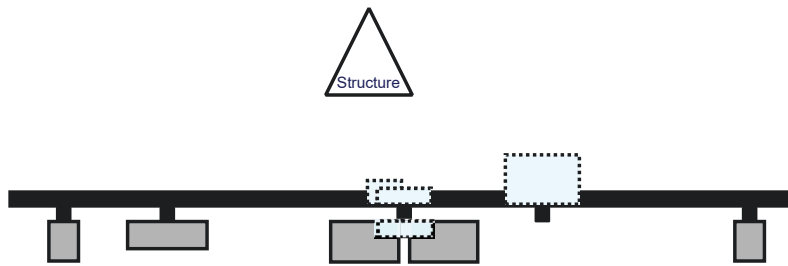


Front View - Looking at Structure

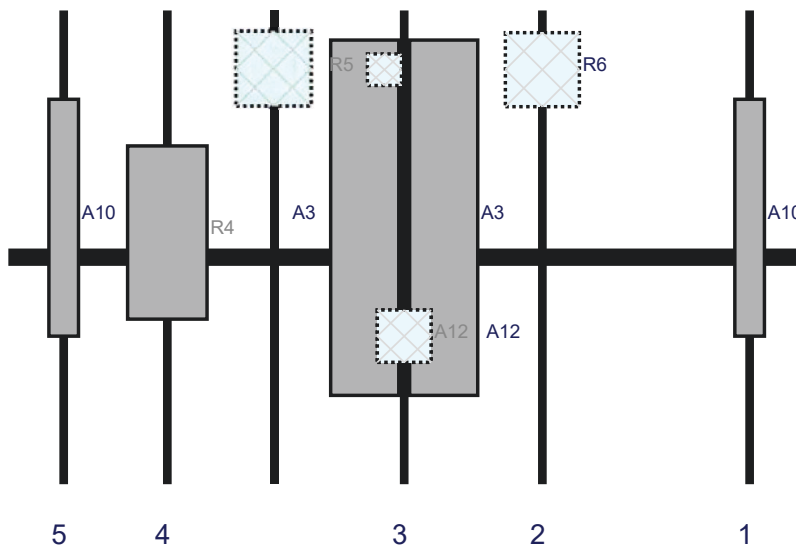


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A8	LPA-80063/6CF	70.9	15	150.215	1	a	Front	42	0	Retained	11/04/2022
R6	B2/B66A RRR-BR049	15	15	108.215	2	a	Behind	12	0	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	a	Front	42	8	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	b	Front	42	-8	Retained	11/04/2022
R5	CB78T-DS-43-2X	6.4	6.9	80.215	3	b	Behind	12	-4	Retained	11/04/2022
R4	MT6407-77A	35.1	16.1	32.215	4	a	Front	45	0	Retained	11/04/2022
A8	LPA-80063/6CF	70.9	15	11.215	5	a	Front	42	0	Retained	11/04/2022

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A10	APL868013	48	6	150.215	1	a	Front	42	0	Retained	11/04/2022
R6	B2/B66A RRR-BR049	15	15	108.215	2	a	Behind	12	0	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	a	Front	42	8	Retained	11/04/2022
A3	JAHH-65B-R3B	72	13.8	80.215	3	b	Front	42	-8	Retained	11/04/2022
R5	CB78T-DS-43-2X	6.4	6.9	80.215	3	b	Behind	12	-4	Retained	11/04/2022
A12	BSF0020F3V1-1	10.6	10.9	80.215	3	a	Behind	66	0	Added	
A12	BSF0020F3V1-1	10.6	10.9	80.215	3	b	Behind	66	0	Added	
R4	MT6407-77A	35.1	16.1	32.215	4	a	Front	45	0	Retained	11/04/2022
A10	APL868013	48	6	11.215	5	a	Front	42	0	Retained	11/04/2022

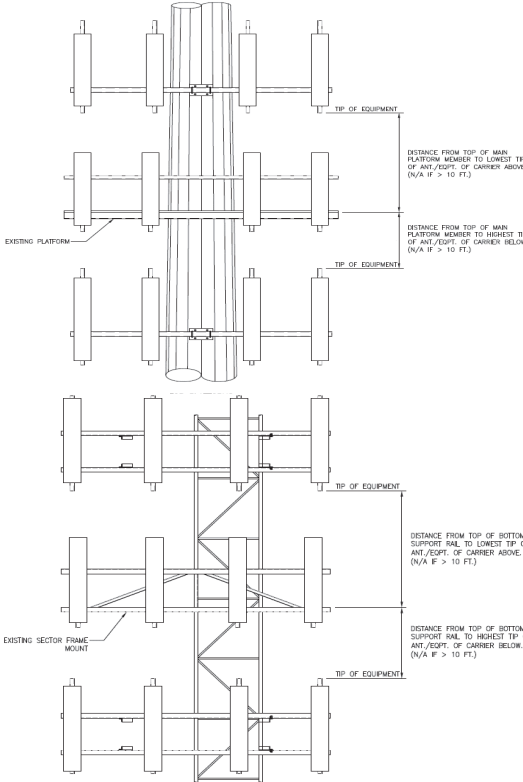
Nov 4, 2022 at 3:23:43 PM
21 Acorn Rd
Branford CT 06405
United States



Nov 4, 2022 at 2:18:54 PM
21 Acorn Rd
Branford CT 06405
United States



Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B												
Sector A:	40.00	Deg	Leg A:		Deg	Ant _{1a}														
Sector B:	160.00	Deg	Leg B:		Deg	Ant _{1b}	Unknown	15.00	13.00	72.00	1) 1-5/8 t	118.5	42.00	15.00	160.00	19, 48				
Sector C:	280.00	Deg	Leg C:		Deg	Ant _{1c}														
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	Nokia UHIEV66ARRH4	12.00	7.00	25.00	Jumpers	120.333	12.00	-7.00		19, 48				
Climbing Facility Information							Ant _{2b}													
Location:	15.00	Deg	N/A			Ant _{2c}														
Climbing Facility	Corrosion Type:	N/A				Ant _{3a}	(2) SBNHH 1D65B	12.00	7.00	72.00	Jumpers	118.583	43.00	10.00	160.00	19, 48				
	Access:	Climbing path was obstructed.				Ant _{3b}														
	Condition:	Missing safety cable.				Ant _{3c}														
						Ant _{4a}	B13 RRH 4x30	12.00	7.00	20.00	Jumpers	120.083	15.00	-7.00		19, 49				
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}	Amphonal BXA17108	6.00	4.00	48.00	DEAD	118.667	42.00	7.00	160.00	19, 49				
						Ant _{5c}	Unknown	15.00	13.00	72.00	1) 1-5/8 t	118.667	42.00	15.00	160.00	19, 49				
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower	RRFDC-3315-PF-48	14.50	10.00	19.00	1)1.5 HYE	122.5				49				
						Ant on Tower														
							Sector C													
						Ant _{1a}														
						Ant _{1b}	Unknown	6.00	8.00	48.00		118.5	42.00	11.00	280.00	25, 50				
						Ant _{1c}														
						Ant _{2a}	Nokia UHIEV66ARRH4	12.00	7.00	25.00	Jumpers	120.333	12.00	-7.00		25, 50				
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}	(2) SBNHH 1D65B	12.00	7.00	72.00	Jumpers	118.583	43.00	10.00	160.00	25, 50				
						Ant _{3c}														
						Ant _{4a}	B13 RRH 4x30	12.00	7.00	20.00	Jumpers	120.083	15.00	-7.00		25, 51				
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}	Amphonal BXA17108	6.00	4.00	48.00	DEAD	118.667	42.00	7.00	280.00	25, 51				
						Ant _{5c}	Unknown	15.00	13.00	72.00	1) 1-5/8 t	118.667	42.00	15.00	280.00	25, 51				
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower	RRFDC-3315-PF-48	14.50	10.00	19.00	1)1.5 HYE	122.5				50				
						Ant on Tower														
							Sector D													
						Ant _{1a}														
						Ant _{1b}														
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}														
						Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}														
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														



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

1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



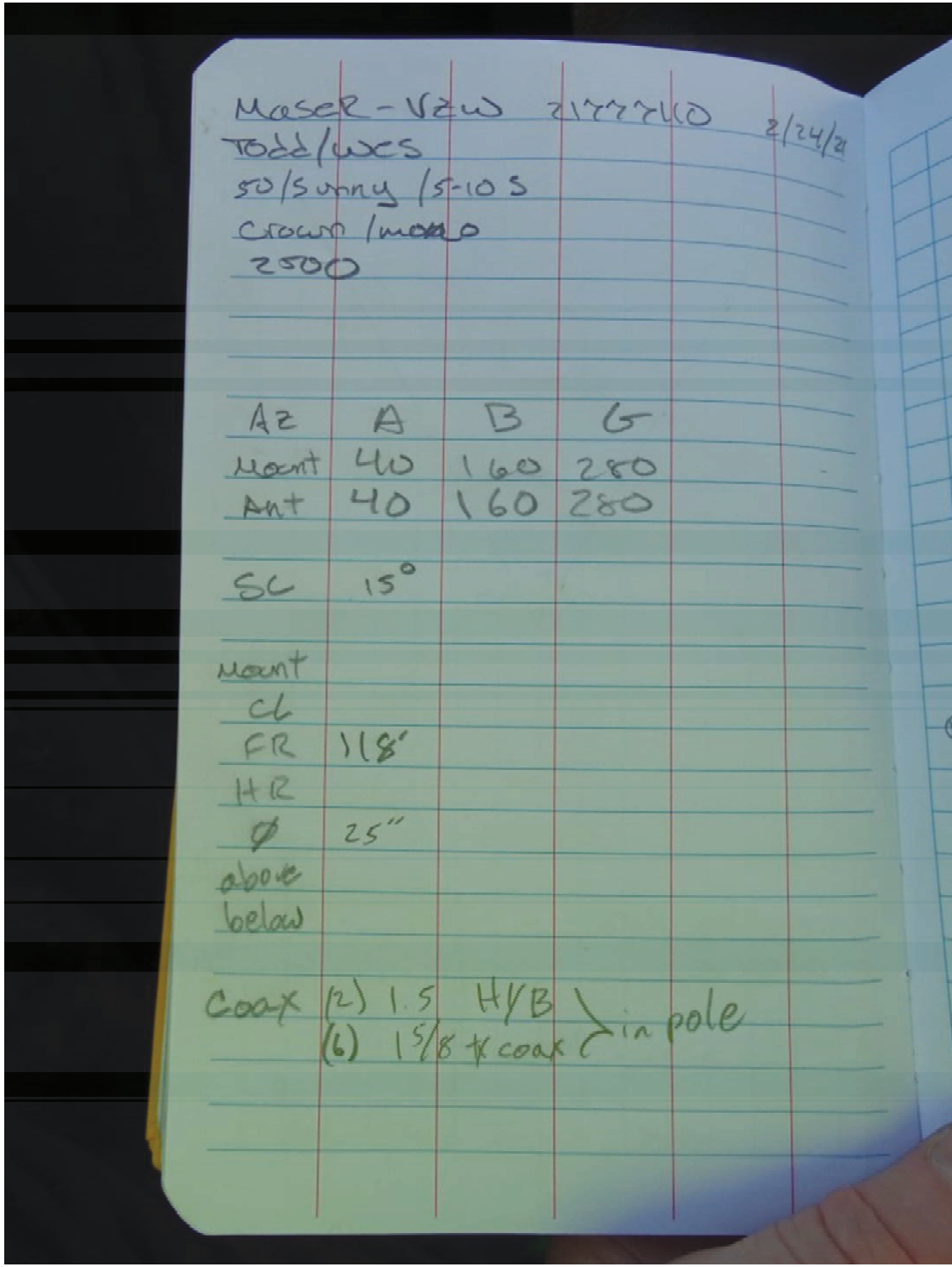
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	Crown Castle	Mapping Date:	2/24/2021
Site Name:	Branford CT	Tower Type:	Monopole
Site Number or ID:	16244072	Tower Height (Ft.):	150
Mapping Contractor:	Structural Components	Mount Elevation (Ft.):	118

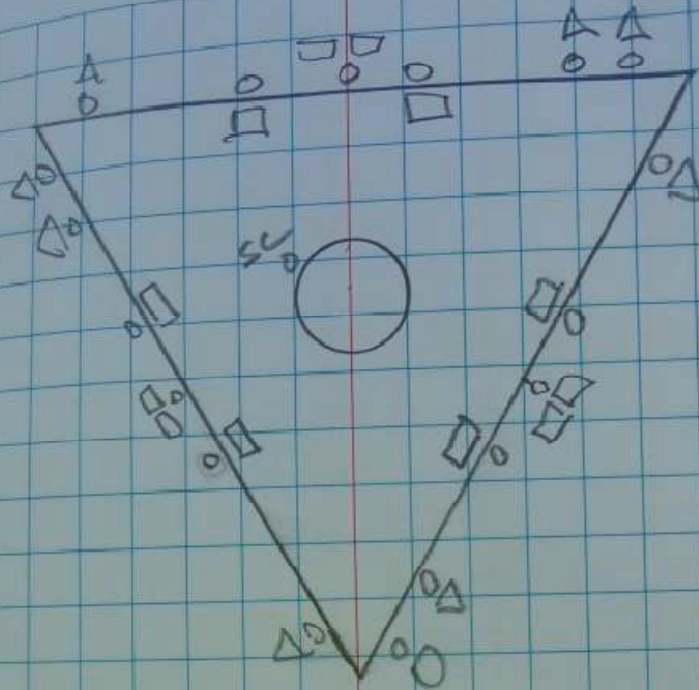
This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited 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



2/24/21

40°



pole B G

↑ 54 RRF DC - 3315 - PF-

48

21777110 Branford 3 CT

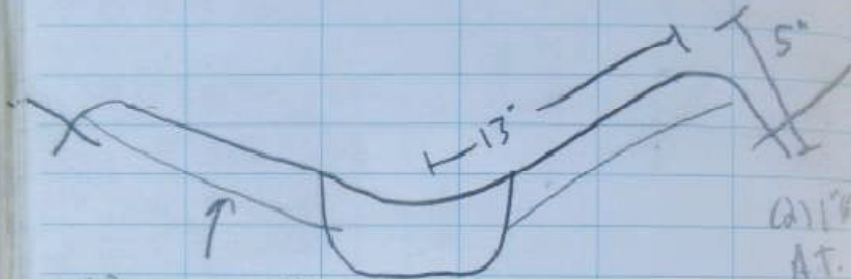
Maser/VZw MM

450F, Sunny, S-10 SW

2/29/21
Wes/Todd

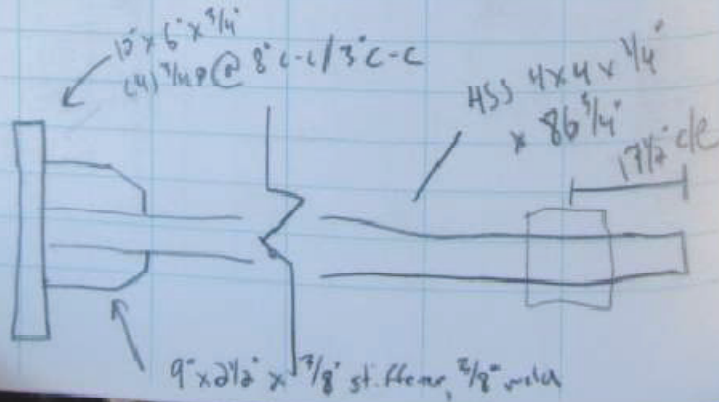
Crown sit - 2wp Access - 2500 Gate

Collar Mount - 12" tall x 1/2"



2) $\approx 12" \times 5" \times 3/8"$
stiffeners, $5 1/2"$ dc
 $5/16"$ weld

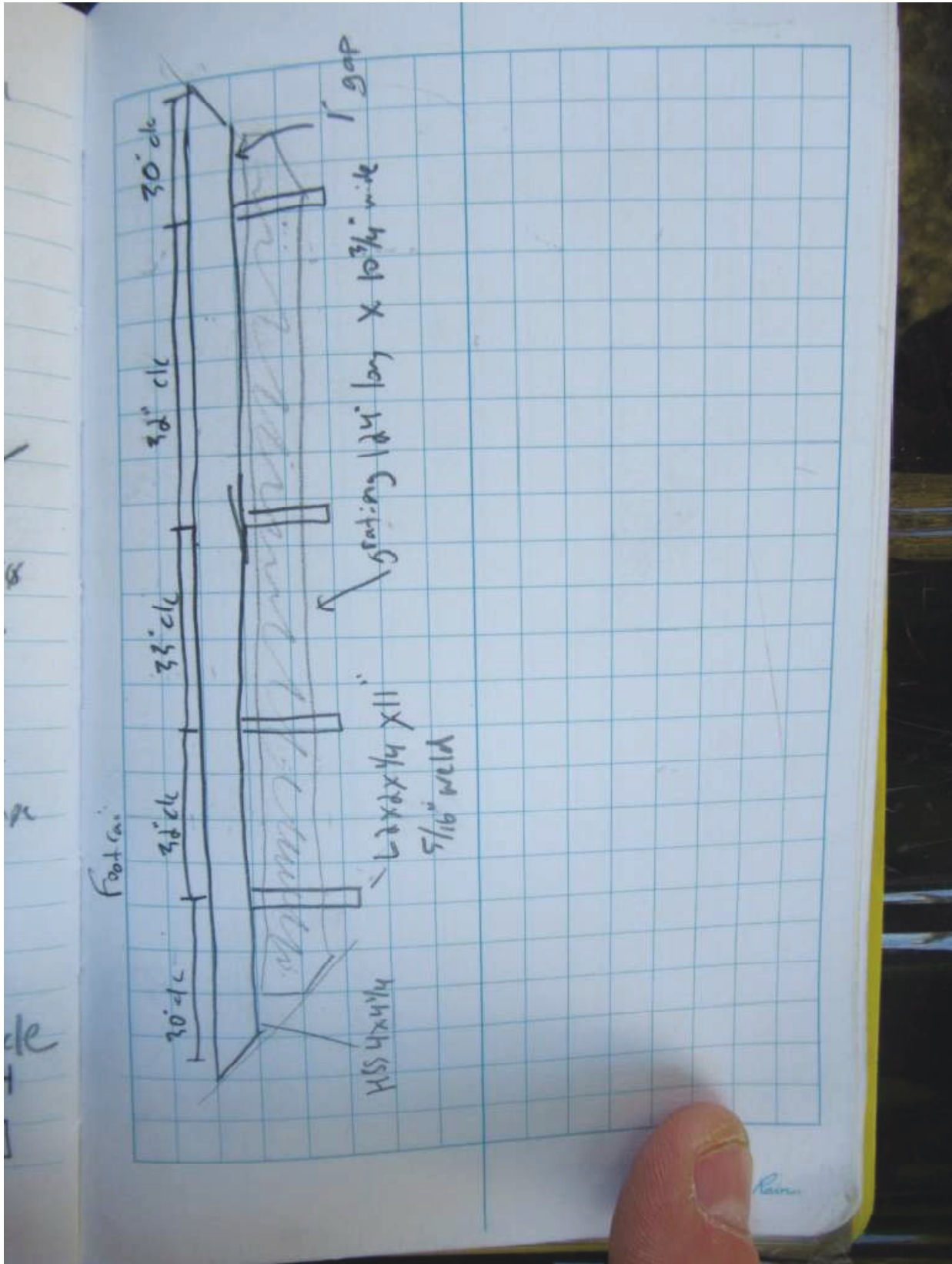
weld
 $11" \times 15"$ tall
 $2"$ dc
 $4 1/2"$ Flange x $1/2"$ C-shape
 $3/8"$ weld



$15 \times 6 \times 3/4"$
 $4 1/2" \text{ MP @ } 8" \text{ c-c} / 3" \text{ c-c}$

45S $4 \times 4 \times 1/4"$
 $\times 86 3/4"$
 $17 1/2" \text{ dc}$

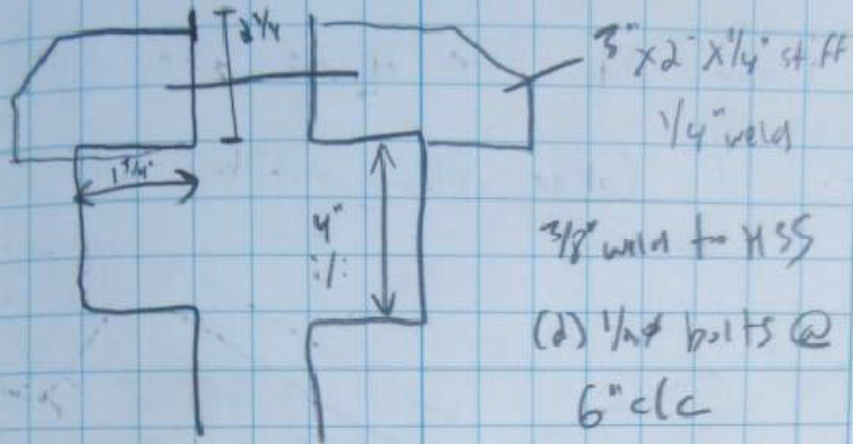
$9" \times 2 1/2" \times 3/8"$ stiffeners, $3/8"$ weld



Bantford 3 CT



HSS Connection - 9" long x 1/4" thick



2 x 1/4
bolts
1/4
Spacer
bolt

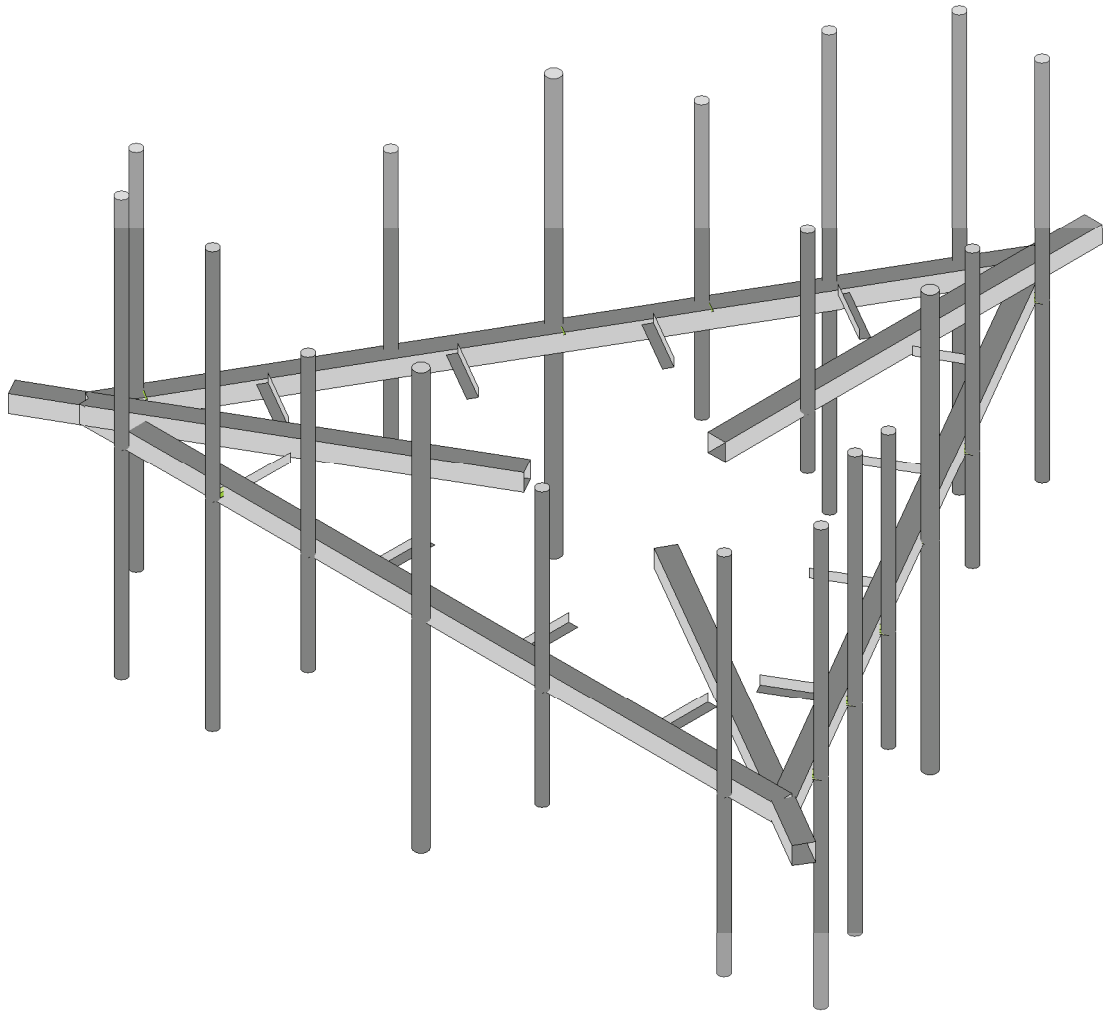
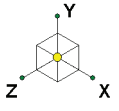
3/8" weld to HSS
(d) 1/2" bolts @
6" clc

Pipe Brackets - Typ.

8" x 7" x 3/8"

(8) 1/2" A.T. → 7" x 1 1/2" x 3/8" BP

6" clc, 5" clc

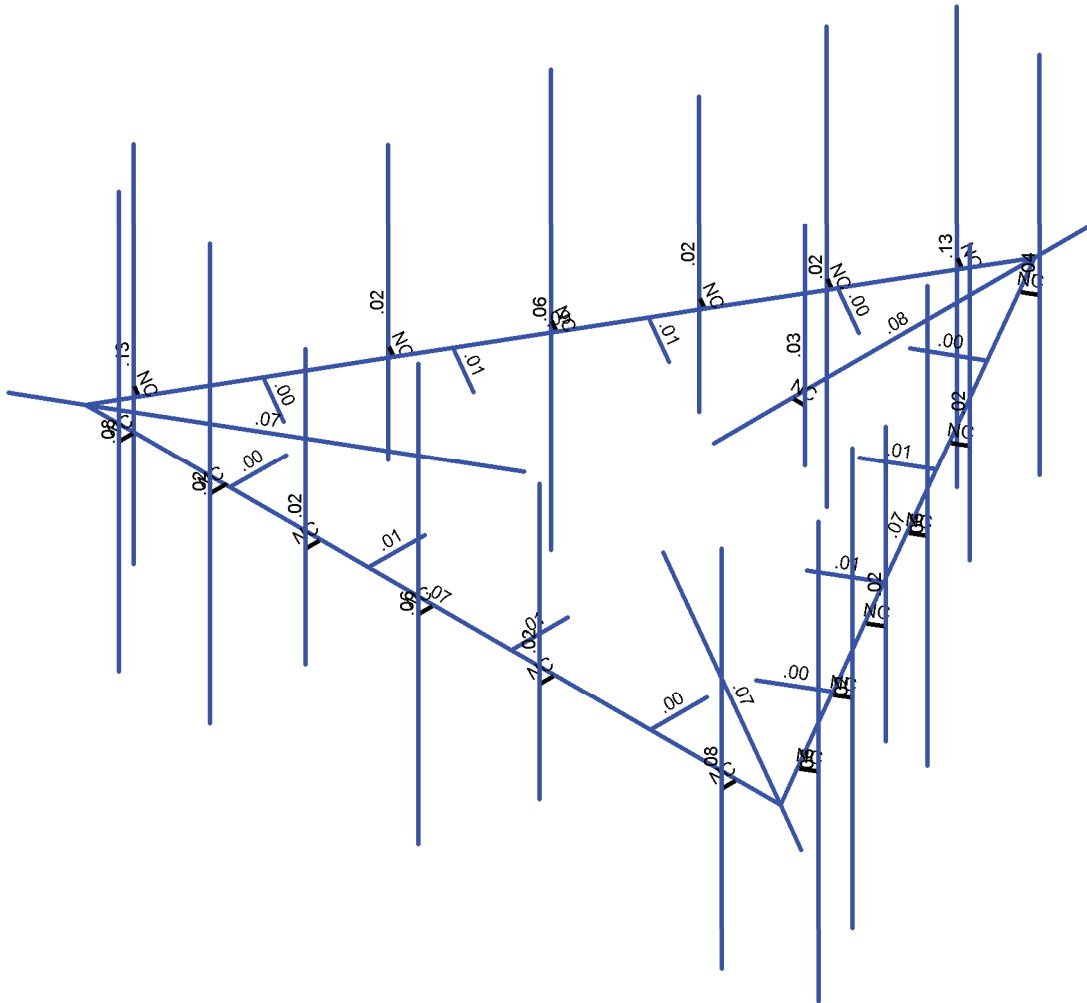
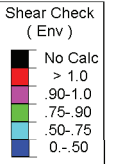
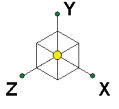


Envelope Only Solution

SK - 1

July 10, 2023 at 12:35 PM

5000382649-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		July 10, 2023 at 12:35 PM
		5000382649-VZW_MT_LO_H.r3d



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
49	N49	1.645139	0	-2.692202	0	
50	N50	3.958333	0	-0.852299	0	
51	N51	3.020139	0	-0.310632	0	
52	N52	4.353472	0	1.998769	0	
53	N53	4.175612	0	3.854167	0	
54	N55	1.508946	0	3.854167	0	
55	N57	-1.241054	0	3.854167	0	
56	N59	-3.907721	0	3.854167	0	
57	N61	-5.425612	0	1.689103	0	
58	N63	-4.092279	0	-0.620298	0	
59	N65	-2.717279	0	-3.001868	0	
60	N67	-1.383946	0	-5.311269	0	
61	N69	0.669257	4	-7.132479	0	
62	N70	5.842279	4	4.145833	0	
63	N71	-6.553203	4	3.058814	0	
64	N72	0.669257	-3	-7.132479	0	
65	N73	5.842279	-3	4.145833	0	
66	N74	-6.553203	-3	3.058814	0	
67	N75	2.502591	3.333333	-3.957052	0	
68	N76	4.710924	3.333333	-0.132107	0	
69	N77	2.342279	3.333333	4.145833	0	
70	N78	-2.157721	3.333333	4.145833	0	
71	N79	-4.761537	3.333333	-0.044443	0	
72	N80	-2.574037	3.333333	-3.833305	0	
73	N81	2.502591	-1.916667	-3.957052	0	
74	N82	4.710924	-1.916667	-0.132107	0	
75	N83	2.342279	-1.916667	4.145833	0	
76	N84	-2.157721	-1.916667	4.145833	0	
77	N85	-4.761537	-1.916667	-0.044443	0	
78	N86	-2.574037	-1.916667	-3.833305	0	
79	N87	3.606757	4.166667	-2.04458	0	
80	N88	5.585924	4.166667	1.383438	0	
81	N89	6.481757	4.166667	2.935066	0	
82	N90	0.008946	4.166667	4.145833	0	
83	N91	-3.991054	4.166667	4.145833	0	
84	N92	-5.741054	4.166667	4.145833	0	
85	N93	-3.615703	4.166667	-2.029085	0	
86	N94	-1.678203	4.166667	-5.384933	0	
87	N95	-0.761537	4.166667	-6.972647	0	
88	N96	3.606757	-3.833333	-2.04458	0	
89	N97	5.585924	-3.833333	1.383438	0	
90	N98	6.481757	-3.833333	2.935066	0	
91	N99	0.008946	-3.833333	4.145833	0	
92	N100	-3.991054	-3.833333	4.145833	0	
93	N101	-5.741054	-3.833333	4.145833	0	
94	N102	-3.615703	-3.833333	-2.029085	0	
95	N103	-1.678203	-3.833333	-5.384933	0	
96	N104	-0.761537	-3.833333	-6.972647	0	
97	N105	5.291667	0	1.457102	0	
98	N100A	4.175612	0	2.770833	0	
99	N102A	1.508946	0	2.770833	0	
100	N104A	-1.241054	0	2.770833	0	
101	N106A	-3.907721	0	2.770833	0	
102	N108	-4.487418	0	2.23077	0	
103	N110	-3.154085	0	-0.078631	0	
104	N112	-1.779085	0	-2.460201	0	
105	N114	-0.445752	0	-4.769602	0	



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
106	N106	-0.	0	-3.041667	0	
107	N107	.25	0	-3.041667	0	
108	N108A	.25	3	-3.041667	0	
109	N109	.25	-1	-3.041667	0	
110	N110A	0	0	0	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Standoff Horizontal	HSS4X4X4	None	None	A500 Gr.B RE...	Typical	3.37	7.8	7.8	12.8
2	Toerail	HSS4X4X4	None	None	A500 Gr.B RE...	Typical	3.37	7.8	7.8	12.8
3	Grating Angle	L2x2x4	None	None	A36 Gr.36	Typical	.944	.346	.346	.021
4	Mount Pipe	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
5	Mount Pipe Dual	PIPE_2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	.3	.65	.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	.3	.65	.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
9	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	.3	.65	.49	65	1.1	80	1.1

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Standoff Horiz...	None	None	A500 Gr.B...	Typical
2	M2	N4	N5			Standoff Horiz...	None	None	A500 Gr.B...	Typical
3	M3	N7	N8			Standoff Horiz...	None	None	A500 Gr.B...	Typical
4	M4	N3	N6			Toerail	None	None	A500 Gr.B...	Typical
5	M5	N6	N9			Toerail	None	None	A500 Gr.B...	Typical
6	M6	N9	N3			Toerail	None	None	A500 Gr.B...	Typical
7	M7	N10	N11			RIGID	None	None	RIGID	Typical
8	M8	N12	N13			RIGID	None	None	RIGID	Typical
9	M9	N14	N15			RIGID	None	None	RIGID	Typical
10	M10	N16	N17			RIGID	None	None	RIGID	Typical
11	M11	N18	N19			RIGID	None	None	RIGID	Typical
12	M12	N20	N21			RIGID	None	None	RIGID	Typical
13	M13	N22	N23			RIGID	None	None	RIGID	Typical
14	M14	N24	N25			RIGID	None	None	RIGID	Typical
15	M15	N26	N27			RIGID	None	None	RIGID	Typical
16	M16	N28	N29			RIGID	None	None	RIGID	Typical
17	M17	N30	N31			RIGID	None	None	RIGID	Typical
18	M18	N32	N33			RIGID	None	None	RIGID	Typical
19	M19	N34	N35			RIGID	None	None	RIGID	Typical
20	M20	N36	N37			RIGID	None	None	RIGID	Typical
21	M21	N38	N39			RIGID	None	None	RIGID	Typical
22	M22	N40	N41			RIGID	None	None	RIGID	Typical
23	M23	N42	N43			RIGID	None	None	RIGID	Typical



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
24	M24	N44	N45			RIGID	None	None	RIGID	Typical
25	M25	N46	N47			Grating Angle	None	None	A36 Gr.36	Typical
26	M26	N48	N49			Grating Angle	None	None	A36 Gr.36	Typical
27	M27	N50	N51			Grating Angle	None	None	A36 Gr.36	Typical
28	M47	N53	N100A			Grating Angle	None	None	A36 Gr.36	Typical
29	M48	N55	N102A			Grating Angle	None	None	A36 Gr.36	Typical
30	M49	N57	N104A			Grating Angle	None	None	A36 Gr.36	Typical
31	M50	N106A	N59			Grating Angle	None	None	A36 Gr.36	Typical
32	M51	N61	N108			Grating Angle	None	None	A36 Gr.36	Typical
33	M52	N63	N110			Grating Angle	None	None	A36 Gr.36	Typical
34	M53	N65	N112			Grating Angle	None	None	A36 Gr.36	Typical
35	M54	N114	N67			Grating Angle	None	None	A36 Gr.36	Typical
36	M54A	N52	N105			Grating Angle	None	None	A36 Gr.36	Typical
37	MP1A	N70	N73			Mount Pipe	None	None	A53 Gr.B	Typical
38	MP1B	N71	N74			Mount Pipe	None	None	A53 Gr.B	Typical
39	MP1C	N69	N72			Mount Pipe	None	None	A53 Gr.B	Typical
40	MP2A	N77	N83			Mount Pipe	None	None	A53 Gr.B	Typical
41	MP2B	N79	N85			Mount Pipe	None	None	A53 Gr.B	Typical
42	MP2C	N75	N81			Mount Pipe	None	None	A53 Gr.B	Typical
43	MP3A	N90	N99			Mount Pipe Dual	None	None	A53 Gr.B	Typical
44	MP3B	N93	N102			Mount Pipe Dual	None	None	A53 Gr.B	Typical
45	MP3C	N87	N96			Mount Pipe Dual	None	None	A53 Gr.B	Typical
46	MPRRUA	N78	N84			Mount Pipe	None	None	A53 Gr.B	Typical
47	MPRRUB	N80	N86			Mount Pipe	None	None	A53 Gr.B	Typical
48	MPRRUC	N76	N82			Mount Pipe	None	None	A53 Gr.B	Typical
49	MP4A	N91	N100			Mount Pipe	None	None	A53 Gr.B	Typical
50	MP4B	N94	N103			Mount Pipe	None	None	A53 Gr.B	Typical
51	MP4C	N88	N97			Mount Pipe	None	None	A53 Gr.B	Typical
52	MP5A	N92	N101			Mount Pipe	None	None	A53 Gr.B	Typical
53	MP5B	N95	N104			Mount Pipe	None	None	A53 Gr.B	Typical
54	MP5C	N89	N98			Mount Pipe	None	None	A53 Gr.B	Typical
55	OVP	N108A	N109			Mount Pipe	None	None	A53 Gr.B	Typical
56	M56	N106	N107			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7						Yes	** NA **			None
8	M8						Yes	** NA **			None
9	M9						Yes	** NA **			None
10	M10						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	M12						Yes	** NA **			None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16						Yes	** NA **			None
17	M17						Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M19						Yes	** NA **			None



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic..
20	M20						Yes	** NA **			None
21	M21						Yes	** NA **			None
22	M22						Yes	** NA **			None
23	M23						Yes	** NA **			None
24	M24						Yes	** NA **			None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	M27						Yes	** NA **			None
28	M47						Yes	** NA **			None
29	M48						Yes	** NA **			None
30	M49						Yes	** NA **			None
31	M50						Yes	** NA **			None
32	M51						Yes	** NA **			None
33	M52						Yes	** NA **			None
34	M53						Yes	** NA **			None
35	M54						Yes	** NA **			None
36	M54A						Yes	** NA **			None
37	MP1A						Yes	** NA **			None
38	MP1B						Yes	** NA **			None
39	MP1C						Yes	** NA **			None
40	MP2A						Yes	** NA **			None
41	MP2B						Yes	** NA **			None
42	MP2C						Yes	** NA **			None
43	MP3A						Yes	** NA **			None
44	MP3B						Yes	** NA **			None
45	MP3C						Yes	** NA **			None
46	MPRRUA						Yes	** NA **			None
47	MPRRUB						Yes	** NA **			None
48	MPRRUC						Yes	** NA **			None
49	MP4A						Yes	** NA **			None
50	MP4B						Yes	** NA **			None
51	MP4C						Yes	** NA **			None
52	MP5A						Yes	** NA **			None
53	MP5B						Yes	** NA **			None
54	MP5C						Yes	** NA **			None
55	OVP						Yes	** NA **			None
56	M56						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MPRRUB	Y	-70.3	1
2	MPRRUB	My	-.021	1
3	MPRRUB	Mz	.036	1
4	MPRRUC	Y	-70.3	1
5	MPRRUC	My	-.021	1
6	MPRRUC	Mz	-.036	1
7	MP3A	Y	-31.65	1.5
8	MP3A	My	-.017	1.5
9	MP3A	Mz	.024	1.5
10	MP3A	Y	-31.65	5.5
11	MP3A	My	-.017	5.5
12	MP3A	Mz	.024	5.5
13	MP3B	Y	-31.65	1.5
14	MP3B	My	-.013	1.5
15	MP3B	Mz	-.027	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
73	MP2B	Y	-84.4	1
74	MP2B	My	-.025	1
75	MP2B	Mz	.043	1
76	MP2C	Y	-84.4	1
77	MP2C	My	-.025	1
78	MP2C	Mz	-.043	1
79	MPRRUA	Y	-70.3	1
80	MPRRUA	My	.041	1
81	MPRRUA	Mz	0	1
82	MP1B	Y	-13.5	2
83	MP1B	My	.006	2
84	MP1B	Mz	-.016	2
85	MP1B	Y	-13.5	5
86	MP1B	My	.006	5
87	MP1B	Mz	-.016	5
88	MP5B	Y	-13.5	2
89	MP5B	My	.006	2
90	MP5B	Mz	-.016	2
91	MP5B	Y	-13.5	5
92	MP5B	My	.006	5
93	MP5B	Mz	-.016	5
94	MP1A	Y	-6	2
95	MP1A	My	-.007	2
96	MP1A	Mz	.001	2
97	MP1A	Y	-6	5
98	MP1A	My	-.007	5
99	MP1A	Mz	.001	5
100	MP5A	Y	-6	2
101	MP5A	My	-.007	2
102	MP5A	Mz	.001	2
103	MP5A	Y	-6	5
104	MP5A	My	-.007	5
105	MP5A	Mz	.001	5
106	MP1C	Y	-3.15	2
107	MP1C	My	.002	2
108	MP1C	Mz	.002	2
109	MP1C	Y	-3.15	5
110	MP1C	My	.002	5
111	MP1C	Mz	.002	5
112	MP5C	Y	-3.15	2
113	MP5C	My	.003	2
114	MP5C	Mz	.003	2
115	MP5C	Y	-3.15	5
116	MP5C	My	.003	5
117	MP5C	Mz	.003	5
118	OVP	Y	-26.9	1
119	OVP	My	-.01	1
120	OVP	Mz	.009	1
121	MP3C	Y	-17.6	5.5
122	MP3C	My	.003	5.5
123	MP3C	Mz	.003	5.5
124	MP3C	Y	-17.6	5.5
125	MP3C	My	-.003	5.5
126	MP3C	Mz	-.003	5.5

Member Point Loads (BLC 2 : Antenna Di)

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



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP4C	Y	-34.926	5
59	MP4C	My	.015	5
60	MP4C	Mz	.018	5
61	MP3A	Y	-10.505	1
62	MP3A	My	.006	1
63	MP3A	Mz	-.004	1
64	MP3B	Y	-10.505	1
65	MP3B	My	-3.1e-5	1
66	MP3B	Mz	.007	1
67	MP3C	Y	-10.505	1
68	MP3C	My	-.006	1
69	MP3C	Mz	-.004	1
70	MP2A	Y	-44.02	1
71	MP2A	My	.026	1
72	MP2A	Mz	0	1
73	MP2B	Y	-44.02	1
74	MP2B	My	-.013	1
75	MP2B	Mz	.022	1
76	MP2C	Y	-44.02	1
77	MP2C	My	-.013	1
78	MP2C	Mz	-.022	1
79	MPRRUA	Y	-39.582	1
80	MPRRUA	My	.023	1
81	MPRRUA	Mz	0	1
82	MP1B	Y	-87.014	2
83	MP1B	My	.037	2
84	MP1B	Mz	-.102	2
85	MP1B	Y	-87.014	5
86	MP1B	My	.037	5
87	MP1B	Mz	-.102	5
88	MP5B	Y	-87.014	2
89	MP5B	My	.037	2
90	MP5B	Mz	-.102	2
91	MP5B	Y	-87.014	5
92	MP5B	My	.037	5
93	MP5B	Mz	-.102	5
94	MP1A	Y	-39.516	2
95	MP1A	My	-.044	2
96	MP1A	Mz	.008	2
97	MP1A	Y	-39.516	5
98	MP1A	My	-.044	5
99	MP1A	Mz	.008	5
100	MP5A	Y	-39.516	2
101	MP5A	My	-.044	2
102	MP5A	Mz	.008	2
103	MP5A	Y	-39.516	5
104	MP5A	My	-.044	5
105	MP5A	Mz	.008	5
106	MP1C	Y	-30.616	2
107	MP1C	My	.018	2
108	MP1C	Mz	.021	2
109	MP1C	Y	-30.616	5
110	MP1C	My	.018	5
111	MP1C	Mz	.021	5
112	MP5C	Y	-30.616	2
113	MP5C	My	.025	2
114	MP5C	Mz	.029	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
115	MP5C	Y	-30.616	5
116	MP5C	My	.025	5
117	MP5C	Mz	.029	5
118	OVP	Y	-54.191	1
119	OVP	My	-.021	1
120	OVP	Mz	.017	1
121	MP3C	Y	-16.971	5.5
122	MP3C	My	.003	5.5
123	MP3C	Mz	.003	5.5
124	MP3C	Y	-16.971	5.5
125	MP3C	My	-.003	5.5
126	MP3C	Mz	-.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MPRRUB	X	0	1
2	MPRRUB	Z	-35.993	1
3	MPRRUB	Mx	-.018	1
4	MPRRUC	X	0	1
5	MPRRUC	Z	-35.993	1
6	MPRRUC	Mx	.018	1
7	MP3A	X	0	1.5
8	MP3A	Z	-158.293	1.5
9	MP3A	Mx	-.122	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-158.293	5.5
12	MP3A	Mx	-.122	5.5
13	MP3B	X	0	1.5
14	MP3B	Z	-111.474	1.5
15	MP3B	Mx	.095	1.5
16	MP3B	X	0	5.5
17	MP3B	Z	-111.474	5.5
18	MP3B	Mx	.095	5.5
19	MP3C	X	0	1.5
20	MP3C	Z	-127.734	1.5
21	MP3C	Mx	-.01	1.5
22	MP3C	X	0	5.5
23	MP3C	Z	-127.734	5.5
24	MP3C	Mx	-.01	5.5
25	MP3A	X	0	1.5
26	MP3A	Z	-158.293	1.5
27	MP3A	Mx	.086	1.5
28	MP3A	X	0	5.5
29	MP3A	Z	-158.293	5.5
30	MP3A	Mx	.086	5.5
31	MP3B	X	0	1.5
32	MP3B	Z	-111.474	1.5
33	MP3B	Mx	.044	1.5
34	MP3B	X	0	5.5
35	MP3B	Z	-111.474	5.5
36	MP3B	Mx	.044	5.5
37	MP3C	X	0	1.5
38	MP3C	Z	-127.734	1.5
39	MP3C	Mx	-.12	1.5
40	MP3C	X	0	5.5
41	MP3C	Z	-127.734	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
42	MP3C	Mx	-.12	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	-67.465	2.5
45	MP4A	Mx	-.008	2.5
46	MP4A	X	0	5
47	MP4A	Z	-67.465	5
48	MP4A	Mx	-.008	5
49	MP4B	X	0	2.5
50	MP4B	Z	-28.981	2.5
51	MP4B	Mx	.018	2.5
52	MP4B	X	0	5
53	MP4B	Z	-28.981	5
54	MP4B	Mx	.018	5
55	MP4C	X	0	2.5
56	MP4C	Z	-42.346	2.5
57	MP4C	Mx	-.022	2.5
58	MP4C	X	0	5
59	MP4C	Z	-42.346	5
60	MP4C	Mx	-.022	5
61	MP3A	X	0	1
62	MP3A	Z	-12.993	1
63	MP3A	Mx	.004	1
64	MP3B	X	0	1
65	MP3B	Z	-9.99	1
66	MP3B	Mx	-.007	1
67	MP3C	X	0	1
68	MP3C	Z	-9.99	1
69	MP3C	Mx	.003	1
70	MP2A	X	0	1
71	MP2A	Z	-54.428	1
72	MP2A	Mx	0	1
73	MP2B	X	0	1
74	MP2B	Z	-40.997	1
75	MP2B	Mx	-.021	1
76	MP2C	X	0	1
77	MP2C	Z	-40.997	1
78	MP2C	Mx	.021	1
79	MPRRUA	X	0	1
80	MPRRUA	Z	-54.428	1
81	MPRRUA	Mx	0	1
82	MP1B	X	0	2
83	MP1B	Z	-152.656	2
84	MP1B	Mx	.179	2
85	MP1B	X	0	5
86	MP1B	Z	-152.656	5
87	MP1B	Mx	.179	5
88	MP5B	X	0	2
89	MP5B	Z	-152.656	2
90	MP5B	Mx	.179	2
91	MP5B	X	0	5
92	MP5B	Z	-152.656	5
93	MP5B	Mx	.179	5
94	MP1A	X	0	2
95	MP1A	Z	-47.301	2
96	MP1A	Mx	-.009	2
97	MP1A	X	0	5
98	MP1A	Z	-47.301	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
26	MP3A	Z	-118.876	1.5
27	MP3A	Mx	.011	1.5
28	MP3A	X	68.633	5.5
29	MP3A	Z	-118.876	5.5
30	MP3A	Mx	.011	5.5
31	MP3B	X	53.354	1.5
32	MP3B	Z	-92.411	1.5
33	MP3B	Mx	.082	1.5
34	MP3B	X	53.354	5.5
35	MP3B	Z	-92.411	5.5
36	MP3B	Mx	.082	5.5
37	MP3C	X	76.763	1.5
38	MP3C	Z	-132.958	1.5
39	MP3C	Mx	-.131	1.5
40	MP3C	X	76.763	5.5
41	MP3C	Z	-132.958	5.5
42	MP3C	Mx	-.131	5.5
43	MP4A	X	25.091	2.5
44	MP4A	Z	-43.459	2.5
45	MP4A	Mx	-.022	2.5
46	MP4A	X	25.091	5
47	MP4A	Z	-43.459	5
48	MP4A	Mx	-.022	5
49	MP4B	X	12.532	2.5
50	MP4B	Z	-21.705	2.5
51	MP4B	Mx	.016	2.5
52	MP4B	X	12.532	5
53	MP4B	Z	-21.705	5
54	MP4B	Mx	.016	5
55	MP4C	X	31.773	2.5
56	MP4C	Z	-55.033	2.5
57	MP4C	Mx	-.014	2.5
58	MP4C	X	31.773	5
59	MP4C	Z	-55.033	5
60	MP4C	Mx	-.014	5
61	MP3A	X	5.996	1
62	MP3A	Z	-10.385	1
63	MP3A	Mx	.007	1
64	MP3B	X	4.495	1
65	MP3B	Z	-7.785	1
66	MP3B	Mx	-.005	1
67	MP3C	X	5.996	1
68	MP3C	Z	-10.385	1
69	MP3C	Mx	3.6e-5	1
70	MP2A	X	24.975	1
71	MP2A	Z	-43.259	1
72	MP2A	Mx	.015	1
73	MP2B	X	18.26	1
74	MP2B	Z	-31.627	1
75	MP2B	Mx	-.021	1
76	MP2C	X	24.975	1
77	MP2C	Z	-43.259	1
78	MP2C	Mx	.015	1
79	MPRRUA	X	24.142	1
80	MPRRUA	Z	-41.814	1
81	MPRRUA	Mx	.014	1
82	MP1B	X	75.547	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
83	MP1B	Z	-130.851	2
84	MP1B	Mx	.186	2
85	MP1B	X	75.547	5
86	MP1B	Z	-130.851	5
87	MP1B	Mx	.186	5
88	MP5B	X	75.547	2
89	MP5B	Z	-130.851	2
90	MP5B	Mx	.186	2
91	MP5B	X	75.547	5
92	MP5B	Z	-130.851	5
93	MP5B	Mx	.186	5
94	MP1A	X	33.028	2
95	MP1A	Z	-57.206	2
96	MP1A	Mx	-.048	2
97	MP1A	X	33.028	5
98	MP1A	Z	-57.206	5
99	MP1A	Mx	-.048	5
100	MP5A	X	33.028	2
101	MP5A	Z	-57.206	2
102	MP5A	Mx	-.048	2
103	MP5A	X	33.028	5
104	MP5A	Z	-57.206	5
105	MP5A	Mx	-.048	5
106	MP1C	X	25.882	2
107	MP1C	Z	-44.829	2
108	MP1C	Mx	-.016	2
109	MP1C	X	25.882	5
110	MP1C	Z	-44.829	5
111	MP1C	Mx	-.016	5
112	MP5C	X	25.882	2
113	MP5C	Z	-44.829	2
114	MP5C	Mx	-.022	2
115	MP5C	X	25.882	5
116	MP5C	Z	-44.829	5
117	MP5C	Mx	-.022	5
118	OVP	X	30.267	1
119	OVP	Z	-52.425	1
120	OVP	Mx	-.028	1
121	MP3C	X	15.462	5.5
122	MP3C	Z	-26.782	5.5
123	MP3C	Mx	-.003	5.5
124	MP3C	X	15.462	5.5
125	MP3C	Z	-26.782	5.5
126	MP3C	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	31.171	1
2	MPRRUB	Z	-17.996	1
3	MPRRUB	Mx	-.018	1
4	MPRRUC	X	47.136	1
5	MPRRUC	Z	-27.214	1
6	MPRRUC	Mx	0	1
7	MP3A	X	96.539	1.5
8	MP3A	Z	-55.737	1.5
9	MP3A	Mx	-.095	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
10	MP3A	X	96.539	5.5
11	MP3A	Z	-55.737	5.5
12	MP3A	Mx	-.095	5.5
13	MP3B	X	110.621	1.5
14	MP3B	Z	-63.867	1.5
15	MP3B	Mx	.01	1.5
16	MP3B	X	110.621	5.5
17	MP3B	Z	-63.867	5.5
18	MP3B	Mx	.01	5.5
19	MP3C	X	137.086	1.5
20	MP3C	Z	-79.147	1.5
21	MP3C	Mx	.122	1.5
22	MP3C	X	137.086	5.5
23	MP3C	Z	-79.147	5.5
24	MP3C	Mx	.122	5.5
25	MP3A	X	96.539	1.5
26	MP3A	Z	-55.737	1.5
27	MP3A	Mx	-.044	1.5
28	MP3A	X	96.539	5.5
29	MP3A	Z	-55.737	5.5
30	MP3A	Mx	-.044	5.5
31	MP3B	X	110.621	1.5
32	MP3B	Z	-63.867	1.5
33	MP3B	Mx	.12	1.5
34	MP3B	X	110.621	5.5
35	MP3B	Z	-63.867	5.5
36	MP3B	Mx	.12	5.5
37	MP3C	X	137.086	1.5
38	MP3C	Z	-79.147	1.5
39	MP3C	Mx	-.086	1.5
40	MP3C	X	137.086	5.5
41	MP3C	Z	-79.147	5.5
42	MP3C	Mx	-.086	5.5
43	MP4A	X	25.098	2.5
44	MP4A	Z	-14.49	2.5
45	MP4A	Mx	-.018	2.5
46	MP4A	X	25.098	5
47	MP4A	Z	-14.49	5
48	MP4A	Mx	-.018	5
49	MP4B	X	36.673	2.5
50	MP4B	Z	-21.173	2.5
51	MP4B	Mx	.022	2.5
52	MP4B	X	36.673	5
53	MP4B	Z	-21.173	5
54	MP4B	Mx	.022	5
55	MP4C	X	58.426	2.5
56	MP4C	Z	-33.732	2.5
57	MP4C	Mx	.008	2.5
58	MP4C	X	58.426	5
59	MP4C	Z	-33.732	5
60	MP4C	Mx	.008	5
61	MP3A	X	8.652	1
62	MP3A	Z	-4.995	1
63	MP3A	Mx	.007	1
64	MP3B	X	8.652	1
65	MP3B	Z	-4.995	1
66	MP3B	Mx	-.003	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
67	MP3C	X	11.252	1
68	MP3C	Z	-6.496	1
69	MP3C	Mx	-.004	1
70	MP2A	X	35.504	1
71	MP2A	Z	-20.498	1
72	MP2A	Mx	.021	1
73	MP2B	X	35.504	1
74	MP2B	Z	-20.498	1
75	MP2B	Mx	-.021	1
76	MP2C	X	47.136	1
77	MP2C	Z	-27.214	1
78	MP2C	Mx	0	1
79	MPRRUA	X	31.171	1
80	MPRRUA	Z	-17.996	1
81	MPRRUA	Mx	.018	1
82	MP1B	X	136.822	2
83	MP1B	Z	-78.994	2
84	MP1B	Mx	.151	2
85	MP1B	X	136.822	5
86	MP1B	Z	-78.994	5
87	MP1B	Mx	.151	5
88	MP5B	X	136.822	2
89	MP5B	Z	-78.994	2
90	MP5B	Mx	.151	2
91	MP5B	X	136.822	5
92	MP5B	Z	-78.994	5
93	MP5B	Mx	.151	5
94	MP1A	X	77.13	2
95	MP1A	Z	-44.531	2
96	MP1A	Mx	-.094	2
97	MP1A	X	77.13	5
98	MP1A	Z	-44.531	5
99	MP1A	Mx	-.094	5
100	MP5A	X	77.13	2
101	MP5A	Z	-44.531	2
102	MP5A	Mx	-.094	2
103	MP5A	X	77.13	5
104	MP5A	Z	-44.531	5
105	MP5A	Mx	-.094	5
106	MP1C	X	43.833	2
107	MP1C	Z	-25.307	2
108	MP1C	Mx	.008	2
109	MP1C	X	43.833	5
110	MP1C	Z	-25.307	5
111	MP1C	Mx	.008	5
112	MP5C	X	43.833	2
113	MP5C	Z	-25.307	2
114	MP5C	Mx	.011	2
115	MP5C	X	43.833	5
116	MP5C	Z	-25.307	5
117	MP5C	Mx	.011	5
118	OVP	X	50.113	1
119	OVP	Z	-28.933	1
120	OVP	Mx	-.028	1
121	MP3C	X	28.545	5.5
122	MP3C	Z	-16.481	5.5
123	MP3C	Mx	.001	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
124	MP3C	X	28.545	5.5
125	MP3C	Z	-16.481	5.5
126	MP3C	Mx	-.001	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPRRUB	X	48.283	1
2	MPRRUB	Z	0	1
3	MPRRUB	Mx	-.014	1
4	MPRRUC	X	48.283	1
5	MPRRUC	Z	0	1
6	MPRRUC	Mx	-.014	1
7	MP3A	X	106.708	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.058	1.5
10	MP3A	X	106.708	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	-.058	5.5
13	MP3B	X	153.527	1.5
14	MP3B	Z	0	1.5
15	MP3B	Mx	-.061	1.5
16	MP3B	X	153.527	5.5
17	MP3B	Z	0	5.5
18	MP3B	Mx	-.061	5.5
19	MP3C	X	137.267	1.5
20	MP3C	Z	0	1.5
21	MP3C	Mx	.129	1.5
22	MP3C	X	137.267	5.5
23	MP3C	Z	0	5.5
24	MP3C	Mx	.129	5.5
25	MP3A	X	106.708	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.082	1.5
28	MP3A	X	106.708	5.5
29	MP3A	Z	0	5.5
30	MP3A	Mx	-.082	5.5
31	MP3B	X	153.527	1.5
32	MP3B	Z	0	1.5
33	MP3B	Mx	.131	1.5
34	MP3B	X	153.527	5.5
35	MP3B	Z	0	5.5
36	MP3B	Mx	.131	5.5
37	MP3C	X	137.267	1.5
38	MP3C	Z	0	1.5
39	MP3C	Mx	-.011	1.5
40	MP3C	X	137.267	5.5
41	MP3C	Z	0	5.5
42	MP3C	Mx	-.011	5.5
43	MP4A	X	25.063	2.5
44	MP4A	Z	0	2.5
45	MP4A	Mx	-.016	2.5
46	MP4A	X	25.063	5
47	MP4A	Z	0	5
48	MP4A	Mx	-.016	5
49	MP4B	X	63.547	2.5
50	MP4B	Z	0	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
108	MP1C	Mx	.033	2
109	MP1C	X	55.69	5
110	MP1C	Z	0	5
111	MP1C	Mx	.033	5
112	MP5C	X	55.69	2
113	MP5C	Z	0	2
114	MP5C	Mx	.045	2
115	MP5C	X	55.69	5
116	MP5C	Z	0	5
117	MP5C	Mx	.045	5
118	OVP	X	69.64	1
119	OVP	Z	0	1
120	OVP	Mx	-.027	1
121	MP3C	X	23.977	5.5
122	MP3C	Z	0	5.5
123	MP3C	Mx	.004	5.5
124	MP3C	X	23.977	5.5
125	MP3C	Z	0	5.5
126	MP3C	Mx	-.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPPRRUB	X	47.136	1
2	MPPRRUB	Z	27.214	1
3	MPPRRUB	Mx	0	1
4	MPPRRUC	X	31.171	1
5	MPPRRUC	Z	17.996	1
6	MPPRRUC	Mx	-.018	1
7	MP3A	X	110.621	1.5
8	MP3A	Z	63.867	1.5
9	MP3A	Mx	-.01	1.5
10	MP3A	X	110.621	5.5
11	MP3A	Z	63.867	5.5
12	MP3A	Mx	-.01	5.5
13	MP3B	X	137.086	1.5
14	MP3B	Z	79.147	1.5
15	MP3B	Mx	-.122	1.5
16	MP3B	X	137.086	5.5
17	MP3B	Z	79.147	5.5
18	MP3B	Mx	-.122	5.5
19	MP3C	X	96.539	1.5
20	MP3C	Z	55.737	1.5
21	MP3C	Mx	.095	1.5
22	MP3C	X	96.539	5.5
23	MP3C	Z	55.737	5.5
24	MP3C	Mx	.095	5.5
25	MP3A	X	110.621	1.5
26	MP3A	Z	63.867	1.5
27	MP3A	Mx	-.12	1.5
28	MP3A	X	110.621	5.5
29	MP3A	Z	63.867	5.5
30	MP3A	Mx	-.12	5.5
31	MP3B	X	137.086	1.5
32	MP3B	Z	79.147	1.5
33	MP3B	Mx	.086	1.5
34	MP3B	X	137.086	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
92	MP5B	Z	84.004	5
93	MP5B	Mx	-.036	5
94	MP1A	X	64.57	2
95	MP1A	Z	37.28	2
96	MP1A	Mx	-.064	2
97	MP1A	X	64.57	5
98	MP1A	Z	37.28	5
99	MP1A	Mx	-.064	5
100	MP5A	X	64.57	2
101	MP5A	Z	37.28	2
102	MP5A	Mx	-.064	2
103	MP5A	X	64.57	5
104	MP5A	Z	37.28	5
105	MP5A	Mx	-.064	5
106	MP1C	X	53.621	2
107	MP1C	Z	30.958	2
108	MP1C	Mx	.053	2
109	MP1C	X	53.621	5
110	MP1C	Z	30.958	5
111	MP1C	Mx	.053	5
112	MP5C	X	53.621	2
113	MP5C	Z	30.958	2
114	MP5C	Mx	.073	2
115	MP5C	X	53.621	5
116	MP5C	Z	30.958	5
117	MP5C	Mx	.073	5
118	OVP	X	72.818	1
119	OVP	Z	42.042	1
120	OVP	Mx	-.014	1
121	MP3C	X	11.22	5.5
122	MP3C	Z	6.478	5.5
123	MP3C	Mx	.003	5.5
124	MP3C	X	11.22	5.5
125	MP3C	Z	6.478	5.5
126	MP3C	Mx	-.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	24.142	1
2	MRRUB	Z	41.814	1
3	MRRUB	Mx	.014	1
4	MRRUC	X	14.924	1
5	MRRUC	Z	25.849	1
6	MRRUC	Mx	-.017	1
7	MP3A	X	76.763	1.5
8	MP3A	Z	132.958	1.5
9	MP3A	Mx	.061	1.5
10	MP3A	X	76.763	5.5
11	MP3A	Z	132.958	5.5
12	MP3A	Mx	.061	5.5
13	MP3B	X	68.633	1.5
14	MP3B	Z	118.876	1.5
15	MP3B	Mx	-.129	1.5
16	MP3B	X	68.633	5.5
17	MP3B	Z	118.876	5.5
18	MP3B	Mx	-.129	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
76	MP2C	X	18.26	1
77	MP2C	Z	31.627	1
78	MP2C	Mx	-.021	1
79	MPRRUA	X	24.142	1
80	MPRRUA	Z	41.814	1
81	MPRRUA	Mx	.014	1
82	MP1B	X	80.557	2
83	MP1B	Z	139.529	2
84	MP1B	Mx	-.129	2
85	MP1B	X	80.557	5
86	MP1B	Z	139.529	5
87	MP1B	Mx	-.129	5
88	MP5B	X	80.557	2
89	MP5B	Z	139.529	2
90	MP5B	Mx	-.129	2
91	MP5B	X	80.557	5
92	MP5B	Z	139.529	5
93	MP5B	Mx	-.129	5
94	MP1A	X	25.776	2
95	MP1A	Z	44.646	2
96	MP1A	Mx	-.02	2
97	MP1A	X	25.776	5
98	MP1A	Z	44.646	5
99	MP1A	Mx	-.02	5
100	MP5A	X	25.776	2
101	MP5A	Z	44.646	2
102	MP5A	Mx	-.02	2
103	MP5A	X	25.776	5
104	MP5A	Z	44.646	5
105	MP5A	Mx	-.02	5
106	MP1C	X	31.534	2
107	MP1C	Z	54.618	2
108	MP1C	Mx	.057	2
109	MP1C	X	31.534	5
110	MP1C	Z	54.618	5
111	MP1C	Mx	.057	5
112	MP5C	X	31.534	2
113	MP5C	Z	54.618	2
114	MP5C	Mx	.078	2
115	MP5C	X	31.534	5
116	MP5C	Z	54.618	5
117	MP5C	Mx	.078	5
118	OVP	X	43.376	1
119	OVP	Z	75.13	1
120	OVP	Mx	.008	1
121	MP3C	X	5.46	5.5
122	MP3C	Z	9.456	5.5
123	MP3C	Mx	.003	5.5
124	MP3C	X	5.46	5.5
125	MP3C	Z	9.456	5.5
126	MP3C	Mx	-.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	0	1
2	MPRRUB	Z	35.993	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MPRRUB	Mx	.018	1
4	MPRRUC	X	0	1
5	MPRRUC	Z	35.993	1
6	MPRRUC	Mx	-.018	1
7	MP3A	X	0	1.5
8	MP3A	Z	158.293	1.5
9	MP3A	Mx	.122	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	158.293	5.5
12	MP3A	Mx	.122	5.5
13	MP3B	X	0	1.5
14	MP3B	Z	111.474	1.5
15	MP3B	Mx	-.095	1.5
16	MP3B	X	0	5.5
17	MP3B	Z	111.474	5.5
18	MP3B	Mx	-.095	5.5
19	MP3C	X	0	1.5
20	MP3C	Z	127.734	1.5
21	MP3C	Mx	.01	1.5
22	MP3C	X	0	5.5
23	MP3C	Z	127.734	5.5
24	MP3C	Mx	.01	5.5
25	MP3A	X	0	1.5
26	MP3A	Z	158.293	1.5
27	MP3A	Mx	-.086	1.5
28	MP3A	X	0	5.5
29	MP3A	Z	158.293	5.5
30	MP3A	Mx	-.086	5.5
31	MP3B	X	0	1.5
32	MP3B	Z	111.474	1.5
33	MP3B	Mx	-.044	1.5
34	MP3B	X	0	5.5
35	MP3B	Z	111.474	5.5
36	MP3B	Mx	-.044	5.5
37	MP3C	X	0	1.5
38	MP3C	Z	127.734	1.5
39	MP3C	Mx	.12	1.5
40	MP3C	X	0	5.5
41	MP3C	Z	127.734	5.5
42	MP3C	Mx	.12	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	67.465	2.5
45	MP4A	Mx	.008	2.5
46	MP4A	X	0	5
47	MP4A	Z	67.465	5
48	MP4A	Mx	.008	5
49	MP4B	X	0	2.5
50	MP4B	Z	28.981	2.5
51	MP4B	Mx	-.018	2.5
52	MP4B	X	0	5
53	MP4B	Z	28.981	5
54	MP4B	Mx	-.018	5
55	MP4C	X	0	2.5
56	MP4C	Z	42.346	2.5
57	MP4C	Mx	.022	2.5
58	MP4C	X	0	5
59	MP4C	Z	42.346	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
117	MP5C	Mx	.056	5
118	OVP	X	0	1
119	OVP	Z	74.978	1
120	OVP	Mx	.024	1
121	MP3C	X	0	5.5
122	MP3C	Z	19.904	5.5
123	MP3C	Mx	.004	5.5
124	MP3C	X	0	5.5
125	MP3C	Z	19.904	5.5
126	MP3C	Mx	-.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-14.924	1
2	MPRRUB	Z	25.849	1
3	MPRRUB	Mx	.017	1
4	MPRRUC	X	-24.142	1
5	MPRRUC	Z	41.814	1
6	MPRRUC	Mx	-.014	1
7	MP3A	X	-68.633	1.5
8	MP3A	Z	118.876	1.5
9	MP3A	Mx	.129	1.5
10	MP3A	X	-68.633	5.5
11	MP3A	Z	118.876	5.5
12	MP3A	Mx	.129	5.5
13	MP3B	X	-53.354	1.5
14	MP3B	Z	92.411	1.5
15	MP3B	Mx	-.058	1.5
16	MP3B	X	-53.354	5.5
17	MP3B	Z	92.411	5.5
18	MP3B	Mx	-.058	5.5
19	MP3C	X	-76.763	1.5
20	MP3C	Z	132.958	1.5
21	MP3C	Mx	-.061	1.5
22	MP3C	X	-76.763	5.5
23	MP3C	Z	132.958	5.5
24	MP3C	Mx	-.061	5.5
25	MP3A	X	-68.633	1.5
26	MP3A	Z	118.876	1.5
27	MP3A	Mx	-.011	1.5
28	MP3A	X	-68.633	5.5
29	MP3A	Z	118.876	5.5
30	MP3A	Mx	-.011	5.5
31	MP3B	X	-53.354	1.5
32	MP3B	Z	92.411	1.5
33	MP3B	Mx	-.082	1.5
34	MP3B	X	-53.354	5.5
35	MP3B	Z	92.411	5.5
36	MP3B	Mx	-.082	5.5
37	MP3C	X	-76.763	1.5
38	MP3C	Z	132.958	1.5
39	MP3C	Mx	.131	1.5
40	MP3C	X	-76.763	5.5
41	MP3C	Z	132.958	5.5
42	MP3C	Mx	.131	5.5
43	MP4A	X	-25.091	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
44	MP4A	Z	43.459	2.5
45	MP4A	Mx	.022	2.5
46	MP4A	X	-25.091	5
47	MP4A	Z	43.459	5
48	MP4A	Mx	.022	5
49	MP4B	X	-12.532	2.5
50	MP4B	Z	21.705	2.5
51	MP4B	Mx	-.016	2.5
52	MP4B	X	-12.532	5
53	MP4B	Z	21.705	5
54	MP4B	Mx	-.016	5
55	MP4C	X	-31.773	2.5
56	MP4C	Z	55.033	2.5
57	MP4C	Mx	.014	2.5
58	MP4C	X	-31.773	5
59	MP4C	Z	55.033	5
60	MP4C	Mx	.014	5
61	MP3A	X	-5.996	1
62	MP3A	Z	10.385	1
63	MP3A	Mx	-.007	1
64	MP3B	X	-4.495	1
65	MP3B	Z	7.785	1
66	MP3B	Mx	.005	1
67	MP3C	X	-5.996	1
68	MP3C	Z	10.385	1
69	MP3C	Mx	-3.6e-5	1
70	MP2A	X	-24.975	1
71	MP2A	Z	43.259	1
72	MP2A	Mx	-.015	1
73	MP2B	X	-18.26	1
74	MP2B	Z	31.627	1
75	MP2B	Mx	.021	1
76	MP2C	X	-24.975	1
77	MP2C	Z	43.259	1
78	MP2C	Mx	-.015	1
79	MPRRUA	X	-24.142	1
80	MPRRUA	Z	41.814	1
81	MPRRUA	Mx	-.014	1
82	MP1B	X	-75.547	2
83	MP1B	Z	130.851	2
84	MP1B	Mx	-.186	2
85	MP1B	X	-75.547	5
86	MP1B	Z	130.851	5
87	MP1B	Mx	-.186	5
88	MP5B	X	-75.547	2
89	MP5B	Z	130.851	2
90	MP5B	Mx	-.186	2
91	MP5B	X	-75.547	5
92	MP5B	Z	130.851	5
93	MP5B	Mx	-.186	5
94	MP1A	X	-33.028	2
95	MP1A	Z	57.206	2
96	MP1A	Mx	.048	2
97	MP1A	X	-33.028	5
98	MP1A	Z	57.206	5
99	MP1A	Mx	.048	5
100	MP5A	X	-33.028	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
28	MP3A	X	-96.539	5.5
29	MP3A	Z	55.737	5.5
30	MP3A	Mx	.044	5.5
31	MP3B	X	-110.621	1.5
32	MP3B	Z	63.867	1.5
33	MP3B	Mx	-.12	1.5
34	MP3B	X	-110.621	5.5
35	MP3B	Z	63.867	5.5
36	MP3B	Mx	-.12	5.5
37	MP3C	X	-137.086	1.5
38	MP3C	Z	79.147	1.5
39	MP3C	Mx	.086	1.5
40	MP3C	X	-137.086	5.5
41	MP3C	Z	79.147	5.5
42	MP3C	Mx	.086	5.5
43	MP4A	X	-25.098	2.5
44	MP4A	Z	14.49	2.5
45	MP4A	Mx	.018	2.5
46	MP4A	X	-25.098	5
47	MP4A	Z	14.49	5
48	MP4A	Mx	.018	5
49	MP4B	X	-36.673	2.5
50	MP4B	Z	21.173	2.5
51	MP4B	Mx	-.022	2.5
52	MP4B	X	-36.673	5
53	MP4B	Z	21.173	5
54	MP4B	Mx	-.022	5
55	MP4C	X	-58.426	2.5
56	MP4C	Z	33.732	2.5
57	MP4C	Mx	-.008	2.5
58	MP4C	X	-58.426	5
59	MP4C	Z	33.732	5
60	MP4C	Mx	-.008	5
61	MP3A	X	-8.652	1
62	MP3A	Z	4.995	1
63	MP3A	Mx	-.007	1
64	MP3B	X	-8.652	1
65	MP3B	Z	4.995	1
66	MP3B	Mx	.003	1
67	MP3C	X	-11.252	1
68	MP3C	Z	6.496	1
69	MP3C	Mx	.004	1
70	MP2A	X	-35.504	1
71	MP2A	Z	20.498	1
72	MP2A	Mx	-.021	1
73	MP2B	X	-35.504	1
74	MP2B	Z	20.498	1
75	MP2B	Mx	.021	1
76	MP2C	X	-47.136	1
77	MP2C	Z	27.214	1
78	MP2C	Mx	0	1
79	MPRRUA	X	-31.171	1
80	MPRRUA	Z	17.996	1
81	MPRRUA	Mx	-.018	1
82	MP1B	X	-136.822	2
83	MP1B	Z	78.994	2
84	MP1B	Mx	-.151	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
85	MP1B	X	-136.822	5
86	MP1B	Z	78.994	5
87	MP1B	Mx	-.151	5
88	MP5B	X	-136.822	2
89	MP5B	Z	78.994	2
90	MP5B	Mx	-.151	2
91	MP5B	X	-136.822	5
92	MP5B	Z	78.994	5
93	MP5B	Mx	-.151	5
94	MP1A	X	-77.13	2
95	MP1A	Z	44.531	2
96	MP1A	Mx	.094	2
97	MP1A	X	-77.13	5
98	MP1A	Z	44.531	5
99	MP1A	Mx	.094	5
100	MP5A	X	-77.13	2
101	MP5A	Z	44.531	2
102	MP5A	Mx	.094	2
103	MP5A	X	-77.13	5
104	MP5A	Z	44.531	5
105	MP5A	Mx	.094	5
106	MP1C	X	-43.833	2
107	MP1C	Z	25.307	2
108	MP1C	Mx	-.008	2
109	MP1C	X	-43.833	5
110	MP1C	Z	25.307	5
111	MP1C	Mx	-.008	5
112	MP5C	X	-43.833	2
113	MP5C	Z	25.307	2
114	MP5C	Mx	-.011	2
115	MP5C	X	-43.833	5
116	MP5C	Z	25.307	5
117	MP5C	Mx	-.011	5
118	OVP	X	-50.113	1
119	OVP	Z	28.933	1
120	OVP	Mx	.028	1
121	MP3C	X	-28.545	5.5
122	MP3C	Z	16.481	5.5
123	MP3C	Mx	-.001	5.5
124	MP3C	X	-28.545	5.5
125	MP3C	Z	16.481	5.5
126	MP3C	Mx	.001	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-48.283	1
2	MPRRUB	Z	0	1
3	MPRRUB	Mx	.014	1
4	MPRRUC	X	-48.283	1
5	MPRRUC	Z	0	1
6	MPRRUC	Mx	.014	1
7	MP3A	X	-106.708	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.058	1.5
10	MP3A	X	-106.708	5.5
11	MP3A	Z	0	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP3A	Mx	.058	5.5
13	MP3B	X	-153.527	1.5
14	MP3B	Z	0	1.5
15	MP3B	Mx	.061	1.5
16	MP3B	X	-153.527	5.5
17	MP3B	Z	0	5.5
18	MP3B	Mx	.061	5.5
19	MP3C	X	-137.267	1.5
20	MP3C	Z	0	1.5
21	MP3C	Mx	-.129	1.5
22	MP3C	X	-137.267	5.5
23	MP3C	Z	0	5.5
24	MP3C	Mx	-.129	5.5
25	MP3A	X	-106.708	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.082	1.5
28	MP3A	X	-106.708	5.5
29	MP3A	Z	0	5.5
30	MP3A	Mx	.082	5.5
31	MP3B	X	-153.527	1.5
32	MP3B	Z	0	1.5
33	MP3B	Mx	-.131	1.5
34	MP3B	X	-153.527	5.5
35	MP3B	Z	0	5.5
36	MP3B	Mx	-.131	5.5
37	MP3C	X	-137.267	1.5
38	MP3C	Z	0	1.5
39	MP3C	Mx	.011	1.5
40	MP3C	X	-137.267	5.5
41	MP3C	Z	0	5.5
42	MP3C	Mx	.011	5.5
43	MP4A	X	-25.063	2.5
44	MP4A	Z	0	2.5
45	MP4A	Mx	.016	2.5
46	MP4A	X	-25.063	5
47	MP4A	Z	0	5
48	MP4A	Mx	.016	5
49	MP4B	X	-63.547	2.5
50	MP4B	Z	0	2.5
51	MP4B	Mx	-.014	2.5
52	MP4B	X	-63.547	5
53	MP4B	Z	0	5
54	MP4B	Mx	-.014	5
55	MP4C	X	-50.182	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	-.022	2.5
58	MP4C	X	-50.182	5
59	MP4C	Z	0	5
60	MP4C	Mx	-.022	5
61	MP3A	X	-8.989	1
62	MP3A	Z	0	1
63	MP3A	Mx	-.005	1
64	MP3B	X	-11.992	1
65	MP3B	Z	0	1
66	MP3B	Mx	3.6e-5	1
67	MP3C	X	-11.992	1
68	MP3C	Z	0	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
126	MP3C	Mx	.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MPRRUB	X	-47.136	1
2	MPRRUB	Z	-27.214	1
3	MPRRUB	Mx	0	1
4	MPRRUC	X	-31.171	1
5	MPRRUC	Z	-17.996	1
6	MPRRUC	Mx	.018	1
7	MP3A	X	-110.621	1.5
8	MP3A	Z	-63.867	1.5
9	MP3A	Mx	.01	1.5
10	MP3A	X	-110.621	5.5
11	MP3A	Z	-63.867	5.5
12	MP3A	Mx	.01	5.5
13	MP3B	X	-137.086	1.5
14	MP3B	Z	-79.147	1.5
15	MP3B	Mx	.122	1.5
16	MP3B	X	-137.086	5.5
17	MP3B	Z	-79.147	5.5
18	MP3B	Mx	.122	5.5
19	MP3C	X	-96.539	1.5
20	MP3C	Z	-55.737	1.5
21	MP3C	Mx	-.095	1.5
22	MP3C	X	-96.539	5.5
23	MP3C	Z	-55.737	5.5
24	MP3C	Mx	-.095	5.5
25	MP3A	X	-110.621	1.5
26	MP3A	Z	-63.867	1.5
27	MP3A	Mx	.12	1.5
28	MP3A	X	-110.621	5.5
29	MP3A	Z	-63.867	5.5
30	MP3A	Mx	.12	5.5
31	MP3B	X	-137.086	1.5
32	MP3B	Z	-79.147	1.5
33	MP3B	Mx	-.086	1.5
34	MP3B	X	-137.086	5.5
35	MP3B	Z	-79.147	5.5
36	MP3B	Mx	-.086	5.5
37	MP3C	X	-96.539	1.5
38	MP3C	Z	-55.737	1.5
39	MP3C	Mx	-.044	1.5
40	MP3C	X	-96.539	5.5
41	MP3C	Z	-55.737	5.5
42	MP3C	Mx	-.044	5.5
43	MP4A	X	-36.673	2.5
44	MP4A	Z	-21.173	2.5
45	MP4A	Mx	.022	2.5
46	MP4A	X	-36.673	5
47	MP4A	Z	-21.173	5
48	MP4A	Mx	.022	5
49	MP4B	X	-58.426	2.5
50	MP4B	Z	-33.732	2.5
51	MP4B	Mx	.008	2.5
52	MP4B	X	-58.426	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
53	MP4B	Z	-33.732	5
54	MP4B	Mx	.008	5
55	MP4C	X	-25.098	2.5
56	MP4C	Z	-14.49	2.5
57	MP4C	Mx	-.018	2.5
58	MP4C	X	-25.098	5
59	MP4C	Z	-14.49	5
60	MP4C	Mx	-.018	5
61	MP3A	X	-8.652	1
62	MP3A	Z	-4.995	1
63	MP3A	Mx	-.003	1
64	MP3B	X	-11.252	1
65	MP3B	Z	-6.496	1
66	MP3B	Mx	-.004	1
67	MP3C	X	-8.652	1
68	MP3C	Z	-4.995	1
69	MP3C	Mx	.007	1
70	MP2A	X	-35.504	1
71	MP2A	Z	-20.498	1
72	MP2A	Mx	-.021	1
73	MP2B	X	-47.136	1
74	MP2B	Z	-27.214	1
75	MP2B	Mx	0	1
76	MP2C	X	-35.504	1
77	MP2C	Z	-20.498	1
78	MP2C	Mx	.021	1
79	MPRRUA	X	-31.171	1
80	MPRRUA	Z	-17.996	1
81	MPRRUA	Mx	-.018	1
82	MP1B	X	-145.5	2
83	MP1B	Z	-84.004	2
84	MP1B	Mx	.036	2
85	MP1B	X	-145.5	5
86	MP1B	Z	-84.004	5
87	MP1B	Mx	.036	5
88	MP5B	X	-145.5	2
89	MP5B	Z	-84.004	2
90	MP5B	Mx	.036	2
91	MP5B	X	-145.5	5
92	MP5B	Z	-84.004	5
93	MP5B	Mx	.036	5
94	MP1A	X	-64.57	2
95	MP1A	Z	-37.28	2
96	MP1A	Mx	.064	2
97	MP1A	X	-64.57	5
98	MP1A	Z	-37.28	5
99	MP1A	Mx	.064	5
100	MP5A	X	-64.57	2
101	MP5A	Z	-37.28	2
102	MP5A	Mx	.064	2
103	MP5A	X	-64.57	5
104	MP5A	Z	-37.28	5
105	MP5A	Mx	.064	5
106	MP1C	X	-53.621	2
107	MP1C	Z	-30.958	2
108	MP1C	Mx	-.053	2
109	MP1C	X	-53.621	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
110	MP1C	Z	-30.958	5
111	MP1C	Mx	-.053	5
112	MP5C	X	-53.621	2
113	MP5C	Z	-30.958	2
114	MP5C	Mx	-.073	2
115	MP5C	X	-53.621	5
116	MP5C	Z	-30.958	5
117	MP5C	Mx	-.073	5
118	OVP	X	-72.818	1
119	OVP	Z	-42.042	1
120	OVP	Mx	.014	1
121	MP3C	X	-11.22	5.5
122	MP3C	Z	-6.478	5.5
123	MP3C	Mx	-.003	5.5
124	MP3C	X	-11.22	5.5
125	MP3C	Z	-6.478	5.5
126	MP3C	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPRRUB	X	-24.142	1
2	MPRRUB	Z	-41.814	1
3	MPRRUB	Mx	-.014	1
4	MPRRUC	X	-14.924	1
5	MPRRUC	Z	-25.849	1
6	MPRRUC	Mx	.017	1
7	MP3A	X	-76.763	1.5
8	MP3A	Z	-132.958	1.5
9	MP3A	Mx	-.061	1.5
10	MP3A	X	-76.763	5.5
11	MP3A	Z	-132.958	5.5
12	MP3A	Mx	-.061	5.5
13	MP3B	X	-68.633	1.5
14	MP3B	Z	-118.876	1.5
15	MP3B	Mx	.129	1.5
16	MP3B	X	-68.633	5.5
17	MP3B	Z	-118.876	5.5
18	MP3B	Mx	.129	5.5
19	MP3C	X	-53.354	1.5
20	MP3C	Z	-92.411	1.5
21	MP3C	Mx	-.058	1.5
22	MP3C	X	-53.354	5.5
23	MP3C	Z	-92.411	5.5
24	MP3C	Mx	-.058	5.5
25	MP3A	X	-76.763	1.5
26	MP3A	Z	-132.958	1.5
27	MP3A	Mx	.131	1.5
28	MP3A	X	-76.763	5.5
29	MP3A	Z	-132.958	5.5
30	MP3A	Mx	.131	5.5
31	MP3B	X	-68.633	1.5
32	MP3B	Z	-118.876	1.5
33	MP3B	Mx	-.011	1.5
34	MP3B	X	-68.633	5.5
35	MP3B	Z	-118.876	5.5
36	MP3B	Mx	-.011	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	-25.776	2
95	MP1A	Z	-44.646	2
96	MP1A	Mx	.02	2
97	MP1A	X	-25.776	5
98	MP1A	Z	-44.646	5
99	MP1A	Mx	.02	5
100	MP5A	X	-25.776	2
101	MP5A	Z	-44.646	2
102	MP5A	Mx	.02	2
103	MP5A	X	-25.776	5
104	MP5A	Z	-44.646	5
105	MP5A	Mx	.02	5
106	MP1C	X	-31.534	2
107	MP1C	Z	-54.618	2
108	MP1C	Mx	-.057	2
109	MP1C	X	-31.534	5
110	MP1C	Z	-54.618	5
111	MP1C	Mx	-.057	5
112	MP5C	X	-31.534	2
113	MP5C	Z	-54.618	2
114	MP5C	Mx	-.078	2
115	MP5C	X	-31.534	5
116	MP5C	Z	-54.618	5
117	MP5C	Mx	-.078	5
118	OVP	X	-43.376	1
119	OVP	Z	-75.13	1
120	OVP	Mx	-.008	1
121	MP3C	X	-5.46	5.5
122	MP3C	Z	-9.456	5.5
123	MP3C	Mx	-.003	5.5
124	MP3C	X	-5.46	5.5
125	MP3C	Z	-9.456	5.5
126	MP3C	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPPRRUB	X	0	1
2	MPPRRUB	Z	-8.578	1
3	MPPRRUB	Mx	-.004	1
4	MPPRRUC	X	0	1
5	MPPRRUC	Z	-8.578	1
6	MPPRRUC	Mx	.004	1
7	MP3A	X	0	1.5
8	MP3A	Z	-27.731	1.5
9	MP3A	Mx	-.021	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-27.731	5.5
12	MP3A	Mx	-.021	5.5
13	MP3B	X	0	1.5
14	MP3B	Z	-20.13	1.5
15	MP3B	Mx	.017	1.5
16	MP3B	X	0	5.5
17	MP3B	Z	-20.13	5.5
18	MP3B	Mx	.017	5.5
19	MP3C	X	0	1.5
20	MP3C	Z	-22.77	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP3C	Mx	-.002	1.5
22	MP3C	X	0	5.5
23	MP3C	Z	-22.77	5.5
24	MP3C	Mx	-.002	5.5
25	MP3A	X	0	1.5
26	MP3A	Z	-27.731	1.5
27	MP3A	Mx	.015	1.5
28	MP3A	X	0	5.5
29	MP3A	Z	-27.731	5.5
30	MP3A	Mx	.015	5.5
31	MP3B	X	0	1.5
32	MP3B	Z	-20.13	1.5
33	MP3B	Mx	.008	1.5
34	MP3B	X	0	5.5
35	MP3B	Z	-20.13	5.5
36	MP3B	Mx	.008	5.5
37	MP3C	X	0	1.5
38	MP3C	Z	-22.77	1.5
39	MP3C	Mx	-.021	1.5
40	MP3C	X	0	5.5
41	MP3C	Z	-22.77	5.5
42	MP3C	Mx	-.021	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	-14.627	2.5
45	MP4A	Mx	-.002	2.5
46	MP4A	X	0	5
47	MP4A	Z	-14.627	5
48	MP4A	Mx	-.002	5
49	MP4B	X	0	2.5
50	MP4B	Z	-7.332	2.5
51	MP4B	Mx	.005	2.5
52	MP4B	X	0	5
53	MP4B	Z	-7.332	5
54	MP4B	Mx	.005	5
55	MP4C	X	0	2.5
56	MP4C	Z	-9.865	2.5
57	MP4C	Mx	-.005	2.5
58	MP4C	X	0	5
59	MP4C	Z	-9.865	5
60	MP4C	Mx	-.005	5
61	MP3A	X	0	1
62	MP3A	Z	-3.032	1
63	MP3A	Mx	.001	1
64	MP3B	X	0	1
65	MP3B	Z	-2.462	1
66	MP3B	Mx	-.002	1
67	MP3C	X	0	1
68	MP3C	Z	-2.462	1
69	MP3C	Mx	.000833	1
70	MP2A	X	0	1
71	MP2A	Z	-12.533	1
72	MP2A	Mx	0	1
73	MP2B	X	0	1
74	MP2B	Z	-9.667	1
75	MP2B	Mx	-.005	1
76	MP2C	X	0	1
77	MP2C	Z	-9.667	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
78	MP2C	Mx	.005	1
79	MRRUA	X	0	1
80	MRRUA	Z	-12.533	1
81	MRRUA	Mx	0	1
82	MP1B	X	0	2
83	MP1B	Z	-26.773	2
84	MP1B	Mx	.031	2
85	MP1B	X	0	5
86	MP1B	Z	-26.773	5
87	MP1B	Mx	.031	5
88	MP5B	X	0	2
89	MP5B	Z	-26.773	2
90	MP5B	Mx	.031	2
91	MP5B	X	0	5
92	MP5B	Z	-26.773	5
93	MP5B	Mx	.031	5
94	MP1A	X	0	2
95	MP1A	Z	-9.103	2
96	MP1A	Mx	-.002	2
97	MP1A	X	0	5
98	MP1A	Z	-9.103	5
99	MP1A	Mx	-.002	5
100	MP5A	X	0	2
101	MP5A	Z	-9.103	2
102	MP5A	Mx	-.002	2
103	MP5A	X	0	5
104	MP5A	Z	-9.103	5
105	MP5A	Mx	-.002	5
106	MP1C	X	0	2
107	MP1C	Z	-10.84	2
108	MP1C	Mx	-.008	2
109	MP1C	X	0	5
110	MP1C	Z	-10.84	5
111	MP1C	Mx	-.008	5
112	MP5C	X	0	2
113	MP5C	Z	-10.84	2
114	MP5C	Mx	-.01	2
115	MP5C	X	0	5
116	MP5C	Z	-10.84	5
117	MP5C	Mx	-.01	5
118	OVP	X	0	1
119	OVP	Z	-14.144	1
120	OVP	Mx	-.005	1
121	MP3C	X	0	5.5
122	MP3C	Z	-4.353	5.5
123	MP3C	Mx	-.000834	5.5
124	MP3C	X	0	5.5
125	MP3C	Z	-4.353	5.5
126	MP3C	Mx	.000834	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	3.63	1
2	MRRUB	Z	-6.287	1
3	MRRUB	Mx	-.004	1
4	MRRUC	X	5.607	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
62	MP3A	Z	-2.461	1
63	MP3A	Mx	.002	1
64	MP3B	X	1.136	1
65	MP3B	Z	-1.968	1
66	MP3B	Mx	-.001	1
67	MP3C	X	1.421	1
68	MP3C	Z	-2.461	1
69	MP3C	Mx	8e-6	1
70	MP2A	X	5.789	1
71	MP2A	Z	-10.027	1
72	MP2A	Mx	.003	1
73	MP2B	X	4.356	1
74	MP2B	Z	-7.545	1
75	MP2B	Mx	-.005	1
76	MP2C	X	5.789	1
77	MP2C	Z	-10.027	1
78	MP2C	Mx	.003	1
79	MPRRUA	X	5.607	1
80	MPRRUA	Z	-9.712	1
81	MPRRUA	Mx	.003	1
82	MP1B	X	13.258	2
83	MP1B	Z	-22.964	2
84	MP1B	Mx	.033	2
85	MP1B	X	13.258	5
86	MP1B	Z	-22.964	5
87	MP1B	Mx	.033	5
88	MP5B	X	13.258	2
89	MP5B	Z	-22.964	2
90	MP5B	Mx	.033	2
91	MP5B	X	13.258	5
92	MP5B	Z	-22.964	5
93	MP5B	Mx	.033	5
94	MP1A	X	6.1	2
95	MP1A	Z	-10.566	2
96	MP1A	Mx	-.009	2
97	MP1A	X	6.1	5
98	MP1A	Z	-10.566	5
99	MP1A	Mx	-.009	5
100	MP5A	X	6.1	2
101	MP5A	Z	-10.566	2
102	MP5A	Mx	-.009	2
103	MP5A	X	6.1	5
104	MP5A	Z	-10.566	5
105	MP5A	Mx	-.009	5
106	MP1C	X	4.914	2
107	MP1C	Z	-8.512	2
108	MP1C	Mx	-.003	2
109	MP1C	X	4.914	5
110	MP1C	Z	-8.512	5
111	MP1C	Mx	-.003	5
112	MP5C	X	4.914	2
113	MP5C	Z	-8.512	2
114	MP5C	Mx	-.004	2
115	MP5C	X	4.914	5
116	MP5C	Z	-8.512	5
117	MP5C	Mx	-.004	5
118	OVP	X	5.838	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
119	OVP	Z	-10.112	1
120	OVP	Mx	-.005	1
121	MP3C	X	3.185	5.5
122	MP3C	Z	-5.517	5.5
123	MP3C	Mx	-.000545	5.5
124	MP3C	X	3.185	5.5
125	MP3C	Z	-5.517	5.5
126	MP3C	Mx	.000545	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	7.429	1
2	MRRUB	Z	-4.289	1
3	MRRUB	Mx	-.004	1
4	MRRUC	X	10.854	1
5	MRRUC	Z	-6.267	1
6	MRRUC	Mx	0	1
7	MP3A	X	17.433	1.5
8	MP3A	Z	-10.065	1.5
9	MP3A	Mx	-.017	1.5
10	MP3A	X	17.433	5.5
11	MP3A	Z	-10.065	5.5
12	MP3A	Mx	-.017	5.5
13	MP3B	X	19.719	1.5
14	MP3B	Z	-11.385	1.5
15	MP3B	Mx	.002	1.5
16	MP3B	X	19.719	5.5
17	MP3B	Z	-11.385	5.5
18	MP3B	Mx	.002	5.5
19	MP3C	X	24.016	1.5
20	MP3C	Z	-13.865	1.5
21	MP3C	Mx	.021	1.5
22	MP3C	X	24.016	5.5
23	MP3C	Z	-13.865	5.5
24	MP3C	Mx	.021	5.5
25	MP3A	X	17.433	1.5
26	MP3A	Z	-10.065	1.5
27	MP3A	Mx	-.008	1.5
28	MP3A	X	17.433	5.5
29	MP3A	Z	-10.065	5.5
30	MP3A	Mx	-.008	5.5
31	MP3B	X	19.719	1.5
32	MP3B	Z	-11.385	1.5
33	MP3B	Mx	.021	1.5
34	MP3B	X	19.719	5.5
35	MP3B	Z	-11.385	5.5
36	MP3B	Mx	.021	5.5
37	MP3C	X	24.016	1.5
38	MP3C	Z	-13.865	1.5
39	MP3C	Mx	-.015	1.5
40	MP3C	X	24.016	5.5
41	MP3C	Z	-13.865	5.5
42	MP3C	Mx	-.015	5.5
43	MP4A	X	6.349	2.5
44	MP4A	Z	-3.666	2.5
45	MP4A	Mx	-.005	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
46	MP4A	X	6.349	5
47	MP4A	Z	-3.666	5
48	MP4A	Mx	-.005	5
49	MP4B	X	8.544	2.5
50	MP4B	Z	-4.933	2.5
51	MP4B	Mx	.005	2.5
52	MP4B	X	8.544	5
53	MP4B	Z	-4.933	5
54	MP4B	Mx	.005	5
55	MP4C	X	12.667	2.5
56	MP4C	Z	-7.314	2.5
57	MP4C	Mx	.002	2.5
58	MP4C	X	12.667	5
59	MP4C	Z	-7.314	5
60	MP4C	Mx	.002	5
61	MP3A	X	2.132	1
62	MP3A	Z	-1.231	1
63	MP3A	Mx	.002	1
64	MP3B	X	2.132	1
65	MP3B	Z	-1.231	1
66	MP3B	Mx	-.000833	1
67	MP3C	X	2.626	1
68	MP3C	Z	-1.516	1
69	MP3C	Mx	-.001	1
70	MP2A	X	8.372	1
71	MP2A	Z	-4.834	1
72	MP2A	Mx	.005	1
73	MP2B	X	8.372	1
74	MP2B	Z	-4.834	1
75	MP2B	Mx	-.005	1
76	MP2C	X	10.854	1
77	MP2C	Z	-6.267	1
78	MP2C	Mx	0	1
79	MPRRUA	X	7.429	1
80	MPRRUA	Z	-4.289	1
81	MPRRUA	Mx	.004	1
82	MP1B	X	23.943	2
83	MP1B	Z	-13.824	2
84	MP1B	Mx	.026	2
85	MP1B	X	23.943	5
86	MP1B	Z	-13.824	5
87	MP1B	Mx	.026	5
88	MP5B	X	23.943	2
89	MP5B	Z	-13.824	2
90	MP5B	Mx	.026	2
91	MP5B	X	23.943	5
92	MP5B	Z	-13.824	5
93	MP5B	Mx	.026	5
94	MP1A	X	13.857	2
95	MP1A	Z	-8	2
96	MP1A	Mx	-.017	2
97	MP1A	X	13.857	5
98	MP1A	Z	-8	5
99	MP1A	Mx	-.017	5
100	MP5A	X	13.857	2
101	MP5A	Z	-8	2
102	MP5A	Mx	-.017	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
103	MP5A	X	13.857	5
104	MP5A	Z	-8	5
105	MP5A	Mx	-.017	5
106	MP1C	X	8.35	2
107	MP1C	Z	-4.821	2
108	MP1C	Mx	.002	2
109	MP1C	X	8.35	5
110	MP1C	Z	-4.821	5
111	MP1C	Mx	.002	5
112	MP5C	X	8.35	2
113	MP5C	Z	-4.821	2
114	MP5C	Mx	.002	2
115	MP5C	X	8.35	5
116	MP5C	Z	-4.821	5
117	MP5C	Mx	.002	5
118	OVP	X	9.717	1
119	OVP	Z	-5.61	1
120	OVP	Mx	-.006	1
121	MP3C	X	5.84	5.5
122	MP3C	Z	-3.372	5.5
123	MP3C	Mx	.000293	5.5
124	MP3C	X	5.84	5.5
125	MP3C	Z	-3.372	5.5
126	MP3C	Mx	-.000293	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MPPRRUB	X	11.215	1
2	MPPRRUB	Z	0	1
3	MPPRRUB	Mx	-.003	1
4	MPPRRUC	X	11.215	1
5	MPPRRUC	Z	0	1
6	MPPRRUC	Mx	-.003	1
7	MP3A	X	19.356	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.01	1.5
10	MP3A	X	19.356	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	-.01	5.5
13	MP3B	X	26.957	1.5
14	MP3B	Z	0	1.5
15	MP3B	Mx	-.011	1.5
16	MP3B	X	26.957	5.5
17	MP3B	Z	0	5.5
18	MP3B	Mx	-.011	5.5
19	MP3C	X	24.317	1.5
20	MP3C	Z	0	1.5
21	MP3C	Mx	.023	1.5
22	MP3C	X	24.317	5.5
23	MP3C	Z	0	5.5
24	MP3C	Mx	.023	5.5
25	MP3A	X	19.356	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.015	1.5
28	MP3A	X	19.356	5.5
29	MP3A	Z	0	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30	MP3A	Mx	-.015	5.5
31	MP3B	X	26.957	1.5
32	MP3B	Z	0	1.5
33	MP3B	Mx	.023	1.5
34	MP3B	X	26.957	5.5
35	MP3B	Z	0	5.5
36	MP3B	Mx	.023	5.5
37	MP3C	X	24.317	1.5
38	MP3C	Z	0	1.5
39	MP3C	Mx	-.002	1.5
40	MP3C	X	24.317	5.5
41	MP3C	Z	0	5.5
42	MP3C	Mx	-.002	5.5
43	MP4A	X	6.589	2.5
44	MP4A	Z	0	2.5
45	MP4A	Mx	-.004	2.5
46	MP4A	X	6.589	5
47	MP4A	Z	0	5
48	MP4A	Mx	-.004	5
49	MP4B	X	13.884	2.5
50	MP4B	Z	0	2.5
51	MP4B	Mx	.003	2.5
52	MP4B	X	13.884	5
53	MP4B	Z	0	5
54	MP4B	Mx	.003	5
55	MP4C	X	11.351	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	.005	2.5
58	MP4C	X	11.351	5
59	MP4C	Z	0	5
60	MP4C	Mx	.005	5
61	MP3A	X	2.273	1
62	MP3A	Z	0	1
63	MP3A	Mx	.001	1
64	MP3B	X	2.842	1
65	MP3B	Z	0	1
66	MP3B	Mx	-9e-6	1
67	MP3C	X	2.842	1
68	MP3C	Z	0	1
69	MP3C	Mx	-.002	1
70	MP2A	X	8.712	1
71	MP2A	Z	0	1
72	MP2A	Mx	.005	1
73	MP2B	X	11.578	1
74	MP2B	Z	0	1
75	MP2B	Mx	-.003	1
76	MP2C	X	11.578	1
77	MP2C	Z	0	1
78	MP2C	Mx	-.003	1
79	MPRRUA	X	7.26	1
80	MPRRUA	Z	0	1
81	MPRRUA	Mx	.004	1
82	MP1B	X	29.034	2
83	MP1B	Z	0	2
84	MP1B	Mx	.012	2
85	MP1B	X	29.034	5
86	MP1B	Z	0	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
87	MP1B	Mx	.012	5
88	MP5B	X	29.034	2
89	MP5B	Z	0	2
90	MP5B	Mx	.012	2
91	MP5B	X	29.034	5
92	MP5B	Z	0	5
93	MP5B	Mx	.012	5
94	MP1A	X	16.702	2
95	MP1A	Z	0	2
96	MP1A	Mx	-.019	2
97	MP1A	X	16.702	5
98	MP1A	Z	0	5
99	MP1A	Mx	-.019	5
100	MP5A	X	16.702	2
101	MP5A	Z	0	2
102	MP5A	Mx	-.019	2
103	MP5A	X	16.702	5
104	MP5A	Z	0	5
105	MP5A	Mx	-.019	5
106	MP1C	X	10.466	2
107	MP1C	Z	0	2
108	MP1C	Mx	.006	2
109	MP1C	X	10.466	5
110	MP1C	Z	0	5
111	MP1C	Mx	.006	5
112	MP5C	X	10.466	2
113	MP5C	Z	0	2
114	MP5C	Mx	.008	2
115	MP5C	X	10.466	5
116	MP5C	Z	0	5
117	MP5C	Mx	.008	5
118	OVP	X	13.232	1
119	OVP	Z	0	1
120	OVP	Mx	-.005	1
121	MP3C	X	5.099	5.5
122	MP3C	Z	0	5.5
123	MP3C	Mx	.000819	5.5
124	MP3C	X	5.099	5.5
125	MP3C	Z	0	5.5
126	MP3C	Mx	-.000819	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	10.854	1
2	MPRRUB	Z	6.267	1
3	MPRRUB	Mx	0	1
4	MPRRUC	X	7.429	1
5	MPRRUC	Z	4.289	1
6	MPRRUC	Mx	-.004	1
7	MP3A	X	19.719	1.5
8	MP3A	Z	11.385	1.5
9	MP3A	Mx	-.002	1.5
10	MP3A	X	19.719	5.5
11	MP3A	Z	11.385	5.5
12	MP3A	Mx	-.002	5.5
13	MP3B	X	24.016	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
14	MP3B	Z	13.865	1.5
15	MP3B	Mx	-.021	1.5
16	MP3B	X	24.016	5.5
17	MP3B	Z	13.865	5.5
18	MP3B	Mx	-.021	5.5
19	MP3C	X	17.433	1.5
20	MP3C	Z	10.065	1.5
21	MP3C	Mx	.017	1.5
22	MP3C	X	17.433	5.5
23	MP3C	Z	10.065	5.5
24	MP3C	Mx	.017	5.5
25	MP3A	X	19.719	1.5
26	MP3A	Z	11.385	1.5
27	MP3A	Mx	-.021	1.5
28	MP3A	X	19.719	5.5
29	MP3A	Z	11.385	5.5
30	MP3A	Mx	-.021	5.5
31	MP3B	X	24.016	1.5
32	MP3B	Z	13.865	1.5
33	MP3B	Mx	.015	1.5
34	MP3B	X	24.016	5.5
35	MP3B	Z	13.865	5.5
36	MP3B	Mx	.015	5.5
37	MP3C	X	17.433	1.5
38	MP3C	Z	10.065	1.5
39	MP3C	Mx	.008	1.5
40	MP3C	X	17.433	5.5
41	MP3C	Z	10.065	5.5
42	MP3C	Mx	.008	5.5
43	MP4A	X	8.544	2.5
44	MP4A	Z	4.933	2.5
45	MP4A	Mx	-.005	2.5
46	MP4A	X	8.544	5
47	MP4A	Z	4.933	5
48	MP4A	Mx	-.005	5
49	MP4B	X	12.667	2.5
50	MP4B	Z	7.314	2.5
51	MP4B	Mx	-.002	2.5
52	MP4B	X	12.667	5
53	MP4B	Z	7.314	5
54	MP4B	Mx	-.002	5
55	MP4C	X	6.349	2.5
56	MP4C	Z	3.666	2.5
57	MP4C	Mx	.005	2.5
58	MP4C	X	6.349	5
59	MP4C	Z	3.666	5
60	MP4C	Mx	.005	5
61	MP3A	X	2.132	1
62	MP3A	Z	1.231	1
63	MP3A	Mx	.000833	1
64	MP3B	X	2.626	1
65	MP3B	Z	1.516	1
66	MP3B	Mx	.001	1
67	MP3C	X	2.132	1
68	MP3C	Z	1.231	1
69	MP3C	Mx	-.002	1
70	MP2A	X	8.372	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
71	MP2A	Z	4.834	1
72	MP2A	Mx	.005	1
73	MP2B	X	10.854	1
74	MP2B	Z	6.267	1
75	MP2B	Mx	0	1
76	MP2C	X	8.372	1
77	MP2C	Z	4.834	1
78	MP2C	Mx	-.005	1
79	MPRRUA	X	7.429	1
80	MPRRUA	Z	4.289	1
81	MPRRUA	Mx	.004	1
82	MP1B	X	25.366	2
83	MP1B	Z	14.645	2
84	MP1B	Mx	-.006	2
85	MP1B	X	25.366	5
86	MP1B	Z	14.645	5
87	MP1B	Mx	-.006	5
88	MP5B	X	25.366	2
89	MP5B	Z	14.645	2
90	MP5B	Mx	-.006	2
91	MP5B	X	25.366	5
92	MP5B	Z	14.645	5
93	MP5B	Mx	-.006	5
94	MP1A	X	11.782	2
95	MP1A	Z	6.802	2
96	MP1A	Mx	-.012	2
97	MP1A	X	11.782	5
98	MP1A	Z	6.802	5
99	MP1A	Mx	-.012	5
100	MP5A	X	11.782	2
101	MP5A	Z	6.802	2
102	MP5A	Mx	-.012	2
103	MP5A	X	11.782	5
104	MP5A	Z	6.802	5
105	MP5A	Mx	-.012	5
106	MP1C	X	9.939	2
107	MP1C	Z	5.739	2
108	MP1C	Mx	.01	2
109	MP1C	X	9.939	5
110	MP1C	Z	5.739	5
111	MP1C	Mx	.01	5
112	MP5C	X	9.939	2
113	MP5C	Z	5.739	2
114	MP5C	Mx	.013	2
115	MP5C	X	9.939	5
116	MP5C	Z	5.739	5
117	MP5C	Mx	.013	5
118	OVP	X	13.597	1
119	OVP	Z	7.85	1
120	OVP	Mx	-.003	1
121	MP3C	X	2.669	5.5
122	MP3C	Z	1.541	5.5
123	MP3C	Mx	.000724	5.5
124	MP3C	X	2.669	5.5
125	MP3C	Z	1.541	5.5
126	MP3C	Mx	-.000724	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	5.607	1
2	MPRRUB	Z	9.712	1
3	MPRRUB	Mx	.003	1
4	MPRRUC	X	3.63	1
5	MPRRUC	Z	6.287	1
6	MPRRUC	Mx	-.004	1
7	MP3A	X	13.479	1.5
8	MP3A	Z	23.345	1.5
9	MP3A	Mx	.011	1.5
10	MP3A	X	13.479	5.5
11	MP3A	Z	23.345	5.5
12	MP3A	Mx	.011	5.5
13	MP3B	X	12.159	1.5
14	MP3B	Z	21.059	1.5
15	MP3B	Mx	-.023	1.5
16	MP3B	X	12.159	5.5
17	MP3B	Z	21.059	5.5
18	MP3B	Mx	-.023	5.5
19	MP3C	X	9.678	1.5
20	MP3C	Z	16.763	1.5
21	MP3C	Mx	.01	1.5
22	MP3C	X	9.678	5.5
23	MP3C	Z	16.763	5.5
24	MP3C	Mx	.01	5.5
25	MP3A	X	13.479	1.5
26	MP3A	Z	23.345	1.5
27	MP3A	Mx	-.023	1.5
28	MP3A	X	13.479	5.5
29	MP3A	Z	23.345	5.5
30	MP3A	Mx	-.023	5.5
31	MP3B	X	12.159	1.5
32	MP3B	Z	21.059	1.5
33	MP3B	Mx	.002	1.5
34	MP3B	X	12.159	5.5
35	MP3B	Z	21.059	5.5
36	MP3B	Mx	.002	5.5
37	MP3C	X	9.678	1.5
38	MP3C	Z	16.763	1.5
39	MP3C	Mx	.015	1.5
40	MP3C	X	9.678	5.5
41	MP3C	Z	16.763	5.5
42	MP3C	Mx	.015	5.5
43	MP4A	X	6.942	2.5
44	MP4A	Z	12.024	2.5
45	MP4A	Mx	-.003	2.5
46	MP4A	X	6.942	5
47	MP4A	Z	12.024	5
48	MP4A	Mx	-.003	5
49	MP4B	X	5.675	2.5
50	MP4B	Z	9.83	2.5
51	MP4B	Mx	-.005	2.5
52	MP4B	X	5.675	5
53	MP4B	Z	9.83	5
54	MP4B	Mx	-.005	5
55	MP4C	X	3.294	2.5
56	MP4C	Z	5.706	2.5
57	MP4C	Mx	.004	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP4C	X	3.294	5
59	MP4C	Z	5.706	5
60	MP4C	Mx	.004	5
61	MP3A	X	1.421	1
62	MP3A	Z	2.461	1
63	MP3A	Mx	9e-6	1
64	MP3B	X	1.421	1
65	MP3B	Z	2.461	1
66	MP3B	Mx	.002	1
67	MP3C	X	1.136	1
68	MP3C	Z	1.968	1
69	MP3C	Mx	-.001	1
70	MP2A	X	5.789	1
71	MP2A	Z	10.027	1
72	MP2A	Mx	.003	1
73	MP2B	X	5.789	1
74	MP2B	Z	10.027	1
75	MP2B	Mx	.003	1
76	MP2C	X	4.356	1
77	MP2C	Z	7.545	1
78	MP2C	Mx	-.005	1
79	MPRRUA	X	5.607	1
80	MPRRUA	Z	9.712	1
81	MPRRUA	Mx	.003	1
82	MP1B	X	14.08	2
83	MP1B	Z	24.387	2
84	MP1B	Mx	-.023	2
85	MP1B	X	14.08	5
86	MP1B	Z	24.387	5
87	MP1B	Mx	-.023	5
88	MP5B	X	14.08	2
89	MP5B	Z	24.387	2
90	MP5B	Mx	-.023	2
91	MP5B	X	14.08	5
92	MP5B	Z	24.387	5
93	MP5B	Mx	-.023	5
94	MP1A	X	4.903	2
95	MP1A	Z	8.492	2
96	MP1A	Mx	-.004	2
97	MP1A	X	4.903	5
98	MP1A	Z	8.492	5
99	MP1A	Mx	-.004	5
100	MP5A	X	4.903	2
101	MP5A	Z	8.492	2
102	MP5A	Mx	-.004	2
103	MP5A	X	4.903	5
104	MP5A	Z	8.492	5
105	MP5A	Mx	-.004	5
106	MP1C	X	5.832	2
107	MP1C	Z	10.101	2
108	MP1C	Mx	.011	2
109	MP1C	X	5.832	5
110	MP1C	Z	10.101	5
111	MP1C	Mx	.011	5
112	MP5C	X	5.832	2
113	MP5C	Z	10.101	2
114	MP5C	Mx	.014	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
42	MP3C	Mx	.021	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	14.627	2.5
45	MP4A	Mx	.002	2.5
46	MP4A	X	0	5
47	MP4A	Z	14.627	5
48	MP4A	Mx	.002	5
49	MP4B	X	0	2.5
50	MP4B	Z	7.332	2.5
51	MP4B	Mx	-.005	2.5
52	MP4B	X	0	5
53	MP4B	Z	7.332	5
54	MP4B	Mx	-.005	5
55	MP4C	X	0	2.5
56	MP4C	Z	9.865	2.5
57	MP4C	Mx	.005	2.5
58	MP4C	X	0	5
59	MP4C	Z	9.865	5
60	MP4C	Mx	.005	5
61	MP3A	X	0	1
62	MP3A	Z	3.032	1
63	MP3A	Mx	-.001	1
64	MP3B	X	0	1
65	MP3B	Z	2.462	1
66	MP3B	Mx	.002	1
67	MP3C	X	0	1
68	MP3C	Z	2.462	1
69	MP3C	Mx	-.000833	1
70	MP2A	X	0	1
71	MP2A	Z	12.533	1
72	MP2A	Mx	0	1
73	MP2B	X	0	1
74	MP2B	Z	9.667	1
75	MP2B	Mx	.005	1
76	MP2C	X	0	1
77	MP2C	Z	9.667	1
78	MP2C	Mx	-.005	1
79	MPRRUA	X	0	1
80	MPRRUA	Z	12.533	1
81	MPRRUA	Mx	0	1
82	MP1B	X	0	2
83	MP1B	Z	26.773	2
84	MP1B	Mx	-.031	2
85	MP1B	X	0	5
86	MP1B	Z	26.773	5
87	MP1B	Mx	-.031	5
88	MP5B	X	0	2
89	MP5B	Z	26.773	2
90	MP5B	Mx	-.031	2
91	MP5B	X	0	5
92	MP5B	Z	26.773	5
93	MP5B	Mx	-.031	5
94	MP1A	X	0	2
95	MP1A	Z	9.103	2
96	MP1A	Mx	.002	2
97	MP1A	X	0	5
98	MP1A	Z	9.103	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
83	MP1B	Z	22.964	2
84	MP1B	Mx	-.033	2
85	MP1B	X	-13.258	5
86	MP1B	Z	22.964	5
87	MP1B	Mx	-.033	5
88	MP5B	X	-13.258	2
89	MP5B	Z	22.964	2
90	MP5B	Mx	-.033	2
91	MP5B	X	-13.258	5
92	MP5B	Z	22.964	5
93	MP5B	Mx	-.033	5
94	MP1A	X	-6.1	2
95	MP1A	Z	10.566	2
96	MP1A	Mx	.009	2
97	MP1A	X	-6.1	5
98	MP1A	Z	10.566	5
99	MP1A	Mx	.009	5
100	MP5A	X	-6.1	2
101	MP5A	Z	10.566	2
102	MP5A	Mx	.009	2
103	MP5A	X	-6.1	5
104	MP5A	Z	10.566	5
105	MP5A	Mx	.009	5
106	MP1C	X	-4.914	2
107	MP1C	Z	8.512	2
108	MP1C	Mx	.003	2
109	MP1C	X	-4.914	5
110	MP1C	Z	8.512	5
111	MP1C	Mx	.003	5
112	MP5C	X	-4.914	2
113	MP5C	Z	8.512	2
114	MP5C	Mx	.004	2
115	MP5C	X	-4.914	5
116	MP5C	Z	8.512	5
117	MP5C	Mx	.004	5
118	OVP	X	-5.838	1
119	OVP	Z	10.112	1
120	OVP	Mx	.005	1
121	MP3C	X	-3.185	5.5
122	MP3C	Z	5.517	5.5
123	MP3C	Mx	.000545	5.5
124	MP3C	X	-3.185	5.5
125	MP3C	Z	5.517	5.5
126	MP3C	Mx	-.000545	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-7.429	1
2	MPRRUB	Z	4.289	1
3	MPRRUB	Mx	.004	1
4	MPRRUC	X	-10.854	1
5	MPRRUC	Z	6.267	1
6	MPRRUC	Mx	0	1
7	MP3A	X	-17.433	1.5
8	MP3A	Z	10.065	1.5
9	MP3A	Mx	.017	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	-17.433	5.5
11	MP3A	Z	10.065	5.5
12	MP3A	Mx	.017	5.5
13	MP3B	X	-19.719	1.5
14	MP3B	Z	11.385	1.5
15	MP3B	Mx	-.002	1.5
16	MP3B	X	-19.719	5.5
17	MP3B	Z	11.385	5.5
18	MP3B	Mx	-.002	5.5
19	MP3C	X	-24.016	1.5
20	MP3C	Z	13.865	1.5
21	MP3C	Mx	-.021	1.5
22	MP3C	X	-24.016	5.5
23	MP3C	Z	13.865	5.5
24	MP3C	Mx	-.021	5.5
25	MP3A	X	-17.433	1.5
26	MP3A	Z	10.065	1.5
27	MP3A	Mx	.008	1.5
28	MP3A	X	-17.433	5.5
29	MP3A	Z	10.065	5.5
30	MP3A	Mx	.008	5.5
31	MP3B	X	-19.719	1.5
32	MP3B	Z	11.385	1.5
33	MP3B	Mx	-.021	1.5
34	MP3B	X	-19.719	5.5
35	MP3B	Z	11.385	5.5
36	MP3B	Mx	-.021	5.5
37	MP3C	X	-24.016	1.5
38	MP3C	Z	13.865	1.5
39	MP3C	Mx	.015	1.5
40	MP3C	X	-24.016	5.5
41	MP3C	Z	13.865	5.5
42	MP3C	Mx	.015	5.5
43	MP4A	X	-6.349	2.5
44	MP4A	Z	3.666	2.5
45	MP4A	Mx	.005	2.5
46	MP4A	X	-6.349	5
47	MP4A	Z	3.666	5
48	MP4A	Mx	.005	5
49	MP4B	X	-8.544	2.5
50	MP4B	Z	4.933	2.5
51	MP4B	Mx	-.005	2.5
52	MP4B	X	-8.544	5
53	MP4B	Z	4.933	5
54	MP4B	Mx	-.005	5
55	MP4C	X	-12.667	2.5
56	MP4C	Z	7.314	2.5
57	MP4C	Mx	-.002	2.5
58	MP4C	X	-12.667	5
59	MP4C	Z	7.314	5
60	MP4C	Mx	-.002	5
61	MP3A	X	-2.132	1
62	MP3A	Z	1.231	1
63	MP3A	Mx	-.002	1
64	MP3B	X	-2.132	1
65	MP3B	Z	1.231	1
66	MP3B	Mx	.000833	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
67	MP3C	X	-2.626	1
68	MP3C	Z	1.516	1
69	MP3C	Mx	.001	1
70	MP2A	X	-8.372	1
71	MP2A	Z	4.834	1
72	MP2A	Mx	-.005	1
73	MP2B	X	-8.372	1
74	MP2B	Z	4.834	1
75	MP2B	Mx	.005	1
76	MP2C	X	-10.854	1
77	MP2C	Z	6.267	1
78	MP2C	Mx	0	1
79	MPRRUA	X	-7.429	1
80	MPRRUA	Z	4.289	1
81	MPRRUA	Mx	-.004	1
82	MP1B	X	-23.943	2
83	MP1B	Z	13.824	2
84	MP1B	Mx	-.026	2
85	MP1B	X	-23.943	5
86	MP1B	Z	13.824	5
87	MP1B	Mx	-.026	5
88	MP5B	X	-23.943	2
89	MP5B	Z	13.824	2
90	MP5B	Mx	-.026	2
91	MP5B	X	-23.943	5
92	MP5B	Z	13.824	5
93	MP5B	Mx	-.026	5
94	MP1A	X	-13.857	2
95	MP1A	Z	8	2
96	MP1A	Mx	.017	2
97	MP1A	X	-13.857	5
98	MP1A	Z	8	5
99	MP1A	Mx	.017	5
100	MP5A	X	-13.857	2
101	MP5A	Z	8	2
102	MP5A	Mx	.017	2
103	MP5A	X	-13.857	5
104	MP5A	Z	8	5
105	MP5A	Mx	.017	5
106	MP1C	X	-8.35	2
107	MP1C	Z	4.821	2
108	MP1C	Mx	-.002	2
109	MP1C	X	-8.35	5
110	MP1C	Z	4.821	5
111	MP1C	Mx	-.002	5
112	MP5C	X	-8.35	2
113	MP5C	Z	4.821	2
114	MP5C	Mx	-.002	2
115	MP5C	X	-8.35	5
116	MP5C	Z	4.821	5
117	MP5C	Mx	-.002	5
118	OVP	X	-9.717	1
119	OVP	Z	5.61	1
120	OVP	Mx	.006	1
121	MP3C	X	-5.84	5.5
122	MP3C	Z	3.372	5.5
123	MP3C	Mx	-.000293	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
124	MP3C	X	-5.84	5.5
125	MP3C	Z	3.372	5.5
126	MP3C	Mx	.000293	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPRRUB	X	-11.215	1
2	MPRRUB	Z	0	1
3	MPRRUB	Mx	.003	1
4	MPRRUC	X	-11.215	1
5	MPRRUC	Z	0	1
6	MPRRUC	Mx	.003	1
7	MP3A	X	-19.356	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.01	1.5
10	MP3A	X	-19.356	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	.01	5.5
13	MP3B	X	-26.957	1.5
14	MP3B	Z	0	1.5
15	MP3B	Mx	.011	1.5
16	MP3B	X	-26.957	5.5
17	MP3B	Z	0	5.5
18	MP3B	Mx	.011	5.5
19	MP3C	X	-24.317	1.5
20	MP3C	Z	0	1.5
21	MP3C	Mx	-.023	1.5
22	MP3C	X	-24.317	5.5
23	MP3C	Z	0	5.5
24	MP3C	Mx	-.023	5.5
25	MP3A	X	-19.356	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.015	1.5
28	MP3A	X	-19.356	5.5
29	MP3A	Z	0	5.5
30	MP3A	Mx	.015	5.5
31	MP3B	X	-26.957	1.5
32	MP3B	Z	0	1.5
33	MP3B	Mx	-.023	1.5
34	MP3B	X	-26.957	5.5
35	MP3B	Z	0	5.5
36	MP3B	Mx	-.023	5.5
37	MP3C	X	-24.317	1.5
38	MP3C	Z	0	1.5
39	MP3C	Mx	.002	1.5
40	MP3C	X	-24.317	5.5
41	MP3C	Z	0	5.5
42	MP3C	Mx	.002	5.5
43	MP4A	X	-6.589	2.5
44	MP4A	Z	0	2.5
45	MP4A	Mx	.004	2.5
46	MP4A	X	-6.589	5
47	MP4A	Z	0	5
48	MP4A	Mx	.004	5
49	MP4B	X	-13.884	2.5
50	MP4B	Z	0	2.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
108	MP1C	Mx	-.006	2
109	MP1C	X	-10.466	5
110	MP1C	Z	0	5
111	MP1C	Mx	-.006	5
112	MP5C	X	-10.466	2
113	MP5C	Z	0	2
114	MP5C	Mx	-.008	2
115	MP5C	X	-10.466	5
116	MP5C	Z	0	5
117	MP5C	Mx	-.008	5
118	OVP	X	-13.232	1
119	OVP	Z	0	1
120	OVP	Mx	.005	1
121	MP3C	X	-5.099	5.5
122	MP3C	Z	0	5.5
123	MP3C	Mx	-.000819	5.5
124	MP3C	X	-5.099	5.5
125	MP3C	Z	0	5.5
126	MP3C	Mx	.000819	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPRRUB	X	-10.854	1
2	MPRRUB	Z	-6.267	1
3	MPRRUB	Mx	0	1
4	MPRRUC	X	-7.429	1
5	MPRRUC	Z	-4.289	1
6	MPRRUC	Mx	.004	1
7	MP3A	X	-19.719	1.5
8	MP3A	Z	-11.385	1.5
9	MP3A	Mx	.002	1.5
10	MP3A	X	-19.719	5.5
11	MP3A	Z	-11.385	5.5
12	MP3A	Mx	.002	5.5
13	MP3B	X	-24.016	1.5
14	MP3B	Z	-13.865	1.5
15	MP3B	Mx	.021	1.5
16	MP3B	X	-24.016	5.5
17	MP3B	Z	-13.865	5.5
18	MP3B	Mx	.021	5.5
19	MP3C	X	-17.433	1.5
20	MP3C	Z	-10.065	1.5
21	MP3C	Mx	-.017	1.5
22	MP3C	X	-17.433	5.5
23	MP3C	Z	-10.065	5.5
24	MP3C	Mx	-.017	5.5
25	MP3A	X	-19.719	1.5
26	MP3A	Z	-11.385	1.5
27	MP3A	Mx	.021	1.5
28	MP3A	X	-19.719	5.5
29	MP3A	Z	-11.385	5.5
30	MP3A	Mx	.021	5.5
31	MP3B	X	-24.016	1.5
32	MP3B	Z	-13.865	1.5
33	MP3B	Mx	-.015	1.5
34	MP3B	X	-24.016	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
92	MP5B	Z	-14.645	5
93	MP5B	Mx	.006	5
94	MP1A	X	-11.782	2
95	MP1A	Z	-6.802	2
96	MP1A	Mx	.012	2
97	MP1A	X	-11.782	5
98	MP1A	Z	-6.802	5
99	MP1A	Mx	.012	5
100	MP5A	X	-11.782	2
101	MP5A	Z	-6.802	2
102	MP5A	Mx	.012	2
103	MP5A	X	-11.782	5
104	MP5A	Z	-6.802	5
105	MP5A	Mx	.012	5
106	MP1C	X	-9.939	2
107	MP1C	Z	-5.739	2
108	MP1C	Mx	-.01	2
109	MP1C	X	-9.939	5
110	MP1C	Z	-5.739	5
111	MP1C	Mx	-.01	5
112	MP5C	X	-9.939	2
113	MP5C	Z	-5.739	2
114	MP5C	Mx	-.013	2
115	MP5C	X	-9.939	5
116	MP5C	Z	-5.739	5
117	MP5C	Mx	-.013	5
118	OVP	X	-13.597	1
119	OVP	Z	-7.85	1
120	OVP	Mx	.003	1
121	MP3C	X	-2.669	5.5
122	MP3C	Z	-1.541	5.5
123	MP3C	Mx	-.000724	5.5
124	MP3C	X	-2.669	5.5
125	MP3C	Z	-1.541	5.5
126	MP3C	Mx	.000724	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	-5.607	1
2	MRRUB	Z	-9.712	1
3	MRRUB	Mx	-.003	1
4	MRRUC	X	-3.63	1
5	MRRUC	Z	-6.287	1
6	MRRUC	Mx	.004	1
7	MP3A	X	-13.479	1.5
8	MP3A	Z	-23.345	1.5
9	MP3A	Mx	-.011	1.5
10	MP3A	X	-13.479	5.5
11	MP3A	Z	-23.345	5.5
12	MP3A	Mx	-.011	5.5
13	MP3B	X	-12.159	1.5
14	MP3B	Z	-21.059	1.5
15	MP3B	Mx	.023	1.5
16	MP3B	X	-12.159	5.5
17	MP3B	Z	-21.059	5.5
18	MP3B	Mx	.023	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
19	MP3C	X	-9.678	1.5
20	MP3C	Z	-16.763	1.5
21	MP3C	Mx	-.01	1.5
22	MP3C	X	-9.678	5.5
23	MP3C	Z	-16.763	5.5
24	MP3C	Mx	-.01	5.5
25	MP3A	X	-13.479	1.5
26	MP3A	Z	-23.345	1.5
27	MP3A	Mx	.023	1.5
28	MP3A	X	-13.479	5.5
29	MP3A	Z	-23.345	5.5
30	MP3A	Mx	.023	5.5
31	MP3B	X	-12.159	1.5
32	MP3B	Z	-21.059	1.5
33	MP3B	Mx	-.002	1.5
34	MP3B	X	-12.159	5.5
35	MP3B	Z	-21.059	5.5
36	MP3B	Mx	-.002	5.5
37	MP3C	X	-9.678	1.5
38	MP3C	Z	-16.763	1.5
39	MP3C	Mx	-.015	1.5
40	MP3C	X	-9.678	5.5
41	MP3C	Z	-16.763	5.5
42	MP3C	Mx	-.015	5.5
43	MP4A	X	-6.942	2.5
44	MP4A	Z	-12.024	2.5
45	MP4A	Mx	.003	2.5
46	MP4A	X	-6.942	5
47	MP4A	Z	-12.024	5
48	MP4A	Mx	.003	5
49	MP4B	X	-5.675	2.5
50	MP4B	Z	-9.83	2.5
51	MP4B	Mx	.005	2.5
52	MP4B	X	-5.675	5
53	MP4B	Z	-9.83	5
54	MP4B	Mx	.005	5
55	MP4C	X	-3.294	2.5
56	MP4C	Z	-5.706	2.5
57	MP4C	Mx	-.004	2.5
58	MP4C	X	-3.294	5
59	MP4C	Z	-5.706	5
60	MP4C	Mx	-.004	5
61	MP3A	X	-1.421	1
62	MP3A	Z	-2.461	1
63	MP3A	Mx	-9e-6	1
64	MP3B	X	-1.421	1
65	MP3B	Z	-2.461	1
66	MP3B	Mx	-.002	1
67	MP3C	X	-1.136	1
68	MP3C	Z	-1.968	1
69	MP3C	Mx	.001	1
70	MP2A	X	-5.789	1
71	MP2A	Z	-10.027	1
72	MP2A	Mx	-.003	1
73	MP2B	X	-5.789	1
74	MP2B	Z	-10.027	1
75	MP2B	Mx	-.003	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MPRRUB	Mx	-.001	1
4	MPRRUC	X	0	1
5	MPRRUC	Z	-2.073	1
6	MPRRUC	Mx	.001	1
7	MP3A	X	0	1.5
8	MP3A	Z	-9.118	1.5
9	MP3A	Mx	-.007	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-9.118	5.5
12	MP3A	Mx	-.007	5.5
13	MP3B	X	0	1.5
14	MP3B	Z	-6.421	1.5
15	MP3B	Mx	.005	1.5
16	MP3B	X	0	5.5
17	MP3B	Z	-6.421	5.5
18	MP3B	Mx	.005	5.5
19	MP3C	X	0	1.5
20	MP3C	Z	-7.357	1.5
21	MP3C	Mx	-.000605	1.5
22	MP3C	X	0	5.5
23	MP3C	Z	-7.357	5.5
24	MP3C	Mx	-.000605	5.5
25	MP3A	X	0	1.5
26	MP3A	Z	-9.118	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	0	5.5
29	MP3A	Z	-9.118	5.5
30	MP3A	Mx	.005	5.5
31	MP3B	X	0	1.5
32	MP3B	Z	-6.421	1.5
33	MP3B	Mx	.003	1.5
34	MP3B	X	0	5.5
35	MP3B	Z	-6.421	5.5
36	MP3B	Mx	.003	5.5
37	MP3C	X	0	1.5
38	MP3C	Z	-7.357	1.5
39	MP3C	Mx	-.007	1.5
40	MP3C	X	0	5.5
41	MP3C	Z	-7.357	5.5
42	MP3C	Mx	-.007	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	-3.886	2.5
45	MP4A	Mx	-.00045	2.5
46	MP4A	X	0	5
47	MP4A	Z	-3.886	5
48	MP4A	Mx	-.00045	5
49	MP4B	X	0	2.5
50	MP4B	Z	-1.669	2.5
51	MP4B	Mx	.001	2.5
52	MP4B	X	0	5
53	MP4B	Z	-1.669	5
54	MP4B	Mx	.001	5
55	MP4C	X	0	2.5
56	MP4C	Z	-2.439	2.5
57	MP4C	Mx	-.001	2.5
58	MP4C	X	0	5
59	MP4C	Z	-2.439	5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
117	MP5C	Mx	-0.003	5
118	OVP	X	0	1
119	OVP	Z	-4.319	1
120	OVP	Mx	-0.001	1
121	MP3C	X	0	5.5
122	MP3C	Z	-1.146	5.5
123	MP3C	Mx	-0.000219	5.5
124	MP3C	X	0	5.5
125	MP3C	Z	-1.146	5.5
126	MP3C	Mx	.000219	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	.86	1
2	MPRRUB	Z	-1.489	1
3	MPRRUB	Mx	-0.001	1
4	MPRRUC	X	1.391	1
5	MPRRUC	Z	-2.409	1
6	MPRRUC	Mx	.000811	1
7	MP3A	X	3.953	1.5
8	MP3A	Z	-6.847	1.5
9	MP3A	Mx	-0.007	1.5
10	MP3A	X	3.953	5.5
11	MP3A	Z	-6.847	5.5
12	MP3A	Mx	-0.007	5.5
13	MP3B	X	3.073	1.5
14	MP3B	Z	-5.323	1.5
15	MP3B	Mx	.003	1.5
16	MP3B	X	3.073	5.5
17	MP3B	Z	-5.323	5.5
18	MP3B	Mx	.003	5.5
19	MP3C	X	4.422	1.5
20	MP3C	Z	-7.658	1.5
21	MP3C	Mx	.004	1.5
22	MP3C	X	4.422	5.5
23	MP3C	Z	-7.658	5.5
24	MP3C	Mx	.004	5.5
25	MP3A	X	3.953	1.5
26	MP3A	Z	-6.847	1.5
27	MP3A	Mx	.00065	1.5
28	MP3A	X	3.953	5.5
29	MP3A	Z	-6.847	5.5
30	MP3A	Mx	.00065	5.5
31	MP3B	X	3.073	1.5
32	MP3B	Z	-5.323	1.5
33	MP3B	Mx	.005	1.5
34	MP3B	X	3.073	5.5
35	MP3B	Z	-5.323	5.5
36	MP3B	Mx	.005	5.5
37	MP3C	X	4.422	1.5
38	MP3C	Z	-7.658	1.5
39	MP3C	Mx	-0.008	1.5
40	MP3C	X	4.422	5.5
41	MP3C	Z	-7.658	5.5
42	MP3C	Mx	-0.008	5.5
43	MP4A	X	1.445	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
101	MP5A	Z	-3.295	2
102	MP5A	Mx	-.003	2
103	MP5A	X	1.902	5
104	MP5A	Z	-3.295	5
105	MP5A	Mx	-.003	5
106	MP1C	X	1.491	2
107	MP1C	Z	-2.582	2
108	MP1C	Mx	-.000935	2
109	MP1C	X	1.491	5
110	MP1C	Z	-2.582	5
111	MP1C	Mx	-.000935	5
112	MP5C	X	1.491	2
113	MP5C	Z	-2.582	2
114	MP5C	Mx	-.001	2
115	MP5C	X	1.491	5
116	MP5C	Z	-2.582	5
117	MP5C	Mx	-.001	5
118	OVP	X	1.743	1
119	OVP	Z	-3.02	1
120	OVP	Mx	-.002	1
121	MP3C	X	.891	5.5
122	MP3C	Z	-1.543	5.5
123	MP3C	Mx	-.000152	5.5
124	MP3C	X	.891	5.5
125	MP3C	Z	-1.543	5.5
126	MP3C	Mx	.000152	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MRRUB	X	1.795	1
2	MRRUB	Z	-1.037	1
3	MRRUB	Mx	-.001	1
4	MRRUC	X	2.715	1
5	MRRUC	Z	-1.568	1
6	MRRUC	Mx	0	1
7	MP3A	X	5.561	1.5
8	MP3A	Z	-3.21	1.5
9	MP3A	Mx	-.005	1.5
10	MP3A	X	5.561	5.5
11	MP3A	Z	-3.21	5.5
12	MP3A	Mx	-.005	5.5
13	MP3B	X	6.372	1.5
14	MP3B	Z	-3.679	1.5
15	MP3B	Mx	.000605	1.5
16	MP3B	X	6.372	5.5
17	MP3B	Z	-3.679	5.5
18	MP3B	Mx	.000605	5.5
19	MP3C	X	7.896	1.5
20	MP3C	Z	-4.559	1.5
21	MP3C	Mx	.007	1.5
22	MP3C	X	7.896	5.5
23	MP3C	Z	-4.559	5.5
24	MP3C	Mx	.007	5.5
25	MP3A	X	5.561	1.5
26	MP3A	Z	-3.21	1.5
27	MP3A	Mx	-.003	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
28	MP3A	X	5.561	5.5
29	MP3A	Z	-3.21	5.5
30	MP3A	Mx	-.003	5.5
31	MP3B	X	6.372	1.5
32	MP3B	Z	-3.679	1.5
33	MP3B	Mx	.007	1.5
34	MP3B	X	6.372	5.5
35	MP3B	Z	-3.679	5.5
36	MP3B	Mx	.007	5.5
37	MP3C	X	7.896	1.5
38	MP3C	Z	-4.559	1.5
39	MP3C	Mx	-.005	1.5
40	MP3C	X	7.896	5.5
41	MP3C	Z	-4.559	5.5
42	MP3C	Mx	-.005	5.5
43	MP4A	X	1.446	2.5
44	MP4A	Z	-.835	2.5
45	MP4A	Mx	-.001	2.5
46	MP4A	X	1.446	5
47	MP4A	Z	-.835	5
48	MP4A	Mx	-.001	5
49	MP4B	X	2.112	2.5
50	MP4B	Z	-1.22	2.5
51	MP4B	Mx	.001	2.5
52	MP4B	X	2.112	5
53	MP4B	Z	-1.22	5
54	MP4B	Mx	.001	5
55	MP4C	X	3.365	2.5
56	MP4C	Z	-1.943	2.5
57	MP4C	Mx	.00045	2.5
58	MP4C	X	3.365	5
59	MP4C	Z	-1.943	5
60	MP4C	Mx	.00045	5
61	MP3A	X	.498	1
62	MP3A	Z	-.288	1
63	MP3A	Mx	.000386	1
64	MP3B	X	.498	1
65	MP3B	Z	-.288	1
66	MP3B	Mx	-.000195	1
67	MP3C	X	.648	1
68	MP3C	Z	-.374	1
69	MP3C	Mx	-.000249	1
70	MP2A	X	2.045	1
71	MP2A	Z	-1.181	1
72	MP2A	Mx	.001	1
73	MP2B	X	2.045	1
74	MP2B	Z	-1.181	1
75	MP2B	Mx	-.001	1
76	MP2C	X	2.715	1
77	MP2C	Z	-1.568	1
78	MP2C	Mx	0	1
79	MPRRUA	X	1.795	1
80	MPRRUA	Z	-1.037	1
81	MPRRUA	Mx	.001	1
82	MP1B	X	7.881	2
83	MP1B	Z	-4.55	2
84	MP1B	Mx	.009	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
85	MP1B	X	7.881	5
86	MP1B	Z	-4.55	5
87	MP1B	Mx	.009	5
88	MP5B	X	7.881	2
89	MP5B	Z	-4.55	2
90	MP5B	Mx	.009	2
91	MP5B	X	7.881	5
92	MP5B	Z	-4.55	5
93	MP5B	Mx	.009	5
94	MP1A	X	4.443	2
95	MP1A	Z	-2.565	2
96	MP1A	Mx	-.005	2
97	MP1A	X	4.443	5
98	MP1A	Z	-2.565	5
99	MP1A	Mx	-.005	5
100	MP5A	X	4.443	2
101	MP5A	Z	-2.565	2
102	MP5A	Mx	-.005	2
103	MP5A	X	4.443	5
104	MP5A	Z	-2.565	5
105	MP5A	Mx	-.005	5
106	MP1C	X	2.525	2
107	MP1C	Z	-1.458	2
108	MP1C	Mx	.000464	2
109	MP1C	X	2.525	5
110	MP1C	Z	-1.458	5
111	MP1C	Mx	.000464	5
112	MP5C	X	2.525	2
113	MP5C	Z	-1.458	2
114	MP5C	Mx	.000633	2
115	MP5C	X	2.525	5
116	MP5C	Z	-1.458	5
117	MP5C	Mx	.000633	5
118	OVP	X	2.887	1
119	OVP	Z	-1.667	1
120	OVP	Mx	-.002	1
121	MP3C	X	1.644	5.5
122	MP3C	Z	-.949	5.5
123	MP3C	Mx	8.2e-5	5.5
124	MP3C	X	1.644	5.5
125	MP3C	Z	-.949	5.5
126	MP3C	Mx	-8.2e-5	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MPRRUB	X	2.781	1
2	MPRRUB	Z	0	1
3	MPRRUB	Mx	-.000811	1
4	MPRRUC	X	2.781	1
5	MPRRUC	Z	0	1
6	MPRRUC	Mx	-.000811	1
7	MP3A	X	6.146	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.003	1.5
10	MP3A	X	6.146	5.5
11	MP3A	Z	0	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP3C	Mx	-.000401	1
70	MP2A	X	2.104	1
71	MP2A	Z	0	1
72	MP2A	Mx	.001	1
73	MP2B	X	2.877	1
74	MP2B	Z	0	1
75	MP2B	Mx	-.000839	1
76	MP2C	X	2.877	1
77	MP2C	Z	0	1
78	MP2C	Mx	-.000839	1
79	MPRRUA	X	1.719	1
80	MPRRUA	Z	0	1
81	MPRRUA	Mx	.001	1
82	MP1B	X	9.587	2
83	MP1B	Z	0	2
84	MP1B	Mx	.004	2
85	MP1B	X	9.587	5
86	MP1B	Z	0	5
87	MP1B	Mx	.004	5
88	MP5B	X	9.587	2
89	MP5B	Z	0	2
90	MP5B	Mx	.004	2
91	MP5B	X	9.587	5
92	MP5B	Z	0	5
93	MP5B	Mx	.004	5
94	MP1A	X	5.375	2
95	MP1A	Z	0	2
96	MP1A	Mx	-.006	2
97	MP1A	X	5.375	5
98	MP1A	Z	0	5
99	MP1A	Mx	-.006	5
100	MP5A	X	5.375	2
101	MP5A	Z	0	2
102	MP5A	Mx	-.006	2
103	MP5A	X	5.375	5
104	MP5A	Z	0	5
105	MP5A	Mx	-.006	5
106	MP1C	X	3.208	2
107	MP1C	Z	0	2
108	MP1C	Mx	.002	2
109	MP1C	X	3.208	5
110	MP1C	Z	0	5
111	MP1C	Mx	.002	5
112	MP5C	X	3.208	2
113	MP5C	Z	0	2
114	MP5C	Mx	.003	2
115	MP5C	X	3.208	5
116	MP5C	Z	0	5
117	MP5C	Mx	.003	5
118	OVP	X	4.011	1
119	OVP	Z	0	1
120	OVP	Mx	-.002	1
121	MP3C	X	1.381	5.5
122	MP3C	Z	0	5.5
123	MP3C	Mx	.000222	5.5
124	MP3C	X	1.381	5.5
125	MP3C	Z	0	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	1.485	2
95	MP1A	Z	2.572	2
96	MP1A	Mx	-.001	2
97	MP1A	X	1.485	5
98	MP1A	Z	2.572	5
99	MP1A	Mx	-.001	5
100	MP5A	X	1.485	2
101	MP5A	Z	2.572	2
102	MP5A	Mx	-.001	2
103	MP5A	X	1.485	5
104	MP5A	Z	2.572	5
105	MP5A	Mx	-.001	5
106	MP1C	X	1.816	2
107	MP1C	Z	3.146	2
108	MP1C	Mx	.003	2
109	MP1C	X	1.816	5
110	MP1C	Z	3.146	5
111	MP1C	Mx	.003	5
112	MP5C	X	1.816	2
113	MP5C	Z	3.146	2
114	MP5C	Mx	.004	2
115	MP5C	X	1.816	5
116	MP5C	Z	3.146	5
117	MP5C	Mx	.004	5
118	OVP	X	2.498	1
119	OVP	Z	4.327	1
120	OVP	Mx	.000434	1
121	MP3C	X	.314	5.5
122	MP3C	Z	.545	5.5
123	MP3C	Mx	.000155	5.5
124	MP3C	X	.314	5.5
125	MP3C	Z	.545	5.5
126	MP3C	Mx	-.000155	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPPRRUB	X	0	1
2	MPPRRUB	Z	2.073	1
3	MPPRRUB	Mx	.001	1
4	MPPRRUC	X	0	1
5	MPPRRUC	Z	2.073	1
6	MPPRRUC	Mx	-.001	1
7	MP3A	X	0	1.5
8	MP3A	Z	9.118	1.5
9	MP3A	Mx	.007	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	9.118	5.5
12	MP3A	Mx	.007	5.5
13	MP3B	X	0	1.5
14	MP3B	Z	6.421	1.5
15	MP3B	Mx	-.005	1.5
16	MP3B	X	0	5.5
17	MP3B	Z	6.421	5.5
18	MP3B	Mx	-.005	5.5
19	MP3C	X	0	1.5
20	MP3C	Z	7.357	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP3C	Mx	.000605	1.5
22	MP3C	X	0	5.5
23	MP3C	Z	7.357	5.5
24	MP3C	Mx	.000605	5.5
25	MP3A	X	0	1.5
26	MP3A	Z	9.118	1.5
27	MP3A	Mx	-.005	1.5
28	MP3A	X	0	5.5
29	MP3A	Z	9.118	5.5
30	MP3A	Mx	-.005	5.5
31	MP3B	X	0	1.5
32	MP3B	Z	6.421	1.5
33	MP3B	Mx	-.003	1.5
34	MP3B	X	0	5.5
35	MP3B	Z	6.421	5.5
36	MP3B	Mx	-.003	5.5
37	MP3C	X	0	1.5
38	MP3C	Z	7.357	1.5
39	MP3C	Mx	.007	1.5
40	MP3C	X	0	5.5
41	MP3C	Z	7.357	5.5
42	MP3C	Mx	.007	5.5
43	MP4A	X	0	2.5
44	MP4A	Z	3.886	2.5
45	MP4A	Mx	.00045	2.5
46	MP4A	X	0	5
47	MP4A	Z	3.886	5
48	MP4A	Mx	.00045	5
49	MP4B	X	0	2.5
50	MP4B	Z	1.669	2.5
51	MP4B	Mx	-.001	2.5
52	MP4B	X	0	5
53	MP4B	Z	1.669	5
54	MP4B	Mx	-.001	5
55	MP4C	X	0	2.5
56	MP4C	Z	2.439	2.5
57	MP4C	Mx	.001	2.5
58	MP4C	X	0	5
59	MP4C	Z	2.439	5
60	MP4C	Mx	.001	5
61	MP3A	X	0	1
62	MP3A	Z	.748	1
63	MP3A	Mx	-.000249	1
64	MP3B	X	0	1
65	MP3B	Z	.575	1
66	MP3B	Mx	.000386	1
67	MP3C	X	0	1
68	MP3C	Z	.575	1
69	MP3C	Mx	-.000195	1
70	MP2A	X	0	1
71	MP2A	Z	3.135	1
72	MP2A	Mx	0	1
73	MP2B	X	0	1
74	MP2B	Z	2.361	1
75	MP2B	Mx	.001	1
76	MP2C	X	0	1
77	MP2C	Z	2.361	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
78	MP2C	Mx	-.001	1
79	MPRRUA	X	0	1
80	MPRRUA	Z	3.135	1
81	MPRRUA	Mx	0	1
82	MP1B	X	0	2
83	MP1B	Z	8.793	2
84	MP1B	Mx	-.01	2
85	MP1B	X	0	5
86	MP1B	Z	8.793	5
87	MP1B	Mx	-.01	5
88	MP5B	X	0	2
89	MP5B	Z	8.793	2
90	MP5B	Mx	-.01	2
91	MP5B	X	0	5
92	MP5B	Z	8.793	5
93	MP5B	Mx	-.01	5
94	MP1A	X	0	2
95	MP1A	Z	2.725	2
96	MP1A	Mx	.000532	2
97	MP1A	X	0	5
98	MP1A	Z	2.725	5
99	MP1A	Mx	.000532	5
100	MP5A	X	0	2
101	MP5A	Z	2.725	2
102	MP5A	Mx	.000532	2
103	MP5A	X	0	5
104	MP5A	Z	2.725	5
105	MP5A	Mx	.000532	5
106	MP1C	X	0	2
107	MP1C	Z	3.34	2
108	MP1C	Mx	.002	2
109	MP1C	X	0	5
110	MP1C	Z	3.34	5
111	MP1C	Mx	.002	5
112	MP5C	X	0	2
113	MP5C	Z	3.34	2
114	MP5C	Mx	.003	2
115	MP5C	X	0	5
116	MP5C	Z	3.34	5
117	MP5C	Mx	.003	5
118	OVP	X	0	1
119	OVP	Z	4.319	1
120	OVP	Mx	.001	1
121	MP3C	X	0	5.5
122	MP3C	Z	1.146	5.5
123	MP3C	Mx	.000219	5.5
124	MP3C	X	0	5.5
125	MP3C	Z	1.146	5.5
126	MP3C	Mx	-.000219	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-.86	1
2	MPRRUB	Z	1.489	1
3	MPRRUB	Mx	.001	1
4	MPRRUC	X	-1.391	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
5	MPRRUC	Z	2.409	1
6	MPRRUC	Mx	-0.00811	1
7	MP3A	X	-3.953	1.5
8	MP3A	Z	6.847	1.5
9	MP3A	Mx	.007	1.5
10	MP3A	X	-3.953	5.5
11	MP3A	Z	6.847	5.5
12	MP3A	Mx	.007	5.5
13	MP3B	X	-3.073	1.5
14	MP3B	Z	5.323	1.5
15	MP3B	Mx	-.003	1.5
16	MP3B	X	-3.073	5.5
17	MP3B	Z	5.323	5.5
18	MP3B	Mx	-.003	5.5
19	MP3C	X	-4.422	1.5
20	MP3C	Z	7.658	1.5
21	MP3C	Mx	-.004	1.5
22	MP3C	X	-4.422	5.5
23	MP3C	Z	7.658	5.5
24	MP3C	Mx	-.004	5.5
25	MP3A	X	-3.953	1.5
26	MP3A	Z	6.847	1.5
27	MP3A	Mx	-.00065	1.5
28	MP3A	X	-3.953	5.5
29	MP3A	Z	6.847	5.5
30	MP3A	Mx	-.00065	5.5
31	MP3B	X	-3.073	1.5
32	MP3B	Z	5.323	1.5
33	MP3B	Mx	-.005	1.5
34	MP3B	X	-3.073	5.5
35	MP3B	Z	5.323	5.5
36	MP3B	Mx	-.005	5.5
37	MP3C	X	-4.422	1.5
38	MP3C	Z	7.658	1.5
39	MP3C	Mx	.008	1.5
40	MP3C	X	-4.422	5.5
41	MP3C	Z	7.658	5.5
42	MP3C	Mx	.008	5.5
43	MP4A	X	-1.445	2.5
44	MP4A	Z	2.503	2.5
45	MP4A	Mx	.001	2.5
46	MP4A	X	-1.445	5
47	MP4A	Z	2.503	5
48	MP4A	Mx	.001	5
49	MP4B	X	-.722	2.5
50	MP4B	Z	1.25	2.5
51	MP4B	Mx	-.000948	2.5
52	MP4B	X	-.722	5
53	MP4B	Z	1.25	5
54	MP4B	Mx	-.000948	5
55	MP4C	X	-1.83	2.5
56	MP4C	Z	3.17	2.5
57	MP4C	Mx	.000835	2.5
58	MP4C	X	-1.83	5
59	MP4C	Z	3.17	5
60	MP4C	Mx	.000835	5
61	MP3A	X	-.345	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
62	MP3A	Z	.598	1
63	MP3A	Mx	-.000401	1
64	MP3B	X	-.259	1
65	MP3B	Z	.448	1
66	MP3B	Mx	.000302	1
67	MP3C	X	-.345	1
68	MP3C	Z	.598	1
69	MP3C	Mx	-2e-6	1
70	MP2A	X	-1.439	1
71	MP2A	Z	2.492	1
72	MP2A	Mx	-.000839	1
73	MP2B	X	-1.052	1
74	MP2B	Z	1.822	1
75	MP2B	Mx	.001	1
76	MP2C	X	-1.439	1
77	MP2C	Z	2.492	1
78	MP2C	Mx	-.000839	1
79	MPRRUA	X	-1.391	1
80	MPRRUA	Z	2.409	1
81	MPRRUA	Mx	-.000811	1
82	MP1B	X	-4.351	2
83	MP1B	Z	7.537	2
84	MP1B	Mx	-.011	2
85	MP1B	X	-4.351	5
86	MP1B	Z	7.537	5
87	MP1B	Mx	-.011	5
88	MP5B	X	-4.351	2
89	MP5B	Z	7.537	2
90	MP5B	Mx	-.011	2
91	MP5B	X	-4.351	5
92	MP5B	Z	7.537	5
93	MP5B	Mx	-.011	5
94	MP1A	X	-1.902	2
95	MP1A	Z	3.295	2
96	MP1A	Mx	.003	2
97	MP1A	X	-1.902	5
98	MP1A	Z	3.295	5
99	MP1A	Mx	.003	5
100	MP5A	X	-1.902	2
101	MP5A	Z	3.295	2
102	MP5A	Mx	.003	2
103	MP5A	X	-1.902	5
104	MP5A	Z	3.295	5
105	MP5A	Mx	.003	5
106	MP1C	X	-1.491	2
107	MP1C	Z	2.582	2
108	MP1C	Mx	.000935	2
109	MP1C	X	-1.491	5
110	MP1C	Z	2.582	5
111	MP1C	Mx	.000935	5
112	MP5C	X	-1.491	2
113	MP5C	Z	2.582	2
114	MP5C	Mx	.001	2
115	MP5C	X	-1.491	5
116	MP5C	Z	2.582	5
117	MP5C	Mx	.001	5
118	OVP	X	-1.743	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
119	OVP	Z	3.02	1
120	OVP	Mx	.002	1
121	MP3C	X	-.891	5.5
122	MP3C	Z	1.543	5.5
123	MP3C	Mx	.000152	5.5
124	MP3C	X	-.891	5.5
125	MP3C	Z	1.543	5.5
126	MP3C	Mx	-.000152	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	-1.795	1
2	MRRUB	Z	1.037	1
3	MRRUB	Mx	.001	1
4	MRRUC	X	-2.715	1
5	MRRUC	Z	1.568	1
6	MRRUC	Mx	0	1
7	MP3A	X	-5.561	1.5
8	MP3A	Z	3.21	1.5
9	MP3A	Mx	.005	1.5
10	MP3A	X	-5.561	5.5
11	MP3A	Z	3.21	5.5
12	MP3A	Mx	.005	5.5
13	MP3B	X	-6.372	1.5
14	MP3B	Z	3.679	1.5
15	MP3B	Mx	-.000605	1.5
16	MP3B	X	-6.372	5.5
17	MP3B	Z	3.679	5.5
18	MP3B	Mx	-.000605	5.5
19	MP3C	X	-7.896	1.5
20	MP3C	Z	4.559	1.5
21	MP3C	Mx	-.007	1.5
22	MP3C	X	-7.896	5.5
23	MP3C	Z	4.559	5.5
24	MP3C	Mx	-.007	5.5
25	MP3A	X	-5.561	1.5
26	MP3A	Z	3.21	1.5
27	MP3A	Mx	.003	1.5
28	MP3A	X	-5.561	5.5
29	MP3A	Z	3.21	5.5
30	MP3A	Mx	.003	5.5
31	MP3B	X	-6.372	1.5
32	MP3B	Z	3.679	1.5
33	MP3B	Mx	-.007	1.5
34	MP3B	X	-6.372	5.5
35	MP3B	Z	3.679	5.5
36	MP3B	Mx	-.007	5.5
37	MP3C	X	-7.896	1.5
38	MP3C	Z	4.559	1.5
39	MP3C	Mx	.005	1.5
40	MP3C	X	-7.896	5.5
41	MP3C	Z	4.559	5.5
42	MP3C	Mx	.005	5.5
43	MP4A	X	-1.446	2.5
44	MP4A	Z	.835	2.5
45	MP4A	Mx	.001	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
103	MP5A	X	-4.443	5
104	MP5A	Z	2.565	5
105	MP5A	Mx	.005	5
106	MP1C	X	-2.525	2
107	MP1C	Z	1.458	2
108	MP1C	Mx	-.000464	2
109	MP1C	X	-2.525	5
110	MP1C	Z	1.458	5
111	MP1C	Mx	-.000464	5
112	MP5C	X	-2.525	2
113	MP5C	Z	1.458	2
114	MP5C	Mx	-.000633	2
115	MP5C	X	-2.525	5
116	MP5C	Z	1.458	5
117	MP5C	Mx	-.000633	5
118	OVP	X	-2.887	1
119	OVP	Z	1.667	1
120	OVP	Mx	.002	1
121	MP3C	X	-1.644	5.5
122	MP3C	Z	.949	5.5
123	MP3C	Mx	-8.2e-5	5.5
124	MP3C	X	-1.644	5.5
125	MP3C	Z	.949	5.5
126	MP3C	Mx	8.2e-5	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MPPRRUB	X	-2.781	1
2	MPPRRUB	Z	0	1
3	MPPRRUB	Mx	.000811	1
4	MPPRRUC	X	-2.781	1
5	MPPRRUC	Z	0	1
6	MPPRRUC	Mx	.000811	1
7	MP3A	X	-6.146	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.003	1.5
10	MP3A	X	-6.146	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	.003	5.5
13	MP3B	X	-8.843	1.5
14	MP3B	Z	0	1.5
15	MP3B	Mx	.004	1.5
16	MP3B	X	-8.843	5.5
17	MP3B	Z	0	5.5
18	MP3B	Mx	.004	5.5
19	MP3C	X	-7.907	1.5
20	MP3C	Z	0	1.5
21	MP3C	Mx	-.007	1.5
22	MP3C	X	-7.907	5.5
23	MP3C	Z	0	5.5
24	MP3C	Mx	-.007	5.5
25	MP3A	X	-6.146	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	-6.146	5.5
29	MP3A	Z	0	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30	MP3A	Mx	.005	5.5
31	MP3B	X	-8.843	1.5
32	MP3B	Z	0	1.5
33	MP3B	Mx	-.008	1.5
34	MP3B	X	-8.843	5.5
35	MP3B	Z	0	5.5
36	MP3B	Mx	-.008	5.5
37	MP3C	X	-7.907	1.5
38	MP3C	Z	0	1.5
39	MP3C	Mx	.00065	1.5
40	MP3C	X	-7.907	5.5
41	MP3C	Z	0	5.5
42	MP3C	Mx	.00065	5.5
43	MP4A	X	-1.444	2.5
44	MP4A	Z	0	2.5
45	MP4A	Mx	.000948	2.5
46	MP4A	X	-1.444	5
47	MP4A	Z	0	5
48	MP4A	Mx	.000948	5
49	MP4B	X	-3.66	2.5
50	MP4B	Z	0	2.5
51	MP4B	Mx	-.000835	2.5
52	MP4B	X	-3.66	5
53	MP4B	Z	0	5
54	MP4B	Mx	-.000835	5
55	MP4C	X	-2.89	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	-.001	2.5
58	MP4C	X	-2.89	5
59	MP4C	Z	0	5
60	MP4C	Mx	-.001	5
61	MP3A	X	-.518	1
62	MP3A	Z	0	1
63	MP3A	Mx	-.000302	1
64	MP3B	X	-.691	1
65	MP3B	Z	0	1
66	MP3B	Mx	2e-6	1
67	MP3C	X	-.691	1
68	MP3C	Z	0	1
69	MP3C	Mx	.000401	1
70	MP2A	X	-2.104	1
71	MP2A	Z	0	1
72	MP2A	Mx	-.001	1
73	MP2B	X	-2.877	1
74	MP2B	Z	0	1
75	MP2B	Mx	.000839	1
76	MP2C	X	-2.877	1
77	MP2C	Z	0	1
78	MP2C	Mx	.000839	1
79	MPRRUA	X	-1.719	1
80	MPRRUA	Z	0	1
81	MPRRUA	Mx	-.001	1
82	MP1B	X	-9.587	2
83	MP1B	Z	0	2
84	MP1B	Mx	-.004	2
85	MP1B	X	-9.587	5
86	MP1B	Z	0	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
87	MP1B	Mx	-.004	5
88	MP5B	X	-9.587	2
89	MP5B	Z	0	2
90	MP5B	Mx	-.004	2
91	MP5B	X	-9.587	5
92	MP5B	Z	0	5
93	MP5B	Mx	-.004	5
94	MP1A	X	-5.375	2
95	MP1A	Z	0	2
96	MP1A	Mx	.006	2
97	MP1A	X	-5.375	5
98	MP1A	Z	0	5
99	MP1A	Mx	.006	5
100	MP5A	X	-5.375	2
101	MP5A	Z	0	2
102	MP5A	Mx	.006	2
103	MP5A	X	-5.375	5
104	MP5A	Z	0	5
105	MP5A	Mx	.006	5
106	MP1C	X	-3.208	2
107	MP1C	Z	0	2
108	MP1C	Mx	-.002	2
109	MP1C	X	-3.208	5
110	MP1C	Z	0	5
111	MP1C	Mx	-.002	5
112	MP5C	X	-3.208	2
113	MP5C	Z	0	2
114	MP5C	Mx	-.003	2
115	MP5C	X	-3.208	5
116	MP5C	Z	0	5
117	MP5C	Mx	-.003	5
118	OVP	X	-4.011	1
119	OVP	Z	0	1
120	OVP	Mx	.002	1
121	MP3C	X	-1.381	5.5
122	MP3C	Z	0	5.5
123	MP3C	Mx	-.000222	5.5
124	MP3C	X	-1.381	5.5
125	MP3C	Z	0	5.5
126	MP3C	Mx	.000222	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-2.715	1
2	MPRRUB	Z	-1.568	1
3	MPRRUB	Mx	0	1
4	MPRRUC	X	-1.795	1
5	MPRRUC	Z	-1.037	1
6	MPRRUC	Mx	.001	1
7	MP3A	X	-6.372	1.5
8	MP3A	Z	-3.679	1.5
9	MP3A	Mx	.000604	1.5
10	MP3A	X	-6.372	5.5
11	MP3A	Z	-3.679	5.5
12	MP3A	Mx	.000604	5.5
13	MP3B	X	-7.896	1.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
14	MP3B	Z	-4.559	1.5
15	MP3B	Mx	.007	1.5
16	MP3B	X	-7.896	5.5
17	MP3B	Z	-4.559	5.5
18	MP3B	Mx	.007	5.5
19	MP3C	X	-5.561	1.5
20	MP3C	Z	-3.21	1.5
21	MP3C	Mx	-.005	1.5
22	MP3C	X	-5.561	5.5
23	MP3C	Z	-3.21	5.5
24	MP3C	Mx	-.005	5.5
25	MP3A	X	-6.372	1.5
26	MP3A	Z	-3.679	1.5
27	MP3A	Mx	.007	1.5
28	MP3A	X	-6.372	5.5
29	MP3A	Z	-3.679	5.5
30	MP3A	Mx	.007	5.5
31	MP3B	X	-7.896	1.5
32	MP3B	Z	-4.559	1.5
33	MP3B	Mx	-.005	1.5
34	MP3B	X	-7.896	5.5
35	MP3B	Z	-4.559	5.5
36	MP3B	Mx	-.005	5.5
37	MP3C	X	-5.561	1.5
38	MP3C	Z	-3.21	1.5
39	MP3C	Mx	-.003	1.5
40	MP3C	X	-5.561	5.5
41	MP3C	Z	-3.21	5.5
42	MP3C	Mx	-.003	5.5
43	MP4A	X	-2.112	2.5
44	MP4A	Z	-1.22	2.5
45	MP4A	Mx	.001	2.5
46	MP4A	X	-2.112	5
47	MP4A	Z	-1.22	5
48	MP4A	Mx	.001	5
49	MP4B	X	-3.365	2.5
50	MP4B	Z	-1.943	2.5
51	MP4B	Mx	.00045	2.5
52	MP4B	X	-3.365	5
53	MP4B	Z	-1.943	5
54	MP4B	Mx	.00045	5
55	MP4C	X	-1.446	2.5
56	MP4C	Z	-.835	2.5
57	MP4C	Mx	-.001	2.5
58	MP4C	X	-1.446	5
59	MP4C	Z	-.835	5
60	MP4C	Mx	-.001	5
61	MP3A	X	-.498	1
62	MP3A	Z	-.288	1
63	MP3A	Mx	-.000194	1
64	MP3B	X	-.648	1
65	MP3B	Z	-.374	1
66	MP3B	Mx	-.000249	1
67	MP3C	X	-.498	1
68	MP3C	Z	-.288	1
69	MP3C	Mx	.000387	1
70	MP2A	X	-2.045	1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
71	MP2A	Z	-1.181	1
72	MP2A	Mx	-.001	1
73	MP2B	X	-2.715	1
74	MP2B	Z	-1.568	1
75	MP2B	Mx	0	1
76	MP2C	X	-2.045	1
77	MP2C	Z	-1.181	1
78	MP2C	Mx	.001	1
79	MPRRUA	X	-1.795	1
80	MPRRUA	Z	-1.037	1
81	MPRRUA	Mx	-.001	1
82	MP1B	X	-8.381	2
83	MP1B	Z	-4.839	2
84	MP1B	Mx	.002	2
85	MP1B	X	-8.381	5
86	MP1B	Z	-4.839	5
87	MP1B	Mx	.002	5
88	MP5B	X	-8.381	2
89	MP5B	Z	-4.839	2
90	MP5B	Mx	.002	2
91	MP5B	X	-8.381	5
92	MP5B	Z	-4.839	5
93	MP5B	Mx	.002	5
94	MP1A	X	-3.719	2
95	MP1A	Z	-2.147	2
96	MP1A	Mx	.004	2
97	MP1A	X	-3.719	5
98	MP1A	Z	-2.147	5
99	MP1A	Mx	.004	5
100	MP5A	X	-3.719	2
101	MP5A	Z	-2.147	2
102	MP5A	Mx	.004	2
103	MP5A	X	-3.719	5
104	MP5A	Z	-2.147	5
105	MP5A	Mx	.004	5
106	MP1C	X	-3.089	2
107	MP1C	Z	-1.783	2
108	MP1C	Mx	-.003	2
109	MP1C	X	-3.089	5
110	MP1C	Z	-1.783	5
111	MP1C	Mx	-.003	5
112	MP5C	X	-3.089	2
113	MP5C	Z	-1.783	2
114	MP5C	Mx	-.004	2
115	MP5C	X	-3.089	5
116	MP5C	Z	-1.783	5
117	MP5C	Mx	-.004	5
118	OVP	X	-4.194	1
119	OVP	Z	-2.422	1
120	OVP	Mx	.000828	1
121	MP3C	X	-.646	5.5
122	MP3C	Z	-.373	5.5
123	MP3C	Mx	-.000175	5.5
124	MP3C	X	-.646	5.5
125	MP3C	Z	-.373	5.5
126	MP3C	Mx	.000175	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MPRRUB	X	-1.391	1
2	MPRRUB	Z	-2.409	1
3	MPRRUB	Mx	-.000811	1
4	MPRRUC	X	-.86	1
5	MPRRUC	Z	-1.489	1
6	MPRRUC	Mx	.001	1
7	MP3A	X	-4.422	1.5
8	MP3A	Z	-7.658	1.5
9	MP3A	Mx	-.004	1.5
10	MP3A	X	-4.422	5.5
11	MP3A	Z	-7.658	5.5
12	MP3A	Mx	-.004	5.5
13	MP3B	X	-3.953	1.5
14	MP3B	Z	-6.847	1.5
15	MP3B	Mx	.007	1.5
16	MP3B	X	-3.953	5.5
17	MP3B	Z	-6.847	5.5
18	MP3B	Mx	.007	5.5
19	MP3C	X	-3.073	1.5
20	MP3C	Z	-5.323	1.5
21	MP3C	Mx	-.003	1.5
22	MP3C	X	-3.073	5.5
23	MP3C	Z	-5.323	5.5
24	MP3C	Mx	-.003	5.5
25	MP3A	X	-4.422	1.5
26	MP3A	Z	-7.658	1.5
27	MP3A	Mx	.008	1.5
28	MP3A	X	-4.422	5.5
29	MP3A	Z	-7.658	5.5
30	MP3A	Mx	.008	5.5
31	MP3B	X	-3.953	1.5
32	MP3B	Z	-6.847	1.5
33	MP3B	Mx	-.00065	1.5
34	MP3B	X	-3.953	5.5
35	MP3B	Z	-6.847	5.5
36	MP3B	Mx	-.00065	5.5
37	MP3C	X	-3.073	1.5
38	MP3C	Z	-5.323	1.5
39	MP3C	Mx	-.005	1.5
40	MP3C	X	-3.073	5.5
41	MP3C	Z	-5.323	5.5
42	MP3C	Mx	-.005	5.5
43	MP4A	X	-1.83	2.5
44	MP4A	Z	-3.17	2.5
45	MP4A	Mx	.000834	2.5
46	MP4A	X	-1.83	5
47	MP4A	Z	-3.17	5
48	MP4A	Mx	.000834	5
49	MP4B	X	-1.445	2.5
50	MP4B	Z	-2.503	2.5
51	MP4B	Mx	.001	2.5
52	MP4B	X	-1.445	5
53	MP4B	Z	-2.503	5
54	MP4B	Mx	.001	5
55	MP4C	X	-.722	2.5
56	MP4C	Z	-1.25	2.5
57	MP4C	Mx	-.000948	2.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP4C	X	-.722	5
59	MP4C	Z	-1.25	5
60	MP4C	Mx	-.000948	5
61	MP3A	X	-.345	1
62	MP3A	Z	-.598	1
63	MP3A	Mx	-2e-6	1
64	MP3B	X	-.345	1
65	MP3B	Z	-.598	1
66	MP3B	Mx	-.000401	1
67	MP3C	X	-.259	1
68	MP3C	Z	-.448	1
69	MP3C	Mx	.000302	1
70	MP2A	X	-1.439	1
71	MP2A	Z	-2.492	1
72	MP2A	Mx	-.000839	1
73	MP2B	X	-1.439	1
74	MP2B	Z	-2.492	1
75	MP2B	Mx	-.000839	1
76	MP2C	X	-1.052	1
77	MP2C	Z	-1.822	1
78	MP2C	Mx	.001	1
79	MPRRUA	X	-1.391	1
80	MPRRUA	Z	-2.409	1
81	MPRRUA	Mx	-.000811	1
82	MP1B	X	-4.64	2
83	MP1B	Z	-8.037	2
84	MP1B	Mx	.007	2
85	MP1B	X	-4.64	5
86	MP1B	Z	-8.037	5
87	MP1B	Mx	.007	5
88	MP5B	X	-4.64	2
89	MP5B	Z	-8.037	2
90	MP5B	Mx	.007	2
91	MP5B	X	-4.64	5
92	MP5B	Z	-8.037	5
93	MP5B	Mx	.007	5
94	MP1A	X	-1.485	2
95	MP1A	Z	-2.572	2
96	MP1A	Mx	.001	2
97	MP1A	X	-1.485	5
98	MP1A	Z	-2.572	5
99	MP1A	Mx	.001	5
100	MP5A	X	-1.485	2
101	MP5A	Z	-2.572	2
102	MP5A	Mx	.001	2
103	MP5A	X	-1.485	5
104	MP5A	Z	-2.572	5
105	MP5A	Mx	.001	5
106	MP1C	X	-1.816	2
107	MP1C	Z	-3.146	2
108	MP1C	Mx	-.003	2
109	MP1C	X	-1.816	5
110	MP1C	Z	-3.146	5
111	MP1C	Mx	-.003	5
112	MP5C	X	-1.816	2
113	MP5C	Z	-3.146	2
114	MP5C	Mx	-.004	2



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
115	MP5C	X	-1.816	5
116	MP5C	Z	-3.146	5
117	MP5C	Mx	-.004	5
118	OVP	X	-2.498	1
119	OVP	Z	-4.327	1
120	OVP	Mx	-.000434	1
121	MP3C	X	-.314	5.5
122	MP3C	Z	-.545	5.5
123	MP3C	Mx	-.000155	5.5
124	MP3C	X	-.314	5.5
125	MP3C	Z	-.545	5.5
126	MP3C	Mx	.000155	5.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M15	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M17	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M6	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M6	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MPRRUB	Y	-1.696	1
2	MPRRUB	My	-.000495	1
3	MPRRUB	Mz	.000857	1
4	MPRRUC	Y	-1.696	1
5	MPRRUC	My	-.000495	1
6	MPRRUC	Mz	-.000857	1
7	MP3A	Y	-.763	1.5
8	MP3A	My	-.000413	1.5
9	MP3A	Mz	.00059	1.5
10	MP3A	Y	-.763	5.5
11	MP3A	My	-.000413	5.5
12	MP3A	Mz	.00059	5.5
13	MP3B	Y	-.763	1.5
14	MP3B	My	-.000304	1.5
15	MP3B	Mz	-.000652	1.5
16	MP3B	Y	-.763	5.5
17	MP3B	My	-.000304	5.5
18	MP3B	Mz	-.000652	5.5
19	MP3C	Y	-.763	1.5
20	MP3C	My	.000717	1.5
21	MP3C	Mz	6.3e-5	1.5
22	MP3C	Y	-.763	5.5
23	MP3C	My	.000717	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP3C	Mz	6.3e-5	5.5
25	MP3A	Y	-.763	1.5
26	MP3A	My	-.00059	1.5
27	MP3A	Mz	-.000413	1.5
28	MP3A	Y	-.763	5.5
29	MP3A	My	-.00059	5.5
30	MP3A	Mz	-.000413	5.5
31	MP3B	Y	-.763	1.5
32	MP3B	My	.000652	1.5
33	MP3B	Mz	-.000304	1.5
34	MP3B	Y	-.763	5.5
35	MP3B	My	.000652	5.5
36	MP3B	Mz	-.000304	5.5
37	MP3C	Y	-.763	1.5
38	MP3C	My	-6.3e-5	1.5
39	MP3C	Mz	.000717	1.5
40	MP3C	Y	-.763	5.5
41	MP3C	My	-6.3e-5	5.5
42	MP3C	Mz	.000717	5.5
43	MP4A	Y	-1.05	2.5
44	MP4A	My	-.00069	2.5
45	MP4A	Mz	.000122	2.5
46	MP4A	Y	-1.05	5
47	MP4A	My	-.00069	5
48	MP4A	Mz	.000122	5
49	MP4B	Y	-1.05	2.5
50	MP4B	My	.00024	2.5
51	MP4B	Mz	-.000658	2.5
52	MP4B	Y	-1.05	5
53	MP4B	My	.00024	5
54	MP4B	Mz	-.000658	5
55	MP4C	Y	-1.05	2.5
56	MP4C	My	.00045	2.5
57	MP4C	Mz	.000536	2.5
58	MP4C	Y	-1.05	5
59	MP4C	My	.00045	5
60	MP4C	Mz	.000536	5
61	MP3A	Y	-.251	1
62	MP3A	My	.000146	1
63	MP3A	Mz	-8.4e-5	1
64	MP3B	Y	-.251	1
65	MP3B	My	-1e-6	1
66	MP3B	Mz	.000169	1
67	MP3C	Y	-.251	1
68	MP3C	My	-.000146	1
69	MP3C	Mz	-8.5e-5	1
70	MP2A	Y	-2.036	1
71	MP2A	My	.001	1
72	MP2A	Mz	0	1
73	MP2B	Y	-2.036	1
74	MP2B	My	-.000594	1
75	MP2B	Mz	.001	1
76	MP2C	Y	-2.036	1
77	MP2C	My	-.000594	1
78	MP2C	Mz	-.001	1
79	MPRRUA	Y	-1.696	1
80	MPRRUA	My	.000989	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
81	MPRRUA	Mz	0	1
82	MP1B	Y	- .326	2
83	MP1B	My	.000139	2
84	MP1B	Mz	-.000382	2
85	MP1B	Y	-.326	5
86	MP1B	My	.000139	5
87	MP1B	Mz	-.000382	5
88	MP5B	Y	-.326	2
89	MP5B	My	.000139	2
90	MP5B	Mz	-.000382	2
91	MP5B	Y	-.326	5
92	MP5B	My	.000139	5
93	MP5B	Mz	-.000382	5
94	MP1A	Y	-.145	2
95	MP1A	My	-.00016	2
96	MP1A	Mz	2.8e-5	2
97	MP1A	Y	-.145	5
98	MP1A	My	-.00016	5
99	MP1A	Mz	2.8e-5	5
100	MP5A	Y	-.145	2
101	MP5A	My	-.00016	2
102	MP5A	Mz	2.8e-5	2
103	MP5A	Y	-.145	5
104	MP5A	My	-.00016	5
105	MP5A	Mz	2.8e-5	5
106	MP1C	Y	-.076	2
107	MP1C	My	4.5e-5	2
108	MP1C	Mz	5.3e-5	2
109	MP1C	Y	-.076	5
110	MP1C	My	4.5e-5	5
111	MP1C	Mz	5.3e-5	5
112	MP5C	Y	-.076	2
113	MP5C	My	6.1e-5	2
114	MP5C	Mz	7.3e-5	2
115	MP5C	Y	-.076	5
116	MP5C	My	6.1e-5	5
117	MP5C	Mz	7.3e-5	5
118	OVP	Y	-.649	1
119	OVP	My	-.000249	1
120	OVP	Mz	.000209	1
121	MP3C	Y	-.425	5.5
122	MP3C	My	6.8e-5	5.5
123	MP3C	Mz	8.1e-5	5.5
124	MP3C	Y	-.425	5.5
125	MP3C	My	-6.8e-5	5.5
126	MP3C	Mz	-8.1e-5	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MPRRUB	Z	-4.239	1
2	MPRRUB	Mx	-.002	1
3	MPRRUC	Z	-4.239	1
4	MPRRUC	Mx	.002	1
5	MP3A	Z	-1.908	1.5
6	MP3A	Mx	-.001	1.5
7	MP3A	Z	-1.908	5.5



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
65	MP1A	Z	-.362	5
66	MP1A	Mx	-7.1e-5	5
67	MP5A	Z	-.362	2
68	MP5A	Mx	-7.1e-5	2
69	MP5A	Z	-.362	5
70	MP5A	Mx	-7.1e-5	5
71	MP1C	Z	-.19	2
72	MP1C	Mx	-.000133	2
73	MP1C	Z	-.19	5
74	MP1C	Mx	-.000133	5
75	MP5C	Z	-.19	2
76	MP5C	Mx	-.000182	2
77	MP5C	Z	-.19	5
78	MP5C	Mx	-.000182	5
79	OVP	Z	-1.622	1
80	OVP	Mx	-.000521	1
81	MP3C	Z	-1.061	5.5
82	MP3C	Mx	-.000203	5.5
83	MP3C	Z	-1.061	5.5
84	MP3C	Mx	.000203	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MRRUB	X	4.239	1
2	MRRUB	Mx	-.001	1
3	MRRUC	X	4.239	1
4	MRRUC	Mx	-.001	1
5	MP3A	X	1.908	1.5
6	MP3A	Mx	-.001	1.5
7	MP3A	X	1.908	5.5
8	MP3A	Mx	-.001	5.5
9	MP3B	X	1.908	1.5
10	MP3B	Mx	-.00076	1.5
11	MP3B	X	1.908	5.5
12	MP3B	Mx	-.00076	5.5
13	MP3C	X	1.908	1.5
14	MP3C	Mx	.002	1.5
15	MP3C	X	1.908	5.5
16	MP3C	Mx	.002	5.5
17	MP3A	X	1.908	1.5
18	MP3A	Mx	-.001	1.5
19	MP3A	X	1.908	5.5
20	MP3A	Mx	-.001	5.5
21	MP3B	X	1.908	1.5
22	MP3B	Mx	.002	1.5
23	MP3B	X	1.908	5.5
24	MP3B	Mx	.002	5.5
25	MP3C	X	1.908	1.5
26	MP3C	Mx	-.000157	1.5
27	MP3C	X	1.908	5.5
28	MP3C	Mx	-.000157	5.5
29	MP4A	X	2.626	2.5
30	MP4A	Mx	-.002	2.5
31	MP4A	X	2.626	5
32	MP4A	Mx	-.002	5
33	MP4B	X	2.626	2.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4B	Mx	.000599	2.5
35	MP4B	X	2.626	5
36	MP4B	Mx	.000599	5
37	MP4C	X	2.626	2.5
38	MP4C	Mx	.001	2.5
39	MP4C	X	2.626	5
40	MP4C	Mx	.001	5
41	MP3A	X	.627	1
42	MP3A	Mx	.000366	1
43	MP3B	X	.627	1
44	MP3B	Mx	-2e-6	1
45	MP3C	X	.627	1
46	MP3C	Mx	-.000364	1
47	MP2A	X	5.089	1
48	MP2A	Mx	.003	1
49	MP2B	X	5.089	1
50	MP2B	Mx	-.001	1
51	MP2C	X	5.089	1
52	MP2C	Mx	-.001	1
53	MPRRUA	X	4.239	1
54	MPRRUA	Mx	.002	1
55	MP1B	X	.814	2
56	MP1B	Mx	.000348	2
57	MP1B	X	.814	5
58	MP1B	Mx	.000348	5
59	MP5B	X	.814	2
60	MP5B	Mx	.000348	2
61	MP5B	X	.814	5
62	MP5B	Mx	.000348	5
63	MP1A	X	.362	2
64	MP1A	Mx	-.000401	2
65	MP1A	X	.362	5
66	MP1A	Mx	-.000401	5
67	MP5A	X	.362	2
68	MP5A	Mx	-.000401	2
69	MP5A	X	.362	5
70	MP5A	Mx	-.000401	5
71	MP1C	X	.19	2
72	MP1C	Mx	.000112	2
73	MP1C	X	.19	5
74	MP1C	Mx	.000112	5
75	MP5C	X	.19	2
76	MP5C	Mx	.000153	2
77	MP5C	X	.19	5
78	MP5C	Mx	.000153	5
79	OVP	X	1.622	1
80	OVP	Mx	-.000621	1
81	MP3C	X	1.061	5.5
82	MP3C	Mx	.000171	5.5
83	MP3C	X	1.061	5.5
84	MP3C	Mx	-.000171	5.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-9.403	-9.403	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	M27	Z	-6.04	-6.04	0	%100
19	M47	X	0	0	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	0	0	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	0	0	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	0	0	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	-6.04	-6.04	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	-6.04	-6.04	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	-6.04	-6.04	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-6.04	-6.04	0	%100
35	M54A	X	0	0	0	%100
36	M54A	Z	-6.04	-6.04	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-8.33	-8.33	0	%100
39	MP1B	X	0	0	0	%100
40	MP1B	Z	-8.33	-8.33	0	%100
41	MP1C	X	0	0	0	%100
42	MP1C	Z	-8.33	-8.33	0	%100
43	MP2A	X	0	0	0	%100
44	MP2A	Z	-8.33	-8.33	0	%100
45	MP2B	X	0	0	0	%100
46	MP2B	Z	-8.33	-8.33	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-8.33	-8.33	0	%100
49	MP3A	X	0	0	0	%100
50	MP3A	Z	-10.083	-10.083	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	-10.083	-10.083	0	%100
53	MP3C	X	0	0	0	%100
54	MP3C	Z	-10.083	-10.083	0	%100
55	MPRRUA	X	0	0	0	%100
56	MPRRUA	Z	-8.33	-8.33	0	%100
57	MPRRUB	X	0	0	0	%100
58	MPRRUB	Z	-8.33	-8.33	0	%100
59	MPRRUC	X	0	0	0	%100
60	MPRRUC	Z	-8.33	-8.33	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	-8.33	-8.33	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	-8.33	-8.33	0	%100
65	MP4C	X	0	0	0	%100
66	MP4C	Z	-8.33	-8.33	0	%100
67	MP5A	X	0	0	0	%100
68	MP5A	Z	-8.33	-8.33	0	%100
69	MP5B	X	0	0	0	%100
70	MP5B	Z	-8.33	-8.33	0	%100
71	MP5C	X	0	0	0	%100
72	MP5C	Z	-8.33	-8.33	0	%100
73	OVP	X	0	0	0	%100
74	OVP	Z	-7.591	-7.591	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.-%]	End Location[ft.-%]
1	M1	X	1.734	1.734	0	%100
2	M1	Z	-3.004	-3.004	0	%100
3	M2	X	1.734	1.734	0	%100
4	M2	Z	-3.004	-3.004	0	%100
5	M3	X	6.937	6.937	0	%100
6	M3	Z	-12.016	-12.016	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	5.48	5.48	0	%100
10	M5	Z	-9.492	-9.492	0	%100
11	M6	X	5.48	5.48	0	%100
12	M6	Z	-9.492	-9.492	0	%100
13	M25	X	1.007	1.007	0	%100
14	M25	Z	-1.744	-1.744	0	%100
15	M26	X	1.007	1.007	0	%100
16	M26	Z	-1.744	-1.744	0	%100
17	M27	X	1.007	1.007	0	%100
18	M27	Z	-1.744	-1.744	0	%100
19	M47	X	1.007	1.007	0	%100
20	M47	Z	-1.744	-1.744	0	%100
21	M48	X	1.007	1.007	0	%100
22	M48	Z	-1.744	-1.744	0	%100
23	M49	X	1.007	1.007	0	%100
24	M49	Z	-1.744	-1.744	0	%100
25	M50	X	1.007	1.007	0	%100
26	M50	Z	-1.744	-1.744	0	%100
27	M51	X	4.027	4.027	0	%100
28	M51	Z	-6.975	-6.975	0	%100
29	M52	X	4.027	4.027	0	%100
30	M52	Z	-6.975	-6.975	0	%100
31	M53	X	4.027	4.027	0	%100
32	M53	Z	-6.975	-6.975	0	%100
33	M54	X	4.027	4.027	0	%100
34	M54	Z	-6.975	-6.975	0	%100
35	M54A	X	1.007	1.007	0	%100
36	M54A	Z	-1.744	-1.744	0	%100
37	MP1A	X	4.165	4.165	0	%100
38	MP1A	Z	-7.214	-7.214	0	%100
39	MP1B	X	4.165	4.165	0	%100
40	MP1B	Z	-7.214	-7.214	0	%100
41	MP1C	X	4.165	4.165	0	%100
42	MP1C	Z	-7.214	-7.214	0	%100
43	MP2A	X	4.165	4.165	0	%100
44	MP2A	Z	-7.214	-7.214	0	%100
45	MP2B	X	4.165	4.165	0	%100
46	MP2B	Z	-7.214	-7.214	0	%100
47	MP2C	X	4.165	4.165	0	%100
48	MP2C	Z	-7.214	-7.214	0	%100
49	MP3A	X	5.042	5.042	0	%100
50	MP3A	Z	-8.732	-8.732	0	%100
51	MP3B	X	5.042	5.042	0	%100
52	MP3B	Z	-8.732	-8.732	0	%100
53	MP3C	X	5.042	5.042	0	%100
54	MP3C	Z	-8.732	-8.732	0	%100
55	MPRRUA	X	4.165	4.165	0	%100
56	MPRRUA	Z	-7.214	-7.214	0	%100
57	MPRRUB	X	4.165	4.165	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
73	OVP	X	7.591	7.591	0	%100
74	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	9.012	9.012	0	%100
2	M1	Z	5.203	5.203	0	%100
3	M2	X	9.012	9.012	0	%100
4	M2	Z	5.203	5.203	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	12.655	12.655	0	%100
8	M4	Z	7.307	7.307	0	%100
9	M5	X	3.164	3.164	0	%100
10	M5	Z	1.827	1.827	0	%100
11	M6	X	3.164	3.164	0	%100
12	M6	Z	1.827	1.827	0	%100
13	M25	X	5.231	5.231	0	%100
14	M25	Z	3.02	3.02	0	%100
15	M26	X	5.231	5.231	0	%100
16	M26	Z	3.02	3.02	0	%100
17	M27	X	5.231	5.231	0	%100
18	M27	Z	3.02	3.02	0	%100
19	M47	X	5.231	5.231	0	%100
20	M47	Z	3.02	3.02	0	%100
21	M48	X	5.231	5.231	0	%100
22	M48	Z	3.02	3.02	0	%100
23	M49	X	5.231	5.231	0	%100
24	M49	Z	3.02	3.02	0	%100
25	M50	X	5.231	5.231	0	%100
26	M50	Z	3.02	3.02	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	0	0	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	0	0	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M54A	X	5.231	5.231	0	%100
36	M54A	Z	3.02	3.02	0	%100
37	MP1A	X	7.214	7.214	0	%100
38	MP1A	Z	4.165	4.165	0	%100
39	MP1B	X	7.214	7.214	0	%100
40	MP1B	Z	4.165	4.165	0	%100
41	MP1C	X	7.214	7.214	0	%100
42	MP1C	Z	4.165	4.165	0	%100
43	MP2A	X	7.214	7.214	0	%100
44	MP2A	Z	4.165	4.165	0	%100
45	MP2B	X	7.214	7.214	0	%100
46	MP2B	Z	4.165	4.165	0	%100
47	MP2C	X	7.214	7.214	0	%100
48	MP2C	Z	4.165	4.165	0	%100
49	MP3A	X	8.732	8.732	0	%100
50	MP3A	Z	5.042	5.042	0	%100
51	MP3B	X	8.732	8.732	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
10	M5	Z	3.653	3.653	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	14.613	14.613	0	%100
13	M25	X	0	0	0	%100
14	M25	Z	6.04	6.04	0	%100
15	M26	X	0	0	0	%100
16	M26	Z	6.04	6.04	0	%100
17	M27	X	0	0	0	%100
18	M27	Z	6.04	6.04	0	%100
19	M47	X	0	0	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	0	0	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	0	0	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	0	0	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	6.04	6.04	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	6.04	6.04	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	6.04	6.04	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	6.04	6.04	0	%100
35	M54A	X	0	0	0	%100
36	M54A	Z	6.04	6.04	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	8.33	8.33	0	%100
39	MP1B	X	0	0	0	%100
40	MP1B	Z	8.33	8.33	0	%100
41	MP1C	X	0	0	0	%100
42	MP1C	Z	8.33	8.33	0	%100
43	MP2A	X	0	0	0	%100
44	MP2A	Z	8.33	8.33	0	%100
45	MP2B	X	0	0	0	%100
46	MP2B	Z	8.33	8.33	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	8.33	8.33	0	%100
49	MP3A	X	0	0	0	%100
50	MP3A	Z	10.083	10.083	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	10.083	10.083	0	%100
53	MP3C	X	0	0	0	%100
54	MP3C	Z	10.083	10.083	0	%100
55	MPRRUA	X	0	0	0	%100
56	MPRRUA	Z	8.33	8.33	0	%100
57	MPRRUB	X	0	0	0	%100
58	MPRRUB	Z	8.33	8.33	0	%100
59	MPRRUC	X	0	0	0	%100
60	MPRRUC	Z	8.33	8.33	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	8.33	8.33	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	8.33	8.33	0	%100
65	MP4C	X	0	0	0	%100
66	MP4C	Z	8.33	8.33	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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, %]
4	M2	Z	0	0	0	%100
5	M3	X	-3.469	-3.469	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-10.96	-10.96	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	-10.96	-10.96	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M25	X	-2.013	-2.013	0	%100
14	M25	Z	0	0	0	%100
15	M26	X	-2.013	-2.013	0	%100
16	M26	Z	0	0	0	%100
17	M27	X	-2.013	-2.013	0	%100
18	M27	Z	0	0	0	%100
19	M47	X	-8.053	-8.053	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	-8.053	-8.053	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	-8.053	-8.053	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	-8.053	-8.053	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	-2.013	-2.013	0	%100
28	M51	Z	0	0	0	%100
29	M52	X	-2.013	-2.013	0	%100
30	M52	Z	0	0	0	%100
31	M53	X	-2.013	-2.013	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	-2.013	-2.013	0	%100
34	M54	Z	0	0	0	%100
35	M54A	X	-2.013	-2.013	0	%100
36	M54A	Z	0	0	0	%100
37	MP1A	X	-8.33	-8.33	0	%100
38	MP1A	Z	0	0	0	%100
39	MP1B	X	-8.33	-8.33	0	%100
40	MP1B	Z	0	0	0	%100
41	MP1C	X	-8.33	-8.33	0	%100
42	MP1C	Z	0	0	0	%100
43	MP2A	X	-8.33	-8.33	0	%100
44	MP2A	Z	0	0	0	%100
45	MP2B	X	-8.33	-8.33	0	%100
46	MP2B	Z	0	0	0	%100
47	MP2C	X	-8.33	-8.33	0	%100
48	MP2C	Z	0	0	0	%100
49	MP3A	X	-10.083	-10.083	0	%100
50	MP3A	Z	0	0	0	%100
51	MP3B	X	-10.083	-10.083	0	%100
52	MP3B	Z	0	0	0	%100
53	MP3C	X	-10.083	-10.083	0	%100
54	MP3C	Z	0	0	0	%100
55	MPRRUA	X	-8.33	-8.33	0	%100
56	MPRRUA	Z	0	0	0	%100
57	MPRRUB	X	-8.33	-8.33	0	%100
58	MPRRUB	Z	0	0	0	%100
59	MPRRUC	X	-8.33	-8.33	0	%100
60	MPRRUC	Z	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-2.619	-2.619	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-2.619	-2.619	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-.903	-.903	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-.903	-.903	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	-3.61	-3.61	0	%100
13	M25	X	0	0	0	%100
14	M25	Z	-1.58	-1.58	0	%100
15	M26	X	0	0	0	%100
16	M26	Z	-1.58	-1.58	0	%100
17	M27	X	0	0	0	%100
18	M27	Z	-1.58	-1.58	0	%100
19	M47	X	0	0	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	0	0	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	0	0	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	0	0	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	-1.58	-1.58	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	-1.58	-1.58	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	-1.58	-1.58	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-1.58	-1.58	0	%100
35	M54A	X	0	0	0	%100
36	M54A	Z	-1.58	-1.58	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-2.605	-2.605	0	%100
39	MP1B	X	0	0	0	%100
40	MP1B	Z	-2.605	-2.605	0	%100
41	MP1C	X	0	0	0	%100
42	MP1C	Z	-2.605	-2.605	0	%100
43	MP2A	X	0	0	0	%100
44	MP2A	Z	-2.605	-2.605	0	%100
45	MP2B	X	0	0	0	%100
46	MP2B	Z	-2.605	-2.605	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-2.605	-2.605	0	%100
49	MP3A	X	0	0	0	%100
50	MP3A	Z	-2.885	-2.885	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	-2.885	-2.885	0	%100
53	MP3C	X	0	0	0	%100
54	MP3C	Z	-2.885	-2.885	0	%100
55	MPRRUA	X	0	0	0	%100
56	MPRRUA	Z	-2.605	-2.605	0	%100
57	MPRRUB	X	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
73	OVP	X	2.075	2.075	0	%100
74	OVP	Z	-1.198	-1.198	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	.873	.873	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.492	3.492	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.873	.873	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	2.708	2.708	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	2.708	2.708	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M25	X	.527	.527	0	%100
14	M25	Z	0	0	0	%100
15	M26	X	.527	.527	0	%100
16	M26	Z	0	0	0	%100
17	M27	X	.527	.527	0	%100
18	M27	Z	0	0	0	%100
19	M47	X	2.107	2.107	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	2.107	2.107	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	2.107	2.107	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	2.107	2.107	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	.527	.527	0	%100
28	M51	Z	0	0	0	%100
29	M52	X	.527	.527	0	%100
30	M52	Z	0	0	0	%100
31	M53	X	.527	.527	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	.527	.527	0	%100
34	M54	Z	0	0	0	%100
35	M54A	X	.527	.527	0	%100
36	M54A	Z	0	0	0	%100
37	MP1A	X	2.605	2.605	0	%100
38	MP1A	Z	0	0	0	%100
39	MP1B	X	2.605	2.605	0	%100
40	MP1B	Z	0	0	0	%100
41	MP1C	X	2.605	2.605	0	%100
42	MP1C	Z	0	0	0	%100
43	MP2A	X	2.605	2.605	0	%100
44	MP2A	Z	0	0	0	%100
45	MP2B	X	2.605	2.605	0	%100
46	MP2B	Z	0	0	0	%100
47	MP2C	X	2.605	2.605	0	%100
48	MP2C	Z	0	0	0	%100
49	MP3A	X	2.885	2.885	0	%100
50	MP3A	Z	0	0	0	%100
51	MP3B	X	2.885	2.885	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
67	MP5A	X	1.302	1.302	0	%100
68	MP5A	Z	2.256	2.256	0	%100
69	MP5B	X	1.302	1.302	0	%100
70	MP5B	Z	2.256	2.256	0	%100
71	MP5C	X	1.302	1.302	0	%100
72	MP5C	Z	2.256	2.256	0	%100
73	OVP	X	1.198	1.198	0	%100
74	OVP	Z	2.075	2.075	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	2.619	2.619	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	2.619	2.619	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	.903	.903	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	.903	.903	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	3.61	3.61	0	%100
13	M25	X	0	0	0	%100
14	M25	Z	1.58	1.58	0	%100
15	M26	X	0	0	0	%100
16	M26	Z	1.58	1.58	0	%100
17	M27	X	0	0	0	%100
18	M27	Z	1.58	1.58	0	%100
19	M47	X	0	0	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	0	0	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	0	0	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	0	0	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	1.58	1.58	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	1.58	1.58	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	1.58	1.58	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	1.58	1.58	0	%100
35	M54A	X	0	0	0	%100
36	M54A	Z	1.58	1.58	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	2.605	2.605	0	%100
39	MP1B	X	0	0	0	%100
40	MP1B	Z	2.605	2.605	0	%100
41	MP1C	X	0	0	0	%100
42	MP1C	Z	2.605	2.605	0	%100
43	MP2A	X	0	0	0	%100
44	MP2A	Z	2.605	2.605	0	%100
45	MP2B	X	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
40	MP1B	Z	0	0	0	%100
41	MP1C	X	-2.605	-2.605	0	%100
42	MP1C	Z	0	0	0	%100
43	MP2A	X	-2.605	-2.605	0	%100
44	MP2A	Z	0	0	0	%100
45	MP2B	X	-2.605	-2.605	0	%100
46	MP2B	Z	0	0	0	%100
47	MP2C	X	-2.605	-2.605	0	%100
48	MP2C	Z	0	0	0	%100
49	MP3A	X	-2.885	-2.885	0	%100
50	MP3A	Z	0	0	0	%100
51	MP3B	X	-2.885	-2.885	0	%100
52	MP3B	Z	0	0	0	%100
53	MP3C	X	-2.885	-2.885	0	%100
54	MP3C	Z	0	0	0	%100
55	MPRRUA	X	-2.605	-2.605	0	%100
56	MPRRUA	Z	0	0	0	%100
57	MPRRUB	X	-2.605	-2.605	0	%100
58	MPRRUB	Z	0	0	0	%100
59	MPRRUC	X	-2.605	-2.605	0	%100
60	MPRRUC	Z	0	0	0	%100
61	MP4A	X	-2.605	-2.605	0	%100
62	MP4A	Z	0	0	0	%100
63	MP4B	X	-2.605	-2.605	0	%100
64	MP4B	Z	0	0	0	%100
65	MP4C	X	-2.605	-2.605	0	%100
66	MP4C	Z	0	0	0	%100
67	MP5A	X	-2.605	-2.605	0	%100
68	MP5A	Z	0	0	0	%100
69	MP5B	X	-2.605	-2.605	0	%100
70	MP5B	Z	0	0	0	%100
71	MP5C	X	-2.605	-2.605	0	%100
72	MP5C	Z	0	0	0	%100
73	OVP	X	-2.396	-2.396	0	%100
74	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	-2.268	-2.268	0	%100
2	M1	Z	-1.309	-1.309	0	%100
3	M2	X	-2.268	-2.268	0	%100
4	M2	Z	-1.309	-1.309	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-3.127	-3.127	0	%100
8	M4	Z	-1.805	-1.805	0	%100
9	M5	X	-.782	-.782	0	%100
10	M5	Z	-.451	-.451	0	%100
11	M6	X	-.782	-.782	0	%100
12	M6	Z	-.451	-.451	0	%100
13	M25	X	-1.368	-1.368	0	%100
14	M25	Z	-.79	-.79	0	%100
15	M26	X	-1.368	-1.368	0	%100
16	M26	Z	-.79	-.79	0	%100
17	M27	X	-1.368	-1.368	0	%100
18	M27	Z	-.79	-.79	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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.%,]
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-.48	-.48	0	%100
39	MP1B	X	0	0	0	%100
40	MP1B	Z	-.48	-.48	0	%100
41	MP1C	X	0	0	0	%100
42	MP1C	Z	-.48	-.48	0	%100
43	MP2A	X	0	0	0	%100
44	MP2A	Z	-.48	-.48	0	%100
45	MP2B	X	0	0	0	%100
46	MP2B	Z	-.48	-.48	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-.48	-.48	0	%100
49	MP3A	X	0	0	0	%100
50	MP3A	Z	-.581	-.581	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	-.581	-.581	0	%100
53	MP3C	X	0	0	0	%100
54	MP3C	Z	-.581	-.581	0	%100
55	MPRRUA	X	0	0	0	%100
56	MPRRUA	Z	-.48	-.48	0	%100
57	MPRRUB	X	0	0	0	%100
58	MPRRUB	Z	-.48	-.48	0	%100
59	MPRRUC	X	0	0	0	%100
60	MPRRUC	Z	-.48	-.48	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	-.48	-.48	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	-.48	-.48	0	%100
65	MP4C	X	0	0	0	%100
66	MP4C	Z	-.48	-.48	0	%100
67	MP5A	X	0	0	0	%100
68	MP5A	Z	-.48	-.48	0	%100
69	MP5B	X	0	0	0	%100
70	MP5B	Z	-.48	-.48	0	%100
71	MP5C	X	0	0	0	%100
72	MP5C	Z	-.48	-.48	0	%100
73	OVP	X	0	0	0	%100
74	OVP	Z	-.437	-.437	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	.1	.1	0	%100
2	M1	Z	-.173	-.173	0	%100
3	M2	X	.1	.1	0	%100
4	M2	Z	-.173	-.173	0	%100
5	M3	X	.4	.4	0	%100
6	M3	Z	-.692	-.692	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	.316	.316	0	%100
10	M5	Z	-.547	-.547	0	%100
11	M6	X	.316	.316	0	%100
12	M6	Z	-.547	-.547	0	%100
13	M25	X	.058	.058	0	%100
14	M25	Z	-.1	-.1	0	%100
15	M26	X	.058	.058	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
16	M26	Z	-.1	-.1	0	%100
17	M27	X	.058	.058	0	%100
18	M27	Z	-.1	-.1	0	%100
19	M47	X	.058	.058	0	%100
20	M47	Z	-.1	-.1	0	%100
21	M48	X	.058	.058	0	%100
22	M48	Z	-.1	-.1	0	%100
23	M49	X	.058	.058	0	%100
24	M49	Z	-.1	-.1	0	%100
25	M50	X	.058	.058	0	%100
26	M50	Z	-.1	-.1	0	%100
27	M51	X	.232	.232	0	%100
28	M51	Z	-.402	-.402	0	%100
29	M52	X	.232	.232	0	%100
30	M52	Z	-.402	-.402	0	%100
31	M53	X	.232	.232	0	%100
32	M53	Z	-.402	-.402	0	%100
33	M54	X	.232	.232	0	%100
34	M54	Z	-.402	-.402	0	%100
35	M54A	X	.058	.058	0	%100
36	M54A	Z	-.1	-.1	0	%100
37	MP1A	X	.24	.24	0	%100
38	MP1A	Z	-.416	-.416	0	%100
39	MP1B	X	.24	.24	0	%100
40	MP1B	Z	-.416	-.416	0	%100
41	MP1C	X	.24	.24	0	%100
42	MP1C	Z	-.416	-.416	0	%100
43	MP2A	X	.24	.24	0	%100
44	MP2A	Z	-.416	-.416	0	%100
45	MP2B	X	.24	.24	0	%100
46	MP2B	Z	-.416	-.416	0	%100
47	MP2C	X	.24	.24	0	%100
48	MP2C	Z	-.416	-.416	0	%100
49	MP3A	X	.29	.29	0	%100
50	MP3A	Z	-.503	-.503	0	%100
51	MP3B	X	.29	.29	0	%100
52	MP3B	Z	-.503	-.503	0	%100
53	MP3C	X	.29	.29	0	%100
54	MP3C	Z	-.503	-.503	0	%100
55	MPRRUA	X	.24	.24	0	%100
56	MPRRUA	Z	-.416	-.416	0	%100
57	MPRRUB	X	.24	.24	0	%100
58	MPRRUB	Z	-.416	-.416	0	%100
59	MPRRUC	X	.24	.24	0	%100
60	MPRRUC	Z	-.416	-.416	0	%100
61	MP4A	X	.24	.24	0	%100
62	MP4A	Z	-.416	-.416	0	%100
63	MP4B	X	.24	.24	0	%100
64	MP4B	Z	-.416	-.416	0	%100
65	MP4C	X	.24	.24	0	%100
66	MP4C	Z	-.416	-.416	0	%100
67	MP5A	X	.24	.24	0	%100
68	MP5A	Z	-.416	-.416	0	%100
69	MP5B	X	.24	.24	0	%100
70	MP5B	Z	-.416	-.416	0	%100
71	MP5C	X	.24	.24	0	%100
72	MP5C	Z	-.416	-.416	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
52	MP3B	Z	-.29	-.29	0	%100
53	MP3C	X	.503	.503	0	%100
54	MP3C	Z	-.29	-.29	0	%100
55	MPRRUA	X	.416	.416	0	%100
56	MPRRUA	Z	-.24	-.24	0	%100
57	MPRRUB	X	.416	.416	0	%100
58	MPRRUB	Z	-.24	-.24	0	%100
59	MPRRUC	X	.416	.416	0	%100
60	MPRRUC	Z	-.24	-.24	0	%100
61	MP4A	X	.416	.416	0	%100
62	MP4A	Z	-.24	-.24	0	%100
63	MP4B	X	.416	.416	0	%100
64	MP4B	Z	-.24	-.24	0	%100
65	MP4C	X	.416	.416	0	%100
66	MP4C	Z	-.24	-.24	0	%100
67	MP5A	X	.416	.416	0	%100
68	MP5A	Z	-.24	-.24	0	%100
69	MP5B	X	.416	.416	0	%100
70	MP5B	Z	-.24	-.24	0	%100
71	MP5C	X	.416	.416	0	%100
72	MP5C	Z	-.24	-.24	0	%100
73	OVP	X	.379	.379	0	%100
74	OVP	Z	-.219	-.219	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	M1	X	.2	.2	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.799	.799	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.2	.2	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.631	.631	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	.631	.631	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M25	X	.116	.116	0	%100
14	M25	Z	0	0	0	%100
15	M26	X	.116	.116	0	%100
16	M26	Z	0	0	0	%100
17	M27	X	.116	.116	0	%100
18	M27	Z	0	0	0	%100
19	M47	X	.464	.464	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	.464	.464	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	.464	.464	0	%100
24	M49	Z	0	0	0	%100
25	M50	X	.464	.464	0	%100
26	M50	Z	0	0	0	%100
27	M51	X	.116	.116	0	%100
28	M51	Z	0	0	0	%100
29	M52	X	.116	.116	0	%100
30	M52	Z	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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.%,]
31	M53	X	.116	.116	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	.116	.116	0	%100
34	M54	Z	0	0	0	%100
35	M54A	X	.116	.116	0	%100
36	M54A	Z	0	0	0	%100
37	MP1A	X	.48	.48	0	%100
38	MP1A	Z	0	0	0	%100
39	MP1B	X	.48	.48	0	%100
40	MP1B	Z	0	0	0	%100
41	MP1C	X	.48	.48	0	%100
42	MP1C	Z	0	0	0	%100
43	MP2A	X	.48	.48	0	%100
44	MP2A	Z	0	0	0	%100
45	MP2B	X	.48	.48	0	%100
46	MP2B	Z	0	0	0	%100
47	MP2C	X	.48	.48	0	%100
48	MP2C	Z	0	0	0	%100
49	MP3A	X	.581	.581	0	%100
50	MP3A	Z	0	0	0	%100
51	MP3B	X	.581	.581	0	%100
52	MP3B	Z	0	0	0	%100
53	MP3C	X	.581	.581	0	%100
54	MP3C	Z	0	0	0	%100
55	MPRRUA	X	.48	.48	0	%100
56	MPRRUA	Z	0	0	0	%100
57	MPRRUB	X	.48	.48	0	%100
58	MPRRUB	Z	0	0	0	%100
59	MPRRUC	X	.48	.48	0	%100
60	MPRRUC	Z	0	0	0	%100
61	MP4A	X	.48	.48	0	%100
62	MP4A	Z	0	0	0	%100
63	MP4B	X	.48	.48	0	%100
64	MP4B	Z	0	0	0	%100
65	MP4C	X	.48	.48	0	%100
66	MP4C	Z	0	0	0	%100
67	MP5A	X	.48	.48	0	%100
68	MP5A	Z	0	0	0	%100
69	MP5B	X	.48	.48	0	%100
70	MP5B	Z	0	0	0	%100
71	MP5C	X	.48	.48	0	%100
72	MP5C	Z	0	0	0	%100
73	OVP	X	.437	.437	0	%100
74	OVP	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	M1	X	.519	.519	0	%100
2	M1	Z	.3	.3	0	%100
3	M2	X	.519	.519	0	%100
4	M2	Z	.3	.3	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.729	.729	0	%100
8	M4	Z	.421	.421	0	%100
9	M5	X	.182	.182	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
10	M5	Z	.105	.105	0	%100
11	M6	X	.182	.182	0	%100
12	M6	Z	.105	.105	0	%100
13	M25	X	.301	.301	0	%100
14	M25	Z	.174	.174	0	%100
15	M26	X	.301	.301	0	%100
16	M26	Z	.174	.174	0	%100
17	M27	X	.301	.301	0	%100
18	M27	Z	.174	.174	0	%100
19	M47	X	.301	.301	0	%100
20	M47	Z	.174	.174	0	%100
21	M48	X	.301	.301	0	%100
22	M48	Z	.174	.174	0	%100
23	M49	X	.301	.301	0	%100
24	M49	Z	.174	.174	0	%100
25	M50	X	.301	.301	0	%100
26	M50	Z	.174	.174	0	%100
27	M51	X	0	0	0	%100
28	M51	Z	0	0	0	%100
29	M52	X	0	0	0	%100
30	M52	Z	0	0	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M54A	X	.301	.301	0	%100
36	M54A	Z	.174	.174	0	%100
37	MP1A	X	.416	.416	0	%100
38	MP1A	Z	.24	.24	0	%100
39	MP1B	X	.416	.416	0	%100
40	MP1B	Z	.24	.24	0	%100
41	MP1C	X	.416	.416	0	%100
42	MP1C	Z	.24	.24	0	%100
43	MP2A	X	.416	.416	0	%100
44	MP2A	Z	.24	.24	0	%100
45	MP2B	X	.416	.416	0	%100
46	MP2B	Z	.24	.24	0	%100
47	MP2C	X	.416	.416	0	%100
48	MP2C	Z	.24	.24	0	%100
49	MP3A	X	.503	.503	0	%100
50	MP3A	Z	.29	.29	0	%100
51	MP3B	X	.503	.503	0	%100
52	MP3B	Z	.29	.29	0	%100
53	MP3C	X	.503	.503	0	%100
54	MP3C	Z	.29	.29	0	%100
55	MPRRUA	X	.416	.416	0	%100
56	MPRRUA	Z	.24	.24	0	%100
57	MPRRUB	X	.416	.416	0	%100
58	MPRRUB	Z	.24	.24	0	%100
59	MPRRUC	X	.416	.416	0	%100
60	MPRRUC	Z	.24	.24	0	%100
61	MP4A	X	.416	.416	0	%100
62	MP4A	Z	.24	.24	0	%100
63	MP4B	X	.416	.416	0	%100
64	MP4B	Z	.24	.24	0	%100
65	MP4C	X	.416	.416	0	%100
66	MP4C	Z	.24	.24	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
67	MP5A	X	.416	.416	0	%100
68	MP5A	Z	.24	.24	0	%100
69	MP5B	X	.416	.416	0	%100
70	MP5B	Z	.24	.24	0	%100
71	MP5C	X	.416	.416	0	%100
72	MP5C	Z	.24	.24	0	%100
73	OVP	X	.379	.379	0	%100
74	OVP	Z	.219	.219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.4	.4	0	%100
2	M1	Z	.692	.692	0	%100
3	M2	X	.1	.1	0	%100
4	M2	Z	.173	.173	0	%100
5	M3	X	.1	.1	0	%100
6	M3	Z	.173	.173	0	%100
7	M4	X	.316	.316	0	%100
8	M4	Z	.547	.547	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	.316	.316	0	%100
12	M6	Z	.547	.547	0	%100
13	M25	X	.232	.232	0	%100
14	M25	Z	.402	.402	0	%100
15	M26	X	.232	.232	0	%100
16	M26	Z	.402	.402	0	%100
17	M27	X	.232	.232	0	%100
18	M27	Z	.402	.402	0	%100
19	M47	X	.058	.058	0	%100
20	M47	Z	.1	.1	0	%100
21	M48	X	.058	.058	0	%100
22	M48	Z	.1	.1	0	%100
23	M49	X	.058	.058	0	%100
24	M49	Z	.1	.1	0	%100
25	M50	X	.058	.058	0	%100
26	M50	Z	.1	.1	0	%100
27	M51	X	.058	.058	0	%100
28	M51	Z	.1	.1	0	%100
29	M52	X	.058	.058	0	%100
30	M52	Z	.1	.1	0	%100
31	M53	X	.058	.058	0	%100
32	M53	Z	.1	.1	0	%100
33	M54	X	.058	.058	0	%100
34	M54	Z	.1	.1	0	%100
35	M54A	X	.232	.232	0	%100
36	M54A	Z	.402	.402	0	%100
37	MP1A	X	.24	.24	0	%100
38	MP1A	Z	.416	.416	0	%100
39	MP1B	X	.24	.24	0	%100
40	MP1B	Z	.416	.416	0	%100
41	MP1C	X	.24	.24	0	%100
42	MP1C	Z	.416	.416	0	%100
43	MP2A	X	.24	.24	0	%100
44	MP2A	Z	.416	.416	0	%100
45	MP2B	X	.24	.24	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
46	MP2B	Z	.416	.416	0	%100
47	MP2C	X	.24	.24	0	%100
48	MP2C	Z	.416	.416	0	%100
49	MP3A	X	.29	.29	0	%100
50	MP3A	Z	.503	.503	0	%100
51	MP3B	X	.29	.29	0	%100
52	MP3B	Z	.503	.503	0	%100
53	MP3C	X	.29	.29	0	%100
54	MP3C	Z	.503	.503	0	%100
55	MPRRUA	X	.24	.24	0	%100
56	MPRRUA	Z	.416	.416	0	%100
57	MPRRUB	X	.24	.24	0	%100
58	MPRRUB	Z	.416	.416	0	%100
59	MPRRUC	X	.24	.24	0	%100
60	MPRRUC	Z	.416	.416	0	%100
61	MP4A	X	.24	.24	0	%100
62	MP4A	Z	.416	.416	0	%100
63	MP4B	X	.24	.24	0	%100
64	MP4B	Z	.416	.416	0	%100
65	MP4C	X	.24	.24	0	%100
66	MP4C	Z	.416	.416	0	%100
67	MP5A	X	.24	.24	0	%100
68	MP5A	Z	.416	.416	0	%100
69	MP5B	X	.24	.24	0	%100
70	MP5B	Z	.416	.416	0	%100
71	MP5C	X	.24	.24	0	%100
72	MP5C	Z	.416	.416	0	%100
73	OVP	X	.219	.219	0	%100
74	OVP	Z	.379	.379	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	.599	.599	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.599	.599	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	.21	.21	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	.21	.21	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	.842	.842	0	%100
13	M25	X	0	0	0	%100
14	M25	Z	.348	.348	0	%100
15	M26	X	0	0	0	%100
16	M26	Z	.348	.348	0	%100
17	M27	X	0	0	0	%100
18	M27	Z	.348	.348	0	%100
19	M47	X	0	0	0	%100
20	M47	Z	0	0	0	%100
21	M48	X	0	0	0	%100
22	M48	Z	0	0	0	%100
23	M49	X	0	0	0	%100
24	M49	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
40	MP1B	Z	.24	.24	0	%100
41	MP1C	X	-.416	-.416	0	%100
42	MP1C	Z	.24	.24	0	%100
43	MP2A	X	-.416	-.416	0	%100
44	MP2A	Z	.24	.24	0	%100
45	MP2B	X	-.416	-.416	0	%100
46	MP2B	Z	.24	.24	0	%100
47	MP2C	X	-.416	-.416	0	%100
48	MP2C	Z	.24	.24	0	%100
49	MP3A	X	-.503	-.503	0	%100
50	MP3A	Z	.29	.29	0	%100
51	MP3B	X	-.503	-.503	0	%100
52	MP3B	Z	.29	.29	0	%100
53	MP3C	X	-.503	-.503	0	%100
54	MP3C	Z	.29	.29	0	%100
55	MPRRUA	X	-.416	-.416	0	%100
56	MPRRUA	Z	.24	.24	0	%100
57	MPRRUB	X	-.416	-.416	0	%100
58	MPRRUB	Z	.24	.24	0	%100
59	MPRRUC	X	-.416	-.416	0	%100
60	MPRRUC	Z	.24	.24	0	%100
61	MP4A	X	-.416	-.416	0	%100
62	MP4A	Z	.24	.24	0	%100
63	MP4B	X	-.416	-.416	0	%100
64	MP4B	Z	.24	.24	0	%100
65	MP4C	X	-.416	-.416	0	%100
66	MP4C	Z	.24	.24	0	%100
67	MP5A	X	-.416	-.416	0	%100
68	MP5A	Z	.24	.24	0	%100
69	MP5B	X	-.416	-.416	0	%100
70	MP5B	Z	.24	.24	0	%100
71	MP5C	X	-.416	-.416	0	%100
72	MP5C	Z	.24	.24	0	%100
73	OVP	X	-.379	-.379	0	%100
74	OVP	Z	.219	.219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.2	-.2	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.799	-.799	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.2	-.2	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-.631	-.631	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	-.631	-.631	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M25	X	-.116	-.116	0	%100
14	M25	Z	0	0	0	%100
15	M26	X	-.116	-.116	0	%100
16	M26	Z	0	0	0	%100
17	M27	X	-.116	-.116	0	%100
18	M27	Z	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MPRRUB	Z	-24	-24	0	%100
59	MPRRUC	X	-416	-416	0	%100
60	MPRRUC	Z	-24	-24	0	%100
61	MP4A	X	-416	-416	0	%100
62	MP4A	Z	-24	-24	0	%100
63	MP4B	X	-416	-416	0	%100
64	MP4B	Z	-24	-24	0	%100
65	MP4C	X	-416	-416	0	%100
66	MP4C	Z	-24	-24	0	%100
67	MP5A	X	-416	-416	0	%100
68	MP5A	Z	-24	-24	0	%100
69	MP5B	X	-416	-416	0	%100
70	MP5B	Z	-24	-24	0	%100
71	MP5C	X	-416	-416	0	%100
72	MP5C	Z	-24	-24	0	%100
73	OVP	X	-379	-379	0	%100
74	OVP	Z	-219	-219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.4	-.4	0	%100
2	M1	Z	-.692	-.692	0	%100
3	M2	X	-.1	-.1	0	%100
4	M2	Z	-.173	-.173	0	%100
5	M3	X	-.1	-.1	0	%100
6	M3	Z	-.173	-.173	0	%100
7	M4	X	-.316	-.316	0	%100
8	M4	Z	-.547	-.547	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-.316	-.316	0	%100
12	M6	Z	-.547	-.547	0	%100
13	M25	X	-.232	-.232	0	%100
14	M25	Z	-.402	-.402	0	%100
15	M26	X	-.232	-.232	0	%100
16	M26	Z	-.402	-.402	0	%100
17	M27	X	-.232	-.232	0	%100
18	M27	Z	-.402	-.402	0	%100
19	M47	X	-.058	-.058	0	%100
20	M47	Z	-.1	-.1	0	%100
21	M48	X	-.058	-.058	0	%100
22	M48	Z	-.1	-.1	0	%100
23	M49	X	-.058	-.058	0	%100
24	M49	Z	-.1	-.1	0	%100
25	M50	X	-.058	-.058	0	%100
26	M50	Z	-.1	-.1	0	%100
27	M51	X	-.058	-.058	0	%100
28	M51	Z	-.1	-.1	0	%100
29	M52	X	-.058	-.058	0	%100
30	M52	Z	-.1	-.1	0	%100
31	M53	X	-.058	-.058	0	%100
32	M53	Z	-.1	-.1	0	%100
33	M54	X	-.058	-.058	0	%100
34	M54	Z	-.1	-.1	0	%100
35	M54A	X	-.232	-.232	0	%100
36	M54A	Z	-.402	-.402	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	MP1A	X	-24	-24	0	%100
38	MP1A	Z	-416	-416	0	%100
39	MP1B	X	-24	-24	0	%100
40	MP1B	Z	-416	-416	0	%100
41	MP1C	X	-24	-24	0	%100
42	MP1C	Z	-416	-416	0	%100
43	MP2A	X	-24	-24	0	%100
44	MP2A	Z	-416	-416	0	%100
45	MP2B	X	-24	-24	0	%100
46	MP2B	Z	-416	-416	0	%100
47	MP2C	X	-24	-24	0	%100
48	MP2C	Z	-416	-416	0	%100
49	MP3A	X	-29	-29	0	%100
50	MP3A	Z	-503	-503	0	%100
51	MP3B	X	-29	-29	0	%100
52	MP3B	Z	-503	-503	0	%100
53	MP3C	X	-29	-29	0	%100
54	MP3C	Z	-503	-503	0	%100
55	MPRRUA	X	-24	-24	0	%100
56	MPRRUA	Z	-416	-416	0	%100
57	MPRRUB	X	-24	-24	0	%100
58	MPRRUB	Z	-416	-416	0	%100
59	MPRRUC	X	-24	-24	0	%100
60	MPRRUC	Z	-416	-416	0	%100
61	MP4A	X	-24	-24	0	%100
62	MP4A	Z	-416	-416	0	%100
63	MP4B	X	-24	-24	0	%100
64	MP4B	Z	-416	-416	0	%100
65	MP4C	X	-24	-24	0	%100
66	MP4C	Z	-416	-416	0	%100
67	MP5A	X	-24	-24	0	%100
68	MP5A	Z	-416	-416	0	%100
69	MP5B	X	-24	-24	0	%100
70	MP5B	Z	-416	-416	0	%100
71	MP5C	X	-24	-24	0	%100
72	MP5C	Z	-416	-416	0	%100
73	OVP	X	-219	-219	0	%100
74	OVP	Z	-379	-379	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	M47	Y	-12	-12	0	1.083
2	M48	Y	-24.375	-24.375	0	1.083
3	M49	Y	-24.375	-24.375	0	1.083
4	M50	Y	-12	-12	0	1.083
5	M25	Y	-12	-12	0	1.083
6	M26	Y	-24.375	-24.375	0	1.083
7	M27	Y	-24.375	-24.375	7.999e-14	1.083
8	M54A	Y	-12	-12	0	1.083
9	M51	Y	-12	-12	0	1.083
10	M52	Y	-24.375	-24.375	1.284e-12	1.083
11	M53	Y	-24.375	-24.375	9.673e-13	1.083
12	M54	Y	-12	-12	4.014e-13	1.083

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, %]
--	--------------	-----------	---------------------------	--------------------------	-----------------------	---------------------



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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, %]
11	M5	Z	-.17	-.253	3.471	5.608
12	M5	Z	-.253	-.2	5.608	7.744
13	M5	Z	-.2	-.117	7.744	9.88
14	M5	Z	-.117	-.011	9.88	12.016
15	M10	Z	-.778	-.778	0	.292
16	M25	Z	-.147	-.147	.312	1.083
17	M26	Z	-.321	-.321	0	1.083
18	M27	Z	-.321	-.321	0	1.083
19	M54A	Z	-.147	-.147	0	.771
20	M4	Z	-.011	-.17	1.335	3.471
21	M4	Z	-.17	-.253	3.471	5.608
22	M4	Z	-.253	-.253	5.608	7.744
23	M4	Z	-.253	-.17	7.744	9.88
24	M4	Z	-.17	-.011	9.88	12.016
25	M51	Z	-.147	-.147	.312	1.083
26	M52	Z	-.321	-.321	7.263e-13	1.083
27	M53	Z	-.321	-.321	6.818e-13	1.083
28	M54	Z	-.147	-.147	0	.771

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	M6	X	.011	.17	1.335	3.471
2	M6	X	.17	.253	3.471	5.608
3	M6	X	.253	.253	5.608	7.744
4	M6	X	.253	.17	7.744	9.88
5	M6	X	.17	.011	9.88	12.016
6	M47	X	.147	.147	.313	1.083
7	M48	X	.321	.321	0	1.083
8	M49	X	.321	.321	0	1.083
9	M50	X	.147	.147	0	.771
10	M5	X	.011	.17	1.335	3.471
11	M5	X	.17	.253	3.471	5.608
12	M5	X	.253	.2	5.608	7.744
13	M5	X	.2	.117	7.744	9.88
14	M5	X	.117	.011	9.88	12.016
15	M10	X	.778	.778	0	.292
16	M25	X	.147	.147	.312	1.083
17	M26	X	.321	.321	0	1.083
18	M27	X	.321	.321	0	1.083
19	M54A	X	.147	.147	0	.771
20	M4	X	.011	.17	1.335	3.471
21	M4	X	.17	.253	3.471	5.608
22	M4	X	.253	.253	5.608	7.744
23	M4	X	.253	.17	7.744	9.88
24	M4	X	.17	.011	9.88	12.016
25	M51	X	.147	.147	.312	1.083
26	M52	X	.321	.321	7.263e-13	1.083
27	M53	X	.321	.321	6.818e-13	1.083
28	M54	X	.147	.147	0	.771

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N59	N53	N100A	N106A	Y	A-B	-.009
2	N52	N47	N46	N105	Y	A-B	-.009
3	N114	N108	N61	N67	Y	A-B	-.009



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N59	N53	N100A	N106A	Y	A-B	-.011
2	N52	N47	N46	N105	Y	A-B	-.011
3	N67	N61	N108	N114	Y	A-B	-.011

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N59	N53	N100A	N106A	Y	Two Way	-.000125
2	N52	N47	N46	N105	Y	Two Way	-.000125
3	N114	N108	N61	N67	Y	Two Way	-.000125

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N59	N53	N100A	N106A	Z	Two Way	-.000314
2	N52	N47	N46	N105	Z	Two Way	-.000314
3	N114	N108	N61	N67	Z	Two Way	-.000314

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N59	N53	N100A	N106A	X	Two Way	.000314
2	N52	N47	N46	N105	X	Two Way	.000314
3	N114	N108	N61	N67	X	Two Way	.000314

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	N7	max	2361.838	11	2241.248	17	1309.455	11	-1.203	12	1.109	8	6.776	17
2		min	-2365.468	5	798.284	74	-1310.247	5	-3.852	18	-1.11	2	2.368	74
3	N1	max	2368.803	9	2406.845	21	1444.479	3	-1.278	2	1.854	12	-2.337	4
4		min	-2366.644	3	806.796	66	-1448.228	9	-4.251	20	-1.856	6	-7.457	22
5	N4	max	786.285	10	2498.509	13	2765.708	1	8.553	13	1.783	4	.558	4
6		min	-786.239	4	842.944	70	-2762.196	7	2.656	7	-1.783	10	-.599	10
7	Totals:	max	5148.156	10	6992.329	13	4915.324	1						
8		min	-5148.157	4	2475.646	70	-4915.324	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear	...	Loc[ft]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn
1	M1	HSS4X4X4	.541	0	19	.073	0	y	24	111968...	139518	16.181	16.181	2...	H1-1b
2	M2	HSS4X4X4	.539	0	15	.082	0	y	22	111968...	139518	16.181	16.181	2...	H1-1b
3	M3	HSS4X4X4	.485	0	15	.069	0	y	14	111968...	139518	16.181	16.181	2...	H1-1b
4	M4	HSS4X4X4	.248	13.351	24	.089	13.351	z	11	66166.7...	139518	16.181	16.181	2...	H1-1b
5	M5	HSS4X4X4	.249	0	14	.069	13.351	z	3	66166.7...	139518	16.181	16.181	2...	H1-1b
6	M6	HSS4X4X4	.253	13.351	20	.069	13.351	z	7	66166.7...	139518	16.181	16.181	2...	H1-1b
7	M25	L2x2x4	.033	0	18	.004	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
8	M26	L2x2x4	.059	0	18	.008	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
9	M27	L2x2x4	.059	0	18	.008	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
10	M47	L2x2x4	.033	0	22	.004	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
11	M48	L2x2x4	.059	0	22	.008	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
12	M49	L2x2x4	.059	0	22	.008	0	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
13	M50	L2x2x4	.033	1.083	16	.004	1.083	y	23	28821.6	30585.6	.691	1.577	2...	H2-1
14	M51	L2x2x4	.033	0	14	.004	0	y	19	28821.6	30585.6	.691	1.577	2...	H2-1
15	M52	L2x2x4	.059	0	14	.008	0	y	19	28821.6	30585.6	.691	1.577	2...	H2-1
16	M53	L2x2x4	.059	0	14	.008	0	y	19	28821.6	30585.6	.691	1.577	2...	H2-1
17	M54	L2x2x4	.033	1.083	20	.004	1.083	y	19	28821.6	30585.6	.691	1.577	2...	H2-1



Company :
 Designer :
 Job Number :
 Model Name :

July 10, 2023
 12:36 PM
 Checked By: _____

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn y ...	phi*Mn z ...	Cb	Eqn
18	M54A	L2x2x4	.033	1.083	24	.004	1.083	y	23	28821.6	30585.6	.691	1.577	2... H2-1
19	MP1A	PIPE 2.0	.133	3.938	4	.075	3.938		4	17855.0...	32130	1.872	1.872	2... H1-1b
20	MP1B	PIPE 2.0	.220	3.938	11	.131	3.938		8	17855.0...	32130	1.872	1.872	2... H1-1b
21	MP1C	PIPE 2.0	.101	3.938	12	.044	3.938		12	17855.0...	32130	1.872	1.872	2... H1-1b
22	MP2A	PIPE 2.0	.125	3.281	1	.020	3.281		9	23088.1...	32130	1.872	1.872	1... H1-1b
23	MP2B	PIPE 2.0	.125	3.281	5	.020	3.281		1	23088.1...	32130	1.872	1.872	1... H1-1b
24	MP2C	PIPE 2.0	.125	3.281	9	.020	3.281		5	23088.1...	32130	1.872	1.872	1... H1-1b
25	MP3A	PIPE 2.5	.285	4.167	7	.062	4.167		9	30038.4...	50715	3.596	3.596	2... H1-1b
26	MP3B	PIPE 2.5	.285	4.167	11	.062	4.167		1	30038.4...	50715	3.596	3.596	1... H1-1b
27	MP3C	PIPE 2.5	.285	4.167	3	.063	4.167		1	30038.4...	50715	3.596	3.596	1... H1-1b
28	MPRRUA	PIPE 2.0	.119	3.281	1	.018	3.281		5	23088.1...	32130	1.872	1.872	1... H1-1b
29	MPRRUB	PIPE 2.0	.119	3.281	5	.018	3.281		9	23088.1...	32130	1.872	1.872	1... H1-1b
30	MPRRUC	PIPE 2.0	.119	3.281	9	.018	3.281		1	23088.1...	32130	1.872	1.872	1... H1-1b
31	MP4A	PIPE 2.0	.120	4.167	7	.022	4.167		8	14916.0...	32130	1.872	1.872	1... H1-1b
32	MP4B	PIPE 2.0	.120	4.167	11	.022	4.167		12	14916.0...	32130	1.872	1.872	1... H1-1b
33	MP4C	PIPE 2.0	.120	4.167	3	.022	4.167		4	14916.0...	32130	1.872	1.872	1... H1-1b
34	MP5A	PIPE 2.0	.148	4.167	4	.075	4.167		10	14916.0...	32130	1.872	1.872	1... H1-1b
35	MP5B	PIPE 2.0	.245	4.167	11	.131	4.167		2	14916.0...	32130	1.872	1.872	1... H1-1b
36	MP5C	PIPE 2.0	.113	4.167	12	.057	4.167		6	14916.0...	32130	1.872	1.872	1... H1-1b
37	OVP	PIPE 2.0	.120	3	6	.026	3		2	26521.4...	32130	1.872	1.872	1... H1-1b

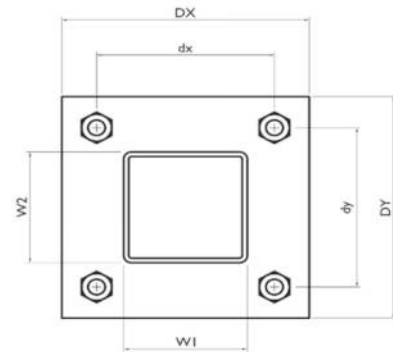
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

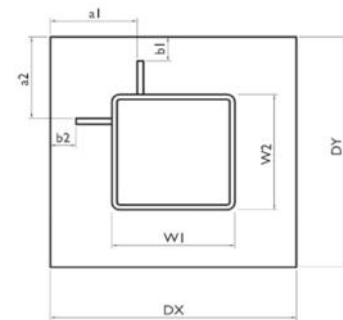
Bolt Orientation

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch) :	3
d_y (in) (Delta Y of typ. bolt config. sketch) :	8
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	7.0
Required Shear Strength / bolt (kips):	0.7
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	23.6%



Tower Connection Baseplate Checks

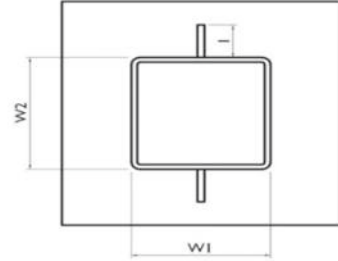
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	Has Stiffeners
Plate Width, D_x (in):	6
Plate Height, D_y (in):	10
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	3
Stiffener location b_1 (in):	0.5
Stiffener location a_2 (in):	5
Stiffener location b_2 (in):	1
F_y (ksi, plate):	36
Plate Thickness (in):	0.75
Length of Yield Line, L_y (in):	4.63
Bolt Eccentricity, e (in):	0.00
M_u (kip-in):	0.00
$\Phi * M_n$ (kip-in):	21.09
Plate Bending Utilization:	Sufficient



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Stiffener Notch Present?
 Stiffener Length, l (in):
 Stiffener Spacing/Width, s (in):
 Stiffener Notch Length, n (in):
 Weld Size (1/16 in):
 W1 (in):
 W2 (in):
 Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
 Required combined strength (kip/in):
 Weld Capacity (kip/in):
 Weld Utilization:

Yes
Rectangle
(1) Stiffener on top/bottom
Yes
2.5
0.5
6
4
4
26.00
58.50
21.33
271.17
5
5
1.29
8.35
15.5%



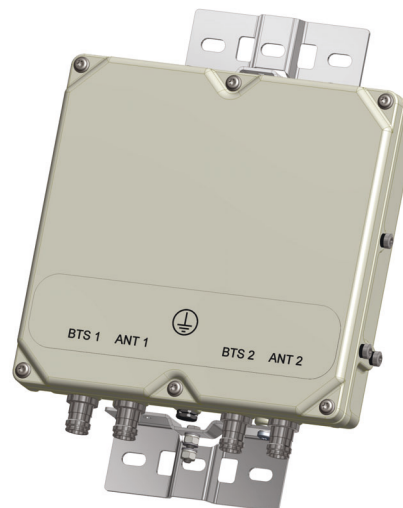
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



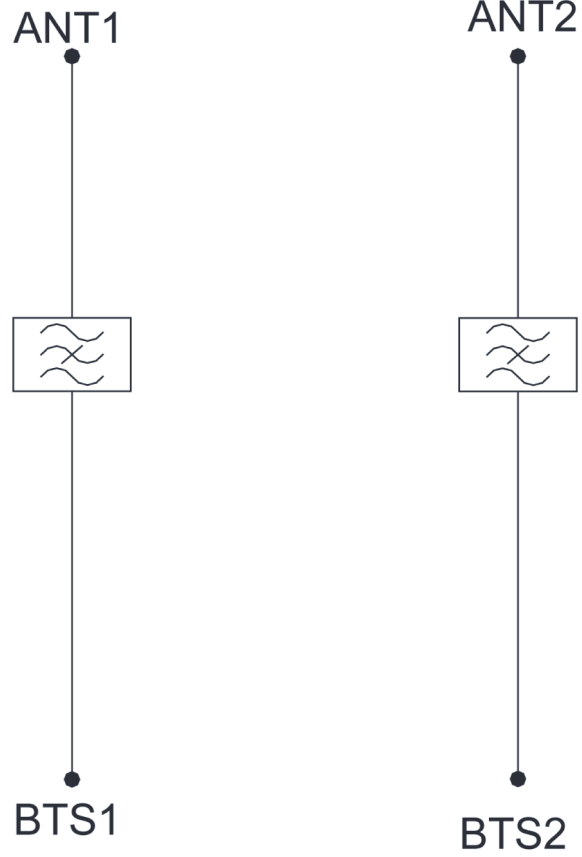
TECHNICAL SPECIFICATIONS

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

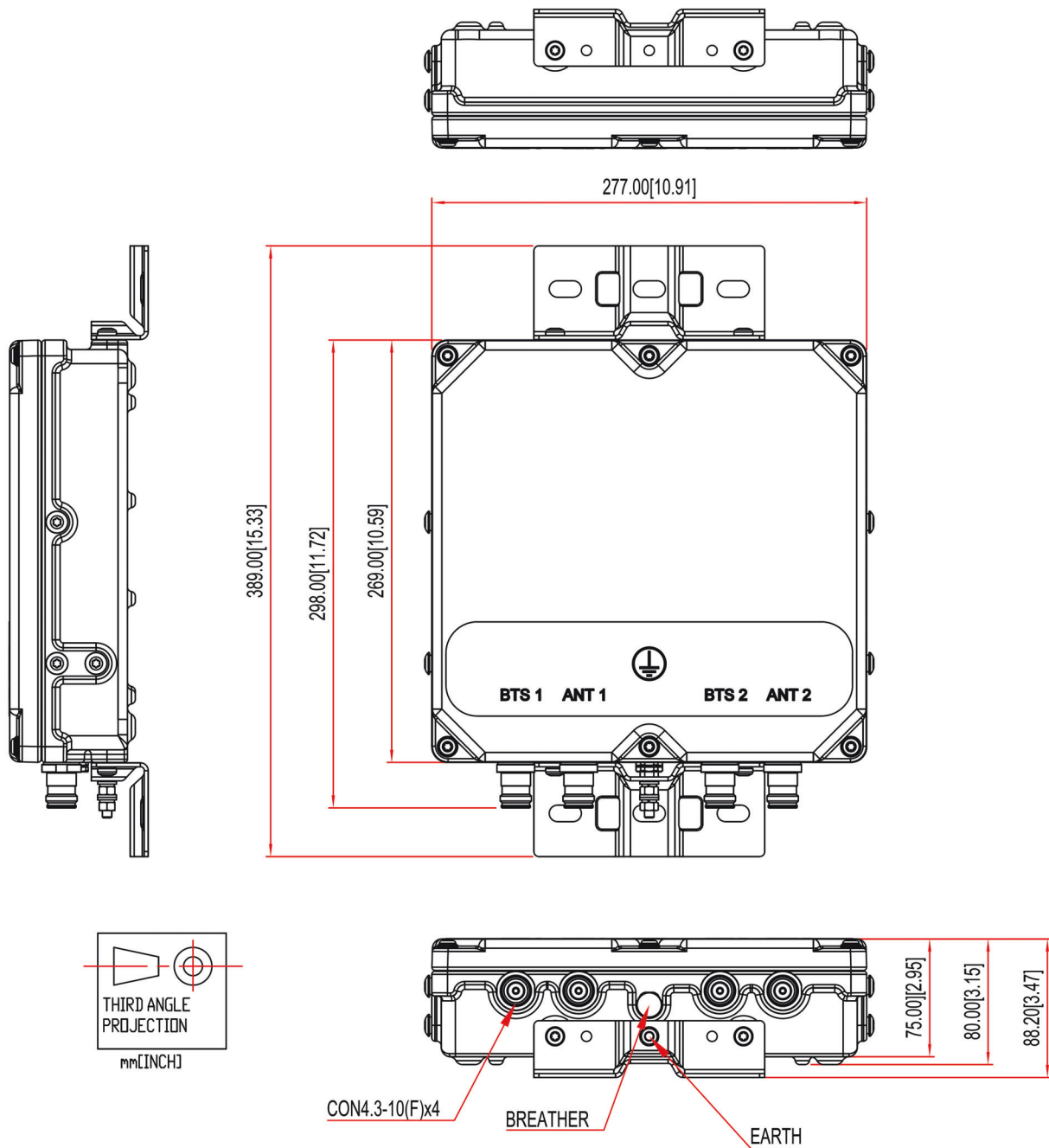
ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM



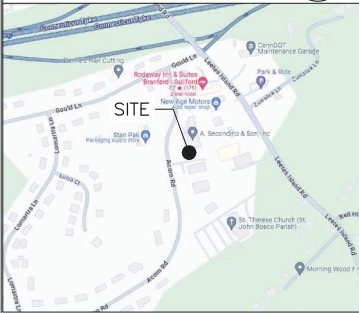
MECHANICAL BLOCK DIAGRAM



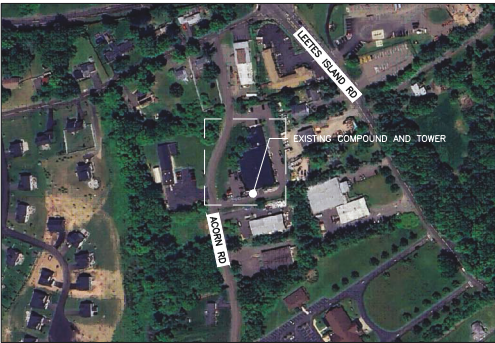
NOTE:
AN ANALYSIS OF THE CAPACITY OF THE STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY CROWN CASTLE DATED JANUARY 16, 2024.

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

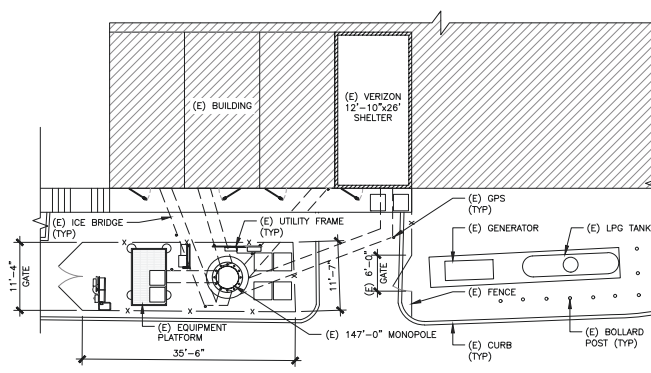
**LOCATION MAP
N.T.S.**



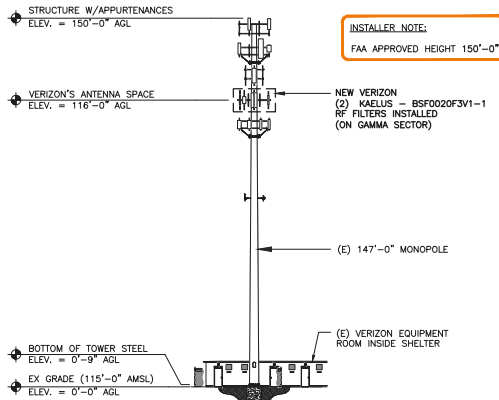
APPROXIMATE COORDINATES: LATITUDE: 41° 17' 35.1" N, 41.293072° N
LONGITUDE: 72° 45' 46.4" W, 72.762889° W



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



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



**3 TOWER ELEVATION
SCALE: N.T.S.**

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 200
TULSA, OK 74119
PH: (918) 581-4634
btm@btgrp.com

**BRANFORD 3
CT**
21 ACORN ROAD
BRANFORD, CT 06405
EXISTING MONOPOLE

PROJECT NO: 137117.008.01
CHECKED BY: LR

ISSUED FOR:

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

MTS ENGINEERING P.L.L.C.
BER-2386085
Expires 3/31/24



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

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

verizon
 20 ALEXANDER DRIVE
 WALLINGFORD, CT 06492

B+T GRP
 MTS ENGINEERING, P.L.L.C.
 1717 S. BOULDER
 SUITE 200
 TULSA, OK 74119
 PH: (918) 581-4838
 bteng@btgrp.com

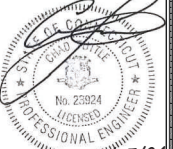
**BRANFORD 3
 CT**

21 ACCORN ROAD
 BRANFORD, CT 06405
 EXISTING MONOPOLE

PROJECT NO: 137117.008.01
 CHECKED BY: LR

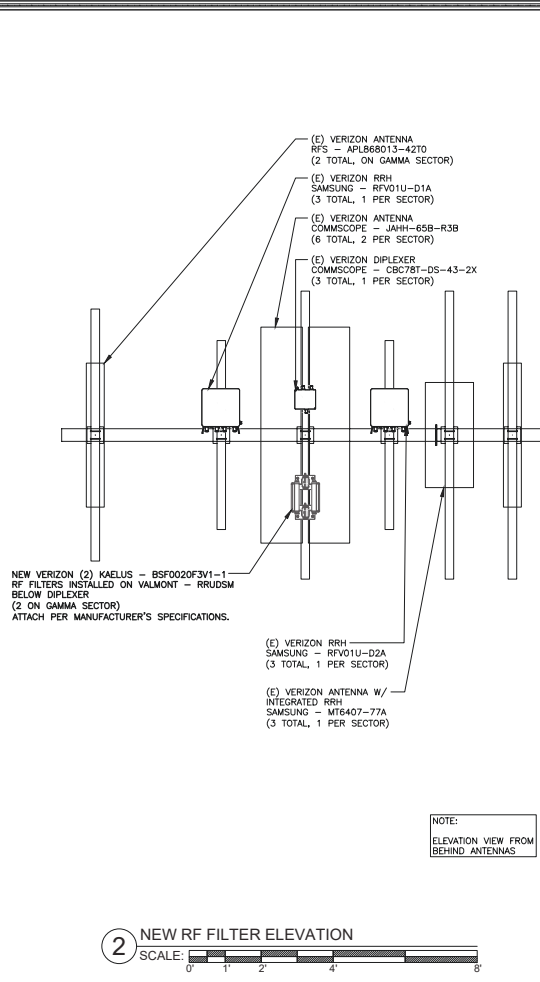
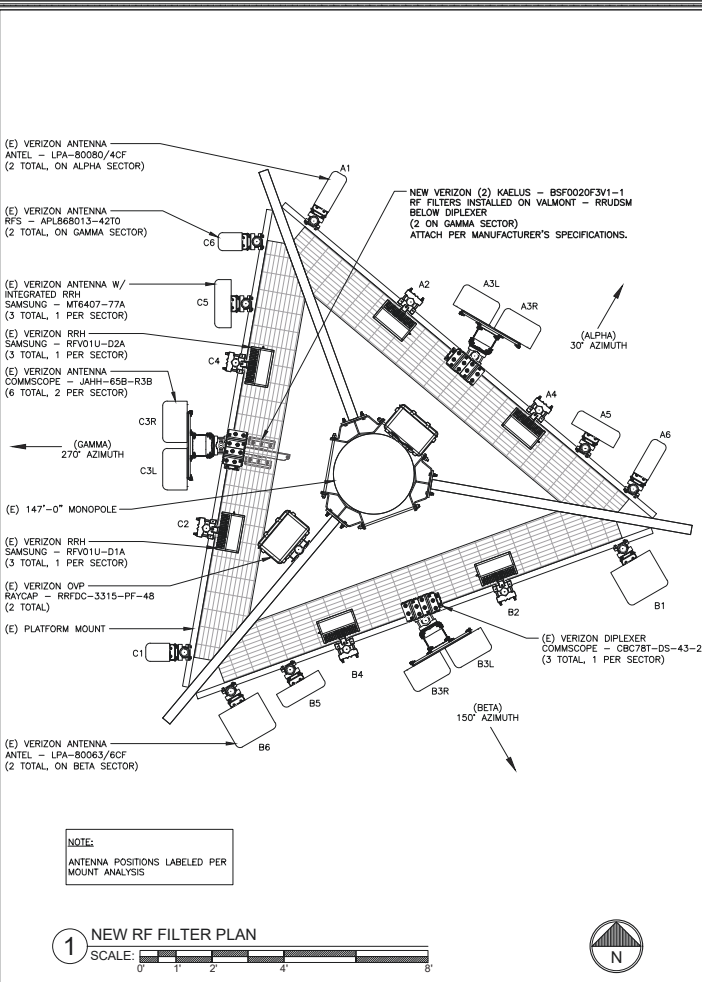
ISSUED FOR:		
REV	DATE	DESCRIPTION
0	2/27/24	RMC CONSTRUCTION

MTS ENGINEERING P.L.L.C.
 BEC-2386085
 Expires 3/31/24

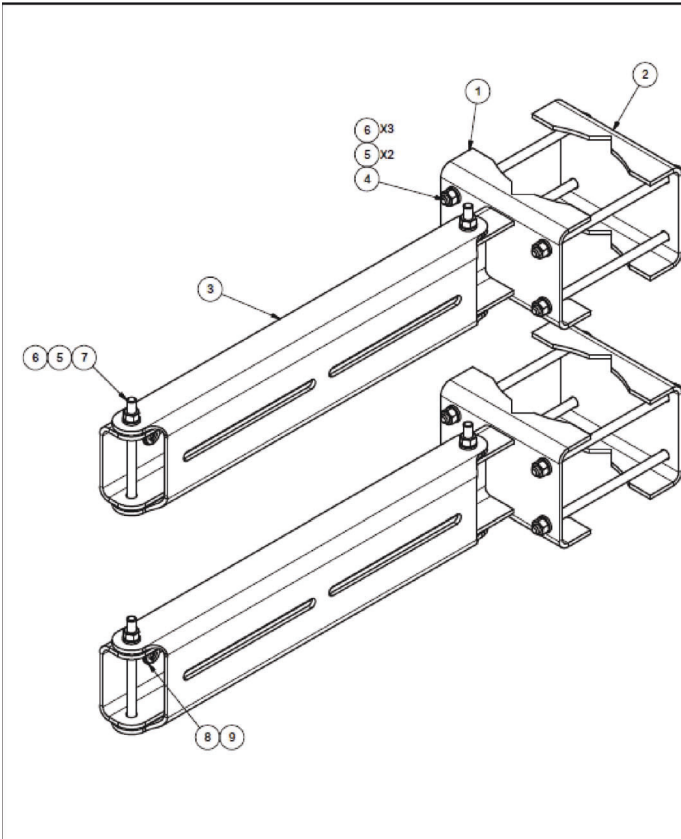


IF IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

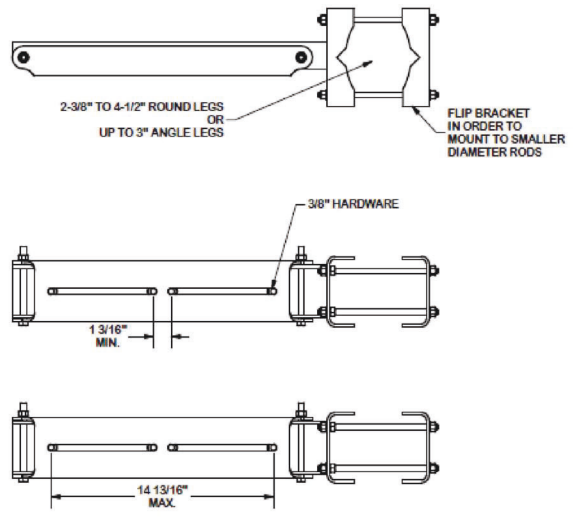
SHEET NUMBER: **LE-2** REVISION: **0**



137117.008.01_0001_SECONDING PROPERTY.dwg - SheetLE-2 - Feb 27, 2024 - 1:03pm - User: btaubler - Plot: btaubler - Feb 27, 2024 - 1:03pm



PARTS LIST					
ITEM	QTY	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	MOUNTING ARM		8.99	17.97
2	2	CLAMP PLATE		2.35	4.69
3	2	SWIVEL MOUNT		6.65	13.30
4	8	3/8"-16 UNC X 8" GALV. THREADED ROD		0.25	2.00
5	20	3/8" GALV LOCK WASHER		0.01	0.13
6	28	3/8"-16 UNC GALV HEX NUT		0.02	0.52
7	4	3/8" X 5" GALV BOLT		0.18	0.71
8	8	3/8" SS FLAT WASHER		0.01	0.06
9	8	3/8" SS LOCK WASHER		0.01	0.05
				TOTAL WT. #	39.43



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

PROPRIETARY NOTE:
 THE DATA AND TOLERANCES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION			
RRU DUAL SWIVEL MOUNT			
CRD NO.	DRAWN BY	ENG. APPROVAL	
	CEK	1/12/2015	
CLASS	SUB	DRAWING USAGE	CHECKED BY
81	01	SHOP	BMC 2/3/2015

	Engineering Support Team: 1-866-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	A valmont COMPANY	
PART NO.	RRUDSM	
DWG. NO.	RRUDSM	