



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

February 3, 2022

Denise Sabo
Northeast Site Solutions
54 Main Street, Unit 3
Sturbridge, MA 01566-1359
denise@northeastsitesolutions.com

RE: **TS-DISH-007-220126** - Dish Wireless LLC request for an order to approve tower sharing at an existing telecommunications facility located at 240 Kensington Road, Berlin, Connecticut.

Dear Ms. Sabo:

The Connecticut Siting Council (Council) is in receipt of your correspondence of February 2, 2022 submitted in response to the Council's February 2, 2022 notification of an incomplete request for tower sharing with regard to the above-referenced matter.

The submission renders the request for tower sharing complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Melanie Bachman".

Melanie Bachman
Executive Director
MAB/IN/laf

From: Denise Sabo <denise@northeastsitesolutions.com>
Sent: Wednesday, February 2, 2022 11:51 AM
To: Robidoux, Evan <Evan.Robidoux@ct.gov>
Cc: CSC-DL Siting Council <Siting.Council@ct.gov>; Victoria Masse <victoria@northeastsitesolutions.com>; Deborah Chase <deborah@northeastsitesolutions.com>
Subject: Crown/DISH - 826217 - RE: Council Incomplete Letter for TS-DISH-007-220126 (Kensington Road, Berlin)

Good afternoon, Evan

The Verizon SA dated October 6, 2021 includes the DISH proposed equipment (RAD 171-ft). It was run after the DISH SA.

The DISH SA is dated August 24, 2021. I have attached the Verizon SA that was submitted for reference and I highlighted the DISH equipment as shown on the Verizon SA. Please see attached.

Let me know if you have any questions.

Thank you,
Denise



MORRISON HERSHFIELD

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

Date: **October 06, 2021**

Subject: **Structural Analysis Report**

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 535818
Site Name: Berlin Kensington CT

Crown Castle Designation: **BU Number:** 826217
Site Name: Newington_1
JDE Job Number: 689157
Work Order Number: 2028612
Order Number: 589572 Rev. 0

Engineering Firm Designation: **Morrison Hershfield Project Number:** CN7-585R2 / 2101398

Site Data: **240 Kensington Road, Berlin, Hartford County, CT 06037**
Latitude 41° 37' 34.3", Longitude -72° 46' 32.33"
191.667 Foot - PiRod 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 – 80.2%**

This analysis utilizes an ultimate 3-second gust wind speed of 118 mph as required by the 2018 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



G. Lance Cooke

Digitally signed by
G. Lance Cooke
Date: 2021.10.06
09:44:07-07'00'

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1) INTRODUCTION

This tower is a 191.667 ft monopole tower designed by PiRod Manufactures Inc. The tower was modified multiple times in the past to accommodate additional loading. All the modifications have been considered in this analysis per their respective post modification inspection reports.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	118 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.5 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)
160.0	162.0	3	samsung telecommunications	RFV01U-D1A	13	1-5/8
		3	samsung telecommunications	RFV01U-D2A		
	160.0	1	andrew	HBXX-6517DS-A2M w/ Mount Pipe		
		2	andrew	LNx-6514DS-A1M w/ Mount Pipe		
		6	commscope	NNHH-65B-R4 w/ Mount Pipe		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		1	raycap	RVZDC-6627-PF-48		
		1	-	Platform Mount [LP 303-1]		

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)
192.0	196.0	1	kathrein	OGB4-900D	1	7/8
	192.0	1	-	Side Arm Mount [SO 701-1]		
191.0	196.0	1	andrew	DB589-A	1	5/16
	191.0	1	-	Side Arm Mount [SO 701-1]		
	190.0	1	motorola	WB2623 w/ Mount Pipe		
181.0	181.0	3	rfs celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe	3	1-5/8
		3	ericsson	AIR -32 B2A/B66AA w/ Mount Pipe		
		3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe		
		3	ericsson	RADIO 4415 B25_TMO		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
181.0	181.0	3	ericsson	RADIO 4449 B71 B85A_T-MOBILE	-	-
		3	commscope	ATBT-BOTTOM-24V		
		1	-	Platform Mount [LP 405-1_HR-1]		
171.0	171.0	3	fujitsu	TA08025-B604	1	1-3/4
		3	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MC-PK8-DSH		
158.0	158.0	1	decibel	DB205-A	2	7/8
		1	sinclair	SRL-224NM-4		
		2	-	Side Arm Mount [SO 702-1]		
151.0	151.0	3	andrew	SBNH-1D6565C w/ Mount Pipe	12	1-1/4
		3	powerwave technologies	7770.00 w/ Mount Pipe		
		3	cci antennas	TPA-65R-LCUUUU-H8 w/ Mount Pipe		
		3	ericsson	RRUS 32		
		3	ericsson	RRUS 32 B2		
		3	kaelus	DBC0062F3V52-1		
		3	cci antennas	DTMABP7819VG12A		
		1	raycap	DC6-48-60-18-8F		
		1	-	Miscellaneous [NA 510-1]		
150.0	152.0	2	ericsson	RRUS 11	-	-
		1	raycap	DC6-48-60-18-8F		
	150.0	2	ericsson	RRUS 12		
		1	-	Pipe Mount [PM 601-3]		
		1	-	Side Arm Mount [SO 102-3]		
132.0	132.0	1	sinclair	SRL-235-2	1	7/8
		1	-	Side Arm Mount [SO 104-3]		
		1	-	Side Arm Mount [SO 702-1]		
124.0	124.0	1	decibel	PCS 1900 TMA RX	-	-
		1	tower mounts	Side Arm Mount [SO 104-3]		
116.0	120.0	1	andrew	VHLP2-18	6 3 1 1	5/16 1-5/8 1/2 2C
	118.0	3	decibel	844G65VTZAS w/ Mount Pipe		
		6	decibel	844G65VTZAS		
		3	commscope	NNVV-65B-R4		
		3	alcatel lucent	PCS 1900MHZ 4X45W-65MHZ		
		3	argus technologies	LLPX310R-V4		
3	nokia	AHCC				

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
116.0	116.0	1	dragonwave	HORIZON DUO	-	-
		3	samsung telecommunications	WIMAX DAP HEAD		
		6	-	Dual Mount Bracket		
		1	-	Platform Mount [LP 405-1_HR-1]		
90.0	99.0	1	decibel	DB205-A	2 1 1	1/2 7/8 5/16
	90.0	1	andrew	KP2F-34		
		1	mti wireless edge	MT-485002		
		1	-	Side Arm Mount [SO 702-3]		
70.0	70.0	1	sinclair	SRL-235-2	2	7/8
		1	-	Side Arm Mount [SO 102-3]		
		1	-	Side Arm Mount [SO 701-1]		
33.0	33.0	1	decibel	DB909XVTE-M	2	1/2
		1	-	Side Arm Mount [SO 102-3]		
		1	-	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	3438510	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	3463552	CCISITES
4-TOWER MANUFACTURER DRAWINGS	3438498	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3678661	CCISITES
4-POST-MODIFICATION INSPECTION	5493013	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5753424	CCISITES
4-POST-MODIFICATION INSPECTION	5947973	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	4003976	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	191.667 - 186.667	Pole	TP18x18x0.375	Pole	1.1%	Pass
L2	186.667 - 181.567	Pole	TP24x24x0.375	Pole	1.3%	Pass
L3	181.567 - 176.567	Pole	TP24x24x0.375	Pole	5.0%	Pass
L4	176.567 - 171.567	Pole	TP24x24x0.375	Pole	8.9%	Pass
L5	171.567 - 166.567	Pole	TP24x24x0.375	Pole	15.2%	Pass
L6	166.567 - 161.567	Pole	TP24x24x0.375	Pole	21.7%	Pass
L7	161.567 - 156.567	Pole	TP24x24x0.375	Pole	31.5%	Pass
L8	156.567 - 151.567	Pole	TP24x24x0.375	Pole	42.0%	Pass
L9	151.567 - 146.567	Pole	TP24x24x0.375	Pole	56.4%	Pass
L10	146.567 - 141.567	Pole	TP24x24x0.375	Pole	70.8%	Pass
L11	141.567 - 141.417	Pole	TP24x24x0.375	Pole	71.3%	Pass
L12	141.417 - 136.417	Pole	TP36x36x0.375	Pole	40.6%	Pass
L13	136.417 - 131.417	Pole	TP36x36x0.375	Pole	47.7%	Pass
L14	131.417 - 126.417	Pole	TP36x36x0.375	Pole	55.0%	Pass
L15	126.417 - 121.417	Pole	TP36x36x0.375	Pole	62.6%	Pass
L16	121.417 - 121.167	Pole	TP36x36x0.375	Pole	62.9%	Pass
L17	121.167 - 116.167	Pole	TP42x42x0.375	Pole	53.0%	Pass
L18	116.167 - 111.167	Pole	TP42x42x0.375	Pole	60.5%	Pass
L19	111.167 - 110.042	Pole	TP42x42x0.375	Pole	62.1%	Pass
L20	110.042 - 109.792	Pole + Reinf.	TP42x42x0.4875	Reinf. 13 Tension Rupture	48.4%	Pass
L21	109.792 - 105.083	Pole + Reinf.	TP42x42x0.4875	Reinf. 13 Tension Rupture	53.8%	Pass
L22	105.083 - 104.833	Pole + Reinf.	TP42x42x0.5625	Reinf. 6 Tension Rupture	49.1%	Pass
L23	104.833 - 100.917	Pole + Reinf.	TP42x42x0.5625	Reinf. 6 Tension Rupture	53.4%	Pass
L24	100.917 - 100.667	Pole	TP48x48x0.375	Pole	59.4%	Pass
L25	100.667 - 95.833	Pole	TP48x48x0.375	Pole	65.4%	Pass
L26	95.833 - 95.583	Pole + Reinf.	TP48x48x0.475	Pole	52.1%	Pass
L27	95.583 - 90.583	Pole + Reinf.	TP48x48x0.475	Pole	57.3%	Pass
L28	90.583 - 89.917	Pole + Reinf.	TP48x48x0.475	Pole	58.0%	Pass
L29	89.917 - 89.667	Pole + Reinf.	TP48x48x0.575	Pole	48.3%	Pass
L30	89.667 - 84.667	Pole + Reinf.	TP48x48x0.575	Pole	52.9%	Pass
L31	84.667 - 80.833	Pole + Reinf.	TP48x48x0.575	Pole	56.5%	Pass
L32	80.833 - 80.333	Pole + Reinf.	TP54x54x0.55	Pole	47.5%	Pass
L33	80.333 - 80.083	Pole + Reinf.	TP54x54x0.4875	Pole	53.7%	Pass
L34	80.083 - 75.083	Pole + Reinf.	TP54x54x0.4875	Pole	58.2%	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L35	75.083 - 70.083	Pole + Reinf.	TP54x54x0.4875	Pole	62.9%	Pass
L36	70.083 - 69.5	Pole + Reinf.	TP54x54x0.4875	Pole	63.5%	Pass
L37	69.5 - 69.25	Pole + Reinf.	TP54x54x0.5875	Pole	52.7%	Pass
L38	69.25 - 64.25	Pole + Reinf.	TP54x54x0.5875	Pole	56.9%	Pass
L39	64.25 - 60.583	Pole + Reinf.	TP54x54x0.5875	Pole	60.1%	Pass
L40	60.583 - 60.333	Pole + Reinf.	TP60x60x0.5125	Pole	56.4%	Pass
L41	60.333 - 55.333	Pole + Reinf.	TP60x60x0.5125	Pole	60.6%	Pass
L42	55.333 - 52.167	Pole + Reinf.	TP60x60x0.5125	Pole	63.2%	Pass
L43	52.167 - 51.917	Pole + Reinf.	TP60x60x0.625	Pole	52.9%	Pass
L44	51.917 - 46.917	Pole + Reinf.	TP60x60x0.625	Pole	56.5%	Pass
L45	46.917 - 41.917	Pole + Reinf.	TP60x60x0.625	Pole	60.2%	Pass
L46	41.917 - 40.233	Pole + Reinf.	TP60x60x0.6	Pole	62.0%	Pass
L47	40.233 - 39.983	Pole + Reinf.	TP60x60x0.6	Pole	62.2%	Pass
L48	39.983 - 34.983	Pole + Reinf.	TP60x60x0.6	Pole	66.1%	Pass
L49	34.983 - 29.983	Pole + Reinf.	TP60x60x0.6	Pole	70.0%	Pass
L50	29.983 - 28	Pole + Reinf.	TP60x60x0.6	Pole	71.6%	Pass
L51	28 - 27.75	Pole + Reinf.	TP60x60x0.725	Pole	60.3%	Pass
L52	27.75 - 22.75	Pole + Reinf.	TP60x60x0.725	Pole	63.7%	Pass
L53	22.75 - 20.083	Pole + Reinf.	TP60x60x0.725	Pole	65.6%	Pass
L54	20.083 - 19.833	Pole	TP60x60x0.625	Pole	73.2%	Pass
L55	19.833 - 17	Pole	TP60x60x0.625	Pole	75.5%	Pass
L56	17 - 16.75	Pole + Reinf.	TP60x60x0.725	Pole	65.4%	Pass
L57	16.75 - 11.65	Pole + Reinf.	TP60x60x0.75	Pole	67.3%	Pass
L58	11.65 - 11.417	Pole + Reinf.	TP60x60x0.75	Pole	67.5%	Pass
L59	11.417 - 9.396	Pole + Reinf.	TP60x60x0.75	Pole	68.8%	Pass
L60	9.396 - 9.146	Pole + Reinf.	TP60x60x0.8	Reinf. 7 Tension Rupture	68.5%	Pass
L61	9.146 - 4.833	Pole + Reinf.	TP60x60x0.8	Reinf. 7 Tension Rupture	71.4%	Pass
L62	4.833 - 4.583	Pole + Reinf.	TP60x60x0.75	Pole	73.1%	Pass
L63	4.583 - 0	Pole + Reinf.	TP60x60x0.75	Pole	76.3%	Pass
					Summary	
				Pole	76.3%	Pass
				Reinforcement	74.3%	Pass
				Overall	76.3%	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Flange Connection	181.58	1.8	Pass
1,2	Flange Connection	141.42	46.1	Pass
1,2	Flange Connection	121.2	35.8	Pass
1,2	Flange Connection	100.9	34.4	Pass
1,2	Flange Connection	80.83	34.9	Pass
1,2	Flange Connection	60.58	22.5	Pass
1,2	Flange Connection	40.33	16.6	Pass
1,2	Flange Connection	20.08	21.1	Pass
1	Anchor Rods	0	48.9	Pass
1,2	Base Plate		48.9	Pass
1	Base Foundation (Structure)	0	80.2	Pass
1	Base Foundation (Soil Interaction)		76.6	Pass

Structure Rating (max from all components) =	80.2%*
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Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
- 2) The base and flange plates have been considered to have the same capacity as their respective bolts.
- 3) *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

Tower Input Data

The tower is a monopole.
 This tower is designed using the TIA-222-H standard.
 The following design criteria apply:

- Tower is located in Hartford County, Connecticut.
- Tower base elevation above sea level: 133.00 ft.
- Basic wind speed of 118 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.5000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric | <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. Autocalc Torque Arm Areas Add IBC .6D+W Combination Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs | <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 |
| Poles | | |
| <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 | | |

Pole Section Geometry

Section	Elevation	Section Length	Pole Size	Pole Grade	Socket Length
	ft	ft			ft
L1	191.67-186.67	5.00	P18x0.375	A53-B-42 (42 ksi)	
L2	186.67-181.57	5.10	P24x0.375	A53-B-42 (42 ksi)	
L3	181.57-176.57	5.00	P24x0.375	A53-B-42 (42 ksi)	
L4	176.57-171.57	5.00	P24x0.375	A53-B-42	

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
L5	171.57-166.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L6	166.57-161.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L7	161.57-156.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L8	156.57-151.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L9	151.57-146.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L10	146.57-141.57	5.00	P24x0.375	(42 ksi) A53-B-42	
L11	141.57-141.42	0.15	P24x0.375	(42 ksi) A53-B-42	
L12	141.42-136.42	5.00	P36x0.375	(42 ksi) A53-B-42	
L13	136.42-131.42	5.00	P36x0.375	(42 ksi) A53-B-42	
L14	131.42-126.42	5.00	P36x0.375	(42 ksi) A53-B-42	
L15	126.42-121.42	5.00	P36x0.375	(42 ksi) A53-B-42	
L16	121.42-121.17	0.25	P36x0.375	(42 ksi) A53-B-42	
L17	121.17-116.17	5.00	P42x0.375	(42 ksi) A53-B-42	
L18	116.17-111.17	5.00	P42x0.375	(42 ksi) A53-B-42	
L19	111.17-110.04	1.13	P42x0.375	(42 ksi) A53-B-42	
L20	110.04-109.79	0.25	P42x0.4875	(42 ksi) A53-B-42	
L21	109.79-105.08	4.71	P42x0.4875	(42 ksi) A53-B-42	
L22	105.08-104.83	0.25	P42x0.5625	(42 ksi) A53-B-42	
L23	104.83-100.92	3.92	P42x0.5625	(42 ksi) A53-B-42	
L24	100.92-100.67	0.25	P48x0.375	(42 ksi) A53-B-42	
L25	100.67-95.83	4.83	P48x0.375	(42 ksi) A53-B-42	
L26	95.83-95.58	0.25	P48x0.475	(42 ksi) A53-B-42	
L27	95.58-90.58	5.00	P48x0.475	(42 ksi) A53-B-42	
L28	90.58-89.92	0.67	P48x0.475	(42 ksi) A53-B-42	
L29	89.92-89.67	0.25	P48x0.575	(42 ksi) A53-B-42	
L30	89.67-84.67	5.00	P48x0.575	(42 ksi) A53-B-42	
L31	84.67-80.83	3.83	P48x0.575	(42 ksi) A53-B-42	
L32	80.83-80.33	0.50	P54x0.55	(42 ksi) A53-B-42	
L33	80.33-80.08	0.25	P54x0.4875	(42 ksi) A53-B-42	
L34	80.08-75.08	5.00	P54x0.4875	(42 ksi) A53-B-42	
L35	75.08-70.08	5.00	P54x0.4875	(42 ksi) A53-B-42	
L36	70.08-69.50	0.58	P54x0.4875	(42 ksi) A53-B-42	
L37	69.50-69.25	0.25	P54x0.5875	(42 ksi) A53-B-42	
L38	69.25-64.25	5.00	P54x0.5875	(42 ksi) A53-B-42	

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
L39	64.25-60.58	3.67	P54x0.5875	A53-B-42 (42 ksi)	
L40	60.58-60.33	0.25	P60x0.5125	A53-B-42 (42 ksi)	
L41	60.33-55.33	5.00	P60x0.5125	A53-B-42 (42 ksi)	
L42	55.33-52.17	3.17	P60x0.5125	A53-B-42 (42 ksi)	
L43	52.17-51.92	0.25	P60x0.625	A53-B-42 (42 ksi)	
L44	51.92-46.92	5.00	P60x0.625	A53-B-42 (42 ksi)	
L45	46.92-41.92	5.00	P60x0.625	A53-B-42 (42 ksi)	
L46	41.92-40.23	1.68	P60x0.6	A53-B-42 (42 ksi)	
L47	40.23-39.98	0.25	P60x0.6	A53-B-42 (42 ksi)	
L48	39.98-34.98	5.00	P60x0.6	A53-B-42 (42 ksi)	
L49	34.98-29.98	5.00	P60x0.6	A53-B-42 (42 ksi)	
L50	29.98-28.00	1.98	P60x0.6	A53-B-42 (42 ksi)	
L51	28.00-27.75	0.25	P60x0.725	A53-B-42 (42 ksi)	
L52	27.75-22.75	5.00	P60x0.725	A53-B-42 (42 ksi)	
L53	22.75-20.08	2.67	P60x0.725	A53-B-42 (42 ksi)	
L54	20.08-19.83	0.25	P60x0.625	A53-B-42 (42 ksi)	
L55	19.83-17.00	2.83	P60x0.625	A53-B-42 (42 ksi)	
L56	17.00-16.75	0.25	P60x0.725	A53-B-42 (42 ksi)	
L57	16.75-11.65	5.10	P60x0.75	A53-B-42 (42 ksi)	
L58	11.65-11.42	0.23	P60x0.75	A53-B-42 (42 ksi)	
L59	11.42-9.40	2.02	P60x0.75	A53-B-42 (42 ksi)	
L60	9.40-9.15	0.25	P60x0.8	A53-B-42 (42 ksi)	
L61	9.15-4.83	4.31	P60x0.8	A53-B-42 (42 ksi)	
L62	4.83-4.58	0.25	P60x0.75	A53-B-42 (42 ksi)	
L63	4.58-0.00	4.58	P60x0.75	A53-B-42 (42 ksi)	

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontal in	Double Angle Stitch Bolt Spacing Redundants in
L1 191.67- 186.67				1	1	1			
L2 186.67- 181.57				1	1	1			
L3 181.57- 176.57				1	1	1			
L4 176.57- 171.57				1	1	1			
L5 171.57- 166.57				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							
L6 166.57-161.57				1	1	1			
L7 161.57-156.57				1	1	1			
L8 156.57-151.57				1	1	1			
L9 151.57-146.57				1	1	1			
L10 146.57-141.57				1	1	1			
L11 141.57-141.42				1	1	1			
L12 141.42-136.42				1	1	1			
L13 136.42-131.42				1	1	1			
L14 131.42-126.42				1	1	1			
L15 126.42-121.42				1	1	1			
L16 121.42-121.17				1	1	1			
L17 121.17-116.17				1	1	1			
L18 116.17-111.17				1	1	1			
L19 111.17-110.04				1	1	1			
L20 110.04-109.79				1	1	0.983655			
L21 109.79-105.08				1	1	0.983655			
L22 105.08-104.83				1	1	0.976951			
L23 104.83-100.92				1	1	0.976951			
L24 100.92-100.67				1	1	1			
L25 100.67-95.83				1	1	1			
L26 95.83-95.58				1	1	0.981492			
L27 95.58-90.58				1	1	0.981492			
L28 90.58-89.92				1	1	0.981492			
L29 89.92-89.67				1	1	0.97009			
L30 89.67-84.67				1	1	0.97009			
L31 84.67-80.83				1	1	0.97009			
L32 80.83-80.33				1	1	0.976401			
L33 80.33-80.08				1	1	0.990478			
L34 80.08-75.08				1	1	0.990478			
L35 75.08-70.08				1	1	0.990478			
L36 70.08-69.50				1	1	0.990478			
L37 69.50-69.25				1	1	1.00601			
L38 69.25-64.25				1	1	1.00601			

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							
L39 64.25-60.58				1	1	1.00601			
L40 60.58-60.33				1	1	0.987891			
L41 60.33-55.33				1	1	0.987891			
L42 55.33-52.17				1	1	0.987891			
L43 52.17-51.92				1	1	1.01747			
L44 51.92-46.92				1	1	1.01747			
L45 46.92-41.92				1	1	1.01747			
L46 41.92-40.23				1	1	0.995499			
L47 40.23-39.98				1	1	0.995499			
L48 39.98-34.98				1	1	0.995499			
L49 34.98-29.98				1	1	0.995499			
L50 29.98-28.00				1	1	0.995499			
L51 28.00-27.75				1	1	1.00337			
L52 27.75-22.75				1	1	1.00337			
L53 22.75-20.08				1	1	1.00337			
L54 20.08-19.83				1	1	1			
L55 19.83-17.00				1	1	1			
L56 17.00-16.75				1	1	1.04129			
L57 16.75-11.65				1	1	1.02849			
L58 11.65-11.42				1	1	1.02849			
L59 11.42-9.40				1	1	1.02849			
L60 9.40-9.15				1	1	1.00535			
L61 9.15-4.83				1	1	1.00535			
L62 4.83-4.58				1	1	1.04998			
L63 4.58-0.00				1	1	1.04998			

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
* Reinforcement Plates*										
CCI 4" x 0.75" Plate	A	No	Surface (CaAa)	Af 10.88 - 0.00	1	1	0.400 - 0.450	4.0000	9.5000	0.00
CCI 4" x 0.75" Plate	B	No	Surface (CaAa)	Af 10.88 - 0.00	1	1	-0.250 - 0.200	4.0000	9.5000	0.00
CCI 4" x 0.75" Plate	C	No	Surface (CaAa)	Af 13.17 - 3.17	1	1	0.250 - 0.300	4.0000	9.5000	0.00
*										
CCI 6" x 1" Plate	A	No	Surface (CaAa)	Af 39.75 - 20.75	1	1	0.400 - 0.500	6.0000	14.0000	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
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	39.75 - 20.75	1	1	0.400 0.500	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	39.75 - 20.75	1	1	0.400 0.500	6.0000	14.0000	0.00
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	59.92 - 40.83	1	1	-0.450 -0.400	6.5000	15.5000	0.00
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	59.92 - 40.83	1	1	-0.450 -0.400	6.5000	15.5000	0.00
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	59.92 - 40.83	1	1	-0.400 -0.350	6.5000	15.5000	0.00
*										
CCI 6" x 1" Plate	A	No	Surface Af (CaAa)	80.17 - 61.17	1	1	-0.450 -0.400	6.0000	14.0000	0.00
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	80.17 - 61.17	1	1	-0.350 -0.300	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	80.17 - 61.17	1	1	-0.450 -0.400	6.0000	14.0000	0.00
*										
CCI 4" x 0.75" Plate	A	No	Surface Af (CaAa)	106.58 - 101.58	1	1	-0.500 -0.450	4.0000	9.5000	0.00
CCI 4" x 0.75" Plate	B	No	Surface Af (CaAa)	106.58 - 101.58	1	1	-0.500 -0.450	4.0000	9.5000	0.00
CCI 4" x 0.75" Plate	C	No	Surface Af (CaAa)	106.58 - 101.58	1	1	-0.500 -0.450	4.0000	9.5000	0.00
*										
1" x 2" Plate	A	No	Surface Af (CaAa)	50.42 - 40.58	1	1	-0.450 -0.400	1.0000	6.0000	6.81
1" x 2" Plate	B	No	Surface Af (CaAa)	50.42 - 40.58	1	1	-0.350 -0.300	1.0000	6.0000	6.81
1" x 2" Plate	B	No	Surface Af (CaAa)	50.42 - 40.58	1	1	0.200 0.250	1.0000	6.0000	6.81
1" x 2" Plate	C	No	Surface Af (CaAa)	50.42 - 40.58	1	1	-0.350 -0.300	1.0000	6.0000	6.81
*										
1" x 2" Plate	A	No	Surface Af (CaAa)	66.17 - 61.08	1	1	-0.350 -0.300	1.0000	6.0000	6.81
1" x 2" Plate	B	No	Surface Af (CaAa)	66.17 - 61.08	1	1	-0.450 -0.400	1.0000	6.0000	6.81
1" x 2" Plate	B	No	Surface Af (CaAa)	66.17 - 61.08	1	1	0.300 0.350	1.0000	6.0000	6.81
1" x 2" Plate	C	No	Surface Af (CaAa)	66.17 - 61.08	1	1	-0.450 -0.400	1.0000	6.0000	6.81
*										
CCI 6" x 1" Plate	A	No	Surface Af (CaAa)	19.00 - 0.00	1	1	0.300 0.350	6.0000	14.0000	0.00
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	19.00 - 0.00	1	1	0.400 0.450	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	19.00 - 0.00	1	1	0.450 0.500	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	19.00 - 0.00	1	1	-0.500 -0.450	6.0000	14.0000	0.00
*										
CCI 6" x 1" Plate	A	No	Surface Af (CaAa)	30.00 - 17.00	1	1	-0.150 -0.100	6.0000	14.0000	0.00
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	30.00 - 17.00	1	1	-0.450 -0.400	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	30.00 - 17.00	1	1	0.350 0.400	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	30.00 - 17.00	1	1	-0.500 -0.450	6.0000	14.0000	0.00
*										
CCI 6" x 1" Plate	A	No	Surface Af (CaAa)	50.17 - 37.17	1	1	0.250 0.300	6.0000	14.0000	0.00
CCI 6" x 1" Plate	B	No	Surface Af (CaAa)	50.17 - 37.17	1	1	0.100 0.150	6.0000	14.0000	0.00
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	50.17 - 37.17	1	1	-0.400 -0.350	6.0000	14.0000	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
CCI 6" x 1" Plate	C	No	Surface Af (CaAa)	50.17 - 37.17	1	1	0.450 0.500	6.0000	14.0000	0.00
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	71.00 - 61.00	1	1	-0.250 -0.200	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	71.00 - 61.00	1	1	-0.450 -0.400	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	71.00 - 61.00	1	1	0.400 0.450	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	71.00 - 61.00	1	1	0.350 0.400	4.5000	11.0000	0.00
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	97.33 - 81.33	1	1	-0.500 -0.450	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	97.33 - 81.33	1	1	-0.500 -0.450	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	97.33 - 81.33	1	1	-0.500 -0.450	4.5000	11.0000	0.00
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	111.54 - 101.54	1	1	-0.350 -0.300	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	111.54 - 101.54	1	1	-0.350 -0.300	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	111.54 - 101.54	1	1	-0.350 -0.300	4.5000	11.0000	0.00
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	91.42 - 81.42	1	1	-0.150 -0.100	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	91.42 - 81.42	1	1	-0.150 -0.100	4.5000	11.0000	0.00
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	91.42 - 81.42	1	1	-0.150 -0.100	4.5000	11.0000	0.00
*										
* BS*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	27.50 - 12.67	1	1	0.400 0.450	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	27.50 - 12.67	1	1	-0.250 -0.200	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	27.50 - 12.67	1	1	0.450 0.500	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	27.50 - 12.67	1	1	-0.250 -0.200	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	27.50 - 12.67	1	1	0.350 0.400	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	27.50 - 12.67	1	1	-0.250 -0.200	6.5000	15.5000	27.65
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	47.83 - 32.83	1	1	0.400 0.450	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	47.83 - 32.83	1	1	-0.400 -0.350	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	47.83 - 32.83	1	1	-0.400 -0.350	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	47.83 - 32.83	1	1	-0.250 -0.200	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	47.83 - 32.83	1	1	-0.400 0.350	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	47.83 - 32.83	1	1	-0.250 -0.200	6.5000	15.5000	27.65
*										
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	60.08 - 55.25	1	1	0.200 0.250	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	60.08 - 55.25	1	1	-0.400 -0.350	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	60.08 - 55.25	1	1	0.150 0.200	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	60.08 - 55.25	1	1	-0.350 -0.300	8.5000	19.5000	36.16

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
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	60.08 - 55.25	1	1	0.100 0.150	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	60.08 - 55.25	1	1	-0.500 -0.450	8.5000	19.5000	36.16
*										
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	61.08 - 60.08	1	1	0.200 0.250	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	61.08 - 60.08	1	1	-0.400 -0.350	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	61.08 - 60.08	1	1	0.150 0.200	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	61.08 - 60.08	1	1	-0.350 -0.300	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	61.08 - 60.08	1	1	0.100 0.150	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	61.08 - 60.08	1	1	-0.500 -0.450	8.5000	19.5000	36.16
*										
CCI 8.5" x 4.25" Plate	A	No	Surface Af (CaAa)	68.42 - 61.08	1	1	0.200 0.250	8.5000	25.5000	122.94
CCI 8.5" x 4.25" Plate	A	No	Surface Af (CaAa)	68.42 - 61.08	1	1	-0.400 -0.350	8.5000	25.5000	122.94
CCI 8.5" x 4.25" Plate	B	No	Surface Af (CaAa)	68.42 - 61.08	1	1	0.150 0.200	8.5000	25.5000	122.94
CCI 8.5" x 4.25" Plate	B	No	Surface Af (CaAa)	68.42 - 61.08	1	1	-0.350 -0.300	8.5000	25.5000	122.94
CCI 8.5" x 4.25" Plate	C	No	Surface Af (CaAa)	68.42 - 61.08	1	1	0.100 0.150	8.5000	25.5000	122.94
CCI 8.5" x 4.25" Plate	C	No	Surface Af (CaAa)	68.42 - 61.08	1	1	-0.500 -0.450	8.5000	25.5000	122.94
*										
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	73.42 - 68.42	1	1	0.200 0.250	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	A	No	Surface Af (CaAa)	73.42 - 68.42	1	1	-0.400 -0.350	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	73.42 - 68.42	1	1	0.150 0.200	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	B	No	Surface Af (CaAa)	73.42 - 68.42	1	1	-0.350 -0.300	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	73.42 - 68.42	1	1	0.100 0.150	8.5000	19.5000	36.16
CCI 8.5" x 1.25" Plate	C	No	Surface Af (CaAa)	73.42 - 68.42	1	1	-0.500 -0.450	8.5000	19.5000	36.16
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	80.33 - 76.50	1	1	0.050 0.100	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	80.33 - 76.50	1	1	0.000 0.050	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	80.33 - 76.50	1	1	0.150 0.200	6.5000	15.5000	27.65
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	80.50 - 80.33	1	1	0.050 0.100	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	80.50 - 80.33	1	1	0.000 0.050	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	80.50 - 80.33	1	1	0.150 0.200	6.5000	15.5000	27.65
*										
CCI 6.5" x 4.25" Plate	A	No	Surface Af (CaAa)	85.83 - 80.50	1	1	0.050 0.100	6.5000	21.5000	94.01
CCI 6.5" x 4.25" Plate	B	No	Surface Af (CaAa)	85.83 - 80.50	1	1	0.000 0.050	6.5000	21.5000	94.01
CCI 6.5" x 4.25" Plate	C	No	Surface Af (CaAa)	85.83 - 80.50	1	1	0.150 0.200	6.5000	21.5000	94.01
*										
CCI 6.5" x 1.25" Plate	A	No	Surface Af (CaAa)	89.75 - 85.83	1	1	0.050 0.100	6.5000	15.5000	27.65

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
CCI 6.5" x 1.25" Plate	B	No	Surface Af (CaAa)	89.75 - 85.83	1	1	0.000 0.050	6.5000	15.5000	27.65
CCI 6.5" x 1.25" Plate	C	No	Surface Af (CaAa)	89.75 - 85.83	1	1	0.150 0.200	6.5000	15.5000	27.65
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	100.42 - 97.92	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	100.42 - 97.92	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	100.42 - 97.92	1	1	-0.100 -0.050	4.5000	11.0000	15.34
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	101.42 - 100.42	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	101.42 - 100.42	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	101.42 - 100.42	1	1	-0.100 -0.050	4.5000	11.0000	15.34
* CCI 4.5" x 4" Plate	A	No	Surface Af (CaAa)	104.42 - 101.42	1	1	-0.150 -0.100	4.5000	17.0000	61.26
CCI 4.5" x 4" Plate	B	No	Surface Af (CaAa)	104.42 - 101.42	1	1	-0.100 -0.050	4.5000	17.0000	61.26
CCI 4.5" x 4" Plate	C	No	Surface Af (CaAa)	104.42 - 101.42	1	1	-0.100 -0.050	4.5000	17.0000	61.26
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	107.17 - 104.42	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	107.17 - 104.42	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	107.17 - 104.42	1	1	-0.100 -0.050	4.5000	11.0000	15.34
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	120.67 - 117.92	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	120.67 - 117.92	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	120.67 - 117.92	1	1	-0.200 -0.150	4.5000	11.0000	15.34
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	121.67 - 120.67	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	121.67 - 120.67	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	121.67 - 120.67	1	1	-0.200 -0.150	4.5000	11.0000	15.34
* CCI 4.5" x 4" Plate	A	No	Surface Af (CaAa)	124.42 - 121.67	1	1	-0.150 -0.100	4.5000	17.0000	61.26
CCI 4.5" x 4" Plate	B	No	Surface Af (CaAa)	124.42 - 121.67	1	1	-0.100 -0.050	4.5000	17.0000	61.26
CCI 4.5" x 4" Plate	C	No	Surface Af (CaAa)	124.42 - 121.67	1	1	-0.200 -0.150	4.5000	17.0000	61.26
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	127.17 - 124.42	1	1	-0.150 -0.100	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	127.17 - 124.42	1	1	-0.100 -0.050	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	127.17 - 124.42	1	1	-0.200 -0.150	4.5000	11.0000	15.34
* CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	61.46 - 58.00	1	1	-0.250 -0.200	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	61.46 - 58.00	1	1	-0.450 -0.400	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	61.46 - 58.00	1	1	0.400 0.450	4.5000	11.0000	15.34

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
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	61.46 - 58.00	1	1	0.350 0.400	4.5000	11.0000	15.34
*										
CCI 4.5" x 3" Plate	A	No	Surface Af (CaAa)	62.96 - 61.55	1	1	-0.250 -0.200	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	B	No	Surface Af (CaAa)	62.96 - 61.55	1	1	-0.450 -0.400	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	B	No	Surface Af (CaAa)	62.96 - 61.55	1	1	0.400 0.450	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	C	No	Surface Af (CaAa)	62.96 - 61.55	1	1	0.350 0.400	4.5000	15.0000	45.94
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	81.71 - 78.33	1	1	-0.500 -0.450	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	81.71 - 78.33	1	1	-0.500 -0.450	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	81.71 - 78.33	1	1	-0.500 -0.450	4.5000	11.0000	15.34
*										
CCI 4.5" x 3" Plate	A	No	Surface Af (CaAa)	83.21 - 81.71	1	1	-0.500 -0.450	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	B	No	Surface Af (CaAa)	83.21 - 81.71	1	1	-0.500 -0.450	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	C	No	Surface Af (CaAa)	83.21 - 81.71	1	1	-0.500 -0.450	4.5000	15.0000	45.94
*										
CCI 4.5" x 1" Plate	A	No	Surface Af (CaAa)	101.79 - 98.42	1	1	0.300 0.350	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	B	No	Surface Af (CaAa)	101.79 - 98.42	1	1	0.300 0.350	4.5000	11.0000	15.34
CCI 4.5" x 1" Plate	C	No	Surface Af (CaAa)	101.79 - 98.42	1	1	0.300 0.350	4.5000	11.0000	15.34
*										
CCI 4.5" x 3" Plate	A	No	Surface Af (CaAa)	103.29 - 101.79	1	1	0.300 0.350	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	B	No	Surface Af (CaAa)	103.29 - 101.79	1	1	0.300 0.350	4.5000	15.0000	45.94
CCI 4.5" x 3" Plate	C	No	Surface Af (CaAa)	103.29 - 101.79	1	1	0.300 0.350	4.5000	15.0000	45.94

CU12PSM6P4XXX(1-3/4)	C	No	Surface Ar (CaAa)	171.00 - 0.00	1	1	0.450 0.450	1.7500		2.72

AL7-50(1-5/8)	B	No	Surface Ar (CaAa)	160.00 - 4.00	12	12	-0.350 -0.100	1.9600		0.52

HB158-U12S24-XXX-LI(1-5/8)	B	No	Surface Ar (CaAa)	160.00 - 4.00	1	1	-0.375 -0.375	1.9760		3.20

LDF7-50A(1-5/8)	B	No	Surface Ar (CaAa)	116.00 - 4.00	12	3	-0.200 -0.100	1.9800		0.82
Banjo	B	No	Surface Af (CaAa)	116.00 - 4.00	1	1	-0.200 -0.100	1.0000	4.0000	8.40

Safety Line 3/8	C	No	Surface Ar (CaAa)	191.67 - 4.00	1	1	0.000 0.010	0.3750		0.22
Step Pegs	C	No	Surface Ar (CaAa)	191.67 - 4.00	1	1	-0.050 0.050	1.0000		8.40

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
*									

LDF5-50A(7/8)	B	No	No	Inside Pole	191.67 - 5.00	1	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33

ATCB-B01-001(5/16)	B	No	No	Inside Pole	191.00 - 5.00	1	No Ice	0.00	0.07
							1/2" Ice	0.00	0.07
							1" Ice	0.00	0.07
							2" Ice	0.00	0.07

HB158-21U6S24-xxM_TMO(1-5/8)	C	No	No	Inside Pole	184.00 - 5.00	1	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
HCS 6X12 4AWG(1-5/8)	C	No	No	Inside Pole	184.00 - 5.00	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

LDF5-50A(7/8)	B	No	No	Inside Pole	158.00 - 4.00	2	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33

LDF6-50A(1-1/4)	C	No	No	Inside Pole	151.00 - 4.00	12	No Ice	0.00	0.60
							1/2" Ice	0.00	0.60
							1" Ice	0.00	0.60
							2" Ice	0.00	0.60

LDF5-50A(7/8)	B	No	No	Inside Pole	132.00 - 4.00	1	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33

2" Rigid Conduit	B	No	No	Inside Pole	116.00 - 4.00	1	No Ice	0.00	2.80
							1/2" Ice	0.00	2.80
							1" Ice	0.00	2.80
							2" Ice	0.00	2.80
9207(5/16)	B	No	No	Inside Pole	116.00 - 4.00	6	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
LDF4-50A(1/2)	B	No	No	Inside Pole	116.00 - 4.00	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

HB158-21U6M48-30F(1-5/8)	B	No	No	Inside Pole	116.00 - 4.00	3	No Ice	0.00	2.39
							1/2" Ice	0.00	2.39
							1" Ice	0.00	2.39
							2" Ice	0.00	2.39

ATCB-B01-001(5/16)	B	No	No	Inside Pole	90.00 - 4.00	1	No Ice	0.00	0.07
							1/2" Ice	0.00	0.07
							1" Ice	0.00	0.07
							2" Ice	0.00	0.07
LDF4-50A(1/2)	B	No	No	Inside Pole	90.00 - 4.00	2	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
LDF5-50A(7/8)	B	No	No	Inside Pole	90.00 - 4.00	1	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33

LDF5-50A(7/8)	B	No	No	Inside Pole	70.00 - 4.00	2	No Ice	0.00	0.33

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight plf
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33

LDF4-50A(1/2)	B	No	No	Inside Pole	33.00 - 4.00	2	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 Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	191.67-186.67	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.688	0.000	0.04
L2	186.67-181.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.701	0.000	0.06
L3	181.57-176.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.688	0.000	0.08
L4	176.57-171.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.688	0.000	0.08
L5	171.57-166.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.463	0.000	0.09
L6	166.57-161.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.563	0.000	0.09
L7	161.57-156.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	8.753	0.000	0.04
		C	0.000	0.000	1.563	0.000	0.09
L8	156.57-151.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	12.748	0.000	0.05
		C	0.000	0.000	1.563	0.000	0.09
L9	151.57-146.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	12.748	0.000	0.05
		C	0.000	0.000	1.563	0.000	0.13
L10	146.57-141.57	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	12.748	0.000	0.05
		C	0.000	0.000	1.563	0.000	0.13
L11	141.57-141.42	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.382	0.000	0.00
		C	0.000	0.000	0.047	0.000	0.00
L12	141.42-136.42	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	12.748	0.000	0.05
		C	0.000	0.000	1.563	0.000	0.13
L13	136.42-131.42	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	12.748	0.000	0.05
		C	0.000	0.000	1.563	0.000	0.13
L14	131.42-126.42	A	0.000	0.000	0.395	0.000	0.01
		B	0.000	0.000	13.143	0.000	0.07
		C	0.000	0.000	1.958	0.000	0.14
L15	126.42-121.42	A	0.000	0.000	2.541	0.000	0.20
		B	0.000	0.000	15.289	0.000	0.26
		C	0.000	0.000	4.104	0.000	0.33
L16	121.42-121.17	A	0.000	0.000	0.113	0.000	0.00
		B	0.000	0.000	0.750	0.000	0.01
		C	0.000	0.000	0.191	0.000	0.01
L17	121.17-116.17	A	0.000	0.000	1.675	0.000	0.05
		B	0.000	0.000	14.423	0.000	0.10

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
L18	116.17-111.17	C	0.000	0.000	3.238	0.000	0.18
		A	0.000	0.000	0.844	0.000	0.00
		B	0.000	0.000	16.424	0.000	0.19
L19	111.17-110.04	C	0.000	0.000	1.563	0.000	0.13
		A	0.000	0.000	2.531	0.000	0.00
		B	0.000	0.000	3.724	0.000	0.04
		C	0.000	0.000	0.352	0.000	0.03
L20	110.04-109.79	A	0.000	0.000	0.563	0.000	0.00
		B	0.000	0.000	0.828	0.000	0.01
		C	0.000	0.000	0.078	0.000	0.01
L21	109.79-105.08	A	0.000	0.000	12.523	0.000	0.03
		B	0.000	0.000	17.515	0.000	0.22
		C	0.000	0.000	3.399	0.000	0.15
L22	105.08-104.83	A	0.000	0.000	0.832	0.000	0.00
		B	0.000	0.000	1.097	0.000	0.01
		C	0.000	0.000	0.348	0.000	0.01
L23	104.83-100.92	A	0.000	0.000	12.345	0.000	0.28
		B	0.000	0.000	17.903	0.000	0.44
		C	0.000	0.000	6.164	0.000	0.38
L24	100.92-100.67	A	0.000	0.000	0.250	0.000	0.01
		B	0.000	0.000	1.077	0.000	0.02
		C	0.000	0.000	0.328	0.000	0.01
L25	100.67-95.83	A	0.000	0.000	3.761	0.000	0.08
		B	0.000	0.000	19.763	0.000	0.27
		C	0.000	0.000	5.272	0.000	0.20
L26	95.83-95.58	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	1.015	0.000	0.01
		C	0.000	0.000	0.266	0.000	0.01
L27	95.58-90.58	A	0.000	0.000	4.375	0.000	0.00
		B	0.000	0.000	20.927	0.000	0.20
		C	0.000	0.000	5.938	0.000	0.13
L28	90.58-89.92	A	0.000	0.000	0.999	0.000	0.00
		B	0.000	0.000	3.204	0.000	0.03
		C	0.000	0.000	1.207	0.000	0.02
L29	89.92-89.67	A	0.000	0.000	0.438	0.000	0.00
		B	0.000	0.000	1.266	0.000	0.01
		C	0.000	0.000	0.516	0.000	0.01
L30	89.67-84.67	A	0.000	0.000	11.325	0.000	0.22
		B	0.000	0.000	27.876	0.000	0.42
		C	0.000	0.000	12.887	0.000	0.34
L31	84.67-80.83	A	0.000	0.000	9.104	0.000	0.44
		B	0.000	0.000	21.796	0.000	0.60
		C	0.000	0.000	10.302	0.000	0.54
L32	80.83-80.33	A	0.000	0.000	0.642	0.000	0.04
		B	0.000	0.000	2.297	0.000	0.06
		C	0.000	0.000	0.798	0.000	0.06
L33	80.33-80.08	A	0.000	0.000	0.410	0.000	0.01
		B	0.000	0.000	1.238	0.000	0.02
		C	0.000	0.000	0.488	0.000	0.02
L34	80.08-75.08	A	0.000	0.000	8.671	0.000	0.13
		B	0.000	0.000	25.222	0.000	0.33
		C	0.000	0.000	10.233	0.000	0.26
L35	75.08-70.08	A	0.000	0.000	12.297	0.000	0.24
		B	0.000	0.000	29.536	0.000	0.44
		C	0.000	0.000	13.859	0.000	0.37
L36	70.08-69.50	A	0.000	0.000	2.176	0.000	0.04
		B	0.000	0.000	4.543	0.000	0.07
		C	0.000	0.000	2.358	0.000	0.06
L37	69.50-69.25	A	0.000	0.000	0.933	0.000	0.02
		B	0.000	0.000	1.948	0.000	0.03
		C	0.000	0.000	1.011	0.000	0.02
L38	69.25-64.25	A	0.000	0.000	19.430	0.000	1.10
		B	0.000	0.000	40.051	0.000	1.32
		C	0.000	0.000	20.993	0.000	1.23
L39	64.25-60.58	A	0.000	0.000	14.648	0.000	0.91
		B	0.000	0.000	30.883	0.000	1.16
		C	0.000	0.000	15.794	0.000	1.01
L40	60.58-60.33	A	0.000	0.000	0.563	0.000	0.02
		B	0.000	0.000	1.528	0.000	0.04

Tower Sectio n	Tower Elevation ft	Face	A_R	A_F	C_{AA}	C_{AA}	Weight K
			ft ²	ft ²	In Face ft ²	Out Face ft ²	
L41	60.33-55.33	C	0.000	0.000	0.641	0.000	0.03
		A	0.000	0.000	16.020	0.000	0.40
		B	0.000	0.000	33.855	0.000	0.64
L42	55.33-52.17	C	0.000	0.000	17.583	0.000	0.53
		A	0.000	0.000	3.593	0.000	0.01
		B	0.000	0.000	14.073	0.000	0.14
L43	52.17-51.92	C	0.000	0.000	4.583	0.000	0.09
		A	0.000	0.000	0.271	0.000	0.00
		B	0.000	0.000	1.098	0.000	0.01
L44	51.92-46.92	C	0.000	0.000	0.349	0.000	0.01
		A	0.000	0.000	11.228	0.000	0.07
		B	0.000	0.000	28.363	0.000	0.30
L45	46.92-41.92	C	0.000	0.000	16.041	0.000	0.20
		A	0.000	0.000	22.083	0.000	0.31
		B	0.000	0.000	39.468	0.000	0.55
L46	41.92-40.23	C	0.000	0.000	28.646	0.000	0.44
		A	0.000	0.000	6.729	0.000	0.10
		B	0.000	0.000	12.526	0.000	0.18
L47	40.23-39.98	C	0.000	0.000	8.940	0.000	0.15
		A	0.000	0.000	0.792	0.000	0.01
		B	0.000	0.000	1.619	0.000	0.02
L48	39.98-34.98	C	0.000	0.000	1.120	0.000	0.02
		A	0.000	0.000	18.416	0.000	0.28
		B	0.000	0.000	34.968	0.000	0.48
L49	34.98-29.98	C	0.000	0.000	22.795	0.000	0.41
		A	0.000	0.000	9.682	0.000	0.12
		B	0.000	0.000	26.233	0.000	0.32
L50	29.98-28.00	C	0.000	0.000	11.261	0.000	0.25
		A	0.000	0.000	3.966	0.000	0.00
		B	0.000	0.000	10.530	0.000	0.08
L51	28.00-27.75	C	0.000	0.000	6.569	0.000	0.05
		A	0.000	0.000	0.500	0.000	0.00
		B	0.000	0.000	1.328	0.000	0.01
L52	27.75-22.75	C	0.000	0.000	0.828	0.000	0.01
		A	0.000	0.000	20.292	0.000	0.26
		B	0.000	0.000	36.843	0.000	0.47
L53	22.75-20.08	C	0.000	0.000	26.854	0.000	0.39
		A	0.000	0.000	10.445	0.000	0.15
		B	0.000	0.000	19.274	0.000	0.26
L54	20.08-19.83	C	0.000	0.000	13.946	0.000	0.22
		A	0.000	0.000	0.792	0.000	0.01
		B	0.000	0.000	1.619	0.000	0.02
L55	19.83-17.00	C	0.000	0.000	1.120	0.000	0.02
		A	0.000	0.000	10.971	0.000	0.16
		B	0.000	0.000	20.349	0.000	0.27
L56	17.00-16.75	C	0.000	0.000	16.689	0.000	0.23
		A	0.000	0.000	0.792	0.000	0.01
		B	0.000	0.000	1.619	0.000	0.02
L57	16.75-11.65	C	0.000	0.000	1.120	0.000	0.02
		A	0.000	0.000	13.940	0.000	0.23
		B	0.000	0.000	30.822	0.000	0.44
L58	11.65-11.42	C	0.000	0.000	21.645	0.000	0.36
		A	0.000	0.000	0.233	0.000	0.00
		B	0.000	0.000	1.004	0.000	0.01
L59	11.42-9.40	C	0.000	0.000	0.694	0.000	0.01
		A	0.000	0.000	3.007	0.000	0.00
		B	0.000	0.000	9.697	0.000	0.08
L60	9.40-9.15	C	0.000	0.000	6.021	0.000	0.05
		A	0.000	0.000	0.417	0.000	0.00
		B	0.000	0.000	1.244	0.000	0.01
L61	9.15-4.83	C	0.000	0.000	0.745	0.000	0.01
		A	0.000	0.000	7.188	0.000	0.00
		B	0.000	0.000	21.466	0.000	0.18
L62	4.83-4.58	C	0.000	0.000	12.849	0.000	0.11
		A	0.000	0.000	0.417	0.000	0.00
		B	0.000	0.000	1.244	0.000	0.01
L63	4.58-0.00	C	0.000	0.000	0.745	0.000	0.00
		A	0.000	0.000	7.638	0.000	0.00
		B	0.000	0.000	9.568	0.000	0.02

Tower Section 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
		C	0.000	0.000	10.992	0.000	0.02

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section n	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	191.67-186.67	A	1.518	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.724	0.000	0.08
L2	186.67-181.57	A	1.514	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.790	0.000	0.10
L3	181.57-176.57	A	1.510	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.707	0.000	0.12
L4	176.57-171.57	A	1.506	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.699	0.000	0.12
L5	171.57-166.57	A	1.501	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	5.797	0.000	0.16
L6	166.57-161.57	A	1.497	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	6.053	0.000	0.16
L7	161.57-156.57	A	1.492	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	13.077	0.000	0.18
		C		0.000	0.000	6.039	0.000	0.16
L8	156.57-151.57	A	1.487	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	19.035	0.000	0.26
		C		0.000	0.000	6.025	0.000	0.16
L9	151.57-146.57	A	1.483	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	19.024	0.000	0.26
		C		0.000	0.000	6.010	0.000	0.19
L10	146.57-141.57	A	1.477	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	19.012	0.000	0.26
		C		0.000	0.000	5.995	0.000	0.20
L11	141.57-141.42	A	1.475	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.570	0.000	0.01
		C		0.000	0.000	0.180	0.000	0.01
L12	141.42-136.42	A	1.472	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	19.000	0.000	0.26
		C		0.000	0.000	5.979	0.000	0.20
L13	136.42-131.42	A	1.467	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	18.988	0.000	0.25
		C		0.000	0.000	5.963	0.000	0.20
L14	131.42-126.42	A	1.461	0.000	0.000	0.510	0.000	0.02
		B		0.000	0.000	19.485	0.000	0.27
		C		0.000	0.000	6.456	0.000	0.21
L15	126.42-121.42	A	1.455	0.000	0.000	3.327	0.000	0.26
		B		0.000	0.000	22.290	0.000	0.51
		C		0.000	0.000	9.256	0.000	0.45
L16	121.42-121.17	A	1.452	0.000	0.000	0.155	0.000	0.01
		B		0.000	0.000	1.103	0.000	0.02
		C		0.000	0.000	0.451	0.000	0.02
L17	121.17-116.17	A	1.449	0.000	0.000	2.176	0.000	0.08
		B		0.000	0.000	21.124	0.000	0.33
		C		0.000	0.000	8.086	0.000	0.28
L18	116.17-111.17	A	1.443	0.000	0.000	1.028	0.000	0.01
		B		0.000	0.000	26.466	0.000	0.62
		C		0.000	0.000	5.891	0.000	0.19
L19	111.17-110.04	A	1.439	0.000	0.000	3.081	0.000	0.03
		B		0.000	0.000	6.010	0.000	0.14
		C		0.000	0.000	1.323	0.000	0.04
L20	110.04-109.79	A	1.438	0.000	0.000	0.685	0.000	0.01
		B		0.000	0.000	1.335	0.000	0.03

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
L21	109.79-105.08	C	1.435	0.000	0.000	0.294	0.000	0.01
		A		0.000	0.000	15.362	0.000	0.19
		B		0.000	0.000	27.607	0.000	0.65
L22	105.08-104.83	C	1.431	0.000	0.000	7.996	0.000	0.25
		A		0.000	0.000	1.030	0.000	0.02
		B		0.000	0.000	1.679	0.000	0.04
L23	104.83-100.92	C	1.429	0.000	0.000	0.638	0.000	0.02
		A		0.000	0.000	15.424	0.000	0.47
		B		0.000	0.000	27.302	0.000	0.87
L24	100.92-100.67	C	1.426	0.000	0.000	11.001	0.000	0.53
		A		0.000	0.000	0.329	0.000	0.01
		B		0.000	0.000	1.662	0.000	0.04
L25	100.67-95.83	C	1.422	0.000	0.000	0.621	0.000	0.02
		A		0.000	0.000	4.946	0.000	0.14
		B		0.000	0.000	30.695	0.000	0.74
L26	95.83-95.58	C	1.418	0.000	0.000	10.581	0.000	0.32
		A		0.000	0.000	0.258	0.000	0.00
		B		0.000	0.000	1.589	0.000	0.03
L27	95.58-90.58	C	1.414	0.000	0.000	0.549	0.000	0.01
		A		0.000	0.000	5.924	0.000	0.05
		B		0.000	0.000	32.522	0.000	0.67
L28	90.58-89.92	C	1.410	0.000	0.000	11.729	0.000	0.25
		A		0.000	0.000	1.293	0.000	0.01
		B		0.000	0.000	4.834	0.000	0.09
L29	89.92-89.67	C	1.409	0.000	0.000	2.065	0.000	0.04
		A		0.000	0.000	0.561	0.000	0.01
		B		0.000	0.000	1.890	0.000	0.04
L30	89.67-84.67	C	1.405	0.000	0.000	0.850	0.000	0.02
		A		0.000	0.000	14.273	0.000	0.37
		B		0.000	0.000	40.830	0.000	0.99
L31	84.67-80.83	C	1.398	0.000	0.000	20.051	0.000	0.56
		A		0.000	0.000	11.514	0.000	0.58
		B		0.000	0.000	31.853	0.000	1.06
L32	80.83-80.33	C	1.394	0.000	0.000	15.928	0.000	0.73
		A		0.000	0.000	0.796	0.000	0.05
		B		0.000	0.000	3.447	0.000	0.12
L33	80.33-80.08	C	1.393	0.000	0.000	1.371	0.000	0.07
		A		0.000	0.000	0.507	0.000	0.02
		B		0.000	0.000	1.832	0.000	0.05
L34	80.08-75.08	C	1.389	0.000	0.000	0.794	0.000	0.03
		A		0.000	0.000	10.839	0.000	0.23
		B		0.000	0.000	37.322	0.000	0.85
L35	75.08-70.08	C	1.380	0.000	0.000	16.568	0.000	0.42
		A		0.000	0.000	14.775	0.000	0.39
		B		0.000	0.000	42.049	0.000	1.01
L36	70.08-69.50	C	1.374	0.000	0.000	20.476	0.000	0.58
		A		0.000	0.000	2.594	0.000	0.07
		B		0.000	0.000	6.202	0.000	0.15
L37	69.50-69.25	C	1.373	0.000	0.000	3.257	0.000	0.09
		A		0.000	0.000	1.112	0.000	0.03
		B		0.000	0.000	2.659	0.000	0.06
L38	69.25-64.25	C	1.368	0.000	0.000	1.396	0.000	0.04
		A		0.000	0.000	23.445	0.000	1.36
		B		0.000	0.000	55.039	0.000	2.04
L39	64.25-60.58	C	1.359	0.000	0.000	29.112	0.000	1.55
		A		0.000	0.000	18.035	0.000	1.13
		B		0.000	0.000	42.882	0.000	1.75
L40	60.58-60.33	C	1.355	0.000	0.000	22.171	0.000	1.27
		A		0.000	0.000	0.678	0.000	0.03
		B		0.000	0.000	2.169	0.000	0.07
L41	60.33-55.33	C	1.349	0.000	0.000	0.959	0.000	0.04
		A		0.000	0.000	19.007	0.000	0.60
		B		0.000	0.000	46.933	0.000	1.26
L42	55.33-52.17	C	1.339	0.000	0.000	24.615	0.000	0.78
		A		0.000	0.000	4.463	0.000	0.04
		B		0.000	0.000	21.089	0.000	0.43
L43	52.17-51.92	C	1.334	0.000	0.000	7.995	0.000	0.16
		A		0.000	0.000	0.337	0.000	0.00
		B		0.000	0.000	1.649	0.000	0.03

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
L44	51.92-46.92	C	1.328	0.000	0.000	0.616	0.000	0.01
		A		0.000	0.000	14.294	0.000	0.20
		B		0.000	0.000	42.008	0.000	0.85
L45	46.92-41.92	C	1.313	0.000	0.000	23.576	0.000	0.42
		A		0.000	0.000	27.227	0.000	0.54
		B		0.000	0.000	55.513	0.000	1.21
L46	41.92-40.23	C	1.303	0.000	0.000	38.473	0.000	0.78
		A		0.000	0.000	8.203	0.000	0.17
		B		0.000	0.000	17.562	0.000	0.39
L47	40.23-39.98	C	1.300	0.000	0.000	11.978	0.000	0.25
		A		0.000	0.000	0.917	0.000	0.02
		B		0.000	0.000	2.221	0.000	0.05
L48	39.98-34.98	C	1.291	0.000	0.000	1.477	0.000	0.03
		A		0.000	0.000	21.816	0.000	0.45
		B		0.000	0.000	47.860	0.000	1.05
L49	34.98-29.98	C	1.273	0.000	0.000	30.480	0.000	0.66
		A		0.000	0.000	11.705	0.000	0.21
		B		0.000	0.000	37.668	0.000	0.80
L50	29.98-28.00	C	1.259	0.000	0.000	17.106	0.000	0.39
		A		0.000	0.000	4.749	0.000	0.04
		B		0.000	0.000	15.020	0.000	0.27
L51	28.00-27.75	C	1.254	0.000	0.000	9.133	0.000	0.13
		A		0.000	0.000	0.598	0.000	0.00
		B		0.000	0.000	1.892	0.000	0.03
L52	27.75-22.75	C	1.241	0.000	0.000	1.150	0.000	0.02
		A		0.000	0.000	23.807	0.000	0.45
		B		0.000	0.000	49.627	0.000	1.03
L53	22.75-20.08	C	1.221	0.000	0.000	34.800	0.000	0.67
		A		0.000	0.000	12.175	0.000	0.24
		B		0.000	0.000	25.898	0.000	0.55
L54	20.08-19.83	C	1.212	0.000	0.000	18.000	0.000	0.36
		A		0.000	0.000	0.907	0.000	0.02
		B		0.000	0.000	2.192	0.000	0.05
L55	19.83-17.00	C	1.203	0.000	0.000	1.452	0.000	0.03
		A		0.000	0.000	12.754	0.000	0.25
		B		0.000	0.000	27.286	0.000	0.58
L56	17.00-16.75	C	1.192	0.000	0.000	21.387	0.000	0.39
		A		0.000	0.000	0.931	0.000	0.02
		B		0.000	0.000	2.211	0.000	0.05
L57	16.75-11.65	C	1.172	0.000	0.000	1.498	0.000	0.03
		A		0.000	0.000	16.424	0.000	0.34
		B		0.000	0.000	42.442	0.000	0.92
L58	11.65-11.42	C	1.148	0.000	0.000	29.170	0.000	0.58
		A		0.000	0.000	0.286	0.000	0.00
		B		0.000	0.000	1.470	0.000	0.03
L59	11.42-9.40	C	1.136	0.000	0.000	1.001	0.000	0.01
		A		0.000	0.000	3.755	0.000	0.03
		B		0.000	0.000	13.999	0.000	0.25
L60	9.40-9.15	C	1.123	0.000	0.000	8.655	0.000	0.12
		A		0.000	0.000	0.521	0.000	0.00
		B		0.000	0.000	1.786	0.000	0.03
L61	9.15-4.83	C	1.092	0.000	0.000	1.067	0.000	0.01
		A		0.000	0.000	8.952	0.000	0.06
		B		0.000	0.000	30.644	0.000	0.53
L62	4.83-4.58	C	1.049	0.000	0.000	18.259	0.000	0.24
		A		0.000	0.000	0.516	0.000	0.00
		B		0.000	0.000	1.764	0.000	0.03
L63	4.58-0.00	C	0.976	0.000	0.000	1.047	0.000	0.01
		A		0.000	0.000	9.355	0.000	0.05
		B		0.000	0.000	12.227	0.000	0.11
		C		0.000	0.000	14.119	0.000	0.11

Feed Line Center of Pressure

Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
L1	191.67-186.67	-0.0035	1.2477	-0.0115	2.4465
L2	186.67-181.57	-0.0036	1.2763	-0.0126	2.6648
L3	181.57-176.57	-0.0036	1.2763	-0.0126	2.6607
L4	176.57-171.57	-0.0036	1.2763	-0.0126	2.6566
L5	171.57-166.57	-1.0859	1.9302	-1.1483	3.1890
L6	166.57-161.57	-1.2083	2.0042	-1.2747	3.2448
L7	161.57-156.57	3.0783	-4.9801	1.7639	-2.3580
L8	156.57-151.57	3.8069	-6.1671	2.4156	-3.5595
L9	151.57-146.57	3.8069	-6.1671	2.4176	-3.5634
L10	146.57-141.57	3.8069	-6.1671	2.4196	-3.5674
L11	141.57-141.42	3.8069	-6.1671	2.4206	-3.5695
L12	141.42-136.42	4.8486	-7.8483	3.0918	-4.5395
L13	136.42-131.42	4.8486	-7.8483	3.0942	-4.5445
L14	131.42-126.42	4.7133	-7.4550	3.0640	-4.3988
L15	126.42-121.42	4.1707	-5.8429	2.9250	-3.7121
L16	121.42-121.17	4.2187	-6.0184	2.9286	-3.7649
L17	121.17-116.17	4.7890	-7.0445	3.2641	-4.3532
L18	116.17-111.17	6.0084	-9.3225	4.3917	-6.2711
L19	111.17-110.04	-0.5021	-2.4794	0.4479	-2.3986
L20	110.04-109.79	-0.5021	-2.4794	0.4479	-2.3989
L21	109.79-105.08	-0.4576	-2.0400	0.3884	-2.0937
L22	105.08-104.83	-0.3386	-1.3265	0.3145	-1.7101
L23	104.83-100.92	0.1664	-1.7408	0.7298	-2.0447
L24	100.92-100.67	3.7937	-5.5430	3.9203	-5.3338
L25	100.67-95.83	5.2139	-7.6824	4.1600	-5.7126
L26	95.83-95.58	5.3041	-7.9319	4.1771	-5.8180
L27	95.58-90.58	5.0740	-7.5877	4.0613	-5.6577
L28	90.58-89.92	3.3857	-5.0630	3.5573	-4.9563
L29	89.92-89.67	2.9806	-4.9142	3.2103	-4.8393
L30	89.67-84.67	2.2860	-4.6618	2.5967	-4.6357
L31	84.67-80.83	2.1944	-4.5422	2.5032	-4.5291
L32	80.83-80.33	3.0505	-6.1960	3.4199	-6.1182
L33	80.33-80.08	3.0844	-5.7337	3.4474	-5.7117
L34	80.08-75.08	3.7637	-5.5466	4.0432	-5.5315
L35	75.08-70.08	3.8552	-4.7424	4.0985	-4.8666
L36	70.08-69.50	1.5218	-3.4096	1.8998	-3.6307
L37	69.50-69.25	1.5218	-3.4096	1.8998	-3.6309
L38	69.25-64.25	1.5847	-3.2928	1.9677	-3.4691
L39	64.25-60.58	0.8865	-2.9593	1.2752	-3.0759
L40	60.58-60.33	1.9570	-4.7280	2.3312	-4.9066
L41	60.33-55.33	2.7372	-4.1226	3.0342	-4.3485
L42	55.33-52.17	5.1793	-7.4066	4.3250	-5.7949
L43	52.17-51.92	5.2041	-7.4889	4.3328	-5.8328
L44	51.92-46.92	4.4835	-5.7216	4.8345	-5.4773
L45	46.92-41.92	4.2388	-5.2460	4.5752	-5.0354
L46	41.92-40.23	4.4757	-5.7021	4.7849	-5.5214
L47	40.23-39.98	4.9330	-6.8692	5.1256	-6.9130
L48	39.98-34.98	4.0823	-5.7433	4.3015	-5.8327
L49	34.98-29.98	3.9832	-5.8622	4.2863	-5.9619
L50	29.98-28.00	0.3373	-6.9814	1.1101	-6.9388
L51	28.00-27.75	0.3373	-6.9814	1.1098	-6.9409
L52	27.75-22.75	0.1177	-4.5258	0.7119	-4.7327
L53	22.75-20.08	0.1134	-4.5909	0.7192	-4.8109
L54	20.08-19.83	0.1268	-5.1333	0.8011	-5.3646
L55	19.83-17.00	0.9057	-4.9221	1.4832	-5.1375
L56	17.00-16.75	3.7570	-4.0941	4.1093	-4.4235
L57	16.75-11.65	3.7037	-4.2918	4.0496	-4.6016
L58	11.65-11.42	4.1831	-5.9101	4.4657	-6.0219
L59	11.42-9.40	4.7320	-7.6560	4.9822	-7.7144
L60	9.40-9.15	4.9161	-8.2415	5.1571	-8.2881
L61	9.15-4.83	4.9161	-8.2415	5.1608	-8.3033
L62	4.83-4.58	4.9161	-8.2415	5.1660	-8.3239
L63	4.58-0.00	3.3262	-5.2537	3.3643	-5.5677

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	219	Safety Line 3/8	186.67 - 191.67	1.0000	1.0000
L1	220	Step Pegs	186.67 - 191.67	1.0000	1.0000
L2	219	Safety Line 3/8	181.57 - 186.67	1.0000	1.0000
L2	220	Step Pegs	181.57 - 186.67	1.0000	1.0000
L3	219	Safety Line 3/8	176.57 - 181.57	1.0000	1.0000
L3	220	Step Pegs	176.57 - 181.57	1.0000	1.0000
L4	219	Safety Line 3/8	171.57 - 176.57	1.0000	1.0000
L4	220	Step Pegs	171.57 - 176.57	1.0000	1.0000
L5	188	CU12PSM6P4XXX(1-3/4)	166.57 - 171.00	1.0000	1.0000
L5	219	Safety Line 3/8	166.57 - 171.57	1.0000	1.0000
L5	220	Step Pegs	166.57 - 171.57	1.0000	1.0000
L6	188	CU12PSM6P4XXX(1-3/4)	161.57 - 166.57	1.0000	1.0000
L6	219	Safety Line 3/8	161.57 - 166.57	1.0000	1.0000
L6	220	Step Pegs	161.57 - 166.57	1.0000	1.0000
L7	188	CU12PSM6P4XXX(1-3/4)	156.57 - 161.57	1.0000	1.0000
L7	191	AL7-50(1-5/8)	156.57 - 160.00	1.0000	1.0000
L7	193	HB158-U12S24-XXX-LI(1-5/8)	156.57 - 160.00	1.0000	1.0000
L7	219	Safety Line 3/8	156.57 - 161.57	1.0000	1.0000
L7	220	Step Pegs	156.57 - 161.57	1.0000	1.0000
L8	188	CU12PSM6P4XXX(1-3/4)	151.57 - 156.57	1.0000	1.0000
L8	191	AL7-50(1-5/8)	151.57 - 156.57	1.0000	1.0000
L8	193	HB158-U12S24-XXX-LI(1-5/8)	151.57 - 156.57	1.0000	1.0000
L8	219	Safety Line 3/8	151.57 - 156.57	1.0000	1.0000
L8	220	Step Pegs	151.57 - 156.57	1.0000	1.0000
L9	188	CU12PSM6P4XXX(1-3/4)	146.57 - 151.57	1.0000	1.0000
L9	191	AL7-50(1-5/8)	146.57 - 151.57	1.0000	1.0000
L9	193	HB158-U12S24-XXX-LI(1-5/8)	146.57 - 151.57	1.0000	1.0000
L9	219	Safety Line 3/8	146.57 - 151.57	1.0000	1.0000
L9	220	Step Pegs	146.57 - 151.57	1.0000	1.0000
L10	188	CU12PSM6P4XXX(1-3/4)	141.57 - 146.57	1.0000	1.0000
L10	191	AL7-50(1-5/8)	141.57 - 146.57	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L10	193	HB158-U12S24-XXX-LI(1-5/8)	141.57 - 146.57	1.0000	1.0000
L10	219	Safety Line 3/8	141.57 - 146.57	1.0000	1.0000
L10	220	Step Pegs	141.57 - 146.57	1.0000	1.0000
L11	188	CU12PSM6P4XXX(1-3/4)	141.42 - 141.57	1.0000	1.0000
L11	191	AL7-50(1-5/8)	141.42 - 141.57	1.0000	1.0000
L11	193	HB158-U12S24-XXX-LI(1-5/8)	141.42 - 141.57	1.0000	1.0000
L11	219	Safety Line 3/8	141.42 - 141.57	1.0000	1.0000
L11	220	Step Pegs	141.42 - 141.57	1.0000	1.0000
L12	188	CU12PSM6P4XXX(1-3/4)	136.42 - 141.42	1.0000	1.0000
L12	191	AL7-50(1-5/8)	136.42 - 141.42	1.0000	1.0000
L12	193	HB158-U12S24-XXX-LI(1-5/8)	136.42 - 141.42	1.0000	1.0000
L12	219	Safety Line 3/8	136.42 - 141.42	1.0000	1.0000
L12	220	Step Pegs	136.42 - 141.42	1.0000	1.0000
L13	188	CU12PSM6P4XXX(1-3/4)	131.42 - 136.42	1.0000	1.0000
L13	191	AL7-50(1-5/8)	131.42 - 136.42	1.0000	1.0000
L13	193	HB158-U12S24-XXX-LI(1-5/8)	131.42 - 136.42	1.0000	1.0000
L13	219	Safety Line 3/8	131.42 - 136.42	1.0000	1.0000
L13	220	Step Pegs	131.42 - 136.42	1.0000	1.0000
L14	151	CCI 4.5" x 1" Plate	126.42 - 127.17	1.0000	1.0000
L14	152	CCI 4.5" x 1" Plate	126.42 - 127.17	1.0000	1.0000
L14	153	CCI 4.5" x 1" Plate	126.42 - 127.17	1.0000	1.0000
L14	188	CU12PSM6P4XXX(1-3/4)	126.42 - 131.42	1.0000	1.0000
L14	191	AL7-50(1-5/8)	126.42 - 131.42	1.0000	1.0000
L14	193	HB158-U12S24-XXX-LI(1-5/8)	126.42 - 131.42	1.0000	1.0000
L14	219	Safety Line 3/8	126.42 - 131.42	1.0000	1.0000
L14	220	Step Pegs	126.42 - 131.42	1.0000	1.0000
L15	143	CCI 4.5" x 1" Plate	121.42 - 121.67	1.0000	1.0000
L15	144	CCI 4.5" x 1" Plate	121.42 - 121.67	1.0000	1.0000
L15	145	CCI 4.5" x 1" Plate	121.42 - 121.67	1.0000	1.0000
L15	147	CCI 4.5" x 4" Plate	121.67 - 124.42	1.0000	1.0000
L15	148	CCI 4.5" x 4" Plate	121.67 - 124.42	1.0000	1.0000
L15	149	CCI 4.5" x 4" Plate	121.67 - 124.42	1.0000	1.0000
L15	151	CCI 4.5" x 1" Plate	124.42 - 126.42	1.0000	1.0000
L15	152	CCI 4.5" x 1" Plate	124.42 - 126.42	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L15	153	CCI 4.5" x 1" Plate	124.42 - 126.42	1.0000	1.0000
L15	188	CU12PSM6P4XXX(1-3/4)	121.42 - 126.42	1.0000	1.0000
L15	191	AL7-50(1-5/8)	121.42 - 126.42	1.0000	1.0000
L15	193	HB158-U12S24-XXX-LI(1-5/8)	121.42 - 126.42	1.0000	1.0000
L15	219	Safety Line 3/8	121.42 - 126.42	1.0000	1.0000
L15	220	Step Pegs	121.42 - 126.42	1.0000	1.0000
L16	143	CCI 4.5" x 1" Plate	121.17 - 121.42	1.0000	1.0000
L16	144	CCI 4.5" x 1" Plate	121.17 - 121.42	1.0000	1.0000
L16	145	CCI 4.5" x 1" Plate	121.17 - 121.42	1.0000	1.0000
L16	188	CU12PSM6P4XXX(1-3/4)	121.17 - 121.42	1.0000	1.0000
L16	191	AL7-50(1-5/8)	121.17 - 121.42	1.0000	1.0000
L16	193	HB158-U12S24-XXX-LI(1-5/8)	121.17 - 121.42	1.0000	1.0000
L16	219	Safety Line 3/8	121.17 - 121.42	1.0000	1.0000
L16	220	Step Pegs	121.17 - 121.42	1.0000	1.0000
L17	139	CCI 4.5" x 1" Plate	117.92 - 120.67	1.0000	1.0000
L17	140	CCI 4.5" x 1" Plate	117.92 - 120.67	1.0000	1.0000
L17	141	CCI 4.5" x 1" Plate	117.92 - 120.67	1.0000	1.0000
L17	143	CCI 4.5" x 1" Plate	120.67 - 121.17	1.0000	1.0000
L17	144	CCI 4.5" x 1" Plate	120.67 - 121.17	1.0000	1.0000
L17	145	CCI 4.5" x 1" Plate	120.67 - 121.17	1.0000	1.0000
L17	188	CU12PSM6P4XXX(1-3/4)	116.17 - 121.17	1.0000	1.0000
L17	191	AL7-50(1-5/8)	116.17 - 121.17	1.0000	1.0000
L17	193	HB158-U12S24-XXX-LI(1-5/8)	116.17 - 121.17	1.0000	1.0000
L17	219	Safety Line 3/8	116.17 - 121.17	1.0000	1.0000
L17	220	Step Pegs	116.17 - 121.17	1.0000	1.0000
L18	56	CCI 4.5" x 1" Plate	111.17 - 111.54	1.0000	1.0000
L18	57	CCI 4.5" x 1" Plate	111.17 - 111.54	1.0000	1.0000
L18	58	CCI 4.5" x 1" Plate	111.17 - 111.54	1.0000	1.0000
L18	188	CU12PSM6P4XXX(1-3/4)	111.17 - 116.17	1.0000	1.0000
L18	191	AL7-50(1-5/8)	111.17 - 116.17	1.0000	1.0000
L18	193	HB158-U12S24-XXX-LI(1-5/8)	111.17 - 116.17	1.0000	1.0000
L18	201	LDF7-50A(1-5/8)	111.17 - 116.00	1.0000	1.0000
L18	202	Banjo	111.17 - 116.00	1.0000	1.0000
L18	219	Safety Line 3/8	111.17 - 116.17	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L18	220	Step Pegs	111.17 - 116.17	1.0000	1.0000
L19	56	CCI 4.5" x 1" Plate	110.04 - 111.17	1.0000	1.0000
L19	57	CCI 4.5" x 1" Plate	110.04 - 111.17	1.0000	1.0000
L19	58	CCI 4.5" x 1" Plate	110.04 - 111.17	1.0000	1.0000
L19	188	CU12PSM6P4XXX(1-3/4)	110.04 - 111.17	1.0000	1.0000
L19	191	AL7-50(1-5/8)	110.04 - 111.17	1.0000	1.0000
L19	193	HB158-U12S24-XXX-LI(1-5/8)	110.04 - 111.17	1.0000	1.0000
L19	201	LDF7-50A(1-5/8)	110.04 - 111.17	1.0000	1.0000
L19	202	Banjo	110.04 - 111.17	1.0000	1.0000
L19	219	Safety Line 3/8	110.04 - 111.17	1.0000	1.0000
L19	220	Step Pegs	110.04 - 111.17	1.0000	1.0000
L20	56	CCI 4.5" x 1" Plate	109.79 - 110.04	1.0000	1.0000
L20	57	CCI 4.5" x 1" Plate	109.79 - 110.04	1.0000	1.0000
L20	58	CCI 4.5" x 1" Plate	109.79 - 110.04	1.0000	1.0000
L20	188	CU12PSM6P4XXX(1-3/4)	109.79 - 110.04	1.0000	1.0000
L20	191	AL7-50(1-5/8)	109.79 - 110.04	1.0000	1.0000
L20	193	HB158-U12S24-XXX-LI(1-5/8)	109.79 - 110.04	1.0000	1.0000
L20	201	LDF7-50A(1-5/8)	109.79 - 110.04	1.0000	1.0000
L20	202	Banjo	109.79 - 110.04	1.0000	1.0000
L20	219	Safety Line 3/8	109.79 - 110.04	1.0000	1.0000
L20	220	Step Pegs	109.79 - 110.04	1.0000	1.0000
L21	18	CCI 4" x 0.75" Plate	105.08 - 106.58	1.0000	1.0000
L21	19	CCI 4" x 0.75" Plate	105.08 - 106.58	1.0000	1.0000
L21	20	CCI 4" x 0.75" Plate	105.08 - 106.58	1.0000	1.0000
L21	56	CCI 4.5" x 1" Plate	105.08 - 109.79	1.0000	1.0000
L21	57	CCI 4.5" x 1" Plate	105.08 - 109.79	1.0000	1.0000
L21	58	CCI 4.5" x 1" Plate	105.08 - 109.79	1.0000	1.0000
L21	135	CCI 4.5" x 1" Plate	105.08 - 107.17	1.0000	1.0000
L21	136	CCI 4.5" x 1" Plate	105.08 - 107.17	1.0000	1.0000
L21	137	CCI 4.5" x 1" Plate	105.08 - 107.17	1.0000	1.0000
L21	188	CU12PSM6P4XXX(1-3/4)	105.08 - 109.79	1.0000	1.0000
L21	191	AL7-50(1-5/8)	105.08 - 109.79	1.0000	1.0000
L21	193	HB158-U12S24-XXX-LI(1-5/8)	105.08 - 109.79	1.0000	1.0000
L21	201	LDF7-50A(1-5/8)	105.08 - 109.79	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L21	202	Banjo	105.08 - 109.79	1.0000	1.0000
L21	219	Safety Line 3/8	105.08 - 109.79	1.0000	1.0000
L21	220	Step Pegs	105.08 - 109.79	1.0000	1.0000
L22	18	CCI 4" x 0.75" Plate	104.83 - 105.08	1.0000	1.0000
L22	19	CCI 4" x 0.75" Plate	104.83 - 105.08	1.0000	1.0000
L22	20	CCI 4" x 0.75" Plate	104.83 - 105.08	1.0000	1.0000
L22	56	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	57	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	58	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	135	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	136	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	137	CCI 4.5" x 1" Plate	104.83 - 105.08	1.0000	1.0000
L22	188	CU12PSM6P4XXX(1-3/4)	104.83 - 105.08	1.0000	1.0000
L22	191	AL7-50(1-5/8)	104.83 - 105.08	1.0000	1.0000
L22	193	HB158-U12S24-XXX-LI(1-5/8)	104.83 - 105.08	1.0000	1.0000
L22	201	LDF7-50A(1-5/8)	104.83 - 105.08	1.0000	1.0000
L22	202	Banjo	104.83 - 105.08	1.0000	1.0000
L22	219	Safety Line 3/8	104.83 - 105.08	1.0000	1.0000
L22	220	Step Pegs	104.83 - 105.08	1.0000	1.0000
L23	18	CCI 4" x 0.75" Plate	101.58 - 104.83	1.0000	1.0000
L23	19	CCI 4" x 0.75" Plate	101.58 - 104.83	1.0000	1.0000
L23	20	CCI 4" x 0.75" Plate	101.58 - 104.83	1.0000	1.0000
L23	56	CCI 4.5" x 1" Plate	101.54 - 104.83	1.0000	1.0000
L23	57	CCI 4.5" x 1" Plate	101.54 - 104.83	1.0000	1.0000
L23	58	CCI 4.5" x 1" Plate	101.54 - 104.83	1.0000	1.0000
L23	127	CCI 4.5" x 1" Plate	100.92 - 101.42	1.0000	1.0000
L23	128	CCI 4.5" x 1" Plate	100.92 - 101.42	1.0000	1.0000
L23	129	CCI 4.5" x 1" Plate	100.92 - 101.42	1.0000	1.0000
L23	131	CCI 4.5" x 4" Plate	101.42 - 104.42	1.0000	1.0000
L23	132	CCI 4.5" x 4" Plate	101.42 - 104.42	1.0000	1.0000
L23	133	CCI 4.5" x 4" Plate	101.42 - 104.42	1.0000	1.0000
L23	135	CCI 4.5" x 1" Plate	104.42 - 104.83	1.0000	1.0000
L23	136	CCI 4.5" x 1" Plate	104.42 - 104.83	1.0000	1.0000
L23	137	CCI 4.5" x 1" Plate	104.42 - 104.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L23	173	CCI 4.5" x 1" Plate	100.92 - 101.79	1.0000	1.0000
L23	174	CCI 4.5" x 1" Plate	100.92 - 101.79	1.0000	1.0000
L23	175	CCI 4.5" x 1" Plate	100.92 - 101.79	1.0000	1.0000
L23	177	CCI 4.5" x 3" Plate	101.79 - 103.29	1.0000	1.0000
L23	178	CCI 4.5" x 3" Plate	101.79 - 103.29	1.0000	1.0000
L23	179	CCI 4.5" x 3" Plate	101.79 - 103.29	1.0000	1.0000
L23	188	CU12PSM6P4XXX(1-3/4)	100.92 - 104.83	1.0000	1.0000
L23	191	AL7-50(1-5/8)	100.92 - 104.83	1.0000	1.0000
L23	193	HB158-U12S24-XXX-LI(1-5/8)	100.92 - 104.83	1.0000	1.0000
L23	201	LDF7-50A(1-5/8)	100.92 - 104.83	1.0000	1.0000
L23	202	Banjo	100.92 - 104.83	1.0000	1.0000
L23	219	Safety Line 3/8	100.92 - 104.83	1.0000	1.0000
L23	220	Step Pegs	100.92 - 104.83	1.0000	1.0000
L24	127	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	128	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	129	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	173	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	174	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	175	CCI 4.5" x 1" Plate	100.67 - 100.92	1.0000	1.0000
L24	188	CU12PSM6P4XXX(1-3/4)	100.67 - 100.92	1.0000	1.0000
L24	191	AL7-50(1-5/8)	100.67 - 100.92	1.0000	1.0000
L24	193	HB158-U12S24-XXX-LI(1-5/8)	100.67 - 100.92	1.0000	1.0000
L24	201	LDF7-50A(1-5/8)	100.67 - 100.92	1.0000	1.0000
L24	202	Banjo	100.67 - 100.92	1.0000	1.0000
L24	219	Safety Line 3/8	100.67 - 100.92	1.0000	1.0000
L24	220	Step Pegs	100.67 - 100.92	1.0000	1.0000
L25	52	CCI 4.5" x 1" Plate	95.83 - 97.33	1.0000	1.0000
L25	53	CCI 4.5" x 1" Plate	95.83 - 97.33	1.0000	1.0000
L25	54	CCI 4.5" x 1" Plate	95.83 - 97.33	1.0000	1.0000
L25	123	CCI 4.5" x 1" Plate	97.92 - 100.42	1.0000	1.0000
L25	124	CCI 4.5" x 1" Plate	97.92 - 100.42	1.0000	1.0000
L25	125	CCI 4.5" x 1" Plate	97.92 - 100.42	1.0000	1.0000
L25	127	CCI 4.5" x 1" Plate	100.42 - 100.67	1.0000	1.0000
L25	128	CCI 4.5" x 1" Plate	100.42 - 100.67	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L25	129	CCI 4.5" x 1" Plate	100.42 - 100.67	1.0000	1.0000
L25	173	CCI 4.5" x 1" Plate	98.42 - 100.67	1.0000	1.0000
L25	174	CCI 4.5" x 1" Plate	98.42 - 100.67	1.0000	1.0000
L25	175	CCI 4.5" x 1" Plate	98.42 - 100.67	1.0000	1.0000
L25	188	CU12PSM6P4XXX(1-3/4)	95.83 - 100.67	1.0000	1.0000
L25	191	AL7-50(1-5/8)	95.83 - 100.67	1.0000	1.0000
L25	193	HB158-U12S24-XXX-LI(1-5/8)	95.83 - 100.67	1.0000	1.0000
L25	201	LDF7-50A(1-5/8)	95.83 - 100.67	1.0000	1.0000
L25	202	Banjo	95.83 - 100.67	1.0000	1.0000
L25	219	Safety Line 3/8	95.83 - 100.67	1.0000	1.0000
L25	220	Step Pegs	95.83 - 100.67	1.0000	1.0000
L26	52	CCI 4.5" x 1" Plate	95.58 - 95.83	1.0000	1.0000
L26	53	CCI 4.5" x 1" Plate	95.58 - 95.83	1.0000	1.0000
L26	54	CCI 4.5" x 1" Plate	95.58 - 95.83	1.0000	1.0000
L26	188	CU12PSM6P4XXX(1-3/4)	95.58 - 95.83	1.0000	1.0000
L26	191	AL7-50(1-5/8)	95.58 - 95.83	1.0000	1.0000
L26	193	HB158-U12S24-XXX-LI(1-5/8)	95.58 - 95.83	1.0000	1.0000
L26	201	LDF7-50A(1-5/8)	95.58 - 95.83	1.0000	1.0000
L26	202	Banjo	95.58 - 95.83	1.0000	1.0000
L26	219	Safety Line 3/8	95.58 - 95.83	1.0000	1.0000
L26	220	Step Pegs	95.58 - 95.83	1.0000	1.0000
L27	52	CCI 4.5" x 1" Plate	90.58 - 95.58	1.0000	1.0000
L27	53	CCI 4.5" x 1" Plate	90.58 - 95.58	1.0000	1.0000
L27	54	CCI 4.5" x 1" Plate	90.58 - 95.58	1.0000	1.0000
L27	60	CCI 4.5" x 1" Plate	90.58 - 91.42	1.0000	1.0000
L27	61	CCI 4.5" x 1" Plate	90.58 - 91.42	1.0000	1.0000
L27	62	CCI 4.5" x 1" Plate	90.58 - 91.42	1.0000	1.0000
L27	188	CU12PSM6P4XXX(1-3/4)	90.58 - 95.58	1.0000	1.0000
L27	191	AL7-50(1-5/8)	90.58 - 95.58	1.0000	1.0000
L27	193	HB158-U12S24-XXX-LI(1-5/8)	90.58 - 95.58	1.0000	1.0000
L27	201	LDF7-50A(1-5/8)	90.58 - 95.58	1.0000	1.0000
L27	202	Banjo	90.58 - 95.58	1.0000	1.0000
L27	219	Safety Line 3/8	90.58 - 95.58	1.0000	1.0000
L27	220	Step Pegs	90.58 - 95.58	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L28	52	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	53	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	54	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	60	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	61	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	62	CCI 4.5" x 1" Plate	89.92 - 90.58	1.0000	1.0000
L28	188	CU12PSM6P4XXX(1-3/4)	89.92 - 90.58	1.0000	1.0000
L28	191	AL7-50(1-5/8)	89.92 - 90.58	1.0000	1.0000
L28	193	HB158-U12S24-XXX-LI(1-5/8)	89.92 - 90.58	1.0000	1.0000
L28	201	LDF7-50A(1-5/8)	89.92 - 90.58	1.0000	1.0000
L28	202	Banjo	89.92 - 90.58	1.0000	1.0000
L28	219	Safety Line 3/8	89.92 - 90.58	1.0000	1.0000
L28	220	Step Pegs	89.92 - 90.58	1.0000	1.0000
L29	52	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	53	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	54	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	60	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	61	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	62	CCI 4.5" x 1" Plate	89.67 - 89.92	1.0000	1.0000
L29	119	CCI 6.5" x 1.25" Plate	89.67 - 89.75	1.0000	1.0000
L29	120	CCI 6.5" x 1.25" Plate	89.67 - 89.75	1.0000	1.0000
L29	121	CCI 6.5" x 1.25" Plate	89.67 - 89.75	1.0000	1.0000
L29	188	CU12PSM6P4XXX(1-3/4)	89.67 - 89.92	1.0000	1.0000
L29	191	AL7-50(1-5/8)	89.67 - 89.92	1.0000	1.0000
L29	193	HB158-U12S24-XXX-LI(1-5/8)	89.67 - 89.92	1.0000	1.0000
L29	201	LDF7-50A(1-5/8)	89.67 - 89.92	1.0000	1.0000
L29	202	Banjo	89.67 - 89.92	1.0000	1.0000
L29	219	Safety Line 3/8	89.67 - 89.92	1.0000	1.0000
L29	220	Step Pegs	89.67 - 89.92	1.0000	1.0000
L30	52	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000
L30	53	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000
L30	54	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000
L30	60	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000
L30	61	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L30	62	CCI 4.5" x 1" Plate	84.67 - 89.67	1.0000	1.0000
L30	115	CCI 6.5" x 4.25" Plate	84.67 - 85.83	1.0000	1.0000
L30	116	CCI 6.5" x 4.25" Plate	84.67 - 85.83	1.0000	1.0000
L30	117	CCI 6.5" x 4.25" Plate	84.67 - 85.83	1.0000	1.0000
L30	119	CCI 6.5" x 1.25" Plate	85.83 - 89.67	1.0000	1.0000
L30	120	CCI 6.5" x 1.25" Plate	85.83 - 89.67	1.0000	1.0000
L30	121	CCI 6.5" x 1.25" Plate	85.83 - 89.67	1.0000	1.0000
L30	188	CU12PSM6P4XXX(1-3/4)	84.67 - 89.67	1.0000	1.0000
L30	191	AL7-50(1-5/8)	84.67 - 89.67	1.0000	1.0000
L30	193	HB158-U12S24-XXX-LI(1-5/8)	84.67 - 89.67	1.0000	1.0000
L30	201	LDF7-50A(1-5/8)	84.67 - 89.67	1.0000	1.0000
L30	202	Banjo	84.67 - 89.67	1.0000	1.0000
L30	219	Safety Line 3/8	84.67 - 89.67	1.0000	1.0000
L30	220	Step Pegs	84.67 - 89.67	1.0000	1.0000
L31	52	CCI 4.5" x 1" Plate	81.33 - 84.67	1.0000	1.0000
L31	53	CCI 4.5" x 1" Plate	81.33 - 84.67	1.0000	1.0000
L31	54	CCI 4.5" x 1" Plate	81.33 - 84.67	1.0000	1.0000
L31	60	CCI 4.5" x 1" Plate	81.42 - 84.67	1.0000	1.0000
L31	61	CCI 4.5" x 1" Plate	81.42 - 84.67	1.0000	1.0000
L31	62	CCI 4.5" x 1" Plate	81.42 - 84.67	1.0000	1.0000
L31	115	CCI 6.5" x 4.25" Plate	80.83 - 84.67	1.0000	1.0000
L31	116	CCI 6.5" x 4.25" Plate	80.83 - 84.67	1.0000	1.0000
L31	117	CCI 6.5" x 4.25" Plate	80.83 - 84.67	1.0000	1.0000
L31	165	CCI 4.5" x 1" Plate	80.83 - 81.71	1.0000	1.0000
L31	166	CCI 4.5" x 1" Plate	80.83 - 81.71	1.0000	1.0000
L31	167	CCI 4.5" x 1" Plate	80.83 - 81.71	1.0000	1.0000
L31	169	CCI 4.5" x 3" Plate	81.71 - 83.20	1.0000	1.0000
L31	170	CCI 4.5" x 3" Plate	81.71 - 83.20	1.0000	1.0000
L31	171	CCI 4.5" x 3" Plate	81.71 - 83.20	1.0000	1.0000
L31	188	CU12PSM6P4XXX(1-3/4)	80.83 - 84.67	1.0000	1.0000
L31	191	AL7-50(1-5/8)	80.83 - 84.67	1.0000	1.0000
L31	193	HB158-U12S24-XXX-LI(1-5/8)	80.83 - 84.67	1.0000	1.0000
L31	201	LDF7-50A(1-5/8)	80.83 - 84.67	1.0000	1.0000
L31	202	Banjo	80.83 - 84.67	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L31	219	Safety Line 3/8	80.83 - 84.67	1.0000	1.0000
L31	220	Step Pegs	80.83 - 84.67	1.0000	1.0000
L32	111	CCI 6.5" x 1.25" Plate	80.33 - 80.50	1.0000	1.0000
L32	112	CCI 6.5" x 1.25" Plate	80.33 - 80.50	1.0000	1.0000
L32	113	CCI 6.5" x 1.25" Plate	80.33 - 80.50	1.0000	1.0000
L32	115	CCI 6.5" x 4.25" Plate	80.50 - 80.83	1.0000	1.0000
L32	116	CCI 6.5" x 4.25" Plate	80.50 - 80.83	1.0000	1.0000
L32	117	CCI 6.5" x 4.25" Plate	80.50 - 80.83	1.0000	1.0000
L32	165	CCI 4.5" x 1" Plate	80.33 - 80.83	1.0000	1.0000
L32	166	CCI 4.5" x 1" Plate	80.33 - 80.83	1.0000	1.0000
L32	167	CCI 4.5" x 1" Plate	80.33 - 80.83	1.0000	1.0000
L32	188	CU12PSM6P4XXX(1-3/4)	80.33 - 80.83	1.0000	1.0000
L32	191	AL7-50(1-5/8)	80.33 - 80.83	1.0000	1.0000
L32	193	HB158-U12S24-XXX-LI(1-5/8)	80.33 - 80.83	1.0000	1.0000
L32	201	LDF7-50A(1-5/8)	80.33 - 80.83	1.0000	1.0000
L32	202	Banjo	80.33 - 80.83	1.0000	1.0000
L32	219	Safety Line 3/8	80.33 - 80.83	1.0000	1.0000
L32	220	Step Pegs	80.33 - 80.83	1.0000	1.0000
L33	14	CCI 6" x 1" Plate	80.08 - 80.17	1.0000	1.0000
L33	15	CCI 6" x 1" Plate	80.08 - 80.17	1.0000	1.0000
L33	16	CCI 6" x 1" Plate	80.08 - 80.17	1.0000	1.0000
L33	107	CCI 6.5" x 1.25" Plate	80.08 - 80.33	1.0000	1.0000
L33	108	CCI 6.5" x 1.25" Plate	80.08 - 80.33	1.0000	1.0000
L33	109	CCI 6.5" x 1.25" Plate	80.08 - 80.33	1.0000	1.0000
L33	165	CCI 4.5" x 1" Plate	80.08 - 80.33	1.0000	1.0000
L33	166	CCI 4.5" x 1" Plate	80.08 - 80.33	1.0000	1.0000
L33	167	CCI 4.5" x 1" Plate	80.08 - 80.33	1.0000	1.0000
L33	188	CU12PSM6P4XXX(1-3/4)	80.08 - 80.33	1.0000	1.0000
L33	191	AL7-50(1-5/8)	80.08 - 80.33	1.0000	1.0000
L33	193	HB158-U12S24-XXX-LI(1-5/8)	80.08 - 80.33	1.0000	1.0000
L33	201	LDF7-50A(1-5/8)	80.08 - 80.33	1.0000	1.0000
L33	202	Banjo	80.08 - 80.33	1.0000	1.0000
L33	219	Safety Line 3/8	80.08 - 80.33	1.0000	1.0000
L33	220	Step Pegs	80.08 - 80.33	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L34	14	CCI 6" x 1" Plate	75.08 - 80.08	1.0000	1.0000
L34	15	CCI 6" x 1" Plate	75.08 - 80.08	1.0000	1.0000
L34	16	CCI 6" x 1" Plate	75.08 - 80.08	1.0000	1.0000
L34	107	CCI 6.5" x 1.25" Plate	76.50 - 80.08	1.0000	1.0000
L34	108	CCI 6.5" x 1.25" Plate	76.50 - 80.08	1.0000	1.0000
L34	109	CCI 6.5" x 1.25" Plate	76.50 - 80.08	1.0000	1.0000
L34	165	CCI 4.5" x 1" Plate	78.33 - 80.08	1.0000	1.0000
L34	166	CCI 4.5" x 1" Plate	78.33 - 80.08	1.0000	1.0000
L34	167	CCI 4.5" x 1" Plate	78.33 - 80.08	1.0000	1.0000
L34	188	CU12PSM6P4XXX(1-3/4)	75.08 - 80.08	1.0000	1.0000
L34	191	AL7-50(1-5/8)	75.08 - 80.08	1.0000	1.0000
L34	193	HB158-U12S24-XXX-LI(1-5/8)	75.08 - 80.08	1.0000	1.0000
L34	201	LDF7-50A(1-5/8)	75.08 - 80.08	1.0000	1.0000
L34	202	Banjo	75.08 - 80.08	1.0000	1.0000
L34	219	Safety Line 3/8	75.08 - 80.08	1.0000	1.0000
L34	220	Step Pegs	75.08 - 80.08	1.0000	1.0000
L35	14	CCI 6" x 1" Plate	70.08 - 75.08	1.0000	1.0000
L35	15	CCI 6" x 1" Plate	70.08 - 75.08	1.0000	1.0000
L35	16	CCI 6" x 1" Plate	70.08 - 75.08	1.0000	1.0000
L35	47	CCI 4.5" x 1" Plate	70.08 - 71.00	1.0000	1.0000
L35	48	CCI 4.5" x 1" Plate	70.08 - 71.00	1.0000	1.0000
L35	49	CCI 4.5" x 1" Plate	70.08 - 71.00	1.0000	1.0000
L35	50	CCI 4.5" x 1" Plate	70.08 - 71.00	1.0000	1.0000
L35	100	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	101	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	102	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	103	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	104	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	105	CCI 8.5" x 1.25" Plate	70.08 - 73.42	1.0000	1.0000
L35	188	CU12PSM6P4XXX(1-3/4)	70.08 - 75.08	1.0000	1.0000
L35	191	AL7-50(1-5/8)	70.08 - 75.08	1.0000	1.0000
L35	193	HB158-U12S24-XXX-LI(1-5/8)	70.08 - 75.08	1.0000	1.0000
L35	201	LDF7-50A(1-5/8)	70.08 - 75.08	1.0000	1.0000
L35	202	Banjo	70.08 - 75.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L35	219	Safety Line 3/8	70.08 - 75.08	1.0000	1.0000
L35	220	Step Pegs	70.08 - 75.08	1.0000	1.0000
L36	14	CCI 6" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	15	CCI 6" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	16	CCI 6" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	47	CCI 4.5" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	48	CCI 4.5" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	49	CCI 4.5" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	50	CCI 4.5" x 1" Plate	69.50 - 70.08	1.0000	1.0000
L36	100	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	101	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	102	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	103	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	104	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	105	CCI 8.5" x 1.25" Plate	69.50 - 70.08	1.0000	1.0000
L36	188	CU12PSM6P4XXX(1-3/4)	69.50 - 70.08	1.0000	1.0000
L36	191	AL7-50(1-5/8)	69.50 - 70.08	1.0000	1.0000
L36	193	HB158-U12S24-XXX-LI(1-5/8)	69.50 - 70.08	1.0000	1.0000
L36	201	LDF7-50A(1-5/8)	69.50 - 70.08	1.0000	1.0000
L36	202	Banjo	69.50 - 70.08	1.0000	1.0000
L36	219	Safety Line 3/8	69.50 - 70.08	1.0000	1.0000
L36	220	Step Pegs	69.50 - 70.08	1.0000	1.0000
L37	14	CCI 6" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	15	CCI 6" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	16	CCI 6" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	47	CCI 4.5" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	48	CCI 4.5" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	49	CCI 4.5" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	50	CCI 4.5" x 1" Plate	69.25 - 69.50	1.0000	1.0000
L37	100	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000
L37	101	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000
L37	102	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000
L37	103	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000
L37	104	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L37	105	CCI 8.5" x 1.25" Plate	69.25 - 69.50	1.0000	1.0000
L37	188	CU12PSM6P4XXX(1-3/4)	69.25 - 69.50	1.0000	1.0000
L37	191	AL7-50(1-5/8)	69.25 - 69.50	1.0000	1.0000
L37	193	HB158-U12S24-XXX-LI(1-5/8)	69.25 - 69.50	1.0000	1.0000
L37	201	LDF7-50A(1-5/8)	69.25 - 69.50	1.0000	1.0000
L37	202	Banjo	69.25 - 69.50	1.0000	1.0000
L37	219	Safety Line 3/8	69.25 - 69.50	1.0000	1.0000
L37	220	Step Pegs	69.25 - 69.50	1.0000	1.0000
L38	14	CCI 6" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	15	CCI 6" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	16	CCI 6" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	27	1" x 2" Plate	64.25 - 66.17	1.0000	1.0000
L38	28	1" x 2" Plate	64.25 - 66.17	1.0000	1.0000
L38	29	1" x 2" Plate	64.25 - 66.17	1.0000	1.0000
L38	30	1" x 2" Plate	64.25 - 66.17	1.0000	1.0000
L38	47	CCI 4.5" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	48	CCI 4.5" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	49	CCI 4.5" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	50	CCI 4.5" x 1" Plate	64.25 - 69.25	1.0000	1.0000
L38	93	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	94	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	95	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	96	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	97	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	98	CCI 8.5" x 4.25" Plate	64.25 - 68.42	1.0000	1.0000
L38	100	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	101	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	102	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	103	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	104	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	105	CCI 8.5" x 1.25" Plate	68.42 - 69.25	1.0000	1.0000
L38	188	CU12PSM6P4XXX(1-3/4)	64.25 - 69.25	1.0000	1.0000
L38	191	AL7-50(1-5/8)	64.25 - 69.25	1.0000	1.0000
L38	193	HB158-U12S24-XXX-LI(1-5/8)	64.25 - 69.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L38	201	LDF7-50A(1-5/8)	64.25 - 69.25	1.0000	1.0000
L38	202	Banjo	64.25 - 69.25	1.0000	1.0000
L38	219	Safety Line 3/8	64.25 - 69.25	1.0000	1.0000
L38	220	Step Pegs	64.25 - 69.25	1.0000	1.0000
L39	14	CCI 6" x 1" Plate	61.17 - 64.25	1.0000	1.0000
L39	15	CCI 6" x 1" Plate	61.17 - 64.25	1.0000	1.0000
L39	16	CCI 6" x 1" Plate	61.17 - 64.25	1.0000	1.0000
L39	27	1" x 2" Plate	61.08 - 64.25	1.0000	1.0000
L39	28	1" x 2" Plate	61.08 - 64.25	1.0000	1.0000
L39	29	1" x 2" Plate	61.08 - 64.25	1.0000	1.0000
L39	30	1" x 2" Plate	61.08 - 64.25	1.0000	1.0000
L39	47	CCI 4.5" x 1" Plate	61.00 - 64.25	1.0000	1.0000
L39	48	CCI 4.5" x 1" Plate	61.00 - 64.25	1.0000	1.0000
L39	49	CCI 4.5" x 1" Plate	61.00 - 64.25	1.0000	1.0000
L39	50	CCI 4.5" x 1" Plate	61.00 - 64.25	1.0000	1.0000
L39	86	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	87	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	88	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	89	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	90	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	91	CCI 8.5" x 1.25" Plate	60.58 - 61.08	1.0000	1.0000
L39	93	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	94	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	95	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	96	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	97	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	98	CCI 8.5" x 4.25" Plate	61.08 - 64.25	1.0000	1.0000
L39	155	CCI 4.5" x 1" Plate	60.58 - 61.46	1.0000	1.0000
L39	156	CCI 4.5" x 1" Plate	60.58 - 61.46	1.0000	1.0000
L39	157	CCI 4.5" x 1" Plate	60.58 - 61.46	1.0000	1.0000
L39	158	CCI 4.5" x 1" Plate	60.58 - 61.46	1.0000	1.0000
L39	160	CCI 4.5" x 3" Plate	61.55 - 62.96	1.0000	1.0000
L39	161	CCI 4.5" x 3" Plate	61.55 - 62.96	1.0000	1.0000
L39	162	CCI 4.5" x 3" Plate	61.55 - 62.96	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L39	163	CCI 4.5" x 3" Plate	61.55 - 62.96	1.0000	1.0000
L39	188	CU12PSM6P4XXX(1-3/4)	60.58 - 64.25	1.0000	1.0000
L39	191	AL7-50(1-5/8)	60.58 - 64.25	1.0000	1.0000
L39	193	HB158-U12S24-XXX-LI(1-5/8)	60.58 - 64.25	1.0000	1.0000
L39	201	LDF7-50A(1-5/8)	60.58 - 64.25	1.0000	1.0000
L39	202	Banjo	60.58 - 64.25	1.0000	1.0000
L39	219	Safety Line 3/8	60.58 - 64.25	1.0000	1.0000
L39	220	Step Pegs	60.58 - 64.25	1.0000	1.0000
L40	86	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	87	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	88	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	89	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	90	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	91	CCI 8.5" x 1.25" Plate	60.33 - 60.58	1.0000	1.0000
L40	155	CCI 4.5" x 1" Plate	60.33 - 60.58	1.0000	1.0000
L40	156	CCI 4.5" x 1" Plate	60.33 - 60.58	1.0000	1.0000
L40	157	CCI 4.5" x 1" Plate	60.33 - 60.58	1.0000	1.0000
L40	158	CCI 4.5" x 1" Plate	60.33 - 60.58	1.0000	1.0000
L40	188	CU12PSM6P4XXX(1-3/4)	60.33 - 60.58	1.0000	1.0000
L40	191	AL7-50(1-5/8)	60.33 - 60.58	1.0000	1.0000
L40	193	HB158-U12S24-XXX-LI(1-5/8)	60.33 - 60.58	1.0000	1.0000
L40	201	LDF7-50A(1-5/8)	60.33 - 60.58	1.0000	1.0000
L40	202	Banjo	60.33 - 60.58	1.0000	1.0000
L40	219	Safety Line 3/8	60.33 - 60.58	1.0000	1.0000
L40	220	Step Pegs	60.33 - 60.58	1.0000	1.0000
L41	10	CCI 6.5" x 1.25" Plate	55.33 - 59.92	1.0000	1.0000
L41	11	CCI 6.5" x 1.25" Plate	55.33 - 59.92	1.0000	1.0000
L41	12	CCI 6.5" x 1.25" Plate	55.33 - 59.92	1.0000	1.0000
L41	79	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000
L41	80	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000
L41	81	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000
L41	82	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000
L41	83	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000
L41	84	CCI 8.5" x 1.25" Plate	55.33 - 60.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L41	86	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	87	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	88	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	89	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	90	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	91	CCI 8.5" x 1.25" Plate	60.08 - 60.33	1.0000	1.0000
L41	155	CCI 4.5" x 1" Plate	58.00 - 60.33	1.0000	1.0000
L41	156	CCI 4.5" x 1" Plate	58.00 - 60.33	1.0000	1.0000
L41	157	CCI 4.5" x 1" Plate	58.00 - 60.33	1.0000	1.0000
L41	158	CCI 4.5" x 1" Plate	58.00 - 60.33	1.0000	1.0000
L41	188	CU12PSM6P4XXX(1-3/4)	55.33 - 60.33	1.0000	1.0000
L41	191	AL7-50(1-5/8)	55.33 - 60.33	1.0000	1.0000
L41	193	HB158-U12S24-XXX-LI(1-5/8)	55.33 - 60.33	1.0000	1.0000
L41	201	LDF7-50A(1-5/8)	55.33 - 60.33	1.0000	1.0000
L41	202	Banjo	55.33 - 60.33	1.0000	1.0000
L41	219	Safety Line 3/8	55.33 - 60.33	1.0000	1.0000
L41	220	Step Pegs	55.33 - 60.33	1.0000	1.0000
L42	10	CCI 6.5" x 1.25" Plate	52.17 - 55.33	1.0000	1.0000
L42	11	CCI 6.5" x 1.25" Plate	52.17 - 55.33	1.0000	1.0000
L42	12	CCI 6.5" x 1.25" Plate	52.17 - 55.33	1.0000	1.0000
L42	79	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	80	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	81	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	82	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	83	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	84	CCI 8.5" x 1.25" Plate	55.25 - 55.33	1.0000	1.0000
L42	188	CU12PSM6P4XXX(1-3/4)	52.17 - 55.33	1.0000	1.0000
L42	191	AL7-50(1-5/8)	52.17 - 55.33	1.0000	1.0000
L42	193	HB158-U12S24-XXX-LI(1-5/8)	52.17 - 55.33	1.0000	1.0000
L42	201	LDF7-50A(1-5/8)	52.17 - 55.33	1.0000	1.0000
L42	202	Banjo	52.17 - 55.33	1.0000	1.0000
L42	219	Safety Line 3/8	52.17 - 55.33	1.0000	1.0000
L42	220	Step Pegs	52.17 - 55.33	1.0000	1.0000
L43	10	CCI 6.5" x 1.25" Plate	51.92 - 52.17	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L43	11	CCI 6.5" x 1.25" Plate	51.92 - 52.17	1.0000	1.0000
L43	12	CCI 6.5" x 1.25" Plate	51.92 - 52.17	1.0000	1.0000
L43	188	CU12PSM6P4XXX(1-3/4)	51.92 - 52.17	1.0000	1.0000
L43	191	AL7-50(1-5/8)	51.92 - 52.17	1.0000	1.0000
L43	193	HB158-U12S24-XXX-LI(1-5/8)	51.92 - 52.17	1.0000	1.0000
L43	201	LDF7-50A(1-5/8)	51.92 - 52.17	1.0000	1.0000
L43	202	Banjo	51.92 - 52.17	1.0000	1.0000
L43	219	Safety Line 3/8	51.92 - 52.17	1.0000	1.0000
L43	220	Step Pegs	51.92 - 52.17	1.0000	1.0000
L44	10	CCI 6.5" x 1.25" Plate	46.92 - 51.92	1.0000	1.0000
L44	11	CCI 6.5" x 1.25" Plate	46.92 - 51.92	1.0000	1.0000
L44	12	CCI 6.5" x 1.25" Plate	46.92 - 51.92	1.0000	1.0000
L44	22	1" x 2" Plate	46.92 - 50.42	1.0000	1.0000
L44	23	1" x 2" Plate	46.92 - 50.42	1.0000	1.0000
L44	24	1" x 2" Plate	46.92 - 50.42	1.0000	1.0000
L44	25	1" x 2" Plate	46.92 - 50.42	1.0000	1.0000
L44	42	CCI 6" x 1" Plate	46.92 - 50.17	1.0000	1.0000
L44	43	CCI 6" x 1" Plate	46.92 - 50.17	1.0000	1.0000
L44	44	CCI 6" x 1" Plate	46.92 - 50.17	1.0000	1.0000
L44	45	CCI 6" x 1" Plate	46.92 - 50.17	1.0000	1.0000
L44	72	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	73	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	74	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	75	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	76	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	77	CCI 6.5" x 1.25" Plate	46.92 - 47.83	1.0000	1.0000
L44	188	CU12PSM6P4XXX(1-3/4)	46.92 - 51.92	1.0000	1.0000
L44	191	AL7-50(1-5/8)	46.92 - 51.92	1.0000	1.0000
L44	193	HB158-U12S24-XXX-LI(1-5/8)	46.92 - 51.92	1.0000	1.0000
L44	201	LDF7-50A(1-5/8)	46.92 - 51.92	1.0000	1.0000
L44	202	Banjo	46.92 - 51.92	1.0000	1.0000
L44	219	Safety Line 3/8	46.92 - 51.92	1.0000	1.0000
L44	220	Step Pegs	46.92 - 51.92	1.0000	1.0000
L45	10	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L45	11	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	12	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	22	1" x 2" Plate	41.92 - 46.92	1.0000	1.0000
L45	23	1" x 2" Plate	41.92 - 46.92	1.0000	1.0000
L45	24	1" x 2" Plate	41.92 - 46.92	1.0000	1.0000
L45	25	1" x 2" Plate	41.92 - 46.92	1.0000	1.0000
L45	42	CCI 6" x 1" Plate	41.92 - 46.92	1.0000	1.0000
L45	43	CCI 6" x 1" Plate	41.92 - 46.92	1.0000	1.0000
L45	44	CCI 6" x 1" Plate	41.92 - 46.92	1.0000	1.0000
L45	45	CCI 6" x 1" Plate	41.92 - 46.92	1.0000	1.0000
L45	72	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	73	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	74	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	75	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	76	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	77	CCI 6.5" x 1.25" Plate	41.92 - 46.92	1.0000	1.0000
L45	188	CU12PSM6P4XXX(1-3/4)	41.92 - 46.92	1.0000	1.0000
L45	191	AL7-50(1-5/8)	41.92 - 46.92	1.0000	1.0000
L45	193	HB158-U12S24-XXX-LI(1-5/8)	41.92 - 46.92	1.0000	1.0000
L45	201	LDF7-50A(1-5/8)	41.92 - 46.92	1.0000	1.0000
L45	202	Banjo	41.92 - 46.92	1.0000	1.0000
L45	219	Safety Line 3/8	41.92 - 46.92	1.0000	1.0000
L45	220	Step Pegs	41.92 - 46.92	1.0000	1.0000
L46	10	CCI 6.5" x 1.25" Plate	40.83 - 41.92	1.0000	1.0000
L46	11	CCI 6.5" x 1.25" Plate	40.83 - 41.92	1.0000	1.0000
L46	12	CCI 6.5" x 1.25" Plate	40.83 - 41.92	1.0000	1.0000
L46	22	1" x 2" Plate	40.58 - 41.92	1.0000	1.0000
L46	23	1" x 2" Plate	40.58 - 41.92	1.0000	1.0000
L46	24	1" x 2" Plate	40.58 - 41.92	1.0000	1.0000
L46	25	1" x 2" Plate	40.58 - 41.92	1.0000	1.0000
L46	42	CCI 6" x 1" Plate	40.23 - 41.92	1.0000	1.0000
L46	43	CCI 6" x 1" Plate	40.23 - 41.92	1.0000	1.0000
L46	44	CCI 6" x 1" Plate	40.23 - 41.92	1.0000	1.0000
L46	45	CCI 6" x 1" Plate	40.23 - 41.92	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L46	72	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	73	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	74	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	75	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	76	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	77	CCI 6.5" x 1.25" Plate	40.23 - 41.92	1.0000	1.0000
L46	188	CU12PSM6P4XXX(1-3/4)	40.23 - 41.92	1.0000	1.0000
L46	191	AL7-50(1-5/8)	40.23 - 41.92	1.0000	1.0000
L46	193	HB158-U12S24-XXX-LI(1-5/8)	40.23 - 41.92	1.0000	1.0000
L46	201	LDF7-50A(1-5/8)	40.23 - 41.92	1.0000	1.0000
L46	202	Banjo	40.23 - 41.92	1.0000	1.0000
L46	219	Safety Line 3/8	40.23 - 41.92	1.0000	1.0000
L46	220	Step Pegs	40.23 - 41.92	1.0000	1.0000
L47	42	CCI 6" x 1" Plate	39.98 - 40.23	1.0000	1.0000
L47	43	CCI 6" x 1" Plate	39.98 - 40.23	1.0000	1.0000
L47	44	CCI 6" x 1" Plate	39.98 - 40.23	1.0000	1.0000
L47	45	CCI 6" x 1" Plate	39.98 - 40.23	1.0000	1.0000
L47	72	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	73	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	74	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	75	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	76	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	77	CCI 6.5" x 1.25" Plate	39.98 - 40.23	1.0000	1.0000
L47	188	CU12PSM6P4XXX(1-3/4)	39.98 - 40.23	1.0000	1.0000
L47	191	AL7-50(1-5/8)	39.98 - 40.23	1.0000	1.0000
L47	193	HB158-U12S24-XXX-LI(1-5/8)	39.98 - 40.23	1.0000	1.0000
L47	201	LDF7-50A(1-5/8)	39.98 - 40.23	1.0000	1.0000
L47	202	Banjo	39.98 - 40.23	1.0000	1.0000
L47	219	Safety Line 3/8	39.98 - 40.23	1.0000	1.0000
L47	220	Step Pegs	39.98 - 40.23	1.0000	1.0000
L48	6	CCI 6" x 1" Plate	34.98 - 39.75	1.0000	1.0000
L48	7	CCI 6" x 1" Plate	34.98 - 39.75	1.0000	1.0000
L48	8	CCI 6" x 1" Plate	34.98 - 39.75	1.0000	1.0000
L48	42	CCI 6" x 1" Plate	37.17 - 39.98	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L48	43	CCI 6" x 1" Plate	37.17 - 39.98	1.0000	1.0000
L48	44	CCI 6" x 1" Plate	37.17 - 39.98	1.0000	1.0000
L48	45	CCI 6" x 1" Plate	37.17 - 39.98	1.0000	1.0000
L48	72	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	73	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	74	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	75	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	76	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	77	CCI 6.5" x 1.25" Plate	34.98 - 39.98	1.0000	1.0000
L48	188	CU12PSM6P4XXX(1-3/4)	34.98 - 39.98	1.0000	1.0000
L48	191	AL7-50(1-5/8)	34.98 - 39.98	1.0000	1.0000
L48	193	HB158-U12S24-XXX-LI(1-5/8)	34.98 - 39.98	1.0000	1.0000
L48	201	LDF7-50A(1-5/8)	34.98 - 39.98	1.0000	1.0000
L48	202	Banjo	34.98 - 39.98	1.0000	1.0000
L48	219	Safety Line 3/8	34.98 - 39.98	1.0000	1.0000
L48	220	Step Pegs	34.98 - 39.98	1.0000	1.0000
L49	6	CCI 6" x 1" Plate	29.98 - 34.98	1.0000	1.0000
L49	7	CCI 6" x 1" Plate	29.98 - 34.98	1.0000	1.0000
L49	8	CCI 6" x 1" Plate	29.98 - 34.98	1.0000	1.0000
L49	37	CCI 6" x 1" Plate	29.98 - 30.00	1.0000	1.0000
L49	38	CCI 6" x 1" Plate	29.98 - 30.00	1.0000	1.0000
L49	39	CCI 6" x 1" Plate	29.98 - 30.00	1.0000	1.0000
L49	40	CCI 6" x 1" Plate	29.98 - 30.00	1.0000	1.0000
L49	72	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	73	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	74	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	75	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	76	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	77	CCI 6.5" x 1.25" Plate	32.83 - 34.98	1.0000	1.0000
L49	188	CU12PSM6P4XXX(1-3/4)	29.98 - 34.98	1.0000	1.0000
L49	191	AL7-50(1-5/8)	29.98 - 34.98	1.0000	1.0000
L49	193	HB158-U12S24-XXX-LI(1-5/8)	29.98 - 34.98	1.0000	1.0000
L49	201	LDF7-50A(1-5/8)	29.98 - 34.98	1.0000	1.0000
L49	202	Banjo	29.98 - 34.98	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L49	219	Safety Line 3/8	29.98 - 34.98	1.0000	1.0000
L49	220	Step Pegs	29.98 - 34.98	1.0000	1.0000
L50	6	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	7	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	8	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	37	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	38	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	39	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	40	CCI 6" x 1" Plate	28.00 - 29.98	1.0000	1.0000
L50	188	CU12PSM6P4XXX(1-3/4)	28.00 - 29.98	1.0000	1.0000
L50	191	AL7-50(1-5/8)	28.00 - 29.98	1.0000	1.0000
L50	193	HB158-U12S24-XXX-LI(1-5/8)	28.00 - 29.98	1.0000	1.0000
L50	201	LDF7-50A(1-5/8)	28.00 - 29.98	1.0000	1.0000
L50	202	Banjo	28.00 - 29.98	1.0000	1.0000
L50	219	Safety Line 3/8	28.00 - 29.98	1.0000	1.0000
L50	220	Step Pegs	28.00 - 29.98	1.0000	1.0000
L51	6	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	7	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	8	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	37	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	38	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	39	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	40	CCI 6" x 1" Plate	27.75 - 28.00	1.0000	1.0000
L51	188	CU12PSM6P4XXX(1-3/4)	27.75 - 28.00	1.0000	1.0000
L51	191	AL7-50(1-5/8)	27.75 - 28.00	1.0000	1.0000
L51	193	HB158-U12S24-XXX-LI(1-5/8)	27.75 - 28.00	1.0000	1.0000
L51	201	LDF7-50A(1-5/8)	27.75 - 28.00	1.0000	1.0000
L51	202	Banjo	27.75 - 28.00	1.0000	1.0000
L51	219	Safety Line 3/8	27.75 - 28.00	1.0000	1.0000
L51	220	Step Pegs	27.75 - 28.00	1.0000	1.0000
L52	6	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	7	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	8	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	37	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L52	38	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	39	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	40	CCI 6" x 1" Plate	22.75 - 27.75	1.0000	1.0000
L52	65	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	66	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	67	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	68	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	69	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	70	CCI 6.5" x 1.25" Plate	22.75 - 27.50	1.0000	1.0000
L52	188	CU12PSM6P4XXX(1-3/4)	22.75 - 27.75	1.0000	1.0000
L52	191	AL7-50(1-5/8)	22.75 - 27.75	1.0000	1.0000
L52	193	HB158-U12S24-XXX-LI(1-5/8)	22.75 - 27.75	1.0000	1.0000
L52	201	LDF7-50A(1-5/8)	22.75 - 27.75	1.0000	1.0000
L52	202	Banjo	22.75 - 27.75	1.0000	1.0000
L52	219	Safety Line 3/8	22.75 - 27.75	1.0000	1.0000
L52	220	Step Pegs	22.75 - 27.75	1.0000	1.0000
L53	6	CCI 6" x 1" Plate	20.75 - 22.75	1.0000	1.0000
L53	7	CCI 6" x 1" Plate	20.75 - 22.75	1.0000	1.0000
L53	8	CCI 6" x 1" Plate	20.75 - 22.75	1.0000	1.0000
L53	37	CCI 6" x 1" Plate	20.08 - 22.75	1.0000	1.0000
L53	38	CCI 6" x 1" Plate	20.08 - 22.75	1.0000	1.0000
L53	39	CCI 6" x 1" Plate	20.08 - 22.75	1.0000	1.0000
L53	40	CCI 6" x 1" Plate	20.08 - 22.75	1.0000	1.0000
L53	65	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	66	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	67	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	68	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	69	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	70	CCI 6.5" x 1.25" Plate	20.08 - 22.75	1.0000	1.0000
L53	188	CU12PSM6P4XXX(1-3/4)	20.08 - 22.75	1.0000	1.0000
L53	191	AL7-50(1-5/8)	20.08 - 22.75	1.0000	1.0000
L53	193	HB158-U12S24-XXX-LI(1-5/8)	20.08 - 22.75	1.0000	1.0000
L53	201	LDF7-50A(1-5/8)	20.08 - 22.75	1.0000	1.0000
L53	202	Banjo	20.08 - 22.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L53	219	Safety Line 3/8	20.08 - 22.75	1.0000	1.0000
L53	220	Step Pegs	20.08 - 22.75	1.0000	1.0000
L54	37	CCI 6" x 1" Plate	19.83 - 20.08	1.0000	1.0000
L54	38	CCI 6" x 1" Plate	19.83 - 20.08	1.0000	1.0000
L54	39	CCI 6" x 1" Plate	19.83 - 20.08	1.0000	1.0000
L54	40	CCI 6" x 1" Plate	19.83 - 20.08	1.0000	1.0000
L54	65	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	66	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	67	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	68	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	69	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	70	CCI 6.5" x 1.25" Plate	19.83 - 20.08	1.0000	1.0000
L54	188	CU12PSM6P4XXX(1-3/4)	19.83 - 20.08	1.0000	1.0000
L54	191	AL7-50(1-5/8)	19.83 - 20.08	1.0000	1.0000
L54	193	HB158-U12S24-XXX-LI(1-5/8)	19.83 - 20.08	1.0000	1.0000
L54	201	LDF7-50A(1-5/8)	19.83 - 20.08	1.0000	1.0000
L54	202	Banjo	19.83 - 20.08	1.0000	1.0000
L54	219	Safety Line 3/8	19.83 - 20.08	1.0000	1.0000
L54	220	Step Pegs	19.83 - 20.08	1.0000	1.0000
L55	32	CCI 6" x 1" Plate	17.00 - 19.00	1.0000	1.0000
L55	33	CCI 6" x 1" Plate	17.00 - 19.00	1.0000	1.0000
L55	34	CCI 6" x 1" Plate	17.00 - 19.00	1.0000	1.0000
L55	35	CCI 6" x 1" Plate	17.00 - 19.00	1.0000	1.0000
L55	37	CCI 6" x 1" Plate	17.00 - 19.83	1.0000	1.0000
L55	38	CCI 6" x 1" Plate	17.00 - 19.83	1.0000	1.0000
L55	39	CCI 6" x 1" Plate	17.00 - 19.83	1.0000	1.0000
L55	40	CCI 6" x 1" Plate	17.00 - 19.83	1.0000	1.0000
L55	65	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	66	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	67	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	68	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	69	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	70	CCI 6.5" x 1.25" Plate	17.00 - 19.83	1.0000	1.0000
L55	188	CU12PSM6P4XXX(1-3/4)	17.00 - 19.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L55	191	AL7-50(1-5/8)	17.00 - 19.83	1.0000	1.0000
L55	193	HB158-U12S24-XXX-LI(1-5/8)	17.00 - 19.83	1.0000	1.0000
L55	201	LDF7-50A(1-5/8)	17.00 - 19.83	1.0000	1.0000
L55	202	Banjo	17.00 - 19.83	1.0000	1.0000
L55	219	Safety Line 3/8	17.00 - 19.83	1.0000	1.0000
L55	220	Step Pegs	17.00 - 19.83	1.0000	1.0000
L56	32	CCI 6" x 1" Plate	16.75 - 17.00	1.0000	1.0000
L56	33	CCI 6" x 1" Plate	16.75 - 17.00	1.0000	1.0000
L56	34	CCI 6" x 1" Plate	16.75 - 17.00	1.0000	1.0000
L56	35	CCI 6" x 1" Plate	16.75 - 17.00	1.0000	1.0000
L56	65	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	66	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	67	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	68	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	69	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	70	CCI 6.5" x 1.25" Plate	16.75 - 17.00	1.0000	1.0000
L56	188	CU12PSM6P4XXX(1-3/4)	16.75 - 17.00	1.0000	1.0000
L56	191	AL7-50(1-5/8)	16.75 - 17.00	1.0000	1.0000
L56	193	HB158-U12S24-XXX-LI(1-5/8)	16.75 - 17.00	1.0000	1.0000
L56	201	LDF7-50A(1-5/8)	16.75 - 17.00	1.0000	1.0000
L56	202	Banjo	16.75 - 17.00	1.0000	1.0000
L56	219	Safety Line 3/8	16.75 - 17.00	1.0000	1.0000
L56	220	Step Pegs	16.75 - 17.00	1.0000	1.0000
L57	4	CCI 4" x 0.75" Plate	11.65 - 13.17	1.0000	1.0000
L57	32	CCI 6" x 1" Plate	11.65 - 16.75	1.0000	1.0000
L57	33	CCI 6" x 1" Plate	11.65 - 16.75	1.0000	1.0000
L57	34	CCI 6" x 1" Plate	11.65 - 16.75	1.0000	1.0000
L57	35	CCI 6" x 1" Plate	11.65 - 16.75	1.0000	1.0000
L57	65	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000
L57	66	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000
L57	67	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000
L57	68	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000
L57	69	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000
L57	70	CCI 6.5" x 1.25" Plate	12.67 - 16.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L57	188	CU12PSM6P4XXX(1-3/4)	11.65 - 16.75	1.0000	1.0000
L57	191	AL7-50(1-5/8)	11.65 - 16.75	1.0000	1.0000
L57	193	HB158-U12S24-XXX-LI(1-5/8)	11.65 - 16.75	1.0000	1.0000
L57	201	LDF7-50A(1-5/8)	11.65 - 16.75	1.0000	1.0000
L57	202	Banjo	11.65 - 16.75	1.0000	1.0000
L57	219	Safety Line 3/8	11.65 - 16.75	1.0000	1.0000
L57	220	Step Pegs	11.65 - 16.75	1.0000	1.0000
L58	4	CCI 4" x 0.75" Plate	11.42 - 11.65	1.0000	1.0000
L58	32	CCI 6" x 1" Plate	11.42 - 11.65	1.0000	1.0000
L58	33	CCI 6" x 1" Plate	11.42 - 11.65	1.0000	1.0000
L58	34	CCI 6" x 1" Plate	11.42 - 11.65	1.0000	1.0000
L58	35	CCI 6" x 1" Plate	11.42 - 11.65	1.0000	1.0000
L58	188	CU12PSM6P4XXX(1-3/4)	11.42 - 11.65	1.0000	1.0000
L58	191	AL7-50(1-5/8)	11.42 - 11.65	1.0000	1.0000
L58	193	HB158-U12S24-XXX-LI(1-5/8)	11.42 - 11.65	1.0000	1.0000
L58	201	LDF7-50A(1-5/8)	11.42 - 11.65	1.0000	1.0000
L58	202	Banjo	11.42 - 11.65	1.0000	1.0000
L58	219	Safety Line 3/8	11.42 - 11.65	1.0000	1.0000
L58	220	Step Pegs	11.42 - 11.65	1.0000	1.0000
L59	2	CCI 4" x 0.75" Plate	9.40 - 10.88	1.0000	1.0000
L59	3	CCI 4" x 0.75" Plate	9.40 - 10.88	1.0000	1.0000
L59	4	CCI 4" x 0.75" Plate	9.40 - 11.42	1.0000	1.0000
L59	32	CCI 6" x 1" Plate	9.40 - 11.42	1.0000	1.0000
L59	33	CCI 6" x 1" Plate	9.40 - 11.42	1.0000	1.0000
L59	34	CCI 6" x 1" Plate	9.40 - 11.42	1.0000	1.0000
L59	35	CCI 6" x 1" Plate	9.40 - 11.42	1.0000	1.0000
L59	188	CU12PSM6P4XXX(1-3/4)	9.40 - 11.42	1.0000	1.0000
L59	191	AL7-50(1-5/8)	9.40 - 11.42	1.0000	1.0000
L59	193	HB158-U12S24-XXX-LI(1-5/8)	9.40 - 11.42	1.0000	1.0000
L59	201	LDF7-50A(1-5/8)	9.40 - 11.42	1.0000	1.0000
L59	202	Banjo	9.40 - 11.42	1.0000	1.0000
L59	219	Safety Line 3/8	9.40 - 11.42	1.0000	1.0000
L59	220	Step Pegs	9.40 - 11.42	1.0000	1.0000
L60	2	CCI 4" x 0.75" Plate	9.15 - 9.40	1.0000	1.0000
L60	3	CCI 4" x 0.75" Plate	9.15 - 9.40	1.0000	1.0000
L60	4	CCI 4" x 0.75" Plate	9.15 - 9.40	1.0000	1.0000
L60	32	CCI 6" x 1" Plate	9.15 - 9.40	1.0000	1.0000
L60	33	CCI 6" x 1" Plate	9.15 - 9.40	1.0000	1.0000
L60	34	CCI 6" x 1" Plate	9.15 - 9.40	1.0000	1.0000
L60	35	CCI 6" x 1" Plate	9.15 - 9.40	1.0000	1.0000
L60	188	CU12PSM6P4XXX(1-3/4)	9.15 - 9.40	1.0000	1.0000
L60	191	AL7-50(1-5/8)	9.15 - 9.40	1.0000	1.0000
L60	193	HB158-U12S24-XXX-LI(1-5/8)	9.15 - 9.40	1.0000	1.0000
L60	201	LDF7-50A(1-5/8)	9.15 - 9.40	1.0000	1.0000
L60	202	Banjo	9.15 - 9.40	1.0000	1.0000
L60	219	Safety Line 3/8	9.15 - 9.40	1.0000	1.0000
L60	220	Step Pegs	9.15 - 9.40	1.0000	1.0000
L61	2	CCI 4" x 0.75" Plate	4.83 - 9.15	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L61	3	CCI 4" x 0.75" Plate	4.83 - 9.15	1.0000	1.0000
L61	4	CCI 4" x 0.75" Plate	4.83 - 9.15	1.0000	1.0000
L61	32	CCI 6" x 1" Plate	4.83 - 9.15	1.0000	1.0000
L61	33	CCI 6" x 1" Plate	4.83 - 9.15	1.0000	1.0000
L61	34	CCI 6" x 1" Plate	4.83 - 9.15	1.0000	1.0000
L61	35	CCI 6" x 1" Plate	4.83 - 9.15	1.0000	1.0000
L61	188	CU12PSM6P4XXX(1-3/4)	4.83 - 9.15	1.0000	1.0000
L61	191	AL7-50(1-5/8)	4.83 - 9.15	1.0000	1.0000
L61	193	HB158-U12S24-XXX-LI(1-5/8)	4.83 - 9.15	1.0000	1.0000
L61	201	LDF7-50A(1-5/8)	4.83 - 9.15	1.0000	1.0000
L61	202	Banjo	4.83 - 9.15	1.0000	1.0000
L61	219	Safety Line 3/8	4.83 - 9.15	1.0000	1.0000
L61	220	Step Pegs	4.83 - 9.15	1.0000	1.0000
L62	2	CCI 4" x 0.75" Plate	4.58 - 4.83	1.0000	1.0000
L62	3	CCI 4" x 0.75" Plate	4.58 - 4.83	1.0000	1.0000
L62	4	CCI 4" x 0.75" Plate	4.58 - 4.83	1.0000	1.0000
L62	32	CCI 6" x 1" Plate	4.58 - 4.83	1.0000	1.0000
L62	33	CCI 6" x 1" Plate	4.58 - 4.83	1.0000	1.0000
L62	34	CCI 6" x 1" Plate	4.58 - 4.83	1.0000	1.0000
L62	35	CCI 6" x 1" Plate	4.58 - 4.83	1.0000	1.0000
L62	188	CU12PSM6P4XXX(1-3/4)	4.58 - 4.83	1.0000	1.0000
L62	191	AL7-50(1-5/8)	4.58 - 4.83	1.0000	1.0000
L62	193	HB158-U12S24-XXX-LI(1-5/8)	4.58 - 4.83	1.0000	1.0000
L62	201	LDF7-50A(1-5/8)	4.58 - 4.83	1.0000	1.0000
L62	202	Banjo	4.58 - 4.83	1.0000	1.0000
L62	219	Safety Line 3/8	4.58 - 4.83	1.0000	1.0000
L62	220	Step Pegs	4.58 - 4.83	1.0000	1.0000
L63	2	CCI 4" x 0.75" Plate	0.00 - 4.58	1.0000	1.0000
L63	3	CCI 4" x 0.75" Plate	0.00 - 4.58	1.0000	1.0000
L63	4	CCI 4" x 0.75" Plate	3.17 - 4.58	1.0000	1.0000
L63	32	CCI 6" x 1" Plate	0.00 - 4.58	1.0000	1.0000
L63	33	CCI 6" x 1" Plate	0.00 - 4.58	1.0000	1.0000
L63	34	CCI 6" x 1" Plate	0.00 - 4.58	1.0000	1.0000
L63	35	CCI 6" x 1" Plate	0.00 - 4.58	1.0000	1.0000
L63	188	CU12PSM6P4XXX(1-3/4)	0.00 - 4.58	1.0000	1.0000
L63	191	AL7-50(1-5/8)	4.00 - 4.58	1.0000	1.0000
L63	193	HB158-U12S24-XXX-LI(1-5/8)	4.00 - 4.58	1.0000	1.0000
L63	201	LDF7-50A(1-5/8)	4.00 - 4.58	1.0000	1.0000
L63	202	Banjo	4.00 - 4.58	1.0000	1.0000
L63	219	Safety Line 3/8	4.00 - 4.58	1.0000	1.0000
L63	220	Step Pegs	4.00 - 4.58	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
L14	151	CCI 4.5" x 1" Plate	126.42 - 127.17	Auto	1.0000
L14	152	CCI 4.5" x 1" Plate	126.42 - 127.17	Auto	1.0000
L14	153	CCI 4.5" x 1" Plate	126.42 - 127.17	Auto	1.0000
L15	143	CCI 4.5" x 1" Plate	121.42 - 121.67	Auto	1.0000
L15	144	CCI 4.5" x 1" Plate	121.42 - 121.67	Auto	1.0000
L15	145	CCI 4.5" x 1" Plate	121.42 - 121.67	Auto	1.0000
L15	147	CCI 4.5" x 4" Plate	121.67 - 124.42	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L15	148	CCI 4.5" x 4" Plate	121.67 - 124.42	Auto	1.0000
L15	149	CCI 4.5" x 4" Plate	121.67 - 124.42	Auto	1.0000
L15	151	CCI 4.5" x 1" Plate	124.42 - 126.42	Auto	1.0000
L15	152	CCI 4.5" x 1" Plate	124.42 - 126.42	Auto	1.0000
L15	153	CCI 4.5" x 1" Plate	124.42 - 126.42	Auto	1.0000
L16	143	CCI 4.5" x 1" Plate	121.17 - 121.42	Auto	1.0000
L16	144	CCI 4.5" x 1" Plate	121.17 - 121.42	Auto	1.0000
L16	145	CCI 4.5" x 1" Plate	121.17 - 121.42	Auto	1.0000
L17	139	CCI 4.5" x 1" Plate	117.92 - 120.67	Auto	1.0000
L17	140	CCI 4.5" x 1" Plate	117.92 - 120.67	Auto	1.0000
L17	141	CCI 4.5" x 1" Plate	117.92 - 120.67	Auto	1.0000
L17	143	CCI 4.5" x 1" Plate	120.67 - 121.17	Auto	1.0000
L17	144	CCI 4.5" x 1" Plate	120.67 - 121.17	Auto	1.0000
L17	145	CCI 4.5" x 1" Plate	120.67 - 121.17	Auto	1.0000
L18	56	CCI 4.5" x 1" Plate	111.17 - 111.54	Auto	1.0000
L18	57	CCI 4.5" x 1" Plate	111.17 - 111.54	Auto	1.0000
L18	58	CCI 4.5" x 1" Plate	111.17 - 111.54	Auto	1.0000
L18	202	Banjo	111.17 - 116.00	Manual	1.0000
L19	56	CCI 4.5" x 1" Plate	110.04 - 111.17	Auto	1.0000
L19	57	CCI 4.5" x 1" Plate	110.04 - 111.17	Auto	1.0000
L19	58	CCI 4.5" x 1" Plate	110.04 - 111.17	Auto	1.0000
L19	202	Banjo	110.04 - 111.17	Manual	1.0000
L20	56	CCI 4.5" x 1" Plate	109.79 - 110.04	Auto	1.0000
L20	57	CCI 4.5" x 1" Plate	109.79 - 110.04	Auto	1.0000
L20	58	CCI 4.5" x 1" Plate	109.79 - 110.04	Auto	1.0000
L20	202	Banjo	109.79 - 110.04	Manual	1.0000
L21	18	CCI 4" x 0.75" Plate	105.08 - 106.58	Auto	1.0000
L21	19	CCI 4" x 0.75" Plate	105.08 - 106.58	Auto	1.0000
L21	20	CCI 4" x 0.75" Plate	105.08 - 106.58	Auto	1.0000
L21	56	CCI 4.5" x 1" Plate	105.08 - 109.79	Auto	1.0000
L21	57	CCI 4.5" x 1" Plate	105.08 - 109.79	Auto	1.0000
L21	58	CCI 4.5" x 1" Plate	105.08 - 109.79	Auto	1.0000
L21	135	CCI 4.5" x 1" Plate	105.08 - 107.17	Auto	1.0000
L21	136	CCI 4.5" x 1" Plate	105.08 - 107.17	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L21	137	CCI 4.5" x 1" Plate	105.08 - 107.17	Auto	1.0000
L21	202	Banjo	105.08 - 109.79	Manual	1.0000
L22	18	CCI 4" x 0.75" Plate	104.83 - 105.08	Auto	1.0000
L22	19	CCI 4" x 0.75" Plate	104.83 - 105.08	Auto	1.0000
L22	20	CCI 4" x 0.75" Plate	104.83 - 105.08	Auto	1.0000
L22	56	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	57	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	58	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	135	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	136	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	137	CCI 4.5" x 1" Plate	104.83 - 105.08	Auto	1.0000
L22	202	Banjo	104.83 - 105.08	Manual	1.0000
L23	18	CCI 4" x 0.75" Plate	101.58 - 104.83	Auto	1.0000
L23	19	CCI 4" x 0.75" Plate	101.58 - 104.83	Auto	1.0000
L23	20	CCI 4" x 0.75" Plate	101.58 - 104.83	Auto	1.0000
L23	56	CCI 4.5" x 1" Plate	101.54 - 104.83	Auto	1.0000
L23	57	CCI 4.5" x 1" Plate	101.54 - 104.83	Auto	1.0000
L23	58	CCI 4.5" x 1" Plate	101.54 - 104.83	Auto	1.0000
L23	127	CCI 4.5" x 1" Plate	100.92 - 101.42	Auto	1.0000
L23	128	CCI 4.5" x 1" Plate	100.92 - 101.42	Auto	1.0000
L23	129	CCI 4.5" x 1" Plate	100.92 - 101.42	Auto	1.0000
L23	131	CCI 4.5" x 4" Plate	101.42 - 104.42	Auto	1.0000
L23	132	CCI 4.5" x 4" Plate	101.42 - 104.42	Auto	1.0000
L23	133	CCI 4.5" x 4" Plate	101.42 - 104.42	Auto	1.0000
L23	135	CCI 4.5" x 1" Plate	104.42 - 104.83	Auto	1.0000
L23	136	CCI 4.5" x 1" Plate	104.42 - 104.83	Auto	1.0000
L23	137	CCI 4.5" x 1" Plate	104.42 - 104.83	Auto	1.0000
L23	173	CCI 4.5" x 1" Plate	100.92 - 101.79	Auto	1.0000
L23	174	CCI 4.5" x 1" Plate	100.92 - 101.79	Auto	1.0000
L23	175	CCI 4.5" x 1" Plate	100.92 - 101.79	Auto	1.0000
L23	177	CCI 4.5" x 3" Plate	101.79 - 103.29	Auto	1.0000
L23	178	CCI 4.5" x 3" Plate	101.79 - 103.29	Auto	1.0000
L23	179	CCI 4.5" x 3" Plate	101.79 - 103.29	Auto	1.0000
L23	202	Banjo	100.92 - 104.83	Manual	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L24	127	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	128	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	129	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	173	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	174	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	175	CCI 4.5" x 1" Plate	100.67 - 100.92	Auto	1.0000
L24	202	Banjo	100.67 - 100.92	Manual	1.0000
L25	52	CCI 4.5" x 1" Plate	95.83 - 97.33	Auto	1.0000
L25	53	CCI 4.5" x 1" Plate	95.83 - 97.33	Auto	1.0000
L25	54	CCI 4.5" x 1" Plate	95.83 - 97.33	Auto	1.0000
L25	123	CCI 4.5" x 1" Plate	97.92 - 100.42	Auto	1.0000
L25	124	CCI 4.5" x 1" Plate	97.92 - 100.42	Auto	1.0000
L25	125	CCI 4.5" x 1" Plate	97.92 - 100.42	Auto	1.0000
L25	127	CCI 4.5" x 1" Plate	100.42 - 100.67	Auto	1.0000
L25	128	CCI 4.5" x 1" Plate	100.42 - 100.67	Auto	1.0000
L25	129	CCI 4.5" x 1" Plate	100.42 - 100.67	Auto	1.0000
L25	173	CCI 4.5" x 1" Plate	98.42 - 100.67	Auto	1.0000
L25	174	CCI 4.5" x 1" Plate	98.42 - 100.67	Auto	1.0000
L25	175	CCI 4.5" x 1" Plate	98.42 - 100.67	Auto	1.0000
L25	202	Banjo	95.83 - 100.67	Manual	1.0000
L26	52	CCI 4.5" x 1" Plate	95.58 - 95.83	Auto	1.0000
L26	53	CCI 4.5" x 1" Plate	95.58 - 95.83	Auto	1.0000
L26	54	CCI 4.5" x 1" Plate	95.58 - 95.83	Auto	1.0000
L26	202	Banjo	95.58 - 95.83	Manual	1.0000
L27	52	CCI 4.5" x 1" Plate	90.58 - 95.58	Auto	1.0000
L27	53	CCI 4.5" x 1" Plate	90.58 - 95.58	Auto	1.0000
L27	54	CCI 4.5" x 1" Plate	90.58 - 95.58	Auto	1.0000
L27	60	CCI 4.5" x 1" Plate	90.58 - 91.42	Auto	1.0000
L27	61	CCI 4.5" x 1" Plate	90.58 - 91.42	Auto	1.0000
L27	62	CCI 4.5" x 1" Plate	90.58 - 91.42	Auto	1.0000
L27	202	Banjo	90.58 - 95.58	Manual	1.0000
L28	52	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000
L28	53	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000
L28	54	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L28	60	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000
L28	61	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000
L28	62	CCI 4.5" x 1" Plate	89.92 - 90.58	Auto	1.0000
L28	202	Banjo	89.92 - 90.58	Manual	1.0000
L29	52	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	53	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	54	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	60	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	61	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	62	CCI 4.5" x 1" Plate	89.67 - 89.92	Auto	1.0000
L29	119	CCI 6.5" x 1.25" Plate	89.67 - 89.75	Auto	1.0000
L29	120	CCI 6.5" x 1.25" Plate	89.67 - 89.75	Auto	1.0000
L29	121	CCI 6.5" x 1.25" Plate	89.67 - 89.75	Auto	1.0000
L29	202	Banjo	89.67 - 89.92	Manual	1.0000
L30	52	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	53	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	54	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	60	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	61	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	62	CCI 4.5" x 1" Plate	84.67 - 89.67	Auto	1.0000
L30	115	CCI 6.5" x 4.25" Plate	84.67 - 85.83	Auto	1.0000
L30	116	CCI 6.5" x 4.25" Plate	84.67 - 85.83	Auto	1.0000
L30	117	CCI 6.5" x 4.25" Plate	84.67 - 85.83	Auto	1.0000
L30	119	CCI 6.5" x 1.25" Plate	85.83 - 89.67	Auto	1.0000
L30	120	CCI 6.5" x 1.25" Plate	85.83 - 89.67	Auto	1.0000
L30	121	CCI 6.5" x 1.25" Plate	85.83 - 89.67	Auto	1.0000
L30	202	Banjo	84.67 - 89.67	Manual	1.0000
L31	52	CCI 4.5" x 1" Plate	81.33 - 84.67	Auto	1.0000
L31	53	CCI 4.5" x 1" Plate	81.33 - 84.67	Auto	1.0000
L31	54	CCI 4.5" x 1" Plate	81.33 - 84.67	Auto	1.0000
L31	60	CCI 4.5" x 1" Plate	81.42 - 84.67	Auto	1.0000
L31	61	CCI 4.5" x 1" Plate	81.42 - 84.67	Auto	1.0000
L31	62	CCI 4.5" x 1" Plate	81.42 - 84.67	Auto	1.0000
L31	115	CCI 6.5" x 4.25" Plate	80.83 - 84.67	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L31	116	CCI 6.5" x 4.25" Plate	80.83 - 84.67	Auto	1.0000
L31	117	CCI 6.5" x 4.25" Plate	80.83 - 84.67	Auto	1.0000
L31	165	CCI 4.5" x 1" Plate	80.83 - 81.71	Auto	1.0000
L31	166	CCI 4.5" x 1" Plate	80.83 - 81.71	Auto	1.0000
L31	167	CCI 4.5" x 1" Plate	80.83 - 81.71	Auto	1.0000
L31	169	CCI 4.5" x 3" Plate	81.71 - 83.20	Auto	1.0000
L31	170	CCI 4.5" x 3" Plate	81.71 - 83.20	Auto	1.0000
L31	171	CCI 4.5" x 3" Plate	81.71 - 83.20	Auto	1.0000
L31	202	Banjo	80.83 - 84.67	Manual	1.0000
L32	111	CCI 6.5" x 1.25" Plate	80.33 - 80.50	Auto	1.0000
L32	112	CCI 6.5" x 1.25" Plate	80.33 - 80.50	Auto	1.0000
L32	113	CCI 6.5" x 1.25" Plate	80.33 - 80.50	Auto	1.0000
L32	115	CCI 6.5" x 4.25" Plate	80.50 - 80.83	Auto	1.0000
L32	116	CCI 6.5" x 4.25" Plate	80.50 - 80.83	Auto	1.0000
L32	117	CCI 6.5" x 4.25" Plate	80.50 - 80.83	Auto	1.0000
L32	165	CCI 4.5" x 1" Plate	80.33 - 80.83	Auto	1.0000
L32	166	CCI 4.5" x 1" Plate	80.33 - 80.83	Auto	1.0000
L32	167	CCI 4.5" x 1" Plate	80.33 - 80.83	Auto	1.0000
L32	202	Banjo	80.33 - 80.83	Manual	1.0000
L33	14	CCI 6" x 1" Plate	80.08 - 80.17	Auto	1.0000
L33	15	CCI 6" x 1" Plate	80.08 - 80.17	Auto	1.0000
L33	16	CCI 6" x 1" Plate	80.08 - 80.17	Auto	1.0000
L33	107	CCI 6.5" x 1.25" Plate	80.08 - 80.33	Auto	1.0000
L33	108	CCI 6.5" x 1.25" Plate	80.08 - 80.33	Auto	1.0000
L33	109	CCI 6.5" x 1.25" Plate	80.08 - 80.33	Auto	1.0000
L33	165	CCI 4.5" x 1" Plate	80.08 - 80.33	Auto	1.0000
L33	166	CCI 4.5" x 1" Plate	80.08 - 80.33	Auto	1.0000
L33	167	CCI 4.5" x 1" Plate	80.08 - 80.33	Auto	1.0000
L33	202	Banjo	80.08 - 80.33	Manual	1.0000
L34	14	CCI 6" x 1" Plate	75.08 - 80.08	Auto	1.0000
L34	15	CCI 6" x 1" Plate	75.08 - 80.08	Auto	1.0000
L34	16	CCI 6" x 1" Plate	75.08 - 80.08	Auto	1.0000
L34	107	CCI 6.5" x 1.25" Plate	76.50 - 80.08	Auto	1.0000
L34	108	CCI 6.5" x 1.25" Plate	76.50 - 80.08	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L34	109	CCI 6.5" x 1.25" Plate	76.50 - 80.08	Auto	1.0000
L34	165	CCI 4.5" x 1" Plate	78.33 - 80.08	Auto	1.0000
L34	166	CCI 4.5" x 1" Plate	78.33 - 80.08	Auto	1.0000
L34	167	CCI 4.5" x 1" Plate	78.33 - 80.08	Auto	1.0000
L34	202	Banjo	75.08 - 80.08	Manual	1.0000
L35	14	CCI 6" x 1" Plate	70.08 - 75.08	Auto	1.0000
L35	15	CCI 6" x 1" Plate	70.08 - 75.08	Auto	1.0000
L35	16	CCI 6" x 1" Plate	70.08 - 75.08	Auto	1.0000
L35	47	CCI 4.5" x 1" Plate	70.08 - 71.00	Auto	1.0000
L35	48	CCI 4.5" x 1" Plate	70.08 - 71.00	Auto	1.0000
L35	49	CCI 4.5" x 1" Plate	70.08 - 71.00	Auto	1.0000
L35	50	CCI 4.5" x 1" Plate	70.08 - 71.00	Auto	1.0000
L35	100	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	101	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	102	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	103	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	104	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	105	CCI 8.5" x 1.25" Plate	70.08 - 73.42	Auto	1.0000
L35	202	Banjo	70.08 - 75.08	Manual	1.0000
L36	14	CCI 6" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	15	CCI 6" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	16	CCI 6" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	47	CCI 4.5" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	48	CCI 4.5" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	49	CCI 4.5" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	50	CCI 4.5" x 1" Plate	69.50 - 70.08	Auto	1.0000
L36	100	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	101	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	102	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	103	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	104	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	105	CCI 8.5" x 1.25" Plate	69.50 - 70.08	Auto	1.0000
L36	202	Banjo	69.50 - 70.08	Manual	1.0000
L37	14	CCI 6" x 1" Plate	69.25 - 69.50	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L37	15	CCI 6" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	16	CCI 6" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	47	CCI 4.5" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	48	CCI 4.5" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	49	CCI 4.5" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	50	CCI 4.5" x 1" Plate	69.25 - 69.50	Auto	1.0000
L37	100	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	101	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	102	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	103	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	104	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	105	CCI 8.5" x 1.25" Plate	69.25 - 69.50	Auto	1.0000
L37	202	Banjo	69.25 - 69.50	Manual	1.0000
L38	14	CCI 6" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	15	CCI 6" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	16	CCI 6" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	27	1" x 2" Plate	64.25 - 66.17	Auto	1.0000
L38	28	1" x 2" Plate	64.25 - 66.17	Auto	1.0000
L38	29	1" x 2" Plate	64.25 - 66.17	Auto	1.0000
L38	30	1" x 2" Plate	64.25 - 66.17	Auto	1.0000
L38	47	CCI 4.5" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	48	CCI 4.5" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	49	CCI 4.5" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	50	CCI 4.5" x 1" Plate	64.25 - 69.25	Auto	1.0000
L38	93	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	94	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	95	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	96	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	97	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	98	CCI 8.5" x 4.25" Plate	64.25 - 68.42	Auto	1.0000
L38	100	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000
L38	101	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000
L38	102	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000
L38	103	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L38	104	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000
L38	105	CCI 8.5" x 1.25" Plate	68.42 - 69.25	Auto	1.0000
L38	202	Banjo	64.25 - 69.25	Manual	1.0000
L39	14	CCI 6" x 1" Plate	61.17 - 64.25	Auto	1.0000
L39	15	CCI 6" x 1" Plate	61.17 - 64.25	Auto	1.0000
L39	16	CCI 6" x 1" Plate	61.17 - 64.25	Auto	1.0000
L39	27	1" x 2" Plate	61.08 - 64.25	Auto	1.0000
L39	28	1" x 2" Plate	61.08 - 64.25	Auto	1.0000
L39	29	1" x 2" Plate	61.08 - 64.25	Auto	1.0000
L39	30	1" x 2" Plate	61.08 - 64.25	Auto	1.0000
L39	47	CCI 4.5" x 1" Plate	61.00 - 64.25	Auto	1.0000
L39	48	CCI 4.5" x 1" Plate	61.00 - 64.25	Auto	1.0000
L39	49	CCI 4.5" x 1" Plate	61.00 - 64.25	Auto	1.0000
L39	50	CCI 4.5" x 1" Plate	61.00 - 64.25	Auto	1.0000
L39	86	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	87	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	88	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	89	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	90	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	91	CCI 8.5" x 1.25" Plate	60.58 - 61.08	Auto	1.0000
L39	93	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	94	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	95	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	96	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	97	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	98	CCI 8.5" x 4.25" Plate	61.08 - 64.25	Auto	1.0000
L39	155	CCI 4.5" x 1" Plate	60.58 - 61.46	Auto	1.0000
L39	156	CCI 4.5" x 1" Plate	60.58 - 61.46	Auto	1.0000
L39	157	CCI 4.5" x 1" Plate	60.58 - 61.46	Auto	1.0000
L39	158	CCI 4.5" x 1" Plate	60.58 - 61.46	Auto	1.0000
L39	160	CCI 4.5" x 3" Plate	61.55 - 62.96	Auto	1.0000
L39	161	CCI 4.5" x 3" Plate	61.55 - 62.96	Auto	1.0000
L39	162	CCI 4.5" x 3" Plate	61.55 - 62.96	Auto	1.0000
L39	163	CCI 4.5" x 3" Plate	61.55 - 62.96	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L39	202	Banjo	60.58 - 64.25	Manual	1.0000
L40	86	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	87	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	88	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	89	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	90	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	91	CCI 8.5" x 1.25" Plate	60.33 - 60.58	Auto	1.0000
L40	155	CCI 4.5" x 1" Plate	60.33 - 60.58	Auto	1.0000
L40	156	CCI 4.5" x 1" Plate	60.33 - 60.58	Auto	1.0000
L40	157	CCI 4.5" x 1" Plate	60.33 - 60.58	Auto	1.0000
L40	158	CCI 4.5" x 1" Plate	60.33 - 60.58	Auto	1.0000
L40	202	Banjo	60.33 - 60.58	Manual	1.0000
L41	10	CCI 6.5" x 1.25" Plate	55.33 - 59.92	Auto	1.0000
L41	11	CCI 6.5" x 1.25" Plate	55.33 - 59.92	Auto	1.0000
L41	12	CCI 6.5" x 1.25" Plate	55.33 - 59.92	Auto	1.0000
L41	79	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	80	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	81	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	82	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	83	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	84	CCI 8.5" x 1.25" Plate	55.33 - 60.08	Auto	1.0000
L41	86	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	87	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	88	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	89	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	90	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	91	CCI 8.5" x 1.25" Plate	60.08 - 60.33	Auto	1.0000
L41	155	CCI 4.5" x 1" Plate	58.00 - 60.33	Auto	1.0000
L41	156	CCI 4.5" x 1" Plate	58.00 - 60.33	Auto	1.0000
L41	157	CCI 4.5" x 1" Plate	58.00 - 60.33	Auto	1.0000
L41	158	CCI 4.5" x 1" Plate	58.00 - 60.33	Auto	1.0000
L41	202	Banjo	55.33 - 60.33	Manual	1.0000
L42	10	CCI 6.5" x 1.25" Plate	52.17 - 55.33	Auto	1.0000
L42	11	CCI 6.5" x 1.25" Plate	52.17 - 55.33	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L42	12	CCI 6.5" x 1.25" Plate	52.17 - 55.33	Auto	1.0000
L42	79	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	80	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	81	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	82	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	83	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	84	CCI 8.5" x 1.25" Plate	55.25 - 55.33	Auto	1.0000
L42	202	Banjo	52.17 - 55.33	Manual	1.0000
L43	10	CCI 6.5" x 1.25" Plate	51.92 - 52.17	Auto	1.0000
L43	11	CCI 6.5" x 1.25" Plate	51.92 - 52.17	Auto	1.0000
L43	12	CCI 6.5" x 1.25" Plate	51.92 - 52.17	Auto	1.0000
L43	202	Banjo	51.92 - 52.17	Manual	1.0000
L44	10	CCI 6.5" x 1.25" Plate	46.92 - 51.92	Auto	1.0000
L44	11	CCI 6.5" x 1.25" Plate	46.92 - 51.92	Auto	1.0000
L44	12	CCI 6.5" x 1.25" Plate	46.92 - 51.92	Auto	1.0000
L44	22	1" x 2" Plate	46.92 - 50.42	Auto	1.0000
L44	23	1" x 2" Plate	46.92 - 50.42	Auto	1.0000
L44	24	1" x 2" Plate	46.92 - 50.42	Auto	1.0000
L44	25	1" x 2" Plate	46.92 - 50.42	Auto	1.0000
L44	42	CCI 6" x 1" Plate	46.92 - 50.17	Auto	1.0000
L44	43	CCI 6" x 1" Plate	46.92 - 50.17	Auto	1.0000
L44	44	CCI 6" x 1" Plate	46.92 - 50.17	Auto	1.0000
L44	45	CCI 6" x 1" Plate	46.92 - 50.17	Auto	1.0000
L44	72	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	73	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	74	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	75	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	76	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	77	CCI 6.5" x 1.25" Plate	46.92 - 47.83	Auto	1.0000
L44	202	Banjo	46.92 - 51.92	Manual	1.0000
L45	10	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	11	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	12	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	22	1" x 2" Plate	41.92 - 46.92	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L45	23	1" x 2" Plate	41.92 - 46.92	Auto	1.0000
L45	24	1" x 2" Plate	41.92 - 46.92	Auto	1.0000
L45	25	1" x 2" Plate	41.92 - 46.92	Auto	1.0000
L45	42	CCI 6" x 1" Plate	41.92 - 46.92	Auto	1.0000
L45	43	CCI 6" x 1" Plate	41.92 - 46.92	Auto	1.0000
L45	44	CCI 6" x 1" Plate	41.92 - 46.92	Auto	1.0000
L45	45	CCI 6" x 1" Plate	41.92 - 46.92	Auto	1.0000
L45	72	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	73	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	74	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	75	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	76	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	77	CCI 6.5" x 1.25" Plate	41.92 - 46.92	Auto	1.0000
L45	202	Banjo	41.92 - 46.92	Manual	1.0000
L46	10	CCI 6.5" x 1.25" Plate	40.83 - 41.92	Auto	1.0000
L46	11	CCI 6.5" x 1.25" Plate	40.83 - 41.92	Auto	1.0000
L46	12	CCI 6.5" x 1.25" Plate	40.83 - 41.92	Auto	1.0000
L46	22	1" x 2" Plate	40.58 - 41.92	Auto	1.0000
L46	23	1" x 2" Plate	40.58 - 41.92	Auto	1.0000
L46	24	1" x 2" Plate	40.58 - 41.92	Auto	1.0000
L46	25	1" x 2" Plate	40.58 - 41.92	Auto	1.0000
L46	42	CCI 6" x 1" Plate	40.23 - 41.92	Auto	1.0000
L46	43	CCI 6" x 1" Plate	40.23 - 41.92	Auto	1.0000
L46	44	CCI 6" x 1" Plate	40.23 - 41.92	Auto	1.0000
L46	45	CCI 6" x 1" Plate	40.23 - 41.92	Auto	1.0000
L46	72	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	73	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	74	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	75	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	76	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	77	CCI 6.5" x 1.25" Plate	40.23 - 41.92	Auto	1.0000
L46	202	Banjo	40.23 - 41.92	Manual	1.0000
L47	42	CCI 6" x 1" Plate	39.98 - 40.23	Auto	1.0000
L47	43	CCI 6" x 1" Plate	39.98 - 40.23	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L47	44	CCI 6" x 1" Plate	39.98 - 40.23	Auto	1.0000
L47	45	CCI 6" x 1" Plate	39.98 - 40.23	Auto	1.0000
L47	72	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	73	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	74	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	75	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	76	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	77	CCI 6.5" x 1.25" Plate	39.98 - 40.23	Auto	1.0000
L47	202	Banjo	39.98 - 40.23	Manual	1.0000
L48	6	CCI 6" x 1" Plate	34.98 - 39.75	Auto	1.0000
L48	7	CCI 6" x 1" Plate	34.98 - 39.75	Auto	1.0000
L48	8	CCI 6" x 1" Plate	34.98 - 39.75	Auto	1.0000
L48	42	CCI 6" x 1" Plate	37.17 - 39.98	Auto	1.0000
L48	43	CCI 6" x 1" Plate	37.17 - 39.98	Auto	1.0000
L48	44	CCI 6" x 1" Plate	37.17 - 39.98	Auto	1.0000
L48	45	CCI 6" x 1" Plate	37.17 - 39.98	Auto	1.0000
L48	72	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	73	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	74	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	75	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	76	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	77	CCI 6.5" x 1.25" Plate	34.98 - 39.98	Auto	1.0000
L48	202	Banjo	34.98 - 39.98	Manual	1.0000
L49	6	CCI 6" x 1" Plate	29.98 - 34.98	Auto	1.0000
L49	7	CCI 6" x 1" Plate	29.98 - 34.98	Auto	1.0000
L49	8	CCI 6" x 1" Plate	29.98 - 34.98	Auto	1.0000
L49	37	CCI 6" x 1" Plate	29.98 - 30.00	Auto	1.0000
L49	38	CCI 6" x 1" Plate	29.98 - 30.00	Auto	1.0000
L49	39	CCI 6" x 1" Plate	29.98 - 30.00	Auto	1.0000
L49	40	CCI 6" x 1" Plate	29.98 - 30.00	Auto	1.0000
L49	72	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000
L49	73	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000
L49	74	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000
L49	75	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L49	76	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000
L49	77	CCI 6.5" x 1.25" Plate	32.83 - 34.98	Auto	1.0000
L49	202	Banjo	29.98 - 34.98	Manual	1.0000
L50	6	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	7	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	8	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	37	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	38	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	39	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	40	CCI 6" x 1" Plate	28.00 - 29.98	Auto	1.0000
L50	202	Banjo	28.00 - 29.98	Manual	1.0000
L51	6	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	7	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	8	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	37	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	38	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	39	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	40	CCI 6" x 1" Plate	27.75 - 28.00	Auto	1.0000
L51	202	Banjo	27.75 - 28.00	Manual	1.0000
L52	6	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	7	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	8	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	37	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	38	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	39	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	40	CCI 6" x 1" Plate	22.75 - 27.75	Auto	1.0000
L52	65	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	66	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	67	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	68	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	69	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	70	CCI 6.5" x 1.25" Plate	22.75 - 27.50	Auto	1.0000
L52	202	Banjo	22.75 - 27.75	Manual	1.0000
L53	6	CCI 6" x 1" Plate	20.75 - 22.75	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L53	7	CCI 6" x 1" Plate	20.75 - 22.75	Auto	1.0000
L53	8	CCI 6" x 1" Plate	20.75 - 22.75	Auto	1.0000
L53	37	CCI 6" x 1" Plate	20.08 - 22.75	Auto	1.0000
L53	38	CCI 6" x 1" Plate	20.08 - 22.75	Auto	1.0000
L53	39	CCI 6" x 1" Plate	20.08 - 22.75	Auto	1.0000
L53	40	CCI 6" x 1" Plate	20.08 - 22.75	Auto	1.0000
L53	65	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	66	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	67	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	68	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	69	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	70	CCI 6.5" x 1.25" Plate	20.08 - 22.75	Auto	1.0000
L53	202	Banjo	20.08 - 22.75	Manual	1.0000
L54	37	CCI 6" x 1" Plate	19.83 - 20.08	Auto	1.0000
L54	38	CCI 6" x 1" Plate	19.83 - 20.08	Auto	1.0000
L54	39	CCI 6" x 1" Plate	19.83 - 20.08	Auto	1.0000
L54	40	CCI 6" x 1" Plate	19.83 - 20.08	Auto	1.0000
L54	65	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	66	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	67	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	68	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	69	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	70	CCI 6.5" x 1.25" Plate	19.83 - 20.08	Auto	1.0000
L54	202	Banjo	19.83 - 20.08	Manual	1.0000
L55	32	CCI 6" x 1" Plate	17.00 - 19.00	Auto	1.0000
L55	33	CCI 6" x 1" Plate	17.00 - 19.00	Auto	1.0000
L55	34	CCI 6" x 1" Plate	17.00 - 19.00	Auto	1.0000
L55	35	CCI 6" x 1" Plate	17.00 - 19.00	Auto	1.0000
L55	37	CCI 6" x 1" Plate	17.00 - 19.83	Auto	1.0000
L55	38	CCI 6" x 1" Plate	17.00 - 19.83	Auto	1.0000
L55	39	CCI 6" x 1" Plate	17.00 - 19.83	Auto	1.0000
L55	40	CCI 6" x 1" Plate	17.00 - 19.83	Auto	1.0000
L55	65	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000
L55	66	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L55	67	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000
L55	68	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000
L55	69	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000
L55	70	CCI 6.5" x 1.25" Plate	17.00 - 19.83	Auto	1.0000
L55	202	Banjo	17.00 - 19.83	Manual	1.0000
L56	32	CCI 6" x 1" Plate	16.75 - 17.00	Auto	1.0000
L56	33	CCI 6" x 1" Plate	16.75 - 17.00	Auto	1.0000
L56	34	CCI 6" x 1" Plate	16.75 - 17.00	Auto	1.0000
L56	35	CCI 6" x 1" Plate	16.75 - 17.00	Auto	1.0000
L56	65	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	66	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	67	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	68	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	69	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	70	CCI 6.5" x 1.25" Plate	16.75 - 17.00	Auto	1.0000
L56	202	Banjo	16.75 - 17.00	Manual	1.0000
L57	4	CCI 4" x 0.75" Plate	11.65 - 13.17	Auto	1.0000
L57	32	CCI 6" x 1" Plate	11.65 - 16.75	Auto	1.0000
L57	33	CCI 6" x 1" Plate	11.65 - 16.75	Auto	1.0000
L57	34	CCI 6" x 1" Plate	11.65 - 16.75	Auto	1.0000
L57	35	CCI 6" x 1" Plate	11.65 - 16.75	Auto	1.0000
L57	65	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	66	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	67	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	68	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	69	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	70	CCI 6.5" x 1.25" Plate	12.67 - 16.75	Auto	1.0000
L57	202	Banjo	11.65 - 16.75	Manual	1.0000
L58	4	CCI 4" x 0.75" Plate	11.42 - 11.65	Auto	1.0000
L58	32	CCI 6" x 1" Plate	11.42 - 11.65	Auto	1.0000
L58	33	CCI 6" x 1" Plate	11.42 - 11.65	Auto	1.0000
L58	34	CCI 6" x 1" Plate	11.42 - 11.65	Auto	1.0000
L58	35	CCI 6" x 1" Plate	11.42 - 11.65	Auto	1.0000
L58	202	Banjo	11.42 - 11.65	Manual	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L59	2	CCI 4" x 0.75" Plate	9.40 - 10.88	Auto	1.0000
L59	3	CCI 4" x 0.75" Plate	9.40 - 10.88	Auto	1.0000
L59	4	CCI 4" x 0.75" Plate	9.40 - 11.42	Auto	1.0000
L59	32	CCI 6" x 1" Plate	9.40 - 11.42	Auto	1.0000
L59	33	CCI 6" x 1" Plate	9.40 - 11.42	Auto	1.0000
L59	34	CCI 6" x 1" Plate	9.40 - 11.42	Auto	1.0000
L59	35	CCI 6" x 1" Plate	9.40 - 11.42	Auto	1.0000
L59	202	Banjo	9.40 - 11.42	Manual	1.0000
L60	2	CCI 4" x 0.75" Plate	9.15 - 9.40	Auto	1.0000
L60	3	CCI 4" x 0.75" Plate	9.15 - 9.40	Auto	1.0000
L60	4	CCI 4" x 0.75" Plate	9.15 - 9.40	Auto	1.0000
L60	32	CCI 6" x 1" Plate	9.15 - 9.40	Auto	1.0000
L60	33	CCI 6" x 1" Plate	9.15 - 9.40	Auto	1.0000
L60	34	CCI 6" x 1" Plate	9.15 - 9.40	Auto	1.0000
L60	35	CCI 6" x 1" Plate	9.15 - 9.40	Auto	1.0000
L60	202	Banjo	9.15 - 9.40	Manual	1.0000
L61	2	CCI 4" x 0.75" Plate	4.83 - 9.15	Auto	1.0000
L61	3	CCI 4" x 0.75" Plate	4.83 - 9.15	Auto	1.0000
L61	4	CCI 4" x 0.75" Plate	4.83 - 9.15	Auto	1.0000
L61	32	CCI 6" x 1" Plate	4.83 - 9.15	Auto	1.0000
L61	33	CCI 6" x 1" Plate	4.83 - 9.15	Auto	1.0000
L61	34	CCI 6" x 1" Plate	4.83 - 9.15	Auto	1.0000
L61	35	CCI 6" x 1" Plate	4.83 - 9.15	Auto	1.0000
L61	202	Banjo	4.83 - 9.15	Manual	1.0000
L62	2	CCI 4" x 0.75" Plate	4.58 - 4.83	Auto	1.0000
L62	3	CCI 4" x 0.75" Plate	4.58 - 4.83	Auto	1.0000
L62	4	CCI 4" x 0.75" Plate	4.58 - 4.83	Auto	1.0000
L62	32	CCI 6" x 1" Plate	4.58 - 4.83	Auto	1.0000
L62	33	CCI 6" x 1" Plate	4.58 - 4.83	Auto	1.0000
L62	34	CCI 6" x 1" Plate	4.58 - 4.83	Auto	1.0000
L62	35	CCI 6" x 1" Plate	4.58 - 4.83	Auto	1.0000
L62	202	Banjo	4.58 - 4.83	Manual	1.0000
L63	2	CCI 4" x 0.75" Plate	0.00 - 4.58	Auto	1.0000
L63	3	CCI 4" x 0.75" Plate	0.00 - 4.58	Auto	1.0000
L63	4	CCI 4" x 0.75" Plate	3.17 - 4.58	Auto	1.0000
L63	32	CCI 6" x 1" Plate	0.00 - 4.58	Auto	1.0000
L63	33	CCI 6" x 1" Plate	0.00 - 4.58	Auto	1.0000
L63	34	CCI 6" x 1" Plate	0.00 - 4.58	Auto	1.0000
L63	35	CCI 6" x 1" Plate	0.00 - 4.58	Auto	1.0000
L63	202	Banjo	4.00 - 4.58	Manual	1.0000

Discrete Tower Loads

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	
Lightning Rod 5/8" x 4' on 4' Pole	B	From Leg	1.00	0.0000	191.67	No Ice	1.36	1.36	0.07
			0.00			1/2"	2.13	2.13	0.09
			4.00			Ice	2.70	2.70	0.11
						1" Ice	3.77	3.77	0.17
						2" Ice			
* 4' ICE SHIELDS	A	From Leg	0.50	0.0000	178.00	No Ice	1.40	0.47	0.03
			0.00			1/2"	1.88	0.64	0.10
			0.00			Ice	2.38	0.82	0.17
						1" Ice	3.39	1.21	0.33
						2" Ice			
4' ICE SHIELDS	A	From Leg	0.50	0.0000	138.00	No Ice	1.40	0.47	0.03
			0.00			1/2"	1.88	0.64	0.10
			0.00			Ice	2.38	0.82	0.17

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K	
4' ICE SHIELDS	A	From Leg	0.50 0.00 0.00	0.0000	98.00	1" Ice	3.39	1.21	0.33
						2" Ice			
						No Ice	1.40	0.47	0.03
						1/2" Ice	1.88	0.64	0.10
4' ICE SHIELDS	B	From Leg	0.50 0.00 0.00	0.0000	98.00	1" Ice	3.39	1.21	0.33
						2" Ice			
						No Ice	1.40	0.47	0.03
						1/2" Ice	1.88	0.64	0.10
4' ICE SHIELDS	C	From Leg	0.50 0.00 0.00	0.0000	98.00	1" Ice	3.39	1.21	0.33
						2" Ice			
						No Ice	1.40	0.47	0.03
						1/2" Ice	1.88	0.64	0.10
***** OGB4-900D	C	From Leg	3.00 0.00 4.00	0.0000	192.00	Ice	1.28	1.28	0.03
						1" Ice	1.81	1.81	0.05
						2" Ice			
						No Ice	0.79	0.79	0.01
Side Arm Mount [SO 701-1]	C	From Leg	1.50 0.00 0.00	0.0000	192.00	1/2" Ice	1.14	2.34	0.08
						1" Ice	1.43	3.01	0.09
						2" Ice	2.01	4.35	0.12
						No Ice	0.85	1.67	0.07
*** DB589-A	B	From Leg	3.00 0.00 5.00	0.0000	191.00	1" Ice	8.49	8.49	0.15
						2" Ice			
						Ice	5.59	5.59	0.06
						1/2" Ice	4.17	4.17	0.03
WB2623 w/ Mount Pipe	B	From Leg	3.00 0.00 -1.00	0.0000	191.00	1" Ice	2.91	1.94	0.11
						2" Ice			
						Ice	2.40	1.37	0.06
						1/2" Ice	2.16	1.11	0.04
Side Arm Mount [SO 701-1]	B	From Leg	1.50 0.00 0.00	0.0000	191.00	1" Ice	2.01	4.35	0.12
						2" Ice			
						Ice	1.43	3.01	0.09
						1/2" Ice	1.14	2.34	0.08
*** AIR -32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	181.00	1" Ice	5.24	4.58	0.48
						2" Ice			
						Ice	4.48	3.84	0.32
						1/2" Ice	4.12	3.49	0.25
AIR -32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	181.00	1" Ice	5.24	4.58	0.48
						2" Ice			
						Ice	4.48	3.84	0.32
						1/2" Ice	4.12	3.49	0.25
AIR -32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	181.00	1" Ice	5.24	4.58	0.48
						2" Ice			
						Ice	4.48	3.84	0.32
						1/2" Ice	4.12	3.49	0.25
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	181.00	1" Ice	6.90	4.12	0.35
						2" Ice			
						Ice	6.02	3.38	0.23
						1/2" Ice	5.59	3.04	0.17

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral					
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.00	0.0000	181.00	No Ice	5.19	2.71	0.13
			0.00			1/2"	5.59	3.04	0.17
			0.00			Ice	6.02	3.38	0.23
						1" Ice	6.90	4.12	0.35
						2" Ice			
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.00	0.0000	181.00	No Ice	5.19	2.71	0.13
			0.00			1/2"	5.59	3.04	0.17
			0.00			Ice	6.02	3.38	0.23
						1" Ice	6.90	4.12	0.35
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.00	0.0000	181.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.00	0.0000	181.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.00	0.0000	181.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
RADIO 4415 B25_TMO	A	From Leg	4.00	0.0000	181.00	No Ice	1.86	0.87	0.05
			0.00			1/2"	2.03	1.00	0.06
			0.00			Ice	2.20	1.13	0.08
						1" Ice	2.58	1.43	0.12
						2" Ice			
RADIO 4415 B25_TMO	B	From Leg	4.00	0.0000	181.00	No Ice	1.86	0.87	0.05
			0.00			1/2"	2.03	1.00	0.06
			0.00			Ice	2.20	1.13	0.08
						1" Ice	2.58	1.43	0.12
						2" Ice			
RADIO 4415 B25_TMO	C	From Leg	4.00	0.0000	181.00	No Ice	1.86	0.87	0.05
			0.00			1/2"	2.03	1.00	0.06
			0.00			Ice	2.20	1.13	0.08
						1" Ice	2.58	1.43	0.12
						2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.00	0.0000	181.00	No Ice	1.97	1.59	0.07
			0.00			1/2"	2.15	1.75	0.09
			0.00			Ice	2.33	1.92	0.12
						1" Ice	2.72	2.28	0.17
						2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.00	0.0000	181.00	No Ice	1.97	1.59	0.07
			0.00			1/2"	2.15	1.75	0.09
			0.00			Ice	2.33	1.92	0.12
						1" Ice	2.72	2.28	0.17
						2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.00	0.0000	181.00	No Ice	1.97	1.59	0.07
			0.00			1/2"	2.15	1.75	0.09
			0.00			Ice	2.33	1.92	0.12
						1" Ice	2.72	2.28	0.17
						2" Ice			
ATBT-BOTTOM-24V	A	From Leg	4.00	0.0000	181.00	No Ice	0.10	0.06	0.00
			0.00			1/2"	0.15	0.10	0.00
			0.00			Ice	0.20	0.15	0.01
						1" Ice	0.32	0.26	0.01
						2" Ice			
ATBT-BOTTOM-24V	B	From Leg	4.00	0.0000	181.00	No Ice	0.10	0.06	0.00
			0.00			1/2"	0.15	0.10	0.00
			0.00			Ice	0.20	0.15	0.01
						1" Ice	0.32	0.26	0.01
						2" Ice			

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft		C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K
ATBT-BOTTOM-24V	C	From Leg	4.00 0.00 0.00	0.0000	181.00	No Ice 1/2" Ice 1" 2"	0.10 0.15 0.20 0.32	0.06 0.10 0.15 0.26	0.00 0.00 0.01 0.01
Platform Mount [LP 405-1_HR-1]	C	None		0.0000	181.00	No Ice 1/2" Ice 1" 2"	25.33 33.79 42.16 58.77	25.33 33.79 42.16 58.77	2.06 2.63 3.36 5.25

MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
TA08025-B604	A	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15
TA08025-B604	B	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15
TA08025-B604	C	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15
TA08025-B605	A	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
TA08025-B605	B	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
TA08025-B605	C	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
RDIDC-9181-PF-48	A	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1" 2"	2.01 2.19 2.37 2.76	1.17 1.31 1.46 1.78	0.02 0.04 0.06 0.11
(2) 8' x 2" Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	171.00	No Ice 1/2" Ice 1"	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} _{Front}	C _{AA} _{Side}	Weight	
			Horz	Lateral						Vert
			ft	ft	°	ft	ft ²	ft ²	K	
(2) 8' x 2" Mount Pipe	B	From Leg	4.00	0.00	0.0000	171.00	2" Ice			
							No Ice	1.90	1.90	0.03
							1/2"	2.73	2.73	0.04
							Ice	3.40	3.40	0.06
							1" Ice	4.40	4.40	0.12
(2) 8' x 2" Mount Pipe	C	From Leg	4.00	0.00	0.0000	171.00	2" Ice			
							No Ice	1.90	1.90	0.03
							1/2"	2.73	2.73	0.04
							Ice	3.40	3.40	0.06
							1" Ice	4.40	4.40	0.12
Commscope MC-PK8-DSH	C	None			0.0000	171.00	2" Ice			
							No Ice	34.24	34.24	1.75
							1/2"	62.95	62.95	2.10
							Ice	91.66	91.66	2.45
							1" Ice	149.08	149.08	3.15
*** (2) NNHH-65B-R4 w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	7.55	4.23	0.11
							1/2"	8.04	4.67	0.20
							Ice	8.53	5.12	0.30
							1" Ice	9.56	6.05	0.53
(2) NNHH-65B-R4 w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	7.55	4.23	0.11
							1/2"	8.04	4.67	0.20
							Ice	8.53	5.12	0.30
							1" Ice	9.56	6.05	0.53
(2) NNHH-65B-R4 w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	7.55	4.23	0.11
							1/2"	8.04	4.67	0.20
							Ice	8.53	5.12	0.30
							1" Ice	9.56	6.05	0.53
LNX-6514DS-A1M w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	4.09	3.30	0.06
							1/2"	4.49	3.68	0.13
							Ice	4.89	4.06	0.20
							1" Ice	5.71	4.87	0.38
RFV01U-D1A	A	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.25	0.08
							1/2"	2.05	1.39	0.10
							Ice	2.22	1.54	0.12
							1" Ice	2.60	1.86	0.18
RFV01U-D1A	B	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.25	0.08
							1/2"	2.05	1.39	0.10
							Ice	2.22	1.54	0.12
							1" Ice	2.60	1.86	0.18
RFV01U-D1A	C	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.25	0.08
							1/2"	2.05	1.39	0.10
							Ice	2.22	1.54	0.12
							1" Ice	2.60	1.86	0.18
RFV01U-D2A	A	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.01	0.07
							1/2"	2.05	1.14	0.09
							Ice	2.22	1.28	0.11
							1" Ice	2.60	1.59	0.15
RFV01U-D2A	B	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.01	0.07
							1/2"	2.05	1.14	0.09
							Ice	2.22	1.28	0.11
							1" Ice	2.60	1.59	0.15
RFV01U-D2A	C	From Leg	4.00	0.00	0.0000	160.00	2" Ice			
							No Ice	1.88	1.01	0.07
							1/2"	2.05	1.14	0.09
							Ice	2.22	1.28	0.11
							1" Ice	2.22	1.28	0.11

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K	
						1" Ice 2" Ice	2.60 1.59	0.15	
Platform Mount [LP 303-1]	C	None		0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	14.69 18.01 21.34 28.08	14.69 18.01 21.34 28.08	1.25 1.57 1.94 2.85

LNx-6514DS-A1M w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.09 4.49 4.89 5.71	3.30 3.68 4.06 4.87	0.06 0.13 0.20 0.38
HBXX-6517DS-A2M w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	7.97 8.73 9.51 11.11	5.99 6.72 7.47 9.02	0.08 0.14 0.21 0.40
MT6407-77A w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
RVZDC-6627-PF-48	A	From Leg	4.00 0.00 0.00	0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.79 4.04 4.30 4.84	2.51 2.73 2.95 3.42	0.03 0.06 0.10 0.18
Mount Reinforcement Specifications	C	None		0.0000	160.00	No Ice 1/2" Ice 1" Ice 2" Ice	28.63 37.31 45.80 62.38	28.63 37.31 45.80 62.38	0.28 0.67 0.94 1.63

SRL-224NM-4	B	From Leg	6.00 0.00 0.00	0.0000	158.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.60 4.68 6.76 10.92	2.60 4.68 6.76 10.92	0.04 0.05 0.06 0.08
DB205-A	C	From Leg	6.00 0.00 0.00	0.0000	158.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.20 2.16 3.12 5.04	1.20 2.16 3.12 5.04	0.04 0.05 0.06 0.08
Side Arm Mount [SO 702- 1]	B	From Leg	3.00 0.00 0.00	0.0000	158.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.62 0.74 0.89 1.25	1.49 2.07 2.54 3.55	0.03 0.04 0.06 0.12
Side Arm Mount [SO 702- 1]	C	From Leg	3.00 0.00 0.00	0.0000	158.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.62 0.74 0.89 1.25	1.49 2.07 2.54 3.55	0.03 0.04 0.06 0.12
4' x 2" Pipe Mount	B	From Leg	6.00	0.0000	158.00	No Ice	0.79	0.79	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K	
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04
						1" Ice	1.81	1.81	0.07
						2" Ice			
4' x 2" Pipe Mount	C	From Leg	6.00	0.0000	158.00	No Ice	0.79	0.79	0.03
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04
						1" Ice	1.81	1.81	0.07
						2" Ice			

SBNH-1D6565C w/ Mount Pipe	A	From Leg	4.00	0.0000	151.00	No Ice	5.56	4.47	0.08
			0.00			1/2"	6.07	4.97	0.17
			0.00			Ice	6.59	5.47	0.26
						1" Ice	7.65	6.52	0.50
						2" Ice			
SBNH-1D6565C w/ Mount Pipe	B	From Leg	4.00	0.0000	151.00	No Ice	5.56	4.47	0.08
			0.00			1/2"	6.07	4.97	0.17
			0.00			Ice	6.59	5.47	0.26
						1" Ice	7.65	6.52	0.50
						2" Ice			
SBNH-1D6565C w/ Mount Pipe	C	From Leg	4.00	0.0000	151.00	No Ice	5.56	4.47	0.08
			0.00			1/2"	6.07	4.97	0.17
			0.00			Ice	6.59	5.47	0.26
						1" Ice	7.65	6.52	0.50
						2" Ice			
7770.00 w/ Mount Pipe	A	From Leg	4.00	0.0000	151.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice	7.49	7.16	0.29
						2" Ice			
7770.00 w/ Mount Pipe	B	From Leg	4.00	0.0000	151.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice	7.49	7.16	0.29
						2" Ice			
7770.00 w/ Mount Pipe	C	From Leg	4.00	0.0000	151.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice	7.49	7.16	0.29
						2" Ice			
TPA-65R-LCUUUU-H8 w/ Mount Pipe	A	From Leg	4.00	0.0000	151.00	No Ice	11.85	8.99	0.11
			0.00			1/2"	12.77	9.88	0.21
			0.00			Ice	13.71	10.79	0.32
						1" Ice	15.64	12.66	0.58
						2" Ice			
TPA-65R-LCUUUU-H8 w/ Mount Pipe	B	From Leg	4.00	0.0000	151.00	No Ice	11.85	8.99	0.11
			0.00			1/2"	12.77	9.88	0.21
			0.00			Ice	13.71	10.79	0.32
						1" Ice	15.64	12.66	0.58
						2" Ice			
TPA-65R-LCUUUU-H8 w/ Mount Pipe	C	From Leg	4.00	0.0000	151.00	No Ice	11.85	8.99	0.11
			0.00			1/2"	12.77	9.88	0.21
			0.00			Ice	13.71	10.79	0.32
						1" Ice	15.64	12.66	0.58
						2" Ice			
DTMABP7819VG12A	A	From Leg	4.00	0.0000	151.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			0.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06
						2" Ice			
DTMABP7819VG12A	B	From Leg	4.00	0.0000	151.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			0.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06
						2" Ice			

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A _{Front}	C _A A _{Side}	Weight
			Horz	Lateral					
			ft	ft	°	ft	ft ²	ft ²	K
DTMABP7819VG12A	C	From Leg	4.00	0.0000	151.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			0.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06
						2" Ice			
RRUS 32	A	From Leg	4.00	0.0000	151.00	No Ice	2.86	1.78	0.06
			0.00			1/2"	3.08	1.97	0.08
			0.00			Ice	3.32	2.17	0.10
						1" Ice	3.81	2.58	0.16
						2" Ice			
RRUS 32	B	From Leg	4.00	0.0000	151.00	No Ice	2.86	1.78	0.06
			0.00			1/2"	3.08	1.97	0.08
			0.00			Ice	3.32	2.17	0.10
						1" Ice	3.81	2.58	0.16
						2" Ice			
RRUS 32	C	From Leg	4.00	0.0000	151.00	No Ice	2.86	1.78	0.06
			0.00			1/2"	3.08	1.97	0.08
			0.00			Ice	3.32	2.17	0.10
						1" Ice	3.81	2.58	0.16
						2" Ice			
RRUS 32 B2	A	From Leg	4.00	0.0000	151.00	No Ice	2.73	1.67	0.05
			0.00			1/2"	2.95	1.86	0.07
			0.00			Ice	3.18	2.05	0.10
						1" Ice	3.66	2.46	0.16
						2" Ice			
RRUS 32 B2	B	From Leg	4.00	0.0000	151.00	No Ice	2.73	1.67	0.05
			0.00			1/2"	2.95	1.86	0.07
			0.00			Ice	3.18	2.05	0.10
						1" Ice	3.66	2.46	0.16
						2" Ice			
RRUS 32 B2	C	From Leg	4.00	0.0000	151.00	No Ice	2.73	1.67	0.05
			0.00			1/2"	2.95	1.86	0.07
			0.00			Ice	3.18	2.05	0.10
						1" Ice	3.66	2.46	0.16
						2" Ice			
DBC0062F3V52-1	A	From Leg	4.00	0.0000	151.00	No Ice	0.71	0.22	0.01
			0.00			1/2"	0.82	0.29	0.02
			0.00			Ice	0.93	0.37	0.02
						1" Ice	1.18	0.54	0.04
						2" Ice			
DBC0062F3V52-1	B	From Leg	4.00	0.0000	151.00	No Ice	0.71	0.22	0.01
			0.00			1/2"	0.82	0.29	0.02
			0.00			Ice	0.93	0.37	0.02
						1" Ice	1.18	0.54	0.04
						2" Ice			
DBC0062F3V52-1	C	From Leg	4.00	0.0000	151.00	No Ice	0.71	0.22	0.01
			0.00			1/2"	0.82	0.29	0.02
			0.00			Ice	0.93	0.37	0.02
						1" Ice	1.18	0.54	0.04
						2" Ice			
DC6-48-60-18-8F	C	From Leg	4.00	0.0000	151.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			0.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
Platform Mount [LP 403-1_KCKR]	C	None		0.0000	151.00	No Ice	30.16	30.16	1.77
						1/2"	37.53	37.53	2.32
						Ice	45.13	45.13	2.97
						1" Ice	61.01	61.01	4.61
						2" Ice			
Miscellaneous [NA 510-1]	C	None		0.0000	151.00	No Ice	6.36	6.36	0.26
						1/2"	8.52	8.52	0.34
						Ice	10.62	10.62	0.46
						1" Ice	14.64	14.64	0.77
						2" Ice			

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft		C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K

RRUS 11	B	From Leg	4.00	0.0000	150.00	No Ice	2.78	1.19	0.05
			0.00			1/2"	2.99	1.33	0.07
			2.00			Ice	3.21	1.49	0.09
						1" Ice	3.66	1.83	0.15
						2" Ice			
RRUS 11	C	From Leg	4.00	0.0000	150.00	No Ice	2.78	1.19	0.05
			0.00			1/2"	2.99	1.33	0.07
			2.00			Ice	3.21	1.49	0.09
						1" Ice	3.66	1.83	0.15
						2" Ice			
RRUS 12	B	From Leg	4.00	0.0000	150.00	No Ice	3.15	1.29	0.06
			0.00			1/2"	3.36	1.44	0.08
			0.00			Ice	3.59	1.60	0.11
						1" Ice	4.07	1.95	0.17
						2" Ice			
RRUS 12	C	From Leg	4.00	0.0000	150.00	No Ice	3.15	1.29	0.06
			0.00			1/2"	3.36	1.44	0.08
			0.00			Ice	3.59	1.60	0.11
						1" Ice	4.07	1.95	0.17
						2" Ice			
DC6-48-60-18-8F	C	From Leg	4.00	0.0000	150.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			2.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
Side Arm Mount [SO 102-3]	C	None		0.0000	150.00	No Ice	3.60	3.60	0.07
						1/2"	4.18	4.18	0.11
						Ice	4.75	4.75	0.14
						1" Ice	5.90	5.90	0.20
						2" Ice			
Pipe Mount [PM 601-3]	C	None		0.0000	150.00	No Ice	3.17	3.17	0.20
						1/2"	3.79	3.79	0.23
						Ice	4.42	4.42	0.28
						1" Ice	5.76	5.76	0.40
						2" Ice			

SRL-235-2	B	From Leg	6.00	0.0000	132.00	No Ice	7.00	7.00	0.08
			0.00			1/2"	9.04	9.04	0.13
			0.00			Ice	11.09	11.09	0.19
						1" Ice	15.25	15.25	0.35
						2" Ice			
Side Arm Mount [SO 702-1]	B	From Leg	3.00	0.0000	132.00	No Ice	0.62	1.49	0.03
			0.00			1/2"	0.74	2.07	0.04
			0.00			Ice	0.89	2.54	0.06
						1" Ice	1.25	3.55	0.12
						2" Ice			
Side Arm Mount [SO 104-3]	C	None		0.0000	132.00	No Ice	2.62	2.62	0.29
						1/2"	3.30	3.30	0.41
						Ice	3.98	3.98	0.53
						1" Ice	5.35	5.35	0.77
						2" Ice			
4' x 2" Pipe Mount	B	From Leg	6.00	0.0000	132.00	No Ice	0.79	0.79	0.03
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04
						1" Ice	1.81	1.81	0.07
						2" Ice			

PCS 1900 TMA RX	A	From Leg	2.00	0.0000	124.00	No Ice	0.54	0.53	0.02
			0.00			1/2"	0.64	0.63	0.02
			0.00			Ice	0.75	0.73	0.03
						1" Ice	0.98	0.97	0.05
						2" Ice			
Side Arm Mount [SO 104-3]	A	None		0.0000	124.00	No Ice	2.62	2.62	0.29
						3.30	3.30	0.41	

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _A A _{Front}	C _A A _{Side}	Weight
			Horz	Lateral					
			ft	ft	°	ft	ft ²	ft ²	K
						1/2" Ice	3.98	3.98	0.53
						2" Ice	5.35	5.35	0.77
2' x 2" Pipe Mount	A	From Leg	2.00	0.0000	124.00	No Ice	0.02	0.02	0.01
			0.00			1/2" Ice	0.05	0.05	0.01
			0.00			1" Ice	0.09	0.09	0.01
						2" Ice	0.19	0.19	0.01

844G65VTZAS w/ Mount Pipe	A	From Leg	4.00	0.0000	116.00	No Ice	5.49	4.98	0.03
			0.00			1/2" Ice	5.88	5.60	0.09
			2.00			1" Ice	6.27	6.23	0.14
						2" Ice	7.09	7.53	0.28
844G65VTZAS w/ Mount Pipe	B	From Leg	4.00	0.0000	116.00	No Ice	5.49	4.98	0.03
			0.00			1/2" Ice	5.88	5.60	0.09
			2.00			1" Ice	6.27	6.23	0.14
						2" Ice	7.09	7.53	0.28
844G65VTZAS w/ Mount Pipe	C	From Leg	4.00	0.0000	116.00	No Ice	5.49	4.98	0.03
			0.00			1/2" Ice	5.88	5.60	0.09
			2.00			1" Ice	6.27	6.23	0.14
						2" Ice	7.09	7.53	0.28
(2) 844G65VTZAS	A	From Leg	4.00	0.0000	116.00	No Ice	5.25	3.80	0.02
			0.00			1/2" Ice	5.58	4.10	0.05
			2.00			1" Ice	5.91	4.42	0.10
						2" Ice	6.60	5.07	0.20
(2) 844G65VTZAS	B	From Leg	4.00	0.0000	116.00	No Ice	5.25	3.80	0.02
			0.00			1/2" Ice	5.58	4.10	0.05
			2.00			1" Ice	5.91	4.42	0.10
						2" Ice	6.60	5.07	0.20
(2) 844G65VTZAS	C	From Leg	4.00	0.0000	116.00	No Ice	5.25	3.80	0.02
			0.00			1/2" Ice	5.58	4.10	0.05
			2.00			1" Ice	5.91	4.42	0.10
						2" Ice	6.60	5.07	0.20
Dual Mount Bracket	A	From Leg	4.00	0.0000	116.00	No Ice	1.66	1.66	0.03
			0.00			1/2" Ice	2.39	2.39	0.04
			0.00			1" Ice	2.83	2.83	0.06
						2" Ice	3.71	3.71	0.10
Dual Mount Bracket	B	From Leg	4.00	0.0000	116.00	No Ice	1.66	1.66	0.03
			0.00			1/2" Ice	2.39	2.39	0.04
			0.00			1" Ice	2.83	2.83	0.06
						2" Ice	3.71	3.71	0.10
Dual Mount Bracket	C	From Leg	4.00	0.0000	116.00	No Ice	1.66	1.66	0.03
			0.00			1/2" Ice	2.39	2.39	0.04
			0.00			1" Ice	2.83	2.83	0.06
						2" Ice	3.71	3.71	0.10

LLPX310R-V4	A	From Leg	4.00	0.0000	116.00	No Ice	3.87	1.49	0.04
			0.00			1/2" Ice	4.30	1.86	0.07
			2.00			1" Ice	4.74	2.24	0.10
						2" Ice	5.68	3.06	0.17
LLPX310R-V4	B	From Leg	4.00	0.0000	116.00	No Ice	3.87	1.49	0.04
			0.00			1/2" Ice	4.30	1.86	0.07
			2.00			1" Ice	4.74	2.24	0.10
						2" Ice	5.68	3.06	0.17

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _{Front}	C _A A _{Side}	Weight	
			Horz	Lateral	Vert						ft
			ft	ft	ft	°	ft	ft ²	ft ²	K	
LLPX310R-V4	C	From Leg	4.00	0.00	0.00	0.0000	116.00	2" Ice			
								No Ice	3.87	1.49	0.04
								1/2"	4.30	1.86	0.07
								Ice	4.74	2.24	0.10
WIMAX DAP HEAD	A	From Leg	4.00	0.00	0.00	0.0000	116.00	1" Ice	5.68	3.06	0.17
								2" Ice			
								No Ice	1.55	0.68	0.03
								1/2"	1.70	0.80	0.04
WIMAX DAP HEAD	B	From Leg	4.00	0.00	0.00	0.0000	116.00	Ice	1.87	0.92	0.06
								1" Ice	2.22	1.19	0.09
								2" Ice			
								No Ice	1.55	0.68	0.03
WIMAX DAP HEAD	C	From Leg	4.00	0.00	0.00	0.0000	116.00	1/2"	1.70	0.80	0.04
								Ice	1.87	0.92	0.06
								1" Ice	2.22	1.19	0.09
								2" Ice			
WIMAX DAP HEAD	A	From Leg	4.00	0.00	0.00	0.0000	116.00	No Ice	0.17	0.24	0.01
								1/2"	0.25	0.34	0.02
								Ice	0.34	0.46	0.03
								1" Ice	0.53	0.70	0.06
Platform Mount [LP 405-1_HR-1]	C	None				0.0000	116.00	2" Ice			
								No Ice	25.33	25.33	2.06
								1/2"	33.79	33.79	2.63
								Ice	42.16	42.16	3.36
Dual Mount Bracket	A	From Leg	4.00	0.00	0.00	0.0000	116.00	1" Ice	58.77	58.77	5.25
								2" Ice			
								No Ice	1.66	1.66	0.03
								1/2"	2.39	2.39	0.04
Dual Mount Bracket	B	From Leg	4.00	0.00	0.00	0.0000	116.00	Ice	2.83	2.83	0.06
								1" Ice	3.71	3.71	0.10
								2" Ice			
								No Ice	1.66	1.66	0.03
Dual Mount Bracket	C	From Leg	4.00	0.00	0.00	0.0000	116.00	1/2"	2.39	2.39	0.04
								Ice	2.83	2.83	0.06
								1" Ice	3.71	3.71	0.10
								2" Ice			
Dual Mount Bracket	A	From Leg	4.00	0.00	0.00	0.0000	116.00	No Ice	1.66	1.66	0.03
								1/2"	2.39	2.39	0.04
								Ice	2.83	2.83	0.06
								1" Ice	3.71	3.71	0.10
*** NNVV-65B-R4	A	From Leg	4.00	0.00	2.00	0.0000	116.00	2" Ice			
								No Ice	7.62	3.01	0.08
								1/2"	8.12	3.45	0.15
								Ice	8.63	3.90	0.23
NNVV-65B-R4	B	From Leg	4.00	0.00	2.00	0.0000	116.00	1" Ice	9.68	4.82	0.41
								2" Ice			
								No Ice	7.62	3.01	0.08
								1/2"	8.12	3.45	0.15
NNVV-65B-R4	C	From Leg	4.00	0.00	2.00	0.0000	116.00	Ice	8.63	3.90	0.23
								1" Ice	9.68	4.82	0.41
								2" Ice			
								No Ice	7.62	3.01	0.08
AHCC	A	From Leg	4.00	0.00	2.00	0.0000	116.00	1/2"	8.12	3.45	0.15
								Ice	8.63	3.90	0.23
								1" Ice	9.68	4.82	0.41
								2" Ice			
AHCC	A	From Leg	4.00	0.00	2.00	0.0000	116.00	No Ice	1.63	1.14	0.05
								1/2"	1.79	1.28	0.06
								Ice	1.96	1.43	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 ²	ft ²	K	
AHCC	B	From Leg	4.00	0.00	0.0000	116.00	1" Ice	2.32	1.75	0.12
							2" Ice			
							No Ice	1.63	1.14	0.05
							1/2" Ice	1.79	1.28	0.06
							Ice	1.96	1.43	0.08
AHCC	C	From Leg	4.00	0.00	0.0000	116.00	1" Ice	2.32	1.75	0.12
							2" Ice			
							No Ice	1.63	1.14	0.05
							1/2" Ice	1.79	1.28	0.06
							Ice	1.96	1.43	0.08
PCS 1900MHZ 4X45W-65MHZ	A	From Leg	4.00	0.00	0.0000	116.00	1" Ice	2.32	1.75	0.12
							2" Ice			
							No Ice	2.32	2.24	0.06
							1/2" Ice	2.53	2.44	0.08
							Ice	2.74	2.65	0.11
(2) PCS 1900MHZ 4X45W-65MHZ	B	From Leg	4.00	0.00	0.0000	116.00	1" Ice	3.19	3.09	0.17
							2" Ice			
							No Ice	2.32	2.24	0.06
							1/2" Ice	2.53	2.44	0.08
							Ice	2.74	2.65	0.11
**** DB205-A	C	From Leg	6.00	0.00	0.0000	90.00	1" Ice	3.19	3.09	0.17
							2" Ice			
							No Ice	1.20	1.20	0.04
							1/2" Ice	2.16	2.16	0.05
							Ice	3.12	3.12	0.06
MT-485002	C	From Leg	6.00	0.00	0.0000	90.00	1" Ice	5.04	5.04	0.08
							2" Ice			
							No Ice	1.20	0.13	0.00
							1/2" Ice	1.34	0.21	0.01
							Ice	1.48	0.29	0.02
Side Arm Mount [SO 702-3]	C	None	0.00	0.0000	90.00	1" Ice	1.79	0.47	0.04	
						2" Ice				
						No Ice	2.53	2.53	0.08	
						1/2" Ice	3.37	3.37	0.13	
						Ice	4.12	4.12	0.19	
5' x 2" Pipe Mount	C	From Leg	6.00	0.00	0.0000	90.00	1" Ice	5.76	5.76	0.36
							2" Ice			
							No Ice	1.19	1.19	0.02
							1/2" Ice	1.50	1.50	0.03
							Ice	1.81	1.81	0.04
*** SRL-235-2	C	From Leg	3.00	0.00	0.0000	70.00	1" Ice	2.46	2.46	0.08
							2" Ice			
							No Ice	7.00	7.00	0.08
							1/2" Ice	9.04	9.04	0.13
							Ice	11.09	11.09	0.19
Side Arm Mount [SO 701-1]	C	From Leg	1.50	0.00	0.0000	70.00	1" Ice	15.25	15.25	0.35
							2" Ice			
							No Ice	0.85	1.67	0.07
							1/2" Ice	1.14	2.34	0.08
							Ice	1.43	3.01	0.09
Side Arm Mount [SO 102-3]	C	None	0.00	0.0000	70.00	1" Ice	2.01	4.35	0.12	
						2" Ice				
						No Ice	3.60	3.60	0.07	
						1/2" Ice	4.18	4.18	0.11	
						Ice	4.75	4.75	0.14	
6' x 2" Mount Pipe	C	From Leg	3.00	0.00	0.0000	70.00	1" Ice	5.90	5.90	0.20
							2" Ice			
							No Ice	1.43	1.43	0.02
							1/2" Ice	1.92	1.92	0.03
							Ice	2.29	2.29	0.05
***							1" Ice	3.06	3.06	0.09
							2" Ice			

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _{AA} _{Front} ft ²	C _{AA} _{Side} ft ²	Weight K
DB909XVTE-M	B	From Leg	3.00 0.00 0.00	0.0000	33.00	No Ice	1.95	1.95	0.02
						1/2" Ice	2.62	2.62	0.05
						Ice	2.95	2.95	0.07
						1" Ice	3.64	3.64	0.14
Side Arm Mount [SO 701-1]	B	From Leg	1.50 0.00 0.00	0.0000	33.00	No Ice	0.85	1.67	0.07
						1/2" Ice	1.14	2.34	0.08
						Ice	1.43	3.01	0.09
						1" Ice	2.01	4.35	0.12
Side Arm Mount [SO 102-3]	B	None		0.0000	33.00	No Ice	3.60	3.60	0.07
						1/2" Ice	4.18	4.18	0.11
						Ice	4.75	4.75	0.14
						1" Ice	5.90	5.90	0.20
6' x 2" Mount Pipe	B	From Leg	3.00 0.00 0.00	0.0000	33.00	No Ice	1.43	1.43	0.02
						1/2" Ice	1.92	1.92	0.03
						Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft ²	Weight K
VHLP2-18	B	Paraboloid w/o Radome	From Leg	4.00 0.00 4.00	0.0000		116.00	2.17	No Ice	3.72	0.03
									1/2" Ice	4.01	0.05
									1" Ice	4.30	0.07
									2" Ice	4.88	0.11
* KP2F-34	B	Grid	From Leg	6.00 0.00 0.00	5.0000		90.00	2.00	No Ice	3.14	0.01
									1/2" Ice	3.41	0.02
									1" Ice	3.68	0.04
									2" Ice	4.28	0.07

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

Comb. No.	Description
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	191.667 - 186.667	Pole	Max Tension	36	0.00	-0.00	0.00
			Max. Compression	26	-1.34	-0.76	-0.94
			Max. Mx	8	-0.72	-3.41	-0.42
			Max. My	14	-0.72	-0.25	-3.68
			Max. Vy	20	-0.61	3.02	-0.26
			Max. Vx	14	0.62	-0.25	-3.68
			Max. Torque	6			-0.72
L2	186.667 - 181.567	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-2.28	-0.76	-1.04
			Max. Mx	8	-1.36	-7.27	-0.57
			Max. My	14	-1.36	-0.35	-7.65
			Max. Vy	20	-0.91	6.88	-0.21
			Max. Vx	14	0.92	-0.35	-7.65
			Max. Torque	6			-0.72
L3	181.567 - 176.567	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-13.33	-0.80	-0.78
			Max. Mx	8	-6.53	-28.09	-0.69
			Max. My	14	-6.54	-0.46	-28.54
			Max. Vy	20	-4.72	27.69	-0.12
			Max. Vx	14	4.76	-0.46	-28.54

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L4	176.567 - 171.567	Pole	Max. Torque	6			-0.72
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-14.27	-0.84	-0.90
			Max. Mx	8	-7.18	-52.41	-0.86
			Max. My	14	-7.19	-0.57	-53.13
			Max. Vy	20	-5.01	52.02	-0.09
			Max. Vx	14	5.05	-0.57	-53.13
L5	171.567 - 166.567	Pole	Max. Torque	6			-0.70
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-21.24	-0.91	-0.64
			Max. Mx	8	-10.88	-91.07	-0.95
			Max. My	14	-10.89	-0.70	-92.06
			Max. Vy	20	-8.20	90.68	0.04
			Max. Vx	14	8.27	-0.70	-92.06
L6	166.567 - 161.567	Pole	Max. Torque	6			-0.70
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-22.22	-0.97	-0.83
			Max. Mx	8	-11.56	-132.77	-1.15
			Max. My	14	-11.56	-0.83	-134.14
			Max. Vy	20	-8.48	132.38	0.06
			Max. Vx	14	8.54	-0.83	-134.14
L7	161.567 - 156.567	Pole	Max. Torque	17			0.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.19	-2.57	-3.90
			Max. Mx	8	-16.01	-192.02	-2.45
			Max. My	14	-16.02	-1.38	-194.43
			Max. Vy	20	-13.34	190.82	-0.83
			Max. Vx	14	13.41	-1.38	-194.43
L8	156.567 - 151.567	Pole	Max. Torque	7			-2.42
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-34.44	-2.91	-3.96
			Max. Mx	8	-16.77	-259.43	-2.77
			Max. My	14	-16.79	-1.71	-262.10
			Max. Vy	20	-13.61	258.12	-0.64
			Max. Vx	14	13.65	-1.71	-262.10
L9	151.567 - 146.567	Pole	Max. Torque	7			-2.42
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.18	-2.54	-5.86
			Max. Mx	8	-21.81	-348.86	-3.84
			Max. My	14	-21.84	-1.85	-352.17
			Max. Vy	20	-18.64	347.87	-1.20
			Max. Vx	14	18.54	-1.85	-352.17
L10	146.567 - 141.567	Pole	Max. Torque	19			2.74
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.47	-2.90	-5.92
			Max. Mx	8	-22.68	-442.54	-4.15
			Max. My	14	-22.71	-2.18	-445.30
			Max. Vy	20	-18.83	441.45	-1.01
			Max. Vx	14	18.71	-2.18	-445.30
L11	141.567 - 141.417	Pole	Max. Torque	19			2.74
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.51	-2.92	-5.92
			Max. Mx	8	-22.71	-445.36	-4.16
			Max. My	14	-22.74	-2.19	-448.11
			Max. Vy	20	-18.83	444.27	-1.01
			Max. Vx	14	18.71	-2.19	-448.11
L12	141.417 - 136.417	Pole	Max. Torque	19			2.74
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-49.44	-3.38	-5.46
			Max. Mx	8	-23.83	-540.48	-4.42

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L13	136.417 - 131.417	Pole	Max. My	14	-23.86	-2.55	-542.59
			Max. Vy	20	-19.21	539.24	-0.76
			Max. Vx	14	19.12	-2.55	-542.59
			Max. Torque	19			2.74
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-52.26	-6.45	-7.01
			Max. Mx	8	-25.42	-638.66	-5.25
			Max. My	14	-25.45	-3.77	-639.92
			Max. Vy	20	-20.00	635.32	-1.10
			Max. Vx	14	19.93	-3.77	-639.92
L14	131.417 - 126.417	Pole	Max. Torque	19			4.81
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-54.00	-6.92	-7.05
			Max. Mx	8	-26.57	-739.52	-5.51
			Max. My	14	-26.60	-4.06	-740.40
			Max. Vy	20	-20.33	736.03	-1.00
			Max. Vx	14	20.25	-4.06	-740.40
			Max. Torque	19			4.81
			Max Tension	1	0.00	0.00	0.00
			L15	126.417 - 121.417	Pole	Max. Compression	26
Max. Mx	8	-28.79				-842.53	-5.68
Max. My	14	-28.81				-4.39	-843.65
Max. Vy	20	-21.15				839.57	-0.81
Max. Vx	14	21.06				-4.39	-843.65
Max. Torque	19						4.81
Max Tension	1	0.00				0.00	0.00
Max. Compression	26	-57.43				-7.48	-6.93
Max. Mx	8	-28.86				-847.74	-5.70
Max. My	14	-28.88				-4.41	-848.92
L16	121.417 - 121.167	Pole	Max. Vy	20	-21.16	844.85	-0.80
			Max. Vx	14	21.08	-4.41	-848.92
			Max. Torque	19			4.75
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.67	-8.49	-7.25
			Max. Mx	8	-30.32	-953.64	-6.08
			Max. My	14	-30.34	-4.96	-955.75
			Max. Vy	20	-21.73	951.99	-0.39
			Max. Vx	14	21.55	-4.96	-955.75
			Max. Torque	7			-5.15
L17	121.167 - 116.167	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.01	-11.11	-6.61
			Max. Mx	8	-35.44	-1086.32	-6.21
			Max. My	14	-35.49	-6.25	-1086.84
			Max. Vy	20	-26.40	1084.60	0.46
			Max. Vx	14	25.65	-6.25	-1086.84
			Max. Torque	17			5.59
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.55	-11.30	-6.53
			Max. Mx	8	-35.76	-1115.77	-6.24
L18	116.167 - 111.167	Pole	Max. My	14	-35.81	-6.39	-1115.71
			Max. Vy	20	-26.61	1114.35	0.64
			Max. Vx	14	25.73	-6.39	-1115.71
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.69	-11.35	-6.51
			Max. Mx	8	-35.85	-1122.35	-6.25
			Max. My	14	-35.90	-6.42	-1122.14
			Max. Vy	20	-26.65	1120.99	0.68
			Max. Vx	14	25.74	-6.42	-1122.14
L19	111.167 - 110.042	Pole	Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.69	-11.35	-6.51
			Max. Mx	8	-35.85	-1122.35	-6.25
			Max. My	14	-35.90	-6.42	-1122.14
			Max. Vy	20	-26.65	1120.99	0.68
			Max. Vx	14	25.74	-6.42	-1122.14
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.69	-11.35	-6.51
L20	110.042 - 109.792	Pole	Max. Mx	8	-35.85	-1122.35	-6.25
			Max. My	14	-35.90	-6.42	-1122.14
			Max. Vy	20	-26.65	1120.99	0.68
			Max. Vx	14	25.74	-6.42	-1122.14
			Max. Torque	17			5.58
			Max. Compression	26	-71.69	-11.35	-6.51
			Max. Mx	8	-35.85	-1122.35	-6.25
			Max. My	14	-35.90	-6.42	-1122.14
			Max. Vy	20	-26.65	1120.99	0.68
			Max. Vx	14	25.74	-6.42	-1122.14

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L21	109.792 - 105.083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-74.42	-12.16	-6.17
			Max. Mx	8	-37.54	-1248.54	-6.42
			Max. My	14	-37.62	-6.98	-1244.17
			Max. Vy	20	-27.55	1248.32	1.43
			Max. Vx	14	26.12	-6.98	-1244.17
L22	105.083 - 104.833	Pole	Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-74.59	-12.20	-6.15
			Max. Mx	8	-37.66	-1255.37	-6.43
			Max. My	14	-37.74	-7.01	-1250.70
			Max. Vy	20	-27.59	1255.19	1.47
L23	104.833 - 100.917	Pole	Max. Vx	14	26.16	-7.01	-1250.70
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-78.12	-12.88	-5.90
			Max. Mx	20	-40.11	1364.74	2.06
			Max. My	14	-40.20	-7.46	-1354.65
L24	100.917 - 100.667	Pole	Max. Vy	20	-28.47	1364.74	2.06
			Max. Vx	14	26.96	-7.46	-1354.65
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-78.28	-12.95	-5.88
			Max. Mx	20	-40.22	1371.84	2.10
L25	100.667 - 95.833	Pole	Max. My	14	-40.31	-7.49	-1361.38
			Max. Vy	20	-28.51	1371.84	2.10
			Max. Vx	14	26.99	-7.49	-1361.38
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-81.84	-14.17	-5.48
L26	95.833 - 95.583	Pole	Max. Mx	20	-42.12	1510.73	2.88
			Max. My	14	-42.22	-8.10	-1492.90
			Max. Vy	20	-29.10	1510.73	2.88
			Max. Vx	14	27.47	-8.10	-1492.90
			Max. Torque	17			5.58
			Max Tension	1	0.00	0.00	0.00
L27	95.583 - 90.583	Pole	Max. Compression	26	-81.98	-14.23	-5.45
			Max. Mx	20	-42.22	1518.00	2.92
			Max. My	14	-42.32	-8.13	-1499.77
			Max. Vy	20	-29.15	1518.00	2.92
			Max. Vx	14	27.49	-8.13	-1499.77
			Max. Torque	17			5.58
L28	90.583 - 89.917	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-84.87	-15.50	-5.02
			Max. Mx	20	-44.05	1665.91	3.72
			Max. My	14	-44.17	-8.76	-1638.06
			Max. Vy	20	-30.15	1665.91	3.72
			Max. Vx	14	27.87	-8.76	-1638.06
L29	89.917 - 89.667	Pole	Max. Torque	7			5.58
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.76	-14.91	-5.84
			Max. Mx	20	-44.47	1686.85	3.53
			Max. My	14	-44.58	-8.39	-1657.35
			Max. Vy	20	-30.54	1686.85	3.53
L29	89.917 - 89.667	Pole	Max. Vx	14	28.20	-8.39	-1657.35
			Max. Torque	7			5.67
			Max Tension	1	0.00	0.00	0.00
L29	89.917 - 89.667	Pole	Max. Compression	26	-85.94	-14.98	-5.82
			Max. Mx	20	-44.59	1694.48	3.57
			Max. My	14	-44.70	-8.42	-1664.40

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L30	89.667 - 84.667	Pole	Max. Vy	20	-30.59	1694.48	3.57
			Max. Vx	14	28.24	-8.42	-1664.40
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-90.16	-16.07	-5.33
L31	84.667 - 80.833	Pole	Max. Mx	20	-47.47	1849.96	4.37
			Max. My	14	-47.59	-8.89	-1807.66
			Max. Vy	20	-31.68	1849.96	4.37
			Max. Vx	14	29.12	-8.89	-1807.66
			Max. Torque	7			-5.67
L32	80.833 - 80.333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.47	-16.79	-4.91
			Max. Mx	20	-50.69	1973.13	5.02
			Max. My	14	-50.81	-9.13	-1920.49
			Max. Vy	20	-32.60	1973.13	5.02
L33	80.333 - 80.083	Pole	Max. Vx	14	29.82	-9.13	-1920.49
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.98	-16.90	-4.85
			Max. Mx	20	-51.08	1989.44	5.11
L34	80.083 - 75.083	Pole	Max. My	14	-51.20	-9.17	-1935.40
			Max. Vy	20	-32.70	1989.44	5.11
			Max. Vx	14	29.91	-9.17	-1935.40
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
L35	75.083 - 70.083	Pole	Max. Compression	26	-95.19	-16.96	-4.83
			Max. Mx	20	-51.22	1997.61	5.15
			Max. My	14	-51.34	-9.20	-1942.87
			Max. Vy	20	-32.75	1997.61	5.15
			Max. Vx	14	29.96	-9.20	-1942.87
L36	70.083 - 69.5	Pole	Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-98.96	-18.25	-4.34
			Max. Mx	20	-53.76	2163.26	5.94
			Max. My	14	-53.87	-9.77	-2094.70
L37	69.5 - 69.25	Pole	Max. Vy	20	-33.63	2163.26	5.94
			Max. Vx	12	31.00	-1113.28	-1922.26
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-103.28	-19.80	-3.87
L38	69.25 - 64.25	Pole	Max. Mx	20	-56.72	2333.16	6.71
			Max. My	14	-56.83	-10.53	-2250.94
			Max. Vy	20	-34.53	2333.16	6.71
			Max. Vx	12	32.07	-1204.86	-2079.82
			Max. Torque	7			-5.67
L37	69.5 - 69.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-104.76	-18.18	-4.88
			Max. Mx	20	-57.58	2363.00	6.40
			Max. My	14	-57.69	-9.91	-2278.18
			Max. Vy	20	-35.11	2363.00	6.40
L38	69.25 - 64.25	Pole	Max. Vx	12	32.63	-1219.83	-2107.31
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-112.93	-20.27	-4.40
			Max. Mx	20	-57.58	2363.00	6.40

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L39	64.25 - 60.583	Pole	Max. Mx	20	-64.00	2540.90	7.23
			Max. My	14	-64.11	-11.23	-2442.64
			Max. Vy	20	-36.46	2540.90	7.23
			Max. Vx	12	33.91	-1316.94	-2273.56
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-119.52	-21.87	-4.01
			Max. Mx	20	-69.22	2675.66	7.87
			Max. My	14	-69.32	-12.24	-2567.23
			Max. Vy	20	-37.47	2675.66	7.87
L40	60.583 - 60.333	Pole	Max. Vx	12	34.86	-1390.55	-2399.53
			Max. Torque	7			-5.67
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-119.79	-21.95	-3.98
			Max. Mx	20	-69.43	2685.00	7.91
			Max. My	14	-69.53	-12.29	-2575.85
			Max. Vy	20	-37.51	2685.00	7.91
			Max. Vx	12	34.91	-1395.62	-2408.25
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
L41	60.333 - 55.333	Pole	Max. Compression	26	-125.19	-23.67	-3.44
			Max. Mx	20	-73.27	2874.32	8.76
			Max. My	14	-73.36	-13.22	-2750.71
			Max. Vy	20	-38.47	2874.32	8.76
			Max. Vx	12	36.02	-1498.67	-2585.45
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-127.40	-24.59	-3.11
			Max. Mx	20	-74.80	2996.27	9.29
			Max. My	14	-74.89	-13.68	-2863.28
L42	55.333 - 52.167	Pole	Max. Vy	20	-38.75	2996.27	9.29
			Max. Vx	12	36.63	-1565.36	-2700.37
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-127.60	-24.66	-3.08
			Max. Mx	20	-74.95	3005.94	9.33
			Max. My	14	-75.04	-13.71	-2872.20
			Max. Vy	20	-38.77	3005.94	9.33
			Max. Vx	12	36.67	-1570.67	-2709.52
			Max. Torque	7			-5.66
L43	52.167 - 51.917	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-132.10	-26.22	-2.51
			Max. Mx	20	-78.11	3201.40	10.24
			Max. My	14	-78.19	-14.50	-3052.64
			Max. Vy	20	-39.61	3201.40	10.24
			Max. Vx	12	37.70	-1678.53	-2895.24
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-137.80	-27.81	-1.48
			Max. Mx	20	-82.13	3401.77	11.54
L44	51.917 - 46.917	Pole	Max. My	14	-82.21	-15.31	-3237.00
			Max. Vy	20	-40.74	3401.77	11.54
			Max. Vx	12	38.77	-1789.44	-3085.82
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-139.63	-28.33	-1.13
			Max. Mx	20	-83.42	3470.50	11.97
			Max. My	14	-83.51	-15.57	-3300.08
			Max. Vy	20	-41.11	3470.50	11.97
			Max. Vx	12	39.12	-1827.47	-3151.19
L45	46.917 - 41.917	Pole	Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-139.63	-28.33	-1.13
			Max. Mx	20	-83.42	3470.50	11.97
			Max. My	14	-83.51	-15.57	-3300.08
			Max. Vy	20	-41.11	3470.50	11.97
			Max. Vx	12	39.12	-1827.47	-3151.19
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-139.63	-28.33	-1.13
L46	41.917 - 40.233	Pole	Max. Mx	20	-83.42	3470.50	11.97
			Max. My	14	-83.51	-15.57	-3300.08
			Max. Vy	20	-41.11	3470.50	11.97
			Max. Vx	12	39.12	-1827.47	-3151.19
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-139.63	-28.33	-1.13
			Max. Mx	20	-83.42	3470.50	11.97
			Max. My	14	-83.51	-15.57	-3300.08
			Max. Vy	20	-41.11	3470.50	11.97

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L47	40.233 - 39.983	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-139.89	-28.40	-1.08
			Max. Mx	20	-83.62	3480.76	12.04
			Max. My	14	-83.70	-15.60	-3309.48
			Max. Vy	20	-41.13	3480.76	12.04
			Max. Vx	12	39.15	-1833.13	-3160.94
L48	39.983 - 34.983	Pole	Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-145.04	-29.79	-0.00
			Max. Mx	20	-87.34	3688.44	13.33
			Max. My	14	-87.42	-16.30	-3499.58
			Max. Vy	20	-42.11	3688.44	13.33
L49	34.983 - 29.983	Pole	Max. Vx	12	40.08	-1947.92	-3358.41
			Max. Torque	7			-5.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-149.77	-32.27	0.11
			Max. Mx	20	-90.74	3900.25	14.05
			Max. My	14	-90.80	-17.47	-3694.43
L50	29.983 - 28	Pole	Max. Vy	20	-42.95	3900.25	14.05
			Max. Vx	12	41.05	-2065.95	-3561.25
			Max. Torque	7			-6.22
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-151.32	-32.78	0.28
			Max. Mx	20	-91.82	3985.48	14.36
L51	28 - 27.75	Pole	Max. My	14	-91.88	-17.73	-3772.73
			Max. Vy	20	-43.21	3985.48	14.36
			Max. Vx	12	41.36	-2113.26	-3642.88
			Max. Torque	7			-6.22
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-151.54	-32.84	0.31
L52	27.75 - 22.75	Pole	Max. Mx	20	-92.00	3996.26	14.40
			Max. My	14	-92.06	-17.77	-3782.63
			Max. Vy	20	-43.21	3996.26	14.40
			Max. Vx	12	41.37	-2119.25	-3653.21
			Max. Torque	7			-6.22
			Max Tension	1	0.00	0.00	0.00
L53	22.75 - 20.083	Pole	Max. Compression	26	-157.14	-34.17	0.71
			Max. Mx	20	-96.17	4213.56	15.15
			Max. My	14	-96.22	-18.49	-3982.59
			Max. Vy	20	-43.91	4213.56	15.15
			Max. Vx	12	42.22	-2240.36	-3862.10
			Max. Torque	7			-6.22
L54	20.083 - 19.833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-160.39	-34.94	0.94
			Max. Mx	20	-98.63	4341.89	15.59
			Max. My	14	-98.67	-18.91	-4100.83
			Max. Vy	20	-44.28	4341.89	15.59
			Max. Vx	12	42.68	-2312.12	-3985.88
L55	19.833 - 17	Pole	Max. Torque	7			-6.22
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-163.35	-35.72	1.11
			Max. Mx	20	-100.81	4467.58	16.01
			Max. My	14	-100.85	-19.32	-4216.72
			Max. Vy	20	-44.66	4467.58	16.01
			Max. Vx	12	43.14	-2382.56	-4107.38
			Max. Torque	7			-6.22

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L56	17 - 16.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-163.63	-35.79	1.13
			Max. Mx	20	-101.04	4478.72	16.04
			Max. My	14	-101.08	-19.35	-4227.00
			Max. Vy	20	-44.67	4478.72	16.04
			Max. Vx	12	43.16	-2388.81	-4118.16
			Max. Torque	7			-6.22
L57	16.75 - 11.65	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-169.11	-37.20	1.44
			Max. Mx	20	-105.32	4707.69	16.81
			Max. My	14	-105.35	-20.07	-4438.27
			Max. Vy	20	-45.32	4707.69	16.81
			Max. Vx	12	43.93	-2517.47	-4340.14
			Max. Torque	7			-6.22
L58	11.65 - 11.417	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-169.31	-37.26	1.45
			Max. Mx	20	-105.49	4718.23	16.84
			Max. My	14	-105.52	-20.10	-4448.00
			Max. Vy	20	-45.33	4718.23	16.84
			Max. Vx	12	43.95	-2523.40	-4350.37
			Max. Torque	7			-6.22
L59	11.417 - 9.396	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-171.09	-37.78	1.62
			Max. Mx	20	-106.87	4809.90	17.16
			Max. My	14	-106.89	-20.37	-4532.58
			Max. Vy	20	-45.57	4809.90	17.16
			Max. Vx	12	44.25	-2575.01	-4439.44
			Max. Torque	7			-6.22
L60	9.396 - 9.146	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-171.31	-37.84	1.64
			Max. Mx	20	-107.05	4821.27	17.19
			Max. My	14	-107.07	-20.40	-4543.07
			Max. Vy	20	-45.58	4821.27	17.19
			Max. Vx	12	44.27	-2581.41	-4450.49
			Max. Torque	7			-6.22
L61	9.146 - 4.833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-175.18	-38.92	2.02
			Max. Mx	20	-110.09	5018.57	17.86
			Max. My	14	-110.11	-20.96	-4725.25
			Max. Vy	20	-46.08	5018.57	17.86
			Max. Vx	12	44.88	-2692.74	-4642.63
			Max. Torque	7			-6.22
L62	4.833 - 4.583	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-175.40	-38.99	2.04
			Max. Mx	20	-110.27	5030.07	17.90
			Max. My	14	-110.28	-20.99	-4735.88
			Max. Vy	20	-46.09	5030.07	17.90
			Max. Vx	12	44.90	-2699.23	-4653.84
			Max. Torque	7			-6.22
L63	4.583 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-178.76	-39.17	2.04
			Max. Mx	20	-113.15	5242.34	18.50
			Max. My	14	-113.15	-21.28	-4931.93
			Max. Vy	20	-46.59	5242.34	18.50
			Max. Vx	12	45.32	-2818.63	-4860.54
			Max. Torque	7			-6.22

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	178.76	-0.00	-0.00
	Max. H _x	20	113.16	46.56	0.14
	Max. H _z	24	113.16	26.03	44.88
	Max. M _x	2	4887.62	0.21	42.72
	Max. M _z	8	5213.10	-45.66	-0.04
	Max. Torsion	19	5.99	36.61	-20.93
	Min. Vert	17	84.87	20.93	-36.33
	Min. H _x	8	113.16	-45.66	-0.04
	Min. H _z	12	113.16	-26.16	-45.29
	Min. M _x	14	-4931.93	-0.05	-43.02
	Min. M _z	20	-5242.34	46.56	0.14
	Min. Torsion	7	-6.22	-36.27	20.91

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturing Moment, M _x kip-ft	Overturing Moment, M _z kip-ft	Torque kip-ft
Dead Only	94.30	0.00	0.00	1.13	-9.48	-0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	113.16	-0.21	-42.72	-4887.62	17.06	3.16
0.9 Dead+1.0 Wind 0 deg - No Ice	84.87	-0.21	-42.72	-4835.13	19.78	3.17
1.2 Dead+1.0 Wind 30 deg - No Ice	113.16	20.93	-36.29	-4258.65	-2465.06	5.28
0.9 Dead+1.0 Wind 30 deg - No Ice	84.87	20.93	-36.29	-4212.90	-2435.47	5.29
1.2 Dead+1.0 Wind 60 deg - No Ice	113.16	36.27	-20.91	-2455.16	-4274.00	6.20
0.9 Dead+1.0 Wind 60 deg - No Ice	84.87	36.27	-20.91	-2428.95	-4224.80	6.22
1.2 Dead+1.0 Wind 90 deg - No Ice	113.16	45.66	0.04	8.83	-5213.10	4.04
0.9 Dead+1.0 Wind 90 deg - No Ice	84.87	45.66	0.04	8.31	-5154.77	4.06
1.2 Dead+1.0 Wind 120 deg - No Ice	113.16	45.41	26.25	2805.58	-4856.71	-3.19
0.9 Dead+1.0 Wind 120 deg - No Ice	84.87	45.41	26.25	2776.19	-4803.68	-3.19
1.2 Dead+1.0 Wind 150 deg - No Ice	113.16	26.16	45.29	4860.54	-2818.63	-5.37
0.9 Dead+1.0 Wind 150 deg - No Ice	84.87	26.16	45.29	4809.87	-2786.58	-5.37
1.2 Dead+1.0 Wind 180 deg - No Ice	113.16	0.05	43.02	4931.93	-21.28	-3.39
0.9 Dead+1.0 Wind 180 deg - No Ice	84.87	0.05	43.02	4878.22	-18.13	-3.40
1.2 Dead+1.0 Wind 210 deg - No Ice	113.16	-20.93	36.33	4180.34	2393.30	-5.30
0.9 Dead+1.0 Wind 210 deg - No Ice	84.87	-20.93	36.33	4134.52	2370.22	-5.31
1.2 Dead+1.0 Wind 240 deg - No Ice	113.16	-36.61	20.93	2400.64	4189.06	-5.97
0.9 Dead+1.0 Wind 240 deg - No Ice	84.87	-36.61	20.93	2374.18	4146.55	-5.99
1.2 Dead+1.0 Wind 270 deg - No Ice	113.16	-46.56	-0.14	-18.50	5242.34	-3.69
0.9 Dead+1.0 Wind 270 deg - No Ice	84.87	-46.56	-0.14	-18.69	5189.63	-3.70
1.2 Dead+1.0 Wind 300 deg - No Ice	113.16	-45.66	-26.39	-2822.34	4867.63	3.18
0.9 Dead+1.0 Wind 300 deg - No Ice	84.87	-45.66	-26.39	-2793.59	4820.32	3.18
1.2 Dead+1.0 Wind 330 deg - No Ice	113.16	-26.03	-44.88	-4812.07	2783.34	5.02

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 330 deg - No Ice	84.87	-26.03	-44.88	-4762.63	2757.44	5.02
1.2 Dead+1.0 Ice+1.0 Temp	178.76	0.00	0.00	-2.04	-39.17	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	178.76	-0.07	-11.72	-1546.85	-30.80	0.92
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	178.76	5.72	-9.96	-1324.78	-798.22	1.74
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	178.76	9.93	-5.74	-764.97	-1357.65	2.13
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	178.76	12.29	0.00	-1.03	-1629.46	1.55
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	178.76	11.84	6.86	837.03	-1485.69	-0.29
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	178.76	6.78	11.78	1445.80	-872.47	-1.16
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	178.76	0.01	11.71	1541.29	-41.08	-1.02
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	178.76	-5.72	9.96	1319.46	718.99	-1.74
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	178.76	-10.01	5.72	756.28	1284.10	-2.03
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	178.76	-12.35	-0.05	-7.96	1554.45	-1.36
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	178.76	-11.85	-6.87	-842.28	1408.15	0.32
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	178.76	-6.81	-11.75	-1447.33	797.20	1.01
Dead+Wind 0 deg - Service	94.30	-0.05	-10.41	-1181.70	-2.75	0.77
Dead+Wind 30 deg - Service	94.30	5.10	-8.84	-1029.52	-603.29	1.30
Dead+Wind 60 deg - Service	94.30	8.84	-5.09	-593.17	-1040.95	1.53
Dead+Wind 90 deg - Service	94.30	11.12	0.01	2.97	-1268.32	1.00
Dead+Wind 120 deg - Service	94.30	11.06	6.40	679.85	-1182.31	-0.77
Dead+Wind 150 deg - Service	94.30	6.37	11.03	1177.19	-689.04	-1.30
Dead+Wind 180 deg - Service	94.30	0.01	10.48	1194.12	-12.02	-0.83
Dead+Wind 210 deg - Service	94.30	-5.10	8.85	1012.23	572.16	-1.30
Dead+Wind 240 deg - Service	94.30	-8.92	5.10	581.66	1006.64	-1.47
Dead+Wind 270 deg - Service	94.30	-11.34	-0.03	-3.63	1261.67	-0.92
Dead+Wind 300 deg - Service	94.30	-11.12	-6.43	-682.23	1171.21	0.76
Dead+Wind 330 deg - Service	94.30	-6.34	-10.93	-1163.77	666.75	1.22

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	-94.30	0.00	-0.00	94.30	-0.00	0.000%
2	-0.21	-113.16	-42.72	0.21	113.16	42.72	0.000%
3	-0.21	-84.87	-42.72	0.21	84.87	42.72	0.000%
4	20.93	-113.16	-36.29	-20.93	113.16	36.29	0.000%
5	20.93	-84.87	-36.29	-20.93	84.87	36.29	0.000%
6	36.27	-113.16	-20.91	-36.27	113.16	20.91	0.000%
7	36.27	-84.87	-20.91	-36.27	84.87	20.91	0.000%
8	45.66	-113.16	0.04	-45.66	113.16	-0.04	0.000%
9	45.66	-84.87	0.04	-45.66	84.87	-0.04	0.000%
10	45.41	-113.16	26.25	-45.41	113.16	-26.25	0.000%
11	45.41	-84.87	26.25	-45.41	84.87	-26.25	0.000%
12	26.16	-113.16	45.29	-26.16	113.16	-45.29	0.000%
13	26.16	-84.87	45.29	-26.16	84.87	-45.29	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
14	0.05	-113.16	43.02	-0.05	113.16	-43.02	0.000%
15	0.05	-84.87	43.02	-0.05	84.87	-43.02	0.000%
16	-20.93	-113.16	36.33	20.93	113.16	-36.33	0.000%
17	-20.93	-84.87	36.33	20.93	84.87	-36.33	0.000%
18	-36.61	-113.16	20.93	36.61	113.16	-20.93	0.000%
19	-36.61	-84.87	20.93	36.61	84.87	-20.93	0.000%
20	-46.56	-113.16	-0.14	46.56	113.16	0.14	0.000%
21	-46.56	-84.87	-0.14	46.56	84.87	0.14	0.000%
22	-45.66	-113.16	-26.39	45.66	113.16	26.39	0.000%
23	-45.66	-84.87	-26.39	45.66	84.87	26.39	0.000%
24	-26.03	-113.16	-44.88	26.03	113.16	44.88	0.000%
25	-26.03	-84.87	-44.88	26.03	84.87	44.88	0.000%
26	0.00	-178.76	0.00	-0.00	178.76	-0.00	0.000%
27	-0.07	-178.76	-11.72	0.07	178.76	11.72	0.000%
28	5.72	-178.76	-9.96	-5.72	178.76	9.96	0.000%
29	9.93	-178.76	-5.74	-9.93	178.76	5.74	0.000%
30	12.29	-178.76	0.00	-12.29	178.76	-0.00	0.000%
31	11.84	-178.76	6.86	-11.84	178.76	-6.86	0.000%
32	6.78	-178.76	11.78	-6.78	178.76	-11.78	0.000%
33	0.01	-178.76	11.71	-0.01	178.76	-11.71	0.000%
34	-5.72	-178.76	9.96	5.72	178.76	-9.96	0.000%
35	-10.01	-178.76	5.72	10.01	178.76	-5.72	0.000%
36	-12.35	-178.76	-0.05	12.35	178.76	0.05	0.000%
37	-11.85	-178.76	-6.87	11.85	178.76	6.87	0.000%
38	-6.81	-178.76	-11.75	6.81	178.76	11.75	0.000%
39	-0.05	-94.30	-10.41	0.05	94.30	10.41	0.000%
40	5.10	-94.30	-8.84	-5.10	94.30	8.84	0.000%
41	8.84	-94.30	-5.09	-8.84	94.30	5.09	0.000%
42	11.12	-94.30	0.01	-11.12	94.30	-0.01	0.000%
43	11.06	-94.30	6.40	-11.06	94.30	-6.40	0.000%
44	6.37	-94.30	11.03	-6.37	94.30	-11.03	0.000%
45	0.01	-94.30	10.48	-0.01	94.30	-10.48	0.000%
46	-5.10	-94.30	8.85	5.10	94.30	-8.85	0.000%
47	-8.92	-94.30	5.10	8.92	94.30	-5.10	0.000%
48	-11.34	-94.30	-0.03	11.34	94.30	0.03	0.000%
49	-11.12	-94.30	-6.43	11.12	94.30	6.43	0.000%
50	-6.34	-94.30	-10.93	6.34	94.30	10.93	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000922
2	Yes	5	0.00000001	0.00079782
3	Yes	5	0.00000001	0.00039848
4	Yes	6	0.00000001	0.00042929
5	Yes	6	0.00000001	0.00015978
6	Yes	6	0.00000001	0.00035933
7	Yes	6	0.00000001	0.00013192
8	Yes	5	0.00000001	0.00099283
9	Yes	5	0.00000001	0.00050106
10	Yes	6	0.00000001	0.00045873
11	Yes	6	0.00000001	0.00016572
12	Yes	6	0.00000001	0.00049294
13	Yes	6	0.00000001	0.00017883
14	Yes	5	0.00000001	0.00096285
15	Yes	5	0.00000001	0.00048509
16	Yes	6	0.00000001	0.00034369
17	Yes	6	0.00000001	0.00012669
18	Yes	6	0.00000001	0.00041434
19	Yes	6	0.00000001	0.00015484
20	Yes	5	0.00000001	0.00083390
21	Yes	5	0.00000001	0.00041678
22	Yes	6	0.00000001	0.00047001
23	Yes	6	0.00000001	0.00017046
24	Yes	6	0.00000001	0.00043719
25	Yes	6	0.00000001	0.00015831
26	Yes	5	0.00000001	0.00022228
27	Yes	6	0.00000001	0.00092010
28	Yes	7	0.00000001	0.00011765
29	Yes	7	0.00000001	0.00011736
30	Yes	6	0.00000001	0.00096266
31	Yes	7	0.00000001	0.00012522
32	Yes	7	0.00000001	0.00012532
33	Yes	6	0.00000001	0.00093736
34	Yes	6	0.00000001	0.00099175
35	Yes	6	0.00000001	0.00099176
36	Yes	6	0.00000001	0.00091577
37	Yes	7	0.00000001	0.00011821
38	Yes	7	0.00000001	0.00011846
39	Yes	5	0.00000001	0.00006872
40	Yes	5	0.00000001	0.00015308
41	Yes	5	0.00000001	0.00012101
42	Yes	5	0.00000001	0.00007562
43	Yes	5	0.00000001	0.00014725
44	Yes	5	0.00000001	0.00016774
45	Yes	5	0.00000001	0.00007223
46	Yes	5	0.00000001	0.00011494
47	Yes	5	0.00000001	0.00014946
48	Yes	5	0.00000001	0.00007210
49	Yes	5	0.00000001	0.00014828
50	Yes	5	0.00000001	0.00013538

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	191.667 - 186.667	21.804	44	1.0463	0.0065
L2	186.667 - 181.567	20.709	44	1.0449	0.0061
L3	181.567 - 176.567	19.594	44	1.0437	0.0059

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L4	176.567 - 171.567	18.502	44	1.0404	0.0058
L5	171.567 - 166.567	17.416	44	1.0330	0.0056
L6	166.567 - 161.567	16.341	44	1.0201	0.0055
L7	161.567 - 156.567	15.283	44	0.9999	0.0054
L8	156.567 - 151.567	14.250	44	0.9708	0.0050
L9	151.567 - 146.567	13.254	44	0.9297	0.0045
L10	146.567 - 141.567	12.308	44	0.8745	0.0039
L11	141.567 - 141.417	11.428	44	0.8028	0.0033
L12	141.417 - 136.417	11.403	44	0.8004	0.0033
L13	136.417 - 131.417	10.578	44	0.7745	0.0031
L14	131.417 - 126.417	9.783	44	0.7435	0.0029
L15	126.417 - 121.417	9.023	44	0.7073	0.0026
L16	121.417 - 121.167	8.303	44	0.6658	0.0022
L17	121.167 - 116.167	8.269	44	0.6636	0.0022
L18	116.167 - 111.167	7.589	44	0.6339	0.0020
L19	111.167 - 110.042	6.942	44	0.6003	0.0018
L20	110.042 - 109.792	6.802	44	0.5921	0.0017
L21	109.792 - 105.083	6.771	44	0.5907	0.0017
L22	105.083 - 104.833	6.202	44	0.5621	0.0016
L23	104.833 - 100.917	6.173	44	0.5608	0.0015
L24	100.917 - 100.667	5.722	44	0.5379	0.0014
L25	100.667 - 95.833	5.694	44	0.5364	0.0014
L26	95.833 - 95.583	5.166	44	0.5057	0.0013
L27	95.583 - 90.583	5.140	44	0.5044	0.0013
L28	90.583 - 89.917	4.626	44	0.4764	0.0011
L29	89.917 - 89.667	4.560	44	0.4725	0.0011
L30	89.667 - 84.667	4.535	44	0.4713	0.0011
L31	84.667 - 80.833	4.055	44	0.4454	0.0010
L32	80.833 - 80.333	3.706	44	0.4239	0.0009
L33	80.333 - 80.083	3.662	44	0.4218	0.0009
L34	80.083 - 75.083	3.640	44	0.4206	0.0009
L35	75.083 - 70.083	3.212	44	0.3955	0.0008
L36	70.083 - 69.5	2.812	44	0.3683	0.0008
L37	69.5 - 69.25	2.767	44	0.3650	0.0007
L38	69.25 - 64.25	2.748	44	0.3638	0.0007
L39	64.25 - 60.583	2.380	44	0.3390	0.0007
L40	60.583 - 60.333	2.127	44	0.3195	0.0006
L41	60.333 - 55.333	2.111	44	0.3184	0.0006
L42	55.333 - 52.167	1.789	44	0.2949	0.0006
L43	52.167 - 51.917	1.599	44	0.2791	0.0005
L44	51.917 - 46.917	1.584	44	0.2781	0.0005
L45	46.917 - 41.917	1.305	44	0.2563	0.0005
L46	41.917 - 40.233	1.048	44	0.2331	0.0004
L47	40.233 - 39.983	0.967	44	0.2246	0.0004
L48	39.983 - 34.983	0.956	44	0.2234	0.0004
L49	34.983 - 29.983	0.735	44	0.1970	0.0003
L50	29.983 - 28	0.544	44	0.1691	0.0003
L51	28 - 27.75	0.476	44	0.1576	0.0003

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L52	27.75 - 22.75	0.468	44	0.1563	0.0003
L53	22.75 - 20.083	0.317	44	0.1311	0.0002
L54	20.083 - 19.833	0.248	44	0.1170	0.0002
L55	19.833 - 17	0.242	44	0.1155	0.0002
L56	17 - 16.75	0.178	44	0.0977	0.0002
L57	16.75 - 11.65	0.173	44	0.0963	0.0002
L58	11.65 - 11.417	0.085	44	0.0682	0.0001
L59	11.417 - 9.396	0.082	44	0.0669	0.0001
L60	9.396 - 9.146	0.056	44	0.0553	0.0001
L61	9.146 - 4.833	0.053	44	0.0539	0.0001
L62	4.833 - 4.583	0.015	44	0.0299	0.0000
L63	4.583 - 0	0.014	44	0.0284	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
192.00	OGB4-900D	44	21.804	1.0463	0.0065	213132
191.67	Lightning Rod 5/8" x 4' on 4' Pole	44	21.804	1.0463	0.0065	213132
191.00	DB589-A	44	21.658	1.0461	0.0064	213132
181.00	AIR -32 B2A/B66AA w/ Mount Pipe	44	19.470	1.0435	0.0059	130344
178.00	4' ICE SHIELDS	44	18.815	1.0417	0.0058	69079
171.00	MX08FRO665-21 w/ Mount Pipe	44	17.294	1.0318	0.0056	27055
160.00	(2) NNHH-65B-R4 w/ Mount Pipe	44	14.956	0.9919	0.0053	10469
158.00	SRL-224NM-4	44	14.543	0.9802	0.0052	9024
151.00	SBNH-1D6565C w/ Mount Pipe	44	13.144	0.9242	0.0044	5807
150.00	RRUS 11	44	12.951	0.9140	0.0043	5477
138.00	4' ICE SHIELDS	44	10.836	0.7773	0.0031	9642
132.00	SRL-235-2	44	9.874	0.7479	0.0029	8701
124.00	PCS 1900 TMA RX	44	8.670	0.6881	0.0024	7192
120.00	VHLP2-18	44	8.107	0.6546	0.0022	8549
116.00	844G65VTZAS w/ Mount Pipe	44	7.567	0.6330	0.0020	9035
98.00	4' ICE SHIELDS	44	5.399	0.5190	0.0013	9300
90.00	KP2F-34	44	4.568	0.4730	0.0011	10569
70.00	SRL-235-2	44	2.806	0.3678	0.0008	10872
33.00	DB909XVTE-M	44	0.656	0.1864	0.0003	10315

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	191.667 - 186.667	89.680	12	4.2991	0.0265
L2	186.667 - 181.567	85.187	12	4.2951	0.0251
L3	181.567 - 176.567	80.608	12	4.2909	0.0244
L4	176.567 - 171.567	76.128	12	4.2782	0.0238
L5	171.567 - 166.567	71.669	12	4.2481	0.0231
L6	166.567 - 161.567	67.253	12	4.1951	0.0226
L7	161.567 - 156.567	62.907	12	4.1119	0.0221
L8	156.567 - 151.567	58.666	12	3.9927	0.0207
L9	151.567 - 146.567	54.574	12	3.8245	0.0185

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L10	146.567 - 141.567	50.686	12	3.5992	0.0160
L11	141.567 - 141.417	47.069	12	3.3053	0.0134
L12	141.417 - 136.417	46.965	12	3.2954	0.0134
L13	136.417 - 131.417	43.571	12	3.1889	0.0126
L14	131.417 - 126.417	40.300	12	3.0618	0.0118
L15	126.417 - 121.417	37.172	12	2.9132	0.0105
L16	121.417 - 121.167	34.211	12	2.7426	0.0092
L17	121.167 - 116.167	34.067	12	2.7335	0.0091
L18	116.167 - 111.167	31.269	12	2.6117	0.0082
L19	111.167 - 110.042	28.607	12	2.4734	0.0073
L20	110.042 - 109.792	28.028	12	2.4398	0.0071
L21	109.792 - 105.083	27.901	12	2.4340	0.0071
L22	105.083 - 104.833	25.558	12	2.3167	0.0064
L23	104.833 - 100.917	25.437	12	2.3109	0.0063
L24	100.917 - 100.667	23.581	12	2.2169	0.0058
L25	100.667 - 95.833	23.465	12	2.2107	0.0058
L26	95.833 - 95.583	21.291	12	2.0843	0.0052
L27	95.583 - 90.583	21.182	12	2.0788	0.0052
L28	90.583 - 89.917	19.065	12	1.9638	0.0047
L29	89.917 - 89.667	18.792	12	1.9476	0.0046
L30	89.667 - 84.667	18.690	12	1.9426	0.0046
L31	84.667 - 80.833	16.712	12	1.8358	0.0042
L32	80.833 - 80.333	15.273	12	1.7473	0.0038
L33	80.333 - 80.083	15.091	12	1.7386	0.0038
L34	80.083 - 75.083	15.000	12	1.7336	0.0038
L35	75.083 - 70.083	13.239	22	1.6302	0.0034
L36	70.083 - 69.5	11.592	22	1.5181	0.0031
L37	69.5 - 69.25	11.407	22	1.5044	0.0030
L38	69.25 - 64.25	11.329	22	1.4995	0.0030
L39	64.25 - 60.583	9.812	22	1.3971	0.0027
L40	60.583 - 60.333	8.770	22	1.3170	0.0025
L41	60.333 - 55.333	8.701	22	1.3124	0.0025
L42	55.333 - 52.167	7.378	22	1.2155	0.0022
L43	52.167 - 51.917	6.593	22	1.1506	0.0021
L44	51.917 - 46.917	6.533	22	1.1463	0.0021
L45	46.917 - 41.917	5.379	22	1.0568	0.0019
L46	41.917 - 40.233	4.322	22	0.9612	0.0017
L47	40.233 - 39.983	3.989	22	0.9263	0.0016
L48	39.983 - 34.983	3.941	22	0.9210	0.0016
L49	34.983 - 29.983	3.033	22	0.8125	0.0014
L50	29.983 - 28	2.242	22	0.6974	0.0012
L51	28 - 27.75	1.962	22	0.6498	0.0011
L52	27.75 - 22.75	1.928	22	0.6447	0.0011
L53	22.75 - 20.083	1.307	22	0.5405	0.0009
L54	20.083 - 19.833	1.021	22	0.4825	0.0008
L55	19.833 - 17	0.996	22	0.4762	0.0008
L56	17 - 16.75	0.735	22	0.4028	0.0006
L57	16.75 - 11.65	0.714	22	0.3971	0.0006
L58	11.65 - 11.417	0.352	22	0.2812	0.0004
L59	11.417 - 9.396	0.338	22	0.2758	0.0004
L60	9.396 - 9.146	0.231	22	0.2281	0.0003
L61	9.146 - 4.833	0.219	22	0.2224	0.0003
L62	4.833 - 4.583	0.063	22	0.1234	0.0002
L63	4.583 - 0	0.057	22	0.1172	0.0002

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
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Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
192.00	OGB4-900D	12	89.680	4.2991	0.0265	67676
191.67	Lightning Rod 5/8" x 4' on 4' Pole	12	89.680	4.2991	0.0265	67676
191.00	DB589-A	12	89.080	4.2986	0.0263	67676
181.00	AIR -32 B2A/B66AA w/ Mount Pipe	12	80.100	4.2901	0.0244	34789
178.00	4' ICE SHIELDS	12	77.410	4.2833	0.0240	17635
171.00	MX08FRO665-21 w/ Mount Pipe	12	71.166	4.2433	0.0231	6701
160.00	(2) NNHH-65B-R4 w/ Mount Pipe	12	61.565	4.0789	0.0218	2580
158.00	SRL-224NM-4	12	59.868	4.0313	0.0212	2231
151.00	SBNH-1D6565C w/ Mount Pipe	12	54.122	3.8020	0.0182	1434
150.00	RRUS 11	12	53.331	3.7605	0.0177	1352
138.00	4' ICE SHIELDS	12	44.633	3.2004	0.0126	2364
132.00	SRL-235-2	12	40.674	3.0799	0.0119	2133
124.00	PCS 1900 TMA RX	12	35.718	2.8343	0.0098	1761
120.00	VHLP2-18	12	33.403	2.6968	0.0088	2091
116.00	844G65VTZAS w/ Mount Pipe	12	31.178	2.6080	0.0082	2209
98.00	4' ICE SHIELDS	12	22.250	2.1389	0.0055	2266
90.00	KP2F-34	12	18.826	1.9495	0.0046	2573
70.00	SRL-235-2	22	11.565	1.5160	0.0031	2641
33.00	DB909XVTE-M	22	2.705	0.7685	0.0013	2502

Compression Checks

Pole Design Data

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
L1	191.667 - 186.667 (1)	P18x0.375	5.00	0.00	0.0	20.764 0	-0.72	784.88	0.001
L2	186.667 - 181.567 (2)	P24x0.375	5.10	0.00	0.0	27.832 5	-1.35	1052.07	0.001
L3	181.567 - 176.567 (3)	P24x0.375	5.00	0.00	0.0	27.832 5	-6.52	1052.07	0.006
L4	176.567 - 171.567 (4)	P24x0.375	5.00	0.00	0.0	27.832 5	-7.17	1052.07	0.007
L5	171.567 - 166.567 (5)	P24x0.375	5.00	0.00	0.0	27.832 5	-10.86	1052.07	0.010
L6	166.567 - 161.567 (6)	P24x0.375	5.00	0.00	0.0	27.832 5	-11.53	1052.07	0.011
L7	161.567 - 156.567 (7)	P24x0.375	5.00	0.00	0.0	27.832 5	-15.98	1052.07	0.015
L8	156.567 - 151.567 (8)	P24x0.375	5.00	0.00	0.0	27.832 5	-16.74	1052.07	0.016
L9	151.567 - 146.567 (9)	P24x0.375	5.00	0.00	0.0	27.832 5	-21.77	1052.07	0.021
L10	146.567 - 141.567 (10)	P24x0.375	5.00	0.00	0.0	27.832 5	-22.64	1052.07	0.022
L11	141.567 - 141.417 (11)	P24x0.375	0.15	0.00	0.0	27.832 5	-22.67	1052.07	0.022
L12	141.417 - 136.417 (12)	P36x0.375	5.00	0.00	0.0	41.969 7	-23.79	1490.10	0.016
L13	136.417 - 131.417 (13)	P36x0.375	5.00	0.00	0.0	41.969 7	-25.38	1490.10	0.017

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	131.417 - 126.417 (14)	P36x0.375	5.00	0.00	0.0	41.969 7	-26.53	1490.10	0.018
L15	126.417 - 121.417 (15)	P36x0.375	5.00	0.00	0.0	41.969 7	-28.73	1490.10	0.019
L16	121.417 - 121.167 (16)	P36x0.375	0.25	0.00	0.0	41.969 7	-28.81	1490.10	0.019
L17	121.167 - 116.167 (17)	P42x0.375	5.00	0.00	0.0	49.038 3	-30.26	1668.87	0.018
L18	116.167 - 111.167 (18)	P42x0.375	5.00	0.00	0.0	49.038 3	-35.37	1668.87	0.021
L19	111.167 - 110.042 (19)	P42x0.375	1.13	0.00	0.0	49.038 3	-35.69	1668.87	0.021
L20	110.042 - 109.792 (20)	P42x0.4875	0.25	0.00	0.0	63.577 5	-35.78	2332.13	0.015
L21	109.792 - 105.083 (21)	P42x0.4875	4.71	0.00	0.0	63.577 5	-37.47	2332.13	0.016
L22	105.083 - 104.833 (22)	P42x0.5625	0.25	0.00	0.0	73.226 1	-37.58	2767.95	0.014
L23	104.833 - 100.917 (23)	P42x0.5625	3.92	0.00	0.0	73.226 1	-40.04	2767.95	0.014
L24	100.917 - 100.667 (24)	P48x0.375	0.25	0.00	0.0	56.106 9	-40.15	1847.49	0.022
L25	100.667 - 95.833 (25)	P48x0.375	4.83	0.00	0.0	56.106 9	-42.03	1847.49	0.023
L26	95.833 - 95.583 (26)	P48x0.475	0.25	0.00	0.0	70.919 5	-42.13	2481.39	0.017
L27	95.583 - 90.583 (27)	P48x0.475	5.00	0.00	0.0	70.919 5	-43.96	2481.39	0.018
L28	90.583 - 89.917 (28)	P48x0.475	0.67	0.00	0.0	70.919 5	-44.38	2481.39	0.018
L29	89.917 - 89.667 (29)	P48x0.575	0.25	0.00	0.0	85.669 3	-44.49	3174.02	0.014
L30	89.667 - 84.667 (30)	P48x0.575	5.00	0.00	0.0	85.669 3	-47.37	3174.02	0.015
L31	84.667 - 80.833 (31)	P48x0.575	3.83	0.00	0.0	85.669 3	-50.59	3174.02	0.016
L32	80.833 - 80.333 (32)	P54x0.55	0.50	0.00	0.0	92.355 0	-50.98	3257.83	0.016
L33	80.333 - 80.083 (33)	P54x0.4875	0.25	0.00	0.0	81.955 8	-51.12	2797.17	0.018
L34	80.083 - 75.083 (34)	P54x0.4875	5.00	0.00	0.0	81.955 8	-53.65	2797.17	0.019
L35	75.083 - 70.083 (35)	P54x0.4875	5.00	0.00	0.0	81.955 8	-56.61	2797.17	0.020
L36	70.083 - 69.5 (36)	P54x0.4875	0.58	0.00	0.0	81.955 8	-57.28	2797.17	0.020
L37	69.5 - 69.25 (37)	P54x0.5875	0.25	0.00	0.0	98.582 7	-57.47	3545.23	0.016
L38	69.25 - 64.25 (38)	P54x0.5875	5.00	0.00	0.0	98.582 7	-63.89	3545.23	0.018
L39	64.25 - 60.583 (39)	P54x0.5875	3.67	0.00	0.0	98.582 7	-69.11	3545.23	0.019
L40	60.583 - 60.333 (40)	P60x0.5125	0.25	0.00	0.0	95.778 8	-69.32	3222.89	0.022
L41	60.333 - 55.333 (41)	P60x0.5125	5.00	0.00	0.0	95.778 8	-73.16	3222.89	0.023
L42	55.333 - 52.167 (42)	P60x0.5125	3.17	0.00	0.0	95.778 8	-74.69	3222.89	0.023
L43	52.167 - 51.917 (43)	P60x0.625	0.25	0.00	0.0	116.58 30	-74.84	4139.15	0.018
L44	51.917 - 46.917 (44)	P60x0.625	5.00	0.00	0.0	116.58 30	-77.99	4139.15	0.019
L45	46.917 - 41.917 (45)	P60x0.625	5.00	0.00	0.0	116.58 30	-82.02	4139.15	0.020
L46	41.917 - 40.233 (46)	P60x0.6	1.68	0.00	0.0	111.96 60	-83.32	3929.11	0.021
L47	40.233 - 39.983 (47)	P60x0.6	0.25	0.00	0.0	111.96 60	-83.52	3929.11	0.021

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
L48	39.983 - 34.983 (48)	P60x0.6	5.00	0.00	0.0	111.96 60	-87.25	3929.11	0.022
L49	34.983 - 29.983 (49)	P60x0.6	5.00	0.00	0.0	111.96 60	-90.65	3929.11	0.023
L50	29.983 - 28 (50)	P60x0.6	1.98	0.00	0.0	111.96 60	-91.74	3929.11	0.023
L51	28 - 27.75 (51)	P60x0.725	0.25	0.00	0.0	135.00 80	-91.92	5015.91	0.018
L52	27.75 - 22.75 (52)	P60x0.725	5.00	0.00	0.0	135.00 80	-96.10	5015.91	0.019
L53	22.75 - 20.083 (53)	P60x0.725	2.67	0.00	0.0	135.00 80	-98.36	5015.91	0.020
L54	20.083 - 19.833 (54)	P60x0.625	0.25	0.00	0.0	116.58 30	-98.56	4139.15	0.024
L55	19.833 - 17 (55)	P60x0.625	2.83	0.00	0.0	116.58 30	-100.75	4139.15	0.024
L56	17 - 16.75 (56)	P60x0.725	0.25	0.00	0.0	135.00 80	-100.98	5015.91	0.020
L57	16.75 - 11.65 (57)	P60x0.75	5.10	0.00	0.0	139.60 50	-105.28	5244.23	0.020
L58	11.65 - 11.417 (58)	P60x0.75	0.23	0.00	0.0	139.60 50	-105.45	5244.23	0.020
L59	11.417 - 9.396 (59)	P60x0.75	2.02	0.00	0.0	139.60 50	-106.83	5244.23	0.020
L60	9.396 - 9.146 (60)	P60x0.8	0.25	0.00	0.0	148.78 60	-107.01	5624.10	0.019
L61	9.146 - 4.833 (61)	P60x0.8	4.31	0.00	0.0	148.78 60	-110.07	5624.10	0.020
L62	4.833 - 4.583 (62)	P60x0.75	0.25	0.00	0.0	139.60 50	-110.25	5244.23	0.021
L63	4.583 - 0 (63)	P60x0.75	4.58	0.00	0.0	139.60 50	-113.15	5244.23	0.022

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{nx} kip-ft	Ratio M _{ux} / φM _{nx}	M _{uy} kip-ft	φM _{ny} kip-ft	Ratio M _{uy} / φM _{ny}
L1	191.667 - 186.667 (1)	P18x0.375	3.78	367.00	0.010	0.00	367.00	0.000
L2	186.667 - 181.567 (2)	P24x0.375	7.83	623.72	0.013	0.00	623.72	0.000
L3	181.567 - 176.567 (3)	P24x0.375	28.88	623.72	0.046	0.00	623.72	0.000
L4	176.567 - 171.567 (4)	P24x0.375	53.60	623.72	0.086	0.00	623.72	0.000
L5	171.567 - 166.567 (5)	P24x0.375	92.69	623.72	0.149	0.00	623.72	0.000
L6	166.567 - 161.567 (6)	P24x0.375	134.94	623.72	0.216	0.00	623.72	0.000
L7	161.567 - 156.567 (7)	P24x0.375	195.60	623.72	0.314	0.00	623.72	0.000
L8	156.567 - 151.567 (8)	P24x0.375	263.72	623.72	0.423	0.00	623.72	0.000
L9	151.567 - 146.567 (9)	P24x0.375	354.30	623.72	0.568	0.00	623.72	0.000
L10	146.567 - 141.567 (10)	P24x0.375	448.29	623.72	0.719	0.00	623.72	0.000
L11	141.567 - 141.417 (11)	P24x0.375	451.12	623.72	0.723	0.00	623.72	0.000
L12	141.417 - 136.417 (12)	P36x0.375	546.52	1338.81	0.408	0.00	1338.81	0.000
L13	136.417 - 131.417 (13)	P36x0.375	645.15	1338.81	0.482	0.00	1338.81	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 $\frac{M_{uy}}{\phi M_{ny}}$
L14	131.417 - 126.417 (14)	P36x0.375	746.48	1338.81	0.558	0.00	1338.81	0.000
L15	126.417 - 121.417 (15)	P36x0.375	850.62	1338.81	0.635	0.00	1338.81	0.000
L16	121.417 - 121.167 (16)	P36x0.375	855.93	1338.81	0.639	0.00	1338.81	0.000
L17	121.167 - 116.167 (17)	P42x0.375	963.85	1796.56	0.536	0.00	1796.56	0.000
L18	116.167 - 111.167 (18)	P42x0.375	1098.38	1796.56	0.611	0.00	1796.56	0.000
L19	111.167 - 110.042 (19)	P42x0.375	1128.46	1796.56	0.628	0.00	1796.56	0.000
L20	110.042 - 109.792 (20)	P42x0.4875	1135.18	2395.43	0.474	0.00	2395.43	0.000
L21	109.792 - 105.083 (21)	P42x0.4875	1264.43	2395.43	0.528	0.00	2395.43	0.000
L22	105.083 - 104.833 (22)	P42x0.5625	1271.43	2809.31	0.453	0.00	2809.31	0.000
L23	104.833 - 100.917 (23)	P42x0.5625	1383.30	2809.31	0.492	0.00	2809.31	0.000
L24	100.917 - 100.667 (24)	P48x0.375	1390.58	2321.11	0.599	0.00	2321.11	0.000
L25	100.667 - 95.833 (25)	P48x0.375	1534.42	2321.11	0.661	0.00	2321.11	0.000
L26	95.833 - 95.583 (26)	P48x0.475	1542.02	2999.96	0.514	0.00	2999.96	0.000
L27	95.583 - 90.583 (27)	P48x0.475	1697.11	2999.96	0.566	0.00	2999.96	0.000
L28	90.583 - 89.917 (28)	P48x0.475	1718.64	2999.96	0.573	0.00	2999.96	0.000
L29	89.917 - 89.667 (29)	P48x0.575	1726.64	3702.97	0.466	0.00	3702.97	0.000
L30	89.667 - 84.667 (30)	P48x0.575	1889.98	3702.97	0.510	0.00	3702.97	0.000
L31	84.667 - 80.833 (31)	P48x0.575	2019.59	3702.97	0.545	0.00	3702.97	0.000
L32	80.833 - 80.333 (32)	P54x0.55	2036.79	4408.41	0.462	0.00	4408.41	0.000
L33	80.333 - 80.083 (33)	P54x0.4875	2045.43	3864.47	0.529	0.00	3864.47	0.000
L34	80.083 - 75.083 (34)	P54x0.4875	2221.37	3864.47	0.575	0.00	3864.47	0.000
L35	75.083 - 70.083 (35)	P54x0.4875	2403.61	3864.47	0.622	0.00	3864.47	0.000
L36	70.083 - 69.5 (36)	P54x0.4875	2425.48	3864.47	0.628	0.00	3864.47	0.000
L37	69.5 - 69.25 (37)	P54x0.5875	2434.90	4739.87	0.514	0.00	4739.87	0.000
L38	69.25 - 64.25 (38)	P54x0.5875	2627.43	4739.87	0.554	0.00	4739.87	0.000
L39	64.25 - 60.583 (39)	P54x0.5875	2773.33	4739.87	0.585	0.00	4739.87	0.000
L40	60.583 - 60.333 (40)	P60x0.5125	2783.42	4992.04	0.558	0.00	4992.04	0.000
L41	60.333 - 55.333 (41)	P60x0.5125	2988.40	4992.04	0.599	0.00	4992.04	0.000
L42	55.333 - 52.167 (42)	P60x0.5125	3121.27	4992.04	0.625	0.00	4992.04	0.000
L43	52.167 - 51.917 (43)	P60x0.625	3131.86	6198.18	0.505	0.00	6198.18	0.000
L44	51.917 - 46.917 (44)	P60x0.625	3346.63	6198.18	0.540	0.00	6198.18	0.000
L45	46.917 - 41.917 (45)	P60x0.625	3567.12	6198.18	0.576	0.00	6198.18	0.000
L46	41.917 - 40.233 (46)	P60x0.6	3642.75	5926.84	0.615	0.00	5926.84	0.000
L47	40.233 - 39.983 (47)	P60x0.6	3654.03	5926.84	0.617	0.00	5926.84	0.000

Section No.	Elevation ft	Size	M_{ux}	ϕM_{nx}	Ratio	M_{uy} kip-ft	ϕM_{ny}	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{nx}}$		kip-ft	$\frac{M_{uy}}{\phi M_{ny}}$
L48	39.983 - 34.983 (48)	P60x0.6	3882.44	5926.84	0.655	0.00	5926.84	0.000
L49	34.983 - 29.983 (49)	P60x0.6	4117.12	5926.84	0.695	0.00	5926.84	0.000
L50	29.983 - 28 (50)	P60x0.6	4211.46	5926.84	0.711	0.00	5926.84	0.000
L51	28 - 27.75 (51)	P60x0.725	4223.41	7302.23	0.578	0.00	7302.23	0.000
L52	27.75 - 22.75 (52)	P60x0.725	4465.94	7302.23	0.612	0.00	7302.23	0.000
L53	22.75 - 20.083 (53)	P60x0.725	4597.27	7302.23	0.630	0.00	7302.23	0.000
L54	20.083 - 19.833 (54)	P60x0.625	4609.65	6198.18	0.744	0.00	6198.18	0.000
L55	19.833 - 17 (55)	P60x0.625	4750.73	6198.18	0.766	0.00	6198.18	0.000
L56	17 - 16.75 (56)	P60x0.725	4763.26	7302.23	0.652	0.00	7302.23	0.000
L57	16.75 - 11.65 (57)	P60x0.75	5021.18	7582.87	0.662	0.00	7582.87	0.000
L58	11.65 - 11.417 (58)	P60x0.75	5033.07	7582.87	0.664	0.00	7582.87	0.000
L59	11.417 - 9.396 (59)	P60x0.75	5136.65	7582.87	0.677	0.00	7582.87	0.000
L60	9.396 - 9.146 (60)	P60x0.8	5149.51	8149.65	0.632	0.00	8149.65	0.000
L61	9.146 - 4.833 (61)	P60x0.8	5373.02	8149.65	0.659	0.00	8149.65	0.000
L62	4.833 - 4.583 (62)	P60x0.75	5386.07	7582.87	0.710	0.00	7582.87	0.000
L63	4.583 - 0 (63)	P60x0.75	5626.67	7582.87	0.742	0.00	7582.87	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual	ϕV_n	Ratio	Actual	ϕT_n	Ratio
			V_u K	K	$\frac{V_u}{\phi V_n}$	T_u kip-ft	kip-ft	$\frac{T_u}{\phi T_n}$
L1	191.667 - 186.667 (1)	P18x0.375	0.63	235.46	0.003	0.12	364.87	0.000
L2	186.667 - 181.567 (2)	P24x0.375	0.94	315.62	0.003	0.12	655.57	0.000
L3	181.567 - 176.567 (3)	P24x0.375	4.79	315.62	0.015	0.13	655.57	0.000
L4	176.567 - 171.567 (4)	P24x0.375	5.08	315.62	0.016	0.13	655.57	0.000
L5	171.567 - 166.567 (5)	P24x0.375	8.30	315.62	0.026	0.22	655.57	0.000
L6	166.567 - 161.567 (6)	P24x0.375	8.58	315.62	0.027	0.22	655.57	0.000
L7	161.567 - 156.567 (7)	P24x0.375	13.49	315.62	0.043	0.47	655.57	0.001
L8	156.567 - 151.567 (8)	P24x0.375	13.74	315.62	0.044	0.47	655.57	0.001
L9	151.567 - 146.567 (9)	P24x0.375	18.70	315.62	0.059	0.03	655.57	0.000
L10	146.567 - 141.567 (10)	P24x0.375	18.89	315.62	0.060	0.03	655.57	0.000
L11	141.567 - 141.417 (11)	P24x0.375	18.89	315.62	0.060	0.03	655.57	0.000
L12	141.417 - 136.417 (12)	P36x0.375	19.29	454.19	0.042	0.01	1094.28	0.000
L13	136.417 - 131.417 (13)	P36x0.375	20.09	454.19	0.044	1.20	1094.28	0.001
L14	131.417 - 126.417 (14)	P36x0.375	20.42	454.19	0.045	1.20	1094.28	0.001

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 $\frac{T_u}{\phi T_n}$
L15	126.417 - 121.417 (15)	P36x0.375	21.23	454.19	0.047	1.23	1094.28	0.001
L16	121.417 - 121.167 (16)	P36x0.375	21.25	454.19	0.047	1.23	1094.28	0.001
L17	121.167 - 116.167 (17)	P42x0.375	21.75	421.13	0.052	1.57	1185.51	0.001
L18	116.167 - 111.167 (18)	P42x0.375	26.60	421.13	0.063	2.61	1185.51	0.002
L19	111.167 - 110.042 (19)	P42x0.375	26.85	421.13	0.064	2.62	1185.51	0.002
L20	110.042 - 109.792 (20)	P42x0.4875	26.90	720.97	0.037	2.62	2272.02	0.001
L21	109.792 - 105.083 (21)	P42x0.4875	27.98	720.97	0.039	2.64	2272.02	0.001
L22	105.083 - 104.833 (22)	P42x0.5625	28.04	830.38	0.034	2.64	3025.18	0.001
L23	104.833 - 100.917 (23)	P42x0.5625	29.07	830.38	0.035	2.69	3025.18	0.001
L24	100.917 - 100.667 (24)	P48x0.375	29.13	394.37	0.074	2.70	1270.22	0.002
L25	100.667 - 95.833 (25)	P48x0.375	30.37	394.37	0.077	3.05	1270.22	0.002
L26	95.833 - 95.583 (26)	P48x0.475	30.43	710.64	0.043	3.07	2284.06	0.001
L27	95.583 - 90.583 (27)	P48x0.475	31.59	710.64	0.044	3.42	2284.06	0.001
L28	90.583 - 89.917 (28)	P48x0.475	31.98	710.64	0.045	3.42	2284.06	0.001
L29	89.917 - 89.667 (29)	P48x0.575	32.04	971.49	0.033	2.97	3667.03	0.001
L30	89.667 - 84.667 (30)	P48x0.575	33.32	971.49	0.034	3.19	3667.03	0.001
L31	84.667 - 80.833 (31)	P48x0.575	34.37	971.49	0.035	3.37	3667.03	0.001
L32	80.833 - 80.333 (32)	P54x0.55	34.50	966.32	0.036	3.41	3493.03	0.001
L33	80.333 - 80.083 (33)	P54x0.4875	34.57	729.66	0.047	3.42	2639.00	0.001
L34	80.083 - 75.083 (34)	P54x0.4875	35.81	729.66	0.049	3.73	2639.00	0.001
L35	75.083 - 70.083 (35)	P54x0.4875	37.04	729.66	0.051	3.98	2639.00	0.002
L36	70.083 - 69.5 (36)	P54x0.4875	37.62	729.66	0.052	3.98	2639.00	0.002
L37	69.5 - 69.25 (37)	P54x0.5875	37.69	1117.93	0.034	2.40	4113.45	0.001
L38	69.25 - 64.25 (38)	P54x0.5875	39.17	1117.93	0.035	2.56	4113.45	0.001
L39	64.25 - 60.583 (39)	P54x0.5875	40.27	1117.93	0.036	2.65	4113.45	0.001
L40	60.583 - 60.333 (40)	P60x0.5125	40.32	838.76	0.048	2.66	3372.33	0.001
L41	60.333 - 55.333 (41)	P60x0.5125	41.61	838.76	0.050	2.84	3372.33	0.001
L42	55.333 - 52.167 (42)	P60x0.5125	42.31	838.76	0.050	3.03	3372.33	0.001
L43	52.167 - 51.917 (43)	P60x0.625	42.35	1308.39	0.032	3.05	5250.55	0.001
L44	51.917 - 46.917 (44)	P60x0.625	43.54	1308.39	0.033	3.35	5250.55	0.001
L45	46.917 - 41.917 (45)	P60x0.625	44.78	1308.39	0.034	3.61	5250.55	0.001
L46	41.917 - 40.233 (46)	P60x0.6	45.18	1194.07	0.038	3.70	4793.81	0.001
L47	40.233 - 39.983 (47)	P60x0.6	45.22	1194.07	0.038	3.72	4793.81	0.001
L48	39.983 - 34.983 (48)	P60x0.6	46.28	1194.07	0.039	3.95	4793.81	0.001

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 $\frac{T_u}{\phi T_n}$
L49	34.983 - 29.983 (49)	P60x0.6	47.40	1194.07	0.040	4.51	4793.81	0.001
L50	29.983 - 28 (50)	P60x0.6	47.77	1194.07	0.040	4.57	4793.81	0.001
L51	28 - 27.75 (51)	P60x0.725	47.78	1530.99	0.031	4.57	7317.32	0.001
L52	27.75 - 22.75 (52)	P60x0.725	49.08	1530.99	0.032	2.26	7317.32	0.000
L53	22.75 - 20.083 (53)	P60x0.725	49.59	1530.99	0.032	2.34	7317.32	0.000
L54	20.083 - 19.833 (54)	P60x0.625	49.62	1308.39	0.038	2.34	5250.55	0.000
L55	19.833 - 17 (55)	P60x0.625	50.16	1308.39	0.038	2.44	5250.55	0.000
L56	17 - 16.75 (56)	P60x0.725	50.18	1530.99	0.033	2.45	7317.32	0.000
L57	16.75 - 11.65 (57)	P60x0.75	51.12	1583.12	0.032	2.66	7957.82	0.000
L58	11.65 - 11.417 (58)	P60x0.75	51.14	1583.12	0.032	2.67	7957.82	0.000
L59	11.417 - 9.396 (59)	P60x0.75	51.50	1583.12	0.033	2.82	7957.82	0.000
L60	9.396 - 9.146 (60)	P60x0.8	51.52	1687.23	0.031	2.84	8781.67	0.000
L61	9.146 - 4.833 (61)	P60x0.8	52.26	1687.23	0.031	3.17	8781.67	0.000
L62	4.833 - 4.583 (62)	P60x0.75	52.28	1583.12	0.033	3.18	7957.82	0.000
L63	4.583 - 0 (63)	P60x0.75	52.77	1583.12	0.033	3.18	7957.82	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	191.667 - 186.667 (1)	0.001	0.010	0.000	0.003	0.000	0.011	1.050	4.8.2
L2	186.667 - 181.567 (2)	0.001	0.013	0.000	0.003	0.000	0.014	1.050	4.8.2
L3	181.567 - 176.567 (3)	0.006	0.046	0.000	0.015	0.000	0.053	1.050	4.8.2
L4	176.567 - 171.567 (4)	0.007	0.086	0.000	0.016	0.000	0.093	1.050	4.8.2
L5	171.567 - 166.567 (5)	0.010	0.149	0.000	0.026	0.000	0.160	1.050	4.8.2
L6	166.567 - 161.567 (6)	0.011	0.216	0.000	0.027	0.000	0.228	1.050	4.8.2
L7	161.567 - 156.567 (7)	0.015	0.314	0.000	0.043	0.001	0.331	1.050	4.8.2
L8	156.567 - 151.567 (8)	0.016	0.423	0.000	0.044	0.001	0.441	1.050	4.8.2
L9	151.567 - 146.567 (9)	0.021	0.568	0.000	0.059	0.000	0.592	1.050	4.8.2
L10	146.567 - 141.567 (10)	0.022	0.719	0.000	0.060	0.000	0.744	1.050	4.8.2
L11	141.567 - 141.417 (11)	0.022	0.723	0.000	0.060	0.000	0.748	1.050	4.8.2
L12	141.417 - 136.417 (12)	0.016	0.408	0.000	0.042	0.000	0.426	1.050	4.8.2
L13	136.417 - 131.417 (13)	0.017	0.482	0.000	0.044	0.001	0.501	1.050	4.8.2
L14	131.417 - 126.417 (14)	0.018	0.558	0.000	0.045	0.001	0.577	1.050	4.8.2
L15	126.417 - 121.417 (15)	0.019	0.635	0.000	0.047	0.001	0.657	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			
L16	121.417 - 121.167 (16)	0.019	0.639	0.000	0.047	0.001	0.661	1.050	4.8.2
L17	121.167 - 116.167 (17)	0.018	0.536	0.000	0.052	0.001	0.557	1.050	4.8.2
L18	116.167 - 111.167 (18)	0.021	0.611	0.000	0.063	0.002	0.637	1.050	4.8.2
L19	111.167 - 110.042 (19)	0.021	0.628	0.000	0.064	0.002	0.654	1.050	4.8.2
L20	110.042 - 109.792 (20)	0.015	0.474	0.000	0.037	0.001	0.491	1.050	4.8.2
L21	109.792 - 105.083 (21)	0.016	0.528	0.000	0.039	0.001	0.546	1.050	4.8.2
L22	105.083 - 104.833 (22)	0.014	0.453	0.000	0.034	0.001	0.467	1.050	4.8.2
L23	104.833 - 100.917 (23)	0.014	0.492	0.000	0.035	0.001	0.508	1.050	4.8.2
L24	100.917 - 100.667 (24)	0.022	0.599	0.000	0.074	0.002	0.627	1.050	4.8.2
L25	100.667 - 95.833 (25)	0.023	0.661	0.000	0.077	0.002	0.690	1.050	4.8.2
L26	95.833 - 95.583 (26)	0.017	0.514	0.000	0.043	0.001	0.533	1.050	4.8.2
L27	95.583 - 90.583 (27)	0.018	0.566	0.000	0.044	0.001	0.586	1.050	4.8.2
L28	90.583 - 89.917 (28)	0.018	0.573	0.000	0.045	0.001	0.593	1.050	4.8.2
L29	89.917 - 89.667 (29)	0.014	0.466	0.000	0.033	0.001	0.481	1.050	4.8.2
L30	89.667 - 84.667 (30)	0.015	0.510	0.000	0.034	0.001	0.527	1.050	4.8.2
L31	84.667 - 80.833 (31)	0.016	0.545	0.000	0.035	0.001	0.563	1.050	4.8.2
L32	80.833 - 80.333 (32)	0.016	0.462	0.000	0.036	0.001	0.479	1.050	4.8.2
L33	80.333 - 80.083 (33)	0.018	0.529	0.000	0.047	0.001	0.550	1.050	4.8.2
L34	80.083 - 75.083 (34)	0.019	0.575	0.000	0.049	0.001	0.597	1.050	4.8.2
L35	75.083 - 70.083 (35)	0.020	0.622	0.000	0.051	0.002	0.645	1.050	4.8.2
L36	70.083 - 69.5 (36)	0.020	0.628	0.000	0.052	0.002	0.651	1.050	4.8.2
L37	69.5 - 69.25 (37)	0.016	0.514	0.000	0.034	0.001	0.531	1.050	4.8.2
L38	69.25 - 64.25 (38)	0.018	0.554	0.000	0.035	0.001	0.574	1.050	4.8.2
L39	64.25 - 60.583 (39)	0.019	0.585	0.000	0.036	0.001	0.606	1.050	4.8.2
L40	60.583 - 60.333 (40)	0.022	0.558	0.000	0.048	0.001	0.581	1.050	4.8.2
L41	60.333 - 55.333 (41)	0.023	0.599	0.000	0.050	0.001	0.624	1.050	4.8.2
L42	55.333 - 52.167 (42)	0.023	0.625	0.000	0.050	0.001	0.651	1.050	4.8.2
L43	52.167 - 51.917 (43)	0.018	0.505	0.000	0.032	0.001	0.524	1.050	4.8.2
L44	51.917 - 46.917 (44)	0.019	0.540	0.000	0.033	0.001	0.560	1.050	4.8.2
L45	46.917 - 41.917 (45)	0.020	0.576	0.000	0.034	0.001	0.597	1.050	4.8.2
L46	41.917 - 40.233 (46)	0.021	0.615	0.000	0.038	0.001	0.637	1.050	4.8.2
L47	40.233 - 39.983 (47)	0.021	0.617	0.000	0.038	0.001	0.639	1.050	4.8.2
L48	39.983 - 34.983 (48)	0.022	0.655	0.000	0.039	0.001	0.679	1.050	4.8.2
L49	34.983 - 29.983 (49)	0.023	0.695	0.000	0.040	0.001	0.719	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			
L50	29.983 - 28 (50)	0.023	0.711	0.000	0.040	0.001	0.736	1.050	4.8.2
L51	28 - 27.75 (51)	0.018	0.578	0.000	0.031	0.001	0.598	1.050	4.8.2
L52	27.75 - 22.75 (52)	0.019	0.612	0.000	0.032	0.000	0.632	1.050	4.8.2
L53	22.75 - 20.083 (53)	0.020	0.630	0.000	0.032	0.000	0.650	1.050	4.8.2
L54	20.083 - 19.833 (54)	0.024	0.744	0.000	0.038	0.000	0.769	1.050	4.8.2
L55	19.833 - 17 (55)	0.024	0.766	0.000	0.038	0.000	0.792	1.050	4.8.2
L56	17 - 16.75 (56)	0.020	0.652	0.000	0.033	0.000	0.674	1.050	4.8.2
L57	16.75 - 11.65 (57)	0.020	0.662	0.000	0.032	0.000	0.683	1.050	4.8.2
L58	11.65 - 11.417 (58)	0.020	0.664	0.000	0.032	0.000	0.685	1.050	4.8.2
L59	11.417 - 9.396 (59)	0.020	0.677	0.000	0.033	0.000	0.699	1.050	4.8.2
L60	9.396 - 9.146 (60)	0.019	0.632	0.000	0.031	0.000	0.652	1.050	4.8.2
L61	9.146 - 4.833 (61)	0.020	0.659	0.000	0.031	0.000	0.680	1.050	4.8.2
L62	4.833 - 4.583 (62)	0.021	0.710	0.000	0.033	0.000	0.732	1.050	4.8.2
L63	4.583 - 0 (63)	0.022	0.742	0.000	0.033	0.000	0.765	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	191.667 - 186.667	Pole	P18x0.375	1	-0.72	824.12	1.1	Pass
L2	186.667 - 181.567	Pole	P24x0.375	2	-1.35	1104.67	1.3	Pass
L3	181.567 - 176.567	Pole	P24x0.375	3	-6.52	1104.67	5.0	Pass
L4	176.567 - 171.567	Pole	P24x0.375	4	-7.17	1104.67	8.9	Pass
L5	171.567 - 166.567	Pole	P24x0.375	5	-10.86	1104.67	15.2	Pass
L6	166.567 - 161.567	Pole	P24x0.375	6	-11.53	1104.67	21.7	Pass
L7	161.567 - 156.567	Pole	P24x0.375	7	-15.98	1104.67	31.5	Pass
L8	156.567 - 151.567	Pole	P24x0.375	8	-16.74	1104.67	42.0	Pass
L9	151.567 - 146.567	Pole	P24x0.375	9	-21.77	1104.67	56.4	Pass
L10	146.567 - 141.567	Pole	P24x0.375	10	-22.64	1104.67	70.8	Pass
L11	141.567 - 141.417	Pole	P24x0.375	11	-22.67	1104.67	71.3	Pass
L12	141.417 - 136.417	Pole	P36x0.375	12	-23.79	1564.60	40.6	Pass
L13	136.417 - 131.417	Pole	P36x0.375	13	-25.38	1564.60	47.7	Pass
L14	131.417 - 126.417	Pole	P36x0.375	14	-26.53	1564.60	55.0	Pass
L15	126.417 - 121.417	Pole	P36x0.375	15	-28.73	1564.60	62.6	Pass
L16	121.417 - 121.167	Pole	P36x0.375	16	-28.81	1564.60	62.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
L17	121.167 - 116.167	Pole	P42x0.375	17	-30.26	1752.31	53.1	Pass	
L18	116.167 - 111.167	Pole	P42x0.375	18	-35.37	1752.31	60.7	Pass	
L19	111.167 - 110.042	Pole	P42x0.375	19	-35.69	1752.31	62.3	Pass	
L20	110.042 - 109.792	Pole	P42x0.4875	20	-35.78	2448.74	46.7	Pass	
L21	109.792 - 105.083	Pole	P42x0.4875	21	-37.47	2448.74	52.0	Pass	
L22	105.083 - 104.833	Pole	P42x0.5625	22	-37.58	2906.35	44.5	Pass	
L23	104.833 - 100.917	Pole	P42x0.5625	23	-40.04	2906.35	48.4	Pass	
L24	100.917 - 100.667	Pole	P48x0.375	24	-40.15	1939.86	59.7	Pass	
L25	100.667 - 95.833	Pole	P48x0.375	25	-42.03	1939.86	65.7	Pass	
L26	95.833 - 95.583	Pole	P48x0.475	26	-42.13	2605.46	50.8	Pass	
L27	95.583 - 90.583	Pole	P48x0.475	27	-43.96	2605.46	55.8	Pass	
L28	90.583 - 89.917	Pole	P48x0.475	28	-44.38	2605.46	56.5	Pass	
L29	89.917 - 89.667	Pole	P48x0.575	29	-44.49	3332.72	45.9	Pass	
L30	89.667 - 84.667	Pole	P48x0.575	30	-47.37	3332.72	50.1	Pass	
L31	84.667 - 80.833	Pole	P48x0.575	31	-50.59	3332.72	53.6	Pass	
L32	80.833 - 80.333	Pole	P54x0.55	32	-50.98	3420.72	45.6	Pass	
L33	80.333 - 80.083	Pole	P54x0.4875	33	-51.12	2937.03	52.4	Pass	
L34	80.083 - 75.083	Pole	P54x0.4875	34	-53.65	2937.03	56.8	Pass	
L35	75.083 - 70.083	Pole	P54x0.4875	35	-56.61	2937.03	61.4	Pass	
L36	70.083 - 69.5	Pole	P54x0.4875	36	-57.28	2937.03	62.0	Pass	
L37	69.5 - 69.25	Pole	P54x0.5875	37	-57.47	3722.49	50.6	Pass	
L38	69.25 - 64.25	Pole	P54x0.5875	38	-63.89	3722.49	54.6	Pass	
L39	64.25 - 60.583	Pole	P54x0.5875	39	-69.11	3722.49	57.7	Pass	
L40	60.583 - 60.333	Pole	P60x0.5125	40	-69.32	3384.03	55.4	Pass	
L41	60.333 - 55.333	Pole	P60x0.5125	41	-73.16	3384.03	59.4	Pass	
L42	55.333 - 52.167	Pole	P60x0.5125	42	-74.69	3384.03	62.0	Pass	
L43	52.167 - 51.917	Pole	P60x0.625	43	-74.84	4346.11	49.9	Pass	
L44	51.917 - 46.917	Pole	P60x0.625	44	-77.99	4346.11	53.3	Pass	
L45	46.917 - 41.917	Pole	P60x0.625	45	-82.02	4346.11	56.8	Pass	
L46	41.917 - 40.233	Pole	P60x0.6	46	-83.32	4125.57	60.7	Pass	
L47	40.233 - 39.983	Pole	P60x0.6	47	-83.52	4125.57	60.9	Pass	
L48	39.983 - 34.983	Pole	P60x0.6	48	-87.25	4125.57	64.7	Pass	
L49	34.983 - 29.983	Pole	P60x0.6	49	-90.65	4125.57	68.5	Pass	
L50	29.983 - 28	Pole	P60x0.6	50	-91.74	4125.57	70.1	Pass	
L51	28 - 27.75	Pole	P60x0.725	51	-91.92	5266.71	56.9	Pass	
L52	27.75 - 22.75	Pole	P60x0.725	52	-96.10	5266.71	60.2	Pass	
L53	22.75 - 20.083	Pole	P60x0.725	53	-98.36	5266.71	61.9	Pass	
L54	20.083 - 19.833	Pole	P60x0.625	54	-98.56	4346.11	73.2	Pass	
L55	19.833 - 17	Pole	P60x0.625	55	-100.75	4346.11	75.5	Pass	
L56	17 - 16.75	Pole	P60x0.725	56	-100.98	5266.71	64.1	Pass	
L57	16.75 - 11.65	Pole	P60x0.75	57	-105.28	5506.44	65.1	Pass	
L58	11.65 - 11.417	Pole	P60x0.75	58	-105.45	5506.44	65.2	Pass	
L59	11.417 - 9.396	Pole	P60x0.75	59	-106.83	5506.44	66.6	Pass	
L60	9.396 - 9.146	Pole	P60x0.8	60	-107.01	5905.30	62.1	Pass	
L61	9.146 - 4.833	Pole	P60x0.8	61	-110.07	5905.30	64.7	Pass	
L62	4.833 - 4.583	Pole	P60x0.75	62	-110.25	5506.44	69.8	Pass	
L63	4.583 - 0	Pole	P60x0.75	63	-113.15	5506.44	72.8	Pass	
							Summary		
							Pole (L55)	75.5	Pass
							RATING =	75.5	Pass

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

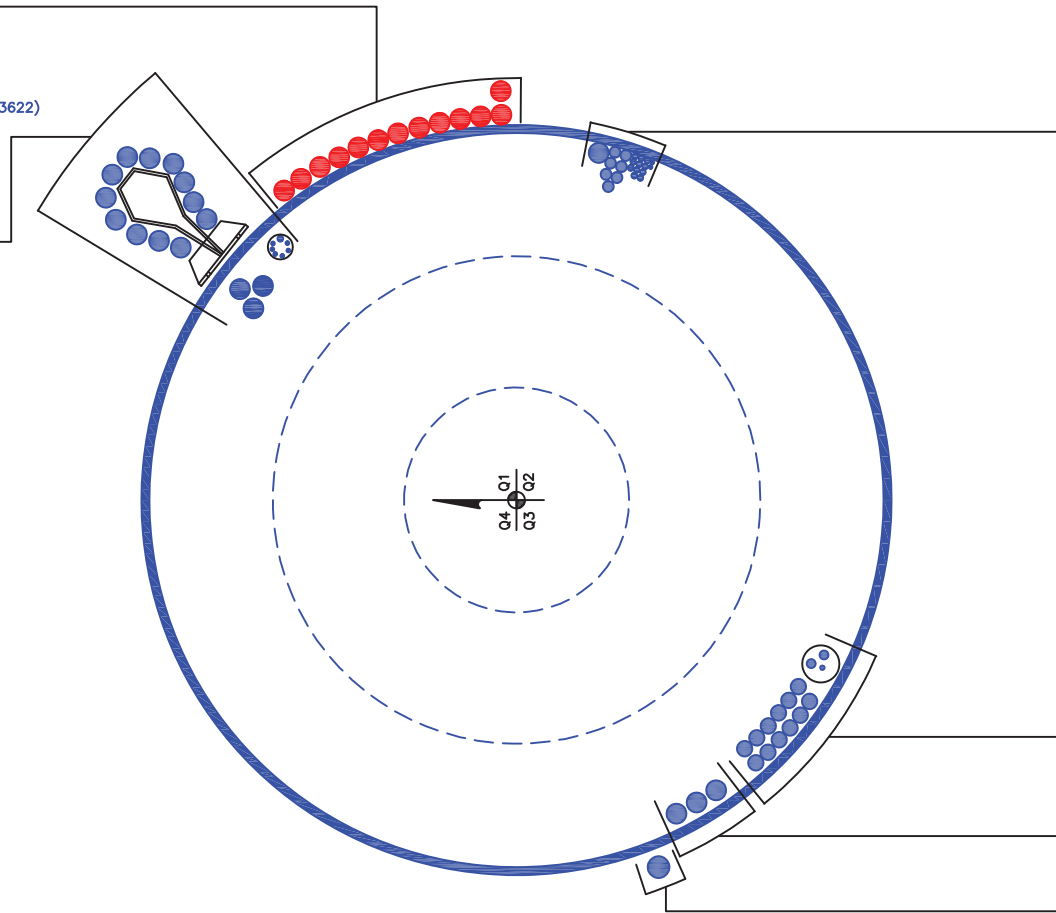
APPENDIX B
BASE LEVEL DRAWING



(PROPOSED EQUIPMENT CONFIGURATION)
(13) 1-5/8" TO 160 FT LEVEL

(OTHER CONSIDERED EQUIPMENT—IN CONDUIT—443622)
(6) 5/16" TO 116 FT LEVEL
(1) 1/2" TO 116 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(3) 1-5/8" TO 116 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(12) 1-5/8" TO 116 FT LEVEL



APPENDIX C
ADDITIONAL CALCULATIONS

Site BU: 826217
Work Order: 2028612



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Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	191.667	10.084		0	18	18	0.375		A53-B-42
2	181.583	40.166		0	24.00	24	0.375		A53-B-42
3	141.417	20.25		0	36.00	36	0.375		A53-B-42
4	121.167	20.25		0	42.00	42	0.375		A53-B-42
5	100.917	20.084		0	48.00	48	0.375		A53-B-42
6	80.833	20.25		0	54.00	54	0.375		A53-B-42
7	60.583	20.25		0	60.00	60	0.375		A53-B-42
8	40.333	20.25		0	60.00	60	0.5		A53-B-42
9	20.083	20.083		0	60.00	60	0.625		A53-B-42

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	0	9.396	plate	CCI-AFP-040075	2				70													313		
2	20.083	40.33	plate	CCI-SFP-060100	3				66						189							312		
3	40.333	60.583	plate	CCI-SFP-065125	3				67.5						188							307		
4	60.583	80.333	plate	CCI-SFP-060100	3				67.5						190							307		
5	80.333	89.917	plate	CCI-SFP-045100	3				72						192							312		
6	100.917	105.083	plate	CCI-AFP-040075	3			53						178								303		
7	4.833	11.667	plate	CCI-AFP-040075	1										198									
8	0	17	plate	CCI-SFP-060100	4		36				113						223				294			
9	20.083	28	plate	CCI-SFP-060100	4			53					157					247				339		
10	40.333	52.167	plate	CCI-SFP-060100	4		36				126						234				294			
11	60.583	69.5	plate	CCI-SFP-045100	4				80				155					254						341
12	80.333	95.833	plate	CCI-SFP-045100	3					93						213						333		
13	100.917	110.042	plate	CCI-SFP-045100	3		30							150						270				
14																								

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	4	0.75	3	0.375	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	16.000	2.063	1.1875	A572-65
2	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
3	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
4	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
5	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
6	4	0.75	3	0.375	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	16.000	2.063	1.1875	A572-65
7	4	0.75	3	0.375	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	16.000	2.063	1.1875	A572-65
8	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
9	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
10	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
11	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
12	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
13	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65

TNX Geometry Input

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

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	191.667 - 186.667	5	0	0	18.000	18.000	0.375	A53-B-42	1.000
2	186.667 - 181.567	5.1		0	24.000	24.000	0.375	A53-B-42	1.000
3	181.567 - 176.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
4	176.567 - 171.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
5	171.567 - 166.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
6	166.567 - 161.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
7	161.567 - 156.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
8	156.567 - 151.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
9	151.567 - 146.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
10	146.567 - 141.567	5		0	24.000	24.000	0.375	A53-B-42	1.000
11	141.567 - 141.417	0.15	0	0	24.000	24.000	0.375	A53-B-42	1.000
12	141.417 - 136.417	5		0	36.000	36.000	0.375	A53-B-42	1.000
13	136.417 - 131.417	5		0	36.000	36.000	0.375	A53-B-42	1.000
14	131.417 - 126.417	5		0	36.000	36.000	0.375	A53-B-42	1.000
15	126.417 - 121.417	5		0	36.000	36.000	0.375	A53-B-42	1.000
16	121.417 - 121.167	0.25	0	0	36.000	36.000	0.375	A53-B-42	1.000
17	121.167 - 116.167	5		0	42.000	42.000	0.375	A53-B-42	1.000
18	116.167 - 111.167	5		0	42.000	42.000	0.375	A53-B-42	1.000
19	111.167 - 110.042	1.125		0	42.000	42.000	0.375	A53-B-42	1.000
20	110.042 - 109.792	0.25		0	42.000	42.000	0.4875	A53-B-42	0.984
21	109.792 - 105.083	4.709		0	42.000	42.000	0.4875	A53-B-42	0.984
22	105.083 - 104.833	0.25		0	42.000	42.000	0.5625	A53-B-42	0.977
23	104.833 - 100.917	3.916	0	0	42.000	42.000	0.5625	A53-B-42	0.977
24	100.917 - 100.667	0.25		0	48.000	48.000	0.375	A53-B-42	1.000
25	100.667 - 95.833	4.834		0	48.000	48.000	0.375	A53-B-42	1.000
26	95.833 - 95.583	0.25		0	48.000	48.000	0.475	A53-B-42	0.981
27	95.583 - 90.583	5		0	48.000	48.000	0.475	A53-B-42	0.981
28	90.583 - 89.917	0.666		0	48.000	48.000	0.475	A53-B-42	0.981
29	89.917 - 89.667	0.25		0	48.000	48.000	0.575	A53-B-42	0.970
30	89.667 - 84.667	5		0	48.000	48.000	0.575	A53-B-42	0.970
31	84.667 - 80.833	3.834	0	0	48.000	48.000	0.575	A53-B-42	0.970
32	80.833 - 80.333	0.5		0	54.000	54.000	0.55	A53-B-42	0.976
33	80.333 - 80.083	0.25		0	54.000	54.000	0.4875	A53-B-42	0.990
34	80.083 - 75.083	5		0	54.000	54.000	0.4875	A53-B-42	0.990
35	75.083 - 70.083	5		0	54.000	54.000	0.4875	A53-B-42	0.990
36	70.083 - 69.5	0.583		0	54.000	54.000	0.4875	A53-B-42	0.990
37	69.5 - 69.25	0.25		0	54.000	54.000	0.5875	A53-B-42	1.006
38	69.25 - 64.25	5		0	54.000	54.000	0.5875	A53-B-42	1.006
39	64.25 - 60.583	3.667	0	0	54.000	54.000	0.5875	A53-B-42	1.006
40	60.583 - 60.333	0.25		0	60.000	60.000	0.5125	A53-B-42	0.988
41	60.333 - 55.333	5		0	60.000	60.000	0.5125	A53-B-42	0.988
42	55.333 - 52.167	3.166		0	60.000	60.000	0.5125	A53-B-42	0.988
43	52.167 - 51.917	0.25		0	60.000	60.000	0.625	A53-B-42	1.017
44	51.917 - 46.917	5		0	60.000	60.000	0.625	A53-B-42	1.017
45	46.917 - 41.917	5	0	0	60.000	60.000	0.625	A53-B-42	1.017
46	41.917 - 40.233	1.684		0	60.000	60.000	0.6	A53-B-42	0.995
47	40.233 - 39.983	0.25		0	60.000	60.000	0.6	A53-B-42	0.995
48	39.983 - 34.983	5		0	60.000	60.000	0.6	A53-B-42	0.995
49	34.983 - 29.983	5		0	60.000	60.000	0.6	A53-B-42	0.995
50	29.983 - 28	1.983		0	60.000	60.000	0.6	A53-B-42	0.995
51	28 - 27.75	0.25		0	60.000	60.000	0.725	A53-B-42	1.003
52	27.75 - 22.75	5		0	60.000	60.000	0.725	A53-B-42	1.003
53	22.75 - 20.083	2.667	0	0	60.000	60.000	0.725	A53-B-42	1.003
54	20.083 - 19.833	0.25		0	60.000	60.000	0.625	A53-B-42	1.000
55	19.833 - 17	2.833		0	60.000	60.000	0.625	A53-B-42	1.000
56	17 - 16.75	0.25		0	60.000	60.000	0.725	A53-B-42	1.041
57	16.75 - 11.65	5.1		0	60.000	60.000	0.75	A53-B-42	1.028
58	11.65 - 11.417	0.233		0	60.000	60.000	0.75	A53-B-42	1.028
59	11.417 - 9.396	2.021		0	60.000	60.000	0.75	A53-B-42	1.028
60	9.396 - 9.146	0.25		0	60.000	60.000	0.8	A53-B-42	1.005
61	9.146 - 4.833	4.313		0	60.000	60.000	0.8	A53-B-42	1.005
62	4.833 - 4.583	0.25		0	60.000	60.000	0.75	A53-B-42	1.050
63	4.583 - 0	4.583		0	60.000	60.000	0.75	A53-B-42	1.050

TNX Section Forces

Increment (ft):		5	TNX Output		
	Section Height (ft)		P _u (K)	M _{ux} (kip-ft)	V _u (K)
1	191.667 - 186.667		0.72	3.78	0.63
2	186.667 - 181.567		1.35	7.83	0.94
3	181.567 - 176.567		6.52	28.88	4.79
4	176.567 - 171.567		7.17	53.60	5.08
5	171.567 - 166.567		10.86	92.69	8.30
6	166.567 - 161.567		11.53	134.94	8.58
7	161.567 - 156.567		15.98	195.60	13.49
8	156.567 - 151.567		16.74	263.72	13.74
9	151.567 - 146.567		21.77	354.30	18.70
10	146.567 - 141.567		22.64	448.29	18.89
11	141.567 - 141.417		22.67	451.12	18.89
12	141.417 - 136.417		23.79	546.52	19.29
13	136.417 - 131.417		25.38	645.15	20.09
14	131.417 - 126.417		26.53	746.47	20.42
15	126.417 - 121.417		28.73	850.62	21.23
16	121.417 - 121.167		28.81	855.93	21.25
17	121.167 - 116.167		30.26	963.85	21.75
18	116.167 - 111.167		35.37	1098.38	26.60
19	111.167 - 110.042		35.69	1128.45	26.85
20	110.042 - 109.792		35.78	1135.18	26.90
21	109.792 - 105.083		37.47	1264.43	27.98
22	105.083 - 104.833		37.58	1271.43	28.04
23	104.833 - 100.917		40.04	1383.30	29.07
24	100.917 - 100.667		40.15	1390.58	29.13
25	100.667 - 95.833		42.03	1534.42	30.37
26	95.833 - 95.583		42.13	1542.02	30.43
27	95.583 - 90.583		43.96	1697.11	31.59
28	90.583 - 89.917		44.38	1718.64	31.98
29	89.917 - 89.667		44.49	1726.64	32.04
30	89.667 - 84.667		47.37	1889.98	33.32
31	84.667 - 80.833		50.59	2019.59	34.37
32	80.833 - 80.333		50.98	2036.79	34.50
33	80.333 - 80.083		51.12	2045.43	34.57
34	80.083 - 75.083		53.65	2221.37	35.81
35	75.083 - 70.083		56.61	2403.61	37.04
36	70.083 - 69.5		57.28	2425.48	37.62
37	69.5 - 69.25		57.47	2434.90	37.69
38	69.25 - 64.25		63.89	2627.43	39.17
39	64.25 - 60.583		69.11	2773.34	40.27
40	60.583 - 60.333		69.32	2783.42	40.32
41	60.333 - 55.333		73.16	2988.40	41.61
42	55.333 - 52.167		74.69	3121.27	42.31
43	52.167 - 51.917		74.84	3131.86	42.35
44	51.917 - 46.917		77.99	3346.63	43.54
45	46.917 - 41.917		82.02	3567.12	44.78
46	41.917 - 40.233		83.32	3642.75	45.18
47	40.233 - 39.983		83.52	3654.03	45.22
48	39.983 - 34.983		87.25	3882.44	46.28
49	34.983 - 29.983		90.65	4117.11	47.40
50	29.983 - 28		91.74	4211.46	47.77
51	28 - 27.75		91.91	4223.41	48.09
52	27.75 - 22.75		96.10	4465.94	49.08
53	22.75 - 20.083		98.36	4597.27	49.59
54	20.083 - 19.833		98.56	4609.65	49.62
55	19.833 - 17		100.75	4750.74	50.16
56	17 - 16.75		100.98	4763.26	50.18
57	16.75 - 11.65		105.28	5021.18	51.12
58	11.65 - 11.417		105.45	5033.07	51.14
59	11.417 - 9.396		106.83	5136.65	51.50
60	9.396 - 9.146		107.01	5149.51	51.52
61	9.146 - 4.833		110.07	5373.02	52.26
62	4.833 - 4.583		110.25	5386.07	52.28
63	4.583 - 0		113.15	5626.67	52.77

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
191.67 - 186.67	Pole	TP18x18x0.375	Pole	1.1%	Pass
186.67 - 181.57	Pole	TP24x24x0.375	Pole	1.3%	Pass
181.57 - 176.57	Pole	TP24x24x0.375	Pole	5.0%	Pass
176.57 - 171.57	Pole	TP24x24x0.375	Pole	8.9%	Pass
171.57 - 166.57	Pole	TP24x24x0.375	Pole	15.2%	Pass
166.57 - 161.57	Pole	TP24x24x0.375	Pole	21.7%	Pass
161.57 - 156.57	Pole	TP24x24x0.375	Pole	31.5%	Pass
156.57 - 151.57	Pole	TP24x24x0.375	Pole	42.0%	Pass
151.57 - 146.57	Pole	TP24x24x0.375	Pole	56.4%	Pass
146.57 - 141.57	Pole	TP24x24x0.375	Pole	70.8%	Pass
141.57 - 141.42	Pole	TP24x24x0.375	Pole	71.3%	Pass
141.42 - 136.42	Pole	TP36x36x0.375	Pole	40.6%	Pass
136.42 - 131.42	Pole	TP36x36x0.375	Pole	47.7%	Pass
131.42 - 126.42	Pole	TP36x36x0.375	Pole	55.0%	Pass
126.42 - 121.42	Pole	TP36x36x0.375	Pole	62.6%	Pass
121.42 - 121.17	Pole	TP36x36x0.375	Pole	62.9%	Pass
121.17 - 116.17	Pole	TP42x42x0.375	Pole	53.0%	Pass
116.17 - 111.17	Pole	TP42x42x0.375	Pole	60.5%	Pass
111.17 - 110.04	Pole	TP42x42x0.375	Pole	62.1%	Pass
110.04 - 109.79	Pole + Reinf.	TP42x42x0.4875	Reinf. 13 Tension Rupture	48.4%	Pass
109.79 - 105.08	Pole + Reinf.	TP42x42x0.4875	Reinf. 13 Tension Rupture	53.8%	Pass
105.08 - 104.83	Pole + Reinf.	TP42x42x0.5625	Reinf. 6 Tension Rupture	49.1%	Pass
104.83 - 100.92	Pole + Reinf.	TP42x42x0.5625	Reinf. 6 Tension Rupture	53.4%	Pass
100.92 - 100.67	Pole	TP48x48x0.375	Pole	59.4%	Pass
100.67 - 95.83	Pole	TP48x48x0.375	Pole	65.4%	Pass
95.83 - 95.58	Pole + Reinf.	TP48x48x0.475	Pole	52.1%	Pass
95.58 - 90.58	Pole + Reinf.	TP48x48x0.475	Pole	57.3%	Pass
90.58 - 89.92	Pole + Reinf.	TP48x48x0.475	Pole	58.0%	Pass
89.92 - 89.67	Pole + Reinf.	TP48x48x0.575	Pole	48.3%	Pass
89.67 - 84.67	Pole + Reinf.	TP48x48x0.575	Pole	52.9%	Pass
84.67 - 80.83	Pole + Reinf.	TP48x48x0.575	Pole	56.5%	Pass
80.83 - 80.33	Pole + Reinf.	TP54x54x0.55	Pole	47.5%	Pass
80.33 - 80.08	Pole + Reinf.	TP54x54x0.4875	Pole	53.7%	Pass
80.08 - 75.08	Pole + Reinf.	TP54x54x0.4875	Pole	58.2%	Pass
75.08 - 70.08	Pole + Reinf.	TP54x54x0.4875	Pole	62.9%	Pass
70.08 - 69.5	Pole + Reinf.	TP54x54x0.4875	Pole	63.5%	Pass
69.5 - 69.25	Pole + Reinf.	TP54x54x0.5875	Pole	52.7%	Pass
69.25 - 64.25	Pole + Reinf.	TP54x54x0.5875	Pole	56.9%	Pass
64.25 - 60.58	Pole + Reinf.	TP54x54x0.5875	Pole	60.1%	Pass
60.58 - 60.33	Pole + Reinf.	TP60x60x0.5125	Pole	56.4%	Pass
60.33 - 55.33	Pole + Reinf.	TP60x60x0.5125	Pole	60.6%	Pass
55.33 - 52.17	Pole + Reinf.	TP60x60x0.5125	Pole	63.2%	Pass
52.17 - 51.92	Pole + Reinf.	TP60x60x0.625	Pole	52.9%	Pass
51.92 - 46.92	Pole + Reinf.	TP60x60x0.625	Pole	56.5%	Pass
46.92 - 41.92	Pole + Reinf.	TP60x60x0.625	Pole	60.2%	Pass
41.92 - 40.23	Pole + Reinf.	TP60x60x0.6	Pole	62.0%	Pass
40.23 - 39.98	Pole + Reinf.	TP60x60x0.6	Pole	62.2%	Pass
39.98 - 34.98	Pole + Reinf.	TP60x60x0.6	Pole	66.1%	Pass
34.98 - 29.98	Pole + Reinf.	TP60x60x0.6	Pole	70.0%	Pass
29.98 - 28	Pole + Reinf.	TP60x60x0.6	Pole	71.6%	Pass
28 - 27.75	Pole + Reinf.	TP60x60x0.725	Pole	60.3%	Pass
27.75 - 22.75	Pole + Reinf.	TP60x60x0.725	Pole	63.7%	Pass
22.75 - 20.08	Pole + Reinf.	TP60x60x0.725	Pole	65.6%	Pass
20.08 - 19.83	Pole	TP60x60x0.625	Pole	73.2%	Pass
19.83 - 17	Pole	TP60x60x0.625	Pole	75.5%	Pass
17 - 16.75	Pole + Reinf.	TP60x60x0.725	Pole	65.4%	Pass
16.75 - 11.65	Pole + Reinf.	TP60x60x0.75	Pole	67.3%	Pass
11.65 - 11.42	Pole + Reinf.	TP60x60x0.75	Pole	67.5%	Pass
11.42 - 9.4	Pole + Reinf.	TP60x60x0.75	Pole	68.8%	Pass
9.4 - 9.15	Pole + Reinf.	TP60x60x0.8	Reinf. 7 Tension Rupture	68.5%	Pass
9.15 - 4.83	Pole + Reinf.	TP60x60x0.8	Reinf. 7 Tension Rupture	71.4%	Pass
4.83 - 4.58	Pole + Reinf.	TP60x60x0.75	Pole	73.1%	Pass
4.58 - 0	Pole + Reinf.	TP60x60x0.75	Pole	76.3%	Pass
				Summary	
			Pole	76.3%	Pass
			Reinforcement	74.3%	Pass
			Overall	76.3%	Pass

Monopole Flange Plate Connection

Elevation = 181.583 ft.

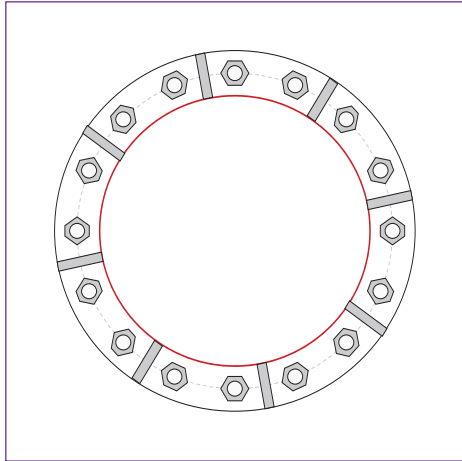


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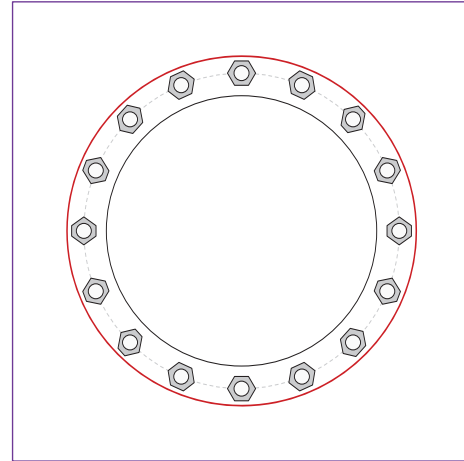
Applied Loads	
Moment (kip-ft)	7.83
Axial Force (kips)	1.35
Shear Force (kips)	0.94

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(16) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 21" BC

Top Plate Data

24" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(8) 5"H x 3"W x 0.625"T, Notch: 0.75"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

18" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

18" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

24" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	1.03
Allowable (kips)	54.54
Stress Rating:	1.8%

Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Piroad OK
Tension Side Stress Rating:	Piroad OK

Top Stiffener Capacity

Horizontal Weld:	Piroad OK
Vertical Weld:	Piroad OK
Plate Flexure+Shear:	Piroad OK
Plate Tension+Shear:	Piroad OK
Plate Compression:	Piroad OK

Top Pole Capacity

Punching Shear:	Piroad OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Piroad OK
Tension Side Stress Rating:	Piroad OK

Bottom Stiffener Capacity

Horizontal Weld:	N/A
Vertical Weld:	N/A
Plate Flexure+Shear:	N/A
Plate Tension+Shear:	N/A
Plate Compression:	N/A

Bottom Pole Capacity

Punching Shear:	N/A
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Monopole Flange Plate Connection

Elevation = 141.417 ft.

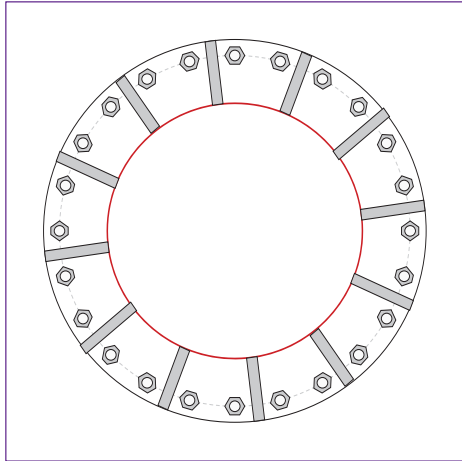


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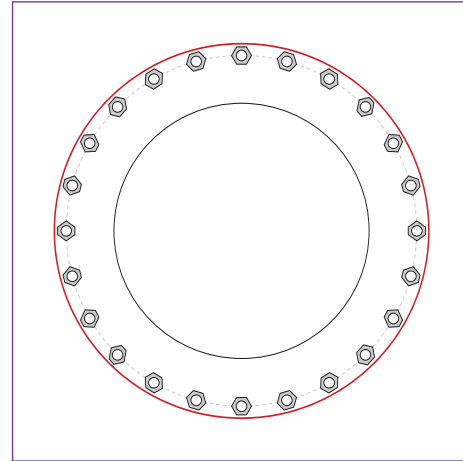
Applied Loads	
Moment (kip-ft)	451.12
Axial Force (kips)	22.67
Shear Force (kips)	18.89

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(24) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 33" BC

Top Plate Data

36" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(12) 8"H x 6"W x 1"T, Notch: 1"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

24" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

24" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

36" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	26.39
Allowable (kips)	54.53
Stress Rating:	46.1% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Piroad OK
Tension Side Stress Rating:	Piroad OK

Top Stiffener Capacity

Horizontal Weld:	Piroad OK
Vertical Weld:	Piroad OK
Plate Flexure+Shear:	Piroad OK
Plate Tension+Shear:	Piroad OK
Plate Compression:	Piroad OK

Top Pole Capacity

Punching Shear:	Piroad OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Piroad OK
Tension Side Stress Rating:	Piroad OK

Bottom Stiffener Capacity

Horizontal Weld:	N/A
Vertical Weld:	N/A
Plate Flexure+Shear:	N/A
Plate Tension+Shear:	N/A
Plate Compression:	N/A

Bottom Pole Capacity

Punching Shear:	N/A
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MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data		
Site ID:	826217	
Site Name:	Newington_1	
Order ID:	589572 Rev. 0	

Flange Connection Data		
Number of Bolts:	28	
Flange Bolt Diameter:	1	in
Bolt Circle:	39.00	in
Area of Bolt:	0.79	in ²
Moment of Inertia:	4181.07	in ⁴

Jump Plates (Configuration #1)		
Number of Bridge Stiffeners:	3	
Bridge Stiffener Width:	4.5	in
Bridge Stiffener Thickness:	1.00	in
Bolt Circle of Bridge Stiffener:	44.00	in
Area of Stiffener:	4.50	in ²
Moment of Inertia:	3267.00	in ⁴

Reactions		
Mu:	855.93	kips-ft
Axial, Pu:	28.81	kip
Shear, Vu:	21.25	kip
Elevation:	121.167	ft

Forces on Flange Bolts		
Moment:	480.49	kips-ft
Axial:	17.85	kip
Shear:	21.25	kip

Forces on Bridge Stiffener #1		
Moment:	375.44	kips-ft
Axial:	10.96	kip

Monopole Flange Plate Connection

Elevation = 121.167 ft.

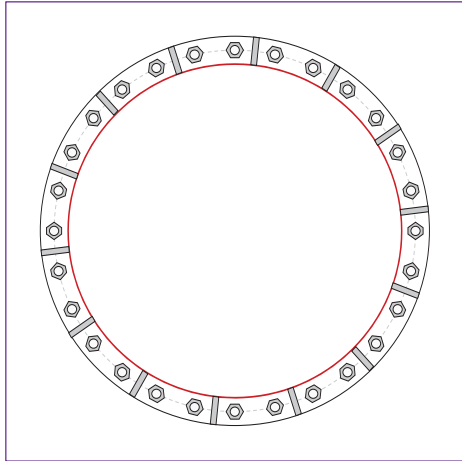


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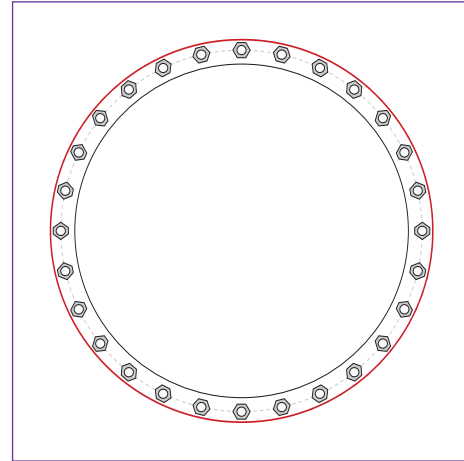
Applied Loads	
Moment (kip-ft)	480.49
Axial Force (kips)	17.85
Shear Force (kips)	21.25

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(28) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 39" BC

Top Plate Data

42" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(14) 5"H x 3"W x 0.625"T, Notch: 0.75"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

36" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

36" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

42" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	20.48
Allowable (kips)	54.53
Stress Rating:	35.8% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Top Stiffener Capacity

Horizontal Weld:	Pirot OK
Vertical Weld:	Pirot OK
Plate Flexure+Shear:	Pirot OK
Plate Tension+Shear:	Pirot OK
Plate Compression:	Pirot OK

Top Pole Capacity

Punching Shear:	Pirot OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Bottom Stiffener Capacity

Horizontal Weld:	N/A
Vertical Weld:	N/A
Plate Flexure+Shear:	N/A
Plate Tension+Shear:	N/A
Plate Compression:	N/A

Bottom Pole Capacity

Punching Shear:	N/A
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MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data

Site ID:	826217
Site Name:	Newington_1
Order ID:	589572 Rev. 0

Flange Connection Data

Number of Bolts:	32	
Flange Bolt Diameter:	1	in
Bolt Circle:	45.00	in
Area of Bolt:	0.79	in ²
Moment of Inertia:	6361.73	in ⁴

Jump Plates (Configuration #1)

Number of Bridge Stiffeners:	6	
Bridge Stiffener Width:	4.5	in
Bridge Stiffener Thickness:	1.00	in
Bolt Circle of Bridge Stiffener:	49.00	in
Area of Stiffener:	4.50	in ²
Moment of Inertia:	8103.38	in ⁴

Reactions

Mu:	1383.3	kips-ft
Axial, Pu:	40.04	kip
Shear, Vu:	29.07	kip
Elevation:	100.917	ft

Forces on Flange Bolts

Moment:	608.37	kips-ft
Axial:	19.30	kip
Shear:	29.07	kip

Forces on Bridge Stiffener #1

Moment:	774.93	kips-ft
Axial:	20.74	kip

Monopole Flange Plate Connection

Elevation = 100.917 ft.

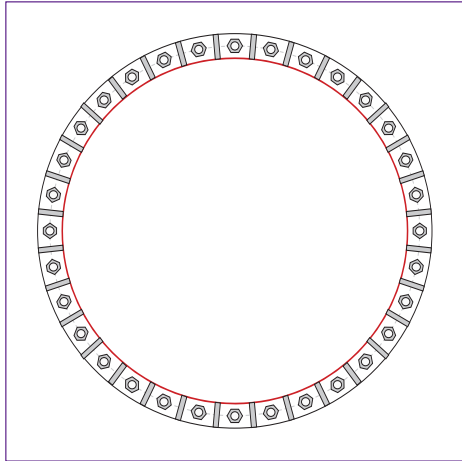


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Site Name	Newington_1
Order #	589572 Rev. 0
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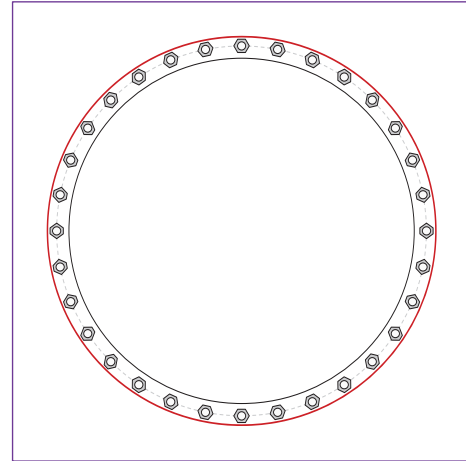
Applied Loads	
Moment (kip-ft)	608.37
Axial Force (kips)	19.30
Shear Force (kips)	29.07

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(32) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 45" BC

Top Plate Data

48" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(32) 5"H x 3"W x 0.625"T, Notch: 0.75"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

42" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

42" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

48" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	19.67
Allowable (kips)	54.52
Stress Rating:	34.4% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Top Stiffener Capacity

Horizontal Weld:	Pirot OK
Vertical Weld:	Pirot OK
Plate Flexure+Shear:	Pirot OK
Plate Tension+Shear:	Pirot OK
Plate Compression:	Pirot OK

Top Pole Capacity

Punching Shear:	Pirot OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Bottom Stiffener Capacity

Horizontal Weld:	N/A
Vertical Weld:	N/A
Plate Flexure+Shear:	N/A
Plate Tension+Shear:	N/A
Plate Compression:	N/A

Bottom Pole Capacity

Punching Shear:	N/A
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MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data	
Site ID:	826217
Site Name:	Newington_1
Order ID:	589572 Rev. 0

Flange Connection Data		
Number of Bolts:	36	
Flange Bolt Diameter:	1	in
Bolt Circle:	51.00	in
Area of Bolt:	0.79	in ²
Moment of Inertia:	9192.69	in ⁴

Jump Plates (Configuration #1)		
Number of Bridge Stiffeners:	3	
Bridge Stiffener Width:	4.5	in
Bridge Stiffener Thickness:	1.00	in
Bolt Circle of Bridge Stiffener:	55.00	in
Area of Stiffener:	4.50	in ²
Moment of Inertia:	5104.69	in ⁴

Jump Plates (Configuration #2)		
Number of Bridge Stiffeners:	3	
Bridge Stiffener Width:	6.5	in
Bridge Stiffener Thickness:	1.25	in
Bolt Circle of Bridge Stiffener:	55.13	in
Area of Stiffener:	8.13	in ²
Moment of Inertia:	9259.07	in ⁴

Reactions		
Mu:	2019.59	kips-ft
Axial, Pu:	50.59	kip
Shear, Vu:	34.37	kip
Elevation:	80.833	ft

Forces on Flange Bolts		
Moment:	788.13	kips-ft
Axial:	21.62	kip
Shear:	34.37	kip

Forces on Bridge Stiffener #1		
Moment:	437.65	kips-ft
Axial:	10.32	kip

Forces on Bridge Stiffener #2		
Moment:	793.82	kips-ft
Axial:	18.64	kip

Monopole Flange Plate Connection

Elevation = 80.833 ft.

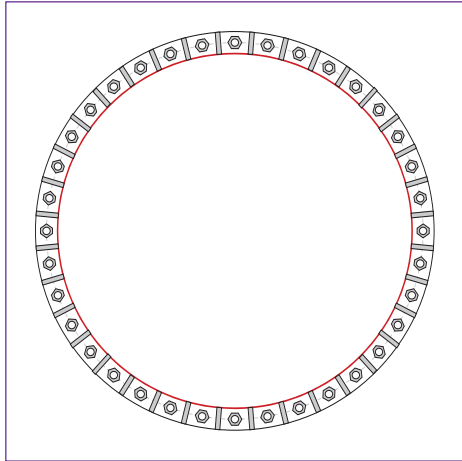


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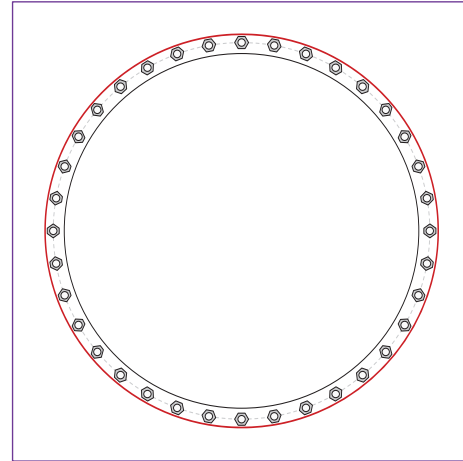
Applied Loads	
Moment (kip-ft)	788.13
Axial Force (kips)	21.62
Shear Force (kips)	34.37

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(36) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 51" BC

Top Plate Data

54" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(36) 5"H x 3"W x 0.625"T, Notch: 0.75"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

48" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

48" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

54" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	20.00
Allowable (kips)	54.52
Stress Rating:	34.9% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Top Stiffener Capacity

Horizontal Weld:	Pirot OK
Vertical Weld:	Pirot OK
Plate Flexure+Shear:	Pirot OK
Plate Tension+Shear:	Pirot OK
Plate Compression:	Pirot OK

Top Pole Capacity

Punching Shear:	Pirot OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirot OK
Tension Side Stress Rating:	Pirot OK

Bottom Stiffener Capacity

Horizontal Weld:	N/A
Vertical Weld:	N/A
Plate Flexure+Shear:	N/A
Plate Tension+Shear:	N/A
Plate Compression:	N/A

Bottom Pole Capacity

Punching Shear:	N/A
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MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data	
Site ID:	826217
Site Name:	Newington_1
Order ID:	589572 Rev. 0

Flange Connection Data		
Number of Bolts:	48	
Flange Bolt Diameter:	1	in
Bolt Circle:	57.00	in
Area of Bolt:	0.79	in ²
Moment of Inertia:	15310.55	in ⁴

Jump Plates (Configuration #1)		
Number of Bridge Stiffeners:	4	
Bridge Stiffener Width:	4.5	in
Bridge Stiffener Thickness:	1.00	in
Bolt Circle of Bridge Stiffener:	61.00	in
Area of Stiffener:	4.50	in ²
Moment of Inertia:	8372.25	in ⁴

Jump Plates (Configuration #2)		
Number of Bridge Stiffeners:	6	
Bridge Stiffener Width:	8.5	in
Bridge Stiffener Thickness:	1.25	in
Bolt Circle of Bridge Stiffener:	63.50	in
Area of Stiffener:	10.63	in ²
Moment of Inertia:	32131.99	in ⁴

Reactions		
Mu:	2773.34	kips-ft
Axial, Pu:	69.11	kip
Shear, Vu:	40.27	kip
Elevation:	60.583	ft

Forces on Flange Bolts		
Moment:	760.75	kips-ft
Axial:	21.81	kip
Shear:	40.27	kip

Forces on Bridge Stiffener #1		
Moment:	416.00	kips-ft
Axial:	10.41	kip

Forces on Bridge Stiffener #2		
Moment:	1596.58	kips-ft
Axial:	36.88	kip

Monopole Flange Plate Connection

Elevation = 60.583 ft.

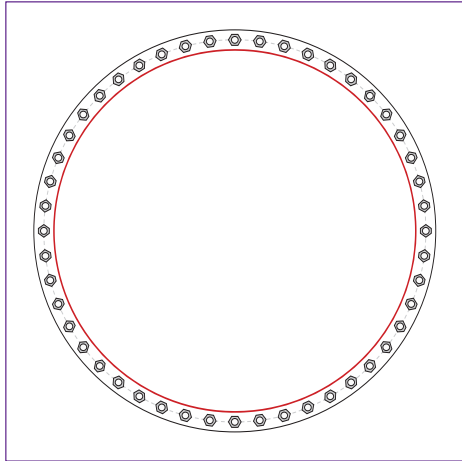


BU #	826217
Site Name	Newington_1
Order #	589572 Rev. 0
TIA-222 Revision	H

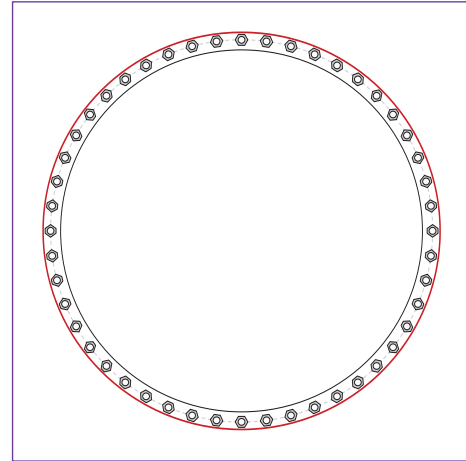
Applied Loads	
Moment (kip-ft)	760.75
Axial Force (kips)	21.81
Shear Force (kips)	40.27

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(48) 1" \emptyset bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 57" BC

Top Plate Data

60" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Top Pole Data

54" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

54" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

60" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	12.89
Allowable (kips)	54.52
Stress Rating:	22.5% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK



MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data	
Site ID:	826217
Site Name:	Newington_1
Order ID:	589572 Rev. 0

Flange Connection (Bolt Circle 1)		
Number of Bolts:	32	
Flange Bolt Diameter:	1.25	in
Bolt Circle:	47.00	in
Area of Bolt:	1.23	in ²
Moment of Inertia:	10843.40	in ⁴

Flange Connection (Bolt Circle 2)		
Number of Bolts:	32	
Flange Bolt Diameter:	1.25	in
Bolt Circle:	53.00	in
Area of Bolt:	1.23	in
Moment of Inertia:	13788.65	in ²

Jump Plates (Configuration #1)		
Number of Bridge Stiffeners:	6	
Bridge Stiffener Width:	1.25	in
Bridge Stiffener Thickness:	6.50	in
Bolt Circle of Bridge Stiffener:	63.75	in
Area of Stiffener:	8.13	in ²
Moment of Inertia:	24765.38	in ⁴

Jump Plates (Configuration #2)		
Number of Bridge Stiffeners:	4	
Bridge Stiffener Width:	1	in
Bridge Stiffener Thickness:	6.00	in
Bolt Circle of Bridge Stiffener:	63.50	in
Area of Stiffener:	6.00	in ²

Reactions		
Mu:	3642.75	kips-ft
Axial, Pu:	83.32	kip
Shear, Vu:	45.18	kip
Elevation:	40.333	ft

Forces on Flange Bolts		
Moment:	642.33	kips-ft
Axial:	21.63	kip
Shear:	45.18	kip

Forces on Bridge Stiffener #1		
Moment:	816.80	kips-ft
Axial:	21.63	kip

Forces on Bridge Stiffener #2		
Moment:	1467.03	kips-ft
Axial:	26.85	kip

Forces on Bridge Stiffener #3		
Moment:	716.58	kips-ft

Monopole Flange Plate Connection

Elevation = 40.333 ft.

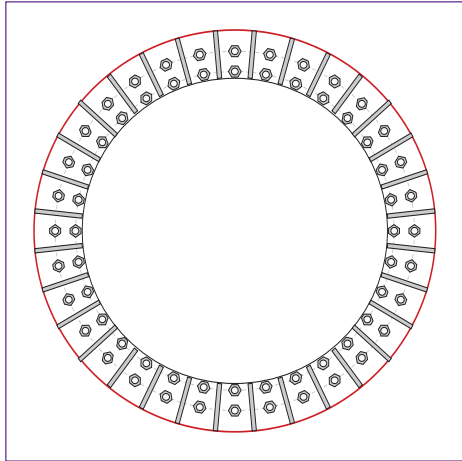


BU #	826217
Site Name	Newington_1
Order #	589572 Rev. 0
TIA-222 Revision	H

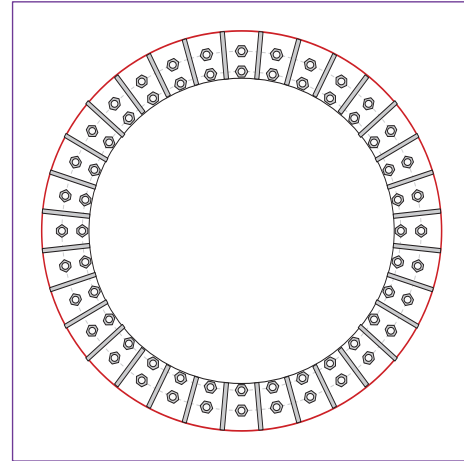
Applied Loads	
Moment (kip-ft)	642.33
Axial Force (kips)	21.63
Shear Force (kips)	45.18

*TIA-222-H Section 15.5 Applied

Top Plate - Internal



Bottom Plate - Internal



Connection Properties

Bolt Data

- GROUP 1: (32) 1" ϕ bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 53" BC
- GROUP 2: (32) 1" ϕ bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 47" BC

Top Plate Data

45" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

60" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

45" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Bottom Pole Data

60" x 0.5" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	9.50
Allowable (kips)	54.50
Stress Rating:	16.6% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK

Top Stiffener Capacity

Horizontal Weld:	Pirod OK
Vertical Weld:	Pirod OK
Plate Flexure+Shear:	Pirod OK
Plate Tension+Shear:	Pirod OK
Plate Compression:	Pirod OK

Top Pole Capacity

Punching Shear:	Pirod OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK

Bottom Stiffener Capacity

Horizontal Weld:	Pirod OK
Vertical Weld:	Pirod OK
Plate Flexure+Shear:	Pirod OK
Plate Tension+Shear:	Pirod OK
Plate Compression:	Pirod OK

Bottom Pole Capacity

Punching Shear:	Pirod OK
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MORRISON HERSHFIELD

Flange Connection Force Distribution

Site Data		
Site ID:	826217	
Site Name:	Newington_1	
Order ID:	589572 Rev. 0	

Flange Connection (Bolt Circle 1)		
Number of Bolts:	32	
Flange Bolt Diameter:	1.25	in
Bolt Circle:	47.00	in
Area of Bolt:	1.23	in ²
Moment of Inertia:	10843.40	in ⁴

Flange Connection (Bolt Circle 2)		
Number of Bolts:	32	
Flange Bolt Diameter:	1.25	in
Bolt Circle:	53.00	in
Area of Bolt:	1.23	in
Moment of Inertia:	13788.65	in ²

Jump Plates (Configuration #1)		
Number of Bridge Stiffeners:	6	
Bridge Stiffener Width:	1.25	in
Bridge Stiffener Thickness:	6.50	in
Bolt Circle of Bridge Stiffener:	63.75	in
Area of Stiffener:	8.13	in ²
Moment of Inertia:	24765.38	in ⁴

Jump Plates (Configuration #2)		
Number of Bridge Stiffeners:	4	
Bridge Stiffener Width:	1	in
Bridge Stiffener Thickness:	6.00	in
Bolt Circle of Bridge Stiffener:	63.50	in
Area of Stiffener:	6.00	in ²

Reactions		
Mu:	4597.27	kips-ft
Axial, Pu:	96.36	kip
Shear, Vu:	49.59	kip
Elevation:	20.083	ft

Forces on Flange Bolts		
Moment:	810.65	kips-ft
Axial:	25.01	kip
Shear:	49.59	kip

Forces on Bridge Stiffener #1		
Moment:	1030.83	kips-ft
Axial:	25.01	kip

Forces on Bridge Stiffener #2		
Moment:	1851.45	kips-ft
Axial:	31.05	kip

Forces on Bridge Stiffener #3		
Moment:	904.35	kips-ft

Monopole Flange Plate Connection

Elevation = 20.083 ft.

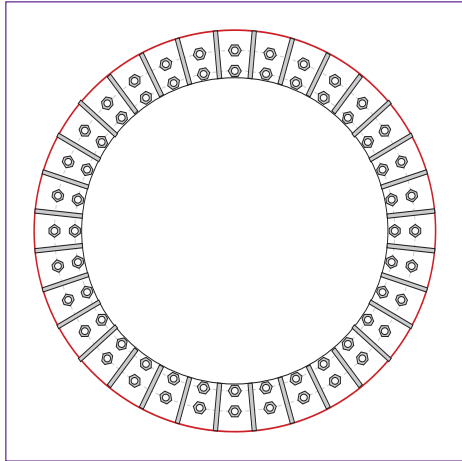


BU #	826217
Site Name	Newington_1
Order #	589572 Rev. 0
TIA-222 Revision	H

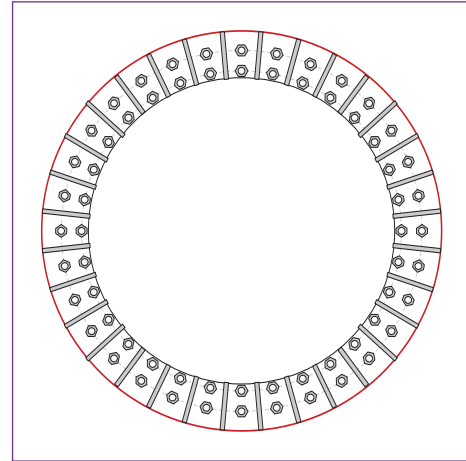
Applied Loads	
Moment (kip-ft)	810.65
Axial Force (kips)	25.01
Shear Force (kips)	49.59

*TIA-222-H Section 15.5 Applied

Top Plate - Internal



Bottom Plate - Internal



Connection Properties

Bolt Data

- GROUP 1: (32) 1" ϕ bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 53" BC
- GROUP 2: (32) 1" ϕ bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 47" BC

Top Plate Data

45" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Top Pole Data

60" x 0.5" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Plate Data

45" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
 plate: Fy= 36 ksi ; weld: Fy= 70 ksi
 horiz. weld: 0.3125" fillet
 vert. weld: 0.3125" fillet

Bottom Pole Data

60" x 0.625" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	12.06
Allowable (kips)	54.49
Stress Rating:	21.1% Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK

Top Stiffener Capacity

Horizontal Weld:	Pirod OK
Vertical Weld:	Pirod OK
Plate Flexure+Shear:	Pirod OK
Plate Tension+Shear:	Pirod OK
Plate Compression:	Pirod OK

Top Pole Capacity

Punching Shear:	Pirod OK
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Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	Pirod OK
Tension Side Stress Rating:	Pirod OK

Bottom Stiffener Capacity

Horizontal Weld:	Pirod OK
Vertical Weld:	Pirod OK
Plate Flexure+Shear:	Pirod OK
Plate Tension+Shear:	Pirod OK
Plate Compression:	Pirod OK

Bottom Pole Capacity

Punching Shear:	Pirod OK
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Monopole Base Plate Connection

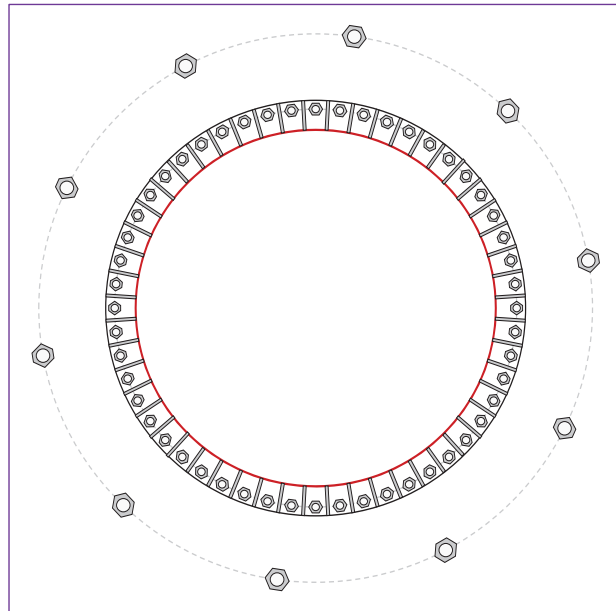


Site Info	
BU #	826217
Site Name	Newington_1
Order #	589572 Rev. 0

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

Applied Loads	
Moment (kip-ft)	5626.67
Axial Force (kips)	113.15
Shear Force (kips)	52.77

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
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Anchor Rod Data
GROUP 1: (52) 1-1/4" ϕ bolts (A687 N; $F_y=105$ ksi, $F_u=125$ ksi) on 67" BC
GROUP 2: (10) 2-1/4" ϕ bolts (A687 N; $F_y=105$ ksi, $F_u=125$ ksi) on 92.3" BC
Base Plate Data
70" OD x 1.25" Plate (A36; $F_y=36$ ksi, $F_u=58$ ksi)
Stiffener Data
(52) 6"H x 5"W x 0.5"T, Notch: 0.5"
plate: $F_y=36$ ksi ; weld: $F_y=70$ ksi
horiz. weld: 0.3125" fillet
vert. weld: 0.3125" fillet
Pole Data
60" x 0.625" round pole (A53-B-42; $F_y=42$ ksi, $F_u=63$ ksi)

Anchor Rod Summary			(units of kips, kip-in)
GROUP 1:			
$P_u_t = 33.53$	$\phi P_n_t = 90.84$	Stress Rating	
$V_u = 0.62$	$\phi V_n = 57.52$		35.1%
$M_u = n/a$	$\phi M_n = n/a$		Pass
GROUP 2:			
$P_u_t = 156.58$	$\phi P_n_t = 304.69$	Stress Rating	
$V_u = 2.07$	$\phi V_n = 186.38$		48.9%
$M_u = n/a$	$\phi M_n = n/a$		Pass
Base Plate Summary			
Max Stress (ksi):	-		
Allowable Stress (ksi):	-		
Stress Rating:	Pi rod OK		
Stiffener Summary			
Horizontal Weld:	Pi rod OK		
Vertical Weld:	Pi rod OK		
Plate Flexure+Shear:	Pi rod OK		
Plate Tension+Shear:	Pi rod OK		
Plate Compression:	Pi rod OK		
Pole Summary			
Punching Shear:	Pi rod OK		

Pier and Pad Foundation



BU #:	826217
Site Name:	Newington_1
App. Number:	589572 Rev. 0

TIA-222 Revision:	H
Tower Type:	Monopole

Top & Bot. Pad Rein. Different?:	<input type="checkbox"/>
Block Foundation?:	<input type="checkbox"/>
Rectangular Pad?:	<input type="checkbox"/>

Superstructure Analysis Reactions		
Compression, P_{comp} :	113.16	kips
Base Shear, V_u :	52.74	kips
Moment, M_u :	4426.67	ft-kips
Tower Height, H :	191.67	ft
BP Dist. Above Fdn, bp_{dist} :	2.5	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	335.39	52.74	15.0%	Pass
Bearing Pressure (ksf)	12.00	5.22	43.5%	Pass
Overturing (kip*ft)	6446.48	4938.69	76.6%	Pass
Pier Flexure (Comp.) (kip*ft)	5695.51	4795.85	80.2%	Pass
Pier Compression (kip)	24494.62	161.65	0.6%	Pass
Pad Flexure (kip*ft)	4887.26	2488.99	48.5%	Pass
Pad Shear - 1-way (kips)	580.76	448.15	73.5%	Pass
Pad Shear - 2-way (Comp) (ksi)	0.190	0.000	0.0%	Pass
Flexural 2-way (Comp) (kip*ft)	6892.45	2877.51	39.8%	Pass

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, $dpier$:	7	ft
Ext. Above Grade, E :	0.5	ft
Pier Rebar Size, Sc :	9	
Pier Rebar Quantity, mc :	34	
Pier Tie/Spiral Size, St :	4	
Pier Tie/Spiral Quantity, mt :	11	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier} :	3	in

*Rating per TIA-222-H Section 15.5

Structural Rating*:	80.2%
Soil Rating*:	76.6%

Pad Properties		
Depth, D :	9	ft
Pad Width, W_1 :	20.5	ft
Pad Thickness, T :	2.5	ft
Pad Rebar Size (Bottom dir. 2), Sp_2 :	11	
Pad Rebar Quantity (Bottom dir. 2), mp_2 :	30	
Pad Clear Cover, cc_{pad} :	3	in

Material Properties		
Rebar Grade, F_y :	60	ksi
Concrete Compressive Strength, F'_c :	4	ksi
Dry Concrete Density, δ_c :	150	pcf

Soil Properties		
Total Soil Unit Weight, γ :	130	pcf
Ultimate Gross Bearing, Q_{ult} :	16.000	ksf
Cohesion, C_u :	0.000	ksf
Friction Angle, ϕ :	36	degrees
SPT Blow Count, N_{blows} :		
Base Friction, μ :	0.35	
Neglected Depth, N :	3.33	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, gw :	N/A	ft

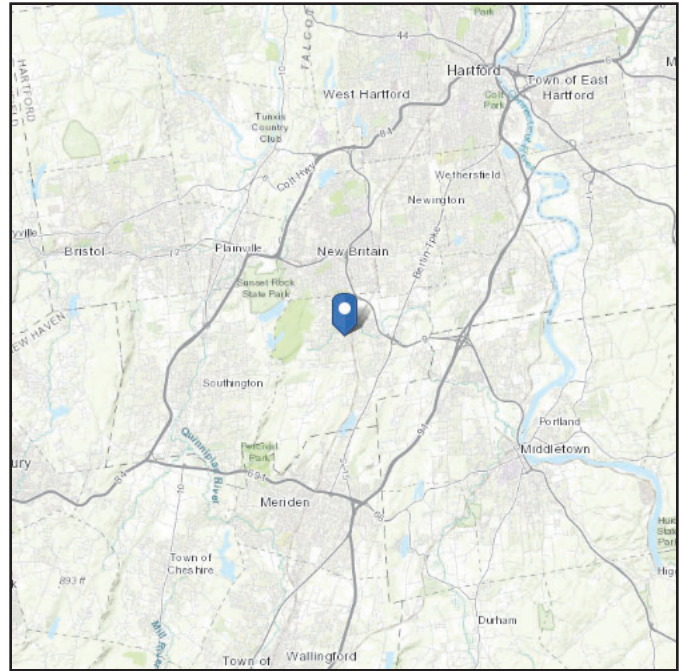
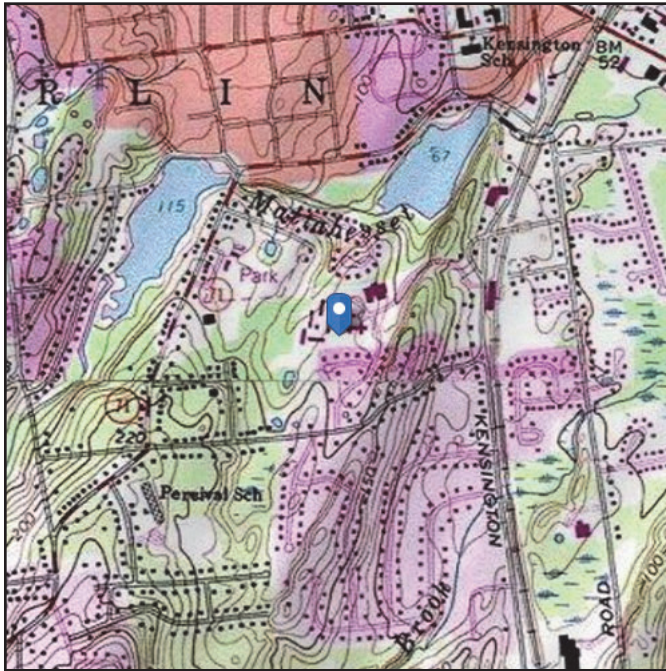
<-- Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 0 ft (NAVD 88)
Latitude: 41.626194
Longitude: -72.775647



Wind

Results:

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

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed Oct 06 2021

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).

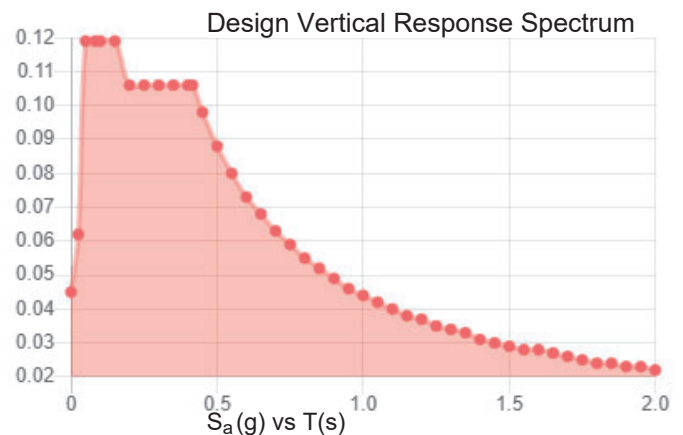
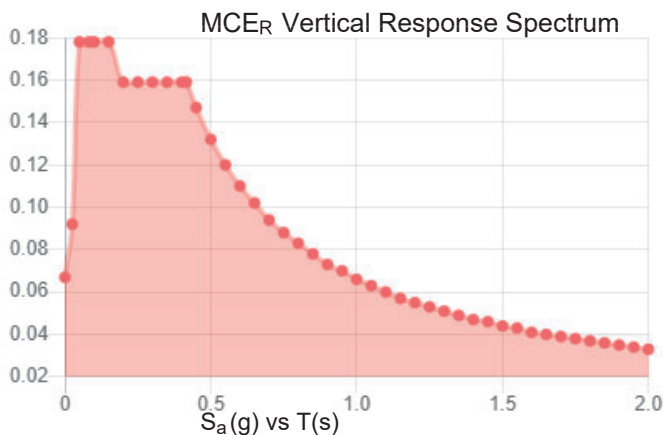
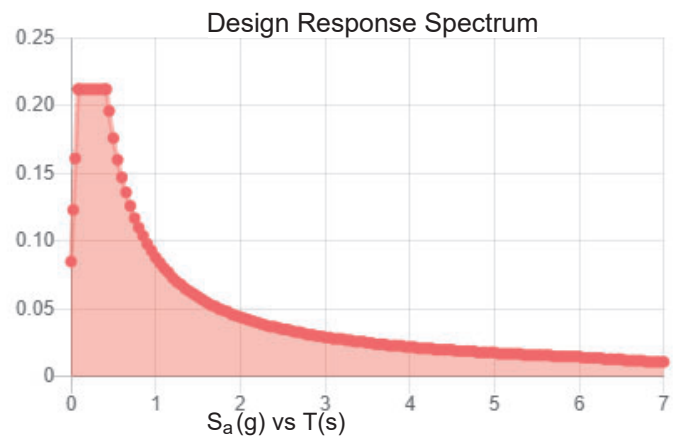
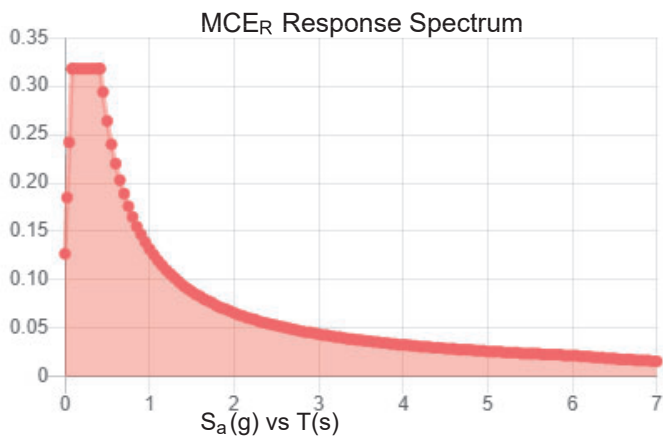
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class: D - Stiff Soil

Results:

S_s :	0.199	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.109
F_v :	2.4	PGA _M :	0.173
S_{MS} :	0.318	F_{PGA} :	1.582
S_{M1} :	0.132	I_e :	1
S_{DS} :	0.212	C_v :	0.7

Seismic Design Category B



Data Accessed:

Wed Oct 06 2021

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: Wed Oct 06 2021

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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