



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

January 19, 2023

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

RE: **Notice of Exempt Modification for T-Mobile: 876335/CTHA233B**
8040 Birdseye Road, Farmington, CT 06032
Latitude: 42° 1' 14.91" / Longitude: -72° 35' 6.59"

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 100' level of the 139'-0" monopole tower. T-Mobile is to remove all equipment at the 100' level including the antenna mount. T-Mobile proposes to replace Sprint antennas at the 139' level of the monopole/tower with nine (9) new antennas and ancillary equipment. The property is located at 8040 Birdseye Road, Farmington, CT and owned by GOIS Holdings of Connecticut LLC. The tower is owned by Crown Castle. 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:

Installed New @139'

- (3) Ericsson – AIR6419 Antennas
- (3) CommScope – W-65B-R1 Antennas
- (3) RFS-APXVAALL24_43-U-NA20 Antennas
- (3) Ericsson- Radio 4460 B25+B66
- (3) Ericsson- Radio 4480 B71+B85
- (3) Hybrid Cables (6x24) 1-5/8"
- (1) Site Pro 1 PRK-SFS & HRK12 Antenna Mount Mod

Remove @ 139'

All Sprint equipment to be removed

Remove @ 100'

- (3) RFS-APXVAARR24-43-U-NA20 Antennas
- (6) Ericsson – Air21 KRC118023-1_B2P-B4P Antennas
- (3) Ericsson- Radio 4449 B71+B85
- (3) Generic Twin Style 1B – AWS TMA's
- (1) 9x18 Coaxial Cable (1-5/8")
- (1) 6x12 HCS Coaxial Cable (1-3/8")
- (3) Sector Antenna Mounts

The Foundation for a Wireless World.

CrownCastle.com

Ground:

Install New:

- (1) 6160 & (1) B160 Battery Cabinet
- (2) PSU4813 Voltage Booster in (P) Cabinet
- (1) CSR IXRE Router V2
- (1) RP 6651 in (P) Cabinet
- (1) 150 Amp Breaker
- (1) 20 AMP Breaker

Remove:

- Existing battery backup system
- (1) 6131 Cabinet

The facility was approved by a Federal Judge on November 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 Kathleen Blonski, Town Manager, Town of Farmington, Shannon Rutherford, Town Planner, Town of Farmington and the landowner, GOIS Holdings of Connecticut. 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, T-Mobile 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.

Melanie A. Bachman

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Sincerely,



Jeffrey Barbadora
Site Acquisition Specialist
1800 W. Park Drive, Suite 250
Westborough, MA 01581
(781) 970-0053
Jeff.Barbadora@crowncastle.com

Attachments

cc:

Kathleen Blonski, Town Manager
Town of Farmington
1 Monteith Drive
Farmington, CT 06032
(860)-675-2350

Shannon Rutherford, Town Planner
Town of Farmington
1 Monteith Drive
Farmington, CT 06032
(860) 675-2325

GOIS Holdings of Connecticut, LLC
58 Mayflower St
East Falmouth, MA 02536
(781) 970-0053

Crown Castle – Tower Owner

Mark Roberts

From: Sandra Michaud <michauds@farmington-ct.org>
Sent: Monday, February 27, 2017 4:16 PM
To: Mark Roberts
Subject: 130 Birdseye Road

Hi Mark

I was able to go through documents for this address and it appears on November 4, 1997 a federal judge ordered the Town (within 20 days) to issue a zoning permit so that Sprint Spectrum could install a 140 foot high communications tower. I do not have an approval letter from the Plan & Zoning Commission as it appears they did not formally make a decision in support of the Court's Order but a zoning permit was issued on November 26, 1997.

The Town did appeal this Order but did later withdraw in March 1998.

Sandy

*Sandra Michaud
Land Use Coordinator
Town of Farmington
Planning Division
Department of Public Works
1 Monteith Drive
Farmington, CT 06032
860.675.2325 Office
860.675.2319 Fax*



Town of Farmington, CT

Property Listing Report

Map Block Lot

119 3A

Building #

Unique Identifier

01358040

Property Information

Property Location	8040 BIRDSEYE RD
Mailing Address	58 MAYFLOWER ST EAST FALMOUTH MA 02536
Land Use	Residential
Zoning Code	R80
Neighborhood	99

Owner	GOIS HOLDINGS OF CONNECTICUT LLC
Co-Owner	
Book / Page	0928/0470
Land Class	Vacant Land
Census Tract	4602
Acreage	13.53

Valuation Summary


(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Outbuildings	206200	144340


Utility Information

Electric	No
Gas	No
Sewer	No

I	375500	262850	No
7	581700	407190	No



No Photo Available



No Photo Available

Primary Construction Details

Year Built	
Building Desc.	
Building Style	
Stories	
Exterior Walls	
Exterior Walls 2	
Interior Walls	
Interior Walls 2	
Interior Floors 1	
Interior Floors 2	

Heating Fuel	
Heating Type	
AC Type	
Bedrooms	
Full Bathrooms	
Half Bathrooms	
Extra Fixtures	
Total Rooms	
Bath Style	
Kitchen Style	
Occupancy	

Building Use	
Building Condition	
Frame Type	
Fireplaces	
Bsmt Gar	
Fin Bsmt Area	
Fin Bsmt Quality	
Building Grade	
Roof Style	
Roof Cover	

Report Created On

1/18/2023



Town of Farmington, CT

Property Listing Report

Map Block Lot 119 3A

Building #

Unique Identifier

01358040

Detached Outbuildings

Type	Description	Area (sq ft)	Condition	Year Built
Utility	Building	220	Average	1996
Utility	Building	200	Average	1996
Utility	Building	100	Average	1996
Utility	Building	360	Average	1996
Other	Tower	200	Average	1996

Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
GOIS HOLDINGS OF CONNECTICUT LLC	0928_0470	4/9/2008	518000
UNISON SITE MANAGEMENT LLC	0862_0062	12/7/2005	385000
CELL TOWER LEASE	0862_0083	12/7/2005	0
FREEDON COMMUNICATIONS OF	0809_0324	6/15/2004	280000
MEGA BROADCASTING	0530_0225	12/17/1996	75000
MEGA COMMUNICATIONS OC NB LL	0585_0272	1/1/1900	0
AMERICAN RADIO SYSTEMS INC	0484_0674	1/1/1900	0

Town of Farmington

Geographic Information System (GIS)



Date Printed: 1/18/2023



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Farmington and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 200 feet



Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, January 20, 2023 10:19 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 771075355586: 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, 01/20/2023 at
10:12am.



Delivered to 1 MONTIETH DR, FARMINGTON, CT 06032
Received by N.MOSES

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER [771075355586](#)

FROM	Jeff Barbadora 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Farmington Kathleen Blonski, Town Manager 1 Monteith Drive FARMINGTON, CT, US, 06032
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 1/19/2023 08:28 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	FARMINGTON, CT, US, 06032
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, January 20, 2023 10:19 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 771075379686: 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, 01/20/2023 at
10:12am.



Delivered to 1 MONTIETH DR, FARMINGTON, CT 06032
Received by N.MOSES

[OBTAIN PROOF OF DELIVERY](#)

TRACKING NUMBER [771075379686](#)

FROM	Jeff Barbadora 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of Farmington Shannon Rutherford 1 Monteith Drive FARMINGTON, CT, US, 06032
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 1/19/2023 05:30 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	FARMINGTON, CT, US, 06032
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Friday, January 20, 2023 11:30 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 771075452134: Your package has been delivered
Attachments: DeliveryPicture.jpeg

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Hi. Your package was
delivered Fri, 01/20/2023 at
11:24am.



Delivered to 58 MAYFLOWER ST, EAST FALMOUTH, MA 02536

[OBTAIN PROOF OF DELIVERY](#)



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

TRACKING NUMBER	771075452134
FROM	Jeff Barbadora 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	GOIS Holdings of Connecticut LLC Property Owner 58 Mayflower Street EAST FALMOUTH, MA, US, 02536
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Thu 1/19/2023 05:30 PM
DELIVERED TO	Residence
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	EAST FALMOUTH, MA, US, 02536
SPECIAL HANDLING	Deliver Weekday Residential Delivery
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight



MORRISON HERSHFIELD

Morrison Hershfield
1455 Lincoln Parkway, Suite 500
Atlanta, GA 30346
(770) 379-8500

Date: **November 18, 2022**

Subject: **Structural Analysis Report**

Carrier Designation:

Site Number: CTHA233B
Site Name: CT03XC100

Crown Castle Designation:

BU Number: 876335
Site Name: East Farmington
JDE Job Number: 730803
Work Order Number: 2174917
Order Number: 632513 Rev. 0

Engineering Firm Designation:

Morrison Hershfield Project Number: CN11-655R1 / 2300001

Site Data:

3 A Birdseye Road, Farmington, Hartford County, CT 06030
Latitude 41° 42' 56.94", Longitude -72° 48' 37.42"
140 Foot – Summit Monopole Tower

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

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

LC7: Proposed Equipment Configuration

Sufficient Capacity – 89.9%

This analysis utilizes an ultimate 3-second gust wind speed of 117 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Respectfully submitted by:

G. Lance Cooke, P.E. (CT License No. PEN.0028133)
Senior Engineer



Digitally signed by
G. Lance Cooke
Date: 2022.11.18
10:22:54+05'30'

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1) INTRODUCTION

This tower is a 140 ft monopole tower designed by Summit Manufacturing, Inc.

The tower has been modified multiple times in the past to accommodate additional loading. Per the post modification inspection reports these modifications were properly installed and have been considered in this analysis.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	117 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.5 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)
139.0	139.0	3	commscope	VV-65A-R1_TMO w/ Mount Pipe	5	1-5/8
		3	ericsson	AIR 6419 B41_TMO_CCIV2 w/ Mount Pipe		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
		3	ericsson	Radio 4480_TMOV2		
		1	Site Pro 1	Reinforcement Kit [# PRK-SFS]		
		1	Site Pr 1	Support Rail Kit [# HRK12]		
1	-	Platform Mount [LP 1201-1_HR-1]				

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
137.0	140.0	3	alcatel lucent	TME-800MHz 2X50W RRH W/FILTER	-	-
	137.0	3	alcatel lucent	TME-PCS 1900MHz 4x45W-65MHz		
		1	-	Pipe Mount [PM 601-3]		
130.0	132.0	3	ericsson	RRUS 11	-	-
	130.0	3	ericsson	RRUS 32 B2		
		1	-	Pipe Mount [PM 601-3]		

128.0	132.0	3	ericsson	AIR 6419 B77G_CCIV3	6 3 2	13/16 3/8 7/8	
	130.0	3	cci antennas	DMP65R-BU8D w/ Mount Pipe			
		3	kmw communications	EPBQ-654L8H8-L2 w/ Mount Pipe			
		3	ericsson	RRUS 32 B30			
		3	ericsson	RRUS 4415 B25_CCIV2			
		3	ericsson	RRUS 4426 B66			
		3	ericsson	RRUS 4449 B5/B12			
		3	ericsson	RRUS 4478 B14_CCIV2			
		1	raycap	DC6-48-60-0-8C-EV			
		2	raycap	DC6-48-60-18-8C			
		128.0	3	ericsson			AIR 6449 B77D_CCIV2
	1		raycap	DC6-48-60-18-8F			
	1		Site Pro 1	Support Kicker Kit [#PRK-SFS-L]			
	1		-	T-Arm Mount [TA 601-3]			
118.0	118.0	3	jma wireless	MX08FRO665-21 w/ Mount Pipe	1	1-1/2	
		3	fujitsu	TA08025-B604			
		3	fujitsu	TA08025-B605			
		1	raycap	RDIDC-9181-PF-48			
		1	-	Sabre C10801018-32788			
108.0	110.0	6	andrew	SBNHH-1D65B	8	1-5/8	
		3	antel	BXA-70063-4CF-EDIN-X w/ Mount Pipe			
		3	samsung telecommunications	CBRS w/ Mount Pipe			
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe			
		1	rfs celwave	DB-T1-6Z-8AB-0Z			
		3	samsung telecommunications	20W CBRS			
		3	samsung telecommunications	RFV01U-D1A			
		3	samsung telecommunications	RFV01U-D2A			
	108.0	108.0	1	Site Pro 1			Kicker Kit [#PRK-1245]
			1	-			Platform Mount [LP 304-1_HR-1]
100.0	100.0	3	commscope	VV-65A-R1_TMO w/ Mount Pipe	3 1	1-5/8 1-3/8	
		3	ericsson	AIR 6419 B41_TMO w/ Mount Pipe			
		3	rfs celwave	APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe			
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE			
		3	ericsson	RADIO 4460 B2/B25 B66_TMO			
		1	-	Platform Mount [LP 303-1_HR-1]			
49.0	51.0	1	lucent	KS24019-L112A	1	1/2	
	49.0	1	tower mounts	Side Arm Mount [SO 701-1]			

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1531892	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	1440555	CCISITES
4-TOWER MANUFACTURER DRAWINGS	1615361	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	4456376	CCISITES
4-POST-MODIFICATION INSPECTION	5400317	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3672042	CCISITES
4-POST-MODIFICATION INSPECTION	4836434	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2397525	CCISITES
4-POST-MODIFICATION INSPECTION	3413367	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3262310	CCISITES
4-POST-MODIFICATION INSPECTION	2397526	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

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

3.2) Assumptions

- 1) 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. Morrison Hershfield should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L1	140 - 135	Pole	TP17.025x16x0.25	Pole	7.00	Pass
L2	135 - 130	Pole	TP18.05x17.025x0.25	Pole	13.80	Pass
L3	130 - 125	Pole	TP19.075x18.05x0.25	Pole	26.20	Pass
L4	125 - 120	Pole	TP20.099x19.075x0.25	Pole	36.40	Pass
L5	120 - 115	Pole	TP21.124x20.099x0.25	Pole	46.70	Pass
L6	115 - 110	Pole	TP22.149x21.124x0.25	Pole	56.10	Pass
L7	110 - 105	Pole	TP23.174x22.149x0.25	Pole	67.20	Pass
L8	105 - 102	Pole	TP23.789x23.174x0.25	Pole	73.30	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L9	102 - 101.75	Pole + Reinf.	TP23.84x23.789x0.3875	Reinf. 12 Tension Rupture	65.20	Pass
L10	101.75 - 96.75	Pole + Reinf.	TP24.865x23.84x0.375	Reinf. 12 Tension Rupture	74.70	Pass
L11	96.75 - 95	Pole + Reinf.	TP25.89x24.865x0.375	Reinf. 12 Tension Rupture	77.90	Pass
L12	95 - 90.75	Pole + Reinf.	TP25.595x24.724x0.3563	Pole	66.70	Pass
L13	90.75 - 85.75	Pole + Reinf.	TP26.62x25.595x0.3563	Pole	72.30	Pass
L14	85.75 - 85.33	Pole + Reinf.	TP26.706x26.62x0.3563	Pole	72.80	Pass
L15	85.33 - 85.08	Pole + Reinf.	TP26.758x26.706x0.5625	Reinf. 11 Tension Rupture	65.40	Pass
L16	85.08 - 82.5	Pole + Reinf.	TP27.287x26.758x0.5625	Reinf. 11 Tension Rupture	68.00	Pass
L17	82.5 - 82.25	Pole + Reinf.	TP27.338x27.287x0.4125	Pole	67.70	Pass
L18	82.25 - 82	Pole + Reinf.	TP27.389x27.338x0.4125	Pole	68.00	Pass
L19	82 - 81.75	Pole + Reinf.	TP27.44x27.389x0.3563	Pole	76.60	Pass
L20	81.75 - 78.83	Pole + Reinf.	TP28.039x27.44x0.3563	Pole	79.50	Pass
L21	78.83 - 78.58	Pole + Reinf.	TP28.09x28.039x0.6125	Reinf. 11 Tension Rupture	66.90	Pass
L22	78.58 - 77.66	Pole + Reinf.	TP28.279x28.09x0.6125	Reinf. 11 Tension Rupture	67.70	Pass
L23	77.66 - 77.41	Pole + Reinf.	TP28.33x28.279x0.55	Reinf. 2 Tension Rupture	72.20	Pass
L24	77.41 - 77.17	Pole + Reinf.	TP28.38x28.33x0.55	Reinf. 2 Tension Rupture	72.40	Pass
L25	77.17 - 72.17	Pole + Reinf.	TP29.406x28.38x0.5375	Reinf. 2 Tension Rupture	76.40	Pass
L26	72.17 - 67.17	Pole + Reinf.	TP30.431x29.406x0.525	Reinf. 2 Tension Rupture	79.90	Pass
L27	67.17 - 66.58	Pole + Reinf.	TP30.551x30.431x0.525	Reinf. 2 Tension Rupture	80.30	Pass
L28	66.58 - 66.33	Pole + Reinf.	TP30.603x30.551x0.625	Reinf. 2 Tension Rupture	68.20	Pass
L29	66.33 - 66.16	Pole + Reinf.	TP30.638x30.603x0.625	Reinf. 2 Tension Rupture	68.30	Pass
L30	66.16 - 65.91	Pole + Reinf.	TP30.689x30.638x0.525	Reinf. 5 Tension Rupture	75.50	Pass
L31	65.91 - 62.66	Pole + Reinf.	TP31.355x30.689x0.5125	Reinf. 5 Tension Rupture	77.50	Pass
L32	62.66 - 62.41	Pole + Reinf.	TP31.407x31.355x0.5125	Reinf. 5 Tension Rupture	81.60	Pass
L33	62.41 - 60	Pole + Reinf.	TP31.901x31.407x0.5063	Reinf. 5 Tension Rupture	83.00	Pass
L34	60 - 59.75	Pole + Reinf.	TP31.952x31.901x0.5	Reinf. 5 Tension Rupture	83.20	Pass
L35	59.75 - 54.75	Pole + Reinf.	TP32.978x31.952x0.5	Reinf. 5 Tension Rupture	86.00	Pass
L36	54.75 - 52.83	Pole + Reinf.	TP33.372x32.978x0.5	Reinf. 5 Tension Rupture	86.90	Pass
L37	52.83 - 52.58	Pole + Reinf.	TP33.423x33.372x0.6875	Reinf. 5 Tension Rupture	64.00	Pass
L38	52.58 - 51.41	Pole + Reinf.	TP33.663x33.423x0.6875	Reinf. 5 Tension Rupture	64.60	Pass
L39	51.41 - 51.16	Pole + Reinf.	TP33.714x33.663x0.5063	Reinf. 1 Tension Rupture	81.00	Pass
L40	51.16 - 51	Pole + Reinf.	TP34.67x33.714x0.5063	Reinf. 1 Tension Rupture	81.10	Pass
L41	51 - 45.5	Pole + Reinf.	TP34.25x33.122x0.55	Reinf. 1 Tension Rupture	82.80	Pass
L42	45.5 - 44.25	Pole + Reinf.	TP34.506x34.25x0.55	Reinf. 1 Tension Rupture	83.20	Pass
L43	44.25 - 44	Pole + Reinf.	TP34.557x34.506x0.625	Reinf. 1 Tension Rupture	68.20	Pass
L44	44 - 43.08	Pole + Reinf.	TP34.746x34.557x0.625	Reinf. 1 Tension Rupture	68.50	Pass
L45	43.08 - 42.83	Pole + Reinf.	TP34.797x34.746x0.6625	Reinf. 8 Tension Rupture	71.20	Pass
L46	42.83 - 37.83	Pole + Reinf.	TP35.823x34.797x0.6625	Reinf. 8 Tension Rupture	72.80	Pass
L47	37.83 - 32.83	Pole + Reinf.	TP36.848x35.823x0.65	Reinf. 8 Tension Rupture	74.20	Pass
L48	32.83 - 29.25	Pole + Reinf.	TP37.582x36.848x0.6375	Reinf. 8 Tension Rupture	75.10	Pass
L49	29.25 - 29	Pole + Reinf.	TP37.633x37.582x0.6375	Reinf. 7 Tension Rupture	75.10	Pass
L50	29 - 27.75	Pole + Reinf.	TP37.89x37.633x0.6375	Reinf. 7 Tension Rupture	75.40	Pass
L51	27.75 - 27.5	Pole + Reinf.	TP37.941x37.89x0.6375	Reinf. 7 Tension Rupture	75.50	Pass
L52	27.5 - 24.08	Pole + Reinf.	TP38.642x37.941x0.6375	Reinf. 7 Tension Rupture	76.30	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L53	24.08 - 23.83	Pole + Reinf.	TP38.693x38.642x0.7	Reinf. 14 Tension Rupture	73.70	Pass
L54	23.83 - 23.5	Pole + Reinf.	TP38.761x38.693x0.7	Reinf. 14 Tension Rupture	73.80	Pass
L55	23.5 - 23.25	Pole + Reinf.	TP38.812x38.761x0.4438	Pole	81.20	Pass
L56	23.25 - 18.91	Pole + Reinf.	TP39.702x38.812x0.4438	Pole	82.50	Pass
L57	18.91 - 18.66	Pole + Reinf.	TP39.754x39.702x0.525	Reinf. 7 Tension Rupture	89.80	Pass
L58	18.66 - 18.08	Pole + Reinf.	TP39.873x39.754x0.525	Reinf. 7 Tension Rupture	89.90	Pass
L59	18.08 - 17.83	Pole + Reinf.	TP39.924x39.873x0.6375	Reinf. 3 Compression	78.30	Pass
L60	17.83 - 12.83	Pole + Reinf.	TP40.949x39.924x0.625	Reinf. 3 Compression	79.10	Pass
L61	12.83 - 7.83	Pole + Reinf.	TP41.974x40.949x0.625	Reinf. 3 Compression	79.80	Pass
L62	7.83 - 2.83	Pole + Reinf.	TP43x41.974x0.6125	Reinf. 3 Compression	80.50	Pass
L63	2.83 - 0	Pole + Reinf.	TP43.58x43x0.6125	Reinf. 3 Compression	80.80	Pass
					Summary	
				Pole	82.50	Pass
				Reinforcement	89.90	Pass
				Overall	89.90	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	84.5	Pass
1	Base Plate		80.7	Pass
1	Base Foundation (Structure)	0	44.2	Pass
1	Base Foundation (Soil Interaction)		61.9	Pass

Structure Rating (max from all components) =	89.9%
---	--------------

Notes:

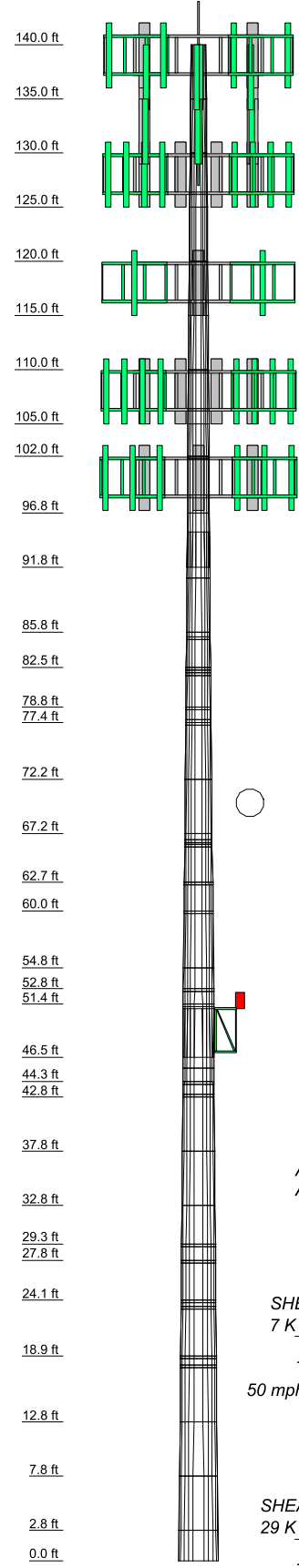
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
- 2) *Rating per TIA-222-H, Section 15.5.

4.1) Recommendations

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

APPENDIX A
TNXTOWER OUTPUT

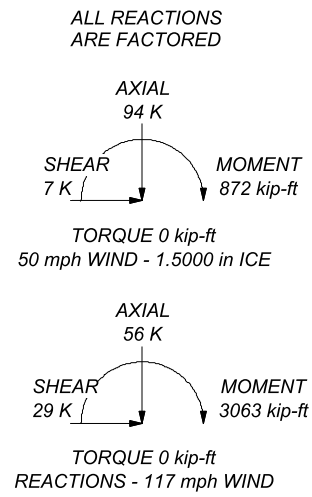
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1								
2								
3								
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GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 117 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. CCI POLE RATING = 89.9%



Morrison Hershfield
 1455 Lincoln Parkway, Suite 500
 Atlanta, GA 30346
 Phone: (770) 379-8500
 FAX: (770) 379-8501

Job: CN11-655R1 / 230001		
Project: 876335 / East Farmington		
Client: Crown Castle USA	Drawn by: VG	App'd:
Code: TIA-222-H	Date: 11/18/22	Scale: NTS
Path:		Dwg No. E-1

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower is located in Hartford County, Connecticut.

Tower base elevation above sea level: 414.00 ft.

Basic wind speed of 117 mph.

Risk Category II.

Exposure Category B.

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

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.5000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

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

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

CCI POLE RATING = 89.9%.

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

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

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

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

Maximum demand-capacity ratio is: 1.05.

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

Options

<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 Appurt. 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Include Bolts In Member Capacity 	<ul style="list-style-type: none"> Autocalc Torque Arm Areas 	<div style="background-color: #e0e0e0; text-align: center; padding: 2px;">Poles</div> <ul style="list-style-type: none"> √ 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
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	

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	140.00-135.00	5.00	0.00	12	16.0000	17.0249	0.2500	1.0000	A607-60 (60 ksi)
L2	135.00-130.00	5.00	0.00	12	17.0249	18.0497	0.2500	1.0000	A607-60 (60 ksi)
L3	130.00-125.00	5.00	0.00	12	18.0497	19.0746	0.2500	1.0000	A607-60 (60 ksi)
L4	125.00-120.00	5.00	0.00	12	19.0746	20.0995	0.2500	1.0000	A607-60 (60 ksi)
L5	120.00-115.00	5.00	0.00	12	20.0995	21.1244	0.2500	1.0000	A607-60 (60 ksi)
L6	115.00-110.00	5.00	0.00	12	21.1244	22.1492	0.2500	1.0000	A607-60 (60 ksi)
L7	110.00-105.00	5.00	0.00	12	22.1492	23.1741	0.2500	1.0000	A607-60 (60 ksi)
L8	105.00-102.00	3.00	0.00	12	23.1741	23.7890	0.2500	1.0000	A607-60 (60 ksi)
L9	102.00-101.75	0.25	0.00	12	23.7890	23.8403	0.3875	1.5500	A607-60 (60 ksi)
L10	101.75-96.75	5.00	0.00	12	23.8403	24.8651	0.3750	1.5000	A607-60 (60 ksi)
L11	96.75-91.75	5.00	3.25	12	24.8651	25.8900	0.3750	1.5000	A607-60 (60 ksi)
L12	91.75-90.75	4.25	0.00	12	24.7238	25.5952	0.3563	1.4250	A607-65 (65 ksi)
L13	90.75-85.75	5.00	0.00	12	25.5952	26.6203	0.3563	1.4250	A607-65 (65 ksi)
L14	85.75-85.33	0.42	0.00	12	26.6203	26.7064	0.3563	1.4250	A607-65 (65 ksi)
L15	85.33-85.08	0.25	0.00	12	26.7064	26.7577	0.5625	2.2500	A607-65 (65 ksi)
L16	85.08-82.50	2.58	0.00	12	26.7577	27.2866	0.5625	2.2500	A607-65 (65 ksi)
L17	82.50-82.25	0.25	0.00	12	27.2866	27.3379	0.4125	1.6500	A607-65 (65 ksi)
L18	82.25-82.00	0.25	0.00	12	27.3379	27.3891	0.4125	1.6500	A607-65 (65 ksi)
L19	82.00-81.75	0.25	0.00	12	27.3891	27.4404	0.3563	1.4250	A607-65 (65 ksi)
L20	81.75-78.83	2.92	0.00	12	27.4404	28.0390	0.3563	1.4250	A607-65 (65 ksi)
L21	78.83-78.58	0.25	0.00	12	28.0390	28.0903	0.6125	2.4500	A607-65 (65 ksi)
L22	78.58-77.66	0.92	0.00	12	28.0903	28.2789	0.6125	2.4500	A607-65 (65 ksi)
L23	77.66-77.41	0.25	0.00	12	28.2789	28.3302	0.5500	2.2000	A607-65 (65 ksi)
L24	77.41-77.17	0.24	0.00	12	28.3302	28.3800	0.5500	2.2000	A607-65 (65 ksi)
L25	77.17-72.17	5.00	0.00	12	28.3800	29.4055	0.5375	2.1500	A607-65 (65 ksi)
L26	72.17-67.17	5.00	0.00	12	29.4055	30.4311	0.5250	2.1000	A607-65 (65 ksi)
L27	67.17-66.58	0.59	0.00	12	30.4311	30.5515	0.5250	2.1000	A607-65 (65 ksi)
L28	66.58-66.33	0.25	0.00	12	30.5515	30.6027	0.6250	2.5000	A607-65 (65 ksi)
L29	66.33-66.16	0.17	0.00	12	30.6027	30.6376	0.6250	2.5000	A607-65 (65 ksi)
L30	66.16-65.91	0.25	0.00	12	30.6376	30.6889	0.5250	2.1000	A607-65 (65 ksi)
L31	65.91-62.66	3.25	0.00	12	30.6889	31.3555	0.5125	2.0500	A607-65 (65 ksi)
L32	62.66-62.41	0.25	0.00	12	31.3555	31.4068	0.5125	2.0500	A607-65 (65 ksi)
L33	62.41-60.00	2.41	0.00	12	31.4068	31.9011	0.5062	2.0250	A607-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L34	60.00-59.75	0.25	0.00	12	31.9011	31.9523	0.5000	2.0000	(65 ksi) A607-65
L35	59.75-54.75	5.00	0.00	12	31.9523	32.9779	0.5000	2.0000	(65 ksi) A607-65
L36	54.75-52.83	1.92	0.00	12	32.9779	33.3717	0.5000	2.0000	(65 ksi) A607-65
L37	52.83-52.58	0.25	0.00	12	33.3717	33.4230	0.6875	2.7500	(65 ksi) A607-65
L38	52.58-51.41	1.17	0.00	12	33.4230	33.6629	0.6875	2.7500	(65 ksi) A607-65
L39	51.41-51.16	0.25	0.00	12	33.6629	33.7142	0.5062	2.0250	(65 ksi) A607-65
L40	51.16-46.50	4.66	4.50	12	33.7142	34.6700	0.5062	2.0250	(65 ksi) A607-65
L41	46.50-45.50	5.50	0.00	12	33.1220	34.2498	0.5500	2.2000	(65 ksi) A607-65
L42	45.50-44.25	1.25	0.00	12	34.2498	34.5062	0.5500	2.2000	(65 ksi) A607-65
L43	44.25-44.00	0.25	0.00	12	34.5062	34.5574	0.6250	2.5000	(65 ksi) A607-65
L44	44.00-43.08	0.92	0.00	12	34.5574	34.7461	0.6250	2.5000	(65 ksi) A607-65
L45	43.08-42.83	0.25	0.00	12	34.7461	34.7973	0.6625	2.6500	(65 ksi) A607-65
L46	42.83-37.83	5.00	0.00	12	34.7973	35.8226	0.6625	2.6500	(65 ksi) A607-65
L47	37.83-32.83	5.00	0.00	12	35.8226	36.8479	0.6500	2.6000	(65 ksi) A607-65
L48	32.83-29.25	3.58	0.00	12	36.8479	37.5820	0.6375	2.5500	(65 ksi) A607-65
L49	29.25-29.00	0.25	0.00	12	37.5820	37.6333	0.6375	2.5500	(65 ksi) A607-65
L50	29.00-27.75	1.25	0.00	12	37.6333	37.8896	0.6375	2.5500	(65 ksi) A607-65
L51	27.75-27.50	0.25	0.00	12	37.8896	37.9409	0.6375	2.5500	(65 ksi) A607-65
L52	27.50-24.08	3.42	0.00	12	37.9409	38.6422	0.6375	2.5500	(65 ksi) A607-65
L53	24.08-23.83	0.25	0.00	12	38.6422	38.6935	0.7000	2.8000	(65 ksi) A607-65
L54	23.83-23.50	0.33	0.00	12	38.6935	38.7611	0.7000	2.8000	(65 ksi) A607-65
L55	23.50-23.25	0.25	0.00	12	38.7611	38.8124	0.4437	1.7750	(65 ksi) A607-65
L56	23.25-18.91	4.34	0.00	12	38.8124	39.7023	0.4437	1.7750	(65 ksi) A607-65
L57	18.91-18.66	0.25	0.00	12	39.7023	39.7536	0.5250	2.1000	(65 ksi) A607-65
L58	18.66-18.08	0.58	0.00	12	39.7536	39.8725	0.5250	2.1000	(65 ksi) A607-65
L59	18.08-17.83	0.25	0.00	12	39.8725	39.9238	0.6375	2.5500	(65 ksi) A607-65
L60	17.83-12.83	5.00	0.00	12	39.9238	40.9491	0.6250	2.5000	(65 ksi) A607-65
L61	12.83-7.83	5.00	0.00	12	40.9491	41.9744	0.6250	2.5000	(65 ksi) A607-65
L62	7.83-2.83	5.00	0.00	12	41.9744	42.9997	0.6125	2.4500	(65 ksi) A607-65
L63	2.83-0.00	2.83		12	42.9997	43.5800	0.6125	2.4500	(65 ksi) A607-65

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	16.4762	12.6788	401.4426	5.6385	8.2880	48.4366	813.4316	6.2401	3.6180	14.472
	17.5373	13.5038	485.0197	6.0054	8.8189	54.9979	982.7814	6.6461	3.8927	15.571
L2	17.5373	13.5038	485.0197	6.0054	8.8189	54.9979	982.7814	6.6461	3.8927	15.571
	18.5983	14.3288	579.4592	6.3723	9.3498	61.9758	1174.1415	7.0522	4.1673	16.669
L3	18.5983	14.3288	579.4592	6.3723	9.3498	61.9758	1174.1415	7.0522	4.1673	16.669
	19.6593	15.1538	685.4249	6.7392	9.8806	69.3704	1388.8567	7.4582	4.4420	17.768
L4	19.6593	15.1538	685.4249	6.7392	9.8806	69.3704	1388.8567	7.4582	4.4420	17.768
	20.7203	15.9788	803.5804	7.1061	10.4115	77.1818	1628.2718	7.8643	4.7167	18.867
L5	20.7203	15.9788	803.5804	7.1061	10.4115	77.1818	1628.2718	7.8643	4.7167	18.867
	21.7813	16.8039	934.5894	7.4730	10.9424	85.4098	1893.7315	8.2703	4.9913	19.965
L6	21.7813	16.8039	934.5894	7.4730	10.9424	85.4098	1893.7315	8.2703	4.9913	19.965
	22.8424	17.6289	1079.1155	7.8399	11.4733	94.0545	2186.5806	8.6764	5.2660	21.064
L7	22.8424	17.6289	1079.1155	7.8399	11.4733	94.0545	2186.5806	8.6764	5.2660	21.064
	23.9034	18.4539	1237.8224	8.2068	12.0042	103.1159	2508.1637	9.0824	5.5407	22.163
L8	23.9034	18.4539	1237.8224	8.2068	12.0042	103.1159	2508.1637	9.0824	5.5407	22.163
	24.5400	18.9489	1340.1293	8.4270	12.3227	108.7528	2715.4654	9.3261	5.7055	22.822
L9	24.4915	29.1992	2041.0116	8.3777	12.3227	165.6301	4135.6429	14.3710	5.3370	13.773
	24.5446	29.2632	2054.4490	8.3961	12.3493	166.3622	4162.8706	14.4024	5.3507	13.808
L10	24.5490	28.3343	1991.3571	8.4006	12.3493	161.2532	4035.0294	13.9453	5.3842	14.358
	25.6100	29.5718	2263.8432	8.7675	12.8801	175.7623	4587.1600	14.5544	5.6589	15.09
L11	25.6100	29.5718	2263.8432	8.7675	12.8801	175.7623	4587.1600	14.5544	5.6589	15.09
	26.6710	30.8094	2560.1170	9.1344	13.4110	190.8965	5187.4911	15.1634	5.9335	15.823
L12	26.1602	27.9527	2118.5276	8.7236	12.8069	165.4202	4292.7112	13.7575	5.6712	15.919
	26.3724	28.9522	2354.0165	9.0355	13.2583	177.5504	4769.8756	14.2494	5.9048	16.575
L13	26.3724	28.9522	2354.0165	9.0355	13.2583	177.5504	4769.8756	14.2494	5.9048	16.575
	27.4337	30.1281	2652.6588	9.4025	13.7893	192.3707	5375.0059	14.8282	6.1795	17.346
L14	27.4337	30.1281	2652.6588	9.4025	13.7893	192.3707	5375.0059	14.8282	6.1795	17.346
	27.5228	30.2269	2678.8355	9.4334	13.8339	193.6426	5428.0470	14.8768	6.2026	17.411
L15	27.4501	47.3531	4131.1936	9.3595	13.8339	298.6279	8370.9182	23.3058	5.6498	10.044
	27.5031	47.4460	4155.5391	9.3779	13.8605	299.8124	8420.2488	23.3515	5.6636	10.069
L16	27.5031	47.4460	4155.5391	9.3779	13.8605	299.8124	8420.2488	23.3515	5.6636	10.069
	28.0508	48.4041	4412.3947	9.5672	14.1345	312.1727	8940.7079	23.8230	5.8053	10.321
L17	28.1037	35.6955	3290.5485	9.6209	14.1345	232.8032	6667.5434	17.5683	6.2073	15.048
	28.1567	35.7636	3309.4121	9.6393	14.1610	233.6988	6705.7662	17.6018	6.2210	15.081
L18	28.1567	35.7636	3309.4121	9.6393	14.1610	233.6988	6705.7662	17.6018	6.2210	15.081
	28.2098	35.8317	3328.3477	9.6576	14.1876	234.5961	6744.1348	17.6353	6.2348	15.115
L19	28.2296	31.0101	2892.5007	9.6778	14.1876	203.8757	5860.9906	15.2622	6.3855	17.924
	28.2827	31.0689	2908.9849	9.6961	14.2141	204.6546	5894.3920	15.2912	6.3993	17.963
L20	28.2827	31.0689	2908.9849	9.6961	14.2141	204.6546	5894.3920	15.2912	6.3993	17.963
	28.9025	31.7556	3106.1801	9.9104	14.5242	213.8620	6293.9629	15.6292	6.5597	18.413
L21	28.8121	54.0920	5193.5145	9.8187	14.5242	357.5760	10523.4683	26.6224	5.8730	9.589
	28.8652	54.1931	5222.6863	9.8371	14.5508	358.9283	10582.5784	26.6722	5.8867	9.611
L22	28.8652	54.1931	5222.6863	9.8371	14.5508	358.9283	10582.5784	26.6722	5.8867	9.611
	29.0604	54.5651	5330.9793	9.9046	14.6485	363.9271	10802.0094	26.8553	5.9373	9.693
L23	29.0825	49.1079	4819.5175	9.9270	14.6485	329.0114	9765.6491	24.1694	6.1048	11.1
	29.1355	49.1987	4846.2929	9.9453	14.6750	330.2407	9819.9033	24.2141	6.1185	11.125
L24	29.1355	49.1987	4846.2929	9.9453	14.6750	330.2407	9819.9033	24.2141	6.1185	11.125
	29.1871	49.2869	4872.4134	9.9631	14.7008	331.4378	9872.8306	24.2575	6.1318	11.149
L25	29.1915	48.1884	4768.0958	9.9676	14.7008	324.3417	9661.4548	23.7169	6.1653	11.47
	30.2532	49.9633	5314.6154	10.3348	15.2321	348.9097	10768.8516	24.5904	6.4402	11.982
L26	30.2576	48.8225	5197.7658	10.3392	15.2321	341.2384	10532.0827	24.0290	6.4737	12.331
	31.3194	50.5562	5771.3702	10.7064	15.7633	366.1272	11694.3606	24.8822	6.7485	12.854
L27	31.3194	50.5562	5771.3702	10.7064	15.7633	366.1272	11694.3606	24.8822	6.7485	12.854
	31.4440	50.7597	5841.3553	10.7495	15.8257	369.1066	11836.1694	24.9824	6.7808	12.916
L28	31.4087	60.2270	6884.7468	10.7137	15.8257	435.0370	13950.3636	29.6419	6.5128	10.42
	31.4618	60.3302	6920.1969	10.7320	15.8522	436.5444	14022.1951	29.6927	6.5265	10.442
L29	31.4618	60.3302	6920.1969	10.7320	15.8522	436.5444	14022.1951	29.6927	6.5265	10.442
	31.4979	60.4004	6944.3723	10.7445	15.8703	437.5709	14071.1811	29.7272	6.5359	10.457
L30	31.5332	50.9054	5891.7755	10.7803	15.8703	371.2458	11938.3345	25.0541	6.8039	12.96
	31.5863	50.9920	5921.9248	10.7987	15.8968	372.5221	11999.4252	25.0967	6.8176	12.986
L31	31.5907	49.7986	5788.1165	10.8031	15.8968	364.1048	11728.2932	24.5093	6.8511	13.368
	32.2808	50.8986	6180.2304	11.0418	16.2421	380.5060	12522.8224	25.0508	7.0298	13.717
L32	32.2808	50.8986	6180.2304	11.0418	16.2421	380.5060	12522.8224	25.0508	7.0298	13.717
	32.3339	50.9832	6211.1057	11.0601	16.2687	381.7826	12585.3840	25.0924	7.0435	13.743
L33	32.3361	50.3717	6139.0849	11.0624	16.2687	377.3556	12439.4503	24.7914	7.0603	13.946
	32.8478	51.1775	6438.4384	11.2393	16.5248	389.6239	13046.0218	25.1880	7.1927	14.208

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L34	32.8500	50.5557	6362.7501	11.2416	16.5248	385.0436	12892.6567	24.8820	7.2095	14.419
	32.9031	50.6383	6393.9713	11.2599	16.5513	386.3121	12955.9194	24.9226	7.2232	14.446
L35	32.9031	50.6383	6393.9713	11.2599	16.5513	386.3121	12955.9194	24.9226	7.2232	14.446
	33.9648	52.2894	7040.0300	11.6271	17.0825	412.1185	14265.0094	25.7352	7.4981	14.996
L36	33.9648	52.2894	7040.0300	11.6271	17.0825	412.1185	14265.0094	25.7352	7.4981	14.996
	34.3725	52.9234	7299.2354	11.7681	17.2865	422.2499	14790.2299	26.0473	7.6036	15.207
L37	34.3064	72.3546	9865.6828	11.7009	17.2865	570.7151	19990.5481	35.6107	7.1011	10.329
	34.3595	72.4681	9912.1891	11.7193	17.3131	572.5257	20084.7824	35.6666	7.1149	10.349
L38	34.3595	72.4681	9912.1891	11.7193	17.3131	572.5257	20084.7824	35.6666	7.1149	10.349
	34.6079	72.9994	10131.7816	11.8052	17.4374	581.0375	20529.7363	35.9281	7.1792	10.442
L39	34.6718	54.0495	7584.3761	11.8701	17.4374	434.9489	15368.0023	26.6015	7.6649	15.141
	34.7249	54.1331	7619.6182	11.8884	17.4640	436.3054	15439.4122	26.6427	7.6787	15.168
L40	34.7249	54.1331	7619.6182	11.8884	17.4640	436.3054	15439.4122	26.6427	7.6787	15.168
	35.7144	55.6912	8296.6633	12.2306	17.9591	461.9765	16811.2891	27.4095	7.9348	15.674
L41	35.0517	57.6850	7811.5753	11.6608	17.1572	455.2941	15828.3695	28.3908	7.4027	13.459
	35.2640	59.6824	8651.4343	12.0645	17.7414	487.6405	17530.1513	29.3739	7.7050	14.009
L42	35.2640	59.6824	8651.4343	12.0645	17.7414	487.6405	17530.1513	29.3739	7.7050	14.009
	35.5294	60.1364	8850.3496	12.1563	17.8742	495.1468	17933.2077	29.5973	7.7737	14.134
L43	35.5029	68.1858	9990.7215	12.1295	17.8742	558.9467	20243.9103	33.5590	7.5727	12.116
	35.5560	68.2890	10036.1401	12.1478	17.9007	560.6548	20335.9409	33.6098	7.5864	12.138
L44	35.5560	68.2890	10036.1401	12.1478	17.9007	560.6548	20335.9409	33.6098	7.5864	12.138
	35.7513	68.6687	10204.4660	12.2153	17.9985	566.9629	20677.0146	33.7966	7.6370	12.219
L45	35.7381	72.7088	10781.1094	12.2019	17.9985	599.0014	21845.4506	35.7851	7.5365	11.376
	35.7912	72.8182	10829.8298	12.2203	18.0250	600.8219	21944.1712	35.8389	7.5502	11.397
L46	35.7912	72.8182	10829.8298	12.2203	18.0250	600.8219	21944.1712	35.8389	7.5502	11.397
	36.8526	75.0054	11835.3062	12.5873	18.5561	637.8112	23981.5391	36.9154	7.8250	11.811
L47	36.8570	73.6163	11624.3877	12.5918	18.5561	626.4447	23554.1611	36.2317	7.8585	12.09
	37.9185	75.7623	12670.8710	12.9589	19.0872	663.8403	25674.6198	37.2879	8.1332	12.513
L48	37.9229	74.3310	12440.0790	12.9633	19.0872	651.7488	25206.9728	36.5834	8.1667	12.811
	38.6829	75.8379	13212.1304	13.2261	19.4675	678.6764	26771.3581	37.3251	8.3635	13.119
L49	38.6829	75.8379	13212.1304	13.2261	19.4675	678.6764	26771.3581	37.3251	8.3635	13.119
	38.7360	75.9431	13267.2066	13.2445	19.4941	680.5771	26882.9574	37.3769	8.3772	13.141
L50	38.7360	75.9431	13267.2066	13.2445	19.4941	680.5771	26882.9574	37.3769	8.3772	13.141
	39.0013	76.4693	13544.8845	13.3363	19.6268	690.1209	27445.6082	37.6359	8.4459	13.249
L51	39.0013	76.4693	13544.8845	13.3363	19.6268	690.1209	27445.6082	37.6359	8.4459	13.249
	39.0544	76.5745	13600.8810	13.3546	19.6534	692.0377	27559.0722	37.6877	8.4597	13.27
L52	39.0544	76.5745	13600.8810	13.3546	19.6534	692.0377	27559.0722	37.6877	8.4597	13.27
	39.7805	78.0141	14382.4777	13.6057	20.0167	718.5255	29142.7992	38.3962	8.6476	13.565
L53	39.7584	85.5217	15714.7386	13.5833	20.0167	785.0831	31842.3209	42.0912	8.4801	12.114
	39.8115	85.6373	15778.5224	13.6017	20.0432	787.2253	31971.5642	42.1481	8.4938	12.134
L54	39.8115	85.6373	15778.5224	13.6017	20.0432	787.2253	31971.5642	42.1481	8.4938	12.134
	39.8815	85.7898	15862.9809	13.6259	20.0783	790.0574	32142.7001	42.2231	8.5120	12.16
L55	39.9719	54.7507	10260.4761	13.7176	20.0783	511.0241	20790.5063	26.9467	9.1987	20.73
	40.0250	54.8240	10301.7135	13.7360	20.1048	512.4002	20874.0645	26.9827	9.2125	20.76
L56	40.0250	54.8240	10301.7135	13.7360	20.1048	512.4002	20874.0645	26.9827	9.2125	20.76
	40.9464	56.0956	11035.3080	14.0546	20.5658	536.5850	22360.5259	27.6086	9.4510	21.298
L57	40.9177	66.2293	12974.9634	14.0255	20.5658	630.8996	26290.7935	32.5960	9.2332	17.587
	40.9708	66.3160	13025.9643	14.0438	20.5924	632.5627	26394.1353	32.6387	9.2470	17.613
L58	40.9708	66.3160	13025.9643	14.0438	20.5924	632.5627	26394.1353	32.6387	9.2470	17.613
	41.0939	66.5170	13144.8008	14.0864	20.6540	636.4295	26634.9302	32.7377	9.2788	17.674
L59	41.0542	80.5397	15825.0262	14.0461	20.6540	766.1975	32065.7936	39.6392	8.9773	14.082
	41.1073	80.6450	15887.1384	14.0645	20.6805	768.2171	32191.6496	39.6910	8.9911	14.104
L60	41.1117	79.0889	15590.4980	14.0690	20.6805	753.8731	31590.5758	38.9251	9.0246	14.439
	42.1732	81.1523	16842.8626	14.4360	21.2116	794.0389	34128.2060	39.9407	9.2994	14.879
L61	42.1732	81.1523	16842.8626	14.4360	21.2116	794.0389	34128.2060	39.9407	9.2994	14.879
	43.2346	83.2157	18160.5603	14.8031	21.7427	835.2473	36798.2187	40.9562	9.5741	15.319
L62	43.2390	81.5760	17813.4945	14.8076	21.7427	819.2849	36094.9693	40.1492	9.6076	15.686
	44.3005	83.5981	19171.3030	15.1746	22.2738	860.7095	38846.2575	41.1445	9.8824	16.135
L63	44.3005	83.5981	19171.3030	15.1746	22.2738	860.7095	38846.2575	41.1445	9.8824	16.135
	44.9013	84.7427	19969.5451	15.3824	22.5744	884.6087	40463.7124	41.7078	10.0379	16.388

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontal	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L1 140.00- 135.00				1	1	1			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L2 135.00-130.00				1	1	1			
L3 130.00-125.00				1	1	1			
L4 125.00-120.00				1	1	1			
L5 120.00-115.00				1	1	1			
L6 115.00-110.00				1	1	1			
L7 110.00-105.00				1	1	1			
L8 105.00-102.00				1	1	1			
L9 102.00-101.75				1	1	0.948725			
L10 101.75-96.75				1	1	0.966722			
L11 96.75-91.75				1	1	0.96239			
L12 91.75-90.75				1	1	1.29378			
L13 90.75-85.75				1	1	1.27752			
L14 85.75-85.33				1	1	1.27622			
L15 85.33-85.08				1	1	0.999035			
L16 85.08-82.50				1	1	0.990257			
L17 82.50-82.25				1	1	1.51419			
L18 82.25-82.00				1	1	1.51275			
L19 82.00-81.75				1	1	1.2654			
L20 81.75-78.83				1	1	1.25701			
L21 78.83-78.58				1	1	1.00732			
L22 78.58-77.66				1	1	1.00393			
L23 77.66-77.41				1	1	1.05504			
L24 77.41-77.17				1	1	1.05417			
L25 77.17-72.17				1	1	1.06055			
L26 72.17-67.17				1	1	1.06853			
L27 67.17-66.58				1	1	1.06663			
L28 66.58-66.33				1	1	0.980448			
L29 66.33-66.16				1	1	0.979889			
L30 66.16-65.91				1	1	0.989659			
L31 65.91-62.66				1	1	1.00465			
L32 62.66-62.41				1	1	0.946642			
L33 62.41-60.00				1	1	0.952769			
L34 60.00-59.75				1	1	0.963933			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L35 59.75-54.75				1	1	0.953231			
L36 54.75-52.83				1	1	0.949298			
L37 52.83-52.58				1	1	1.01113			
L38 52.58-51.41				1	1	1.00708			
L39 51.41-51.16				1	1	1.04545			
L40 51.16-46.50				1	1	1.04503			
L41 46.50-45.50				1	1	0.969769			
L42 45.50-44.25				1	1	0.967596			
L43 44.25-44.00				1	1	1.11182			
L44 44.00-43.08				1	1	1.10899			
L45 43.08-42.83				1	1	0.968941			
L46 42.83-37.83				1	1	0.957192			
L47 37.83-32.83				1	1	0.96397			
L48 32.83-29.25				1	1	0.974697			
L49 29.25-29.00				1	1	0.974162			
L50 29.00-27.75				1	1	0.971506			
L51 27.75-27.50				1	1	0.97098			
L52 27.50-24.08				1	1	0.963917			
L53 24.08-23.83				1	1	0.944906			
L54 23.83-23.50				1	1	0.944178			
L55 23.50-23.25				1	1	1.30461			
L56 23.25-18.91				1	1	1.2942			
L57 18.91-18.66				1	1	0.972978			
L58 18.66-18.08				1	1	0.972196			
L59 18.08-17.83				1	1	0.973703			
L60 17.83-12.83				1	1	0.982872			
L61 12.83-7.83				1	1	0.973378			
L62 7.83-2.83				1	1	0.983734			
L63 2.83-0.00				1	1	0.978717			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Safety Line 3/8	C	No	Surface Ar (CaAa)	140.00 - 10.00	1	1	-0.250 -0.250	0.3750		0.22
Climbing Pegs	C	No	Surface Ar (CaAa)	140.00 - 10.00	1	1	-0.300 -0.200	0.7050		1.80

CU12PSM9P6XXX(1-1/2)	C	No	Surface Ar (CaAa)	118.00 - 8.00	1	1	-0.040 -0.040	1.6000		2.35
HCS 6X12 6AWG(1-3/8)	A	No	Surface Ar (CaAa)	100.00 - 8.00	1	1	0.400 0.400	1.3800		1.70
HB158-21U6S24-xxM_TMO(1-5/8)	A	No	Surface Ar (CaAa)	100.00 - 8.00	3	3	0.420 0.460	1.9960		2.50

CCI-SFP-065125	C	No	Surface Af (CaAa)	30.50 - 0.50	1	1	-0.480 -0.480	6.5000	15.5000	0.00
CCI-SFP-060100	C	No	Surface Af (CaAa)	46.50 - 21.50	1	1	-0.250 -0.250	6.0000	14.0000	0.00
CCI-SFP-060100	A	No	Surface Af (CaAa)	46.50 - 21.50	1	1	-0.100 -0.100	6.0000	14.0000	0.00
CCI-SFP-060100	A	No	Surface Af (CaAa)	62.00 - 47.00	1	1	0.000 0.000	6.0000	14.0000	0.00
CCI-SFP-060100	A	No	Surface Af (CaAa)	84.50 - 64.50	1	1	0.000 0.000	6.0000	14.0000	0.00
CCI-SFP-060100	C	No	Surface Af (CaAa)	84.50 - 64.50	1	1	-0.300 -0.300	6.0000	14.0000	0.00
CCI-SFP-060100	B	No	Surface Af (CaAa)	95.00 - 80.00	1	1	0.200 0.200	6.0000	14.0000	0.00
CCI-SFP-060100	C	No	Surface Af (CaAa)	95.00 - 80.00	1	1	0.200 0.200	6.0000	14.0000	0.00

Aero MP3-05	C	No	Surface Af (CaAa)	26.50 - 16.50	1	1	0.250 0.250	5.3300	14.8400	0.00
Aero MP3-03	A	No	Surface Af (CaAa)	86.50 - 61.50	1	1	0.400 0.400	4.0600	11.2600	0.00
Aero MP3-03	B	No	Surface Af (CaAa)	86.50 - 76.50	1	1	0.250 0.250	4.0600	11.2600	0.00
Aero MP3-03	C	No	Surface Af (CaAa)	86.50 - 76.50	1	1	0.000 0.000	4.0600	11.2600	0.00
Aero MP3-03	A	No	Surface Af (CaAa)	103.50 - 93.50	1	1	0.400 0.400	4.0600	11.2600	0.00
Aero MP3-03	B	No	Surface Af (CaAa)	103.50 - 93.50	1	1	-0.250 -0.250	4.0600	11.2600	0.00
Aero MP3-03	C	No	Surface Af (CaAa)	103.50 - 93.50	1	1	0.400 0.400	4.0600	11.2600	0.00

Aero MP3-05	B	No	Surface Af (CaAa)	20.50 - 0.50	1	1	0.500 0.500	5.3300	14.8400	0.00
Aero MP3-05	C	No	Surface Af (CaAa)	20.50 - 0.50	1	1	0.000 0.000	5.3300	14.8400	0.00
Aero MP3-05	A	No	Surface Af (CaAa)	45.50 - 0.50	1	1	-0.250 -0.250	5.3300	14.8400	0.00
Aero MP3-05	B	No	Surface Af (CaAa)	45.50 - 0.50	1	1	-0.250 -0.250	5.3300	14.8400	0.00
Aero MP3-05	C	No	Surface Af (CaAa)	46.67 - 11.67	1	1	-0.250 -0.250	5.3300	14.8400	0.00
Aero MP3-05	A	No	Surface Af (CaAa)	69.00 - 49.00	1	1	-0.250 -0.250	5.3300	14.8400	0.00
Aero MP3-05	B	No	Surface Af (CaAa)	69.00 - 49.00	1	1	-0.250 -0.250	5.3300	14.8400	0.00
Aero MP3-05	C	No	Surface Af (CaAa)	69.00 - 49.00	1	1	-0.250 -0.250	5.3300	14.8400	0.00

Aero MP3-05	A	No	Surface Af (CaAa)	52.25 - 40.25	1	1	0.420 0.420	5.3300	14.8400	0.00

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Aero MP3-05	B	No	Surface Af (CaAa)	52.25 - 40.25	1	1	0.420	5.3300	14.8400	0.00
Aero MP3-05	C	No	Surface Af (CaAa)	52.25 - 40.25	1	1	0.420	5.3300	14.8400	0.00
Aero MP3-03	A	No	Surface Af (CaAa)	80.00 - 69.00	1	1	0.420	4.0600	11.2600	0.00
Aero MP3-03	B	No	Surface Af (CaAa)	80.00 - 69.00	1	1	0.420	4.0600	11.2600	0.00
Aero MP3-03	C	No	Surface Af (CaAa)	80.00 - 69.00	1	1	0.420	4.0600	11.2600	0.00

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _{AA} ft ² /ft	Weight plf
Coax Bracket	B	No	No	Inside Pole	139.00 - 10.00	1	No Ice	0.00	1.27
							1/2" Ice	0.00	1.27
							1" Ice	0.00	1.27
							2" Ice	0.00	1.27

HCS 6X12 4AWG(1-5/8)	B	No	No	Inside Pole	139.00 - 0.00	2	No Ice	0.00	2.40
							1/2" Ice	0.00	2.40
							1" Ice	0.00	2.40
							2" Ice	0.00	2.40
HB158-21U6S24-xxM_TMO(1-5/8)	B	No	No	Inside Pole	139.00 - 0.00	3	No Ice	0.00	2.50
							1/2" Ice	0.00	2.50
							1" Ice	0.00	2.50
							2" Ice	0.00	2.50

FB-L98B-034-XXX(3/8)	B	No	No	Inside Pole	128.00 - 8.00	3	No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
							2" Ice	0.00	0.06

PWRT-606-S(7/8)	A	No	No	Inside Pole	128.00 - 8.00	2	No Ice	0.00	0.89
							1/2" Ice	0.00	0.89
							1" Ice	0.00	0.89
							2" Ice	0.00	0.89
PWRT-608-S(13/16)	A	No	No	Inside Pole	128.00 - 8.00	6	No Ice	0.00	0.62
							1/2" Ice	0.00	0.62
							1" Ice	0.00	0.62
							2" Ice	0.00	0.62

LDF7-50A(1-5/8)	B	No	No	Inside Pole	108.00 - 8.00	6	No Ice	0.00	0.82
							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82
HB158-1-08U8-S8J18(1-5/8)	B	No	No	Inside Pole	108.00 - 8.00	2	No Ice	0.00	1.30
							1/2" Ice	0.00	1.30
							1" Ice	0.00	1.30
							2" Ice	0.00	1.30

LDF4-50A(1/2)	B	No	No	Inside Pole	49.00 - 8.00	1	No Ice	0.00	0.15
							1/2" Ice	0.00	0.15
							1" Ice	0.00	0.15
							2" Ice	0.00	0.15

Feed Line/Linear Appurtenances Section Areas

Tower Sectio n	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	140.00-135.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.05
		C	0.000	0.000	0.540	0.000	0.01
L2	135.00-130.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.07
		C	0.000	0.000	0.540	0.000	0.01
L3	130.00-125.00	A	0.000	0.000	0.000	0.000	0.02
		B	0.000	0.000	0.000	0.000	0.07
		C	0.000	0.000	0.540	0.000	0.01
L4	125.00-120.00	A	0.000	0.000	0.000	0.000	0.03
		B	0.000	0.000	0.000	0.000	0.07
		C	0.000	0.000	0.540	0.000	0.01
L5	120.00-115.00	A	0.000	0.000	0.000	0.000	0.03
		B	0.000	0.000	0.000	0.000	0.07
		C	0.000	0.000	1.020	0.000	0.02
L6	115.00-110.00	A	0.000	0.000	0.000	0.000	0.03
		B	0.000	0.000	0.000	0.000	0.07
		C	0.000	0.000	1.340	0.000	0.02
L7	110.00-105.00	A	0.000	0.000	0.000	0.000	0.03
		B	0.000	0.000	0.000	0.000	0.09
		C	0.000	0.000	1.340	0.000	0.02
L8	105.00-102.00	A	0.000	0.000	0.000	1.015	0.02
		B	0.000	0.000	1.015	0.000	0.06
		C	0.000	0.000	1.819	0.000	0.01
L9	102.00-101.75	A	0.000	0.000	0.169	0.000	0.00
		B	0.000	0.000	0.169	0.000	0.01
		C	0.000	0.000	0.236	0.000	0.00
L10	101.75-96.75	A	0.000	0.000	5.778	0.000	0.06
		B	0.000	0.000	3.383	0.000	0.11
		C	0.000	0.000	4.723	0.000	0.02
L11	96.75-91.75	A	0.000	0.000	5.883	0.000	0.07
		B	0.000	0.000	5.449	0.000	0.11
		C	0.000	0.000	6.789	0.000	0.02
L12	91.75-90.75	A	0.000	0.000	0.737	0.000	0.01
		B	0.000	0.000	1.000	0.000	0.02
		C	0.000	0.000	1.268	0.000	0.00
L13	90.75-85.75	A	0.000	0.000	4.191	0.000	0.07
		B	0.000	0.000	5.508	0.000	0.11
		C	0.000	0.000	6.848	0.000	0.02
L14	85.75-85.33	A	0.000	0.000	0.594	0.000	0.01
		B	0.000	0.000	0.704	0.000	0.01
		C	0.000	0.000	0.817	0.000	0.00
L15	85.33-85.08	A	0.000	0.000	0.353	0.000	0.00
		B	0.000	0.000	0.419	0.000	0.01
		C	0.000	0.000	0.486	0.000	0.00
L16	85.08-82.50	A	0.000	0.000	5.647	0.000	0.04
		B	0.000	0.000	4.326	0.000	0.05
		C	0.000	0.000	7.017	0.000	0.01
L17	82.50-82.25	A	0.000	0.000	0.603	0.000	0.00
		B	0.000	0.000	0.419	0.000	0.01
		C	0.000	0.000	0.736	0.000	0.00
L18	82.25-82.00	A	0.000	0.000	0.603	0.000	0.00
		B	0.000	0.000	0.419	0.000	0.01
		C	0.000	0.000	0.736	0.000	0.00
L19	82.00-81.75	A	0.000	0.000	0.603	0.000	0.00
		B	0.000	0.000	0.419	0.000	0.01
		C	0.000	0.000	0.736	0.000	0.00
L20	81.75-78.83	A	0.000	0.000	7.839	0.000	0.04
		B	0.000	0.000	4.518	0.000	0.06
		C	0.000	0.000	8.220	0.000	0.01
L21	78.83-78.58	A	0.000	0.000	0.773	0.000	0.00
		B	0.000	0.000	0.338	0.000	0.01
		C	0.000	0.000	0.655	0.000	0.00
L22	78.58-77.66	A	0.000	0.000	2.843	0.000	0.01
		B	0.000	0.000	1.245	0.000	0.02
		C	0.000	0.000	2.412	0.000	0.00

Tower Sectio n	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
L23	77.66-77.41	A	0.000	0.000	0.773	0.000	0.00
		B	0.000	0.000	0.338	0.000	0.01
		C	0.000	0.000	0.655	0.000	0.00
L24	77.41-77.17	A	0.000	0.000	0.751	0.000	0.00
		B	0.000	0.000	0.329	0.000	0.01
		C	0.000	0.000	0.637	0.000	0.00
L25	77.17-72.17	A	0.000	0.000	15.451	0.000	0.07
		B	0.000	0.000	3.835	0.000	0.11
		C	0.000	0.000	10.175	0.000	0.02
L26	72.17-67.17	A	0.000	0.000	15.839	0.000	0.07
		B	0.000	0.000	3.771	0.000	0.11
		C	0.000	0.000	10.111	0.000	0.02
L27	67.17-66.58	A	0.000	0.000	1.938	0.000	0.01
		B	0.000	0.000	0.521	0.000	0.01
		C	0.000	0.000	1.266	0.000	0.00
L28	66.58-66.33	A	0.000	0.000	0.825	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.539	0.000	0.00
L29	66.33-66.16	A	0.000	0.000	0.561	0.000	0.00
		B	0.000	0.000	0.151	0.000	0.00
		C	0.000	0.000	0.367	0.000	0.00
L30	66.16-65.91	A	0.000	0.000	0.825	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.539	0.000	0.00
L31	65.91-62.66	A	0.000	0.000	8.891	0.000	0.05
		B	0.000	0.000	2.887	0.000	0.07
		C	0.000	0.000	5.168	0.000	0.01
L32	62.66-62.41	A	0.000	0.000	0.575	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.289	0.000	0.00
L33	62.41-60.00	A	0.000	0.000	6.532	0.000	0.04
		B	0.000	0.000	2.141	0.000	0.05
		C	0.000	0.000	2.787	0.000	0.01
L34	60.00-59.75	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.289	0.000	0.00
L35	59.75-54.75	A	0.000	0.000	13.126	0.000	0.07
		B	0.000	0.000	4.442	0.000	0.11
		C	0.000	0.000	5.782	0.000	0.02
L36	54.75-52.83	A	0.000	0.000	5.040	0.000	0.03
		B	0.000	0.000	1.706	0.000	0.04
		C	0.000	0.000	2.220	0.000	0.01
L37	52.83-52.58	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.289	0.000	0.00
L38	52.58-51.41	A	0.000	0.000	3.818	0.000	0.02
		B	0.000	0.000	1.786	0.000	0.02
		C	0.000	0.000	2.099	0.000	0.01
L39	51.41-51.16	A	0.000	0.000	0.878	0.000	0.00
		B	0.000	0.000	0.444	0.000	0.01
		C	0.000	0.000	0.511	0.000	0.00
L40	51.16-46.50	A	0.000	0.000	13.652	0.000	0.07
		B	0.000	0.000	6.058	0.000	0.10
		C	0.000	0.000	7.456	0.000	0.02
L41	46.50-45.50	A	0.000	0.000	2.625	0.000	0.01
		B	0.000	0.000	0.888	0.000	0.02
		C	0.000	0.000	3.045	0.000	0.00
L42	45.50-44.25	A	0.000	0.000	4.392	0.000	0.02
		B	0.000	0.000	2.221	0.000	0.03
		C	0.000	0.000	3.806	0.000	0.01
L43	44.25-44.00	A	0.000	0.000	0.878	0.000	0.00
		B	0.000	0.000	0.444	0.000	0.01
		C	0.000	0.000	0.761	0.000	0.00
L44	44.00-43.08	A	0.000	0.000	3.232	0.000	0.01
		B	0.000	0.000	1.635	0.000	0.02
		C	0.000	0.000	2.801	0.000	0.00
L45	43.08-42.83	A	0.000	0.000	0.878	0.000	0.00
		B	0.000	0.000	0.444	0.000	0.01
		C	0.000	0.000	0.761	0.000	0.00

Tower Section <i>n</i>	Tower Elevation <i>ft</i>	Face	A_R <i>ft²</i>	A_F <i>ft²</i>	C_{AA} In Face <i>ft²</i>	C_{AA} Out Face <i>ft²</i>	Weight <i>K</i>
L46	42.83-37.83	A	0.000	0.000	15.418	0.000	0.07
		B	0.000	0.000	6.734	0.000	0.11
		C	0.000	0.000	13.074	0.000	0.02
L47	37.83-32.83	A	0.000	0.000	13.126	0.000	0.07
		B	0.000	0.000	4.442	0.000	0.11
		C	0.000	0.000	10.782	0.000	0.02
L48	32.83-29.25	A	0.000	0.000	9.398	0.000	0.05
		B	0.000	0.000	3.180	0.000	0.08
		C	0.000	0.000	9.074	0.000	0.02
L49	29.25-29.00	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.810	0.000	0.00
L50	29.00-27.75	A	0.000	0.000	3.281	0.000	0.02
		B	0.000	0.000	1.110	0.000	0.03
		C	0.000	0.000	4.050	0.000	0.01
L51	27.75-27.50	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	0.810	0.000	0.00
L52	27.50-24.08	A	0.000	0.000	8.978	0.000	0.05
		B	0.000	0.000	3.038	0.000	0.07
		C	0.000	0.000	13.085	0.000	0.01
L53	24.08-23.83	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	1.017	0.000	0.00
L54	23.83-23.50	A	0.000	0.000	0.866	0.000	0.00
		B	0.000	0.000	0.293	0.000	0.01
		C	0.000	0.000	1.343	0.000	0.00
L55	23.50-23.25	A	0.000	0.000	0.656	0.000	0.00
		B	0.000	0.000	0.222	0.000	0.01
		C	0.000	0.000	1.017	0.000	0.00
L56	23.25-18.91	A	0.000	0.000	8.803	0.000	0.06
		B	0.000	0.000	5.268	0.000	0.09
		C	0.000	0.000	16.478	0.000	0.02
L57	18.91-18.66	A	0.000	0.000	0.406	0.000	0.00
		B	0.000	0.000	0.444	0.000	0.01
		C	0.000	0.000	0.989	0.000	0.00
L58	18.66-18.08	A	0.000	0.000	0.943	0.000	0.01
		B	0.000	0.000	1.030	0.000	0.01
		C	0.000	0.000	2.295	0.000	0.00
L59	18.08-17.83	A	0.000	0.000	0.406	0.000	0.00
		B	0.000	0.000	0.444	0.000	0.01
		C	0.000	0.000	0.989	0.000	0.00
L60	17.83-12.83	A	0.000	0.000	8.126	0.000	0.07
		B	0.000	0.000	8.883	0.000	0.11
		C	0.000	0.000	16.742	0.000	0.02
L61	12.83-7.83	A	0.000	0.000	8.000	0.000	0.07
		B	0.000	0.000	8.883	0.000	0.10
		C	0.000	0.000	11.970	0.000	0.02
L62	7.83-2.83	A	0.000	0.000	4.442	0.000	0.00
		B	0.000	0.000	8.883	0.000	0.06
		C	0.000	0.000	9.858	0.000	0.00
L63	2.83-0.00	A	0.000	0.000	2.070	0.000	0.00
		B	0.000	0.000	4.140	0.000	0.03
		C	0.000	0.000	4.594	0.000	0.00

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section <i>n</i>	Tower Elevation <i>ft</i>	Face or Leg	Ice Thickness <i>in</i>	A_R <i>ft²</i>	A_F <i>ft²</i>	C_{AA} In Face <i>ft²</i>	C_{AA} Out Face <i>ft²</i>	Weight <i>K</i>
L1	140.00-135.00	A	1.471	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.05
		C		0.000	0.000	3.481	0.000	0.05
L2	135.00-130.00	A	1.465	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.07
		C		0.000	0.000	3.470	0.000	0.05

Tower Section	Tower Elevation	Face or Leg	Ice Thickness	A _R	A _F	C _A A _A In Face	C _A A _A Out Face	Weight
n	ft		in	ft ²	ft ²	ft ²	ft ²	K
L3	130.00-125.00	A	1.459	0.000	0.000	0.000	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.07
		C		0.000	0.000	3.459	0.000	0.05
L4	125.00-120.00	A	1.454	0.000	0.000	0.000	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.07
		C		0.000	0.000	3.447	0.000	0.05
L5	120.00-115.00	A	1.448	0.000	0.000	0.000	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.07
		C		0.000	0.000	4.784	0.000	0.07
L6	115.00-110.00	A	1.441	0.000	0.000	0.000	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.07
		C		0.000	0.000	5.664	0.000	0.08
L7	110.00-105.00	A	1.435	0.000	0.000	0.000	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.09
		C		0.000	0.000	5.644	0.000	0.08
L8	105.00-102.00	A	1.429	0.000	0.000	0.000	1.287	0.03
		B		0.000	0.000	1.287	0.000	0.08
		C		0.000	0.000	4.664	0.000	0.06
L9	102.00-101.75	A	1.427	0.000	0.000	0.214	0.000	0.00
		B		0.000	0.000	0.214	0.000	0.01
		C		0.000	0.000	0.496	0.000	0.01
L10	101.75-96.75	A	1.423	0.000	0.000	9.250	0.000	0.16
		B		0.000	0.000	4.287	0.000	0.15
		C		0.000	0.000	9.898	0.000	0.13
L11	96.75-91.75	A	1.416	0.000	0.000	10.403	0.000	0.18
		B		0.000	0.000	6.760	0.000	0.17
		C		0.000	0.000	12.348	0.000	0.15
L12	91.75-90.75	A	1.412	0.000	0.000	1.524	0.000	0.03
		B		0.000	0.000	1.224	0.000	0.03
		C		0.000	0.000	2.341	0.000	0.03
L13	90.75-85.75	A	1.407	0.000	0.000	8.316	0.000	0.16
		B		0.000	0.000	6.754	0.000	0.17
		C		0.000	0.000	12.314	0.000	0.14
L14	85.75-85.33	A	1.402	0.000	0.000	1.039	0.000	0.02
		B		0.000	0.000	0.872	0.000	0.02
		C		0.000	0.000	1.338	0.000	0.02
L15	85.33-85.08	A	1.402	0.000	0.000	0.619	0.000	0.01
		B		0.000	0.000	0.519	0.000	0.01
		C		0.000	0.000	0.797	0.000	0.01
L16	85.08-82.50	A	1.400	0.000	0.000	8.940	0.000	0.12
		B		0.000	0.000	5.358	0.000	0.11
		C		0.000	0.000	10.776	0.000	0.11
L17	82.50-82.25	A	1.397	0.000	0.000	0.938	0.000	0.01
		B		0.000	0.000	0.519	0.000	0.01
		C		0.000	0.000	1.115	0.000	0.01
L18	82.25-82.00	A	1.397	0.000	0.000	0.938	0.000	0.01
		B		0.000	0.000	0.519	0.000	0.01
		C		0.000	0.000	1.115	0.000	0.01
L19	82.00-81.75	A	1.396	0.000	0.000	0.938	0.000	0.01
		B		0.000	0.000	0.519	0.000	0.01
		C		0.000	0.000	1.115	0.000	0.01
L20	81.75-78.83	A	1.394	0.000	0.000	11.979	0.000	0.16
		B		0.000	0.000	5.667	0.000	0.12
		C		0.000	0.000	12.625	0.000	0.13
L21	78.83-78.58	A	1.391	0.000	0.000	1.157	0.000	0.01
		B		0.000	0.000	0.435	0.000	0.01
		C		0.000	0.000	1.030	0.000	0.01
L22	78.58-77.66	A	1.390	0.000	0.000	4.259	0.000	0.05
		B		0.000	0.000	1.599	0.000	0.04
		C		0.000	0.000	3.789	0.000	0.04
L23	77.66-77.41	A	1.389	0.000	0.000	1.157	0.000	0.01
		B		0.000	0.000	0.435	0.000	0.01
		C		0.000	0.000	1.029	0.000	0.01
L24	77.41-77.17	A	1.388	0.000	0.000	1.124	0.000	0.01
		B		0.000	0.000	0.422	0.000	0.01
		C		0.000	0.000	1.000	0.000	0.01
L25	77.17-72.17	A	1.383	0.000	0.000	23.115	0.000	0.29
		B		0.000	0.000	4.989	0.000	0.16
		C		0.000	0.000	16.862	0.000	0.18

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
L26	72.17-67.17	A	1.374	0.000	0.000	23.583	0.000	0.29
		B		0.000	0.000	4.928	0.000	0.15
		C		0.000	0.000	16.764	0.000	0.18
L27	67.17-66.58	A	1.368	0.000	0.000	2.869	0.000	0.03
		B		0.000	0.000	0.682	0.000	0.02
		C		0.000	0.000	2.069	0.000	0.02
L28	66.58-66.33	A	1.367	0.000	0.000	1.222	0.000	0.01
		B		0.000	0.000	0.290	0.000	0.01
		C		0.000	0.000	0.881	0.000	0.01
L29	66.33-66.16	A	1.367	0.000	0.000	0.831	0.000	0.01
		B		0.000	0.000	0.197	0.000	0.01
		C		0.000	0.000	0.599	0.000	0.01
L30	66.16-65.91	A	1.367	0.000	0.000	1.222	0.000	0.01
		B		0.000	0.000	0.290	0.000	0.01
		C		0.000	0.000	0.881	0.000	0.01
L31	65.91-62.66	A	1.363	0.000	0.000	13.527	0.000	0.17
		B		0.000	0.000	3.773	0.000	0.10
		C		0.000	0.000	9.096	0.000	0.10
L32	62.66-62.41	A	1.359	0.000	0.000	0.902	0.000	0.01
		B		0.000	0.000	0.290	0.000	0.01
		C		0.000	0.000	0.561	0.000	0.01
L33	62.41-60.00	A	1.356	0.000	0.000	9.699	0.000	0.12
		B		0.000	0.000	2.795	0.000	0.08
		C		0.000	0.000	5.402	0.000	0.06
L34	60.00-59.75	A	1.353	0.000	0.000	0.968	0.000	0.01
		B		0.000	0.000	0.290	0.000	0.01
		C		0.000	0.000	0.560	0.000	0.01
L35	59.75-54.75	A	1.347	0.000	0.000	19.335	0.000	0.25
		B		0.000	0.000	5.789	0.000	0.16
		C		0.000	0.000	11.170	0.000	0.13
L36	54.75-52.83	A	1.339	0.000	0.000	7.413	0.000	0.10
		B		0.000	0.000	2.220	0.000	0.06
		C		0.000	0.000	4.277	0.000	0.05
L37	52.83-52.58	A	1.336	0.000	0.000	0.965	0.000	0.01
		B		0.000	0.000	0.289	0.000	0.01
		C		0.000	0.000	0.556	0.000	0.01
L38	52.58-51.41	A	1.334	0.000	0.000	5.383	0.000	0.07
		B		0.000	0.000	2.221	0.000	0.05
		C		0.000	0.000	3.472	0.000	0.04
L39	51.41-51.16	A	1.332	0.000	0.000	1.223	0.000	0.01
		B		0.000	0.000	0.548	0.000	0.01
		C		0.000	0.000	0.814	0.000	0.01
L40	51.16-46.50	A	1.326	0.000	0.000	19.276	0.000	0.25
		B		0.000	0.000	7.313	0.000	0.17
		C		0.000	0.000	12.462	0.000	0.14
L41	46.50-45.50	A	1.318	0.000	0.000	3.783	0.000	0.05
		B		0.000	0.000	1.035	0.000	0.03
		C		0.000	0.000	4.517	0.000	0.05
L42	45.50-44.25	A	1.315	0.000	0.000	6.157	0.000	0.07
		B		0.000	0.000	2.731	0.000	0.05
		C		0.000	0.000	5.631	0.000	0.06
L43	44.25-44.00	A	1.313	0.000	0.000	1.231	0.000	0.01
		B		0.000	0.000	0.546	0.000	0.01
		C		0.000	0.000	1.126	0.000	0.01
L44	44.00-43.08	A	1.311	0.000	0.000	4.528	0.000	0.05
		B		0.000	0.000	2.009	0.000	0.04
		C		0.000	0.000	4.140	0.000	0.04
L45	43.08-42.83	A	1.309	0.000	0.000	1.230	0.000	0.01
		B		0.000	0.000	0.546	0.000	0.01
		C		0.000	0.000	1.125	0.000	0.01
L46	42.83-37.83	A	1.301	0.000	0.000	22.065	0.000	0.27
		B		0.000	0.000	8.405	0.000	0.18
		C		0.000	0.000	19.948	0.000	0.20
L47	37.83-32.83	A	1.284	0.000	0.000	19.330	0.000	0.24
		B		0.000	0.000	5.725	0.000	0.16
		C		0.000	0.000	17.200	0.000	0.17
L48	32.83-29.25	A	1.267	0.000	0.000	13.790	0.000	0.17
		B		0.000	0.000	4.088	0.000	0.11
		C		0.000	0.000	13.927	0.000	0.13

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
L49	29.25-29.00	A	1.259	0.000	0.000	0.961	0.000	0.01
		B		0.000	0.000	0.285	0.000	0.01
		C		0.000	0.000	1.188	0.000	0.01
L50	29.00-27.75	A	1.256	0.000	0.000	4.803	0.000	0.06
		B		0.000	0.000	1.424	0.000	0.04
		C		0.000	0.000	5.933	0.000	0.05
L51	27.75-27.50	A	1.253	0.000	0.000	0.960	0.000	0.01
		B		0.000	0.000	0.285	0.000	0.01
		C		0.000	0.000	1.186	0.000	0.01
L52	27.50-24.08	A	1.244	0.000	0.000	13.106	0.000	0.16
		B		0.000	0.000	3.889	0.000	0.11
		C		0.000	0.000	18.519	0.000	0.17
L53	24.08-23.83	A	1.235	0.000	0.000	0.956	0.000	0.01
		B		0.000	0.000	0.284	0.000	0.01
		C		0.000	0.000	1.421	0.000	0.01
L54	23.83-23.50	A	1.233	0.000	0.000	1.262	0.000	0.02
		B		0.000	0.000	0.375	0.000	0.01
		C		0.000	0.000	1.875	0.000	0.02
L55	23.50-23.25	A	1.232	0.000	0.000	0.955	0.000	0.01
		B		0.000	0.000	0.284	0.000	0.01
		C		0.000	0.000	1.420	0.000	0.01
L56	23.25-18.91	A	1.219	0.000	0.000	13.318	0.000	0.18
		B		0.000	0.000	6.714	0.000	0.15
		C		0.000	0.000	23.162	0.000	0.21
L57	18.91-18.66	A	1.205	0.000	0.000	0.640	0.000	0.01
		B		0.000	0.000	0.565	0.000	0.01
		C		0.000	0.000	1.384	0.000	0.01
L58	18.66-18.08	A	1.202	0.000	0.000	1.483	0.000	0.02
		B		0.000	0.000	1.309	0.000	0.02
		C		0.000	0.000	3.208	0.000	0.03
L59	18.08-17.83	A	1.200	0.000	0.000	0.639	0.000	0.01
		B		0.000	0.000	0.564	0.000	0.01
		C		0.000	0.000	1.382	0.000	0.01
L60	17.83-12.83	A	1.181	0.000	0.000	12.712	0.000	0.18
		B		0.000	0.000	11.245	0.000	0.20
		C		0.000	0.000	23.999	0.000	0.21
L61	12.83-7.83	A	1.135	0.000	0.000	12.326	0.000	0.17
		B		0.000	0.000	11.153	0.000	0.19
		C		0.000	0.000	16.885	0.000	0.14
L62	7.83-2.83	A	1.062	0.000	0.000	5.504	0.000	0.04
		B		0.000	0.000	11.008	0.000	0.14
		C		0.000	0.000	11.983	0.000	0.08
L63	2.83-0.00	A	0.930	0.000	0.000	2.503	0.000	0.02
		B		0.000	0.000	5.007	0.000	0.07
		C		0.000	0.000	5.461	0.000	0.03

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
L1	140.00-135.00	0.3175	0.5499	1.1035	1.9113
L2	135.00-130.00	0.3182	0.5511	1.1232	1.9454
L3	130.00-125.00	0.3187	0.5521	1.1410	1.9763
L4	125.00-120.00	0.3193	0.5530	1.1572	2.0043
L5	120.00-115.00	0.3512	1.0941	1.1531	2.7608
L6	115.00-110.00	0.3715	1.4215	1.1588	3.2215
L7	110.00-105.00	0.3730	1.4264	1.1751	3.2656
L8	105.00-102.00	-0.5775	-1.8518	0.2286	0.2277
L9	102.00-101.75	-1.0714	-3.5549	-0.3420	-1.6034
L10	101.75-96.75	-1.1608	-4.5477	-0.5318	-2.9833
L11	96.75-91.75	-0.3212	-1.7836	0.0065	-1.2628
L12	91.75-90.75	0.6156	1.3992	0.7321	1.1392
L13	90.75-85.75	0.9899	1.4284	1.0273	1.1468
L14	85.75-85.33	2.4810	1.4792	2.2689	1.1138

Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
L15	85.33-85.08	2.4872	1.4831	2.2746	1.1168
L16	85.08-82.50	2.2981	1.1921	2.1500	0.9270
L17	82.50-82.25	2.2672	1.1322	2.1325	0.8874
L18	82.25-82.00	2.2703	1.1338	2.1356	0.8888
L19	82.00-81.75	2.2730	1.1352	2.1384	0.8900
L20	81.75-78.83	2.1184	0.4991	2.0067	0.3736
L21	78.83-78.58	1.8787	-0.4581	1.8034	-0.3956
L22	78.58-77.66	1.8846	-0.4594	1.8094	-0.3968
L23	77.66-77.41	1.8902	-0.4606	1.8151	-0.3980
L24	77.41-77.17	1.8927	-0.4612	1.8176	-0.3985
L25	77.17-72.17	1.1064	-2.1340	1.1772	-1.7469
L26	72.17-67.17	0.9609	-2.4167	1.0653	-1.9812
L27	67.17-66.58	0.9302	-2.3357	1.0383	-1.9305
L28	66.58-66.33	0.9325	-2.3409	1.0408	-1.9350
L29	66.33-66.16	0.9335	-2.3431	1.0419	-1.9371
L30	66.16-65.91	0.9341	-2.3446	1.0428	-1.9386
L31	65.91-62.66	0.8542	-2.6700	0.9937	-2.1557
L32	62.66-62.41	0.7752	-2.9941	0.9478	-2.3635
L33	62.41-60.00	-1.3799	-2.6790	-0.7782	-2.0386
L34	60.00-59.75	-2.0496	-2.2499	-1.3317	-1.6328
L35	59.75-54.75	-2.0705	-2.2723	-1.3487	-1.6528
L36	54.75-52.83	-2.0976	-2.3013	-1.3711	-1.6792
L37	52.83-52.58	-2.1075	-2.3120	-1.3789	-1.6884
L38	52.58-51.41	-1.6788	-1.8416	-1.1594	-1.4194
L39	51.41-51.16	-1.5574	-1.7083	-1.0934	-1.3385
L40	51.16-46.50	-1.5946	-1.8733	-1.0640	-1.4324
L41	46.50-45.50	1.3207	1.0979	1.4023	1.0999
L42	45.50-44.25	-0.2057	0.0099	0.0130	0.1167
L43	44.25-44.00	-0.2063	0.0101	0.0128	0.1168
L44	44.00-43.08	-0.2068	0.0102	0.0127	0.1169
L45	43.08-42.83	-0.2072	0.0103	0.0126	0.1170
L46	42.83-37.83	-0.2364	0.0122	0.0132	0.1293
L47	37.83-32.83	-0.2786	0.0152	0.0130	0.1451
L48	32.83-29.25	0.8115	-0.1849	0.9063	-0.0265
L49	29.25-29.00	2.6250	-0.5183	2.4230	-0.3167
L50	29.00-27.75	2.6322	-0.5198	2.4299	-0.3185
L51	27.75-27.50	2.6395	-0.5213	2.4367	-0.3203
L52	27.50-24.08	1.4750	0.2180	1.5116	0.2639
L53	24.08-23.83	1.0354	0.5016	1.1569	0.4915
L54	23.83-23.50	1.0366	0.5020	1.1579	0.4917
L55	23.50-23.25	1.0370	0.5021	1.1583	0.4916
L56	23.25-18.91	1.4649	1.4806	1.5367	1.3640
L57	18.91-18.66	1.9335	3.6316	1.9456	3.2739
L58	18.66-18.08	1.9362	3.6366	1.9480	3.2782
L59	18.08-17.83	1.9395	3.6426	1.9509	3.2833
L60	17.83-12.83	3.2521	3.0850	3.0015	2.8218
L61	12.83-7.83	2.6008	2.0735	2.2724	1.7268
L62	7.83-2.83	2.6514	3.4133	2.4540	3.3556
L63	2.83-0.00	2.4475	3.1513	2.2479	3.0549

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	Safety Line 3/8	135.00 - 140.00	1.0000	1.0000
L1	2	Climbing Pegs	135.00 - 140.00	1.0000	1.0000
L2	1	Safety Line 3/8	130.00 - 135.00	1.0000	1.0000
L2	2	Climbing Pegs	130.00 - 135.00	1.0000	1.0000
L3	1	Safety Line 3/8	125.00 - 130.00	1.0000	1.0000
L3	2	Climbing Pegs	125.00 - 130.00	1.0000	1.0000
L4	1	Safety Line 3/8	120.00 - 125.00	1.0000	1.0000
L4	2	Climbing Pegs	120.00 - 125.00	1.0000	1.0000
L5	1	Safety Line 3/8	115.00 - 120.00	1.0000	1.0000
L5	2	Climbing Pegs	115.00 - 120.00	1.0000	1.0000
L5	18	CU12PSM9P6XXX(1-1/2)	115.00 - 118.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L6	1	Safety Line 3/8	110.00 - 115.00	1.0000	1.0000
L6	2	Climbing Pegs	110.00 - 115.00	1.0000	1.0000
L6	18	CU12PSM9P6XXX(1-1/2)	110.00 - 115.00	1.0000	1.0000
L7	1	Safety Line 3/8	105.00 - 110.00	1.0000	1.0000
L7	2	Climbing Pegs	105.00 - 110.00	1.0000	1.0000
L7	18	CU12PSM9P6XXX(1-1/2)	105.00 - 110.00	1.0000	1.0000
L8	1	Safety Line 3/8	102.00 - 105.00	1.0000	1.0000
L8	2	Climbing Pegs	102.00 - 105.00	1.0000	1.0000
L8	18	CU12PSM9P6XXX(1-1/2)	102.00 - 105.00	1.0000	1.0000
L8	45	Aero MP3-03	102.00 - 103.50	1.0000	1.0000
L8	46	Aero MP3-03	102.00 - 103.50	1.0000	1.0000
L8	47	Aero MP3-03	102.00 - 103.50	1.0000	1.0000
L9	1	Safety Line 3/8	101.75 - 102.00	1.0000	1.0000
L9	2	Climbing Pegs	101.75 - 102.00	1.0000	1.0000
L9	18	CU12PSM9P6XXX(1-1/2)	101.75 - 102.00	1.0000	1.0000
L9	45	Aero MP3-03	101.75 - 102.00	1.0000	1.0000
L9	46	Aero MP3-03	101.75 - 102.00	1.0000	1.0000
L9	47	Aero MP3-03	101.75 - 102.00	1.0000	1.0000
L10	1	Safety Line 3/8	96.75 - 101.75	1.0000	1.0000
L10	2	Climbing Pegs	96.75 - 101.75	1.0000	1.0000
L10	18	CU12PSM9P6XXX(1-1/2)	96.75 - 101.75	1.0000	1.0000
L10	27	HCS 6X12 6AWG(1-3/8)	96.75 - 100.00	1.0000	1.0000
L10	28	HB158-21U6S24-xxM_TMO(1-5/8)	96.75 - 100.00	1.0000	1.0000
L10	45	Aero MP3-03	96.75 - 101.75	1.0000	1.0000
L10	46	Aero MP3-03	96.75 - 101.75	1.0000	1.0000
L10	47	Aero MP3-03	96.75 - 101.75	1.0000	1.0000
L11	1	Safety Line 3/8	91.75 - 96.75	1.0000	1.0000
L11	2	Climbing Pegs	91.75 - 96.75	1.0000	1.0000
L11	18	CU12PSM9P6XXX(1-1/2)	91.75 - 96.75	1.0000	1.0000
L11	27	HCS 6X12 6AWG(1-3/8)	91.75 - 96.75	1.0000	1.0000
L11	28	HB158-21U6S24-xxM_TMO(1-5/8)	91.75 - 96.75	1.0000	1.0000
L11	38	CCI-SFP-060100	91.75 - 95.00	1.0000	1.0000
L11	39	CCI-SFP-060100	91.75 - 95.00	1.0000	1.0000
L11	45	Aero MP3-03	93.50 - 96.75	1.0000	1.0000
L11	46	Aero MP3-03	93.50 - 96.75	1.0000	1.0000
L11	47	Aero MP3-03	93.50 - 96.75	1.0000	1.0000
L12	1	Safety Line 3/8	90.75 - 91.75	1.0000	1.0000
L12	2	Climbing Pegs	90.75 - 91.75	1.0000	1.0000
L12	18	CU12PSM9P6XXX(1-1/2)	90.75 - 91.75	1.0000	1.0000
L12	27	HCS 6X12 6AWG(1-3/8)	90.75 - 91.75	1.0000	1.0000
L12	28	HB158-21U6S24-xxM_TMO(1-5/8)	90.75 - 91.75	1.0000	1.0000
L12	38	CCI-SFP-060100	90.75 - 91.75	1.0000	1.0000
L12	39	CCI-SFP-060100	90.75 - 91.75	1.0000	1.0000
L13	1	Safety Line 3/8	85.75 - 90.75	1.0000	1.0000
L13	2	Climbing Pegs	85.75 - 90.75	1.0000	1.0000
L13	18	CU12PSM9P6XXX(1-1/2)	85.75 - 90.75	1.0000	1.0000
L13	27	HCS 6X12 6AWG(1-3/8)	85.75 - 90.75	1.0000	1.0000
L13	28	HB158-21U6S24-xxM_TMO(1-5/8)	85.75 - 90.75	1.0000	1.0000
L13	38	CCI-SFP-060100	85.75 - 90.75	1.0000	1.0000
L13	39	CCI-SFP-060100	85.75 - 90.75	1.0000	1.0000
L13	42	Aero MP3-03	85.75 - 86.50	1.0000	1.0000
L13	43	Aero MP3-03	85.75 - 86.50	1.0000	1.0000
L13	44	Aero MP3-03	85.75 - 86.50	1.0000	1.0000
L14	1	Safety Line 3/8	85.33 - 85.75	1.0000	1.0000
L14	2	Climbing Pegs	85.33 - 85.75	1.0000	1.0000
L14	18	CU12PSM9P6XXX(1-1/2)	85.33 - 85.75	1.0000	1.0000
L14	27	HCS 6X12 6AWG(1-3/8)	85.33 - 85.75	1.0000	1.0000
L14	28	HB158-21U6S24-xxM_TMO(1-5/8)	85.33 - 85.75	1.0000	1.0000
L14	38	CCI-SFP-060100	85.33 - 85.75	1.0000	1.0000
L14	39	CCI-SFP-060100	85.33 - 85.75	1.0000	1.0000
L14	42	Aero MP3-03	85.33 - 85.75	1.0000	1.0000
L14	43	Aero MP3-03	85.33 - 85.75	1.0000	1.0000
L14	44	Aero MP3-03	85.33 - 85.75	1.0000	1.0000
L15	1	Safety Line 3/8	85.08 - 85.33	1.0000	1.0000
L15	2	Climbing Pegs	85.08 - 85.33	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L15	18	CU12PSM9P6XXX(1-1/2)	85.08 - 85.33	1.0000	1.0000
L15	27	HCS 6X12 6AWG(1-3/8)	85.08 - 85.33	1.0000	1.0000
L15	28	HB158-21U6S24-xxM_TMO(1-5/8)	85.08 - 85.33	1.0000	1.0000
L15	38	CCI-SFP-060100	85.08 - 85.33	1.0000	1.0000
L15	39	CCI-SFP-060100	85.08 - 85.33	1.0000	1.0000
L15	42	Aero MP3-03	85.08 - 85.33	1.0000	1.0000
L15	43	Aero MP3-03	85.08 - 85.33	1.0000	1.0000
L15	44	Aero MP3-03	85.08 - 85.33	1.0000	1.0000
L16	1	Safety Line 3/8	82.50 - 85.08	1.0000	1.0000
L16	2	Climbing Pegs	82.50 - 85.08	1.0000	1.0000
L16	18	CU12PSM9P6XXX(1-1/2)	82.50 - 85.08	1.0000	1.0000
L16	27	HCS 6X12 6AWG(1-3/8)	82.50 - 85.08	1.0000	1.0000
L16	28	HB158-21U6S24-xxM_TMO(1-5/8)	82.50 - 85.08	1.0000	1.0000
L16	36	CCI-SFP-060100	82.50 - 84.50	1.0000	1.0000
L16	37	CCI-SFP-060100	82.50 - 84.50	1.0000	1.0000
L16	38	CCI-SFP-060100	82.50 - 85.08	1.0000	1.0000
L16	39	CCI-SFP-060100	82.50 - 85.08	1.0000	1.0000
L16	42	Aero MP3-03	82.50 - 85.08	1.0000	1.0000
L16	43	Aero MP3-03	82.50 - 85.08	1.0000	1.0000
L16	44	Aero MP3-03	82.50 - 85.08	1.0000	1.0000
L17	1	Safety Line 3/8	82.25 - 82.50	1.0000	1.0000
L17	2	Climbing Pegs	82.25 - 82.50	1.0000	1.0000
L17	18	CU12PSM9P6XXX(1-1/2)	82.25 - 82.50	1.0000	1.0000
L17	27	HCS 6X12 6AWG(1-3/8)	82.25 - 82.50	1.0000	1.0000
L17	28	HB158-21U6S24-xxM_TMO(1-5/8)	82.25 - 82.50	1.0000	1.0000
L17	36	CCI-SFP-060100	82.25 - 82.50	1.0000	1.0000
L17	37	CCI-SFP-060100	82.25 - 82.50	1.0000	1.0000
L17	38	CCI-SFP-060100	82.25 - 82.50	1.0000	1.0000
L17	39	CCI-SFP-060100	82.25 - 82.50	1.0000	1.0000
L17	42	Aero MP3-03	82.25 - 82.50	1.0000	1.0000
L17	43	Aero MP3-03	82.25 - 82.50	1.0000	1.0000
L17	44	Aero MP3-03	82.25 - 82.50	1.0000	1.0000
L18	1	Safety Line 3/8	82.00 - 82.25	1.0000	1.0000
L18	2	Climbing Pegs	82.00 - 82.25	1.0000	1.0000
L18	18	CU12PSM9P6XXX(1-1/2)	82.00 - 82.25	1.0000	1.0000
L18	27	HCS 6X12 6AWG(1-3/8)	82.00 - 82.25	1.0000	1.0000
L18	28	HB158-21U6S24-xxM_TMO(1-5/8)	82.00 - 82.25	1.0000	1.0000
L18	36	CCI-SFP-060100	82.00 - 82.25	1.0000	1.0000
L18	37	CCI-SFP-060100	82.00 - 82.25	1.0000	1.0000
L18	38	CCI-SFP-060100	82.00 - 82.25	1.0000	1.0000
L18	39	CCI-SFP-060100	82.00 - 82.25	1.0000	1.0000
L18	42	Aero MP3-03	82.00 - 82.25	1.0000	1.0000
L18	43	Aero MP3-03	82.00 - 82.25	1.0000	1.0000
L18	44	Aero MP3-03	82.00 - 82.25	1.0000	1.0000
L19	1	Safety Line 3/8	81.75 - 82.00	1.0000	1.0000
L19	2	Climbing Pegs	81.75 - 82.00	1.0000	1.0000
L19	18	CU12PSM9P6XXX(1-1/2)	81.75 - 82.00	1.0000	1.0000
L19	27	HCS 6X12 6AWG(1-3/8)	81.75 - 82.00	1.0000	1.0000
L19	28	HB158-21U6S24-xxM_TMO(1-5/8)	81.75 - 82.00	1.0000	1.0000
L19	36	CCI-SFP-060100	81.75 - 82.00	1.0000	1.0000
L19	37	CCI-SFP-060100	81.75 - 82.00	1.0000	1.0000
L19	38	CCI-SFP-060100	81.75 - 82.00	1.0000	1.0000
L19	39	CCI-SFP-060100	81.75 - 82.00	1.0000	1.0000
L19	42	Aero MP3-03	81.75 - 82.00	1.0000	1.0000
L19	43	Aero MP3-03	81.75 - 82.00	1.0000	1.0000
L19	44	Aero MP3-03	81.75 - 82.00	1.0000	1.0000
L20	1	Safety Line 3/8	78.83 - 81.75	1.0000	1.0000
L20	2	Climbing Pegs	78.83 - 81.75	1.0000	1.0000
L20	18	CU12PSM9P6XXX(1-1/2)	78.83 - 81.75	1.0000	1.0000
L20	27	HCS 6X12 6AWG(1-3/8)	78.83 - 81.75	1.0000	1.0000
L20	28	HB158-21U6S24-xxM_TMO(1-5/8)	78.83 - 81.75	1.0000	1.0000
L20	36	CCI-SFP-060100	78.83 - 81.75	1.0000	1.0000
L20	37	CCI-SFP-060100	78.83 - 81.75	1.0000	1.0000
L20	38	CCI-SFP-060100	80.00 - 81.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L20	39	CCI-SFP-060100	80.00 - 81.75	1.0000	1.0000
L20	42	Aero MP3-03	78.83 - 81.75	1.0000	1.0000
L20	43	Aero MP3-03	78.83 - 81.75	1.0000	1.0000
L20	44	Aero MP3-03	78.83 - 81.75	1.0000	1.0000
L20	61	Aero MP3-03	78.83 - 80.00	1.0000	1.0000
L20	62	Aero MP3-03	78.83 - 80.00	1.0000	1.0000
L20	63	Aero MP3-03	78.83 - 80.00	1.0000	1.0000
L21	1	Safety Line 3/8	78.58 - 78.83	1.0000	1.0000
L21	2	Climbing Pegs	78.58 - 78.83	1.0000	1.0000
L21	18	CU12PSM9P6XXX(1-1/2)	78.58 - 78.83	1.0000	1.0000
L21	27	HCS 6X12 6AWG(1-3/8)	78.58 - 78.83	1.0000	1.0000
L21	28	HB158-21U6S24-xxM_TMO(1-5/8)	78.58 - 78.83	1.0000	1.0000
L21	36	CCI-SFP-060100	78.58 - 78.83	1.0000	1.0000
L21	37	CCI-SFP-060100	78.58 - 78.83	1.0000	1.0000
L21	42	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L21	43	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L21	44	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L21	61	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L21	62	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L21	63	Aero MP3-03	78.58 - 78.83	1.0000	1.0000
L22	1	Safety Line 3/8	77.66 - 78.58	1.0000	1.0000
L22	2	Climbing Pegs	77.66 - 78.58	1.0000	1.0000
L22	18	CU12PSM9P6XXX(1-1/2)	77.66 - 78.58	1.0000	1.0000
L22	27	HCS 6X12 6AWG(1-3/8)	77.66 - 78.58	1.0000	1.0000
L22	28	HB158-21U6S24-xxM_TMO(1-5/8)	77.66 - 78.58	1.0000	1.0000
L22	36	CCI-SFP-060100	77.66 - 78.58	1.0000	1.0000
L22	37	CCI-SFP-060100	77.66 - 78.58	1.0000	1.0000
L22	42	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L22	43	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L22	44	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L22	61	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L22	62	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L22	63	Aero MP3-03	77.66 - 78.58	1.0000	1.0000
L23	1	Safety Line 3/8	77.41 - 77.66	1.0000	1.0000
L23	2	Climbing Pegs	77.41 - 77.66	1.0000	1.0000
L23	18	CU12PSM9P6XXX(1-1/2)	77.41 - 77.66	1.0000	1.0000
L23	27	HCS 6X12 6AWG(1-3/8)	77.41 - 77.66	1.0000	1.0000
L23	28	HB158-21U6S24-xxM_TMO(1-5/8)	77.41 - 77.66	1.0000	1.0000
L23	36	CCI-SFP-060100	77.41 - 77.66	1.0000	1.0000
L23	37	CCI-SFP-060100	77.41 - 77.66	1.0000	1.0000
L23	42	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L23	43	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L23	44	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L23	61	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L23	62	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L23	63	Aero MP3-03	77.41 - 77.66	1.0000	1.0000
L24	1	Safety Line 3/8	77.17 - 77.41	1.0000	1.0000
L24	2	Climbing Pegs	77.17 - 77.41	1.0000	1.0000
L24	18	CU12PSM9P6XXX(1-1/2)	77.17 - 77.41	1.0000	1.0000
L24	27	HCS 6X12 6AWG(1-3/8)	77.17 - 77.41	1.0000	1.0000
L24	28	HB158-21U6S24-xxM_TMO(1-5/8)	77.17 - 77.41	1.0000	1.0000
L24	36	CCI-SFP-060100	77.17 - 77.41	1.0000	1.0000
L24	37	CCI-SFP-060100	77.17 - 77.41	1.0000	1.0000
L24	42	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L24	43	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L24	44	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L24	61	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L24	62	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L24	63	Aero MP3-03	77.17 - 77.41	1.0000	1.0000
L25	1	Safety Line 3/8	72.17 - 77.17	1.0000	1.0000
L25	2	Climbing Pegs	72.17 - 77.17	1.0000	1.0000
L25	18	CU12PSM9P6XXX(1-1/2)	72.17 - 77.17	1.0000	1.0000
L25	27	HCS 6X12 6AWG(1-3/8)	72.17 - 77.17	1.0000	1.0000
L25	28	HB158-21U6S24-xxM_TMO(1-5/8)	72.17 - 77.17	1.0000	1.0000
L25	36	CCI-SFP-060100	72.17 - 77.17	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L25	37	CCI-SFP-060100	72.17 - 77.17	1.0000	1.0000
L25	42	Aero MP3-03	72.17 - 77.17	1.0000	1.0000
L25	43	Aero MP3-03	76.50 - 77.17	1.0000	1.0000
L25	44	Aero MP3-03	76.50 - 77.17	1.0000	1.0000
L25	61	Aero MP3-03	72.17 - 77.17	1.0000	1.0000
L25	62	Aero MP3-03	72.17 - 77.17	1.0000	1.0000
L25	63	Aero MP3-03	72.17 - 77.17	1.0000	1.0000
L26	1	Safety Line 3/8	67.17 - 72.17	1.0000	1.0000
L26	2	Climbing Pegs	67.17 - 72.17	1.0000	1.0000
L26	18	CU12PSM9P6XXX(1-1/2)	67.17 - 72.17	1.0000	1.0000
L26	27	HCS 6X12 6AWG(1-3/8)	67.17 - 72.17	1.0000	1.0000
L26	28	HB158-21U6S24-xxM_TMO(1-5/8)	67.17 - 72.17	1.0000	1.0000
L26	36	CCI-SFP-060100	67.17 - 72.17	1.0000	1.0000
L26	37	CCI-SFP-060100	67.17 - 72.17	1.0000	1.0000
L26	42	Aero MP3-03	67.17 - 72.17	1.0000	1.0000
L26	54	Aero MP3-05	67.17 - 69.00	1.0000	1.0000
L26	55	Aero MP3-05	67.17 - 69.00	1.0000	1.0000
L26	56	Aero MP3-05	67.17 - 69.00	1.0000	1.0000
L26	61	Aero MP3-03	69.00 - 72.17	1.0000	1.0000
L26	62	Aero MP3-03	69.00 - 72.17	1.0000	1.0000
L26	63	Aero MP3-03	69.00 - 72.17	1.0000	1.0000
L27	1	Safety Line 3/8	66.58 - 67.17	1.0000	1.0000
L27	2	Climbing Pegs	66.58 - 67.17	1.0000	1.0000
L27	18	CU12PSM9P6XXX(1-1/2)	66.58 - 67.17	1.0000	1.0000
L27	27	HCS 6X12 6AWG(1-3/8)	66.58 - 67.17	1.0000	1.0000
L27	28	HB158-21U6S24-xxM_TMO(1-5/8)	66.58 - 67.17	1.0000	1.0000
L27	36	CCI-SFP-060100	66.58 - 67.17	1.0000	1.0000
L27	37	CCI-SFP-060100	66.58 - 67.17	1.0000	1.0000
L27	42	Aero MP3-03	66.58 - 67.17	1.0000	1.0000
L27	54	Aero MP3-05	66.58 - 67.17	1.0000	1.0000
L27	55	Aero MP3-05	66.58 - 67.17	1.0000	1.0000
L27	56	Aero MP3-05	66.58 - 67.17	1.0000	1.0000
L28	1	Safety Line 3/8	66.33 - 66.58	1.0000	1.0000
L28	2	Climbing Pegs	66.33 - 66.58	1.0000	1.0000
L28	18	CU12PSM9P6XXX(1-1/2)	66.33 - 66.58	1.0000	1.0000
L28	27	HCS 6X12 6AWG(1-3/8)	66.33 - 66.58	1.0000	1.0000
L28	28	HB158-21U6S24-xxM_TMO(1-5/8)	66.33 - 66.58	1.0000	1.0000
L28	36	CCI-SFP-060100	66.33 - 66.58	1.0000	1.0000
L28	37	CCI-SFP-060100	66.33 - 66.58	1.0000	1.0000
L28	42	Aero MP3-03	66.33 - 66.58	1.0000	1.0000
L28	54	Aero MP3-05	66.33 - 66.58	1.0000	1.0000
L28	55	Aero MP3-05	66.33 - 66.58	1.0000	1.0000
L28	56	Aero MP3-05	66.33 - 66.58	1.0000	1.0000
L29	1	Safety Line 3/8	66.16 - 66.33	1.0000	1.0000
L29	2	Climbing Pegs	66.16 - 66.33	1.0000	1.0000
L29	18	CU12PSM9P6XXX(1-1/2)	66.16 - 66.33	1.0000	1.0000
L29	27	HCS 6X12 6AWG(1-3/8)	66.16 - 66.33	1.0000	1.0000
L29	28	HB158-21U6S24-xxM_TMO(1-5/8)	66.16 - 66.33	1.0000	1.0000
L29	36	CCI-SFP-060100	66.16 - 66.33	1.0000	1.0000
L29	37	CCI-SFP-060100	66.16 - 66.33	1.0000	1.0000
L29	42	Aero MP3-03	66.16 - 66.33	1.0000	1.0000
L29	54	Aero MP3-05	66.16 - 66.33	1.0000	1.0000
L29	55	Aero MP3-05	66.16 - 66.33	1.0000	1.0000
L29	56	Aero MP3-05	66.16 - 66.33	1.0000	1.0000
L30	1	Safety Line 3/8	65.91 - 66.16	1.0000	1.0000
L30	2	Climbing Pegs	65.91 - 66.16	1.0000	1.0000
L30	18	CU12PSM9P6XXX(1-1/2)	65.91 - 66.16	1.0000	1.0000
L30	27	HCS 6X12 6AWG(1-3/8)	65.91 - 66.16	1.0000	1.0000
L30	28	HB158-21U6S24-xxM_TMO(1-5/8)	65.91 - 66.16	1.0000	1.0000
L30	36	CCI-SFP-060100	65.91 - 66.16	1.0000	1.0000
L30	37	CCI-SFP-060100	65.91 - 66.16	1.0000	1.0000
L30	42	Aero MP3-03	65.91 - 66.16	1.0000	1.0000
L30	54	Aero MP3-05	65.91 - 66.16	1.0000	1.0000
L30	55	Aero MP3-05	65.91 - 66.16	1.0000	1.0000
L30	56	Aero MP3-05	65.91 - 66.16	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L31	1	Safety Line 3/8	62.66 - 65.91	1.0000	1.0000
L31	2	Climbing Pegs	62.66 - 65.91	1.0000	1.0000
L31	18	CU12PSM9P6XXX(1-1/2)	62.66 - 65.91	1.0000	1.0000
L31	27	HCS 6X12 6AWG(1-3/8)	62.66 - 65.91	1.0000	1.0000
L31	28	HB158-21U6S24-xxM_TMO(1-5/8)	62.66 - 65.91	1.0000	1.0000
L31	36	CCI-SFP-060100	64.50 - 65.91	1.0000	1.0000
L31	37	CCI-SFP-060100	64.50 - 65.91	1.0000	1.0000
L31	42	Aero MP3-03	62.66 - 65.91	1.0000	1.0000
L31	54	Aero MP3-05	62.66 - 65.91	1.0000	1.0000
L31	55	Aero MP3-05	62.66 - 65.91	1.0000	1.0000
L31	56	Aero MP3-05	62.66 - 65.91	1.0000	1.0000
L32	1	Safety Line 3/8	62.41 - 62.66	1.0000	1.0000
L32	2	Climbing Pegs	62.41 - 62.66	1.0000	1.0000
L32	18	CU12PSM9P6XXX(1-1/2)	62.41 - 62.66	1.0000	1.0000
L32	27	HCS 6X12 6AWG(1-3/8)	62.41 - 62.66	1.0000	1.0000
L32	28	HB158-21U6S24-xxM_TMO(1-5/8)	62.41 - 62.66	1.0000	1.0000
L32	42	Aero MP3-03	62.41 - 62.66	1.0000	1.0000
L32	54	Aero MP3-05	62.41 - 62.66	1.0000	1.0000
L32	55	Aero MP3-05	62.41 - 62.66	1.0000	1.0000
L32	56	Aero MP3-05	62.41 - 62.66	1.0000	1.0000
L33	1	Safety Line 3/8	60.00 - 62.41	1.0000	1.0000
L33	2	Climbing Pegs	60.00 - 62.41	1.0000	1.0000
L33	18	CU12PSM9P6XXX(1-1/2)	60.00 - 62.41	1.0000	1.0000
L33	27	HCS 6X12 6AWG(1-3/8)	60.00 - 62.41	1.0000	1.0000
L33	28	HB158-21U6S24-xxM_TMO(1-5/8)	60.00 - 62.41	1.0000	1.0000
L33	35	CCI-SFP-060100	60.00 - 62.00	1.0000	1.0000
L33	42	Aero MP3-03	61.50 - 62.41	1.0000	1.0000
L33	54	Aero MP3-05	60.00 - 62.41	1.0000	1.0000
L33	55	Aero MP3-05	60.00 - 62.41	1.0000	1.0000
L33	56	Aero MP3-05	60.00 - 62.41	1.0000	1.0000
L34	1	Safety Line 3/8	59.75 - 60.00	1.0000	1.0000
L34	2	Climbing Pegs	59.75 - 60.00	1.0000	1.0000
L34	18	CU12PSM9P6XXX(1-1/2)	59.75 - 60.00	1.0000	1.0000
L34	27	HCS 6X12 6AWG(1-3/8)	59.75 - 60.00	1.0000	1.0000
L34	28	HB158-21U6S24-xxM_TMO(1-5/8)	59.75 - 60.00	1.0000	1.0000
L34	35	CCI-SFP-060100	59.75 - 60.00	1.0000	1.0000
L34	54	Aero MP3-05	59.75 - 60.00	1.0000	1.0000
L34	55	Aero MP3-05	59.75 - 60.00	1.0000	1.0000
L34	56	Aero MP3-05	59.75 - 60.00	1.0000	1.0000
L35	1	Safety Line 3/8	54.75 - 59.75	1.0000	1.0000
L35	2	Climbing Pegs	54.75 - 59.75	1.0000	1.0000
L35	18	CU12PSM9P6XXX(1-1/2)	54.75 - 59.75	1.0000	1.0000
L35	27	HCS 6X12 6AWG(1-3/8)	54.75 - 59.75	1.0000	1.0000
L35	28	HB158-21U6S24-xxM_TMO(1-5/8)	54.75 - 59.75	1.0000	1.0000
L35	35	CCI-SFP-060100	54.75 - 59.75	1.0000	1.0000
L35	54	Aero MP3-05	54.75 - 59.75	1.0000	1.0000
L35	55	Aero MP3-05	54.75 - 59.75	1.0000	1.0000
L35	56	Aero MP3-05	54.75 - 59.75	1.0000	1.0000
L36	1	Safety Line 3/8	52.83 - 54.75	1.0000	1.0000
L36	2	Climbing Pegs	52.83 - 54.75	1.0000	1.0000
L36	18	CU12PSM9P6XXX(1-1/2)	52.83 - 54.75	1.0000	1.0000
L36	27	HCS 6X12 6AWG(1-3/8)	52.83 - 54.75	1.0000	1.0000
L36	28	HB158-21U6S24-xxM_TMO(1-5/8)	52.83 - 54.75	1.0000	1.0000
L36	35	CCI-SFP-060100	52.83 - 54.75	1.0000	1.0000
L36	54	Aero MP3-05	52.83 - 54.75	1.0000	1.0000
L36	55	Aero MP3-05	52.83 - 54.75	1.0000	1.0000
L36	56	Aero MP3-05	52.83 - 54.75	1.0000	1.0000
L37	1	Safety Line 3/8	52.58 - 52.83	1.0000	1.0000
L37	2	Climbing Pegs	52.58 - 52.83	1.0000	1.0000
L37	18	CU12PSM9P6XXX(1-1/2)	52.58 - 52.83	1.0000	1.0000
L37	27	HCS 6X12 6AWG(1-3/8)	52.58 - 52.83	1.0000	1.0000
L37	28	HB158-21U6S24-xxM_TMO(1-5/8)	52.58 - 52.83	1.0000	1.0000
L37	35	CCI-SFP-060100	52.58 - 52.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L37	54	Aero MP3-05	52.58 - 52.83	1.0000	1.0000
L37	55	Aero MP3-05	52.58 - 52.83	1.0000	1.0000
L37	56	Aero MP3-05	52.58 - 52.83	1.0000	1.0000
L38	1	Safety Line 3/8	51.41 - 52.58	1.0000	1.0000
L38	2	Climbing Pegs	51.41 - 52.58	1.0000	1.0000
L38	18	CU12PSM9P6XXX(1-1/2)	51.41 - 52.58	1.0000	1.0000
L38	27	HCS 6X12 6AWG(1-3/8)	51.41 - 52.58	1.0000	1.0000
L38	28	HB158-21U6S24-xxM_TMO(1-5/8)	51.41 - 52.58	1.0000	1.0000
L38	35	CCI-SFP-060100	51.41 - 52.58	1.0000	1.0000
L38	54	Aero MP3-05	51.41 - 52.58	1.0000	1.0000
L38	55	Aero MP3-05	51.41 - 52.58	1.0000	1.0000
L38	56	Aero MP3-05	51.41 - 52.58	1.0000	1.0000
L38	58	Aero MP3-05	51.41 - 52.25	1.0000	1.0000
L38	59	Aero MP3-05	51.41 - 52.25	1.0000	1.0000
L38	60	Aero MP3-05	51.41 - 52.25	1.0000	1.0000
L39	1	Safety Line 3/8	51.16 - 51.41	1.0000	1.0000
L39	2	Climbing Pegs	51.16 - 51.41	1.0000	1.0000
L39	18	CU12PSM9P6XXX(1-1/2)	51.16 - 51.41	1.0000	1.0000
L39	27	HCS 6X12 6AWG(1-3/8)	51.16 - 51.41	1.0000	1.0000
L39	28	HB158-21U6S24-xxM_TMO(1-5/8)	51.16 - 51.41	1.0000	1.0000
L39	35	CCI-SFP-060100	51.16 - 51.41	1.0000	1.0000
L39	54	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L39	55	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L39	56	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L39	58	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L39	59	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L39	60	Aero MP3-05	51.16 - 51.41	1.0000	1.0000
L40	1	Safety Line 3/8	46.50 - 51.16	1.0000	1.0000
L40	2	Climbing Pegs	46.50 - 51.16	1.0000	1.0000
L40	18	CU12PSM9P6XXX(1-1/2)	46.50 - 51.16	1.0000	1.0000
L40	27	HCS 6X12 6AWG(1-3/8)	46.50 - 51.16	1.0000	1.0000
L40	28	HB158-21U6S24-xxM_TMO(1-5/8)	46.50 - 51.16	1.0000	1.0000
L40	35	CCI-SFP-060100	47.00 - 51.16	1.0000	1.0000
L40	53	Aero MP3-05	46.50 - 46.67	1.0000	1.0000
L40	54	Aero MP3-05	49.00 - 51.16	1.0000	1.0000
L40	55	Aero MP3-05	49.00 - 51.16	1.0000	1.0000
L40	56	Aero MP3-05	49.00 - 51.16	1.0000	1.0000
L40	58	Aero MP3-05	46.50 - 51.16	1.0000	1.0000
L40	59	Aero MP3-05	46.50 - 51.16	1.0000	1.0000
L40	60	Aero MP3-05	46.50 - 51.16	1.0000	1.0000
L41	1	Safety Line 3/8	45.50 - 46.50	1.0000	1.0000
L41	2	Climbing Pegs	45.50 - 46.50	1.0000	1.0000
L41	18	CU12PSM9P6XXX(1-1/2)	45.50 - 46.50	1.0000	1.0000
L41	27	HCS 6X12 6AWG(1-3/8)	45.50 - 46.50	1.0000	1.0000
L41	28	HB158-21U6S24-xxM_TMO(1-5/8)	45.50 - 46.50	1.0000	1.0000
L41	33	CCI-SFP-060100	45.50 - 46.50	1.0000	1.0000
L41	34	CCI-SFP-060100	45.50 - 46.50	1.0000	1.0000
L41	53	Aero MP3-05	45.50 - 46.50	1.0000	1.0000
L41	58	Aero MP3-05	45.50 - 46.50	1.0000	1.0000
L41	59	Aero MP3-05	45.50 - 46.50	1.0000	1.0000
L41	60	Aero MP3-05	45.50 - 46.50	1.0000	1.0000
L42	1	Safety Line 3/8	44.25 - 45.50	1.0000	1.0000
L42	2	Climbing Pegs	44.25 - 45.50	1.0000	1.0000
L42	18	CU12PSM9P6XXX(1-1/2)	44.25 - 45.50	1.0000	1.0000
L42	27	HCS 6X12 6AWG(1-3/8)	44.25 - 45.50	1.0000	1.0000
L42	28	HB158-21U6S24-xxM_TMO(1-5/8)	44.25 - 45.50	1.0000	1.0000
L42	33	CCI-SFP-060100	44.25 - 45.50	1.0000	1.0000
L42	34	CCI-SFP-060100	44.25 - 45.50	1.0000	1.0000
L42	51	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L42	52	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L42	53	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L42	58	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L42	59	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L42	60	Aero MP3-05	44.25 - 45.50	1.0000	1.0000
L43	1	Safety Line 3/8	44.00 - 44.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L43	2	Climbing Pegs	44.00 - 44.25	1.0000	1.0000
L43	18	CU12PSM9P6XXX(1-1/2)	44.00 - 44.25	1.0000	1.0000
L43	27	HCS 6X12 6AWG(1-3/8)	44.00 - 44.25	1.0000	1.0000
L43	28	HB158-21U6S24-xxM_TMO(1-5/8)	44.00 - 44.25	1.0000	1.0000
L43	33	CCI-SFP-060100	44.00 - 44.25	1.0000	1.0000
L43	34	CCI-SFP-060100	44.00 - 44.25	1.0000	1.0000
L43	51	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L43	52	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L43	53	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L43	58	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L43	59	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L43	60	Aero MP3-05	44.00 - 44.25	1.0000	1.0000
L44	1	Safety Line 3/8	43.08 - 44.00	1.0000	1.0000
L44	2	Climbing Pegs	43.08 - 44.00	1.0000	1.0000
L44	18	CU12PSM9P6XXX(1-1/2)	43.08 - 44.00	1.0000	1.0000
L44	27	HCS 6X12 6AWG(1-3/8)	43.08 - 44.00	1.0000	1.0000
L44	28	HB158-21U6S24-xxM_TMO(1-5/8)	43.08 - 44.00	1.0000	1.0000
L44	33	CCI-SFP-060100	43.08 - 44.00	1.0000	1.0000
L44	34	CCI-SFP-060100	43.08 - 44.00	1.0000	1.0000
L44	51	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L44	52	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L44	53	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L44	58	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L44	59	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L44	60	Aero MP3-05	43.08 - 44.00	1.0000	1.0000
L45	1	Safety Line 3/8	42.83 - 43.08	1.0000	1.0000
L45	2	Climbing Pegs	42.83 - 43.08	1.0000	1.0000
L45	18	CU12PSM9P6XXX(1-1/2)	42.83 - 43.08	1.0000	1.0000
L45	27	HCS 6X12 6AWG(1-3/8)	42.83 - 43.08	1.0000	1.0000
L45	28	HB158-21U6S24-xxM_TMO(1-5/8)	42.83 - 43.08	1.0000	1.0000
L45	33	CCI-SFP-060100	42.83 - 43.08	1.0000	1.0000
L45	34	CCI-SFP-060100	42.83 - 43.08	1.0000	1.0000
L45	51	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L45	52	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L45	53	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L45	58	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L45	59	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L45	60	Aero MP3-05	42.83 - 43.08	1.0000	1.0000
L46	1	Safety Line 3/8	37.83 - 42.83	1.0000	1.0000
L46	2	Climbing Pegs	37.83 - 42.83	1.0000	1.0000
L46	18	CU12PSM9P6XXX(1-1/2)	37.83 - 42.83	1.0000	1.0000
L46	27	HCS 6X12 6AWG(1-3/8)	37.83 - 42.83	1.0000	1.0000
L46	28	HB158-21U6S24-xxM_TMO(1-5/8)	37.83 - 42.83	1.0000	1.0000
L46	33	CCI-SFP-060100	37.83 - 42.83	1.0000	1.0000
L46	34	CCI-SFP-060100	37.83 - 42.83	1.0000	1.0000
L46	51	Aero MP3-05	37.83 - 42.83	1.0000	1.0000
L46	52	Aero MP3-05	37.83 - 42.83	1.0000	1.0000
L46	53	Aero MP3-05	37.83 - 42.83	1.0000	1.0000
L46	58	Aero MP3-05	40.25 - 42.83	1.0000	1.0000
L46	59	Aero MP3-05	40.25 - 42.83	1.0000	1.0000
L46	60	Aero MP3-05	40.25 - 42.83	1.0000	1.0000
L47	1	Safety Line 3/8	32.83 - 37.83	1.0000	1.0000
L47	2	Climbing Pegs	32.83 - 37.83	1.0000	1.0000
L47	18	CU12PSM9P6XXX(1-1/2)	32.83 - 37.83	1.0000	1.0000
L47	27	HCS 6X12 6AWG(1-3/8)	32.83 - 37.83	1.0000	1.0000
L47	28	HB158-21U6S24-xxM_TMO(1-5/8)	32.83 - 37.83	1.0000	1.0000
L47	33	CCI-SFP-060100	32.83 - 37.83	1.0000	1.0000
L47	34	CCI-SFP-060100	32.83 - 37.83	1.0000	1.0000
L47	51	Aero MP3-05	32.83 - 37.83	1.0000	1.0000
L47	52	Aero MP3-05	32.83 - 37.83	1.0000	1.0000
L47	53	Aero MP3-05	32.83 - 37.83	1.0000	1.0000
L48	1	Safety Line 3/8	29.25 - 32.83	1.0000	1.0000
L48	2	Climbing Pegs	29.25 - 32.83	1.0000	1.0000
L48	18	CU12PSM9P6XXX(1-1/2)	29.25 - 32.83	1.0000	1.0000
L48	27	HCS 6X12 6AWG(1-3/8)	29.25 - 32.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L48	28	HB158-21U6S24-xxM_TMO(1-5/8)	29.25 - 32.83	1.0000	1.0000
L48	32	CCI-SFP-065125	29.25 - 30.50	1.0000	1.0000
L48	33	CCI-SFP-060100	29.25 - 32.83	1.0000	1.0000
L48	34	CCI-SFP-060100	29.25 - 32.83	1.0000	1.0000
L48	51	Aero MP3-05	29.25 - 32.83	1.0000	1.0000
L48	52	Aero MP3-05	29.25 - 32.83	1.0000	1.0000
L48	53	Aero MP3-05	29.25 - 32.83	1.0000	1.0000
L49	1	Safety Line 3/8	29.00 - 29.25	1.0000	1.0000
L49	2	Climbing Pegs	29.00 - 29.25	1.0000	1.0000
L49	18	CU12PSM9P6XXX(1-1/2)	29.00 - 29.25	1.0000	1.0000
L49	27	HCS 6X12 6AWG(1-3/8)	29.00 - 29.25	1.0000	1.0000
L49	28	HB158-21U6S24-xxM_TMO(1-5/8)	29.00 - 29.25	1.0000	1.0000
L49	32	CCI-SFP-065125	29.00 - 29.25	1.0000	1.0000
L49	33	CCI-SFP-060100	29.00 - 29.25	1.0000	1.0000
L49	34	CCI-SFP-060100	29.00 - 29.25	1.0000	1.0000
L49	51	Aero MP3-05	29.00 - 29.25	1.0000	1.0000
L49	52	Aero MP3-05	29.00 - 29.25	1.0000	1.0000
L49	53	Aero MP3-05	29.00 - 29.25	1.0000	1.0000
L50	1	Safety Line 3/8	27.75 - 29.00	1.0000	1.0000
L50	2	Climbing Pegs	27.75 - 29.00	1.0000	1.0000
L50	18	CU12PSM9P6XXX(1-1/2)	27.75 - 29.00	1.0000	1.0000
L50	27	HCS 6X12 6AWG(1-3/8)	27.75 - 29.00	1.0000	1.0000
L50	28	HB158-21U6S24-xxM_TMO(1-5/8)	27.75 - 29.00	1.0000	1.0000
L50	32	CCI-SFP-065125	27.75 - 29.00	1.0000	1.0000
L50	33	CCI-SFP-060100	27.75 - 29.00	1.0000	1.0000
L50	34	CCI-SFP-060100	27.75 - 29.00	1.0000	1.0000
L50	51	Aero MP3-05	27.75 - 29.00	1.0000	1.0000
L50	52	Aero MP3-05	27.75 - 29.00	1.0000	1.0000
L50	53	Aero MP3-05	27.75 - 29.00	1.0000	1.0000
L51	1	Safety Line 3/8	27.50 - 27.75	1.0000	1.0000
L51	2	Climbing Pegs	27.50 - 27.75	1.0000	1.0000
L51	18	CU12PSM9P6XXX(1-1/2)	27.50 - 27.75	1.0000	1.0000
L51	27	HCS 6X12 6AWG(1-3/8)	27.50 - 27.75	1.0000	1.0000
L51	28	HB158-21U6S24-xxM_TMO(1-5/8)	27.50 - 27.75	1.0000	1.0000
L51	32	CCI-SFP-065125	27.50 - 27.75	1.0000	1.0000
L51	33	CCI-SFP-060100	27.50 - 27.75	1.0000	1.0000
L51	34	CCI-SFP-060100	27.50 - 27.75	1.0000	1.0000
L51	51	Aero MP3-05	27.50 - 27.75	1.0000	1.0000
L51	52	Aero MP3-05	27.50 - 27.75	1.0000	1.0000
L51	53	Aero MP3-05	27.50 - 27.75	1.0000	1.0000
L52	1	Safety Line 3/8	24.08 - 27.50	1.0000	1.0000
L52	2	Climbing Pegs	24.08 - 27.50	1.0000	1.0000
L52	18	CU12PSM9P6XXX(1-1/2)	24.08 - 27.50	1.0000	1.0000
L52	27	HCS 6X12 6AWG(1-3/8)	24.08 - 27.50	1.0000	1.0000
L52	28	HB158-21U6S24-xxM_TMO(1-5/8)	24.08 - 27.50	1.0000	1.0000
L52	32	CCI-SFP-065125	24.08 - 27.50	1.0000	1.0000
L52	33	CCI-SFP-060100	24.08 - 27.50	1.0000	1.0000
L52	34	CCI-SFP-060100	24.08 - 27.50	1.0000	1.0000
L52	41	Aero MP3-05	24.08 - 26.50	1.0000	1.0000
L52	51	Aero MP3-05	24.08 - 27.50	1.0000	1.0000
L52	52	Aero MP3-05	24.08 - 27.50	1.0000	1.0000
L52	53	Aero MP3-05	24.08 - 27.50	1.0000	1.0000
L53	1	Safety Line 3/8	23.83 - 24.08	1.0000	1.0000
L53	2	Climbing Pegs	23.83 - 24.08	1.0000	1.0000
L53	18	CU12PSM9P6XXX(1-1/2)	23.83 - 24.08	1.0000	1.0000
L53	27	HCS 6X12 6AWG(1-3/8)	23.83 - 24.08	1.0000	1.0000
L53	28	HB158-21U6S24-xxM_TMO(1-5/8)	23.83 - 24.08	1.0000	1.0000
L53	32	CCI-SFP-065125	23.83 - 24.08	1.0000	1.0000
L53	33	CCI-SFP-060100	23.83 - 24.08	1.0000	1.0000
L53	34	CCI-SFP-060100	23.83 - 24.08	1.0000	1.0000
L53	41	Aero MP3-05	23.83 - 24.08	1.0000	1.0000
L53	51	Aero MP3-05	23.83 - 24.08	1.0000	1.0000
L53	52	Aero MP3-05	23.83 - 24.08	1.0000	1.0000
L53	53	Aero MP3-05	23.83 - 24.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L54	1	Safety Line 3/8	23.50 - 23.83	1.0000	1.0000
L54	2	Climbing Pegs	23.50 - 23.83	1.0000	1.0000
L54	18	CU12PSM9P6XXX(1-1/2)	23.50 - 23.83	1.0000	1.0000
L54	27	HCS 6X12 6AWG(1-3/8)	23.50 - 23.83	1.0000	1.0000
L54	28	HB158-21U6S24-xxM_TMO(1-5/8)	23.50 - 23.83	1.0000	1.0000
L54	32	CCI-SFP-065125	23.50 - 23.83	1.0000	1.0000
L54	33	CCI-SFP-060100	23.50 - 23.83	1.0000	1.0000
L54	34	CCI-SFP-060100	23.50 - 23.83	1.0000	1.0000
L54	41	Aero MP3-05	23.50 - 23.83	1.0000	1.0000
L54	51	Aero MP3-05	23.50 - 23.83	1.0000	1.0000
L54	52	Aero MP3-05	23.50 - 23.83	1.0000	1.0000
L54	53	Aero MP3-05	23.50 - 23.83	1.0000	1.0000
L55	1	Safety Line 3/8	23.25 - 23.50	1.0000	1.0000
L55	2	Climbing Pegs	23.25 - 23.50	1.0000	1.0000
L55	18	CU12PSM9P6XXX(1-1/2)	23.25 - 23.50	1.0000	1.0000
L55	27	HCS 6X12 6AWG(1-3/8)	23.25 - 23.50	1.0000	1.0000
L55	28	HB158-21U6S24-xxM_TMO(1-5/8)	23.25 - 23.50	1.0000	1.0000
L55	32	CCI-SFP-065125	23.25 - 23.50	1.0000	1.0000
L55	33	CCI-SFP-060100	23.25 - 23.50	1.0000	1.0000
L55	34	CCI-SFP-060100	23.25 - 23.50	1.0000	1.0000
L55	41	Aero MP3-05	23.25 - 23.50	1.0000	1.0000
L55	51	Aero MP3-05	23.25 - 23.50	1.0000	1.0000
L55	52	Aero MP3-05	23.25 - 23.50	1.0000	1.0000
L55	53	Aero MP3-05	23.25 - 23.50	1.0000	1.0000
L56	1	Safety Line 3/8	18.91 - 23.25	1.0000	1.0000
L56	2	Climbing Pegs	18.91 - 23.25	1.0000	1.0000
L56	18	CU12PSM9P6XXX(1-1/2)	18.91 - 23.25	1.0000	1.0000
L56	27	HCS 6X12 6AWG(1-3/8)	18.91 - 23.25	1.0000	1.0000
L56	28	HB158-21U6S24-xxM_TMO(1-5/8)	18.91 - 23.25	1.0000	1.0000
L56	32	CCI-SFP-065125	18.91 - 23.25	1.0000	1.0000
L56	33	CCI-SFP-060100	21.50 - 23.25	1.0000	1.0000
L56	34	CCI-SFP-060100	21.50 - 23.25	1.0000	1.0000
L56	41	Aero MP3-05	18.91 - 23.25	1.0000	1.0000
L56	49	Aero MP3-05	18.91 - 20.50	1.0000	1.0000
L56	50	Aero MP3-05	18.91 - 20.50	1.0000	1.0000
L56	51	Aero MP3-05	18.91 - 23.25	1.0000	1.0000
L56	52	Aero MP3-05	18.91 - 23.25	1.0000	1.0000
L56	53	Aero MP3-05	18.91 - 23.25	1.0000	1.0000
L57	1	Safety Line 3/8	18.66 - 18.91	1.0000	1.0000
L57	2	Climbing Pegs	18.66 - 18.91	1.0000	1.0000
L57	18	CU12PSM9P6XXX(1-1/2)	18.66 - 18.91	1.0000	1.0000
L57	27	HCS 6X12 6AWG(1-3/8)	18.66 - 18.91	1.0000	1.0000
L57	28	HB158-21U6S24-xxM_TMO(1-5/8)	18.66 - 18.91	1.0000	1.0000
L57	32	CCI-SFP-065125	18.66 - 18.91	1.0000	1.0000
L57	41	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L57	49	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L57	50	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L57	51	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L57	52	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L57	53	Aero MP3-05	18.66 - 18.91	1.0000	1.0000
L58	1	Safety Line 3/8	18.08 - 18.66	1.0000	1.0000
L58	2	Climbing Pegs	18.08 - 18.66	1.0000	1.0000
L58	18	CU12PSM9P6XXX(1-1/2)	18.08 - 18.66	1.0000	1.0000
L58	27	HCS 6X12 6AWG(1-3/8)	18.08 - 18.66	1.0000	1.0000
L58	28	HB158-21U6S24-xxM_TMO(1-5/8)	18.08 - 18.66	1.0000	1.0000
L58	32	CCI-SFP-065125	18.08 - 18.66	1.0000	1.0000
L58	41	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L58	49	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L58	50	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L58	51	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L58	52	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L58	53	Aero MP3-05	18.08 - 18.66	1.0000	1.0000
L59	1	Safety Line 3/8	17.83 - 18.08	1.0000	1.0000
L59	2	Climbing Pegs	17.83 - 18.08	1.0000	1.0000
L59	18	CU12PSM9P6XXX(1-1/2)	17.83 - 18.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L59	27	HCS 6X12 6AWG(1-3/8)	17.83 - 18.08	1.0000	1.0000
L59	28	HB158-21U6S24-xxM_TMO(1-5/8)	17.83 - 18.08	1.0000	1.0000
L59	32	CCI-SFP-065125	17.83 - 18.08	1.0000	1.0000
L59	41	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L59	49	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L59	50	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L59	51	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L59	52	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L59	53	Aero MP3-05	17.83 - 18.08	1.0000	1.0000
L60	1	Safety Line 3/8	12.83 - 17.83	1.0000	1.0000
L60	2	Climbing Pegs	12.83 - 17.83	1.0000	1.0000
L60	18	CU12PSM9P6XXX(1-1/2)	12.83 - 17.83	1.0000	1.0000
L60	27	HCS 6X12 6AWG(1-3/8)	12.83 - 17.83	1.0000	1.0000
L60	28	HB158-21U6S24-xxM_TMO(1-5/8)	12.83 - 17.83	1.0000	1.0000
L60	32	CCI-SFP-065125	12.83 - 17.83	1.0000	1.0000
L60	41	Aero MP3-05	16.50 - 17.83	1.0000	1.0000
L60	49	Aero MP3-05	12.83 - 17.83	1.0000	1.0000
L60	50	Aero MP3-05	12.83 - 17.83	1.0000	1.0000
L60	51	Aero MP3-05	12.83 - 17.83	1.0000	1.0000
L60	52	Aero MP3-05	12.83 - 17.83	1.0000	1.0000
L60	53	Aero MP3-05	12.83 - 17.83	1.0000	1.0000
L61	1	Safety Line 3/8	10.00 - 12.83	1.0000	1.0000
L61	2	Climbing Pegs	10.00 - 12.83	1.0000	1.0000
L61	18	CU12PSM9P6XXX(1-1/2)	8.00 - 12.83	1.0000	1.0000
L61	27	HCS 6X12 6AWG(1-3/8)	8.00 - 12.83	1.0000	1.0000
L61	28	HB158-21U6S24-xxM_TMO(1-5/8)	8.00 - 12.83	1.0000	1.0000
L61	32	CCI-SFP-065125	7.83 - 12.83	1.0000	1.0000
L61	49	Aero MP3-05	7.83 - 12.83	1.0000	1.0000
L61	50	Aero MP3-05	7.83 - 12.83	1.0000	1.0000
L61	51	Aero MP3-05	7.83 - 12.83	1.0000	1.0000
L61	52	Aero MP3-05	7.83 - 12.83	1.0000	1.0000
L61	53	Aero MP3-05	11.67 - 12.83	1.0000	1.0000
L62	32	CCI-SFP-065125	2.83 - 7.83	1.0000	1.0000
L62	49	Aero MP3-05	2.83 - 7.83	1.0000	1.0000
L62	50	Aero MP3-05	2.83 - 7.83	1.0000	1.0000
L62	51	Aero MP3-05	2.83 - 7.83	1.0000	1.0000
L62	52	Aero MP3-05	2.83 - 7.83	1.0000	1.0000
L63	32	CCI-SFP-065125	0.50 - 2.83	1.0000	1.0000
L63	49	Aero MP3-05	0.50 - 2.83	1.0000	1.0000
L63	50	Aero MP3-05	0.50 - 2.83	1.0000	1.0000
L63	51	Aero MP3-05	0.50 - 2.83	1.0000	1.0000
L63	52	Aero MP3-05	0.50 - 2.83	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
L8	45	Aero MP3-03	102.00 - 103.50	Auto	0.0000
L8	46	Aero MP3-03	102.00 - 103.50	Auto	0.0000
L8	47	Aero MP3-03	102.00 - 103.50	Auto	0.0000
L9	45	Aero MP3-03	101.75 - 102.00	Auto	0.0000
L9	46	Aero MP3-03	101.75 - 102.00	Auto	0.0000
L9	47	Aero MP3-03	101.75 - 102.00	Auto	0.0000
L10	45	Aero MP3-03	96.75 - 101.75	Auto	0.0000
L10	46	Aero MP3-03	96.75 - 101.75	Auto	0.0000
L10	47	Aero MP3-03	96.75 - 101.75	Auto	0.0000
L11	38	CCI-SFP-060100	91.75 - 95.00	Auto	0.0260
L11	39	CCI-SFP-060100	91.75 - 95.00	Auto	0.0260
L11	45	Aero MP3-03	93.50 - 96.75	Auto	0.0000
L11	46	Aero MP3-03	93.50 - 96.75	Auto	0.0000
L11	47	Aero MP3-03	93.50 - 96.75	Auto	0.0000
L12	38	CCI-SFP-060100	90.75 - 91.75	Auto	0.0205

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L12	39	CCI-SFP-060100	90.75 - 91.75	Auto	0.0205
L13	38	CCI-SFP-060100	85.75 - 90.75	Auto	0.0028
L13	39	CCI-SFP-060100	85.75 - 90.75	Auto	0.0028
L13	42	Aero MP3-03	85.75 - 86.50	Auto	0.0000
L13	43	Aero MP3-03	85.75 - 86.50	Auto	0.0000
L13	44	Aero MP3-03	85.75 - 86.50	Auto	0.0000
L14	38	CCI-SFP-060100	85.33 - 85.75	Auto	0.0000
L14	39	CCI-SFP-060100	85.33 - 85.75	Auto	0.0000
L14	42	Aero MP3-03	85.33 - 85.75	Auto	0.0000
L14	43	Aero MP3-03	85.33 - 85.75	Auto	0.0000
L14	44	Aero MP3-03	85.33 - 85.75	Auto	0.0000
L15	38	CCI-SFP-060100	85.08 - 85.33	Auto	0.0572
L15	39	CCI-SFP-060100	85.08 - 85.33	Auto	0.0572
L15	42	Aero MP3-03	85.08 - 85.33	Auto	0.0000
L15	43	Aero MP3-03	85.08 - 85.33	Auto	0.0000
L15	44	Aero MP3-03	85.08 - 85.33	Auto	0.0000
L16	36	CCI-SFP-060100	82.50 - 84.50	Auto	0.0416
L16	37	CCI-SFP-060100	82.50 - 84.50	Auto	0.0416
L16	38	CCI-SFP-060100	82.50 - 85.08	Auto	0.0443
L16	39	CCI-SFP-060100	82.50 - 85.08	Auto	0.0443
L16	42	Aero MP3-03	82.50 - 85.08	Auto	0.0000
L16	43	Aero MP3-03	82.50 - 85.08	Auto	0.0000
L16	44	Aero MP3-03	82.50 - 85.08	Auto	0.0000
L17	36	CCI-SFP-060100	82.25 - 82.50	Auto	0.0000
L17	37	CCI-SFP-060100	82.25 - 82.50	Auto	0.0000
L17	38	CCI-SFP-060100	82.25 - 82.50	Auto	0.0000
L17	39	CCI-SFP-060100	82.25 - 82.50	Auto	0.0000
L17	42	Aero MP3-03	82.25 - 82.50	Auto	0.0000
L17	43	Aero MP3-03	82.25 - 82.50	Auto	0.0000
L17	44	Aero MP3-03	82.25 - 82.50	Auto	0.0000
L18	36	CCI-SFP-060100	82.00 - 82.25	Auto	0.0000
L18	37	CCI-SFP-060100	82.00 - 82.25	Auto	0.0000
L18	38	CCI-SFP-060100	82.00 - 82.25	Auto	0.0000
L18	39	CCI-SFP-060100	82.00 - 82.25	Auto	0.0000
L18	42	Aero MP3-03	82.00 - 82.25	Auto	0.0000
L18	43	Aero MP3-03	82.00 - 82.25	Auto	0.0000
L18	44	Aero MP3-03	82.00 - 82.25	Auto	0.0000
L19	36	CCI-SFP-060100	81.75 - 82.00	Auto	0.0000
L19	37	CCI-SFP-060100	81.75 - 82.00	Auto	0.0000
L19	38	CCI-SFP-060100	81.75 - 82.00	Auto	0.0000
L19	39	CCI-SFP-060100	81.75 - 82.00	Auto	0.0000
L19	42	Aero MP3-03	81.75 - 82.00	Auto	0.0000
L19	43	Aero MP3-03	81.75 - 82.00	Auto	0.0000
L19	44	Aero MP3-03	81.75 - 82.00	Auto	0.0000
L20	36	CCI-SFP-060100	78.83 - 81.75	Auto	0.0000
L20	37	CCI-SFP-060100	78.83 - 81.75	Auto	0.0000
L20	38	CCI-SFP-060100	80.00 - 81.75	Auto	0.0000
L20	39	CCI-SFP-060100	80.00 - 81.75	Auto	0.0000
L20	42	Aero MP3-03	78.83 - 81.75	Auto	0.0000
L20	43	Aero MP3-03	78.83 - 81.75	Auto	0.0000
L20	44	Aero MP3-03	78.83 - 81.75	Auto	0.0000
L20	61	Aero MP3-03	78.83 - 80.00	Auto	0.0000
L20	62	Aero MP3-03	78.83 - 80.00	Auto	0.0000
L20	63	Aero MP3-03	78.83 - 80.00	Auto	0.0000
L21	36	CCI-SFP-060100	78.58 - 78.83	Auto	0.0200
L21	37	CCI-SFP-060100	78.58 - 78.83	Auto	0.0200
L21	42	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L21	43	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L21	44	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L21	61	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L21	62	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L21	63	Aero MP3-03	78.58 - 78.83	Auto	0.0000
L22	36	CCI-SFP-060100	77.66 - 78.58	Auto	0.0147
L22	37	CCI-SFP-060100	77.66 - 78.58	Auto	0.0147
L22	42	Aero MP3-03	77.66 - 78.58	Auto	0.0000
L22	43	Aero MP3-03	77.66 - 78.58	Auto	0.0000
L22	44	Aero MP3-03	77.66 - 78.58	Auto	0.0000
L22	61	Aero MP3-03	77.66 - 78.58	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L22	62	Aero MP3-03	77.66 - 78.58	Auto	0.0000
L22	63	Aero MP3-03	77.66 - 78.58	Auto	0.0000
L23	36	CCI-SFP-060100	77.41 - 77.66	Auto	0.0000
L23	37	CCI-SFP-060100	77.41 - 77.66	Auto	0.0000
L23	42	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L23	43	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L23	44	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L23	61	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L23	62	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L23	63	Aero MP3-03	77.41 - 77.66	Auto	0.0000
L24	36	CCI-SFP-060100	77.17 - 77.41	Auto	0.0000
L24	37	CCI-SFP-060100	77.17 - 77.41	Auto	0.0000
L24	42	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L24	43	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L24	44	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L24	61	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L24	62	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L24	63	Aero MP3-03	77.17 - 77.41	Auto	0.0000
L25	36	CCI-SFP-060100	72.17 - 77.17	Auto	0.0000
L25	37	CCI-SFP-060100	72.17 - 77.17	Auto	0.0000
L25	42	Aero MP3-03	72.17 - 77.17	Auto	0.0000
L25	43	Aero MP3-03	76.50 - 77.17	Auto	0.0000
L25	44	Aero MP3-03	76.50 - 77.17	Auto	0.0000
L25	61	Aero MP3-03	72.17 - 77.17	Auto	0.0000
L25	62	Aero MP3-03	72.17 - 77.17	Auto	0.0000
L25	63	Aero MP3-03	72.17 - 77.17	Auto	0.0000
L26	36	CCI-SFP-060100	67.17 - 72.17	Auto	0.0000
L26	37	CCI-SFP-060100	67.17 - 72.17	Auto	0.0000
L26	42	Aero MP3-03	67.17 - 72.17	Auto	0.0000
L26	54	Aero MP3-05	67.17 - 69.00	Auto	0.0000
L26	55	Aero MP3-05	67.17 - 69.00	Auto	0.0000
L26	56	Aero MP3-05	67.17 - 69.00	Auto	0.0000
L26	61	Aero MP3-03	69.00 - 72.17	Auto	0.0000
L26	62	Aero MP3-03	69.00 - 72.17	Auto	0.0000
L26	63	Aero MP3-03	69.00 - 72.17	Auto	0.0000
L27	36	CCI-SFP-060100	66.58 - 67.17	Auto	0.0000
L27	37	CCI-SFP-060100	66.58 - 67.17	Auto	0.0000
L27	42	Aero MP3-03	66.58 - 67.17	Auto	0.0000
L27	54	Aero MP3-05	66.58 - 67.17	Auto	0.0000
L27	55	Aero MP3-05	66.58 - 67.17	Auto	0.0000
L27	56	Aero MP3-05	66.58 - 67.17	Auto	0.0000
L28	36	CCI-SFP-060100	66.33 - 66.58	Auto	0.0000
L28	37	CCI-SFP-060100	66.33 - 66.58	Auto	0.0000
L28	42	Aero MP3-03	66.33 - 66.58	Auto	0.0000
L28	54	Aero MP3-05	66.33 - 66.58	Auto	0.0000
L28	55	Aero MP3-05	66.33 - 66.58	Auto	0.0000
L28	56	Aero MP3-05	66.33 - 66.58	Auto	0.0000
L29	36	CCI-SFP-060100	66.16 - 66.33	Auto	0.0000
L29	37	CCI-SFP-060100	66.16 - 66.33	Auto	0.0000
L29	42	Aero MP3-03	66.16 - 66.33	Auto	0.0000
L29	54	Aero MP3-05	66.16 - 66.33	Auto	0.0000
L29	55	Aero MP3-05	66.16 - 66.33	Auto	0.0000
L29	56	Aero MP3-05	66.16 - 66.33	Auto	0.0000
L30	36	CCI-SFP-060100	65.91 - 66.16	Auto	0.0000
L30	37	CCI-SFP-060100	65.91 - 66.16	Auto	0.0000
L30	42	Aero MP3-03	65.91 - 66.16	Auto	0.0000
L30	54	Aero MP3-05	65.91 - 66.16	Auto	0.0000
L30	55	Aero MP3-05	65.91 - 66.16	Auto	0.0000
L30	56	Aero MP3-05	65.91 - 66.16	Auto	0.0000
L31	36	CCI-SFP-060100	64.50 - 65.91	Auto	0.0000
L31	37	CCI-SFP-060100	64.50 - 65.91	Auto	0.0000
L31	42	Aero MP3-03	62.66 - 65.91	Auto	0.0000
L31	54	Aero MP3-05	62.66 - 65.91	Auto	0.0000
L31	55	Aero MP3-05	62.66 - 65.91	Auto	0.0000
L31	56	Aero MP3-05	62.66 - 65.91	Auto	0.0000
L32	42	Aero MP3-03	62.41 - 62.66	Auto	0.0000
L32	54	Aero MP3-05	62.41 - 62.66	Auto	0.0000
L32	55	Aero MP3-05	62.41 - 62.66	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L32	56	Aero MP3-05	62.41 - 62.66	Auto	0.0000
L33	35	CCI-SFP-060100	60.00 - 62.00	Auto	0.0000
L33	42	Aero MP3-03	61.50 - 62.41	Auto	0.0000
L33	54	Aero MP3-05	60.00 - 62.41	Auto	0.0000
L33	55	Aero MP3-05	60.00 - 62.41	Auto	0.0000
L33	56	Aero MP3-05	60.00 - 62.41	Auto	0.0000
L34	35	CCI-SFP-060100	59.75 - 60.00	Auto	0.0000
L34	54	Aero MP3-05	59.75 - 60.00	Auto	0.0000
L34	55	Aero MP3-05	59.75 - 60.00	Auto	0.0000
L34	56	Aero MP3-05	59.75 - 60.00	Auto	0.0000
L35	35	CCI-SFP-060100	54.75 - 59.75	Auto	0.0000
L35	54	Aero MP3-05	54.75 - 59.75	Auto	0.0000
L35	55	Aero MP3-05	54.75 - 59.75	Auto	0.0000
L35	56	Aero MP3-05	54.75 - 59.75	Auto	0.0000
L36	35	CCI-SFP-060100	52.83 - 54.75	Auto	0.0000
L36	54	Aero MP3-05	52.83 - 54.75	Auto	0.0000
L36	55	Aero MP3-05	52.83 - 54.75	Auto	0.0000
L36	56	Aero MP3-05	52.83 - 54.75	Auto	0.0000
L37	35	CCI-SFP-060100	52.58 - 52.83	Auto	0.0000
L37	54	Aero MP3-05	52.58 - 52.83	Auto	0.0000
L37	55	Aero MP3-05	52.58 - 52.83	Auto	0.0000
L37	56	Aero MP3-05	52.58 - 52.83	Auto	0.0000
L38	35	CCI-SFP-060100	51.41 - 52.58	Auto	0.0000
L38	54	Aero MP3-05	51.41 - 52.58	Auto	0.0000
L38	55	Aero MP3-05	51.41 - 52.58	Auto	0.0000
L38	56	Aero MP3-05	51.41 - 52.58	Auto	0.0000
L38	58	Aero MP3-05	51.41 - 52.25	Auto	0.0000
L38	59	Aero MP3-05	51.41 - 52.25	Auto	0.0000
L38	60	Aero MP3-05	51.41 - 52.25	Auto	0.0000
L39	35	CCI-SFP-060100	51.16 - 51.41	Auto	0.0000
L39	54	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L39	55	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L39	56	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L39	58	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L39	59	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L39	60	Aero MP3-05	51.16 - 51.41	Auto	0.0000
L40	35	CCI-SFP-060100	47.00 - 51.16	Auto	0.0000
L40	53	Aero MP3-05	46.50 - 46.67	Auto	0.0000
L40	54	Aero MP3-05	49.00 - 51.16	Auto	0.0000
L40	55	Aero MP3-05	49.00 - 51.16	Auto	0.0000
L40	56	Aero MP3-05	49.00 - 51.16	Auto	0.0000
L40	58	Aero MP3-05	46.50 - 51.16	Auto	0.0000
L40	59	Aero MP3-05	46.50 - 51.16	Auto	0.0000
L40	60	Aero MP3-05	46.50 - 51.16	Auto	0.0000
L41	33	CCI-SFP-060100	45.50 - 46.50	Auto	0.0000
L41	34	CCI-SFP-060100	45.50 - 46.50	Auto	0.0000
L41	53	Aero MP3-05	45.50 - 46.50	Auto	0.0000
L41	58	Aero MP3-05	45.50 - 46.50	Auto	0.0000
L41	59	Aero MP3-05	45.50 - 46.50	Auto	0.0000
L41	60	Aero MP3-05	45.50 - 46.50	Auto	0.0000
L42	33	CCI-SFP-060100	44.25 - 45.50	Auto	0.0000
L42	34	CCI-SFP-060100	44.25 - 45.50	Auto	0.0000
L42	51	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L42	52	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L42	53	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L42	58	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L42	59	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L42	60	Aero MP3-05	44.25 - 45.50	Auto	0.0000
L43	33	CCI-SFP-060100	44.00 - 44.25	Auto	0.0000
L43	34	CCI-SFP-060100	44.00 - 44.25	Auto	0.0000
L43	51	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L43	52	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L43	53	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L43	58	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L43	59	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L43	60	Aero MP3-05	44.00 - 44.25	Auto	0.0000
L44	33	CCI-SFP-060100	43.08 - 44.00	Auto	0.0000
L44	34	CCI-SFP-060100	43.08 - 44.00	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L44	51	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L44	52	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L44	53	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L44	58	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L44	59	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L44	60	Aero MP3-05	43.08 - 44.00	Auto	0.0000
L45	33	CCI-SFP-060100	42.83 - 43.08	Auto	0.0000
L45	34	CCI-SFP-060100	42.83 - 43.08	Auto	0.0000
L45	51	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L45	52	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L45	53	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L45	58	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L45	59	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L45	60	Aero MP3-05	42.83 - 43.08	Auto	0.0000
L46	33	CCI-SFP-060100	37.83 - 42.83	Auto	0.0000
L46	34	CCI-SFP-060100	37.83 - 42.83	Auto	0.0000
L46	51	Aero MP3-05	37.83 - 42.83	Auto	0.0000
L46	52	Aero MP3-05	37.83 - 42.83	Auto	0.0000
L46	53	Aero MP3-05	37.83 - 42.83	Auto	0.0000
L46	58	Aero MP3-05	40.25 - 42.83	Auto	0.0000
L46	59	Aero MP3-05	40.25 - 42.83	Auto	0.0000
L46	60	Aero MP3-05	40.25 - 42.83	Auto	0.0000
L47	33	CCI-SFP-060100	32.83 - 37.83	Auto	0.0000
L47	34	CCI-SFP-060100	32.83 - 37.83	Auto	0.0000
L47	51	Aero MP3-05	32.83 - 37.83	Auto	0.0000
L47	52	Aero MP3-05	32.83 - 37.83	Auto	0.0000
L47	53	Aero MP3-05	32.83 - 37.83	Auto	0.0000
L48	32	CCI-SFP-065125	29.25 - 30.50	Auto	0.0000
L48	33	CCI-SFP-060100	29.25 - 32.83	Auto	0.0000
L48	34	CCI-SFP-060100	29.25 - 32.83	Auto	0.0000
L48	51	Aero MP3-05	29.25 - 32.83	Auto	0.0000
L48	52	Aero MP3-05	29.25 - 32.83	Auto	0.0000
L48	53	Aero MP3-05	29.25 - 32.83	Auto	0.0000
L49	32	CCI-SFP-065125	29.00 - 29.25	Auto	0.0000
L49	33	CCI-SFP-060100	29.00 - 29.25	Auto	0.0000
L49	34	CCI-SFP-060100	29.00 - 29.25	Auto	0.0000
L49	51	Aero MP3-05	29.00 - 29.25	Auto	0.0000
L49	52	Aero MP3-05	29.00 - 29.25	Auto	0.0000
L49	53	Aero MP3-05	29.00 - 29.25	Auto	0.0000
L50	32	CCI-SFP-065125	27.75 - 29.00	Auto	0.0000
L50	33	CCI-SFP-060100	27.75 - 29.00	Auto	0.0000
L50	34	CCI-SFP-060100	27.75 - 29.00	Auto	0.0000
L50	51	Aero MP3-05	27.75 - 29.00	Auto	0.0000
L50	52	Aero MP3-05	27.75 - 29.00	Auto	0.0000
L50	53	Aero MP3-05	27.75 - 29.00	Auto	0.0000
L51	32	CCI-SFP-065125	27.50 - 27.75	Auto	0.0000
L51	33	CCI-SFP-060100	27.50 - 27.75	Auto	0.0000
L51	34	CCI-SFP-060100	27.50 - 27.75	Auto	0.0000
L51	51	Aero MP3-05	27.50 - 27.75	Auto	0.0000
L51	52	Aero MP3-05	27.50 - 27.75	Auto	0.0000
L51	53	Aero MP3-05	27.50 - 27.75	Auto	0.0000
L52	32	CCI-SFP-065125	24.08 - 27.50	Auto	0.0000
L52	33	CCI-SFP-060100	24.08 - 27.50	Auto	0.0000
L52	34	CCI-SFP-060100	24.08 - 27.50	Auto	0.0000
L52	41	Aero MP3-05	24.08 - 26.50	Auto	0.0000
L52	51	Aero MP3-05	24.08 - 27.50	Auto	0.0000
L52	52	Aero MP3-05	24.08 - 27.50	Auto	0.0000
L52	53	Aero MP3-05	24.08 - 27.50	Auto	0.0000
L53	32	CCI-SFP-065125	23.83 - 24.08	Auto	0.0000
L53	33	CCI-SFP-060100	23.83 - 24.08	Auto	0.0000
L53	34	CCI-SFP-060100	23.83 - 24.08	Auto	0.0000
L53	41	Aero MP3-05	23.83 - 24.08	Auto	0.0000
L53	51	Aero MP3-05	23.83 - 24.08	Auto	0.0000
L53	52	Aero MP3-05	23.83 - 24.08	Auto	0.0000
L53	53	Aero MP3-05	23.83 - 24.08	Auto	0.0000
L54	32	CCI-SFP-065125	23.50 - 23.83	Auto	0.0000
L54	33	CCI-SFP-060100	23.50 - 23.83	Auto	0.0000
L54	34	CCI-SFP-060100	23.50 - 23.83	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L54	41	Aero MP3-05	23.50 - 23.83	Auto	0.0000
L54	51	Aero MP3-05	23.50 - 23.83	Auto	0.0000
L54	52	Aero MP3-05	23.50 - 23.83	Auto	0.0000
L54	53	Aero MP3-05	23.50 - 23.83	Auto	0.0000
L55	32	CCI-SFP-065125	23.25 - 23.50	Auto	0.0000
L55	33	CCI-SFP-060100	23.25 - 23.50	Auto	0.0000
L55	34	CCI-SFP-060100	23.25 - 23.50	Auto	0.0000
L55	41	Aero MP3-05	23.25 - 23.50	Auto	0.0000
L55	51	Aero MP3-05	23.25 - 23.50	Auto	0.0000
L55	52	Aero MP3-05	23.25 - 23.50	Auto	0.0000
L55	53	Aero MP3-05	23.25 - 23.50	Auto	0.0000
L56	32	CCI-SFP-065125	18.91 - 23.25	Auto	0.0000
L56	33	CCI-SFP-060100	21.50 - 23.25	Auto	0.0000
L56	34	CCI-SFP-060100	21.50 - 23.25	Auto	0.0000
L56	41	Aero MP3-05	18.91 - 23.25	Auto	0.0000
L56	49	Aero MP3-05	18.91 - 20.50	Auto	0.0000
L56	50	Aero MP3-05	18.91 - 20.50	Auto	0.0000
L56	51	Aero MP3-05	18.91 - 23.25	Auto	0.0000
L56	52	Aero MP3-05	18.91 - 23.25	Auto	0.0000
L56	53	Aero MP3-05	18.91 - 23.25	Auto	0.0000
L57	32	CCI-SFP-065125	18.66 - 18.91	Auto	0.0000
L57	41	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L57	49	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L57	50	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L57	51	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L57	52	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L57	53	Aero MP3-05	18.66 - 18.91	Auto	0.0000
L58	32	CCI-SFP-065125	18.08 - 18.66	Auto	0.0000
L58	41	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L58	49	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L58	50	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L58	51	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L58	52	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L58	53	Aero MP3-05	18.08 - 18.66	Auto	0.0000
L59	32	CCI-SFP-065125	17.83 - 18.08	Auto	0.0000
L59	41	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L59	49	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L59	50	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L59	51	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L59	52	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L59	53	Aero MP3-05	17.83 - 18.08	Auto	0.0000
L60	32	CCI-SFP-065125	12.83 - 17.83	Auto	0.0000
L60	41	Aero MP3-05	16.50 - 17.83	Auto	0.0000
L60	49	Aero MP3-05	12.83 - 17.83	Auto	0.0000
L60	50	Aero MP3-05	12.83 - 17.83	Auto	0.0000
L60	51	Aero MP3-05	12.83 - 17.83	Auto	0.0000
L60	52	Aero MP3-05	12.83 - 17.83	Auto	0.0000
L60	53	Aero MP3-05	12.83 - 17.83	Auto	0.0000
L61	32	CCI-SFP-065125	7.83 - 12.83	Auto	0.0000
L61	49	Aero MP3-05	7.83 - 12.83	Auto	0.0000
L61	50	Aero MP3-05	7.83 - 12.83	Auto	0.0000
L61	51	Aero MP3-05	7.83 - 12.83	Auto	0.0000
L61	52	Aero MP3-05	7.83 - 12.83	Auto	0.0000
L61	53	Aero MP3-05	11.67 - 12.83	Auto	0.0000
L62	32	CCI-SFP-065125	2.83 - 7.83	Auto	0.0000
L62	49	Aero MP3-05	2.83 - 7.83	Auto	0.0000
L62	50	Aero MP3-05	2.83 - 7.83	Auto	0.0000
L62	51	Aero MP3-05	2.83 - 7.83	Auto	0.0000
L62	52	Aero MP3-05	2.83 - 7.83	Auto	0.0000
L63	32	CCI-SFP-065125	0.50 - 2.83	Auto	0.0000
L63	49	Aero MP3-05	0.50 - 2.83	Auto	0.0000
L63	50	Aero MP3-05	0.50 - 2.83	Auto	0.0000
L63	51	Aero MP3-05	0.50 - 2.83	Auto	0.0000
L63	52	Aero MP3-05	0.50 - 2.83	Auto	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K	
Lightning Rod 5/8" x 4'	A	From Leg	0.00	0.0000	140.00	No Ice	0.25	0.25	0.03
			0.00			1/2" Ice	0.66	0.66	0.03
			2.00			1" Ice	0.97	0.97	0.04
						2" Ice	1.49	1.49	0.06

6' x 2" Mount Pipe	A	From Leg	4.00	0.0000	139.00	No Ice	1.43	1.43	0.02
			0.00			1/2" Ice	1.92	1.92	0.03
			0.00			1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
6' x 2" Mount Pipe	B	From Leg	4.00	0.0000	139.00	No Ice	1.43	1.43	0.02
			0.00			1/2" Ice	1.92	1.92	0.03
			0.00			1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
6' x 2" Mount Pipe	C	From Leg	4.00	0.0000	139.00	No Ice	1.43	1.43	0.02
			0.00			1/2" Ice	1.92	1.92	0.03
			0.00			1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
Platform Mount [LP 1201-1_HR-1]	A	None		0.0000	139.00	No Ice	26.39	26.39	2.36
						1/2" Ice	31.40	31.40	3.06
						1" Ice	36.20	36.20	3.86
						2" Ice	45.40	45.40	5.76

VV-65A-R1_TMO w/ Mount Pipe	A	From Leg	4.00	0.0000	139.00	No Ice	4.46	2.69	0.05
			0.00			1/2" Ice	4.91	3.10	0.10
			0.00			1" Ice	5.36	3.52	0.15
						2" Ice	6.32	4.41	0.28
VV-65A-R1_TMO w/ Mount Pipe	B	From Leg	4.00	0.0000	139.00	No Ice	4.46	2.69	0.05
			0.00			1/2" Ice	4.91	3.10	0.10
			0.00			1" Ice	5.36	3.52	0.15
						2" Ice	6.32	4.41	0.28
VV-65A-R1_TMO w/ Mount Pipe	C	From Leg	4.00	0.0000	139.00	No Ice	4.46	2.69	0.05
			0.00			1/2" Ice	4.91	3.10	0.10
			0.00			1" Ice	5.36	3.52	0.15
						2" Ice	6.32	4.41	0.28
AIR 6419 B41_TMO_CCIV2 w/ Mount Pipe	A	From Leg	4.00	0.0000	139.00	No Ice	5.79	2.97	0.10
			0.00			1/2" Ice	6.24	3.34	0.14
			0.00			1" Ice	6.71	3.73	0.19
						2" Ice	7.71	4.56	0.32
AIR 6419 B41_TMO_CCIV2 w/ Mount Pipe	B	From Leg	4.00	0.0000	139.00	No Ice	5.79	2.97	0.10
			0.00			1/2" Ice	6.24	3.34	0.14
			0.00			1" Ice	6.71	3.73	0.19
						2" Ice	7.71	4.56	0.32
AIR 6419 B41_TMO_CCIV2 w/ Mount Pipe	C	From Leg	4.00	0.0000	139.00	No Ice	5.79	2.97	0.10
			0.00			1/2" Ice	6.24	3.34	0.14
			0.00			1" Ice	6.71	3.73	0.19
						2" Ice	7.71	4.56	0.32
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	A	From Leg	4.00	0.0000	139.00	No Ice	14.69	6.87	0.18
			0.00			1/2" Ice	15.46	7.55	0.31
			0.00			1" Ice	16.23	8.25	0.45
						2" Ice	17.82	9.67	0.78
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	B	From Leg	4.00	0.0000	139.00	No Ice	14.69	6.87	0.18
			0.00			1/2" Ice	15.46	7.55	0.31
			0.00			1" Ice	16.23	8.25	0.45
						2" Ice	17.82	9.67	0.78
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	C	From Leg	4.00	0.0000	139.00	No Ice	14.69	6.87	0.18
			0.00			1/2" Ice	15.46	7.55	0.31
			0.00			1" Ice	16.23	8.25	0.45
						2" Ice	17.82	9.67	0.78
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.00	0.0000	139.00	No Ice	2.14	1.69	0.11
			0.00			1/2" Ice	2.32	1.85	0.13
			0.00			1" Ice	2.51	2.02	0.16
						2" Ice	2.91	2.39	0.22

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.00	0.0000	139.00	No Ice	2.14	1.69	0.11	
			0.00			1/2" Ice	2.32	1.85	0.13	
			0.00			1" Ice	2.51	2.02	0.16	
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.00	0.0000	139.00	No Ice	2.14	1.69	0.11	
			0.00			1/2" Ice	2.32	1.85	0.13	
			0.00			1" Ice	2.51	2.02	0.16	
Radio 4480_TMOV2	A	From Leg	4.00	0.0000	139.00	No Ice	2.88	1.40	0.08	
			0.00			1/2" Ice	3.09	1.56	0.10	
			0.00			1" Ice	3.31	1.73	0.13	
Radio 4480_TMOV2	B	From Leg	4.00	0.0000	139.00	No Ice	2.88	1.40	0.08	
			0.00			1/2" Ice	3.09	1.56	0.10	
			0.00			1" Ice	3.31	1.73	0.13	
Radio 4480_TMOV2	C	From Leg	4.00	0.0000	139.00	No Ice	2.88	1.40	0.08	
			0.00			1/2" Ice	3.09	1.56	0.10	
			0.00			1" Ice	3.31	1.73	0.13	
Support Rail Kit [# HRK12]	C	None		0.0000	139.00	No Ice	4.56	4.56	0.25	
						1/2" Ice	6.39	6.39	0.31	
						1" Ice	8.18	8.18	0.40	
Reinforcement Kit [# PRK-SFS]	C	None		0.0000	139.00	No Ice	11.66	11.66	0.66	
						1/2" Ice	16.96	16.96	0.30	
						1" Ice	22.08	22.08	0.32	

TME-PCS 1900MHz 4x45W-65MHz	A	From Leg	2.00	0.0000	137.00	No Ice	2.32	2.24	0.06	
			0.00			1/2" Ice	2.53	2.44	0.08	
			0.00			1" Ice	2.74	2.65	0.11	
TME-PCS 1900MHz 4x45W-65MHz	B	From Leg	2.00	0.0000	137.00	No Ice	2.32	2.24	0.06	
			0.00			1/2" Ice	2.53	2.44	0.08	
			0.00			1" Ice	2.74	2.65	0.11	
TME-PCS 1900MHz 4x45W-65MHz	C	From Leg	2.00	0.0000	137.00	No Ice	2.32	2.24	0.06	
			0.00			1/2" Ice	2.53	2.44	0.08	
			0.00			1" Ice	2.74	2.65	0.11	
TME-800MHz 2X50W RRH W/FILTER	A	From Leg	2.00	0.0000	137.00	No Ice	2.06	1.93	0.06	
			0.00			1/2" Ice	2.24	2.11	0.09	
			3.00			1" Ice	2.43	2.29	0.11	
TME-800MHz 2X50W RRH W/FILTER	B	From Leg	2.00	0.0000	137.00	No Ice	2.06	1.93	0.06	
			0.00			1/2" Ice	2.24	2.11	0.09	
			3.00			1" Ice	2.43	2.29	0.11	
TME-800MHz 2X50W RRH W/FILTER	C	From Leg	2.00	0.0000	137.00	No Ice	2.06	1.93	0.06	
			0.00			1/2" Ice	2.24	2.11	0.09	
			3.00			1" Ice	2.43	2.29	0.11	
Pipe Mount [PM 601-3]	A	None		0.0000	137.00	No Ice	3.17	3.17	0.20	
						1/2" Ice	3.79	3.79	0.23	
						1" Ice	4.42	4.42	0.28	

RRUS 11	A	From Leg	2.00	0.0000	130.00	No Ice	2.78	1.19	0.05	
			0.00			1/2" Ice	2.99	1.33	0.07	
			2.00			1" Ice	3.21	1.49	0.09	
RRUS 11	B	From Leg	2.00	0.0000	130.00	No Ice	2.78	1.19	0.05	
			0.00			1/2" Ice	2.99	1.33	0.07	
			2.00			1" Ice	3.21	1.49	0.09	

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
			ft	ft	ft	°	ft	ft ²	ft ²	K
RRUS 11	C	From Leg	2.00	0.0000	130.00		2" Ice	3.66	1.83	0.15
			0.00				No Ice	2.78	1.19	0.05
			2.00				1/2" Ice	2.99	1.33	0.07
							1" Ice	3.21	1.49	0.09
RRUS 32 B2	A	From Leg	2.00	0.0000	130.00		2" Ice	3.66	1.83	0.15
			0.00				No Ice	2.73	1.67	0.05
			0.00				1/2" Ice	2.95	1.86	0.07
							1" Ice	3.18	2.05	0.10
RRUS 32 B2	B	From Leg	2.00	0.0000	130.00		2" Ice	3.66	2.46	0.16
			0.00				No Ice	2.73	1.67	0.05
			0.00				1/2" Ice	2.95	1.86	0.07
							1" Ice	3.18	2.05	0.10
RRUS 32 B2	C	From Leg	2.00	0.0000	130.00		2" Ice	3.66	2.46	0.16
			0.00				No Ice	2.73	1.67	0.05
			0.00				1/2" Ice	2.95	1.86	0.07
							1" Ice	3.18	2.05	0.10
Pipe Mount [PM 601-3]	A	None		0.0000	130.00		2" Ice	3.66	2.46	0.16
							No Ice	3.17	3.17	0.20
							1/2" Ice	3.79	3.79	0.23
							1" Ice	4.42	4.42	0.28
***** EPBQ-654L8H8-L2 w/ Mount Pipe	A	From Leg	4.00	0.0000	128.00		2" Ice	5.76	5.76	0.40
			0.00				No Ice	14.86	6.25	0.12
			2.00				1/2" Ice	15.72	7.02	0.23
							1" Ice	16.59	7.80	0.35
EPBQ-654L8H8-L2 w/ Mount Pipe	B	From Leg	4.00	0.0000	128.00		2" Ice	18.38	9.41	0.64
			0.00				No Ice	14.86	6.25	0.12
			2.00				1/2" Ice	15.72	7.02	0.23
							1" Ice	16.59	7.80	0.35
EPBQ-654L8H8-L2 w/ Mount Pipe	C	From Leg	4.00	0.0000	128.00		2" Ice	18.38	9.41	0.64
			0.00				No Ice	14.86	6.25	0.12
			2.00				1/2" Ice	15.72	7.02	0.23
							1" Ice	16.59	7.80	0.35
RRUS 4426 B66	A	From Leg	4.00	0.0000	128.00		2" Ice	18.38	9.41	0.64
			0.00				No Ice	1.64	0.73	0.05
			2.00				1/2" Ice	1.80	0.84	0.06
							1" Ice	1.97	0.97	0.08
RRUS 4426 B66	B	From Leg	4.00	0.0000	128.00		2" Ice	2.33	1.24	0.11
			0.00				No Ice	1.64	0.73	0.05
			2.00				1/2" Ice	1.80	0.84	0.06
							1" Ice	1.97	0.97	0.08
RRUS 4426 B66	C	From Leg	4.00	0.0000	128.00		2" Ice	2.33	1.24	0.11
			0.00				No Ice	1.64	0.73	0.05
			2.00				1/2" Ice	1.80	0.84	0.06
							1" Ice	1.97	0.97	0.08
RRUS 32 B30	A	From Leg	4.00	0.0000	128.00		2" Ice	2.33	1.24	0.11
			0.00				No Ice	2.69	1.57	0.06
			2.00				1/2" Ice	2.91	1.76	0.08
							1" Ice	3.14	1.95	0.10
RRUS 32 B30	B	From Leg	4.00	0.0000	128.00		2" Ice	3.61	2.35	0.16
			0.00				No Ice	2.69	1.57	0.06
			2.00				1/2" Ice	2.91	1.76	0.08
							1" Ice	3.14	1.95	0.10
RRUS 32 B30	C	From Leg	4.00	0.0000	128.00		2" Ice	3.61	2.35	0.16
			0.00				No Ice	2.69	1.57	0.06
			2.00				1/2" Ice	2.91	1.76	0.08
							1" Ice	3.14	1.95	0.10
DC6-48-60-18-8F	C	From Leg	4.00	0.0000	128.00		2" Ice	2.04	2.04	0.11
			0.00				No Ice	0.92	0.92	0.02
			0.00				1/2" Ice	1.46	1.46	0.04
							1" Ice	1.64	1.64	0.06
DC6-48-60-18-8C	C	From Leg	4.00	0.0000	128.00		2" Ice	2.04	2.04	0.11
			0.00				No Ice	2.74	2.74	0.03
			2.00				1/2" Ice	2.96	2.96	0.05
							1" Ice	3.20	3.20	0.08

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
			ft	ft	ft	°	ft	ft ²	ft ²	K
DC6-48-60-18-8C	A	From Leg	4.00	0.0000	128.00	2" Ice	3.68	3.68	0.15	
			0.00			No Ice	2.74	2.74	0.03	
			2.00			1/2" Ice	2.96	2.96	0.05	
						1" Ice	3.20	3.20	0.08	
(2) 7'X2" Horizontal Pipe	A	From Leg	4.00	0.0000	128.00	2" Ice	3.68	3.68	0.15	
			0.00			No Ice	1.33	0.01	0.02	
			0.00			1/2" Ice	2.05	0.04	0.29	
						1" Ice	2.64	0.09	0.04	
(2) 7'X2" Horizontal Pipe	B	From Leg	4.00	0.0000	128.00	2" Ice	3.52	0.21	0.09	
			0.00			No Ice	1.33	0.01	0.02	
			0.00			1/2" Ice	2.05	0.04	0.29	
						1" Ice	2.64	0.09	0.04	
(2) 7'X2" Horizontal Pipe	C	From Leg	4.00	0.0000	128.00	2" Ice	3.52	0.21	0.09	
			0.00			No Ice	1.33	0.01	0.02	
			0.00			1/2" Ice	2.05	0.04	0.29	
						1" Ice	2.64	0.09	0.04	
T-Arm Mount [TA 601-3]	A	None		0.0000	128.00	2" Ice	3.52	0.21	0.09	
						No Ice	12.56	12.56	0.73	
						1/2" Ice	15.36	15.36	0.94	
						1" Ice	18.04	18.04	1.21	
***						2" Ice	23.69	23.69	1.92	
AIR 6419 B77G_CCIV3	A	From Leg	4.00	0.0000	128.00	No Ice	3.84	1.51	0.06	
			0.00			1/2" Ice	4.21	1.81	0.08	
			4.00			1" Ice	4.60	2.12	0.12	
						2" Ice	5.41	2.79	0.20	
AIR 6419 B77G_CCIV3	B	From Leg	4.00	0.0000	128.00	No Ice	3.84	1.51	0.06	
			0.00			1/2" Ice	4.21	1.81	0.08	
			4.00			1" Ice	4.60	2.12	0.12	
						2" Ice	5.41	2.79	0.20	
AIR 6419 B77G_CCIV3	C	From Leg	4.00	0.0000	128.00	No Ice	3.84	1.51	0.06	
			0.00			1/2" Ice	4.21	1.81	0.08	
			4.00			1" Ice	4.60	2.12	0.12	
						2" Ice	5.41	2.79	0.20	
AIR 6449 B77D_CCVI2	A	From Leg	4.00	0.0000	128.00	No Ice	3.64	1.72	0.08	
			0.00			1/2" Ice	4.00	2.02	0.11	
			0.00			1" Ice	4.37	2.33	0.14	
						2" Ice	5.16	2.99	0.22	
AIR 6449 B77D_CCVI2	B	From Leg	4.00	0.0000	128.00	No Ice	3.64	1.72	0.08	
			0.00			1/2" Ice	4.00	2.02	0.11	
			0.00			1" Ice	4.37	2.33	0.14	
						2" Ice	5.16	2.99	0.22	
AIR 6449 B77D_CCVI2	C	From Leg	4.00	0.0000	128.00	No Ice	3.64	1.72	0.08	
			0.00			1/2" Ice	4.00	2.02	0.11	
			0.00			1" Ice	4.37	2.33	0.14	
						2" Ice	5.16	2.99	0.22	
DMP65R-BU8D w/ Mount Pipe	A	From Leg	4.00	0.0000	128.00	No Ice	15.89	7.89	0.14	
			0.00			1/2" Ice	16.81	8.74	0.25	
			2.00			1" Ice	17.76	9.60	0.38	
						2" Ice	19.70	11.37	0.68	
DMP65R-BU8D w/ Mount Pipe	B	From Leg	4.00	0.0000	128.00	No Ice	15.89	7.89	0.14	
			0.00			1/2" Ice	16.81	8.74	0.25	
			2.00			1" Ice	17.76	9.60	0.38	
						2" Ice	19.70	11.37	0.68	
DMP65R-BU8D w/ Mount Pipe	C	From Leg	4.00	0.0000	128.00	No Ice	15.89	7.89	0.14	
			0.00			1/2" Ice	16.81	8.74	0.25	
			2.00			1" Ice	17.76	9.60	0.38	
						2" Ice	19.70	11.37	0.68	
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000	128.00	No Ice	1.97	1.41	0.07	
			0.00			1/2" Ice	2.14	1.56	0.09	
			2.00			1" Ice	2.33	1.73	0.11	
						2" Ice	2.72	2.07	0.16	
(2) RRUS 4449 B5/B12	B	From Leg	4.00	0.0000	128.00	No Ice	1.97	1.41	0.07	
			0.00			1/2" Ice	2.14	1.56	0.09	
			2.00			1" Ice	2.33	1.73	0.11	

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
			ft	ft	ft	°	ft	ft ²	ft ²	K
RRUS 4478 B14_CCIV2	A	From Leg	4.00	0.0000	128.00	2" Ice	2.72	2.07	0.16	
			0.00			No Ice	2.02	1.25	0.06	
			2.00			1/2" Ice	2.20	1.40	0.08	
						1" Ice	2.39	1.55	0.10	
RRUS 4478 B14_CCIV2	B	From Leg	4.00	0.0000	128.00	2" Ice	2.78	1.89	0.15	
			0.00			No Ice	2.02	1.25	0.06	
			2.00			1/2" Ice	2.20	1.40	0.08	
						1" Ice	2.39	1.55	0.10	
RRUS 4478 B14_CCIV2	C	From Leg	4.00	0.0000	128.00	2" Ice	2.78	1.89	0.15	
			0.00			No Ice	2.02	1.25	0.06	
			2.00			1/2" Ice	2.20	1.40	0.08	
						1" Ice	2.39	1.55	0.10	
RRUS 4415 B25_CCIV2	A	From Leg	4.00	0.0000	128.00	2" Ice	2.78	1.89	0.15	
			0.00			No Ice	1.84	0.82	0.05	
			2.00			1/2" Ice	2.01	0.94	0.06	
						1" Ice	2.19	1.07	0.08	
RRUS 4415 B25_CCIV2	B	From Leg	4.00	0.0000	128.00	2" Ice	2.57	1.37	0.12	
			0.00			No Ice	1.84	0.82	0.05	
			2.00			1/2" Ice	2.01	0.94	0.06	
						1" Ice	2.19	1.07	0.08	
RRUS 4415 B25_CCIV2	C	From Leg	4.00	0.0000	128.00	2" Ice	2.57	1.37	0.12	
			0.00			No Ice	1.84	0.82	0.05	
			2.00			1/2" Ice	2.01	0.94	0.06	
						1" Ice	2.19	1.07	0.08	
DC6-48-60-0-8C-EV	C	From Leg	4.00	0.0000	128.00	2" Ice	2.57	1.37	0.12	
			0.00			No Ice	2.74	4.78	0.03	
			2.00			1/2" Ice	2.96	5.06	0.06	
						1" Ice	3.20	5.35	0.10	
8' x 2" Mount Pipe	A	From Leg	4.00	0.0000	128.00	2" Ice	3.68	5.95	0.20	
			0.00			No Ice	1.90	1.90	0.03	
			0.00			1/2" Ice	2.73	2.73	0.04	
						1" Ice	3.40	3.40	0.06	
8' x 2" Mount Pipe	B	From Leg	4.00	0.0000	128.00	2" Ice	4.40	4.40	0.12	
			0.00			No Ice	1.90	1.90	0.03	
			0.00			1/2" Ice	2.73	2.73	0.04	
						1" Ice	3.40	3.40	0.06	
8' x 2" Mount Pipe	C	From Leg	4.00	0.0000	128.00	2" Ice	4.40	4.40	0.12	
			0.00			No Ice	1.90	1.90	0.03	
			0.00			1/2" Ice	2.73	2.73	0.04	
						1" Ice	3.40	3.40	0.06	
Support Kicker Kit [#PRK-SFS-L]	A	None		0.0000	128.00	2" Ice	4.40	4.40	0.12	
						No Ice	11.84	11.84	0.28	
						1/2" Ice	16.96	16.96	0.30	
						1" Ice	22.08	22.08	0.32	
*****						2" Ice	32.32	32.32	0.36	
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00	0.0000	118.00	2" Ice	10.11	6.12	0.52	
			0.00			No Ice	8.01	4.23	0.11	
			0.00			1/2" Ice	8.52	4.69	0.19	
						1" Ice	9.04	5.16	0.29	
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00	0.0000	118.00	2" Ice	10.11	6.12	0.52	
			0.00			No Ice	8.01	4.23	0.11	
			0.00			1/2" Ice	8.52	4.69	0.19	
						1" Ice	9.04	5.16	0.29	
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00	0.0000	118.00	2" Ice	10.11	6.12	0.52	
			0.00			No Ice	8.01	4.23	0.11	
			0.00			1/2" Ice	8.52	4.69	0.19	
						1" Ice	9.04	5.16	0.29	
TA08025-B604	A	From Leg	4.00	0.0000	118.00	2" Ice	10.11	6.12	0.52	
			0.00			No Ice	1.96	0.98	0.06	
			0.00			1/2" Ice	2.14	1.11	0.08	
						1" Ice	2.32	1.25	0.10	
TA08025-B604	B	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.55	0.15	
			0.00			No Ice	1.96	0.98	0.06	
			0.00			1/2" Ice	2.14	1.11	0.08	
						1" Ice	2.32	1.25	0.10	

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A _A		Weight
			Horz	Lateral			Front	Side	
			ft	ft	°	ft	ft ²	ft ²	K
TA08025-B604	C	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.55	0.15
			0.00	No Ice		1.96	0.98	0.06	
			0.00	1/2" Ice		2.14	1.11	0.08	
			0.00	1" Ice		2.32	1.25	0.10	
TA08025-B605	A	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.55	0.15
			0.00	No Ice		1.96	1.13	0.08	
			0.00	1/2" Ice		2.14	1.27	0.09	
			0.00	1" Ice		2.32	1.41	0.11	
TA08025-B605	B	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.72	0.16
			0.00	No Ice		1.96	1.13	0.08	
			0.00	1/2" Ice		2.14	1.27	0.09	
			0.00	1" Ice		2.32	1.41	0.11	
TA08025-B605	C	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.72	0.16
			0.00	No Ice		1.96	1.13	0.08	
			0.00	1/2" Ice		2.14	1.27	0.09	
			0.00	1" Ice		2.32	1.41	0.11	
RDIDC-9181-PF-48	B	From Leg	4.00	0.0000	118.00	2" Ice	2.71	1.72	0.16
			0.00	No Ice		2.01	1.17	0.02	
			0.00	1/2" Ice		2.19	1.31	0.04	
			0.00	1" Ice		2.37	1.46	0.06	
(2) 8' x 2" Mount Pipe	A	From Leg	4.00	0.0000	118.00	2" Ice	2.76	1.78	0.11
			0.00	No Ice		1.90	1.90	0.03	
			0.00	1/2" Ice		2.73	2.73	0.04	
			0.00	1" Ice		3.40	3.40	0.06	
(2) 8' x 2" Mount Pipe	B	From Leg	4.00	0.0000	118.00	2" Ice	4.40	4.40	0.12
			0.00	No Ice		1.90	1.90	0.03	
			0.00	1/2" Ice		2.73	2.73	0.04	
			0.00	1" Ice		3.40	3.40	0.06	
(2) 8' x 2" Mount Pipe	C	From Leg	4.00	0.0000	118.00	2" Ice	4.40	4.40	0.12
			0.00	No Ice		1.90	1.90	0.03	
			0.00	1/2" Ice		2.73	2.73	0.04	
			0.00	1" Ice		3.40	3.40	0.06	
Sabre C10801018-32788	A	None		0.0000	118.00	2" Ice	4.40	4.40	0.12
				No Ice		26.80	26.80	1.51	
				1/2" Ice		32.20	32.20	1.81	
				1" Ice		37.60	37.60	2.11	

BXA-70063-4CF-EDIN-X w/ Mount Pipe	A	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.84	3.54	0.04	
			2.00	1/2" Ice		5.35	4.03	0.08	
				1" Ice		5.88	4.53	0.12	
BXA-70063-4CF-EDIN-X w/ Mount Pipe	B	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.84	3.54	0.04	
			2.00	1/2" Ice		5.35	4.03	0.08	
				1" Ice		5.88	4.53	0.12	
BXA-70063-4CF-EDIN-X w/ Mount Pipe	C	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.84	3.54	0.04	
			2.00	1/2" Ice		5.35	4.03	0.08	
				1" Ice		5.88	4.53	0.12	
(2) SBNHH-1D65B	A	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.16	2.49	0.04	
			2.00	1/2" Ice		4.57	2.88	0.09	
				1" Ice		4.99	3.27	0.15	
(2) SBNHH-1D65B	B	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.16	2.49	0.04	
			2.00	1/2" Ice		4.57	2.88	0.09	
				1" Ice		4.99	3.27	0.15	
(2) SBNHH-1D65B	C	From Leg	4.00	0.0000	108.00	2" Ice	6.99	5.59	0.24
			0.00	No Ice		4.16	2.49	0.04	
			2.00	1/2" Ice		4.57	2.88	0.09	
				1" Ice		4.99	3.27	0.15	
CBRS w/ Mount Pipe	A	From Leg	4.00	0.0000	108.00	2" Ice	5.85	4.09	0.28
			0.00	No Ice		1.45	0.99	0.03	
			0.00	1/2" Ice		1.67	1.18	0.05	
			2.00	1" Ice		1.90	1.39	0.07	

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
			ft	ft	ft	°	ft	ft ²	ft ²	K
CBRS w/ Mount Pipe	B	From Leg	4.00	0.0000	108.00		2" Ice	2.42	1.85	0.12
			0.00				No Ice	1.45	0.99	0.03
			2.00				1/2" Ice	1.67	1.18	0.05
							1" Ice	1.90	1.39	0.07
CBRS w/ Mount Pipe	C	From Leg	4.00	0.0000	108.00		2" Ice	2.42	1.85	0.12
			0.00				No Ice	1.45	0.99	0.03
			2.00				1/2" Ice	1.67	1.18	0.05
							1" Ice	1.90	1.39	0.07
20W CBRS	A	From Leg	4.00	0.0000	108.00		2" Ice	2.42	1.85	0.12
			0.00				No Ice	0.86	0.42	0.02
			2.00				1/2" Ice	0.98	0.51	0.03
							1" Ice	1.10	0.61	0.03
20W CBRS	B	From Leg	4.00	0.0000	108.00		2" Ice	1.37	0.83	0.06
			0.00				No Ice	0.86	0.42	0.02
			2.00				1/2" Ice	0.98	0.51	0.03
							1" Ice	1.10	0.61	0.03
20W CBRS	C	From Leg	4.00	0.0000	108.00		2" Ice	1.37	0.83	0.06
			0.00				No Ice	0.86	0.42	0.02
			2.00				1/2" Ice	0.98	0.51	0.03
							1" Ice	1.10	0.61	0.03
RFV01U-D1A	A	From Leg	4.00	0.0000	108.00		2" Ice	1.37	0.83	0.06
			0.00				No Ice	1.88	1.25	0.08
			2.00				1/2" Ice	2.05	1.39	0.10
							1" Ice	2.22	1.54	0.12
RFV01U-D1A	B	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.86	0.18
			0.00				No Ice	1.88	1.25	0.08
			2.00				1/2" Ice	2.05	1.39	0.10
							1" Ice	2.22	1.54	0.12
RFV01U-D1A	C	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.86	0.18
			0.00				No Ice	1.88	1.25	0.08
			2.00				1/2" Ice	2.05	1.39	0.10
							1" Ice	2.22	1.54	0.12
RFV01U-D2A	A	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.86	0.18
			0.00				No Ice	1.88	1.01	0.07
			2.00				1/2" Ice	2.05	1.14	0.09
							1" Ice	2.22	1.28	0.11
RFV01U-D2A	B	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.59	0.15
			0.00				No Ice	1.88	1.01	0.07
			2.00				1/2" Ice	2.05	1.14	0.09
							1" Ice	2.22	1.28	0.11
RFV01U-D2A	C	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.59	0.15
			0.00				No Ice	1.88	1.01	0.07
			2.00				1/2" Ice	2.05	1.14	0.09
							1" Ice	2.22	1.28	0.11
DB-T1-6Z-8AB-0Z	A	From Leg	4.00	0.0000	108.00		2" Ice	2.60	1.59	0.15
			0.00				No Ice	4.80	2.00	0.04
			2.00				1/2" Ice	5.07	2.19	0.08
							1" Ice	5.35	2.39	0.12
Dual Antenna Mounting Kit	A	From Leg	4.00	0.0000	108.00		2" Ice	5.93	2.81	0.21
			0.00				No Ice	1.32	1.32	0.07
			0.00				1/2" Ice	1.58	1.58	0.08
							1" Ice	1.84	1.84	0.09
Dual Antenna Mounting Kit	B	From Leg	4.00	0.0000	108.00		2" Ice	2.40	2.40	0.13
			0.00				No Ice	1.32	1.32	0.07
			0.00				1/2" Ice	1.58	1.58	0.08
							1" Ice	1.84	1.84	0.09
Dual Antenna Mounting Kit	C	From Leg	4.00	0.0000	108.00		2" Ice	2.40	2.40	0.13
			0.00				No Ice	1.32	1.32	0.07
			0.00				1/2" Ice	1.58	1.58	0.08
							1" Ice	1.84	1.84	0.09
Platform Mount [LP 304-1_HR-1]	A	None		0.0000	108.00		2" Ice	2.40	2.40	0.13
							No Ice	21.41	21.41	1.60
							1/2" Ice	26.62	26.62	2.06
							1" Ice	31.66	31.66	2.60
						2" Ice	41.38	41.38	3.96	

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight	
			Horz	Lateral						ft
							ft ²	ft ²	K	

MT6407-77A w/ Mount Pipe	A	From Leg	4.00		0.0000	108.00	No Ice	4.91	2.68	0.10
			0.00				1/2" Ice	5.26	3.14	0.14
			2.00				1" Ice	5.61	3.62	0.18
							2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	B	From Leg	4.00		0.0000	108.00	No Ice	4.91	2.68	0.10
			0.00				1/2" Ice	5.26	3.14	0.14
			2.00				1" Ice	5.61	3.62	0.18
							2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	C	From Leg	4.00		0.0000	108.00	No Ice	4.91	2.68	0.10
			0.00				1/2" Ice	5.26	3.14	0.14
			2.00				1" Ice	5.61	3.62	0.18
							2" Ice	6.36	4.63	0.29
Kicker Kit [#PRK-1245]	A	None			0.0000	108.00	No Ice	11.84	11.84	0.28
							1/2" Ice	16.96	16.96	0.30
							1" Ice	22.08	22.08	0.32
							2" Ice	32.32	32.32	0.36

APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe	A	From Leg	4.00		0.0000	100.00	No Ice	14.69	6.87	0.19
			0.00				1/2" Ice	15.46	7.55	0.31
			0.00				1" Ice	16.23	8.25	0.46
							2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe	B	From Leg	4.00		0.0000	100.00	No Ice	14.69	6.87	0.19
			0.00				1/2" Ice	15.46	7.55	0.31
			0.00				1" Ice	16.23	8.25	0.46
							2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe	C	From Leg	4.00		0.0000	100.00	No Ice	14.69	6.87	0.19
			0.00				1/2" Ice	15.46	7.55	0.31
			0.00				1" Ice	16.23	8.25	0.46
							2" Ice	17.82	9.67	0.79
8' x 2" Mount Pipe	A	From Leg	4.00		0.0000	100.00	No Ice	1.90	1.90	0.03
			0.00				1/2" Ice	2.73	2.73	0.04
			0.00				1" Ice	3.40	3.40	0.06
							2" Ice	4.40	4.40	0.12
8' x 2" Mount Pipe	B	From Leg	4.00		0.0000	100.00	No Ice	1.90	1.90	0.03
			0.00				1/2" Ice	2.73	2.73	0.04
			0.00				1" Ice	3.40	3.40	0.06
							2" Ice	4.40	4.40	0.12
8' x 2" Mount Pipe	C	From Leg	4.00		0.0000	100.00	No Ice	1.90	1.90	0.03
			0.00				1/2" Ice	2.73	2.73	0.04
			0.00				1" Ice	3.40	3.40	0.06
							2" Ice	4.40	4.40	0.12
Platform Mount [LP 303-1_HR-1]	A	None			0.0000	100.00	No Ice	17.09	17.09	1.50
							1/2" Ice	21.47	21.47	1.88
							1" Ice	25.72	25.72	2.35
							2" Ice	33.96	33.96	3.52

AIR 6419 B41_TMO w/ Mount Pipe	A	From Leg	4.00		0.0000	100.00	No Ice	6.58	3.50	0.11
			0.00				1/2" Ice	7.06	3.90	0.16
			0.00				1" Ice	7.57	4.32	0.22
							2" Ice	8.62	5.20	0.36
AIR 6419 B41_TMO w/ Mount Pipe	B	From Leg	4.00		0.0000	100.00	No Ice	6.58	3.50	0.11
			0.00				1/2" Ice	7.06	3.90	0.16
			0.00				1" Ice	7.57	4.32	0.22
							2" Ice	8.62	5.20	0.36
AIR 6419 B41_TMO w/ Mount Pipe	C	From Leg	4.00		0.0000	100.00	No Ice	6.58	3.50	0.11
			0.00				1/2" Ice	7.06	3.90	0.16
			0.00				1" Ice	7.57	4.32	0.22
							2" Ice	8.62	5.20	0.36
VV-65A-R1_TMO w/ Mount Pipe	A	From Leg	4.00		0.0000	100.00	No Ice	4.46	2.69	0.05
			0.00				1/2" Ice	4.91	3.10	0.10
			0.00				1" Ice	5.36	3.52	0.15
							2" Ice	6.32	4.41	0.28
VV-65A-R1_TMO w/ Mount Pipe	B	From Leg	4.00		0.0000	100.00	No Ice	4.46	2.69	0.05
			0.00				1/2" Ice	4.91	3.10	0.10

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
			0.00			1" Ice 5.36	3.52	0.15
						2" Ice 6.32	4.41	0.28
VV-65A-R1_TMO w/ Mount Pipe	C	From Leg	4.00	0.0000	100.00	No Ice 4.46	2.69	0.05
			0.00			1/2" Ice 4.91	3.10	0.10
			0.00			1" Ice 5.36	3.52	0.15
						2" Ice 6.32	4.41	0.28
RADIO 4449 B71 B85A_T- MOBILE	A	From Leg	4.00	0.0000	100.00	No Ice 1.97	1.59	0.07
			0.00			1/2" Ice 2.15	1.75	0.09
			0.00			1" Ice 2.33	1.92	0.12
						2" Ice 2.72	2.28	0.17
RADIO 4449 B71 B85A_T- MOBILE	B	From Leg	4.00	0.0000	100.00	No Ice 1.97	1.59	0.07
			0.00			1/2" Ice 2.15	1.75	0.09
			0.00			1" Ice 2.33	1.92	0.12
						2" Ice 2.72	2.28	0.17
RADIO 4449 B71 B85A_T- MOBILE	C	From Leg	4.00	0.0000	100.00	No Ice 1.97	1.59	0.07
			0.00			1/2" Ice 2.15	1.75	0.09
			0.00			1" Ice 2.33	1.92	0.12
						2" Ice 2.72	2.28	0.17
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.00	0.0000	100.00	No Ice 2.14	1.69	0.11
			0.00			1/2" Ice 2.32	1.85	0.13
			0.00			1" Ice 2.51	2.02	0.16
						2" Ice 2.91	2.39	0.22
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.00	0.0000	100.00	No Ice 2.14	1.69	0.11
			0.00			1/2" Ice 2.32	1.85	0.13
			0.00			1" Ice 2.51	2.02	0.16
						2" Ice 2.91	2.39	0.22
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.00	0.0000	100.00	No Ice 2.14	1.69	0.11
			0.00			1/2" Ice 2.32	1.85	0.13
			0.00			1" Ice 2.51	2.02	0.16
						2" Ice 2.91	2.39	0.22

KS24019-L112A	B	From Leg	3.00	0.0000	49.00	No Ice 0.14	0.14	0.01
			0.00			1/2" Ice 0.20	0.20	0.01
			2.00			1" Ice 0.26	0.26	0.01
						2" Ice 0.41	0.41	0.02
Side Arm Mount [SO 701- 1]	B	From Leg	1.50	0.0000	49.00	No Ice 0.85	1.67	0.07
			0.00			1/2" Ice 1.14	2.34	0.08
			0.00			1" Ice 1.43	3.01	0.09
						2" Ice 2.01	4.35	0.12

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice

Comb. No.	Description
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	140 - 135	Pole	Max Tension	21	0.00	-0.00	-0.00
			Max. Compression	26	-12.85	0.00	-0.00
			Max. Mx	8	-5.80	-20.39	0.01
			Max. My	2	-5.81	0.01	20.37
			Max. Vy	8	5.35	-20.39	0.01
			Max. Vx	14	5.34	-0.01	-20.34
			Max. Torque	8			0.01
L2	135 - 130	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-13.44	0.01	-0.04
			Max. Mx	8	-6.15	-47.91	-0.02
			Max. My	2	-6.16	0.02	47.81
			Max. Vy	8	5.66	-47.91	-0.02
			Max. Vx	14	5.64	-0.02	-47.80
			Max. Torque	8			0.01
L3	130 - 125	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-24.64	0.26	-0.37
			Max. Mx	8	-10.49	-102.36	-0.27
			Max. My	14	-10.51	-0.61	-102.09
			Max. Vy	8	11.59	-102.36	-0.27
			Max. Vx	14	11.60	-0.61	-102.09
			Max. Torque	25			0.66
L4	125 - 120	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-25.32	0.27	-0.41
			Max. Mx	8	-10.94	-161.02	-0.51
			Max. My	14	-10.96	-0.83	-160.80
			Max. Vy	8	11.88	-161.02	-0.51
			Max. Vx	14	11.89	-0.83	-160.80
			Max. Torque	25			0.66

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L5	120 - 115	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-31.48	-0.10	-0.69
			Max. Mx	8	-14.11	-228.57	-0.83
			Max. My	14	-14.14	-1.16	-228.32
			Max. Vy	8	14.62	-228.57	-0.83
			Max. Vx	14	14.61	-1.16	-228.32
			Max. Torque	25			0.66
L6	115 - 110	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-32.25	-0.10	-0.77
			Max. Mx	8	-14.66	-302.29	-1.13
			Max. My	14	-14.69	-1.44	-302.02
			Max. Vy	8	14.89	-302.29	-1.13
			Max. Vx	14	14.88	-1.44	-302.02
			Max. Torque	25			0.58
L7	110 - 105	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-41.42	-0.10	-0.02
			Max. Mx	8	-18.98	-390.81	-1.23
			Max. My	2	-19.01	0.81	390.72
			Max. Vy	8	18.51	-390.81	-1.23
			Max. Vx	2	-18.57	0.81	390.72
			Max. Torque	25			0.57
L8	105 - 102	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-41.97	-0.09	-0.06
			Max. Mx	8	-19.39	-446.51	-1.41
			Max. My	2	-19.42	0.98	446.58
			Max. Vy	8	18.65	-446.51	-1.41
			Max. Vx	14	18.71	-1.88	-446.54
			Max. Torque	3			0.50
L9	102 - 101.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-42.03	-0.09	-0.06
			Max. Mx	8	-19.45	-451.18	-1.42
			Max. My	2	-19.47	1.00	451.26
			Max. Vy	8	18.66	-451.18	-1.42
			Max. Vx	14	18.71	-1.89	-451.22
			Max. Torque	3			0.50
L10	101.75 - 96.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-51.25	0.03	-0.05
			Max. Mx	8	-23.85	-554.99	-1.71
			Max. My	2	-23.89	1.31	555.14
			Max. Vy	8	22.01	-554.99	-1.71
			Max. Vx	14	21.97	-2.14	-555.12
			Max. Torque	3			0.50
L11	96.75 - 91.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-51.73	0.07	-0.06
			Max. Mx	8	-24.15	-593.60	-1.81
			Max. My	2	-24.20	1.43	593.64
			Max. Vy	8	22.18	-593.60	-1.81
			Max. Vx	14	22.07	-2.22	-593.62
			Max. Torque	3			0.50
L12	91.75 - 90.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-53.56	0.17	-0.08
			Max. Mx	8	-25.43	-688.77	-2.05
			Max. My	2	-25.49	1.72	688.05
			Max. Vy	20	-22.63	688.14	2.08
			Max. Vx	14	22.38	-2.41	-688.03
			Max. Torque	3			0.50
L13	90.75 - 85.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-55.08	0.26	-0.15
			Max. Mx	8	-26.57	-802.59	-2.33
			Max. My	2	-26.64	2.06	800.44
			Max. Vy	20	-22.96	802.07	2.36
			Max. Vx	14	22.62	-2.63	-800.41
			Max. Torque	3			0.50
L14	85.75 - 85.33	Pole	Max Tension	1	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L15	85.33 - 85.08	Pole	Max. Compression	26	-55.22	0.27	-0.15
			Max. Mx	8	-26.68	-812.23	-2.35
			Max. My	2	-26.75	2.09	809.94
			Max. Vy	20	-22.99	811.72	2.39
			Max. Vx	14	22.62	-2.65	-809.90
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			L16	85.08 - 82.5	Pole	Max. Compression	26
Max. Mx	8	-26.75				-817.97	-2.37
Max. My	2	-26.81				2.11	815.59
Max. Vy	20	-23.01				817.47	2.40
Max. Vx	14	22.64				-2.66	-815.56
Max. Torque	3						0.50
Max Tension	1	0.00				0.00	0.00
L17	82.5 - 82.25	Pole				Max. Compression	26
			Max. Mx	8	-27.39	-877.66	-2.51
			Max. My	2	-27.47	2.28	874.19
			Max. Vy	20	-23.31	877.22	2.55
			Max. Vx	14	22.81	-2.77	-874.15
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			L18	82.25 - 82	Pole	Max. Compression	26
Max. Mx	8	-27.48				-883.48	-2.52
Max. My	2	-27.55				2.30	879.89
Max. Vy	20	-23.32				883.05	2.56
Max. Vx	14	22.81				-2.79	-879.85
Max. Torque	3						0.50
Max Tension	1	0.00				0.00	0.00
L19	82 - 81.75	Pole				Max. Compression	26
			Max. Mx	8	-27.55	-889.31	-2.54
			Max. My	2	-27.63	2.31	885.59
			Max. Vy	20	-23.35	888.88	2.57
			Max. Vx	14	22.83	-2.80	-885.55
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			L20	81.75 - 78.83	Pole	Max. Compression	26
Max. Mx	8	-27.61				-895.15	-2.55
Max. My	2	-27.69				2.33	891.30
Max. Vy	20	-23.37				894.72	2.59
Max. Vx	14	22.84				-2.81	-891.26
Max. Torque	3						0.50
Max Tension	1	0.00				0.00	0.00
L21	78.83 - 78.58	Pole				Max. Compression	26
			Max. Mx	8	-28.27	-963.74	-2.71
			Max. My	2	-28.36	2.53	958.15
			Max. Vy	20	-23.67	963.39	2.75
			Max. Vx	14	22.99	-2.93	-958.11
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			L22	78.58 - 77.66	Pole	Max. Compression	26
Max. Mx	8	-28.37				-969.65	-2.72
Max. My	2	-28.46				2.55	963.90
Max. Vy	20	-23.67				969.30	2.77
Max. Vx	14	22.98				-2.95	-963.86
Max. Torque	3						0.50
Max Tension	1	0.00				0.00	0.00
L23	77.66 - 77.41	Pole				Max. Compression	26
			Max. Mx	8	-28.62	-991.47	-2.78
			Max. My	2	-28.71	2.61	985.06
			Max. Vy	20	-23.79	991.14	2.82
			Max. Vx	14	23.05	-2.98	-985.02
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
						Max. Compression	26

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L24	77.41 - 77.167	Pole	Max. Mx	8	-28.70	-997.41	-2.79
			Max. My	2	-28.79	2.63	990.82
			Max. Vy	20	-23.81	997.09	2.83
			Max. Vx	14	23.06	-3.00	-990.78
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.35	0.42	-0.27
			Max. Mx	8	-28.76	-1003.20	-2.80
			Max. My	2	-28.86	2.64	996.43
			Max. Vy	20	-23.84	1002.88	2.85
L25	77.167 - 72.167	Pole	Max. Vx	14	23.07	-3.01	-996.39
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-60.34	0.61	-0.26
			Max. Mx	8	-30.14	-1123.64	-3.08
			Max. My	2	-30.25	2.98	1112.50
			Max. Vy	20	-24.39	1123.46	3.12
			Max. Vx	14	23.38	-3.22	-1112.46
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
L26	72.167 - 67.167	Pole	Max. Compression	26	-62.36	0.81	-0.25
			Max. Mx	8	-31.56	-1246.71	-3.36
			Max. My	2	-31.67	3.33	1230.04
			Max. Vy	20	-24.90	1246.65	3.40
			Max. Vx	14	23.67	-3.43	-1229.99
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.60	0.83	-0.25
			Max. Mx	8	-31.73	-1261.32	-3.39
			Max. My	2	-31.85	3.37	1243.94
L27	67.167 - 66.58	Pole	Max. Vy	20	-24.94	1261.27	3.43
			Max. Vx	14	23.70	-3.45	-1243.89
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.60	0.83	-0.25
			Max. Mx	8	-31.73	-1261.32	-3.39
			Max. My	2	-31.85	3.37	1243.94
			Max. Vy	20	-24.94	1261.27	3.43
			Max. Vx	14	23.70	-3.45	-1243.89
			Max. Torque	3			0.50
L28	66.58 - 66.33	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.71	0.84	-0.24
			Max. Mx	8	-31.82	-1267.55	-3.40
			Max. My	2	-31.93	3.38	1249.86
			Max. Vy	20	-24.95	1267.51	3.45
			Max. Vx	14	23.71	-3.47	-1249.81
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.78	0.85	-0.24
			Max. Mx	8	-31.87	-1271.79	-3.41
L29	66.33 - 66.16	Pole	Max. My	2	-31.98	3.39	1253.89
			Max. Vy	20	-24.97	1271.76	3.46
			Max. Vx	14	23.72	-3.47	-1253.84
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.78	0.85	-0.24
			Max. Mx	8	-31.87	-1271.79	-3.41
			Max. My	2	-31.98	3.39	1253.89
			Max. Vy	20	-24.97	1271.76	3.46
			Max. Vx	14	23.72	-3.47	-1253.84
L30	66.16 - 65.91	Pole	Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.88	0.86	-0.24
			Max. Mx	8	-31.94	-1278.03	-3.42
			Max. My	2	-32.05	3.41	1259.82
			Max. Vy	20	-24.98	1278.00	3.47
			Max. Vx	14	23.73	-3.48	-1259.77
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-64.13	0.98	-0.22
L31	65.91 - 62.66	Pole	Max. Mx	20	-32.82	1359.61	3.65
			Max. My	2	-32.93	3.63	1337.22
			Max. Vy	20	-25.23	1359.61	3.65
			Max. Vx	14	23.92	-3.62	-1337.16
			Max. Torque	3			0.50
			Max. Compression	26	-64.13	0.98	-0.22
			Max. Mx	20	-32.82	1359.61	3.65

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L32	62.66 - 62.41	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-64.23	0.99	-0.22
			Max. Mx	20	-32.90	1365.91	3.66
			Max. My	2	-33.01	3.65	1343.20
			Max. Vy	20	-25.24	1365.91	3.66
			Max. Vx	14	23.92	-3.63	-1343.14
L33	62.41 - 60	Pole	Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-65.12	1.09	-0.20
			Max. Mx	20	-33.54	1426.94	3.80
			Max. My	2	-33.64	3.82	1400.99
			Max. Vy	20	-25.41	1426.94	3.80
L34	60 - 59.75	Pole	Max. Vx	14	24.06	-3.73	-1400.93
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-65.21	1.11	-0.20
			Max. Mx	20	-33.62	1433.29	3.81
			Max. My	2	-33.72	3.83	1407.00
L35	59.75 - 54.75	Pole	Max. Vy	20	-25.41	1433.29	3.81
			Max. Vx	14	24.06	-3.74	-1406.94
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.08	1.33	-0.19
			Max. Mx	20	-34.97	1561.08	4.08
L36	54.75 - 52.83	Pole	Max. My	2	-35.07	4.18	1527.91
			Max. Vy	20	-25.71	1561.08	4.08
			Max. Vx	14	24.33	-3.94	-1527.85
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.80	1.41	-0.18
L37	52.83 - 52.58	Pole	Max. Mx	20	-35.49	1610.53	4.19
			Max. My	2	-35.58	4.31	1574.68
			Max. Vy	20	-25.84	1610.53	4.19
			Max. Vx	14	24.44	-4.02	-1574.61
			Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
L38	52.58 - 51.41	Pole	Max. Compression	26	-67.92	1.42	-0.18
			Max. Mx	20	-35.60	1616.99	4.20
			Max. My	2	-35.70	4.32	1580.78
			Max. Vy	20	-25.82	1616.99	4.20
			Max. Vx	14	24.43	-4.03	-1580.72
			Max. Torque	3			0.50
L39	51.41 - 51.16	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-68.61	1.49	-0.18
			Max. Mx	20	-36.10	1653.75	4.28
			Max. My	2	-36.20	4.42	1615.52
			Max. Vy	20	-25.93	1653.75	4.28
			Max. Vx	14	24.51	-4.08	-1615.46
L40	51.16 - 46.5	Pole	Max. Torque	3			0.50
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-68.67	1.49	-0.18
			Max. Mx	20	-36.15	1657.90	4.29
			Max. My	2	-36.25	4.43	1619.44
			Max. Vy	20	-25.94	1657.90	4.29
			Max. Vx	14	24.52	-4.09	-1619.38
			Max. Torque	3			0.50

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L41	46.5 - 45.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-72.43	1.38	-0.40
			Max. Mx	20	-38.89	1801.99	4.43
			Max. My	14	-38.98	-4.49	-1755.69
			Max. Vy	20	-26.49	1801.99	4.43
			Max. Vx	14	24.98	-4.49	-1755.69
			Max. Torque	3			0.37
L42	45.5 - 44.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-72.99	1.43	-0.42
			Max. Mx	20	-39.27	1835.15	4.49
			Max. My	14	-39.36	-4.52	-1786.92
			Max. Vy	20	-26.58	1835.15	4.49
			Max. Vx	14	25.05	-4.52	-1786.92
			Max. Torque	3			0.37
L43	44.25 - 44	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.13	1.44	-0.42
			Max. Mx	20	-39.38	1841.79	4.50
			Max. My	14	-39.47	-4.53	-1793.18
			Max. Vy	20	-26.58	1841.79	4.50
			Max. Vx	14	25.04	-4.53	-1793.18
			Max. Torque	3			0.37
L44	44 - 43.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.61	1.48	-0.43
			Max. Mx	20	-39.72	1866.28	4.54
			Max. My	14	-39.81	-4.56	-1816.23
			Max. Vy	20	-26.65	1866.28	4.54
			Max. Vx	14	25.10	-4.56	-1816.23
			Max. Torque	3			0.37
L45	43.08 - 42.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.73	1.49	-0.44
			Max. Mx	20	-39.82	1872.94	4.55
			Max. My	14	-39.91	-4.56	-1822.51
			Max. Vy	20	-26.66	1872.94	4.55
			Max. Vx	14	25.10	-4.56	-1822.51
			Max. Torque	3			0.37
L46	42.83 - 37.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.16	1.69	-0.51
			Max. Mx	20	-41.60	2007.06	4.77
			Max. My	14	-41.68	-4.71	-1948.65
			Max. Vy	20	-26.98	2007.06	4.77
			Max. Vx	14	25.38	-4.71	-1948.65
			Max. Torque	3			0.37
L47	37.83 - 32.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-78.54	1.90	-0.58
			Max. Mx	20	-43.41	2142.63	4.99
			Max. My	14	-43.48	-4.85	-2076.06
			Max. Vy	20	-27.25	2142.63	4.99
			Max. Vx	14	25.62	-4.85	-2076.06
			Max. Torque	3			0.37
L48	32.83 - 29.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.27	2.03	-0.65
			Max. Mx	20	-44.73	2240.49	5.15
			Max. My	14	-44.79	-4.95	-2168.03
			Max. Vy	20	-27.43	2240.49	5.15
			Max. Vx	14	25.79	-4.95	-2168.03
			Max. Torque	3			0.37
L49	29.25 - 29	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.39	2.04	-0.65
			Max. Mx	20	-44.83	2247.35	5.16
			Max. My	14	-44.89	-4.95	-2174.47
			Max. Vy	20	-27.42	2247.35	5.16
			Max. Vx	14	25.79	-4.95	-2174.47
			Max. Torque	3			0.37
L50	29 - 27.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-81.01	2.07	-0.69

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L51	27.75 - 27.5	Pole	Max. Mx	20	-45.28	2281.68	5.21
			Max. My	14	-45.35	-4.99	-2206.73
			Max. Vy	20	-27.50	2281.68	5.21
			Max. Vx	14	25.86	-4.99	-2206.73
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-81.13	2.08	-0.70
			Max. Mx	20	-45.39	2288.55	5.23
			Max. My	14	-45.45	-4.99	-2213.20
			Max. Vy	20	-27.50	2288.55	5.23
L52	27.5 - 24.08	Pole	Max. Vx	14	25.86	-4.99	-2213.20
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-82.85	2.19	-0.84
			Max. Mx	20	-46.66	2382.91	5.37
			Max. My	14	-46.71	-5.08	-2301.87
			Max. Vy	20	-27.68	2382.91	5.37
			Max. Vx	14	26.03	-5.08	-2301.87
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
L53	24.08 - 23.83	Pole	Max. Compression	26	-82.98	2.20	-0.85
			Max. Mx	20	-46.77	2389.82	5.38
			Max. My	14	-46.82	-5.09	-2308.38
			Max. Vy	20	-27.67	2389.82	5.38
			Max. Vx	14	26.02	-5.09	-2308.38
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.15	2.21	-0.87
			Max. Mx	20	-46.90	2398.96	5.40
			Max. My	14	-46.95	-5.10	-2316.97
L54	23.83 - 23.5	Pole	Max. Vy	20	-27.69	2398.96	5.40
			Max. Vx	14	26.04	-5.10	-2316.97
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.27	2.22	-0.88
			Max. Mx	20	-46.99	2405.89	5.41
			Max. My	14	-47.04	-5.11	-2323.48
			Max. Vy	20	-27.70	2405.89	5.41
			Max. Vx	14	26.05	-5.11	-2323.48
			Max. Torque	3			0.37
L55	23.5 - 23.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.27	2.22	-0.88
			Max. Mx	20	-46.99	2405.89	5.41
			Max. My	14	-47.04	-5.11	-2323.48
			Max. Vy	20	-27.70	2405.89	5.41
			Max. Vx	14	26.05	-5.11	-2323.48
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.39	2.32	-1.09
			Max. Mx	20	-48.59	2526.46	5.60
L56	23.25 - 18.91	Pole	Max. My	14	-48.63	-5.22	-2436.78
			Max. Vy	20	-27.87	2526.46	5.60
			Max. Vx	14	26.20	-5.22	-2436.78
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.50	2.33	-1.10
			Max. Mx	20	-48.69	2533.43	5.61
			Max. My	14	-48.73	-5.22	-2443.32
			Max. Vy	20	-27.86	2533.43	5.61
			Max. Vx	14	26.19	-5.22	-2443.32
L57	18.91 - 18.66	Pole	Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.50	2.33	-1.10
			Max. Mx	20	-48.69	2533.43	5.61
			Max. My	14	-48.73	-5.22	-2443.32
			Max. Vy	20	-27.86	2533.43	5.61
			Max. Vx	14	26.19	-5.22	-2443.32
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.77	2.33	-1.13
L58	18.66 - 18.08	Pole	Max. Mx	20	-48.88	2549.60	5.63
			Max. My	14	-48.92	-5.24	-2458.51
			Max. Vy	20	-27.90	2549.60	5.63
			Max. Vx	14	26.22	-5.24	-2458.51
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.90	2.33	-1.15
			Max. Mx	20	-48.98	2556.58	5.64
			Max. My	14	-48.92	-5.24	-2458.51
			Max. Vy	20	-27.90	2549.60	5.63
L59	18.08 - 17.83	Pole	Max. Vx	14	26.22	-5.24	-2458.51
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.90	2.33	-1.15
			Max. Mx	20	-48.98	2556.58	5.64

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L60	17.83 - 12.83	Pole	Max. My	14	-49.02	-5.25	-2465.07
			Max. Vy	20	-27.90	2556.58	5.64
			Max. Vx	14	26.22	-5.25	-2465.07
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-88.44	2.34	-1.37
			Max. Mx	20	-50.93	2696.86	5.86
			Max. My	14	-50.96	-5.37	-2596.69
			Max. Vy	20	-28.20	2696.86	5.86
			Max. Vx	14	26.46	-5.37	-2596.69
L61	12.83 - 7.83	Pole	Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-90.92	2.37	-1.48
			Max. Mx	20	-52.90	2838.54	6.07
			Max. My	14	-52.92	-5.49	-2729.42
			Max. Vy	20	-28.48	2838.54	6.07
			Max. Vx	14	26.68	-5.49	-2729.42
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-93.14	2.24	-1.58
L62	7.83 - 2.83	Pole	Max. Mx	20	-54.75	2981.36	6.28
			Max. My	14	-54.75	-5.70	-2863.27
			Max. Vy	20	-28.69	2981.36	6.28
			Max. Vx	14	26.90	-5.70	-2863.27
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.35	2.19	-1.62
			Max. Mx	20	-55.80	3062.67	6.40
			Max. My	14	-55.80	-5.82	-2939.52
			Max. Vy	20	-28.82	3062.67	6.40
L63	2.83 - 0	Pole	Max. Vx	14	27.04	-5.82	-2939.52
			Max. Torque	3			0.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.35	2.19	-1.62
			Max. Mx	20	-55.80	3062.67	6.40
			Max. My	14	-55.80	-5.82	-2939.52
			Max. Vy	20	-28.82	3062.67	6.40
			Max. Vx	14	27.04	-5.82	-2939.52
			Max. Torque	3			0.37

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	36	94.35	7.35	0.01
	Max. H _x	21	41.86	28.79	0.04
	Max. H _z	2	55.81	0.04	27.01
	Max. M _x	2	2939.40	0.04	27.01
	Max. M _z	8	3061.35	-28.79	-0.04
	Max. Torsion	3	0.37	0.04	27.01
	Min. Vert	23	41.86	23.32	13.54
	Min. H _x	9	41.86	-28.79	-0.04
	Min. H _z	15	41.86	-0.04	-27.01
	Min. M _x	14	-2939.52	-0.04	-27.01
	Min. M _z	20	-3062.67	28.79	0.04
	Min. Torsion	15	-0.36	-0.04	-27.01

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overtuning Moment, M _x kip-ft	Overtuning Moment, M _z kip-ft	Torque kip-ft
Dead Only	46.51	0.00	0.00	0.05	0.55	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	55.81	-0.04	-27.01	-2939.40	7.10	-0.36

Load Combination	Vertical	Shear _x	Shear _z	Overturning Moment, M _x	Overturning Moment, M _z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
0.9 Dead+1.0 Wind 0 deg - No Ice	41.86	-0.04	-27.01	-2884.41	6.80	-0.37
1.2 Dead+1.0 Wind 30 deg - No Ice	55.81	13.41	-23.37	-2542.39	-1457.30	-0.28
0.9 Dead+1.0 Wind 30 deg - No Ice	41.86	13.41	-23.37	-2494.84	-1430.19	-0.29
1.2 Dead+1.0 Wind 60 deg - No Ice	55.81	23.95	-13.86	-1486.54	-2569.91	-0.13
0.9 Dead+1.0 Wind 60 deg - No Ice	41.86	23.95	-13.86	-1458.95	-2522.32	-0.13
1.2 Dead+1.0 Wind 90 deg - No Ice	55.81	28.79	0.04	6.52	-3061.35	-0.01
0.9 Dead+1.0 Wind 90 deg - No Ice	41.86	28.79	0.04	6.36	-3005.11	-0.00
1.2 Dead+1.0 Wind 120 deg - No Ice	55.81	23.32	13.54	1475.43	-2537.56	0.24
0.9 Dead+1.0 Wind 120 deg - No Ice	41.86	23.32	13.54	1447.79	-2490.21	0.25
1.2 Dead+1.0 Wind 150 deg - No Ice	55.81	13.48	23.41	2548.92	-1468.46	0.34
0.9 Dead+1.0 Wind 150 deg - No Ice	41.86	13.48	23.41	2501.20	-1441.10	0.35
1.2 Dead+1.0 Wind 180 deg - No Ice	55.81	0.04	27.01	2939.52	-5.82	0.34
0.9 Dead+1.0 Wind 180 deg - No Ice	41.86	0.04	27.01	2884.50	-5.83	0.36
1.2 Dead+1.0 Wind 210 deg - No Ice	55.81	-13.41	23.37	2542.53	1458.59	0.26
0.9 Dead+1.0 Wind 210 deg - No Ice	41.86	-13.41	23.37	2494.93	1431.16	0.27
1.2 Dead+1.0 Wind 240 deg - No Ice	55.81	-23.95	13.86	1486.67	2571.22	0.12
0.9 Dead+1.0 Wind 240 deg - No Ice	41.86	-23.95	13.86	1459.05	2523.30	0.12
1.2 Dead+1.0 Wind 270 deg - No Ice	55.81	-28.79	-0.04	-6.40	3062.67	0.02
0.9 Dead+1.0 Wind 270 deg - No Ice	41.86	-28.79	-0.04	-6.27	3006.10	0.02
1.2 Dead+1.0 Wind 300 deg - No Ice	55.81	-23.32	-13.54	-1475.33	2538.86	-0.22
0.9 Dead+1.0 Wind 300 deg - No Ice	41.86	-23.32	-13.54	-1447.71	2491.19	-0.23
1.2 Dead+1.0 Wind 330 deg - No Ice	55.81	-13.48	-23.41	-2548.81	1469.75	-0.33
0.9 Dead+1.0 Wind 330 deg - No Ice	41.86	-13.48	-23.41	-2501.12	1442.07	-0.34
1.2 Dead+1.0 Ice+1.0 Temp	94.35	-0.00	0.00	1.62	2.19	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	94.35	-0.01	-7.12	-847.72	3.82	-0.07
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	94.35	3.54	-6.17	-733.26	-419.73	-0.05
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	94.35	6.15	-3.56	-421.84	-730.14	-0.02
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	94.35	7.35	0.01	3.08	-866.54	-0.00
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	94.35	6.15	3.57	427.65	-731.44	0.05
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	94.35	3.56	6.17	738.11	-421.99	0.07
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	94.35	0.01	7.12	851.27	1.20	0.07
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	94.35	-3.54	6.17	736.80	424.75	0.05
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	94.35	-6.15	3.56	425.39	735.16	0.02
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	94.35	-7.35	-0.01	0.47	871.56	0.00
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	94.35	-6.15	-3.57	-424.11	736.46	-0.05

Load Combination	Vertical	Shear _x	Shear _z	Overturning Moment, M _x	Overturning Moment, M _z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	94.35	-3.56	-6.17	-734.57	427.01	-0.07
Dead+Wind 0 deg - Service	46.51	-0.01	-6.69	-720.44	2.13	-0.10
Dead+Wind 30 deg - Service	46.51	3.32	-5.79	-623.12	-356.81	-0.07
Dead+Wind 60 deg - Service	46.51	5.93	-3.43	-364.36	-629.57	-0.03
Dead+Wind 90 deg - Service	46.51	7.13	0.01	1.63	-750.15	0.00
Dead+Wind 120 deg - Service	46.51	5.78	3.35	361.68	-621.59	0.07
Dead+Wind 150 deg - Service	46.51	3.34	5.80	624.80	-359.54	0.09
Dead+Wind 180 deg - Service	46.51	0.01	6.69	720.54	-1.03	0.10
Dead+Wind 210 deg - Service	46.51	-3.32	5.79	623.23	357.90	0.07
Dead+Wind 240 deg - Service	46.51	-5.93	3.43	364.46	630.66	0.03
Dead+Wind 270 deg - Service	46.51	-7.13	-0.01	-1.53	751.24	0.00
Dead+Wind 300 deg - Service	46.51	-5.78	-3.35	-361.58	622.68	-0.06
Dead+Wind 330 deg - Service	46.51	-3.34	-5.80	-624.70	360.64	-0.09

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	0.00	-46.51	0.00	0.00	46.51	0.00	0.000%
2	-0.04	-55.81	-27.01	0.04	55.81	27.01	0.000%
3	-0.04	-41.86	-27.01	0.04	41.86	27.01	0.000%
4	13.41	-55.81	-23.37	-13.41	55.81	23.37	0.000%
5	13.41	-41.86	-23.37	-13.41	41.86	23.37	0.000%
6	23.95	-55.81	-13.86	-23.95	55.81	13.86	0.000%
7	23.95	-41.86	-13.86	-23.95	41.86	13.86	0.000%
8	28.79	-55.81	0.04	-28.79	55.81	-0.04	0.000%
9	28.79	-41.86	0.04	-28.79	41.86	-0.04	0.000%
10	23.32	-55.81	13.54	-23.32	55.81	-13.54	0.000%
11	23.32	-41.86	13.54	-23.32	41.86	-13.54	0.000%
12	13.48	-55.81	23.41	-13.48	55.81	-23.41	0.000%
13	13.48	-41.86	23.41	-13.48	41.86	-23.41	0.000%
14	0.04	-55.81	27.01	-0.04	55.81	-27.01	0.000%
15	0.04	-41.86	27.01	-0.04	41.86	-27.01	0.000%
16	-13.41	-55.81	23.37	13.41	55.81	-23.37	0.000%
17	-13.41	-41.86	23.37	13.41	41.86	-23.37	0.000%
18	-23.95	-55.81	13.86	23.95	55.81	-13.86	0.000%
19	-23.95	-41.86	13.86	23.95	41.86	-13.86	0.000%
20	-28.79	-55.81	-0.04	28.79	55.81	0.04	0.000%
21	-28.79	-41.86	-0.04	28.79	41.86	0.04	0.000%
22	-23.32	-55.81	-13.54	23.32	55.81	13.54	0.000%
23	-23.32	-41.86	-13.54	23.32	41.86	13.54	0.000%
24	-13.48	-55.81	-23.41	13.48	55.81	23.41	0.000%
25	-13.48	-41.86	-23.41	13.48	41.86	23.41	0.000%
26	0.00	-94.35	0.00	0.00	94.35	-0.00	0.000%
27	-0.01	-94.35	-7.12	0.01	94.35	7.12	0.000%
28	3.54	-94.35	-6.17	-3.54	94.35	6.17	0.000%
29	6.15	-94.35	-3.56	-6.15	94.35	3.56	0.000%
30	7.35	-94.35	0.01	-7.35	94.35	-0.01	0.000%
31	6.15	-94.35	3.57	-6.15	94.35	-3.57	0.000%
32	3.56	-94.35	6.17	-3.56	94.35	-6.17	0.000%
33	0.01	-94.35	7.12	-0.01	94.35	-7.12	0.000%
34	-3.54	-94.35	6.17	3.54	94.35	-6.17	0.000%
35	-6.15	-94.35	3.56	6.15	94.35	-3.56	0.000%
36	-7.35	-94.35	-0.01	7.35	94.35	0.01	0.000%
37	-6.15	-94.35	-3.57	6.15	94.35	3.57	0.000%
38	-3.56	-94.35	-6.17	3.56	94.35	6.17	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
39	-0.01	-46.51	-6.69	0.01	46.51	6.69	0.000%
40	3.32	-46.51	-5.79	-3.32	46.51	5.79	0.000%
41	5.93	-46.51	-3.43	-5.93	46.51	3.43	0.000%
42	7.13	-46.51	0.01	-7.13	46.51	-0.01	0.000%
43	5.78	-46.51	3.35	-5.78	46.51	-3.35	0.000%
44	3.34	-46.51	5.80	-3.34	46.51	-5.80	0.000%
45	0.01	-46.51	6.69	-0.01	46.51	-6.69	0.000%
46	-3.32	-46.51	5.79	3.32	46.51	-5.79	0.000%
47	-5.93	-46.51	3.43	5.93	46.51	-3.43	0.000%
48	-7.13	-46.51	-0.01	7.13	46.51	0.01	0.000%
49	-5.78	-46.51	-3.35	5.78	46.51	3.35	0.000%
50	-3.34	-46.51	-5.80	3.34	46.51	5.80	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	6	0.00000001	0.00026067
3	Yes	6	0.00000001	0.00008705
4	Yes	7	0.00000001	0.00096611
5	Yes	7	0.00000001	0.00023803
6	Yes	7	0.00000001	0.00098829
7	Yes	7	0.00000001	0.00024318
8	Yes	6	0.00000001	0.00017413
9	Yes	5	0.00000001	0.00073514
10	Yes	7	0.00000001	0.00098522
11	Yes	7	0.00000001	0.00024279
12	Yes	7	0.00000001	0.00097557
13	Yes	7	0.00000001	0.00023982
14	Yes	6	0.00000001	0.00017671
15	Yes	5	0.00000001	0.00078106
16	Yes	7	0.00000001	0.00097786
17	Yes	7	0.00000001	0.00024144
18	Yes	7	0.00000001	0.00098221
19	Yes	7	0.00000001	0.00024142
20	Yes	6	0.00000001	0.00018305
21	Yes	5	0.00000001	0.00078879
22	Yes	7	0.00000001	0.00097762
23	Yes	7	0.00000001	0.00024053
24	Yes	7	0.00000001	0.00098830
25	Yes	7	0.00000001	0.00024356
26	Yes	4	0.00000001	0.00006138
27	Yes	8	0.00000001	0.00030302
28	Yes	8	0.00000001	0.00038897
29	Yes	8	0.00000001	0.00038925
30	Yes	8	0.00000001	0.00030632
31	Yes	8	0.00000001	0.00039271
32	Yes	8	0.00000001	0.00039226
33	Yes	8	0.00000001	0.00030388
34	Yes	8	0.00000001	0.00039338
35	Yes	8	0.00000001	0.00039235
36	Yes	8	0.00000001	0.00030786
37	Yes	8	0.00000001	0.00039324
38	Yes	8	0.00000001	0.00039445
39	Yes	5	0.00000001	0.00036894
40	Yes	6	0.00000001	0.00016499
41	Yes	6	0.00000001	0.00017209
42	Yes	5	0.00000001	0.00036193
43	Yes	6	0.00000001	0.00017174
44	Yes	6	0.00000001	0.00016722
45	Yes	5	0.00000001	0.00036389
46	Yes	6	0.00000001	0.00017038
47	Yes	6	0.00000001	0.00016944
48	Yes	5	0.00000001	0.00036194
49	Yes	6	0.00000001	0.00016802
50	Yes	6	0.00000001	0.00017310

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	140 - 135	27.420	42	1.8701	0.0023
L2	135 - 130	25.464	42	1.8642	0.0023
L3	130 - 125	23.522	42	1.8423	0.0023
L4	125 - 120	21.612	42	1.8025	0.0021
L5	120 - 115	19.755	42	1.7412	0.0016
L6	115 - 110	17.974	48	1.6639	0.0013
L7	110 - 105	16.282	48	1.5723	0.0011

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L8	105 - 102	14.690	48	1.4690	0.0009
L9	102 - 101.75	13.789	48	1.4013	0.0008
L10	101.75 - 96.75	13.715	48	1.3975	0.0008
L11	96.75 - 91.75	12.295	48	1.3157	0.0006
L12	95 - 90.75	11.818	48	1.2855	0.0006
L13	90.75 - 85.75	10.693	48	1.2350	0.0005
L14	85.75 - 85.33	9.453	48	1.1318	0.0004
L15	85.33 - 85.08	9.354	48	1.1231	0.0004
L16	85.08 - 82.5	9.295	48	1.1197	0.0004
L17	82.5 - 82.25	8.700	48	1.0843	0.0004
L18	82.25 - 82	8.643	48	1.0797	0.0004
L19	82 - 81.75	8.587	48	1.0751	0.0004
L20	81.75 - 78.83	8.531	48	1.0698	0.0004
L21	78.83 - 78.58	7.896	48	1.0073	0.0004
L22	78.58 - 77.66	7.843	48	1.0040	0.0003
L23	77.66 - 77.41	7.651	48	0.9923	0.0003
L24	77.41 - 77.167	7.599	48	0.9888	0.0003
L25	77.167 - 72.167	7.548	48	0.9853	0.0003
L26	72.167 - 67.167	6.555	48	0.9121	0.0003
L27	67.167 - 66.58	5.639	48	0.8372	0.0002
L28	66.58 - 66.33	5.537	48	0.8284	0.0002
L29	66.33 - 66.16	5.493	48	0.8252	0.0002
L30	66.16 - 65.91	5.464	48	0.8231	0.0002
L31	65.91 - 62.66	5.421	48	0.8193	0.0002
L32	62.66 - 62.41	4.880	48	0.7696	0.0002
L33	62.41 - 60	4.840	48	0.7658	0.0002
L34	60 - 59.75	4.463	48	0.7286	0.0002
L35	59.75 - 54.75	4.425	48	0.7248	0.0002
L36	54.75 - 52.83	3.707	48	0.6473	0.0002
L37	52.83 - 52.58	3.452	48	0.6183	0.0001
L38	52.58 - 51.41	3.420	48	0.6155	0.0001
L39	51.41 - 51.16	3.271	48	0.6024	0.0001
L40	51.16 - 46.5	3.239	48	0.5986	0.0001
L41	51 - 45.5	3.219	48	0.5962	0.0001
L42	45.5 - 44.25	2.556	48	0.5484	0.0001
L43	44.25 - 44	2.415	48	0.5306	0.0001
L44	44 - 43.08	2.387	48	0.5274	0.0001
L45	43.08 - 42.83	2.287	48	0.5158	0.0001
L46	42.83 - 37.83	2.260	48	0.5128	0.0001
L47	37.83 - 32.83	1.754	48	0.4532	0.0001
L48	32.83 - 29.25	1.311	48	0.3938	0.0001
L49	29.25 - 29	1.032	48	0.3512	0.0001
L50	29 - 27.75	1.013	48	0.3483	0.0001
L51	27.75 - 27.5	0.924	48	0.3337	0.0001
L52	27.5 - 24.08	0.907	48	0.3308	0.0001
L53	24.08 - 23.83	0.684	48	0.2911	0.0001
L54	23.83 - 23.5	0.669	48	0.2884	0.0001
L55	23.5 - 23.25	0.649	48	0.2850	0.0001
L56	23.25 - 18.91	0.634	48	0.2809	0.0001
L57	18.91 - 18.66	0.411	48	0.2110	0.0000
L58	18.66 - 18.08	0.400	48	0.2076	0.0000
L59	18.08 - 17.83	0.375	48	0.1998	0.0000
L60	17.83 - 12.83	0.364	48	0.1970	0.0000
L61	12.83 - 7.83	0.188	48	0.1405	0.0000
L62	7.83 - 2.83	0.070	48	0.0854	0.0000
L63	2.83 - 0	0.009	48	0.0305	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	Lightning Rod 5/8" x 4'	42	27.420	1.8701	0.0023	20350
139.00	6' x 2" Mount Pipe	42	27.028	1.8695	0.0023	20350

Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
137.00	TME-PCS 1900MHz 4x45W-65MHz	42	26.245	1.8678	0.0023	20350
130.00	RRUS 11	42	23.522	1.8423	0.0023	9625
128.00	EPBQ-654L8H8-L2 w/ Mount Pipe	42	22.753	1.8288	0.0023	7529
118.00	MX08FRO665-21 w/ Mount Pipe	48	19.033	1.7121	0.0015	3778
108.00	BXA-70063-4CF-EDIN-X w/ Mount Pipe	48	15.632	1.5340	0.0010	2799
100.00	APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe	48	13.209	1.3706	0.0007	3272
49.00	KS24019-L112A	48	2.972	0.5760	0.0001	6056

Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
L1	140 - 135	112.050	8	7.6566	0.0091
L2	135 - 130	104.063	8	7.6323	0.0091
L3	130 - 125	96.136	8	7.5420	0.0091
L4	125 - 120	88.336	8	7.3794	0.0080
L5	120 - 115	80.754	8	7.1285	0.0064
L6	115 - 110	73.471	20	6.8127	0.0052
L7	110 - 105	66.547	20	6.4380	0.0042
L8	105 - 102	60.037	20	6.0148	0.0034
L9	102 - 101.75	56.351	20	5.7376	0.0029
L10	101.75 - 96.75	56.051	20	5.7221	0.0029
L11	96.75 - 91.75	50.242	20	5.3869	0.0025
L12	95 - 90.75	48.293	20	5.2634	0.0023
L13	90.75 - 85.75	43.691	20	5.0559	0.0021
L14	85.75 - 85.33	38.623	20	4.6324	0.0017
L15	85.33 - 85.08	38.217	20	4.5964	0.0017
L16	85.08 - 82.5	37.977	20	4.5825	0.0017
L17	82.5 - 82.25	35.543	20	4.4373	0.0016
L18	82.25 - 82	35.311	20	4.4183	0.0016
L19	82 - 81.75	35.080	20	4.3994	0.0016
L20	81.75 - 78.83	34.851	20	4.3776	0.0015
L21	78.83 - 78.58	32.254	20	4.1210	0.0014
L22	78.58 - 77.66	32.039	20	4.1078	0.0013
L23	77.66 - 77.41	31.253	20	4.0597	0.0013
L24	77.41 - 77.167	31.041	20	4.0451	0.0013
L25	77.167 - 72.167	30.836	20	4.0309	0.0013
L26	72.167 - 67.167	26.775	20	3.7308	0.0011
L27	67.167 - 66.58	23.031	20	3.4233	0.0009
L28	66.58 - 66.33	22.613	20	3.3875	0.0009
L29	66.33 - 66.16	22.436	20	3.3745	0.0009
L30	66.16 - 65.91	22.316	20	3.3656	0.0009
L31	65.91 - 62.66	22.140	20	3.3503	0.0009
L32	62.66 - 62.41	19.930	20	3.1465	0.0008
L33	62.41 - 60	19.766	20	3.1309	0.0008
L34	60 - 59.75	18.225	20	2.9786	0.0007
L35	59.75 - 54.75	18.069	20	2.9627	0.0007
L36	54.75 - 52.83	15.134	20	2.6455	0.0006
L37	52.83 - 52.58	14.095	20	2.5268	0.0005
L38	52.58 - 51.41	13.963	20	2.5152	0.0005
L39	51.41 - 51.16	13.353	20	2.4616	0.0005
L40	51.16 - 46.5	13.225	20	2.4462	0.0005
L41	51 - 45.5	13.143	20	2.4363	0.0005
L42	45.5 - 44.25	10.435	20	2.2407	0.0004
L43	44.25 - 44	9.858	20	2.1676	0.0004
L44	44 - 43.08	9.745	20	2.1546	0.0004
L45	43.08 - 42.83	9.335	20	2.1070	0.0004
L46	42.83 - 37.83	9.225	20	2.0947	0.0004
L47	37.83 - 32.83	7.160	20	1.8511	0.0003
L48	32.83 - 29.25	5.349	20	1.6080	0.0003
L49	29.25 - 29	4.209	20	1.4339	0.0003

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L50	29 - 27.75	4.134	20	1.4219	0.0002
L51	27.75 - 27.5	3.770	20	1.3624	0.0002
L52	27.5 - 24.08	3.699	20	1.3505	0.0002
L53	24.08 - 23.83	2.790	20	1.1880	0.0002
L54	23.83 - 23.5	2.728	20	1.1773	0.0002
L55	23.5 - 23.25	2.647	20	1.1631	0.0002
L56	23.25 - 18.91	2.587	20	1.1465	0.0002
L57	18.91 - 18.66	1.675	20	0.8610	0.0001
L58	18.66 - 18.08	1.630	20	0.8472	0.0001
L59	18.08 - 17.83	1.529	20	0.8153	0.0001
L60	17.83 - 12.83	1.487	20	0.8038	0.0001
L61	12.83 - 7.83	0.766	20	0.5733	0.0001
L62	7.83 - 2.83	0.284	20	0.3483	0.0001
L63	2.83 - 0	0.037	20	0.1243	0.0000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	Lightning Rod 5/8" x 4'	8	112.050	7.6566	0.0091	5104
139.00	6' x 2" Mount Pipe	8	110.451	7.6544	0.0091	5104
137.00	TME-PCS 1900MHz 4x45W-65MHz	8	107.254	7.6474	0.0090	5104
130.00	RRUS 11	8	96.136	7.5420	0.0091	2418
128.00	EPBQ-654L8H8-L2 w/ Mount Pipe	8	92.996	7.4867	0.0088	1897
118.00	MX08FRO665-21 w/ Mount Pipe	20	77.801	7.0098	0.0058	951
108.00	BXA-70063-4CF-EDIN-X w/ Mount Pipe	20	63.890	6.2811	0.0039	700
100.00	APXVAARR24_43-U-NA20_T-MOBILE w/ Mount Pipe	20	53.978	5.6119	0.0028	814
49.00	KS24019-L112A	20	12.133	2.3536	0.0005	1484

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
L1	140 - 135 (1)	TP17.0249x16x0.25	5.00	0.00	0.0	13.5038	-5.80	729.20	0.008
L2	135 - 130 (2)	TP18.0497x17.0249x0.25	5.00	0.00	0.0	14.3288	-6.15	773.76	0.008
L3	130 - 125 (3)	TP19.0746x18.0497x0.25	5.00	0.00	0.0	15.1538	-10.50	818.31	0.013
L4	125 - 120 (4)	TP20.0995x19.0746x0.25	5.00	0.00	0.0	15.9788	-10.96	862.86	0.013
L5	120 - 115 (5)	TP21.1244x20.0995x0.25	5.00	0.00	0.0	16.8039	-14.13	907.41	0.016
L6	115 - 110 (6)	TP22.1492x21.1244x0.25	5.00	0.00	0.0	17.6289	-14.68	951.96	0.015
L7	110 - 105 (7)	TP23.1741x22.1492x0.25	5.00	0.00	0.0	18.4539	-19.00	996.51	0.019
L8	105 - 102 (8)	TP23.789x23.1741x0.25	3.00	0.00	0.0	18.9489	-19.41	1023.24	0.019
L9	102 - 101.75 (9)	TP23.8403x23.789x0.387	0.25	0.00	0.0	29.2632	-19.47	1580.21	0.012
L10	101.75 - 96.75 (10)	TP24.8651x23.8403x0.375	5.00	0.00	0.0	29.5718	-23.88	1596.88	0.015
L11	96.75 - 91.75 (11)	TP25.89x24.8651x0.375	5.00	0.00	0.0	30.0050	-24.20	1620.27	0.015
L12	91.75 - 90.75 (12)	TP25.5952x24.7238x0.3563	4.25	0.00	0.0	28.9522	-25.49	1693.70	0.015
L13	90.75 - 85.75 (13)	TP26.6203x25.5952x0.3563	5.00	0.00	0.0	30.1281	-26.57	1762.50	0.015

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
L14	85.75 - 85.33 (14)	TP26.7064x26.6203x0.35 63	0.42	0.00	0.0	30.2269	-26.68	1768.27	0.015
L15	85.33 - 85.08 (15)	TP26.7577x26.7064x0.56 25	0.25	0.00	0.0	47.4460	-26.75	2775.59	0.010
L16	85.08 - 82.5 (16)	TP27.2866x26.7577x0.56 25	2.58	0.00	0.0	48.4041	-27.39	2831.64	0.010
L17	82.5 - 82.25 (17)	TP27.3379x27.2866x0.41 25	0.25	0.00	0.0	35.7636	-27.48	2092.17	0.013
L18	82.25 - 82 (18)	TP27.3891x27.3379x0.41 25	0.25	0.00	0.0	35.8317	-27.55	2096.15	0.013
L19	82 - 81.75 (19)	TP27.4404x27.3891x0.35 63	0.25	0.00	0.0	31.0689	-27.61	1817.53	0.015
L20	81.75 - 78.83 (20)	TP28.039x27.4404x0.356 3	2.92	0.00	0.0	31.7556	-28.27	1857.70	0.015
L21	78.83 - 78.58 (21)	TP28.0903x28.039x0.612 5	0.25	0.00	0.0	54.1931	-28.37	3170.30	0.009
L22	78.58 - 77.66 (22)	TP28.2789x28.0903x0.61 25	0.92	0.00	0.0	54.5651	-28.62	3192.06	0.009
L23	77.66 - 77.41 (23)	TP28.3302x28.2789x0.55	0.25	0.00	0.0	49.1987	-28.70	2878.12	0.010
L24	77.41 - 77.167 (24)	TP28.38x28.3302x0.55	0.24	0.00	0.0	49.2869	-28.76	2883.29	0.010
L25	77.167 - 72.167 (25)	TP29.4055x28.38x0.5375	5.00	0.00	0.0	49.9633	-30.14	2922.86	0.010
L26	72.167 - 67.167 (26)	TP30.4311x29.4055x0.52 5	5.00	0.00	0.0	50.5562	-31.56	2957.54	0.011
L27	67.167 - 66.58 (27)	TP30.5515x30.4311x0.52 5	0.59	0.00	0.0	50.7597	-31.73	2969.44	0.011
L28	66.58 - 66.33 (28)	TP30.6027x30.5515x0.62 5	0.25	0.00	0.0	60.3302	-31.82	3529.32	0.009
L29	66.33 - 66.16 (29)	TP30.6376x30.6027x0.62 5	0.17	0.00	0.0	60.4004	-31.87	3533.42	0.009
L30	66.16 - 65.91 (30)	TP30.6889x30.6376x0.52 5	0.25	0.00	0.0	50.9920	-31.94	2983.03	0.011
L31	65.91 - 62.66 (31)	TP31.3555x30.6889x0.51 25	3.25	0.00	0.0	50.8986	-32.82	2977.57	0.011
L32	62.66 - 62.41 (32)	TP31.4068x31.3555x0.51 25	0.25	0.00	0.0	50.9832	-32.90	2982.52	0.011
L33	62.41 - 60 (33)	TP31.9011x31.4068x0.50 63	2.41	0.00	0.0	51.1775	-33.54	2993.88	0.011
L34	60 - 59.75 (34)	TP31.9523x31.9011x0.5	0.25	0.00	0.0	50.6383	-33.62	2962.34	0.011
L35	59.75 - 54.75 (35)	TP32.9779x31.9523x0.5	5.00	0.00	0.0	52.2894	-34.97	3058.93	0.011
L36	54.75 - 52.83 (36)	TP33.3717x32.9779x0.5	1.92	0.00	0.0	52.9234	-35.49	3096.02	0.011
L37	52.83 - 52.58 (37)	TP33.423x33.3717x0.687 5	0.25	0.00	0.0	72.4681	-35.60	4239.38	0.008
L38	52.58 - 51.41 (38)	TP33.6629x33.423x0.687 5	1.17	0.00	0.0	72.9994	-36.02	4270.46	0.008
L39	51.41 - 51.16 (39)	TP33.7142x33.6629x0.50 63	0.25	0.00	0.0	54.1331	-36.10	3166.79	0.011
L40	51.16 - 46.5 (40)	TP34.67x33.7142x0.5063	4.66	0.00	0.0	54.1866	-36.15	3169.92	0.011
L41	46.5 - 45.5 (41)	TP34.2498x33.122x0.55	5.50	0.00	0.0	59.6824	-38.89	3491.42	0.011
L42	45.5 - 44.25 (42)	TP34.5062x34.2498x0.55	1.25	0.00	0.0	60.1364	-39.27	3517.98	0.011
L43	44.25 - 44 (43)	TP34.5574x34.5062x0.62 5	0.25	0.00	0.0	68.2890	-39.38	3994.91	0.010
L44	44 - 43.08 (44)	TP34.7461x34.5574x0.62 5	0.92	0.00	0.0	68.6687	-39.72	4017.12	0.010
L45	43.08 - 42.83 (45)	TP34.7973x34.7461x0.66 25	0.25	0.00	0.0	72.8182	-39.82	4259.86	0.009
L46	42.83 - 37.83 (46)	TP35.8226x34.7973x0.66 25	5.00	0.00	0.0	75.0054	-41.60	4387.81	0.009
L47	37.83 - 32.83 (47)	TP36.8479x35.8226x0.65	5.00	0.00	0.0	75.7623	-43.41	4432.09	0.010

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
L48	32.83 - 29.25 (48)	TP37.582x36.8479x0.637 5	3.58	0.00	0.0	75.8379	-44.73	4436.52	0.010
L49	29.25 - 29 (49)	TP37.6333x37.582x0.637 5	0.25	0.00	0.0	75.9431	-44.83	4442.67	0.010
L50	29 - 27.75 (50)	TP37.8896x37.6333x0.63 75	1.25	0.00	0.0	76.4693	-45.28	4473.45	0.010
L51	27.75 - 27.5 (51)	TP37.9409x37.8896x0.63 75	0.25	0.00	0.0	76.5745	-45.39	4479.61	0.010
L52	27.5 - 24.08 (52)	TP38.6422x37.9409x0.63 75	3.42	0.00	0.0	78.0141	-46.66	4563.83	0.010
L53	24.08 - 23.83 (53)	TP38.6935x38.6422x0.7	0.25	0.00	0.0	85.6373	-46.77	5009.78	0.009
L54	23.83 - 23.5 (54)	TP38.7611x38.6935x0.7	0.33	0.00	0.0	85.7898	-46.90	5018.70	0.009
L55	23.5 - 23.25 (55)	TP38.8124x38.7611x0.44 38	0.25	0.00	0.0	54.8240	-46.99	3207.20	0.015
L56	23.25 - 18.91 (56)	TP39.7023x38.8124x0.44 38	4.34	0.00	0.0	56.0956	-48.59	3281.59	0.015
L57	18.91 - 18.66 (57)	TP39.7536x39.7023x0.52 5	0.25	0.00	0.0	66.3160	-48.69	3879.48	0.013
L58	18.66 - 18.08 (58)	TP39.8725x39.7536x0.52 5	0.58	0.00	0.0	66.5170	-48.88	3891.25	0.013
L59	18.08 - 17.83 (59)	TP39.9238x39.8725x0.63 75	0.25	0.00	0.0	80.6450	-48.98	4717.73	0.010
L60	17.83 - 12.83 (60)	TP40.9491x39.9238x0.62 5	5.00	0.00	0.0	81.1523	-50.93	4747.41	0.011
L61	12.83 - 7.83 (61)	TP41.9744x40.9491x0.62 5	5.00	0.00	0.0	83.2157	-52.90	4868.12	0.011
L62	7.83 - 2.83 (62)	TP42.9997x41.9744x0.61 25	5.00	0.00	0.0	82.3848	-53.66	4819.51	0.011
L63	2.83 - 0 (63)	TP43.58x42.9997x0.6125	2.83	0.00	0.0	83.5981	-54.77	4890.49	0.011

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M _{uy} kip-ft	φM _{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	140 - 135 (1)	TP17.0249x16x0.25	20.39	311.84	0.065	0.00	311.84	0.000
L2	135 - 130 (2)	TP18.0497x17.0249x0.25	47.91	351.40	0.136	0.00	351.40	0.000
L3	130 - 125 (3)	TP19.0746x18.0497x0.25	102.39	393.33	0.260	0.00	393.33	0.000
L4	125 - 120 (4)	TP20.0995x19.0746x0.25	161.24	437.62	0.368	0.00	437.62	0.000
L5	120 - 115 (5)	TP21.1244x20.0995x0.25	228.99	484.27	0.473	0.00	484.27	0.000
L6	115 - 110 (6)	TP22.1492x21.1244x0.25	302.89	528.98	0.573	0.00	528.98	0.000
L7	110 - 105 (7)	TP23.1741x22.1492x0.25	391.65	571.73	0.685	0.00	571.73	0.000
L8	105 - 102 (8)	TP23.789x23.1741x0.25	447.61	597.78	0.749	0.00	597.78	0.000
L9	102 - 101.75 (9)	TP23.8403x23.789x0.387 5	452.30	943.27	0.479	0.00	943.27	0.000
L10	101.75 - 96.75 (10)	TP24.8651x23.8403x0.37 5	556.29	996.58	0.558	0.00	996.58	0.000
L11	96.75 - 91.75 (11)	TP25.89x24.8651x0.375	594.82	1026.20	0.580	0.00	1026.20	0.000
L12	91.75 - 90.75 (12)	TP25.5952x24.7238x0.35 63	689.30	1090.60	0.632	0.00	1090.60	0.000
L13	90.75 - 85.75 (13)	TP26.6203x25.5952x0.35 63	802.59	1181.63	0.679	0.00	1181.63	0.000
L14	85.75 - 85.33 (14)	TP26.7064x26.6203x0.35 63	812.23	1189.45	0.683	0.00	1189.45	0.000
L15	85.33 - 85.08 (15)	TP26.7577x26.7064x0.56 25	817.98	1841.60	0.444	0.00	1841.60	0.000
L16	85.08 - 82.5 (16)	TP27.2866x26.7577x0.56 25	877.67	1917.53	0.458	0.00	1917.53	0.000
L17	82.5 - 82.25 (17)	TP27.3379x27.2866x0.41 25	883.49	1435.49	0.615	0.00	1435.49	0.000
L18	82.25 - 82 (18)	TP27.3891x27.3379x0.41 25	889.32	1441.01	0.617	0.00	1441.01	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L19	82 - 81.75 (19)	TP27.4404x27.3891x0.35 63	895.15	1257.09	0.712	0.00	1257.09	0.000
L20	81.75 - 78.83 (20)	TP28.039x27.4404x0.356 3	963.74	1313.65	0.734	0.00	1313.65	0.000
L21	78.83 - 78.58 (21)	TP28.0903x28.039x0.612 5	969.66	2204.72	0.440	0.00	2204.72	0.000
L22	78.58 - 77.66 (22)	TP28.2789x28.0903x0.61 25	991.47	2235.43	0.444	0.00	2235.43	0.000
L23	77.66 - 77.41 (23)	TP28.3302x28.2789x0.55	997.42	2028.50	0.492	0.00	2028.50	0.000
L24	77.41 - 77.167 (24)	TP28.38x28.3302x0.55	1003.20	2035.86	0.493	0.00	2035.86	0.000
L25	77.167 - 72.167 (25)	TP29.4055x28.38x0.5375	1123.65	2143.18	0.524	0.00	2143.18	0.000
L26	72.167 - 67.167 (26)	TP30.4311x29.4055x0.52 5	1246.72	2248.93	0.554	0.00	2248.93	0.000
L27	67.167 - 66.58 (27)	TP30.5515x30.4311x0.52 5	1261.33	2267.24	0.556	0.00	2267.24	0.000
L28	66.58 - 66.33 (28)	TP30.6027x30.5515x0.62 5	1267.56	2681.47	0.473	0.00	2681.47	0.000
L29	66.33 - 66.16 (29)	TP30.6376x30.6027x0.62 5	1271.79	2687.78	0.473	0.00	2687.78	0.000
L30	66.16 - 65.91 (30)	TP30.6889x30.6376x0.52 5	1278.03	2288.22	0.559	0.00	2288.22	0.000
L31	65.91 - 62.66 (31)	TP31.3555x30.6889x0.51 25	1359.61	2337.26	0.582	0.00	2337.26	0.000
L32	62.66 - 62.41 (32)	TP31.4068x31.3555x0.51 25	1365.92	2345.10	0.582	0.00	2345.10	0.000
L33	62.41 - 60 (33)	TP31.9011x31.4068x0.50 63	1426.94	2393.27	0.596	0.00	2393.27	0.000
L34	60 - 59.75 (34)	TP31.9523x31.9011x0.5	1433.29	2372.93	0.604	0.00	2372.93	0.000
L35	59.75 - 54.75 (35)	TP32.9779x31.9523x0.5	1561.08	2531.44	0.617	0.00	2531.44	0.000
L36	54.75 - 52.83 (36)	TP33.3717x32.9779x0.5	1610.54	2593.67	0.621	0.00	2593.67	0.000
L37	52.83 - 52.58 (37)	TP33.423x33.3717x0.687 5	1616.99	3516.74	0.460	0.00	3516.74	0.000
L38	52.58 - 51.41 (38)	TP33.6629x33.423x0.687 5	1647.28	3569.03	0.462	0.00	3569.03	0.000
L39	51.41 - 51.16 (39)	TP33.7142x33.6629x0.50 63	1653.75	2680.01	0.617	0.00	2680.01	0.000
L40	51.16 - 46.5 (40)	TP34.67x33.7142x0.5063	1657.91	2685.34	0.617	0.00	2685.34	0.000
L41	46.5 - 45.5 (41)	TP34.2498x33.122x0.55	1802.00	2995.33	0.602	0.00	2995.33	0.000
L42	45.5 - 44.25 (42)	TP34.5062x34.2498x0.55	1835.16	3041.44	0.603	0.00	3041.44	0.000
L43	44.25 - 44 (43)	TP34.5574x34.5062x0.62 5	1841.80	3443.82	0.535	0.00	3443.82	0.000
L44	44 - 43.08 (44)	TP34.7461x34.5574x0.62 5	1866.28	3482.57	0.536	0.00	3482.57	0.000
L45	43.08 - 42.83 (45)	TP34.7973x34.7461x0.66 25	1872.95	3690.55	0.507	0.00	3690.55	0.000
L46	42.83 - 37.83 (46)	TP35.8226x34.7973x0.66 25	2007.07	3917.76	0.512	0.00	3917.76	0.000
L47	37.83 - 32.83 (47)	TP36.8479x35.8226x0.65	2142.64	4077.64	0.525	0.00	4077.64	0.000
L48	32.83 - 29.25 (48)	TP37.582x36.8479x0.637 5	2240.50	4168.77	0.537	0.00	4168.77	0.000
L49	29.25 - 29 (49)	TP37.6333x37.582x0.637 5	2247.36	4180.44	0.538	0.00	4180.44	0.000
L50	29 - 27.75 (50)	TP37.8896x37.6333x0.63 75	2281.68	4239.07	0.538	0.00	4239.07	0.000
L51	27.75 - 27.5 (51)	TP37.9409x37.8896x0.63 75	2288.56	4250.84	0.538	0.00	4250.84	0.000
L52	27.5 - 24.08 (52)	TP38.6422x37.9409x0.63 75	2382.91	4413.54	0.540	0.00	4413.54	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L53	24.08 - 23.83 (53)	TP38.6935x38.6422x0.7	2389.83	4835.53	0.494	0.00	4835.53	0.000
L54	23.83 - 23.5 (54)	TP38.7611x38.6935x0.7	2398.97	4852.93	0.494	0.00	4852.93	0.000
L55	23.5 - 23.25 (55)	TP38.8124x38.7611x0.44 38	2405.89	3097.88	0.777	0.00	3097.88	0.000
L56	23.25 - 18.91 (56)	TP39.7023x38.8124x0.44 38	2526.47	3220.50	0.784	0.00	3220.50	0.000
L57	18.91 - 18.66 (57)	TP39.7536x39.7023x0.52 5	2533.43	3885.52	0.652	0.00	3885.52	0.000
L58	18.66 - 18.08 (58)	TP39.8725x39.7536x0.52 5	2549.61	3909.27	0.652	0.00	3909.27	0.000
L59	18.08 - 17.83 (59)	TP39.9238x39.8725x0.63 75	2556.58	4718.77	0.542	0.00	4718.77	0.000
L60	17.83 - 12.83 (60)	TP40.9491x39.9238x0.62 5	2696.86	4877.38	0.553	0.00	4877.38	0.000
L61	12.83 - 7.83 (61)	TP41.9744x40.9491x0.62 5	2838.54	5130.51	0.553	0.00	5130.51	0.000
L62	7.83 - 2.83 (62)	TP42.9997x41.9744x0.61 25	2895.54	5133.48	0.564	0.00	5133.48	0.000
L63	2.83 - 0 (63)	TP43.58x42.9997x0.6125	2981.37	5286.91	0.564	0.00	5286.91	0.000

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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 $\frac{T_u}{\phi T_n}$
L1	140 - 135 (1)	TP17.0249x16x0.25	5.35	218.76	0.024	0.01	322.80	0.000
L2	135 - 130 (2)	TP18.0497x17.0249x0.25	5.66	232.13	0.024	0.01	363.44	0.000
L3	130 - 125 (3)	TP19.0746x18.0497x0.25	11.63	245.49	0.047	0.65	406.50	0.002
L4	125 - 120 (4)	TP20.0995x19.0746x0.25	11.92	258.86	0.046	0.65	451.97	0.001
L5	120 - 115 (5)	TP21.1244x20.0995x0.25	14.65	272.22	0.054	0.56	499.85	0.001
L6	115 - 110 (6)	TP22.1492x21.1244x0.25	14.92	285.59	0.052	0.56	550.13	0.001
L7	110 - 105 (7)	TP23.1741x22.1492x0.25	18.60	298.95	0.062	0.42	602.83	0.001
L8	105 - 102 (8)	TP23.789x23.1741x0.25	18.73	306.97	0.061	0.42	635.61	0.001
L9	102 - 101.75 (9)	TP23.8403x23.789x0.387 5	18.75	474.06	0.040	0.42	977.98	0.000
L10	101.75 - 96.75 (10)	TP24.8651x23.8403x0.37 5	21.99	479.06	0.046	0.42	1032.01	0.000
L11	96.75 - 91.75 (11)	TP25.89x24.8651x0.375	22.09	486.08	0.045	0.42	1062.47	0.000
L12	91.75 - 90.75 (12)	TP25.5952x24.7238x0.35 63	22.40	508.11	0.044	0.42	1128.05	0.000
L13	90.75 - 85.75 (13)	TP26.6203x25.5952x0.35 63	22.96	528.75	0.043	0.03	1221.55	0.000
L14	85.75 - 85.33 (14)	TP26.7064x26.6203x0.35 63	22.99	530.48	0.043	0.03	1229.58	0.000
L15	85.33 - 85.08 (15)	TP26.7577x26.7064x0.56 25	23.01	832.68	0.028	0.03	1918.66	0.000
L16	85.08 - 82.5 (16)	TP27.2866x26.7577x0.56 25	23.31	849.49	0.027	0.02	1996.93	0.000
L17	82.5 - 82.25 (17)	TP27.3379x27.2866x0.41 25	23.32	627.65	0.037	0.02	1486.55	0.000
L18	82.25 - 82 (18)	TP27.3891x27.3379x0.41 25	23.35	628.85	0.037	0.01	1492.22	0.000
L19	82 - 81.75 (19)	TP27.4404x27.3891x0.35 63	23.37	545.26	0.043	0.01	1299.03	0.000
L20	81.75 - 78.83 (20)	TP28.039x27.4404x0.356 3	23.67	557.31	0.042	0.01	1357.08	0.000
L21	78.83 - 78.58 (21)	TP28.0903x28.039x0.612 5	23.67	951.09	0.025	0.01	2298.81	0.000
L22	78.58 - 77.66 (22)	TP28.2789x28.0903x0.61 25	23.79	957.62	0.025	0.01	2330.47	0.000
L23	77.66 - 77.41 (23)	TP28.3302x28.2789x0.55	23.81	863.44	0.028	0.01	2109.92	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 $\frac{T_u}{\phi T_n}$
L24	77.41 - 77.167 (24)	TP28.38x28.3302x0.55	23.84	864.99	0.028	0.01	2117.49	0.000
L25	77.167 - 72.167 (25)	TP29.4055x28.38x0.5375	24.39	876.86	0.028	0.05	2226.62	0.000
L26	72.167 - 67.167 (26)	TP30.4311x29.4055x0.525	24.90	887.26	0.028	0.08	2334.05	0.000
L27	67.167 - 66.58 (27)	TP30.5515x30.4311x0.525	24.94	890.83	0.028	0.08	2352.88	0.000
L28	66.58 - 66.33 (28)	TP30.6027x30.5515x0.625	24.95	1058.80	0.024	0.08	2791.97	0.000
L29	66.33 - 66.16 (29)	TP30.6376x30.6027x0.625	24.97	1060.03	0.024	0.08	2798.47	0.000
L30	66.16 - 65.91 (30)	TP30.6889x30.6376x0.525	24.98	894.91	0.028	0.08	2374.47	0.000
L31	65.91 - 62.66 (31)	TP31.3555x30.6889x0.5125	25.23	893.27	0.028	0.09	2423.48	0.000
L32	62.66 - 62.41 (32)	TP31.4068x31.3555x0.5125	25.24	894.76	0.028	0.09	2431.54	0.000
L33	62.41 - 60 (33)	TP31.9011x31.4068x0.5063	25.41	898.16	0.028	0.09	2480.35	0.000
L34	60 - 59.75 (34)	TP31.9523x31.9011x0.5	25.41	888.70	0.029	0.09	2458.72	0.000
L35	59.75 - 54.75 (35)	TP32.9779x31.9523x0.5	25.71	917.68	0.028	0.09	2621.67	0.000
L36	54.75 - 52.83 (36)	TP33.3717x32.9779x0.5	25.84	928.81	0.028	0.09	2685.63	0.000
L37	52.83 - 52.58 (37)	TP33.423x33.3717x0.6875	25.82	1271.82	0.020	0.09	3662.20	0.000
L38	52.58 - 51.41 (38)	TP33.6629x33.423x0.6875	25.93	1281.14	0.020	0.09	3716.09	0.000
L39	51.41 - 51.16 (39)	TP33.7142x33.6629x0.5063	25.93	950.04	0.027	0.09	2775.13	0.000
L40	51.16 - 46.5 (40)	TP34.67x33.7142x0.5063	25.94	950.98	0.027	0.09	2780.61	0.000
L41	46.5 - 45.5 (41)	TP34.2498x33.122x0.55	26.49	1047.43	0.025	0.02	3104.93	0.000
L42	45.5 - 44.25 (42)	TP34.5062x34.2498x0.55	26.58	1055.39	0.025	0.02	3152.34	0.000
L43	44.25 - 44 (43)	TP34.5574x34.5062x0.625	26.58	1198.47	0.022	0.02	3577.20	0.000
L44	44 - 43.08 (44)	TP34.7461x34.5574x0.625	26.65	1205.14	0.022	0.02	3617.08	0.000
L45	43.08 - 42.83 (45)	TP34.7973x34.7461x0.6625	26.66	1277.96	0.021	0.02	3837.20	0.000
L46	42.83 - 37.83 (46)	TP35.8226x34.7973x0.6625	26.98	1316.34	0.020	0.02	4071.18	0.000
L47	37.83 - 32.83 (47)	TP36.8479x35.8226x0.65	27.25	1329.63	0.020	0.02	4233.64	0.000
L48	32.83 - 29.25 (48)	TP37.582x36.8479x0.6375	27.43	1330.96	0.021	0.02	4325.27	0.000
L49	29.25 - 29 (49)	TP37.6333x37.582x0.6375	27.42	1332.80	0.021	0.02	4337.28	0.000
L50	29 - 27.75 (50)	TP37.8896x37.6333x0.6375	27.50	1342.04	0.020	0.02	4397.59	0.000
L51	27.75 - 27.5 (51)	TP37.9409x37.8896x0.6375	27.50	1343.88	0.020	0.02	4409.71	0.000
L52	27.5 - 24.08 (52)	TP38.6422x37.9409x0.6375	27.68	1369.15	0.020	0.02	4577.07	0.000
L53	24.08 - 23.83 (53)	TP38.6935x38.6422x0.7	27.67	1502.93	0.018	0.02	5022.83	0.000
L54	23.83 - 23.5 (54)	TP38.7611x38.6935x0.7	27.69	1505.61	0.018	0.02	5040.74	0.000
L55	23.5 - 23.25 (55)	TP38.8124x38.7611x0.4438	27.70	962.16	0.029	0.02	3247.31	0.000
L56	23.25 - 18.91 (56)	TP39.7023x38.8124x0.4438	27.87	984.48	0.028	0.02	3399.70	0.000
L57	18.91 - 18.66 (57)	TP39.7536x39.7023x0.525	27.86	1163.85	0.024	0.02	4016.04	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 $\frac{T_u}{\phi T_n}$
L58	18.66 - 18.08 (58)	TP39.8725x39.7536x0.52 5	27.90	1167.37	0.024	0.02	4040.43	0.000
L59	18.08 - 17.83 (59)	TP39.9238x39.8725x0.63 75	27.90	1415.32	0.020	0.02	4890.98	0.000
L60	17.83 - 12.83 (60)	TP40.9491x39.9238x0.62 5	28.20	1424.22	0.020	0.02	5051.76	0.000
L61	12.83 - 7.83 (61)	TP41.9744x40.9491x0.62 5	28.48	1460.43	0.020	0.02	5311.92	0.000
L62	7.83 - 2.83 (62)	TP42.9997x41.9744x0.61 25	28.61	1452.95	0.020	0.02	5312.63	0.000
L63	2.83 - 0 (63)	TP43.58x42.9997x0.6125	28.76	1477.19	0.019	0.02	5470.26	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	140 - 135 (1)	0.008	0.065	0.000	0.024	0.000	0.074	1.050	4.8.2
L2	135 - 130 (2)	0.008	0.136	0.000	0.024	0.000	0.145	1.050	4.8.2
L3	130 - 125 (3)	0.013	0.260	0.000	0.047	0.002	0.276	1.050	4.8.2
L4	125 - 120 (4)	0.013	0.368	0.000	0.046	0.001	0.383	1.050	4.8.2
L5	120 - 115 (5)	0.016	0.473	0.000	0.054	0.001	0.491	1.050	4.8.2
L6	115 - 110 (6)	0.015	0.573	0.000	0.052	0.001	0.591	1.050	4.8.2
L7	110 - 105 (7)	0.019	0.685	0.000	0.062	0.001	0.708	1.050	4.8.2
L8	105 - 102 (8)	0.019	0.749	0.000	0.061	0.001	0.772	1.050	4.8.2
L9	102 - 101.75 (9)	0.012	0.479	0.000	0.040	0.000	0.493	1.050	4.8.2
L10	101.75 - 96.75 (10)	0.015	0.558	0.000	0.046	0.000	0.575	1.050	4.8.2
L11	96.75 - 91.75 (11)	0.015	0.580	0.000	0.045	0.000	0.597	1.050	4.8.2
L12	91.75 - 90.75 (12)	0.015	0.632	0.000	0.044	0.000	0.649	1.050	4.8.2
L13	90.75 - 85.75 (13)	0.015	0.679	0.000	0.043	0.000	0.696	1.050	4.8.2
L14	85.75 - 85.33 (14)	0.015	0.683	0.000	0.043	0.000	0.700	1.050	4.8.2
L15	85.33 - 85.08 (15)	0.010	0.444	0.000	0.028	0.000	0.455	1.050	4.8.2
L16	85.08 - 82.5 (16)	0.010	0.458	0.000	0.027	0.000	0.468	1.050	4.8.2
L17	82.5 - 82.25 (17)	0.013	0.615	0.000	0.037	0.000	0.630	1.050	4.8.2
L18	82.25 - 82 (18)	0.013	0.617	0.000	0.037	0.000	0.632	1.050	4.8.2
L19	82 - 81.75 (19)	0.015	0.712	0.000	0.043	0.000	0.729	1.050	4.8.2
L20	81.75 - 78.83 (20)	0.015	0.734	0.000	0.042	0.000	0.751	1.050	4.8.2
L21	78.83 - 78.58 (21)	0.009	0.440	0.000	0.025	0.000	0.449	1.050	4.8.2
L22	78.58 - 77.66 (22)	0.009	0.444	0.000	0.025	0.000	0.453	1.050	4.8.2
L23	77.66 - 77.41 (23)	0.010	0.492	0.000	0.028	0.000	0.502	1.050	4.8.2
L24	77.41 - 77.167 (24)	0.010	0.493	0.000	0.028	0.000	0.504	1.050	4.8.2
L25	77.167 - 72.167 (25)	0.010	0.524	0.000	0.028	0.000	0.535	1.050	4.8.2
L26	72.167 - 67.167 (26)	0.011	0.554	0.000	0.028	0.000	0.566	1.050	4.8.2
L27	67.167 - 66.58 (27)	0.011	0.556	0.000	0.028	0.000	0.568	1.050	4.8.2

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	66.58 - 66.33 (28)	0.009	0.473	0.000	0.024	0.000	0.482	1.050	4.8.2
L29	66.33 - 66.16 (29)	0.009	0.473	0.000	0.024	0.000	0.483	1.050	4.8.2
L30	66.16 - 65.91 (30)	0.011	0.559	0.000	0.028	0.000	0.570	1.050	4.8.2
L31	65.91 - 62.66 (31)	0.011	0.582	0.000	0.028	0.000	0.594	1.050	4.8.2
L32	62.66 - 62.41 (32)	0.011	0.582	0.000	0.028	0.000	0.594	1.050	4.8.2
L33	62.41 - 60 (33)	0.011	0.596	0.000	0.028	0.000	0.608	1.050	4.8.2
L34	60 - 59.75 (34)	0.011	0.604	0.000	0.029	0.000	0.616	1.050	4.8.2
L35	59.75 - 54.75 (35)	0.011	0.617	0.000	0.028	0.000	0.629	1.050	4.8.2
L36	54.75 - 52.83 (36)	0.011	0.621	0.000	0.028	0.000	0.633	1.050	4.8.2
L37	52.83 - 52.58 (37)	0.008	0.460	0.000	0.020	0.000	0.469	1.050	4.8.2
L38	52.58 - 51.41 (38)	0.008	0.462	0.000	0.020	0.000	0.470	1.050	4.8.2
L39	51.41 - 51.16 (39)	0.011	0.617	0.000	0.027	0.000	0.629	1.050	4.8.2
L40	51.16 - 46.5 (40)	0.011	0.617	0.000	0.027	0.000	0.630	1.050	4.8.2
L41	46.5 - 45.5 (41)	0.011	0.602	0.000	0.025	0.000	0.613	1.050	4.8.2
L42	45.5 - 44.25 (42)	0.011	0.603	0.000	0.025	0.000	0.615	1.050	4.8.2
L43	44.25 - 44 (43)	0.010	0.535	0.000	0.022	0.000	0.545	1.050	4.8.2
L44	44 - 43.08 (44)	0.010	0.536	0.000	0.022	0.000	0.546	1.050	4.8.2
L45	43.08 - 42.83 (45)	0.009	0.507	0.000	0.021	0.000	0.517	1.050	4.8.2
L46	42.83 - 37.83 (46)	0.009	0.512	0.000	0.020	0.000	0.522	1.050	4.8.2
L47	37.83 - 32.83 (47)	0.010	0.525	0.000	0.020	0.000	0.536	1.050	4.8.2
L48	32.83 - 29.25 (48)	0.010	0.537	0.000	0.021	0.000	0.548	1.050	4.8.2
L49	29.25 - 29 (49)	0.010	0.538	0.000	0.021	0.000	0.548	1.050	4.8.2
L50	29 - 27.75 (50)	0.010	0.538	0.000	0.020	0.000	0.549	1.050	4.8.2
L51	27.75 - 27.5 (51)	0.010	0.538	0.000	0.020	0.000	0.549	1.050	4.8.2
L52	27.5 - 24.08 (52)	0.010	0.540	0.000	0.020	0.000	0.551	1.050	4.8.2
L53	24.08 - 23.83 (53)	0.009	0.494	0.000	0.018	0.000	0.504	1.050	4.8.2
L54	23.83 - 23.5 (54)	0.009	0.494	0.000	0.018	0.000	0.504	1.050	4.8.2
L55	23.5 - 23.25 (55)	0.015	0.777	0.000	0.029	0.000	0.792	1.050	4.8.2
L56	23.25 - 18.91 (56)	0.015	0.784	0.000	0.028	0.000	0.800	1.050	4.8.2
L57	18.91 - 18.66 (57)	0.013	0.652	0.000	0.024	0.000	0.665	1.050	4.8.2
L58	18.66 - 18.08 (58)	0.013	0.652	0.000	0.024	0.000	0.665	1.050	4.8.2
L59	18.08 - 17.83 (59)	0.010	0.542	0.000	0.020	0.000	0.553	1.050	4.8.2
L60	17.83 - 12.83 (60)	0.011	0.553	0.000	0.020	0.000	0.564	1.050	4.8.2
L61	12.83 - 7.83 (61)	0.011	0.553	0.000	0.020	0.000	0.565	1.050	4.8.2

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			
L62	7.83 - 2.83 (62)	0.011	0.564	0.000	0.020	0.000	0.576	1.050	4.8.2
L63	2.83 - 0 (63)	0.011	0.564	0.000	0.019	0.000	0.575	1.050	4.8.2

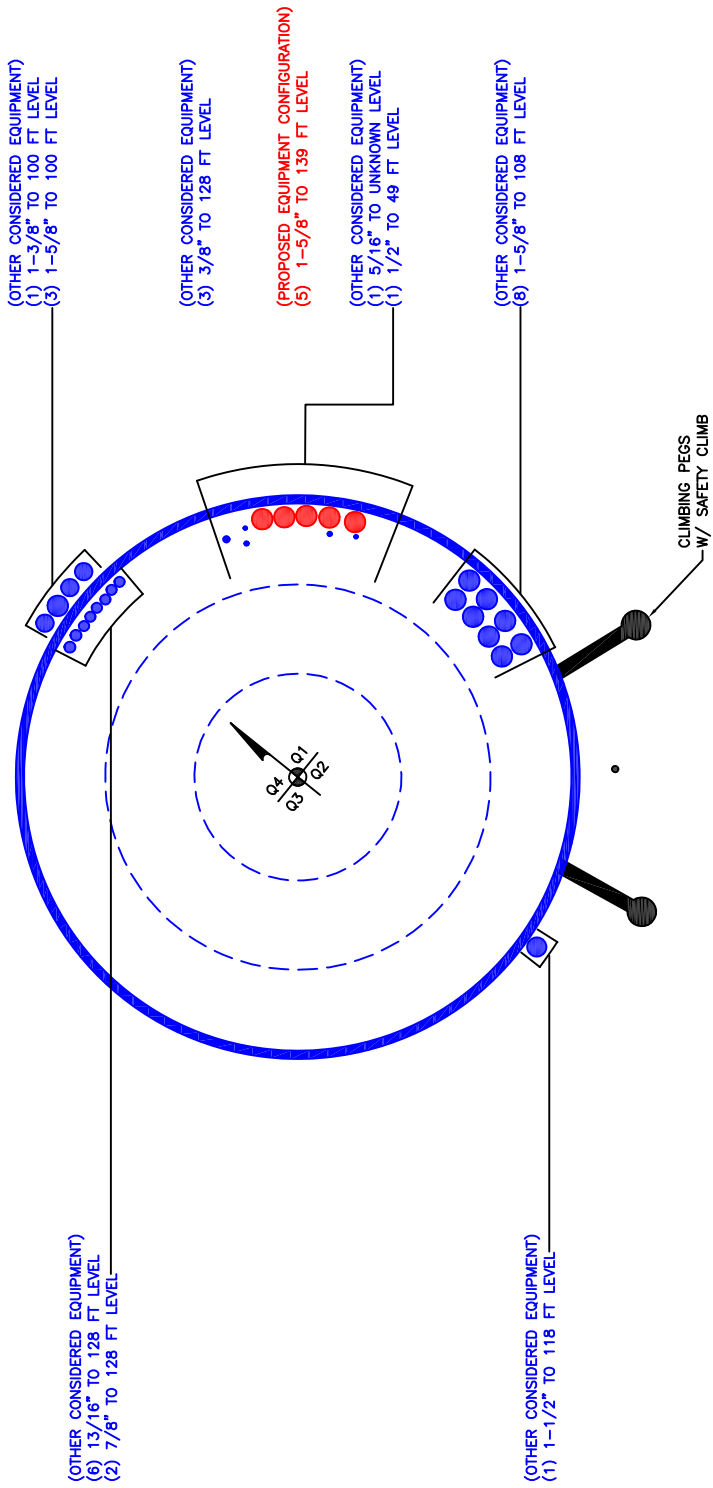
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	140 - 135	Pole	TP17.0249x16x0.25	1	-5.80	765.66	7.0	Pass
L2	135 - 130	Pole	TP18.0497x17.0249x0.25	2	-6.15	812.44	13.8	Pass
L3	130 - 125	Pole	TP19.0746x18.0497x0.25	3	-10.50	859.22	26.2	Pass
L4	125 - 120	Pole	TP20.0995x19.0746x0.25	4	-10.96	906.00	36.5	Pass
L5	120 - 115	Pole	TP21.1244x20.0995x0.25	5	-14.13	952.78	46.8	Pass
L6	115 - 110	Pole	TP22.1492x21.1244x0.25	6	-14.68	999.56	56.3	Pass
L7	110 - 105	Pole	TP23.1741x22.1492x0.25	7	-19.00	1046.34	67.4	Pass
L8	105 - 102	Pole	TP23.789x23.1741x0.25	8	-19.41	1074.40	73.5	Pass
L9	102 - 101.75	Pole	TP23.8403x23.789x0.3875	9	-19.47	1659.22	47.0	Pass
L10	101.75 - 96.75	Pole	TP24.8651x23.8403x0.375	10	-23.88	1676.72	54.8	Pass
L11	96.75 - 91.75	Pole	TP25.89x24.8651x0.375	11	-24.20	1701.28	56.8	Pass
L12	91.75 - 90.75	Pole	TP25.5952x24.7238x0.3563	12	-25.49	1778.38	61.8	Pass
L13	90.75 - 85.75	Pole	TP26.6203x25.5952x0.3563	13	-26.57	1850.62	66.3	Pass
L14	85.75 - 85.33	Pole	TP26.7064x26.6203x0.3563	14	-26.68	1856.68	66.7	Pass
L15	85.33 - 85.08	Pole	TP26.7577x26.7064x0.5625	15	-26.75	2914.37	43.3	Pass
L16	85.08 - 82.5	Pole	TP27.2866x26.7577x0.5625	16	-27.39	2973.22	44.6	Pass
L17	82.5 - 82.25	Pole	TP27.3379x27.2866x0.4125	17	-27.48	2196.78	60.0	Pass
L18	82.25 - 82	Pole	TP27.3891x27.3379x0.4125	18	-27.55	2200.96	60.2	Pass
L19	82 - 81.75	Pole	TP27.4404x27.3891x0.3563	19	-27.61	1908.41	69.4	Pass
L20	81.75 - 78.83	Pole	TP28.039x27.4404x0.3563	20	-28.27	1950.58	71.5	Pass
L21	78.83 - 78.58	Pole	TP28.0903x28.039x0.6125	21	-28.37	3328.81	42.8	Pass
L22	78.58 - 77.66	Pole	TP28.2789x28.0903x0.6125	22	-28.62	3351.66	43.2	Pass
L23	77.66 - 77.41	Pole	TP28.3302x28.2789x0.55	23	-28.70	3022.03	47.9	Pass
L24	77.41 - 77.167	Pole	TP28.38x28.3302x0.55	24	-28.76	3027.45	48.0	Pass
L25	77.167 - 72.167	Pole	TP29.4055x28.38x0.5375	25	-30.14	3069.00	51.0	Pass
L26	72.167 - 67.167	Pole	TP30.4311x29.4055x0.525	26	-31.56	3105.42	53.9	Pass
L27	67.167 - 66.58	Pole	TP30.5515x30.4311x0.525	27	-31.73	3117.91	54.1	Pass
L28	66.58 - 66.33	Pole	TP30.6027x30.5515x0.625	28	-31.82	3705.79	45.9	Pass
L29	66.33 - 66.16	Pole	TP30.6376x30.6027x0.625	29	-31.87	3710.09	46.0	Pass
L30	66.16 - 65.91	Pole	TP30.6889x30.6376x0.525	30	-31.94	3132.18	54.3	Pass
L31	65.91 - 62.66	Pole	TP31.3555x30.6889x0.5125	31	-32.82	3126.45	56.5	Pass
L32	62.66 - 62.41	Pole	TP31.4068x31.3555x0.5125	32	-32.90	3131.65	56.6	Pass
L33	62.41 - 60	Pole	TP31.9011x31.4068x0.5063	33	-33.54	3143.57	57.9	Pass
L34	60 - 59.75	Pole	TP31.9523x31.9011x0.5	34	-33.62	3110.46	58.7	Pass
L35	59.75 - 54.75	Pole	TP32.9779x31.9523x0.5	35	-34.97	3211.88	59.9	Pass
L36	54.75 - 52.83	Pole	TP33.3717x32.9779x0.5	36	-35.49	3250.82	60.3	Pass
L37	52.83 - 52.58	Pole	TP33.423x33.3717x0.6875	37	-35.60	4451.35	44.6	Pass
L38	52.58 - 51.41	Pole	TP33.6629x33.423x0.6875	38	-36.02	4483.98	44.8	Pass
L39	51.41 - 51.16	Pole	TP33.7142x33.6629x0.5063	39	-36.10	3325.13	59.9	Pass
L40	51.16 - 46.5	Pole	TP34.67x33.7142x0.5063	40	-36.15	3328.42	60.0	Pass
L41	46.5 - 45.5	Pole	TP34.2498x33.122x0.55	41	-38.89	3665.99	58.4	Pass
L42	45.5 - 44.25	Pole	TP34.5062x34.2498x0.55	42	-39.27	3693.88	58.6	Pass
L43	44.25 - 44	Pole	TP34.5574x34.5062x0.625	43	-39.38	4194.66	51.9	Pass
L44	44 - 43.08	Pole	TP34.7461x34.5574x0.625	44	-39.72	4217.98	52.0	Pass
L45	43.08 - 42.83	Pole	TP34.7973x34.7461x0.6625	45	-39.82	4472.85	49.3	Pass
L46	42.83 - 37.83	Pole	TP35.8226x34.7973x0.6625	46	-41.60	4607.20	49.7	Pass
L47	37.83 - 32.83	Pole	TP36.8479x35.8226x0.65	47	-43.41	4653.69	51.0	Pass
L48	32.83 - 29.25	Pole	TP37.582x36.8479x0.6375	48	-44.73	4658.35	52.2	Pass
L49	29.25 - 29	Pole	TP37.6333x37.582x0.6375	49	-44.83	4664.80	52.2	Pass
L50	29 - 27.75	Pole	TP37.8896x37.6333x0.6375	50	-45.28	4697.12	52.3	Pass
L51	27.75 - 27.5	Pole	TP37.9409x37.8896x0.6375	51	-45.39	4703.59	52.3	Pass
L52	27.5 - 24.08	Pole	TP38.6422x37.9409x0.6375	52	-46.66	4792.02	52.4	Pass
L53	24.08 - 23.83	Pole	TP38.6935x38.6422x0.7	53	-46.77	5260.27	48.0	Pass
L54	23.83 - 23.5	Pole	TP38.7611x38.6935x0.7	54	-46.90	5269.63	48.0	Pass
L55	23.5 - 23.25	Pole	TP38.8124x38.7611x0.4438	55	-46.99	3367.56	75.4	Pass
L56	23.25 - 18.91	Pole	TP39.7023x38.8124x0.4438	56	-48.59	3445.67	76.2	Pass
L57	18.91 - 18.66	Pole	TP39.7536x39.7023x0.525	57	-48.69	4073.45	63.3	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	σP_{allow} K	% Capacity	Pass Fail	
L58	18.66 - 18.08	Pole	TP39.8725x39.7536x0.525	58	-48.88	4085.81	63.4	Pass	
L59	18.08 - 17.83	Pole	TP39.9238x39.8725x0.6375	59	-48.98	4953.62	52.6	Pass	
L60	17.83 - 12.83	Pole	TP40.9491x39.9238x0.625	60	-50.93	4984.78	53.7	Pass	
L61	12.83 - 7.83	Pole	TP41.9744x40.9491x0.625	61	-52.90	5111.53	53.8	Pass	
L62	7.83 - 2.83	Pole	TP42.9997x41.9744x0.6125	62	-53.66	5060.49	54.8	Pass	
L63	2.83 - 0	Pole	TP43.58x42.9997x0.6125	63	-54.77	5135.01	54.8	Pass	
							Summary		
							Pole (L56)	76.2	Pass
							RATING = 76.2	Pass	

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

APPENDIX B
BASE LEVEL DRAWING



APPENDIX C
ADDITIONAL CALCULATIONS

Site BU: 876335
Work Order: 2174917



Pole Geometry

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	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	140	48.25	3.25	12	16	25.89	0.25	Auto	A607-60
2	95	17.833	0	12	24.72	28.38	0.3125	Auto	A607-65
3	77.167	30.667	4.5	12	28.38	34.67	0.3125	Auto	A607-65
4	51	51	0	12	33.12	43.58	0.375	Auto	A607-65

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12
1	43.08	52.83	channel	MP3-05 (1.1875in)	3		x				x				x		
2	66.16	78.83	channel	MP3-03 (1.1875in)	3		x				x				x		
3	0	27.75	channel	5(1.1875in) - Bottom V	2					x				x			
4	27.75	43.08	channel	MP3-05 (1.1875in)	2					x				x			
5	51.41	66.58	channel	MP3-05 (1.1875in)	3	x				x				x			
6	0	18.08	channel	5(1.1875in) - Bottom V	2		x										x
7	18.08	29.25	channel	MP3-05 (1.1875in)	1	x											
8	29.25	44.25	channel	MP3-05 (1.1875in)	1	x											
9	18.91	24.08	channel	MP3-05 (1.1875in)	1			x									
10	62.66	85.33	channel	MP3-03 (1.1875in)	1							x					
11	77.66	85.33	channel	MP3-03 (1.1875in)	2			x								x	
12	94.33	102	channel	MP3-03 (1.1875in)	3				x				x				x
13	0	27.75	plate	CCI-SFP-065125	1										x		
14	23.5	44.25	plate	CCI-SFP-060100	2							x				x	
15	49	60	plate	CCI-SFP-060100	1								x				
16	66.58	82.5	plate	CCI-SFP-060100	2								x				x
17	82	93	plate	CCI-SFP-060100	2	x								x			
18																	

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	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
2	4.06	1.57	2.92	0.59	PC 8.8 - M20 (100)	14	PC 8.8 - M20 (100)	14.000	18.000	2.545	1.1875	A572-65
3	5.33	2.09	5.65	0.79	Welded	n/a	PC 8.8 - M20 (100)	30.000	18.000	5.025	1.1875	A572-65
4	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
5	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
6	5.33	2.09	5.65	0.79	Welded	n/a	PC 8.8 - M20 (100)	30.000	18.000	5.025	1.1875	A572-65
7	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
8	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
9	5.33	2.09	5.65	0.79	PC 8.8 - M20 (100)	29	PC 8.8 - M20 (100)	29.000	18.000	5.025	1.1875	A572-65
10	4.06	1.57	2.92	0.59	PC 8.8 - M20 (100)	14	PC 8.8 - M20 (100)	14.000	18.000	2.545	1.1875	A572-65
11	4.06	1.57	2.92	0.59	PC 8.8 - M20 (100)	14	PC 8.8 - M20 (100)	14.000	18.000	2.545	1.1875	A572-65
12	4.06	1.57	2.92	0.59	PC 8.8 - M20 (100)	14	PC 8.8 - M20 (100)	14.000	18.000	2.545	1.1875	A572-65
13	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
14	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
15	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
16	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
17	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65

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(1.1875in) - Bottom Welded	Top	10	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	80	None	-	-	-	-	20	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	140 - 135	5		12	16.000	17.025	0.25	A607-60	1.000
2	135 - 130	5		12	17.025	18.050	0.25	A607-60	1.000
3	130 - 125	5		12	18.050	19.075	0.25	A607-60	1.000
4	125 - 120	5		12	19.075	20.099	0.25	A607-60	1.000
5	120 - 115	5		12	20.099	21.124	0.25	A607-60	1.000
6	115 - 110	5		12	21.124	22.149	0.25	A607-60	1.000
7	110 - 105	5		12	22.149	23.174	0.25	A607-60	1.000
8	105 - 102	3		12	23.174	23.789	0.25	A607-60	1.000
9	102 - 101.75	0.25		12	23.789	23.840	0.3875	A607-60	0.949
10	101.75 - 96.75	5		12	23.840	24.865	0.375	A607-60	0.967
11	96.75 - 95	5	3.25	12	24.865	25.890	0.375	A607-60	0.962
12	95 - 90.75	4.25		12	24.724	25.595	0.35625	A607-65	1.294
13	90.75 - 85.75	5		12	25.595	26.620	0.35625	A607-65	1.278
14	85.75 - 85.33	0.42		12	26.620	26.706	0.35625	A607-65	1.276
15	85.33 - 85.08	0.25		12	26.706	26.758	0.5625	A607-65	0.999
16	85.08 - 82.5	2.58		12	26.758	27.287	0.5625	A607-65	0.990
17	82.5 - 82.25	0.25		12	27.287	27.338	0.4125	A607-65	1.514
18	82.25 - 82	0.25		12	27.338	27.389	0.4125	A607-65	1.513
19	82 - 81.75	0.25		12	27.389	27.440	0.35625	A607-65	1.265
20	81.75 - 78.83	2.92		12	27.440	28.039	0.35625	A607-65	1.257
21	78.83 - 78.58	0.25		12	28.039	28.090	0.6125	A607-65	1.007
22	78.58 - 77.66	0.92		12	28.090	28.279	0.6125	A607-65	1.004
23	77.66 - 77.41	0.25		12	28.279	28.330	0.55	A607-65	1.055
24	77.41 - 77.167	0.243	0	12	28.330	28.380	0.55	A607-65	1.054
25	77.167 - 72.167	5		12	28.380	29.406	0.5375	A607-65	1.061
26	72.167 - 67.167	5		12	29.406	30.431	0.525	A607-65	1.069
27	67.167 - 66.58	0.587		12	30.431	30.551	0.525	A607-65	1.067
28	66.58 - 66.33	0.25		12	30.551	30.603	0.625	A607-65	0.980
29	66.33 - 66.16	0.17		12	30.603	30.638	0.625	A607-65	0.980
30	66.16 - 65.91	0.25		12	30.638	30.689	0.525	A607-65	0.990
31	65.91 - 62.66	3.25		12	30.689	31.355	0.5125	A607-65	1.005
32	62.66 - 62.41	0.25		12	31.355	31.407	0.5125	A607-65	0.947
33	62.41 - 60	2.41		12	31.407	31.901	0.50625	A607-65	0.953
34	60 - 59.75	0.25		12	31.901	31.952	0.5	A607-65	0.964
35	59.75 - 54.75	5		12	31.952	32.978	0.5	A607-65	0.953
36	54.75 - 52.83	1.92		12	32.978	33.372	0.5	A607-65	0.949
37	52.83 - 52.58	0.25		12	33.372	33.423	0.6875	A607-65	1.011
38	52.58 - 51.41	1.17		12	33.423	33.663	0.6875	A607-65	1.007
39	51.41 - 51.16	0.25		12	33.663	33.714	0.50625	A607-65	1.045
40	51.16 - 51	4.66	4.5	12	33.714	34.670	0.50625	A607-65	1.045
41	51 - 45.5	5.5		12	33.122	34.250	0.55	A607-65	0.970
42	45.5 - 44.25	1.25		12	34.250	34.506	0.55	A607-65	0.968
43	44.25 - 44	0.25		12	34.506	34.557	0.625	A607-65	1.112
44	44 - 43.08	0.92		12	34.557	34.746	0.625	A607-65	1.109
45	43.08 - 42.83	0.25		12	34.746	34.797	0.6625	A607-65	0.969
46	42.83 - 37.83	5		12	34.797	35.823	0.6625	A607-65	0.957
47	37.83 - 32.83	5		12	35.823	36.848	0.65	A607-65	0.964
48	32.83 - 29.25	3.58		12	36.848	37.582	0.6375	A607-65	0.975
49	29.25 - 29	0.25		12	37.582	37.633	0.6375	A607-65	0.974
50	29 - 27.75	1.25		12	37.633	37.890	0.6375	A607-65	0.972
51	27.75 - 27.5	0.25		12	37.890	37.941	0.6375	A607-65	0.971
52	27.5 - 24.08	3.42		12	37.941	38.642	0.6375	A607-65	0.964
53	24.08 - 23.83	0.25		12	38.642	38.693	0.7	A607-65	0.945
54	23.83 - 23.5	0.33		12	38.693	38.761	0.7	A607-65	0.944
55	23.5 - 23.25	0.25		12	38.761	38.812	0.44375	A607-65	1.305
56	23.25 - 18.91	4.34		12	38.812	39.702	0.44375	A607-65	1.294
57	18.91 - 18.66	0.25		12	39.702	39.754	0.525	A607-65	0.973
58	18.66 - 18.08	0.58		12	39.754	39.873	0.525	A607-65	0.972
59	18.08 - 17.83	0.25		12	39.873	39.924	0.6375	A607-65	0.974
60	17.83 - 12.83	5		12	39.924	40.949	0.625	A607-65	0.983
61	12.83 - 7.83	5		12	40.949	41.974	0.625	A607-65	0.973
62	7.83 - 2.83	5		12	41.974	43.000	0.6125	A607-65	0.984
63	2.83 - 0	2.83		12	43.000	43.580	0.6125	A607-65	0.979

TNX Section Forces

Increment (ft): 5		TNX Output		
	Section Height (ft)	P _u (K)	M _{ux} (kip-ft)	V _u (K)
1	140 - 135	5.80	20.39	5.35
2	135 - 130	6.15	47.91	5.66
3	130 - 125	10.50	102.39	11.63
4	125 - 120	10.96	161.24	11.92
5	120 - 115	14.13	228.99	14.65
6	115 - 110	14.68	302.89	14.92
7	110 - 105	19.00	391.65	18.60
8	105 - 102	19.41	447.61	18.73
9	102 - 101.75	19.47	452.30	18.75
10	101.75 - 96.75	23.88	556.29	21.99
11	96.75 - 95	24.20	594.82	22.09
12	95 - 90.75	25.49	689.30	22.40
13	90.75 - 85.75	26.57	802.59	22.96
14	85.75 - 85.33	26.68	812.23	22.99
15	85.33 - 85.08	26.75	817.98	23.01
16	85.08 - 82.5	27.39	877.66	23.31
17	82.5 - 82.25	27.48	883.49	23.32
18	82.25 - 82	27.55	889.32	23.35
19	82 - 81.75	27.61	895.15	23.37
20	81.75 - 78.83	28.27	963.74	23.67
21	78.83 - 78.58	28.37	969.66	23.67
22	78.58 - 77.66	28.62	991.47	23.79
23	77.66 - 77.41	28.70	997.42	23.81
24	77.41 - 77.167	28.76	1003.20	23.84
25	77.167 - 72.167	30.14	1123.65	24.39
26	72.167 - 67.167	31.56	1246.71	24.90
27	67.167 - 66.58	31.73	1261.32	24.94
28	66.58 - 66.33	31.82	1267.56	24.95
29	66.33 - 66.16	31.87	1271.80	24.97
30	66.16 - 65.91	31.94	1278.03	24.98
31	65.91 - 62.66	32.82	1359.61	25.23
32	62.66 - 62.41	32.90	1365.92	25.24
33	62.41 - 60	33.54	1426.94	25.41
34	60 - 59.75	33.62	1433.29	25.41
35	59.75 - 54.75	34.97	1561.08	25.71
36	54.75 - 52.83	35.49	1610.54	25.84
37	52.83 - 52.58	35.60	1616.99	25.82
38	52.58 - 51.41	36.02	1647.27	25.93
39	51.41 - 51.16	36.10	1653.75	25.93
40	51.16 - 51	36.15	1657.91	25.94
41	51 - 45.5	38.89	1802.00	26.49
42	45.5 - 44.25	39.27	1835.15	26.58
43	44.25 - 44	39.38	1841.80	26.58
44	44 - 43.08	39.72	1866.29	26.65
45	43.08 - 42.83	39.82	1872.95	26.66
46	42.83 - 37.83	41.60	2007.07	26.98
47	37.83 - 32.83	43.41	2142.64	27.25
48	32.83 - 29.25	44.73	2240.50	27.43
49	29.25 - 29	44.83	2247.35	27.42
50	29 - 27.75	45.28	2281.69	27.50
51	27.75 - 27.5	45.39	2288.56	27.50
52	27.5 - 24.08	46.66	2382.91	27.68
53	24.08 - 23.83	46.77	2389.83	27.67
54	23.83 - 23.5	46.90	2398.97	27.69
55	23.5 - 23.25	46.99	2405.89	27.70
56	23.25 - 18.91	48.59	2526.47	27.87
57	18.91 - 18.66	48.69	2533.44	27.86
58	18.66 - 18.08	48.88	2549.61	27.90
59	18.08 - 17.83	48.98	2556.58	27.90
60	17.83 - 12.83	50.93	2696.86	28.20
61	12.83 - 7.83	52.90	2838.54	28.48
62	7.83 - 2.83	54.75	2981.36	28.69
63	2.83 - 0	55.80	3062.67	28.82

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
140 - 135	Pole	TP17.025x16x0.25	Pole	7.0%	Pass
135 - 130	Pole	TP18.05x17.025x0.25	Pole	13.8%	Pass
130 - 125	Pole	TP19.075x18.05x0.25	Pole	26.2%	Pass
125 - 120	Pole	TP20.099x19.075x0.25	Pole	36.4%	Pass
120 - 115	Pole	TP21.124x20.099x0.25	Pole	46.7%	Pass
115 - 110	Pole	TP22.149x21.124x0.25	Pole	56.1%	Pass
110 - 105	Pole	TP23.174x22.149x0.25	Pole	67.2%	Pass
105 - 102	Pole	TP23.789x23.174x0.25	Pole	73.3%	Pass
102 - 101.75	Pole + Reinf.	TP23.84x23.789x0.3875	Reinf. 12 Tension Rupture	65.2%	Pass
101.75 - 96.75	Pole + Reinf.	TP24.865x23.84x0.375	Reinf. 12 Tension Rupture	74.7%	Pass
96.75 - 95	Pole + Reinf.	TP25.89x24.865x0.375	Reinf. 12 Tension Rupture	77.9%	Pass
95 - 90.75	Pole + Reinf.	TP25.595x24.724x0.3563	Pole	66.7%	Pass
90.75 - 85.75	Pole + Reinf.	TP26.62x25.595x0.3563	Pole	72.3%	Pass
85.75 - 85.33	Pole + Reinf.	TP26.706x26.62x0.3563	Pole	72.8%	Pass
85.33 - 85.08	Pole + Reinf.	TP26.758x26.706x0.5625	Reinf. 11 Tension Rupture	65.4%	Pass
85.08 - 82.5	Pole + Reinf.	TP27.287x26.758x0.5625	Reinf. 11 Tension Rupture	68.0%	Pass
82.5 - 82.25	Pole + Reinf.	TP27.338x27.287x0.4125	Pole	67.7%	Pass
82.25 - 82	Pole + Reinf.	TP27.389x27.338x0.4125	Pole	68.0%	Pass
82 - 81.75	Pole + Reinf.	TP27.44x27.389x0.3563	Pole	76.6%	Pass
81.75 - 78.83	Pole + Reinf.	TP28.039x27.44x0.3563	Pole	79.5%	Pass
78.83 - 78.58	Pole + Reinf.	TP28.09x28.039x0.6125	Reinf. 11 Tension Rupture	66.9%	Pass
78.58 - 77.66	Pole + Reinf.	TP28.279x28.09x0.6125	Reinf. 11 Tension Rupture	67.7%	Pass
77.66 - 77.41	Pole + Reinf.	TP28.33x28.279x0.55	Reinf. 2 Tension Rupture	72.2%	Pass
77.41 - 77.17	Pole + Reinf.	TP28.38x28.33x0.55	Reinf. 2 Tension Rupture	72.4%	Pass
77.17 - 72.17	Pole + Reinf.	TP29.406x28.38x0.5375	Reinf. 2 Tension Rupture	76.4%	Pass
72.17 - 67.17	Pole + Reinf.	TP30.431x29.406x0.525	Reinf. 2 Tension Rupture	79.9%	Pass
67.17 - 66.58	Pole + Reinf.	TP30.551x30.431x0.525	Reinf. 2 Tension Rupture	80.3%	Pass
66.58 - 66.33	Pole + Reinf.	TP30.603x30.551x0.625	Reinf. 2 Tension Rupture	68.2%	Pass
66.33 - 66.16	Pole + Reinf.	TP30.638x30.603x0.625	Reinf. 2 Tension Rupture	68.3%	Pass
66.16 - 65.91	Pole + Reinf.	TP30.689x30.638x0.525	Reinf. 5 Tension Rupture	75.5%	Pass
65.91 - 62.66	Pole + Reinf.	TP31.355x30.689x0.5125	Reinf. 5 Tension Rupture	77.5%	Pass
62.66 - 62.41	Pole + Reinf.	TP31.407x31.355x0.5125	Reinf. 5 Tension Rupture	81.6%	Pass
62.41 - 60	Pole + Reinf.	TP31.901x31.407x0.5063	Reinf. 5 Tension Rupture	83.0%	Pass
60 - 59.75	Pole + Reinf.	TP31.952x31.901x0.5	Reinf. 5 Tension Rupture	83.2%	Pass
59.75 - 54.75	Pole + Reinf.	TP32.978x31.952x0.5	Reinf. 5 Tension Rupture	86.0%	Pass
54.75 - 52.83	Pole + Reinf.	TP33.372x32.978x0.5	Reinf. 5 Tension Rupture	86.9%	Pass
52.83 - 52.58	Pole + Reinf.	TP33.423x33.372x0.6875	Reinf. 5 Tension Rupture	64.0%	Pass
52.58 - 51.41	Pole + Reinf.	TP33.663x33.423x0.6875	Reinf. 5 Tension Rupture	64.6%	Pass
51.41 - 51.16	Pole + Reinf.	TP33.714x33.663x0.5063	Reinf. 1 Tension Rupture	81.0%	Pass
51.16 - 51	Pole + Reinf.	TP34.67x33.714x0.5063	Reinf. 1 Tension Rupture	81.1%	Pass
51 - 45.5	Pole + Reinf.	TP34.25x33.122x0.55	Reinf. 1 Tension Rupture	82.8%	Pass
45.5 - 44.25	Pole + Reinf.	TP34.506x34.25x0.55	Reinf. 1 Tension Rupture	83.2%	Pass
44.25 - 44	Pole + Reinf.	TP34.557x34.506x0.625	Reinf. 1 Tension Rupture	68.2%	Pass
44 - 43.08	Pole + Reinf.	TP34.746x34.557x0.625	Reinf. 1 Tension Rupture	68.5%	Pass
43.08 - 42.83	Pole + Reinf.	TP34.797x34.746x0.6625	Reinf. 8 Tension Rupture	71.2%	Pass
42.83 - 37.83	Pole + Reinf.	TP35.823x34.797x0.6625	Reinf. 8 Tension Rupture	72.8%	Pass
37.83 - 32.83	Pole + Reinf.	TP36.848x35.823x0.65	Reinf. 8 Tension Rupture	74.2%	Pass
32.83 - 29.25	Pole + Reinf.	TP37.582x36.848x0.6375	Reinf. 8 Tension Rupture	75.1%	Pass
29.25 - 29	Pole + Reinf.	TP37.633x37.582x0.6375	Reinf. 7 Tension Rupture	75.1%	Pass
29 - 27.75	Pole + Reinf.	TP37.89x37.633x0.6375	Reinf. 7 Tension Rupture	75.4%	Pass
27.75 - 27.5	Pole + Reinf.	TP37.941x37.89x0.6375	Reinf. 7 Tension Rupture	75.5%	Pass
27.5 - 24.08	Pole + Reinf.	TP38.642x37.941x0.6375	Reinf. 7 Tension Rupture	76.3%	Pass
24.08 - 23.83	Pole + Reinf.	TP38.693x38.642x0.7	Reinf. 14 Tension Rupture	73.7%	Pass
23.83 - 23.5	Pole + Reinf.	TP38.761x38.693x0.7	Reinf. 14 Tension Rupture	73.8%	Pass
23.5 - 23.25	Pole + Reinf.	TP38.812x38.761x0.4438	Pole	81.2%	Pass
23.25 - 18.91	Pole + Reinf.	TP39.702x38.812x0.4438	Pole	82.5%	Pass
18.91 - 18.66	Pole + Reinf.	TP39.754x39.702x0.525	Reinf. 7 Tension Rupture	89.8%	Pass
18.66 - 18.08	Pole + Reinf.	TP39.873x39.754x0.525	Reinf. 7 Tension Rupture	89.9%	Pass
18.08 - 17.83	Pole + Reinf.	TP39.924x39.873x0.6375	Reinf. 3 Compression	78.3%	Pass
17.83 - 12.83	Pole + Reinf.	TP40.949x39.924x0.625	Reinf. 3 Compression	79.1%	Pass
12.83 - 7.83	Pole + Reinf.	TP41.974x40.949x0.625	Reinf. 3 Compression	79.8%	Pass
7.83 - 2.83	Pole + Reinf.	TP43x41.974x0.6125	Reinf. 3 Compression	80.5%	Pass
2.83 - 0	Pole + Reinf.	TP43.58x43x0.6125	Reinf. 3 Compression	80.8%	Pass
				Summary	
			Pole	82.5%	Pass
			Reinforcement	89.9%	Pass
			Overall	89.9%	Pass

Monopole Base Plate Connection

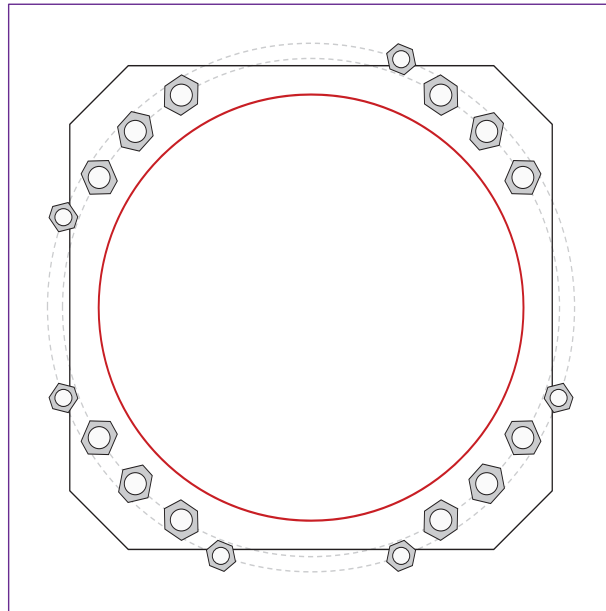


Site Info	
BU #	876335
Site Name	East Farmington
Order #	632513 Rev. 0

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

Applied Loads	
Moment (kip-ft)	3062.67
Axial Force (kips)	55.80
Shear Force (kips)	28.82

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
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Anchor Rod Data
GROUP 1: (12) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 51" BC <i>Anchor Spacing: 6 in</i>
GROUP 2: (6) 1-3/4" ϕ bolts (A193 Gr. B7 N; $F_y=105$ ksi, $F_u=125$ ksi) on 54.08" BC <i>pos. (deg): 70, 160, 200, 250, 290, 340</i>
Base Plate Data
49.5" W x 3" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi); Clip: 6 in
Stiffener Data
N/A
Pole Data
43.58" x 0.375" 12-sided pole (A607-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary (units of kips, kip-in)		
GROUP 1:		
$Pu_c = 238.09$	$\phi Pn_c = 268.39$	Stress Rating
$Vu = 2.4$	$\phi Vn = 120.77$	84.5%
$Mu = n/a$	$\phi Mn = n/a$	Pass
GROUP 2:		
$Pu_t = 128.47$	$\phi Pn_t = 178.13$	Stress Rating
$Vu = 0$	$\phi Vn = 112.75$	68.7%
$Mu = 0$	$\phi Mn = 84.41$	Pass
Base Plate Summary		
Max Stress (ksi):	38.13	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	80.7%	Pass

CCIplate

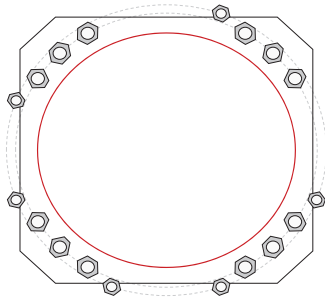
Elevation (ft) = 0 (Base)

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

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

Custom Bolt Connection										
Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η	I_{ar} (in):	Thread Type	Area Override, in ²	Tension Only
1	1	31.487346	2.25	A615-75	51	0.55	2.5	N-Included		No
2	1	45	2.25	A615-75	51	0.55	2.5	N-Included		No
3	1	58.512654	2.25	A615-75	51	0.55	2.5	N-Included		No
4	1	121.48735	2.25	A615-75	51	0.55	2.5	N-Included		No
5	1	135	2.25	A615-75	51	0.55	2.5	N-Included		No
6	1	148.51265	2.25	A615-75	51	0.55	2.5	N-Included		No
7	1	211.48735	2.25	A615-75	51	0.55	2.5	N-Included		No
8	1	225	2.25	A615-75	51	0.55	2.5	N-Included		No
9	1	238.51265	2.25	A615-75	51	0.55	2.5	N-Included		No
10	1	301.48735	2.25	A615-75	51	0.55	2.5	N-Included		No
11	1	315	2.25	A615-75	51	0.55	2.5	N-Included		No
12	1	328.51265	2.25	A615-75	51	0.55	2.5	N-Included		No
13	2	70	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes
14	2	160	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes
15	2	200	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes
16	2	250	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes
17	2	290	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes
18	2	340	1.75	A193 Gr. B7	54.08	0.5	4.75	N-Included		Yes

Plot Graphic



Pier and Pad Foundation



BU # : 876335
 Site Name: East Farmington
 App. Number: 632513 Rev. 0

TIA-222 Revision: H
 Tower Type: Monopole

Top & Bot. Pad Rein. Different?:
 Block Foundation?:
 Rectangular Pad?:

Superstructure Analysis Reactions		
Compression, P_{comp} :	55.81	kips
Base Shear, V_{u_comp} :	28.79	kips
Moment, M_u :	3062.68	ft-kips
Tower Height, H :	140	ft
BP Dist. Above Fdn, bp_{dist} :	4.75	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Lateral (Sliding) (kips)</i>	368.17	28.79	7.4%	Pass
<i>Bearing Pressure (ksf)</i>	22.50	3.63	16.1%	Pass
<i>Overturning (kip*ft)</i>	5409.94	3347.58	61.9%	Pass
<i>Pier Flexure (Comp.) (kip*ft)</i>	6938.59	3221.03	44.2%	Pass
<i>Pier Compression (kip)</i>	30551.04	119.17	0.4%	Pass
<i>Pad Flexure (kip*ft)</i>	5101.11	1100.47	20.5%	Pass
<i>Pad Shear - 1-way (kips)</i>	853.95	168.68	18.8%	Pass
<i>Pad Shear - 2-way (Comp) (ksi)</i>	0.164	0.000	0.0%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	10202.23	1932.62	18.0%	Pass

Pier Properties		
Pier Shape:	Square	
Pier Diameter, d_{pier} :	8	ft
Ext. Above Grade, E :	0.5	ft
Pier Rebar Size, S_c :	11	
Pier Rebar Quantity, mc :	24	
Pier Tie/Spiral Size, S_t :	5	
Pier Tie/Spiral Quantity, mt :	12	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier} :	3	in

*Rating per TIA-222-H Section 15.5

Structural Rating*:	44.2%
Soil Rating*:	61.9%

Pad Properties		
Depth, D :	9	ft
Pad Width, W_1 :	20	ft
Pad Thickness, T :	4	ft
Pad Rebar Size (Bottom dir. 2), Sp_2 :	9	
Pad Rebar Quantity (Bottom dir. 2), mp_2 :	27	
Pad Clear Cover, cc_{pad} :	3	in

Material Properties		
Rebar Grade, F_y :	60	ksi
Concrete Compressive Strength, F'_c :	3	ksi
Dry Concrete Density, δ_c :	150	pcf

Soil Properties		
Total Soil Unit Weight, γ :	130	pcf
Ultimate Gross Bearing, Q_{ult} :	30,000	ksf
Cohesion, C_u :	0.000	ksf
Friction Angle, ϕ :	38	degrees
SPT Blow Count, N_{blows} :	100	
Base Friction, μ :	0.35	
Neglected Depth, N :	4.00	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, gw :	8	ft

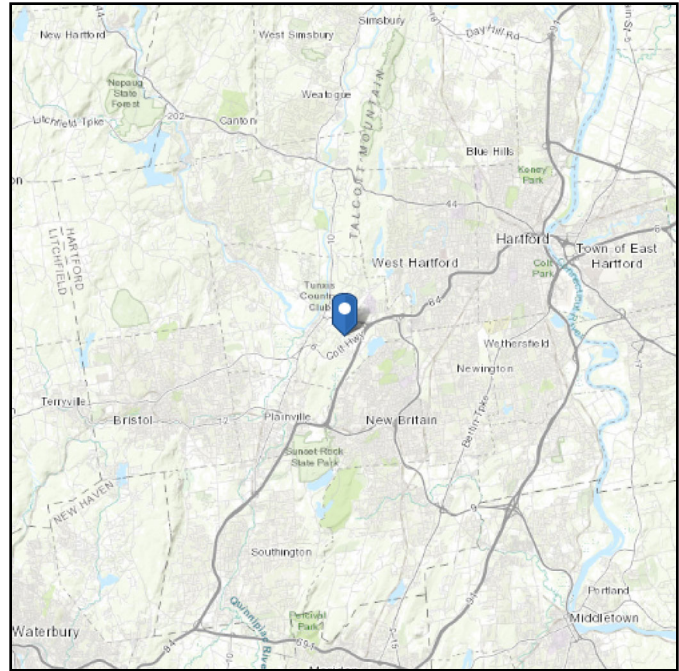
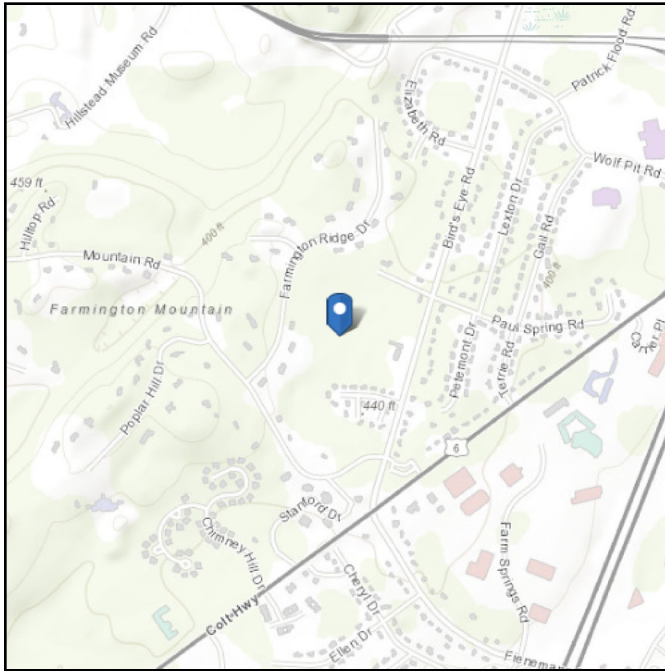
<--Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.715817
Longitude: -72.810394
Elevation: 413.61 ft (NAVD 88)



Wind

Results:

Wind Speed	117 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

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

Date Accessed: Fri Nov 18 2022

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

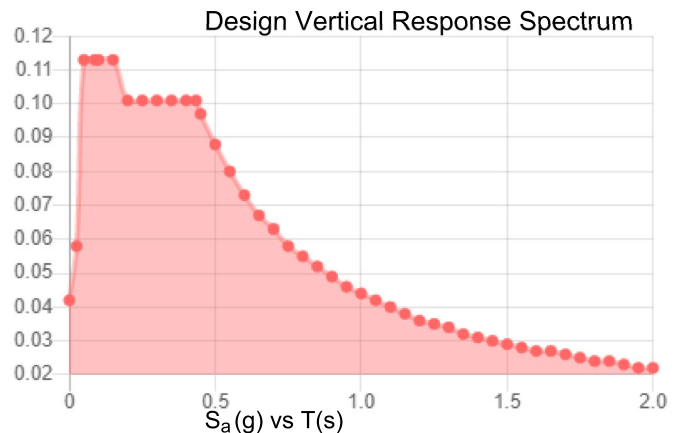
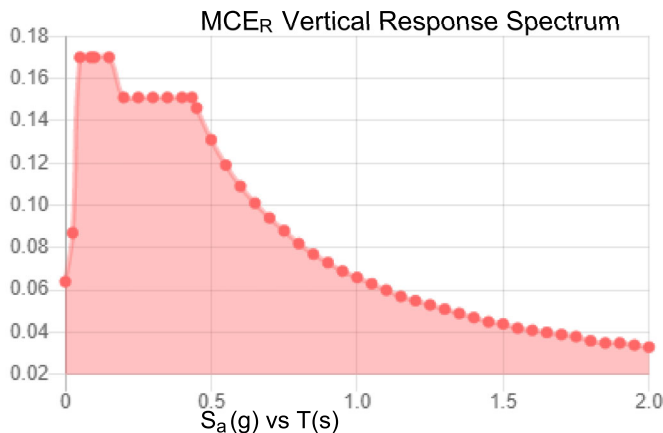
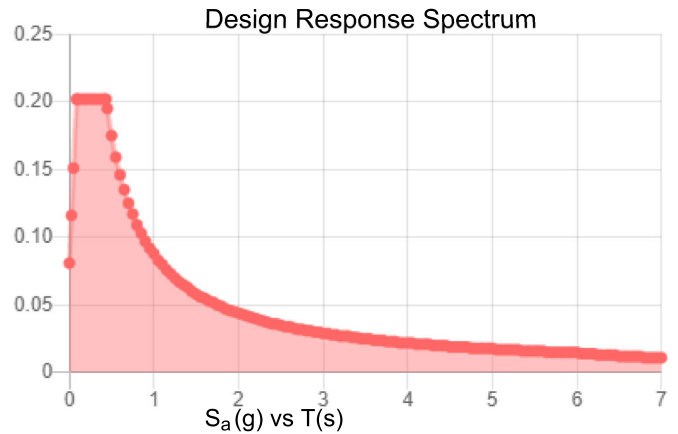
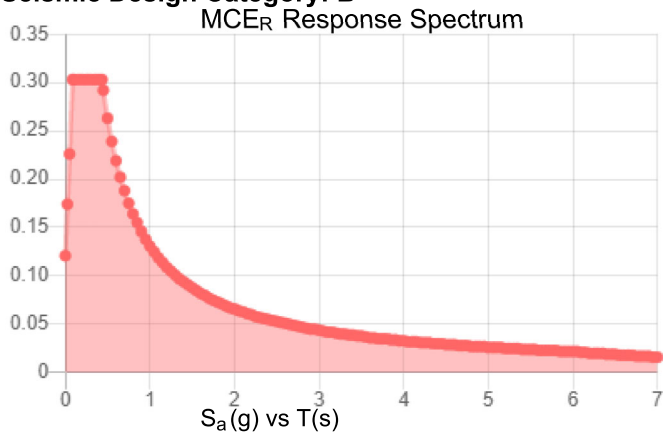
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class:

Results:

S_s :	0.189	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.102
F_v :	2.4	PGA _M :	0.163
S_{MS} :	0.303	F_{PGA} :	1.595
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.202	C_v :	0.7

Seismic Design Category: B



Data Accessed:

Fri Nov 18 2022

Date Source:

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

Ice

Results:

Ice Thickness: 1.50 in.

Concurrent Temperature: 15 F

Gust Speed 50 mph

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

Date Accessed: Fri Nov 18 2022

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

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

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

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Date: **November 14, 2022**



Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
CrownMA@tepgroup.net

Subject: **Mount Modification Report**

Carrier Designation: **T-Mobile Reconfiguration**
Site Number: CTHA233B
Site Name: CT03XC100

Crown Castle Designation: **BU Number:** 876335
Site Name: East Farmington
JDE Job Number: 730803
Order Number: 632513 Rev. 0

Engineering Firm Designation: **TEP Project Number:** 25672.785549

Site Data: **3 A Birdseye Rd., Farmington, Hartford County, CT 06030**
Latitude 41° 42' 56.94", Longitude -72° 48' 37.42"

Structure Information: **Tower Height & Type:** 139.0±ft Monopole
Mount Elevation: 139.0 ft
Mount Width & Type: 14.0 ft Platform w/ Support Rail Mount

Tower Engineering Professionals is pleased to submit this “**Mount Modification Report**” to determine the structural integrity of T-Mobile’s antenna mounting system with the proposed appurtenance and equipment addition on the above-mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis, we have determined the mount stress level to be:

Platform w/ Support Rail Mount

Sufficient

This analysis utilizes an ultimate 3-second gust wind speed of 117 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount analysis prepared by: Marena J. Anderson / JCM

Respectfully submitted by:

Aaron T. Rucker, P.E.
Structural Department Manager
(919) 661-6351
arucker@tepgroup.net



Electronic Copy

11/14/2022

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Mount Modification Design Drawings

1) INTRODUCTION

This is an existing, 3-sector, 14.0' Platform w/ Support Rail mount designed by Summit.

2) ANALYSIS CRITERIA

Building Code:	2022 Connecticut State Building Code
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	117 mph
Exposure Category:	B
Topographic Factor at Base:	1
Ice Thickness:	1.50 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.189
Seismic S₁:	0.055
Live Loading Wind Speed:	30 mph
Live Loading at Mid/End-Points:	250 lb
Man Live Loading at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
139.0	139.0	3	Commscope	VV-65A-R1_TMO	Platform w/ Support Rail Mount
		3	Ericsson	AIR 6419 B41_TMO_CCIV2	
		3	RFS/Celwave	APXVAALL24_43-U-NA20_TMO	
		3	Ericsson	Radio 4460 B2/B25 B66_TMO	
		3	Ericsson	Radio 4480_TMOV2	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Mount Analysis	Tower Engineering Professionals	10653013	CCIsites
Tower Manufacturer Drawings	Summit Manufacturing Inc	1615361	CCIsites
Loading Application	T-Mobile	Order 632513 Rev. 0	CCIsites
RFDS	T-Mobile	Site ID: CTHA233B	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A tool internally developed by TEP, using Microsoft Excel, was used to calculate wind and seismic loading on all appurtenances, dishes, and mount members for various load cases. Selected output from the analysis is included in Appendix B "Software Input Calculations".

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Mount Analysis (Revision E)*.

3.2) Assumptions

- 1) The antenna mounting system was properly fabricated, installed, and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
- 2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
- 3) 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.
- 4) TEP did not analyze the top plate connection to the pole and assumes it to have sufficient structural capacity to transfer the applied forces from the mount to the tower.

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

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Platform w/ Support Rail Mount)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FF-H3	139.0	65.8	Pass
	Support Horizontals	SF-H1		82.5	Pass
	Internals	GSI-2		46.0	Pass
	Support Rails	MOD-SR3		42.8	Pass
	Mount Pipes	MP-9		64.4	Pass

Structure Rating (max from all components)³ =	82.5%
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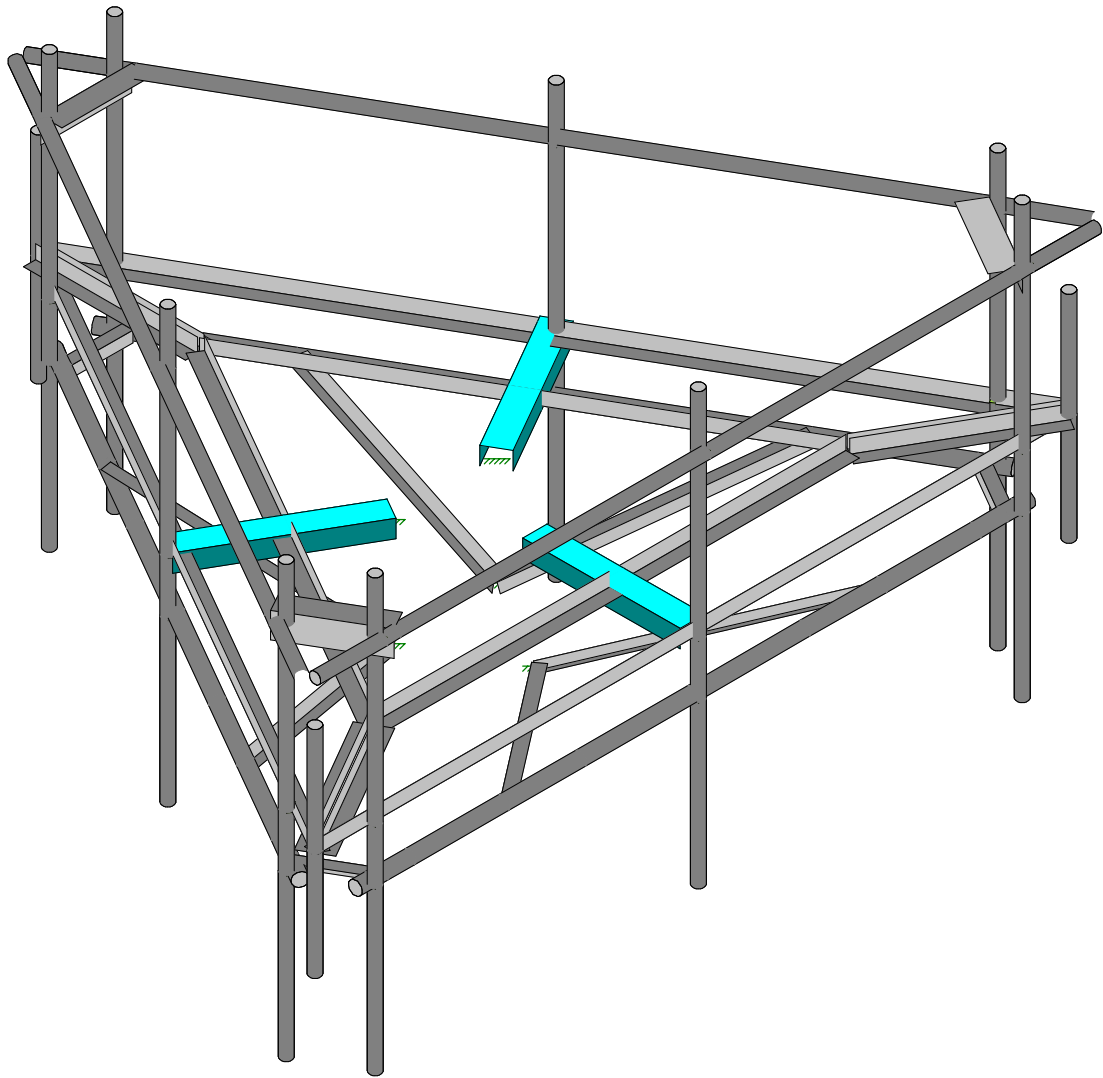
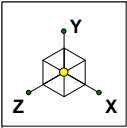
Notes:

- 1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.

4.1) Recommendations

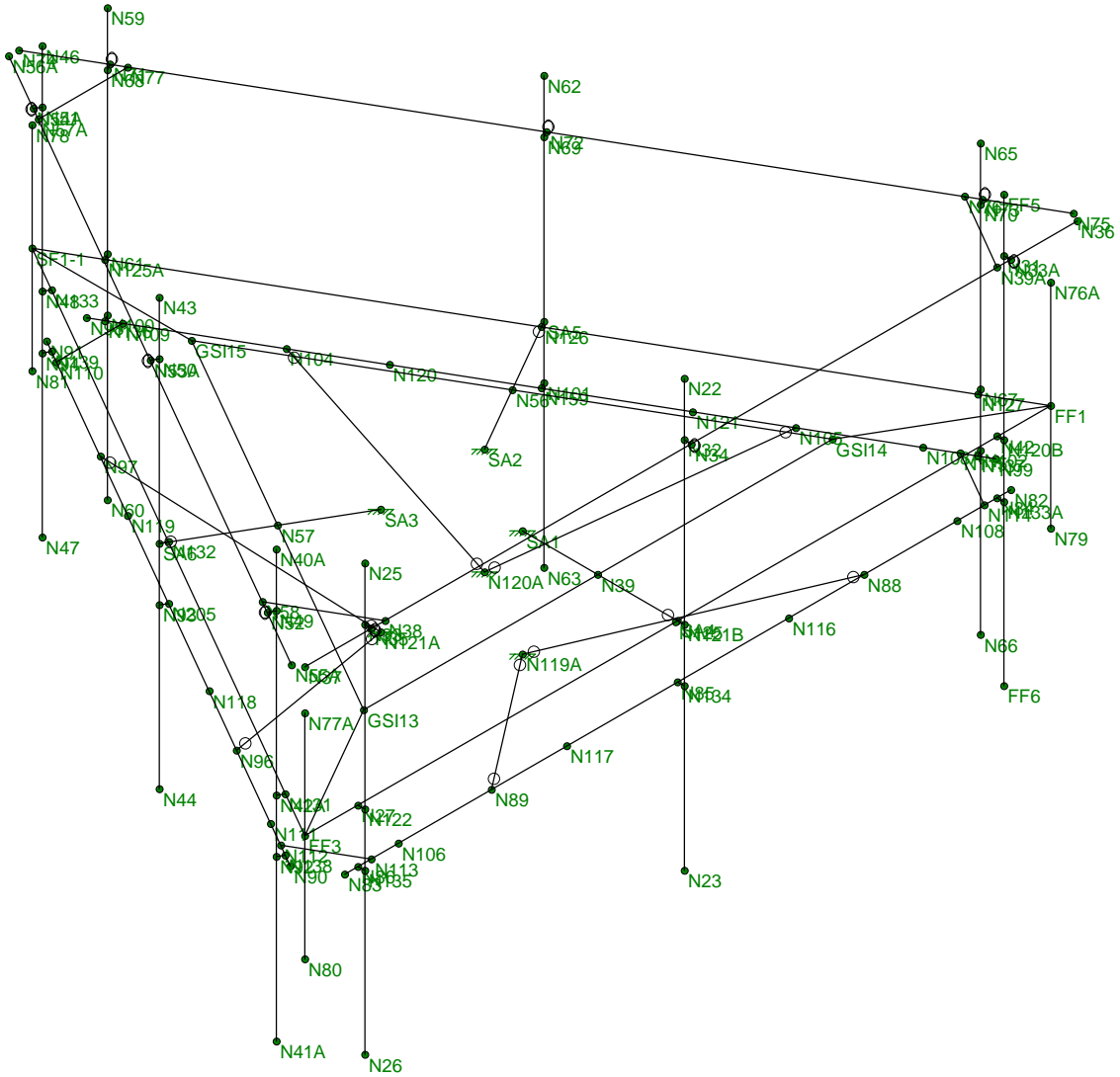
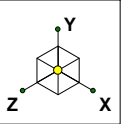
- 1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
- 2) The modifications depicted in "Appendix D – Mount Modification Design Drawings" shall be installed and, upon completion, inspected. The mount has sufficient capacity to support the proposed loading configuration once the proposed modifications listed below are completed.
 - a) Add (1) SitePro Part No. PRK-SFS Support Rail reinforcement kit.
 - b) Add (1) SitePro Part No. HRK12 Support Rail kit.

APPENDIX A
WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

Tower Engineering Profess...	CCI BU No. 876335	SK - 1
MJA		Nov 14, 2022 at 1:43 PM
TEP No. 25672.785546		Mount.r3d

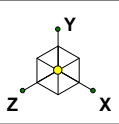


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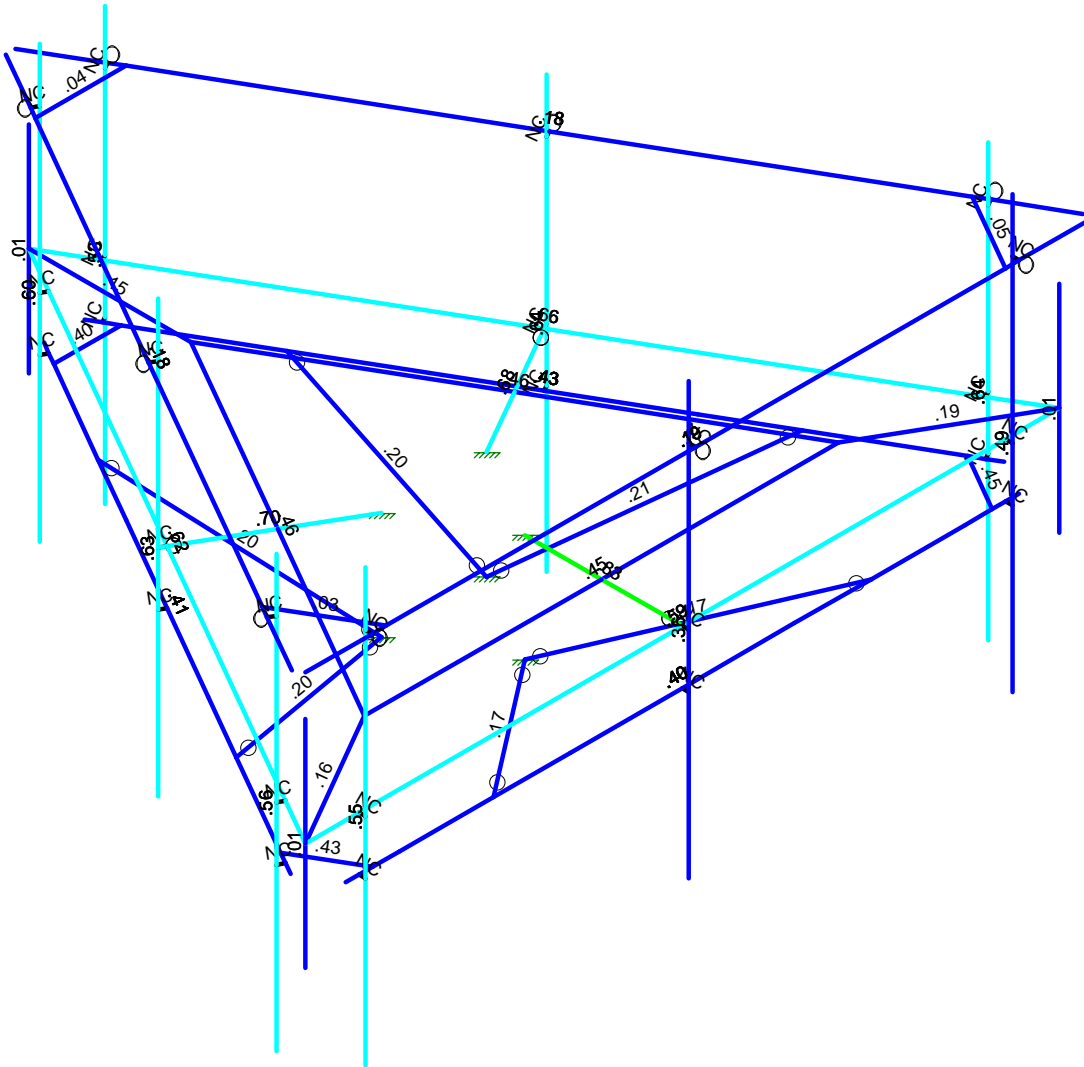
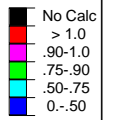
Tower Engineering Profess...
 MJA
 TEP No. 25672.785546

CCI BU No. 876335

SK - 2
 Nov 14, 2022 at 1:43 PM
 Mount.r3d



Code Check
(Env)



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

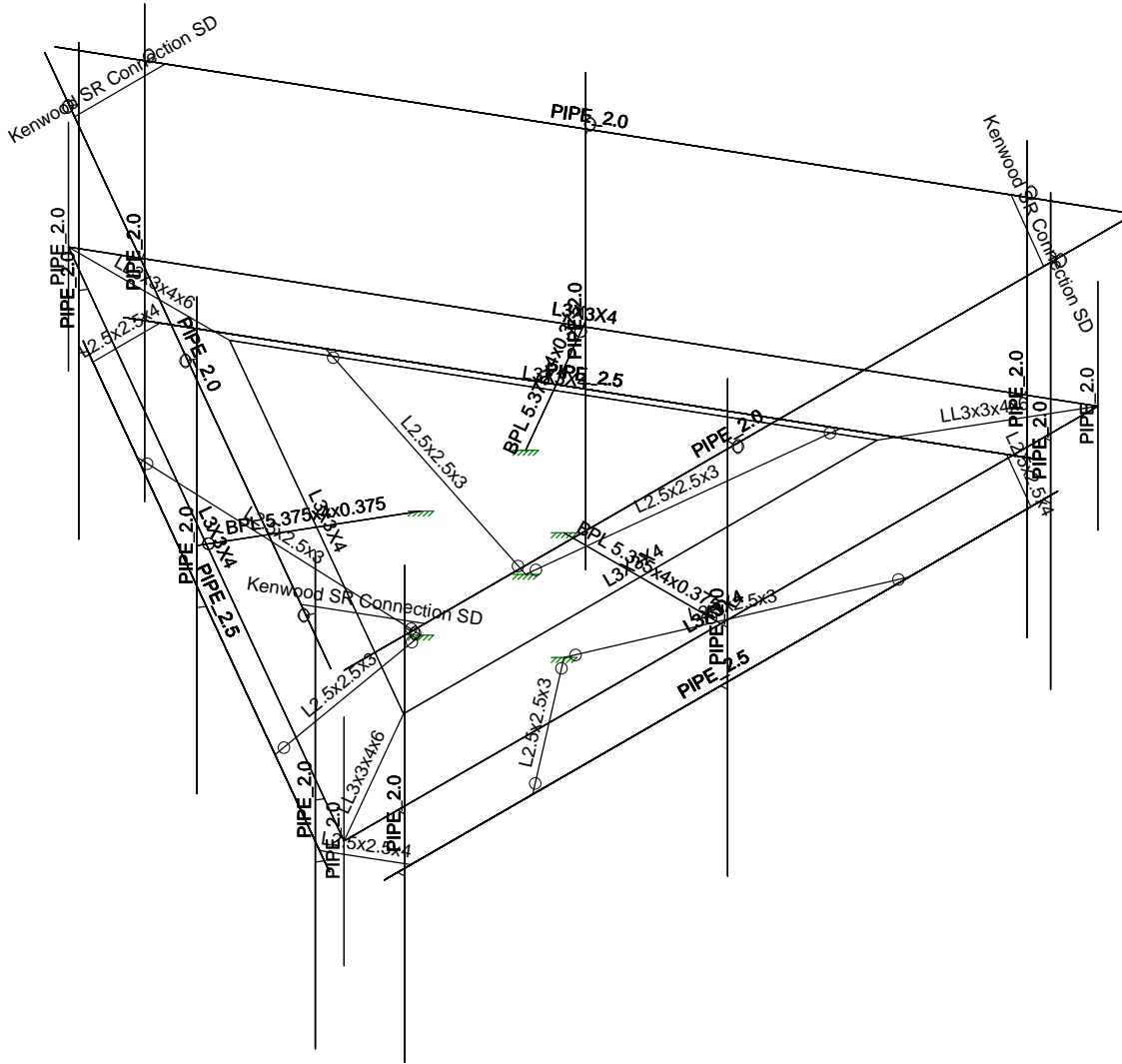
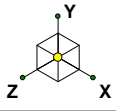
Tower Engineering Profess...
MJA
TEP No. 25672.785546

CCI BU No. 876335

SK - 3

Nov 14, 2022 at 1:43 PM

Mount.r3d



Envelope Only Solution

Tower Engineering Profess...

MJA

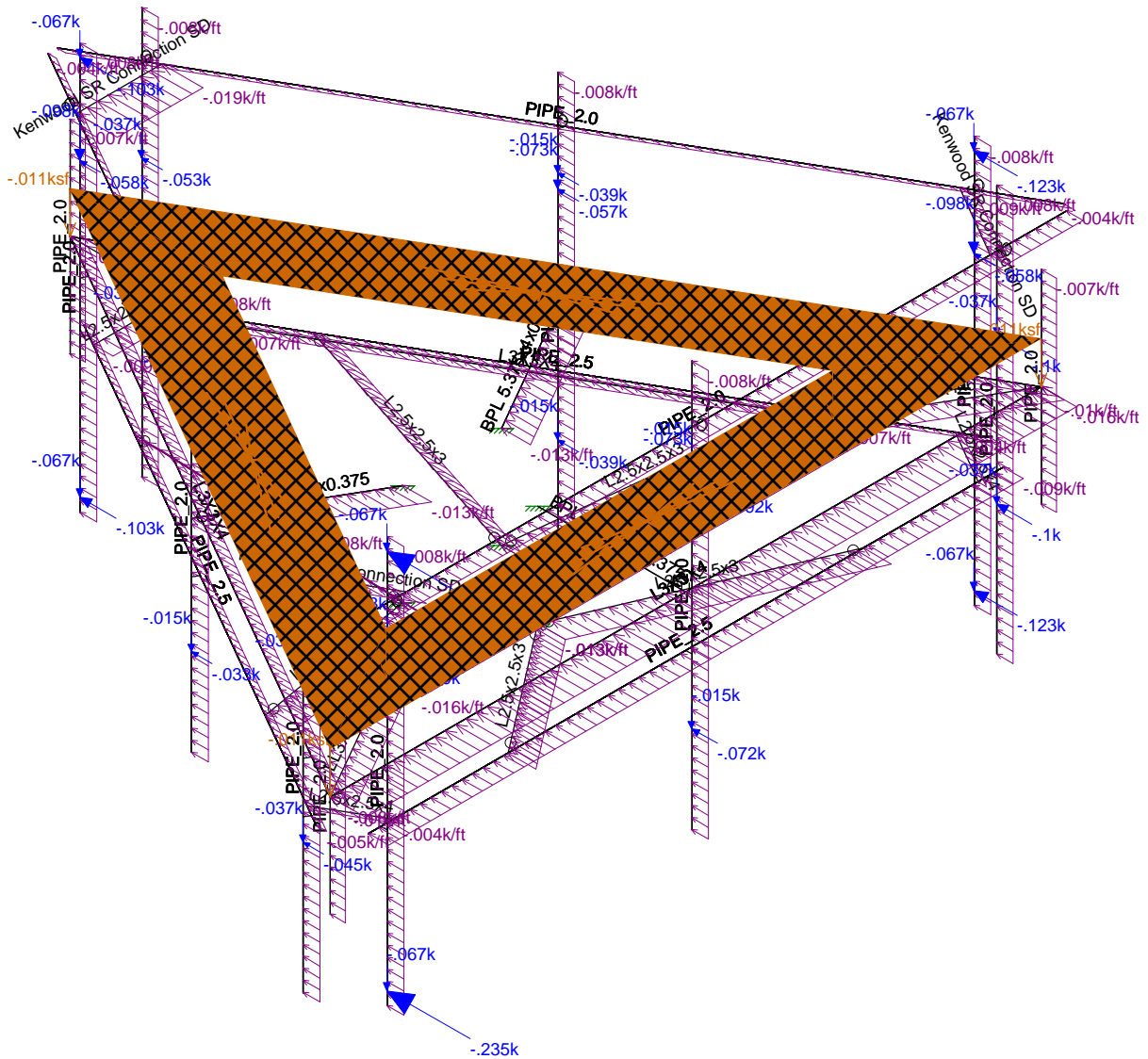
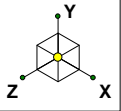
TEP No. 25672.785546

CCI BU No. 876335

SK - 4

Nov 14, 2022 at 1:43 PM

Mount.r3d



Loads: LC 2, 0.9D+1.0 0-Wind
Envelope Only Solution

Tower Engineering Profess...

MJA

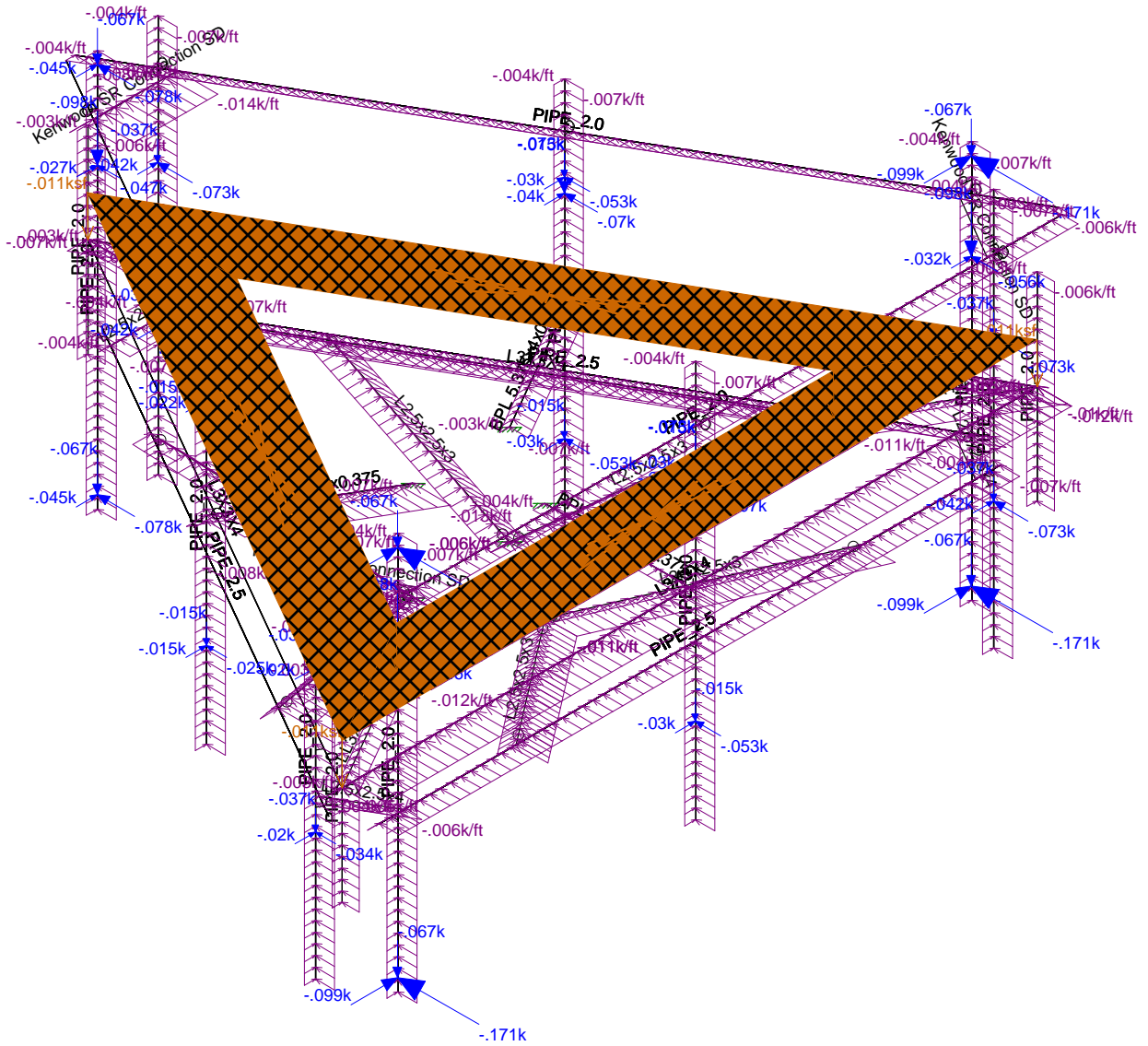
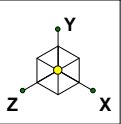
TEP No. 25672.785546

CCI BU No. 876335

SK - 5

Nov 14, 2022 at 1:43 PM

Mount.r3d



Loads: LC 3, 0.9D+1.0 30-Wind
Envelope Only Solution

Tower Engineering Profess...

MJA

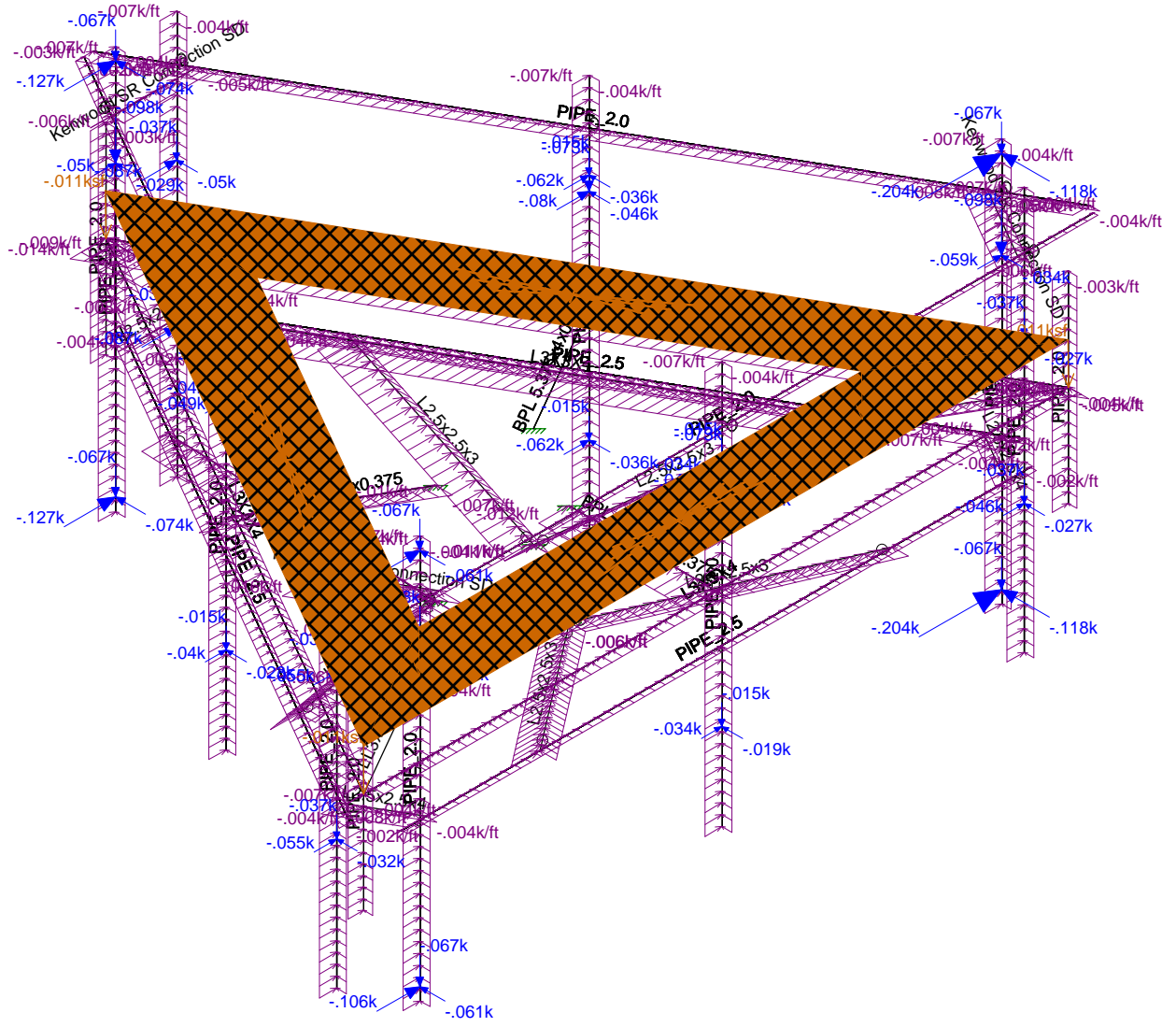
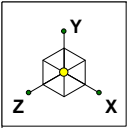
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CCI BU No. 876335

SK - 6

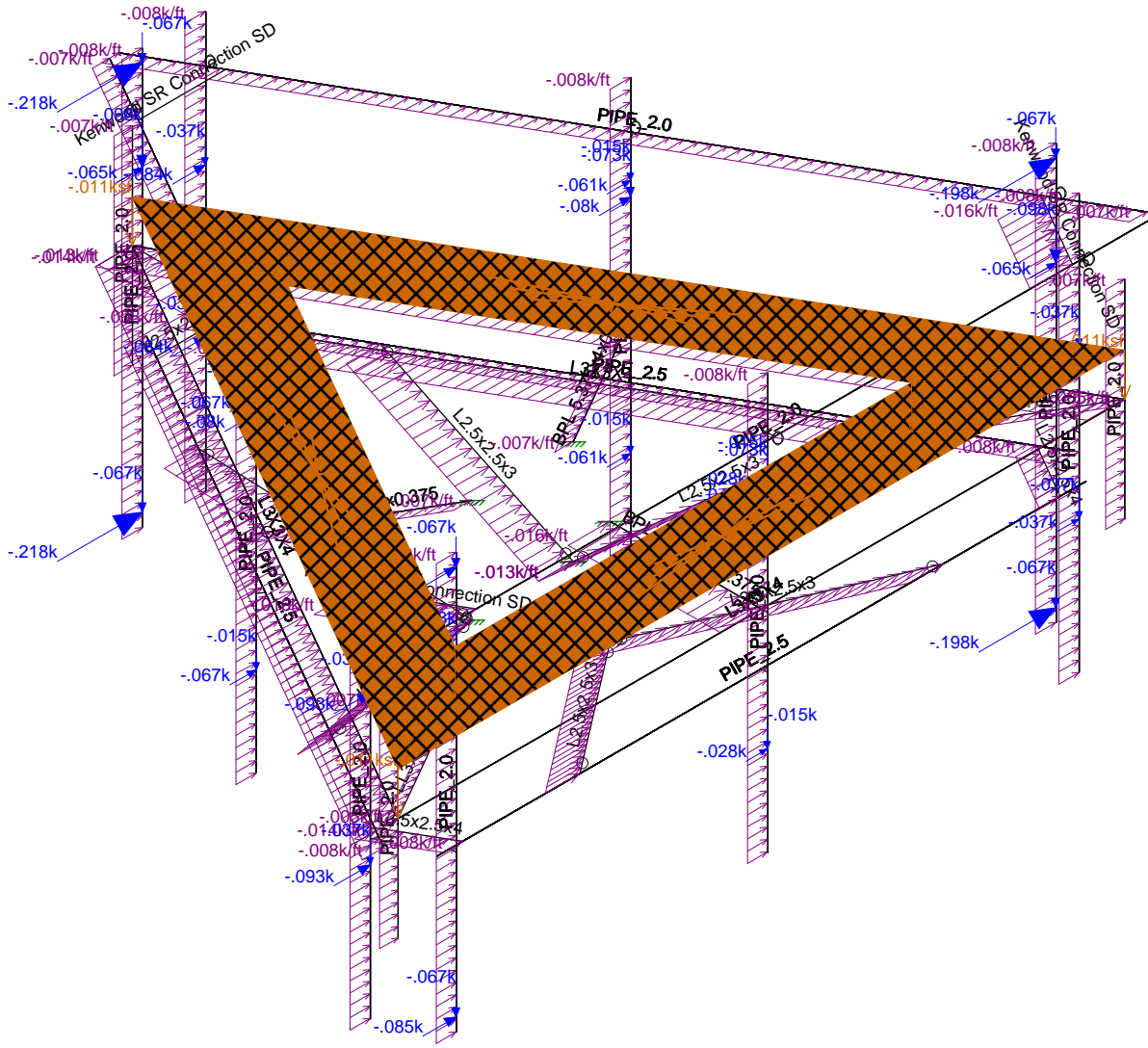
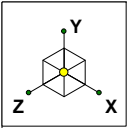
Nov 14, 2022 at 1:44 PM

Mount.r3d



Loads: LC 5, 0.9D+1.0 60-Wind
Envelope Only Solution

Tower Engineering Profess...	CCI BU No. 876335	SK - 7
MJA		Nov 14, 2022 at 1:44 PM
TEP No. 25672.785546		Mount.r3d



Loads: LC 6, 0.9D+1.0 90-Wind Envelope Only Solution

Tower Engineering Profess...	CCI BU No. 876335	SK - 8
MJA		Nov 14, 2022 at 1:44 PM
TEP No. 25672.785546		Mount.r3d

APPENDIX B
SOFTWARE INPUT CALCULATIONS



Code Revisions:	TIA-222-H	IBC 2021
Tower Type:	Monopole	

Wind Inputs:		
Ult. Wind Velocity:	117	mph
Live Load Velocity:	30	mph
Ice Wind Velocity:	50	mph
Base Ice Thickness:	1.50	inches
Mount Centerline:	139.0	ft
Antenna Centerline:	139.0	ft
Exposure Category:	B	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	414	ft

Wind Calculations:		
K_{zt} :	1.000	Section 2.6.6
K_d :	0.950	
$K_{z-Mount}$:	1.086	Section 2.6.5.2
$K_{z-Antenna}$:	1.086	Section 2.6.5.2
K_{iz} :	1.155	Section 2.6.10
Ice Thickness:	1.732	inches - Section 2.6.10
K_e :	0.985	Table 2-6

Without Ice - (psf)	With Ice - (psf)
$(q_z G_h)_{Mount}$: 35.61	$(q_z G_h)_{Mount}$: 6.50
$(q_z G_h)_{Antenna}$: 35.61	$(q_z G_h)_{Antenna}$: 6.50

Seismic Code Revisions:	TIA-222-H
Seismic Risk Category:	II

Seismic Input		
S_{DS} :	0.202	Design Short Period Spectral Accel.
I_p :	1.0	Importance Factor
R_p :	2.0	Response Modification Factor
ρ :	1.0	
A_s :	1.0	Application Factor - TIA-222-H Section 2.7.8.1
S_1 :	0.055	Spectral Acceleration at a Period of 1 Second

Seismic Design Force		TIA-H Sec 2.7.7.1.1
Cs:	0.101 kips/kip	TIA-H Sec 2.7.7.1.1
Cs-min:	0.030 kips/kip	



Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Distance from start node of the member		
										Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
ERICSSON	AIR 6419 B41_TMO_CCIV2	34.49	19.92	7.99	81.84	0.00	1	Flat	MP-1	2.56	5.44	
COMMSCOPE	VV-65A-R1_TMO	54.70	12.00	4.60	33.30	0.00	1	Flat	MP-2	1.72	6.28	
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	95.90	24.00	8.50	149.90	0.00	1	Flat	MP-3	0.25	7.75	
ERICSSON	AIR 6419 B41_TMO_CCIV2	34.49	19.92	7.99	81.84	110.00	1	Flat	MP-4	2.56	5.44	
COMMSCOPE	VV-65A-R1_TMO	54.70	12.00	4.60	33.30	110.00	1	Flat	MP-5	1.72	6.28	
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	95.90	24.00	8.50	149.90	110.00	1	Flat	MP-6	0.25	7.75	
ERICSSON	AIR 6419 B41_TMO_CCIV2	34.49	19.92	7.99	81.84	240.00	1	Flat	MP-7	2.56	5.44	
COMMSCOPE	VV-65A-R1_TMO	54.70	12.00	4.60	33.30	240.00	1	Flat	MP-8	1.72	6.28	
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	95.90	24.00	8.50	149.90	240.00	1	Flat	MP-9	0.25	7.75	
ERICSSON	RADIO 4480_TMOV2	22.00	15.70	7.50	81.00	0.00	1	Flat	MP-2	2.00		
ERICSSON	RADIO 4460 B2/B25 B66_TMO	17.00	15.10	11.90	109.00	0.00	1	Flat	MP-3	2.00		
ERICSSON	RADIO 4480_TMOV2	22.00	15.70	7.50	81.00	120.00	1	Flat	MP-5	2.00		
ERICSSON	RADIO 4460 B2/B25 B66_TMO	17.00	15.10	11.90	109.00	120.00	1	Flat	MP-6	2.00		
ERICSSON	RADIO 4480_TMOV2	22.00	15.70	7.50	81.00	240.00	1	Flat	MP-8	2.00		
ERICSSON	RADIO 4460 B2/B25 B66_TMO	17.00	15.10	11.90	109.00	240.00	1	Flat	MP-9	2.00		



**TOWER
ENGINEERING
PROFESSIONALS**

CCI BU No. 876335

TEP No. 25672.785549
Analysis By: MJA 11/14/2022
Checked By: JCM 11/14/2022

Member Forces are Calculated in Accordance with TIA-222-H

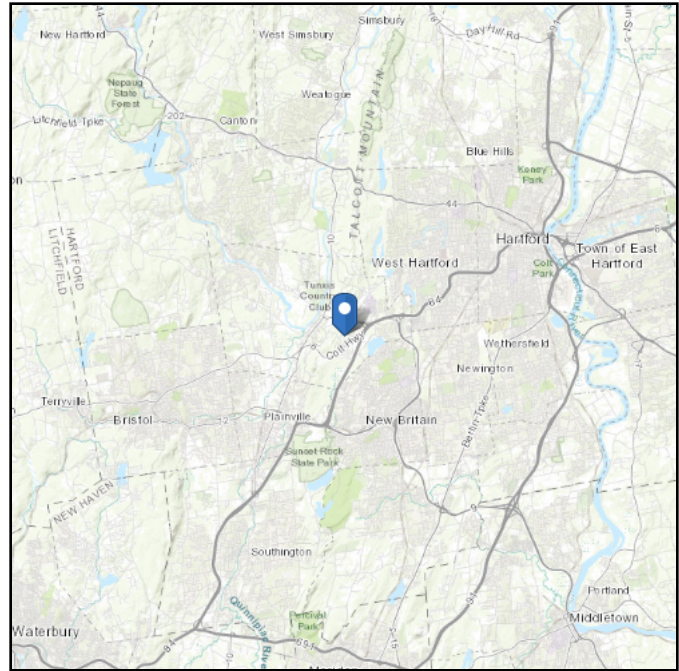
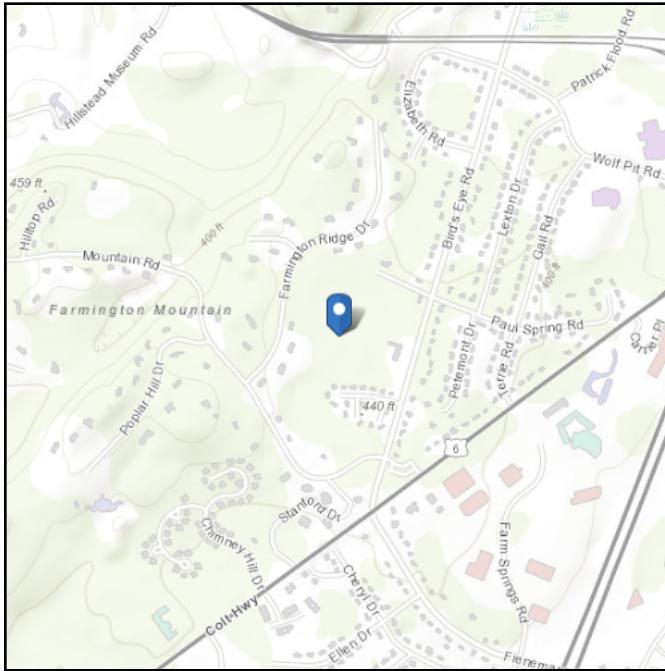
Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
CA-1	2.500	14.94	Flat	90.00	10.00
CA-2	2.500	14.94	Flat	30.00	10.00
CA-3	2.500	14.94	Flat	-30.00	10.00
FF-H1	3.000	168.00	Flat	90.00	12.00
FF-H2	3.000	168.00	Flat	-30.00	12.00
FF-H3	3.000	168.00	Flat	30.00	12.00
GSC-1	3.000	36.00	Flat	-60.00	12.00
GSC-2	3.000	36.00	Flat	0.00	12.00
GSC-3	3.000	36.00	Flat	60.00	12.00
GSI-1	3.000	105.65	Flat	90.00	18.00
GSI-2	3.000	105.65	Flat	-30.00	18.00
GSI-3	3.000	105.65	Flat	30.00	18.00
M55	2.500	55.97	Flat		10.00
M56	2.500	55.97	Flat		10.00
M57	2.500	55.97	Flat		10.00
M58A	2.500	55.97	Flat		10.00
M59A	2.500	55.97	Flat		10.00
M60A	2.500	55.97	Flat		10.00
MOD-SR1	2.875	150.00	Round	90.00	9.03
MOD-SR2	2.875	150.00	Round	-30.00	9.03
MOD-SR3	2.875	150.00	Round	30.00	9.03
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-3	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
MP-5	2.375	96.00	Round		7.46
MP-6	2.375	96.00	Round		7.46
MP-7	2.375	96.00	Round		7.46
MP-8	2.375	96.00	Round		7.46
MP-9	2.375	96.00	Round		7.46
MP-A	2.375	48.00	Round		7.46
MP-B	2.375	48.00	Round		7.46
MP-C	2.375	48.00	Round		7.46
SF-H1	4.000	35.00	Flat	0.00	26.75
SF-H2	4.000	36.50	Flat	60.00	26.75
SF-H3	4.000	36.50	Flat	-60.00	26.75
SR-1	2.375	174.00	Round	90.00	7.46
SR-2	2.375	174.00	Round	-30.00	7.46
SR-3	2.375	174.00	Round	30.00	7.46
CP-1	5.630	20.20	Flat	30.00	22.52
CP-2	5.630	20.20	Flat	90.00	22.52
CP-3	5.630	20.20	Flat	-30.00	22.52

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 413.61 ft (NAVD 88)
Latitude: 41.715817
Longitude: -72.810394



Wind

Results:

Wind Speed	117 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Thu Oct 27 2022

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

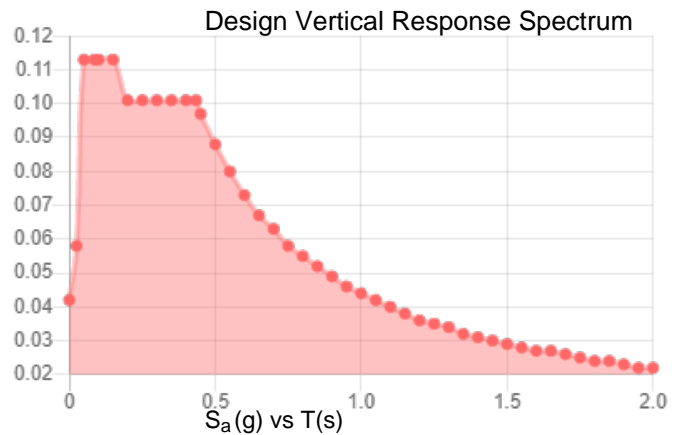
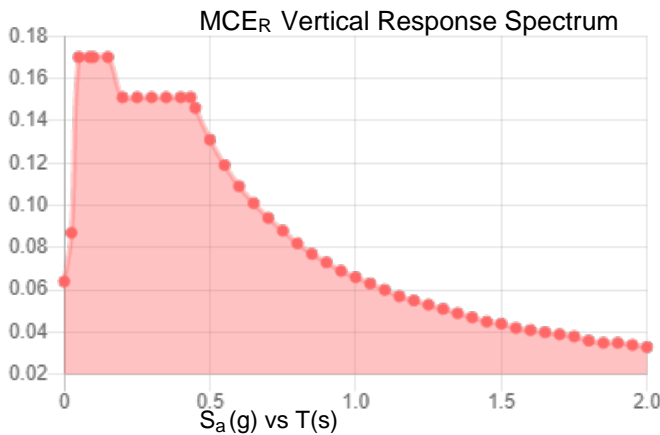
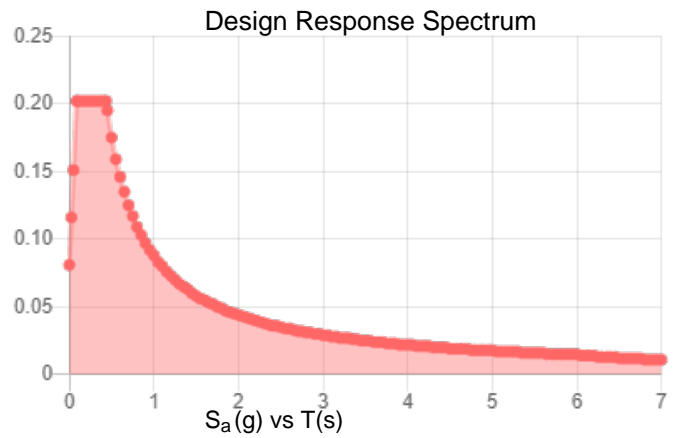
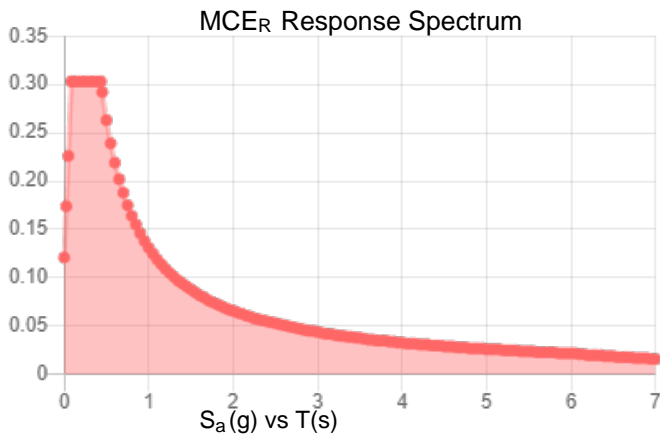
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

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

Results:

S_s :	0.189	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.102
F_v :	2.4	PGA _M :	0.163
S_{MS} :	0.303	F_{PGA} :	1.595
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.202	C_v :	0.7

Seismic Design Category B



Data Accessed: Thu Oct 27 2022

Date Source:

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

Ice

Results:

Ice Thickness: 1.50 in.

Concurrent Temperature: 15 F

Gust Speed 50 mph

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

Date Accessed: Thu Oct 27 2022

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

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

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APPENDIX C
SOFTWARE ANALYSIS OUTPUT

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	12
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISACONNECTION CODE	None
Cold Formed Steel Code	AISI S100-16: LRFD
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parame Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET ASTM615
Min % Steel for Column	1
Max % Steel for Column	8

(Global) Model Settings, Continued

Seismic Code	ASCE 7-16
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	4
Cd X	4
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3
6	A53-B-35	29000	11154	.3	.65	.49	35	1.5	63	1.2

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E5 F)	Density[k/ft^3]	Yield[ksi]	Fu[ksi]
1	A570 Gr.33	29500	11346	.3	.65	.49	33	52
2	A607 C1 Gr.55	29500	11346	.3	.65	.49	55	70
3	ASTM A36	29500	11154	.3	.65	.49	36	58

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz.	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	.031
2	Mount Pipes	PIPE 2.0	None	None	A53-B-35	Typical	1.02	.627	.627	1.25
3	Grating Support Corners	LL3x3x4x6	None	None	A36 Gr.36	Typical	2.88	6.65	2.46	.063
4	Grating Support Internals	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	.031
5	Support Rail	PIPE 2.0	None	None	A53-B-35	Typical	1.02	.627	.627	1.25
6	Mod Support Rail	PIPE 2.5	None	None	A53-B-35	Typical	1.61	1.45	1.45	2.89
7	Support Rail Connection...	Kenwood SR Conn...	None	None	A572 Gr.50	Typical	2.527	5.369	8.237	.051
8	Kicker	L2.5x2.5x3	None	None	A36 Gr.36	Typical	.901	.535	.535	.011
9	AHCP	L2.5x2.5x4	None	None	A36 Gr.36	Typical	1.19	.692	.692	.026

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Support Arms	BPL 5.375x4x0.3...	None	None	ASTM A36	Typical	4.513	7.215	20.276	.212

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Y	-0.41	2.563
2	MP-2	Y	-0.17	1.721
3	MP-3	Y	-0.75	.25
4	MP-4	Y	-0.41	2.563
5	MP-5	Y	-0.17	1.721
6	MP-6	Y	-0.75	.25
7	MP-7	Y	-0.41	2.563
8	MP-8	Y	-0.17	1.721
9	MP-9	Y	-0.75	.25
10	MP-2	Y	-0.81	2
11	MP-3	Y	-1.09	2
12	MP-5	Y	-0.81	2
13	MP-6	Y	-1.09	2
14	MP-8	Y	-0.81	2
15	MP-9	Y	-1.09	2
16	MP-1	Y	-0.41	5.437
17	MP-2	Y	-0.17	6.279
18	MP-3	Y	-0.75	7.75
19	MP-4	Y	-0.41	5.437
20	MP-5	Y	-0.17	6.279
21	MP-6	Y	-0.75	7.75
22	MP-7	Y	-0.41	5.437
23	MP-8	Y	-0.17	6.279
24	MP-9	Y	-0.75	7.75

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-1	2.563
2	MP-2	X	-0.72	1.721
3	MP-3	X	-2.35	.25
4	MP-4	X	-0.45	2.563
5	MP-5	X	-0.33	1.721
6	MP-6	X	-1.03	.25
7	MP-7	X	-0.53	2.563
8	MP-8	X	-0.39	1.721
9	MP-9	X	-1.23	.25
10	MP-2	X	-0.92	2
11	MP-3	X	-0.69	2
12	MP-5	X	-0.57	2
13	MP-6	X	-0.58	2
14	MP-8	X	-0.57	2
15	MP-9	X	-0.58	2
16	MP-1	X	-1	5.437
17	MP-2	X	-0.72	6.279
18	MP-3	X	-2.35	7.75
19	MP-4	X	-0.45	5.437
20	MP-5	X	-0.33	6.279
21	MP-6	X	-1.03	7.75
22	MP-7	X	-0.53	5.437
23	MP-8	X	-0.39	6.279
24	MP-9	X	-1.23	7.75

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-0.73	2.563
2	MP-2	X	-0.53	1.721
3	MP-3	X	-1.71	.25
4	MP-4	X	-0.34	2.563
5	MP-5	X	-0.25	1.721
6	MP-6	X	-0.78	.25
7	MP-7	X	-0.73	2.563

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
8	MP-8	X	-0.53	1.721
9	MP-9	X	-1.71	.25
10	MP-2	X	-0.7	2
11	MP-3	X	-0.56	2
12	MP-5	X	-0.39	2
13	MP-6	X	-0.47	2
14	MP-8	X	-0.7	2
15	MP-9	X	-0.56	2
16	MP-1	X	-0.73	5.437
17	MP-2	X	-0.53	6.279
18	MP-3	X	-1.71	7.75
19	MP-4	X	-0.34	5.437
20	MP-5	X	-0.25	6.279
21	MP-6	X	-0.78	7.75
22	MP-7	X	-0.73	5.437
23	MP-8	X	-0.53	6.279
24	MP-9	X	-1.71	7.75
25	MP-1	Z	-0.42	2.563
26	MP-2	Z	-0.3	1.721
27	MP-3	Z	-0.99	.25
28	MP-4	Z	-0.2	2.563
29	MP-5	Z	-0.15	1.721
30	MP-6	Z	-0.45	.25
31	MP-7	Z	-0.42	2.563
32	MP-8	Z	-0.3	1.721
33	MP-9	Z	-0.99	.25
34	MP-2	Z	-0.4	2
35	MP-3	Z	-0.32	2
36	MP-5	Z	-0.22	2
37	MP-6	Z	-0.27	2
38	MP-8	Z	-0.4	2
39	MP-9	Z	-0.32	2
40	MP-1	Z	-0.42	5.437
41	MP-2	Z	-0.3	6.279
42	MP-3	Z	-0.99	7.75
43	MP-4	Z	-0.2	5.437
44	MP-5	Z	-0.15	6.279
45	MP-6	Z	-0.45	7.75
46	MP-7	Z	-0.42	5.437
47	MP-8	Z	-0.3	6.279
48	MP-9	Z	-0.99	7.75

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-0.49	2.563
2	MP-2	X	-0.35	1.721
3	MP-3	X	-1.13	.25
4	MP-4	X	-0.34	2.563
5	MP-5	X	-0.25	1.721
6	MP-6	X	-0.79	.25
7	MP-7	X	-0.68	2.563
8	MP-8	X	-0.49	1.721
9	MP-9	X	-1.59	.25
10	MP-2	X	-0.48	2
11	MP-3	X	-0.43	2
12	MP-5	X	-0.34	2
13	MP-6	X	-0.39	2
14	MP-8	X	-0.63	2
15	MP-9	X	-0.48	2
16	MP-1	X	-0.49	5.437
17	MP-2	X	-0.35	6.279
18	MP-3	X	-1.13	7.75

Member Point Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
19	MP-4	X	-034	5.437
20	MP-5	X	-025	6.279
21	MP-6	X	-079	7.75
22	MP-7	X	-068	5.437
23	MP-8	X	-049	6.279
24	MP-9	X	-159	7.75
25	MP-1	Z	-049	2.563
26	MP-2	Z	-035	1.721
27	MP-3	Z	-113	.25
28	MP-4	Z	-034	2.563
29	MP-5	Z	-025	1.721
30	MP-6	Z	-079	.25
31	MP-7	Z	-068	2.563
32	MP-8	Z	-049	1.721
33	MP-9	Z	-159	.25
34	MP-2	Z	-048	2
35	MP-3	Z	-043	2
36	MP-5	Z	-034	2
37	MP-6	Z	-039	2
38	MP-8	Z	-063	2
39	MP-9	Z	-048	2
40	MP-1	Z	-049	5.437
41	MP-2	Z	-035	6.279
42	MP-3	Z	-113	7.75
43	MP-4	Z	-034	5.437
44	MP-5	Z	-025	6.279
45	MP-6	Z	-079	7.75
46	MP-7	Z	-068	5.437
47	MP-8	Z	-049	6.279
48	MP-9	Z	-159	7.75

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-027	2.563
2	MP-2	X	-019	1.721
3	MP-3	X	-061	.25
4	MP-4	X	-032	2.563
5	MP-5	X	-023	1.721
6	MP-6	X	-074	.25
7	MP-7	X	-.05	2.563
8	MP-8	X	-036	1.721
9	MP-9	X	-118	.25
10	MP-2	X	-028	2
11	MP-3	X	-029	2
12	MP-5	X	-028	2
13	MP-6	X	-029	2
14	MP-8	X	-046	2
15	MP-9	X	-034	2
16	MP-1	X	-027	5.437
17	MP-2	X	-019	6.279
18	MP-3	X	-061	7.75
19	MP-4	X	-032	5.437
20	MP-5	X	-023	6.279
21	MP-6	X	-074	7.75
22	MP-7	X	-.05	5.437
23	MP-8	X	-036	6.279
24	MP-9	X	-118	7.75
25	MP-1	Z	-046	2.563
26	MP-2	Z	-034	1.721
27	MP-3	Z	-106	.25
28	MP-4	Z	-055	2.563
29	MP-5	Z	-.04	1.721

Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
30	MP-6	Z	-127	.25
31	MP-7	Z	-087	2.563
32	MP-8	Z	-062	1.721
33	MP-9	Z	-204	.25
34	MP-2	Z	-049	2
35	MP-3	Z	-.05	2
36	MP-5	Z	-049	2
37	MP-6	Z	-.05	2
38	MP-8	Z	-.08	2
39	MP-9	Z	-059	2
40	MP-1	Z	-046	5.437
41	MP-2	Z	-034	6.279
42	MP-3	Z	-106	7.75
43	MP-4	Z	-055	5.437
44	MP-5	Z	-.04	6.279
45	MP-6	Z	-127	7.75
46	MP-7	Z	-087	5.437
47	MP-8	Z	-062	6.279
48	MP-9	Z	-204	7.75

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Z	-037	2.563
2	MP-2	Z	-028	1.721
3	MP-3	Z	-085	.25
4	MP-4	Z	-093	2.563
5	MP-5	Z	-067	1.721
6	MP-6	Z	-218	.25
7	MP-7	Z	-084	2.563
8	MP-8	Z	-061	1.721
9	MP-9	Z	-198	.25
10	MP-2	Z	-045	2
11	MP-3	Z	-054	2
12	MP-5	Z	-08	2
13	MP-6	Z	-065	2
14	MP-8	Z	-.08	2
15	MP-9	Z	-065	2
16	MP-1	Z	-037	5.437
17	MP-2	Z	-028	6.279
18	MP-3	Z	-085	7.75
19	MP-4	Z	-093	5.437
20	MP-5	Z	-067	6.279
21	MP-6	Z	-218	7.75
22	MP-7	Z	-084	5.437
23	MP-8	Z	-061	6.279
24	MP-9	Z	-198	7.75

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.027	2.563
2	MP-2	X	.019	1.721
3	MP-3	X	.061	.25
4	MP-4	X	.049	2.563
5	MP-5	X	.035	1.721
6	MP-6	X	.115	.25
7	MP-7	X	.027	2.563
8	MP-8	X	.019	1.721
9	MP-9	X	.061	.25
10	MP-2	X	.028	2
11	MP-3	X	.029	2
12	MP-5	X	.046	2
13	MP-6	X	.034	2

Member Point Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-8	X	.028	2
15	MP-9	X	.029	2
16	MP-1	X	.027	5.437
17	MP-2	X	.019	6.279
18	MP-3	X	.061	7.75
19	MP-4	X	.049	5.437
20	MP-5	X	.035	6.279
21	MP-6	X	.115	7.75
22	MP-7	X	.027	5.437
23	MP-8	X	.019	6.279
24	MP-9	X	.061	7.75
25	MP-1	Z	-.046	2.563
26	MP-2	Z	-.034	1.721
27	MP-3	Z	-.106	.25
28	MP-4	Z	-.085	2.563
29	MP-5	Z	-.061	1.721
30	MP-6	Z	-.2	.25
31	MP-7	Z	-.046	2.563
32	MP-8	Z	-.034	1.721
33	MP-9	Z	-.106	.25
34	MP-2	Z	-.049	2
35	MP-3	Z	-.05	2
36	MP-5	Z	-.08	2
37	MP-6	Z	-.059	2
38	MP-8	Z	-.049	2
39	MP-9	Z	-.05	2
40	MP-1	Z	-.046	5.437
41	MP-2	Z	-.034	6.279
42	MP-3	Z	-.106	7.75
43	MP-4	Z	-.085	5.437
44	MP-5	Z	-.061	6.279
45	MP-6	Z	-.2	7.75
46	MP-7	Z	-.046	5.437
47	MP-8	Z	-.034	6.279
48	MP-9	Z	-.106	7.75

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.049	2.563
2	MP-2	X	.035	1.721
3	MP-3	X	.113	.25
4	MP-4	X	.063	2.563
5	MP-5	X	.045	1.721
6	MP-6	X	.147	.25
7	MP-7	X	.029	2.563
8	MP-8	X	.022	1.721
9	MP-9	X	.067	.25
10	MP-2	X	.048	2
11	MP-3	X	.043	2
12	MP-5	X	.063	2
13	MP-6	X	.048	2
14	MP-8	X	.034	2
15	MP-9	X	.039	2
16	MP-1	X	.049	5.437
17	MP-2	X	.035	6.279
18	MP-3	X	.113	7.75
19	MP-4	X	.063	5.437
20	MP-5	X	.045	6.279
21	MP-6	X	.147	7.75
22	MP-7	X	.029	5.437
23	MP-8	X	.022	6.279
24	MP-9	X	.067	7.75

Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP-1	Z	-.049	2.563
26	MP-2	Z	-.035	1.721
27	MP-3	Z	-.113	.25
28	MP-4	Z	-.063	2.563
29	MP-5	Z	-.045	1.721
30	MP-6	Z	-.147	.25
31	MP-7	Z	-.029	2.563
32	MP-8	Z	-.022	1.721
33	MP-9	Z	-.067	.25
34	MP-2	Z	-.048	2
35	MP-3	Z	-.043	2
36	MP-5	Z	-.063	2
37	MP-6	Z	-.048	2
38	MP-8	Z	-.034	2
39	MP-9	Z	-.039	2
40	MP-1	Z	-.049	5.437
41	MP-2	Z	-.035	6.279
42	MP-3	Z	-.113	7.75
43	MP-4	Z	-.063	5.437
44	MP-5	Z	-.045	6.279
45	MP-6	Z	-.147	7.75
46	MP-7	Z	-.029	5.437
47	MP-8	Z	-.022	6.279
48	MP-9	Z	-.067	7.75

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.073	2.563
2	MP-2	X	.053	1.721
3	MP-3	X	.171	.25
4	MP-4	X	.064	2.563
5	MP-5	X	.046	1.721
6	MP-6	X	.15	.25
7	MP-7	X	.032	2.563
8	MP-8	X	.024	1.721
9	MP-9	X	.074	.25
10	MP-2	X	.07	2
11	MP-3	X	.056	2
12	MP-5	X	.07	2
13	MP-6	X	.056	2
14	MP-8	X	.039	2
15	MP-9	X	.047	2
16	MP-1	X	.073	5.437
17	MP-2	X	.053	6.279
18	MP-3	X	.171	7.75
19	MP-4	X	.064	5.437
20	MP-5	X	.046	6.279
21	MP-6	X	.15	7.75
22	MP-7	X	.032	5.437
23	MP-8	X	.024	6.279
24	MP-9	X	.074	7.75
25	MP-1	Z	-.042	2.563
26	MP-2	Z	-.03	1.721
27	MP-3	Z	-.099	.25
28	MP-4	Z	-.037	2.563
29	MP-5	Z	-.027	1.721
30	MP-6	Z	-.087	.25
31	MP-7	Z	-.019	2.563
32	MP-8	Z	-.014	1.721
33	MP-9	Z	-.043	.25
34	MP-2	Z	-.04	2
35	MP-3	Z	-.032	2

Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
36	MP-5	Z	-04	2
37	MP-6	Z	-032	2
38	MP-8	Z	-022	2
39	MP-9	Z	-027	2
40	MP-1	Z	-042	5.437
41	MP-2	Z	-03	6.279
42	MP-3	Z	-099	7.75
43	MP-4	Z	-037	5.437
44	MP-5	Z	-027	6.279
45	MP-6	Z	-087	7.75
46	MP-7	Z	-019	5.437
47	MP-8	Z	-014	6.279
48	MP-9	Z	-043	7.75

Member Point Loads (BLC 10 : 180 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.1	2.563
2	MP-2	X	.072	1.721
3	MP-3	X	.235	.25
4	MP-4	X	.045	2.563
5	MP-5	X	.033	1.721
6	MP-6	X	.103	.25
7	MP-7	X	.053	2.563
8	MP-8	X	.039	1.721
9	MP-9	X	.123	.25
10	MP-2	X	.092	2
11	MP-3	X	.069	2
12	MP-5	X	.057	2
13	MP-6	X	.058	2
14	MP-8	X	.057	2
15	MP-9	X	.058	2
16	MP-1	X	.1	5.437
17	MP-2	X	.072	6.279
18	MP-3	X	.235	7.75
19	MP-4	X	.045	5.437
20	MP-5	X	.033	6.279
21	MP-6	X	.103	7.75
22	MP-7	X	.053	5.437
23	MP-8	X	.039	6.279
24	MP-9	X	.123	7.75

Member Point Loads (BLC 11 : 210 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.073	2.563
2	MP-2	X	.053	1.721
3	MP-3	X	.171	.25
4	MP-4	X	.034	2.563
5	MP-5	X	.025	1.721
6	MP-6	X	.078	.25
7	MP-7	X	.073	2.563
8	MP-8	X	.053	1.721
9	MP-9	X	.171	.25
10	MP-2	X	.07	2
11	MP-3	X	.056	2
12	MP-5	X	.039	2
13	MP-6	X	.047	2
14	MP-8	X	.07	2
15	MP-9	X	.056	2
16	MP-1	X	.073	5.437
17	MP-2	X	.053	6.279
18	MP-3	X	.171	7.75
19	MP-4	X	.034	5.437

Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
20	MP-5	X	.025	6.279
21	MP-6	X	.078	7.75
22	MP-7	X	.073	5.437
23	MP-8	X	.053	6.279
24	MP-9	X	.171	7.75
25	MP-1	Z	.042	2.563
26	MP-2	Z	.03	1.721
27	MP-3	Z	.099	.25
28	MP-4	Z	.02	2.563
29	MP-5	Z	.015	1.721
30	MP-6	Z	.045	.25
31	MP-7	Z	.042	2.563
32	MP-8	Z	.03	1.721
33	MP-9	Z	.099	.25
34	MP-2	Z	.04	2
35	MP-3	Z	.032	2
36	MP-5	Z	.022	2
37	MP-6	Z	.027	2
38	MP-8	Z	.04	2
39	MP-9	Z	.032	2
40	MP-1	Z	.042	5.437
41	MP-2	Z	.03	6.279
42	MP-3	Z	.099	7.75
43	MP-4	Z	.02	5.437
44	MP-5	Z	.015	6.279
45	MP-6	Z	.045	7.75
46	MP-7	Z	.042	5.437
47	MP-8	Z	.03	6.279
48	MP-9	Z	.099	7.75

Member Point Loads (BLC 12 : 225 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.049	2.563
2	MP-2	X	.035	1.721
3	MP-3	X	.113	.25
4	MP-4	X	.034	2.563
5	MP-5	X	.025	1.721
6	MP-6	X	.079	.25
7	MP-7	X	.068	2.563
8	MP-8	X	.049	1.721
9	MP-9	X	.159	.25
10	MP-2	X	.048	2
11	MP-3	X	.043	2
12	MP-5	X	.034	2
13	MP-6	X	.039	2
14	MP-8	X	.063	2
15	MP-9	X	.048	2
16	MP-1	X	.049	5.437
17	MP-2	X	.035	6.279
18	MP-3	X	.113	7.75
19	MP-4	X	.034	5.437
20	MP-5	X	.025	6.279
21	MP-6	X	.079	7.75
22	MP-7	X	.068	5.437
23	MP-8	X	.049	6.279
24	MP-9	X	.159	7.75
25	MP-1	Z	.049	2.563
26	MP-2	Z	.035	1.721
27	MP-3	Z	.113	.25
28	MP-4	Z	.034	2.563
29	MP-5	Z	.025	1.721
30	MP-6	Z	.079	.25



Member Point Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
31	MP-7	Z	.068	2.563
32	MP-8	Z	.049	1.721
33	MP-9	Z	.159	.25
34	MP-2	Z	.048	2
35	MP-3	Z	.043	2
36	MP-5	Z	.034	2
37	MP-6	Z	.039	2
38	MP-8	Z	.063	2
39	MP-9	Z	.048	2
40	MP-1	Z	.049	5.437
41	MP-2	Z	.035	6.279
42	MP-3	Z	.113	7.75
43	MP-4	Z	.034	5.437
44	MP-5	Z	.025	6.279
45	MP-6	Z	.079	7.75
46	MP-7	Z	.068	5.437
47	MP-8	Z	.049	6.279
48	MP-9	Z	.159	7.75

Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.027	2.563
2	MP-2	X	.019	1.721
3	MP-3	X	.061	.25
4	MP-4	X	.032	2.563
5	MP-5	X	.023	1.721
6	MP-6	X	.074	.25
7	MP-7	X	.05	2.563
8	MP-8	X	.036	1.721
9	MP-9	X	.118	.25
10	MP-2	X	.028	2
11	MP-3	X	.029	2
12	MP-5	X	.028	2
13	MP-6	X	.029	2
14	MP-8	X	.046	2
15	MP-9	X	.034	2
16	MP-1	X	.027	5.437
17	MP-2	X	.019	6.279
18	MP-3	X	.061	7.75
19	MP-4	X	.032	5.437
20	MP-5	X	.023	6.279
21	MP-6	X	.074	7.75
22	MP-7	X	.05	5.437
23	MP-8	X	.036	6.279
24	MP-9	X	.118	7.75
25	MP-1	Z	.046	2.563
26	MP-2	Z	.034	1.721
27	MP-3	Z	.106	.25
28	MP-4	Z	.055	2.563
29	MP-5	Z	.04	1.721
30	MP-6	Z	.127	.25
31	MP-7	Z	.087	2.563
32	MP-8	Z	.062	1.721
33	MP-9	Z	.204	.25
34	MP-2	Z	.049	2
35	MP-3	Z	.05	2
36	MP-5	Z	.049	2
37	MP-6	Z	.05	2
38	MP-8	Z	.08	2
39	MP-9	Z	.059	2
40	MP-1	Z	.046	5.437
41	MP-2	Z	.034	6.279



Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
42	MP-3	Z	.106	7.75
43	MP-4	Z	.055	5.437
44	MP-5	Z	.04	6.279
45	MP-6	Z	.127	7.75
46	MP-7	Z	.087	5.437
47	MP-8	Z	.062	6.279
48	MP-9	Z	.204	7.75

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Z	.037	2.563
2	MP-2	Z	.028	1.721
3	MP-3	Z	.085	.25
4	MP-4	Z	.093	2.563
5	MP-5	Z	.067	1.721
6	MP-6	Z	.218	.25
7	MP-7	Z	.084	2.563
8	MP-8	Z	.061	1.721
9	MP-9	Z	.198	.25
10	MP-2	Z	.045	2
11	MP-3	Z	.054	2
12	MP-5	Z	.08	2
13	MP-6	Z	.065	2
14	MP-8	Z	.08	2
15	MP-9	Z	.065	2
16	MP-1	Z	.037	5.437
17	MP-2	Z	.028	6.279
18	MP-3	Z	.085	7.75
19	MP-4	Z	.093	5.437
20	MP-5	Z	.067	6.279
21	MP-6	Z	.218	7.75
22	MP-7	Z	.084	5.437
23	MP-8	Z	.061	6.279
24	MP-9	Z	.198	7.75

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-.027	2.563
2	MP-2	X	-.019	1.721
3	MP-3	X	-.061	.25
4	MP-4	X	-.049	2.563
5	MP-5	X	-.035	1.721
6	MP-6	X	-.115	.25
7	MP-7	X	-.027	2.563
8	MP-8	X	-.019	1.721
9	MP-9	X	-.061	.25
10	MP-2	X	-.028	2
11	MP-3	X	-.029	2
12	MP-5	X	-.046	2
13	MP-6	X	-.034	2
14	MP-8	X	-.028	2
15	MP-9	X	-.029	2
16	MP-1	X	-.027	5.437
17	MP-2	X	-.019	6.279
18	MP-3	X	-.061	7.75
19	MP-4	X	-.049	5.437
20	MP-5	X	-.035	6.279
21	MP-6	X	-.115	7.75
22	MP-7	X	-.027	5.437
23	MP-8	X	-.019	6.279
24	MP-9	X	-.061	7.75
25	MP-1	Z	.046	2.563

Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
26	MP-2	Z	.034	1.721
27	MP-3	Z	.106	.25
28	MP-4	Z	.085	2.563
29	MP-5	Z	.061	1.721
30	MP-6	Z	.2	.25
31	MP-7	Z	.046	2.563
32	MP-8	Z	.034	1.721
33	MP-9	Z	.106	.25
34	MP-2	Z	.049	2
35	MP-3	Z	.05	2
36	MP-5	Z	.08	2
37	MP-6	Z	.059	2
38	MP-8	Z	.049	2
39	MP-9	Z	.05	2
40	MP-1	Z	.046	5.437
41	MP-2	Z	.034	6.279
42	MP-3	Z	.106	7.75
43	MP-4	Z	.085	5.437
44	MP-5	Z	.061	6.279
45	MP-6	Z	.2	7.75
46	MP-7	Z	.046	5.437
47	MP-8	Z	.034	6.279
48	MP-9	Z	.106	7.75

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-.049	2.563
2	MP-2	X	-.035	1.721
3	MP-3	X	-.113	.25
4	MP-4	X	-.063	2.563
5	MP-5	X	-.045	1.721
6	MP-6	X	-.147	.25
7	MP-7	X	-.029	2.563
8	MP-8	X	-.022	1.721
9	MP-9	X	-.067	.25
10	MP-2	X	-.048	2
11	MP-3	X	-.043	2
12	MP-5	X	-.063	2
13	MP-6	X	-.048	2
14	MP-8	X	-.034	2
15	MP-9	X	-.039	2
16	MP-1	X	-.049	5.437
17	MP-2	X	-.035	6.279
18	MP-3	X	-.113	7.75
19	MP-4	X	-.063	5.437
20	MP-5	X	-.045	6.279
21	MP-6	X	-.147	7.75
22	MP-7	X	-.029	5.437
23	MP-8	X	-.022	6.279
24	MP-9	X	-.067	7.75
25	MP-1	Z	.049	2.563
26	MP-2	Z	.035	1.721
27	MP-3	Z	.113	.25
28	MP-4	Z	.063	2.563
29	MP-5	Z	.045	1.721
30	MP-6	Z	.147	.25
31	MP-7	Z	.029	2.563
32	MP-8	Z	.022	1.721
33	MP-9	Z	.067	.25
34	MP-2	Z	.048	2
35	MP-3	Z	.043	2
36	MP-5	Z	.063	2

Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
37	MP-6	Z	.048	2
38	MP-8	Z	.034	2
39	MP-9	Z	.039	2
40	MP-1	Z	.049	5.437
41	MP-2	Z	.035	6.279
42	MP-3	Z	.113	7.75
43	MP-4	Z	.063	5.437
44	MP-5	Z	.045	6.279
45	MP-6	Z	.147	7.75
46	MP-7	Z	.029	5.437
47	MP-8	Z	.022	6.279
48	MP-9	Z	.067	7.75

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-.073	2.563
2	MP-2	X	-.053	1.721
3	MP-3	X	-.171	.25
4	MP-4	X	-.064	2.563
5	MP-5	X	-.046	1.721
6	MP-6	X	-.15	.25
7	MP-7	X	-.032	2.563
8	MP-8	X	-.024	1.721
9	MP-9	X	-.074	.25
10	MP-2	X	-.07	2
11	MP-3	X	-.056	2
12	MP-5	X	-.07	2
13	MP-6	X	-.056	2
14	MP-8	X	-.039	2
15	MP-9	X	-.047	2
16	MP-1	X	-.073	5.437
17	MP-2	X	-.053	6.279
18	MP-3	X	-.171	7.75
19	MP-4	X	-.064	5.437
20	MP-5	X	-.046	6.279
21	MP-6	X	-.15	7.75
22	MP-7	X	-.032	5.437
23	MP-8	X	-.024	6.279
24	MP-9	X	-.074	7.75
25	MP-1	Z	.042	2.563
26	MP-2	Z	.03	1.721
27	MP-3	Z	.099	.25
28	MP-4	Z	.037	2.563
29	MP-5	Z	.027	1.721
30	MP-6	Z	.087	.25
31	MP-7	Z	.019	2.563
32	MP-8	Z	.014	1.721
33	MP-9	Z	.043	.25
34	MP-2	Z	.04	2
35	MP-3	Z	.032	2
36	MP-5	Z	.04	2
37	MP-6	Z	.032	2
38	MP-8	Z	.022	2
39	MP-9	Z	.027	2
40	MP-1	Z	.042	5.437
41	MP-2	Z	.03	6.279
42	MP-3	Z	.099	7.75
43	MP-4	Z	.037	5.437
44	MP-5	Z	.027	6.279
45	MP-6	Z	.087	7.75
46	MP-7	Z	.019	5.437
47	MP-8	Z	.014	6.279

Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
48	MP-9	Z	.043	7.75

Member Point Loads (BLC 18 : Ice Weight)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
1	MP-1	Y	-0.76	2.563
2	MP-2	Y	-0.69	1.721
3	MP-3	Y	-0.212	.25
4	MP-4	Y	-0.76	2.563
5	MP-5	Y	-0.69	1.721
6	MP-6	Y	-0.212	.25
7	MP-7	Y	-0.76	2.563
8	MP-8	Y	-0.69	1.721
9	MP-9	Y	-0.212	.25
10	MP-2	Y	-0.89	2
11	MP-3	Y	-0.09	2
12	MP-5	Y	-0.89	2
13	MP-6	Y	-0.09	2
14	MP-8	Y	-0.89	2
15	MP-9	Y	-0.09	2
16	MP-1	Y	-0.76	5.437
17	MP-2	Y	-0.69	6.279
18	MP-3	Y	-0.212	7.75
19	MP-4	Y	-0.76	5.437
20	MP-5	Y	-0.69	6.279
21	MP-6	Y	-0.212	7.75
22	MP-7	Y	-0.76	5.437
23	MP-8	Y	-0.69	6.279
24	MP-9	Y	-0.212	7.75

Member Point Loads (BLC 19 : 0 Wind - Ice)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
1	MP-1	X	-0.23	2.563
2	MP-2	X	-0.17	1.721
3	MP-3	X	-0.05	.25
4	MP-4	X	-0.23	2.563
5	MP-5	X	-0.17	1.721
6	MP-6	X	-0.05	.25
7	MP-7	X	-0.23	2.563
8	MP-8	X	-0.17	1.721
9	MP-9	X	-0.05	.25
10	MP-2	X	-0.24	2
11	MP-3	X	-0.19	2
12	MP-5	X	-0.24	2
13	MP-6	X	-0.19	2
14	MP-8	X	-0.24	2
15	MP-9	X	-0.19	2
16	MP-1	X	-0.23	5.437
17	MP-2	X	-0.17	6.279
18	MP-3	X	-0.05	7.75
19	MP-4	X	-0.23	5.437
20	MP-5	X	-0.17	6.279
21	MP-6	X	-0.05	7.75
22	MP-7	X	-0.23	5.437
23	MP-8	X	-0.17	6.279
24	MP-9	X	-0.05	7.75

Member Point Loads (BLC 20 : 30 Wind - Ice)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
1	MP-1	X	-0.17	2.563
2	MP-2	X	-0.13	1.721
3	MP-3	X	-0.37	.25

Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
4	MP-4	X	-0.09	2.563
5	MP-5	X	-0.08	1.721
6	MP-6	X	-0.19	.25
7	MP-7	X	-0.17	2.563
8	MP-8	X	-0.13	1.721
9	MP-9	X	-0.37	.25
10	MP-2	X	-0.18	2
11	MP-3	X	-0.15	2
12	MP-5	X	-0.12	2
13	MP-6	X	-0.13	2
14	MP-8	X	-0.18	2
15	MP-9	X	-0.15	2
16	MP-1	X	-0.17	5.437
17	MP-2	X	-0.13	6.279
18	MP-3	X	-0.37	7.75
19	MP-4	X	-0.09	5.437
20	MP-5	X	-0.08	6.279
21	MP-6	X	-0.19	7.75
22	MP-7	X	-0.17	5.437
23	MP-8	X	-0.13	6.279
24	MP-9	X	-0.37	7.75
25	MP-1	Z	-0.1	2.563
26	MP-2	Z	-0.08	1.721
27	MP-3	Z	-0.21	.25
28	MP-4	Z	-0.05	2.563
29	MP-5	Z	-0.05	1.721
30	MP-6	Z	-0.11	.25
31	MP-7	Z	-0.1	2.563
32	MP-8	Z	-0.08	1.721
33	MP-9	Z	-0.21	.25
34	MP-2	Z	-0.11	2
35	MP-3	Z	-0.09	2
36	MP-5	Z	-0.07	2
37	MP-6	Z	-0.08	2
38	MP-8	Z	-0.11	2
39	MP-9	Z	-0.09	2
40	MP-1	Z	-0.1	5.437
41	MP-2	Z	-0.08	6.279
42	MP-3	Z	-0.21	7.75
43	MP-4	Z	-0.05	5.437
44	MP-5	Z	-0.05	6.279
45	MP-6	Z	-0.11	7.75
46	MP-7	Z	-0.1	5.437
47	MP-8	Z	-0.08	6.279
48	MP-9	Z	-0.21	7.75

Member Point Loads (BLC 21 : 45 Wind - Ice)

Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]	
1	MP-1	X	-0.12	2.563
2	MP-2	X	-0.09	1.721
3	MP-3	X	-0.25	.25
4	MP-4	X	-0.09	2.563
5	MP-5	X	-0.07	1.721
6	MP-6	X	-0.19	.25
7	MP-7	X	-0.16	2.563
8	MP-8	X	-0.12	1.721
9	MP-9	X	-0.34	.25
10	MP-2	X	-0.13	2
11	MP-3	X	-0.12	2
12	MP-5	X	-0.1	2
13	MP-6	X	-0.11	2
14	MP-8	X	-0.16	2

Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
15	MP-9	X	-013	2
16	MP-1	X	-012	5.437
17	MP-2	X	-009	6.279
18	MP-3	X	-025	7.75
19	MP-4	X	-009	5.437
20	MP-5	X	-007	6.279
21	MP-6	X	-019	7.75
22	MP-7	X	-016	5.437
23	MP-8	X	-012	6.279
24	MP-9	X	-034	7.75
25	MP-1	Z	-012	2.563
26	MP-2	Z	-009	1.721
27	MP-3	Z	-025	.25
28	MP-4	Z	-009	2.563
29	MP-5	Z	-007	1.721
30	MP-6	Z	-019	.25
31	MP-7	Z	-016	2.563
32	MP-8	Z	-012	1.721
33	MP-9	Z	-034	.25
34	MP-2	Z	-013	2
35	MP-3	Z	-012	2
36	MP-5	Z	-01	2
37	MP-6	Z	-011	2
38	MP-8	Z	-016	2
39	MP-9	Z	-013	2
40	MP-1	Z	-012	5.437
41	MP-2	Z	-009	6.279
42	MP-3	Z	-025	7.75
43	MP-4	Z	-009	5.437
44	MP-5	Z	-007	6.279
45	MP-6	Z	-019	7.75
46	MP-7	Z	-016	5.437
47	MP-8	Z	-012	6.279
48	MP-9	Z	-034	7.75

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-007	2.563
2	MP-2	X	-005	1.721
3	MP-3	X	-014	.25
4	MP-4	X	-008	2.563
5	MP-5	X	-006	1.721
6	MP-6	X	-017	.25
7	MP-7	X	-011	2.563
8	MP-8	X	-009	1.721
9	MP-9	X	-025	.25
10	MP-2	X	-008	2
11	MP-3	X	-008	2
12	MP-5	X	-008	2
13	MP-6	X	-008	2
14	MP-8	X	-012	2
15	MP-9	X	-009	2
16	MP-1	X	-007	5.437
17	MP-2	X	-005	6.279
18	MP-3	X	-014	7.75
19	MP-4	X	-008	5.437
20	MP-5	X	-006	6.279
21	MP-6	X	-017	7.75
22	MP-7	X	-011	5.437
23	MP-8	X	-009	6.279
24	MP-9	X	-025	7.75
25	MP-1	Z	-012	2.563

Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
26	MP-2	Z	-009	1.721
27	MP-3	Z	-025	.25
28	MP-4	Z	-014	2.563
29	MP-5	Z	-011	1.721
30	MP-6	Z	-029	.25
31	MP-7	Z	-02	2.563
32	MP-8	Z	-015	1.721
33	MP-9	Z	-043	.25
34	MP-2	Z	-014	2
35	MP-3	Z	-014	2
36	MP-5	Z	-014	2
37	MP-6	Z	-014	2
38	MP-8	Z	-021	2
39	MP-9	Z	-016	2
40	MP-1	Z	-012	5.437
41	MP-2	Z	-009	6.279
42	MP-3	Z	-025	7.75
43	MP-4	Z	-014	5.437
44	MP-5	Z	-011	6.279
45	MP-6	Z	-029	7.75
46	MP-7	Z	-02	5.437
47	MP-8	Z	-015	6.279
48	MP-9	Z	-043	7.75

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Z	-01	2.563
2	MP-2	Z	-009	1.721
3	MP-3	Z	-022	.25
4	MP-4	Z	-01	2.563
5	MP-5	Z	-009	1.721
6	MP-6	Z	-022	.25
7	MP-7	Z	-01	2.563
8	MP-8	Z	-009	1.721
9	MP-9	Z	-022	.25
10	MP-2	Z	-014	2
11	MP-3	Z	-015	2
12	MP-5	Z	-014	2
13	MP-6	Z	-015	2
14	MP-8	Z	-014	2
15	MP-9	Z	-015	2
16	MP-1	Z	-01	5.437
17	MP-2	Z	-009	6.279
18	MP-3	Z	-022	7.75
19	MP-4	Z	-01	5.437
20	MP-5	Z	-009	6.279
21	MP-6	Z	-022	7.75
22	MP-7	Z	-01	5.437
23	MP-8	Z	-009	6.279
24	MP-9	Z	-022	7.75

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.007	2.563
2	MP-2	X	.005	1.721
3	MP-3	X	.014	.25
4	MP-4	X	.011	2.563
5	MP-5	X	.009	1.721
6	MP-6	X	.024	.25
7	MP-7	X	.007	2.563
8	MP-8	X	.005	1.721
9	MP-9	X	.014	.25

Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
10	MP-2	X	.008	2
11	MP-3	X	.008	2
12	MP-5	X	.012	2
13	MP-6	X	.009	2
14	MP-8	X	.008	2
15	MP-9	X	.008	2
16	MP-1	X	.007	5.437
17	MP-2	X	.005	6.279
18	MP-3	X	.014	7.75
19	MP-4	X	.011	5.437
20	MP-5	X	.009	6.279
21	MP-6	X	.024	7.75
22	MP-7	X	.007	5.437
23	MP-8	X	.005	6.279
24	MP-9	X	.014	7.75
25	MP-1	Z	-.012	2.563
26	MP-2	Z	-.009	1.721
27	MP-3	Z	-.025	.25
28	MP-4	Z	-.019	2.563
29	MP-5	Z	-.015	1.721
30	MP-6	Z	-.042	.25
31	MP-7	Z	-.012	2.563
32	MP-8	Z	-.009	1.721
33	MP-9	Z	-.025	.25
34	MP-2	Z	-.014	2
35	MP-3	Z	-.014	2
36	MP-5	Z	-.021	2
37	MP-6	Z	-.016	2
38	MP-8	Z	-.014	2
39	MP-9	Z	-.014	2
40	MP-1	Z	-.012	5.437
41	MP-2	Z	-.009	6.279
42	MP-3	Z	-.025	7.75
43	MP-4	Z	-.019	5.437
44	MP-5	Z	-.015	6.279
45	MP-6	Z	-.042	7.75
46	MP-7	Z	-.012	5.437
47	MP-8	Z	-.009	6.279
48	MP-9	Z	-.025	7.75

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.012	2.563
2	MP-2	X	.009	1.721
3	MP-3	X	.025	.25
4	MP-4	X	.015	2.563
5	MP-5	X	.011	1.721
6	MP-6	X	.032	.25
7	MP-7	X	.008	2.563
8	MP-8	X	.007	1.721
9	MP-9	X	.017	.25
10	MP-2	X	.013	2
11	MP-3	X	.012	2
12	MP-5	X	.016	2
13	MP-6	X	.013	2
14	MP-8	X	.01	2
15	MP-9	X	.011	2
16	MP-1	X	.012	5.437
17	MP-2	X	.009	6.279
18	MP-3	X	.025	7.75
19	MP-4	X	.015	5.437
20	MP-5	X	.011	6.279
21	MP-6	X	.013	7.75
22	MP-7	X	.008	5.437
23	MP-8	X	.007	6.279
24	MP-9	X	.017	7.75
25	MP-1	Z	-.01	2.563
26	MP-2	Z	-.008	1.721
27	MP-3	Z	-.021	.25
28	MP-4	Z	-.009	2.563
29	MP-5	Z	-.007	1.721
30	MP-6	Z	-.019	.25
31	MP-7	Z	-.005	2.563

Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
21	MP-6	X	.032	7.75
22	MP-7	X	.008	5.437
23	MP-8	X	.007	6.279
24	MP-9	X	.017	7.75
25	MP-1	Z	-.012	2.563
26	MP-2	Z	-.009	1.721
27	MP-3	Z	-.025	.25
28	MP-4	Z	-.015	2.563
29	MP-5	Z	-.011	1.721
30	MP-6	Z	-.032	.25
31	MP-7	Z	-.008	2.563
32	MP-8	Z	-.007	1.721
33	MP-9	Z	-.017	.25
34	MP-2	Z	-.013	2
35	MP-3	Z	-.012	2
36	MP-5	Z	-.016	2
37	MP-6	Z	-.013	2
38	MP-8	Z	-.01	2
39	MP-9	Z	-.011	2
40	MP-1	Z	-.012	5.437
41	MP-2	Z	-.009	6.279
42	MP-3	Z	-.025	7.75
43	MP-4	Z	-.015	5.437
44	MP-5	Z	-.011	6.279
45	MP-6	Z	-.032	7.75
46	MP-7	Z	-.008	5.437
47	MP-8	Z	-.007	6.279
48	MP-9	Z	-.017	7.75

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.017	2.563
2	MP-2	X	.013	1.721
3	MP-3	X	.037	.25
4	MP-4	X	.015	2.563
5	MP-5	X	.012	1.721
6	MP-6	X	.033	.25
7	MP-7	X	.009	2.563
8	MP-8	X	.008	1.721
9	MP-9	X	.019	.25
10	MP-2	X	.018	2
11	MP-3	X	.015	2
12	MP-5	X	.018	2
13	MP-6	X	.015	2
14	MP-8	X	.012	2
15	MP-9	X	.013	2
16	MP-1	X	.017	5.437
17	MP-2	X	.013	6.279
18	MP-3	X	.037	7.75
19	MP-4	X	.015	5.437
20	MP-5	X	.012	6.279
21	MP-6	X	.033	7.75
22	MP-7	X	.009	5.437
23	MP-8	X	.008	6.279
24	MP-9	X	.019	7.75
25	MP-1	Z	-.01	2.563
26	MP-2	Z	-.008	1.721
27	MP-3	Z	-.021	.25
28	MP-4	Z	-.009	2.563
29	MP-5	Z	-.007	1.721
30	MP-6	Z	-.019	.25
31	MP-7	Z	-.005	2.563

Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
32	MP-8	Z	-004	1.721
33	MP-9	Z	-011	.25
34	MP-2	Z	-011	2
35	MP-3	Z	-009	2
36	MP-5	Z	-011	2
37	MP-6	Z	-009	2
38	MP-8	Z	-007	2
39	MP-9	Z	-008	2
40	MP-1	Z	-01	5.437
41	MP-2	Z	-008	6.279
42	MP-3	Z	-021	7.75
43	MP-4	Z	-009	5.437
44	MP-5	Z	-007	6.279
45	MP-6	Z	-019	7.75
46	MP-7	Z	-005	5.437
47	MP-8	Z	-004	6.279
48	MP-9	Z	-011	7.75

Member Point Loads (BLC 27 : 180 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.023	2.563
2	MP-2	X	.017	1.721
3	MP-3	X	.05	.25
4	MP-4	X	.023	2.563
5	MP-5	X	.017	1.721
6	MP-6	X	.05	.25
7	MP-7	X	.023	2.563
8	MP-8	X	.017	1.721
9	MP-9	X	.05	.25
10	MP-2	X	.024	2
11	MP-3	X	.019	2
12	MP-5	X	.024	2
13	MP-6	X	.019	2
14	MP-8	X	.024	2
15	MP-9	X	.019	2
16	MP-1	X	.023	5.437
17	MP-2	X	.017	6.279
18	MP-3	X	.05	7.75
19	MP-4	X	.023	5.437
20	MP-5	X	.017	6.279
21	MP-6	X	.05	7.75
22	MP-7	X	.023	5.437
23	MP-8	X	.017	6.279
24	MP-9	X	.05	7.75

Member Point Loads (BLC 28 : 210 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.017	2.563
2	MP-2	X	.013	1.721
3	MP-3	X	.037	.25
4	MP-4	X	.009	2.563
5	MP-5	X	.008	1.721
6	MP-6	X	.019	.25
7	MP-7	X	.017	2.563
8	MP-8	X	.013	1.721
9	MP-9	X	.037	.25
10	MP-2	X	.018	2
11	MP-3	X	.015	2
12	MP-5	X	.012	2
13	MP-6	X	.013	2
14	MP-8	X	.018	2
15	MP-9	X	.015	2

Member Point Loads (BLC 28 : 210 Wind - Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
16	MP-1	X	.017	5.437
17	MP-2	X	.013	6.279
18	MP-3	X	.037	7.75
19	MP-4	X	.009	5.437
20	MP-5	X	.008	6.279
21	MP-6	X	.019	7.75
22	MP-7	X	.017	5.437
23	MP-8	X	.013	6.279
24	MP-9	X	.037	7.75
25	MP-1	Z	.01	2.563
26	MP-2	Z	.008	1.721
27	MP-3	Z	.021	.25
28	MP-4	Z	.005	2.563
29	MP-5	Z	.005	1.721
30	MP-6	Z	.011	.25
31	MP-7	Z	.01	2.563
32	MP-8	Z	.008	1.721
33	MP-9	Z	.021	.25
34	MP-2	Z	.011	2
35	MP-3	Z	.009	2
36	MP-5	Z	.007	2
37	MP-6	Z	.008	2
38	MP-8	Z	.011	2
39	MP-9	Z	.009	2
40	MP-1	Z	.01	5.437
41	MP-2	Z	.008	6.279
42	MP-3	Z	.021	7.75
43	MP-4	Z	.005	5.437
44	MP-5	Z	.005	6.279
45	MP-6	Z	.011	7.75
46	MP-7	Z	.01	5.437
47	MP-8	Z	.008	6.279
48	MP-9	Z	.021	7.75

Member Point Loads (BLC 29 : 225 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	.012	2.563
2	MP-2	X	.009	1.721
3	MP-3	X	.025	.25
4	MP-4	X	.009	2.563
5	MP-5	X	.007	1.721
6	MP-6	X	.019	.25
7	MP-7	X	.016	2.563
8	MP-8	X	.012	1.721
9	MP-9	X	.034	.25
10	MP-2	X	.013	2
11	MP-3	X	.012	2
12	MP-5	X	.01	2
13	MP-6	X	.011	2
14	MP-8	X	.016	2
15	MP-9	X	.013	2
16	MP-1	X	.012	5.437
17	MP-2	X	.009	6.279
18	MP-3	X	.025	7.75
19	MP-4	X	.009	5.437
20	MP-5	X	.007	6.279
21	MP-6	X	.019	7.75
22	MP-7	X	.016	5.437
23	MP-8	X	.012	6.279
24	MP-9	X	.034	7.75
25	MP-1	Z	.012	2.563
26	MP-2	Z	.009	1.721

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
27	MP-3	Z	.025	.25
28	MP-4	Z	.009	2.563
29	MP-5	Z	.007	1.721
30	MP-6	Z	.019	.25
31	MP-7	Z	.016	2.563
32	MP-8	Z	.012	1.721
33	MP-9	Z	.034	.25
34	MP-2	Z	.013	2
35	MP-3	Z	.012	2
36	MP-5	Z	.01	2
37	MP-6	Z	.011	2
38	MP-8	Z	.016	2
39	MP-9	Z	.013	2
40	MP-1	Z	.012	5.437
41	MP-2	Z	.009	6.279
42	MP-3	Z	.025	7.75
43	MP-4	Z	.009	5.437
44	MP-5	Z	.007	6.279
45	MP-6	Z	.019	7.75
46	MP-7	Z	.016	5.437
47	MP-8	Z	.012	6.279
48	MP-9	Z	.034	7.75

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	.007	2.563
2	MP-2	X	.005	1.721
3	MP-3	X	.014	.25
4	MP-4	X	.008	2.563
5	MP-5	X	.006	1.721
6	MP-6	X	.017	.25
7	MP-7	X	.011	2.563
8	MP-8	X	.009	1.721
9	MP-9	X	.025	.25
10	MP-2	X	.008	2
11	MP-3	X	.008	2
12	MP-5	X	.008	2
13	MP-6	X	.008	2
14	MP-8	X	.012	2
15	MP-9	X	.009	2
16	MP-1	X	.007	5.437
17	MP-2	X	.005	6.279
18	MP-3	X	.014	7.75
19	MP-4	X	.008	5.437
20	MP-5	X	.006	6.279
21	MP-6	X	.017	7.75
22	MP-7	X	.011	5.437
23	MP-8	X	.009	6.279
24	MP-9	X	.025	7.75
25	MP-1	Z	.012	2.563
26	MP-2	Z	.009	1.721
27	MP-3	Z	.025	.25
28	MP-4	Z	.014	2.563
29	MP-5	Z	.011	1.721
30	MP-6	Z	.029	.25
31	MP-7	Z	.02	2.563
32	MP-8	Z	.015	1.721
33	MP-9	Z	.043	.25
34	MP-2	Z	.014	2
35	MP-3	Z	.014	2
36	MP-5	Z	.014	2
37	MP-6	Z	.014	2

Member Point Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
38	MP-8	Z	.021	2
39	MP-9	Z	.016	2
40	MP-1	Z	.012	5.437
41	MP-2	Z	.009	6.279
42	MP-3	Z	.025	7.75
43	MP-4	Z	.014	5.437
44	MP-5	Z	.011	6.279
45	MP-6	Z	.029	7.75
46	MP-7	Z	.02	5.437
47	MP-8	Z	.015	6.279
48	MP-9	Z	.043	7.75

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Z	.01	2.563
2	MP-2	Z	.009	1.721
3	MP-3	Z	.022	.25
4	MP-4	Z	.01	2.563
5	MP-5	Z	.009	1.721
6	MP-6	Z	.022	.25
7	MP-7	Z	.01	2.563
8	MP-8	Z	.009	1.721
9	MP-9	Z	.022	.25
10	MP-2	Z	.014	2
11	MP-3	Z	.015	2
12	MP-5	Z	.014	2
13	MP-6	Z	.015	2
14	MP-8	Z	.014	2
15	MP-9	Z	.015	2
16	MP-1	Z	.01	5.437
17	MP-2	Z	.009	6.279
18	MP-3	Z	.022	7.75
19	MP-4	Z	.01	5.437
20	MP-5	Z	.009	6.279
21	MP-6	Z	.022	7.75
22	MP-7	Z	.01	5.437
23	MP-8	Z	.009	6.279
24	MP-9	Z	.022	7.75

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-.007	2.563
2	MP-2	X	-.005	1.721
3	MP-3	X	-.014	.25
4	MP-4	X	-.011	2.563
5	MP-5	X	-.009	1.721
6	MP-6	X	-.024	.25
7	MP-7	X	-.007	2.563
8	MP-8	X	-.005	1.721
9	MP-9	X	-.014	.25
10	MP-2	X	-.008	2
11	MP-3	X	-.008	2
12	MP-5	X	-.012	2
13	MP-6	X	-.009	2
14	MP-8	X	-.008	2
15	MP-9	X	-.008	2
16	MP-1	X	-.007	5.437
17	MP-2	X	-.005	6.279
18	MP-3	X	-.014	7.75
19	MP-4	X	-.011	5.437
20	MP-5	X	-.009	6.279
21	MP-6	X	-.024	7.75

Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
22	MP-7	X	-007	5.437
23	MP-8	X	-005	6.279
24	MP-9	X	-014	7.75
25	MP-1	Z	.012	2.563
26	MP-2	Z	.009	1.721
27	MP-3	Z	.025	.25
28	MP-4	Z	.019	2.563
29	MP-5	Z	.015	1.721
30	MP-6	Z	.042	.25
31	MP-7	Z	.012	2.563
32	MP-8	Z	.009	1.721
33	MP-9	Z	.025	.25
34	MP-2	Z	.014	2
35	MP-3	Z	.014	2
36	MP-5	Z	.021	2
37	MP-6	Z	.016	2
38	MP-8	Z	.014	2
39	MP-9	Z	.014	2
40	MP-1	Z	.012	5.437
41	MP-2	Z	.009	6.279
42	MP-3	Z	.025	7.75
43	MP-4	Z	.019	5.437
44	MP-5	Z	.015	6.279
45	MP-6	Z	.042	7.75
46	MP-7	Z	.012	5.437
47	MP-8	Z	.009	6.279
48	MP-9	Z	.025	7.75

Member Point Loads (BLC 33 : 315 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	-012	2.563
2	MP-2	X	-009	1.721
3	MP-3	X	-025	.25
4	MP-4	X	-015	2.563
5	MP-5	X	-011	1.721
6	MP-6	X	-032	.25
7	MP-7	X	-008	2.563
8	MP-8	X	-007	1.721
9	MP-9	X	-017	.25
10	MP-2	X	-013	2
11	MP-3	X	-012	2
12	MP-5	X	-016	2
13	MP-6	X	-013	2
14	MP-8	X	-01	2
15	MP-9	X	-011	2
16	MP-1	X	-012	5.437
17	MP-2	X	-009	6.279
18	MP-3	X	-025	7.75
19	MP-4	X	-015	5.437
20	MP-5	X	-011	6.279
21	MP-6	X	-032	7.75
22	MP-7	X	-008	5.437
23	MP-8	X	-007	6.279
24	MP-9	X	-017	7.75
25	MP-1	Z	.012	2.563
26	MP-2	Z	.009	1.721
27	MP-3	Z	.025	.25
28	MP-4	Z	.015	2.563
29	MP-5	Z	.011	1.721
30	MP-6	Z	.032	.25
31	MP-7	Z	.008	2.563
32	MP-8	Z	.007	1.721

Member Point Loads (BLC 33 : 315 Wind - Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
33	MP-9	Z	.017	.25
34	MP-2	Z	.013	2
35	MP-3	Z	.012	2
36	MP-5	Z	.016	2
37	MP-6	Z	.013	2
38	MP-8	Z	.01	2
39	MP-9	Z	.011	2
40	MP-1	Z	.012	5.437
41	MP-2	Z	.009	6.279
42	MP-3	Z	.025	7.75
43	MP-4	Z	.015	5.437
44	MP-5	Z	.011	6.279
45	MP-6	Z	.032	7.75
46	MP-7	Z	.008	5.437
47	MP-8	Z	.007	6.279
48	MP-9	Z	.017	7.75

Member Point Loads (BLC 34 : 330 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]	
1	MP-1	X	-017	2.563
2	MP-2	X	-013	1.721
3	MP-3	X	-037	.25
4	MP-4	X	-015	2.563
5	MP-5	X	-012	1.721
6	MP-6	X	-033	.25
7	MP-7	X	-009	2.563
8	MP-8	X	-008	1.721
9	MP-9	X	-019	.25
10	MP-2	X	-018	2
11	MP-3	X	-015	2
12	MP-5	X	-018	2
13	MP-6	X	-015	2
14	MP-8	X	-012	2
15	MP-9	X	-013	2
16	MP-1	X	-017	5.437
17	MP-2	X	-013	6.279
18	MP-3	X	-037	7.75
19	MP-4	X	-015	5.437
20	MP-5	X	-012	6.279
21	MP-6	X	-033	7.75
22	MP-7	X	-009	5.437
23	MP-8	X	-008	6.279
24	MP-9	X	-019	7.75
25	MP-1	Z	.01	2.563
26	MP-2	Z	.008	1.721
27	MP-3	Z	.021	.25
28	MP-4	Z	.009	2.563
29	MP-5	Z	.007	1.721
30	MP-6	Z	.019	.25
31	MP-7	Z	.005	2.563
32	MP-8	Z	.004	1.721
33	MP-9	Z	.011	.25
34	MP-2	Z	.011	2
35	MP-3	Z	.009	2
36	MP-5	Z	.011	2
37	MP-6	Z	.009	2
38	MP-8	Z	.007	2
39	MP-9	Z	.008	2
40	MP-1	Z	.01	5.437
41	MP-2	Z	.008	6.279
42	MP-3	Z	.021	7.75
43	MP-4	Z	.009	5.437



Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
44	MP-5	Z	.007	6.279
45	MP-6	Z	7.75	7.75
46	MP-7	Z	.005	5.437
47	MP-8	Z	.004	6.279
48	MP-9	Z	.011	7.75

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	X	-0.41	2.563
2	MP-2	X	-0.17	1.721
3	MP-3	X	-0.75	.25
4	MP-4	X	-0.41	2.563
5	MP-5	X	-0.17	1.721
6	MP-6	X	-0.75	.25
7	MP-7	X	-0.41	2.563
8	MP-8	X	-0.17	1.721
9	MP-9	X	-0.75	.25
10	MP-2	X	-0.81	2
11	MP-3	X	-1.09	2
12	MP-5	X	-0.81	2
13	MP-6	X	-1.09	2
14	MP-8	X	-0.81	2
15	MP-9	X	-1.09	2
16	MP-1	X	-0.41	5.437
17	MP-2	X	-0.17	6.279
18	MP-3	X	-0.75	7.75
19	MP-4	X	-0.41	5.437
20	MP-5	X	-0.17	6.279
21	MP-6	X	-0.75	7.75
22	MP-7	X	-0.41	5.437
23	MP-8	X	-0.17	6.279
24	MP-9	X	-0.75	7.75

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
1	MP-1	Z	-0.41	2.563
2	MP-2	Z	-0.17	1.721
3	MP-3	Z	-0.75	.25
4	MP-4	Z	-0.41	2.563
5	MP-5	Z	-0.17	1.721
6	MP-6	Z	-0.75	.25
7	MP-7	Z	-0.41	2.563
8	MP-8	Z	-0.17	1.721
9	MP-9	Z	-0.75	.25
10	MP-2	Z	-0.81	2
11	MP-3	Z	-1.09	2
12	MP-5	Z	-0.81	2
13	MP-6	Z	-1.09	2
14	MP-8	Z	-0.81	2
15	MP-9	Z	-1.09	2
16	MP-1	Z	-0.41	5.437
17	MP-2	Z	-0.17	6.279
18	MP-3	Z	-0.75	7.75
19	MP-4	Z	-0.41	5.437
20	MP-5	Z	-0.17	6.279
21	MP-6	Z	-0.75	7.75
22	MP-7	Z	-0.41	5.437
23	MP-8	Z	-0.17	6.279
24	MP-9	Z	-0.75	7.75



Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...]	End Magnitude[k/ft,F...]	Start Location[ft.%]	End Location[ft.%]
1	CA-1	X	-0.09	-0.09	0	%100
2	CA-2	X	-0.04	-0.04	0	%100
3	CA-3	X	-0.04	-0.04	0	%100
4	FF-H1	X	-0.16	-0.16	0	%100
5	FF-H2	X	-0.08	-0.08	0	%100
6	FF-H3	X	-0.08	-0.08	0	%100
7	GSC-1	X	-0.1	-0.1	0	%100
8	GSC-2	X	0	0	0	%100
9	GSC-3	X	-0.1	-0.1	0	%100
10	GSI-1	X	-0.16	-0.16	0	%100
11	GSI-2	X	-0.07	-0.07	0	%100
12	GSI-3	X	-0.07	-0.07	0	%100
13	M55	X	-0.13	-0.13	0	%100
14	M56	X	-0.13	-0.13	0	%100
15	M57	X	-0.13	-0.13	0	%100
16	M58A	X	-0.13	-0.13	0	%100
17	M59A	X	-0.13	-0.13	0	%100
18	M60A	X	-0.13	-0.13	0	%100
19	MOD-SR1	X	-0.09	-0.09	0	%100
20	MOD-SR2	X	-0.05	-0.05	0	%100
21	MOD-SR3	X	-0.05	-0.05	0	%100
22	MP-1	X	-0.08	-0.08	0	%100
23	MP-2	X	-0.08	-0.08	0	%100
24	MP-3	X	-0.08	-0.08	0	%100
25	MP-4	X	-0.08	-0.08	0	%100
26	MP-5	X	-0.08	-0.08	0	%100
27	MP-6	X	-0.08	-0.08	0	%100
28	MP-7	X	-0.08	-0.08	0	%100
29	MP-8	X	-0.08	-0.08	0	%100
30	MP-9	X	-0.08	-0.08	0	%100
31	MP-A	X	-0.07	-0.07	0	%100
32	MP-B	X	-0.07	-0.07	0	%100
33	MP-C	X	-0.07	-0.07	0	%100
34	SF-H1	X	0	0	0	%100
35	SF-H2	X	-0.13	-0.13	0	%100
36	SF-H3	X	-0.13	-0.13	0	%100
37	SR-1	X	-0.08	-0.08	0	%100
38	SR-2	X	-0.04	-0.04	0	%100
39	SR-3	X	-0.04	-0.04	0	%100
40	CP-1	X	-0.09	-0.09	0	%100
41	CP-2	X	-0.19	-0.19	0	%100
42	CP-3	X	-0.09	-0.09	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...]	End Magnitude[k/ft,F...]	Start Location[ft.%]	End Location[ft.%]
1	CA-1	X	-0.07	-0.07	0	%100
2	CA-2	X	-0.06	-0.06	0	%100
3	CA-3	X	0	0	0	%100
4	FF-H1	X	-0.12	-0.12	0	%100
5	FF-H2	X	0	0	0	%100
6	FF-H3	X	-0.12	-0.12	0	%100
7	GSC-1	X	-0.05	-0.05	0	%100
8	GSC-2	X	-0.04	-0.04	0	%100
9	GSC-3	X	-0.1	-0.1	0	%100
10	GSI-1	X	-0.12	-0.12	0	%100
11	GSI-2	X	0	0	0	%100
12	GSI-3	X	-0.11	-0.11	0	%100
13	M55	X	-0.11	-0.11	0	%100
14	M56	X	-0.11	-0.11	0	%100
15	M57	X	-0.11	-0.11	0	%100
16	M58A	X	-0.11	-0.11	0	%100



Company : Tower Engineering Professionals
 Designer : MJA
 Job Number : TEP No. 25672.785546
 Model Name : CCI BU No. 876335

Nov 14, 2022
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 Checked By: JCM

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
17	M59A	X	-0.11	-0.11	0	%100
18	M60A	X	-0.11	-0.11	0	%100
19	MOD-SR1	X	-0.07	-0.07	0	%100
20	MOD-SR2	X	0	0	0	%100
21	MOD-SR3	X	-0.07	-0.07	0	%100
22	MP-1	X	-0.07	-0.07	0	%100
23	MP-2	X	-0.07	-0.07	0	%100
24	MP-3	X	-0.07	-0.07	0	%100
25	MP-4	X	-0.07	-0.07	0	%100
26	MP-5	X	-0.07	-0.07	0	%100
27	MP-6	X	-0.07	-0.07	0	%100
28	MP-7	X	-0.07	-0.07	0	%100
29	MP-8	X	-0.07	-0.07	0	%100
30	MP-9	X	-0.07	-0.07	0	%100
31	MP-A	X	-0.06	-0.06	0	%100
32	MP-B	X	-0.06	-0.06	0	%100
33	MP-C	X	-0.06	-0.06	0	%100
34	SF-H1	X	-0.06	-0.06	0	%100
35	SF-H2	X	-0.13	-0.13	0	%100
36	SF-H3	X	-0.07	-0.07	0	%100
37	SR-1	X	-0.06	-0.06	0	%100
38	SR-2	X	0	0	0	%100
39	SR-3	X	-0.06	-0.06	0	%100
40	CP-1	X	-0.14	-0.14	0	%100
41	CP-2	X	-0.14	-0.14	0	%100
42	CP-3	X	0	0	0	%100
43	CA-1	Z	-0.04	-0.04	0	%100
44	CA-2	Z	-0.04	-0.04	0	%100
45	CA-3	Z	0	0	0	%100
46	FF-H1	Z	-0.07	-0.07	0	%100
47	FF-H2	Z	0	0	0	%100
48	FF-H3	Z	-0.07	-0.07	0	%100
49	GSC-1	Z	-0.03	-0.03	0	%100
50	GSC-2	Z	-0.03	-0.03	0	%100
51	GSC-3	Z	-0.05	-0.05	0	%100
52	GSI-1	Z	-0.07	-0.07	0	%100
53	GSI-2	Z	0	0	0	%100
54	GSI-3	Z	-0.07	-0.07	0	%100
55	M55	Z	-0.06	-0.06	0	%100
56	M56	Z	-0.06	-0.06	0	%100
57	M57	Z	-0.06	-0.06	0	%100
58	M58A	Z	-0.06	-0.06	0	%100
59	M59A	Z	-0.06	-0.06	0	%100
60	M60A	Z	-0.06	-0.06	0	%100
61	MOD-SR1	Z	-0.04	-0.04	0	%100
62	MOD-SR2	Z	0	0	0	%100
63	MOD-SR3	Z	-0.04	-0.04	0	%100
64	MP-1	Z	-0.04	-0.04	0	%100
65	MP-2	Z	-0.04	-0.04	0	%100
66	MP-3	Z	-0.04	-0.04	0	%100
67	MP-4	Z	-0.04	-0.04	0	%100
68	MP-5	Z	-0.04	-0.04	0	%100
69	MP-6	Z	-0.04	-0.04	0	%100
70	MP-7	Z	-0.04	-0.04	0	%100
71	MP-8	Z	-0.04	-0.04	0	%100
72	MP-9	Z	-0.04	-0.04	0	%100
73	MP-A	Z	-0.03	-0.03	0	%100
74	MP-B	Z	-0.03	-0.03	0	%100
75	MP-C	Z	-0.03	-0.03	0	%100
76	SF-H1	Z	-0.04	-0.04	0	%100
77	SF-H2	Z	-0.07	-0.07	0	%100
78	SF-H3	Z	-0.03	-0.03	0	%100
79	SR-1	Z	-0.03	-0.03	0	%100



Company : Tower Engineering Professionals
 Designer : MJA
 Job Number : TEP No. 25672.785546
 Model Name : CCI BU No. 876335

Nov 14, 2022
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 Checked By: JCM

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
80	SR-2	Z	0	0	0	%100
81	SR-3	Z	-0.03	-0.03	0	%100
82	CP-1	Z	-0.08	-0.08	0	%100
83	CP-2	Z	-0.08	-0.08	0	%100
84	CP-3	Z	0	0	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	-0.05	-0.05	0	%100
2	CA-2	X	-0.06	-0.06	0	%100
3	CA-3	X	-0.01	-0.01	0	%100
4	FF-H1	X	-0.08	-0.08	0	%100
5	FF-H2	X	-0.03	-0.03	0	%100
6	FF-H3	X	-0.11	-0.11	0	%100
7	GSC-1	X	-0.02	-0.02	0	%100
8	GSC-2	X	-0.05	-0.05	0	%100
9	GSC-3	X	-0.08	-0.08	0	%100
10	GSI-1	X	-0.08	-0.08	0	%100
11	GSI-2	X	-0.03	-0.03	0	%100
12	GSI-3	X	-0.1	-0.1	0	%100
13	M55	X	-0.09	-0.09	0	%100
14	M56	X	-0.09	-0.09	0	%100
15	M57	X	-0.09	-0.09	0	%100
16	M58A	X	-0.09	-0.09	0	%100
17	M59A	X	-0.09	-0.09	0	%100
18	M60A	X	-0.09	-0.09	0	%100
19	MOD-SR1	X	-0.05	-0.05	0	%100
20	MOD-SR2	X	-0.02	-0.02	0	%100
21	MOD-SR3	X	-0.06	-0.06	0	%100
22	MP-1	X	-0.05	-0.05	0	%100
23	MP-2	X	-0.05	-0.05	0	%100
24	MP-3	X	-0.05	-0.05	0	%100
25	MP-4	X	-0.05	-0.05	0	%100
26	MP-5	X	-0.05	-0.05	0	%100
27	MP-6	X	-0.05	-0.05	0	%100
28	MP-7	X	-0.05	-0.05	0	%100
29	MP-8	X	-0.05	-0.05	0	%100
30	MP-9	X	-0.05	-0.05	0	%100
31	MP-A	X	-0.05	-0.05	0	%100
32	MP-B	X	-0.05	-0.05	0	%100
33	MP-C	X	-0.05	-0.05	0	%100
34	SF-H1	X	-0.06	-0.06	0	%100
35	SF-H2	X	-0.1	-0.1	0	%100
36	SF-H3	X	-0.03	-0.03	0	%100
37	SR-1	X	-0.04	-0.04	0	%100
38	SR-2	X	-0.01	-0.01	0	%100
39	SR-3	X	-0.05	-0.05	0	%100
40	CP-1	X	-0.12	-0.12	0	%100
41	CP-2	X	-0.09	-0.09	0	%100
42	CP-3	X	-0.03	-0.03	0	%100
43	CA-1	Z	-0.05	-0.05	0	%100
44	CA-2	Z	-0.06	-0.06	0	%100
45	CA-3	Z	-0.02	-0.02	0	%100
46	FF-H1	Z	-0.08	-0.08	0	%100
47	FF-H2	Z	-0.03	-0.03	0	%100
48	FF-H3	Z	-0.11	-0.11	0	%100
49	GSC-1	Z	-0.02	-0.02	0	%100
50	GSC-2	Z	-0.06	-0.06	0	%100
51	GSC-3	Z	-0.07	-0.07	0	%100
52	GSI-1	Z	-0.08	-0.08	0	%100
53	GSI-2	Z	-0.03	-0.03	0	%100
54	GSI-3	Z	-0.11	-0.11	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
55	M55	Z	-0.09	-0.09	0	%100
56	M56	Z	-0.09	-0.09	0	%100
57	M57	Z	-0.09	-0.09	0	%100
58	M58A	Z	-0.09	-0.09	0	%100
59	M59A	Z	-0.09	-0.09	0	%100
60	M60A	Z	-0.09	-0.09	0	%100
61	MOD-SR1	Z	-0.05	-0.05	0	%100
62	MOD-SR2	Z	-0.02	-0.02	0	%100
63	MOD-SR3	Z	-0.06	-0.06	0	%100
64	MP-1	Z	-0.05	-0.05	0	%100
65	MP-2	Z	-0.05	-0.05	0	%100
66	MP-3	Z	-0.05	-0.05	0	%100
67	MP-4	Z	-0.05	-0.05	0	%100
68	MP-5	Z	-0.05	-0.05	0	%100
69	MP-6	Z	-0.05	-0.05	0	%100
70	MP-7	Z	-0.05	-0.05	0	%100
71	MP-8	Z	-0.05	-0.05	0	%100
72	MP-9	Z	-0.05	-0.05	0	%100
73	MP-A	Z	-0.05	-0.05	0	%100
74	MP-B	Z	-0.05	-0.05	0	%100
75	MP-C	Z	-0.05	-0.05	0	%100
76	SF-H1	Z	-0.08	-0.08	0	%100
77	SF-H2	Z	-0.09	-0.09	0	%100
78	SF-H3	Z	-0.03	-0.03	0	%100
79	SR-1	Z	-0.04	-0.04	0	%100
80	SR-2	Z	-0.01	-0.01	0	%100
81	SR-3	Z	-0.05	-0.05	0	%100
82	CP-1	Z	-0.13	-0.13	0	%100
83	CP-2	Z	-0.09	-0.09	0	%100
84	CP-3	Z	-0.03	-0.03	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	-0.02	-0.02	0	%100
2	CA-2	X	-0.04	-0.04	0	%100
3	CA-3	X	-0.02	-0.02	0	%100
4	FF-H1	X	-0.04	-0.04	0	%100
5	FF-H2	X	-0.04	-0.04	0	%100
6	FF-H3	X	-0.08	-0.08	0	%100
7	GSC-1	X	0	0	0	%100
8	GSC-2	X	-0.04	-0.04	0	%100
9	GSC-3	X	-0.05	-0.05	0	%100
10	GSI-1	X	-0.04	-0.04	0	%100
11	GSI-2	X	-0.04	-0.04	0	%100
12	GSI-3	X	-0.07	-0.07	0	%100
13	M55	X	-0.06	-0.06	0	%100
14	M56	X	-0.06	-0.06	0	%100
15	M57	X	-0.06	-0.06	0	%100
16	M58A	X	-0.06	-0.06	0	%100
17	M59A	X	-0.06	-0.06	0	%100
18	M60A	X	-0.06	-0.06	0	%100
19	MOD-SR1	X	-0.02	-0.02	0	%100
20	MOD-SR2	X	-0.02	-0.02	0	%100
21	MOD-SR3	X	-0.05	-0.05	0	%100
22	MP-1	X	-0.04	-0.04	0	%100
23	MP-2	X	-0.04	-0.04	0	%100
24	MP-3	X	-0.04	-0.04	0	%100
25	MP-4	X	-0.04	-0.04	0	%100
26	MP-5	X	-0.04	-0.04	0	%100
27	MP-6	X	-0.04	-0.04	0	%100
28	MP-7	X	-0.04	-0.04	0	%100
29	MP-8	X	-0.04	-0.04	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
30	MP-9	X	-0.04	-0.04	0	%100
31	MP-A	X	-0.03	-0.03	0	%100
32	MP-B	X	-0.03	-0.03	0	%100
33	MP-C	X	-0.03	-0.03	0	%100
34	SF-H1	X	-0.06	-0.06	0	%100
35	SF-H2	X	-0.07	-0.07	0	%100
36	SF-H3	X	0	0	0	%100
37	SR-1	X	-0.02	-0.02	0	%100
38	SR-2	X	-0.02	-0.02	0	%100
39	SR-3	X	-0.04	-0.04	0	%100
40	CP-1	X	-0.09	-0.09	0	%100
41	CP-2	X	-0.05	-0.05	0	%100
42	CP-3	X	-0.05	-0.05	0	%100
43	CA-1	Z	-0.04	-0.04	0	%100
44	CA-2	Z	-0.08	-0.08	0	%100
45	CA-3	Z	-0.04	-0.04	0	%100
46	FF-H1	Z	-0.07	-0.07	0	%100
47	FF-H2	Z	-0.07	-0.07	0	%100
48	FF-H3	Z	-0.14	-0.14	0	%100
49	GSC-1	Z	0	0	0	%100
50	GSC-2	Z	-0.09	-0.09	0	%100
51	GSC-3	Z	-0.08	-0.08	0	%100
52	GSI-1	Z	-0.07	-0.07	0	%100
53	GSI-2	Z	-0.07	-0.07	0	%100
54	GSI-3	Z	-0.14	-0.14	0	%100
55	M55	Z	-0.11	-0.11	0	%100
56	M56	Z	-0.11	-0.11	0	%100
57	M57	Z	-0.11	-0.11	0	%100
58	M58A	Z	-0.11	-0.11	0	%100
59	M59A	Z	-0.11	-0.11	0	%100
60	M60A	Z	-0.11	-0.11	0	%100
61	MOD-SR1	Z	-0.04	-0.04	0	%100
62	MOD-SR2	Z	-0.04	-0.04	0	%100
63	MOD-SR3	Z	-0.08	-0.08	0	%100
64	MP-1	Z	-0.07	-0.07	0	%100
65	MP-2	Z	-0.07	-0.07	0	%100
66	MP-3	Z	-0.07	-0.07	0	%100
67	MP-4	Z	-0.07	-0.07	0	%100
68	MP-5	Z	-0.07	-0.07	0	%100
69	MP-6	Z	-0.07	-0.07	0	%100
70	MP-7	Z	-0.07	-0.07	0	%100
71	MP-8	Z	-0.07	-0.07	0	%100
72	MP-9	Z	-0.07	-0.07	0	%100
73	MP-A	Z	-0.06	-0.06	0	%100
74	MP-B	Z	-0.06	-0.06	0	%100
75	MP-C	Z	-0.06	-0.06	0	%100
76	SF-H1	Z	-0.12	-0.12	0	%100
77	SF-H2	Z	-0.1	-0.1	0	%100
78	SF-H3	Z	0	0	0	%100
79	SR-1	Z	-0.03	-0.03	0	%100
80	SR-2	Z	-0.03	-0.03	0	%100
81	SR-3	Z	-0.07	-0.07	0	%100
82	CP-1	Z	-0.16	-0.16	0	%100
83	CP-2	Z	-0.08	-0.08	0	%100
84	CP-3	Z	-0.08	-0.08	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	Z	0	0	0	%100
2	CA-2	Z	-0.08	-0.08	0	%100
3	CA-3	Z	-0.08	-0.08	0	%100
4	FF-H1	Z	0	0	0	%100



Member Distributed Loads (BLC 6 : 90 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
5	FF-H2	Z	-0.14	-0.14	0	%100
6	FF-H3	Z	-0.14	-0.14	0	%100
7	GSC-1	Z	-0.05	-0.05	0	%100
8	GSC-2	Z	-0.13	-0.13	0	%100
9	GSC-3	Z	-0.05	-0.05	0	%100
10	GSI-1	Z	0	0	0	%100
11	GSI-2	Z	-0.14	-0.14	0	%100
12	GSI-3	Z	-0.14	-0.14	0	%100
13	M55	Z	-0.13	-0.13	0	%100
14	M56	Z	-0.13	-0.13	0	%100
15	M57	Z	-0.13	-0.13	0	%100
16	M58A	Z	-0.13	-0.13	0	%100
17	M59A	Z	-0.13	-0.13	0	%100
18	M60A	Z	-0.13	-0.13	0	%100
19	MOD-SR1	Z	0	0	0	%100
20	MOD-SR2	Z	-0.08	-0.08	0	%100
21	MOD-SR3	Z	-0.08	-0.08	0	%100
22	MP-1	Z	-0.08	-0.08	0	%100
23	MP-2	Z	-0.08	-0.08	0	%100
24	MP-3	Z	-0.08	-0.08	0	%100
25	MP-4	Z	-0.08	-0.08	0	%100
26	MP-5	Z	-0.08	-0.08	0	%100
27	MP-6	Z	-0.08	-0.08	0	%100
28	MP-7	Z	-0.08	-0.08	0	%100
29	MP-8	Z	-0.08	-0.08	0	%100
30	MP-9	Z	-0.08	-0.08	0	%100
31	MP-A	Z	-0.07	-0.07	0	%100
32	MP-B	Z	-0.07	-0.07	0	%100
33	MP-C	Z	-0.07	-0.07	0	%100
34	SF-H1	Z	-0.16	-0.16	0	%100
35	SF-H2	Z	-0.07	-0.07	0	%100
36	SF-H3	Z	-0.07	-0.07	0	%100
37	SR-1	Z	0	0	0	%100
38	SR-2	Z	-0.07	-0.07	0	%100
39	SR-3	Z	-0.07	-0.07	0	%100
40	CP-1	Z	-0.16	-0.16	0	%100
41	CP-2	Z	0	0	0	%100
42	CP-3	Z	-0.16	-0.16	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.002	.002	0	%100
2	CA-2	X	.002	.002	0	%100
3	CA-3	X	.004	.004	0	%100
4	FF-H1	X	.004	.004	0	%100
5	FF-H2	X	.008	.008	0	%100
6	FF-H3	X	.004	.004	0	%100
7	GSC-1	X	.005	.005	0	%100
8	GSC-2	X	.004	.004	0	%100
9	GSC-3	X	0	0	0	%100
10	GSI-1	X	.004	.004	0	%100
11	GSI-2	X	.007	.007	0	%100
12	GSI-3	X	.004	.004	0	%100
13	M55	X	.006	.006	0	%100
14	M56	X	.006	.006	0	%100
15	M57	X	.006	.006	0	%100
16	M58A	X	.006	.006	0	%100
17	M59A	X	.006	.006	0	%100
18	M60A	X	.006	.006	0	%100
19	MOD-SR1	X	.002	.002	0	%100
20	MOD-SR2	X	.005	.005	0	%100
21	MOD-SR3	X	.002	.002	0	%100



Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
22	MP-1	X	.004	.004	0	%100
23	MP-2	X	.004	.004	0	%100
24	MP-3	X	.004	.004	0	%100
25	MP-4	X	.004	.004	0	%100
26	MP-5	X	.004	.004	0	%100
27	MP-6	X	.004	.004	0	%100
28	MP-7	X	.004	.004	0	%100
29	MP-8	X	.004	.004	0	%100
30	MP-9	X	.004	.004	0	%100
31	MP-A	X	.003	.003	0	%100
32	MP-B	X	.003	.003	0	%100
33	MP-C	X	.003	.003	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	0	0	0	%100
36	SF-H3	X	.007	.007	0	%100
37	SR-1	X	.002	.002	0	%100
38	SR-2	X	.004	.004	0	%100
39	SR-3	X	.002	.002	0	%100
40	CP-1	X	.005	.005	0	%100
41	CP-2	X	.005	.005	0	%100
42	CP-3	X	.009	.009	0	%100
43	CA-1	Z	-.004	-.004	0	%100
44	CA-2	Z	-.004	-.004	0	%100
45	CA-3	Z	-.008	-.008	0	%100
46	FF-H1	Z	-.007	-.007	0	%100
47	FF-H2	Z	-.014	-.014	0	%100
48	FF-H3	Z	-.007	-.007	0	%100
49	GSC-1	Z	-.008	-.008	0	%100
50	GSC-2	Z	-.009	-.009	0	%100
51	GSC-3	Z	0	0	0	%100
52	GSI-1	Z	-.007	-.007	0	%100
53	GSI-2	Z	-.014	-.014	0	%100
54	GSI-3	Z	-.007	-.007	0	%100
55	M55	Z	-.011	-.011	0	%100
56	M56	Z	-.011	-.011	0	%100
57	M57	Z	-.011	-.011	0	%100
58	M58A	Z	-.011	-.011	0	%100
59	M59A	Z	-.011	-.011	0	%100
60	M60A	Z	-.011	-.011	0	%100
61	MOD-SR1	Z	-.004	-.004	0	%100
62	MOD-SR2	Z	-.008	-.008	0	%100
63	MOD-SR3	Z	-.004	-.004	0	%100
64	MP-1	Z	-.007	-.007	0	%100
65	MP-2	Z	-.007	-.007	0	%100
66	MP-3	Z	-.007	-.007	0	%100
67	MP-4	Z	-.007	-.007	0	%100
68	MP-5	Z	-.007	-.007	0	%100
69	MP-6	Z	-.007	-.007	0	%100
70	MP-7	Z	-.007	-.007	0	%100
71	MP-8	Z	-.007	-.007	0	%100
72	MP-9	Z	-.007	-.007	0	%100
73	MP-A	Z	-.006	-.006	0	%100
74	MP-B	Z	-.006	-.006	0	%100
75	MP-C	Z	-.006	-.006	0	%100
76	SF-H1	Z	-.012	-.012	0	%100
77	SF-H2	Z	0	0	0	%100
78	SF-H3	Z	-.01	-.01	0	%100
79	SR-1	Z	-.003	-.003	0	%100
80	SR-2	Z	-.007	-.007	0	%100
81	SR-3	Z	-.003	-.003	0	%100
82	CP-1	Z	-.008	-.008	0	%100
83	CP-2	Z	-.008	-.008	0	%100
84	CP-3	Z	-.016	-.016	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.005	.005	0	%100
2	CA-2	X	.001	.001	0	%100
3	CA-3	X	.006	.006	0	%100
4	FF-H1	X	.008	.008	0	%100
5	FF-H2	X	.011	.011	0	%100
6	FF-H3	X	.003	.003	0	%100
7	GSC-1	X	.008	.008	0	%100
8	GSC-2	X	.005	.005	0	%100
9	GSC-3	X	.002	.002	0	%100
10	GSI-1	X	.008	.008	0	%100
11	GSI-2	X	.01	.01	0	%100
12	GSI-3	X	.003	.003	0	%100
13	M55	X	.009	.009	0	%100
14	M56	X	.009	.009	0	%100
15	M57	X	.009	.009	0	%100
16	M58A	X	.009	.009	0	%100
17	M59A	X	.009	.009	0	%100
18	M60A	X	.009	.009	0	%100
19	MOD-SR1	X	.005	.005	0	%100
20	MOD-SR2	X	.006	.006	0	%100
21	MOD-SR3	X	.002	.002	0	%100
22	MP-1	X	.005	.005	0	%100
23	MP-2	X	.005	.005	0	%100
24	MP-3	X	.005	.005	0	%100
25	MP-4	X	.005	.005	0	%100
26	MP-5	X	.005	.005	0	%100
27	MP-6	X	.005	.005	0	%100
28	MP-7	X	.005	.005	0	%100
29	MP-8	X	.005	.005	0	%100
30	MP-9	X	.005	.005	0	%100
31	MP-A	X	.005	.005	0	%100
32	MP-B	X	.005	.005	0	%100
33	MP-C	X	.005	.005	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	.003	.003	0	%100
36	SF-H3	X	.01	.01	0	%100
37	SR-1	X	.004	.004	0	%100
38	SR-2	X	.005	.005	0	%100
39	SR-3	X	.001	.001	0	%100
40	CP-1	X	.003	.003	0	%100
41	CP-2	X	.009	.009	0	%100
42	CP-3	X	.012	.012	0	%100
43	CA-1	Z	-.005	-.005	0	%100
44	CA-2	Z	-.002	-.002	0	%100
45	CA-3	Z	-.006	-.006	0	%100
46	FF-H1	Z	-.008	-.008	0	%100
47	FF-H2	Z	-.011	-.011	0	%100
48	FF-H3	Z	-.003	-.003	0	%100
49	GSC-1	Z	-.007	-.007	0	%100
50	GSC-2	Z	-.006	-.006	0	%100
51	GSC-3	Z	-.002	-.002	0	%100
52	GSI-1	Z	-.008	-.008	0	%100
53	GSI-2	Z	-.011	-.011	0	%100
54	GSI-3	Z	-.003	-.003	0	%100
55	M55	Z	-.009	-.009	0	%100
56	M56	Z	-.009	-.009	0	%100
57	M57	Z	-.009	-.009	0	%100
58	M58A	Z	-.009	-.009	0	%100
59	M59A	Z	-.009	-.009	0	%100
60	M60A	Z	-.009	-.009	0	%100
61	MOD-SR1	Z	-.005	-.005	0	%100
62	MOD-SR2	Z	-.006	-.006	0	%100
63	MOD-SR3	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
64	MP-1	Z	-.005	-.005	0	%100
65	MP-2	Z	-.005	-.005	0	%100
66	MP-3	Z	-.005	-.005	0	%100
67	MP-4	Z	-.005	-.005	0	%100
68	MP-5	Z	-.005	-.005	0	%100
69	MP-6	Z	-.005	-.005	0	%100
70	MP-7	Z	-.005	-.005	0	%100
71	MP-8	Z	-.005	-.005	0	%100
72	MP-9	Z	-.005	-.005	0	%100
73	MP-A	Z	-.005	-.005	0	%100
74	MP-B	Z	-.005	-.005	0	%100
75	MP-C	Z	-.005	-.005	0	%100
76	SF-H1	Z	-.008	-.008	0	%100
77	SF-H2	Z	-.003	-.003	0	%100
78	SF-H3	Z	-.009	-.009	0	%100
79	SR-1	Z	-.004	-.004	0	%100
80	SR-2	Z	-.005	-.005	0	%100
81	SR-3	Z	-.001	-.001	0	%100
82	CP-1	Z	-.003	-.003	0	%100
83	CP-2	Z	-.009	-.009	0	%100
84	CP-3	Z	-.013	-.013	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.007	.007	0	%100
2	CA-2	X	0	0	0	%100
3	CA-3	X	.006	.006	0	%100
4	FF-H1	X	.012	.012	0	%100
5	FF-H2	X	.012	.012	0	%100
6	FF-H3	X	0	0	0	%100
7	GSC-1	X	.01	.01	0	%100
8	GSC-2	X	.004	.004	0	%100
9	GSC-3	X	.005	.005	0	%100
10	GSI-1	X	.012	.012	0	%100
11	GSI-2	X	.011	.011	0	%100
12	GSI-3	X	0	0	0	%100
13	M55	X	.011	.011	0	%100
14	M56	X	.011	.011	0	%100
15	M57	X	.011	.011	0	%100
16	M58A	X	.011	.011	0	%100
17	M59A	X	.011	.011	0	%100
18	M60A	X	.011	.011	0	%100
19	MOD-SR1	X	.007	.007	0	%100
20	MOD-SR2	X	.007	.007	0	%100
21	MOD-SR3	X	0	0	0	%100
22	MP-1	X	.007	.007	0	%100
23	MP-2	X	.007	.007	0	%100
24	MP-3	X	.007	.007	0	%100
25	MP-4	X	.007	.007	0	%100
26	MP-5	X	.007	.007	0	%100
27	MP-6	X	.007	.007	0	%100
28	MP-7	X	.007	.007	0	%100
29	MP-8	X	.007	.007	0	%100
30	MP-9	X	.007	.007	0	%100
31	MP-A	X	.006	.006	0	%100
32	MP-B	X	.006	.006	0	%100
33	MP-C	X	.006	.006	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	.007	.007	0	%100
36	SF-H3	X	.013	.013	0	%100
37	SR-1	X	.006	.006	0	%100
38	SR-2	X	.006	.006	0	%100



Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
39	SR-3	X	0	0	%100
40	CP-1	X	0	0	%100
41	CP-2	X	.014	.014	%100
42	CP-3	X	.014	.014	%100
43	CA-1	Z	-.004	-.004	%100
44	CA-2	Z	0	0	%100
45	CA-3	Z	-.004	-.004	%100
46	FF-H1	Z	-.007	-.007	%100
47	FF-H2	Z	-.007	-.007	%100
48	FF-H3	Z	0	0	%100
49	GSC-1	Z	-.005	-.005	%100
50	GSC-2	Z	-.003	-.003	%100
51	GSC-3	Z	-.003	-.003	%100
52	GSI-1	Z	-.007	-.007	%100
53	GSI-2	Z	-.007	-.007	%100
54	GSI-3	Z	0	0	%100
55	M55	Z	-.006	-.006	%100
56	M56	Z	-.006	-.006	%100
57	M57	Z	-.006	-.006	%100
58	M58A	Z	-.006	-.006	%100
59	M59A	Z	-.006	-.006	%100
60	M60A	Z	-.006	-.006	%100
61	MOD-SR1	Z	-.004	-.004	%100
62	MOD-SR2	Z	-.004	-.004	%100
63	MOD-SR3	Z	0	0	%100
64	MP-1	Z	-.004	-.004	%100
65	MP-2	Z	-.004	-.004	%100
66	MP-3	Z	-.004	-.004	%100
67	MP-4	Z	-.004	-.004	%100
68	MP-5	Z	-.004	-.004	%100
69	MP-6	Z	-.004	-.004	%100
70	MP-7	Z	-.004	-.004	%100
71	MP-8	Z	-.004	-.004	%100
72	MP-9	Z	-.004	-.004	%100
73	MP-A	Z	-.003	-.003	%100
74	MP-B	Z	-.003	-.003	%100
75	MP-C	Z	-.003	-.003	%100
76	SF-H1	Z	-.004	-.004	%100
77	SF-H2	Z	-.003	-.003	%100
78	SF-H3	Z	-.007	-.007	%100
79	SR-1	Z	-.003	-.003	%100
80	SR-2	Z	-.003	-.003	%100
81	SR-3	Z	0	0	%100
82	CP-1	Z	0	0	%100
83	CP-2	Z	-.008	-.008	%100
84	CP-3	Z	-.008	-.008	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	.009	.009	%100
2	CA-2	X	.004	.004	%100
3	CA-3	X	.004	.004	%100
4	FF-H1	X	.016	.016	%100
5	FF-H2	X	.008	.008	%100
6	FF-H3	X	.008	.008	%100
7	GSC-1	X	.01	.01	%100
8	GSC-2	X	0	0	%100
9	GSC-3	X	.01	.01	%100
10	GSI-1	X	.016	.016	%100
11	GSI-2	X	.007	.007	%100
12	GSI-3	X	.007	.007	%100
13	M55	X	.013	.013	%100



Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
14	M56	X	.013	.013	%100
15	M57	X	.013	.013	%100
16	M58A	X	.013	.013	%100
17	M59A	X	.013	.013	%100
18	M60A	X	.013	.013	%100
19	MOD-SR1	X	.009	.009	%100
20	MOD-SR2	X	.005	.005	%100
21	MOD-SR3	X	.005	.005	%100
22	MP-1	X	.008	.008	%100
23	MP-2	X	.008	.008	%100
24	MP-3	X	.008	.008	%100
25	MP-4	X	.008	.008	%100
26	MP-5	X	.008	.008	%100
27	MP-6	X	.008	.008	%100
28	MP-7	X	.008	.008	%100
29	MP-8	X	.008	.008	%100
30	MP-9	X	.008	.008	%100
31	MP-A	X	.007	.007	%100
32	MP-B	X	.007	.007	%100
33	MP-C	X	.007	.007	%100
34	SF-H1	X	0	0	%100
35	SF-H2	X	.013	.013	%100
36	SF-H3	X	.013	.013	%100
37	SR-1	X	.008	.008	%100
38	SR-2	X	.004	.004	%100
39	SR-3	X	.004	.004	%100
40	CP-1	X	.009	.009	%100
41	CP-2	X	.019	.019	%100
42	CP-3	X	.009	.009	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	.007	.007	%100
2	CA-2	X	.006	.006	%100
3	CA-3	X	0	0	%100
4	FF-H1	X	.012	.012	%100
5	FF-H2	X	0	0	%100
6	FF-H3	X	.012	.012	%100
7	GSC-1	X	.005	.005	%100
8	GSC-2	X	.004	.004	%100
9	GSC-3	X	.01	.01	%100
10	GSI-1	X	.012	.012	%100
11	GSI-2	X	0	0	%100
12	GSI-3	X	.011	.011	%100
13	M55	X	.011	.011	%100
14	M56	X	.011	.011	%100
15	M57	X	.011	.011	%100
16	M58A	X	.011	.011	%100
17	M59A	X	.011	.011	%100
18	M60A	X	.011	.011	%100
19	MOD-SR1	X	.007	.007	%100
20	MOD-SR2	X	0	0	%100
21	MOD-SR3	X	.007	.007	%100
22	MP-1	X	.007	.007	%100
23	MP-2	X	.007	.007	%100
24	MP-3	X	.007	.007	%100
25	MP-4	X	.007	.007	%100
26	MP-5	X	.007	.007	%100
27	MP-6	X	.007	.007	%100
28	MP-7	X	.007	.007	%100
29	MP-8	X	.007	.007	%100
30	MP-9	X	.007	.007	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
31	MP-A	X	.006	.006	0	%100
32	MP-B	X	.006	.006	0	%100
33	MP-C	X	.006	.006	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	.013	.013	0	%100
36	SF-H3	X	.007	.007	0	%100
37	SR-1	X	.006	.006	0	%100
38	SR-2	X	0	0	0	%100
39	SR-3	X	.006	.006	0	%100
40	CP-1	X	.014	.014	0	%100
41	CP-2	X	.014	.014	0	%100
42	CP-3	X	0	0	0	%100
43	CA-1	Z	.004	.004	0	%100
44	CA-2	Z	.004	.004	0	%100
45	CA-3	Z	0	0	0	%100
46	FF-H1	Z	.007	.007	0	%100
47	FF-H2	Z	0	0	0	%100
48	FF-H3	Z	.007	.007	0	%100
49	GSC-1	Z	.003	.003	0	%100
50	GSC-2	Z	.003	.003	0	%100
51	GSC-3	Z	.005	.005	0	%100
52	GSI-1	Z	.007	.007	0	%100
53	GSI-2	Z	0	0	0	%100
54	GSI-3	Z	.007	.007	0	%100
55	M55	Z	.006	.006	0	%100
56	M56	Z	.006	.006	0	%100
57	M57	Z	.006	.006	0	%100
58	M58A	Z	.006	.006	0	%100
59	M59A	Z	.006	.006	0	%100
60	M60A	Z	.006	.006	0	%100
61	MOD-SR1	Z	.004	.004	0	%100
62	MOD-SR2	Z	0	0	0	%100
63	MOD-SR3	Z	.004	.004	0	%100
64	MP-1	Z	.004	.004	0	%100
65	MP-2	Z	.004	.004	0	%100
66	MP-3	Z	.004	.004	0	%100
67	MP-4	Z	.004	.004	0	%100
68	MP-5	Z	.004	.004	0	%100
69	MP-6	Z	.004	.004	0	%100
70	MP-7	Z	.004	.004	0	%100
71	MP-8	Z	.004	.004	0	%100
72	MP-9	Z	.004	.004	0	%100
73	MP-A	Z	.003	.003	0	%100
74	MP-B	Z	.003	.003	0	%100
75	MP-C	Z	.003	.003	0	%100
76	SF-H1	Z	.004	.004	0	%100
77	SF-H2	Z	.007	.007	0	%100
78	SF-H3	Z	.003	.003	0	%100
79	SR-1	Z	.003	.003	0	%100
80	SR-2	Z	0	0	0	%100
81	SR-3	Z	.003	.003	0	%100
82	CP-1	Z	.008	.008	0	%100
83	CP-2	Z	.008	.008	0	%100
84	CP-3	Z	0	0	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.005	.005	0	%100
2	CA-2	X	.006	.006	0	%100
3	CA-3	X	.001	.001	0	%100
4	FF-H1	X	.008	.008	0	%100
5	FF-H2	X	.003	.003	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
6	FF-H3	X	.011	.011	0	%100
7	GSC-1	X	.002	.002	0	%100
8	GSC-2	X	.005	.005	0	%100
9	GSC-3	X	.008	.008	0	%100
10	GSI-1	X	.008	.008	0	%100
11	GSI-2	X	.003	.003	0	%100
12	GSI-3	X	.01	.01	0	%100
13	M55	X	.009	.009	0	%100
14	M56	X	.009	.009	0	%100
15	M57	X	.009	.009	0	%100
16	M58A	X	.009	.009	0	%100
17	M59A	X	.009	.009	0	%100
18	M60A	X	.009	.009	0	%100
19	MOD-SR1	X	.005	.005	0	%100
20	MOD-SR2	X	.002	.002	0	%100
21	MOD-SR3	X	.006	.006	0	%100
22	MP-1	X	.005	.005	0	%100
23	MP-2	X	.005	.005	0	%100
24	MP-3	X	.005	.005	0	%100
25	MP-4	X	.005	.005	0	%100
26	MP-5	X	.005	.005	0	%100
27	MP-6	X	.005	.005	0	%100
28	MP-7	X	.005	.005	0	%100
29	MP-8	X	.005	.005	0	%100
30	MP-9	X	.005	.005	0	%100
31	MP-A	X	.005	.005	0	%100
32	MP-B	X	.005	.005	0	%100
33	MP-C	X	.005	.005	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	.01	.01	0	%100
36	SF-H3	X	.003	.003	0	%100
37	SR-1	X	.004	.004	0	%100
38	SR-2	X	.001	.001	0	%100
39	SR-3	X	.005	.005	0	%100
40	CP-1	X	.012	.012	0	%100
41	CP-2	X	.009	.009	0	%100
42	CP-3	X	.003	.003	0	%100
43	CA-1	Z	.005	.005	0	%100
44	CA-2	Z	.006	.006	0	%100
45	CA-3	Z	.002	.002	0	%100
46	FF-H1	Z	.008	.008	0	%100
47	FF-H2	Z	.003	.003	0	%100
48	FF-H3	Z	.011	.011	0	%100
49	GSC-1	Z	.002	.002	0	%100
50	GSC-2	Z	.006	.006	0	%100
51	GSC-3	Z	.007	.007	0	%100
52	GSI-1	Z	.008	.008	0	%100
53	GSI-2	Z	.003	.003	0	%100
54	GSI-3	Z	.011	.011	0	%100
55	M55	Z	.009	.009	0	%100
56	M56	Z	.009	.009	0	%100
57	M57	Z	.009	.009	0	%100
58	M58A	Z	.009	.009	0	%100
59	M59A	Z	.009	.009	0	%100
60	M60A	Z	.009	.009	0	%100
61	MOD-SR1	Z	.005	.005	0	%100
62	MOD-SR2	Z	.002	.002	0	%100
63	MOD-SR3	Z	.006	.006	0	%100
64	MP-1	Z	.005	.005	0	%100
65	MP-2	Z	.005	.005	0	%100
66	MP-3	Z	.005	.005	0	%100
67	MP-4	Z	.005	.005	0	%100
68	MP-5	Z	.005	.005	0	%100



Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
69	MP-6	Z	.005	.005	0	%100
70	MP-7	Z	.005	.005	0	%100
71	MP-8	Z	.005	.005	0	%100
72	MP-9	Z	.005	.005	0	%100
73	MP-A	Z	.005	.005	0	%100
74	MP-B	Z	.005	.005	0	%100
75	MP-C	Z	.005	.005	0	%100
76	SF-H1	Z	.008	.008	0	%100
77	SF-H2	Z	.009	.009	0	%100
78	SF-H3	Z	.003	.003	0	%100
79	SR-1	Z	.004	.004	0	%100
80	SR-2	Z	.001	.001	0	%100
81	SR-3	Z	.005	.005	0	%100
82	CP-1	Z	.013	.013	0	%100
83	CP-2	Z	.009	.009	0	%100
84	CP-3	Z	.003	.003	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.002	.002	0	%100
2	CA-2	X	.004	.004	0	%100
3	CA-3	X	.002	.002	0	%100
4	FF-H1	X	.004	.004	0	%100
5	FF-H2	X	.004	.004	0	%100
6	FF-H3	X	.008	.008	0	%100
7	GSC-1	X	0	0	0	%100
8	GSC-2	X	.004	.004	0	%100
9	GSC-3	X	.005	.005	0	%100
10	GSI-1	X	.004	.004	0	%100
11	GSI-2	X	.004	.004	0	%100
12	GSI-3	X	.007	.007	0	%100
13	M55	X	.006	.006	0	%100
14	M56	X	.006	.006	0	%100
15	M57	X	.006	.006	0	%100
16	M58A	X	.006	.006	0	%100
17	M59A	X	.006	.006	0	%100
18	M60A	X	.006	.006	0	%100
19	MOD-SR1	X	.002	.002	0	%100
20	MOD-SR2	X	.002	.002	0	%100
21	MOD-SR3	X	.005	.005	0	%100
22	MP-1	X	.004	.004	0	%100
23	MP-2	X	.004	.004	0	%100
24	MP-3	X	.004	.004	0	%100
25	MP-4	X	.004	.004	0	%100
26	MP-5	X	.004	.004	0	%100
27	MP-6	X	.004	.004	0	%100
28	MP-7	X	.004	.004	0	%100
29	MP-8	X	.004	.004	0	%100
30	MP-9	X	.004	.004	0	%100
31	MP-A	X	.003	.003	0	%100
32	MP-B	X	.003	.003	0	%100
33	MP-C	X	.003	.003	0	%100
34	SF-H1	X	.006	.006	0	%100
35	SF-H2	X	.007	.007	0	%100
36	SF-H3	X	0	0	0	%100
37	SR-1	X	.002	.002	0	%100
38	SR-2	X	.002	.002	0	%100
39	SR-3	X	.004	.004	0	%100
40	CP-1	X	.009	.009	0	%100
41	CP-2	X	.005	.005	0	%100
42	CP-3	X	.005	.005	0	%100
43	CA-1	Z	.004	.004	0	%100



Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
44	CA-2	Z	.008	.008	0	%100
45	CA-3	Z	.004	.004	0	%100
46	FF-H1	Z	.007	.007	0	%100
47	FF-H2	Z	.007	.007	0	%100
48	FF-H3	Z	.014	.014	0	%100
49	GSC-1	Z	0	0	0	%100
50	GSC-2	Z	.009	.009	0	%100
51	GSC-3	Z	.008	.008	0	%100
52	GSI-1	Z	.007	.007	0	%100
53	GSI-2	Z	.007	.007	0	%100
54	GSI-3	Z	.014	.014	0	%100
55	M55	Z	.011	.011	0	%100
56	M56	Z	.011	.011	0	%100
57	M57	Z	.011	.011	0	%100
58	M58A	Z	.011	.011	0	%100
59	M59A	Z	.011	.011	0	%100
60	M60A	Z	.011	.011	0	%100
61	MOD-SR1	Z	.004	.004	0	%100
62	MOD-SR2	Z	.004	.004	0	%100
63	MOD-SR3	Z	.008	.008	0	%100
64	MP-1	Z	.007	.007	0	%100
65	MP-2	Z	.007	.007	0	%100
66	MP-3	Z	.007	.007	0	%100
67	MP-4	Z	.007	.007	0	%100
68	MP-5	Z	.007	.007	0	%100
69	MP-6	Z	.007	.007	0	%100
70	MP-7	Z	.007	.007	0	%100
71	MP-8	Z	.007	.007	0	%100
72	MP-9	Z	.007	.007	0	%100
73	MP-A	Z	.006	.006	0	%100
74	MP-B	Z	.006	.006	0	%100
75	MP-C	Z	.006	.006	0	%100
76	SF-H1	Z	.012	.012	0	%100
77	SF-H2	Z	.01	.01	0	%100
78	SF-H3	Z	0	0	0	%100
79	SR-1	Z	.003	.003	0	%100
80	SR-2	Z	.003	.003	0	%100
81	SR-3	Z	.007	.007	0	%100
82	CP-1	Z	.016	.016	0	%100
83	CP-2	Z	.008	.008	0	%100
84	CP-3	Z	.008	.008	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	Z	0	0	0	%100
2	CA-2	Z	.008	.008	0	%100
3	CA-3	Z	.008	.008	0	%100
4	FF-H1	Z	0	0	0	%100
5	FF-H2	Z	.014	.014	0	%100
6	FF-H3	Z	.014	.014	0	%100
7	GSC-1	Z	.005	.005	0	%100
8	GSC-2	Z	.013	.013	0	%100
9	GSC-3	Z	.005	.005	0	%100
10	GSI-1	Z	0	0	0	%100
11	GSI-2	Z	.014	.014	0	%100
12	GSI-3	Z	.014	.014	0	%100
13	M55	Z	.013	.013	0	%100
14	M56	Z	.013	.013	0	%100
15	M57	Z	.013	.013	0	%100
16	M58A	Z	.013	.013	0	%100
17	M59A	Z	.013	.013	0	%100
18	M60A	Z	.013	.013	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	MOD-SR1	Z	0	0	%100
20	MOD-SR2	Z	.008	.008	%100
21	MOD-SR3	Z	.008	.008	%100
22	MP-1	Z	.008	.008	%100
23	MP-2	Z	.008	.008	%100
24	MP-3	Z	.008	.008	%100
25	MP-4	Z	.008	.008	%100
26	MP-5	Z	.008	.008	%100
27	MP-6	Z	.008	.008	%100
28	MP-7	Z	.008	.008	%100
29	MP-8	Z	.008	.008	%100
30	MP-9	Z	.008	.008	%100
31	MP-A	Z	.007	.007	%100
32	MP-B	Z	.007	.007	%100
33	MP-C	Z	.007	.007	%100
34	SF-H1	Z	.016	.016	%100
35	SF-H2	Z	.007	.007	%100
36	SF-H3	Z	.007	.007	%100
37	SR-1	Z	0	0	%100
38	SR-2	Z	.007	.007	%100
39	SR-3	Z	.007	.007	%100
40	CP-1	Z	.016	.016	%100
41	CP-2	Z	0	0	%100
42	CP-3	Z	.016	.016	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	-.002	-.002	0
2	CA-2	X	-.002	-.002	0
3	CA-3	X	-.004	-.004	0
4	FF-H1	X	-.004	-.004	0
5	FF-H2	X	-.008	-.008	0
6	FF-H3	X	-.004	-.004	0
7	GSC-1	X	-.005	-.005	0
8	GSC-2	X	-.004	-.004	0
9	GSC-3	X	0	0	0
10	GSI-1	X	-.004	-.004	0
11	GSI-2	X	-.007	-.007	0
12	GSI-3	X	-.004	-.004	0
13	M55	X	-.006	-.006	0
14	M56	X	-.006	-.006	0
15	M57	X	-.006	-.006	0
16	M58A	X	-.006	-.006	0
17	M59A	X	-.006	-.006	0
18	M60A	X	-.006	-.006	0
19	MOD-SR1	X	-.002	-.002	0
20	MOD-SR2	X	-.005	-.005	0
21	MOD-SR3	X	-.002	-.002	0
22	MP-1	X	-.004	-.004	0
23	MP-2	X	-.004	-.004	0
24	MP-3	X	-.004	-.004	0
25	MP-4	X	-.004	-.004	0
26	MP-5	X	-.004	-.004	0
27	MP-6	X	-.004	-.004	0
28	MP-7	X	-.004	-.004	0
29	MP-8	X	-.004	-.004	0
30	MP-9	X	-.004	-.004	0
31	MP-A	X	-.003	-.003	0
32	MP-B	X	-.003	-.003	0
33	MP-C	X	-.003	-.003	0
34	SF-H1	X	-.006	-.006	0
35	SF-H2	X	0	0	0

Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
36	SF-H3	X	-.007	-.007	0
37	SR-1	X	-.002	-.002	0
38	SR-2	X	-.004	-.004	0
39	SR-3	X	-.002	-.002	0
40	CP-1	X	-.005	-.005	0
41	CP-2	X	-.005	-.005	0
42	CP-3	X	-.009	-.009	0
43	CA-1	Z	.004	.004	0
44	CA-2	Z	.004	.004	0
45	CA-3	Z	.008	.008	0
46	FF-H1	Z	.007	.007	0
47	FF-H2	Z	.014	.014	0
48	FF-H3	Z	.007	.007	0
49	GSC-1	Z	.008	.008	0
50	GSC-2	Z	.009	.009	0
51	GSC-3	Z	0	0	0
52	GSI-1	Z	.007	.007	0
53	GSI-2	Z	.014	.014	0
54	GSI-3	Z	.007	.007	0
55	M55	Z	.011	.011	0
56	M56	Z	.011	.011	0
57	M57	Z	.011	.011	0
58	M58A	Z	.011	.011	0
59	M59A	Z	.011	.011	0
60	M60A	Z	.011	.011	0
61	MOD-SR1	Z	.004	.004	0
62	MOD-SR2	Z	.008	.008	0
63	MOD-SR3	Z	.004	.004	0
64	MP-1	Z	.007	.007	0
65	MP-2	Z	.007	.007	0
66	MP-3	Z	.007	.007	0
67	MP-4	Z	.007	.007	0
68	MP-5	Z	.007	.007	0
69	MP-6	Z	.007	.007	0
70	MP-7	Z	.007	.007	0
71	MP-8	Z	.007	.007	0
72	MP-9	Z	.007	.007	0
73	MP-A	Z	.006	.006	0
74	MP-B	Z	.006	.006	0
75	MP-C	Z	.006	.006	0
76	SF-H1	Z	.012	.012	0
77	SF-H2	Z	0	0	0
78	SF-H3	Z	.01	.01	0
79	SR-1	Z	.003	.003	0
80	SR-2	Z	.007	.007	0
81	SR-3	Z	.003	.003	0
82	CP-1	Z	.008	.008	0
83	CP-2	Z	.008	.008	0
84	CP-3	Z	.016	.016	0

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	-.005	-.005	0
2	CA-2	X	-.001	-.001	0
3	CA-3	X	-.006	-.006	0
4	FF-H1	X	-.008	-.008	0
5	FF-H2	X	-.011	-.011	0
6	FF-H3	X	-.003	-.003	0
7	GSC-1	X	-.008	-.008	0
8	GSC-2	X	-.005	-.005	0
9	GSC-3	X	-.002	-.002	0
10	GSI-1	X	-.008	-.008	0

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
11	GSI-2	X	-01	-01	0 %100
12	GSI-3	X	-003	-003	0 %100
13	M55	X	-009	-009	0 %100
14	M56	X	-009	-009	0 %100
15	M57	X	-009	-009	0 %100
16	M58A	X	-009	-009	0 %100
17	M59A	X	-009	-009	0 %100
18	M60A	X	-009	-009	0 %100
19	MOD-SR1	X	-005	-005	0 %100
20	MOD-SR2	X	-006	-006	0 %100
21	MOD-SR3	X	-002	-002	0 %100
22	MP-1	X	-005	-005	0 %100
23	MP-2	X	-005	-005	0 %100
24	MP-3	X	-005	-005	0 %100
25	MP-4	X	-005	-005	0 %100
26	MP-5	X	-005	-005	0 %100
27	MP-6	X	-005	-005	0 %100
28	MP-7	X	-005	-005	0 %100
29	MP-8	X	-005	-005	0 %100
30	MP-9	X	-005	-005	0 %100
31	MP-A	X	-005	-005	0 %100
32	MP-B	X	-005	-005	0 %100
33	MP-C	X	-005	-005	0 %100
34	SF-H1	X	-006	-006	0 %100
35	SF-H2	X	-003	-003	0 %100
36	SF-H3	X	-01	-01	0 %100
37	SR-1	X	-004	-004	0 %100
38	SR-2	X	-005	-005	0 %100
39	SR-3	X	-001	-001	0 %100
40	CP-1	X	-003	-003	0 %100
41	CP-2	X	-009	-009	0 %100
42	CP-3	X	-012	-012	0 %100
43	CA-1	Z	.005	.005	0 %100
44	CA-2	Z	.002	.002	0 %100
45	CA-3	Z	.006	.006	0 %100
46	FF-H1	Z	.008	.008	0 %100
47	FF-H2	Z	.011	.011	0 %100
48	FF-H3	Z	.003	.003	0 %100
49	GSC-1	Z	.007	.007	0 %100
50	GSC-2	Z	.006	.006	0 %100
51	GSC-3	Z	.002	.002	0 %100
52	GSI-1	Z	.008	.008	0 %100
53	GSI-2	Z	.011	.011	0 %100
54	GSI-3	Z	.003	.003	0 %100
55	M55	Z	.009	.009	0 %100
56	M56	Z	.009	.009	0 %100
57	M57	Z	.009	.009	0 %100
58	M58A	Z	.009	.009	0 %100
59	M59A	Z	.009	.009	0 %100
60	M60A	Z	.009	.009	0 %100
61	MOD-SR1	Z	.005	.005	0 %100
62	MOD-SR2	Z	.006	.006	0 %100
63	MOD-SR3	Z	.002	.002	0 %100
64	MP-1	Z	.005	.005	0 %100
65	MP-2	Z	.005	.005	0 %100
66	MP-3	Z	.005	.005	0 %100
67	MP-4	Z	.005	.005	0 %100
68	MP-5	Z	.005	.005	0 %100
69	MP-6	Z	.005	.005	0 %100
70	MP-7	Z	.005	.005	0 %100
71	MP-8	Z	.005	.005	0 %100
72	MP-9	Z	.005	.005	0 %100
73	MP-A	Z	.005	.005	0 %100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
74	MP-B	Z	.005	.005	0 %100
75	MP-C	Z	.005	.005	0 %100
76	SF-H1	Z	.008	.008	0 %100
77	SF-H2	Z	.003	.003	0 %100
78	SF-H3	Z	.009	.009	0 %100
79	SR-1	Z	.004	.004	0 %100
80	SR-2	Z	.005	.005	0 %100
81	SR-3	Z	.001	.001	0 %100
82	CP-1	Z	.003	.003	0 %100
83	CP-2	Z	.009	.009	0 %100
84	CP-3	Z	.013	.013	0 %100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	-007	-007	0 %100
2	CA-2	X	0	0	0 %100
3	CA-3	X	-006	-006	0 %100
4	FF-H1	X	-012	-012	0 %100
5	FF-H2	X	-012	-012	0 %100
6	FF-H3	X	0	0	0 %100
7	GSC-1	X	-.01	-.01	0 %100
8	GSC-2	X	-004	-004	0 %100
9	GSC-3	X	-005	-005	0 %100
10	GSI-1	X	-012	-012	0 %100
11	GSI-2	X	-011	-011	0 %100
12	GSI-3	X	0	0	0 %100
13	M55	X	-011	-011	0 %100
14	M56	X	-011	-011	0 %100
15	M57	X	-011	-011	0 %100
16	M58A	X	-011	-011	0 %100
17	M59A	X	-011	-011	0 %100
18	M60A	X	-011	-011	0 %100
19	MOD-SR1	X	-007	-007	0 %100
20	MOD-SR2	X	-007	-007	0 %100
21	MOD-SR3	X	0	0	0 %100
22	MP-1	X	-007	-007	0 %100
23	MP-2	X	-007	-007	0 %100
24	MP-3	X	-007	-007	0 %100
25	MP-4	X	-007	-007	0 %100
26	MP-5	X	-007	-007	0 %100
27	MP-6	X	-007	-007	0 %100
28	MP-7	X	-007	-007	0 %100
29	MP-8	X	-007	-007	0 %100
30	MP-9	X	-007	-007	0 %100
31	MP-A	X	-006	-006	0 %100
32	MP-B	X	-006	-006	0 %100
33	MP-C	X	-006	-006	0 %100
34	SF-H1	X	-006	-006	0 %100
35	SF-H2	X	-007	-007	0 %100
36	SF-H3	X	-013	-013	0 %100
37	SR-1	X	-006	-006	0 %100
38	SR-2	X	-006	-006	0 %100
39	SR-3	X	0	0	0 %100
40	CP-1	X	0	0	0 %100
41	CP-2	X	-014	-014	0 %100
42	CP-3	X	-014	-014	0 %100
43	CA-1	Z	.004	.004	0 %100
44	CA-2	Z	0	0	0 %100
45	CA-3	Z	.004	.004	0 %100
46	FF-H1	Z	.007	.007	0 %100
47	FF-H2	Z	.007	.007	0 %100
48	FF-H3	Z	0	0	0 %100



Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
49	GSC-1	Z	.005	.005	0 %100
50	GSC-2	Z	.003	.003	0 %100
51	GSC-3	Z	.003	.003	0 %100
52	GSI-1	Z	.007	.007	0 %100
53	GSI-2	Z	.007	.007	0 %100
54	GSI-3	Z	0	0	0 %100
55	M55	Z	.006	.006	0 %100
56	M56	Z	.006	.006	0 %100
57	M57	Z	.006	.006	0 %100
58	M58A	Z	.006	.006	0 %100
59	M59A	Z	.006	.006	0 %100
60	M60A	Z	.006	.006	0 %100
61	MOD-SR1	Z	.004	.004	0 %100
62	MOD-SR2	Z	.004	.004	0 %100
63	MOD-SR3	Z	0	0	0 %100
64	MP-1	Z	.004	.004	0 %100
65	MP-2	Z	.004	.004	0 %100
66	MP-3	Z	.004	.004	0 %100
67	MP-4	Z	.004	.004	0 %100
68	MP-5	Z	.004	.004	0 %100
69	MP-6	Z	.004	.004	0 %100
70	MP-7	Z	.004	.004	0 %100
71	MP-8	Z	.004	.004	0 %100
72	MP-9	Z	.004	.004	0 %100
73	MP-A	Z	.003	.003	0 %100
74	MP-B	Z	.003	.003	0 %100
75	MP-C	Z	.003	.003	0 %100
76	SF-H1	Z	.004	.004	0 %100
77	SF-H2	Z	.003	.003	0 %100
78	SF-H3	Z	.007	.007	0 %100
79	SR-1	Z	.003	.003	0 %100
80	SR-2	Z	.003	.003	0 %100
81	SR-3	Z	0	0	0 %100
82	CP-1	Z	0	0	0 %100
83	CP-2	Z	.008	.008	0 %100
84	CP-3	Z	.008	.008	0 %100

Member Distributed Loads (BLC 18 : Ice Weight)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	Y	-.008	-.008	0 %100
2	CA-2	Y	-.008	-.008	0 %100
3	CA-3	Y	-.008	-.008	0 %100
4	FF-H1	Y	-.008	-.008	0 %100
5	FF-H2	Y	-.008	-.008	0 %100
6	FF-H3	Y	-.008	-.008	0 %100
7	GSC-1	Y	-.009	-.009	0 %100
8	GSC-2	Y	-.009	-.009	0 %100
9	GSC-3	Y	-.009	-.009	0 %100
10	GSI-1	Y	-.013	-.013	0 %100
11	GSI-2	Y	-.013	-.013	0 %100
12	GSI-3	Y	-.013	-.013	0 %100
13	M55	Y	-.007	-.007	0 %100
14	M56	Y	-.007	-.007	0 %100
15	M57	Y	-.007	-.007	0 %100
16	M58A	Y	-.007	-.007	0 %100
17	M59A	Y	-.007	-.007	0 %100
18	M60A	Y	-.007	-.007	0 %100
19	MOD-SR1	Y	-.01	-.01	0 %100
20	MOD-SR2	Y	-.01	-.01	0 %100
21	MOD-SR3	Y	-.01	-.01	0 %100
22	MP-1	Y	-.009	-.009	0 %100
23	MP-2	Y	-.009	-.009	0 %100



Member Distributed Loads (BLC 18 : Ice Weight) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
24	MP-3	Y	-.009	-.009	0 %100
25	MP-4	Y	-.009	-.009	0 %100
26	MP-5	Y	-.009	-.009	0 %100
27	MP-6	Y	-.009	-.009	0 %100
28	MP-7	Y	-.009	-.009	0 %100
29	MP-8	Y	-.009	-.009	0 %100
30	MP-9	Y	-.009	-.009	0 %100
31	MP-A	Y	-.009	-.009	0 %100
32	MP-B	Y	-.009	-.009	0 %100
33	MP-C	Y	-.009	-.009	0 %100
34	SF-H1	Y	-.02	-.02	0 %100
35	SF-H2	Y	-.02	-.02	0 %100
36	SF-H3	Y	-.02	-.02	0 %100
37	SR-1	Y	-.009	-.009	0 %100
38	SR-2	Y	-.009	-.009	0 %100
39	SR-3	Y	-.009	-.009	0 %100
40	CP-1	Y	-.018	-.018	0 %100
41	CP-2	Y	-.018	-.018	0 %100
42	CP-3	Y	-.018	-.018	0 %100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	-.004	-.004	0 %100
2	CA-2	X	-.004	-.004	0 %100
3	CA-3	X	-.004	-.004	0 %100
4	FF-H1	X	-.006	-.006	0 %100
5	FF-H2	X	-.005	-.005	0 %100
6	FF-H3	X	-.005	-.005	0 %100
7	GSC-1	X	-.005	-.005	0 %100
8	GSC-2	X	-.004	-.004	0 %100
9	GSC-3	X	-.005	-.005	0 %100
10	GSI-1	X	-.006	-.006	0 %100
11	GSI-2	X	-.005	-.005	0 %100
12	GSI-3	X	-.005	-.005	0 %100
13	M55	X	-.004	-.004	0 %100
14	M56	X	-.004	-.004	0 %100
15	M57	X	-.004	-.004	0 %100
16	M58A	X	-.004	-.004	0 %100
17	M59A	X	-.004	-.004	0 %100
18	M60A	X	-.004	-.004	0 %100
19	MOD-SR1	X	-.004	-.004	0 %100
20	MOD-SR2	X	-.003	-.003	0 %100
21	MOD-SR3	X	-.003	-.003	0 %100
22	MP-1	X	-.003	-.003	0 %100
23	MP-2	X	-.003	-.003	0 %100
24	MP-3	X	-.003	-.003	0 %100
25	MP-4	X	-.003	-.003	0 %100
26	MP-5	X	-.003	-.003	0 %100
27	MP-6	X	-.003	-.003	0 %100
28	MP-7	X	-.003	-.003	0 %100
29	MP-8	X	-.003	-.003	0 %100
30	MP-9	X	-.003	-.003	0 %100
31	MP-A	X	-.002	-.002	0 %100
32	MP-B	X	-.002	-.002	0 %100
33	MP-C	X	-.002	-.002	0 %100
34	SF-H1	X	-.005	-.005	0 %100
35	SF-H2	X	-.005	-.005	0 %100
36	SF-H3	X	-.005	-.005	0 %100
37	SR-1	X	-.003	-.003	0 %100
38	SR-2	X	-.003	-.003	0 %100
39	SR-3	X	-.003	-.003	0 %100
40	CP-1	X	-.006	-.006	0 %100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP-1	Z	-0.003	-0.003	0
65	MP-2	Z	-0.003	-0.003	0
66	MP-3	Z	-0.003	-0.003	0
67	MP-4	Z	-0.003	-0.003	0
68	MP-5	Z	-0.003	-0.003	0
69	MP-6	Z	-0.003	-0.003	0
70	MP-7	Z	-0.003	-0.003	0
71	MP-8	Z	-0.003	-0.003	0
72	MP-9	Z	-0.003	-0.003	0
73	MP-A	Z	-0.002	-0.002	0
74	MP-B	Z	-0.002	-0.002	0
75	MP-C	Z	-0.002	-0.002	0
76	SF-H1	Z	-0.004	-0.004	0
77	SF-H2	Z	0	0	0
78	SF-H3	Z	-0.004	-0.004	0
79	SR-1	Z	-0.001	-0.001	0
80	SR-2	Z	-0.003	-0.003	0
81	SR-3	Z	-0.002	-0.002	0
82	CP-1	Z	-0.003	-0.003	0
83	CP-2	Z	-0.002	-0.002	0
84	CP-3	Z	-0.005	-0.005	0

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	.002	.002	0
2	CA-2	X	.000787	.000787	0
3	CA-3	X	.003	.003	0
4	FF-H1	X	.003	.003	0
5	FF-H2	X	.004	.004	0
6	FF-H3	X	.000953	.000953	0
7	GSC-1	X	.003	.003	0
8	GSC-2	X	.002	.002	0
9	GSC-3	X	.000839	.000839	0
10	GSI-1	X	.003	.003	0
11	GSI-2	X	.003	.003	0
12	GSI-3	X	.000868	.000868	0
13	M55	X	.003	.003	0
14	M56	X	.003	.003	0
15	M57	X	.003	.003	0
16	M58A	X	.003	.003	0
17	M59A	X	.003	.003	0
18	M60A	X	.003	.003	0
19	MOD-SR1	X	.002	.002	0
20	MOD-SR2	X	.002	.002	0
21	MOD-SR3	X	.000532	.000532	0
22	MP-1	X	.002	.002	0
23	MP-2	X	.002	.002	0
24	MP-3	X	.002	.002	0
25	MP-4	X	.002	.002	0
26	MP-5	X	.002	.002	0
27	MP-6	X	.002	.002	0
28	MP-7	X	.002	.002	0
29	MP-8	X	.002	.002	0
30	MP-9	X	.002	.002	0
31	MP-A	X	.002	.002	0
32	MP-B	X	.002	.002	0
33	MP-C	X	.002	.002	0
34	SF-H1	X	.002	.002	0
35	SF-H2	X	.000947	.000947	0
36	SF-H3	X	.004	.004	0
37	SR-1	X	.002	.002	0
38	SR-2	X	.002	.002	0

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
39	SR-3	X	.000526	.000526	0
40	CP-1	X	.001	.001	0
41	CP-2	X	.003	.003	0
42	CP-3	X	.004	.004	0
43	CA-1	Z	-0.002	-0.002	0
44	CA-2	Z	-0.000794	-0.000794	0
45	CA-3	Z	-0.003	-0.003	0
46	FF-H1	Z	-0.003	-0.003	0
47	FF-H2	Z	-0.004	-0.004	0
48	FF-H3	Z	-0.001	-0.001	0
49	GSC-1	Z	-0.003	-0.003	0
50	GSC-2	Z	-0.002	-0.002	0
51	GSC-3	Z	-0.000782	-0.000782	0
52	GSI-1	Z	-0.003	-0.003	0
53	GSI-2	Z	-0.004	-0.004	0
54	GSI-3	Z	-0.000987	-0.000987	0
55	M55	Z	-0.003	-0.003	0
56	M56	Z	-0.003	-0.003	0
57	M57	Z	-0.003	-0.003	0
58	M58A	Z	-0.003	-0.003	0
59	M59A	Z	-0.003	-0.003	0
60	M60A	Z	-0.003	-0.003	0
61	MOD-SR1	Z	-0.002	-0.002	0
62	MOD-SR2	Z	-0.002	-0.002	0
63	MOD-SR3	Z	-0.000644	-0.000644	0
64	MP-1	Z	-0.002	-0.002	0
65	MP-2	Z	-0.002	-0.002	0
66	MP-3	Z	-0.002	-0.002	0
67	MP-4	Z	-0.002	-0.002	0
68	MP-5	Z	-0.002	-0.002	0
69	MP-6	Z	-0.002	-0.002	0
70	MP-7	Z	-0.002	-0.002	0
71	MP-8	Z	-0.002	-0.002	0
72	MP-9	Z	-0.002	-0.002	0
73	MP-A	Z	-0.002	-0.002	0
74	MP-B	Z	-0.002	-0.002	0
75	MP-C	Z	-0.002	-0.002	0
76	SF-H1	Z	-0.003	-0.003	0
77	SF-H2	Z	-0.000889	-0.000889	0
78	SF-H3	Z	-0.003	-0.003	0
79	SR-1	Z	-0.002	-0.002	0
80	SR-2	Z	-0.002	-0.002	0
81	SR-3	Z	-0.000638	-0.000638	0
82	CP-1	Z	-0.001	-0.001	0
83	CP-2	Z	-0.003	-0.003	0
84	CP-3	Z	-0.004	-0.004	0

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	X	.003	.003	0
2	CA-2	X	0	0	0
3	CA-3	X	.003	.003	0
4	FF-H1	X	.005	.005	0
5	FF-H2	X	.004	.004	0
6	FF-H3	X	0	0	0
7	GSC-1	X	.004	.004	0
8	GSC-2	X	.002	.002	0
9	GSC-3	X	.002	.002	0
10	GSI-1	X	.004	.004	0
11	GSI-2	X	.004	.004	0
12	GSI-3	X	0	0	0
13	M55	X	.004	.004	0



Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
14 M56	X	.004	.004	0	%100
15 M57	X	.004	.004	0	%100
16 M58A	X	.004	.004	0	%100
17 M59A	X	.004	.004	0	%100
18 M60A	X	.004	.004	0	%100
19 MOD-SR1	X	.003	.003	0	%100
20 MOD-SR2	X	.002	.002	0	%100
21 MOD-SR3	X	0	0	0	%100
22 MP-1	X	.002	.002	0	%100
23 MP-2	X	.002	.002	0	%100
24 MP-3	X	.002	.002	0	%100
25 MP-4	X	.002	.002	0	%100
26 MP-5	X	.002	.002	0	%100
27 MP-6	X	.002	.002	0	%100
28 MP-7	X	.002	.002	0	%100
29 MP-8	X	.002	.002	0	%100
30 MP-9	X	.002	.002	0	%100
31 MP-A	X	.002	.002	0	%100
32 MP-B	X	.002	.002	0	%100
33 MP-C	X	.002	.002	0	%100
34 SF-H1	X	.002	.002	0	%100
35 SF-H2	X	.002	.002	0	%100
36 SF-H3	X	.004	.004	0	%100
37 SR-1	X	.003	.003	0	%100
38 SR-2	X	.002	.002	0	%100
39 SR-3	X	0	0	0	%100
40 CP-1	X	0	0	0	%100
41 CP-2	X	.005	.005	0	%100
42 CP-3	X	.005	.005	0	%100
43 CA-1	Z	-.002	-.002	0	%100
44 CA-2	Z	0	0	0	%100
45 CA-3	Z	-.002	-.002	0	%100
46 FF-H1	Z	-.003	-.003	0	%100
47 FF-H2	Z	-.003	-.003	0	%100
48 FF-H3	Z	0	0	0	%100
49 GSC-1	Z	-.002	-.002	0	%100
50 GSC-2	Z	-.001	-.001	0	%100
51 GSC-3	Z	-.001	-.001	0	%100
52 GSI-1	Z	-.002	-.002	0	%100
53 GSI-2	Z	-.002	-.002	0	%100
54 GSI-3	Z	0	0	0	%100
55 M55	Z	-.002	-.002	0	%100
56 M56	Z	-.002	-.002	0	%100
57 M57	Z	-.002	-.002	0	%100
58 M58A	Z	-.002	-.002	0	%100
59 M59A	Z	-.002	-.002	0	%100
60 M60A	Z	-.002	-.002	0	%100
61 MOD-SR1	Z	-.001	-.001	0	%100
62 MOD-SR2	Z	-.002	-.002	0	%100
63 MOD-SR3	Z	0	0	0	%100
64 MP-1	Z	-.002	-.002	0	%100
65 MP-2	Z	-.002	-.002	0	%100
66 MP-3	Z	-.002	-.002	0	%100
67 MP-4	Z	-.002	-.002	0	%100
68 MP-5	Z	-.002	-.002	0	%100
69 MP-6	Z	-.002	-.002	0	%100
70 MP-7	Z	-.002	-.002	0	%100
71 MP-8	Z	-.002	-.002	0	%100
72 MP-9	Z	-.002	-.002	0	%100
73 MP-A	Z	-.001	-.001	0	%100
74 MP-B	Z	-.001	-.001	0	%100
75 MP-C	Z	-.001	-.001	0	%100
76 SF-H1	Z	-.001	-.001	0	%100



Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
77 SF-H2	Z	-.001	-.001	0	%100
78 SF-H3	Z	-.002	-.002	0	%100
79 SR-1	Z	-.001	-.001	0	%100
80 SR-2	Z	-.002	-.002	0	%100
81 SR-3	Z	0	0	0	%100
82 CP-1	Z	0	0	0	%100
83 CP-2	Z	-.002	-.002	0	%100
84 CP-3	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1 CA-1	X	.004	.004	0	%100
2 CA-2	X	.004	.004	0	%100
3 CA-3	X	.004	.004	0	%100
4 FF-H1	X	.006	.006	0	%100
5 FF-H2	X	.005	.005	0	%100
6 FF-H3	X	.005	.005	0	%100
7 GSC-1	X	.005	.005	0	%100
8 GSC-2	X	.004	.004	0	%100
9 GSC-3	X	.005	.005	0	%100
10 GSI-1	X	.006	.006	0	%100
11 GSI-2	X	.005	.005	0	%100
12 GSI-3	X	.005	.005	0	%100
13 M55	X	.004	.004	0	%100
14 M56	X	.004	.004	0	%100
15 M57	X	.004	.004	0	%100
16 M58A	X	.004	.004	0	%100
17 M59A	X	.004	.004	0	%100
18 M60A	X	.004	.004	0	%100
19 MOD-SR1	X	.004	.004	0	%100
20 MOD-SR2	X	.003	.003	0	%100
21 MOD-SR3	X	.003	.003	0	%100
22 MP-1	X	.003	.003	0	%100
23 MP-2	X	.003	.003	0	%100
24 MP-3	X	.003	.003	0	%100
25 MP-4	X	.003	.003	0	%100
26 MP-5	X	.003	.003	0	%100
27 MP-6	X	.003	.003	0	%100
28 MP-7	X	.003	.003	0	%100
29 MP-8	X	.003	.003	0	%100
30 MP-9	X	.003	.003	0	%100
31 MP-A	X	.002	.002	0	%100
32 MP-B	X	.002	.002	0	%100
33 MP-C	X	.002	.002	0	%100
34 SF-H1	X	.005	.005	0	%100
35 SF-H2	X	.005	.005	0	%100
36 SF-H3	X	.005	.005	0	%100
37 SR-1	X	.003	.003	0	%100
38 SR-2	X	.003	.003	0	%100
39 SR-3	X	.003	.003	0	%100
40 CP-1	X	.006	.006	0	%100
41 CP-2	X	.006	.006	0	%100
42 CP-3	X	.006	.006	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1 CA-1	X	.003	.003	0	%100
2 CA-2	X	.003	.003	0	%100
3 CA-3	X	0	0	0	%100
4 FF-H1	X	.005	.005	0	%100
5 FF-H2	X	0	0	0	%100
6 FF-H3	X	.004	.004	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
7	GSC-1	X	.002	.002	0	%100
8	GSC-2	X	.002	.002	0	%100
9	GSC-3	X	.004	.004	0	%100
10	GSI-1	X	.004	.004	0	%100
11	GSI-2	X	0	0	0	%100
12	GSI-3	X	.004	.004	0	%100
13	M55	X	.004	.004	0	%100
14	M56	X	.004	.004	0	%100
15	M57	X	.004	.004	0	%100
16	M58A	X	.004	.004	0	%100
17	M59A	X	.004	.004	0	%100
18	M60A	X	.004	.004	0	%100
19	MOD-SR1	X	.003	.003	0	%100
20	MOD-SR2	X	0	0	0	%100
21	MOD-SR3	X	.002	.002	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	MP-A	X	.002	.002	0	%100
32	MP-B	X	.002	.002	0	%100
33	MP-C	X	.002	.002	0	%100
34	SF-H1	X	.002	.002	0	%100
35	SF-H2	X	.004	.004	0	%100
36	SF-H3	X	.002	.002	0	%100
37	SR-1	X	.003	.003	0	%100
38	SR-2	X	0	0	0	%100
39	SR-3	X	.002	.002	0	%100
40	CP-1	X	.005	.005	0	%100
41	CP-2	X	.005	.005	0	%100
42	CP-3	X	0	0	0	%100
43	CA-1	Z	.002	.002	0	%100
44	CA-2	Z	.002	.002	0	%100
45	CA-3	Z	0	0	0	%100
46	FF-H1	Z	.003	.003	0	%100
47	FF-H2	Z	0	0	0	%100
48	FF-H3	Z	.003	.003	0	%100
49	GSC-1	Z	.001	.001	0	%100
50	GSC-2	Z	.001	.001	0	%100
51	GSC-3	Z	.002	.002	0	%100
52	GSI-1	Z	.002	.002	0	%100
53	GSI-2	Z	0	0	0	%100
54	GSI-3	Z	.002	.002	0	%100
55	M55	Z	.002	.002	0	%100
56	M56	Z	.002	.002	0	%100
57	M57	Z	.002	.002	0	%100
58	M58A	Z	.002	.002	0	%100
59	M59A	Z	.002	.002	0	%100
60	M60A	Z	.002	.002	0	%100
61	MOD-SR1	Z	.001	.001	0	%100
62	MOD-SR2	Z	0	0	0	%100
63	MOD-SR3	Z	.002	.002	0	%100
64	MP-1	Z	.002	.002	0	%100
65	MP-2	Z	.002	.002	0	%100
66	MP-3	Z	.002	.002	0	%100
67	MP-4	Z	.002	.002	0	%100
68	MP-5	Z	.002	.002	0	%100
69	MP-6	Z	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
70	MP-7	Z	.002	.002	0	%100
71	MP-8	Z	.002	.002	0	%100
72	MP-9	Z	.002	.002	0	%100
73	MP-A	Z	.001	.001	0	%100
74	MP-B	Z	.001	.001	0	%100
75	MP-C	Z	.001	.001	0	%100
76	SF-H1	Z	.001	.001	0	%100
77	SF-H2	Z	.002	.002	0	%100
78	SF-H3	Z	.001	.001	0	%100
79	SR-1	Z	.001	.001	0	%100
80	SR-2	Z	0	0	0	%100
81	SR-3	Z	.002	.002	0	%100
82	CP-1	Z	.003	.003	0	%100
83	CP-2	Z	.002	.002	0	%100
84	CP-3	Z	0	0	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
1	CA-1	X	.002	.002	0	%100
2	CA-2	X	.003	.003	0	%100
3	CA-3	X	.000787	.000787	0	%100
4	FF-H1	X	.003	.003	0	%100
5	FF-H2	X	.000953	.000953	0	%100
6	FF-H3	X	.004	.004	0	%100
7	GSC-1	X	.000839	.000839	0	%100
8	GSC-2	X	.002	.002	0	%100
9	GSC-3	X	.003	.003	0	%100
10	GSI-1	X	.003	.003	0	%100
11	GSI-2	X	.000868	.000868	0	%100
12	GSI-3	X	.003	.003	0	%100
13	M55	X	.003	.003	0	%100
14	M56	X	.003	.003	0	%100
15	M57	X	.003	.003	0	%100
16	M58A	X	.003	.003	0	%100
17	M59A	X	.003	.003	0	%100
18	M60A	X	.003	.003	0	%100
19	MOD-SR1	X	.002	.002	0	%100
20	MOD-SR2	X	.000532	.000532	0	%100
21	MOD-SR3	X	.002	.002	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	MP-A	X	.002	.002	0	%100
32	MP-B	X	.002	.002	0	%100
33	MP-C	X	.002	.002	0	%100
34	SF-H1	X	.002	.002	0	%100
35	SF-H2	X	.004	.004	0	%100
36	SF-H3	X	.000947	.000947	0	%100
37	SR-1	X	.002	.002	0	%100
38	SR-2	X	.000526	.000526	0	%100
39	SR-3	X	.002	.002	0	%100
40	CP-1	X	.004	.004	0	%100
41	CP-2	X	.003	.003	0	%100
42	CP-3	X	.001	.001	0	%100
43	CA-1	Z	.002	.002	0	%100
44	CA-2	Z	.003	.003	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
45	CA-3	Z	.000794	.000794	0	%100
46	FF-H1	Z	.003	.003	0	%100
47	FF-H2	Z	.001	.001	0	%100
48	FF-H3	Z	.004	.004	0	%100
49	GSC-1	Z	.000782	.000782	0	%100
50	GSC-2	Z	.002	.002	0	%100
51	GSC-3	Z	.003	.003	0	%100
52	GSI-1	Z	.003	.003	0	%100
53	GSI-2	Z	.000987	.000987	0	%100
54	GSI-3	Z	.004	.004	0	%100
55	M55	Z	.003	.003	0	%100
56	M56	Z	.003	.003	0	%100
57	M57	Z	.003	.003	0	%100
58	M58A	Z	.003	.003	0	%100
59	M59A	Z	.003	.003	0	%100
60	M60A	Z	.003	.003	0	%100
61	MOD-SR1	Z	.002	.002	0	%100
62	MOD-SR2	Z	.000644	.000644	0	%100
63	MOD-SR3	Z	.002	.002	0	%100
64	MP-1	Z	.002	.002	0	%100
65	MP-2	Z	.002	.002	0	%100
66	MP-3	Z	.002	.002	0	%100
67	MP-4	Z	.002	.002	0	%100
68	MP-5	Z	.002	.002	0	%100
69	MP-6	Z	.002	.002	0	%100
70	MP-7	Z	.002	.002	0	%100
71	MP-8	Z	.002	.002	0	%100
72	MP-9	Z	.002	.002	0	%100
73	MP-A	Z	.002	.002	0	%100
74	MP-B	Z	.002	.002	0	%100
75	MP-C	Z	.002	.002	0	%100
76	SF-H1	Z	.003	.003	0	%100
77	SF-H2	Z	.003	.003	0	%100
78	SF-H3	Z	.000889	.000889	0	%100
79	SR-1	Z	.002	.002	0	%100
80	SR-2	Z	.000638	.000638	0	%100
81	SR-3	Z	.002	.002	0	%100
82	CP-1	Z	.004	.004	0	%100
83	CP-2	Z	.003	.003	0	%100
84	CP-3	Z	.001	.001	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	CA-1	X	.001	.001	0	%100
2	CA-2	X	.002	.002	0	%100
3	CA-3	X	.001	.001	0	%100
4	FF-H1	X	.002	.002	0	%100
5	FF-H2	X	.001	.001	0	%100
6	FF-H3	X	.003	.003	0	%100
7	GSC-1	X	0	0	0	%100
8	GSC-2	X	.002	.002	0	%100
9	GSC-3	X	.002	.002	0	%100
10	GSI-1	X	.001	.001	0	%100
11	GSI-2	X	.001	.001	0	%100
12	GSI-3	X	.002	.002	0	%100
13	M55	X	.002	.002	0	%100
14	M56	X	.002	.002	0	%100
15	M57	X	.002	.002	0	%100
16	M58A	X	.002	.002	0	%100
17	M59A	X	.002	.002	0	%100
18	M60A	X	.002	.002	0	%100
19	MOD-SR1	X	.000935	.000935	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]	
20	MOD-SR2	X	.000727	.000727	0	%100
21	MOD-SR3	X	.001	.001	0	%100
22	MP-1	X	.001	.001	0	%100
23	MP-2	X	.001	.001	0	%100
24	MP-3	X	.001	.001	0	%100
25	MP-4	X	.001	.001	0	%100
26	MP-5	X	.001	.001	0	%100
27	MP-6	X	.001	.001	0	%100
28	MP-7	X	.001	.001	0	%100
29	MP-8	X	.001	.001	0	%100
30	MP-9	X	.001	.001	0	%100
31	MP-A	X	.001	.001	0	%100
32	MP-B	X	.001	.001	0	%100
33	MP-C	X	.001	.001	0	%100
34	SF-H1	X	.002	.002	0	%100
35	SF-H2	X	.002	.002	0	%100
36	SF-H3	X	0	0	0	%100
37	SR-1	X	.000871	.000871	0	%100
38	SR-2	X	.000718	.000718	0	%100
39	SR-3	X	.001	.001	0	%100
40	CP-1	X	.003	.003	0	%100
41	CP-2	X	.002	.002	0	%100
42	CP-3	X	.002	.002	0	%100
43	CA-1	Z	.002	.002	0	%100
44	CA-2	Z	.004	.004	0	%100
45	CA-3	Z	.002	.002	0	%100
46	FF-H1	Z	.003	.003	0	%100
47	FF-H2	Z	.003	.003	0	%100
48	FF-H3	Z	.005	.005	0	%100
49	GSC-1	Z	0	0	0	%100
50	GSC-2	Z	.004	.004	0	%100
51	GSC-3	Z	.003	.003	0	%100
52	GSI-1	Z	.002	.002	0	%100
53	GSI-2	Z	.002	.002	0	%100
54	GSI-3	Z	.005	.005	0	%100
55	M55	Z	.004	.004	0	%100
56	M56	Z	.004	.004	0	%100
57	M57	Z	.004	.004	0	%100
58	M58A	Z	.004	.004	0	%100
59	M59A	Z	.004	.004	0	%100
60	M60A	Z	.004	.004	0	%100
61	MOD-SR1	Z	.001	.001	0	%100
62	MOD-SR2	Z	.002	.002	0	%100
63	MOD-SR3	Z	.003	.003	0	%100
64	MP-1	Z	.003	.003	0	%100
65	MP-2	Z	.003	.003	0	%100
66	MP-3	Z	.003	.003	0	%100
67	MP-4	Z	.003	.003	0	%100
68	MP-5	Z	.003	.003	0	%100
69	MP-6	Z	.003	.003	0	%100
70	MP-7	Z	.003	.003	0	%100
71	MP-8	Z	.003	.003	0	%100
72	MP-9	Z	.003	.003	0	%100
73	MP-A	Z	.002	.002	0	%100
74	MP-B	Z	.002	.002	0	%100
75	MP-C	Z	.002	.002	0	%100
76	SF-H1	Z	.004	.004	0	%100
77	SF-H2	Z	.004	.004	0	%100
78	SF-H3	Z	0	0	0	%100
79	SR-1	Z	.001	.001	0	%100
80	SR-2	Z	.002	.002	0	%100
81	SR-3	Z	.003	.003	0	%100
82	CP-1	Z	.005	.005	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
83	CP-2	.002	.002	0	%100
84	CP-3	.003	.003	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	0	0	0	%100
2	CA-2	.004	.004	0	%100
3	CA-3	.004	.004	0	%100
4	FF-H1	0	0	0	%100
5	FF-H2	.005	.005	0	%100
6	FF-H3	.005	.005	0	%100
7	GSC-1	.002	.002	0	%100
8	GSC-2	.005	.005	0	%100
9	GSC-3	.002	.002	0	%100
10	GSI-1	0	0	0	%100
11	GSI-2	.005	.005	0	%100
12	GSI-3	.005	.005	0	%100
13	M55	.005	.005	0	%100
14	M56	.005	.005	0	%100
15	M57	.005	.005	0	%100
16	M58A	.005	.005	0	%100
17	M59A	.005	.005	0	%100
18	M60A	.005	.005	0	%100
19	MOD-SR1	0	0	0	%100
20	MOD-SR2	.003	.003	0	%100
21	MOD-SR3	.003	.003	0	%100
22	MP-1	.003	.003	0	%100
23	MP-2	.003	.003	0	%100
24	MP-3	.003	.003	0	%100
25	MP-4	.003	.003	0	%100
26	MP-5	.003	.003	0	%100
27	MP-6	.003	.003	0	%100
28	MP-7	.003	.003	0	%100
29	MP-8	.003	.003	0	%100
30	MP-9	.003	.003	0	%100
31	MP-A	.003	.003	0	%100
32	MP-B	.003	.003	0	%100
33	MP-C	.003	.003	0	%100
34	SF-H1	.005	.005	0	%100
35	SF-H2	.002	.002	0	%100
36	SF-H3	.002	.002	0	%100
37	SR-1	0	0	0	%100
38	SR-2	.003	.003	0	%100
39	SR-3	.003	.003	0	%100
40	CP-1	.005	.005	0	%100
41	CP-2	0	0	0	%100
42	CP-3	.005	.005	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	-.001	-.001	0	%100
2	CA-2	-.001	-.001	0	%100
3	CA-3	-.002	-.002	0	%100
4	FF-H1	-.002	-.002	0	%100
5	FF-H2	-.003	-.003	0	%100
6	FF-H3	-.001	-.001	0	%100
7	GSC-1	-.002	-.002	0	%100
8	GSC-2	-.002	-.002	0	%100
9	GSC-3	0	0	0	%100
10	GSI-1	-.001	-.001	0	%100
11	GSI-2	-.002	-.002	0	%100
12	GSI-3	-.001	-.001	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	M55	-.002	-.002	0	%100
14	M56	-.002	-.002	0	%100
15	M57	-.002	-.002	0	%100
16	M58A	-.002	-.002	0	%100
17	M59A	-.002	-.002	0	%100
18	M60A	-.002	-.002	0	%100
19	MOD-SR1	-.000935	-.000935	0	%100
20	MOD-SR2	-.001	-.001	0	%100
21	MOD-SR3	-.000727	-.000727	0	%100
22	MP-1	-.001	-.001	0	%100
23	MP-2	-.001	-.001	0	%100
24	MP-3	-.001	-.001	0	%100
25	MP-4	-.001	-.001	0	%100
26	MP-5	-.001	-.001	0	%100
27	MP-6	-.001	-.001	0	%100
28	MP-7	-.001	-.001	0	%100
29	MP-8	-.001	-.001	0	%100
30	MP-9	-.001	-.001	0	%100
31	MP-A	-.001	-.001	0	%100
32	MP-B	-.001	-.001	0	%100
33	MP-C	-.001	-.001	0	%100
34	SF-H1	-.002	-.002	0	%100
35	SF-H2	0	0	0	%100
36	SF-H3	-.002	-.002	0	%100
37	SR-1	-.000871	-.000871	0	%100
38	SR-2	-.001	-.001	0	%100
39	SR-3	-.000718	-.000718	0	%100
40	CP-1	-.002	-.002	0	%100
41	CP-2	-.002	-.002	0	%100
42	CP-3	-.003	-.003	0	%100
43	CA-1	.002	.002	0	%100
44	CA-2	.002	.002	0	%100
45	CA-3	.004	.004	0	%100
46	FF-H1	.003	.003	0	%100
47	FF-H2	.005	.005	0	%100
48	FF-H3	.003	.003	0	%100
49	GSC-1	.003	.003	0	%100
50	GSC-2	.004	.004	0	%100
51	GSC-3	0	0	0	%100
52	GSI-1	.002	.002	0	%100
53	GSI-2	.005	.005	0	%100
54	GSI-3	.002	.002	0	%100
55	M55	.004	.004	0	%100
56	M56	.004	.004	0	%100
57	M57	.004	.004	0	%100
58	M58A	.004	.004	0	%100
59	M59A	.004	.004	0	%100
60	M60A	.004	.004	0	%100
61	MOD-SR1	.001	.001	0	%100
62	MOD-SR2	.003	.003	0	%100
63	MOD-SR3	.002	.002	0	%100
64	MP-1	.003	.003	0	%100
65	MP-2	.003	.003	0	%100
66	MP-3	.003	.003	0	%100
67	MP-4	.003	.003	0	%100
68	MP-5	.003	.003	0	%100
69	MP-6	.003	.003	0	%100
70	MP-7	.003	.003	0	%100
71	MP-8	.003	.003	0	%100
72	MP-9	.003	.003	0	%100
73	MP-A	.002	.002	0	%100
74	MP-B	.002	.002	0	%100
75	MP-C	.002	.002	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
76	SF-H1	.004	.004	0	%100
77	SF-H2	0	0	0	%100
78	SF-H3	.004	.004	0	%100
79	SR-1	.001	.001	0	%100
80	SR-2	.003	.003	0	%100
81	SR-3	.002	.002	0	%100
82	CP-1	.003	.003	0	%100
83	CP-2	.002	.002	0	%100
84	CP-3	.005	.005	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	-0.02	-0.02	0	%100
2	CA-2	-0.00787	-0.00787	0	%100
3	CA-3	-0.03	-0.03	0	%100
4	FF-H1	-0.03	-0.03	0	%100
5	FF-H2	-0.04	-0.04	0	%100
6	FF-H3	-0.00953	-0.00953	0	%100
7	GSC-1	-0.03	-0.03	0	%100
8	GSC-2	-0.02	-0.02	0	%100
9	GSC-3	-0.00839	-0.00839	0	%100
10	GSI-1	-0.03	-0.03	0	%100
11	GSI-2	-0.03	-0.03	0	%100
12	GSI-3	-0.00868	-0.00868	0	%100
13	M55	-0.03	-0.03	0	%100
14	M56	-0.03	-0.03	0	%100
15	M57	-0.03	-0.03	0	%100
16	M58A	-0.03	-0.03	0	%100
17	M59A	-0.03	-0.03	0	%100
18	M60A	-0.03	-0.03	0	%100
19	MOD-SR1	-0.02	-0.02	0	%100
20	MOD-SR2	-0.02	-0.02	0	%100
21	MOD-SR3	-0.00532	-0.00532	0	%100
22	MP-1	-0.02	-0.02	0	%100
23	MP-2	-0.02	-0.02	0	%100
24	MP-3	-0.02	-0.02	0	%100
25	MP-4	-0.02	-0.02	0	%100
26	MP-5	-0.02	-0.02	0	%100
27	MP-6	-0.02	-0.02	0	%100
28	MP-7	-0.02	-0.02	0	%100
29	MP-8	-0.02	-0.02	0	%100
30	MP-9	-0.02	-0.02	0	%100
31	MP-A	-0.02	-0.02	0	%100
32	MP-B	-0.02	-0.02	0	%100
33	MP-C	-0.02	-0.02	0	%100
34	SF-H1	-0.02	-0.02	0	%100
35	SF-H2	-0.00947	-0.00947	0	%100
36	SF-H3	-0.04	-0.04	0	%100
37	SR-1	-0.02	-0.02	0	%100
38	SR-2	-0.02	-0.02	0	%100
39	SR-3	-0.00526	-0.00526	0	%100
40	CP-1	-0.01	-0.01	0	%100
41	CP-2	-0.03	-0.03	0	%100
42	CP-3	-0.04	-0.04	0	%100
43	CA-1	.002	.002	0	%100
44	CA-2	.000794	.000794	0	%100
45	CA-3	.003	.003	0	%100
46	FF-H1	.003	.003	0	%100
47	FF-H2	.004	.004	0	%100
48	FF-H3	.001	.001	0	%100
49	GSC-1	.003	.003	0	%100
50	GSC-2	.002	.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
51	GSC-3	.000782	.000782	0	%100
52	GSI-1	.003	.003	0	%100
53	GSI-2	.004	.004	0	%100
54	GSI-3	.000987	.000987	0	%100
55	M55	.003	.003	0	%100
56	M56	.003	.003	0	%100
57	M57	.003	.003	0	%100
58	M58A	.003	.003	0	%100
59	M59A	.003	.003	0	%100
60	M60A	.003	.003	0	%100
61	MOD-SR1	.002	.002	0	%100
62	MOD-SR2	.002	.002	0	%100
63	MOD-SR3	.000644	.000644	0	%100
64	MP-1	.002	.002	0	%100
65	MP-2	.002	.002	0	%100
66	MP-3	.002	.002	0	%100
67	MP-4	.002	.002	0	%100
68	MP-5	.002	.002	0	%100
69	MP-6	.002	.002	0	%100
70	MP-7	.002	.002	0	%100
71	MP-8	.002	.002	0	%100
72	MP-9	.002	.002	0	%100
73	MP-A	.002	.002	0	%100
74	MP-B	.002	.002	0	%100
75	MP-C	.002	.002	0	%100
76	SF-H1	.003	.003	0	%100
77	SF-H2	.000889	.000889	0	%100
78	SF-H3	.003	.003	0	%100
79	SR-1	.002	.002	0	%100
80	SR-2	.002	.002	0	%100
81	SR-3	.000638	.000638	0	%100
82	CP-1	.001	.001	0	%100
83	CP-2	.003	.003	0	%100
84	CP-3	.004	.004	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,...	Start Location[ft, %]	End Location[ft, %]
1	CA-1	-0.03	-0.03	0	%100
2	CA-2	0	0	0	%100
3	CA-3	-0.03	-0.03	0	%100
4	FF-H1	-0.05	-0.05	0	%100
5	FF-H2	-0.04	-0.04	0	%100
6	FF-H3	0	0	0	%100
7	GSC-1	-0.04	-0.04	0	%100
8	GSC-2	-0.02	-0.02	0	%100
9	GSC-3	-0.02	-0.02	0	%100
10	GSI-1	-0.04	-0.04	0	%100
11	GSI-2	-0.04	-0.04	0	%100
12	GSI-3	0	0	0	%100
13	M55	-0.04	-0.04	0	%100
14	M56	-0.04	-0.04	0	%100
15	M57	-0.04	-0.04	0	%100
16	M58A	-0.04	-0.04	0	%100
17	M59A	-0.04	-0.04	0	%100
18	M60A	-0.04	-0.04	0	%100
19	MOD-SR1	-0.03	-0.03	0	%100
20	MOD-SR2	-0.02	-0.02	0	%100
21	MOD-SR3	0	0	0	%100
22	MP-1	-0.02	-0.02	0	%100
23	MP-2	-0.02	-0.02	0	%100
24	MP-3	-0.02	-0.02	0	%100
25	MP-4	-0.02	-0.02	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
26	MP-5	X	-0.02	-0.02	0	%100
27	MP-6	X	-0.02	-0.02	0	%100
28	MP-7	X	-0.02	-0.02	0	%100
29	MP-8	X	-0.02	-0.02	0	%100
30	MP-9	X	-0.02	-0.02	0	%100
31	MP-A	X	-0.02	-0.02	0	%100
32	MP-B	X	-0.02	-0.02	0	%100
33	MP-C	X	-0.02	-0.02	0	%100
34	SF-H1	X	-0.02	-0.02	0	%100
35	SF-H2	X	-0.02	-0.02	0	%100
36	SF-H3	X	-0.04	-0.04	0	%100
37	SR-1	X	-0.03	-0.03	0	%100
38	SR-2	X	-0.02	-0.02	0	%100
39	SR-3	X	0	0	0	%100
40	CP-1	X	0	0	0	%100
41	CP-2	X	-0.05	-0.05	0	%100
42	CP-3	X	-0.05	-0.05	0	%100
43	CA-1	Z	.002	.002	0	%100
44	CA-2	Z	0	0	0	%100
45	CA-3	Z	.002	.002	0	%100
46	FF-H1	Z	.003	.003	0	%100
47	FF-H2	Z	.003	.003	0	%100
48	FF-H3	Z	0	0	0	%100
49	GSC-1	Z	.002	.002	0	%100
50	GSC-2	Z	.001	.001	0	%100
51	GSC-3	Z	.001	.001	0	%100
52	GSI-1	Z	.002	.002	0	%100
53	GSI-2	Z	.002	.002	0	%100
54	GSI-3	Z	0	0	0	%100
55	M55	Z	.002	.002	0	%100
56	M56	Z	.002	.002	0	%100
57	M57	Z	.002	.002	0	%100
58	M58A	Z	.002	.002	0	%100
59	M59A	Z	.002	.002	0	%100
60	M60A	Z	.002	.002	0	%100
61	MOD-SR1	Z	.001	.001	0	%100
62	MOD-SR2	Z	.002	.002	0	%100
63	MOD-SR3	Z	0	0	0	%100
64	MP-1	Z	.002	.002	0	%100
65	MP-2	Z	.002	.002	0	%100
66	MP-3	Z	.002	.002	0	%100
67	MP-4	Z	.002	.002	0	%100
68	MP-5	Z	.002	.002	0	%100
69	MP-6	Z	.002	.002	0	%100
70	MP-7	Z	.002	.002	0	%100
71	MP-8	Z	.002	.002	0	%100
72	MP-9	Z	.002	.002	0	%100
73	MP-A	Z	.001	.001	0	%100
74	MP-B	Z	.001	.001	0	%100
75	MP-C	Z	.001	.001	0	%100
76	SF-H1	Z	.001	.001	0	%100
77	SF-H2	Z	.001	.001	0	%100
78	SF-H3	Z	.002	.002	0	%100
79	SR-1	Z	.001	.001	0	%100
80	SR-2	Z	.002	.002	0	%100
81	SR-3	Z	0	0	0	%100
82	CP-1	Z	0	0	0	%100
83	CP-2	Z	.002	.002	0	%100
84	CP-3	Z	.003	.003	0	%100

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
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Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
1	FF-H1	Y	-0.003983	-0.006	0	2
2	FF-H1	Y	-0.006	-0.01	2	4
3	FF-H1	Y	-0.01	-0.005	4	6
4	FF-H1	Y	-0.005	-0.005	6	8
5	FF-H1	Y	-0.005	-0.01	8	10
6	FF-H1	Y	-0.01	-0.006	10	12
7	FF-H1	Y	-0.006	-0.003983	12	14
8	GSC-1	Y	-0.002	-0.009	0	1.5
9	GSC-1	Y	-0.009	-0.016	1.5	3
10	GSC-3	Y	-0.002	-0.009	0	1.5
11	GSC-3	Y	-0.009	-0.016	1.5	3
12	GSI-1	Y	-0.008	-0.008	.013	8.791
13	SF-H1	Y	-0.018	-0.018	1.416	2.916
14	FF-H3	Y	-0.003983	-0.006	0	2
15	FF-H3	Y	-0.006	-0.01	2	4
16	FF-H3	Y	-0.01	-0.005	4	6
17	FF-H3	Y	-0.005	-0.005	6	8
18	FF-H3	Y	-0.005	-0.01	8	10
19	FF-H3	Y	-0.01	-0.006	10	12
20	FF-H3	Y	-0.006	-0.003983	12	14
21	GSC-2	Y	-0.002	-0.009	0	1.5
22	GSC-2	Y	-0.009	-0.016	1.5	3
23	GSI-3	Y	-0.008	-0.008	.013	8.791
24	SF-H3	Y	-0.018	-0.018	1.416	2.916
25	FF-H2	Y	-0.003983	-0.006	0	2
26	FF-H2	Y	-0.006	-0.01	2	4
27	FF-H2	Y	-0.01	-0.005	4	6
28	FF-H2	Y	-0.005	-0.005	6	8
29	FF-H2	Y	-0.005	-0.01	8	10
30	FF-H2	Y	-0.01	-0.006	10	12
31	FF-H2	Y	-0.006	-0.003983	12	14
32	GSI-2	Y	-0.008	-0.008	.013	8.791
33	SF-H2	Y	-0.018	-0.018	1.416	2.916

Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]	
1	FF-H1	Y	-0.002655	-0.004	0	2
2	FF-H1	Y	-0.004	-0.006	2	4
3	FF-H1	Y	-0.006	-0.004	4	6
4	FF-H1	Y	-0.004	-0.004	6	8
5	FF-H1	Y	-0.004	-0.006	8	10
6	FF-H1	Y	-0.006	-0.004	10	12
7	FF-H1	Y	-0.004	-0.002655	12	14
8	GSC-1	Y	-0.001	-0.006	0	1.5
9	GSC-1	Y	-0.006	-0.011	1.5	3
10	GSC-3	Y	-0.001	-0.006	0	1.5
11	GSC-3	Y	-0.006	-0.011	1.5	3
12	GSI-1	Y	-0.005	-0.005	.013	8.791
13	SF-H1	Y	-0.012	-0.012	1.416	2.916
14	FF-H3	Y	-0.002655	-0.004	0	2
15	FF-H3	Y	-0.004	-0.006	2	4
16	FF-H3	Y	-0.006	-0.004	4	6
17	FF-H3	Y	-0.004	-0.004	6	8
18	FF-H3	Y	-0.004	-0.006	8	10
19	FF-H3	Y	-0.006	-0.004	10	12
20	FF-H3	Y	-0.004	-0.002655	12	14
21	GSC-2	Y	-0.001	-0.006	0	1.5
22	GSC-2	Y	-0.006	-0.011	1.5	3
23	GSI-3	Y	-0.005	-0.005	.013	8.791
24	SF-H3	Y	-0.012	-0.012	1.416	2.916
25	FF-H2	Y	-0.002655	-0.004	0	2
26	FF-H2	Y	-0.004	-0.006	2	4

APPENDIX D
MOUNT MODIFICATION DESIGN DRAWINGS

MOUNT DESIGN DRAWINGS

SITE NAME:

EAST FARMINGTON

CROWN CASTLE BU NUMBER:

876335

SITE ADDRESS:

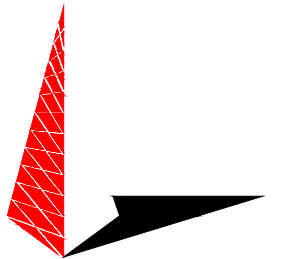
3 A BIRDSEYE ROAD FARMINGTON, CT 06030 (HARTFORD COUNTY) N 41°42'56.94", W 72°48'37.42"

PLANS PREPARED FOR:

CROWN CASTLE

3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

MODIFICATION PROVISIONS

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE MOUNT MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 25672.785549 DATED NOVEMBER 14, 2022 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

INDEX OF SHEETS

NO.	SHEET TITLE	REV
T-1	TITLE SHEET	0
N-1	PROJECT NOTES	0
S-1	MOUNT MODIFICATION SCHEDULE	0
S-2	REINFORCEMENT DETAILS/PARTS	0

PROJECT INFORMATION

TOWER HEIGHT: 139.0-FT
MOUNT ELEVATION: 139.0-FT
MOUNT WIDTH/TYPE: 14.0-FT/PLATFORM W/ SUPPORT RAIL

JDE JOB NO.: 730803
ORDER NO.: 632513 REV. 0

DESIGN BUILDING CODE: 2022 CT STATE BUILDING CODE
DESIGN STANDARD: TIA-222-H

SAFETY CLIMB: 'LOOK UP'



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. MOUNT REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

PROJECT TEAM

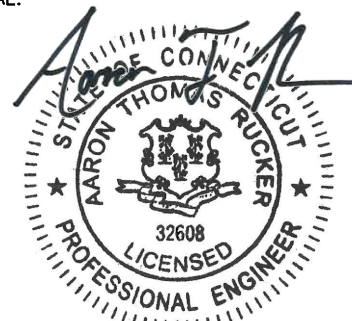
CCI MODIFICATION PROJECT MANAGER:

NAME: CROWN CASTLE
CONTACT: DARCY TARR
PHONE: (704) 405-6589
EMAIL: DARCY.TARR@CROWNCastle.COM

ENGINEERING FIRM PROJECT MANAGER:

NAME: TOWER ENGINEERING PROFESSIONALS, INC.
CONTACT: JORDAN SHELLEY
PHONE: (919) 661-6351
EMAIL: CROWNMA@TEPGROUP.NET

SEAL:



Electronic Copy

November 14, 2022

0 11-14-22 MODIFICATION DRAWINGS

DRAWN BY: MJA CHECKED BY: JCM

SHEET TITLE:

TITLE SHEET

SHEET NUMBER: **T-1** REVISION: **0**
TEP#: 25672.785549

GENERAL NOTES:

1. THE CONTRACT DOCUMENTS ARE THE PROPERTY OF CROWN CASTLE (CROWN). THEY ARE PROVIDED TO THE GC AND ITS LOWER TIER CONTRACTORS AND MATERIAL SUPPLIERS FOR THE LIMITED PURPOSE OF USE IN COMPLETING THE WORK FOR THIS SITE, AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT DISCLOSED TO ANY THIRD PARTIES. THE CONTRACT DOCUMENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF CROWN.
2. DETAIL DRAWINGS, INCLUDING NOTES AND TABLES, SHALL GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. CONTACT THE CROWN POINT OF CONTACT (POC) AND ENGINEER OF RECORD (EOR) FOR CLARIFICATION AS NEEDED.
3. DO NOT SCALE DRAWINGS.
4. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GC AND/OR FABRICATOR. ALL DIMENSIONS OF EXISTING STRUCTURAL ELEMENTS ARE ASSUMED BASED ON THE AVAILABLE DOCUMENTATION AND ARE PRELIMINARY UNTIL FIELD-VERIFIED BY THE GC, UNLESS NOTED OTHERWISE (UNO). WHERE DISCREPANCIES ARE FOUND, GC SHALL CONTACT THE CROWN POC AND EOR THROUGH RFI.
5. FOR THIS ANALYSIS AND MODIFICATION, THE MOUNT HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY STRUCTURAL DEFECTS, UNO. IF THE GC DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE CROWN POC AND EOR IMMEDIATELY.
6. ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS, SHALL BE THE RESPONSIBILITY OF THE GC RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN STANDARD CED-STD-10253, "RIGGING PROGRAM", INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).
7. THE STRUCTURAL INTEGRITY OF THE MODIFICATION DESIGN EXTENDS TO THE COMPLETE CONDITION ONLY. THE GC MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING TOWER HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
8. AERIAL AND UNDERGROUND UTILITIES AND FACILITIES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS. THE GC SHALL TAKE EVERY PRECAUTION TO PRESERVE AND PROTECT THESE ITEMS, WHICH MAY INCLUDE AERIAL OR UNDERGROUND POWER LINES, TELEPHONE LINES, WATER LINES, SEWER LINES, CABLE TELEVISION FACILITIES, PIPELINES, STRUCTURES AND OTHER PUBLIC AND PRIVATE IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA. THE RESPONSIBILITY FOR DETERMINING THE ACTUAL ON-SITE LOCATION OF THESE ITEMS SHALL REST EXCLUSIVELY WITH THE GC.
9. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED, UNO. CONFLICTING NOTES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR AND THE CROWN POC.
10. THE GC SHALL FABRICATE ALL REQUIRED ITEMS PER THE MATERIALS SPECIFIED BELOW, UNO ON THE DETAIL DRAWING SHEETS. IF THE GC FINDS FOR ANY COMPONENT THAT THE MATERIALS HAVE NOT BEEN CLEARLY SPECIFIED, THE GC SHALL SUBMIT AN RFI TO THE EOR TO CONFIRM THE REQUIRED MATERIAL.
11. CONTRACTOR PERSONNEL SHALL NOT DRILL HOLES IN ANY NEW OR EXISTING STRUCTURAL MEMBERS, OTHER THAN THOSE DRILLED HOLES SHOWN ON STRUCTURAL DRAWINGS, WITHOUT THE APPROVAL OF THE EOR.
12. FOR A LIST OF CROWN-APPROVED COLD GALVANIZING COMPOUNDS, REFER TO THE ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
13. ALL EXPOSES STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING BUT NOT LIMITED TO: FIELD DRILLED HOLES, AND SHAFT INTERIORS (WERE ACCESSIBLE), SHALL BE CLEANED AND TWO (2) COATS COLD GALVANIZING SHALL BE APPLIED BY BRUSH IN ACCORDANCE WITH ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
14. ALL TOWER GROUNDING AFFECTED BY THE WORK SHALL BE REPAIRED OR REPLACED IN ACCORDANCE WITH OPS-STD-10090, "TOWER GROUNDING", AND OPS-BUL-10133, "GROUNDING REPAIR RECOMMENDATION".
15. ANY HARDWARE REMOVED FROM THE EXISTING TOWER SHALL BE REPLACED WITH NEW HARDWARE OF EQUAL SIZE AND QUALITY, UNO. NO EXISTING FASTENERS SHALL BE REUSED.
16. ALL JOINTS USING ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS SHALL BE SNUG TIGHTENED, UNO.
17. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED SNUG TIGHTENED ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS.
18. ALL JOINTS ARE BEARING TYPE CONNECTIONS UNO. IF NO BOLT LENGTH IS GIVEN IN THE BILL OF MATERIALS, THE CONNECTION MAY INCLUDE THREADS IN THE SHEAR PLANES, AND THE GC IS RESPONSIBLE FOR SIZING THE LENGTH OF THE BOLT.
19. IF ASTM A325 OR A490 BOLTS, AND/OR THREADED RODS ARE SPECIFIED TO BE PRE-TENSIONED, THESE SHALL BE INSTALLED AND TIGHTENED TO THE PRE-TENSIONED CONDITION ACCORDING TO THE REQUIREMENTS OF THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM HIGH STRENGTH BOLTS.
20. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

PLANS PREPARED FOR:

CROWN CASTLE

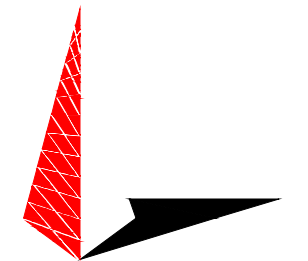
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:

**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**

3 A BIRDSEYE ROAD
FARMINGTON, CT 06030

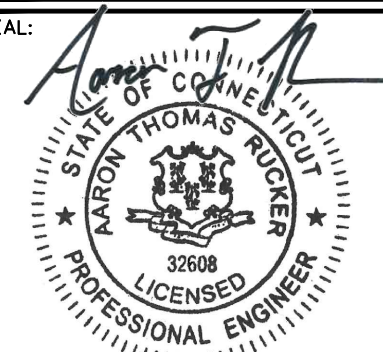
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

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November 14, 2022

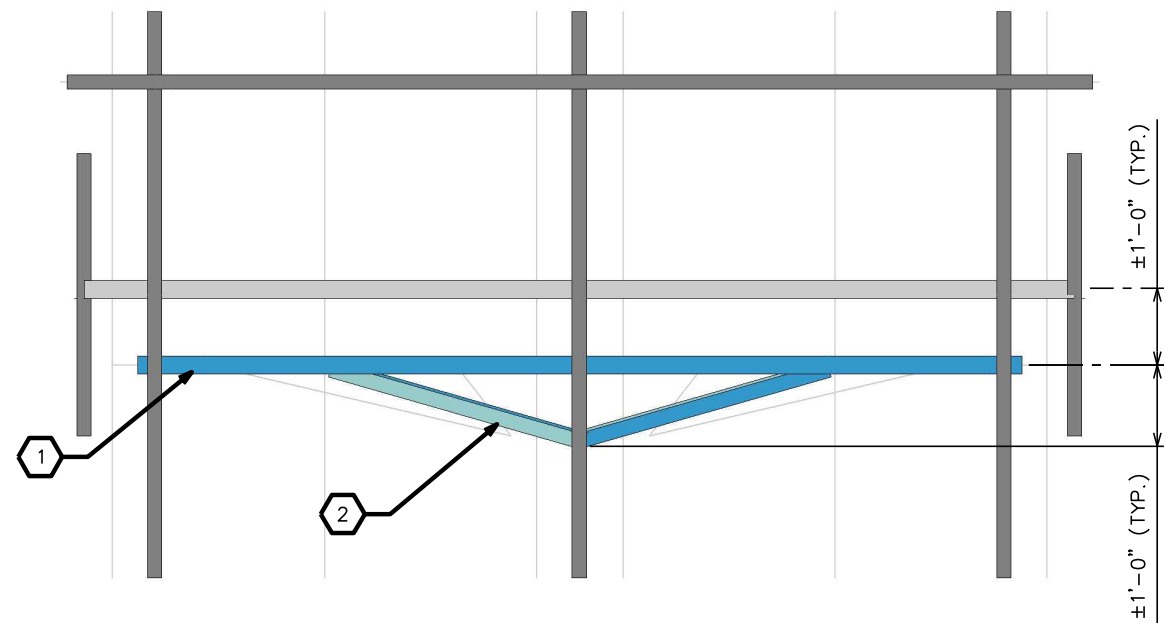
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REV	DATE	ISSUED FOR:

DRAWN BY: MJA | CHECKED BY: JCM

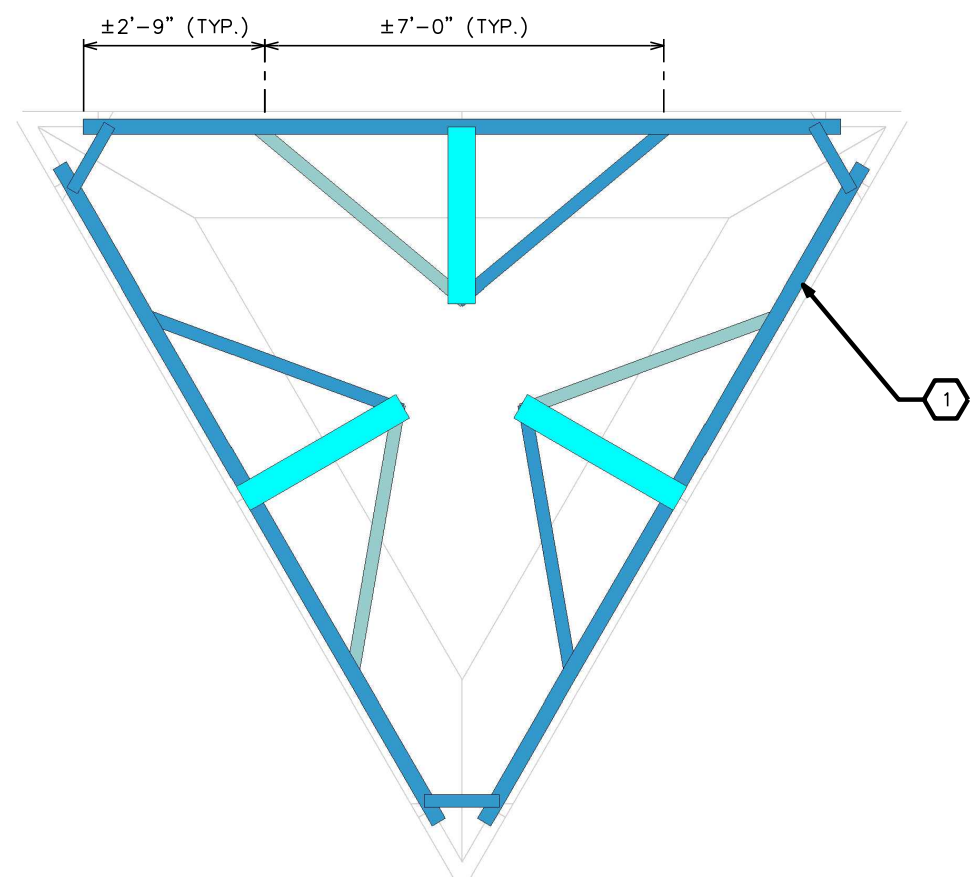
SHEET TITLE:

PROJECT NOTES

SHEET NUMBER: N-1	REVISION: 0
TEP#: 25672.785549	



ELEVATION VIEW



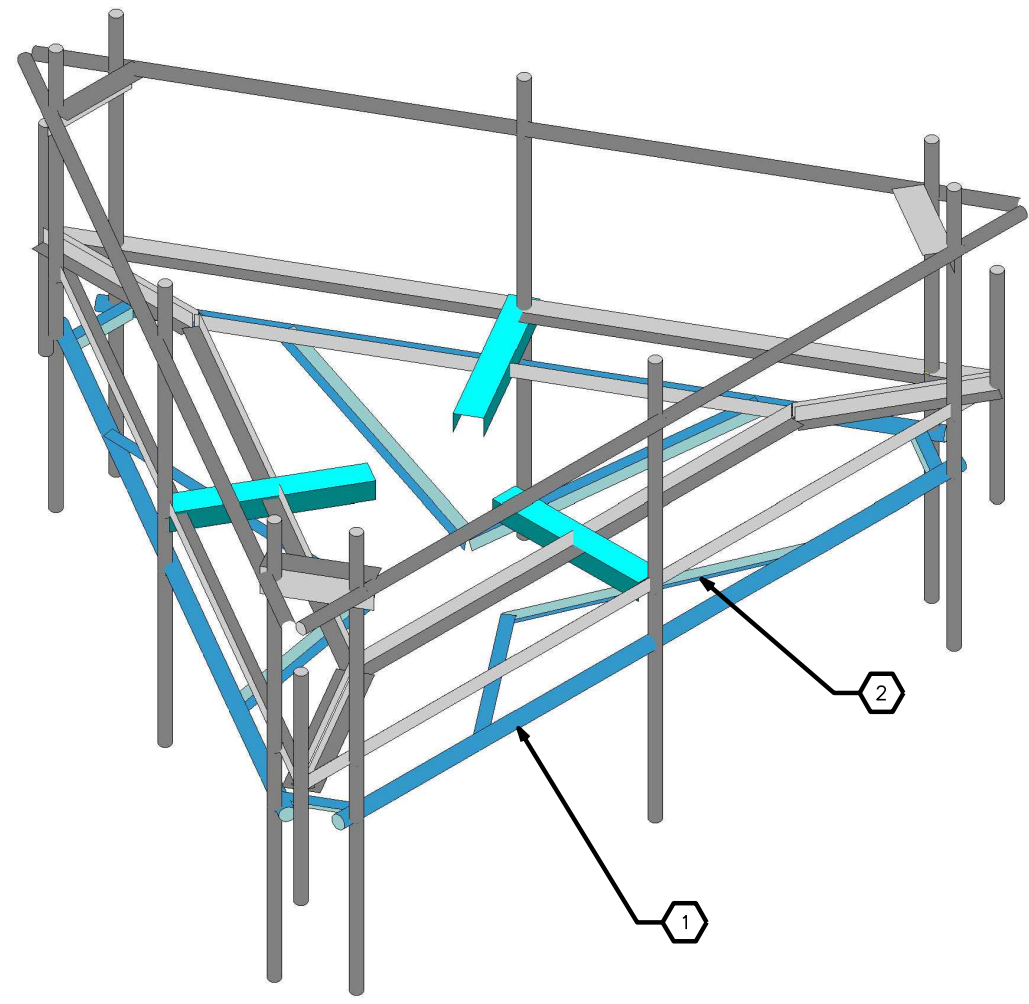
PLAN VIEW

MODIFICATION SCHEDULE

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
1	ADD NEW SUPPORT RAIL. CONNECT TO EXISTING MOUNT PIPES USING INCLUDED HARDWARE.	139	S-2
2	ADD NEW SUPPORT RAIL REINFORCEMENT KIT.	139	S-2

NOTES:

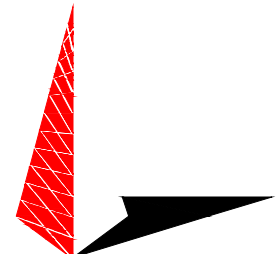
- PRIOR TO FABRICATION, CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. LENGTHS AND QUANTITIES PROVIDED ARE FOR QUOTING PURPOSES ONLY AND SHALL NOT BE USED FOR FABRICATION.
- PROPER FIT-UP OF THE PROPOSED MODIFICATIONS MAY REQUIRE FIELD CUTTING/TRIMMING. CONTACT EOR FOR APPROVAL UNO.

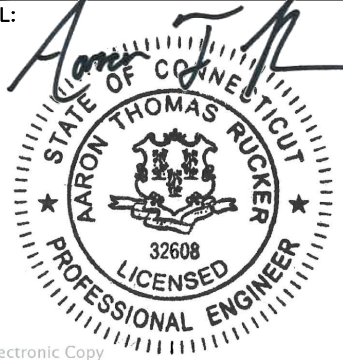


ISOMETRIC VIEW

PLANS PREPARED FOR:
CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:
**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**
3 A BIRDEYE ROAD
FARMINGTON, CT 06030

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

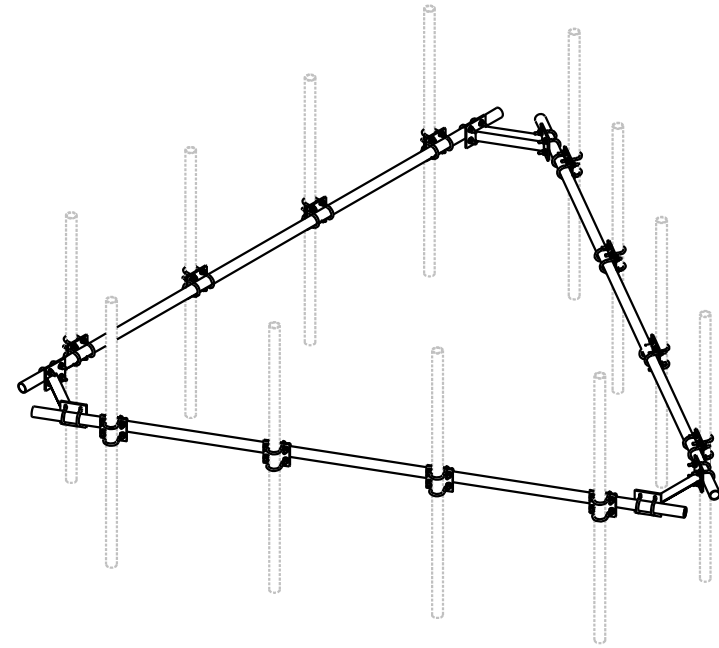
SEAL:

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REV	DATE	ISSUED FOR:
0	11-14-22	MODIFICATION DRAWINGS

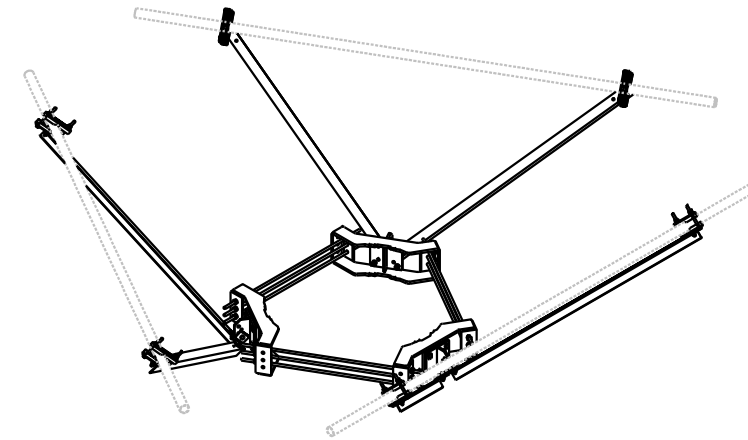
DRAWN BY: MJA | CHECKED BY: JCM

SHEET TITLE:
**MOUNT
MODIFICATION
SCHEDULE**

SHEET NUMBER: **S-1** | REVISION: **0**
TEP#: 25672.785549



1 SITEPRO HRK12 ASSEMBLY
SCALE: N.T.S.



2 SITEPRO PRK-SFS ASSEMBLY
SCALE: N.T.S.

BILL OF MATERIALS			
MANUFACTURER	PART NUMBER	QUANTITY	NOTES
SITEPRO	HRK12	1	1,2
SITEPRO	PRK-SFS	1	1,2

NOTES:

- CONTRACTOR MAY SUBSTITUTE EQUIVALENT PARTS WITH EOR APPROVAL.
- UNO, CONNECTION HARDWARE IS INCLUDED WITH REINFORCEMENT KITS.

PLANS PREPARED FOR:

CROWN CASTLE

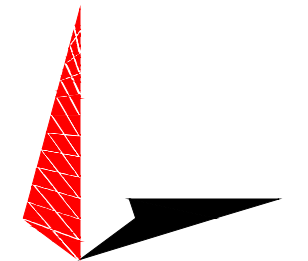
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:

**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**

3 A BIRDSEYE ROAD
FARMINGTON, CT 06030

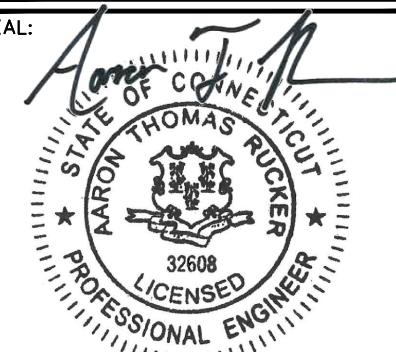
PLANS PREPARED BY:



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326 TRYON ROAD
RALEIGH, NC 27603
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www.tepgroup.net

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November 14, 2022

0	11-14-22	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: MJA | CHECKED BY: JCM

SHEET TITLE:

**REINFORCEMENT
DETAILS/PARTS**

SHEET NUMBER: S-2	REVISION: 0
TEP#: 25672.785549	



FOX HILL TELECOM

Radio Frequency Emissions Analysis Report

T Mobile™

Site ID: CTHA233B

CT233/Global Signal MP
3A Birdseye Road
Farmington, CT 06030

December 15, 2022

Fox Hill Telecom Project Number: 222020

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	12.60 %



December 15, 2022

T-MOBILE
Attn: RF Manager
35 Griffin Road South
Bloomfield, CT 06009

Emissions Analysis for Site: **CTHA233B – CT233/Global Signal MP**

Fox Hill Telecom, Inc (“Fox Hill”) was directed to analyze the proposed upgrades to the T-MOBILE facility located at **3A Birdseye Road, Farmington, CT**, for the purpose of determining whether the emissions from the Proposed T-MOBILE Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

General population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz & 700 MHz bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2500 MHz (BRS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were performed for the proposed upgrades to the T-MOBILE antenna facility located at **3A Birdseye Road, Farmington, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65 for far field modeling calculations.

In OET-65, plane wave power densities in the Far Field of an antenna are calculated by considering antenna gain and reflective waves that would contribute to exposure.

Since the radiation pattern of an antenna has developed in the **Far Field** region the power gain in specific directions needs to be considered in exposure predictions to yield an Effective Radiated Power (ERP) in each specific direction from the antenna. Also, since the vertical radiation pattern of the antenna is considered, the exposure calculations would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels. To determine a worst-case scenario at each point along the calculation radials, each point was calculated using the antenna gain value at each angle of incident and compared against the result using an isotropic radiator at the antenna height with the greater of the two used to yield the more pessimistic far field value for each point along the calculation radial.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential 1.6 times increase in power density in calculating far field power density values.

With these factors Considered, the worst case **Far Field prediction model** utilized in this analysis is determined by the following equation:

Equation 9 per FCC OET65 for Far Field Modeling

$$S = \frac{33.4 \text{ ERP}}{R^2}$$

S = Power Density (in $\mu\text{w}/\text{cm}^2$)

ERP = Effective Radiated Power from antenna (watts)

R = Distance from the antenna (meters)

Predicted far field power density values for all carriers identified in this report were calculated 6 feet above the ground level and are displayed as a percentage of the applicable FCC standards. All emissions values for other carriers were calculated using the same Far Field model outlined above, using industry standard radio configurations and frequency band selection based upon available licenses in this geographic area for emissions contribution estimates.



FOX HILL TELECOM

For each T-Mobile sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
LTE / 5G NR	600 MHz	2	40
LTE	700 MHz	2	20
LTE	1900 MHz (PCS)	4	40
GSM	1900 MHz (PCS)	1	15
LTE	2100 MHz (AWS)	4	40
LTE / 5G NR	2500 MHz (BRS)	8	20

Table 1: Channel Data Table



FOX HILL TELECOM

The following T-Mobile antennas listed in *Table 2* were used in the modeling for transmission in the 600 MHz, 700 MHz, 1900 MHz (PCS), 2100 MHz (AWS) and 2500 MHz (BRS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	RFS APXVAALL24_43-U-NA20	139
A	2	Commscope VV-65A-R1	139
A	3	Ericsson AIR6419 B41	139
B	1	RFS APXVAALL24_43-U-NA20	139
B	2	Commscope VV-65A-R1	139
B	3	Ericsson AIR6419 B41	139
C	1	RFS APXVAALL24_43-U-NA20	139
C	2	Commscope VV-65A-R1	139
C	3	Ericsson AIR6419 B41	139

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.



RESULTS

Per the calculations completed for the proposed T-MOBILE configurations *Table 3* shows resulting emissions power levels and percentages of the FCC’s allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	0.58
Antenna A2	Commscope VV-65A-R1	1900 MHz (PCS) / 2100 MHz (AWS)	15.55 / 16.05	9	335	12,724.61	0.69
Antenna A3	Ericsson AIR6419 B41	2500 MHz (BRS)	21.5	8	160	22,600.60	0.49
Sector A Composite MPE%							1.76
Antenna B1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	0.58
Antenna B2	Commscope VV-65A-R1	1900 MHz (PCS) / 2100 MHz (AWS)	15.55 / 16.05	9	335	12,724.61	0.69
Antenna B3	Ericsson AIR6419 B41	2500 MHz (BRS)	21.5	8	160	22,600.60	0.49
Sector B Composite MPE%							1.76
Antenna C1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	0.58
Antenna C2	Commscope VV-65A-R1	1900 MHz (PCS) / 2100 MHz (AWS)	15.55 / 16.05	9	335	12,724.61	0.69
Antenna C3	Ericsson AIR6419 B41	2500 MHz (BRS)	21.5	8	160	22,600.60	0.49
Sector C Composite MPE%							1.76

Table 3: T-MOBILE Emissions Levels



The Following table (*table 4*) shows all additional identified carriers on site and their emissions contribution estimates, along with the newly calculated maximum T-MOBILE MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three T-Mobile sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each T-MOBILE Sector as well as the composite estimated MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
T-MOBILE – Max Per Sector Value	1.76 %
AT&T	4.19 %
Dish Wireless	2.71 %
Verizon Wireless	3.94 %
Site Total MPE %:	12.60 %

Table 4: All Carrier MPE Contributions

T-MOBILE Sector A Total:	1.76 %
T-MOBILE Sector B Total:	1.76 %
T-MOBILE Sector C Total:	1.76 %
Site Total:	12.60 %

Table 5: Site MPE Summary



Table 6 below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated T-MOBILE sector(s). For this site, all three T-Mobile sectors have the same configuration yielding the same results on all three sectors.

T-MOBILE _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 600 MHz LTE / 5G NR	2	926.96	139	1.64	600 MHz	400	0.41%
T-Mobile 700 MHz LTE	2	485.32	139	0.79	700 MHz	467	0.17%
T-Mobile 1900 MHz (PCS) LTE	4	1,435.69	139	3.30	1900 MHz (PCS)	1000	0.33%
T-Mobile 1900 MHz (PCS) GSM	1	538.38	139	0.30	1900 MHz (PCS)	1000	0.03%
T-Mobile 2100 MHz (AWS) LTE	4	1,610.87	139	3.30	2100 MHz (AWS)	1000	0.33%
T-Mobile 2500 MHz (BRS) LTE / 5G NR	8	2,825.08	139	4.90	2500 MHz (BRS)	1000	0.49%
						Total:	1.76 %

Table 6: T-MOBILE Maximum Sector MPE Power Values



Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the T-MOBILE facility as well as the site composite emissions estimates value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

T-MOBILE Sector	Power Density Value (%)
Sector A:	1.76 %
Sector B:	1.76 %
Sector C:	1.76 %
T-MOBILE Maximum Total (per sector):	1.76 %
Site Total:	12.60 %
Site Compliance Status:	COMPLIANT

The estimated composite MPE value for this site assuming all carriers present is **12.60 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon the far field calculations performed for all carriers identified in this report.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite estimated values calculated were well within the allowable 100% threshold standard per the federal government.

Scott Heffernan
Principal RF Engineer
Fox Hill Telecom, Inc
Worcester, MA 01609
(978)660-3998

MOUNT DESIGN DRAWINGS

SITE NAME:

EAST FARMINGTON

CROWN CASTLE BU NUMBER:

876335

SITE ADDRESS:

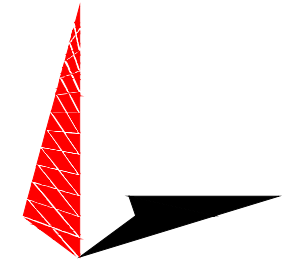
3 A BIRDSEYE ROAD FARMINGTON, CT 06030 (HARTFORD COUNTY) N 41°42'56.94", W 72°48'37.42"

PLANS PREPARED FOR:

CROWN CASTLE

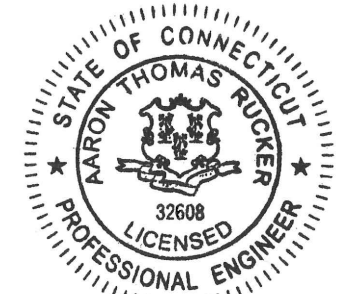
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



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November 14, 2022

0	11-14-22	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: MJA | CHECKED BY: JCM

SHEET TITLE:
TITLE SHEET

SHEET NUMBER: T-1	REVISION: 0 TEP#: 25672.785549
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MODIFICATION PROVISIONS

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE MOUNT MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 25672.785549 DATED NOVEMBER 14, 2022 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

INDEX OF SHEETS

NO.	SHEET TITLE	REV
T-1	TITLE SHEET	0
N-1	PROJECT NOTES	0
S-1	MOUNT MODIFICATION SCHEDULE	0
S-2	REINFORCEMENT DETAILS/PARTS	0

PROJECT INFORMATION

TOWER HEIGHT: 139.0-FT
MOUNT ELEVATION: 139.0-FT
MOUNT WIDTH/TYPE: 14.0-FT/PLATFORM W/ SUPPORT RAIL
JDE JOB NO.: 730803
ORDER NO.: 632513 REV. 0
DESIGN BUILDING CODE: 2022 CT STATE BUILDING CODE
DESIGN STANDARD: TIA-222-H

PROJECT TEAM

CCI MODIFICATION PROJECT MANAGER:
NAME: CROWN CASTLE
CONTACT: DARCY TARR
PHONE: (704) 405-6589
EMAIL: DARCY.TARR@CROWNCastle.COM

ENGINEERING FIRM PROJECT MANAGER:
NAME: TOWER ENGINEERING PROFESSIONALS, INC.
CONTACT: JORDAN SHELLEY
PHONE: (919) 661-6351
EMAIL: CROWNMA@TEPGROUP.NET

SAFETY CLIMB: 'LOOK UP'



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. MOUNT REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

GENERAL NOTES:

1. THE CONTRACT DOCUMENTS ARE THE PROPERTY OF CROWN CASTLE (CROWN). THEY ARE PROVIDED TO THE GC AND ITS LOWER TIER CONTRACTORS AND MATERIAL SUPPLIERS FOR THE LIMITED PURPOSE OF USE IN COMPLETING THE WORK FOR THIS SITE, AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT DISCLOSED TO ANY THIRD PARTIES. THE CONTRACT DOCUMENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF CROWN.
2. DETAIL DRAWINGS, INCLUDING NOTES AND TABLES, SHALL GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. CONTACT THE CROWN POINT OF CONTACT (POC) AND ENGINEER OF RECORD (EOR) FOR CLARIFICATION AS NEEDED.
3. DO NOT SCALE DRAWINGS.
4. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GC AND/OR FABRICATOR. ALL DIMENSIONS OF EXISTING STRUCTURAL ELEMENTS ARE ASSUMED BASED ON THE AVAILABLE DOCUMENTATION AND ARE PRELIMINARY UNTIL FIELD-VERIFIED BY THE GC, UNLESS NOTED OTHERWISE (UNO). WHERE DISCREPANCIES ARE FOUND, GC SHALL CONTACT THE CROWN POC AND EOR THROUGH RFI.
5. FOR THIS ANALYSIS AND MODIFICATION, THE MOUNT HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY STRUCTURAL DEFECTS, UNO. IF THE GC DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE CROWN POC AND EOR IMMEDIATELY.
6. ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS, SHALL BE THE RESPONSIBILITY OF THE GC RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN STANDARD CED-STD-10253, "RIGGING PROGRAM", INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).
7. THE STRUCTURAL INTEGRITY OF THE MODIFICATION DESIGN EXTENDS TO THE COMPLETE CONDITION ONLY. THE GC MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING TOWER HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
8. AERIAL AND UNDERGROUND UTILITIES AND FACILITIES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS. THE GC SHALL TAKE EVERY PRECAUTION TO PRESERVE AND PROTECT THESE ITEMS, WHICH MAY INCLUDE AERIAL OR UNDERGROUND POWER LINES, TELEPHONE LINES, WATER LINES, SEWER LINES, CABLE TELEVISION FACILITIES, PIPELINES, STRUCTURES AND OTHER PUBLIC AND PRIVATE IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA. THE RESPONSIBILITY FOR DETERMINING THE ACTUAL ON-SITE LOCATION OF THESE ITEMS SHALL REST EXCLUSIVELY WITH THE GC.
9. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED, UNO. CONFLICTING NOTES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR AND THE CROWN POC.
10. THE GC SHALL FABRICATE ALL REQUIRED ITEMS PER THE MATERIALS SPECIFIED BELOW, UNO ON THE DETAIL DRAWING SHEETS. IF THE GC FINDS FOR ANY COMPONENT THAT THE MATERIALS HAVE NOT BEEN CLEARLY SPECIFIED, THE GC SHALL SUBMIT AN RFI TO THE EOR TO CONFIRM THE REQUIRED MATERIAL.
11. CONTRACTOR PERSONNEL SHALL NOT DRILL HOLES IN ANY NEW OR EXISTING STRUCTURAL MEMBERS, OTHER THAN THOSE DRILLES HOLES SHOWN ON STRUCTURAL DRAWINGS, WITHOUT THE APPROVAL OF THE EOR.
12. FOR A LIST OF CROWN-APPROVED COLD GALVANIZING COMPOUNDS, REFER TO THE ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
13. ALL EXPOSES STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING BUT NOT LIMITED TO: FIELD DRILLED HOLES, AND SHAFT INTERIORS (WERE ACCESSIBLE), SHALL BE CLEANED AND TWO (2) COATS COLD GALVANIZING SHALL BE APPLIED BY BRUSH IN ACCORDANCE WITH ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
14. ALL TOWER GROUNDING AFFECTED BY THE WORK SHALL BE REPAIRED OR REPLACED IN ACCORDANCE WITH OPS-STD-10090, "TOWER GROUNDING", AND OPS-BUL-10133, "GROUNDING REPAIR RECOMMENDATION".
15. ANY HARDWARE REMOVED FROM THE EXISTING TOWER SHALL BE REPLACED WITH NEW HARDWARE OF EQUAL SIZE AND QUALITY, UNO. NO EXISTING FASTENERS SHALL BE REUSED.
16. ALL JOINTS USING ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS SHALL BE SNUG TIGHTENED, UNO.
17. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED SNUG TIGHTENED ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS.
18. ALL JOINTS ARE BEARING TYPE CONNECTIONS UNO. IF NO BOLT LENGTH IS GIVEN IN THE BILL OF MATERIALS, THE CONNECTION MAY INCLUDE THREADS IN THE SHEAR PLANES, AND THE GC IS RESPONSIBLE FOR SIZING THE LENGTH OF THE BOLT.
19. IF ASTM A325 OR A490 BOLTS, AND/OR THREADED RODS ARE SPECIFIED TO BE PRE-TENSIONED, THESE SHALL BE INSTALLED AND TIGHTENED TO THE PRE-TENSIONED CONDITION ACCORDING TO THE REQUIREMENTS OF THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM HIGH STRENGTH BOLTS.
20. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

PLANS PREPARED FOR:

CROWN CASTLE

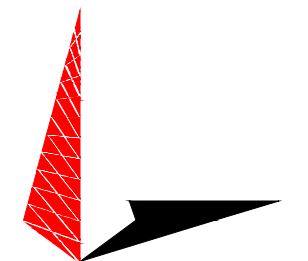
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:

**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**

3 A BIRDSEYE ROAD
FARMINGTON, CT 06030

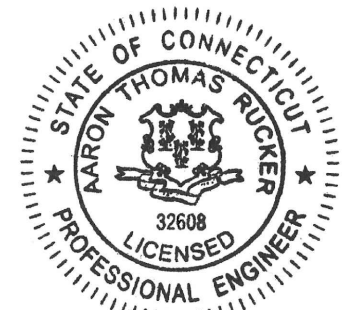
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



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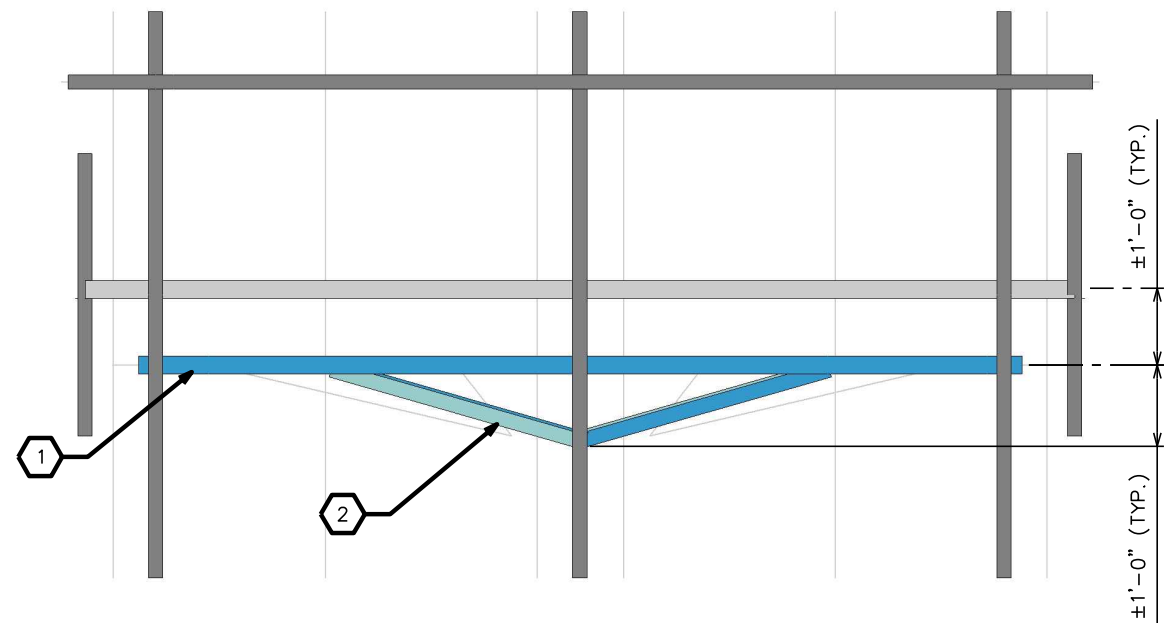
November 14, 2022

0	11-14-22	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

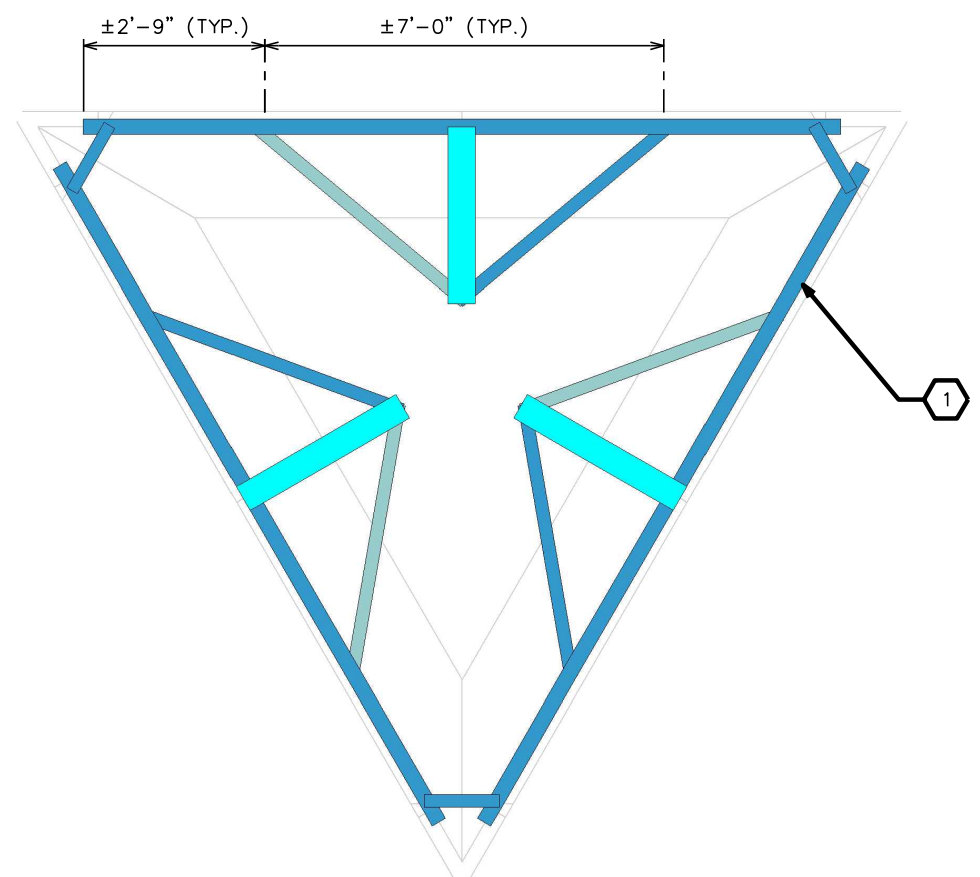
DRAWN BY: MJA | CHECKED BY: JCM

SHEET TITLE:
PROJECT NOTES

SHEET NUMBER: N-1	REVISION: 0
	TEP#: 25672.785549



ELEVATION VIEW



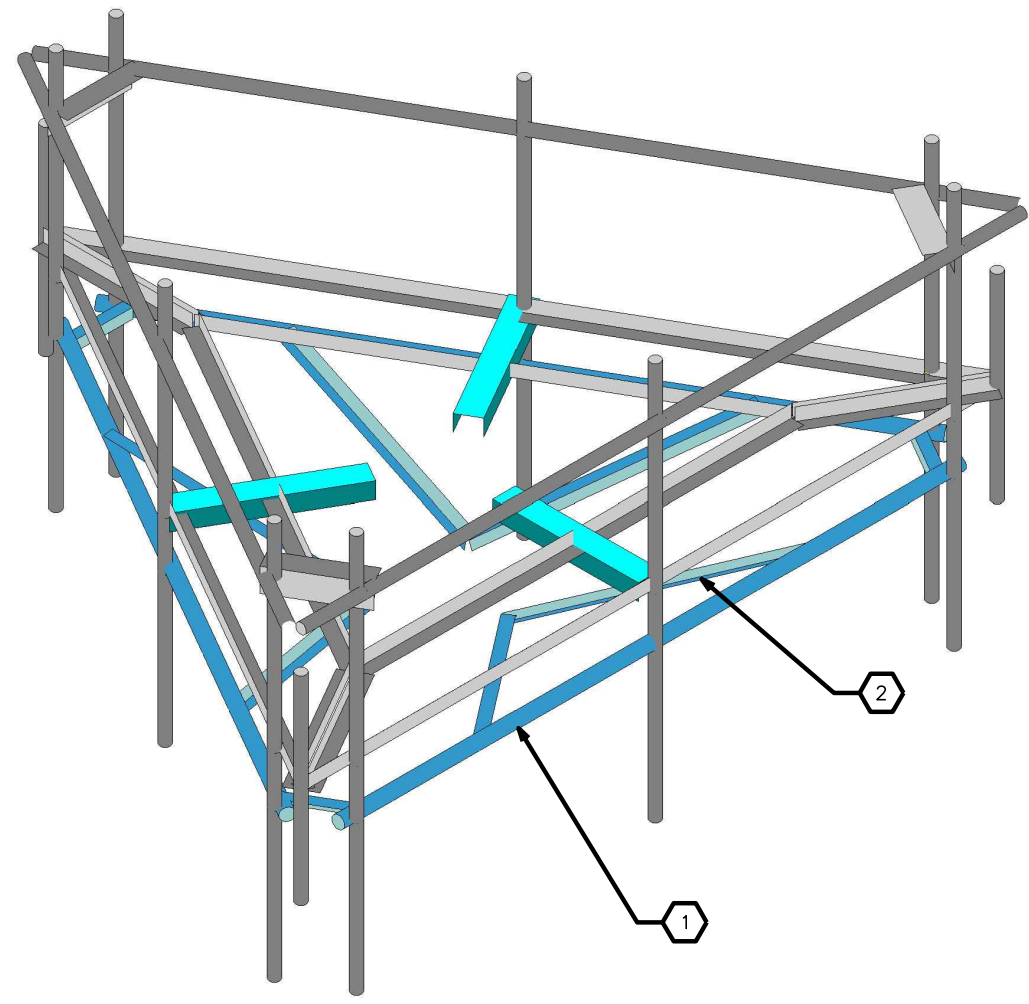
PLAN VIEW

MODIFICATION SCHEDULE

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
1	ADD NEW SUPPORT RAIL. CONNECT TO EXISTING MOUNT PIPES USING INCLUDED HARDWARE.	139	S-2
2	ADD NEW SUPPORT RAIL REINFORCEMENT KIT.	139	S-2

NOTES:

- PRIOR TO FABRICATION, CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. LENGTHS AND QUANTITIES PROVIDED ARE FOR QUOTING PURPOSES ONLY AND SHALL NOT BE USED FOR FABRICATION.
- PROPER FIT-UP OF THE PROPOSED MODIFICATIONS MAY REQUIRE FIELD CUTTING/TRIMMING. CONTACT EOR FOR APPROVAL UNO.



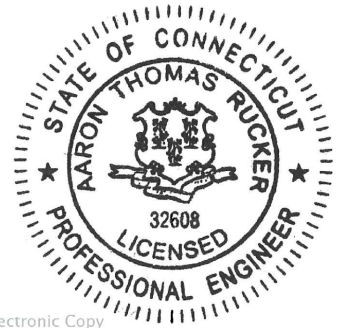
ISOMETRIC VIEW

PLANS PREPARED FOR:
CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:
**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**
3 A BIRDEYE ROAD
FARMINGTON, CT 06030

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
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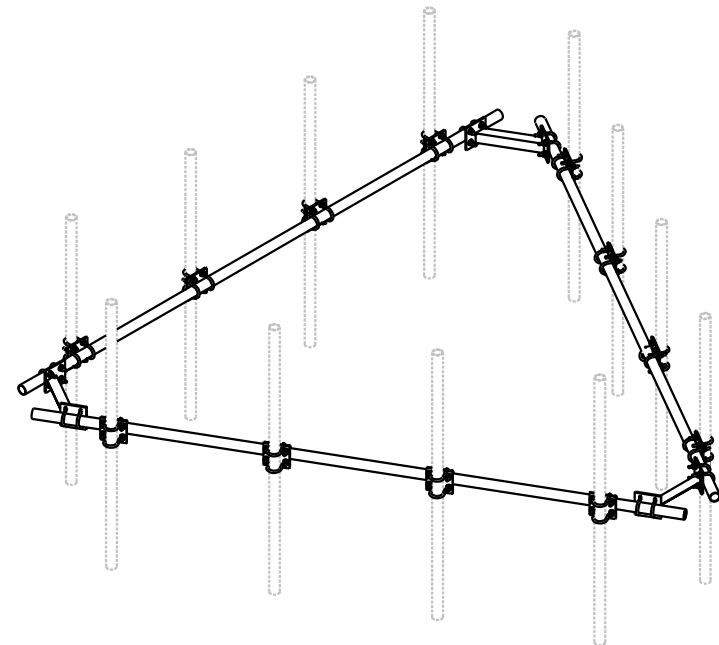
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November 14, 2022

REV	DATE	ISSUED FOR:
0	11-14-22	MODIFICATION DRAWINGS

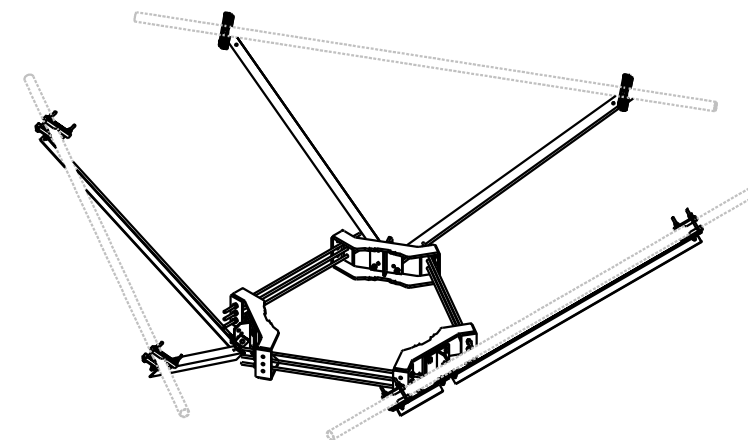
DRAWN BY: MJA | CHECKED BY: JCM

SHEET TITLE:
**MOUNT
MODIFICATION
SCHEDULE**

SHEET NUMBER: **S-1** | REVISION: **0**
TEP#: 25672.785549



1 SITEPRO HRK12 ASSEMBLY
SCALE: N.T.S.



2 SITEPRO PRK-SFS ASSEMBLY
SCALE: N.T.S.

BILL OF MATERIALS			
MANUFACTURER	PART NUMBER	QUANTITY	NOTES
SITEPRO	HRK12	1	1,2
SITEPRO	PRK-SFS	1	1,2

NOTES:

- CONTRACTOR MAY SUBSTITUTE EQUIVALENT PARTS WITH EOR APPROVAL.
- UNO, CONNECTION HARDWARE IS INCLUDED WITH REINFORCEMENT KITS.

PLANS PREPARED FOR:

CROWN CASTLE

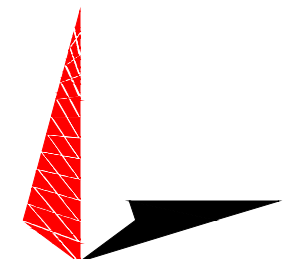
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PROJECT INFORMATION:

**EAST FARMINGTON
BU #: 876335
CARRIER: T-MOBILE**

3 A BIRDSEYE ROAD
FARMINGTON, CT 06030

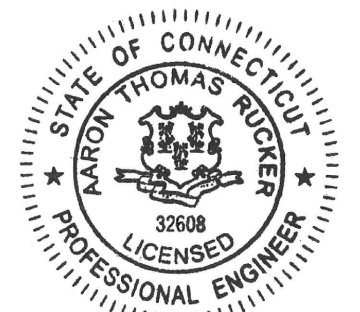
PLANS PREPARED BY:



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November 14, 2022

REV	DATE	ISSUED FOR:
0	11-14-22	MODIFICATION DRAWINGS

DRAWN BY: MJA CHECKED BY: JCM

SHEET TITLE:

**REINFORCEMENT
DETAILS/PARTS**

SHEET NUMBER: S-2	REVISION: 0
TEP#: 25672.785549	

T-Mobile

T-MOBILE SITE NUMBER: 386591
T-MOBILE SITE NAME: CT233/GLOBAL SIGNAL MP
T-MOBILE PROJECT: SPRINT KEEP - DRS
T-MOBILE CONFIGURATION: 67D5D998E OUTDOOR
T-MOBILE RFDS VERSION: 8, DATED 08/31/2022

BUSINESS UNIT #: 876335
SITE ADDRESS: 130 BIRDSEYE ROAD
FARMINGTON, CT 06032
COUNTY: HARTFORD
SITE TYPE: MONOPOLE
TOWER HEIGHT: 139'-0"

T-Mobile
 2105 WATER RIDGE PARKWAY SUITE 400
 CHARLOTTE, NC 28217

CROWN CASTLE
 3530 TORINGDON WAY, SUITE 300
 CHARLOTTE, NC 28277

PM&A
 P. MARSHALL & ASSOCIATES
 3545 WHITEHALL PARK DRIVE
 SUITE 450 CHARLOTTE,
 NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
 386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
 FARMINGTON, CT, 06032

EXISTING 139'-0"
 MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM
1	01/05/2023	RLB	AZIMUTH FIX	JTM
2	01/10/2023	RLB	CABINET LOCATION	JTM

SITE INFORMATION

CROWN CASTLE USA INC.
 SITE NAME: EAST FARMINGTON
 BU NUMBER: 876335

TOWER OWNER: CROWN CASTLE
 2000 CORPORATE DRIVE
 CANONSBURG, PA 15317

CARRIER/APPLICANT: T-MOBILE
 35 GRIFFIN ROAD
 BLOOMFIELD, CT 06002

SITE ADDRESS: 130 BIRDSEYE ROAD
 FARMINGTON, CT 06032
COUNTY: HARTFORD

LATITUDE: 41.719178°
LONGITUDE: -72.809727°
LAT/LONG TYPE: NAD83
GROUND ELEVATION: 406.8' AMSL

AREA OF CONSTRUCTION: EXISTING
CURRENT ZONING: R80
MAP/PARCEL #: 01358040

OCCUPANCY CLASSIFICATION: U
TYPE OF CONSTRUCTION: IIB
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

PROPERTY OWNER: GOIS HOLDINGS OF CONNECTICUT
 125 BROOKSIDE DR
 UXBRIDGE, MA 01569

JURISDICTION: HARTFORD COUNTY

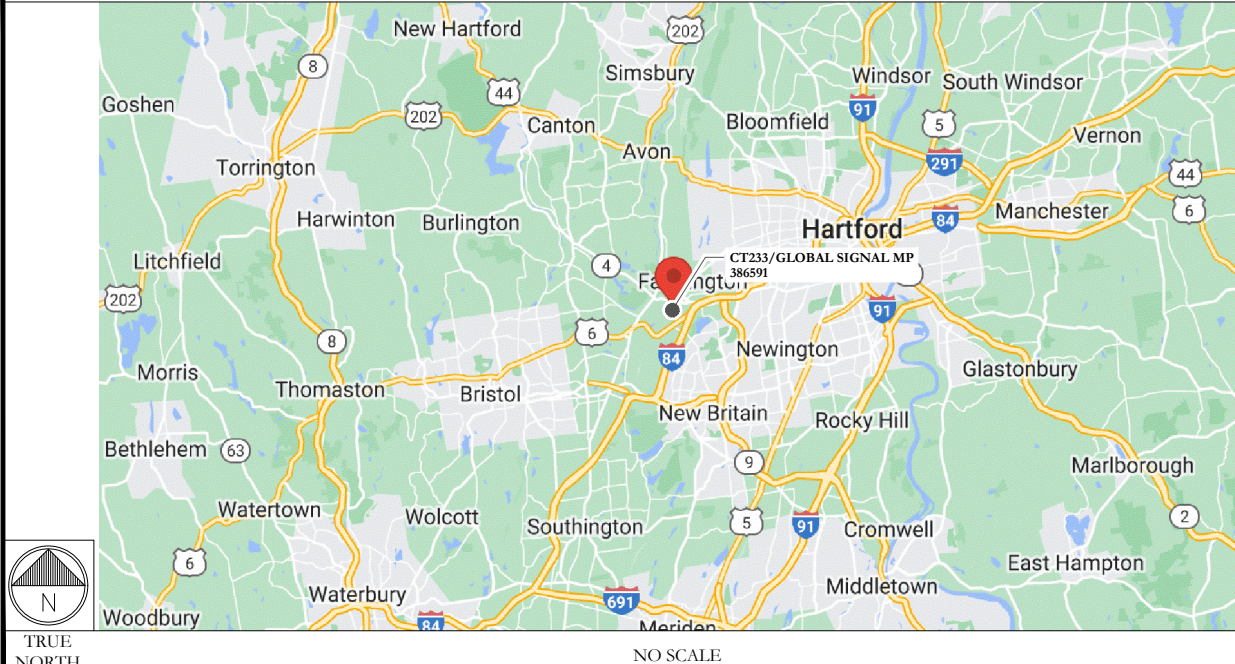
ELECTRIC PROVIDER: NORTHEAST UTILITIES
 800-286-2000

TELCO PROVIDER: LIGHTTOWER
 888-583-4237

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
GN-1	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING AND FINAL EQUIPMENT PLANS
C-2	EXISTING AND FINAL ELEVATION
C-3	ANTENNA PLANS AND SCHEDULE
C-4	MOUNTING DETAILS
C-5	TOWER EQUIPMENT SPECIFICATIONS
C-6	CONSTRUCTION DETAILS
C-7	RF SPECIFICATIONS
C-8	CABINET SPECIFICATIONS
C-9	H-FRAME DETAILS & EQUIPMENT SPECIFICATIONS
E-1	PANEL SCHEDULES & ONE-LINE DIAGRAM
E-2	T-MOBILE ELECTRICAL & GROUNDING SITE PLAN
E-3	COLOR CODING CHART
G-1	TYPICAL GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
APPENDIX	MOUNT MODIFICATION DRAWINGS

LOCATION MAP



TRUE NORTH

NO SCALE

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

- TOWER SCOPE OF WORK:**
- REMOVE (3) AIR21 KRC118023-1_B2P_B4A ANTENNAS
 - REMOVE (3) APXVAARR24_43-U-NA20 ANTENNAS
 - REMOVE (3) 4449 RRU's
 - REMOVE (3) GENERIC TWIN STYLE 1B AWSTMAS
 - REMOVE (1) 9X18 HYBRID CABLES
 - REMOVE (1) 6X12 HYBRID CABLES
 - INSTALL (3) 6X24 4AWG HYBRID CABLES
 - INSTALL (1) SITE PRO 1 PRK-SFS SUPPORT RAIL REINFORCEMENT KIT
 - INSTALL (1) SITE PRO 1 HRK12 SUPPORT RAIL KIT
 - INSTALL (3) ERICSSON 6419 B41 ANTENNAS
 - INSTALL (3) APXVAALL24_43-U-NA20 ANTENNAS
 - INSTALL (3) COMMSCOPE VV-65A-R1 ANTENNAS
 - INSTALL (3) ERICSSON 4460 RRU's
 - INSTALL (3) ERICSSON 4480 RRU's

- GROUND SCOPE OF WORK:**
- REMOVE EXISTING 6131 CABINET
 - REMOVE EXISTING BATTERY BACKUP SYSTEM
 - INSTALL 6160 AND B160 CABINETS
 - INSTALL EQUIPMENT INTO 6160 CABINET: (1) RP 6651, (2) PSU 4813 vR4A, (1) CSR IXRe V2 ROUTER
 - INSTALL 150AMP/2P BREAKER FOR 6160
 - INSTALL 20AMP/1P BREAKER FOR GFCI
 - RELOCATE 6131 EQUIPMENT TO 6160: (2) BB6630, (1) DUG20

PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER.

APPLICABLE CODES & REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2022 CT STATE BUILDING CODE (IBC 2021)
MECHANICAL	2022 CT STATE MECHANICAL CODE (IMC 2021)
ELECTRICAL	2017 ELECTRICAL CODE - NFPA 70

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: N/A
 DATED: N/A

MOUNT ANALYSIS: TEP # 25672.785549
 DATED: 11/14/2022

RFDS REVISION: 8
 SITE CONFIGURATION: 67D5D998E OUTDOOR
 DATED: 08/31/2022

ORDER ID: 632513
 REVISION: 0

PM&A PROJECT NUMBER: 22CCTCTM-0002

INSTALLER NOTE:

NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT MODIFICATIONS ARE INSTALLED PER MOUNT ANALYSIS BY TEP # 25672.785549 DATED 11/14/2022.

PROJECT TEAM

A&E FIRM: P. MARSHALL & ASSOCIATES, LLC.
 3545 WHITEHALL PARK DRIVE, SUITE 450
 CHARLOTTE, NC 28273
 SENIOR ENGINEER - PATRICK W. MARSHALL, P.E.
 PROJECT ENGINEER - TREVOR MCALLISTER
 478-542-3291

CROWN CASTLE USA INC. DISTRICT CONTACTS: 2000 CORPORATE DRIVE
 CANONSBURG, PA 15317

TRICIA PELON - PROJECT MANAGER
 TRICIA.PELON@CROWNCastle.COM

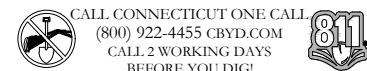
N/A - CONSTRUCTION MANAGER
 N/A

JENNIFER MERSING - AES
 724-416-0884

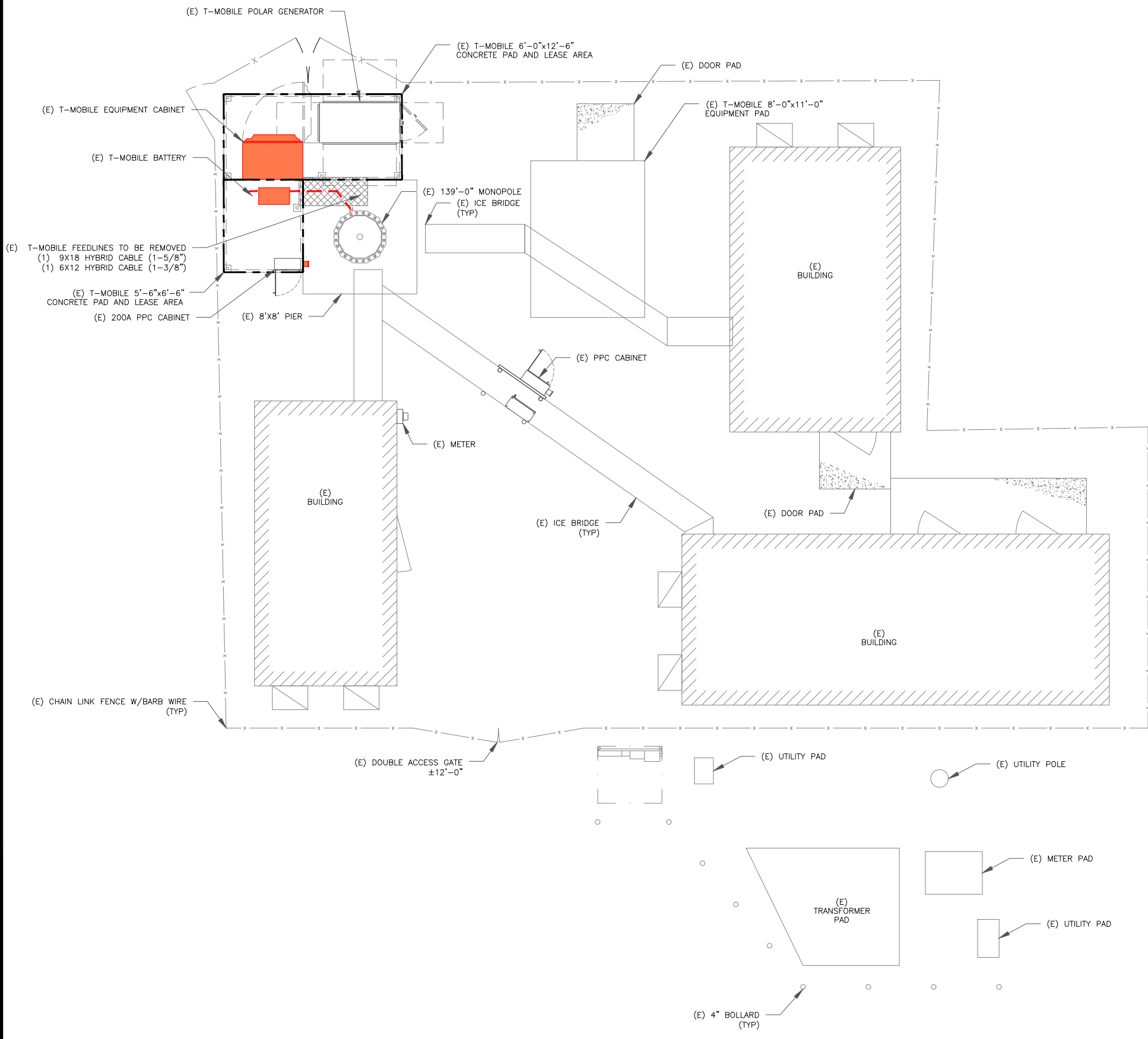
FLOODPLAIN INFORMATION

THIS SITE IS NOT IN ANY SPECIAL FLOOD HAZARD AREAS OR FUTURE CONDITIONS FLOOD HAZARD AREAS, AS SHOWN ON:
 FIRM PANEL(S): 09003C0481F
 EFFECTIVE DATE(S): 09/26/2008

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 22X34. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



SHEET NUMBER: T-1
REVISION: 2



EQUIPMENT LEGEND:

	EXISTING
	TO BE RELOCATED/REMOVED

- ### GENERAL NOTES
- ALL MATERIAL AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY. FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND OF QUALITY OF MATERIAL AND EQUIPMENT BEING SUBSTITUTED.
 - ACCESS TO PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS WITH THE LEASING AGENT FOR APPROVAL.
 - CONTRACTOR SHALL HAVE PRESENT ON SITE CURRENT CARRIER SUPPLIED INFORMATION PRIOR TO COMMENCE OF WORK; IE. RFDS, DESIGN DOCUMENTS SPECIFIC TO SITE AND CONFIGURATION. NOTIFY CONSTRUCTION MANAGER OF ANY DISCREPANCY PRIOR TO ARRIVAL AT SITE.
 - ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTION SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
 - ALL DAMAGE TO EXISTING UNDERGROUND, OVERHEAD OBSTACLES AND/OR EXISTING EQUIPMENT, PAD OR SHELTERS SHALL BE REPLACED BACK TO FULL ORIGINAL OR BETTER CONDITION & SHALL MATCH EXISTING CONDITIONS BY REPAIRS AT GENERAL CONTRACTOR EXPENSE.
 - THE EXISTING TREES AND VEGETATION ARE SUFFICIENT TO PROVIDE THE REQUIRED SCREENING PER LOCAL ORDINANCE. IF THE VEGETATION IS REMOVED OR DAMAGED, NEW LANDSCAPING/ SCREENING WILL BE INSTALLED TO MEET LOCAL ORDINANCE REQUIREMENTS. REPLACE DEAD OR DYING SHRUBS AS NEEDED. REPLACEMENT SHOULD BE DONE IN THE FALL WHEN WEATHER IS COOLER.

T-Mobile
 2105 WATER RIDGE PARKWAY SUITE 400
 CHARLOTTE, NC 28217

CROWN CASTLE
 3530 TORINGDON WAY, SUITE 300
 CHARLOTTE, NC 28277

PM&A
 P. MARSHALL & ASSOCIATES
 3545 WHITEHALL PARK DRIVE
 SUITE 450 CHARLOTTE,
 NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
 386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
 FARMINGTON, CT, 06032

EXISTING 139'-0"
 MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM
1	01/05/2023	RLB	AZIMUTH FIX	JTM
2	01/10/2023	RLB	CABINET LOCATION	JTM



PRESTON E. HUMPHRIES
 No. 34370
 LICENSED PROFESSIONAL ENGINEER

01/11/2023

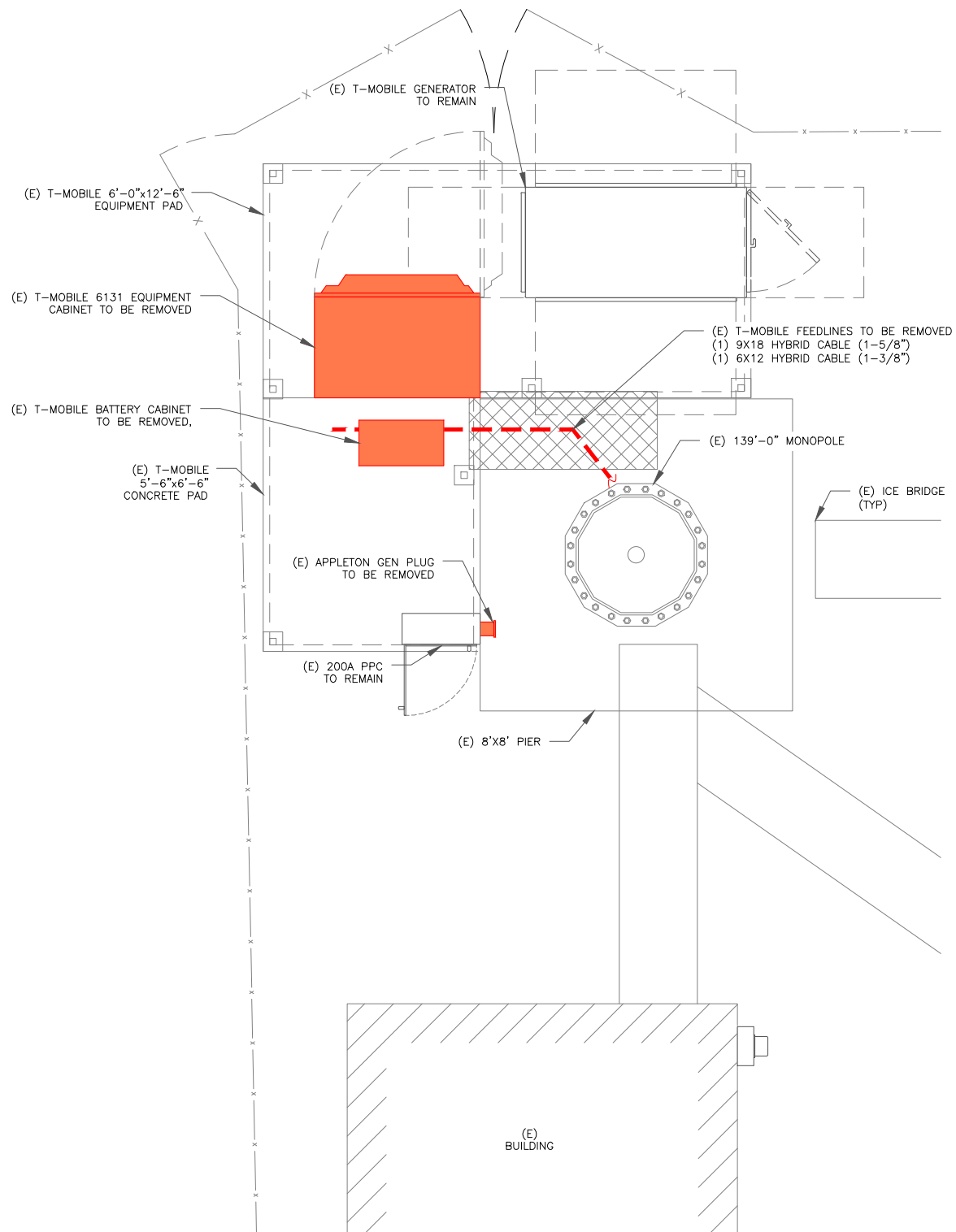
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

1 SITE PLAN
 SCALE: 1/4"=1'-0" (FULL SIZE)
 1/8"=1'-0" (11x17)

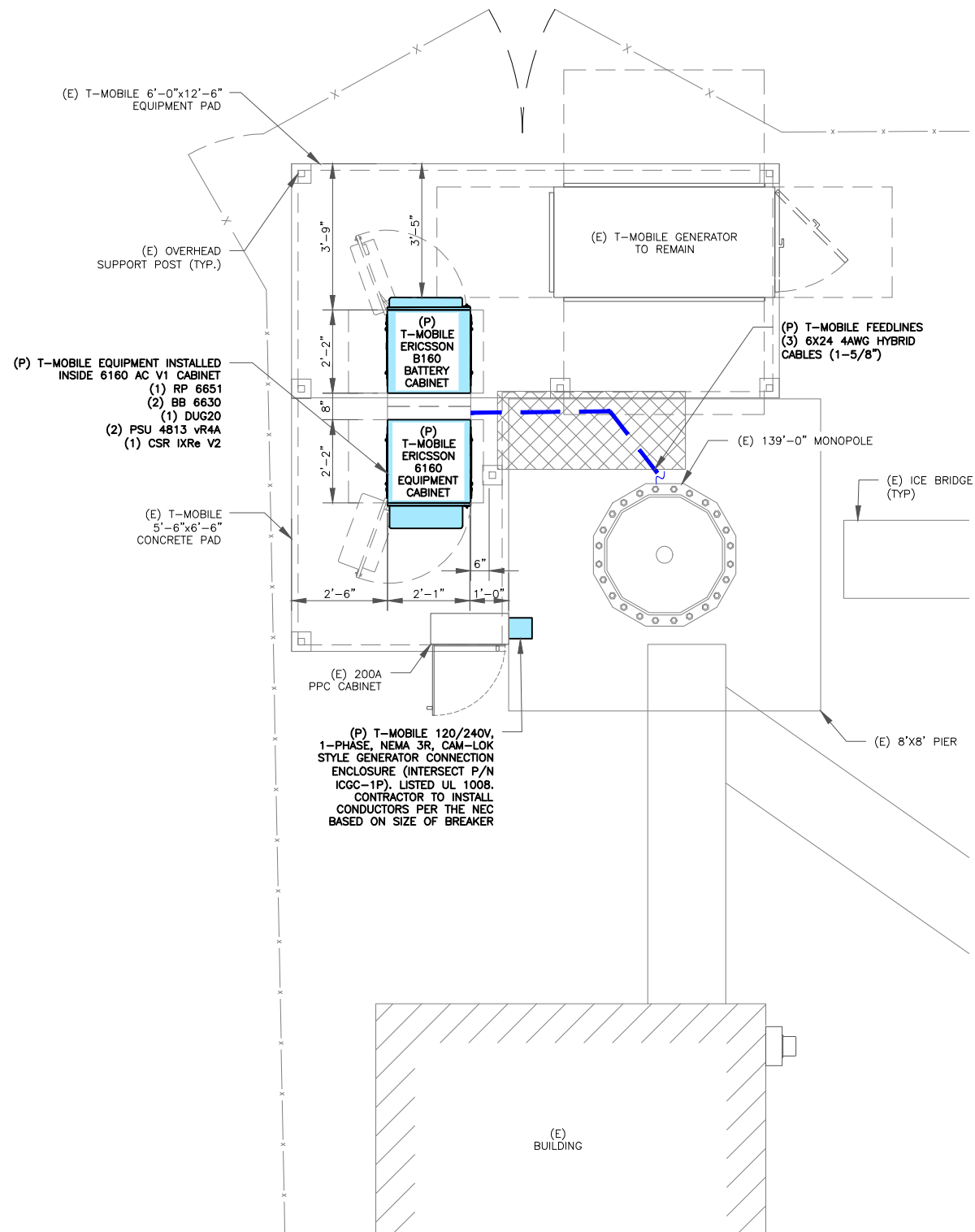


EQUIPMENT LEGEND:

- EXISTING
- TO BE RELOCATED/REMOVED
- NEW/RELOCATED



1 EXISTING EQUIPMENT PLAN
SCALE: 1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)



2 FINAL EQUIPMENT PLAN
SCALE: 1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)



T-Mobile

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386591

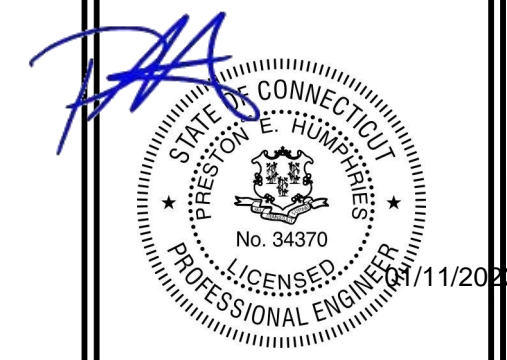
BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
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EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

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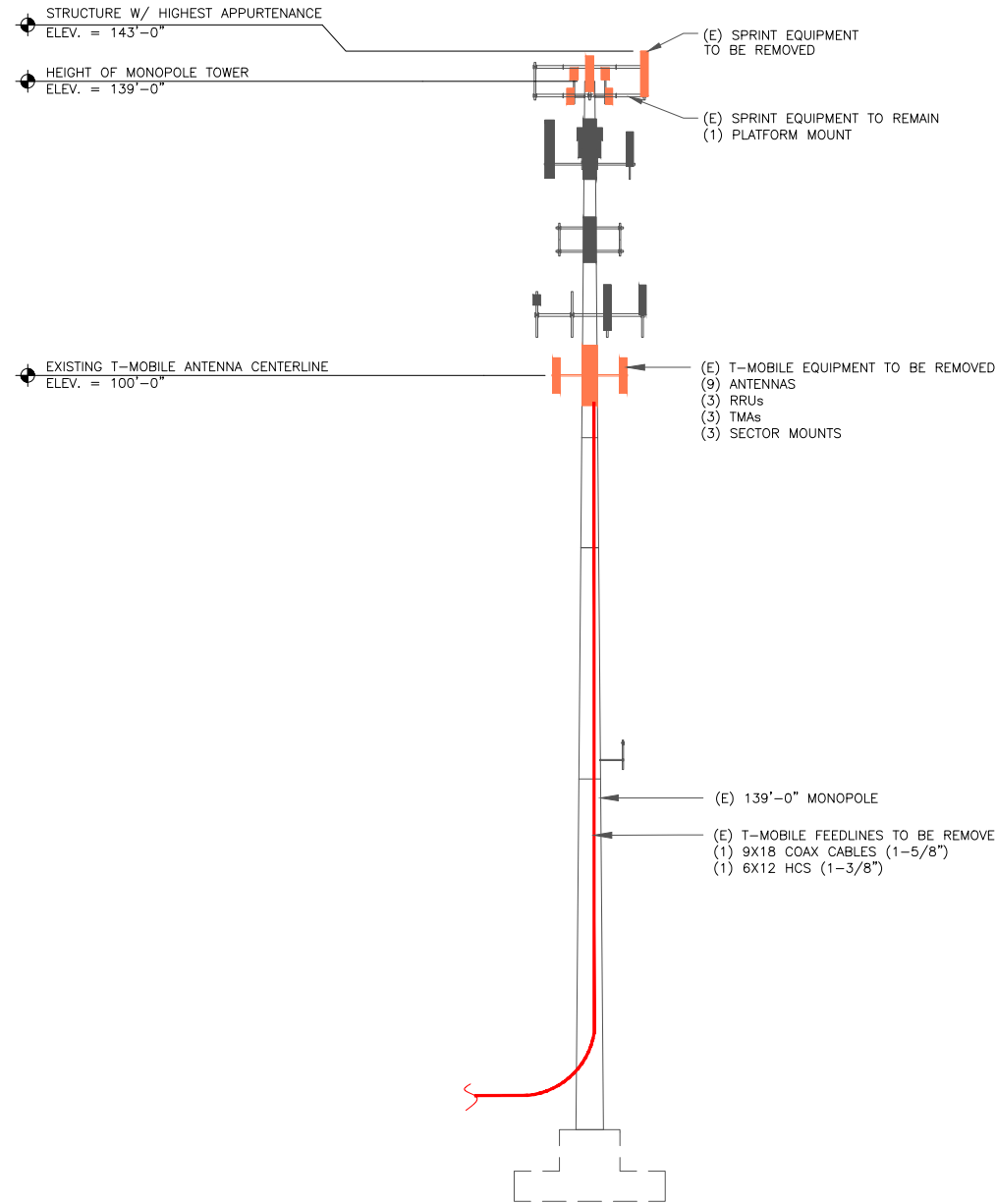
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OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:
C-1.2

REVISION:
2

EQUIPMENT LEGEND:

- EXISTING
- TO BE RELOCATED/REMOVED
- NEW/RELOCATED



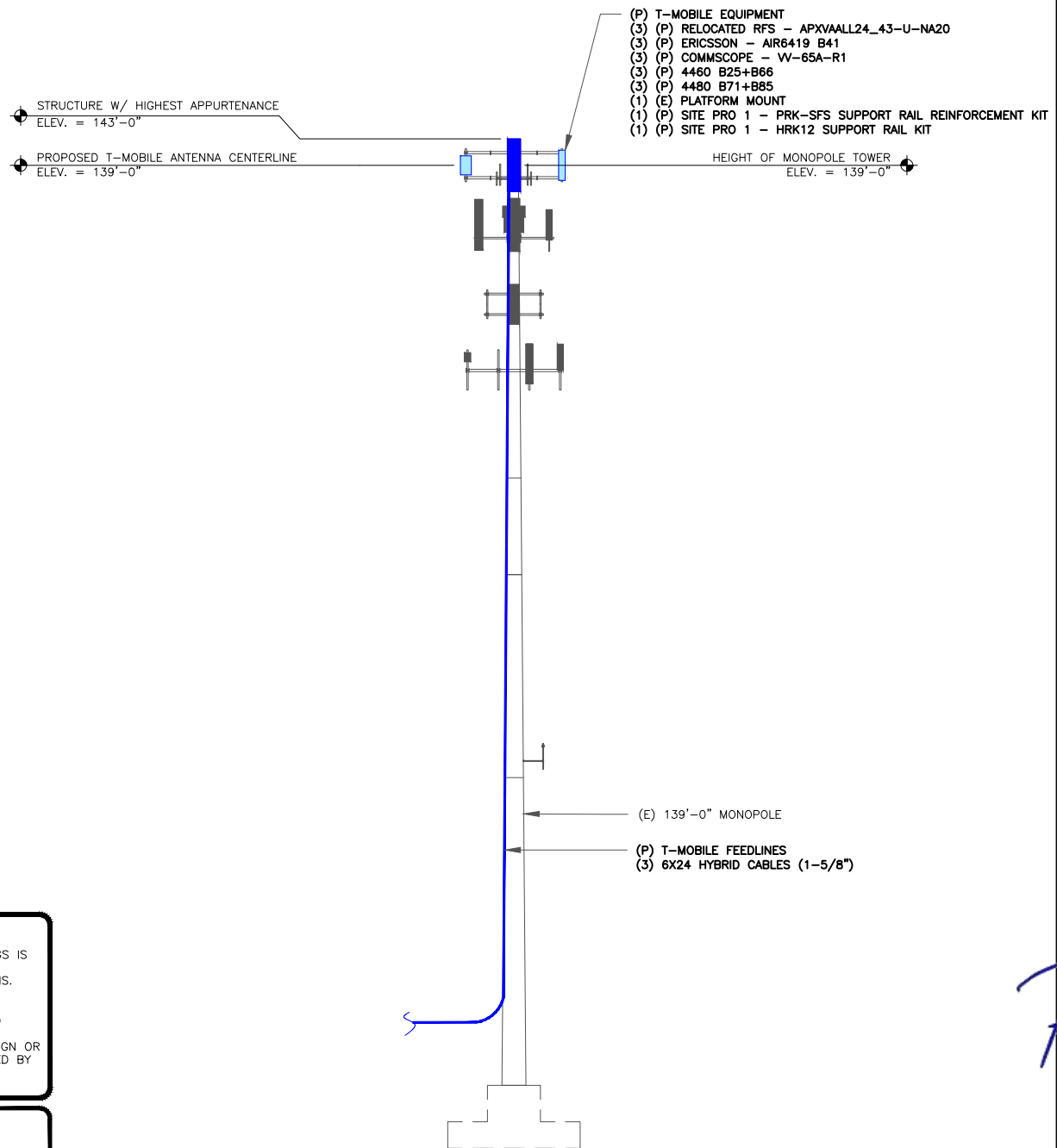
1 EXISTING ELEVATION
SCALE: NOT TO SCALE

MOUNT ANALYSIS NOTES:

1. THE DESIGN DEPICTED IN THESE DRAWINGS IS VALID WHEN ACCOMPANIED BY A CORRESPONDING PASSING MOUNT ANALYSIS.
2. CONSTRUCTION MANAGER / GENERAL CONTRACTOR SHALL REVIEW THE MOUNT ANALYSIS FOR ANY CONDITIONS PRIOR TO INSTALLATION.
3. ANY REQUIRED MOUNT MODIFICATION DESIGN OR MOUNT REPLACEMENT SHALL BE APPROVED BY EOR.

"LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.



2 FINAL ELEVATION
SCALE: NOT TO SCALE

T-Mobile

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CHARLOTTE, NC 28217

CROWN CASTLE

3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PM&A

P. MARSHALL & ASSOCIATES
3545 WHITEHALL PARK DRIVE
SUITE 450 CHARLOTTE,
NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

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SHEET NUMBER: **C-2**

REVISION: **A**

ANTENNA SCHEDULE									
SECTOR	POS.	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	139'-0"	70°	ERICSSON	AIR6419 B41 (ACTIVE ANTENNA - MASSIVE MIMO) (P)	0°	Z/Z'	-	-
ALPHA	A2	139'-0"	70°	RFS	APXVAALL24_43-U-NA20 (OCTO) (P)	0°	Z/Z'	(1) 4480 B71 +B85 (P)	-
ALPHA	A3	139'-0"	70°	COMMSCOPE	W-65A-R1 (P)	0°	Z/Z'	(1) 4460 B25+B66 (P)	(1) 6x24 4AWG (100M) (P)
BETA	B1	139'-0"	180°	ERICSSON	AIR6419 B41 (ACTIVE ANTENNA - MASSIVE MIMO) (P)	0°	Z/Z'	-	-
BETA	B2	139'-0"	180°	RFS	APXVAALL24_43-U-NA20 (OCTO) (P)	0°	Z/Z'	(1) 4480 B71 +B85 (P)	-
BETA	B3	139'-0"	180°	COMMSCOPE	W-65A-R1 (P)		Z/Z'	(1) 4460 B25+B66 (P)	(1) 6x24 4AWG (100M) (P)
GAMMA	C1	139'-0"	310°	ERICSSON	AIR6419 B41 (ACTIVE ANTENNA - MASSIVE MIMO) (P)	0°	Z/Z'	-	-
GAMMA	C2	139'-0"	310°	RFS	APXVAALL24_43-U-NA20 (OCTO) (P)	0°	Z/Z'	(1) 4480 B71 +B85 (P)	-
GAMMA	C3	139'-0"	310°	COMMSCOPE	W-65A-R1 (P)	0°	Z/Z'	(1) 4460 B25+B66 (P)	(1) 6x24 4AWG (100M) (P)

"LOOK-UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:

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- MOUNT ANALYSIS NOTES:
1. THE DESIGN DEPICTED IN THESE DRAWINGS IS VALID WHEN ACCOMPANIED BY A CORRESPONDING PASSING MOUNT ANALYSIS.
 2. CONSTRUCTION MANAGER / GENERAL CONTRACTOR SHALL REVIEW THE MOUNT ANALYSIS FOR ANY CONDITIONS PRIOR TO INSTALLATION.
 3. ANY REQUIRED MOUNT MODIFICATION DESIGN OR MOUNT REPLACEMENT SHALL BE APPROVED BY EOR.

ANY AND ALL TOWER MOUNTED EQUIPMENT MUST NOT TRAP OR INTERFERE W/ EXISTING SAFETY CLIMB

INSTALLER NOTE:
NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT SWAP IS COMPLETE. CONTRACTOR TO INSTALL MOUNT PER MANUFACTURER'S SPECIFICATIONS.



T-MOBILE SITE NUMBER:
386591

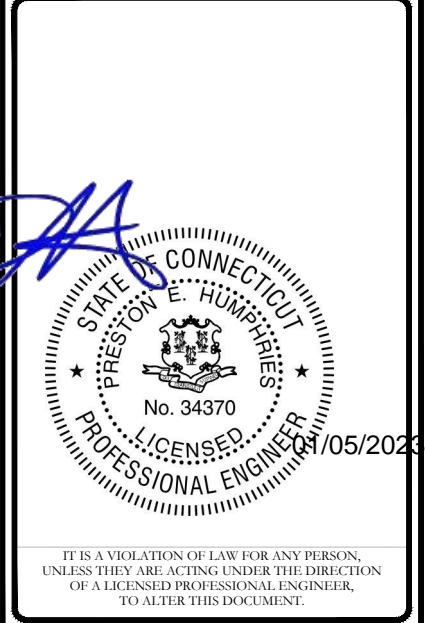
BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM
1	01/05/2023	RLB	AZIMUTH FIX	JTM



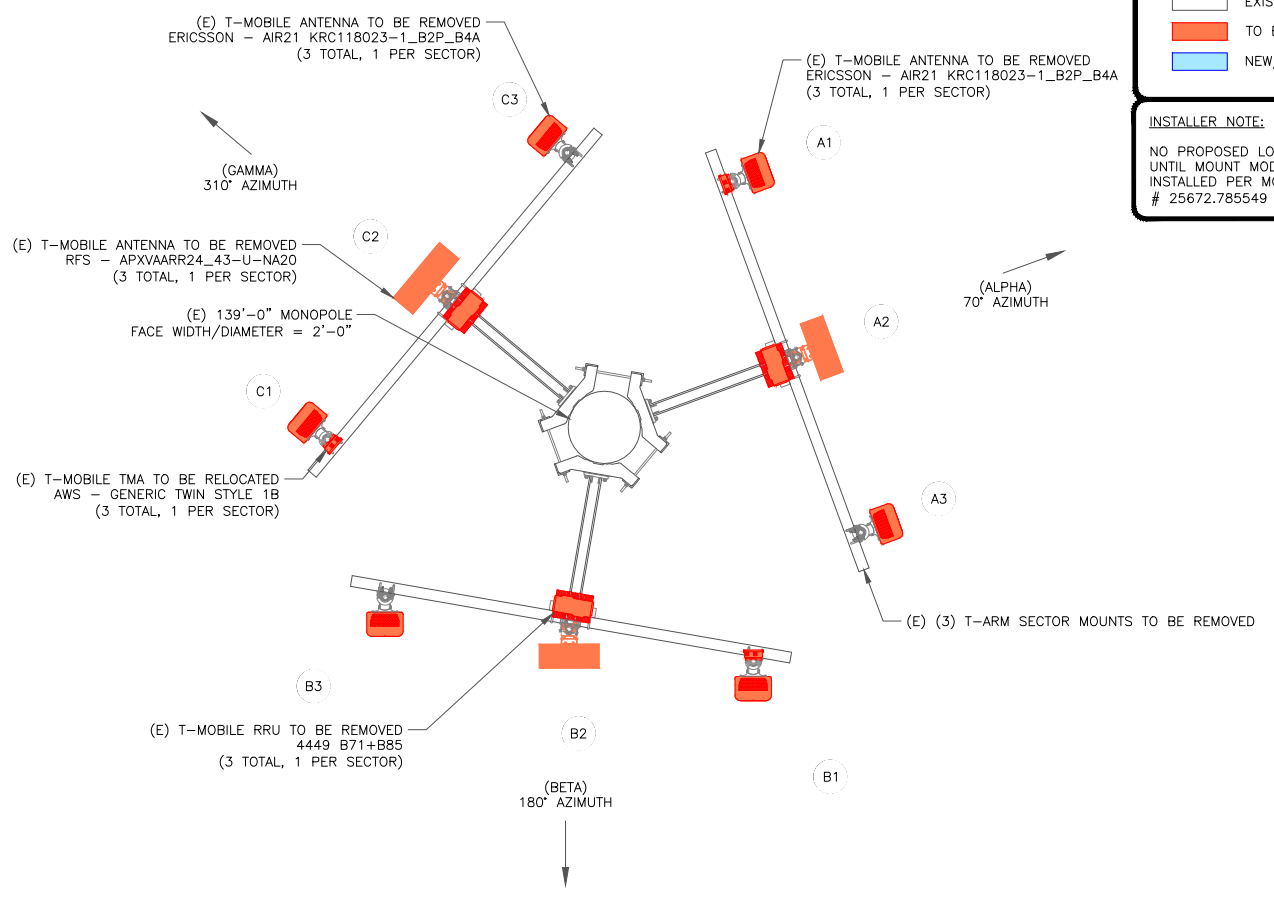
SHEET NUMBER: **C-3** REVISION: **A**

1 ANTENNA & CABLE SCHEDULE
SCALE: NOT TO SCALE

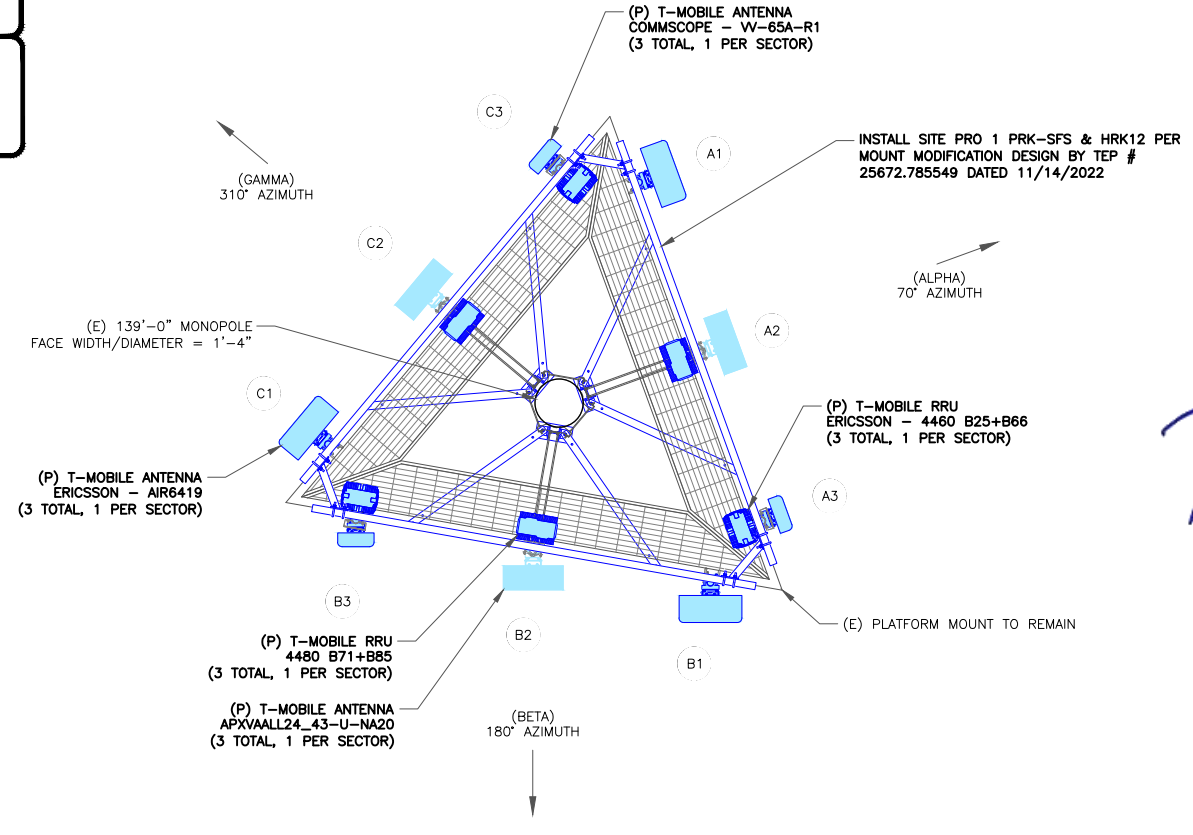
EQUIPMENT LEGEND:

- EXISTING
- TO BE RELOCATED/REMOVED
- NEW/RELOCATED

INSTALLER NOTE:
NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT MODIFICATIONS ARE INSTALLED PER MOUNT ANALYSIS BY TEP # 25672.785549 DATED 11/14/2022.

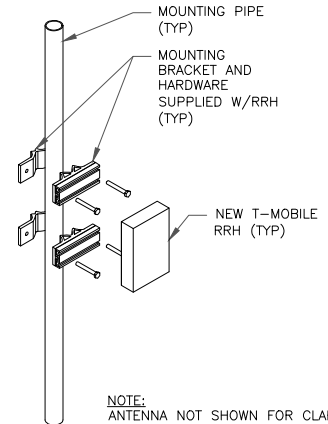
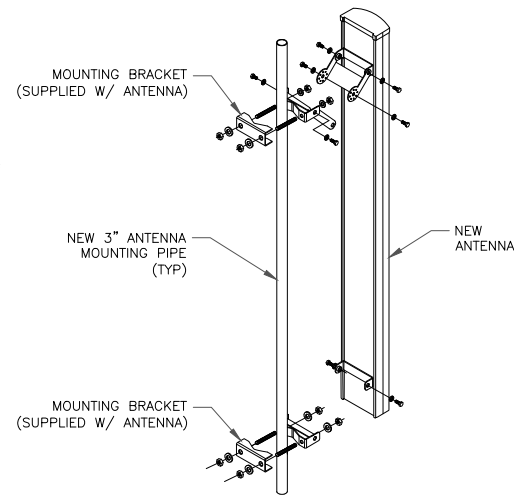


2 EXISTING T-MOBILE ANTENNA PLAN @ 100' RAD CENTER
SCALE: NOT TO SCALE

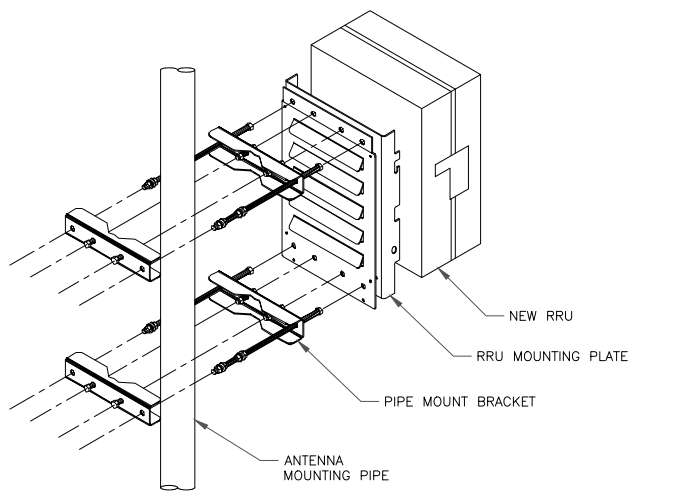


3 FINAL T-MOBILE ANTENNA PLAN @ 139' RAD CENTER
SCALE: NOT TO SCALE

INSTALLER NOTES:
 1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
 2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
 3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.

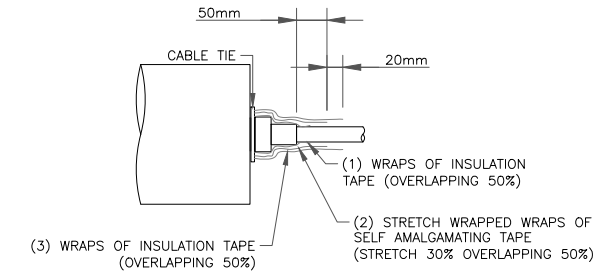


1 MOUNTING DETAIL
SCALE: NOT TO SCALE

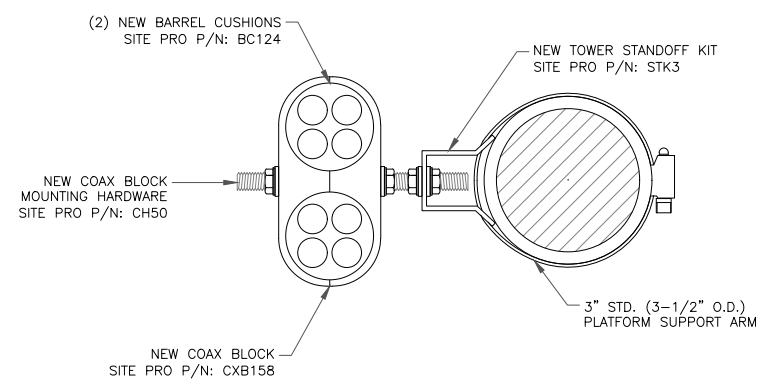


2 RRU MOUNTING DETAIL
SCALE: NOT TO SCALE

INSTALLER NOTE:
JUMPERS TO BE TORQUED TO 221.27 IN/LBS



3 RF JUMPER CONNECTION
SCALE: NOT TO SCALE



4 RF JUMPER DETAIL
SCALE: NOT TO SCALE

T-Mobile
 2105 WATER RIDGE PARKWAY SUITE 400
 CHARLOTTE, NC 28217

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386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
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EXISTING 139'-0"
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ISSUED FOR:

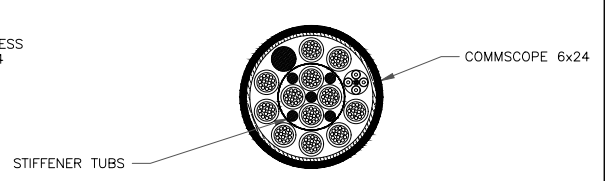
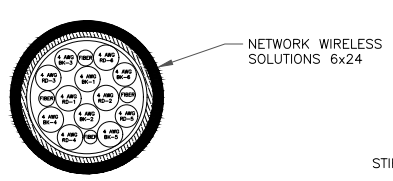
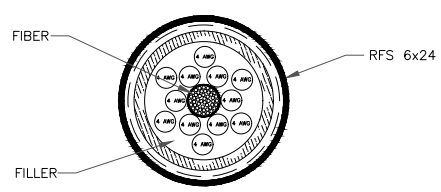
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

MANUFACTURER:	NWS NETWORK WIRELESS SOLUTIONS	COMPONENTS:	A: (12)-#4 AWG CLASS C, SOFT DRAWN, BARE COPPER CIRCUIT CONDUCTORS w/40 MILS 91.02mm) OF HEAT AND MOISTURE RESISTANT, POLYVINYL CHLORIDE (PVC) INSULATION AND JACKETED w/6 MILS (0.15mm) OF NYLON APPLIED DIRECTLY TO THE SURFACE OF THE INSULATION.
MODEL:	NWS-5197-XXM-COE	B: (4) - 12 FOC LOOSE TUBE SINGLE MODE	C: FLAME RESISTANT NON-HYGROSCOPIC FILLERS (AS NEEDED).
CABLE OD:	1.790" (45.5mm)	D: MYLAR BINDER TAPE.	E: 5-MIL THICK BARE COPPER TAPE SHIELD CORRUGATED AND LONGITUDINALLY APPLIED WITH MINIMUM OVERLAP OF 12.5%.
CABLE WEIGHT:	2655 LB/MFT (3951 KG/KM)	F: 110 MILS (2.79 MM) OF HEAT, MOISTURE AND SUNLIGHT RESISTANT, POLYVINYL CHLORIDE (PVC) JACKET. A RIPCORD SHALL BE PLACED UNDERNEATH THE JACKET.	
COPPER WEIGHT:	1710 LB/MFT (2545 KG/KM)		
JACKET COLOR:	BLACK		
COLOR CODE:	4 AWG-COLORED PVC BLK & RED-NUMBER PRINTED		
		STANDARDS:	UL 83-THERMOPLASTIC-INSULATED WIRES & CABLES UL 1277-ELECTRICAL POWER AND CONTROL TRAY CABLES w/ OPTIONAL OPTICAL-FIBER MEMBERS
		RATINGS:	UL THHN/THWN 600V UL TYP TC 600V THE INSULATION IS ACCEPTABLE FOR USE IN LOCATIONS AT 90°C DRY AND 75°C WET. THE CABLE IS SUITABLE FOR USE IN CABLE TRAYS, AERIAL OR DIRECT BURIAL INSTALLATIONS.

PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.99
CROSS-SECTION AREA (SQUARE INCHES)	3.13
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.5

PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.79
CROSS-SECTION AREA (SQUARE INCHES)	2.516
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.65

PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.67
CROSS-SECTION AREA (SQUARE INCHES)	2.19
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.22



NOTE:
 ALL FIBER SPARES AT TOWER TOP TO BE SEALED WITH SELF-AMALGAMATING SEALING TAPE.
 DC CABLE SPLICES TO USE THIS SPLICE AND SEALED WITH SELF-AMALGAMATING SEALING TAPE FOLLOWED BY HEAT SHRINK TUBING.

5 NOT USED
SCALE: NOT TO SCALE

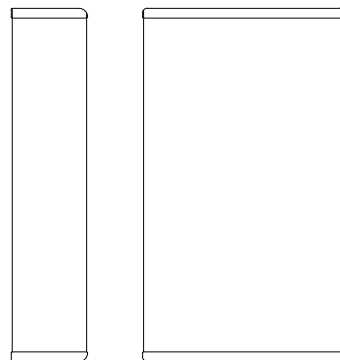
6 6X24 HCS 4AWG HYBRID CABLE, (6) DC PAIRS + (24) OPTICAL PAIRS: SECTION
SCALE: NOT TO SCALE

STATE OF CONNECTICUT
 PRESTON E. HUMPHRIES
 No. 34370
 LICENSED PROFESSIONAL ENGINEER
 11/14/2022

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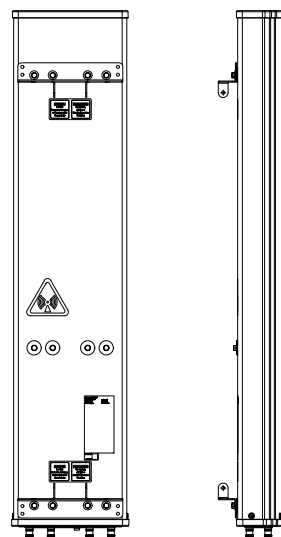
SHEET NUMBER: **C-4** REVISION: **A**

ERICSSON - AIR6419 B41	
WEIGHT (W/O MOUNTING HARDWARE)	96.5 LBS
SIZE (H x W x D)	36.25 x 20.91 x 9.02 IN.
MOUNTING HARDWARE P/N	TBD
RATED WIND VELOCITY	TBD



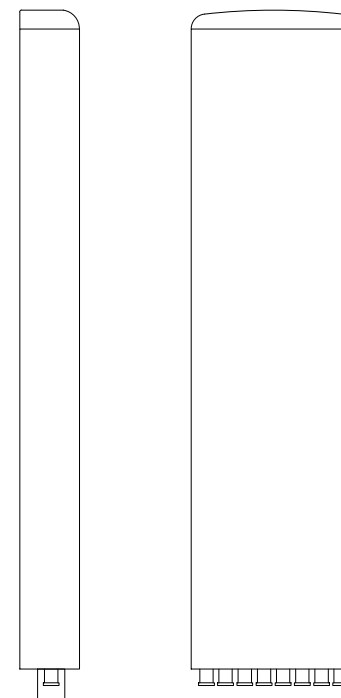
1 ERICSSON - AIR6419 B41
SCALE: NOT TO SCALE

COMMSCOPE - WV-65A-R1	
WEIGHT (W/O MOUNTING HARDWARE)	23.81 LBS
SIZE (H x W x D)	54.7 x 12.1 x 4.6 IN.
MOUNTING HARDWARE P/N	TBD
RATED WIND VELOCITY	150 MPH



2 COMMSCOPE - WV-65A-R1
SCALE: NOT TO SCALE

RFS - APXVAALL24_43-U-NA20	
WEIGHT (W/O MOUNTING HARDWARE)	122.8 LBS
SIZE (H x W x D)	95.9 x 24 x 8.5 IN.
MOUNTING HARDWARE P/N	APM40-5E
RATED WIND VELOCITY	150 MPH



3 RFS - APXVAALL24_43-U-NA20
SCALE: NOT TO SCALE

T-Mobile

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CHARLOTTE, NC 28217

CROWN CASTLE

3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PM&A

P. MARSHALL & ASSOCIATES
3545 WHITEHALL PARK DRIVE
SUITE 450 CHARLOTTE,
NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
386591

BU #: 876335
EAST FARMINGTON

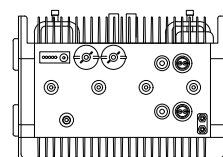
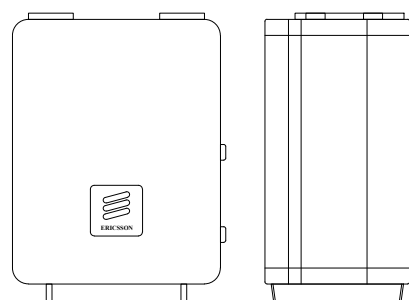
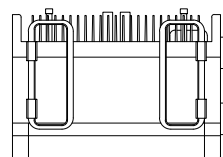
130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

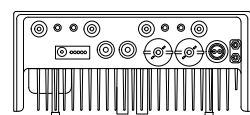
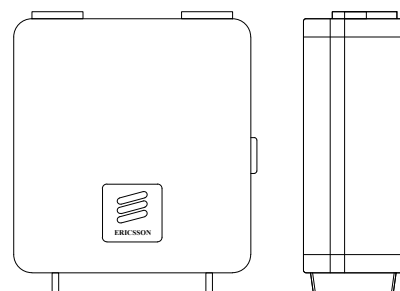
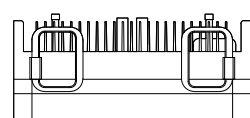
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

ERICSSON - RADIO 4460 B25+B66	
WEIGHT (W/O MOUNTING HARDWARE)	109.0 LBS
SIZE (H x W x D)	17.0 x 15.1 x 11.9 IN.



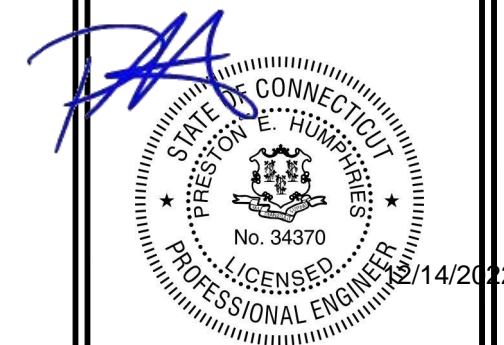
4 ERICSSON RADIO 4460 B25+B66
SCALE: NOT TO SCALE

ERICSSON - RADIO 4480 B71+B85	
WEIGHT (W/O MOUNTING HARDWARE)	93 LBS
SIZE (HxWxD)	21.8 x 15.4 x 7.5 IN.



5 ERICSSON RADIO 4480 B71+B85
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE



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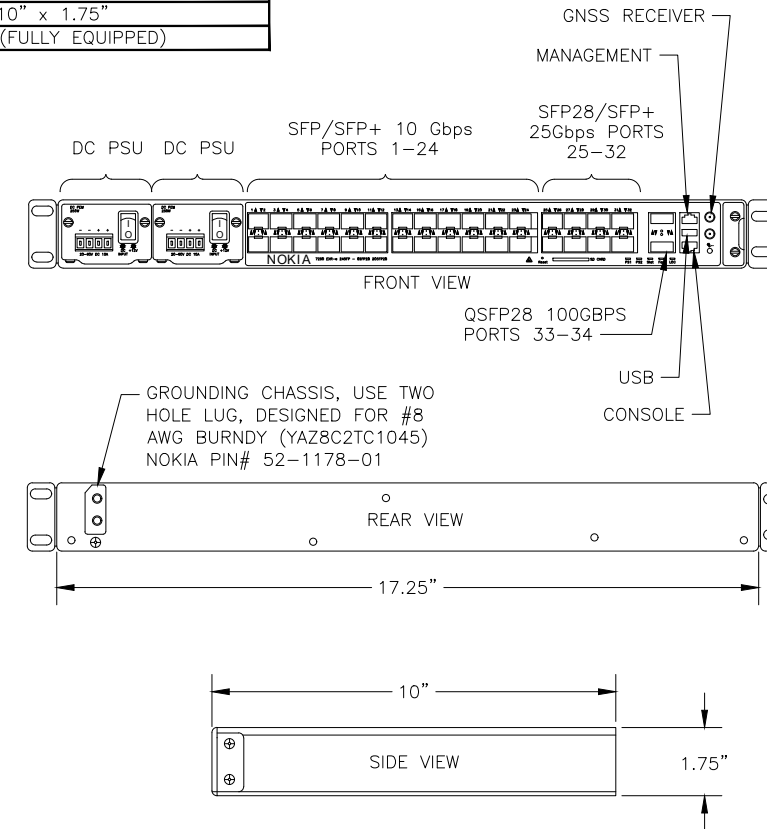
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C-5

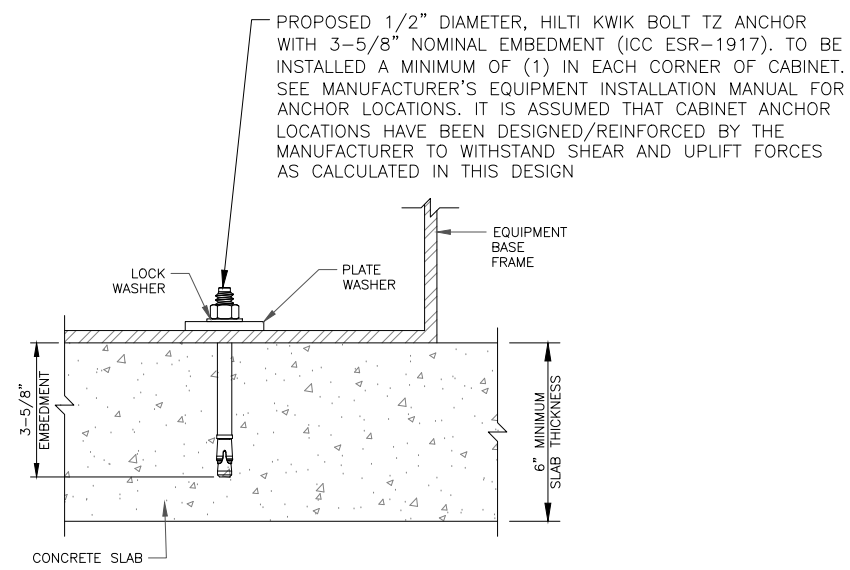
REVISION:

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MANUFACTURER:	NOKIA
MODEL:	3HE15548AA
DIMENSIONS:	17.25" x 10" x 1.75"
WEIGHT:	10.5 LBS (FULLY EQUIPPED)



2 NOKIA – CSR IXRE V2 ROUTER
SCALE: NOT TO SCALE



3 CABINET ATTACHMENT DETAIL
SCALE: NOT TO SCALE

1 NOT USED
SCALE: NOT TO SCALE

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CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PM&A
P. MARSHALL & ASSOCIATES
3545 WHITEHALL PARK DRIVE
SUITE 450 CHARLOTTE,
NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

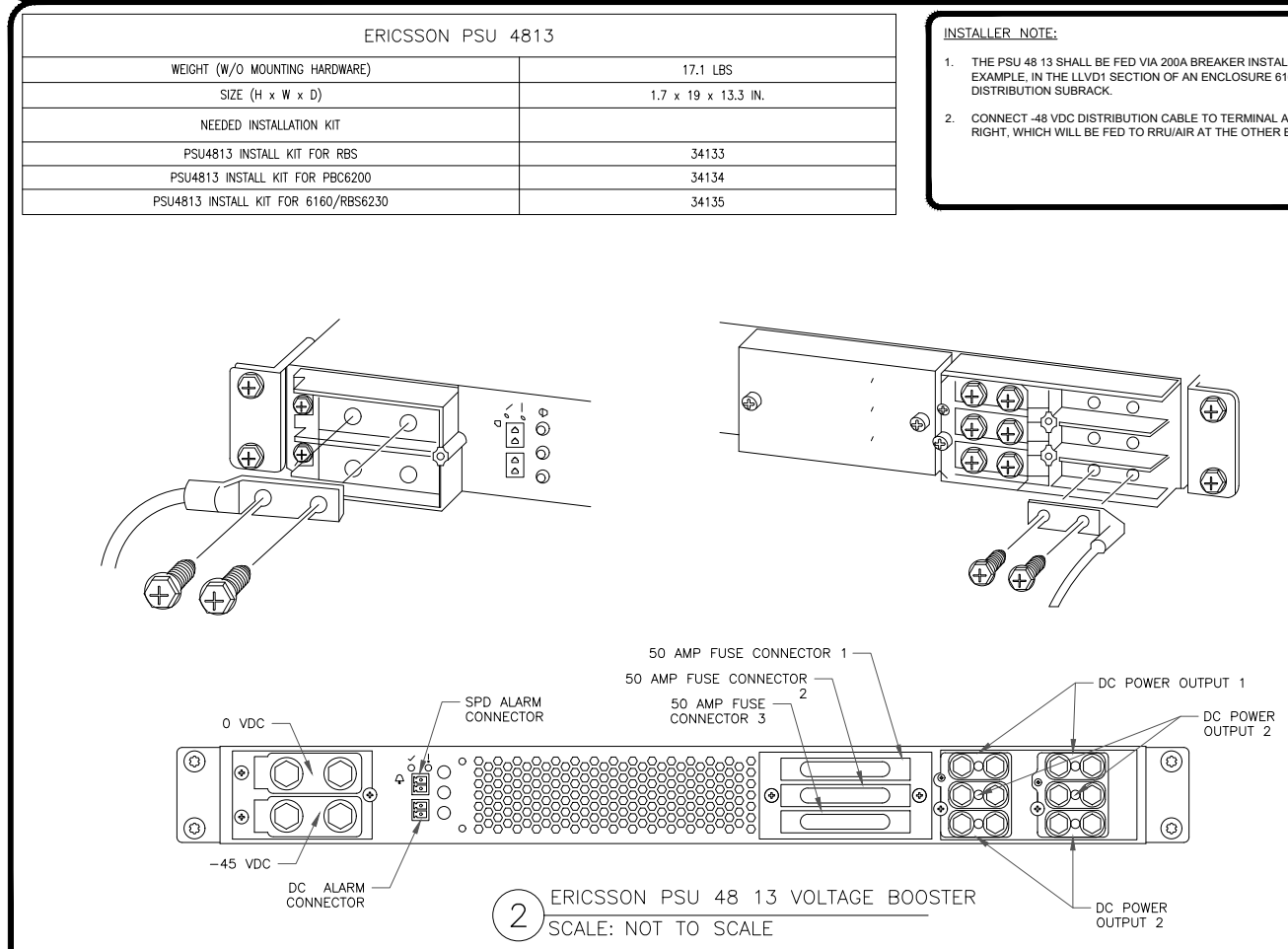
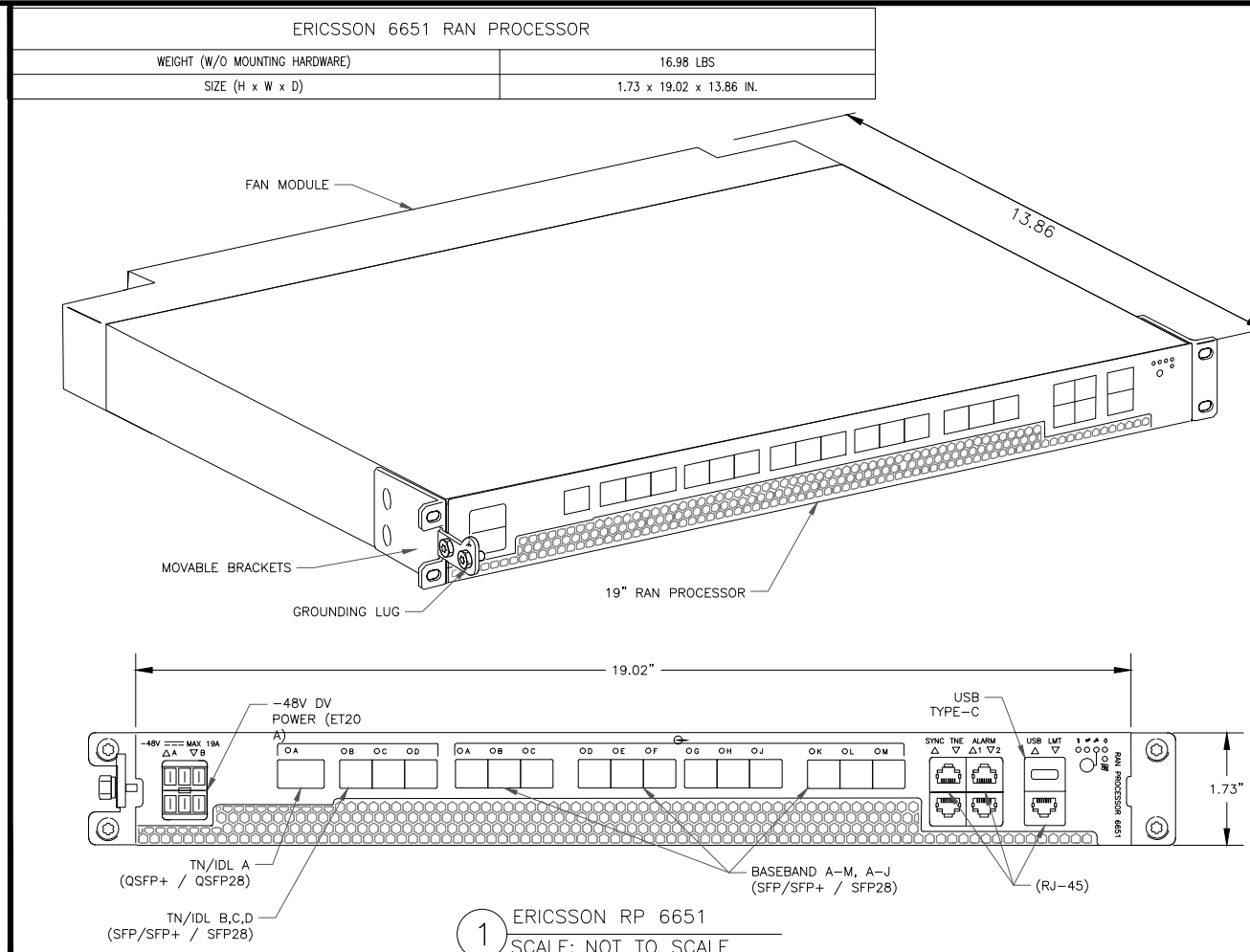
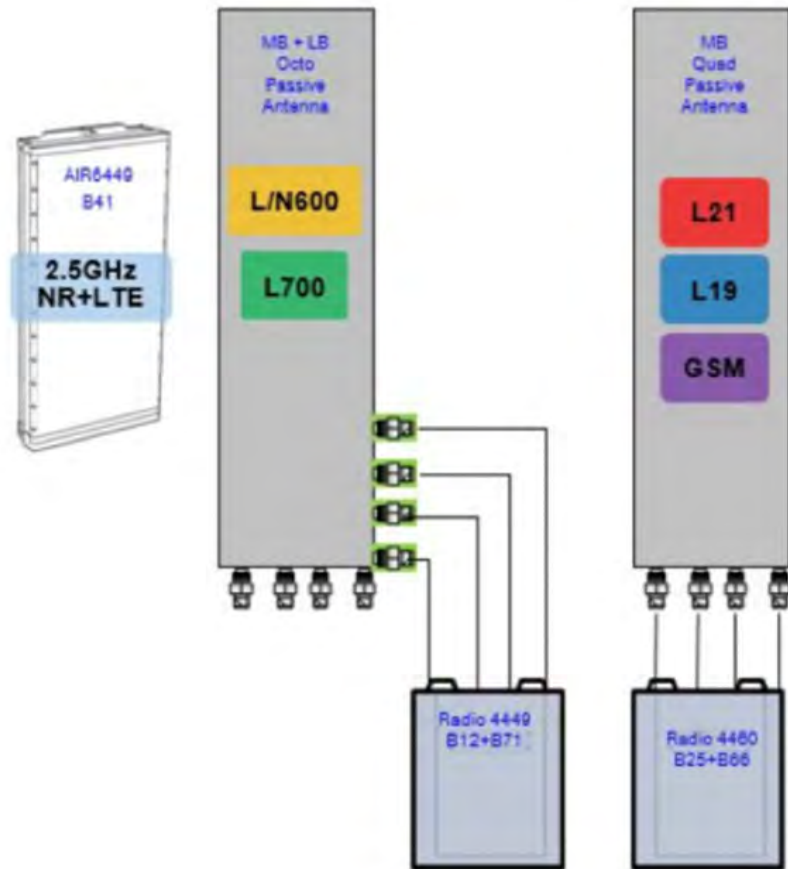
[Signature]

STATE OF CONNECTICUT
PRESTON E. HUMPHRIES
No. 34370
LICENSED PROFESSIONAL ENGINEER
11/14/2022

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SHEET NUMBER: **C-6** REVISION: **A**

PROPOSED RF CONFIGURATION:
(INFORMATION PROVIDED BY CLIENT)
67D5D998E OUTDOOR



INSTALLER NOTE:

- THE PSU 48 13 SHALL BE FED VIA 200A BREAKER INSTALLED, FOR EXAMPLE, IN THE LLVD1 SECTION OF AN ENCLOSURE 6160 DC DISTRIBUTION SUBRACK.
- CONNECT -48 VDC DISTRIBUTION CABLE TO TERMINAL AT THE RIGHT, WHICH WILL BE FED TO RRUIAIR AT THE OTHER END.

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P. MARSHALL & ASSOCIATES
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T-MOBILE SITE NUMBER:
386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

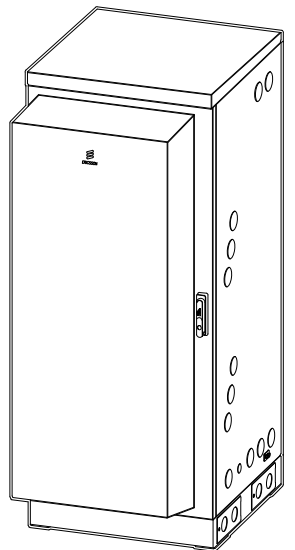
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

STATE OF CONNECTICUT
PRESTON E. HUMPHRIES
No. 34370
LICENSED PROFESSIONAL ENGINEER
11/14/2022

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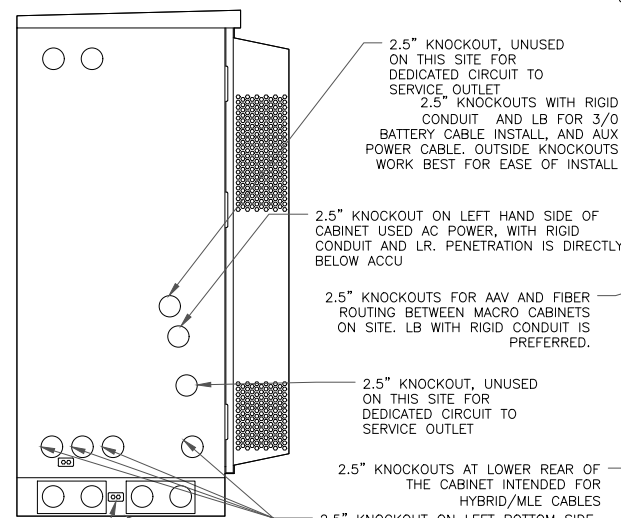
SHEET NUMBER: **C-7** REVISION: **A**

ERICSSON - 6160	
WEIGHT (W/O WITHOUT EQUIPMENT)	295.0 LBS
SIZE (H x W x D)	63" x 25.6" x 34"



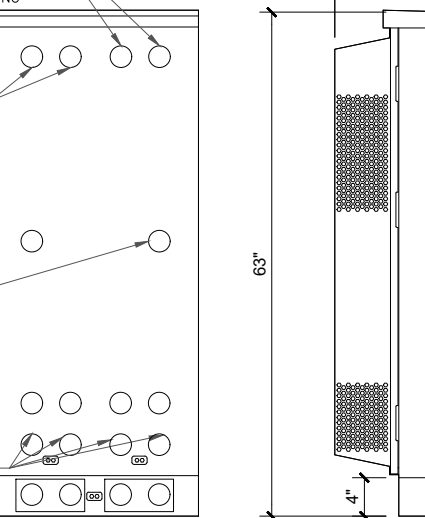
LEFT VIEW

2.5" KNOCKOUTS WITH LBS FOR ALARM CABLE AND TEMP SENSOR ROUTING. UPPER REAR CENTER WORK BEST FOR THIS INSTALL FOR EASE OF INSTALL AND REPLACEMENT IN THE EVENT OF FAILURE. CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING

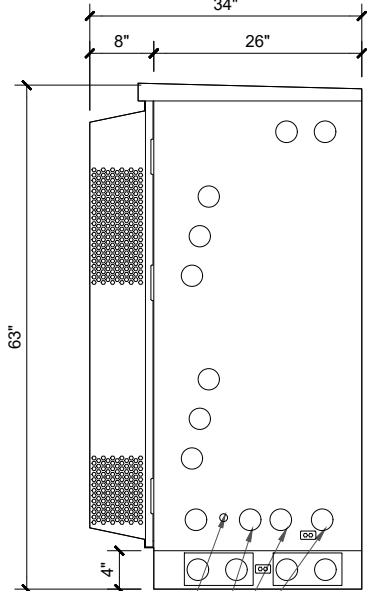


REAR VIEW

2.5" KNOCKOUT, UNUSED ON THIS SITE FOR DEDICATED CIRCUIT TO SERVICE OUTLET
 2.5" KNOCKOUTS WITH RIGID CONDUIT AND LB FOR 3/0 BATTERY CABLE INSTALL, AND AUX POWER CABLE. OUTSIDE KNOCKOUTS WORK BEST FOR EASE OF INSTALL
 2.5" KNOCKOUT ON LEFT HAND SIDE OF CABINET USED AC POWER, WITH RIGID CONDUIT AND LR. PENETRATION IS DIRECTLY BELOW ACCU
 2.5" KNOCKOUTS FOR AAV AND FIBER ROUTING BETWEEN MACRO CABINETS ON SITE. LB WITH RIGID CONDUIT IS PREFERRED.
 2.5" KNOCKOUT, UNUSED ON THIS SITE FOR DEDICATED CIRCUIT TO SERVICE OUTLET
 2.5" KNOCKOUTS AT LOWER REAR OF THE CABINET INTENDED FOR HYBRID/MLE CABLES
 2.5" KNOCKOUT ON LEFT BOTTOM SIDE OF CABINET FOR INTER-BASEBAND CABINET CONNECTION. A RIGID OR FLEXIBLE CONDUIT WITH AN LR WILL BE USED WHEN RUNNING THIS CONDUIT TO THE LEGACY 6131, 6102, ODE OR MUAC CABINET.
 CABINET LOWER 4" PLINTH CAN BE REMOVED FOR ADDITIONAL 12" PLINTH



RIGHT VIEW

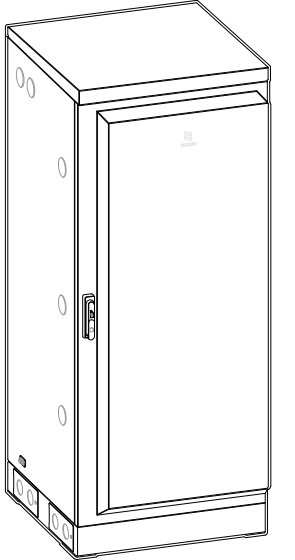


INSTALLER NOTE:

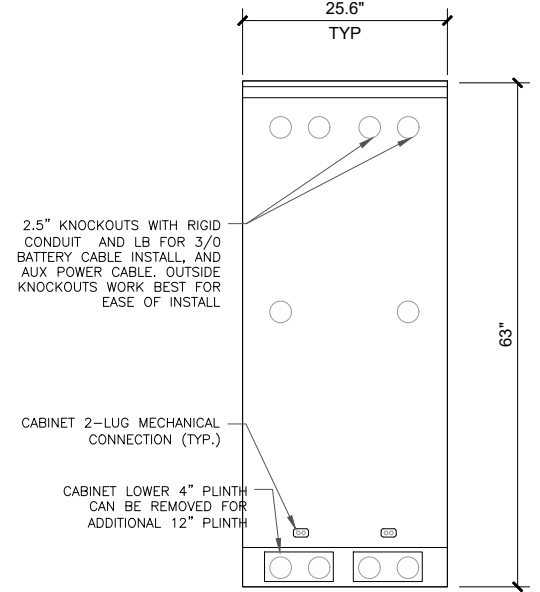
- 6160 BTS REQUIRES FMB FOR CABLE MANAGEMENT SUPPLIED BY GC AND WILL NEED TO BE INCLUDED IN AOS [NO CABLING CAN BE INSTALLED INTO THE PLINTH BELOW BTS UNLESS SUPPLIED WITH OPTIONAL 12" FULLY ENCLOSED PLINTH.]

1 ERICSSON 6160
SCALE: NOT TO SCALE

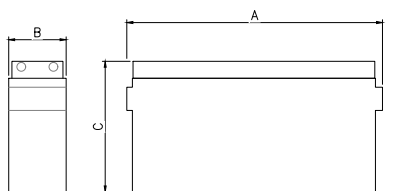
ERICSSON - B160	
WEIGHT (W/O WITHOUT EQUIPMENT)	295.0 LBS
SIZE (H x W x D)	63" x 25.6" x 29"



REAR VIEW



2.5" KNOCKOUTS WITH RIGID CONDUIT AND LB FOR 3/0 BATTERY CABLE INSTALL, AND AUX POWER CABLE. OUTSIDE KNOCKOUTS WORK BEST FOR EASE OF INSTALL
 CABINET 2-LUG MECHANICAL CONNECTION (TYP.)
 CABINET LOWER 4" PLINTH CAN BE REMOVED FOR ADDITIONAL 12" PLINTH



INSTALLER NOTE:

THE BATTERIES INSTALLED IN THE CABINET ARE VALVE REGULATED LEAD-ACID (VRLA) CELLS BATTERY STRINGS: NORTHSTAR NSB 190FT RED. ALL NORTHSTAR BATTERIES ARE COMPLIANT WITH: TELCORDIA SR4228, IEC 60896; BELLCORE GR-63-CORE, ISSUE 1; UL APPROVED AND UN2800 CERTIFIED. NORTHSTAR IS REGISTERED TO ISO 9001 AND ISO 14001. ERICSSON CABINET PROVIDES REQUIRED VENTILATION, SMOKE, SEISMIC & ADDITIONAL SIGNAGE TO MEET ALL IFC SECTION 608 REQUIREMENTS.

		CAPACITY (AH)		NOMINAL DIMENSIONS			NOMINAL WEIGHT				
MODEL NUMBER	VOLTAGE	8 HR TO 1.75 VPC @ 25'	10 HR TO 1.8 VPC @ 25'	INCHES							
				A	B	C	A	B	C	LBS	Kg
NSB 190FT RED BATTERY	12	183 / 186 AH	187 / 190 AH	22.0	4.9	12.6	560	125	320	124.3	56.3

ELECTRICAL DATA		
MODEL NUMBER	SHORT CIRCUIT CURRENT	INTERNAL RESISTANCE (mOhms)
NSB 190FT RED BATTERY	5000 A	2.8

FLOAT VOLTAGE
 CONSTANT VOLTAGE CHARGING IS RECOMMENDED
 RECOMMENDED FLOAT VOLTAGE: 2.27 +/- 0.02 VPC

CHAPTER 12, SECTION 1206
ELECTRICAL ENERGY STORAGE SYSTEM
1206.2 SCOPE:
 STATIONARY STORAGE BATTERY SYSTEMS HAVING CAPACITIES EXCEEDING THE VALUES SHOWN IN TABLE 1206.2 SHALL COMPLY W/ SECTION 1206.2.1 THROUGH 1206.2.12.6, AS APPLICABLE.

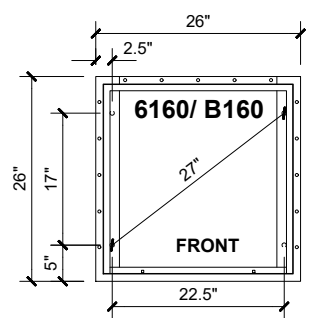
BATTERY STORAGE SYSTEM THRESHOLD QTY'S					
BATTERY TECHNOLOGY		CAPACITY ALLOWED			
LEAD ACID, ALL TYPES		70 kWh (252 MEGAJOULES)			
AH = VOLTAGE (AH)/1000					
VOLTS	AH	kWh	NO. OF BATTERIES	TOTAL kWh	
12	190	1000	2.28	12	27.36

CONCLUSIONS:
 27.36 < 70 kWh SECTION 1206.2 DOES NOT APPLY
 TOTAL BATTERY WEIGHT (12 BATTERIES): 1,491.6 LBS
 TOTAL GALLONS - ELECTROLYTE & ACID (12 BATTERIES): 33.36

NSB 190FT RED BATTERY LEAD & ACID WEIGHTS (12-VOLT MODULE):			
ELECTROLYTE	WEIGHT		
		/KG	10.5
/LBS	23.2		
VOLUME			
	/LITERS	7.8	
/GALLONS	2.08		
ACID	WEIGHT	/KG	4.8
		/LBS	10.5
VOLUME			
	/LITERS	2.6	
/GALLONS	0.7		
LEAD	WEIGHT	/KG	17.9
		/LBS	39.4
LEAD OXIDE	VOLUME	/KG	23.3
		/LBS	51.2
TOTAL WEIGHT	WEIGHT	/KG	56.3
		/LBS	124.3

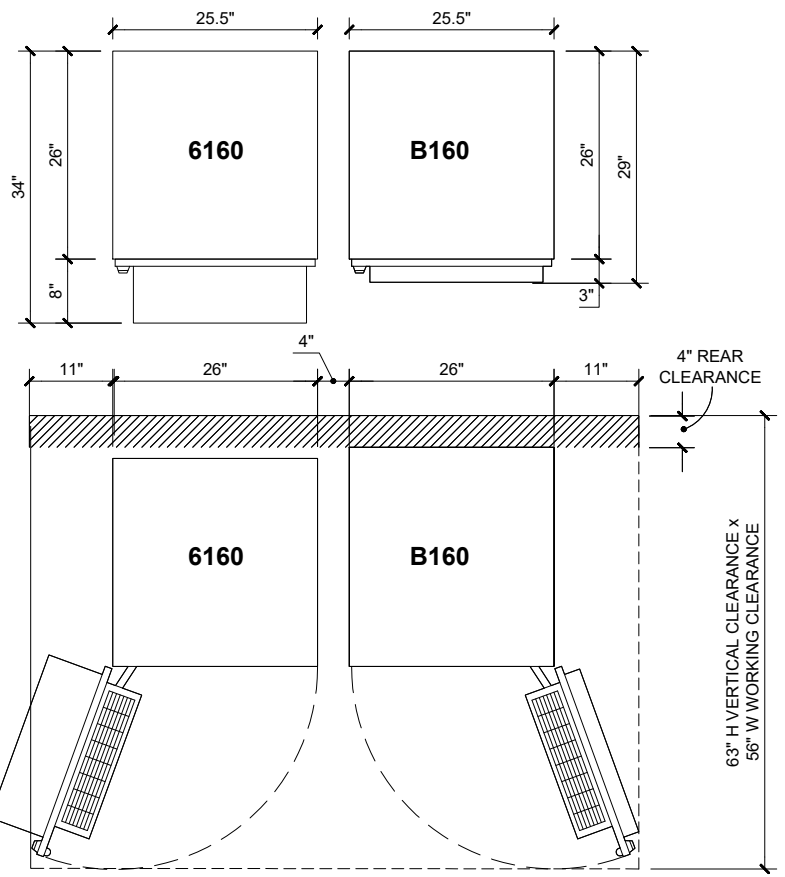
2 ERICSSON B160
SCALE: NOT TO SCALE

BOTTOM VIEW



INSTALLER NOTE:

- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS THROUGH
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING



3 PLAN CABINET DETAILS
SCALE: NOT TO SCALE

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 3530 TORINGDON WAY, SUITE 300
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 3545 WHITEHALL PARK DRIVE
 SUITE 450 CHARLOTTE,
 NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
 386591
 BU #: 876335
EAST FARMINGTON
 130 BIRDSEYE ROAD
 FARMINGTON, CT, 06032
 EXISTING 139'-0"
 MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

PRESTON E. HUMPHRIES
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SHEET NUMBER: **C-8** REVISION: **A**

GENERAL NOTES

1. VERIFY ALL MOUNTING LOCATIONS PER EQUIPMENT MANUFACTURER FOR LOCATION & QUANTITY OF UNISTRUT ON H-FRAME. (MIN. 5 UNISTRUT SHALL BE INSTALLED)
2. ALL EQUIPMENT SHALL BE MOUNTED A MIN. OF 6" ABOVE FINISH GRADE.
3. ALL CONDUIT STUB-UP TO BE ATTACHED NO GREATER THAN 6" MAX. ABOVE FINISHED GRADE. ATTACH ALL CONDUIT ABOVE FIRST 6" AT 12" ON CENTER.
4. BOND ALL METALLIC SURFACES TO GROUND RING WITH #2 SOLID AWG TIN-PLATED COPPER GROUND CONDUCTOR.
5. ALL GROUND LEADS W/ #2 SOLID TINNED GROUND TO GROUND RING. INSTALLED IN 1" SCH. 40 PVC CONDUIT. PROVIDE WATERTIGHT CAULK SEAL & ADEQUATE COIL FOR CONNECTION.



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CHARLOTTE, NC 28217



3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277



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SUITE 450 CHARLOTTE,
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T-MOBILE SITE NUMBER:
386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM



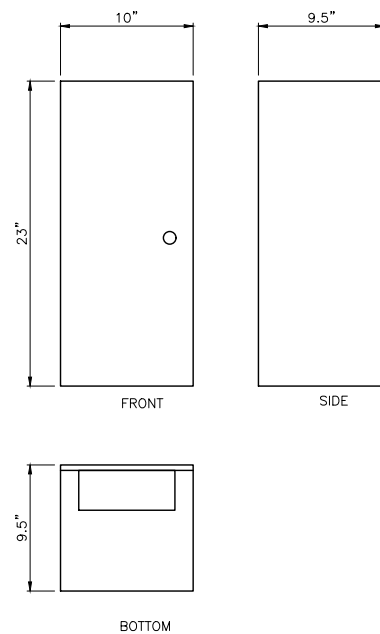
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SHEET NUMBER:
C-9

REVISION:
A

1 NOT USED
SCALE: NOT TO SCALE

SPECIFICATIONS	
WEIGHT	APPROX. 13 LBS.



3 INTERSECT - CAM-LOK GENERATOR PLUG
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

T-MOBILE SITE #:		LOCATION:		VOLTAGE: 240/120 1Ø					MOUNTING / ENCLOSURE: EXISTING / NEMA 3R				
VA66303A (EXISTING)		H-FRAME		MAIN C/B: 200 AMPS					AVAIL. FAULT CURRENT: EXISTING				
11/14/2022				BUS RATING: 200 AMPS					SHORT CIRCUIT RATING: EXISTING				
AMPS/POLES	WIRE & CONDUIT	TYPE	DESCRIPTION	KVA	CKT	A	B	CKT	KVA	DESCRIPTION	TYPE	WIRE & CONDUIT	AMPS/POLES
60/2	EXISTING	EQ	PPC	0.10	1	0.60							
-	-	EQ	-	0.10	3		3.28	4	3.18	6131	EQ	EXISTING	125/2
20/1	EXISTING	L	LIGHT	0.50	5	3.68							
20/1	EXISTING	R	GFCI	0.18	7		1.18	8	1.00	BATTERY	EQ	EXISTING	60/2
			BLANK		9	1.00							
			BLANK		11								
			BLANK		13								
			BLANK		15								
			BLANK		17								
			BLANK		19								
			BLANK		21								
			BLANK		23								
PHASE TOTAL				5.3		4.5	KVA						

TOTAL CONNECTED LOAD 9.7 kVA 41 A

TOTAL DEMAND LOAD 10.0 kVA 42 A

LOAD TYPE	DESCRIPTION	CONN. LOAD		DEMAND FACTOR	DESIGN LOAD	
		KVA	AMPS		KVA	AMPS
L	LIGHTING	1.0	4.2	1.25	1.3	5.2
R	RECEPTACLE	0.2	0.8	NEC	0.2	0.8
M	MOTOR	0.0	0.0	NEC	0.0	0.0
H	HEATING	0.0	0.0	1.00	0.0	0.0
AC	HVAC	0.0	0.0	1.00	0.0	0.0
EQ	EQUIPMENT	8.6	35.7	1.00	8.6	35.7
E	EXISTING	0.0	0.0	1.25	0.0	0.0

* ALL EQUIPMENT LOADS CONSIDERED CONTINUOUS LOADS

NOTES:
DEPICTED LOAD BASED ON ASSUMPTIONS OF EQUIPMENT INSTALLED AND WAS NOT V.I.F. NOTIFY E.O.R. OF ANY DISCREPANCIES PRIOR TO INSTALLATION OF PROPOSED EQUIPMENT.

1 EXISTING PANEL SCHEDULE
SCALE: NOT TO SCALE

T-MOBILE SITE #:		LOCATION:		VOLTAGE: 240/120 1Ø					MOUNTING / ENCLOSURE: EXISTING / NEMA 3R				
VA66303A (PROPOSED)		H-FRAME		MAIN C/B: 200 AMPS					AVAIL. FAULT CURRENT: EXISTING				
11/14/2022				BUS RATING: 200 AMPS					SHORT CIRCUIT RATING: EXISTING				
AMPS/POLES	WIRE & CONDUIT	TYPE	DESCRIPTION	KVA	CKT	A	B	CKT	KVA	DESCRIPTION	TYPE	WIRE & CONDUIT	AMPS/POLES
60/2	EXISTING	EQ	PPC	0.10	1	0.60							
-	-	EQ	-	0.10	3		3.28	4	3.18	6131	EQ	EXISTING	125/2
20/1	EXISTING	L	LIGHT	0.50	5	3.68							
20/1	EXISTING	R	GFCI	0.18	7		5.64	8	5.46	(P) 6160	EQ	2#3/0, 1#2G, 2"C	150/2
			BLANK		9	5.46							
			BLANK		11								
			BLANK		13								
			BLANK		15								
			BLANK		17								
			BLANK		19								
			BLANK		21								
			BLANK		23								
PHASE TOTAL				9.7		9.1	KVA						

TOTAL CONNECTED LOAD 18.8 kVA 79 A

TOTAL DEMAND LOAD 19.1 kVA 80 A

LOAD TYPE	DESCRIPTION	CONN. LOAD		DEMAND FACTOR	DESIGN LOAD	
		KVA	AMPS		KVA	AMPS
L	LIGHTING	1.0	4.2	1.25	1.3	5.2
R	RECEPTACLE	0.4	1.5	NEC	0.4	1.5
M	MOTOR	0.0	0.0	NEC	0.0	0.0
H	HEATING	0.0	0.0	1.00	0.0	0.0
AC	HVAC	0.0	0.0	1.00	0.0	0.0
EQ	EQUIPMENT	17.5	72.8	1.00	###	72.8
E	EXISTING	0.0	0.0	1.25	0.0	0.0

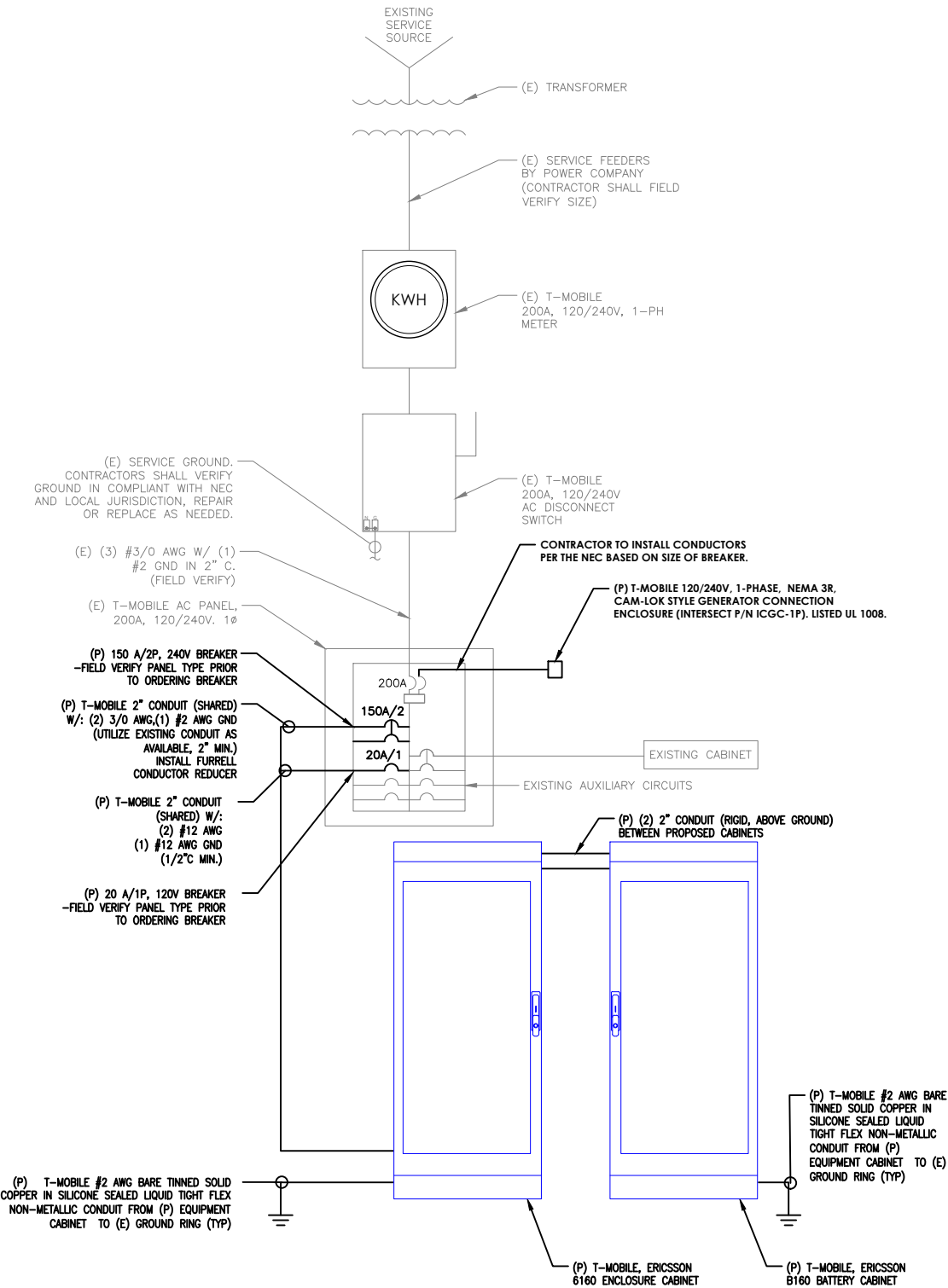
* ALL EQUIPMENT LOADS CONSIDERED CONTINUOUS LOADS

NOTES:
DEPICTED LOAD BASED ON ASSUMPTIONS OF EQUIPMENT INSTALLED AND WAS NOT V.I.F. NOTIFY E.O.R. OF ANY DISCREPANCIES PRIOR TO INSTALLATION OF PROPOSED EQUIPMENT.

2 FINAL PANEL SCHEDULE
SCALE: NOT TO SCALE

NOTES:

- THE MAXIMUM 12-MONTH DEMAND LOAD WAS NOT AVAILABLE AT TIME OF PRINTING. CONTRACTOR SHALL COORDINATE WITH POWER CO., OBTAIN MAXIMUM DEMAND LOAD, MULTIPLY VALUE BY 1.25, ADD ALL NEW LOADS & VERIFY NEW MAXIMUM DEMAND LOAD DOES NOT OVERLOAD ANY PORTION OF THE EXISTING ELECTRICAL SYSTEM. CONTACT EOR IF OVERLOAD IS POSSIBLE BEFORE START OF WORK.
- CONTRACTOR IS RESPONSIBLE FOR LOADING ON ALL PANELS AND FEEDERS PER THE N.E.C. CONTRACTOR SHALL ENSURE CONTINUITY OF EXISTING CIRCUITS TO REMAIN. ELECTRICAL CONTRACTOR SHALL VERIFY THAT ALL EXISTING AND PROPOSED LOADS PLACED ON EXISTING PANELS DO NOT EXCEED THE MAXIMUM LOADING REQUIRED PER THE LATEST EDITION OF THE N.E.C. NOTIFY EOR IF OVERLOAD IS POSSIBLE.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY AND CALCULATE SHORT CIRCUIT FAULT CURRENT AND ARC FLASH AND PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER THE N.E.C. AND LOCAL JURISDICTION. CONTRACTOR SHALL PROVIDE EQUIPMENT RATED FOR FAULT CURRENT.
- 6160 ENCLOSURE STANDARD CONFIGURATION INCLUDES (4) 3500W RECTIFIERS, MAX OF 7. LOAD PROVIDED IN PANEL SCHEDULE IS BASED ON THIS CONFIGURATION. IF ADDITIONAL RECTIFIERS ARE REQUIRED, ENGINEER OF RECORD SHALL BE CONTACTED TO DETERMINE ADEQUACY OF EXISTING PANEL FOR ADDITIONAL LOAD.
- CONTRACTOR TO FIELD VERIFY ALL EQUIPMENT RATINGS AND WIRE SIZES. IF ANY DISCREPANCIES EXIST, CONTACT ENGINEER PRIOR TO ROUGH IN.
- CONTRACTOR SHALL FIELD VERIFY EXISTING AC PANEL MODEL AND ENSURE 150A, 2P, 4-POSITION BREAKER IS COMPATIBLE, CONTACT EOR IF DISCREPANCIES ARE FOUND.



3 ONE-LINE DIAGRAM
SCALE: NOT TO SCALE

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CROWN CASTLE

3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

PM&A

P. MARSHALL & ASSOCIATES
3545 WHITEHALL PARK DRIVE
SUITE 450 CHARLOTTE,
NORTH CAROLINA 28273

T-MOBILE SITE NUMBER:
386591

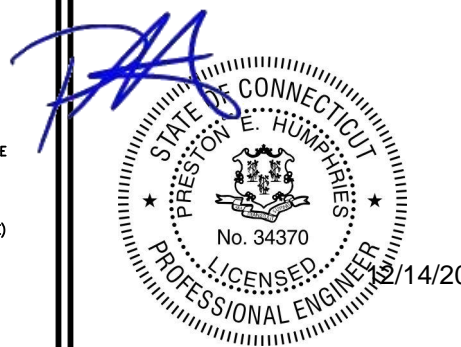
BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
FARMINGTON, CT, 06032

EXISTING 139'-0"
MONOPOLE

ISSUED FOR:

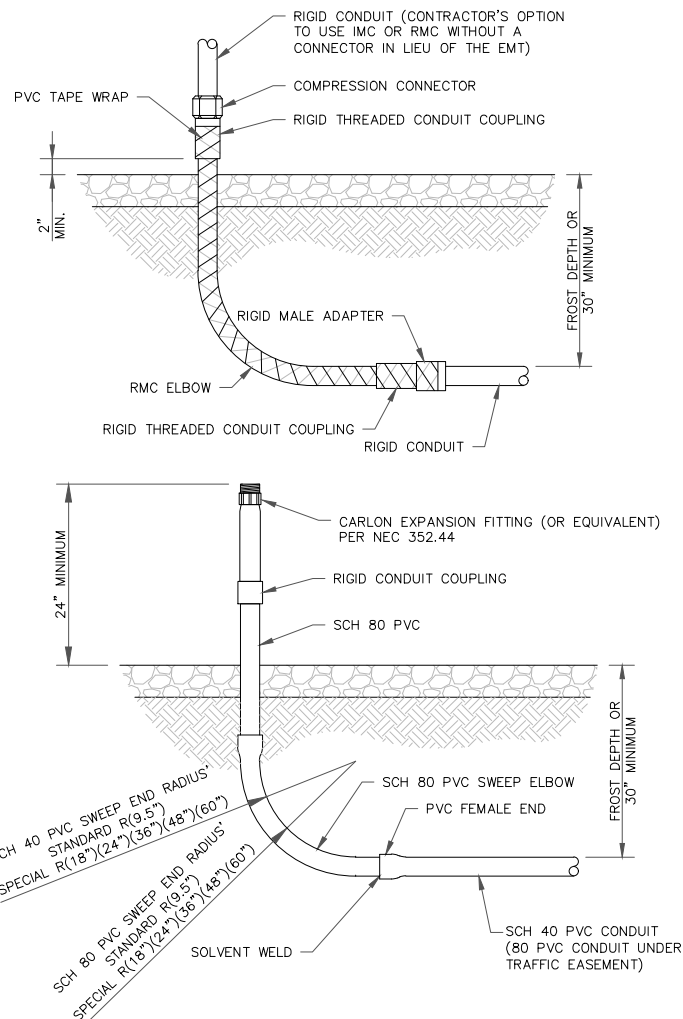
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM



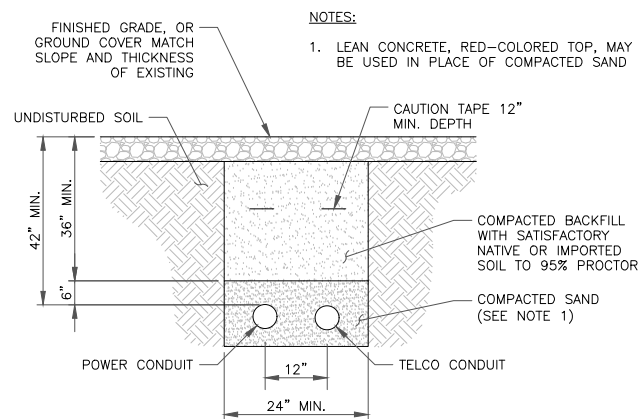
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REVISION: A

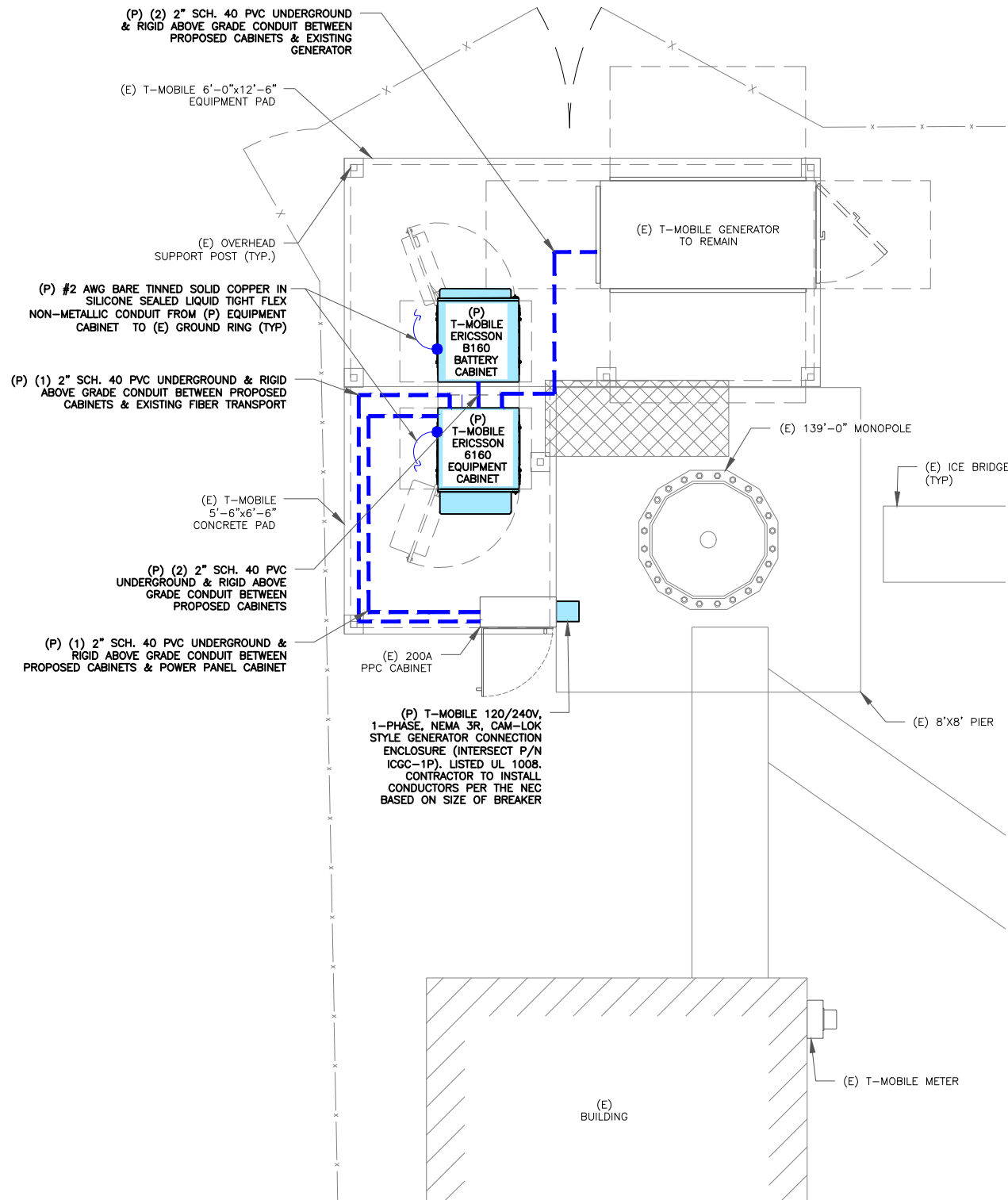
INSTALLER NOTES:
 ALL METAL CONDUIT INSTALLED IN DIRECT CONTACT WITH THE EARTH SHALL BE CONSIDERED TO BE INSTALLED IN A SEVERELY CORROSIVE ENVIRONMENT AND IS REQUIRED TO HAVE SUPPLEMENTAL PROTECTION AGAINST CORROSION (NEC ARTICLE 342.10(B) & 344.10(B)(1)). THIS PROTECTION SHALL EITHER BE AN APPROVED MANUFACTURER INSTALLED PROTECTIVE COATING ON THE CONDUIT OR SHALL BE (2) LAYERS OF 10 MIL PVC PIPE WRAP TAPE INSTALLED USING OPPOSING SPIRAL WRAPS. ON VERTICAL PIPE THE OUTSIDE LAYER OF TAPE SHALL BE WRAPPED SO AS TO PROVIDE SHEDDING OF WATER (I.E. TAPE SHOULD WRAP IN AN UPWARD DIRECTION WITH LOWER WRAP BEING BENEATH THE WRAP ABOVE). SPIRAL WRAPS SHALL HAVE A MINIMUM OF 1/4" OVERLAP WITH THE PRECEDING TAPE WRAP. ANY OTHER METHODS OF CORROSION PROTECTION SHALL REQUIRE APPROVAL BY THE ENGINEER OF RECORD PRIOR TO BEING USED.



2 CONDUIT STUB UP DETAILS
 SCALE: NOT TO SCALE



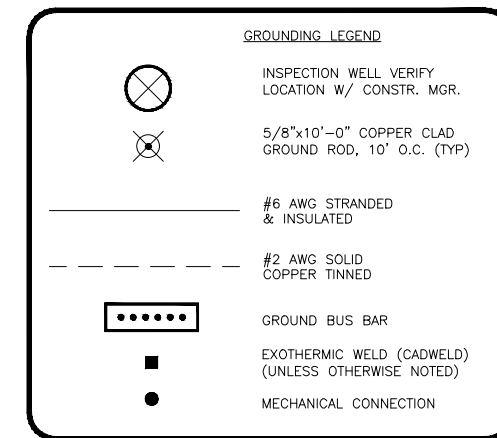
3 TRENCH DETAIL
 SCALE: NOT TO SCALE



1 ELECTRICAL & GROUNDING SITE PLAN
 SCALE: 3/4"=1'-0" (FULL SIZE)
 3/8"=1'-0" (11x17)

GENERAL NOTES:

1. ALL RISERS AND ABOVE GRADE CONDUITS SHALL BE OF GALVANIZED RIGID CONDUIT TYPE.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLATFORM CONDUITS OR ELECTRICAL CONDUCTORS FOR REUSE PRIOR TO CONSTRUCTION.
3. ALL CONDUITS SHALL BE SECURED TO THE PLATFORM WITH ANCHOR AND SIZED PER NEED (TYP.)
4. ALL TRENCHING REQUIRED WITHIN COMPOUND SHALL BE PERFORMED BY HAND-DIGGING ONLY.



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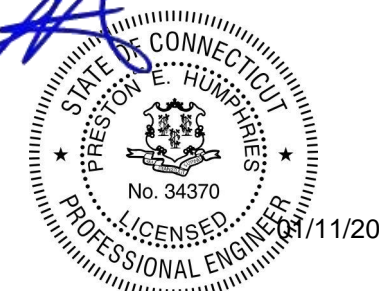
BU #: 876335
 EAST FARMINGTON

130 BIRDSEYE ROAD
 FARMINGTON, CT, 06032

EXISTING 139'-0"
 MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM
1	01/05/2023	RLB	AZIMUTH FIX	JTM
2	01/10/2023	RLB	CABINET LOCATION	JTM



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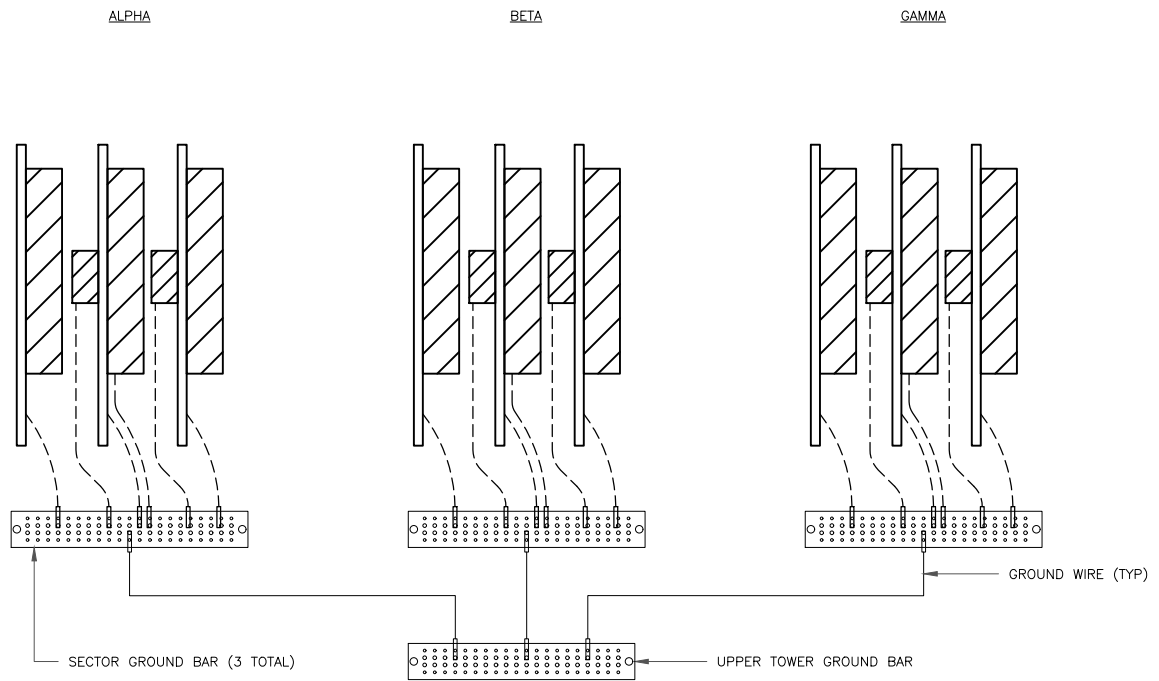
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E-2

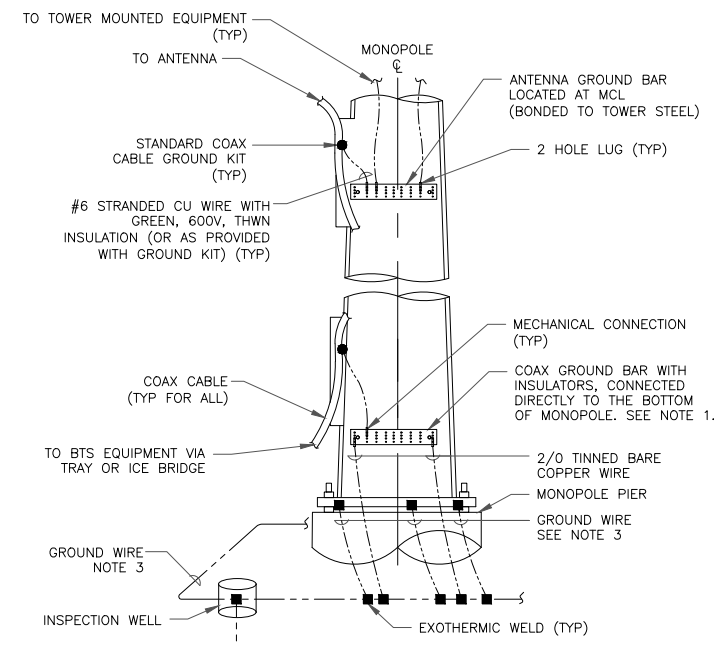
REVISION:

2

NOTE:
ALL NEW GROUNDS TO BE #6 STRANDED COPPER WITH GREEN INSULATION UNLESS NOTED OTHERWISE.

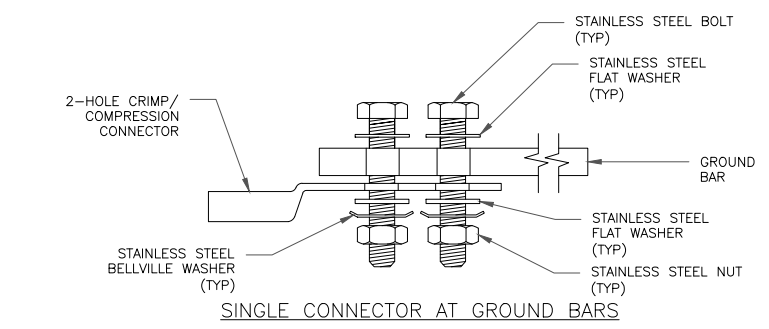


1 ANTENNA GROUNDING DIAGRAM
SCALE: NOT TO SCALE

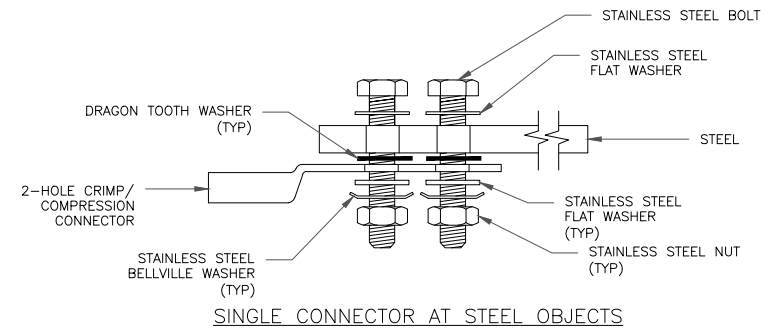


- NOTES:**
1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
 2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
 3. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

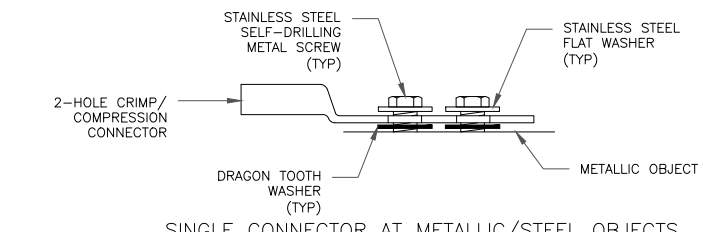
4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

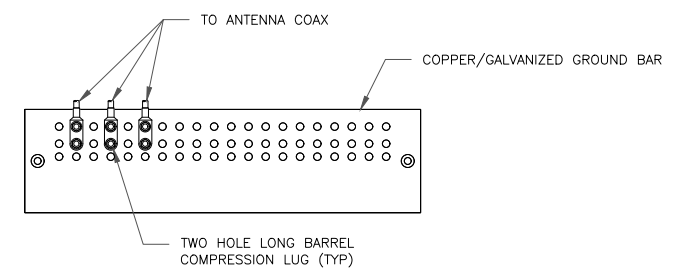


SINGLE CONNECTOR AT STEEL OBJECTS



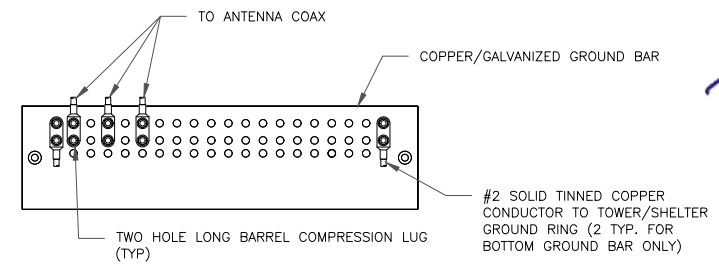
SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



- NOTES:**
1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
 2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
 3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



- NOTES:**
1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
 2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
 3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

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386591

BU #: 876335
EAST FARMINGTON

130 BIRDSEYE ROAD
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EXISTING 139'-0"
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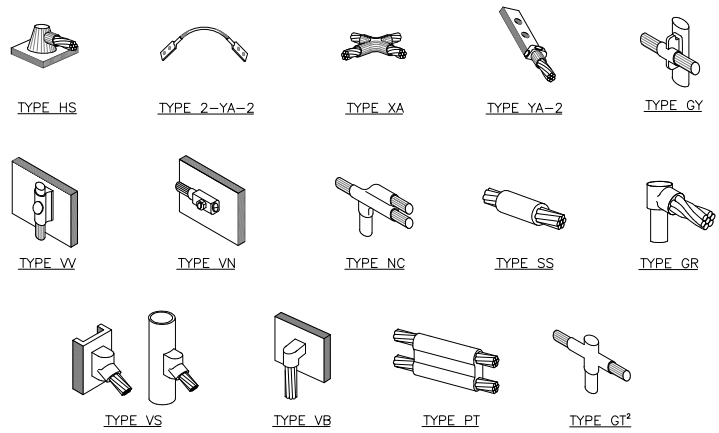
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	11/14/2022	RLB	FCDs	JTM

STATE OF CONNECTICUT
PRESTON E. HUMPHRIES
No. 34370
LICENSED PROFESSIONAL ENGINEER
11/14/2022

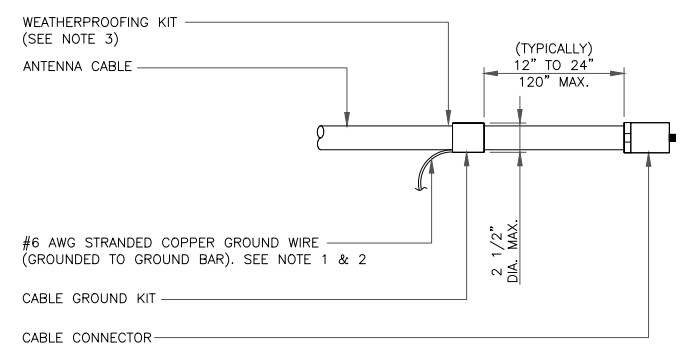
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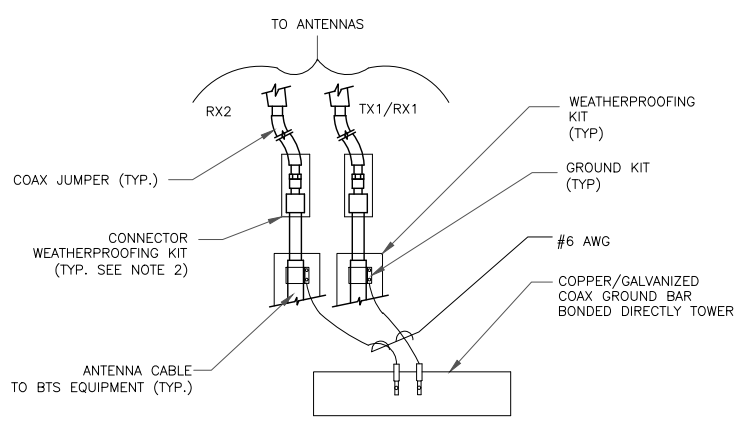
NOTE:
 1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
 2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

1 CADWELD GROUNDING CONNECTIONS
 SCALE: NOT TO SCALE



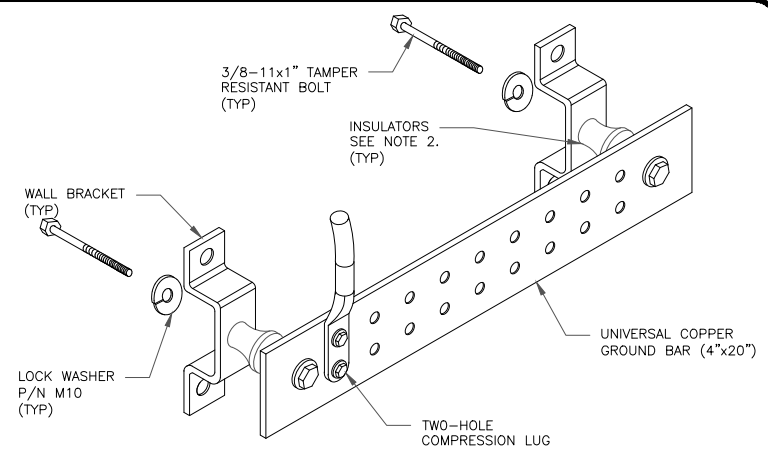
NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
 3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND KIT CONNECTION
 SCALE: NOT TO SCALE



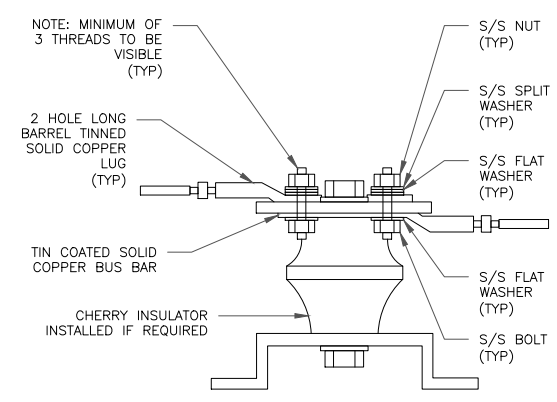
NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
 2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION
 SCALE: NOT TO SCALE



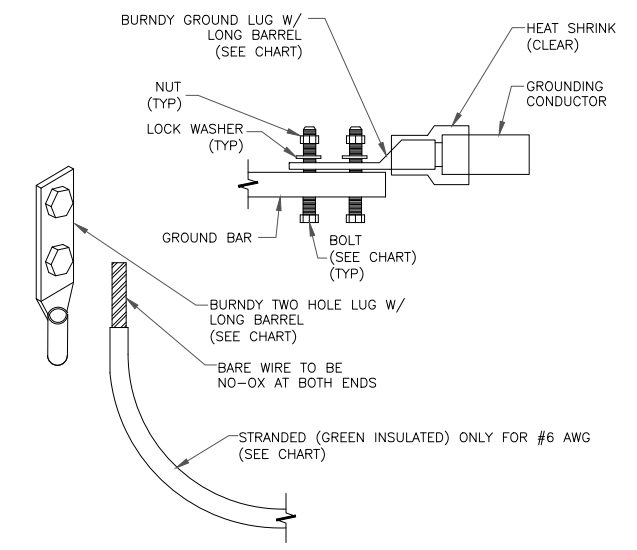
NOTES:
 1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
 2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

6 GROUND BAR DETAIL
 SCALE: NOT TO SCALE



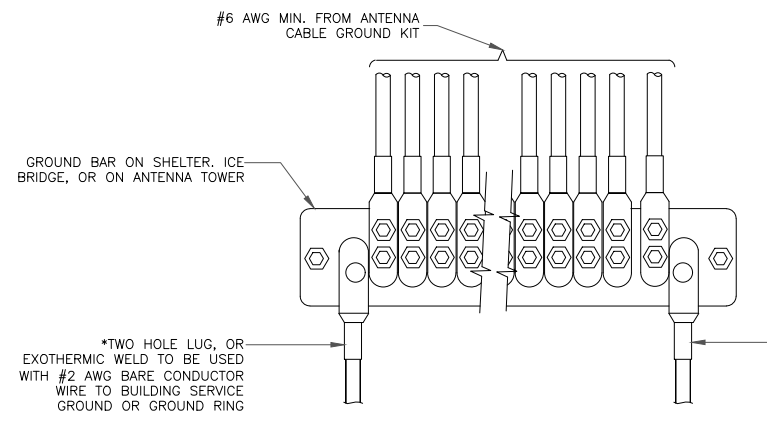
7 LUG DETAIL
 SCALE: NOT TO SCALE

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT

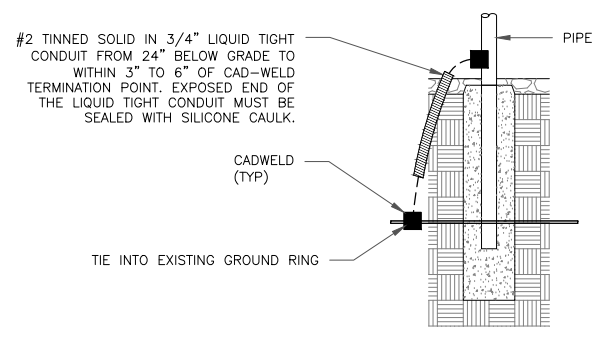


NOTES:
 1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
 STRANDED (GREEN INSULATED) ONLY FOR #6 AWG (SEE CHART)

2 MECHANICAL LUG CONNECTION
 SCALE: NOT TO SCALE



5 GROUNDWIRE INSTALLATION
 SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
 SCALE: NOT TO SCALE

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STATE OF CONNECTICUT
 PRESTON E. HUMPHRIES
 No. 34370
 LICENSED PROFESSIONAL ENGINEER
 11/14/2022

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