Robinson+Cole

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Also admitted in Massachusetts

May 25, 2018

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

Re: **Notice of Exempt Modification – Facility Modification**
1455 Forbes Street, East Hartford, Connecticut

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) antennas at the 111-foot level of the existing 131-foot tower at 1455 Forbes Street in East Hartford, Connecticut (the "Property"). The tower is owned by Crown Castle ("Crown"). The Council approved Cellco's use of this tower in 1991 (Docket No. 139). Cellco now intends to remove six (6) of its existing remote radio heads ("RRHs") and install nine (9) new RRHs behind its antennas. Cellco will also install one (1) new HYBRIFLEX™ fiber optic antenna cable. Included in Attachment 1 are specifications for Cellco's replacement antennas, RRHs and HYBRIFLEX™ cable.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to East Hartford Mayor, Marcia A. Leclerc; Jeffrey Cormier, East Hartford's Town Planner; Robert Handel, the owner of the Property; and Crown, the tower owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's new RRHs will be installed on Cellco's existing antenna platform at the 111-foot level of the tower.

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2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included behind Attachment 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower and its foundation can support Cellco's proposed modifications. (*See* Structural Analysis Report included in Attachment 3). The attached Structural Analysis Report was prepared for and submitted as a part of a recent Sprint exempt modification filing (EM-SPRINT-043-170810). This Structural Analysis Report includes Sprint's EM-SPRINT-043-170810 modification and the Cellco modifications described above.

A copy of the parcel map and owner information for the Property is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the owner of the Property is included in Attachment 5.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Marcia A. Leclerc, Mayor
Jeffrey Cormier, Town Planner
Robert Handel
Crown Castle
Tim Parks

ATTACHMENT 1

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

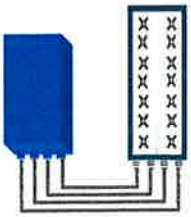
Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

Alcatel·Lucent

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz
Instantaneous bandwidth - #carriers	10MHz – 1 LTE carrier (in 10MHz occupied bandwidth)
LTE carrier bandwidth	10 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure – RX Diversity scheme	2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity
Sizes (HxWxD) in mm (in.) Volume in L Weight in kg (lb) (w/o mounting HW)	550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield) 38 (with solar shield) 26 (57.2) (with solar shield)
DC voltage range DC power consumption	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 550W typical @100% RF load (in 2Tx or 4TX mode)
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) IP65 Frontal:<200N / Lateral :<150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

ALCATEL-LUCENT B25 RRH4X30

Alcatel-Lucent Band 25 Remote Radio Head 4x30W is the new addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B25 RRH4x30 allows operators to have a compact radio solution to deploy LTE in the PCS band (1.9 GHz, 3GPP band 25), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B25 RRH4x30 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity, LTE carriers from 3 MHz up to 20 MHz and up to 65 MHz instantaneous bandwidth.

The Alcatel-Lucent B25 RRH4x30 is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

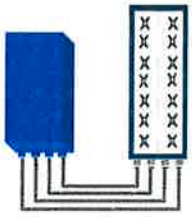
Its compactness and slim design makes the Alcatel-Lucent B25 RRH4x30 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 1.9 GHz band (PCS, 3GPP band 2 & 25)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- Ready for 3, 5, 10, 15 or 20MHz LTE carrier operation with 4Rx Diversity
- Ready to support up to 4 carriers anywhere in 65MHz instantaneous bandwidth
- Convection-cooled (fan-less)
- Supports AISG 2.0 devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in PCS band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Full flexibility for multiple carriers operation over entire PCS spectrum
- Improves downlink spectral efficiency and cell edge throughput through MIMO4
- Increases LTE coverage thanks to 4-way Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options (Pole or Wall)



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

Alcatel·Lucent

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	3GPP bands 2 & 25 (PCS-G) DL: 1930 - 1995 MHz UL: 1850 - 1915 MHz
Instantaneous bandwidth - #carriers	65MHz – Up to 4 LTE carriers (in 40MHz occupied bandwidth)
LTE carrier bandwidth	3, 5, 10, 15 or 20 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure (3GPP band 2) RX Diversity scheme	2.0 dB typ. (<2.5 dB max) 2 or 4 way Rx diversity
Sizes (HxWxD)(w/ solar shield) in mm (in.) Volume (w/ solar shield) in L Weight (w/ solar shield) in kg (lb)	538 x 304 x 182 (21.2" x 12.0" x 7.2") 30 24 (53)
DC voltage range DC power consumption	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 580W typical @100% RF load
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) IP65 Frontal:<200N / Lateral :<150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5 (> 14dB)
CPRI ports	2 CPRI ports (HW ready for Rate7 / 9.8 Gbps)
AISG interfaces	1 AISG2.0 output (RS485), +24V/2A DC power Integrated Smart Bias Tees (x2)
Misc. Interfaces	1 external alarms connector (4 alarms) 4 RF Tx & 4 RF Rx monitor ports 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

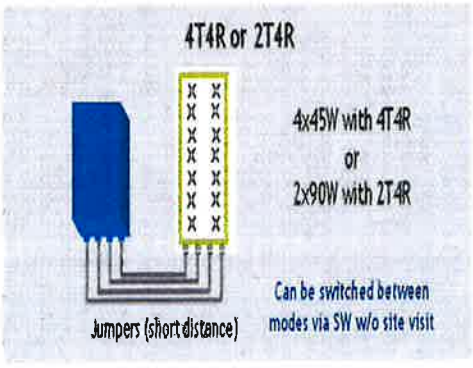
The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.

The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports



BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall

TECHNICAL SPECIFICATIONS

Features & Performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R selectable by SW)
Frequency band	AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz
Instantaneous bandwidth - #carriers	70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth)
LTE carrier bandwidth	5, 10, 15, 20 MHz
RF output power	2x90W or 4x45W (selectable by SW)
Noise figure – RX Diversity scheme Receiver Sensivity (FRC A1-3)	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum
Sizes (HxWxD) in mm (in.) Volume in Liters Weight in kg (lb) (w/o mounting HW)	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) 35.5 (with solar shield) 29.7 (without solar shield) 25.8kg (56.8lb) (with solar shield)
DC voltage range DC power consumption	Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) UL50E Type 4 Enclosure 250N (56lb) Frontal/150N (34lb) Lateral
Antenna ports	4 ports 4.3-10 female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF)
AISG interfaces	1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE

Alcatel·Lucent

Product Data Sheet HB158-1-08U8-S8J18

HYBRIFLEX™ RRH Hybrid Feeder Cabling Solution, 1-5/8", Single-Mode Fiber

Product Description

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments.

It was developed to reduce installation complexity and costs at Cellular sites. HYBRIFLEX allows mobile operators deploying an RRH architecture to standardize the RRH installation process and eliminate the need for and cost of cable grounding. HYBRIFLEX combines optical fiber (multi-mode or single-mode) and power in a single corrugated cable. It eliminates the need for junction boxes and can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable. Both pre-connectorized and on-site options are available.

Figure 1: HYBRIFLEX Series

Features/Benefits

- Aluminum corrugated armor with outstanding bending characteristics – minimizes installation time and enables mechanical protection and shielding
- Same accessories as 1 5/8" coaxial cable
- Outer conductor grounding – Eliminates typical grounding requirements and saves on installation costs
- Lightweight solution and compact design – Decreases tower loading
- Robust cabling – Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable pairs directly to the RRH – Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single corrugated cable – Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- Outdoor polyethylene jacket – Ensures long-lasting cable protection

Technical Specifications

Outer Conductor Armor	Corrugated Aluminum	[mm (in)]	46.5 (1.83)
Jacket:	Polyethylene, PE	[mm (in)]	50.3 (1.98)
UV-Protection	Individual and External Jacket		Yes
Weight, Approximate		[kg/m (lb/ft)]	1.9 (1.30)
Minimum Bending Radius, Single Bending		[mm (in)]	200 (8)
Minimum Bending Radius, Repeated Bending		[mm (in)]	500 (20)
Recommended/Maximum Clamp Spacing		[m (ft)]	1.0 / 1.2 (3.25 / 4.0)
DC-Resistance Outer Conductor Armor		[Ω/km (Ω/1000ft)]	068 (0.205)
DC-Resistance Power Cable, 8.4mm² (8AWG)		[Ω/km (Ω/1000ft)]	2.1 (0.307)
Version			Single-mode OM3
Quantity, Fiber Count			16 (8 pairs)
Core/Clad		[µm]	50/125
Primary Coating (Acrylate)		[µm]	245
Buffer Diameter, Nominal		[µm]	900
Secondary Protection, Jacket, Nominal		[mm (in)]	2.0 (0.08)
Minimum Bending Radius		[mm (in)]	104 (4.1)
Insertion Loss @ wavelength 850nm		dB/km	3.0
Insertion Loss @ wavelength 1310nm		dB/km	1.0
Standards (Meets or exceeds)			UL94-V0, UL1666 RoHS Compliant
Size (Power)		[mm² (AWG)]	8.4 (8)
Quantity, Wire Count (Power)			16 (8 pairs)
Size (Alarm)		[mm² (AWG)]	0.8 (18)
Quantity, Wire Count (Alarm)			4 (2 pairs)
Type			UV protected
Strands			19
Primary Jacket Diameter, Nominal		[mm (in)]	6.8 (0.27)
Standards (Meets or exceeds)			NFPA 130, ICEA S-95-658 UL Type XHHW-2, UL 44 UL-LS Limited Smoke, UL VW-1 IEEE-383 (1974), IEEE1202/FT4 RoHS Compliant
Installation Temperature		[°C (°F)]	-40 to +65 (-40 to149)
Operation Temperature		[°C (°F)]	-40 to +65 (-40 to149)

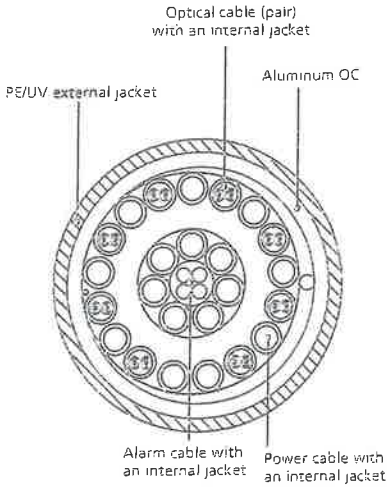


Figure 2: Construction Detail

- This data is provisional and subject to change

ATTACHMENT 2

	General	Power	Density					
Site Name: Forbes (East Hartford)								
Tower Height: 131'								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*Sprint	1	438	97	850	0.0190	0.5667	0.34%	
*Sprint	2	438	97	850	0.0380	0.5667	0.67%	
*Sprint	5	622	97	1900	0.1352	1.0000	1.35%	
*Sprint	2	1556	97	1900	0.1352	1.0000	1.35%	
*Sprint	8	778	97	2500	0.2703	1.0000	2.70%	
*Clearwire	2	153	97	2496	0.0133	1.0000	0.13%	
*Clearwire	1	211	101	18 GHz	0.0084	1.0000	0.08%	
*AT&T-LTE	2	1211	120	700	0.0670	0.4667	1.44%	
*AT&T-PCS-LTE	2	1634	120	1900	0.0904	1.0000	0.90%	
*AT&T-WCS-LTE	2	1964	120	2300	0.1087	1.0000	1.09%	
*AT&T-UMTS	2	419	120	850	0.0232	0.5667	0.41%	
*AT&T-PCS-UMTS	2	817	120	1900	0.0452	1.0000	0.45%	
*AT&T-PCS-GSM	2	817	120	1900	0.0452	1.0000	0.45%	
*T-Mobile	4	2334	87	1900/2100	0.5118	1.0000	5.12%	
*T-Mobile	1	865	87	700	0.0474	0.4667	1.02%	
*T-Mobile	6	1167	87	1900/2100	0.3838	1.0000	3.84%	
VZW PCS	**1**	**5000**	**5000**	**111**	**0.1459**	**1.0**	**14.59%**	
VZW Cellular LTE								
VZW Cellular	**3**	**389**	**1167**	**111**	**0.0341**	**0.579333**	**5.88%**	
VZW AWS	**1**	**7400**	**7400**	**111**	**0.2160**	**1.0**	**21.60%**	
VZW 700	**1**	**2200**	**2200**	**111**	**0.0642**	**0.497333**	**12.91%**	
								76.3%
* Source: Siting Council								

ATTACHMENT 3

Date: **June 19, 2017**

Rebecca Klein
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277

Velocitel, Inc. d.b.a. FDH Velocitel
6521 Meridien Drive, Suite 107
Raleigh, NC 27616
919-755-1012

Subject: **Structural Analysis Report**

Carrier Designation:	***Sprint* Co-Locate**	
	Carrier Site Number:	CT03XC251
	Carrier Site Name:	CT03XC251
Crown Castle Designation:	**Crown Castle BU Number:**	806376
	Crown Castle Site Name:	HRT 100 943239
	Crown Castle JDE Job Number:	441854
	Crown Castle Work Order Number:	1417742
	Crown Castle Application Number:	393435 Rev. 0
Engineering Firm Designation:	**FDH Velocitel Project Number:**	17QGOK1400
Site Data:	**1455 FORBES STREET, EAST HARTFORD, Hartford County, CT** **Latitude *41° 43' 53.3"*, Longitude *-72° 36' 28"*** **131 Foot - Monopole Tower**	

Dear Rebecca Klein,

FDH Velocitel is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above mentioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 1046930, in accordance with application 393435, revision 0.

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:

LC4.7: Modified Structure w/ Existing + Reserved + Proposed Equipment **Sufficient Capacity**
Note: See Table I and Table II for the proposed and existing/reserved loading, respectively.

This analysis has been performed in accordance with the 2012 International Building Code based upon an ultimate 3-second gust wind speed of 125 mph converted to a nominal 3-second gust wind speed of 97 mph per section 1609.3.1 as required for use in the TIA-222-G Standard per Exception #5 of Section 1609.1.1. Exposure Category C with a topographic category 1 and Risk Category II were used in this analysis.

We at *FDH Velocitel* appreciate the opportunity of providing our continuing professional services to you and Crown Castle. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:

Patrick E. Roach, EI
Project Engineer

Reviewed by:

Dennis D. Abel, PE
Director, New Product Development
CT PE License No. 23247

STATE OF CONNECTICUT
DENNIS D. ABEL
No. 23247
LICENSED
PROFESSIONAL ENGINEER

06-19-2017

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 131 ft Monopole tower designed by VALMONT in January of 1999. The tower was originally designed for a wind speed of 90 mph per TIA/EIA-222-F. This tower has been modified multiple times in the past. These modifications have been considered in this analysis. The modifications by GPD Group dated October 21, 2016 have been considered in this analysis.

2) ANALYSIS CRITERIA

The structural analysis was performed for this tower in accordance with the requirements of TIA-222-G Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a 3-second gust wind speed of 97 mph with no ice, 50 mph with 1 inch ice thickness and 60 mph under service loads, exposure category C with topographic category 1 and crest height of 0 feet.

Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
97.0	97.0	3	alcatel lucent	TD-RRH8x20-25	1	1-1/4	-
		3	rfs celwave	APXVTM14-ALU-I20			

Table 2 - Existing and Reserved Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
121.0	121.0	1	crown mounts	T-Arm Mount [TA 702-3]	6 2 1 1	1-1/4 3/4 3/8 Conduit	1
	120.0	3	kathrein	800 10121 w/ Mount Pipe			
		3	ericsson	RRUS-11			
		6	powerwave technologies	LGP21401			
		1	raycap	DC6-48-60-18-8F			
		3	ericsson	RRUS 32	2 1	3/4 3/8	2
		3	ericsson	RRUS 32 B2			
		3	kathrein	80010798 w/ Mount Pipe			
		1	raycap	DC6-48-60-18-8F			
107.0	111.0	6	andrew	SBNHH-1D65B	13	1-5/8	1
		3	antel	BXA-70063/6CFx4			
		3	antel	BXA-80063/4CF			
		2	rfs celwave	DB-T1-6Z-8AB-0Z			
		3	alcatel lucent	B25 RRH4X30	1	1-5/8	2
		3	alcatel lucent	B66A RRH4X45			
	107.0	3	alcatel lucent	B13 RRH 4X30			
		1	crown mounts	Platform Mount (LP 101-1)	-	-	1
		6	rfs celwave	FD9R6004/2C-3L			

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
99.0	100.0	3	alcatel lucent	800MHz 2X50W RRH W/FILTER	-	-	1
	99.0	3	alcatel lucent	PCS 1900MHz 4x45W-65MHz w/Mount Pipe			
		1	crown mounts	Side Arm Mount [SO 101-3]			
	98.0	3	alcatel lucent	PCS 1900MHz 4x45W-65MHz w/Mount Pipe			
97.0	101.0	2	andrew	VHLP2.5-11	3 3 3 2	5/16 1/2 1-1/4 Conduits	1
		2	dragonwave	HORIZON COMPACT			
	97.0	1	crown mounts	Platform Mount (LP 101-1)			
		3	kathrein	840 10054			
		1	motorola	TIMING 2000			
		3	rfs celwave	APXVSPP18-C-A20			
		3	rfs celwave	IBC1900BB-1			
		3	rfs celwave	IBC1900HG-2A			
		3	samsung telecommunications	WIMAX DAP HEAD			
87.0	87.0	3	commscope	LNX-6515DS-VTM w/ Mount Pipe	12 1 1	1-1/4 1-5/8 7/8	1
		1	crown mounts	T-Arm Mount [TA 602-3]			
		3	ericsson	AIR -32 B2A/B66AA w/ Mount Pipe			
		3	ericsson	ERICSSON AIR 21 B2A B4P w/ Mount Pipe			
		3	ericsson	KRY 112 144/1			
		3	ericsson	RRUS 11 B12			

Notes:
1) Existing Equipment
2) Reserved Equipment
3) Equipment To Be Removed

Table 3 - Design Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
Unknown						

3) ANALYSIS PROCEDURE

Table 4 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	Dr. Welti, 11/11/91	262381	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	Valmont, 10613-91 & 10614-91, 11/30/91	262389	CCISITES
4-TOWER MANUFACTURER DRAWINGS	Valmont, 1/22/91	262386	CCISITES
4-TOWER MANUFACTURER DRAWINGS	TEP, 10/04/16	6484331	CCISITES
4-POST-MODIFICATION INSPECTION	TEP, 127151, 2/26/2013	3675451	CCISITES
4-POST-MODIFICATION INSPECTION	TEP, 25676, 6/4/2014	5099148	CCISITES
4-POST-MODIFICATION INSPECTION	ETS, 150936, 10/2/15	5921968	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	GPD, 2016777.806376.03, 10/21/06	6515906	CCISITES
4-TOWER STRUCTURAL ANALYSIS REPORTS	PJF, 37517-1009.002.7805, 3/25/17	6789312	CCISITES

3.1) Analysis Method

tnxTower (version 7.0.5.1), 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.

3.2) Assumptions

1) Tower and structures were built in accordance with the manufacturer's specifications.
2) The tower and structures have been maintained in accordance with the manufacturer's specification.
3) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
4) Monopole was reinforced in conformance with the referenced modification drawings.
5) Monopole will be modified in conformance with the referenced proposed modification drawings.
6) The modifications by GPD Group dated October 21, 2016 have been considered in this analysis.

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

4) ANALYSIS RESULTS

Table 5 - Section Capacity (Summary)

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
131 - 126	Pole	TP11.715x10.525x0.1875	Pole	0.6%	Pass
126 - 121	Pole	TP12.906x11.715x0.1875	Pole	1.9%	Pass
121 - 116	Pole	TP14.096x12.906x0.1875	Pole	12.3%	Pass
116 - 111	Pole	TP15.287x14.096x0.1875	Pole	22.0%	Pass
111 - 110	Pole	TP15.525x15.287x0.1875	Pole	23.8%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
110 - 105	Pole	TP16.776x15.525x0.25	Pole	32.1%	Pass
105 - 100	Pole	TP18.027x16.776x0.25	Pole	43.8%	Pass
100 - 95	Pole	TP19.277x18.027x0.25	Pole	57.3%	Pass
95 - 89.9	Pole + Reinf.	TP20.553x19.277x0.5	Reinf. 14 Tension Rupture	63.3%	Pass
89.9 - 89.67	Pole + Reinf.	TP20.611x20.553x0.5	Reinf. 14 Tension Rupture	63.8%	Pass
89.67 - 84.57	Pole + Reinf.	TP21.887x20.611x0.6375	Reinf. 14 Tension Rupture	59.3%	Pass
84.57 - 84.33	Pole + Reinf.	TP21.946x21.887x0.6375	Reinf. 14 Tension Rupture	59.8%	Pass
84.33 - 82.92	Pole + Reinf.	TP22.3x21.946x0.625	Reinf. 14 Tension Rupture	62.9%	Pass
82.92 - 82.67	Pole + Reinf.	TP22.362x22.3x0.3938	Reinf. 12 Tension Rupture	74.0%	Pass
82.67 - 80.98	Pole + Reinf.	TP22.785x22.362x0.3875	Reinf. 12 Tension Rupture	77.6%	Pass
80.98 - 80.73	Pole + Reinf.	TP22.847x22.785x0.3875	Reinf. 12 Tension Rupture	78.1%	Pass
80.73 - 75.73	Pole + Reinf.	TP24.098x22.847x0.3813	Reinf. 12 Tension Rupture	87.7%	Pass
75.73 - 74	Pole + Reinf.	TP25.531x24.098x0.3813	Reinf. 12 Tension Rupture	90.6%	Pass
74 - 69	Pole + Reinf.	TP25.281x24.03x0.4375	Reinf. 12 Tension Rupture	87.4%	Pass
69 - 66.98	Pole + Reinf.	TP25.785x25.281x0.4375	Reinf. 10 Tension Rupture	89.7%	Pass
66.98 - 66.73	Pole + Reinf.	TP25.848x25.785x0.4375	Reinf. 10 Tension Rupture	90.0%	Pass
66.73 - 64.08	Pole + Reinf.	TP26.511x25.848x0.4313	Reinf. 10 Tension Rupture	92.8%	Pass
64.08 - 63.83	Pole + Reinf.	TP26.573x26.511x0.575	Reinf. 11 Tension Rupture	88.0%	Pass
63.83 - 62.42	Pole + Reinf.	TP26.928x26.573x0.5625	Reinf. 11 Tension Rupture	89.6%	Pass
62.42 - 62.17	Pole + Reinf.	TP26.99x26.928x0.6125	Reinf. 9 Tension Rupture	89.0%	Pass
62.17 - 59.46	Pole + Reinf.	TP27.668x26.99x0.6125	Reinf. 9 Tension Rupture	91.9%	Pass
59.46 - 59.21	Pole + Reinf.	TP27.73x27.668x0.725	Reinf. 8 Compression	82.6%	Pass
59.21 - 56	Pole + Reinf.	TP28.532x27.73x0.7125	Reinf. 8 Compression	85.7%	Pass
56 - 55.75	Pole + Reinf.	TP28.595x28.532x0.7375	Reinf. 8 Compression	84.4%	Pass
55.75 - 50.75	Pole + Reinf.	TP29.846x28.595x0.7125	Reinf. 8 Compression	88.7%	Pass
50.75 - 45.75	Pole + Reinf.	TP31.096x29.846x0.7	Reinf. 8 Compression	92.6%	Pass
45.75 - 44.48	Pole + Reinf.	TP31.413x31.096x0.6875	Reinf. 8 Compression	93.6%	Pass
44.48 - 44.23	Pole + Reinf.	TP31.476x31.413x0.6125	Reinf. 4 Tension Rupture	88.0%	Pass
44.23 - 44.08	Pole + Reinf.	TP31.513x31.476x0.6125	Reinf. 4 Tension Rupture	88.1%	Pass
44.08 - 39.08	Pole + Reinf.	TP32.764x31.513x0.6	Reinf. 4 Tension Rupture	91.2%	Pass
39.08 - 39	Pole + Reinf.	TP34.015x32.764x0.6	Reinf. 4 Tension Rupture	91.2%	Pass
39 - 34	Pole + Reinf.	TP33.408x32.159x0.6313	Reinf. 4 Tension Rupture	91.9%	Pass
34 - 31.46	Pole + Reinf.	TP34.043x33.408x0.6188	Reinf. 4 Tension Rupture	93.1%	Pass
31.46 - 31.21	Pole + Reinf.	TP34.105x34.043x0.6188	Reinf. 4 Tension Rupture	93.2%	Pass
31.21 - 29.46	Pole + Reinf.	TP34.543x34.105x0.6188	Reinf. 4 Tension Rupture	93.9%	Pass
29.46 - 29.21	Pole + Reinf.	TP34.605x34.543x0.6188	Reinf. 4 Tension Rupture	94.0%	Pass
29.21 - 26.83	Pole + Reinf.	TP35.198x34.605x0.6188	Reinf. 4 Tension Rupture	95.0%	Pass
26.83 - 26.58	Pole + Reinf.	TP35.261x35.198x0.8438	Reinf. 2 Compression	85.1%	Pass
26.58 - 21.58	Pole + Reinf.	TP36.509x35.261x0.8188	Reinf. 2 Compression	87.3%	Pass
21.58 - 20.75	Pole + Reinf.	TP36.718x36.509x0.8188	Reinf. 2 Compression	87.6%	Pass
20.75 - 20.5	Pole + Reinf.	TP36.78x36.718x0.8188	Reinf. 2 Compression	87.1%	Pass
20.5 - 18	Pole + Reinf.	TP37.404x36.78x0.8063	Reinf. 2 Compression	88.1%	Pass
18 - 17.75	Pole + Reinf.	TP37.467x37.404x0.8188	Reinf. 4 Tension Rupture	72.6%	Pass
17.75 - 17.08	Pole + Reinf.	TP37.633x37.467x0.8188	Reinf. 4 Tension Rupture	72.8%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
17.08 - 16.83	Pole + Reinf.	TP37.696x37.633x0.7313	Reinf. 4 Tension Rupture	80.9%	Pass
16.83 - 13	Pole + Reinf.	TP38.653x37.696x0.7188	Reinf. 4 Tension Rupture	82.1%	Pass
13 - 12.75	Pole + Reinf.	TP38.716x38.653x0.8938	Reinf. 1 Tension Rupture	67.9%	Pass
12.75 - 11.83	Pole + Reinf.	TP38.945x38.716x0.8938	Reinf. 1 Tension Rupture	68.1%	Pass
11.83 - 11.58	Pole + Reinf.	TP39.007x38.945x0.6688	Reinf. 1 Tension Rupture	90.9%	Pass
11.58 - 6.48	Pole + Reinf.	TP40.281x39.007x0.7563	Reinf. 1 Tension Rupture	87.2%	Pass
6.48 - 6.25	Pole + Reinf.	TP40.339x40.281x0.7563	Reinf. 1 Tension Rupture	87.3%	Pass
6.25 - 1.25	Pole + Reinf.	TP41.588x40.339x0.7438	Reinf. 1 Tension Rupture	88.5%	Pass
1.25 - 0	Pole + Reinf.	TP41.9x41.588x0.7313	Reinf. 1 Tension Rupture	88.8%	Pass
				Summary	
			Pole	70.4%	Pass
			Reinforcement	95.0%	Pass
			Overall	95.0%	Pass

Table 6 - Tower Component Stresses vs. Capacity – LC4.7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	98.7	Pass
1	Base Plate	0	66.6	Pass
1	Transfer Stiffeners	0	61.5	Pass
1	Base Foundation	0	57.0	Pass
1	Base Foundation Soil Interaction	0	66.3	Pass
1	Flange Bolts	110	22.2	Pass
1	Flange Plate	110	11.8	Pass

Structure Rating (max from all components) =	98.7%

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

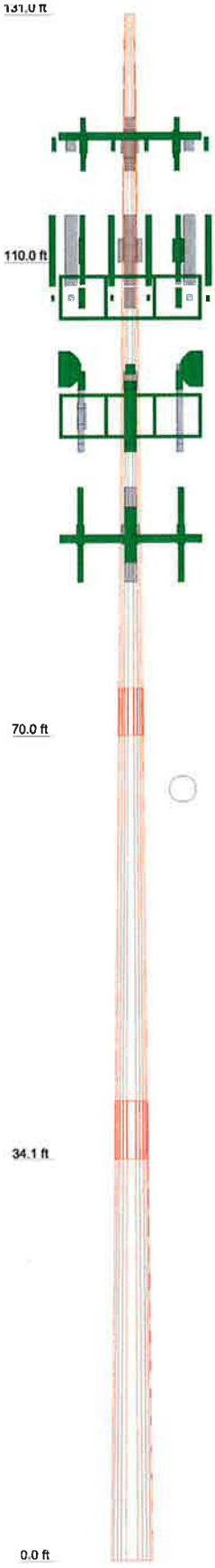
4.1) Recommendations

The monopole and its foundation will have the sufficient capacity to carry the proposed loading configuration. No further modifications are needed at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	1	2	3	4
Length (ft)	21.0000	40.0000	39.9200	39.0000
Number of Sides	12	12	12	12
Thickness (in)	0.1875	0.2500	0.3125	0.3438
Socket Length (ft)		4.0000	4.9200	
Top Dia (in)	10.5250	15.5250	24.0304	32.1594
Bot Dia (in)	15.5250	25.5310	34.0150	41.9000
Grade	A572-65			
Weight (K)	0.6	2.2	3.9	5.4



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
RRUS-11	121	Side Arm Mount [SO 101-3]	99
RRUS-11	121	TIMING 2000	97
RRUS-11	121	840 10054	97
(2) LGP21401	121	840 10054	97
(2) LGP21401	121	840 10054	97
(2) LGP21401	121	WIMAX DAP HEAD	97
DC6-48-60-18-8F	121	WIMAX DAP HEAD	97
T-Arm Mount [TA 702-3]	121	WIMAX DAP HEAD	97
80010798 w/ Mount Pipe	121	HORIZON COMPACT	97
80010798 w/ Mount Pipe	121	HORIZON COMPACT	97
80010798 w/ Mount Pipe	121	APXVSPP18-C-A20	97
RRUS 32	121	APXVSPP18-C-A20	97
RRUS 32	121	APXVSPP18-C-A20	97
RRUS 32	121	IBC1900HG-2A	97
RRUS 32 B2	121	IBC1900HG-2A	97
RRUS 32 B2	121	IBC1900HG-2A	97
RRUS 32 B2	121	IBC1900BB-1	97
DC6-48-60-18-8F	121	IBC1900BB-1	97
BXA-80063/4CF	107	IBC1900BB-1	97
BXA-80063/4CF	107	Platform Mount (LP 101-1)	97
BXA-80063/4CF	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	VHLP2.5-11	97
(2) FD9R6004/2C-3L	107	VHLP2.5-11	97
(2) FD9R6004/2C-3L	107	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	87
(2) FD9R6004/2C-3L	107	LNX-6515DS-VTM w/ Mount Pipe	87
DB-T1-6Z-8AB-0Z	107	LNX-6515DS-VTM w/ Mount Pipe	87
DB-T1-6Z-8AB-0Z	107	LNX-6515DS-VTM w/ Mount Pipe	87
Platform Mount (LP 101-1)	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	KRY 112 144/1	87
B13 RRH 4X30	107	KRY 112 144/1	87
B13 RRH 4X30	107	KRY 112 144/1	87
B13 RRH 4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	T-Arm Mount [TA 602-3]	87
800MHz 2X50W RRH W/FILTER	99	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	87
800MHz 2X50W RRH W/FILTER	99	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	87
800MHz 2X50W RRH W/FILTER	99		
PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99		
PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99		
PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

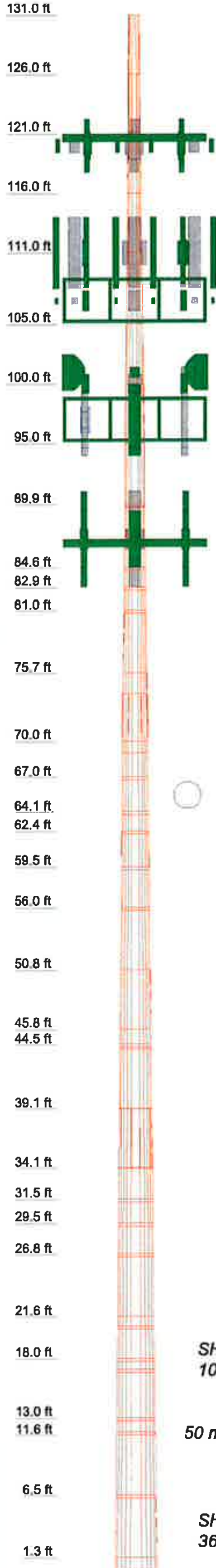
1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 97 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.0000 ft

FDH Velocitel
222 S. Central Ave., Suite 1110
Saint Louis, MO 63105
Phone: 3147734000
FAX: 3147734001

Tower Analysis

Job: HRT 100 943239, 806376			
Project: 17QGOK1400			
Client: Crown Castle International	Drawn by: PRoach	App'd:	
Code: TIA-222-G	Date: 06/19/17	Scale: N	
Path:		Dwg No.	

Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.0000	12	0.1875		10.5250	11.7155	A572-65	0.1
2	5.0000	12	0.1875		11.7155	12.9060	A572-65	0.1
3	5.0000	12	0.1875		12.9060	14.0964	A572-65	0.1
4	[illegible]	12	0.1875		[illegible]	[illegible]	A572-65	0.1
5	[illegible]	12	[illegible]		[illegible]	[illegible]	A572-65	0.0
6	[illegible]	12	0.2500		15.5250	16.7757	A572-65	0.2
7	5.0000	12	0.2500		16.7757	18.0265	A572-65	0.2
8	5.0000	12	0.2500		18.0265	19.2772	A572-65	0.3
9–58	[illegible]	12	[illegible]	4.0000; 4.9200	[illegible]	[illegible]	A572-65	[illegible]



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
800 10121 w/ Mount Pipe	121	PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99
RRUS-11	121	Side Arm Mount [SO 101-3]	99
RRUS-11	121	TIMING 2000	97
RRUS-11	121	840 10054	97
(2) LGP21401	121	840 10054	97
(2) LGP21401	121	840 10054	97
(2) LGP21401	121	WIMAX DAP HEAD	97
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80010798 w/ Mount Pipe	121	HORIZON COMPACT	97
80010798 w/ Mount Pipe	121	APXVSPP18-C-A20	97
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RRUS 32	121	APXVSPP18-C-A20	97
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RRUS 32 B2	121	IBC1900HG-2A	97
RRUS 32 B2	121	IBC1900HG-2A	97
RRUS 32 B2	121	IBC1900BB-1	97
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BXA-80063/4CF	107	Platform Mount (LP 101-1)	97
BXA-80063/4CF	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	APXVTM14-ALU-I20	97
BXA-70063/6CFx4	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	TD-RRH8x20-25	97
(2) SBNHH-1D65B	107	VHLP2.5-11	97
(2) FD9R6004/2C-3L	107	VHLP2.5-11	97
(2) FD9R6004/2C-3L	107	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	87
(2) FD9R6004/2C-3L	107	LNX-6515DS-VTM w/ Mount Pipe	87
DB-T1-6Z-8AB-0Z	107	LNX-6515DS-VTM w/ Mount Pipe	87
DB-T1-6Z-8AB-0Z	107	LNX-6515DS-VTM w/ Mount Pipe	87
Platform Mount (LP 101-1)	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	AIR -32 B2A/B66AA w/ Mount Pipe	87
B66A RRH4X45	107	KRY 112 144/1	87
B13 RRH 4X30	107	KRY 112 144/1	87
B13 RRH 4X30	107	KRY 112 144/1	87
B13 RRH 4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	RRUS 11 B12	87
B25 RRH4X30	107	T-Arm Mount [TA 602-3]	87
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PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99		
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PCS 1900MHz 4x45W-65MHz w/Mount Pipe	99		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

ALL REACTIONS ARE FACTORED

AXIAL 99 K
SHEAR 10 K
MOMENT 900 kip-ft
TORQUE 0 kip-ft
50 mph WIND - 1.0000 in ICE

AXIAL 43 K
SHEAR 36 K
MOMENT 3081 kip-ft
TORQUE 2 kip-ft
REACTIONS - 97 mph WIND

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
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7. Topographic Category 1 with Crest Height of 0.0000 ft

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222 S. Central Ave., Suite 1110
Saint Louis, MO 63105
Phone: 3147734000
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Tower Analysis

Job: **HRT 100 943239, 806376**			
Project: **17QGOK1400**			
Client: Crown Castle International	Drawn by: PRoach	App'd:	
Code: TIA-222-G	Date: 06/19/17	Scale: N	
Path: [illegible]		Dwg No.	

Tower Input Data

There is a pole section.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in Hartford County, Connecticut.
ASCE 7-10 Wind Data is used (wind speeds converted to nominal values).
Basic wind speed of 97 mph.
Structure Class II.
Exposure Category C.
Topographic Category 1.
Crest Height 0.0000 ft.
Nominal ice thickness of 1.0000 in.
Ice thickness is considered to increase with height.
Ice density of 56.00 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.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned		Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
√	Use Code Stress Ratios	√	Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys		Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-G Bracing Resist. Exemption
	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Use TIA-222-G Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
	Secondary Horizontal Braces Leg		Sort Capacity Reports By Component	√	Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric				

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	131.0000-126.0000	5.0000	0.00	12	10.5250	11.7155	0.1875	0.7500	A572-65 (65 ksi)
L2	126.0000-121.0	5.0000	0.00	12	11.7155	12.9060	0.1875	0.7500	A572-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
	000								(65 ksi)
L3	121.0000-116.0000	5.0000	0.00	12	12.9060	14.0964	0.1875	0.7500	A572-65 (65 ksi)
L4	116.0000-111.0000	5.0000	0.00	12	14.0964	15.2869	0.1875	0.7500	A572-65 (65 ksi)
L5	111.0000-110.0000	1.0000	0.00	12	15.2869	15.5250	0.1875	0.7500	A572-65 (65 ksi)
L6	110.0000-105.0000	5.0000	0.00	12	15.5250	16.7757	0.2500	1.0000	A572-65 (65 ksi)
L7	105.0000-100.0000	5.0000	0.00	12	16.7757	18.0265	0.2500	1.0000	A572-65 (65 ksi)
L8	100.0000-95.0000	5.0000	0.00	12	18.0265	19.2772	0.2500	1.0000	A572-65 (65 ksi)
L9	95.0000-89.9000	5.1000	0.00	12	19.2772	20.5530	0.5000	2.0000	A572-65 (65 ksi)
L10	89.9000-89.6667	0.2333	0.00	12	20.5530	20.6114	0.5000	2.0000	A572-65 (65 ksi)
L11	89.6667-84.5667	5.1000	0.00	12	20.6114	21.8871	0.6375	2.5500	A572-65 (65 ksi)
L12	84.5667-84.3333	0.2334	0.00	12	21.8871	21.9455	0.6375	2.5500	A572-65 (65 ksi)
L13	84.3333-82.9167	1.4166	0.00	12	21.9455	22.2999	0.6250	2.5000	A572-65 (65 ksi)
L14	82.9167-82.6667	0.2500	0.00	12	22.2999	22.3624	0.3937	1.5750	A572-65 (65 ksi)
L15	82.6667-80.9792	1.6875	0.00	12	22.3624	22.7846	0.3875	1.5500	A572-65 (65 ksi)
L16	80.9792-80.7292	0.2500	0.00	12	22.7846	22.8471	0.3875	1.5500	A572-65 (65 ksi)
L17	80.7292-75.7292	5.0000	0.00	12	22.8471	24.0978	0.3812	1.5250	A572-65 (65 ksi)
L18	75.7292-70.0000	5.7292	4.00	12	24.0978	25.5310	0.3812	1.5250	A572-65 (65 ksi)
L19	70.0000-69.0000	5.0000	0.00	12	24.0304	25.2810	0.4375	1.7500	A572-65 (65 ksi)
L20	69.0000-66.9833	2.0167	0.00	12	25.2810	25.7854	0.4375	1.7500	A572-65 (65 ksi)
L21	66.9833-66.7333	0.2500	0.00	12	25.7854	25.8479	0.4375	1.7500	A572-65 (65 ksi)
L22	66.7333-64.0833	2.6500	0.00	12	25.8479	26.5107	0.4313	1.7250	A572-65 (65 ksi)
L23	64.0833-63.8333	0.2500	0.00	12	26.5107	26.5732	0.5750	2.3000	A572-65 (65 ksi)
L24	63.8333-62.4167	1.4166	0.00	12	26.5732	26.9276	0.5625	2.2500	A572-65 (65 ksi)
L25	62.4167-62.1667	0.2500	0.00	12	26.9276	26.9901	0.6125	2.4500	A572-65 (65 ksi)
L26	62.1667-59.4583	2.7084	0.00	12	26.9901	27.6675	0.6125	2.4500	A572-65 (65 ksi)
L27	59.4583-59.2083	0.2500	0.00	12	27.6675	27.7300	0.7250	2.9000	A572-65 (65 ksi)
L28	59.2083-56.0000	3.2083	0.00	12	27.7300	28.5325	0.7125	2.8500	A572-65 (65 ksi)
L29	56.0000-55.7500	0.2500	0.00	12	28.5325	28.5950	0.7375	2.9500	A572-65 (65 ksi)
L30	55.7500-50.7500	5.0000	0.00	12	28.5950	29.8456	0.7125	2.8500	A572-65 (65 ksi)
L31	50.7500-45.7500	5.0000	0.00	12	29.8456	31.0962	0.7000	2.8000	A572-65 (65 ksi)
L32	45.7500-44.4833	1.2667	0.00	12	31.0962	31.4130	0.6875	2.7500	A572-65 (65 ksi)

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L33	44.4833-44.2333	0.2500	0.00	12	31.4130	31.4755	0.6125	2.4500	A572-65 (65 ksi)
L34	44.2333-44.0833	0.1500	0.00	12	31.4755	31.5130	0.6125	2.4500	A572-65 (65 ksi)
L35	44.0833-39.0833	5.0000	0.00	12	31.5130	32.7636	0.6000	2.4000	A572-65 (65 ksi)
L36	39.0833-34.0800	5.0033	4.92	12	32.7636	34.0150	0.6000	2.4000	A572-65 (65 ksi)
L37	34.0800-34.0000	5.0000	0.00	12	32.1594	33.4082	0.6313	2.5252	A572-65 (65 ksi)
L38	34.0000-31.4583	2.5417	0.00	12	33.4082	34.0430	0.6188	2.4752	A572-65 (65 ksi)
L39	31.4583-31.2083	0.2500	0.00	12	34.0430	34.1055	0.6188	2.4752	A572-65 (65 ksi)
L40	31.2083-29.4583	1.7500	0.00	12	34.1055	34.5426	0.6188	2.4752	A572-65 (65 ksi)
L41	29.4583-29.2083	0.2500	0.00	12	34.5426	34.6050	0.6188	2.4752	A572-65 (65 ksi)
L42	29.2083-26.8333	2.3750	0.00	12	34.6050	35.1982	0.6188	2.4752	A572-65 (65 ksi)
L43	26.8333-26.5833	0.2500	0.00	12	35.1982	35.2606	0.8438	3.3752	A572-65 (65 ksi)
L44	26.5833-21.5833	5.0000	0.00	12	35.2606	36.5094	0.8188	3.2752	A572-65 (65 ksi)
L45	21.5833-20.7500	0.8333	0.00	12	36.5094	36.7175	0.8188	3.2752	A572-65 (65 ksi)
L46	20.7500-20.5000	0.2500	0.00	12	36.7175	36.7800	0.8188	3.2752	A572-65 (65 ksi)
L47	20.5000-18.0000	2.5000	0.00	12	36.7800	37.4044	0.8063	3.2252	A572-65 (65 ksi)
L48	18.0000-17.7500	0.2500	0.00	12	37.4044	37.4668	0.8188	3.2752	A572-65 (65 ksi)
L49	17.7500-17.0833	0.6667	0.00	12	37.4668	37.6333	0.8188	3.2752	A572-65 (65 ksi)
L50	17.0833-16.8333	0.2500	0.00	12	37.6333	37.6957	0.7313	2.9252	A572-65 (65 ksi)
L51	16.8333-13.0000	3.8333	0.00	12	37.6957	38.6531	0.7188	2.8752	A572-65 (65 ksi)
L52	13.0000-12.7500	0.2500	0.00	12	38.6531	38.7156	0.8938	3.5752	A572-65 (65 ksi)
L53	12.7500-11.8333	0.9167	0.00	12	38.7156	38.9445	0.8938	3.5752	A572-65 (65 ksi)
L54	11.8333-11.5833	0.2500	0.00	12	38.9445	39.0070	0.6688	2.6752	A572-65 (65 ksi)
L55	11.5833-6.4833	5.1000	0.00	12	39.0070	40.2807	0.7563	3.0252	A572-65 (65 ksi)
L56	6.4833-6.2500	0.2333	0.00	12	40.2807	40.3390	0.7563	3.0252	A572-65 (65 ksi)
L57	6.2500-1.2500	5.0000	0.00	12	40.3390	41.5878	0.7438	2.9752	A572-65 (65 ksi)
L58	1.2500-0.0000	1.2500		12	41.5878	41.9000	0.7313	2.9252	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	10.8963	6.2413	85.1314	3.7008	5.4520	15.6148	172.4993	3.0718	2.3182	12.364
	12.1288	6.9600	118.0599	4.1270	6.0686	19.4542	239.2213	3.4255	2.6372	14.065
L2	12.1288	6.9600	118.0599	4.1270	6.0686	19.4542	239.2213	3.4255	2.6372	14.065
	13.3612	7.6788	158.5426	4.5532	6.6853	23.7152	321.2502	3.7793	2.9563	15.767
L3	13.3612	7.6788	158.5426	4.5532	6.6853	23.7152	321.2502	3.7793	2.9563	15.767
	14.5937	8.3975	207.3596	4.9794	7.3019	28.3978	420.1667	4.1330	3.2753	17.468
L4	14.5937	8.3975	207.3596	4.9794	7.3019	28.3978	420.1667	4.1330	3.2753	17.468
	15.8262	9.1163	265.2910	5.4056	7.9186	33.5022	537.5516	4.4867	3.5944	19.17
L5	15.8262	9.1163	265.2910	5.4056	7.9186	33.5022	537.5516	4.4867	3.5944	19.17
	16.0727	9.2600	278.0397	5.4908	8.0419	34.5737	563.3838	4.5575	3.6582	19.51
L6	16.0727	12.2964	366.2060	5.4684	8.0419	45.5370	742.0327	6.0519	3.4907	13.963
	17.3675	13.3032	463.7302	5.9162	8.6898	53.3646	939.6431	6.5474	3.8259	15.304
L7	17.3675	13.3032	463.7302	5.9162	8.6898	53.3646	939.6431	6.5474	3.8259	15.304
	18.6624	14.3101	577.1924	6.3640	9.3377	61.8129	1169.5483	7.0430	4.1611	16.644
L8	18.6624	14.3101	577.1924	6.3640	9.3377	61.8129	1169.5483	7.0430	4.1611	16.644
	19.9573	15.3169	707.7989	6.8118	9.9856	70.8819	1434.1925	7.5385	4.4963	17.985
L9	19.9573	30.2314	1360.5290	6.7223	9.9856	136.2489	2756.8005	14.8790	3.8263	7.653
	21.2780	32.2854	1657.1082	7.1790	10.6465	155.6487	3357.7504	15.8899	4.1682	8.336
L10	21.2780	32.2854	1657.1082	7.1790	10.6465	155.6487	3357.7504	15.8899	4.1682	8.336
	21.3385	32.3793	1671.6183	7.1999	10.6767	156.5671	3387.1519	15.9361	4.1838	8.368
L11	21.3385	41.0014	2087.8966	7.1506	10.6767	195.5565	4230.6446	20.1796	3.8153	5.985
	22.6592	43.6202	2514.0664	7.6074	11.3375	221.7471	5094.1801	21.4685	4.1573	6.521
L12	22.6592	43.6202	2514.0664	7.6074	11.3375	221.7471	5094.1801	21.4685	4.1573	6.521
	22.7197	43.7400	2534.8461	7.6283	11.3678	222.9851	5136.2855	21.5275	4.1729	6.546
L13	22.7197	42.9076	2489.5194	7.6327	11.3678	218.9978	5044.4413	21.1178	4.2064	6.73
	23.0865	43.6207	2615.7269	7.7596	11.5513	226.4436	5300.1718	21.4688	4.3014	6.882
L14	23.0865	27.7742	1701.2174	7.8424	11.5513	147.2744	3447.1277	13.6696	4.9211	12.498
	23.1513	27.8535	1715.8289	7.8648	11.5837	148.1240	3476.7346	13.7087	4.9379	12.541
L15	23.1513	27.4192	1690.0351	7.8670	11.5837	145.8972	3424.4694	13.4949	4.9546	12.786
	23.5883	27.9459	1789.3124	8.0181	11.8024	151.6058	3625.6320	13.7541	5.0678	13.078
L16	23.5883	27.9459	1789.3124	8.0181	11.8024	151.6058	3625.6320	13.7541	5.0678	13.078
	23.6530	28.0240	1804.3427	8.0405	11.8348	152.4609	3656.0876	13.7925	5.0845	13.121
L17	23.6530	27.5796	1776.7229	8.0428	11.8348	150.1271	3600.1222	13.5739	5.1013	13.38
	24.9479	29.1151	2090.2992	8.4905	12.4827	167.4559	4235.5128	14.3296	5.4365	14.26
L18	24.9479	29.1151	2090.2992	8.4905	12.4827	167.4559	4235.5128	14.3296	5.4365	14.26
	26.4316	30.8745	2492.6006	9.0036	13.2251	188.4756	5050.6845	15.1955	5.8206	15.267
L19	25.9139	33.2365	2361.3690	8.4463	12.4477	189.7025	4784.7738	16.3580	5.2676	12.04
	26.1728	34.9982	2757.1283	8.8940	13.0955	210.5394	5586.6893	17.2251	5.6028	12.806
L20	26.1728	34.9982	2757.1283	8.8940	13.0955	210.5394	5586.6893	17.2251	5.6028	12.806
	26.6950	35.7088	2928.4984	9.0745	13.3568	219.2510	5933.9317	17.5748	5.7380	13.115
L21	26.6950	35.7088	2928.4984	9.0745	13.3568	219.2510	5933.9317	17.5748	5.7380	13.115
	26.7597	35.7969	2950.2242	9.0969	13.3892	220.3433	5977.9540	17.6182	5.7547	13.154
L22	26.7597	35.2942	2910.2245	9.0992	13.3892	217.3558	5896.9038	17.3707	5.7715	13.383
	27.4459	36.2146	3143.8882	9.3364	13.7326	228.9369	6370.3699	17.8237	5.9491	13.795
L23	27.4459	48.0200	4122.9159	9.2850	13.7326	300.2294	8354.1454	23.6340	5.5639	9.676
	27.5106	48.1358	4152.8079	9.3074	13.7649	301.6945	8414.7146	23.6910	5.5806	9.705
L24	27.5106	47.1120	4068.3921	9.3118	13.7649	295.5619	8243.6653	23.1871	5.6141	9.981
	27.8775	47.7537	4236.9236	9.4387	13.9485	303.7553	8585.1558	23.5029	5.7091	10.149
L25	27.8775	51.8999	4587.3407	9.4208	13.9485	328.8776	9295.1959	25.5435	5.5751	9.102
	27.9422	52.0232	4620.1192	9.4432	13.9809	330.4602	9361.6142	25.6042	5.5918	9.13
L26	27.9422	52.0232	4620.1192	9.4432	13.9809	330.4602	9361.6142	25.6042	5.5918	9.13
	28.6435	53.3592	4985.2915	9.6857	14.3318	347.8491	10101.5522	26.2618	5.7734	9.426
L27	28.6435	62.8973	5827.6510	9.6454	14.3318	406.6248	11808.4009	30.9561	5.4719	7.547
	28.7082	63.0432	5868.3201	9.6678	14.3642	408.5392	11890.8075	31.0280	5.4886	7.571
L28	28.7082	61.9850	5775.1543	9.6723	14.3642	402.0532	11702.0283	30.5071	5.5221	7.75
	29.5390	63.8260	6305.1708	9.9596	14.7798	426.6067	12775.9855	31.4132	5.7372	8.052
L29	29.5390	66.0061	6508.8261	9.9506	14.7798	440.3860	13188.6464	32.4862	5.6702	7.688
	29.6037	66.1546	6552.8526	9.9730	14.8122	442.3953	13277.8560	32.5593	5.6870	7.711
L30	29.6037	63.9694	6347.7814	9.9819	14.8122	428.5505	12862.3261	31.4838	5.7540	8.076
	30.8984	66.8386	7240.7884	10.4296	15.4600	468.3560	14671.8003	32.8959	6.0891	8.546
L31	30.8984	65.6941	7122.9177	10.4341	15.4600	460.7318	14432.9625	32.3327	6.1226	8.747
	32.1931	68.5129	8079.7110	10.8818	16.1078	501.6021	16371.6849	33.7200	6.4578	9.225

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L32	32.1931	67.3172	7945.2244	10.8863	16.1078	493.2530	16099.1788	33.1315	6.4913	9.442
	32.5211	68.0185	8196.1593	10.9997	16.2719	503.6995	16607.6409	33.4766	6.5762	9.565
L33	32.5211	60.7462	7355.6357	11.0266	16.2719	452.0447	14904.5120	29.8975	6.7772	11.065
	32.5858	60.8696	7400.5252	11.0490	16.3043	453.8999	14995.4705	29.9581	6.7939	11.092
L34	32.5858	60.8696	7400.5252	11.0490	16.3043	453.8999	14995.4705	29.9581	6.7939	11.092
	32.6247	60.9436	7427.5464	11.0624	16.3237	455.0148	15050.2228	29.9946	6.8040	11.109
L35	32.6247	59.7240	7284.7973	11.0669	16.3237	446.2700	14760.9744	29.3943	6.8375	11.396
	33.9194	62.1401	8205.1584	11.5146	16.9715	483.4656	16625.8754	30.5835	7.1726	11.954
L36	33.9194	62.1401	8205.1584	11.5146	16.9715	483.4656	16625.8754	30.5835	7.1726	11.954
	35.2149	64.5578	9200.6279	11.9626	17.6198	522.1764	18642.9666	31.7734	7.5080	12.513
L37	34.5661	64.0899	8131.5320	11.2871	16.6586	488.1286	16476.6884	31.5431	6.9268	10.972
	34.5867	66.6285	9136.5489	11.7341	17.3055	527.9576	18513.1251	32.7925	7.2615	11.502
L38	34.5867	65.3341	8965.8915	11.7386	17.3055	518.0961	18167.3269	32.1555	7.2950	11.789
	35.2439	66.5990	9496.7830	11.9659	17.6343	538.5407	19243.0570	32.7780	7.4651	12.064
L39	35.2439	66.5990	9496.7830	11.9659	17.6343	538.5407	19243.0570	32.7780	7.4651	12.064
	35.3086	66.7234	9550.1050	11.9882	17.6666	540.5729	19351.1020	32.8392	7.4819	12.091
L40	35.3086	66.7234	9550.1050	11.9882	17.6666	540.5729	19351.1020	32.8392	7.4819	12.091
	35.7611	67.5943	9928.9585	12.1447	17.8930	554.9062	20118.7618	33.2679	7.5990	12.28
L41	35.7611	67.5943	9928.9585	12.1447	17.8930	554.9062	20118.7618	33.2679	7.5990	12.28
	35.8257	67.7187	9983.8847	12.1671	17.9254	556.9691	20230.0573	33.3291	7.6158	12.307
L42	35.8257	67.7187	9983.8847	12.1671	17.9254	556.9691	20230.0573	33.3291	7.6158	12.307
	36.4398	68.9006	10515.8208	12.3794	18.2326	576.7577	21307.9040	33.9108	7.7747	12.564
L43	36.4398	93.3420	14061.3536	12.2989	18.2326	771.2183	28492.1146	45.9401	7.1717	8.499
	36.5045	93.5117	14138.1631	12.3212	18.2650	774.0579	28647.7516	46.0236	7.1885	8.519
L44	36.5045	90.8071	13749.1978	12.3302	18.2650	752.7623	27859.6023	44.6925	7.2555	8.861
	37.7973	94.0995	15299.6338	12.7772	18.9119	808.9965	31001.2060	46.3129	7.5901	9.27
L45	37.7973	94.0995	15299.6338	12.7772	18.9119	808.9965	31001.2060	46.3129	7.5901	9.27
	38.0128	94.6483	15568.8490	12.8517	19.0197	818.5655	31546.7090	46.5830	7.6459	9.338
L46	38.0128	94.6483	15568.8490	12.8517	19.0197	818.5655	31546.7090	46.5830	7.6459	9.338
	38.0774	94.8129	15650.2282	12.8741	19.0520	821.4473	31711.6054	46.6640	7.6626	9.358
L47	38.0774	93.3979	15427.3844	12.8786	19.0520	809.7507	31260.0634	45.9676	7.6961	9.545
	38.7238	95.0190	16244.7283	13.1021	19.3755	838.4179	32916.2237	46.7655	7.8635	9.753
L48	38.7238	96.4591	16479.6716	13.0976	19.3755	850.5437	33392.2825	47.4742	7.8300	9.563
	38.7885	96.6238	16564.1919	13.1200	19.4078	853.4812	33563.5435	47.5553	7.8467	9.583
L49	38.7885	96.6238	16564.1919	13.1200	19.4078	853.4812	33563.5435	47.5553	7.8467	9.583
	38.9609	97.0628	16790.9921	13.1796	19.4940	861.3394	34023.1023	47.7713	7.8913	9.638
L50	38.9609	86.8963	15103.8301	13.2109	19.4940	774.7918	30604.4546	42.7677	8.1258	11.112
	39.0255	87.0433	15180.6286	13.2333	19.5264	777.4415	30760.0692	42.8401	8.1426	11.134
L51	39.0255	85.5845	14936.2909	13.2377	19.5264	764.9283	30264.9747	42.1221	8.1761	11.375
	40.0167	87.8004	16126.7791	13.5805	20.0223	805.4397	32677.2266	43.2127	8.4327	11.732
L52	40.0167	108.6728	19776.7765	13.5178	20.0223	987.7361	40073.1110	53.4854	7.9637	8.91
	40.0813	108.8525	19875.0486	13.5402	20.0547	991.0433	40272.2368	53.5739	7.9804	8.929
L53	40.0813	108.8525	19875.0486	13.5402	20.0547	991.0433	40272.2368	53.5739	7.9804	8.929
	40.3184	109.5114	20238.1773	13.6222	20.1733	1003.2175	41008.0341	53.8982	8.0418	8.997
L54	40.3184	82.4282	15413.7666	13.7027	20.1733	764.0688	31232.4699	40.5686	8.6448	12.926
	40.3830	82.5626	15489.3235	13.7251	20.2056	766.5851	31385.5688	40.6348	8.6615	12.951
L55	40.3830	93.1513	17396.1559	13.6937	20.2056	860.9566	35249.3281	45.8463	8.4270	11.142
	41.7017	96.2533	19192.5730	14.1498	20.8654	919.8266	38889.3563	47.3730	8.7684	11.594
L56	41.7017	96.2533	19192.5730	14.1498	20.8654	919.8266	38889.3563	47.3730	8.7684	11.594
	41.7620	96.3952	19277.5817	14.1706	20.8956	922.5662	39061.6069	47.4428	8.7840	11.614
L57	41.7620	94.8320	18976.9321	14.1751	20.8956	908.1780	38452.4094	46.6734	8.8175	11.855
	43.0549	97.8229	20829.6932	14.6222	21.5425	966.9124	42206.6056	48.1454	9.1521	12.305
L58	43.0549	96.2083	20498.4465	14.6266	21.5425	951.5360	41535.4101	47.3508	9.1856	12.561
	43.3781	96.9435	20971.9520	14.7384	21.7042	966.2624	42494.8606	47.7126	9.2693	12.675

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1				1	1	1			

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
131.0000-126.0000 L2				1	1	1			
126.0000-121.0000 L3				1	1	1			
121.0000-116.0000 L4				1	1	1			
116.0000-111.0000 L5				1	1	1			
111.0000-110.0000 L6				1	1	1			
110.0000-105.0000 L7				1	1	1			
105.0000-100.0000 L8				1	1	1			
100.0000-95.0000 L9				1	1	0.924979			
95.0000-89.9000 L10				1	1	0.923746			
89.9000-89.6667 L11				1	1	0.915864			
89.6667-84.5667 L12				1	1	0.914429			
84.5667-84.3333 L13				1	1	0.92347			
84.3333-82.9167 L14				1	1	0.962657			
82.9167-82.6667 L15				1	1	0.971634			
82.6667-80.9792 L16				1	1	0.970725			
80.9792-80.7292 L17				1	1	0.968928			
80.7292-75.7292 L18				1	1	0.963318			
75.7292-70.0000 L19				1	1	0.975404			
70.0000-69.0000 L20				1	1	0.970208			
69.0000-66.9833									

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L21 66.9833-66.73 33				1	1	0.969578			
L22 66.7333-64.08 33				1	1	0.976812			
L23 64.0833-63.83 33				1	1	0.923444			
L24 63.8333-62.41 67				1	1	0.938298			
L25 62.4167-62.16 67				1	1	0.949126			
L26 62.1667-59.45 83				1	1	0.938136			
L27 59.4583-59.20 83				1	1	0.937992			
L28 59.2083-56.00 00				1	1	0.93914			
L29 56.0000-55.75 00				1	1	0.952447			
L30 55.7500-50.75 00				1	1	0.961528			
L31 50.7500-45.75 00				1	1	0.956396			
L32 45.7500-44.48 33				1	1	0.968035			
L33 44.4833-44.23 33				1	1	0.959371			
L34 44.2333-44.08 33				1	1	0.958825			
L35 44.0833-39.08 33				1	1	0.960614			
L36 39.0833-34.08 00				1	1	0.960329			
L37 34.0800-34.00 00				1	1	0.95518			
L38 34.0000-31.45 83				1	1	0.966155			
L39 31.4583-31.20 83				1	1	0.96539			
L40 31.2083-29.45				1	1	0.96011			

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
83 L41 29.4583-29.20				1	1	0.959367			
83 L42 29.2083-26.83				1	1	0.95244			
33 L43 26.8333-26.58				1	1	0.927402			
33 L44 26.5833-21.58				1	1	0.9363			
33 L45 21.5833-20.75				1	1	0.933306			
00 L46 20.7500-20.50				1	1	0.977304			
00 L47 20.5000-18.00				1	1	0.982459			
00 L48 18.0000-17.75				1	1	0.957789			
00 L49 17.7500-17.08				1	1	0.955356			
33 L50 17.0833-16.83				1	1	0.962574			
33 L51 16.8333-13.00				1	1	0.966346			
00 L52 13.0000-12.75				1	1	0.945688			
00 L53 12.7500-11.83				1	1	0.942313			
33 L54 11.8333-11.58				1	1	1.0324			
33 L55 11.5833-6.483				1	1	0.984735			
3 L56 6.4833-6.2500				1	1	0.983955			
L57 6.2500-1.2500				1	1	0.983727			
L58 1.2500-0.0000				1	1	0.996216			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Safety Line 3/8	A	Surface Ar (CaAa)	131.0000 - 0.0000	1	1	0.250 0.250	0.3750		0.22
***									
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***									
LDF6-50A(1-1/4")	C	Surface Ar (CaAa)	121.0000 - 0.0000	6	3	-0.300 -0.300	1.5500		0.66
2" (Nominal) Conduit	C	Surface Ar (CaAa)	121.0000 - 0.0000	1	1	-0.242 -0.242	0.0000		0.72
FB-L98B-002-75000(3/8")	C	Surface Ar (CaAa)	121.0000 - 0.0000	1	1	-0.200 -0.200	0.0000		0.06
WR-VG86ST-BRD(3/4")	C	Surface Ar (CaAa)	121.0000 - 0.0000	2	2	-0.200 -0.200	0.0000		0.58
***									
***									
FSJ4-50B(1/2")	C	Surface Ar (CaAa)	97.0000 - 0.0000	1	1	-0.500 -0.500	0.5200		0.14
2" (Nominal) Conduit	C	Surface Ar (CaAa)	97.0000 - 0.0000	1	1	-0.480 -0.480	0.0000		0.72
2" (Nominal) Conduit	C	Surface Ar (CaAa)	97.0000 - 0.0000	1	1	-0.460 -0.460	0.0000		0.72
HB114-1-08U4-M5J(1 1/4")	B	Surface Ar (CaAa)	97.0000 - 0.0000	1	1	-0.066 -0.066	0.0000		1.08
***									
***									
LCF114-50J(1-1/4")	C	Surface Ar (CaAa)	87.0000 - 0.0000	12	6	0.094 0.094	0.0000		0.70
MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	C	Surface Ar (CaAa)	87.0000 - 0.0000	1	1	-0.010 -0.010	0.0000		1.07
MLC Hybrid 6/6(7/8")	C	Surface Ar (CaAa)	87.0000 - 0.0000	1	1	-0.010 -0.010	0.0000		1.82
***									
***									
6" x 1" Flat Plate (G)	C	Surface Af (CaAa)	15.5000 - 0.5000	1	1	0.000 0.000	6.0000	14.0000	0.00
6" x 1" Flat Plate (G)	B	Surface Af (CaAa)	15.5000 - 0.5000	1	1	0.000 0.000	6.0000	14.0000	0.00
6" x 1" Flat Plate (G)	A	Surface Af (CaAa)	15.5000 - 0.5000	1	1	0.000 0.000	6.0000	14.0000	0.00
***									
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	30.4583 - 0.5000	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	30.4583 - 0.5000	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af (CaAa)	30.4583 - 0.5000	1	1	-0.250 -0.250	4.0000	9.5000	0.00
***									
***									
6" x 1" Flat Plate (G)	C	Surface Af (CaAa)	44.3333 - 9.3333	1	1	-0.500 -0.500	6.0000	14.0000	0.00
***									
6" x 1" Flat Plate (G)	A	Surface Af (CaAa)	29.3333 - 9.3333	1	1	0.250 0.250	6.0000	14.0000	0.00
6" x 1" Flat Plate (G)	C	Surface Af (CaAa)	29.3333 - 9.3333	1	1	0.250 0.250	6.0000	14.0000	0.00
***									
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	45.8333 - 15.8333	1	1	0.000 0.000	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	45.8333 - 15.8333	1	1	0.000 0.000	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af	45.8333 - 15.8333	1	1	0.000	4.0000	9.5000	0.00

Description	Sector	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
		(CaAa)				0.000			
***									
6" x 1" Flat Plate (G)	B	Surface Af (CaAa)	56.0000 - 21.0000	1	1	-0.500 -0.500	6.0000	14.0000	0.00
6" x 1" Flat Plate (G)	A	Surface Af (CaAa)	56.0000 - 21.0000	1	1	-0.500 -0.500	6.0000	14.0000	0.00
***									
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	60.4583 - 30.4583	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	60.4583 - 30.4583	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af (CaAa)	60.4583 - 30.4583	1	1	-0.250 -0.250	4.0000	9.5000	0.00
***									
4.5" x 1" Flat Plate (G)	C	Surface Af (CaAa)	64.4167 - 44.5000	1	1	-0.500 -0.500	4.5000	11.0000	0.00
***									
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	68.2500 - 43.2500	1	1	0.250 0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af (CaAa)	68.2500 - 43.2500	1	1	0.250 0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	68.2500 - 43.2500	1	1	0.250 0.250	4.0000	9.5000	0.00
***									
4.5" x 1" Flat Plate (G)	B	Surface Af (CaAa)	66.0833 - 56.0833	1	1	-0.500 -0.500	4.5000	11.0000	0.00
4.5" x 1" Flat Plate (G)	A	Surface Af (CaAa)	66.0833 - 56.0833	1	1	-0.500 -0.500	4.5000	11.0000	0.00
***									
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	85.8333 - 65.8333	1	1	0.000 0.000	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	85.8333 - 65.8333	1	1	0.000 0.000	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af (CaAa)	85.8333 - 65.8333	1	1	0.000 0.000	4.0000	9.5000	0.00
***									
4" x .75" Flat Plate (G)	C	Surface Af (CaAa)	81.9792 - 71.9792	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	B	Surface Af (CaAa)	81.9792 - 71.9792	1	1	-0.250 -0.250	4.0000	9.5000	0.00
4" x .75" Flat Plate (G)	A	Surface Af (CaAa)	81.9792 - 71.9792	1	1	-0.250 -0.250	4.0000	9.5000	0.00
***									
4" x 1" Flat Plate (G)	C	Surface Af (CaAa)	91.4167 - 81.4167	1	1	-0.500 -0.500	4.0000	10.0000	0.00
4" x 1" Flat Plate (G)	B	Surface Af (CaAa)	91.4167 - 81.4167	1	1	-0.500 -0.500	4.0000	10.0000	0.00
4" x 1" Flat Plate (G)	A	Surface Af (CaAa)	91.4167 - 81.4167	1	1	-0.500 -0.500	4.0000	10.0000	0.00
***									
6.5" x 1.25" Flat Plate (G)	B	Surface Af (CaAa)	20.7500 - 0.0000	1	1	0.250 0.250	6.5000	15.5000	0.00
6.5" x 1.25" Flat Plate (G)	B	Surface Af (CaAa)	20.7500 - 0.0000	1	1	-0.500 -0.500	6.5000	15.5000	0.00
6.5" x 1.25" Flat Plate (G)	A	Surface Af (CaAa)	20.7500 - 0.0000	1	1	-0.500 -0.500	6.5000	15.5000	0.00
***									
6.5" x 1.25" Flat Plate (G)	A	Surface Af (CaAa)	9.2500 - 0.0000	1	1	0.250 0.250	6.5000	15.5000	0.00
***									

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
***								
***								
FB-L98B-002-75000(3/8")	C	No	Inside Pole	121.0000 - 0.0000	1	No Ice	0.0000	0.06
						1/2" Ice	0.0000	0.06
						1" Ice	0.0000	0.06
WR-VG86ST-BRD(3/4)	C	No	Inside Pole	121.0000 - 0.0000	2	No Ice	0.0000	0.58
						1/2" Ice	0.0000	0.58
						1" Ice	0.0000	0.58
***								
***								
HJ7-50A(1-5/8")	C	No	Inside Pole	107.0000 - 0.0000	12	No Ice	0.0000	1.04
						1/2" Ice	0.0000	1.04
						1" Ice	0.0000	1.04
HB158-1-08U8-S8J18(1-5/8)	C	No	Inside Pole	107.0000 - 0.0000	1	No Ice	0.0000	1.30
						1/2" Ice	0.0000	1.30
						1" Ice	0.0000	1.30
HB158-1-08U8-S8J18(1-5/8)	C	No	Inside Pole	107.0000 - 0.0000	1	No Ice	0.0000	1.30
						1/2" Ice	0.0000	1.30
						1" Ice	0.0000	1.30
***								
***								
ATCB-B01-005(5/16)	C	No	Inside Pole	97.0000 - 0.0000	3	No Ice	0.0000	0.07
						1/2" Ice	0.0000	0.07
						1" Ice	0.0000	0.07
FSJ4-50B(1/2")	C	No	Inside Pole	97.0000 - 0.0000	2	No Ice	0.0000	0.14
						1/2" Ice	0.0000	0.14
						1" Ice	0.0000	0.14
HB114-1-08U4-M5J(1 1/4")	B	No	Inside Pole	97.0000 - 0.0000	3	No Ice	0.0000	1.08
						1/2" Ice	0.0000	1.08
						1" Ice	0.0000	1.08
***								
***								
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Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	131.0000-126.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	126.0000-121.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L3	121.0000-116.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.325	0.000	0.04
L4	116.0000-111.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.325	0.000	0.04
L5	111.0000-110.000	A	0.000	0.000	0.037	0.000	0.00

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.465	0.000	0.01
L6	110.0000-105.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.325	0.000	0.07
L7	105.0000-100.000	A	0.000	0.000	0.188	0.000	0.00
	0	B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.325	0.000	0.11
L8	100.0000-95.0000	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.01
		C	0.000	0.000	2.429	0.000	0.12
L9	95.0000-89.9000	A	0.000	0.000	1.202	0.000	0.00
		B	0.000	0.000	1.011	0.000	0.02
		C	0.000	0.000	3.648	0.000	0.12
L10	89.9000-89.6667	A	0.000	0.000	0.164	0.000	0.00
		B	0.000	0.000	0.156	0.000	0.00
		C	0.000	0.000	0.276	0.000	0.01
L11	89.6667-84.5667	A	0.000	0.000	4.436	0.000	0.00
		B	0.000	0.000	4.244	0.000	0.02
		C	0.000	0.000	6.881	0.000	0.15
L12	84.5667-84.3333	A	0.000	0.000	0.320	0.000	0.00
		B	0.000	0.000	0.311	0.000	0.00
		C	0.000	0.000	0.432	0.000	0.01
L13	84.3333-82.9167	A	0.000	0.000	1.942	0.000	0.00
		B	0.000	0.000	1.889	0.000	0.01
		C	0.000	0.000	2.621	0.000	0.05
L14	82.9167-82.6667	A	0.000	0.000	0.343	0.000	0.00
		B	0.000	0.000	0.333	0.000	0.00
		C	0.000	0.000	0.463	0.000	0.01
L15	82.6667-80.9792	A	0.000	0.000	2.688	0.000	0.00
		B	0.000	0.000	2.625	0.000	0.01
		C	0.000	0.000	3.497	0.000	0.06
L16	80.9792-80.7292	A	0.000	0.000	0.343	0.000	0.00
		B	0.000	0.000	0.333	0.000	0.00
		C	0.000	0.000	0.463	0.000	0.01
L17	80.7292-75.7292	A	0.000	0.000	6.854	0.000	0.00
		B	0.000	0.000	6.667	0.000	0.02
		C	0.000	0.000	9.252	0.000	0.18
L18	75.7292-70.0000	A	0.000	0.000	6.534	0.000	0.00
		B	0.000	0.000	6.319	0.000	0.02
		C	0.000	0.000	9.281	0.000	0.20
L19	70.0000-69.0000	A	0.000	0.000	0.704	0.000	0.00
		B	0.000	0.000	0.667	0.000	0.00
		C	0.000	0.000	1.184	0.000	0.04
L20	69.0000-66.9833	A	0.000	0.000	2.265	0.000	0.00
		B	0.000	0.000	2.189	0.000	0.01
		C	0.000	0.000	3.232	0.000	0.07
L21	66.9833-66.7333	A	0.000	0.000	0.343	0.000	0.00
		B	0.000	0.000	0.333	0.000	0.00
		C	0.000	0.000	0.463	0.000	0.01
L22	66.7333-64.0833	A	0.000	0.000	3.966	0.000	0.00
		B	0.000	0.000	3.867	0.000	0.01
		C	0.000	0.000	3.987	0.000	0.09
L23	64.0833-63.8333	A	0.000	0.000	0.364	0.000	0.00
		B	0.000	0.000	0.354	0.000	0.00
		C	0.000	0.000	0.483	0.000	0.01
L24	63.8333-62.4167	A	0.000	0.000	2.060	0.000	0.00
		B	0.000	0.000	2.007	0.000	0.01
		C	0.000	0.000	2.739	0.000	0.05
L25	62.4167-62.1667	A	0.000	0.000	0.364	0.000	0.00
		B	0.000	0.000	0.354	0.000	0.00

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C	0.000	0.000	0.483	0.000	0.01
L26	62.1667-59.4583	A	0.000	0.000	4.605	0.000	0.00
		B	0.000	0.000	4.504	0.000	0.01
		C	0.000	0.000	5.904	0.000	0.10
L27	59.4583-59.2083	A	0.000	0.000	0.530	0.000	0.00
		B	0.000	0.000	0.521	0.000	0.00
		C	0.000	0.000	0.650	0.000	0.01
L28	59.2083-56.0000	A	0.000	0.000	6.742	0.000	0.00
		B	0.000	0.000	6.621	0.000	0.01
		C	0.000	0.000	8.343	0.000	0.11
L29	56.0000-55.7500	A	0.000	0.000	0.593	0.000	0.00
		B	0.000	0.000	0.583	0.000	0.00
		C	0.000	0.000	0.650	0.000	0.01
L30	55.7500-50.7500	A	0.000	0.000	11.854	0.000	0.00
		B	0.000	0.000	11.667	0.000	0.02
		C	0.000	0.000	13.002	0.000	0.18
L31	50.7500-45.7500	A	0.000	0.000	11.910	0.000	0.00
		B	0.000	0.000	11.722	0.000	0.02
		C	0.000	0.000	13.057	0.000	0.18
L32	45.7500-44.4833	A	0.000	0.000	3.848	0.000	0.00
		B	0.000	0.000	3.800	0.000	0.01
		C	0.000	0.000	4.126	0.000	0.05
L33	44.4833-44.2333	A	0.000	0.000	0.759	0.000	0.00
		B	0.000	0.000	0.750	0.000	0.00
		C	0.000	0.000	0.729	0.000	0.01
L34	44.2333-44.0833	A	0.000	0.000	0.456	0.000	0.00
		B	0.000	0.000	0.450	0.000	0.00
		C	0.000	0.000	0.528	0.000	0.01
L35	44.0833-39.0833	A	0.000	0.000	12.410	0.000	0.00
		B	0.000	0.000	12.222	0.000	0.02
		C	0.000	0.000	14.807	0.000	0.18
L36	39.0833-34.0800	A	0.000	0.000	11.862	0.000	0.00
		B	0.000	0.000	11.674	0.000	0.02
		C	0.000	0.000	14.261	0.000	0.18
L37	34.0800-34.0000	A	0.000	0.000	0.190	0.000	0.00
		B	0.000	0.000	0.187	0.000	0.00
		C	0.000	0.000	0.228	0.000	0.00
L38	34.0000-31.4583	A	0.000	0.000	6.026	0.000	0.00
		B	0.000	0.000	5.931	0.000	0.01
		C	0.000	0.000	7.245	0.000	0.09
L39	31.4583-31.2083	A	0.000	0.000	0.593	0.000	0.00
		B	0.000	0.000	0.583	0.000	0.00
		C	0.000	0.000	0.713	0.000	0.01
L40	31.2083-29.4583	A	0.000	0.000	4.149	0.000	0.00
		B	0.000	0.000	4.083	0.000	0.01
		C	0.000	0.000	4.988	0.000	0.06
L41	29.4583-29.2083	A	0.000	0.000	0.718	0.000	0.00
		B	0.000	0.000	0.583	0.000	0.00
		C	0.000	0.000	0.838	0.000	0.01
L42	29.2083-26.8333	A	0.000	0.000	8.006	0.000	0.00
		B	0.000	0.000	5.542	0.000	0.01
		C	0.000	0.000	9.145	0.000	0.08
L43	26.8333-26.5833	A	0.000	0.000	0.843	0.000	0.00
		B	0.000	0.000	0.583	0.000	0.00
		C	0.000	0.000	0.963	0.000	0.01
L44	26.5833-21.5833	A	0.000	0.000	16.854	0.000	0.00
		B	0.000	0.000	11.667	0.000	0.02
		C	0.000	0.000	19.252	0.000	0.18
L45	21.5833-20.7500	A	0.000	0.000	2.559	0.000	0.00
		B	0.000	0.000	1.694	0.000	0.00
		C	0.000	0.000	3.208	0.000	0.03

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L46	20.7500-20.5000	A	0.000	0.000	0.864	0.000	0.00
		B	0.000	0.000	0.875	0.000	0.00
		C	0.000	0.000	0.963	0.000	0.01
L47	20.5000-18.0000	A	0.000	0.000	8.635	0.000	0.00
		B	0.000	0.000	8.750	0.000	0.01
		C	0.000	0.000	9.626	0.000	0.09
L48	18.0000-17.7500	A	0.000	0.000	0.864	0.000	0.00
		B	0.000	0.000	0.875	0.000	0.00
		C	0.000	0.000	0.963	0.000	0.01
L49	17.7500-17.0833	A	0.000	0.000	2.303	0.000	0.00
		B	0.000	0.000	2.333	0.000	0.00
		C	0.000	0.000	2.567	0.000	0.02
L50	17.0833-16.8333	A	0.000	0.000	0.864	0.000	0.00
		B	0.000	0.000	0.875	0.000	0.00
		C	0.000	0.000	0.963	0.000	0.01
L51	16.8333-13.0000	A	0.000	0.000	13.852	0.000	0.00
		B	0.000	0.000	14.028	0.000	0.02
		C	0.000	0.000	15.371	0.000	0.14
L52	13.0000-12.7500	A	0.000	0.000	0.947	0.000	0.00
		B	0.000	0.000	0.958	0.000	0.00
		C	0.000	0.000	1.046	0.000	0.01
L53	12.7500-11.8333	A	0.000	0.000	3.472	0.000	0.00
		B	0.000	0.000	3.514	0.000	0.00
		C	0.000	0.000	3.835	0.000	0.03
L54	11.8333-11.5833	A	0.000	0.000	0.947	0.000	0.00
		B	0.000	0.000	0.958	0.000	0.00
		C	0.000	0.000	1.046	0.000	0.01
L55	11.5833-6.4833	A	0.000	0.000	19.464	0.000	0.00
		B	0.000	0.000	19.550	0.000	0.02
		C	0.000	0.000	15.637	0.000	0.18
L56	6.4833-6.2500	A	0.000	0.000	0.903	0.000	0.00
		B	0.000	0.000	0.894	0.000	0.00
		C	0.000	0.000	0.509	0.000	0.01
L57	6.2500-1.2500	A	0.000	0.000	19.354	0.000	0.00
		B	0.000	0.000	19.167	0.000	0.02
		C	0.000	0.000	10.918	0.000	0.18
L58	1.2500-0.0000	A	0.000	0.000	4.005	0.000	0.00
		B	0.000	0.000	3.958	0.000	0.01
		C	0.000	0.000	1.896	0.000	0.04

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	131.0000-126.000	A	2.291	0.000	0.000	2.479	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L2	126.0000-121.000	A	2.282	0.000	0.000	2.470	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L3	121.0000-116.000	A	2.273	0.000	0.000	2.460	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	13.133	0.000	0.26
L4	116.0000-111.000	A	2.263	0.000	0.000	2.450	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	13.089	0.000	0.26
L5	111.0000-110.000	A	2.257	0.000	0.000	0.489	0.000	0.01

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	2.612	0.000	0.05
L6	110.0000-105.000	A	2.251	0.000	0.000	2.438	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	13.034	0.000	0.28
L7	105.0000-100.000	A	2.240	0.000	0.000	2.427	0.000	0.04
	0	B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	12.986	0.000	0.33
L8	100.0000-95.0000	A	2.229	0.000	0.000	2.416	0.000	0.04
		B		0.000	0.000	0.892	0.000	0.02
		C		0.000	0.000	15.714	0.000	0.37
L9	95.0000-89.9000	A	2.217	0.000	0.000	3.885	0.000	0.06
		B		0.000	0.000	3.694	0.000	0.08
		C		0.000	0.000	21.622	0.000	0.46
L10	89.9000-89.6667	A	2.211	0.000	0.000	0.332	0.000	0.01
		B		0.000	0.000	0.323	0.000	0.01
		C		0.000	0.000	1.142	0.000	0.02
L11	89.6667-84.5667	A	2.204	0.000	0.000	8.652	0.000	0.14
		B		0.000	0.000	8.461	0.000	0.15
		C		0.000	0.000	29.788	0.000	0.61
L12	84.5667-84.3333	A	2.197	0.000	0.000	0.589	0.000	0.01
		B		0.000	0.000	0.581	0.000	0.01
		C		0.000	0.000	1.728	0.000	0.03
L13	84.3333-82.9167	A	2.195	0.000	0.000	3.576	0.000	0.05
		B		0.000	0.000	3.523	0.000	0.06
		C		0.000	0.000	10.483	0.000	0.21
L14	82.9167-82.6667	A	2.193	0.000	0.000	0.631	0.000	0.01
		B		0.000	0.000	0.621	0.000	0.01
		C		0.000	0.000	1.849	0.000	0.04
L15	82.6667-80.9792	A	2.190	0.000	0.000	4.786	0.000	0.07
		B		0.000	0.000	4.723	0.000	0.08
		C		0.000	0.000	12.998	0.000	0.25
L16	80.9792-80.7292	A	2.188	0.000	0.000	0.630	0.000	0.01
		B		0.000	0.000	0.621	0.000	0.01
		C		0.000	0.000	1.846	0.000	0.04
L17	80.7292-75.7292	A	2.180	0.000	0.000	12.586	0.000	0.19
		B		0.000	0.000	12.398	0.000	0.20
		C		0.000	0.000	36.822	0.000	0.72
L18	75.7292-70.0000	A	2.165	0.000	0.000	12.518	0.000	0.18
		B		0.000	0.000	12.303	0.000	0.20
		C		0.000	0.000	40.116	0.000	0.79
L19	70.0000-69.0000	A	2.155	0.000	0.000	1.570	0.000	0.02
		B		0.000	0.000	1.533	0.000	0.02
		C		0.000	0.000	6.387	0.000	0.13
L20	69.0000-66.9833	A	2.150	0.000	0.000	4.544	0.000	0.06
		B		0.000	0.000	4.468	0.000	0.07
		C		0.000	0.000	14.200	0.000	0.27
L21	66.9833-66.7333	A	2.146	0.000	0.000	0.665	0.000	0.01
		B		0.000	0.000	0.655	0.000	0.01
		C		0.000	0.000	1.860	0.000	0.04
L22	66.7333-64.0833	A	2.142	0.000	0.000	7.099	0.000	0.10
		B		0.000	0.000	6.999	0.000	0.11
		C		0.000	0.000	18.160	0.000	0.35
L23	64.0833-63.8333	A	2.137	0.000	0.000	0.637	0.000	0.01
		B		0.000	0.000	0.627	0.000	0.01
		C		0.000	0.000	1.875	0.000	0.04
L24	63.8333-62.4167	A	2.134	0.000	0.000	3.606	0.000	0.05
		B		0.000	0.000	3.553	0.000	0.06
		C		0.000	0.000	10.613	0.000	0.20
L25	62.4167-62.1667	A	2.131	0.000	0.000	0.636	0.000	0.01
		B		0.000	0.000	0.627	0.000	0.01

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C		0.000	0.000	1.871	0.000	0.04
L26	62.1667-59.4583	A	2.126	0.000	0.000	7.975	0.000	0.11
		B		0.000	0.000	7.874	0.000	0.12
		C		0.000	0.000	21.327	0.000	0.40
L27	59.4583-59.2083	A	2.121	0.000	0.000	0.907	0.000	0.01
		B		0.000	0.000	0.898	0.000	0.01
		C		0.000	0.000	2.137	0.000	0.04
L28	59.2083-56.0000	A	2.115	0.000	0.000	11.549	0.000	0.16
		B		0.000	0.000	11.429	0.000	0.17
		C		0.000	0.000	27.372	0.000	0.49
L29	56.0000-55.7500	A	2.108	0.000	0.000	1.014	0.000	0.01
		B		0.000	0.000	1.005	0.000	0.01
		C		0.000	0.000	2.128	0.000	0.04
L30	55.7500-50.7500	A	2.098	0.000	0.000	20.246	0.000	0.26
		B		0.000	0.000	20.058	0.000	0.28
		C		0.000	0.000	42.430	0.000	0.76
L31	50.7500-45.7500	A	2.077	0.000	0.000	20.254	0.000	0.26
		B		0.000	0.000	20.066	0.000	0.28
		C		0.000	0.000	42.237	0.000	0.75
L32	45.7500-44.4833	A	2.064	0.000	0.000	6.461	0.000	0.08
		B		0.000	0.000	6.414	0.000	0.09
		C		0.000	0.000	11.977	0.000	0.21
L33	44.4833-44.2333	A	2.060	0.000	0.000	1.274	0.000	0.02
		B		0.000	0.000	1.265	0.000	0.02
		C		0.000	0.000	2.216	0.000	0.04
L34	44.2333-44.0833	A	2.059	0.000	0.000	0.764	0.000	0.01
		B		0.000	0.000	0.759	0.000	0.01
		C		0.000	0.000	1.456	0.000	0.02
L35	44.0833-39.0833	A	2.047	0.000	0.000	20.938	0.000	0.27
		B		0.000	0.000	20.750	0.000	0.28
		C		0.000	0.000	43.872	0.000	0.76
L36	39.0833-34.0800	A	2.021	0.000	0.000	19.950	0.000	0.25
		B		0.000	0.000	19.762	0.000	0.27
		C		0.000	0.000	42.645	0.000	0.74
L37	34.0800-34.0000	A	2.006	0.000	0.000	0.319	0.000	0.00
		B		0.000	0.000	0.316	0.000	0.00
		C		0.000	0.000	0.682	0.000	0.01
L38	34.0000-31.4583	A	1.998	0.000	0.000	10.089	0.000	0.13
		B		0.000	0.000	9.994	0.000	0.13
		C		0.000	0.000	21.508	0.000	0.37
L39	31.4583-31.2083	A	1.990	0.000	0.000	0.991	0.000	0.01
		B		0.000	0.000	0.981	0.000	0.01
		C		0.000	0.000	2.110	0.000	0.04
L40	31.2083-29.4583	A	1.983	0.000	0.000	6.925	0.000	0.09
		B		0.000	0.000	6.860	0.000	0.09
		C		0.000	0.000	14.736	0.000	0.25
L41	29.4583-29.2083	A	1.977	0.000	0.000	1.162	0.000	0.01
		B		0.000	0.000	0.979	0.000	0.01
		C		0.000	0.000	2.275	0.000	0.04
L42	29.2083-26.8333	A	1.968	0.000	0.000	12.671	0.000	0.15
		B		0.000	0.000	9.280	0.000	0.12
		C		0.000	0.000	23.198	0.000	0.38
L43	26.8333-26.5833	A	1.958	0.000	0.000	1.332	0.000	0.02
		B		0.000	0.000	0.975	0.000	0.01
		C		0.000	0.000	2.435	0.000	0.04
L44	26.5833-21.5833	A	1.938	0.000	0.000	26.533	0.000	0.32
		B		0.000	0.000	19.418	0.000	0.25
		C		0.000	0.000	48.405	0.000	0.79
L45	21.5833-20.7500	A	1.913	0.000	0.000	4.056	0.000	0.05
		B		0.000	0.000	2.874	0.000	0.04
		C		0.000	0.000	8.007	0.000	0.13

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L46	20.7500-20.5000	A	1.908	0.000	0.000	1.339	0.000	0.02
		B		0.000	0.000	1.350	0.000	0.02
		C		0.000	0.000	2.399	0.000	0.04
L47	20.5000-18.0000	A	1.895	0.000	0.000	13.364	0.000	0.16
		B		0.000	0.000	13.472	0.000	0.17
		C		0.000	0.000	23.891	0.000	0.38
L48	18.0000-17.7500	A	1.881	0.000	0.000	1.333	0.000	0.02
		B		0.000	0.000	1.344	0.000	0.02
		C		0.000	0.000	2.379	0.000	0.04
L49	17.7500-17.0833	A	1.876	0.000	0.000	3.552	0.000	0.04
		B		0.000	0.000	3.581	0.000	0.04
		C		0.000	0.000	6.334	0.000	0.10
L50	17.0833-16.8333	A	1.871	0.000	0.000	1.331	0.000	0.02
		B		0.000	0.000	1.342	0.000	0.02
		C		0.000	0.000	2.372	0.000	0.04
L51	16.8333-13.0000	A	1.847	0.000	0.000	20.558	0.000	0.23
		B		0.000	0.000	20.728	0.000	0.25
		C		0.000	0.000	36.336	0.000	0.57
L52	13.0000-12.7500	A	1.820	0.000	0.000	1.378	0.000	0.02
		B		0.000	0.000	1.389	0.000	0.02
		C		0.000	0.000	2.393	0.000	0.04
L53	12.7500-11.8333	A	1.812	0.000	0.000	5.045	0.000	0.06
		B		0.000	0.000	5.087	0.000	0.06
		C		0.000	0.000	8.754	0.000	0.14
L54	11.8333-11.5833	A	1.803	0.000	0.000	1.374	0.000	0.02
		B		0.000	0.000	1.386	0.000	0.02
		C		0.000	0.000	2.381	0.000	0.04
L55	11.5833-6.4833	A	1.757	0.000	0.000	27.084	0.000	0.30
		B		0.000	0.000	28.053	0.000	0.32
		C		0.000	0.000	40.200	0.000	0.65
L56	6.4833-6.2500	A	1.697	0.000	0.000	1.209	0.000	0.01
		B		0.000	0.000	1.271	0.000	0.01
		C		0.000	0.000	1.526	0.000	0.03
L57	6.2500-1.2500	A	1.609	0.000	0.000	25.555	0.000	0.27
		B		0.000	0.000	26.837	0.000	0.28
		C		0.000	0.000	31.636	0.000	0.53
L58	1.2500-0.0000	A	1.345	0.000	0.000	5.046	0.000	0.04
		B		0.000	0.000	5.335	0.000	0.05
		C		0.000	0.000	6.024	0.000	0.10

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	131.0000-126.0000	-0.0270	-0.0468	-0.1939	-0.3358
L2	126.0000-121.0000	-0.0270	-0.0468	-0.2022	-0.3503
L3	121.0000-116.0000	0.3524	0.4781	0.3716	0.6211
L4	116.0000-111.0000	0.3534	0.4793	0.3913	0.6553
L5	111.0000-110.0000	0.3539	0.4799	0.4028	0.6752
L6	110.0000-105.0000	0.3544	0.4805	0.4146	0.6954
L7	105.0000-100.0000	0.3552	0.4815	0.4337	0.7284
L8	100.0000-95.0000	0.3731	0.4895	0.6114	0.7452
L9	95.0000-89.9000	0.3162	0.3973	0.7498	0.6884
L10	89.9000-89.6667	0.2152	0.2702	0.6309	0.5786
L11	89.6667-84.5667	0.1959	0.2459	0.5491	0.6605
L12	84.5667-84.3333	0.1523	0.1911	0.4348	0.6597

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L13	84.3333-82.9167	0.1531	0.1920	0.4381	0.6645
L14	82.9167-82.6667	0.1539	0.1930	0.4413	0.6694
L15	82.6667-80.9792	0.1404	0.1761	0.4212	0.6387
L16	80.9792-80.7292	0.1557	0.1952	0.4489	0.6806
L17	80.7292-75.7292	0.1581	0.1981	0.4591	0.6957
L18	75.7292-70.0000	0.1816	0.2274	0.5094	0.7712
L19	70.0000-69.0000	0.2335	0.2924	0.5836	0.8835
L20	69.0000-66.9833	0.1858	0.2326	0.5130	0.7762
L21	66.9833-66.7333	0.1663	0.2082	0.4804	0.7267
L22	66.7333-64.0833	-0.1520	0.2925	0.3359	0.7989
L23	64.0833-63.8333	0.1628	0.2037	0.5462	0.7350
L24	63.8333-62.4167	0.1635	0.2046	0.5495	0.7393
L25	62.4167-62.1667	0.1642	0.2054	0.5527	0.7436
L26	62.1667-59.4583	0.1499	0.1876	0.5214	0.7013
L27	59.4583-59.2083	0.1303	0.1630	0.4732	0.6364
L28	59.2083-56.0000	0.1427	0.1626	0.4864	0.6439
L29	56.0000-55.7500	-0.0016	0.1894	0.3619	0.6501
L30	55.7500-50.7500	-0.0020	0.1921	0.3680	0.6613
L31	50.7500-45.7500	-0.0026	0.1967	0.3783	0.6806
L32	45.7500-44.4833	-0.0070	0.1684	0.3317	0.6043
L33	44.4833-44.2333	-0.1668	0.2140	0.2075	0.6554
L34	44.2333-44.0833	0.1092	0.1364	0.3889	0.5863
L35	44.0833-39.0833	0.1280	0.1599	0.4432	0.6679
L36	39.0833-34.0800	0.1353	0.1688	0.4669	0.7031
L37	34.0800-34.0000	0.1353	0.1689	0.4670	0.7032
L38	34.0000-31.4583	0.1361	0.1699	0.4690	0.7060
L39	31.4583-31.2083	0.1369	0.1709	0.4723	0.7108
L40	31.2083-29.4583	0.1375	0.1717	0.4746	0.7142
L41	29.4583-29.2083	-0.0666	0.0638	0.3109	0.6070
L42	29.2083-26.8333	-0.2403	-0.0278	0.1646	0.5120
L43	26.8333-26.5833	-0.2421	-0.0282	0.1648	0.5145
L44	26.5833-21.5833	-0.2455	-0.0289	0.1650	0.5193
L45	21.5833-20.7500	-0.1038	-0.0712	0.2855	0.5138
L46	20.7500-20.5000	0.1004	0.1593	0.4053	0.6274
L47	20.5000-18.0000	0.1010	0.1603	0.4072	0.6306
L48	18.0000-17.7500	0.1016	0.1614	0.4090	0.6335
L49	17.7500-17.0833	0.1018	0.1617	0.4095	0.6344
L50	17.0833-16.8333	0.1020	0.1620	0.4101	0.6354
L51	16.8333-13.0000	0.0995	0.1582	0.4094	0.6345
L52	13.0000-12.7500	0.0970	0.1541	0.4031	0.6249
L53	12.7500-11.8333	0.0972	0.1545	0.4035	0.6256
L54	11.8333-11.5833	0.0974	0.1549	0.4039	0.6263
L55	11.5833-6.4833	0.0174	0.1000	0.3653	0.6600
L56	6.4833-6.2500	-0.0565	0.0364	0.3266	0.6772
L57	6.2500-1.2500	-0.0573	0.0368	0.3193	0.6680
L58	1.2500-0.0000	-0.0684	0.0438	0.3266	0.7068

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	1	Safety Line 3/8	126.00 - 131.00	1.0000	1.0000
L2	1	Safety Line 3/8	121.00 - 126.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L3	1	Safety Line 3/8	116.00 - 121.00	1.0000	1.0000
L3	5	LDF6-50A(1-1/4")	116.00 - 121.00	1.0000	1.0000
L3	8	2" (Nominal) Conduit	116.00 - 121.00	1.0000	1.0000
L3	9	FB-L98B-002-75000(3/8")	116.00 - 121.00	1.0000	1.0000
L3	10	WR-VG86ST-BRD(3/4")	116.00 - 121.00	1.0000	1.0000
L4	1	Safety Line 3/8	111.00 - 116.00	1.0000	1.0000
L4	5	LDF6-50A(1-1/4")	111.00 - 116.00	1.0000	1.0000
L4	8	2" (Nominal) Conduit	111.00 - 116.00	1.0000	1.0000
L4	9	FB-L98B-002-75000(3/8")	111.00 - 116.00	1.0000	1.0000
L4	10	WR-VG86ST-BRD(3/4")	111.00 - 116.00	1.0000	1.0000
L5	1	Safety Line 3/8	110.00 - 111.00	1.0000	1.0000
L5	5	LDF6-50A(1-1/4")	110.00 - 111.00	1.0000	1.0000
L5	8	2" (Nominal) Conduit	110.00 - 111.00	1.0000	1.0000
L5	9	FB-L98B-002-75000(3/8")	110.00 - 111.00	1.0000	1.0000
L5	10	WR-VG86ST-BRD(3/4")	110.00 - 111.00	1.0000	1.0000
L6	1	Safety Line 3/8	105.00 - 110.00	1.0000	1.0000
L6	5	LDF6-50A(1-1/4")	105.00 - 110.00	1.0000	1.0000
L6	8	2" (Nominal) Conduit	105.00 - 110.00	1.0000	1.0000
L6	9	FB-L98B-002-75000(3/8")	105.00 - 110.00	1.0000	1.0000
L6	10	WR-VG86ST-BRD(3/4")	105.00 - 110.00	1.0000	1.0000
L7	1	Safety Line 3/8	100.00 - 105.00	1.0000	1.0000
L7	5	LDF6-50A(1-1/4")	100.00 - 105.00	1.0000	1.0000
L7	8	2" (Nominal) Conduit	100.00 - 105.00	1.0000	1.0000
L7	9	FB-L98B-002-75000(3/8")	100.00 - 105.00	1.0000	1.0000
L7	10	WR-VG86ST-BRD(3/4")	100.00 - 105.00	1.0000	1.0000
L8	1	Safety Line 3/8	95.00 - 100.00	1.0000	1.0000
L8	5	LDF6-50A(1-1/4")	95.00 - 100.00	1.0000	1.0000
L8	8	2" (Nominal) Conduit	95.00 - 100.00	1.0000	1.0000
L8	9	FB-L98B-002-75000(3/8")	95.00 - 100.00	1.0000	1.0000
L8	10	WR-VG86ST-BRD(3/4")	95.00 - 100.00	1.0000	1.0000
L8	20	FSJ4-50B(1/2")	95.00 - 97.00	1.0000	1.0000
L8	22	2" (Nominal) Conduit	95.00 - 97.00	1.0000	1.0000
L8	23	2" (Nominal) Conduit	95.00 - 97.00	1.0000	1.0000
L8	24	HB114-1-08U4-M5J(1 1/4")	95.00 - 97.00	1.0000	1.0000
L9	1	Safety Line 3/8	89.90 - 95.00	1.0000	1.0000
L9	5	LDF6-50A(1-1/4")	89.90 - 95.00	1.0000	1.0000
L9	8	2" (Nominal) Conduit	89.90 - 95.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L9	9	FB-L98B-002-75000(3/8")	89.90 - 95.00	1.0000	1.0000
L9	10	WR-VG86ST-BRD(3/4")	89.90 - 95.00	1.0000	1.0000
L9	20	FSJ4-50B(1/2")	89.90 - 95.00	1.0000	1.0000
L9	22	2" (Nominal) Conduit	89.90 - 95.00	1.0000	1.0000
L9	23	2" (Nominal) Conduit	89.90 - 95.00	1.0000	1.0000
L9	24	HB114-1-08U4-M5J(1 1/4")	89.90 - 95.00	1.0000	1.0000
L9	77	4" x 1" Flat Plate (G)	89.90 - 91.42	1.0000	1.0000
L9	78	4" x 1" Flat Plate (G)	89.90 - 91.42	1.0000	1.0000
L9	79	4" x 1" Flat Plate (G)	89.90 - 91.42	1.0000	1.0000
L10	1	Safety Line 3/8	89.67 - 89.90	1.0000	1.0000
L10	5	LDF6-50A(1-1/4")	89.67 - 89.90	1.0000	1.0000
L10	8	2" (Nominal) Conduit	89.67 - 89.90	1.0000	1.0000
L10	9	FB-L98B-002-75000(3/8")	89.67 - 89.90	1.0000	1.0000
L10	10	WR-VG86ST-BRD(3/4")	89.67 - 89.90	1.0000	1.0000
L10	20	FSJ4-50B(1/2")	89.67 - 89.90	1.0000	1.0000
L10	22	2" (Nominal) Conduit	89.67 - 89.90	1.0000	1.0000
L10	23	2" (Nominal) Conduit	89.67 - 89.90	1.0000	1.0000
L10	24	HB114-1-08U4-M5J(1 1/4")	89.67 - 89.90	1.0000	1.0000
L10	77	4" x 1" Flat Plate (G)	89.67 - 89.90	1.0000	1.0000
L10	78	4" x 1" Flat Plate (G)	89.67 - 89.90	1.0000	1.0000
L10	79	4" x 1" Flat Plate (G)	89.67 - 89.90	1.0000	1.0000
L11	1	Safety Line 3/8	84.57 - 89.67	1.0000	1.0000
L11	5	LDF6-50A(1-1/4")	84.57 - 89.67	1.0000	1.0000
L11	8	2" (Nominal) Conduit	84.57 - 89.67	1.0000	1.0000
L11	9	FB-L98B-002-75000(3/8")	84.57 - 89.67	1.0000	1.0000
L11	10	WR-VG86ST-BRD(3/4")	84.57 - 89.67	1.0000	1.0000
L11	20	FSJ4-50B(1/2")	84.57 - 89.67	1.0000	1.0000
L11	22	2" (Nominal) Conduit	84.57 - 89.67	1.0000	1.0000
L11	23	2" (Nominal) Conduit	84.57 - 89.67	1.0000	1.0000
L11	24	HB114-1-08U4-M5J(1 1/4")	84.57 - 89.67	1.0000	1.0000
L11	27	LCF114-50J(1-1/4")	84.57 - 87.00	1.0000	1.0000
L11	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	84.57 - 87.00	1.0000	1.0000
L11	29	MLC Hybrid 6/6(7/8")	84.57 - 87.00	1.0000	1.0000
L11	69	4" x .75" Flat Plate (G)	84.57 - 85.83	1.0000	1.0000
L11	70	4" x .75" Flat Plate (G)	84.57 - 85.83	1.0000	1.0000
L11	71	4" x .75" Flat Plate (G)	84.57 - 85.83	1.0000	1.0000
L11	77	4" x 1" Flat Plate (G)	84.57 - 89.67	1.0000	1.0000
L11	78	4" x 1" Flat Plate (G)	84.57 - 89.67	1.0000	1.0000
L11	79	4" x 1" Flat Plate (G)	84.57 - 89.67	1.0000	1.0000
L12	1	Safety Line 3/8	84.33 - 84.57	1.0000	1.0000
L12	5	LDF6-50A(1-1/4")	84.33 - 84.57	1.0000	1.0000
L12	8	2" (Nominal) Conduit	84.33 - 84.57	1.0000	1.0000
L12	9	FB-L98B-002-75000(3/8")	84.33 - 84.57	1.0000	1.0000
L12	10	WR-VG86ST-BRD(3/4")	84.33 - 84.57	1.0000	1.0000
L12	20	FSJ4-50B(1/2")	84.33 - 84.57	1.0000	1.0000
L12	22	2" (Nominal) Conduit	84.33 - 84.57	1.0000	1.0000
L12	23	2" (Nominal) Conduit	84.33 - 84.57	1.0000	1.0000
L12	24	HB114-1-08U4-M5J(1 1/4")	84.33 - 84.57	1.0000	1.0000
L12	27	LCF114-50J(1-1/4")	84.33 - 84.57	1.0000	1.0000
L12	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	84.33 - 84.57	1.0000	1.0000
L12	29	MLC Hybrid 6/6(7/8")	84.33 - 84.57	1.0000	1.0000
L12	69	4" x .75" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L12	70	4" x .75" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L12	71	4" x .75" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L12	77	4" x 1" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L12	78	4" x 1" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L12	79	4" x 1" Flat Plate (G)	84.33 - 84.57	1.0000	1.0000
L13	1	Safety Line 3/8	82.92 - 84.33	1.0000	1.0000
L13	5	LDF6-50A(1-1/4")	82.92 - 84.33	1.0000	1.0000
L13	8	2" (Nominal) Conduit	82.92 - 84.33	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L13	9	FB-L98B-002-75000(3/8")	82.92 - 84.33	1.0000	1.0000
L13	10	WR-VG86ST-BRD(3/4")	82.92 - 84.33	1.0000	1.0000
L13	20	FSJ4-50B(1/2")	82.92 - 84.33	1.0000	1.0000
L13	22	2" (Nominal) Conduit	82.92 - 84.33	1.0000	1.0000
L13	23	2" (Nominal) Conduit	82.92 - 84.33	1.0000	1.0000
L13	24	HB114-1-08U4-M5J(1 1/4")	82.92 - 84.33	1.0000	1.0000
L13	27	LCF114-50J(1-1/4")	82.92 - 84.33	1.0000	1.0000
L13	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	82.92 - 84.33	1.0000	1.0000
L13	29	MLC Hybrid 6/6(7/8")	82.92 - 84.33	1.0000	1.0000
L13	69	4" x .75" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L13	70	4" x .75" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L13	71	4" x .75" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L13	77	4" x 1" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L13	78	4" x 1" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L13	79	4" x 1" Flat Plate (G)	82.92 - 84.33	1.0000	1.0000
L14	1	Safety Line 3/8	82.67 - 82.92	1.0000	1.0000
L14	5	LDF6-50A(1-1/4")	82.67 - 82.92	1.0000	1.0000
L14	8	2" (Nominal) Conduit	82.67 - 82.92	1.0000	1.0000
L14	9	FB-L98B-002-75000(3/8")	82.67 - 82.92	1.0000	1.0000
L14	10	WR-VG86ST-BRD(3/4")	82.67 - 82.92	1.0000	1.0000
L14	20	FSJ4-50B(1/2")	82.67 - 82.92	1.0000	1.0000
L14	22	2" (Nominal) Conduit	82.67 - 82.92	1.0000	1.0000
L14	23	2" (Nominal) Conduit	82.67 - 82.92	1.0000	1.0000
L14	24	HB114-1-08U4-M5J(1 1/4")	82.67 - 82.92	1.0000	1.0000
L14	27	LCF114-50J(1-1/4")	82.67 - 82.92	1.0000	1.0000
L14	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	82.67 - 82.92	1.0000	1.0000
L14	29	MLC Hybrid 6/6(7/8")	82.67 - 82.92	1.0000	1.0000
L14	69	4" x .75" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L14	70	4" x .75" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L14	71	4" x .75" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L14	77	4" x 1" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L14	78	4" x 1" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L14	79	4" x 1" Flat Plate (G)	82.67 - 82.92	1.0000	1.0000
L15	1	Safety Line 3/8	80.98 - 82.67	1.0000	1.0000
L15	5	LDF6-50A(1-1/4")	80.98 - 82.67	1.0000	1.0000
L15	8	2" (Nominal) Conduit	80.98 - 82.67	1.0000	1.0000
L15	9	FB-L98B-002-75000(3/8")	80.98 - 82.67	1.0000	1.0000
L15	10	WR-VG86ST-BRD(3/4")	80.98 - 82.67	1.0000	1.0000
L15	20	FSJ4-50B(1/2")	80.98 - 82.67	1.0000	1.0000
L15	22	2" (Nominal) Conduit	80.98 - 82.67	1.0000	1.0000
L15	23	2" (Nominal) Conduit	80.98 - 82.67	1.0000	1.0000
L15	24	HB114-1-08U4-M5J(1 1/4")	80.98 - 82.67	1.0000	1.0000
L15	27	LCF114-50J(1-1/4")	80.98 - 82.67	1.0000	1.0000
L15	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	80.98 - 82.67	1.0000	1.0000
L15	29	MLC Hybrid 6/6(7/8")	80.98 - 82.67	1.0000	1.0000
L15	69	4" x .75" Flat Plate (G)	80.98 - 82.67	1.0000	1.0000
L15	70	4" x .75" Flat Plate (G)	80.98 - 82.67	1.0000	1.0000
L15	71	4" x .75" Flat Plate (G)	80.98 - 82.67	1.0000	1.0000
L15	73	4" x .75" Flat Plate (G)	80.98 - 81.98	1.0000	1.0000
L15	74	4" x .75" Flat Plate (G)	80.98 - 81.98	1.0000	1.0000
L15	75	4" x .75" Flat Plate (G)	80.98 - 81.98	1.0000	1.0000
L15	77	4" x 1" Flat Plate (G)	81.42 - 82.67	1.0000	1.0000
L15	78	4" x 1" Flat Plate (G)	81.42 - 82.67	1.0000	1.0000
L15	79	4" x 1" Flat Plate (G)	81.42 - 82.67	1.0000	1.0000
L16	1	Safety Line 3/8	80.73 - 80.98	1.0000	1.0000
L16	5	LDF6-50A(1-1/4")	80.73 - 80.98	1.0000	1.0000
L16	8	2" (Nominal) Conduit	80.73 - 80.98	1.0000	1.0000
L16	9	FB-L98B-002-75000(3/8")	80.73 - 80.98	1.0000	1.0000
L16	10	WR-VG86ST-BRD(3/4")	80.73 - 80.98	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L16	20	FSJ4-50B(1/2")	80.73 - 80.98	1.0000	1.0000
L16	22	2" (Nominal) Conduit	80.73 - 80.98	1.0000	1.0000
L16	23	2" (Nominal) Conduit	80.73 - 80.98	1.0000	1.0000
L16	24	HB114-1-08U4-M5J(1 1/4")	80.73 - 80.98	1.0000	1.0000
L16	27	LCF114-50J(1-1/4")	80.73 - 80.98	1.0000	1.0000
L16	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	80.73 - 80.98	1.0000	1.0000
L16	29	MLC Hybrid 6/6(7/8")	80.73 - 80.98	1.0000	1.0000
L16	69	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L16	70	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L16	71	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L16	73	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L16	74	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L16	75	4" x .75" Flat Plate (G)	80.73 - 80.98	1.0000	1.0000
L17	1	Safety Line 3/8	75.73 - 80.73	1.0000	1.0000
L17	5	LDF6-50A(1-1/4")	75.73 - 80.73	1.0000	1.0000
L17	8	2" (Nominal) Conduit	75.73 - 80.73	1.0000	1.0000
L17	9	FB-L98B-002-75000(3/8")	75.73 - 80.73	1.0000	1.0000
L17	10	WR-VG86ST-BRD(3/4")	75.73 - 80.73	1.0000	1.0000
L17	20	FSJ4-50B(1/2")	75.73 - 80.73	1.0000	1.0000
L17	22	2" (Nominal) Conduit	75.73 - 80.73	1.0000	1.0000
L17	23	2" (Nominal) Conduit	75.73 - 80.73	1.0000	1.0000
L17	24	HB114-1-08U4-M5J(1 1/4")	75.73 - 80.73	1.0000	1.0000
L17	27	LCF114-50J(1-1/4")	75.73 - 80.73	1.0000	1.0000
L17	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	75.73 - 80.73	1.0000	1.0000
L17	29	MLC Hybrid 6/6(7/8")	75.73 - 80.73	1.0000	1.0000
L17	69	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L17	70	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L17	71	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L17	73	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L17	74	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L17	75	4" x .75" Flat Plate (G)	75.73 - 80.73	1.0000	1.0000
L18	1	Safety Line 3/8	70.00 - 75.73	1.0000	1.0000
L18	5	LDF6-50A(1-1/4")	70.00 - 75.73	1.0000	1.0000
L18	8	2" (Nominal) Conduit	70.00 - 75.73	1.0000	1.0000
L18	9	FB-L98B-002-75000(3/8")	70.00 - 75.73	1.0000	1.0000
L18	10	WR-VG86ST-BRD(3/4")	70.00 - 75.73	1.0000	1.0000
L18	20	FSJ4-50B(1/2")	70.00 - 75.73	1.0000	1.0000
L18	22	2" (Nominal) Conduit	70.00 - 75.73	1.0000	1.0000
L18	23	2" (Nominal) Conduit	70.00 - 75.73	1.0000	1.0000
L18	24	HB114-1-08U4-M5J(1 1/4")	70.00 - 75.73	1.0000	1.0000
L18	27	LCF114-50J(1-1/4")	70.00 - 75.73	1.0000	1.0000
L18	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	70.00 - 75.73	1.0000	1.0000
L18	29	MLC Hybrid 6/6(7/8")	70.00 - 75.73	1.0000	1.0000
L18	69	4" x .75" Flat Plate (G)	70.00 - 75.73	1.0000	1.0000
L18	70	4" x .75" Flat Plate (G)	70.00 - 75.73	1.0000	1.0000
L18	71	4" x .75" Flat Plate (G)	70.00 - 75.73	1.0000	1.0000
L18	73	4" x .75" Flat Plate (G)	71.98 - 75.73	1.0000	1.0000
L18	74	4" x .75" Flat Plate (G)	71.98 - 75.73	1.0000	1.0000
L18	75	4" x .75" Flat Plate (G)	71.98 - 75.73	1.0000	1.0000
L20	1	Safety Line 3/8	66.98 - 69.00	1.0000	1.0000
L20	5	LDF6-50A(1-1/4")	66.98 - 69.00	1.0000	1.0000
L20	8	2" (Nominal) Conduit	66.98 - 69.00	1.0000	1.0000
L20	9	FB-L98B-002-75000(3/8")	66.98 - 69.00	1.0000	1.0000
L20	10	WR-VG86ST-BRD(3/4")	66.98 - 69.00	1.0000	1.0000
L20	20	FSJ4-50B(1/2")	66.98 - 69.00	1.0000	1.0000
L20	22	2" (Nominal) Conduit	66.98 - 69.00	1.0000	1.0000
L20	23	2" (Nominal) Conduit	66.98 - 69.00	1.0000	1.0000
L20	24	HB114-1-08U4-M5J(1 1/4")	66.98 - 69.00	1.0000	1.0000
L20	27	LCF114-50J(1-1/4")	66.98 - 69.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L20	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	66.98 - 69.00	1.0000	1.0000
L20	29	MLC Hybrid 6/6(7/8")	66.98 - 69.00	1.0000	1.0000
L20	62	4" x .75" Flat Plate (G)	66.98 - 68.25	1.0000	1.0000
L20	63	4" x .75" Flat Plate (G)	66.98 - 68.25	1.0000	1.0000
L20	64	4" x .75" Flat Plate (G)	66.98 - 68.25	1.0000	1.0000
L20	69	4" x .75" Flat Plate (G)	66.98 - 69.00	1.0000	1.0000
L20	70	4" x .75" Flat Plate (G)	66.98 - 69.00	1.0000	1.0000
L20	71	4" x .75" Flat Plate (G)	66.98 - 69.00	1.0000	1.0000
L21	1	Safety Line 3/8	66.73 - 66.98	1.0000	1.0000
L21	5	LDF6-50A(1-1/4")	66.73 - 66.98	1.0000	1.0000
L21	8	2" (Nominal) Conduit	66.73 - 66.98	1.0000	1.0000
L21	9	FB-L98B-002-75000(3/8")	66.73 - 66.98	1.0000	1.0000
L21	10	WR-VG86ST-BRD(3/4")	66.73 - 66.98	1.0000	1.0000
L21	20	FSJ4-50B(1/2")	66.73 - 66.98	1.0000	1.0000
L21	22	2" (Nominal) Conduit	66.73 - 66.98	1.0000	1.0000
L21	23	2" (Nominal) Conduit	66.73 - 66.98	1.0000	1.0000
L21	24	HB114-1-08U4-M5J(1 1/4")	66.73 - 66.98	1.0000	1.0000
L21	27	LCF114-50J(1-1/4")	66.73 - 66.98	1.0000	1.0000
L21	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	66.73 - 66.98	1.0000	1.0000
L21	29	MLC Hybrid 6/6(7/8")	66.73 - 66.98	1.0000	1.0000
L21	62	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L21	63	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L21	64	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L21	69	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L21	70	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L21	71	4" x .75" Flat Plate (G)	66.73 - 66.98	1.0000	1.0000
L22	1	Safety Line 3/8	64.08 - 66.73	1.0000	1.0000
L22	5	LDF6-50A(1-1/4")	64.08 - 66.73	1.0000	1.0000
L22	8	2" (Nominal) Conduit	64.08 - 66.73	1.0000	1.0000
L22	9	FB-L98B-002-75000(3/8")	64.08 - 66.73	1.0000	1.0000
L22	10	WR-VG86ST-BRD(3/4")	64.08 - 66.73	1.0000	1.0000
L22	20	FSJ4-50B(1/2")	64.08 - 66.73	1.0000	1.0000
L22	22	2" (Nominal) Conduit	64.08 - 66.73	1.0000	1.0000
L22	23	2" (Nominal) Conduit	64.08 - 66.73	1.0000	1.0000
L22	24	HB114-1-08U4-M5J(1 1/4")	64.08 - 66.73	1.0000	1.0000
L22	27	LCF114-50J(1-1/4")	64.08 - 66.73	1.0000	1.0000
L22	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	64.08 - 66.73	1.0000	1.0000
L22	29	MLC Hybrid 6/6(7/8")	64.08 - 66.73	1.0000	1.0000
L22	60	4.5" x 1" Flat Plate (G)	64.08 - 64.42	1.0000	1.0000
L22	62	4" x .75" Flat Plate (G)	64.08 - 66.73	1.0000	1.0000
L22	63	4" x .75" Flat Plate (G)	64.08 - 66.73	1.0000	1.0000
L22	64	4" x .75" Flat Plate (G)	64.08 - 66.73	1.0000	1.0000
L22	66	4.5" x 1" Flat Plate (G)	64.08 - 66.08	1.0000	1.0000
L22	67	4.5" x 1" Flat Plate (G)	64.08 - 66.08	1.0000	1.0000
L22	69	4" x .75" Flat Plate (G)	65.83 - 66.73	1.0000	1.0000
L22	70	4" x .75" Flat Plate (G)	65.83 - 66.73	1.0000	1.0000
L22	71	4" x .75" Flat Plate (G)	65.83 - 66.73	1.0000	1.0000
L23	1	Safety Line 3/8	63.83 - 64.08	1.0000	1.0000
L23	5	LDF6-50A(1-1/4")	63.83 - 64.08	1.0000	1.0000
L23	8	2" (Nominal) Conduit	63.83 - 64.08	1.0000	1.0000
L23	9	FB-L98B-002-75000(3/8")	63.83 - 64.08	1.0000	1.0000
L23	10	WR-VG86ST-BRD(3/4")	63.83 - 64.08	1.0000	1.0000
L23	20	FSJ4-50B(1/2")	63.83 - 64.08	1.0000	1.0000
L23	22	2" (Nominal) Conduit	63.83 - 64.08	1.0000	1.0000
L23	23	2" (Nominal) Conduit	63.83 - 64.08	1.0000	1.0000
L23	24	HB114-1-08U4-M5J(1 1/4")	63.83 - 64.08	1.0000	1.0000
L23	27	LCF114-50J(1-1/4")	63.83 - 64.08	1.0000	1.0000
L23	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	63.83 - 64.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L23	29	MLC Hybrid 6/6(7/8")	63.83 - 64.08	1.0000	1.0000
L23	60	4.5" x 1" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L23	62	4" x .75" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L23	63	4" x .75" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L23	64	4" x .75" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L23	66	4.5" x 1" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L23	67	4.5" x 1" Flat Plate (G)	63.83 - 64.08	1.0000	1.0000
L24	1	Safety Line 3/8	62.42 - 63.83	1.0000	1.0000
L24	5	LDF6-50A(1-1/4")	62.42 - 63.83	1.0000	1.0000
L24	8	2" (Nominal) Conduit	62.42 - 63.83	1.0000	1.0000
L24	9	FB-L98B-002-75000(3/8")	62.42 - 63.83	1.0000	1.0000
L24	10	WR-VG86ST-BRD(3/4")	62.42 - 63.83	1.0000	1.0000
L24	20	FSJ4-50B(1/2")	62.42 - 63.83	1.0000	1.0000
L24	22	2" (Nominal) Conduit	62.42 - 63.83	1.0000	1.0000
L24	23	2" (Nominal) Conduit	62.42 - 63.83	1.0000	1.0000
L24	24	HB114-1-08U4-M5J(1 1/4")	62.42 - 63.83	1.0000	1.0000
L24	27	LCF114-50J(1-1/4")	62.42 - 63.83	1.0000	1.0000
L24	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	62.42 - 63.83	1.0000	1.0000
L24	29	MLC Hybrid 6/6(7/8")	62.42 - 63.83	1.0000	1.0000
L24	60	4.5" x 1" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L24	62	4" x .75" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L24	63	4" x .75" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L24	64	4" x .75" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L24	66	4.5" x 1" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L24	67	4.5" x 1" Flat Plate (G)	62.42 - 63.83	1.0000	1.0000
L25	1	Safety Line 3/8	62.17 - 62.42	1.0000	1.0000
L25	5	LDF6-50A(1-1/4")	62.17 - 62.42	1.0000	1.0000
L25	8	2" (Nominal) Conduit	62.17 - 62.42	1.0000	1.0000
L25	9	FB-L98B-002-75000(3/8")	62.17 - 62.42	1.0000	1.0000
L25	10	WR-VG86ST-BRD(3/4")	62.17 - 62.42	1.0000	1.0000
L25	20	FSJ4-50B(1/2")	62.17 - 62.42	1.0000	1.0000
L25	22	2" (Nominal) Conduit	62.17 - 62.42	1.0000	1.0000
L25	23	2" (Nominal) Conduit	62.17 - 62.42	1.0000	1.0000
L25	24	HB114-1-08U4-M5J(1 1/4")	62.17 - 62.42	1.0000	1.0000
L25	27	LCF114-50J(1-1/4")	62.17 - 62.42	1.0000	1.0000
L25	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	62.17 - 62.42	1.0000	1.0000
L25	29	MLC Hybrid 6/6(7/8")	62.17 - 62.42	1.0000	1.0000
L25	60	4.5" x 1" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L25	62	4" x .75" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L25	63	4" x .75" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L25	64	4" x .75" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L25	66	4.5" x 1" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L25	67	4.5" x 1" Flat Plate (G)	62.17 - 62.42	1.0000	1.0000
L26	1	Safety Line 3/8	59.46 - 62.17	1.0000	1.0000
L26	5	LDF6-50A(1-1/4")	59.46 - 62.17	1.0000	1.0000
L26	8	2" (Nominal) Conduit	59.46 - 62.17	1.0000	1.0000
L26	9	FB-L98B-002-75000(3/8")	59.46 - 62.17	1.0000	1.0000
L26	10	WR-VG86ST-BRD(3/4")	59.46 - 62.17	1.0000	1.0000
L26	20	FSJ4-50B(1/2")	59.46 - 62.17	1.0000	1.0000
L26	22	2" (Nominal) Conduit	59.46 - 62.17	1.0000	1.0000
L26	23	2" (Nominal) Conduit	59.46 - 62.17	1.0000	1.0000
L26	24	HB114-1-08U4-M5J(1 1/4")	59.46 - 62.17	1.0000	1.0000
L26	27	LCF114-50J(1-1/4")	59.46 - 62.17	1.0000	1.0000
L26	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	59.46 - 62.17	1.0000	1.0000
L26	29	MLC Hybrid 6/6(7/8")	59.46 - 62.17	1.0000	1.0000
L26	56	4" x .75" Flat Plate (G)	59.46 - 60.46	1.0000	1.0000
L26	57	4" x .75" Flat Plate (G)	59.46 - 60.46	1.0000	1.0000
L26	58	4" x .75" Flat Plate (G)	59.46 - 60.46	1.0000	1.0000
L26	60	4.5" x 1" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L26	62	4" x .75" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000
L26	63	4" x .75" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000
L26	64	4" x .75" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000
L26	66	4.5" x 1" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000
L26	67	4.5" x 1" Flat Plate (G)	59.46 - 62.17	1.0000	1.0000
L27	1	Safety Line 3/8	59.21 - 59.46	1.0000	1.0000
L27	5	LDF6-50A(1-1/4")	59.21 - 59.46	1.0000	1.0000
L27	8	2" (Nominal) Conduit	59.21 - 59.46	1.0000	1.0000
L27	9	FB-L98B-002-75000(3/8")	59.21 - 59.46	1.0000	1.0000
L27	10	WR-VG86ST-BRD(3/4")	59.21 - 59.46	1.0000	1.0000
L27	20	FSJ4-50B(1/2")	59.21 - 59.46	1.0000	1.0000
L27	22	2" (Nominal) Conduit	59.21 - 59.46	1.0000	1.0000
L27	23	2" (Nominal) Conduit	59.21 - 59.46	1.0000	1.0000
L27	24	HB114-1-08U4-M5J(1 1/4")	59.21 - 59.46	1.0000	1.0000
L27	27	LCF114-50J(1-1/4")	59.21 - 59.46	1.0000	1.0000
L27	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	59.21 - 59.46	1.0000	1.0000
L27	29	MLC Hybrid 6/6(7/8")	59.21 - 59.46	1.0000	1.0000
L27	56	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	57	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	58	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	60	4.5" x 1" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	62	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	63	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	64	4" x .75" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	66	4.5" x 1" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L27	67	4.5" x 1" Flat Plate (G)	59.21 - 59.46	1.0000	1.0000
L28	1	Safety Line 3/8	56.00 - 59.21	1.0000	1.0000
L28	5	LDF6-50A(1-1/4")	56.00 - 59.21	1.0000	1.0000
L28	8	2" (Nominal) Conduit	56.00 - 59.21	1.0000	1.0000
L28	9	FB-L98B-002-75000(3/8")	56.00 - 59.21	1.0000	1.0000
L28	10	WR-VG86ST-BRD(3/4")	56.00 - 59.21	1.0000	1.0000
L28	20	FSJ4-50B(1/2")	56.00 - 59.21	1.0000	1.0000
L28	22	2" (Nominal) Conduit	56.00 - 59.21	1.0000	1.0000
L28	23	2" (Nominal) Conduit	56.00 - 59.21	1.0000	1.0000
L28	24	HB114-1-08U4-M5J(1 1/4")	56.00 - 59.21	1.0000	1.0000
L28	27	LCF114-50J(1-1/4")	56.00 - 59.21	1.0000	1.0000
L28	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	56.00 - 59.21	1.0000	1.0000
L28	29	MLC Hybrid 6/6(7/8")	56.00 - 59.21	1.0000	1.0000
L28	56	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	57	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	58	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	60	4.5" x 1" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	62	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	63	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	64	4" x .75" Flat Plate (G)	56.00 - 59.21	1.0000	1.0000
L28	66	4.5" x 1" Flat Plate (G)	56.08 - 59.21	1.0000	1.0000
L28	67	4.5" x 1" Flat Plate (G)	56.08 - 59.21	1.0000	1.0000
L29	1	Safety Line 3/8	55.75 - 56.00	1.0000	1.0000
L29	5	LDF6-50A(1-1/4")	55.75 - 56.00	1.0000	1.0000
L29	8	2" (Nominal) Conduit	55.75 - 56.00	1.0000	1.0000
L29	9	FB-L98B-002-75000(3/8")	55.75 - 56.00	1.0000	1.0000
L29	10	WR-VG86ST-BRD(3/4")	55.75 - 56.00	1.0000	1.0000
L29	20	FSJ4-50B(1/2")	55.75 - 56.00	1.0000	1.0000
L29	22	2" (Nominal) Conduit	55.75 - 56.00	1.0000	1.0000
L29	23	2" (Nominal) Conduit	55.75 - 56.00	1.0000	1.0000
L29	24	HB114-1-08U4-M5J(1 1/4")	55.75 - 56.00	1.0000	1.0000
L29	27	LCF114-50J(1-1/4")	55.75 - 56.00	1.0000	1.0000
L29	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	55.75 - 56.00	1.0000	1.0000
L29	29	MLC Hybrid 6/6(7/8")	55.75 - 56.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L29	53	6" x 1" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	54	6" x 1" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	56	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	57	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	58	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	60	4.5" x 1" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	62	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	63	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L29	64	4" x .75" Flat Plate (G)	55.75 - 56.00	1.0000	1.0000
L30	1	Safety Line 3/8	50.75 - 55.75	1.0000	1.0000
L30	5	LDF6-50A(1-1/4")	50.75 - 55.75	1.0000	1.0000
L30	8	2" (Nominal) Conduit	50.75 - 55.75	1.0000	1.0000
L30	9	FB-L98B-002-75000(3/8")	50.75 - 55.75	1.0000	1.0000
L30	10	WR-VG86ST-BRD(3/4")	50.75 - 55.75	1.0000	1.0000
L30	20	FSJ4-50B(1/2")	50.75 - 55.75	1.0000	1.0000
L30	22	2" (Nominal) Conduit	50.75 - 55.75	1.0000	1.0000
L30	23	2" (Nominal) Conduit	50.75 - 55.75	1.0000	1.0000
L30	24	HB114-1-08U4-M5J(1 1/4")	50.75 - 55.75	1.0000	1.0000
L30	27	LCF114-50J(1-1/4")	50.75 - 55.75	1.0000	1.0000
L30	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	50.75 - 55.75	1.0000	1.0000
L30	29	MLC Hybrid 6/6(7/8")	50.75 - 55.75	1.0000	1.0000
L30	53	6" x 1" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	54	6" x 1" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	56	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	57	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	58	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	60	4.5" x 1" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	62	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	63	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L30	64	4" x .75" Flat Plate (G)	50.75 - 55.75	1.0000	1.0000
L31	1	Safety Line 3/8	45.75 - 50.75	1.0000	1.0000
L31	5	LDF6-50A(1-1/4")	45.75 - 50.75	1.0000	1.0000
L31	8	2" (Nominal) Conduit	45.75 - 50.75	1.0000	1.0000
L31	9	FB-L98B-002-75000(3/8")	45.75 - 50.75	1.0000	1.0000
L31	10	WR-VG86ST-BRD(3/4")	45.75 - 50.75	1.0000	1.0000
L31	20	FSJ4-50B(1/2")	45.75 - 50.75	1.0000	1.0000
L31	22	2" (Nominal) Conduit	45.75 - 50.75	1.0000	1.0000
L31	23	2" (Nominal) Conduit	45.75 - 50.75	1.0000	1.0000
L31	24	HB114-1-08U4-M5J(1 1/4")	45.75 - 50.75	1.0000	1.0000
L31	27	LCF114-50J(1-1/4")	45.75 - 50.75	1.0000	1.0000
L31	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	45.75 - 50.75	1.0000	1.0000
L31	29	MLC Hybrid 6/6(7/8")	45.75 - 50.75	1.0000	1.0000
L31	49	4" x .75" Flat Plate (G)	45.75 - 45.83	1.0000	1.0000
L31	50	4" x .75" Flat Plate (G)	45.75 - 45.83	1.0000	1.0000
L31	51	4" x .75" Flat Plate (G)	45.75 - 45.83	1.0000	1.0000
L31	53	6" x 1" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	54	6" x 1" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	56	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	57	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	58	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	60	4.5" x 1" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	62	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	63	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L31	64	4" x .75" Flat Plate (G)	45.75 - 50.75	1.0000	1.0000
L32	1	Safety Line 3/8	44.48 - 45.75	1.0000	1.0000
L32	5	LDF6-50A(1-1/4")	44.48 - 45.75	1.0000	1.0000
L32	8	2" (Nominal) Conduit	44.48 - 45.75	1.0000	1.0000
L32	9	FB-L98B-002-75000(3/8")	44.48 - 45.75	1.0000	1.0000
L32	10	WR-VG86ST-BRD(3/4")	44.48 - 45.75	1.0000	1.0000
L32	20	FSJ4-50B(1/2")	44.48 - 45.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L32	22	2" (Nominal) Conduit	44.48 - 45.75	1.0000	1.0000
L32	23	2" (Nominal) Conduit	44.48 - 45.75	1.0000	1.0000
L32	24	HB114-1-08U4-M5J(1 1/4")	44.48 - 45.75	1.0000	1.0000
L32	27	LCF114-50J(1-1/4")	44.48 - 45.75	1.0000	1.0000
L32	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	44.48 - 45.75	1.0000	1.0000
L32	29	MLC Hybrid 6/6(7/8")	44.48 - 45.75	1.0000	1.0000
L32	49	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	50	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	51	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	53	6" x 1" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	54	6" x 1" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	56	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	57	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	58	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	60	4.5" x 1" Flat Plate (G)	44.50 - 45.75	1.0000	1.0000
L32	62	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	63	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L32	64	4" x .75" Flat Plate (G)	44.48 - 45.75	1.0000	1.0000
L33	1	Safety Line 3/8	44.23 - 44.48	1.0000	1.0000
L33	5	LDF6-50A(1-1/4")	44.23 - 44.48	1.0000	1.0000
L33	8	2" (Nominal) Conduit	44.23 - 44.48	1.0000	1.0000
L33	9	FB-L98B-002-75000(3/8")	44.23 - 44.48	1.0000	1.0000
L33	10	WR-VG86ST-BRD(3/4")	44.23 - 44.48	1.0000	1.0000
L33	20	FSJ4-50B(1/2")	44.23 - 44.48	1.0000	1.0000
L33	22	2" (Nominal) Conduit	44.23 - 44.48	1.0000	1.0000
L33	23	2" (Nominal) Conduit	44.23 - 44.48	1.0000	1.0000
L33	24	HB114-1-08U4-M5J(1 1/4")	44.23 - 44.48	1.0000	1.0000
L33	27	LCF114-50J(1-1/4")	44.23 - 44.48	1.0000	1.0000
L33	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	44.23 - 44.48	1.0000	1.0000
L33	29	MLC Hybrid 6/6(7/8")	44.23 - 44.48	1.0000	1.0000
L33	44	6" x 1" Flat Plate (G)	44.23 - 44.33	1.0000	1.0000
L33	49	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	50	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	51	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	53	6" x 1" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	54	6" x 1" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	56	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	57	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	58	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	62	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	63	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L33	64	4" x .75" Flat Plate (G)	44.23 - 44.48	1.0000	1.0000
L34	1	Safety Line 3/8	44.08 - 44.23	1.0000	1.0000
L34	5	LDF6-50A(1-1/4")	44.08 - 44.23	1.0000	1.0000
L34	8	2" (Nominal) Conduit	44.08 - 44.23	1.0000	1.0000
L34	9	FB-L98B-002-75000(3/8")	44.08 - 44.23	1.0000	1.0000
L34	10	WR-VG86ST-BRD(3/4")	44.08 - 44.23	1.0000	1.0000
L34	20	FSJ4-50B(1/2")	44.08 - 44.23	1.0000	1.0000
L34	22	2" (Nominal) Conduit	44.08 - 44.23	1.0000	1.0000
L34	23	2" (Nominal) Conduit	44.08 - 44.23	1.0000	1.0000
L34	24	HB114-1-08U4-M5J(1 1/4")	44.08 - 44.23	1.0000	1.0000
L34	27	LCF114-50J(1-1/4")	44.08 - 44.23	1.0000	1.0000
L34	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	44.08 - 44.23	1.0000	1.0000
L34	29	MLC Hybrid 6/6(7/8")	44.08 - 44.23	1.0000	1.0000
L34	44	6" x 1" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	49	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	50	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	51	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	53	6" x 1" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L34	54	6" x 1" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	56	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	57	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	58	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	62	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	63	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L34	64	4" x .75" Flat Plate (G)	44.08 - 44.23	1.0000	1.0000
L35	1	Safety Line 3/8	39.08 - 44.08	1.0000	1.0000
L35	5	LDF6-50A(1-1/4")	39.08 - 44.08	1.0000	1.0000
L35	8	2" (Nominal) Conduit	39.08 - 44.08	1.0000	1.0000
L35	9	FB-L98B-002-75000(3/8")	39.08 - 44.08	1.0000	1.0000
L35	10	WR-VG86ST-BRD(3/4")	39.08 - 44.08	1.0000	1.0000
L35	20	FSJ4-50B(1/2")	39.08 - 44.08	1.0000	1.0000
L35	22	2" (Nominal) Conduit	39.08 - 44.08	1.0000	1.0000
L35	23	2" (Nominal) Conduit	39.08 - 44.08	1.0000	1.0000
L35	24	HB114-1-08U4-M5J(1 1/4")	39.08 - 44.08	1.0000	1.0000
L35	27	LCF114-50J(1-1/4")	39.08 - 44.08	1.0000	1.0000
L35	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	39.08 - 44.08	1.0000	1.0000
L35	29	MLC Hybrid 6/6(7/8")	39.08 - 44.08	1.0000	1.0000
L35	44	6" x 1" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	49	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	50	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	51	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	53	6" x 1" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	54	6" x 1" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	56	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	57	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	58	4" x .75" Flat Plate (G)	39.08 - 44.08	1.0000	1.0000
L35	62	4" x .75" Flat Plate (G)	43.25 - 44.08	1.0000	1.0000
L35	63	4" x .75" Flat Plate (G)	43.25 - 44.08	1.0000	1.0000
L35	64	4" x .75" Flat Plate (G)	43.25 - 44.08	1.0000	1.0000
L36	1	Safety Line 3/8	34.08 - 39.08	1.0000	1.0000
L36	5	LDF6-50A(1-1/4")	34.08 - 39.08	1.0000	1.0000
L36	8	2" (Nominal) Conduit	34.08 - 39.08	1.0000	1.0000
L36	9	FB-L98B-002-75000(3/8")	34.08 - 39.08	1.0000	1.0000
L36	10	WR-VG86ST-BRD(3/4")	34.08 - 39.08	1.0000	1.0000
L36	20	FSJ4-50B(1/2")	34.08 - 39.08	1.0000	1.0000
L36	22	2" (Nominal) Conduit	34.08 - 39.08	1.0000	1.0000
L36	23	2" (Nominal) Conduit	34.08 - 39.08	1.0000	1.0000
L36	24	HB114-1-08U4-M5J(1 1/4")	34.08 - 39.08	1.0000	1.0000
L36	27	LCF114-50J(1-1/4")	34.08 - 39.08	1.0000	1.0000
L36	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	34.08 - 39.08	1.0000	1.0000
L36	29	MLC Hybrid 6/6(7/8")	34.08 - 39.08	1.0000	1.0000
L36	44	6" x 1" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	49	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	50	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	51	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	53	6" x 1" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	54	6" x 1" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	56	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	57	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L36	58	4" x .75" Flat Plate (G)	34.08 - 39.08	1.0000	1.0000
L38	1	Safety Line 3/8	31.46 - 34.00	1.0000	1.0000
L38	5	LDF6-50A(1-1/4")	31.46 - 34.00	1.0000	1.0000
L38	8	2" (Nominal) Conduit	31.46 - 34.00	1.0000	1.0000
L38	9	FB-L98B-002-75000(3/8")	31.46 - 34.00	1.0000	1.0000
L38	10	WR-VG86ST-BRD(3/4")	31.46 - 34.00	1.0000	1.0000
L38	20	FSJ4-50B(1/2")	31.46 - 34.00	1.0000	1.0000
L38	22	2" (Nominal) Conduit	31.46 - 34.00	1.0000	1.0000
L38	23	2" (Nominal) Conduit	31.46 - 34.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L38	24	HB114-1-08U4-M5J(1 1/4")	31.46 - 34.00	1.0000	1.0000
L38	27	LCF114-50J(1-1/4")	31.46 - 34.00	1.0000	1.0000
L38	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	31.46 - 34.00	1.0000	1.0000
L38	29	MLC Hybrid 6/6(7/8")	31.46 - 34.00	1.0000	1.0000
L38	44	6" x 1" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	49	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	50	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	51	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	53	6" x 1" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	54	6" x 1" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	56	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	57	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L38	58	4" x .75" Flat Plate (G)	31.46 - 34.00	1.0000	1.0000
L39	1	Safety Line 3/8	31.21 - 31.46	1.0000	1.0000
L39	5	LDF6-50A(1-1/4")	31.21 - 31.46	1.0000	1.0000
L39	8	2" (Nominal) Conduit	31.21 - 31.46	1.0000	1.0000
L39	9	FB-L98B-002-75000(3/8")	31.21 - 31.46	1.0000	1.0000
L39	10	WR-VG86ST-BRD(3/4")	31.21 - 31.46	1.0000	1.0000
L39	20	FSJ4-50B(1/2")	31.21 - 31.46	1.0000	1.0000
L39	22	2" (Nominal) Conduit	31.21 - 31.46	1.0000	1.0000
L39	23	2" (Nominal) Conduit	31.21 - 31.46	1.0000	1.0000
L39	24	HB114-1-08U4-M5J(1 1/4")	31.21 - 31.46	1.0000	1.0000
L39	27	LCF114-50J(1-1/4")	31.21 - 31.46	1.0000	1.0000
L39	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	31.21 - 31.46	1.0000	1.0000
L39	29	MLC Hybrid 6/6(7/8")	31.21 - 31.46	1.0000	1.0000
L39	44	6" x 1" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	49	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	50	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	51	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	53	6" x 1" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	54	6" x 1" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	56	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	57	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L39	58	4" x .75" Flat Plate (G)	31.21 - 31.46	1.0000	1.0000
L40	1	Safety Line 3/8	29.46 - 31.21	1.0000	1.0000
L40	5	LDF6-50A(1-1/4")	29.46 - 31.21	1.0000	1.0000
L40	8	2" (Nominal) Conduit	29.46 - 31.21	1.0000	1.0000
L40	9	FB-L98B-002-75000(3/8")	29.46 - 31.21	1.0000	1.0000
L40	10	WR-VG86ST-BRD(3/4")	29.46 - 31.21	1.0000	1.0000
L40	20	FSJ4-50B(1/2")	29.46 - 31.21	1.0000	1.0000
L40	22	2" (Nominal) Conduit	29.46 - 31.21	1.0000	1.0000
L40	23	2" (Nominal) Conduit	29.46 - 31.21	1.0000	1.0000
L40	24	HB114-1-08U4-M5J(1 1/4")	29.46 - 31.21	1.0000	1.0000
L40	27	LCF114-50J(1-1/4")	29.46 - 31.21	1.0000	1.0000
L40	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	29.46 - 31.21	1.0000	1.0000
L40	29	MLC Hybrid 6/6(7/8")	29.46 - 31.21	1.0000	1.0000
L40	36	4" x .75" Flat Plate (G)	29.46 - 30.46	1.0000	1.0000
L40	37	4" x .75" Flat Plate (G)	29.46 - 30.46	1.0000	1.0000
L40	38	4" x .75" Flat Plate (G)	29.46 - 30.46	1.0000	1.0000
L40	44	6" x 1" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	49	4" x .75" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	50	4" x .75" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	51	4" x .75" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	53	6" x 1" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	54	6" x 1" Flat Plate (G)	29.46 - 31.21	1.0000	1.0000
L40	56	4" x .75" Flat Plate (G)	30.46 - 31.21	1.0000	1.0000
L40	57	4" x .75" Flat Plate (G)	30.46 - 31.21	1.0000	1.0000
L40	58	4" x .75" Flat Plate (G)	30.46 - 31.21	1.0000	1.0000
L41	1	Safety Line 3/8	29.21 - 29.46	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L41	5	LDF6-50A(1-1/4")	29.21 - 29.46	1.0000	1.0000
L41	8	2" (Nominal) Conduit	29.21 - 29.46	1.0000	1.0000
L41	9	FB-L98B-002-75000(3/8")	29.21 - 29.46	1.0000	1.0000
L41	10	WR-VG86ST-BRD(3/4")	29.21 - 29.46	1.0000	1.0000
L41	20	FSJ4-50B(1/2")	29.21 - 29.46	1.0000	1.0000
L41	22	2" (Nominal) Conduit	29.21 - 29.46	1.0000	1.0000
L41	23	2" (Nominal) Conduit	29.21 - 29.46	1.0000	1.0000
L41	24	HB114-1-08U4-M5J(1 1/4")	29.21 - 29.46	1.0000	1.0000
L41	27	LCF114-50J(1-1/4")	29.21 - 29.46	1.0000	1.0000
L41	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	29.21 - 29.46	1.0000	1.0000
L41	29	MLC Hybrid 6/6(7/8")	29.21 - 29.46	1.0000	1.0000
L41	36	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	37	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	38	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	44	6" x 1" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	46	6" x 1" Flat Plate (G)	29.21 - 29.33	1.0000	1.0000
L41	47	6" x 1" Flat Plate (G)	29.21 - 29.33	1.0000	1.0000
L41	49	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	50	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	51	4" x .75" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	53	6" x 1" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L41	54	6" x 1" Flat Plate (G)	29.21 - 29.46	1.0000	1.0000
L42	1	Safety Line 3/8	26.83 - 29.21	1.0000	1.0000
L42	5	LDF6-50A(1-1/4")	26.83 - 29.21	1.0000	1.0000
L42	8	2" (Nominal) Conduit	26.83 - 29.21	1.0000	1.0000
L42	9	FB-L98B-002-75000(3/8")	26.83 - 29.21	1.0000	1.0000
L42	10	WR-VG86ST-BRD(3/4")	26.83 - 29.21	1.0000	1.0000
L42	20	FSJ4-50B(1/2")	26.83 - 29.21	1.0000	1.0000
L42	22	2" (Nominal) Conduit	26.83 - 29.21	1.0000	1.0000
L42	23	2" (Nominal) Conduit	26.83 - 29.21	1.0000	1.0000
L42	24	HB114-1-08U4-M5J(1 1/4")	26.83 - 29.21	1.0000	1.0000
L42	27	LCF114-50J(1-1/4")	26.83 - 29.21	1.0000	1.0000
L42	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	26.83 - 29.21	1.0000	1.0000
L42	29	MLC Hybrid 6/6(7/8")	26.83 - 29.21	1.0000	1.0000
L42	36	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	37	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	38	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	44	6" x 1" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	46	6" x 1" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	47	6" x 1" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	49	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	50	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	51	4" x .75" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	53	6" x 1" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L42	54	6" x 1" Flat Plate (G)	26.83 - 29.21	1.0000	1.0000
L43	1	Safety Line 3/8	26.58 - 26.83	1.0000	1.0000
L43	5	LDF6-50A(1-1/4")	26.58 - 26.83	1.0000	1.0000
L43	8	2" (Nominal) Conduit	26.58 - 26.83	1.0000	1.0000
L43	9	FB-L98B-002-75000(3/8")	26.58 - 26.83	1.0000	1.0000
L43	10	WR-VG86ST-BRD(3/4")	26.58 - 26.83	1.0000	1.0000
L43	20	FSJ4-50B(1/2")	26.58 - 26.83	1.0000	1.0000
L43	22	2" (Nominal) Conduit	26.58 - 26.83	1.0000	1.0000
L43	23	2" (Nominal) Conduit	26.58 - 26.83	1.0000	1.0000
L43	24	HB114-1-08U4-M5J(1 1/4")	26.58 - 26.83	1.0000	1.0000
L43	27	LCF114-50J(1-1/4")	26.58 - 26.83	1.0000	1.0000
L43	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	26.58 - 26.83	1.0000	1.0000
L43	29	MLC Hybrid 6/6(7/8")	26.58 - 26.83	1.0000	1.0000
L43	36	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	37	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L43	38	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	44	6" x 1" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	46	6" x 1" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	47	6" x 1" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	49	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	50	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	51	4" x .75" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	53	6" x 1" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L43	54	6" x 1" Flat Plate (G)	26.58 - 26.83	1.0000	1.0000
L44	1	Safety Line 3/8	21.58 - 26.58	1.0000	1.0000
L44	5	LDF6-50A(1-1/4")	21.58 - 26.58	1.0000	1.0000
L44	8	2" (Nominal) Conduit	21.58 - 26.58	1.0000	1.0000
L44	9	FB-L98B-002-75000(3/8")	21.58 - 26.58	1.0000	1.0000
L44	10	WR-VG86ST-BRD(3/4")	21.58 - 26.58	1.0000	1.0000
L44	20	FSJ4-50B(1/2")	21.58 - 26.58	1.0000	1.0000
L44	22	2" (Nominal) Conduit	21.58 - 26.58	1.0000	1.0000
L44	23	2" (Nominal) Conduit	21.58 - 26.58	1.0000	1.0000
L44	24	HB114-1-08U4-M5J(1 1/4")	21.58 - 26.58	1.0000	1.0000
L44	27	LCF114-50J(1-1/4")	21.58 - 26.58	1.0000	1.0000
L44	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	21.58 - 26.58	1.0000	1.0000
L44	29	MLC Hybrid 6/6(7/8")	21.58 - 26.58	1.0000	1.0000
L44	36	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	37	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	38	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	44	6" x 1" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	46	6" x 1" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	47	6" x 1" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	49	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	50	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	51	4" x .75" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	53	6" x 1" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L44	54	6" x 1" Flat Plate (G)	21.58 - 26.58	1.0000	1.0000
L45	1	Safety Line 3/8	20.75 - 21.58	1.0000	1.0000
L45	5	LDF6-50A(1-1/4")	20.75 - 21.58	1.0000	1.0000
L45	8	2" (Nominal) Conduit	20.75 - 21.58	1.0000	1.0000
L45	9	FB-L98B-002-75000(3/8")	20.75 - 21.58	1.0000	1.0000
L45	10	WR-VG86ST-BRD(3/4")	20.75 - 21.58	1.0000	1.0000
L45	20	FSJ4-50B(1/2")	20.75 - 21.58	1.0000	1.0000
L45	22	2" (Nominal) Conduit	20.75 - 21.58	1.0000	1.0000
L45	23	2" (Nominal) Conduit	20.75 - 21.58	1.0000	1.0000
L45	24	HB114-1-08U4-M5J(1 1/4")	20.75 - 21.58	1.0000	1.0000
L45	27	LCF114-50J(1-1/4")	20.75 - 21.58	1.0000	1.0000
L45	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	20.75 - 21.58	1.0000	1.0000
L45	29	MLC Hybrid 6/6(7/8")	20.75 - 21.58	1.0000	1.0000
L45	36	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	37	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	38	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	44	6" x 1" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	46	6" x 1" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	47	6" x 1" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	49	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	50	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	51	4" x .75" Flat Plate (G)	20.75 - 21.58	1.0000	1.0000
L45	53	6" x 1" Flat Plate (G)	21.00 - 21.58	1.0000	1.0000
L45	54	6" x 1" Flat Plate (G)	21.00 - 21.58	1.0000	1.0000
L46	1	Safety Line 3/8	20.50 - 20.75	1.0000	1.0000
L46	5	LDF6-50A(1-1/4")	20.50 - 20.75	1.0000	1.0000
L46	8	2" (Nominal) Conduit	20.50 - 20.75	1.0000	1.0000
L46	9	FB-L98B-002-75000(3/8")	20.50 - 20.75	1.0000	1.0000
L46	10	WR-VG86ST-BRD(3/4")	20.50 - 20.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L46	20	FSJ4-50B(1/2")	20.50 - 20.75	1.0000	1.0000
L46	22	2" (Nominal) Conduit	20.50 - 20.75	1.0000	1.0000
L46	23	2" (Nominal) Conduit	20.50 - 20.75	1.0000	1.0000
L46	24	HB114-1-08U4-M5J(1 1/4")	20.50 - 20.75	1.0000	1.0000
L46	27	LCF114-50J(1-1/4")	20.50 - 20.75	1.0000	1.0000
L46	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	20.50 - 20.75	1.0000	1.0000
L46	29	MLC Hybrid 6/6(7/8")	20.50 - 20.75	1.0000	1.0000
L46	36	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	37	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	38	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	44	6" x 1" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	46	6" x 1" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	47	6" x 1" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	49	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	50	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	51	4" x .75" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	81	6.5" x 1.25" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	82	6.5" x 1.25" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L46	83	6.5" x 1.25" Flat Plate (G)	20.50 - 20.75	1.0000	1.0000
L47	1	Safety Line 3/8	18.00 - 20.50	1.0000	1.0000
L47	5	LDF6-50A(1-1/4")	18.00 - 20.50	1.0000	1.0000
L47	8	2" (Nominal) Conduit	18.00 - 20.50	1.0000	1.0000
L47	9	FB-L98B-002-75000(3/8")	18.00 - 20.50	1.0000	1.0000
L47	10	WR-VG86ST-BRD(3/4")	18.00 - 20.50	1.0000	1.0000
L47	20	FSJ4-50B(1/2")	18.00 - 20.50	1.0000	1.0000
L47	22	2" (Nominal) Conduit	18.00 - 20.50	1.0000	1.0000
L47	23	2" (Nominal) Conduit	18.00 - 20.50	1.0000	1.0000
L47	24	HB114-1-08U4-M5J(1 1/4")	18.00 - 20.50	1.0000	1.0000
L47	27	LCF114-50J(1-1/4")	18.00 - 20.50	1.0000	1.0000
L47	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	18.00 - 20.50	1.0000	1.0000
L47	29	MLC Hybrid 6/6(7/8")	18.00 - 20.50	1.0000	1.0000
L47	36	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	37	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	38	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	44	6" x 1" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	46	6" x 1" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	47	6" x 1" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	49	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	50	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	51	4" x .75" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	81	6.5" x 1.25" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	82	6.5" x 1.25" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L47	83	6.5" x 1.25" Flat Plate (G)	18.00 - 20.50	1.0000	1.0000
L48	1	Safety Line 3/8	17.75 - 18.00	1.0000	1.0000
L48	5	LDF6-50A(1-1/4")	17.75 - 18.00	1.0000	1.0000
L48	8	2" (Nominal) Conduit	17.75 - 18.00	1.0000	1.0000
L48	9	FB-L98B-002-75000(3/8")	17.75 - 18.00	1.0000	1.0000
L48	10	WR-VG86ST-BRD(3/4")	17.75 - 18.00	1.0000	1.0000
L48	20	FSJ4-50B(1/2")	17.75 - 18.00	1.0000	1.0000
L48	22	2" (Nominal) Conduit	17.75 - 18.00	1.0000	1.0000
L48	23	2" (Nominal) Conduit	17.75 - 18.00	1.0000	1.0000
L48	24	HB114-1-08U4-M5J(1 1/4")	17.75 - 18.00	1.0000	1.0000
L48	27	LCF114-50J(1-1/4")	17.75 - 18.00	1.0000	1.0000
L48	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	17.75 - 18.00	1.0000	1.0000
L48	29	MLC Hybrid 6/6(7/8")	17.75 - 18.00	1.0000	1.0000
L48	36	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	37	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	38	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	44	6" x 1" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L48	46	6" x 1" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	47	6" x 1" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	49	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	50	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	51	4" x .75" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	81	6.5" x 1.25" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	82	6.5" x 1.25" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L48	83	6.5" x 1.25" Flat Plate (G)	17.75 - 18.00	1.0000	1.0000
L49	1	Safety Line 3/8	17.08 - 17.75	1.0000	1.0000
L49	5	LDF6-50A(1-1/4")	17.08 - 17.75	1.0000	1.0000
L49	8	2" (Nominal) Conduit	17.08 - 17.75	1.0000	1.0000
L49	9	FB-L98B-002-75000(3/8")	17.08 - 17.75	1.0000	1.0000
L49	10	WR-VG86ST-BRD(3/4")	17.08 - 17.75	1.0000	1.0000
L49	20	FSJ4-50B(1/2")	17.08 - 17.75	1.0000	1.0000
L49	22	2" (Nominal) Conduit	17.08 - 17.75	1.0000	1.0000
L49	23	2" (Nominal) Conduit	17.08 - 17.75	1.0000	1.0000
L49	24	HB114-1-08U4-M5J(1 1/4")	17.08 - 17.75	1.0000	1.0000
L49	27	LCF114-50J(1-1/4")	17.08 - 17.75	1.0000	1.0000
L49	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	17.08 - 17.75	1.0000	1.0000
L49	29	MLC Hybrid 6/6(7/8")	17.08 - 17.75	1.0000	1.0000
L49	36	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	37	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	38	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	44	6" x 1" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	46	6" x 1" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	47	6" x 1" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	49	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	50	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	51	4" x .75" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	81	6.5" x 1.25" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	82	6.5" x 1.25" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L49	83	6.5" x 1.25" Flat Plate (G)	17.08 - 17.75	1.0000	1.0000
L50	1	Safety Line 3/8	16.83 - 17.08	1.0000	1.0000
L50	5	LDF6-50A(1-1/4")	16.83 - 17.08	1.0000	1.0000
L50	8	2" (Nominal) Conduit	16.83 - 17.08	1.0000	1.0000
L50	9	FB-L98B-002-75000(3/8")	16.83 - 17.08	1.0000	1.0000
L50	10	WR-VG86ST-BRD(3/4")	16.83 - 17.08	1.0000	1.0000
L50	20	FSJ4-50B(1/2")	16.83 - 17.08	1.0000	1.0000
L50	22	2" (Nominal) Conduit	16.83 - 17.08	1.0000	1.0000
L50	23	2" (Nominal) Conduit	16.83 - 17.08	1.0000	1.0000
L50	24	HB114-1-08U4-M5J(1 1/4")	16.83 - 17.08	1.0000	1.0000
L50	27	LCF114-50J(1-1/4")	16.83 - 17.08	1.0000	1.0000
L50	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	16.83 - 17.08	1.0000	1.0000
L50	29	MLC Hybrid 6/6(7/8")	16.83 - 17.08	1.0000	1.0000
L50	36	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	37	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	38	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	44	6" x 1" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	46	6" x 1" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	47	6" x 1" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	49	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	50	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	51	4" x .75" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	81	6.5" x 1.25" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	82	6.5" x 1.25" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L50	83	6.5" x 1.25" Flat Plate (G)	16.83 - 17.08	1.0000	1.0000
L51	1	Safety Line 3/8	13.00 - 16.83	1.0000	1.0000
L51	5	LDF6-50A(1-1/4")	13.00 - 16.83	1.0000	1.0000
L51	8	2" (Nominal) Conduit	13.00 - 16.83	1.0000	1.0000
L51	9	FB-L98B-002-75000(3/8")	13.00 - 16.83	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L51	10	WR-VG86ST-BRD(3/4")	13.00 - 16.83	1.0000	1.0000
L51	20	FSJ4-50B(1/2")	13.00 - 16.83	1.0000	1.0000
L51	22	2" (Nominal) Conduit	13.00 - 16.83	1.0000	1.0000
L51	23	2" (Nominal) Conduit	13.00 - 16.83	1.0000	1.0000
L51	24	HB114-1-08U4-M5J(1 1/4")	13.00 - 16.83	1.0000	1.0000
L51	27	LCF114-50J(1-1/4")	13.00 - 16.83	1.0000	1.0000
L51	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	13.00 - 16.83	1.0000	1.0000
L51	29	MLC Hybrid 6/6(7/8")	13.00 - 16.83	1.0000	1.0000
L51	32	6" x 1" Flat Plate (G)	13.00 - 15.50	1.0000	1.0000
L51	33	6" x 1" Flat Plate (G)	13.00 - 15.50	1.0000	1.0000
L51	34	6" x 1" Flat Plate (G)	13.00 - 15.50	1.0000	1.0000
L51	36	4" x .75" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	37	4" x .75" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	38	4" x .75" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	44	6" x 1" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	46	6" x 1" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	47	6" x 1" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	49	4" x .75" Flat Plate (G)	15.83 - 16.83	1.0000	1.0000
L51	50	4" x .75" Flat Plate (G)	15.83 - 16.83	1.0000	1.0000
L51	51	4" x .75" Flat Plate (G)	15.83 - 16.83	1.0000	1.0000
L51	81	6.5" x 1.25" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	82	6.5" x 1.25" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L51	83	6.5" x 1.25" Flat Plate (G)	13.00 - 16.83	1.0000	1.0000
L52	1	Safety Line 3/8	12.75 - 13.00	1.0000	1.0000
L52	5	LDF6-50A(1-1/4")	12.75 - 13.00	1.0000	1.0000
L52	8	2" (Nominal) Conduit	12.75 - 13.00	1.0000	1.0000
L52	9	FB-L98B-002-75000(3/8")	12.75 - 13.00	1.0000	1.0000
L52	10	WR-VG86ST-BRD(3/4")	12.75 - 13.00	1.0000	1.0000
L52	20	FSJ4-50B(1/2")	12.75 - 13.00	1.0000	1.0000
L52	22	2" (Nominal) Conduit	12.75 - 13.00	1.0000	1.0000
L52	23	2" (Nominal) Conduit	12.75 - 13.00	1.0000	1.0000
L52	24	HB114-1-08U4-M5J(1 1/4")	12.75 - 13.00	1.0000	1.0000
L52	27	LCF114-50J(1-1/4")	12.75 - 13.00	1.0000	1.0000
L52	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	12.75 - 13.00	1.0000	1.0000
L52	29	MLC Hybrid 6/6(7/8")	12.75 - 13.00	1.0000	1.0000
L52	32	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	33	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	34	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	36	4" x .75" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	37	4" x .75" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	38	4" x .75" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	44	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	46	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	47	6" x 1" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	81	6.5" x 1.25" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	82	6.5" x 1.25" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L52	83	6.5" x 1.25" Flat Plate (G)	12.75 - 13.00	1.0000	1.0000
L53	1	Safety Line 3/8	11.83 - 12.75	1.0000	1.0000
L53	5	LDF6-50A(1-1/4")	11.83 - 12.75	1.0000	1.0000
L53	8	2" (Nominal) Conduit	11.83 - 12.75	1.0000	1.0000
L53	9	FB-L98B-002-75000(3/8")	11.83 - 12.75	1.0000	1.0000
L53	10	WR-VG86ST-BRD(3/4")	11.83 - 12.75	1.0000	1.0000
L53	20	FSJ4-50B(1/2")	11.83 - 12.75	1.0000	1.0000
L53	22	2" (Nominal) Conduit	11.83 - 12.75	1.0000	1.0000
L53	23	2" (Nominal) Conduit	11.83 - 12.75	1.0000	1.0000
L53	24	HB114-1-08U4-M5J(1 1/4")	11.83 - 12.75	1.0000	1.0000
L53	27	LCF114-50J(1-1/4")	11.83 - 12.75	1.0000	1.0000
L53	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	11.83 - 12.75	1.0000	1.0000
L53	29	MLC Hybrid 6/6(7/8")	11.83 - 12.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L53	32	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	33	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	34	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	36	4" x .75" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	37	4" x .75" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	38	4" x .75" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	44	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	46	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	47	6" x 1" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	81	6.5" x 1.25" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	82	6.5" x 1.25" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L53	83	6.5" x 1.25" Flat Plate (G)	11.83 - 12.75	1.0000	1.0000
L54	1	Safety Line 3/8	11.58 - 11.83	1.0000	1.0000
L54	5	LDF6-50A(1-1/4")	11.58 - 11.83	1.0000	1.0000
L54	8	2" (Nominal) Conduit	11.58 - 11.83	1.0000	1.0000
L54	9	FB-L98B-002-75000(3/8")	11.58 - 11.83	1.0000	1.0000
L54	10	WR-VG86ST-BRD(3/4")	11.58 - 11.83	1.0000	1.0000
L54	20	FSJ4-50B(1/2")	11.58 - 11.83	1.0000	1.0000
L54	22	2" (Nominal) Conduit	11.58 - 11.83	1.0000	1.0000
L54	23	2" (Nominal) Conduit	11.58 - 11.83	1.0000	1.0000
L54	24	HB114-1-08U4-M5J(1 1/4")	11.58 - 11.83	1.0000	1.0000
L54	27	LCF114-50J(1-1/4")	11.58 - 11.83	1.0000	1.0000
L54	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	11.58 - 11.83	1.0000	1.0000
L54	29	MLC Hybrid 6/6(7/8")	11.58 - 11.83	1.0000	1.0000
L54	32	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	33	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	34	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	36	4" x .75" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	37	4" x .75" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	38	4" x .75" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	44	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	46	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	47	6" x 1" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	81	6.5" x 1.25" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	82	6.5" x 1.25" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L54	83	6.5" x 1.25" Flat Plate (G)	11.58 - 11.83	1.0000	1.0000
L55	1	Safety Line 3/8	6.48 - 11.58	1.0000	1.0000
L55	5	LDF6-50A(1-1/4")	6.48 - 11.58	1.0000	1.0000
L55	8	2" (Nominal) Conduit	6.48 - 11.58	1.0000	1.0000
L55	9	FB-L98B-002-75000(3/8")	6.48 - 11.58	1.0000	1.0000
L55	10	WR-VG86ST-BRD(3/4")	6.48 - 11.58	1.0000	1.0000
L55	20	FSJ4-50B(1/2")	6.48 - 11.58	1.0000	1.0000
L55	22	2" (Nominal) Conduit	6.48 - 11.58	1.0000	1.0000
L55	23	2" (Nominal) Conduit	6.48 - 11.58	1.0000	1.0000
L55	24	HB114-1-08U4-M5J(1 1/4")	6.48 - 11.58	1.0000	1.0000
L55	27	LCF114-50J(1-1/4")	6.48 - 11.58	1.0000	1.0000
L55	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	6.48 - 11.58	1.0000	1.0000
L55	29	MLC Hybrid 6/6(7/8")	6.48 - 11.58	1.0000	1.0000
L55	32	6" x 1" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	33	6" x 1" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	34	6" x 1" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	36	4" x .75" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	37	4" x .75" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	38	4" x .75" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	44	6" x 1" Flat Plate (G)	9.33 - 11.58	1.0000	1.0000
L55	46	6" x 1" Flat Plate (G)	9.33 - 11.58	1.0000	1.0000
L55	47	6" x 1" Flat Plate (G)	9.33 - 11.58	1.0000	1.0000
L55	81	6.5" x 1.25" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	82	6.5" x 1.25" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000
L55	83	6.5" x 1.25" Flat Plate (G)	6.48 - 11.58	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L55	85	6.5" x 1.25" Flat Plate (G)	6.48 - 9.25	1.0000	1.0000
L56	1	Safety Line 3/8	6.25 - 6.48	1.0000	1.0000
L56	5	LDF6-50A(1-1/4")	6.25 - 6.48	1.0000	1.0000
L56	8	2" (Nominal) Conduit	6.25 - 6.48	1.0000	1.0000
L56	9	FB-L98B-002-75000(3/8")	6.25 - 6.48	1.0000	1.0000
L56	10	WR-VG86ST-BRD(3/4")	6.25 - 6.48	1.0000	1.0000
L56	20	FSJ4-50B(1/2")	6.25 - 6.48	1.0000	1.0000
L56	22	2" (Nominal) Conduit	6.25 - 6.48	1.0000	1.0000
L56	23	2" (Nominal) Conduit	6.25 - 6.48	1.0000	1.0000
L56	24	HB114-1-08U4-M5J(1 1/4")	6.25 - 6.48	1.0000	1.0000
L56	27	LCF114-50J(1-1/4")	6.25 - 6.48	1.0000	1.0000
L56	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	6.25 - 6.48	1.0000	1.0000
L56	29	MLC Hybrid 6/6(7/8")	6.25 - 6.48	1.0000	1.0000
L56	32	6" x 1" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	33	6" x 1" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	34	6" x 1" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	36	4" x .75" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	37	4" x .75" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	38	4" x .75" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	81	6.5" x 1.25" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	82	6.5" x 1.25" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	83	6.5" x 1.25" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L56	85	6.5" x 1.25" Flat Plate (G)	6.25 - 6.48	1.0000	1.0000
L57	1	Safety Line 3/8	1.25 - 6.25	1.0000	1.0000
L57	5	LDF6-50A(1-1/4")	1.25 - 6.25	1.0000	1.0000
L57	8	2" (Nominal) Conduit	1.25 - 6.25	1.0000	1.0000
L57	9	FB-L98B-002-75000(3/8")	1.25 - 6.25	1.0000	1.0000
L57	10	WR-VG86ST-BRD(3/4")	1.25 - 6.25	1.0000	1.0000
L57	20	FSJ4-50B(1/2")	1.25 - 6.25	1.0000	1.0000
L57	22	2" (Nominal) Conduit	1.25 - 6.25	1.0000	1.0000
L57	23	2" (Nominal) Conduit	1.25 - 6.25	1.0000	1.0000
L57	24	HB114-1-08U4-M5J(1 1/4")	1.25 - 6.25	1.0000	1.0000
L57	27	LCF114-50J(1-1/4")	1.25 - 6.25	1.0000	1.0000
L57	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	1.25 - 6.25	1.0000	1.0000
L57	29	MLC Hybrid 6/6(7/8")	1.25 - 6.25	1.0000	1.0000
L57	32	6" x 1" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	33	6" x 1" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	34	6" x 1" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	36	4" x .75" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	37	4" x .75" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	38	4" x .75" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	81	6.5" x 1.25" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	82	6.5" x 1.25" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	83	6.5" x 1.25" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L57	85	6.5" x 1.25" Flat Plate (G)	1.25 - 6.25	1.0000	1.0000
L58	1	Safety Line 3/8	0.00 - 1.25	1.0000	1.0000
L58	5	LDF6-50A(1-1/4")	0.00 - 1.25	1.0000	1.0000
L58	8	2" (Nominal) Conduit	0.00 - 1.25	1.0000	1.0000
L58	9	FB-L98B-002-75000(3/8")	0.00 - 1.25	1.0000	1.0000
L58	10	WR-VG86ST-BRD(3/4")	0.00 - 1.25	1.0000	1.0000
L58	20	FSJ4-50B(1/2")	0.00 - 1.25	1.0000	1.0000
L58	22	2" (Nominal) Conduit	0.00 - 1.25	1.0000	1.0000
L58	23	2" (Nominal) Conduit	0.00 - 1.25	1.0000	1.0000
L58	24	HB114-1-08U4-M5J(1 1/4")	0.00 - 1.25	1.0000	1.0000
L58	27	LCF114-50J(1-1/4")	0.00 - 1.25	1.0000	1.0000
L58	28	MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	0.00 - 1.25	1.0000	1.0000
L58	29	MLC Hybrid 6/6(7/8")	0.00 - 1.25	1.0000	1.0000
L58	32	6" x 1" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000
L58	33	6" x 1" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L58	34	6" x 1" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000
L58	36	4" x .75" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000
L58	37	4" x .75" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000
L58	38	4" x .75" Flat Plate (G)	0.50 - 1.25	1.0000	1.0000
L58	81	6.5" x 1.25" Flat Plate (G)	0.00 - 1.25	1.0000	1.0000
L58	82	6.5" x 1.25" Flat Plate (G)	0.00 - 1.25	1.0000	1.0000
L58	83	6.5" x 1.25" Flat Plate (G)	0.00 - 1.25	1.0000	1.0000
L58	85	6.5" x 1.25" Flat Plate (G)	0.00 - 1.25	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
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800 10121 w/ Mount Pipe	A	From Leg	4.0000	0.00	121.0000	No Ice	5.3879	4.5996	0.07
			0.00			1/2" Ice	5.8131	5.3507	0.11
			-1.00			1" Ice	6.2340	6.0464	0.17
800 10121 w/ Mount Pipe	B	From Leg	4.0000	0.00	121.0000	No Ice	5.3879	4.5996	0.07
			0.00			1/2" Ice	5.8131	5.3507	0.11
			-1.00			1" Ice	6.2340	6.0464	0.17
800 10121 w/ Mount Pipe	C	From Leg	4.0000	0.00	121.0000	No Ice	5.3879	4.5996	0.07
			0.00			1/2" Ice	5.8131	5.3507	0.11
			-1.00			1" Ice	6.2340	6.0464	0.17
RRUS-11	A	From Leg	4.0000	0.00	121.0000	No Ice	2.5217	1.0680	0.06
			0.00			1/2" Ice	2.7187	1.2106	0.07
			-1.00			1" Ice	2.9231	1.3606	0.10
RRUS-11	B	From Leg	4.0000	0.00	121.0000	No Ice	2.5217	1.0680	0.06
			0.00			1/2" Ice	2.7187	1.2106	0.07
			-1.00			1" Ice	2.9231	1.3606	0.10
RRUS-11	C	From Leg	4.0000	0.00	121.0000	No Ice	2.5217	1.0680	0.06
			0.00			1/2" Ice	2.7187	1.2106	0.07
			-1.00			1" Ice	2.9231	1.3606	0.10
(2) LGP21401	A	From Leg	4.0000	0.00	121.0000	No Ice	1.1040	0.3471	0.01
			0.00			1/2" Ice	1.2388	0.4422	0.02
			-1.00			1" Ice	1.3810	0.5444	0.03
(2) LGP21401	B	From Leg	4.0000	0.00	121.0000	No Ice	1.1040	0.3471	0.01
			0.00			1/2" Ice	1.2388	0.4422	0.02
			-1.00			1" Ice	1.3810	0.5444	0.03
(2) LGP21401	C	From Leg	4.0000	0.00	121.0000	No Ice	1.1040	0.3471	0.01
			0.00			1/2" Ice	1.2388	0.4422	0.02
			-1.00			1" Ice	1.3810	0.5444	0.03
DC6-48-60-18-8F	A	From Leg	4.0000	0.00	121.0000	No Ice	0.8594	0.8594	0.03
			0.00			1/2" Ice	1.3708	1.3708	0.05
			-1.00			1" Ice	1.5483	1.5483	0.07
T-Arm Mount [TA 702-3]	C	None		0.00	121.0000	No Ice	5.6400	5.6400	0.34
						1/2" Ice	6.5500	6.5500	0.43
						1" Ice	7.4600	7.4600	0.52
80010798 w/ Mount Pipe	A	From Leg	4.0000	0.00	121.0000	No Ice	10.9246	7.4788	0.11
			0.00			1/2" Ice	11.5345	8.7492	0.19

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			-1.00			1" Ice	12.1217	9.8028	0.28
80010798 w/ Mount Pipe	B	From Leg	4.0000	0.00	121.0000	No Ice	10.9246	7.4788	0.11
			0.00			1/2" Ice	11.5345	8.7492	0.19
			-1.00			1" Ice	12.1217	9.8028	0.28
80010798 w/ Mount Pipe	C	From Leg	4.0000	0.00	121.0000	No Ice	10.9246	7.4788	0.11
			0.00			1/2" Ice	11.5345	8.7492	0.19
			-1.00			1" Ice	12.1217	9.8028	0.28
RRUS 32	A	From Leg	4.0000	0.00	121.0000	No Ice	2.8571	1.7766	0.06
			0.00			1/2" Ice	3.0830	1.9677	0.08
			-1.00			1" Ice	3.3163	2.1658	0.10
RRUS 32	B	From Leg	4.0000	0.00	121.0000	No Ice	2.8571	1.7766	0.06
			0.00			1/2" Ice	3.0830	1.9677	0.08
			-1.00			1" Ice	3.3163	2.1658	0.10
RRUS 32	C	From Leg	4.0000	0.00	121.0000	No Ice	2.8571	1.7766	0.06
			0.00			1/2" Ice	3.0830	1.9677	0.08
			-1.00			1" Ice	3.3163	2.1658	0.10
RRUS 32 B2	A	From Leg	4.0000	0.00	121.0000	No Ice	2.7313	1.6681	0.05
			0.00			1/2" Ice	2.9531	1.8552	0.07
			-1.00			1" Ice	3.1823	2.0493	0.10
RRUS 32 B2	B	From Leg	4.0000	0.00	121.0000	No Ice	2.7313	1.6681	0.05
			0.00			1/2" Ice	2.9531	1.8552	0.07
			-1.00			1" Ice	3.1823	2.0493	0.10
RRUS 32 B2	C	From Leg	4.0000	0.00	121.0000	No Ice	2.7313	1.6681	0.05
			0.00			1/2" Ice	2.9531	1.8552	0.07
			-1.00			1" Ice	3.1823	2.0493	0.10
DC6-48-60-18-8F	A	From Leg	4.0000	0.00	121.0000	No Ice	0.8594	0.8594	0.03
			0.00			1/2" Ice	1.3708	1.3708	0.05
			-1.00			1" Ice	1.5483	1.5483	0.07
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BXA-80063/4CF	A	From Leg	4.0000	0.00	107.0000	No Ice	4.7078	2.2482	0.01
			0.00			1/2" Ice	5.0262	2.5469	0.04
			4.00			1" Ice	5.3516	2.8529	0.07
BXA-80063/4CF	B	From Leg	4.0000	0.00	107.0000	No Ice	4.7078	2.2482	0.01
			0.00			1/2" Ice	5.0262	2.5469	0.04
			4.00			1" Ice	5.3516	2.8529	0.07
BXA-80063/4CF	C	From Leg	4.0000	0.00	107.0000	No Ice	4.7078	2.2482	0.01
			0.00			1/2" Ice	5.0262	2.5469	0.04
			4.00			1" Ice	5.3516	2.8529	0.07
BXA-70063/6CFx4	A	From Leg	4.0000	0.00	107.0000	No Ice	7.5690	3.7554	0.02
			0.00			1/2" Ice	8.0160	4.1889	0.06
			4.00			1" Ice	8.4701	4.6297	0.10
BXA-70063/6CFx4	B	From Leg	4.0000	0.00	107.0000	No Ice	7.5690	3.7554	0.02
			0.00			1/2" Ice	8.0160	4.1889	0.06
			4.00			1" Ice	8.4701	4.6297	0.10
BXA-70063/6CFx4	C	From Leg	4.0000	0.00	107.0000	No Ice	7.5690	3.7554	0.02
			0.00			1/2" Ice	8.0160	4.1889	0.06
			4.00			1" Ice	8.4701	4.6297	0.10
(2) SBNHH-1D65B	A	From Leg	4.0000	0.00	107.0000	No Ice	8.1597	5.3963	0.04
			0.00			1/2" Ice	8.6190	5.8529	0.09
			4.00			1" Ice	9.0854	6.3169	0.15
(2) SBNHH-1D65B	B	From Leg	4.0000	0.00	107.0000	No Ice	8.1597	5.3963	0.04
			0.00			1/2" Ice	8.6190	5.8529	0.09
			4.00			1" Ice	9.0854	6.3169	0.15
(2) SBNHH-1D65B	C	From Leg	4.0000	0.00	107.0000	No Ice	8.1597	5.3963	0.04
			0.00			1/2" Ice	8.6190	5.8529	0.09
			4.00			1" Ice	9.0854	6.3169	0.15

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(2) FD9R6004/2C-3L	A	From Leg	4.0000	0.00	107.0000	No Ice	0.3142	0.0762	0.00
			0.00			1/2" Ice	0.3862	0.1189	0.01
			0.00			1" Ice	0.4656	0.1685	0.01
(2) FD9R6004/2C-3L	B	From Leg	4.0000	0.00	107.0000	No Ice	0.3142	0.0762	0.00
			0.00			1/2" Ice	0.3862	0.1189	0.01
			0.00			1" Ice	0.4656	0.1685	0.01
(2) FD9R6004/2C-3L	C	From Leg	4.0000	0.00	107.0000	No Ice	0.3142	0.0762	0.00
			0.00			1/2" Ice	0.3862	0.1189	0.01
			0.00			1" Ice	0.4656	0.1685	0.01
DB-T1-6Z-8AB-0Z	A	From Leg	4.0000	0.00	107.0000	No Ice	4.8000	2.0000	0.04
			0.00			1/2" Ice	5.0704	2.1926	0.08
			4.00			1" Ice	5.3481	2.3926	0.12
DB-T1-6Z-8AB-0Z	B	From Leg	4.0000	0.00	107.0000	No Ice	4.8000	2.0000	0.04
			0.00			1/2" Ice	5.0704	2.1926	0.08
			4.00			1" Ice	5.3481	2.3926	0.12
Platform Mount (LP 101-1)	C	None		0.00	107.0000	No Ice	36.2100	36.2100	1.50
						1/2" Ice	42.8200	42.8200	2.30
						1" Ice	49.4300	49.4300	3.10
B66A RRH4X45	A	From Leg	4.0000	0.00	107.0000	No Ice	2.5370	1.6101	0.06
			0.00			1/2" Ice	2.7496	1.7906	0.08
			4.00			1" Ice	2.9696	1.9781	0.10
B66A RRH4X45	B	From Leg	4.0000	0.00	107.0000	No Ice	2.5370	1.6101	0.06
			0.00			1/2" Ice	2.7496	1.7906	0.08
			4.00			1" Ice	2.9696	1.9781	0.10
B66A RRH4X45	C	From Leg	4.0000	0.00	107.0000	No Ice	2.5370	1.6101	0.06
			0.00			1/2" Ice	2.7496	1.7906	0.08
			4.00			1" Ice	2.9696	1.9781	0.10
B13 RRH 4X30	A	From Leg	4.0000	0.00	107.0000	No Ice	2.0552	1.3201	0.06
			0.00			1/2" Ice	2.2405	1.4754	0.07
			0.00			1" Ice	2.4333	1.6376	0.09
B13 RRH 4X30	B	From Leg	4.0000	0.00	107.0000	No Ice	2.0552	1.3201	0.06
			0.00			1/2" Ice	2.2405	1.4754	0.07
			0.00			1" Ice	2.4333	1.6376	0.09
B13 RRH 4X30	C	From Leg	4.0000	0.00	107.0000	No Ice	2.0552	1.3201	0.06
			0.00			1/2" Ice	2.2405	1.4754	0.07
			0.00			1" Ice	2.4333	1.6376	0.09
B25 RRH4X30	A	From Leg	4.0000	0.00	107.0000	No Ice	2.2000	1.7417	0.06
			0.00			1/2" Ice	2.3926	1.9204	0.08
			4.00			1" Ice	2.5926	2.1065	0.10
B25 RRH4X30	B	From Leg	4.0000	0.00	107.0000	No Ice	2.2000	1.7417	0.06
			0.00			1/2" Ice	2.3926	1.9204	0.08
			4.00			1" Ice	2.5926	2.1065	0.10
B25 RRH4X30	C	From Leg	4.0000	0.00	107.0000	No Ice	2.2000	1.7417	0.06
			0.00			1/2" Ice	2.3926	1.9204	0.08
			4.00			1" Ice	2.5926	2.1065	0.10
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800MHz 2X50W RRH W/FILTER	A	From Leg	4.0000	0.00	99.0000	No Ice	2.0583	1.9317	0.06
			0.00			1/2" Ice	2.2398	2.1087	0.09
			1.00			1" Ice	2.4287	2.2931	0.11
800MHz 2X50W RRH W/FILTER	B	From Leg	4.0000	0.00	99.0000	No Ice	2.0583	1.9317	0.06
			0.00			1/2" Ice	2.2398	2.1087	0.09
			1.00			1" Ice	2.4287	2.2931	0.11
800MHz 2X50W RRH W/FILTER	C	From Leg	4.0000	0.00	99.0000	No Ice	2.0583	1.9317	0.06
			0.00			1/2" Ice	2.2398	2.1087	0.09
			1.00			1" Ice	2.4287	2.2931	0.11
PCS 1900MHz	A	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			0.00			1" Ice	3.3899	4.0155	0.15
PCS 1900MHz	B	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			0.00			1" Ice	3.3899	4.0155	0.15
PCS 1900MHz	C	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			0.00			1" Ice	3.3899	4.0155	0.15
PCS 1900MHz	A	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			-1.00			1" Ice	3.3899	4.0155	0.15
PCS 1900MHz	B	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			-1.00			1" Ice	3.3899	4.0155	0.15
PCS 1900MHz	C	From Leg	4.0000	0.00	99.0000	No Ice	2.7348	3.1038	0.07
4x45W-65MHz w/Mount			0.00			1/2" Ice	3.0564	3.5513	0.11
Pipe			-1.00			1" Ice	3.3899	4.0155	0.15
Side Arm Mount [SO 101-3]	C	None		0.00	99.0000	No Ice	7.5000	7.5000	0.25
						1/2" Ice	8.9000	8.9000	0.33
						1" Ice	10.3000	10.3000	0.41
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TIMING 2000	A	From Face	4.0000	0.00	97.0000	No Ice	0.1079	0.1079	0.00
			0.00			1/2" Ice	0.1518	0.1518	0.00
			0.00			1" Ice	0.2031	0.2031	0.01
840 10054	A	From Face	4.0000	0.00	97.0000	No Ice	4.5779	1.3611	0.03
			0.00			1/2" Ice	4.8744	1.6198	0.05
			0.00			1" Ice	5.1779	1.8858	0.08
840 10054	B	From Face	4.0000	0.00	97.0000	No Ice	4.5779	1.3611	0.03
			0.00			1/2" Ice	4.8744	1.6198	0.05
			0.00			1" Ice	5.1779	1.8858	0.08
840 10054	C	From Face	4.0000	0.00	97.0000	No Ice	4.5779	1.3611	0.03
			0.00			1/2" Ice	4.8744	1.6198	0.05
			0.00			1" Ice	5.1779	1.8858	0.08
WIMAX DAP HEAD	A	From Face	4.0000	0.00	97.0000	No Ice	1.5467	0.6840	0.03
			0.00			1/2" Ice	1.7037	0.7999	0.04
			0.00			1" Ice	1.8681	0.9228	0.06
WIMAX DAP HEAD	B	From Face	4.0000	0.00	97.0000	No Ice	1.5467	0.6840	0.03
			0.00			1/2" Ice	1.7037	0.7999	0.04
			0.00			1" Ice	1.8681	0.9228	0.06
WIMAX DAP HEAD	C	From Face	4.0000	0.00	97.0000	No Ice	1.5467	0.6840	0.03
			0.00			1/2" Ice	1.7037	0.7999	0.04
			0.00			1" Ice	1.8681	0.9228	0.06
HORIZON COMPACT	B	From Face	4.0000	0.00	97.0000	No Ice	0.7208	0.3681	0.01
			0.00			1/2" Ice	0.8278	0.4499	0.02
			4.00			1" Ice	0.9422	0.5391	0.03
HORIZON COMPACT	C	From Face	4.0000	0.00	97.0000	No Ice	0.7208	0.3681	0.01
			0.00			1/2" Ice	0.8278	0.4499	0.02
			4.00			1" Ice	0.9422	0.5391	0.03
APXVSPP18-C-A20	A	From Face	4.0000	0.00	97.0000	No Ice	8.0244	5.2833	0.06
			0.00			1/2" Ice	8.4800	5.7360	0.11
			0.00			1" Ice	8.9426	6.1960	0.16
APXVSPP18-C-A20	B	From Face	4.0000	0.00	97.0000	No Ice	8.0244	5.2833	0.06
			0.00			1/2" Ice	8.4800	5.7360	0.11
			0.00			1" Ice	8.9426	6.1960	0.16
APXVSPP18-C-A20	C	From Face	4.0000	0.00	97.0000	No Ice	8.0244	5.2833	0.06
			0.00			1/2" Ice	8.4800	5.7360	0.11

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert (ft ft ft)	Azimuth Adjustment (°)	Placement (ft)		C_AA_A Front (ft^2)	C_AA_A Side (ft^2)	Weight (K)
			0.00			1" Ice	8.9426	6.1960	0.16
IBC1900HG-2A	A	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
IBC1900HG-2A	B	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
IBC1900HG-2A	C	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
IBC1900BB-1	A	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
IBC1900BB-1	B	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
IBC1900BB-1	C	From Face	4.0000	0.00	97.0000	No Ice	0.9660	0.4635	0.02
			0.00			1/2" Ice	1.0908	0.5576	0.03
			0.00			1" Ice	1.2230	0.6599	0.04
Platform Mount (LP 101-1)	C	None		0.00	97.0000	No Ice	36.2100	36.2100	1.50
						1/2" Ice	42.8200	42.8200	2.30
						1" Ice	49.4300	49.4300	3.10
APXVTM14-ALU-I20	A	From Face	4.0000	0.00	97.0000	No Ice	6.3424	3.6074	0.06
			0.00			1/2" Ice	6.7164	3.9666	0.10
			0.00			1" Ice	7.0974	4.3332	0.14
APXVTM14-ALU-I20	B	From Face	4.0000	0.00	97.0000	No Ice	6.3424	3.6074	0.06
			0.00			1/2" Ice	6.7164	3.9666	0.10
			0.00			1" Ice	7.0974	4.3332	0.14
APXVTM14-ALU-I20	C	From Face	4.0000	0.00	97.0000	No Ice	6.3424	3.6074	0.06
			0.00			1/2" Ice	6.7164	3.9666	0.10
			0.00			1" Ice	7.0974	4.3332	0.14
TD-RRH8x20-25	A	From Face	4.0000	0.00	97.0000	No Ice	4.0455	1.5326	0.07
			0.00			1/2" Ice	4.2975	1.7122	0.10
			0.00			1" Ice	4.5570	1.8987	0.13
TD-RRH8x20-25	A	From Face	4.0000	0.00	97.0000	No Ice	4.0455	1.5326	0.07
			0.00			1/2" Ice	4.2975	1.7122	0.10
			0.00			1" Ice	4.5570	1.8987	0.13
TD-RRH8x20-25	A	From Face	4.0000	0.00	97.0000	No Ice	4.0455	1.5326	0.07
			0.00			1/2" Ice	4.2975	1.7122	0.10
			0.00			1" Ice	4.5570	1.8987	0.13
***									
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ERICSSON AIR 21 B2A	A	From Face	4.0000	0.00	87.0000	No Ice	6.3292	5.6424	0.11
B4P w/ Mount Pipe			0.00			1/2" Ice	6.7751	6.4259	0.17
			0.00			1" Ice	7.2137	7.1313	0.23
ERICSSON AIR 21 B2A	B	From Face	4.0000	0.00	87.0000	No Ice	6.3292	5.6424	0.11
B4P w/ Mount Pipe			0.00			1/2" Ice	6.7751	6.4259	0.17
			0.00			1" Ice	7.2137	7.1313	0.23
ERICSSON AIR 21 B2A	C	From Face	4.0000	0.00	87.0000	No Ice	6.3292	5.6424	0.11
B4P w/ Mount Pipe			0.00			1/2" Ice	6.7751	6.4259	0.17
			0.00			1" Ice	7.2137	7.1313	0.23
LNX-6515DS-VTM w/	A	From Leg	4.0000	0.00	87.0000	No Ice	11.6828	9.8418	0.08
Mount Pipe			0.00			1/2" Ice	12.4043	11.3657	0.17
			0.00			1" Ice	13.1351	12.9138	0.27
LNX-6515DS-VTM w/	B	From Leg	4.0000	0.00	87.0000	No Ice	11.6828	9.8418	0.08
Mount Pipe			0.00			1/2" Ice	12.4043	11.3657	0.17
			0.00			1" Ice	13.1351	12.9138	0.27

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
LNX-6515DS-VTM w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	11.6828 12.4043 13.1351	9.8418 11.3657 12.9138	0.08 0.17 0.27
AIR -32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	6.7474 7.2017 7.6475	6.0700 6.8671 7.5828	0.15 0.21 0.28
AIR -32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	6.7474 7.2017 7.6475	6.0700 6.8671 7.5828	0.15 0.21 0.28
AIR -32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	6.7474 7.2017 7.6475	6.0700 6.8671 7.5828	0.15 0.21 0.28
KRY 112 144/1	A	From Face	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	0.3523 0.4284 0.5119	0.1617 0.2195 0.2846	0.01 0.01 0.02
KRY 112 144/1	B	From Face	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	0.3523 0.4284 0.5119	0.1617 0.2195 0.2846	0.01 0.01 0.02
KRY 112 144/1	C	From Face	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	0.3523 0.4284 0.5119	0.1617 0.2195 0.2846	0.01 0.01 0.02
RRUS 11 B12	A	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	2.8333 3.0426 3.2593	1.1821 1.3299 1.4848	0.05 0.07 0.10
RRUS 11 B12	B	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	2.8333 3.0426 3.2593	1.1821 1.3299 1.4848	0.05 0.07 0.10
RRUS 11 B12	C	From Leg	4.0000 0.00 0.00	0.00	87.0000	No Ice 1/2" Ice 1" Ice	2.8333 3.0426 3.2593	1.1821 1.3299 1.4848	0.05 0.07 0.10
T-Arm Mount [TA 602-3]	C	None		0.00	87.0000	No Ice 1/2" Ice 1" Ice	11.5900 15.4400 19.2900	11.5900 15.4400 19.2900	0.77 0.99 1.21
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Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
VHLP2.5-11	B	Paraboloid w/Shroud (HP)	From Leg	4.0000 0.00 4.00	-33.00		97.0000	2.9167	No Ice 1/2" Ice 1" Ice	6.6800 7.0700 7.4600	0.05 0.08 0.12
VHLP2.5-11	C	Paraboloid w/Shroud (HP)	From Leg	4.0000 0.00 4.00	90.00		97.0000	2.9167	No Ice 1/2" Ice 1" Ice	6.6800 7.0700 7.4600	0.05 0.08 0.12

Tower Pressures - No Ice

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	128.4554	1.334	30.52	4.797	A	0.000	4.797	4.797	100.00	0.188	0.000
131.0000-126.0000			8		B	0.000	4.797		100.00	0.000	0.000
					C	0.000	4.797		100.00	0.000	0.000
L2	123.4597	1.323	30.27	5.310	A	0.000	5.310	5.310	100.00	0.188	0.000
126.0000-121.0000			5		B	0.000	5.310		100.00	0.000	0.000
					C	0.000	5.310		100.00	0.000	0.000
L3	118.4633	1.312	30.01	5.824	A	0.000	5.824	5.824	100.00	0.188	0.000
121.0000-116.0000			2		B	0.000	5.824		100.00	0.000	0.000
					C	0.000	5.824		100.00	2.325	0.000
L4	113.4662	1.3	29.74	6.337	A	0.000	6.337	6.337	100.00	0.188	0.000
116.0000-111.0000			1		B	0.000	6.337		100.00	0.000	0.000
					C	0.000	6.337		100.00	2.325	0.000
L5	110.4987	1.293	29.57	1.329	A	0.000	1.329	1.329	100.00	0.037	0.000
111.0000-110.0000			6		B	0.000	1.329		100.00	0.000	0.000
					C	0.000	1.329		100.00	0.465	0.000
L6	107.4677	1.285	29.40	6.967	A	0.000	6.967	6.967	100.00	0.188	0.000
110.0000-105.0000			3		B	0.000	6.967		100.00	0.000	0.000
					C	0.000	6.967		100.00	2.325	0.000
L7	102.4701	1.272	29.11	7.506	A	0.000	7.506	7.506	100.00	0.188	0.000
105.0000-100.0000			0		B	0.000	7.506		100.00	0.000	0.000
					C	0.000	7.506		100.00	2.325	0.000
L8	97.4721	1.259	28.80	8.046	A	0.000	8.046	8.046	100.00	0.188	0.000
100.0000-95.0000			5		B	0.000	8.046		100.00	0.000	0.000
					C	0.000	8.046		100.00	2.429	0.000
L9	92.4228	1.245	28.48	8.763	A	0.000	8.763	8.763	100.00	1.202	0.000
95.0000-89.9000			4		B	0.000	8.763		100.00	1.011	0.000
					C	0.000	8.763		100.00	3.648	0.000
L10	89.7833	1.237	28.31	0.414	A	0.000	0.414	0.414	100.00	0.164	0.000
89.9000-89.6667			1		B	0.000	0.414		100.00	0.156	0.000
					C	0.000	0.414		100.00	0.276	0.000
L11	87.0912	1.229	28.13	9.350	A	0.000	9.350	9.350	100.00	4.436	0.000
89.6667-84.5667			0		B	0.000	9.350		100.00	4.244	0.000
					C	0.000	9.350		100.00	6.881	0.000
L12	84.4499	1.221	27.94	0.441	A	0.000	0.441	0.441	100.00	0.320	0.000
84.5667-84.3333			8		B	0.000	0.441		100.00	0.311	0.000
					C	0.000	0.441		100.00	0.432	0.000
L13	83.6231	1.219	27.89	2.704	A	0.000	2.704	2.704	100.00	1.942	0.000
84.3333-82.9167			1		B	0.000	2.704		100.00	1.889	0.000
					C	0.000	2.704		100.00	2.621	0.000
L14	82.7916	1.216	27.83	0.482	A	0.000	0.482	0.482	100.00	0.343	0.000
82.9167-82.6667			2		B	0.000	0.482		100.00	0.333	0.000
					C	0.000	0.482		100.00	0.463	0.000
L15	81.8203	1.213	27.76	3.286	A	0.000	3.286	3.286	100.00	2.688	0.000
82.6667-80.9792			3		B	0.000	3.286		100.00	2.625	0.000
					C	0.000	3.286		100.00	3.497	0.000
L16	80.8541	1.21	27.69	0.492	A	0.000	0.492	0.492	100.00	0.343	0.000
80.9792-80.7292			4		B	0.000	0.492		100.00	0.333	0.000
					C	0.000	0.492		100.00	0.463	0.000
L17	78.2070	1.202	27.50	10.125	A	0.000	10.125	10.125	100.00	6.854	0.000
80.7292-75.7292			0		B	0.000	10.125		100.00	6.667	0.000
					C	0.000	10.125		100.00	9.252	0.000
L18	72.8370	1.184	27.09	12.265	A	0.000	12.265	12.265	100.00	6.534	0.000
75.7292-70.00			1		B	0.000	12.265		100.00	6.319	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
00					C	0.000	12.265		100.00	9.281	0.000
L19	69.4992	1.172	26.82	2.170	A	0.000	2.170	2.170	100.00	0.704	0.000
70.0000-69.00			5		B	0.000	2.170		100.00	0.667	0.000
00					C	0.000	2.170		100.00	1.184	0.000
L20	67.9883	1.167	26.70	4.442	A	0.000	4.442	4.442	100.00	2.265	0.000
69.0000-66.98			1		B	0.000	4.442		100.00	2.189	0.000
33					C	0.000	4.442		100.00	3.232	0.000
L21	66.8582	1.163	26.60	0.557	A	0.000	0.557	0.557	100.00	0.343	0.000
66.9833-66.73			7		B	0.000	0.557		100.00	0.333	0.000
33					C	0.000	0.557		100.00	0.463	0.000
L22	65.4027	1.157	26.48	5.985	A	0.000	5.985	5.985	100.00	3.966	0.000
66.7333-64.08			4		B	0.000	5.985		100.00	3.867	0.000
33					C	0.000	5.985		100.00	3.987	0.000
L23	63.9583	1.152	26.36	0.572	A	0.000	0.572	0.572	100.00	0.364	0.000
64.0833-63.83			0		B	0.000	0.572		100.00	0.354	0.000
33					C	0.000	0.572		100.00	0.483	0.000
L24	63.1234	1.149	26.28	3.269	A	0.000	3.269	3.269	100.00	2.060	0.000
63.8333-62.41			7		B	0.000	3.269		100.00	2.007	0.000
67					C	0.000	3.269		100.00	2.739	0.000
L25	62.2917	1.146	26.21	0.581	A	0.000	0.581	0.581	100.00	0.364	0.000
62.4167-62.16			4		B	0.000	0.581		100.00	0.354	0.000
67					C	0.000	0.581		100.00	0.483	0.000
L26	60.8069	1.14	26.08	6.386	A	0.000	6.386	6.386	100.00	4.605	0.000
62.1667-59.45			1		B	0.000	6.386		100.00	4.504	0.000
83					C	0.000	6.386		100.00	5.904	0.000
L27	59.3333	1.134	25.94	0.597	A	0.000	0.597	0.597	100.00	0.530	0.000
59.4583-59.20			7		B	0.000	0.597		100.00	0.521	0.000
83					C	0.000	0.597		100.00	0.650	0.000
L28	57.5965	1.127	25.78	7.786	A	0.000	7.786	7.786	100.00	6.742	0.000
59.2083-56.00			5		B	0.000	7.786		100.00	6.621	0.000
00					C	0.000	7.786		100.00	8.343	0.000
L29	55.8750	1.12	25.62	0.616	A	0.000	0.616	0.616	100.00	0.593	0.000
56.0000-55.75			1		B	0.000	0.616		100.00	0.583	0.000
00					C	0.000	0.616		100.00	0.650	0.000
L30	53.2322	1.108	25.36	12.605	A	0.000	12.605	12.605	100.00	11.854	0.000
55.7500-50.75			1		B	0.000	12.605		100.00	11.667	0.000
00					C	0.000	12.605		100.00	13.002	0.000
L31	48.2329	1.086	24.84	13.144	A	0.000	13.144	13.144	100.00	11.910	0.000
50.7500-45.75			0		B	0.000	13.144		100.00	11.722	0.000
00					C	0.000	13.144		100.00	13.057	0.000
L32	45.1156	1.07	24.49	3.416	A	0.000	3.416	3.416	100.00	3.848	0.000
45.7500-44.48			3		B	0.000	3.416		100.00	3.800	0.000
33					C	0.000	3.416		100.00	4.126	0.000
L33	44.3583	1.067	24.40	0.678	A	0.000	0.678	0.678	100.00	0.759	0.000
44.4833-44.23			6		B	0.000	0.678		100.00	0.750	0.000
33					C	0.000	0.678		100.00	0.729	0.000
L34	44.1583	1.066	24.38	0.408	A	0.000	0.408	0.408	100.00	0.456	0.000
44.2333-44.08			2		B	0.000	0.408		100.00	0.450	0.000
33					C	0.000	0.408		100.00	0.528	0.000
L35	41.5671	1.052	24.07	13.863	A	0.000	13.863	13.863	100.00	12.410	0.000
44.0833-39.08			4		B	0.000	13.863		100.00	12.222	0.000
33					C	0.000	13.863		100.00	14.807	0.000
L36	36.5660	1.024	23.43	14.412	A	0.000	14.412	14.412	100.00	11.862	0.000
39.0833-34.08			3		B	0.000	14.412		100.00	11.674	0.000
00					C	0.000	14.412		100.00	14.261	0.000
L37	34.0400	1.009	23.08	0.231	A	0.000	0.231	0.231	100.00	0.190	0.000
34.0800-34.00			2		B	0.000	0.231		100.00	0.187	0.000
00					C	0.000	0.231		100.00	0.228	0.000
L38	32.7252	1	22.89	7.395	A	0.000	7.395	7.395	100.00	6.026	0.000
34.0000-31.45			2		B	0.000	7.395		100.00	5.931	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
83					C	0.000	7.395		100.00	7.245	0.000
L39	31.3333	0.991	22.68	0.735	A	0.000	0.735	0.735	100.00	0.593	0.000
31.4583-31.20			3		B	0.000	0.735		100.00	0.583	0.000
83					C	0.000	0.735		100.00	0.713	0.000
L40	30.3314	0.985	22.52	5.182	A	0.000	5.182	5.182	100.00	4.149	0.000
31.2083-29.45			9		B	0.000	5.182		100.00	4.083	0.000
83					C	0.000	5.182		100.00	4.988	0.000
L41	29.3333	0.978	22.37	0.746	A	0.000	0.746	0.746	100.00	0.718	0.000
29.4583-29.20			0		B	0.000	0.746		100.00	0.583	0.000
83					C	0.000	0.746		100.00	0.838	0.000
L42	28.0174	0.968	22.15	7.151	A	0.000	7.151	7.151	100.00	8.006	0.000
29.2083-26.83			5		B	0.000	7.151		100.00	5.542	0.000
33					C	0.000	7.151		100.00	9.145	0.000
L43	26.7083	0.959	21.93	0.760	A	0.000	0.760	0.760	100.00	0.843	0.000
26.8333-26.58			3		B	0.000	0.760		100.00	0.583	0.000
33					C	0.000	0.760		100.00	0.963	0.000
L44	24.0688	0.938	21.45	15.480	A	0.000	15.480	15.480	100.00	16.854	0.000
26.5833-21.58			8		B	0.000	15.480		100.00	11.667	0.000
33					C	0.000	15.480		100.00	19.252	0.000
L45	21.1663	0.913	20.88	2.632	A	0.000	2.632	2.632	100.00	2.559	0.000
21.5833-20.75			5		B	0.000	2.632		100.00	1.694	0.000
00					C	0.000	2.632		100.00	3.208	0.000
L46	20.6250	0.908	20.77	0.793	A	0.000	0.793	0.793	100.00	0.864	0.000
20.7500-20.50			2		B	0.000	0.793		100.00	0.875	0.000
00					C	0.000	0.793		100.00	0.963	0.000
L47	19.2465	0.895	20.47	8.000	A	0.000	8.000	8.000	100.00	8.635	0.000
20.5000-18.00			1		B	0.000	8.000		100.00	8.750	0.000
00					C	0.000	8.000		100.00	9.626	0.000
L48	17.8750	0.881	20.15	0.807	A	0.000	0.807	0.807	100.00	0.864	0.000
18.0000-17.75			5		B	0.000	0.807		100.00	0.875	0.000
00					C	0.000	0.807		100.00	0.963	0.000
L49	17.4164	0.876	20.04	2.160	A	0.000	2.160	2.160	100.00	2.303	0.000
17.7500-17.08			5		B	0.000	2.160		100.00	2.333	0.000
33					C	0.000	2.160		100.00	2.567	0.000
L50	16.9583	0.871	19.93	0.812	A	0.000	0.812	0.812	100.00	0.864	0.000
17.0833-16.83			3		B	0.000	0.812		100.00	0.875	0.000
33					C	0.000	0.812		100.00	0.963	0.000
L51	14.9087	0.85	19.45	12.625	A	0.000	12.625	12.625	100.00	13.852	0.000
16.8333-13.00			0		B	0.000	12.625		100.00	14.028	0.000
00					C	0.000	12.625		100.00	15.371	0.000
L52	12.8750	0.85	19.45	0.834	A	0.000	0.834	0.834	100.00	0.947	0.000
13.0000-12.75			0		B	0.000	0.834		100.00	0.958	0.000
00					C	0.000	0.834		100.00	1.046	0.000
L53	12.2912	0.85	19.45	3.071	A	0.000	3.071	3.071	100.00	3.472	0.000
12.7500-11.83			0		B	0.000	3.071		100.00	3.514	0.000
33					C	0.000	3.071		100.00	3.835	0.000
L54	11.7083	0.85	19.45	0.841	A	0.000	0.841	0.841	100.00	0.947	0.000
11.8333-11.58			0		B	0.000	0.841		100.00	0.958	0.000
33					C	0.000	0.841		100.00	1.046	0.000
L55	9.0196	0.85	19.45	17.443	A	0.000	17.443	17.443	100.00	19.464	0.000
11.5833-6.483			0		B	0.000	17.443		100.00	19.550	0.000
3					C	0.000	17.443		100.00	15.637	0.000
L56	6.3666	0.85	19.45	0.811	A	0.000	0.811	0.811	100.00	0.903	0.000
6.4833-6.2500			0		B	0.000	0.811		100.00	0.894	0.000
					C	0.000	0.811		100.00	0.509	0.000
L57	3.7373	0.85	19.45	17.670	A	0.000	17.670	17.670	100.00	19.354	0.000
6.2500-1.2500			0		B	0.000	17.670		100.00	19.167	0.000
					C	0.000	17.670		100.00	10.918	0.000
L58	0.6242	0.85	19.45	4.502	A	0.000	4.502	4.502	100.00	4.005	0.000
1.2500-0.0000			0		B	0.000	4.502		100.00	3.958	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	0.000	4.502		100.00	1.896	0.000

Tower Pressure - With Ice

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	128.4554	1.334	8.112	2.2912	6.706	A	0.000	6.706	6.706	100.00	2.479	0.000
131.0000-126.00						B	0.000	6.706		100.00	0.000	0.000
00						C	0.000	6.706		100.00	0.000	0.000
L2	123.4597	1.323	8.044	2.2821	7.212	A	0.000	7.212	7.212	100.00	2.470	0.000
126.0000-121.00						B	0.000	7.212		100.00	0.000	0.000
00						C	0.000	7.212		100.00	0.000	0.000
L3	118.4633	1.312	7.974	2.2727	7.718	A	0.000	7.718	7.718	100.00	2.460	0.000
121.0000-116.00						B	0.000	7.718		100.00	0.000	0.000
00						C	0.000	7.718		100.00	13.133	0.000
L4	113.4662	1.3	7.902	2.2629	8.223	A	0.000	8.223	8.223	100.00	2.450	0.000
116.0000-111.00						B	0.000	8.223		100.00	0.000	0.000
00						C	0.000	8.223		100.00	13.089	0.000
L5	110.4987	1.293	7.858	2.2569	1.705	A	0.000	1.705	1.705	100.00	0.489	0.000
111.0000-110.00						B	0.000	1.705		100.00	0.000	0.000
00						C	0.000	1.705		100.00	2.612	0.000
L6	107.4677	1.285	7.813	2.2506	8.842	A	0.000	8.842	8.842	100.00	2.438	0.000
110.0000-105.00						B	0.000	8.842		100.00	0.000	0.000
00						C	0.000	8.842		100.00	13.034	0.000
L7	102.4701	1.272	7.735	2.2399	9.373	A	0.000	9.373	9.373	100.00	2.427	0.000
105.0000-100.00						B	0.000	9.373		100.00	0.000	0.000
00						C	0.000	9.373		100.00	12.986	0.000
L8	97.4721	1.259	7.654	2.2288	9.903	A	0.000	9.903	9.903	100.00	2.416	0.000
100.0000-95.000						B	0.000	9.903		100.00	0.892	0.000
0						C	0.000	9.903		100.00	15.714	0.000
L9	92.4228	1.245	7.568	2.2170	10.647	A	0.000	10.647	10.647	100.00	3.885	0.000
95.0000-89.9000						B	0.000	10.647		100.00	3.694	0.000
						C	0.000	10.647		100.00	21.622	0.000
L10	89.7833	1.237	7.522	2.2105	0.500	A	0.000	0.500	0.500	100.00	0.332	0.000
89.9000-89.6667						B	0.000	0.500		100.00	0.323	0.000
						C	0.000	0.500		100.00	1.142	0.000
L11	87.0912	1.229	7.474	2.2038	11.223	A	0.000	11.223	11.223	100.00	8.652	0.000
89.6667-84.5667						B	0.000	11.223		100.00	8.461	0.000
						C	0.000	11.223		100.00	29.788	0.000
L12	84.4499	1.221	7.426	2.1970	0.527	A	0.000	0.527	0.527	100.00	0.589	0.000
84.5667-84.3333						B	0.000	0.527		100.00	0.581	0.000
						C	0.000	0.527		100.00	1.728	0.000
L13	83.6231	1.219	7.411	2.1949	3.222	A	0.000	3.222	3.222	100.00	3.576	0.000
84.3333-82.9167						B	0.000	3.222		100.00	3.523	0.000
						C	0.000	3.222		100.00	10.483	0.000
L14	82.7916	1.216	7.395	2.1927	0.573	A	0.000	0.573	0.573	100.00	0.631	0.000
82.9167-82.6667						B	0.000	0.573		100.00	0.621	0.000
						C	0.000	0.573		100.00	1.849	0.000
L15	81.8203	1.213	7.377	2.1901	3.902	A	0.000	3.902	3.902	100.00	4.786	0.000
82.6667-80.9792						B	0.000	3.902		100.00	4.723	0.000
						C	0.000	3.902		100.00	12.998	0.000
L16	80.8541	1.21	7.358	2.1875	0.583	A	0.000	0.583	0.583	100.00	0.630	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
80.9792-80.7292						B	0.000	0.583		100.00	0.621	0.000
						C	0.000	0.583		100.00	1.846	0.000
L17	78.2070	1.202	7.307	2.1802	11.942	A	0.000	11.942	11.942	100.00	12.586	0.000
80.7292-75.7292						B	0.000	11.942		100.00	12.398	0.000
						C	0.000	11.942		100.00	36.822	0.000
L18	72.8370	1.184	7.198	2.1648	14.332	A	0.000	14.332	14.332	100.00	12.518	0.000
75.7292-70.0000						B	0.000	14.332		100.00	12.303	0.000
						C	0.000	14.332		100.00	40.116	0.000
L19	69.4992	1.172	7.128	2.1546	2.531	A	0.000	2.531	2.531	100.00	1.570	0.000
70.0000-69.0000						B	0.000	2.531		100.00	1.533	0.000
						C	0.000	2.531		100.00	6.387	0.000
L20	67.9883	1.167	7.095	2.1499	5.165	A	0.000	5.165	5.165	100.00	4.544	0.000
69.0000-66.9833						B	0.000	5.165		100.00	4.468	0.000
						C	0.000	5.165		100.00	14.200	0.000
L21	66.8582	1.163	7.070	2.1463	0.646	A	0.000	0.646	0.646	100.00	0.665	0.000
66.9833-66.7333						B	0.000	0.646		100.00	0.655	0.000
						C	0.000	0.646		100.00	1.860	0.000
L22	65.4027	1.157	7.037	2.1416	6.931	A	0.000	6.931	6.931	100.00	7.099	0.000
66.7333-64.0833						B	0.000	6.931		100.00	6.999	0.000
						C	0.000	6.931		100.00	18.160	0.000
L23	63.9583	1.152	7.004	2.1368	0.661	A	0.000	0.661	0.661	100.00	0.637	0.000
64.0833-63.8333						B	0.000	0.661		100.00	0.627	0.000
						C	0.000	0.661		100.00	1.875	0.000
L24	63.1234	1.149	6.985	2.1340	3.773	A	0.000	3.773	3.773	100.00	3.606	0.000
63.8333-62.4167						B	0.000	3.773		100.00	3.553	0.000
						C	0.000	3.773		100.00	10.613	0.000
L25	62.2917	1.146	6.965	2.1312	0.670	A	0.000	0.670	0.670	100.00	0.636	0.000
62.4167-62.1667						B	0.000	0.670		100.00	0.627	0.000
						C	0.000	0.670		100.00	1.871	0.000
L26	60.8069	1.14	6.930	2.1261	7.345	A	0.000	7.345	7.345	100.00	7.975	0.000
62.1667-59.4583						B	0.000	7.345		100.00	7.874	0.000
						C	0.000	7.345		100.00	21.327	0.000
L27	59.3333	1.134	6.894	2.1208	0.686	A	0.000	0.686	0.686	100.00	0.907	0.000
59.4583-59.2083						B	0.000	0.686		100.00	0.898	0.000
						C	0.000	0.686		100.00	2.137	0.000
L28	57.5965	1.127	6.851	2.1146	8.917	A	0.000	8.917	8.917	100.00	11.549	0.000
59.2083-56.0000						B	0.000	8.917		100.00	11.429	0.000
						C	0.000	8.917		100.00	27.372	0.000
L29	55.8750	1.12	6.808	2.1081	0.704	A	0.000	0.704	0.704	100.00	1.014	0.000
56.0000-55.7500						B	0.000	0.704		100.00	1.005	0.000
						C	0.000	0.704		100.00	2.128	0.000
L30	53.2322	1.108	6.738	2.0980	14.353	A	0.000	14.353	14.353	100.00	20.246	0.000
55.7500-50.7500						B	0.000	14.353		100.00	20.058	0.000
						C	0.000	14.353		100.00	42.430	0.000
L31	48.2329	1.086	6.600	2.0774	14.875	A	0.000	14.875	14.875	100.00	20.254	0.000
50.7500-45.7500						B	0.000	14.875		100.00	20.066	0.000
						C	0.000	14.875		100.00	42.237	0.000
L32	45.1156	1.07	6.508	2.0635	3.851	A	0.000	3.851	3.851	100.00	6.461	0.000
45.7500-44.4833						B	0.000	3.851		100.00	6.414	0.000
						C	0.000	3.851		100.00	11.977	0.000
L33	44.3583	1.067	6.485	2.0600	0.764	A	0.000	0.764	0.764	100.00	1.274	0.000
44.4833-44.2333						B	0.000	0.764		100.00	1.265	0.000
						C	0.000	0.764		100.00	2.216	0.000
L34	44.1583	1.066	6.478	2.0591	0.459	A	0.000	0.459	0.459	100.00	0.764	0.000
44.2333-44.0833						B	0.000	0.459		100.00	0.759	0.000
						C	0.000	0.459		100.00	1.456	0.000
L35	41.5671	1.052	6.397	2.0467	15.569	A	0.000	15.569	15.569	100.00	20.938	0.000
44.0833-39.0833						B	0.000	15.569		100.00	20.750	0.000
						C	0.000	15.569		100.00	43.872	0.000
L36	36.5660	1.024	6.226	2.0206	16.097	A	0.000	16.097	16.097	100.00	19.950	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
39.0833-34.0800						B	0.000	16.097		100.00	19.762	0.000
						C	0.000	16.097		100.00	42.645	0.000
L37	34.0400	1.009	6.133	2.0062	0.257	A	0.000	0.257	0.257	100.00	0.319	0.000
34.0800-34.0000						B	0.000	0.257		100.00	0.316	0.000
						C	0.000	0.257		100.00	0.682	0.000
L38	32.7252	1	6.082	1.9983	8.242	A	0.000	8.242	8.242	100.00	10.089	0.000
34.0000-31.4583						B	0.000	8.242		100.00	9.994	0.000
						C	0.000	8.242		100.00	21.508	0.000
L39	31.3333	0.991	6.027	1.9897	0.818	A	0.000	0.818	0.818	100.00	0.991	0.000
31.4583-31.2083						B	0.000	0.818		100.00	0.981	0.000
						C	0.000	0.818		100.00	2.110	0.000
L40	30.3314	0.985	5.986	1.9832	5.761	A	0.000	5.761	5.761	100.00	6.925	0.000
31.2083-29.4583						B	0.000	5.761		100.00	6.860	0.000
						C	0.000	5.761		100.00	14.736	0.000
L41	29.3333	0.978	5.944	1.9766	0.828	A	0.000	0.828	0.828	100.00	1.162	0.000
29.4583-29.2083						B	0.000	0.828		100.00	0.979	0.000
						C	0.000	0.828		100.00	2.275	0.000
L42	28.0174	0.968	5.887	1.9675	7.930	A	0.000	7.930	7.930	100.00	12.671	0.000
29.2083-26.8333						B	0.000	7.930		100.00	9.280	0.000
						C	0.000	7.930		100.00	23.198	0.000
L43	26.7083	0.959	5.828	1.9581	0.841	A	0.000	0.841	0.841	100.00	1.332	0.000
26.8333-26.5833						B	0.000	0.841		100.00	0.975	0.000
						C	0.000	0.841		100.00	2.435	0.000
L44	24.0688	0.938	5.701	1.9379	17.094	A	0.000	17.094	17.094	100.00	26.533	0.000
26.5833-21.5833						B	0.000	17.094		100.00	19.418	0.000
						C	0.000	17.094		100.00	48.405	0.000
L45	21.1663	0.913	5.549	1.9131	2.898	A	0.000	2.898	2.898	100.00	4.056	0.000
21.5833-20.7500						B	0.000	2.898		100.00	2.874	0.000
						C	0.000	2.898		100.00	8.007	0.000
L46	20.6250	0.908	5.519	1.9082	0.872	A	0.000	0.872	0.872	100.00	1.339	0.000
20.7500-20.5000						B	0.000	0.872		100.00	1.350	0.000
						C	0.000	0.872		100.00	2.399	0.000
L47	19.2465	0.895	5.439	1.8950	8.790	A	0.000	8.790	8.790	100.00	13.364	0.000
20.5000-18.0000						B	0.000	8.790		100.00	13.472	0.000
						C	0.000	8.790		100.00	23.891	0.000
L48	17.8750	0.881	5.355	1.8811	0.886	A	0.000	0.886	0.886	100.00	1.333	0.000
18.0000-17.7500						B	0.000	0.886		100.00	1.344	0.000
						C	0.000	0.886		100.00	2.379	0.000
L49	17.4164	0.876	5.326	1.8762	2.368	A	0.000	2.368	2.368	100.00	3.552	0.000
17.7500-17.0833						B	0.000	2.368		100.00	3.581	0.000
						C	0.000	2.368		100.00	6.334	0.000
L50	16.9583	0.871	5.296	1.8712	0.890	A	0.000	0.890	0.890	100.00	1.331	0.000
17.0833-16.8333						B	0.000	0.890		100.00	1.342	0.000
						C	0.000	0.890		100.00	2.372	0.000
L51	14.9087	0.85	5.168	1.8472	13.805	A	0.000	13.805	13.805	100.00	20.558	0.000
16.8333-13.0000						B	0.000	13.805		100.00	20.728	0.000
						C	0.000	13.805		100.00	36.336	0.000
L52	12.8750	0.85	5.168	1.8203	0.910	A	0.000	0.910	0.910	100.00	1.378	0.000
13.0000-12.7500						B	0.000	0.910		100.00	1.389	0.000
						C	0.000	0.910		100.00	2.393	0.000
L53	12.2912	0.85	5.168	1.8119	3.348	A	0.000	3.348	3.348	100.00	5.045	0.000
12.7500-11.8333						B	0.000	3.348		100.00	5.087	0.000
						C	0.000	3.348		100.00	8.754	0.000
L54	11.7083	0.85	5.168	1.8031	0.916	A	0.000	0.916	0.916	100.00	1.374	0.000
11.8333-11.5833						B	0.000	0.916		100.00	1.386	0.000
						C	0.000	0.916		100.00	2.381	0.000
L55	9.0196	0.85	5.168	1.7567	18.936	A	0.000	18.936	18.936	100.00	27.084	0.000
11.5833-6.4833						B	0.000	18.936		100.00	28.053	0.000
						C	0.000	18.936		100.00	40.200	0.000
L56	6.3666	0.85	5.168	1.6966	0.877	A	0.000	0.877	0.877	100.00	1.209	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
6.4833-6.2500						B	0.000	0.877		100.00	1.271	0.000
						C	0.000	0.877		100.00	1.526	0.000
L57	3.7373	0.85	5.168	1.6085	19.011	A	0.000	19.011	19.011	100.00	25.555	0.000
6.2500-1.2500						B	0.000	19.011		100.00	26.837	0.000
						C	0.000	19.011		100.00	31.636	0.000
L58	0.6242	0.85	5.168	1.3450	4.782	A	0.000	4.782	4.782	100.00	5.046	0.000
1.2500-0.0000						B	0.000	4.782		100.00	5.335	0.000
						C	0.000	4.782		100.00	6.024	0.000

Tower Pressure - Service

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	128.4554	1.334	10.45	4.797	A	0.000	4.797	4.797	100.00	0.188	0.000
131.0000-126.			1		B	0.000	4.797		100.00	0.000	0.000
0000					C	0.000	4.797		100.00	0.000	0.000
L2	123.4597	1.323	10.36	5.310	A	0.000	5.310	5.310	100.00	0.188	0.000
126.0000-121.			4		B	0.000	5.310		100.00	0.000	0.000
0000					C	0.000	5.310		100.00	0.000	0.000
L3	118.4633	1.312	10.27	5.824	A	0.000	5.824	5.824	100.00	0.188	0.000
121.0000-116.			4		B	0.000	5.824		100.00	0.000	0.000
0000					C	0.000	5.824		100.00	2.325	0.000
L4	113.4662	1.3	10.18	6.337	A	0.000	6.337	6.337	100.00	0.188	0.000
116.0000-111.			2		B	0.000	6.337		100.00	0.000	0.000
0000					C	0.000	6.337		100.00	2.325	0.000
L5	110.4987	1.293	10.12	1.329	A	0.000	1.329	1.329	100.00	0.037	0.000
111.0000-110.			5		B	0.000	1.329		100.00	0.000	0.000
0000					C	0.000	1.329		100.00	0.465	0.000
L6	107.4677	1.285	10.06	6.967	A	0.000	6.967	6.967	100.00	0.188	0.000
110.0000-105.			6		B	0.000	6.967		100.00	0.000	0.000
0000					C	0.000	6.967		100.00	2.325	0.000
L7	102.4701	1.272	9.965	7.506	A	0.000	7.506	7.506	100.00	0.188	0.000
105.0000-100.					B	0.000	7.506		100.00	0.000	0.000
0000					C	0.000	7.506		100.00	2.325	0.000
L8	97.4721	1.259	9.861	8.046	A	0.000	8.046	8.046	100.00	0.188	0.000
100.0000-95.0					B	0.000	8.046		100.00	0.000	0.000
000					C	0.000	8.046		100.00	2.429	0.000
L9	92.4228	1.245	9.751	8.763	A	0.000	8.763	8.763	100.00	1.202	0.000
95.0000-89.90					B	0.000	8.763		100.00	1.011	0.000
00					C	0.000	8.763		100.00	3.648	0.000
L10	89.7833	1.237	9.692	0.414	A	0.000	0.414	0.414	100.00	0.164	0.000
89.9000-89.66					B	0.000	0.414		100.00	0.156	0.000
67					C	0.000	0.414		100.00	0.276	0.000
L11	87.0912	1.229	9.630	9.350	A	0.000	9.350	9.350	100.00	4.436	0.000
89.6667-84.56					B	0.000	9.350		100.00	4.244	0.000
67					C	0.000	9.350		100.00	6.881	0.000
L12	84.4499	1.221	9.568	0.441	A	0.000	0.441	0.441	100.00	0.320	0.000
84.5667-84.33					B	0.000	0.441		100.00	0.311	0.000
33					C	0.000	0.441		100.00	0.432	0.000
L13	83.6231	1.219	9.548	2.704	A	0.000	2.704	2.704	100.00	1.942	0.000
84.3333-82.91					B	0.000	2.704		100.00	1.889	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
67					C	0.000	2.704		100.00	2.621	0.000
L14	82.7916	1.216	9.528	0.482	A	0.000	0.482	0.482	100.00	0.343	0.000
82.9167-82.66					B	0.000	0.482		100.00	0.333	0.000
67					C	0.000	0.482		100.00	0.463	0.000
L15	81.8203	1.213	9.504	3.286	A	0.000	3.286	3.286	100.00	2.688	0.000
82.6667-80.97					B	0.000	3.286		100.00	2.625	0.000
92					C	0.000	3.286		100.00	3.497	0.000
L16	80.8541	1.21	9.481	0.492	A	0.000	0.492	0.492	100.00	0.343	0.000
80.9792-80.72					B	0.000	0.492		100.00	0.333	0.000
92					C	0.000	0.492		100.00	0.463	0.000
L17	78.2070	1.202	9.414	10.125	A	0.000	10.125	10.125	100.00	6.854	0.000
80.7292-75.72					B	0.000	10.125		100.00	6.667	0.000
92					C	0.000	10.125		100.00	9.252	0.000
L18	72.8370	1.184	9.274	12.265	A	0.000	12.265	12.265	100.00	6.534	0.000
75.7292-70.00					B	0.000	12.265		100.00	6.319	0.000
00					C	0.000	12.265		100.00	9.281	0.000
L19	69.4992	1.172	9.183	2.170	A	0.000	2.170	2.170	100.00	0.704	0.000
70.0000-69.00					B	0.000	2.170		100.00	0.667	0.000
00					C	0.000	2.170		100.00	1.184	0.000
L20	67.9883	1.167	9.141	4.442	A	0.000	4.442	4.442	100.00	2.265	0.000
69.0000-66.98					B	0.000	4.442		100.00	2.189	0.000
33					C	0.000	4.442		100.00	3.232	0.000
L21	66.8582	1.163	9.109	0.557	A	0.000	0.557	0.557	100.00	0.343	0.000
66.9833-66.73					B	0.000	0.557		100.00	0.333	0.000
33					C	0.000	0.557		100.00	0.463	0.000
L22	65.4027	1.157	9.067	5.985	A	0.000	5.985	5.985	100.00	3.966	0.000
66.7333-64.08					B	0.000	5.985		100.00	3.867	0.000
33					C	0.000	5.985		100.00	3.987	0.000
L23	63.9583	1.152	9.024	0.572	A	0.000	0.572	0.572	100.00	0.364	0.000
64.0833-63.83					B	0.000	0.572		100.00	0.354	0.000
33					C	0.000	0.572		100.00	0.483	0.000
L24	63.1234	1.149	8.999	3.269	A	0.000	3.269	3.269	100.00	2.060	0.000
63.8333-62.41					B	0.000	3.269		100.00	2.007	0.000
67					C	0.000	3.269		100.00	2.739	0.000
L25	62.2917	1.146	8.974	0.581	A	0.000	0.581	0.581	100.00	0.364	0.000
62.4167-62.16					B	0.000	0.581		100.00	0.354	0.000
67					C	0.000	0.581		100.00	0.483	0.000
L26	60.8069	1.14	8.929	6.386	A	0.000	6.386	6.386	100.00	4.605	0.000
62.1667-59.45					B	0.000	6.386		100.00	4.504	0.000
83					C	0.000	6.386		100.00	5.904	0.000
L27	59.3333	1.134	8.883	0.597	A	0.000	0.597	0.597	100.00	0.530	0.000
59.4583-59.20					B	0.000	0.597		100.00	0.521	0.000
83					C	0.000	0.597		100.00	0.650	0.000
L28	57.5965	1.127	8.827	7.786	A	0.000	7.786	7.786	100.00	6.742	0.000
59.2083-56.00					B	0.000	7.786		100.00	6.621	0.000
00					C	0.000	7.786		100.00	8.343	0.000
L29	55.8750	1.12	8.771	0.616	A	0.000	0.616	0.616	100.00	0.593	0.000
56.0000-55.75					B	0.000	0.616		100.00	0.583	0.000
00					C	0.000	0.616		100.00	0.650	0.000
L30	53.2322	1.108	8.682	12.605	A	0.000	12.605	12.605	100.00	11.854	0.000
55.7500-50.75					B	0.000	12.605		100.00	11.667	0.000
00					C	0.000	12.605		100.00	13.002	0.000
L31	48.2329	1.086	8.504	13.144	A	0.000	13.144	13.144	100.00	11.910	0.000
50.7500-45.75					B	0.000	13.144		100.00	11.722	0.000
00					C	0.000	13.144		100.00	13.057	0.000
L32	45.1156	1.07	8.385	3.416	A	0.000	3.416	3.416	100.00	3.848	0.000
45.7500-44.48					B	0.000	3.416		100.00	3.800	0.000
33					C	0.000	3.416		100.00	4.126	0.000
L33	44.3583	1.067	8.355	0.678	A	0.000	0.678	0.678	100.00	0.759	0.000
44.4833-44.23					B	0.000	0.678		100.00	0.750	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
33					C	0.000	0.678		100.00	0.729	0.000
L34	44.1583	1.066	8.347	0.408	A	0.000	0.408	0.408	100.00	0.456	0.000
44.2333-44.08					B	0.000	0.408		100.00	0.450	0.000
33					C	0.000	0.408		100.00	0.528	0.000
L35	41.5671	1.052	8.241	13.863	A	0.000	13.863	13.863	100.00	12.410	0.000
44.0833-39.08					B	0.000	13.863		100.00	12.222	0.000
33					C	0.000	13.863		100.00	14.807	0.000
L36	36.5660	1.024	8.022	14.412	A	0.000	14.412	14.412	100.00	11.862	0.000
39.0833-34.08					B	0.000	14.412		100.00	11.674	0.000
00					C	0.000	14.412		100.00	14.261	0.000
L37	34.0400	1.009	7.902	0.231	A	0.000	0.231	0.231	100.00	0.190	0.000
34.0800-34.00					B	0.000	0.231		100.00	0.187	0.000
00					C	0.000	0.231		100.00	0.228	0.000
L38	32.7252	1	7.837	7.395	A	0.000	7.395	7.395	100.00	6.026	0.000
34.0000-31.45					B	0.000	7.395		100.00	5.931	0.000
83					C	0.000	7.395		100.00	7.245	0.000
L39	31.3333	0.991	7.765	0.735	A	0.000	0.735	0.735	100.00	0.593	0.000
31.4583-31.20					B	0.000	0.735		100.00	0.583	0.000
83					C	0.000	0.735		100.00	0.713	0.000
L40	30.3314	0.985	7.712	5.182	A	0.000	5.182	5.182	100.00	4.149	0.000
31.2083-29.45					B	0.000	5.182		100.00	4.083	0.000
83					C	0.000	5.182		100.00	4.988	0.000
L41	29.3333	0.978	7.658	0.746	A	0.000	0.746	0.746	100.00	0.718	0.000
29.4583-29.20					B	0.000	0.746		100.00	0.583	0.000
83					C	0.000	0.746		100.00	0.838	0.000
L42	28.0174	0.968	7.585	7.151	A	0.000	7.151	7.151	100.00	8.006	0.000
29.2083-26.83					B	0.000	7.151		100.00	5.542	0.000
33					C	0.000	7.151		100.00	9.145	0.000
L43	26.7083	0.959	7.509	0.760	A	0.000	0.760	0.760	100.00	0.843	0.000
26.8333-26.58					B	0.000	0.760		100.00	0.583	0.000
33					C	0.000	0.760		100.00	0.963	0.000
L44	24.0688	0.938	7.346	15.480	A	0.000	15.480	15.480	100.00	16.854	0.000
26.5833-21.58					B	0.000	15.480		100.00	11.667	0.000
33					C	0.000	15.480		100.00	19.252	0.000
L45	21.1663	0.913	7.150	2.632	A	0.000	2.632	2.632	100.00	2.559	0.000
21.5833-20.75					B	0.000	2.632		100.00	1.694	0.000
00					C	0.000	2.632		100.00	3.208	0.000
L46	20.6250	0.908	7.111	0.793	A	0.000	0.793	0.793	100.00	0.864	0.000
20.7500-20.50					B	0.000	0.793		100.00	0.875	0.000
00					C	0.000	0.793		100.00	0.963	0.000
L47	19.2465	0.895	7.008	8.000	A	0.000	8.000	8.000	100.00	8.635	0.000
20.5000-18.00					B	0.000	8.000		100.00	8.750	0.000
00					C	0.000	8.000		100.00	9.626	0.000
L48	17.8750	0.881	6.900	0.807	A	0.000	0.807	0.807	100.00	0.864	0.000
18.0000-17.75					B	0.000	0.807		100.00	0.875	0.000
00					C	0.000	0.807		100.00	0.963	0.000
L49	17.4164	0.876	6.862	2.160	A	0.000	2.160	2.160	100.00	2.303	0.000
17.7500-17.08					B	0.000	2.160		100.00	2.333	0.000
33					C	0.000	2.160		100.00	2.567	0.000
L50	16.9583	0.871	6.824	0.812	A	0.000	0.812	0.812	100.00	0.864	0.000
17.0833-16.83					B	0.000	0.812		100.00	0.875	0.000
33					C	0.000	0.812		100.00	0.963	0.000
L51	14.9087	0.85	6.659	12.625	A	0.000	12.625	12.625	100.00	13.852	0.000
16.8333-13.00					B	0.000	12.625		100.00	14.028	0.000
00					C	0.000	12.625		100.00	15.371	0.000
L52	12.8750	0.85	6.659	0.834	A	0.000	0.834	0.834	100.00	0.947	0.000
13.0000-12.75					B	0.000	0.834		100.00	0.958	0.000
00					C	0.000	0.834		100.00	1.046	0.000
L53	12.2912	0.85	6.659	3.071	A	0.000	3.071	3.071	100.00	3.472	0.000
12.7500-11.83					B	0.000	3.071		100.00	3.514	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
33					C	0.000	3.071		100.00	3.835	0.000
L54	11.7083	0.85	6.659	0.841	A	0.000	0.841	0.841	100.00	0.947	0.000
11.8333-11.58					B	0.000	0.841		100.00	0.958	0.000
33					C	0.000	0.841		100.00	1.046	0.000
L55	9.0196	0.85	6.659	17.443	A	0.000	17.443	17.443	100.00	19.464	0.000
11.5833-6.483					B	0.000	17.443		100.00	19.550	0.000
3					C	0.000	17.443		100.00	15.637	0.000
L56	6.3666	0.85	6.659	0.811	A	0.000	0.811	0.811	100.00	0.903	0.000
6.4833-6.2500					B	0.000	0.811		100.00	0.894	0.000
					C	0.000	0.811		100.00	0.509	0.000
L57	3.7373	0.85	6.659	17.670	A	0.000	17.670	17.670	100.00	19.354	0.000
6.2500-1.2500					B	0.000	17.670		100.00	19.167	0.000
					C	0.000	17.670		100.00	10.918	0.000
L58	0.6242	0.85	6.659	4.502	A	0.000	4.502	4.502	100.00	4.005	0.000
1.2500-0.0000					B	0.000	4.502		100.00	3.958	0.000
					C	0.000	4.502		100.00	1.896	0.000

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 30 deg - No Ice
5	0.9 Dead+1.6 Wind 30 deg - No Ice
6	1.2 Dead+1.6 Wind 60 deg - No Ice
7	0.9 Dead+1.6 Wind 60 deg - No Ice
8	1.2 Dead+1.6 Wind 90 deg - No Ice
9	0.9 Dead+1.6 Wind 90 deg - No Ice
10	1.2 Dead+1.6 Wind 120 deg - No Ice
11	0.9 Dead+1.6 Wind 120 deg - No Ice
12	1.2 Dead+1.6 Wind 150 deg - No Ice
13	0.9 Dead+1.6 Wind 150 deg - No Ice
14	1.2 Dead+1.6 Wind 180 deg - No Ice
15	0.9 Dead+1.6 Wind 180 deg - No Ice
16	1.2 Dead+1.6 Wind 210 deg - No Ice
17	0.9 Dead+1.6 Wind 210 deg - No Ice
18	1.2 Dead+1.6 Wind 240 deg - No Ice
19	0.9 Dead+1.6 Wind 240 deg - No Ice
20	1.2 Dead+1.6 Wind 270 deg - No Ice
21	0.9 Dead+1.6 Wind 270 deg - No Ice
22	1.2 Dead+1.6 Wind 300 deg - No Ice
23	0.9 Dead+1.6 Wind 300 deg - No Ice
24	1.2 Dead+1.6 Wind 330 deg - No Ice
25	0.9 Dead+1.6 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

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	131 - 126	Pole	Max Tension	20	0.00	-0.00	-0.00
			Max. Compression	26	-0.37	0.01	0.02
			Max. Mx	20	-0.11	0.67	0.00
			Max. My	2	-0.11	0.00	0.67
			Max. Vy	8	0.27	-0.67	0.00
			Max. Vx	14	0.27	0.00	-0.66
			Max. Torque	20			0.00
L2	126 - 121	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-0.76	0.02	0.03
			Max. Mx	20	-0.23	2.75	0.00
			Max. My	2	-0.23	0.00	2.75
			Max. Vy	8	0.57	-2.75	-0.00
			Max. Vx	14	0.57	-0.00	-2.75
			Max. Torque	9			0.00
L3	121 - 116	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-7.56	-0.07	1.18
			Max. Mx	8	-1.86	-20.26	0.25
			Max. My	2	-1.86	0.00	20.55
			Max. Vy	20	-4.24	20.23	0.28
			Max. Vx	14	4.24	-0.02	-19.93
			Max. Torque	20			-0.37
L4	116 - 111	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-8.28	-0.16	1.05
			Max. Mx	8	-2.06	-42.31	0.21
			Max. My	2	-2.06	-0.00	42.56
			Max. Vy	20	-4.58	42.26	0.27
			Max. Vx	14	4.58	-0.04	-41.99
			Max. Torque	20			-0.37
L5	111 - 110	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-8.42	-0.18	1.02
			Max. Mx	8	-2.10	-46.93	0.20
			Max. My	2	-2.10	-0.00	47.18
			Max. Vy	20	-4.66	46.88	0.27
			Max. Vx	14	4.66	-0.05	-46.61
			Max. Torque	20			-0.37
L6	110 - 105	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-20.26	-1.30	1.47
			Max. Mx	8	-4.80	-97.75	-0.07
			Max. My	2	-4.80	0.15	98.22

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	20	-11.04	97.29	0.65
			Max. Vx	14	11.09	-0.54	-97.49
			Max. Torque	22			-0.69
L7	105 - 100	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-21.64	-1.40	0.28
			Max. Mx	8	-5.31	-154.54	-0.66
			Max. My	2	-5.31	0.43	154.88
			Max. Vy	20	-12.12	154.11	0.94
			Max. Vx	14	12.10	-1.06	-154.84
			Max. Torque	11			-1.89
L8	100 - 95	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-35.11	1.23	1.70
			Max. Mx	20	-9.18	231.67	2.58
			Max. My	2	-9.21	2.17	231.24
			Max. Vy	20	-18.56	231.67	2.58
			Max. Vx	14	18.40	-1.40	-230.50
			Max. Torque	11			-1.88
L9	95 - 89.9	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-36.66	1.02	1.50
			Max. Mx	20	-10.01	327.43	4.12
			Max. My	2	-10.05	3.41	325.74
			Max. Vy	20	-19.02	327.43	4.12
			Max. Vx	14	18.85	-3.11	-325.48
			Max. Torque	11			-1.88
L10	89.9 - 89.6667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-36.74	1.01	1.49
			Max. Mx	20	-10.06	331.87	4.19
			Max. My	2	-10.09	3.47	330.12
			Max. Vy	20	-19.04	331.87	4.19
			Max. Vx	14	18.87	-3.19	-329.88
			Max. Torque	11			-1.88
L11	89.6667 - 84.5667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.00	0.79	1.20
			Max. Mx	20	-13.19	439.38	5.71
			Max. My	14	-13.21	-4.92	-436.61
			Max. Vy	20	-23.31	439.38	5.71
			Max. Vx	14	23.14	-4.92	-436.61
			Max. Torque	11			-1.88
L12	84.5667 - 84.3333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.11	0.78	1.18
			Max. Mx	20	-13.25	444.82	5.77
			Max. My	14	-13.27	-5.00	-442.01
			Max. Vy	20	-23.34	444.82	5.77
			Max. Vx	14	23.16	-5.00	-442.01
			Max. Torque	11			-1.88
L13	84.3333 - 82.9167	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.76	0.72	1.08
			Max. Mx	20	-13.55	477.97	6.19
			Max. My	14	-13.58	-5.48	-474.94
			Max. Vy	20	-23.49	477.97	6.19
			Max. Vx	14	23.30	-5.48	-474.94
			Max. Torque	11			-1.88
L14	82.9167 - 82.6667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.87	0.71	1.06
			Max. Mx	20	-13.61	483.85	6.26
			Max. My	14	-13.63	-5.56	-480.77
			Max. Vy	20	-23.51	483.85	6.26

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	14	23.32	-5.56	-480.77
			Max. Torque	11			-1.88
L15	82.6667 - 80.9792	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.58	0.64	0.93
			Max. Mx	20	-13.89	523.63	6.75
			Max. My	14	-13.92	-6.13	-520.27
			Max. Vy	20	-23.68	523.63	6.75
			Max. Vx	14	23.48	-6.13	-520.27
			Max. Torque	11			-1.88
L16	80.9792 - 80.7292	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.68	0.62	0.91
			Max. Mx	20	-13.96	529.55	6.83
			Max. My	14	-13.99	-6.22	-526.15
			Max. Vy	20	-23.69	529.55	6.83
			Max. Vx	14	23.49	-6.22	-526.15
			Max. Torque	11			-1.88
L17	80.7292 - 75.7292	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-49.74	0.40	0.52
			Max. Mx	20	-14.90	649.01	8.28
			Max. My	14	-14.92	-7.91	-644.75
			Max. Vy	20	-24.13	649.01	8.28
			Max. Vx	14	23.93	-7.91	-644.75
			Max. Torque	11			-1.88
L18	75.7292 - 70	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-50.43	0.32	0.38
			Max. Mx	20	-15.22	690.83	8.78
			Max. My	14	-15.24	-8.50	-686.28
			Max. Vy	20	-24.29	690.83	8.78
			Max. Vx	14	24.09	-8.50	-686.28
			Max. Torque	11			-1.88
L19	70 - 69	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-53.28	0.08	-0.02
			Max. Mx	20	-16.71	813.49	10.22
			Max. My	14	-16.73	-10.20	-808.09
			Max. Vy	20	-24.80	813.49	10.22
			Max. Vx	14	24.61	-10.20	-808.09
			Max. Torque	11			-1.88
L20	69 - 66.9833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-54.13	-0.01	-0.19
			Max. Mx	20	-17.15	863.66	10.81
			Max. My	14	-17.17	-10.88	-857.92
			Max. Vy	20	-24.99	863.66	10.81
			Max. Vx	14	24.79	-10.88	-857.92
			Max. Torque	11			-1.88
L21	66.9833 - 66.7333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-54.24	-0.02	-0.21
			Max. Mx	20	-17.22	869.91	10.88
			Max. My	14	-17.23	-10.97	-864.13
			Max. Vy	20	-25.00	869.91	10.88
			Max. Vx	14	24.80	-10.97	-864.13
			Max. Torque	11			-1.88
L22	66.7333 - 64.0833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-55.40	-0.11	-0.44
			Max. Mx	20	-17.78	936.44	11.64
			Max. My	14	-17.80	-11.87	-930.21
			Max. Vy	20	-25.25	936.44	11.64

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	14	25.05	-11.87	-930.21
			Max. Torque	11			-1.88
L23	64.0833 - 63.8333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-55.53	-0.12	-0.46
			Max. Mx	20	-17.87	942.75	11.71
			Max. My	14	-17.89	-11.95	-936.48
			Max. Vy	20	-25.26	942.75	11.71
			Max. Vx	14	25.06	-11.95	-936.48
			Max. Torque	11			-1.88
L24	63.8333 - 62.4167	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.21	-0.19	-0.58
			Max. Mx	20	-18.21	978.62	12.12
			Max. My	14	-18.23	-12.43	-972.11
			Max. Vy	20	-25.41	978.62	12.12
			Max. Vx	14	25.21	-12.43	-972.11
			Max. Torque	11			-1.88
L25	62.4167 - 62.1667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.34	-0.21	-0.60
			Max. Mx	20	-18.29	984.97	12.19
			Max. My	14	-18.31	-12.52	-978.42
			Max. Vy	20	-25.42	984.97	12.19
			Max. Vx	14	25.23	-12.52	-978.42
			Max. Torque	11			-1.88
L26	62.1667 - 59.4583	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-57.75	-0.34	-0.84
			Max. Mx	20	-19.01	1054.17	12.97
			Max. My	14	-19.03	-13.44	-1047.17
			Max. Vy	20	-25.70	1054.17	12.97
			Max. Vx	14	25.51	-13.44	-1047.17
			Max. Torque	11			-1.88
L27	59.4583 - 59.2083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-57.90	-0.35	-0.86
			Max. Mx	20	-19.11	1060.59	13.04
			Max. My	14	-19.12	-13.52	-1053.55
			Max. Vy	20	-25.72	1060.59	13.04
			Max. Vx	14	25.53	-13.52	-1053.55
			Max. Torque	11			-1.88
L28	59.2083 - 56	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.79	-0.52	-1.14
			Max. Mx	20	-20.08	1143.62	13.95
			Max. My	14	-20.10	-14.61	-1136.05
			Max. Vy	20	-26.06	1143.62	13.95
			Max. Vx	14	25.87	-14.61	-1136.05
			Max. Torque	11			-1.88
L29	56 - 55.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.94	-0.53	-1.16
			Max. Mx	20	-20.17	1150.14	14.02
			Max. My	14	-20.19	-14.70	-1142.52
			Max. Vy	20	-26.09	1150.14	14.02
			Max. Vx	14	25.89	-14.70	-1142.52
			Max. Torque	11			-1.88
L30	55.75 - 50.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.98	-0.77	-1.62
			Max. Mx	20	-21.78	1281.84	15.45
			Max. My	14	-21.80	-16.39	-1273.40
			Max. Vy	20	-26.62	1281.84	15.45

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	14	26.43	-16.39	-1273.40
			Max. Torque	11			-1.88
L31	50.75 - 45.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-66.05	-1.02	-2.09
			Max. Mx	20	-23.43	1416.19	16.86
			Max. My	14	-23.44	-18.09	-1406.93
			Max. Vy	20	-27.15	1416.19	16.86
			Max. Vx	14	26.96	-18.09	-1406.93
			Max. Torque	11			-1.87
L32	45.75 - 44.4833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-66.88	-1.08	-2.21
			Max. Mx	20	-23.85	1450.64	17.22
			Max. My	14	-23.86	-18.51	-1441.18
			Max. Vy	20	-27.29	1450.64	17.22
			Max. Vx	14	27.10	-18.51	-1441.18
			Max. Torque	11			-1.87
L33	44.4833 - 44.2333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.04	-1.09	-2.24
			Max. Mx	20	-23.94	1457.47	17.29
			Max. My	14	-23.95	-18.60	-1447.96
			Max. Vy	20	-27.31	1457.47	17.29
			Max. Vx	14	27.11	-18.60	-1447.96
			Max. Torque	11			-1.87
L34	44.2333 - 44.0833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.13	-1.10	-2.25
			Max. Mx	20	-23.99	1461.56	17.33
			Max. My	14	-24.00	-18.65	-1452.03
			Max. Vy	20	-27.33	1461.56	17.33
			Max. Vx	14	27.13	-18.65	-1452.03
			Max. Torque	11			-1.87
L35	44.0833 - 39.0833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.12	-1.37	-2.73
			Max. Mx	20	-25.53	1599.38	18.73
			Max. My	14	-25.54	-20.34	-1589.05
			Max. Vy	20	-27.84	1599.38	18.73
			Max. Vx	14	27.64	-20.34	-1589.05
			Max. Torque	11			-1.87
L36	39.0833 - 34.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.17	-1.38	-2.74
			Max. Mx	20	-25.57	1601.70	18.76
			Max. My	14	-25.58	-20.37	-1591.36
			Max. Vy	20	-27.86	1601.70	18.76
			Max. Vx	14	27.65	-20.37	-1591.36
			Max. Torque	11			-1.87
L37	34.08 - 34	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-74.85	-1.66	-3.23
			Max. Mx	20	-28.36	1742.35	20.15
			Max. My	14	-28.37	-22.06	-1731.20
			Max. Vy	20	-28.47	1742.35	20.15
			Max. Vx	14	28.26	-22.06	-1731.20
			Max. Torque	11			-1.87
L38	34 - 31.4583	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.39	-1.80	-3.48
			Max. Mx	20	-29.19	1814.91	20.86
			Max. My	14	-29.20	-22.92	-1803.37
			Max. Vy	20	-28.70	1814.91	20.86

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	14	28.50	-22.92	-1803.37
			Max. Torque	11			-1.87
L39	31.4583 - 31.2083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.54	-1.81	-3.50
			Max. Mx	20	-29.29	1822.09	20.93
			Max. My	14	-29.30	-23.01	-1810.50
			Max. Vy	20	-28.71	1822.09	20.93
			Max. Vx	14	28.52	-23.01	-1810.50
			Max. Torque	11			-1.87
L40	31.2083 - 29.4583	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-77.60	-1.91	-3.68
			Max. Mx	20	-29.85	1872.46	21.42
			Max. My	14	-29.86	-23.60	-1860.59
			Max. Vy	20	-28.90	1872.46	21.42
			Max. Vx	14	28.71	-23.60	-1860.59
			Max. Torque	11			-1.87
L41	29.4583 - 29.2083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-77.76	-1.92	-3.70
			Max. Mx	20	-29.96	1879.68	21.49
			Max. My	14	-29.97	-23.68	-1867.77
			Max. Vy	20	-28.91	1879.68	21.49
			Max. Vx	14	28.71	-23.68	-1867.77
			Max. Torque	11			-1.87
L42	29.2083 - 26.8333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-79.28	-2.00	-3.91
			Max. Mx	20	-30.75	1948.56	22.14
			Max. My	14	-30.76	-24.48	-1936.28
			Max. Vy	20	-29.14	1948.56	22.14
			Max. Vx	14	28.95	-24.48	-1936.28
			Max. Torque	11			-1.87
L43	26.8333 - 26.5833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-79.46	-2.00	-3.93
			Max. Mx	20	-30.87	1955.85	22.21
			Max. My	14	-30.87	-24.57	-1943.53
			Max. Vy	20	-29.16	1955.85	22.21
			Max. Vx	14	28.96	-24.57	-1943.53
			Max. Torque	11			-1.87
L44	26.5833 - 21.5833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.08	-2.16	-4.37
			Max. Mx	20	-32.96	2102.83	23.59
			Max. My	14	-32.97	-26.25	-2089.73
			Max. Vy	20	-29.67	2102.83	23.59
			Max. Vx	14	29.48	-26.25	-2089.73
			Max. Torque	11			-1.87
L45	21.5833 - 20.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.68	-2.20	-4.44
			Max. Mx	20	-33.32	2127.57	23.82
			Max. My	14	-33.32	-26.53	-2114.34
			Max. Vy	20	-29.75	2127.57	23.82
			Max. Vx	14	29.56	-26.53	-2114.34
			Max. Torque	11			-1.87
L46	20.75 - 20.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-83.87	-2.21	-4.47
			Max. Mx	20	-33.43	2135.00	23.88

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	14	-33.44	-26.61	-2121.74
			Max. Vy	20	-29.77	2135.00	23.88
			Max. Vx	14	29.58	-26.61	-2121.74
			Max. Torque	11			-1.87
L47	20.5 - 18	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.77	-2.35	-4.73
			Max. Mx	20	-34.54	2209.70	24.57
			Max. My	14	-34.54	-27.45	-2196.05
			Max. Vy	20	-30.02	2209.70	24.57
			Max. Vx	14	29.83	-27.45	-2196.05
			Max. Torque	11			-1.87
L48	18 - 17.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.96	-2.37	-4.75
			Max. Mx	20	-34.66	2217.21	24.64
			Max. My	14	-34.66	-27.54	-2203.52
			Max. Vy	20	-30.04	2217.21	24.64
			Max. Vx	14	29.85	-27.54	-2203.52
			Max. Torque	11			-1.87
L49	17.75 - 17.0833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-86.47	-2.40	-4.82
			Max. Mx	20	-34.95	2237.25	24.82
			Max. My	14	-34.95	-27.76	-2223.45
			Max. Vy	20	-30.11	2237.25	24.82
			Max. Vx	14	29.91	-27.76	-2223.45
			Max. Torque	11			-1.87
L50	17.0833 - 16.8333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-86.65	-2.42	-4.84
			Max. Mx	20	-35.06	2244.77	24.89
			Max. My	14	-35.06	-27.84	-2230.94
			Max. Vy	20	-30.13	2244.77	24.89
			Max. Vx	14	29.93	-27.84	-2230.94
			Max. Torque	11			-1.87
L51	16.8333 - 13	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-89.40	-2.63	-5.24
			Max. Mx	20	-36.62	2360.87	25.93
			Max. My	14	-36.63	-29.13	-2346.45
			Max. Vy	20	-30.48	2360.87	25.93
			Max. Vx	14	30.29	-29.13	-2346.45
			Max. Torque	11			-1.87
L52	13 - 12.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-89.60	-2.65	-5.26
			Max. Mx	20	-36.76	2368.49	25.99
			Max. My	14	-36.76	-29.21	-2354.03
			Max. Vy	20	-30.50	2368.49	25.99
			Max. Vx	14	30.30	-29.21	-2354.03
			Max. Torque	11			-1.87
L53	12.75 - 11.8333	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-90.33	-2.69	-5.36
			Max. Mx	20	-37.19	2396.47	26.24
			Max. My	14	-37.20	-29.52	-2381.88
			Max. Vy	20	-30.59	2396.47	26.24
			Max. Vx	14	30.40	-29.52	-2381.88
			Max. Torque	11			-1.87
L54	11.8333 - 11.5833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-90.51	-2.71	-5.38
			Max. Mx	20	-37.30	2404.12	26.31
			Max. My	14	-37.31	-29.60	-2389.49

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	20	-30.61	2404.12	26.31
			Max. Vx	14	30.42	-29.60	-2389.49
			Max. Torque	11			-1.87
L55	11.5833 - 6.4833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.24	-2.95	-5.87
			Max. Mx	20	-39.59	2561.37	27.68
			Max. My	14	-39.59	-31.30	-2545.97
			Max. Vy	20	-31.09	2561.37	27.68
			Max. Vx	14	30.90	-31.30	-2545.97
			Max. Torque	11			-1.87
L56	6.4833 - 6.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.40	-2.96	-5.89
			Max. Mx	20	-39.70	2568.62	27.74
			Max. My	14	-39.70	-31.38	-2553.18
			Max. Vy	20	-31.11	2568.62	27.74
			Max. Vx	14	30.92	-31.38	-2553.18
			Max. Torque	11			-1.87
L57	6.25 - 1.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-97.88	-3.16	-6.33
			Max. Mx	20	-41.97	2725.27	29.08
			Max. My	14	-41.97	-33.04	-2709.10
			Max. Vy	20	-31.59	2725.27	29.08
			Max. Vx	14	31.40	-33.04	-2709.10
			Max. Torque	11			-1.87
L58	1.25 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-98.67	-3.20	-6.42
			Max. Mx	20	-42.55	2764.81	29.41
			Max. My	14	-42.55	-33.46	-2748.45
			Max. Vy	20	-31.72	2764.81	29.41
			Max. Vx	14	31.52	-33.46	-2748.45
			Max. Torque	11			-1.87

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	98.67	0.00	-0.00
	Max. H_x	21	31.92	31.70	0.30
	Max. H_z	3	31.92	0.24	31.43
	Max. M_x	2	2736.65	0.24	31.43
	Max. M_z	8	2757.64	-31.63	-0.39
	Max. Torsion	24	1.71	16.12	27.27
	Min. Vert	21	31.92	31.70	0.30
	Min. H_x	8	42.56	-31.63	-0.39
	Min. H_z	14	42.56	-0.32	-31.51
	Min. M_x	14	-2748.45	-0.32	-31.51
	Min. M_z	20	-2764.81	31.70	0.30
	Min. Torsion	11	-1.87	-27.53	-15.97

Tower Mast Reaction Summary

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
Dead Only	35.46	0.00	0.00	1.45	0.10	-0.00
1.2 Dead+1.6 Wind 0 deg - No Ice	42.56	-0.24	-31.43	-2736.65	24.87	-0.97
0.9 Dead+1.6 Wind 0 deg - No Ice	31.92	-0.24	-31.43	-2716.03	24.63	-0.95
1.2 Dead+1.6 Wind 30 deg - No Ice	42.56	16.79	-29.17	-2507.81	-1442.82	-0.70
0.9 Dead+1.6 Wind 30 deg - No Ice	31.92	16.79	-29.17	-2489.11	-1431.87	-0.68
1.2 Dead+1.6 Wind 60 deg - No Ice	42.56	31.44	-17.94	-1517.48	-2668.96	0.57
0.9 Dead+1.6 Wind 60 deg - No Ice	31.92	31.44	-17.94	-1506.44	-2648.85	0.59
1.2 Dead+1.6 Wind 90 deg - No Ice	42.56	31.63	0.39	41.82	-2757.64	1.35
0.9 Dead+1.6 Wind 90 deg - No Ice	31.92	31.63	0.39	41.06	-2736.47	1.37
1.2 Dead+1.6 Wind 120 deg - No Ice	42.56	27.53	15.97	1397.54	-2402.56	1.86
0.9 Dead+1.6 Wind 120 deg - No Ice	31.92	27.53	15.97	1386.35	-2384.11	1.87
1.2 Dead+1.6 Wind 150 deg - No Ice	42.56	16.10	27.37	2389.03	-1408.09	1.76
0.9 Dead+1.6 Wind 150 deg - No Ice	31.92	16.10	27.37	2370.22	-1397.29	1.76
1.2 Dead+1.6 Wind 180 deg - No Ice	42.56	0.32	31.51	2748.45	-33.46	1.42
0.9 Dead+1.6 Wind 180 deg - No Ice	31.92	0.32	31.51	2726.87	-33.23	1.40
1.2 Dead+1.6 Wind 210 deg - No Ice	42.56	-16.81	29.22	2515.86	1445.11	0.91
0.9 Dead+1.6 Wind 210 deg - No Ice	31.92	-16.81	29.22	2496.25	1434.05	0.89
1.2 Dead+1.6 Wind 240 deg - No Ice	42.56	-31.57	17.89	1516.45	2682.29	-1.13
0.9 Dead+1.6 Wind 240 deg - No Ice	31.92	-31.57	17.89	1504.58	2661.99	-1.15
1.2 Dead+1.6 Wind 270 deg - No Ice	42.56	-31.70	-0.30	-29.41	2764.81	-1.09
0.9 Dead+1.6 Wind 270 deg - No Ice	31.92	-31.70	-0.30	-29.60	2743.53	-1.11
1.2 Dead+1.6 Wind 300 deg - No Ice	42.56	-27.55	-15.92	-1388.82	2405.31	-1.56
0.9 Dead+1.6 Wind 300 deg - No Ice	31.92	-27.55	-15.92	-1378.56	2386.77	-1.57
1.2 Dead+1.6 Wind 330 deg - No Ice	42.56	-16.12	-27.27	-2375.28	1411.12	-1.71
0.9 Dead+1.6 Wind 330 deg - No Ice	31.92	-16.12	-27.27	-2357.43	1400.22	-1.71
1.2 Dead+1.0 Ice+1.0 Temp	98.67	-0.00	0.00	6.42	-3.20	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	98.67	-0.05	-7.84	-735.94	1.69	-0.25
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	98.67	4.64	-8.06	-713.66	-418.13	-0.23
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	98.67	8.81	-5.04	-438.84	-782.94	0.34
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	98.67	9.45	0.08	15.24	-843.47	0.14
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	98.67	7.16	4.15	394.74	-672.38	0.29
1.2 Dead+1.0 Wind 150	98.67	4.11	7.02	666.34	-390.55	0.34

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 180	98.67	0.06	7.86	751.25	-10.46	0.35
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 210	98.67	-4.65	8.07	728.14	411.80	0.28
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 240	98.67	-8.84	5.04	451.29	779.08	-0.45
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 270	98.67	-9.46	-0.06	0.21	838.24	-0.08
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 300	98.67	-7.16	-4.14	-380.12	666.15	-0.23
deg+1.0 Ice+1.0 Temp 1.2 Dead+1.0 Wind 330	98.67	-4.12	-7.00	-650.59	384.38	-0.34
deg+1.0 Ice+1.0 Temp Dead+Wind 0 deg - Service	35.46	-0.05	-6.72	-582.08	5.39	-0.20
Dead+Wind 30 deg - Service	35.46	3.59	-6.24	-533.40	-307.42	-0.18
Dead+Wind 60 deg - Service	35.46	6.73	-3.84	-322.39	-568.84	-0.05
Dead+Wind 90 deg - Service	35.46	6.77	0.08	10.00	-587.55	0.29
Dead+Wind 120 deg - Service	35.46	5.89	3.42	298.92	-511.92	0.40
Dead+Wind 150 deg - Service	35.46	3.44	5.86	510.20	-299.98	0.38
Dead+Wind 180 deg - Service	35.46	0.07	6.74	586.77	-7.04	0.31
Dead+Wind 210 deg - Service	35.46	-3.60	6.25	537.30	308.09	0.23
Dead+Wind 240 deg - Service	35.46	-6.75	3.83	324.35	571.87	-0.06
Dead+Wind 270 deg - Service	35.46	-6.78	-0.06	-5.18	589.27	-0.24
Dead+Wind 300 deg - Service	35.46	-5.89	-3.41	-294.88	512.68	-0.34
Dead+Wind 330 deg - Service	35.46	-3.45	-5.83	-505.11	300.81	-0.37

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.00	-35.46	0.00	-0.00	35.46	-0.00	0.000%
2	-0.24	-42.56	-31.43	0.24	42.56	31.43	0.000%
3	-0.24	-31.92	-31.43	0.24	31.92	31.43	0.000%
4	16.79	-42.56	-29.17	-16.79	42.56	29.17	0.000%
5	16.79	-31.92	-29.17	-16.79	31.92	29.17	0.000%
6	31.44	-42.56	-17.94	-31.44	42.56	17.94	0.000%
7	31.44	-31.92	-17.94	-31.44	31.92	17.94	0.000%
8	31.63	-42.56	0.39	-31.63	42.56	-0.39	0.000%
9	31.63	-31.92	0.39	-31.63	31.92	-0.39	0.000%
10	27.53	-42.56	15.97	-27.53	42.56	-15.97	0.000%
11	27.53	-31.92	15.97	-27.53	31.92	-15.97	0.000%
12	16.10	-42.56	27.37	-16.10	42.56	-27.37	0.000%
13	16.10	-31.92	27.37	-16.10	31.92	-27.37	0.000%
14	0.32	-42.56	31.51	-0.32	42.56	-31.51	0.000%
15	0.32	-31.92	31.51	-0.32	31.92	-31.51	0.001%
16	-16.81	-42.56	29.22	16.81	42.56	-29.22	0.000%
17	-16.81	-31.92	29.22	16.81	31.92	-29.22	0.000%
18	-31.57	-42.56	17.89	31.57	42.56	-17.89	0.000%
19	-31.57	-31.92	17.89	31.57	31.92	-17.89	0.000%
20	-31.70	-42.56	-0.30	31.70	42.56	0.30	0.001%
21	-31.70	-31.92	-0.30	31.70	31.92	0.30	0.001%
22	-27.55	-42.56	-15.92	27.55	42.56	15.92	0.000%
23	-27.55	-31.92	-15.92	27.55	31.92	15.92	0.000%
24	-16.12	-42.56	-27.27	16.12	42.56	27.27	0.000%
25	-16.12	-31.92	-27.27	16.12	31.92	27.27	0.000%
26	0.00	-98.67	0.00	0.00	98.67	-0.00	0.000%
27	-0.05	-98.67	-7.84	0.05	98.67	7.84	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
28	4.64	-98.67	-8.06	-4.64	98.67	8.06	0.000%
29	8.81	-98.67	-5.04	-8.81	98.67	5.04	0.000%
30	9.45	-98.67	0.08	-9.45	98.67	-0.08	0.000%
31	7.16	-98.67	4.15	-7.16	98.67	-4.15	0.000%
32	4.11	-98.67	7.02	-4.11	98.67	-7.02	0.000%
33	0.06	-98.67	7.86	-0.06	98.67	-7.86	0.000%
34	-4.65	-98.67	8.07	4.65	98.67	-8.07	0.000%
35	-8.84	-98.67	5.04	8.84	98.67	-5.04	0.000%
36	-9.46	-98.67	-0.06	9.46	98.67	0.06	0.000%
37	-7.16	-98.67	-4.14	7.16	98.67	4.14	0.000%
38	-4.12	-98.67	-7.00	4.12	98.67	7.00	0.000%
39	-0.05	-35.46	-6.72	0.05	35.46	6.72	0.001%
40	3.59	-35.46	-6.24	-3.59	35.46	6.24	0.001%
41	6.73	-35.46	-3.84	-6.73	35.46	3.84	0.000%
42	6.77	-35.46	0.08	-6.77	35.46	-0.08	0.001%
43	5.89	-35.46	3.42	-5.89	35.46	-3.42	0.000%
44	3.44	-35.46	5.86	-3.44	35.46	-5.86	0.001%
45	0.07	-35.46	6.74	-0.07	35.46	-6.74	0.001%
46	-3.60	-35.46	6.25	3.60	35.46	-6.25	0.000%
47	-6.75	-35.46	3.83	6.75	35.46	-3.83	0.000%
48	-6.78	-35.46	-0.06	6.78	35.46	0.06	0.001%
49	-5.90	-35.46	-3.41	5.89	35.46	3.41	0.001%
50	-3.45	-35.46	-5.83	3.45	35.46	5.83	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	19	0.00000001	0.00013284
3	Yes	19	0.00000001	0.00009690
4	Yes	23	0.00000001	0.00010364
5	Yes	23	0.00000001	0.00007383
6	Yes	23	0.00000001	0.00011470
7	Yes	23	0.00000001	0.00008092
8	Yes	20	0.00000001	0.00009104
9	Yes	19	0.00000001	0.00014157
10	Yes	23	0.00000001	0.00010348
11	Yes	23	0.00000001	0.00007434
12	Yes	23	0.00000001	0.00009582
13	Yes	22	0.00000001	0.00014724
14	Yes	19	0.00000001	0.00008766
15	Yes	18	0.00000001	0.00012371
16	Yes	23	0.00000001	0.00010784
17	Yes	23	0.00000001	0.00007680
18	Yes	23	0.00000001	0.00011925
19	Yes	23	0.00000001	0.00008426
20	Yes	18	0.00000001	0.00014743
21	Yes	18	0.00000001	0.00009968
22	Yes	23	0.00000001	0.00009570
23	Yes	22	0.00000001	0.00014697
24	Yes	23	0.00000001	0.00010286
25	Yes	23	0.00000001	0.00007391
26	Yes	8	0.00000001	0.00002350
27	Yes	23	0.00000001	0.00010163
28	Yes	23	0.00000001	0.00011820

29	Yes	23	0.00000001	0.00012816
30	Yes	23	0.00000001	0.00011103
31	Yes	23	0.00000001	0.00011245
32	Yes	23	0.00000001	0.00011156
33	Yes	23	0.00000001	0.00010239
34	Yes	23	0.00000001	0.00011871
35	Yes	23	0.00000001	0.00012882
36	Yes	23	0.00000001	0.00011075
37	Yes	23	0.00000001	0.00011127
38	Yes	23	0.00000001	0.00011053
39	Yes	16	0.00000001	0.00011874
40	Yes	17	0.00000001	0.00014979
41	Yes	18	0.00000001	0.00008825
42	Yes	16	0.00000001	0.00012767
43	Yes	18	0.00000001	0.00008202
44	Yes	17	0.00000001	0.00013762
45	Yes	16	0.00000001	0.00012268
46	Yes	18	0.00000001	0.00008379
47	Yes	18	0.00000001	0.00008960
48	Yes	16	0.00000001	0.00011918
49	Yes	17	0.00000001	0.00013741
50	Yes	18	0.00000001	0.00008095

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	131 - 126	20.61	47	1.44	0.00
L2	126 - 121	19.10	47	1.44	0.00
L3	121 - 116	17.60	47	1.44	0.00
L4	116 - 111	16.10	47	1.42	0.00
L5	111 - 110	14.63	47	1.38	0.00
L6	110 - 105	14.34	47	1.37	0.00
L7	105 - 100	12.93	47	1.32	0.00
L8	100 - 95	11.58	47	1.24	0.00
L9	95 - 89.9	10.33	47	1.15	0.00
L10	89.9 - 89.6667	9.13	47	1.09	0.00
L11	89.6667 - 84.5667	9.08	47	1.09	0.00
L12	84.5667 - 84.3333	7.95	47	1.03	0.00
L13	84.3333 - 82.9167	7.90	47	1.03	0.00
L14	82.9167 - 82.6667	7.59	47	1.01	0.00
L15	82.6667 - 80.9792	7.54	47	1.01	0.00
L16	80.9792 - 80.7292	7.19	47	0.98	0.00
L17	80.7292 - 75.7292	7.14	47	0.97	0.00
L18	75.7292 - 70	6.17	47	0.87	0.00
L19	74 - 69	5.86	47	0.84	0.00
L20	69 - 66.9833	5.01	47	0.78	0.00
L21	66.9833 - 66.7333	4.69	47	0.74	0.00
L22	66.7333 - 64.0833	4.65	47	0.74	0.00
L23	64.0833 - 63.8333	4.26	47	0.68	0.00
L24	63.8333 - 62.4167	4.22	47	0.68	0.00
L25	62.4167 - 62.1667	4.02	47	0.66	0.00
L26	62.1667 - 59.4583	3.99	47	0.66	0.00
L27	59.4583 - 59.2083	3.63	47	0.62	0.00
L28	59.2083 - 56	3.60	47	0.62	0.00
L29	56 - 55.75	3.20	47	0.58	0.00
L30	55.75 - 50.75	3.17	47	0.57	0.00
L31	50.75 - 45.75	2.59	47	0.52	0.00
L32	45.75 - 44.4833	2.09	47	0.46	0.00

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L33	44.4833 - 44.2333	1.97	47	0.44	0.00
L34	44.2333 - 44.0833	1.94	47	0.44	0.00
L35	44.0833 - 39.0833	1.93	47	0.44	0.00
L36	39.0833 - 34.08	1.51	47	0.37	0.00
L37	39 - 34	1.50	47	0.37	0.00
L38	34 - 31.4583	1.13	47	0.34	0.00
L39	31.4583 - 31.2083	0.96	47	0.31	0.00
L40	31.2083 - 29.4583	0.94	47	0.30	0.00
L41	29.4583 - 29.2083	0.83	47	0.28	0.00
L42	29.2083 - 26.8333	0.82	47	0.28	0.00
L43	26.8333 - 26.5833	0.69	47	0.25	0.00
L44	26.5833 - 21.5833	0.68	47	0.25	0.00
L45	21.5833 - 20.75	0.44	47	0.20	0.00
L46	20.75 - 20.5	0.41	47	0.19	0.00
L47	20.5 - 18	0.40	47	0.19	0.00
L48	18 - 17.75	0.31	47	0.17	0.00
L49	17.75 - 17.0833	0.30	47	0.16	0.00
L50	17.0833 - 16.8333	0.28	47	0.16	0.00
L51	16.8333 - 13	0.27	47	0.15	0.00
L52	13 - 12.75	0.16	47	0.12	0.00
L53	12.75 - 11.8333	0.15	47	0.11	0.00
L54	11.8333 - 11.5833	0.13	47	0.11	0.00
L55	11.5833 - 6.4833	0.13	47	0.10	0.00
L56	6.4833 - 6.25	0.04	47	0.06	0.00
L57	6.25 - 1.25	0.04	47	0.06	0.00
L58	1.25 - 0	0.00	47	0.01	0.00

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
121.0000	800 10121 w/ Mount Pipe	47	17.60	1.44	0.00	33523
107.0000	BXA-80063/4CF	47	13.48	1.34	0.00	5055
101.0000	VHLP2.5-11	47	11.84	1.26	0.00	3389
99.0000	800MHz 2X50W RRH W/FILTER	47	11.32	1.22	0.00	3282
97.0000	TIMING 2000	47	10.82	1.18	0.00	3389
87.0000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	47	8.48	1.06	0.00	5202

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	131 - 126	96.49	18	6.77	0.01
L2	126 - 121	89.43	18	6.77	0.01
L3	121 - 116	82.37	18	6.76	0.01
L4	116 - 111	75.35	18	6.68	0.01
L5	111 - 110	68.48	18	6.49	0.02
L6	110 - 105	67.13	18	6.44	0.02
L7	105 - 100	60.52	18	6.20	0.02

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L8	100 - 95	54.24	18	5.83	0.02
L9	95 - 89.9	48.37	18	5.39	0.01
L10	89.9 - 89.6667	42.78	18	5.10	0.01
L11	89.6667 - 84.5667	42.53	18	5.09	0.01
L12	84.5667 - 84.3333	37.24	18	4.83	0.01
L13	84.3333 - 82.9167	37.00	18	4.82	0.01
L14	82.9167 - 82.6667	35.59	18	4.74	0.01
L15	82.6667 - 80.9792	35.34	18	4.72	0.01
L16	80.9792 - 80.7292	33.70	18	4.58	0.01
L17	80.7292 - 75.7292	33.46	18	4.56	0.01
L18	75.7292 - 70	28.94	18	4.09	0.01
L19	74 - 69	27.49	18	3.93	0.01
L20	69 - 66.9833	23.50	18	3.66	0.01
L21	66.9833 - 66.7333	21.99	18	3.47	0.01
L22	66.7333 - 64.0833	21.81	18	3.45	0.01
L23	64.0833 - 63.8333	19.97	18	3.21	0.00
L24	63.8333 - 62.4167	19.80	18	3.19	0.00
L25	62.4167 - 62.1667	18.87	18	3.09	0.00
L26	62.1667 - 59.4583	18.71	18	3.08	0.00
L27	59.4583 - 59.2083	17.01	18	2.90	0.00
L28	59.2083 - 56	16.86	18	2.89	0.00
L29	56 - 55.75	14.98	18	2.71	0.00
L30	55.75 - 50.75	14.84	18	2.69	0.00
L31	50.75 - 45.75	12.16	18	2.42	0.00
L32	45.75 - 44.4833	9.78	18	2.14	0.00
L33	44.4833 - 44.2333	9.22	18	2.07	0.00
L34	44.2333 - 44.0833	9.11	18	2.06	0.00
L35	44.0833 - 39.0833	9.05	18	2.05	0.00
L36	39.0833 - 34.08	7.06	18	1.74	0.00
L37	39 - 34	7.03	18	1.74	0.00
L38	34 - 31.4583	5.29	18	1.58	0.00
L39	31.4583 - 31.2083	4.49	18	1.43	0.00
L40	31.2083 - 29.4583	4.41	18	1.42	0.00
L41	29.4583 - 29.2083	3.91	18	1.31	0.00
L42	29.2083 - 26.8333	3.84	18	1.30	0.00
L43	26.8333 - 26.5833	3.23	18	1.16	0.00
L44	26.5833 - 21.5833	3.17	18	1.15	0.00
L45	21.5833 - 20.75	2.08	18	0.93	0.00
L46	20.75 - 20.5	1.92	18	0.90	0.00
L47	20.5 - 18	1.88	18	0.88	0.00
L48	18 - 17.75	1.44	18	0.78	0.00
L49	17.75 - 17.0833	1.40	18	0.77	0.00
L50	17.0833 - 16.8333	1.29	18	0.74	0.00
L51	16.8333 - 13	1.26	18	0.73	0.00
L52	13 - 12.75	0.75	18	0.55	0.00
L53	12.75 - 11.8333	0.72	18	0.54	0.00
L54	11.8333 - 11.5833	0.62	18	0.50	0.00
L55	11.5833 - 6.4833	0.59	18	0.49	0.00
L56	6.4833 - 6.25	0.18	18	0.27	0.00
L57	6.25 - 1.25	0.17	18	0.26	0.00
L58	1.25 - 0	0.01	18	0.05	0.00

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
121.0000	800 10121 w/ Mount Pipe	18	82.37	6.76	0.01	8065
107.0000	BXA-80063/4CF	18	63.14	6.30	0.02	1118
101.0000	VHLP2.5-11	18	55.46	5.92	0.02	744
99.0000	800MHz 2X50W RRH W/FILTER	18	53.03	5.74	0.02	718
97.0000	TIMING 2000	18	50.67	5.55	0.02	738
87.0000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	18	39.73	4.95	0.01	1130

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 $\frac{P_u}{\phi P_n}$
L1	131 - 126 (1)	TP11.7155x10.525x0.1875	5.0000	0.0000	0.0	6.9600	-0.10	513.02	0.000
L2	126 - 121 (2)	TP12.906x11.7155x0.1875	5.0000	0.0000	0.0	7.6788	-0.22	566.00	0.000
L3	121 - 116 (3)	TP14.0964x12.906x0.1875	5.0000	0.0000	0.0	8.3975	-1.80	618.98	0.003
L4	116 - 111 (4)	TP15.2869x14.0964x0.1875	5.0000	0.0000	0.0	9.1163	-1.97	671.96	0.003
L5	111 - 110 (5)	TP15.525x15.2869x0.1875	1.0000	0.0000	0.0	9.2600	-2.01	682.56	0.003
L6	110 - 105 (6)	TP16.7758x15.525x0.25	5.0000	0.0000	0.0	13.3032	-4.64	980.58	0.005
L7	105 - 100 (7)	TP18.0265x16.7758x0.25	5.0000	0.0000	0.0	14.3101	-5.13	1054.80	0.005
L8	100 - 95 (8)	TP19.2773x18.0265x0.25	5.0000	0.0000	0.0	15.3169	-8.95	1129.01	0.008
L9	95 - 89.9 (9)	TP20.553x19.2773x0.5	5.1000	0.0000	0.0	32.2854	-9.77	2379.75	0.004
L10	89.9 - 89.6667 (10)	TP20.6114x20.553x0.5	0.2333	0.0000	0.0	32.3793	-9.81	2386.68	0.004
L11	89.6667 - 84.5667 (11)	TP21.8871x20.6114x0.6375	5.1000	0.0000	0.0	43.6202	-12.91	3215.24	0.004
L12	84.5667 - 84.3333 (12)	TP21.9455x21.8871x0.6375	0.2334	0.0000	0.0	43.7400	-12.97	3224.08	0.004
L13	84.3333 - 82.9167 (13)	TP22.2999x21.9455x0.625	1.4166	0.0000	0.0	43.6207	-13.27	3215.28	0.004
L14	82.9167 - 82.6667 (14)	TP22.3624x22.2999x0.3938	0.2500	0.0000	0.0	27.8535	-13.33	2053.08	0.006
L15	82.6667 - 80.9792 (15)	TP22.7846x22.3624x0.3875	1.6875	0.0000	0.0	27.9459	-13.61	2059.89	0.007
L16	80.9792 - 80.7292 (16)	TP22.8471x22.7846x0.3875	0.2500	0.0000	0.0	28.0240	-13.68	2065.65	0.007
L17	80.7292 - 75.7292 (17)	TP24.0978x22.8471x0.3813	5.0000	0.0000	0.0	29.1151	-14.61	2146.07	0.007
L18	75.7292 - 70 (18)	TP25.531x24.0978x0.3813	5.7292	0.0000	0.0	29.6461	-14.94	2185.21	0.007
L19	70 - 69 (19)	TP25.281x24.0304x0.4375	5.0000	0.0000	0.0	34.9982	-16.43	2579.72	0.006
L20	69 - 66.9833 (20)	TP25.7854x25.281x0.4375	2.0167	0.0000	0.0	35.7088	-16.87	2632.10	0.006
L21	66.9833 - 66.7333 (21)	TP25.8479x25.7854x0.4375	0.2500	0.0000	0.0	35.7969	-16.94	2638.59	0.006
L22	66.7333 - 64.0833 (22)	TP26.5107x25.8479x0.4313	2.6500	0.0000	0.0	36.2146	-17.52	2669.38	0.007
L23	64.0833 - 63.8333 (23)	TP26.5732x26.5107x0.575	0.2500	0.0000	0.0	48.1358	-17.60	3548.09	0.005
L24	63.8333 - 62.4167 (24)	TP26.9276x26.5732x0.5625	1.4166	0.0000	0.0	47.7537	-17.95	3519.93	0.005
L25	62.4167 -	TP26.9901x26.9276x0.6125	0.2500	0.0000	0.0	52.0232	-18.03	3834.63	0.005

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
	62.1667 (25)								
L26	62.1667 - 59.4583 (26)	TP27.6675x26.9901x0.6125	2.7084	0.0000	0.0	53.3592	-18.76	3933.11	0.005
L27	59.4583 - 59.2083 (27)	TP27.73x27.6675x0.725	0.2500	0.0000	0.0	63.0432	-18.85	4646.92	0.004
L28	59.2083 - 56 (28)	TP28.5325x27.73x0.7125	3.2083	0.0000	0.0	63.8260	-19.83	4704.61	0.004
L29	56 - 55.75 (29)	TP28.595x28.5325x0.7375	0.2500	0.0000	0.0	66.1546	-19.92	4876.26	0.004
L30	55.75 - 50.75 (30)	TP29.8456x28.595x0.7125	5.0000	0.0000	0.0	66.8386	-21.54	4926.67	0.004
L31	50.75 - 45.75 (31)	TP31.0962x29.8456x0.7	5.0000	0.0000	0.0	68.5129	-23.20	5050.09	0.005
L32	45.75 - 44.4833 (32)	TP31.413x31.0962x0.6875	1.2667	0.0000	0.0	68.0185	-23.63	5013.65	0.005
L33	44.4833 - 44.2333 (33)	TP31.4755x31.413x0.6125	0.2500	0.0000	0.0	60.8696	-23.72	4486.70	0.005
L34	44.2333 - 44.0833 (34)	TP31.513x31.4755x0.6125	0.1500	0.0000	0.0	60.9436	-23.77	4492.15	0.005
L35	44.0833 - 39.0833 (35)	TP32.7636x31.513x0.6	5.0000	0.0000	0.0	62.1401	-25.33	4580.34	0.006
L36	39.0833 - 34.08 (36)	TP34.015x32.7636x0.6	5.0033	0.0000	0.0	62.1803	-25.38	4583.31	0.006
L37	34.08 - 34 (37)	TP33.4082x32.1594x0.6313	5.0000	0.0000	0.0	66.6285	-28.18	4911.18	0.006
L38	34 - 31.4583 (38)	TP34.043x33.4082x0.6188	2.5417	0.0000	0.0	66.5990	-29.02	4909.01	0.006
L39	31.4583 - 31.2083 (39)	TP34.1055x34.043x0.6188	0.2500	0.0000	0.0	66.7234	-29.12	4918.18	0.006
L40	31.2083 - 29.4583 (40)	TP34.5426x34.1055x0.6188	1.7500	0.0000	0.0	67.5943	-29.69	4982.38	0.006
L41	29.4583 - 29.2083 (41)	TP34.605x34.5426x0.6188	0.2500	0.0000	0.0	67.7187	-29.80	4991.55	0.006
L42	29.2083 - 26.8333 (42)	TP35.1982x34.605x0.6188	2.3750	0.0000	0.0	68.9006	-30.61	5078.67	0.006
L43	26.8333 - 26.5833 (43)	TP35.2606x35.1982x0.8438	0.2500	0.0000	0.0	93.5117	-30.73	6892.75	0.004
L44	26.5833 - 21.5833 (44)	TP36.5094x35.2606x0.8188	5.0000	0.0000	0.0	94.0995	-32.84	6936.08	0.005
L45	21.5833 - 20.75 (45)	TP36.7175x36.5094x0.8188	0.8333	0.0000	0.0	94.6483	-33.20	6976.52	0.005
L46	20.75 - 20.5 (46)	TP36.78x36.7175x0.8188	0.2500	0.0000	0.0	94.8129	-33.32	6988.66	0.005
L47	20.5 - 18 (47)	TP37.4044x36.78x0.8063	2.5000	0.0000	0.0	95.0190	-34.44	7003.85	0.005
L48	18 - 17.75 (48)	TP37.4668x37.4044x0.8188	0.2500	0.0000	0.0	96.6238	-34.56	7122.14	0.005
L49	17.75 - 17.0833 (49)	TP37.6333x37.4668x0.8188	0.6667	0.0000	0.0	97.0628	-34.86	7154.50	0.005
L50	17.0833 - 16.8333 (50)	TP37.6957x37.6333x0.7313	0.2500	0.0000	0.0	87.0433	-34.96	6415.97	0.005
L51	16.8333 - 13 (51)	TP38.6531x37.6957x0.7188	3.8333	0.0000	0.0	87.8004	-36.55	6471.77	0.006
L52	13 - 12.75 (52)	TP38.7156x38.6531x0.8938	0.2500	0.0000	0.0	108.6730	-36.57	8010.27	0.005
L53	12.75 - 11.8333 (53)	TP38.9445x38.7156x0.8938	0.9167	0.0000	0.0	108.8520	-36.70	8023.51	0.005
L54	11.8333 - 11.5833 (54)	TP39.007x38.9445x0.6688	0.2500	0.0000	0.0	82.5626	-37.24	6085.69	0.006
L55	11.5833 - 6.4833 (55)	TP40.2807x39.007x0.7563	5.1000	0.0000	0.0	93.1513	-37.26	6866.19	0.005
L56	6.4833 - 6.25 (56)	TP40.339x40.2807x0.7563	0.2333	0.0000	0.0	96.2533	-39.56	7094.83	0.006
L57	6.25 - 1.25 (57)	TP41.5878x40.339x0.7438	5.0000	0.0000	0.0	94.8320	-39.68	6990.06	0.006

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
L58	1.25 - 0 (58)	TP41.9x41.5878x0.7313	1.2500	0.0000	0.0	96.2083	-41.99	7091.52	0.006

Pole Bending Design Data

Section No.	Elevation	Size	M_{ux}	ϕM_{nx}	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy}	ϕM_{ny}	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	ft		kip-ft	kip-ft		kip-ft	kip-ft	
L1	131 - 126 (1)	TP11.7155x10.525x0.1875	0.67	119.50	0.006	0.00	119.50	0.000
L2	126 - 121 (2)	TP12.906x11.7155x0.1875	2.76	145.67	0.019	0.00	145.67	0.000
L3	121 - 116 (3)	TP14.0964x12.906x0.1875	21.04	174.43	0.121	0.00	174.43	0.000
L4	116 - 111 (4)	TP15.2869x14.0964x0.1875	44.84	205.79	0.218	0.00	205.79	0.000
L5	111 - 110 (5)	TP15.525x15.2869x0.1875	49.95	212.37	0.235	0.00	212.37	0.000
L6	110 - 105 (6)	TP16.7758x15.525x0.25	103.78	327.79	0.317	0.00	327.79	0.000
L7	105 - 100 (7)	TP18.0265x16.7758x0.25	164.58	379.69	0.433	0.00	379.69	0.000
L8	100 - 95 (8)	TP19.2773x18.0265x0.25	246.28	435.39	0.566	0.00	435.39	0.000
L9	95 - 89.9 (9)	TP20.553x19.2773x0.5	347.93	956.08	0.364	0.00	956.08	0.000
L10	89.9 - 89.6667 (10)	TP20.6114x20.553x0.5	352.67	961.72	0.367	0.00	961.72	0.000
L11	89.6667 - 84.5667 (11)	TP21.8871x20.6114x0.6375	467.43	1362.08	0.343	0.00	1362.08	0.000
L12	84.5667 - 84.3333 (12)	TP21.9455x21.8871x0.6375	473.24	1369.68	0.346	0.00	1369.68	0.000
L13	84.3333 - 82.9167 (13)	TP22.2999x21.9455x0.625	508.65	1390.93	0.366	0.00	1390.93	0.000
L14	82.9167 - 82.6667 (14)	TP22.3624x22.2999x0.3938	514.93	909.85	0.566	0.00	909.85	0.000
L15	82.6667 - 80.9792 (15)	TP22.7846x22.3624x0.3875	557.54	931.24	0.599	0.00	931.24	0.000
L16	80.9792 - 80.7292 (16)	TP22.8471x22.7846x0.3875	563.89	936.49	0.602	0.00	936.49	0.000
L17	80.7292 - 75.7292 (17)	TP24.0978x22.8471x0.3813	692.67	1028.60	0.673	0.00	1028.60	0.000
L18	75.7292 - 70 (18)	TP25.531x24.0978x0.3813	738.03	1066.77	0.692	0.00	1066.77	0.000
L19	70 - 69 (19)	TP25.281x24.0304x0.4375	871.79	1293.24	0.674	0.00	1293.24	0.000
L20	69 - 66.9833 (20)	TP25.7854x25.281x0.4375	926.75	1346.75	0.688	0.00	1346.75	0.000
L21	66.9833 - 66.7333 (21)	TP25.8479x25.7854x0.4375	933.61	1353.46	0.690	0.00	1353.46	0.000
L22	66.7333 - 64.0833 (22)	TP26.5107x25.8479x0.4313	1006.80	1406.24	0.716	0.00	1406.24	0.000
L23	64.0833 - 63.8333 (23)	TP26.5732x26.5107x0.575	1013.76	1853.16	0.547	0.00	1853.16	0.000
L24	63.8333 - 62.4167 (24)	TP26.9276x26.5732x0.5625	1053.37	1865.82	0.565	0.00	1865.82	0.000
L25	62.4167 - 62.1667 (25)	TP26.9901x26.9276x0.6125	1060.38	2029.85	0.522	0.00	2029.85	0.000
L26	62.1667 - 59.4583 (26)	TP27.6675x26.9901x0.6125	1137.07	2136.67	0.532	0.00	2136.67	0.000
L27	59.4583 - 59.2083 (27)	TP27.73x27.6675x0.725	1144.21	2509.45	0.456	0.00	2509.45	0.000
L28	59.2083 - 56 (28)	TP28.5325x27.73x0.7125	1236.69	2620.43	0.472	0.00	2620.43	0.000
L29	56 - 55.75 (29)	TP28.595x28.5325x0.7375	1243.97	2717.42	0.458	0.00	2717.42	0.000
L30	55.75 - 50.75 (30)	TP29.8456x28.595x0.7125	1391.68	2876.88	0.484	0.00	2876.88	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 $\frac{M_{uy}}{\phi M_{ny}}$
L31	50.75 - 45.75 (31)	TP31.0962x29.8456x0.7	1543.49	3081.09	0.501	0.00	3081.09	0.000
L32	45.75 - 44.4833 (32)	TP31.413x31.0962x0.6875	1582.58	3093.97	0.512	0.00	3093.97	0.000
L33	44.4833 - 44.2333 (33)	TP31.4755x31.413x0.6125	1590.31	2788.08	0.570	0.00	2788.08	0.000
L34	44.2333 - 44.0833 (34)	TP31.513x31.4755x0.6125	1594.96	2794.93	0.571	0.00	2794.93	0.000
L35	44.0833 - 39.0833 (35)	TP32.7636x31.513x0.6	1751.43	2969.69	0.590	0.00	2969.69	0.000
L36	39.0833 - 34.08 (36)	TP34.015x32.7636x0.6	1754.07	2973.57	0.590	0.00	2973.57	0.000
L37	34.08 - 34 (37)	TP33.4082x32.1594x0.6313	1913.95	3242.98	0.590	0.00	3242.98	0.000
L38	34 - 31.4583 (38)	TP34.043x33.4082x0.6188	1996.51	3307.98	0.604	0.00	3307.98	0.000
L39	31.4583 - 31.2083 (39)	TP34.1055x34.043x0.6188	2004.68	3320.47	0.604	0.00	3320.47	0.000
L40	31.2083 - 29.4583 (40)	TP34.5426x34.1055x0.6188	2062.01	3408.51	0.605	0.00	3408.51	0.000
L41	29.4583 - 29.2083 (41)	TP34.605x34.5426x0.6188	2070.22	3421.18	0.605	0.00	3421.18	0.000
L42	29.2083 - 26.8333 (42)	TP35.1982x34.605x0.6188	2148.68	3542.73	0.607	0.00	3542.73	0.000
L43	26.8333 - 26.5833 (43)	TP35.2606x35.1982x0.8438	2156.97	4754.65	0.454	0.00	4754.65	0.000
L44	26.5833 - 21.5833 (44)	TP36.5094x35.2606x0.8188	2324.52	4969.26	0.468	0.00	4969.26	0.000
L45	21.5833 - 20.75 (45)	TP36.7175x36.5094x0.8188	2352.73	5028.04	0.468	0.00	5028.04	0.000
L46	20.75 - 20.5 (46)	TP36.78x36.7175x0.8188	2361.22	5045.74	0.468	0.00	5045.74	0.000
L47	20.5 - 18 (47)	TP37.4044x36.78x0.8063	2446.46	5149.98	0.475	0.00	5149.98	0.000
L48	18 - 17.75 (48)	TP37.4668x37.4044x0.8188	2455.03	5242.51	0.468	0.00	5242.51	0.000
L49	17.75 - 17.0833 (49)	TP37.6333x37.4668x0.8188	2477.91	5290.77	0.468	0.00	5290.77	0.000
L50	17.0833 - 16.8333 (50)	TP37.6957x37.6333x0.7313	2486.50	4775.43	0.521	0.00	4775.43	0.000
L51	16.8333 - 13 (51)	TP38.6531x37.6957x0.7188	2619.11	4947.42	0.529	0.00	4947.42	0.000
L52	13 - 12.75 (52)	TP38.7156x38.6531x0.8938	2619.11	6067.17	0.432	0.00	6067.17	0.000
L53	12.75 - 11.8333 (53)	TP38.9445x38.7156x0.8938	2627.81	6087.48	0.432	0.00	6087.48	0.000
L54	11.8333 - 11.5833 (54)	TP39.007x38.9445x0.6688	2668.53	4708.75	0.567	0.00	4708.75	0.000
L55	11.5833 - 6.4833 (55)	TP40.2807x39.007x0.7563	2668.53	5288.43	0.505	0.00	5288.43	0.000
L56	6.4833 - 6.25 (56)	TP40.339x40.2807x0.7563	2848.37	5650.03	0.504	0.00	5650.03	0.000
L57	6.25 - 1.25 (57)	TP41.5878x40.339x0.7438	2856.67	5578.48	0.512	0.00	5578.48	0.000
L58	1.25 - 0 (58)	TP41.9x41.5878x0.7313	3036.00	5844.81	0.519	0.00	5844.81	0.000

Pole Shear Design Data

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 $\frac{T_u}{\phi T_n}$

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	131 - 126 (1)	TP11.7155x10.525x0.1875	0.27	256.51	0.001	0.00	242.30	0.000
L2	126 - 121 (2)	TP12.906x11.7155x0.1875	0.57	283.00	0.002	0.00	295.37	0.000
L3	121 - 116 (3)	TP14.0964x12.906x0.1875	4.48	309.49	0.014	0.23	353.70	0.001
L4	116 - 111 (4)	TP15.2869x14.0964x0.1875	5.05	335.98	0.015	0.12	417.27	0.000
L5	111 - 110 (5)	TP15.525x15.2869x0.1875	5.17	341.28	0.015	0.10	430.62	0.000
L6	110 - 105 (6)	TP16.7758x15.525x0.25	11.77	490.29	0.024	0.03	664.66	0.000
L7	105 - 100 (7)	TP18.0265x16.7758x0.25	12.94	527.40	0.025	1.03	769.88	0.001
L8	100 - 95 (8)	TP19.2773x18.0265x0.25	19.59	564.51	0.035	0.90	882.84	0.001
L9	95 - 89.9 (9)	TP20.553x19.2773x0.5	20.30	1189.88	0.017	0.97	1938.62	0.000
L10	89.9 - 89.6667 (10)	TP20.6114x20.553x0.5	20.34	1193.34	0.017	0.97	1950.05	0.000
L11	89.6667 - 84.5667 (11)	TP21.8871x20.6114x0.6375	24.86	1607.62	0.015	1.00	2761.88	0.000
L12	84.5667 - 84.3333 (12)	TP21.9455x21.8871x0.6375	24.90	1612.04	0.015	1.00	2777.29	0.000
L13	84.3333 - 82.9167 (13)	TP22.2999x21.9455x0.625	25.11	1607.64	0.016	1.00	2820.38	0.000
L14	82.9167 - 82.6667 (14)	TP22.3624x22.2999x0.3938	25.14	1026.54	0.024	1.00	1844.89	0.001
L15	82.6667 - 80.9792 (15)	TP22.7846x22.3624x0.3875	25.38	1029.95	0.025	1.01	1888.26	0.001
L16	80.9792 - 80.7292 (16)	TP22.8471x22.7846x0.3875	25.41	1032.82	0.025	1.01	1898.91	0.001
L17	80.7292 - 75.7292 (17)	TP24.0978x22.8471x0.3813	26.12	1073.04	0.024	1.03	2085.68	0.000
L18	75.7292 - 70 (18)	TP25.531x24.0978x0.3813	26.37	1092.61	0.024	1.04	2163.07	0.000
L19	70 - 69 (19)	TP25.281x24.0304x0.4375	27.12	1289.86	0.021	1.05	2622.28	0.000
L20	69 - 66.9833 (20)	TP25.7854x25.281x0.4375	27.40	1316.05	0.021	1.06	2730.78	0.000
L21	66.9833 - 66.7333 (21)	TP25.8479x25.7854x0.4375	27.44	1319.30	0.021	1.06	2744.39	0.000
L22	66.7333 - 64.0833 (22)	TP26.5107x25.8479x0.4313	27.82	1334.69	0.021	1.07	2851.43	0.000
L23	64.0833 - 63.8333 (23)	TP26.5732x26.5107x0.575	27.85	1774.04	0.016	1.07	3757.63	0.000
L24	63.8333 - 62.4167 (24)	TP26.9276x26.5732x0.5625	28.07	1759.96	0.016	1.08	3783.29	0.000
L25	62.4167 - 62.1667 (25)	TP26.9901x26.9276x0.6125	28.10	1917.32	0.015	1.08	4115.91	0.000
L26	62.1667 - 59.4583 (26)	TP27.6675x26.9901x0.6125	28.53	1966.55	0.015	1.09	4332.48	0.000
L27	59.4583 - 59.2083 (27)	TP27.73x27.6675x0.725	28.57	2323.46	0.012	1.09	5088.38	0.000
L28	59.2083 - 56 (28)	TP28.5325x27.73x0.7125	29.10	2352.31	0.012	1.10	5313.42	0.000
L29	56 - 55.75 (29)	TP28.595x28.5325x0.7375	29.13	2438.13	0.012	1.10	5510.07	0.000
L30	55.75 - 50.75 (30)	TP29.8456x28.595x0.7125	29.96	2463.34	0.012	1.12	5833.41	0.000
L31	50.75 - 45.75 (31)	TP31.0962x29.8456x0.7	30.78	2525.04	0.012	1.13	6247.49	0.000
L32	45.75 - 44.4833 (32)	TP31.413x31.0962x0.6875	30.94	2506.82	0.012	1.13	6273.62	0.000
L33	44.4833 - 44.2333 (33)	TP31.4755x31.413x0.6125	30.97	2243.35	0.014	1.13	5653.36	0.000
L34	44.2333 - 44.0833 (34)	TP31.513x31.4755x0.6125	30.99	2246.07	0.014	1.13	5667.24	0.000
L35	44.0833 - 39.0833 (35)	TP32.7636x31.513x0.6	31.61	2290.17	0.014	1.13	6021.60	0.000
L36	39.0833 -	TP34.015x32.7636x0.6	31.63	2291.66	0.014	1.13	6029.47	0.000

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
	34.08 (36)							
L37	34.08 - 34 (37)	TP33.4082x32.1594x0.6313	32.34	2455.59	0.013	1.13	6575.75	0.000
L38	34 - 31.4583 (38)	TP34.043x33.4082x0.6188	32.64	2454.51	0.013	1.13	6707.57	0.000
L39	31.4583 - 31.2083 (39)	TP34.1055x34.043x0.6188	32.66	2459.09	0.013	1.13	6732.87	0.000
L40	31.2083 - 29.4583 (40)	TP34.5426x34.1055x0.6188	32.88	2491.19	0.013	1.13	6911.40	0.000
L41	29.4583 - 29.2083 (41)	TP34.605x34.5426x0.6188	32.89	2495.77	0.013	1.13	6937.09	0.000
L42	29.2083 - 26.8333 (42)	TP35.1982x34.605x0.6188	33.18	2539.33	0.013	1.13	7183.56	0.000
L43	26.8333 - 26.5833 (43)	TP35.2606x35.1982x0.8438	33.20	3446.37	0.010	1.13	9640.92	0.000
L44	26.5833 - 21.5833 (44)	TP36.5094x35.2606x0.8188	33.82	3468.04	0.010	1.13	10076.08	0.000
L45	21.5833 - 20.75 (45)	TP36.7175x36.5094x0.8188	33.92	3488.26	0.010	1.13	10195.33	0.000
L46	20.75 - 20.5 (46)	TP36.78x36.7175x0.8188	33.94	3494.33	0.010	1.13	10231.17	0.000
L47	20.5 - 18 (47)	TP37.4044x36.78x0.8063	34.25	3501.93	0.010	1.13	10442.58	0.000
L48	18 - 17.75 (48)	TP37.4668x37.4044x0.8188	34.27	3561.07	0.010	1.13	10630.17	0.000
L49	17.75 - 17.0833 (49)	TP37.6333x37.4668x0.8188	34.35	3577.25	0.010	1.13	10728.08	0.000
L50	17.0833 - 16.8333 (50)	TP37.6957x37.6333x0.7313	34.38	3207.98	0.011	1.13	9683.08	0.000
L51	16.8333 - 13 (51)	TP38.6531x37.6957x0.7188	34.82	3235.88	0.011	1.13	10031.83	0.000
L52	13 - 12.75 (52)	TP38.7156x38.6531x0.8938	34.83	4011.76	0.009	1.13	12302.33	0.000
L53	12.75 - 11.8333 (53)	TP38.9445x38.7156x0.8938	34.95	4036.04	0.009	1.13	12343.50	0.000
L54	11.8333 - 11.5833 (54)	TP39.007x38.9445x0.6688	34.97	3042.85	0.011	1.13	9547.83	0.000
L55	11.5833 - 6.4833 (55)	TP40.2807x39.007x0.7563	35.09	3455.96	0.010	1.13	10723.25	0.000
L56	6.4833 - 6.25 (56)	TP40.339x40.2807x0.7563	35.57	3552.65	0.010	1.13	11456.50	0.000
L57	6.25 - 1.25 (57)	TP41.5878x40.339x0.7438	35.70	3517.08	0.010	1.13	11311.42	0.000
L58	1.25 - 0 (58)	TP41.9x41.5878x0.7313	36.31	3572.85	0.010	1.13	11851.42	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	131 - 126 (1)	0.000	0.006	0.000	0.001	0.000	0.006 ✔	1.000	4.8.2 ✔
L2	126 - 121 (2)	0.000	0.019	0.000	0.002	0.000	0.019 ✔	1.000	4.8.2 ✔
L3	121 - 116 (3)	0.003	0.121	0.000	0.014	0.001	0.124 ✔	1.000	4.8.2 ✔
L4	116 - 111 (4)	0.003	0.218	0.000	0.015	0.000	0.221 ✔	1.000	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L5	111 - 110 (5)	0.003	0.235	0.000	0.015	0.000	0.238 ✔	1.000	4.8.2 ✔
L6	110 - 105 (6)	0.005	0.317	0.000	0.024	0.000	0.322 ✔	1.000	4.8.2 ✔
L7	105 - 100 (7)	0.005	0.433	0.000	0.025	0.001	0.439 ✔	1.000	4.8.2 ✔
L8	100 - 95 (8)	0.008	0.566	0.000	0.035	0.001	0.575 ✔	1.000	4.8.2 ✔
L9	95 - 89.9 (9)	0.004	0.364	0.000	0.017	0.000	0.368 ✔	1.000	4.8.2 ✔
L10	89.9 - 89.6667 (10)	0.004	0.367	0.000	0.017	0.000	0.371 ✔	1.000	4.8.2 ✔
L11	89.6667 - 84.5667 (11)	0.004	0.343	0.000	0.015	0.000	0.347 ✔	1.000	4.8.2 ✔
L12	84.5667 - 84.3333 (12)	0.004	0.346	0.000	0.015	0.000	0.350 ✔	1.000	4.8.2 ✔
L13	84.3333 - 82.9167 (13)	0.004	0.366	0.000	0.016	0.000	0.370 ✔	1.000	4.8.2 ✔
L14	82.9167 - 82.6667 (14)	0.006	0.566	0.000	0.024	0.001	0.573 ✔	1.000	4.8.2 ✔
L15	82.6667 - 80.9792 (15)	0.007	0.599	0.000	0.025	0.001	0.606 ✔	1.000	4.8.2 ✔
L16	80.9792 - 80.7292 (16)	0.007	0.602	0.000	0.025	0.001	0.609 ✔	1.000	4.8.2 ✔
L17	80.7292 - 75.7292 (17)	0.007	0.673	0.000	0.024	0.000	0.681 ✔	1.000	4.8.2 ✔
L18	75.7292 - 70 (18)	0.007	0.692	0.000	0.024	0.000	0.699 ✔	1.000	4.8.2 ✔
L19	70 - 69 (19)	0.006	0.674	0.000	0.021	0.000	0.681 ✔	1.000	4.8.2 ✔
L20	69 - 66.9833 (20)	0.006	0.688	0.000	0.021	0.000	0.695 ✔	1.000	4.8.2 ✔
L21	66.9833 - 66.7333 (21)	0.006	0.690	0.000	0.021	0.000	0.697 ✔	1.000	4.8.2 ✔
L22	66.7333 - 64.0833 (22)	0.007	0.716	0.000	0.021	0.000	0.723 ✔	1.000	4.8.2 ✔
L23	64.0833 - 63.8333 (23)	0.005	0.547	0.000	0.016	0.000	0.552 ✔	1.000	4.8.2 ✔
L24	63.8333 - 62.4167 (24)	0.005	0.565	0.000	0.016	0.000	0.570 ✔	1.000	4.8.2 ✔
L25	62.4167 - 62.1667 (25)	0.005	0.522	0.000	0.015	0.000	0.527 ✔	1.000	4.8.2 ✔
L26	62.1667 - 59.4583 (26)	0.005	0.532	0.000	0.015	0.000	0.537 ✔	1.000	4.8.2 ✔
L27	59.4583 - 59.2083 (27)	0.004	0.456	0.000	0.012	0.000	0.460 ✔	1.000	4.8.2 ✔
L28	59.2083 - 56 (28)	0.004	0.472	0.000	0.012	0.000	0.476 ✔	1.000	4.8.2 ✔
L29	56 - 55.75 (29)	0.004	0.458	0.000	0.012	0.000	0.462 ✔	1.000	4.8.2 ✔
L30	55.75 - 50.75 (30)	0.004	0.484	0.000	0.012	0.000	0.488 ✔	1.000	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L31	50.75 - 45.75 (31)	0.005	0.501	0.000	0.012	0.000	0.506 ✔	1.000	4.8.2 ✔
L32	45.75 - 44.4833 (32)	0.005	0.512	0.000	0.012	0.000	0.516 ✔	1.000	4.8.2 ✔
L33	44.4833 - 44.2333 (33)	0.005	0.570	0.000	0.014	0.000	0.576 ✔	1.000	4.8.2 ✔
L34	44.2333 - 44.0833 (34)	0.005	0.571	0.000	0.014	0.000	0.576 ✔	1.000	4.8.2 ✔
L35	44.0833 - 39.0833 (35)	0.006	0.590	0.000	0.014	0.000	0.595 ✔	1.000	4.8.2 ✔
L36	39.0833 - 34.08 (36)	0.006	0.590	0.000	0.014	0.000	0.596 ✔	1.000	4.8.2 ✔
L37	34.08 - 34 (37)	0.006	0.590	0.000	0.013	0.000	0.596 ✔	1.000	4.8.2 ✔
L38	34 - 31.4583 (38)	0.006	0.604	0.000	0.013	0.000	0.610 ✔	1.000	4.8.2 ✔
L39	31.4583 - 31.2083 (39)	0.006	0.604	0.000	0.013	0.000	0.610 ✔	1.000	4.8.2 ✔
L40	31.2083 - 29.4583 (40)	0.006	0.605	0.000	0.013	0.000	0.611 ✔	1.000	4.8.2 ✔
L41	29.4583 - 29.2083 (41)	0.006	0.605	0.000	0.013	0.000	0.611 ✔	1.000	4.8.2 ✔
L42	29.2083 - 26.8333 (42)	0.006	0.607	0.000	0.013	0.000	0.613 ✔	1.000	4.8.2 ✔
L43	26.8333 - 26.5833 (43)	0.004	0.454	0.000	0.010	0.000	0.458 ✔	1.000	4.8.2 ✔
L44	26.5833 - 21.5833 (44)	0.005	0.468	0.000	0.010	0.000	0.473 ✔	1.000	4.8.2 ✔
L45	21.5833 - 20.75 (45)	0.005	0.468	0.000	0.010	0.000	0.473 ✔	1.000	4.8.2 ✔
L46	20.75 - 20.5 (46)	0.005	0.468	0.000	0.010	0.000	0.473 ✔	1.000	4.8.2 ✔
L47	20.5 - 18 (47)	0.005	0.475	0.000	0.010	0.000	0.480 ✔	1.000	4.8.2 ✔
L48	18 - 17.75 (48)	0.005	0.468	0.000	0.010	0.000	0.473 ✔	1.000	4.8.2 ✔
L49	17.75 - 17.0833 (49)	0.005	0.468	0.000	0.010	0.000	0.473 ✔	1.000	4.8.2 ✔
L50	17.0833 - 16.8333 (50)	0.005	0.521	0.000	0.011	0.000	0.526 ✔	1.000	4.8.2 ✔
L51	16.8333 - 13 (51)	0.006	0.529	0.000	0.011	0.000	0.535 ✔	1.000	4.8.2 ✔
L52	13 - 12.75 (52)	0.005	0.432	0.000	0.009	0.000	0.436 ✔	1.000	4.8.2 ✔
L53	12.75 - 11.8333 (53)	0.005	0.432	0.000	0.009	0.000	0.436 ✔	1.000	4.8.2 ✔
L54	11.8333 - 11.5833 (54)	0.006	0.567	0.000	0.011	0.000	0.573 ✔	1.000	4.8.2 ✔
L55	11.5833 - 6.4833 (55)	0.005	0.505	0.000	0.010	0.000	0.510 ✔	1.000	4.8.2 ✔
L56	6.4833 - 6.25 (56)	0.006	0.504	0.000	0.010	0.000	0.510 ✔	1.000	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u / \phi P_n$	Ratio $M_{ux} / \phi M_{nx}$	Ratio $M_{uy} / \phi M_{ny}$	Ratio $V_u / \phi V_n$	Ratio $T_u / \phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L57	6.25 - 1.25 (57)	0.006	0.512	0.000	0.010	0.000	0.518 ✔	1.000	4.8.2 ✔
L58	1.25 - 0 (58)	0.006	0.519	0.000	0.010	0.000	0.525 ✔	1.000	4.8.2 ✔

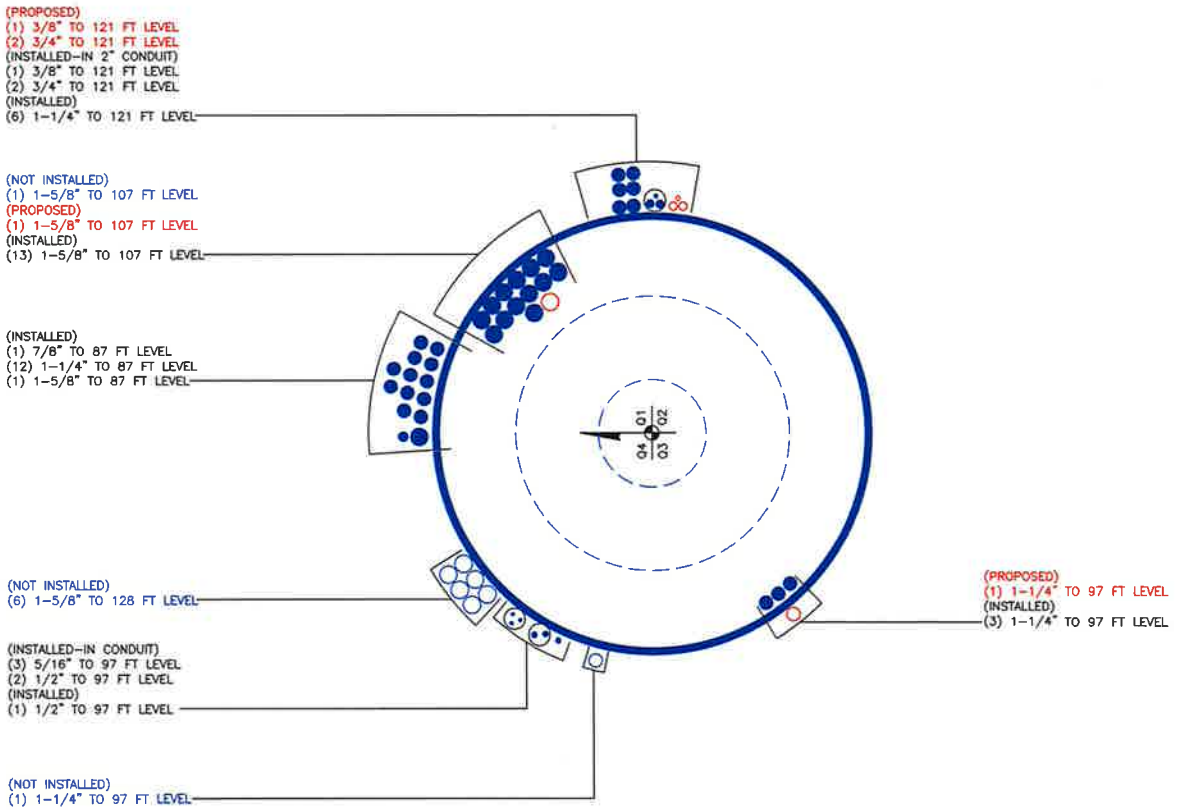
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	131 - 126	Pole	TP11.7155x10.525x0.1875	1	-0.10	513.02	0.6	Pass
L2	126 - 121	Pole	TP12.906x11.7155x0.1875	2	-0.22	566.00	1.9	Pass
L3	121 - 116	Pole	TP14.0964x12.906x0.1875	3	-1.80	618.98	12.4	Pass
L4	116 - 111	Pole	TP15.2869x14.0964x0.1875	4	-1.97	671.96	22.1	Pass
L5	111 - 110	Pole	TP15.525x15.2869x0.1875	5	-2.01	682.56	23.8	Pass
L6	110 - 105	Pole	TP16.7758x15.525x0.25	6	-4.64	980.58	32.2	Pass
L7	105 - 100	Pole	TP18.0265x16.7758x0.25	7	-5.13	1054.80	43.9	Pass
L8	100 - 95	Pole	TP19.2773x18.0265x0.25	8	-8.95	1129.01	57.5	Pass
L9	95 - 89.9	Pole	TP20.553x19.2773x0.5	9	-9.77	2379.75	36.8	Pass
L10	89.9 - 89.6667	Pole	TP20.6114x20.553x0.5	10	-9.81	2386.68	37.1	Pass
L11	89.6667 - 84.5667	Pole	TP21.8871x20.6114x0.6375	11	-12.91	3215.24	34.7	Pass
L12	84.5667 - 84.3333	Pole	TP21.9455x21.8871x0.6375	12	-12.97	3224.08	35.0	Pass
L13	84.3333 - 82.9167	Pole	TP22.2999x21.9455x0.625	13	-13.27	3215.28	37.0	Pass
L14	82.9167 - 82.6667	Pole	TP22.3624x22.2999x0.3938	14	-13.33	2053.08	57.3	Pass
L15	82.6667 - 80.9792	Pole	TP22.7846x22.3624x0.3875	15	-13.61	2059.89	60.6	Pass
L16	80.9792 - 80.7292	Pole	TP22.8471x22.7846x0.3875	16	-13.68	2065.65	60.9	Pass
L17	80.7292 - 75.7292	Pole	TP24.0978x22.8471x0.3813	17	-14.61	2146.07	68.1	Pass
L18	75.7292 - 70	Pole	TP25.531x24.0978x0.3813	18	-14.94	2185.21	69.9	Pass
L19	70 - 69	Pole	TP25.281x24.0304x0.4375	19	-16.43	2579.72	68.1	Pass
L20	69 - 66.9833	Pole	TP25.7854x25.281x0.4375	20	-16.87	2632.10	69.5	Pass
L21	66.9833 - 66.7333	Pole	TP25.8479x25.7854x0.4375	21	-16.94	2638.59	69.7	Pass
L22	66.7333 - 64.0833	Pole	TP26.5107x25.8479x0.4313	22	-17.52	2669.38	72.3	Pass
L23	64.0833 - 63.8333	Pole	TP26.5732x26.5107x0.575	23	-17.60	3548.09	55.2	Pass
L24	63.8333 - 62.4167	Pole	TP26.9276x26.5732x0.5625	24	-17.95	3519.93	57.0	Pass
L25	62.4167 - 62.1667	Pole	TP26.9901x26.9276x0.6125	25	-18.03	3834.63	52.7	Pass
L26	62.1667 - 59.4583	Pole	TP27.6675x26.9901x0.6125	26	-18.76	3933.11	53.7	Pass
L27	59.4583 - 59.2083	Pole	TP27.73x27.6675x0.725	27	-18.85	4646.92	46.0	Pass
L28	59.2083 - 56	Pole	TP28.5325x27.73x0.7125	28	-19.83	4704.61	47.6	Pass
L29	56 - 55.75	Pole	TP28.595x28.5325x0.7375	29	-19.92	4876.26	46.2	Pass
L30	55.75 - 50.75	Pole	TP29.8456x28.595x0.7125	30	-21.54	4926.67	48.8	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L31	50.75 - 45.75	Pole	TP31.0962x29.8456x0.7	31	-23.20	5050.09	50.6	Pass
L32	45.75 - 44.4833	Pole	TP31.413x31.0962x0.6875	32	-23.63	5013.65	51.6	Pass
L33	44.4833 - 44.2333	Pole	TP31.4755x31.413x0.6125	33	-23.72	4486.70	57.6	Pass
L34	44.2333 - 44.0833	Pole	TP31.513x31.4755x0.6125	34	-23.77	4492.15	57.6	Pass
L35	44.0833 - 39.0833	Pole	TP32.7636x31.513x0.6	35	-25.33	4580.34	59.5	Pass
L36	39.0833 - 34.08	Pole	TP34.015x32.7636x0.6	36	-25.38	4583.31	59.6	Pass
L37	34.08 - 34	Pole	TP33.4082x32.1594x0.6313	37	-28.18	4911.18	59.6	Pass
L38	34 - 31.4583	Pole	TP34.043x33.4082x0.6188	38	-29.02	4909.01	61.0	Pass
L39	31.4583 - 31.2083	Pole	TP34.1055x34.043x0.6188	39	-29.12	4918.18	61.0	Pass
L40	31.2083 - 29.4583	Pole	TP34.5426x34.1055x0.6188	40	-29.69	4982.38	61.1	Pass
L41	29.4583 - 29.2083	Pole	TP34.605x34.5426x0.6188	41	-29.80	4991.55	61.1	Pass
L42	29.2083 - 26.8333	Pole	TP35.1982x34.605x0.6188	42	-30.61	5078.67	61.3	Pass
L43	26.8333 - 26.5833	Pole	TP35.2606x35.1982x0.8438	43	-30.73	6892.75	45.8	Pass
L44	26.5833 - 21.5833	Pole	TP36.5094x35.2606x0.8188	44	-32.84	6936.08	47.3	Pass
L45	21.5833 - 20.75	Pole	TP36.7175x36.5094x0.8188	45	-33.20	6976.52	47.3	Pass
L46	20.75 - 20.5	Pole	TP36.78x36.7175x0.8188	46	-33.32	6988.66	47.3	Pass
L47	20.5 - 18	Pole	TP37.4044x36.78x0.8063	47	-34.44	7003.85	48.0	Pass
L48	18 - 17.75	Pole	TP37.4668x37.4044x0.8188	48	-34.56	7122.14	47.3	Pass
L49	17.75 - 17.0833	Pole	TP37.6333x37.4668x0.8188	49	-34.86	7154.50	47.3	Pass
L50	17.0833 - 16.8333	Pole	TP37.6957x37.6333x0.7313	50	-34.96	6415.97	52.6	Pass
L51	16.8333 - 13	Pole	TP38.6531x37.6957x0.7188	51	-36.55	6471.77	53.5	Pass
L52	13 - 12.75	Pole	TP38.7156x38.6531x0.8938	52	-36.57	8010.27	43.6	Pass
L53	12.75 - 11.8333	Pole	TP38.9445x38.7156x0.8938	53	-36.70	8023.51	43.6	Pass
L54	11.8333 - 11.5833	Pole	TP39.007x38.9445x0.6688	54	-37.24	6085.69	57.3	Pass
L55	11.5833 - 6.4833	Pole	TP40.2807x39.007x0.7563	55	-37.26	6866.19	51.0	Pass
L56	6.4833 - 6.25	Pole	TP40.339x40.2807x0.7563	56	-39.56	7094.83	51.0	Pass
L57	6.25 - 1.25	Pole	TP41.5878x40.339x0.7438	57	-39.68	6990.06	51.8	Pass
L58	1.25 - 0	Pole	TP41.9x41.5878x0.7313	58	-41.99	7091.52	52.5	Pass
							Summary	
						Pole (L22)	72.3	Pass
						RATING =	**72.3**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 806376 TOWER ID: C_BASELEVEL

BASE LEVEL DRAWING

SCALE: 1" = 1'-0" | 1

PLOT DATE: 11/22/2016 FILE NAME: 806376_BASELEVEL.dwg
TEMPLATES\TYPICAL BLOCKS FOR TEMPLATES\TITLE BLOCK STD-VER 5.1.dwg

CROWN REGION ADDRESS

USA

21/7/2015	UPDATED PER WORK ORDER 1002513	SLS
29/7/2015	UPDATED PER WORK ORDER 1007098	BMH
5/1/2016	UPDATED PER WORK ORDER 1153211 1170497	NJH
10/05/16	UPDATED PER WORK ORDER 1234662	ARR
05/07/16	UPDATED PER WORK ORDER 1242452	AJH
22/08/16	UPDATED PER WORK ORDER 1270649	ADE
02/12/16	UPDATED PER WORK ORDER 1310665	AT

DRAWN BY: MM
CHECKED BY: PLW
DRAWING DATE: 17/05/07

SITE NUMBER:
SITE NAME:

SITE NAME

HRT 100 943239

BUSINESS UNIT NUMBER

806376

SITE ADDRESS

1455 FORBES STREET
EAST HARTFORD, CT 06118
HARTFORD COUNTY
USA

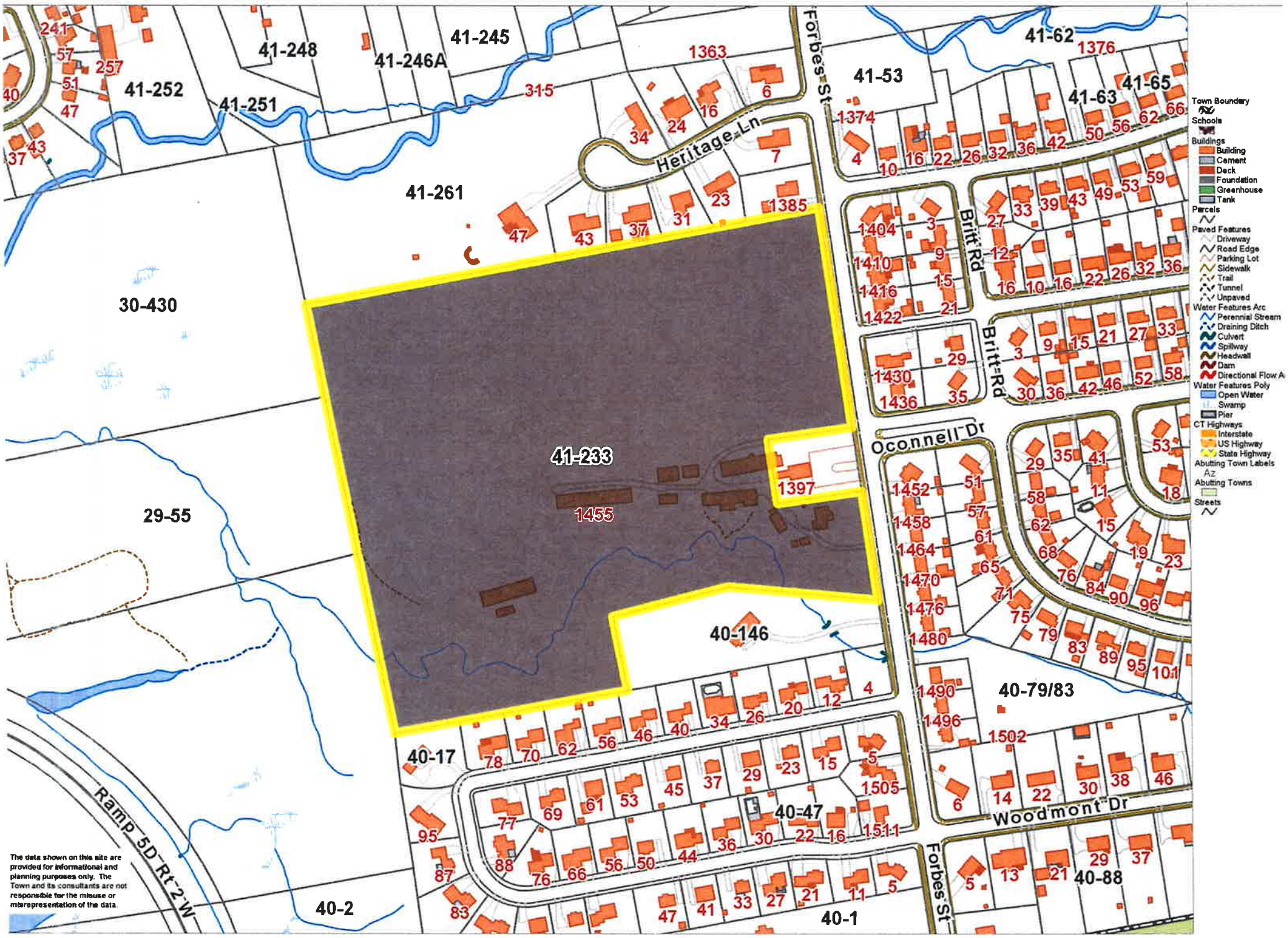
SHEET TITLE

BASE LEVEL

SHEET NUMBER

A1-0

ATTACHMENT 4


41-233
1455
1397
41-261
41-252
41-251
41-248
41-246A
41-245
41-53
41-62
41-63
41-65
30-430
29-55
40-146
40-17
40-47
40-79/83
40-88
40-2
40-1
Heritage Ln
Forbes St
Britt Rd
Oconnell Dr
Woodmont Dr
Ramp 5D Rt 2 W
Town Boundary
Schools
Buildings
Building
Cement
Deck
Foundation
Greenhouse
Tank
Parcels
Paved Features
Driveway
Road Edge
Parking Lot
Sidewalk
Trail
Tunnel
Unpaved
Water Features Arc
Perennial Stream
Draining Ditch
Culvert
Spillway
Headwall
Dam
Directional Flow A
Water Features Poly
Open Water
Swamp
Pier
CT Highways
Interstate
US Highway
State Highway
Abutting Town Labels
Abutting Towns
Streets
The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.
0
400
800 ft
Printed on 02/26/2018 at 09:16 AM
East Hartford MapsOnline

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	**CAMA PID:**	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL ROBERT D		

OWNER OF RECORD
HANDEL ROBERT D 1473 FORBES ST EAST HARTFORD, CT 06118

LIVING AREA:	720	**ZONING:**	R2	**ACREAGE:**	25.74

SALES HISTORY

OWNER	BOOK / PAGE	SALE DATE	SALE PRICE
HANDEL ROBERT D	3582/ 113	25-Jan-2016	$0.00
HANDEL JESSIE K EST OF C/O ROBERT D HANDEL EXECUTOR	3534/ 329	21-May-2015	$0.00
HANDEL JESSIE K	1874/ 345	03-Jan-2000	$0.00
HANDEL ALBERT P JR EST OF HANDEL JESSIE K EXEC	0/ 0	01-Jan-2000	$0.00
HANDEL ALBERT P JR EST OF HANDEL JESSIE K EXEC	1693/ 161	05-Aug-1997	$0.00

CURRENT PARCEL ASSESSMENT

TOTAL:	$332,880.00	**IMPROVEMENTS:**	$291,500.00	**LAND:**	$41,380.00

ASSESSING HISTORY

FISCAL YEAR	TOTAL VALUE	IMPROVEMENT VALUE	LAND VALUE
2017	$332,880.00	$291,500.00	$41,380.00
2016	$332,880.00	$291,500.00	$41,380.00
2015	$346,650.00	$302,420.00	$44,230.00
2014	$346,650.00	$302,420.00	$44,230.00
2013	$346,650.00	$302,420.00	$44,230.00

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	**CAMA PID:**	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL ROBERT D		

BUILDING # 1

YEAR BUILT	1865	**EXT WALL 1**	Vinyl Siding
STYLE	Colonial	**INT WALLS 1**	Plaster
MODEL	Residential	**HEAT FUEL**	Gas
STORIES	2.0	**HEAT TYPE**	Hot Water
OCCUPANCY	One Family	**AC TYPE**	None
ROOF	Gable	**BEDROOMS**	4
ROOF COVER	Asphalt	**FULL BATHS**	1
FLOOR COVER 1	Hardwood	**HALF BATHS**	1
% BSMT	100	**TOTAL ROOMS**	9
% FIN BSMT	0	**% REC RM**	60
% SEMI FIN BSMT	0	**% ATTIC FINISH**	0
BSMT GARAGE		**FIREPLACES**	0

OUTBUILDINGS

DESCRIPTION	CODE	UNITS
1 Story Barn	BRN1	1x5112 (5112 SF)
Shed	SHD1	1x64 (64 S.F.)
1 Story Barn	BRN1	1x3072 (3072 SF)
Shed	SHD1	1x300 (300 S.F.)
Shed	SHD1	1x561 (561 S.F.)
1 Story Barn	BRN1	1x4928 (4928 SF)
Shed	SHD1	1x600 (600 S.F.)

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	**CAMA PID:**	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL ROBERT D		

BUILDING # 2

YEAR BUILT	1934	**EXT WALL 1**	Vinyl Siding
STYLE	Single Family	**INT WALLS 1**	Plaster
MODEL	Residential	**HEAT FUEL**	Other
STORIES	1.0	**HEAT TYPE**	Other
OCCUPANCY	One Family	**AC TYPE**	None
ROOF	Gable	**BEDROOMS**	1
ROOF COVER	Asphalt	**FULL BATHS**	1
FLOOR COVER 1	Hardwood	**HALF BATHS**	0
% BSMT	0	**TOTAL ROOMS**	4
% FIN BSMT	0	**% REC RM**	0
% SEMI FIN BSMT	0	**% ATTIC FINISH**	0
BSMT GARAGE		**FIREPLACES**	0

OUTBUILDINGS

DESCRIPTION	CODE	UNITS
FR/SHED		30 SF
Shed	SHD1	1x105 (105 S.F.)
1 Story Barn	BRN1	1x840 (840 SF)
Shed	SHD1	1x144 (144 S.F.)
1 Story Barn	BRN1	1x3840 (3840 SF)
Shed	SHD1	1x308 (308 S.F.)

ATTACHMENT 5

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		3	neopost 05/25/2018 US POSTAGE $002.38 ZIP 06103 041L12203380
	Postmaster, per *(name of receiving employee)*		OLD STATE HOUSE STATION 06103 MAY 25 2018 USPS

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Marcia A. Leclerc, Mayor Town of East Hartford 740 Main Street East Hartford, CT 06108				
2.	Jeffrey Cormier, Town Planner Town of East Hartford 740 Main Street East Hartford, CT 06108				
3.	Robert Handel 1473 Forbes Street East Hartford, CT 06118				
4.					
5.					
6.					