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

December 18, 2018

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

RE: **Notice of Exempt Modification for Verizon: 806370**
Verizon Site ID: 3077
570 New Park Ave. West Hartford, CT 06110
Latitude: 41° 44' 10.50"/ Longitude: -72° 43' 14.2"

Dear Ms. Bachman:

Verizon currently maintains six (6) antennas at the 147-foot level of the existing 150-foot monopole tower at 570 New Park Ave. West Hartford, CT 06110. The tower is owned by Crown Castle. The property is owned by 570 New Park LLC. Verizon now intends to replace six (6) RRH's. Verizon also intends to replace one (1) OVP, add one (1) hybrid cable and remove twelve (12) coaxial cables.

This facility was approved by the Connecticut Siting Council on February 20th 1997. This approval was given without conditions.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j- 73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.S.C.A. § 16-50j-73, a copy of this letter is being sent to Town Manager Matt Hart, Town of West Hartford, Building official Tim Mikloiche, Town of West Hartford, as well as the property owner, and Crown Castle is the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.

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

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

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.

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

6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

Jeffrey Barbadora
Real Estate Specialist
12 Gill Street, Suite 5800, Woburn, MA 01801
781-729-0053
Jeff.Barbadora@crowncastle.com

Attachments:

Tab 1: Exhibit-1: Compound plan and elevation depicting the planned changes
Tab 2: Exhibit-2: Structural Modification Report
Tab 3: Exhibit-3: General Power Density Table Report (RF Emissions Analysis Report)

cc: Town Manager Matt Hart
50 South Main Street
West Hartford, CT 06107

Building Official Tim Mikloiche
50 South Main Street
West Hartford, CT 06107

570 New Park LLC
ATTN Michael Reiner
40 Jansen Court
West Hartford, CT 06127

570 NEW PARK AVENUE

Location	570 NEW PARK AVENUE	**Mblu**	H14/ 3776/ 570/ /
Parcel ID	3776 2 570 0001	**Owner**	570 NEW PARK LLC
Assessment	$510,930	**Appraisal**	$729,900
Vision Id #	19109	**Building Count**	3

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$379,900	$350,000	$729,900
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$265,930	$245,000	$510,930

Owner of Record

Owner	570 NEW PARK LLC
Co-Owner	
Address	C/O MICHAEL REINER PO BOX 271763 WEST HARTFORD, CT 06127

Sale Price	$550,000
Certificate	1
Book & Page	4487/ 322
Sale Date	05/25/2010
Instrument	Q

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
570 NEW PARK LLC	$550,000	1	4487/ 322	Q	05/25/2010
CONNECTICUT TAR AND ASPHALT SERVICE INC	$0	1	4487/ 321	25	05/25/2010
CONN TAR & ASPHALT SERVICE INC	$30,670	1	2940/ 34	U	08/02/2002
CONN TAR & ASPHALT SERVICE INC	$0	1	322/ 42	U	

Building Information

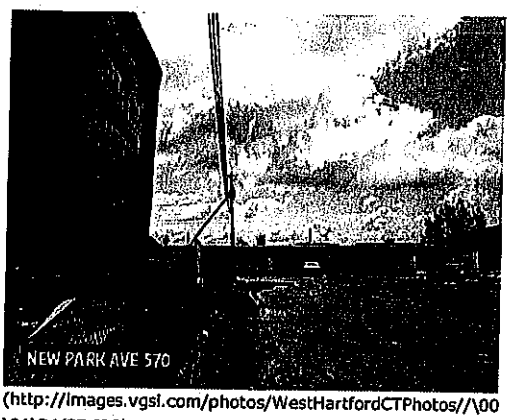
Building 1 : Section 1

Year Built:	1929
Living Area:	2,698
Replacement Cost:	$106,986
Building Percent Good:	41
Replacement Cost Less Depreciation:	$43,900

Building Photo

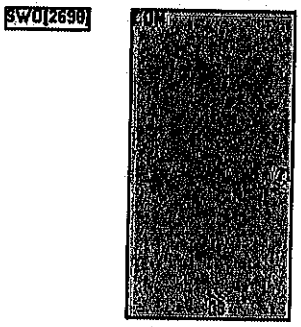
Building Attributes

Field	Description
STYLE	Storage Area
MODEL	Comm/Ind
Grade	C 0.80
Stories:	1
Occupancy	
Exterior Wall 1	Precast Panel
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Built Up
Interior Wall 1	Typical
Interior Wall 2	
Floor Type	Concrete Slab
Floor Cover	None
Heating Fuel	Typical
Heating Type	Steam - No Bir
AC Type	None
As Built Use	MLTR
Bldg Use	Commercial
# of Bedrooms	
Total Baths	
Type	01
Wet Sprinkler	
Dry Sprinkler	
1st Floor Use:	
Class	Class C
Frame Type	Masonry
Plumbing	LIGHT
Ceiling	Not Applicable
Group	IND
Wall Height	15
Adjustment	



(http://images.vgsi.com/photos/WestHartfordCTPhotos//\00\01\24/37.JPG)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
SWO	STORAGE/WHSE/DIST	2,698	2,698
COM	COMMERCIAL - NV	2,698	0
		5,396	2,698

Building 2 : Section 1

Year Built: 1966
Living Area: 936
Replacement Cost: $170,951
Building Percent Good: 73
Replacement Cost Less Depreciation: $250,000

Building Photo

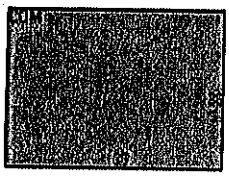
Building Attributes : Bldg 2 of 3	
Field	Description
STYLE	Telephone Exchange
MODEL	Comm/Ind

Grade	B 1.00
Stories:	1
Occupancy	
Exterior Wall 1	Concrete Block
Exterior Wall 2	
Roof Structure	Shed
Roof Cover	Built Up
Interior Wall 1	Typical
Interior Wall 2	
Floor Type	Concrete Slab
Floor Cover	Carpet
Heating Fuel	Typical
Heating Type	Steam Boiler
AC Type	None
As Built Use	TSGR
Bldg Use	Commercial
# of Bedrooms	
Total Baths	
Type	01
Wet Sprinkler	
Dry Sprinkler	
1st Floor Use:	
Class	Class C
Frame Type	Rigid Steel
Plumbing	LIGHT
Ceiling	Acoustic Panel
Group	IND
Wall Height	13
Adjustment	

(http://images.vgsi.com/photos/WestHartfordCTPhotos//defau

Building Layout

SWD[364]
SWD[572]



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
TEL	TELEPHONE BUILDING	936	936
		936	936

Building 3 : Section 1

Year Built: 1929
Living Area: 4,798
Replacement Cost: $190,280
Building Percent Good: 41
Replacement Cost Less Depreciation: $78,000

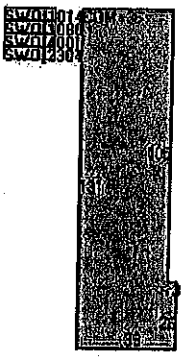
Building Attributes : Bldg 3 of 3	
Field	Description
STYLE	Light Manufacturing
MODEL	Comm/Ind
Grade	C 0.80
Stories:	1
Occupancy	

Building Photo

(http://images.vgsi.com/photos/WestHartfordCTPhotos//defau

Exterior Wall 1	Concrete Block
Exterior Wall 2	Brick Veneer
Roof Structure	Flat
Roof Cover	Built Up
Interior Wall 1	Typical
Interior Wall 2	
Floor Type	Concrete Slab
Floor Cover	Asphalt
Heating Fuel	Typical
Heating Type	Forced Hot Air
AC Type	Not Applicable
As Built Use	LMAN
Bldg Use	Commercial
# of Bedrooms	
Total Baths	
Type	00
Wet Sprinkler	
Dry Sprinkler	
1st Floor Use:	
Class	Class C
Frame Type	Rigid Steel
Plumbing	LIGHT
Ceiling	Acoustic Panel
Group	IND
Wall Height	11
Adjustment	

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
SWO	STORAGE/WHSE/DIST	4,798	4,798
COM	COMMERCIAL - NV	4,794	0
		9,592	4,798

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	201
Description	Commercial
Zone	IG
Neighborhood	
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.96
Frontage	
Depth	
Assessed Value	$245,000
Appraised Value	$350,000

Outbuildings

Outbuildings	Legend

Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CLP4	Paving, Asphalt			10000 SF	$8,000	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	$379,900	$350,000	$729,900
2016	$379,900	$350,000	$729,900
2015	$104,400	$429,900	$534,300

Assessment			
Valuation Year	Improvements	Land	Total
2017	$265,930	$245,000	$510,930
2016	$265,930	$245,000	$510,930
2015	$73,080	$300,930	$374,010


Chick-fil-A
Raymour & Flanigan Furniture and...
Walmart Supercenter
BJ's Gas Station
ALDI
New Park Ave
CTfastrak Busway
Coastal Tool & Supply Corporation
Colt Defense
CTfastrak Busway
Taylor Rental
New Park Ave
Oakwood Ave
Newfield Ave
Andover Dr
Overlook Terrace
Talcott Rd
Talcott Rd
Talcott Rd
Warehouse Liquors
Lincare
Homewood Pl
570 New Park Avenue
Tolles St
Royal Indian Grocery
Plus One Defense Systems
Marjam Supply Co
New Park Ave
Fernwood Ave
Chelton Ave
Grassmere Ave
Grassmere Ave
Star St
Cabinet Hardware Specialties
CT SELF STOR
CTfastrak Busway
Oakwood Ave
Vanderbilt Ave
Reed Ave
Newfield Ave
Excel Fitness
Capitol Glass
Revival Home Consignment
Oakwood Ave
Har-Conn Chrome
New Park Ave
Argelia Novias Bridal
Chelton Ave
Trout Brook
Trout Brook Trail (Unpaved)
Trout Brook Trail
Trout Brook Trail
CTfastrak Busway
Brixton Street
Oakwood Ave
Dexter Ave
Dexter St
Newfield Ave
Jo-Di's Radio
Brook Park River
Newfield Ave
Hartford Baking

Site Name: West Hartford, CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW PCS	1970	1	5000	5000	147	0.0832	1.0	8.32%
VZW Cellular LTE	869	1	3050	3050	147	0.0508	0.579333333	8.76%
VZW Cellular	869	3	389	1167	147	0.0194	0.579333333	3.35%
VZW AWS	2145	1	7400	7400	147	0.1232	1.0	12.32%
VZW 700	746	1	2200	2200	147	0.0366	0.497333333	7.36%

Total Percentage of Maximum Permissible Exposure 40.11%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:
1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

-1992

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Wednesday, December 19, 2018 1:37 PM
To: Barbadora, Jeff
Subject: FedEx Shipment 774007513889 Delivered

Your package has been delivered

Tracking # 774007513889

Ship date:
Tue, 12/18/2018

Jeff Barbadora
Crown Castle
WOBURN, MA 01801
US

Delivered

Delivery date:
Wed, 12/19/2018 1:35 pm

Matt Hart - Town Manager
Town of West Hartford
50 South Main Street
Room 310
WEST HARTFORD, CT 06107
US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	774007513889
Status:	Delivered: 12/19/2018 1:35 PM Signed for By: T.JOE
Reference:	1766.6680
Signed for by:	T.JOE
Delivery location:	WEST HARTFORD, CT
Delivered to:	Mailroom
Service type:	FedEx Priority Overnight®
Packaging type:	FedEx® Envelope
Number of pieces:	1
Weight:	0.50 lb.

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Wednesday, December 19, 2018 11:23 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 774007688125 Delivered

Your package has been delivered

Tracking # 774007688125

Ship date:
Tue, 12/18/2018

Jeff Barbadora
Crown Castle
WOBURN, MA 01801
US

Delivery date:
Wed, 12/19/2018 11:20 am

Michael Reiner
570 New Park LLC
40 Jansen Court
WEST HARTFORD, CT 06110
US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	774007688125
Status:	Delivered: 12/19/2018 11:20 AM Signed for By: Signature not required
Reference:	1766.6680
Signed for by:	Signature not required
Delivery location:	WEST HARTFORD, CT
Delivered to:	Residence
Service type:	FedEx Priority Overnight®
Packaging type:	FedEx® Envelope
Number of pieces:	1
Weight:	0.50 lb.

Ex. Shipping Tracking Printing Services Locations Support

FedEx Ship Manager®

My Profile Logout Help

Ship | LTL Freight | Ship History | My Lists | Reports | Integration Manager | Administration

Your Shipment Details

From:	Jeff Barbadora Crown Castle 12 Gill Street Suite 5800 WOBURN, MA 01801 US 781-970-0053	**Ship date:**	12/18/2018
		Weight:	0.50 LBS
		Declared value:	0.00 USD
		Package Contents:	
		Document Description:	
		Shipment Purpose:	
		Invoice number:	
		Freight On Value:	
To:	Tim Mikloiche - Building Department Town of West Hartford 50 South Main Street Room 208 WEST HARTFORD, CT 06107 US 860-561-7530	**Pricing Option:**	FedEx Standard Rate
		Service type:	Priority Overnight
		Package type:	FedEx Envelope
		Pickup/Drop Off:	Pickup requested, view Pickup History for details
		Your reference:	1766.6680
		Courtesy rate quote:*	12.58 USD
		Discounted variable %:	
		Special services:	
Tracking no.:	774007579805	**Shipment type:**	Express
		Commercial/Residential Status:	Commercial

Print Track Return to History

Please note :

. * The courtesy rate shown here may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1000, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

Date: **September 07, 2018**

Tectonic
PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.

Holly Haas
Crown Castle
3530 Toringdon Way Suite 300
Charlotte, NC 28277

Tectonic
1279 Route 300
Newburgh, NY 12550
(845) 567-6656

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Carrier Site Number:	1926
	Carrier Site Name:	West Hartford CT
Crown Castle Designation:	**Crown Castle BU Number:**	806370
	Crown Castle Site Name:	HRT 099 943226
	Crown Castle JDE Job Number:	528516
	Crown Castle Work Order Number:	1626625
	Crown Castle Order Number:	457789 Rev. 0
Engineering Firm Designation:	**Tectonic Project Number:**	9800.806370
Site Data:	**570 NEW PARK AVENUE, WEST HARTFORD, Hartford County, CT** **Latitude *41° 44' 10.5"*, Longitude *-72° 43' 14.2"*** **150 Foot - Monopole Tower**	

Dear Holly Haas,

Tectonic Engineering & Surveying Consultants P.C. (Tectonic) is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above mentioned tower.

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

LC5: Proposed Equipment Configuration **Sufficient Capacity**

The analysis has been performed in accordance with the TIA-222-H standard. This analysis utilizes an ultimate 3-second gust wind speed of 125 mph from the 2016 Connecticut State Building Code (2012 IBC). Exposure Category C with a maximum topographic factor, Kzt, of 1.0 and Risk Category II were used in this analysis.

Structural analysis prepared by: Swati Gandhi / VE

Respectfully submitted by:

STATE OF CONNECTICUT ★ ANTONIO A. GUALTIERI ★ No. 25406 LICENSED PROFESSIONAL ENGINEER

9/7/18.

Antonio A. Gualtieri, P.E.
Sr. Vice President

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 150 ft Monopole tower designed by Valmont Industries, Inc.

2) ANALYSIS CRITERIA

Building Code:	2012 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1.7 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuartion

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
147.0	147.0	3	antel	BXA-70063-6CF-EDIN-4 w/ Mount Pipe	7 1	1-1/4 1-5/8
		3	antel	BXA-70063-6CF-EDIN-5 w/ Mount Pipe		
		6	commscope	SBNHH-1D65B w/ Mount Pipe		
		1	crown mounts	LP 713-1		
		1	raycap	RVZDC-6627-PF-48		
		1	rfs celwave	DB-T1-6Z-8AB-0Z		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		

Table 2 – Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
139.0	140.0	3	alcatel lucent	800MHz 2X50W RRH W/FILTER	-	-
		6	alcatel lucent	PCS 1900MHz 4x45W-65MHz		
	139.0	1	crown mounts	SO 102-3		
137.0	138.0	3	alcatel lucent	TD-RRH8x20-25	1 3	5/8 1-1/4
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
		3	rfs celwave	IBC1900BB-1		
		3	rfs celwave	IBC1900HG-2A		
	137.0	1	crown mounts	LP 713-1		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
117.0	122.0	1	antel	BCD-87010	1	1-1/4
	117.0	1	crown mounts	SO 702-1		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	Tower Engineering Professionals	2308053	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	Tower Engineering Professionals (Mapping)	2308022	CCISITES
4-TOWER MANUFACTURER DRAWINGS	Valmont Industries, Inc	260794	CCISITES

3.1) Analysis Method

tnxTower (version 8.0.4.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

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 specifications.
3) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
4) Tectonic did not analyze the antenna supporting mounts as a part of this analysis report and assumed they are structurally sufficient. It is the carrier's responsibility to ensure structural compliance of their existing and/or proposed antenna supporting mounts.
5) The existing base plate grout was not considered in this analysis.
6) This analysis is based on the foundation mapping reports referenced above. Therefore, the material grades are assumed as follows:
   Foundation: Concrete: 3000 psi
   Steel Reinforcement: Grade 60 ksi

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	150 - 132.278	Pole	TP30.53x26.19x0.313	1	-8.624	2230.336	11.4	Pass
L2	132.278 - 114.556	Pole	TP34.87x30.53x0.313	2	-11.242	2417.278	25.6	Pass
L3	114.556 - 96.8334	Pole	TP39.21x34.87x0.313	3	-13.215	2525.292	34.0	Pass
L4	96.8334 - 84.3334	Pole	TP41.657x37.197x0.406	4	-18.173	3885.892	31.6	Pass
L5	84.3334 -	Pole	TP46.103x41.657x0.406	5	-22.747	4124.043	38.1	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L5	84.3334 - 66.1667	Pole	TP46.103x41.657x0.406	5	-22.747	4124.043	38.1	Pass
L6	66.1667 - 48	Pole	TP50.55x46.103x0.406	6	-25.799	4252.972	41.9	Pass
L7	48 - 36.6667	Pole	TP52.52x48.024x0.5	7	-34.013	5973.418	36.2	Pass
L8	36.6667 - 18.3334	Pole	TP57.01x52.52x0.5	8	-41.002	6263.334	39.9	Pass
L9	18.3334 - 0	Pole	TP61.5x57.01x0.5	9	-48.569	6517.381	43.5	Pass
							Summary	
						Pole (L9)	43.5	Pass
						Rating* =	43.5	Pass

*Rating per TIA-222-H Section 15.5

Table 5 - Tower Component Stresses vs. Capacity – LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	0	39.3	Pass
1,2	Base Plate	0	25.8	Pass
1,2	Base Foundation	0	23.7	Pass
1,2	Base Foundation Soil Interaction	0	55.1	Pass

Structure Rating (max from all components) =	55.1%

Notes:
1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
2) Rating per TIA-222-H Section15.5

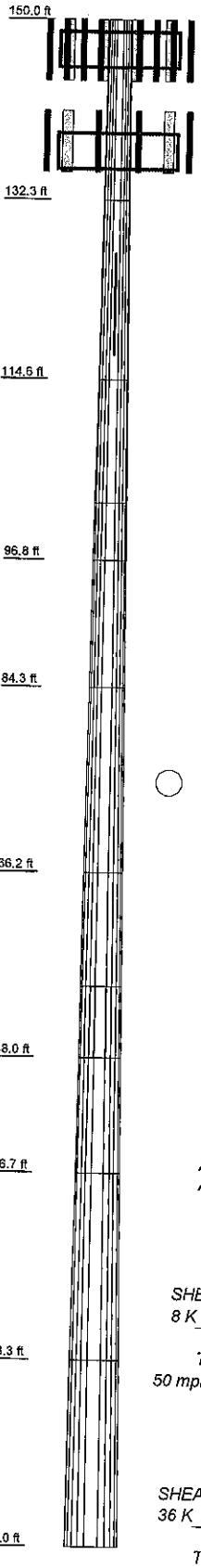
4.1) Recommendations

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

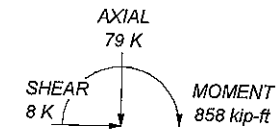
APPENDIX A

TNXTOWER OUTPUT

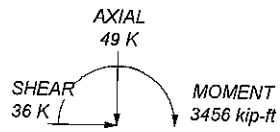
Section	1	2	3	4	5	6	7	8	9
Length (ft)	17.722	17.722	17.722	18.167	18.167	18.167	18.333	18.333	18.333
Number of Sides	12	12	12	12	12	12	12	12	12
Thickness (in)	0.313	0.313	0.313	0.406	0.406	0.406	0.500	0.500	0.500
Socket Length (ft)			5.667			7.000			
Top Dia (in)	26.190	30.530	34.870	37.197	41.857	46.103	48.024	52.520	57.010
Bot Dia (in)	30.530	34.870	39.210	41.657	46.103	50.550	52.520	57.010	61.500
Grade					A572-65				
Weight (K)	1.7	2.0	2.2	3.2	3.5	3.9	5.0	5.5	5.9



ALL REACTIONS ARE FACTORED



TORQUE 1 kip-ft
50 mph WIND - 1.700 in ICE



TORQUE 2 kip-ft
REACTIONS - 125 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	147	800MHz 2X50W RRH W/FILTER	139
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	147	800MHz 2X50W RRH W/FILTER	139
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	147	800MHz 2X50W RRH W/FILTER	139
BXA-70063-6CF-EDIN-5 w/ Mount Pipe	147	(2) PCS 1900MHz 4x45W-65MHz	139
BXA-70063-6CF-EDIN-5 w/ Mount Pipe	147	(2) PCS 1900MHz 4x45W-65MHz	139
BXA-70063-6CF-EDIN-5 w/ Mount Pipe	147	(2) PCS 1900MHz 4x45W-65MHz	139
(2) SBNHH-1D65B w/ Mount Pipe	147	(2) 4' x 2" STD Pipe	139
(2) SBNHH-1D65B w/ Mount Pipe	147	(2) 4' x 2" STD Pipe	139
(2) SBNHH-1D65B w/ Mount Pipe	147	(2) 4' x 2" STD Pipe	139
(2) RFV01U-D2A	147	SO 102-3	139
RFV01U-D2A	147	APXVSPP18-C-A20 w/ Mount Pipe	137
RFV01U-D1A	147	APXVSPP18-C-A20 w/ Mount Pipe	137
(2) RFV01U-D1A	147	APXVSPP18-C-A20 w/ Mount Pipe	137
DB-T1-6Z-8AB-0Z	147	APXVTM14-C-120 w/ Mount Pipe	137
RVZDC-6627-PF-48	147	APXVTM14-C-120 w/ Mount Pipe	137
5' x 2" STD Pipe	147	APXVTM14-C-120 w/ Mount Pipe	137
5' x 2" STD Pipe	147	IBC1900HG-2A	137
5' x 2" STD Pipe	147	IBC1900HG-2A	137
5' x 2" STD Pipe	147	IBC1900HG-2A	137
5' x 2" STD Pipe	147	IBC1900BB-1	137
5' x 2" STD Pipe	147	IBC1900BB-1	137
5' x 2" STD Pipe	147	IBC1900BB-1	137
5' x 2" STD Pipe	147	TD-RRH8x20-25	137
LP 713-1	147	TD-RRH8x20-25	137
		TD-RRH8x20-25	137
		LP 713-1	137
		BCD-87010	117
		SO 702-1	117

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-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.70 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 43.5%

Tectonic
Tectonic
1279 Route 300
Newburgh, NY 12550
Phone: (845) 567-6656
FAX: (845) 567-8703

Job: 9800.806370			
Project: BU 806370 - HRT 099 943226			
Client: Crown Castle	Drawn by: Swati Gandhi	App'd:	
Code: TIA-222-H	Date: 09/07/18	Scale: NTS	
Path: I:\Projects\9800\806370\1826625\Structural\9800.806370 Structural Analysis.eti		Dwg No. E-1	

Tower Input Data

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

1) Tower is located in Hartford County, Connecticut.
2) Tower base elevation above sea level: 67.000 ft.
3) Basic wind speed of 125 mph.
4) Risk Category II.
5) Exposure Category C.
6) Simplified Topographic Factor Procedure for wind speed-up calculations is used.
7) Topographic Category: 1.
8) Crest Height 0.000 ft.
9) Nominal ice thickness of 1.700 in.
10) Ice thickness is considered to increase with height.
11) Ice density of 56.000 pcf.
12) A wind speed of 50 mph is used in combination with ice.
13) Temperature drop of 50.000 °F.
14) Deflections calculated using a wind speed of 60 mph.
15) TIA-222-H Annex S.
16) A non-linear (P-delta) analysis was used.
17) Pressures are calculated at each section.
18) Stress ratio used in pole design is 1.05.
19) 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-H Bracing Resist. Exemption
Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H 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	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are Known

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.000-132.278	17.722	0.000	12	26.190	30.530	0.313	1.250	A572-65 (65 ksi)
L2	132.278-114.556	17.722	0.000	12	30.530	34.870	0.313	1.250	A572-65 (65 ksi)
L3	114.556-	17.722	5.667	12	34.870	39.210	0.313	1.250	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
	96.833								(65 ksi)
L4	96.833-84.333	18.167	0.000	12	37.197	41.657	0.406	1.625	A572-65 (65 ksi)
L5	84.333-66.167	18.167	0.000	12	41.657	46.103	0.406	1.625	A572-65 (65 ksi)
L6	66.167-48.000	18.167	7.000	12	46.103	50.550	0.406	1.625	A572-65 (65 ksi)
L7	48.000-36.667	18.333	0.000	12	48.024	52.520	0.500	2.000	A572-65 (65 ksi)
L8	36.667-18.333	18.333	0.000	12	52.520	57.010	0.500	2.000	A572-65 (65 ksi)
L9	18.333-0.000	18.333		12	57.010	61.500	0.500	2.000	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	27.004	26.039	2225.660	9.264	13.566	164.057	4509.790	12.816	6.181	19.781
	31.497	30.406	3543.786	10.818	15.815	224.084	7180.670	14.965	7.345	23.503
L2	31.497	30.406	3543.786	10.818	15.815	224.084	7180.670	14.965	7.345	23.503
	35.990	34.773	5300.524	12.372	18.063	293.452	10740.298	17.114	8.508	27.225
L3	35.990	34.773	5300.524	12.372	18.063	293.452	10740.298	17.114	8.508	27.225
	40.483	39.141	7558.871	13.925	20.311	372.161	15316.321	19.264	9.671	30.946
L4	39.806	48.127	8314.976	13.171	19.268	431.539	16848.396	23.687	8.880	21.859
	42.983	53.961	11719.829	14.768	21.578	543.134	23747.551	26.558	10.075	24.801
L5	42.983	53.961	11719.829	14.768	21.578	543.134	23747.551	26.558	10.075	24.801
	47.586	59.777	15933.078	16.360	23.882	667.172	32284.736	29.421	11.267	27.734
L6	47.586	59.777	15933.078	16.360	23.882	667.172	32284.736	29.421	11.267	27.734
	52.190	65.594	21051.625	17.951	26.185	803.960	42656.300	32.284	12.459	30.667
L7	51.319	76.514	22057.354	17.014	24.876	886.675	44694.180	37.658	11.530	23.061
	54.196	83.752	28928.297	18.623	27.205	1063.331	58616.573	41.220	12.735	25.471
L8	54.196	83.752	28928.297	18.623	27.205	1063.331	58616.573	41.220	12.735	25.471
	58.845	90.981	37084.100	20.231	29.531	1255.761	75142.441	44.778	13.939	27.877
L9	58.845	90.981	37084.100	20.231	29.531	1255.761	75142.441	44.778	13.939	27.877
	63.493	98.210	46644.596	21.838	31.857	1464.187	94514.596	48.336	15.142	30.284

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 150.000-132.278				1	1	1			
L2 132.278-114.556				1	1	1			
L3 114.556-96.833				1	1	1			
L4 96.833-84.333				1	1	1			
L5 84.333-66.167				1	1	1			
L6 66.167-48.000				1	1	1			
L7 48.000-36.667				1	1	1			
L8 36.667-18.333				1	1	1			
L9 18.333-0.000				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
***										
Safety Line 3/8	A	No	Surface Ar (CaAa)	150.000 - 0.000	1	1	-0.120 -0.120	0.375		0.000
Step Bolts	A	No	Surface Ar (CaAa)	150.000 - 0.000	1	1	-0.250 0.000	0.375		0.002

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight klf
LDF6-50A(1-1/4)	C	No	No	Inside Pole	147.000 - 0.000	6	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
LDF6-50A(1-1/4)	C	No	No	Inside Pole	147.000 - 0.000	1	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
HB158-1-08U8-S8J18(1-5/8)	C	No	No	Inside Pole	147.000 - 0.000	1	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
***									
HB058-M12-XXXF(5/8)	A	No	No	Inside Pole	137.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
HB114-1-08U4-M5J(1-1/4)	A	No	No	Inside Pole	137.000 - 0.000	3	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
***									
LDF6-50A(1-1/4")	A	No	No	Inside Pole	117.000 - 0.000	1	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001

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	150.000-132.278	A	0.000	0.000	1.329	0.000	0.056
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.081
L2	132.278-114.556	A	0.000	0.000	1.329	0.000	0.103
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.097
L3	114.556-96.833	A	0.000	0.000	1.329	0.000	0.113
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.097
L4	96.833-84.333	A	0.000	0.000	0.938	0.000	0.080
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.069
L5	84.333-66.167	A	0.000	0.000	1.363	0.000	0.116
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.100
L6	66.167-48.000	A	0.000	0.000	1.363	0.000	0.116

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
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.100
L7	48.000-36.667	A	0.000	0.000	0.850	0.000	0.072
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.062
L8	36.667-18.333	A	0.000	0.000	1.375	0.000	0.117
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.101
L9	18.333-0.000	A	0.000	0.000	1.375	0.000	0.117
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.101

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	150.000-132.278	A	1.966	0.000	0.000	15.263	0.000	0.255
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.081
L2	132.278-114.556	A	1.939	0.000	0.000	15.077	0.000	0.297
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.097
L3	114.556-96.833	A	1.910	0.000	0.000	14.866	0.000	0.302
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.097
L4	96.833-84.333	A	1.880	0.000	0.000	10.485	0.000	0.213
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.069
L5	84.333-66.167	A	1.846	0.000	0.000	14.775	0.000	0.298
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.100
L6	66.167-48.000	A	1.795	0.000	0.000	14.409	0.000	0.289
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.100
L7	48.000-36.667	A	1.743	0.000	0.000	8.989	0.000	0.180
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.062
L8	36.667-18.333	A	1.669	0.000	0.000	13.611	0.000	0.269
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.101
L9	18.333-0.000	A	1.494	0.000	0.000	12.329	0.000	0.242
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.101

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	150.000-132.278	-0.435	-0.119	-2.856	-0.781
L2	132.278-114.556	-0.436	-0.119	-2.942	-0.805
L3	114.556-96.833	-0.436	-0.119	-3.001	-0.821
L4	96.833-84.333	-0.437	-0.120	-3.056	-0.836
L5	84.333-66.167	-0.437	-0.120	-3.039	-0.831
L6	66.167-48.000	-0.438	-0.120	-3.033	-0.830
L7	48.000-36.667	-0.438	-0.120	-3.065	-0.838
L8	36.667-18.333	-0.438	-0.120	-2.934	-0.803
L9	18.333-0.000	-0.439	-0.120	-2.728	-0.746

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	12	Safety Line 3/8	132.28 - 150.00	1.0000	1.0000
L1	13	Step Bolts	132.28 - 150.00	1.0000	1.0000
L2	12	Safety Line 3/8	114.56 - 132.28	1.0000	1.0000
L2	13	Step Bolts	114.56 - 132.28	1.0000	1.0000
L3	12	Safety Line 3/8	96.83 - 114.56	1.0000	1.0000
L3	13	Step Bolts	96.83 - 114.56	1.0000	1.0000
L5	12	Safety Line 3/8	66.17 - 84.33	1.0000	1.0000
L5	13	Step Bolts	66.17 - 84.33	1.0000	1.0000
L6	12	Safety Line 3/8	48.00 - 66.17	1.0000	1.0000
L6	13	Step Bolts	48.00 - 66.17	1.0000	1.0000
L8	12	Safety Line 3/8	18.33 - 36.67	1.0000	1.0000
L8	13	Step Bolts	18.33 - 36.67	1.0000	1.0000
L9	12	Safety Line 3/8	0.00 - 18.33	1.0000	1.0000
L9	13	Step Bolts	0.00 - 18.33	1.0000	1.0000

Discrete Tower Loads

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
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	147.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	147.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-EDIN-4 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	147.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-EDIN-5 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	147.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-EDIN-5	B	From Leg	4.000	0.000	147.000	No Ice	7.806	5.801	0.042

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
w/ Mount Pipe			0.000			1/2"	8.357	6.953	0.103
			0.000			Ice	8.872	7.819	0.171
						1" Ice	9.927	9.601	0.335
						2" Ice			
BXA-70063-6CF-EDIN-5 w/ Mount Pipe	C	From Leg	4.000	0.000	147.000	No Ice	7.806	5.801	0.042
			0.000			1/2"	8.357	6.953	0.103
			0.000			Ice	8.872	7.819	0.171
						1" Ice	9.927	9.601	0.335
						2" Ice			
(2) SBNHH-1D65B w/ Mount Pipe	A	From Leg	4.000	0.000	147.000	No Ice	8.289	7.004	0.076
			0.000			1/2"	8.849	8.185	0.145
			0.000			Ice	9.374	9.081	0.221
						1" Ice	10.446	10.904	0.401
						2" Ice			
(2) SBNHH-1D65B w/ Mount Pipe	B	From Leg	4.000	0.000	147.000	No Ice	8.289	7.004	0.076
			0.000			1/2"	8.849	8.185	0.145
			0.000			Ice	9.374	9.081	0.221
						1" Ice	10.446	10.904	0.401
						2" Ice			
(2) SBNHH-1D65B w/ Mount Pipe	C	From Leg	4.000	0.000	147.000	No Ice	8.289	7.004	0.076
			0.000			1/2"	8.849	8.185	0.145
			0.000			Ice	9.374	9.081	0.221
						1" Ice	10.446	10.904	0.401
						2" Ice			
(2) RFV01U-D2A	A	From Leg	4.000	0.000	147.000	No Ice	1.875	1.013	0.070
			0.000			1/2"	2.045	1.145	0.087
			0.000			Ice	2.223	1.284	0.106
						1" Ice	2.601	1.585	0.153
						2" Ice			
RFV01U-D2A	B	From Leg	4.000	0.000	147.000	No Ice	1.875	1.013	0.070
			0.000			1/2"	2.045	1.145	0.087
			0.000			Ice	2.223	1.284	0.106
						1" Ice	2.601	1.585	0.153
						2" Ice			
RFV01U-D1A	B	From Leg	4.000	0.000	147.000	No Ice	1.875	1.250	0.084
			0.000			1/2"	2.045	1.393	0.103
			0.000			Ice	2.223	1.543	0.124
						1" Ice	2.601	1.865	0.175
						2" Ice			
(2) RFV01U-D1A	C	From Leg	4.000	0.000	147.000	No Ice	1.875	1.250	0.084
			0.000			1/2"	2.045	1.393	0.103
			0.000			Ice	2.223	1.543	0.124
						1" Ice	2.601	1.865	0.175
						2" Ice			
DB-T1-6Z-8AB-0Z	B	From Leg	4.000	0.000	147.000	No Ice	4.800	2.000	0.044
			0.000			1/2"	5.070	2.193	0.080
			0.000			Ice	5.348	2.393	0.120
						1" Ice	5.926	2.815	0.213
						2" Ice			
RVZDC-6627-PF-48	A	From Leg	4.000	0.000	147.000	No Ice	3.792	2.514	0.032
			0.000			1/2"	4.044	2.727	0.063
			0.000			Ice	4.303	2.947	0.099
						1" Ice	4.844	3.417	0.181
						2" Ice			
5' x 2" STD Pipe	A	From Leg	4.000	0.000	147.000	No Ice	1.188	1.188	0.018
			0.000			1/2"	1.496	1.496	0.027
			0.000			Ice	1.807	1.807	0.040
						1" Ice	2.458	2.458	0.076
						2" Ice			
5' x 2" STD Pipe	B	From Leg	4.000	0.000	147.000	No Ice	1.188	1.188	0.018
			0.000			1/2"	1.496	1.496	0.027
			0.000			Ice	1.807	1.807	0.040
						1" Ice	2.458	2.458	0.076
						2" Ice			
5' x 2" STD Pipe	C	From Leg	4.000	0.000	147.000	No Ice	1.188	1.188	0.018
			0.000			1/2"	1.496	1.496	0.027
			0.000			Ice	1.807	1.807	0.040

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" Ice	2.458	2.458	0.076
							2" Ice			
5' x 2" STD Pipe	B	From Leg	1.000	0.000	0.000	147.000	No Ice	1.188	1.188	0.018
			0.000				1/2"	1.496	1.496	0.027
			0.000				Ice	1.807	1.807	0.040
							1" Ice	2.458	2.458	0.076
							2" Ice			
5' x 2" STD Pipe	A	From Leg	4.000	0.000	0.000	147.000	No Ice	0.000	1.188	0.018
			0.000				1/2"	0.000	1.496	0.027
			0.000				Ice	0.000	1.807	0.040
							1" Ice	0.000	2.458	0.076
							2" Ice			
5' x 2" STD Pipe	B	From Leg	4.000	0.000	0.000	147.000	No Ice	0.000	1.188	0.018
			0.000				1/2"	0.000	1.496	0.027
			0.000				Ice	0.000	1.807	0.040
							1" Ice	0.000	2.458	0.076
							2" Ice			
5' x 2" STD Pipe	C	From Leg	4.000	0.000	0.000	147.000	No Ice	0.000	1.188	0.018
			0.000				1/2"	0.000	1.496	0.027
			0.000				Ice	0.000	1.807	0.040
							1" Ice	0.000	2.458	0.076
							2" Ice			
LP 713-1	C	None			0.000	147.000	No Ice	31.270	31.270	1.510
							1/2"	39.680	39.680	1.929
							Ice	48.090	48.090	2.348
							1" Ice	64.910	64.910	3.186
							2" Ice			
***										
800MHz 2X50W RRH W/FILTER	A	From Leg	2.000	0.000	0.000	139.000	No Ice	2.058	1.932	0.064
			0.000				1/2"	2.240	2.109	0.086
			1.000				Ice	2.429	2.293	0.111
							1" Ice	2.829	2.684	0.172
							2" Ice			
800MHz 2X50W RRH W/FILTER	B	From Leg	2.000	0.000	0.000	139.000	No Ice	2.058	1.932	0.064
			0.000				1/2"	2.240	2.109	0.086
			1.000				Ice	2.429	2.293	0.111
							1" Ice	2.829	2.684	0.172
							2" Ice			
800MHz 2X50W RRH W/FILTER	C	From Leg	2.000	0.000	0.000	139.000	No Ice	2.058	1.932	0.064
			0.000				1/2"	2.240	2.109	0.086
			1.000				Ice	2.429	2.293	0.111
							1" Ice	2.829	2.684	0.172
							2" Ice			
(2) PCS 1900MHz 4x45W-65MHz	A	From Leg	2.000	0.000	0.000	139.000	No Ice	2.322	2.238	0.060
			0.000				1/2"	2.527	2.441	0.083
			1.000				Ice	2.739	2.651	0.110
							1" Ice	3.185	3.093	0.173
							2" Ice			
(2) PCS 1900MHz 4x45W-65MHz	B	From Leg	2.000	0.000	0.000	139.000	No Ice	2.322	2.238	0.060
			0.000				1/2"	2.527	2.441	0.083
			1.000				Ice	2.739	2.651	0.110
							1" Ice	3.185	3.093	0.173
							2" Ice			
(2) PCS 1900MHz 4x45W-65MHz	C	From Leg	2.000	0.000	0.000	139.000	No Ice	2.322	2.238	0.060
			0.000				1/2"	2.527	2.441	0.083
			1.000				Ice	2.739	2.651	0.110
							1" Ice	3.185	3.093	0.173
							2" Ice			
(2) 4' x 2" STD Pipe	A	From Leg	2.000	0.000	0.000	139.000	No Ice	0.866	0.866	0.015
			0.000				1/2"	1.111	1.111	0.022
			1.000				Ice	1.365	1.365	0.032
							1" Ice	1.901	1.901	0.062
							2" Ice			
(2) 4' x 2" STD Pipe	B	From Leg	2.000	0.000	0.000	139.000	No Ice	0.866	0.866	0.015
			0.000				1/2"	1.111	1.111	0.022
			1.000				Ice	1.365	1.365	0.032
							1" Ice	1.901	1.901	0.062

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
							2" Ice			
(2) 4' x 2" STD Pipe	C	From Leg	2.000	0.000	0.000	139.000	No Ice	0.866	0.866	0.015
			0.000				1/2" Ice	1.111	1.111	0.022
			1.000				1" Ice	1.365	1.365	0.032
							2" Ice	1.901	1.901	0.062
SO 102-3	C	None			0.000	139.000	No Ice	3.000	3.000	0.081
							1/2" Ice	3.480	3.480	0.111
							1" Ice	3.960	3.960	0.141
							2" Ice	4.920	4.920	0.201
***										
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	137.000	No Ice	8.262	6.946	0.083
			0.000				1/2" Ice	8.822	8.127	0.151
			1.000				1" Ice	9.346	9.021	0.227
							2" Ice	10.418	10.844	0.406
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	137.000	No Ice	8.262	6.946	0.083
			0.000				1/2" Ice	8.822	8.127	0.151
			1.000				1" Ice	9.346	9.021	0.227
							2" Ice	10.418	10.844	0.406
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	137.000	No Ice	8.262	6.946	0.083
			0.000				1/2" Ice	8.822	8.127	0.151
			1.000				1" Ice	9.346	9.021	0.227
							2" Ice	10.418	10.844	0.406
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	137.000	No Ice	6.580	4.959	0.077
			0.000				1/2" Ice	7.031	5.754	0.131
			1.000				1" Ice	7.473	6.472	0.193
							2" Ice	8.385	7.941	0.338
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	137.000	No Ice	6.580	4.959	0.077
			0.000				1/2" Ice	7.031	5.754	0.131
			1.000				1" Ice	7.473	6.472	0.193
							2" Ice	8.385	7.941	0.338
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	137.000	No Ice	6.580	4.959	0.077
			0.000				1/2" Ice	7.031	5.754	0.131
			1.000				1" Ice	7.473	6.472	0.193
							2" Ice	8.385	7.941	0.338
IBC1900HG-2A	A	From Leg	4.000	0.000	0.000	137.000	No Ice	0.966	0.463	0.022
			0.000				1/2" Ice	1.091	0.558	0.030
			1.000				1" Ice	1.223	0.660	0.039
							2" Ice	1.510	0.893	0.065
IBC1900HG-2A	B	From Leg	4.000	0.000	0.000	137.000	No Ice	0.966	0.463	0.022
			0.000				1/2" Ice	1.091	0.558	0.030
			1.000				1" Ice	1.223	0.660	0.039
							2" Ice	1.510	0.893	0.065
IBC1900HG-2A	C	From Leg	4.000	0.000	0.000	137.000	No Ice	0.966	0.463	0.022
			0.000				1/2" Ice	1.091	0.558	0.030
			1.000				1" Ice	1.223	0.660	0.039
							2" Ice	1.510	0.893	0.065
IBC1900BB-1	A	From Leg	4.000	0.000	0.000	137.000	No Ice	0.966	0.463	0.022
			0.000				1/2" Ice	1.091	0.558	0.030
			1.000				1" Ice	1.223	0.660	0.039
							2" Ice	1.510	0.893	0.065
IBC1900BB-1	B	From Leg	4.000	0.000	0.000	137.000	No Ice	0.966	0.463	0.022
			0.000				1/2" Ice	1.091	0.558	0.030
			1.000				1" Ice	1.223	0.660	0.039
							2" Ice	1.510	0.893	0.065

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
IBC1900BB-1	C	From Leg	4.000 0.000 1.000	0.000	137.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.966 1.091 1.223 1.510	0.463 0.558 0.660 0.893	0.022 0.030 0.039 0.065
TD-RRH8x20-25	A	From Leg	4.000 0.000 1.000	0.000	137.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8x20-25	B	From Leg	4.000 0.000 1.000	0.000	137.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8x20-25	C	From Leg	4.000 0.000 1.000	0.000	137.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
LP 713-1	C	None		0.000	137.000	No Ice 1/2" Ice 1" Ice 2" Ice	31.270 39.680 48.090 64.910	31.270 39.680 48.090 64.910	1.510 1.929 2.348 3.186
***									
BCD-87010	A	From Leg	6.000 0.000 5.000	0.000	117.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.903 4.050 5.213 7.015	2.903 4.050 5.213 7.015	0.027 0.048 0.077 0.157
SO 702-1	A	From Leg	3.000 0.000 0.000	0.000	117.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.000 1.250 1.500 2.000	1.430 2.050 2.670 3.910	0.027 0.038 0.049 0.071
***									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	150 - 132.278	Pole	Max Tension	14	0.000	0.000	0.000
			Max. Compression	26	-22.755	-0.751	0.262
			Max. Mx	8	-8.629	-148.431	-0.916
			Max. My	14	-8.629	-0.991	-148.491
			Max. Vy	8	14.261	-148.431	-0.916
			Max. Vx	2	-14.271	0.724	148.369
			Max. Torque	12			0.480
L2	132.278 - 114.556	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-27.271	-0.463	1.928
			Max. Mx	8	-11.247	-424.536	-1.584
			Max. My	2	-11.247	1.817	425.076
			Max. Vy	20	-17.036	424.349	2.216
			Max. Vx	2	-17.024	1.817	425.076
			Max. Torque	21			-1.651
L3	114.556 - 96.8334	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-30.479	-0.246	2.054
			Max. Mx	8	-13.219	-640.751	-2.256
			Max. My	2	-13.220	2.568	641.215
			Max. Vy	20	-18.868	640.651	2.964
			Max. Vx	2	-18.856	2.568	641.215
			Max. Torque	21			-1.651
L4	96.8334 - 84.3334	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-37.932	0.099	2.253
			Max. Mx	20	-18.176	1010.756	4.093
			Max. My	2	-18.177	3.707	1011.072
			Max. Vy	20	-21.859	1010.756	4.093
			Max. Vx	2	-21.846	3.707	1011.072
			Max. Torque	21			-1.651

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L5	84.3334 - 66.1667	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.511	0.467	2.465
			Max. Mx	20	-22.749	1435.078	5.219
			Max. My	2	-22.750	4.854	1435.141
			Max. Vy	20	-24.898	1435.078	5.219
			Max. Vx	2	-24.886	4.854	1435.141
			Max. Torque	21			-1.650
L6	66.1667 - 48	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-48.841	0.706	2.603
			Max. Mx	20	-25.801	1723.474	5.910
			Max. My	2	-25.801	5.562	1723.379
			Max. Vy	20	-26.771	1723.474	5.910
			Max. Vx	2	-26.759	5.562	1723.379
			Max. Torque	21			-1.650
L7	48 - 36.6667	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.023	1.113	2.838
			Max. Mx	20	-34.014	2244.287	7.043
			Max. My	2	-34.015	6.726	2243.931
			Max. Vy	20	-29.978	2244.287	7.043
			Max. Vx	2	-29.966	6.726	2243.931
			Max. Torque	21			-1.649
L8	36.6667 - 18.3334	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-69.138	1.514	3.070
			Max. Mx	20	-41.003	2820.531	8.169
			Max. My	2	-41.003	7.892	2819.911
			Max. Vy	20	-32.918	2820.531	8.169
			Max. Vx	2	-32.906	7.892	2819.911
			Max. Torque	21			-1.649
L9	18.3334 - 0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-78.689	1.888	3.286
			Max. Mx	20	-48.569	3448.606	9.284
			Max. My	2	-48.569	9.053	3447.720
			Max. Vy	20	-35.627	3448.606	9.284
			Max. Vx	2	-35.615	9.053	3447.720
			Max. Torque	21			-1.649

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	78.689	0.000	0.000
	Max. H_x	20	48.575	35.618	0.057
	Max. H_z	2	48.575	0.057	35.606
	Max. M_x	2	3447.720	0.057	35.606
	Max. M_z	8	3447.718	-35.618	-0.057
	Max. Torsion	9	1.647	-35.618	-0.057
	Min. Vert	17	36.431	17.760	-30.807
	Min. H_x	8	48.575	-35.618	-0.057
	Min. H_z	14	48.575	-0.057	-35.606
	Min. M_x	14	-3446.361	-0.057	-35.606
	Min. M_z	20	-3448.606	35.618	0.057
	Min. Torsion	21	-1.649	35.618	0.057

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	40.479	0.000	0.000	-0.552	0.366	0.000
1.2 Dead+1.0 Wind 0 deg -	48.575	-0.057	-35.606	-3447.720	9.053	0.437

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
0.9 Dead+1.0 Wind 0 deg - No Ice	36.431	-0.057	-35.606	-3430.393	8.889	0.436
1.2 Dead+1.0 Wind 30 deg - No Ice	48.575	17.760	-30.807	-2981.607	-1716.187	-0.445
0.9 Dead+1.0 Wind 30 deg - No Ice	36.431	17.760	-30.807	-2966.603	-1707.764	-0.446
1.2 Dead+1.0 Wind 60 deg - No Ice	48.575	30.818	-17.754	-1716.747	-2981.456	-1.207
0.9 Dead+1.0 Wind 60 deg - No Ice	36.431	30.818	-17.754	-1708.042	-2966.734	-1.209
1.2 Dead+1.0 Wind 90 deg - No Ice	48.575	35.618	0.057	7.931	-3447.718	-1.645
0.9 Dead+1.0 Wind 90 deg - No Ice	36.431	35.618	0.057	8.053	-3430.672	-1.647
1.2 Dead+1.0 Wind 120 deg - No Ice	48.575	30.875	17.853	1730.295	-2990.049	-1.644
0.9 Dead+1.0 Wind 120 deg - No Ice	36.431	30.875	17.853	1721.846	-2975.276	-1.645
1.2 Dead+1.0 Wind 150 deg - No Ice	48.575	17.859	30.864	2988.845	-1731.086	-1.202
0.9 Dead+1.0 Wind 150 deg - No Ice	36.431	17.859	30.864	2974.137	-1722.575	-1.202
1.2 Dead+1.0 Wind 180 deg - No Ice	48.575	0.057	35.606	3446.361	-8.162	-0.438
0.9 Dead+1.0 Wind 180 deg - No Ice	36.431	0.057	35.606	3429.381	-8.223	-0.437
1.2 Dead+1.0 Wind 210 deg - No Ice	48.575	-17.760	30.807	2980.249	1717.075	0.444
0.9 Dead+1.0 Wind 210 deg - No Ice	36.431	-17.760	30.807	2965.592	1708.428	0.446
1.2 Dead+1.0 Wind 240 deg - No Ice	48.575	-30.818	17.754	1715.392	2982.342	1.207
0.9 Dead+1.0 Wind 240 deg - No Ice	36.431	-30.818	17.754	1707.032	2967.397	1.209
1.2 Dead+1.0 Wind 270 deg - No Ice	48.575	-35.618	-0.057	-9.284	3448.606	1.646
0.9 Dead+1.0 Wind 270 deg - No Ice	36.431	-35.618	-0.057	-9.060	3431.337	1.649
1.2 Dead+1.0 Wind 300 deg - No Ice	48.575	-30.875	-17.853	-1731.648	2990.940	1.644
0.9 Dead+1.0 Wind 300 deg - No Ice	36.431	-30.875	-17.853	-1722.854	2975.943	1.646
1.2 Dead+1.0 Wind 330 deg - No Ice	48.575	-17.859	-30.864	-2990.201	1731.979	1.201
0.9 Dead+1.0 Wind 330 deg - No Ice	36.431	-17.859	-30.864	-2975.147	1723.243	1.201
1.2 Dead+1.0 Ice+1.0 Temp	78.689	0.000	0.000	-3.286	1.888	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	78.689	-0.010	-8.305	-855.141	3.513	0.114
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	78.689	4.150	-7.187	-740.254	-423.303	-0.202
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	78.689	7.199	-4.144	-427.953	-736.176	-0.464
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	78.689	8.318	0.010	-1.920	-851.272	-0.602
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	78.689	7.209	4.161	423.691	-737.752	-0.578
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	78.689	4.168	7.197	734.838	-426.033	-0.400
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	78.689	0.010	8.305	848.148	0.360	-0.114
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	78.689	-4.150	7.187	733.261	427.175	0.202
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	78.689	-7.199	4.144	420.961	740.048	0.464
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	78.689	-8.318	-0.010	-5.072	855.145	0.602
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	78.689	-7.209	-4.161	-430.683	741.625	0.578
1.2 Dead+1.0 Wind 330	78.689	-4.168	-7.197	-741.830	429.906	0.400

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						
Dead+Wind 0 deg - Service	40.479	-0.012	-7.340	-709.053	2.138	0.090
Dead+Wind 30 deg - Service	40.479	3.661	-6.351	-613.250	-352.459	-0.092
Dead+Wind 60 deg - Service	40.479	6.353	-3.660	-353.278	-612.515	-0.250
Dead+Wind 90 deg - Service	40.479	7.343	0.012	1.204	-708.350	-0.341
Dead+Wind 120 deg - Service	40.479	6.365	3.680	355.211	-614.283	-0.340
Dead+Wind 150 deg - Service	40.479	3.682	6.363	613.889	-355.521	-0.248
Dead+Wind 180 deg - Service	40.479	0.012	7.340	707.924	-1.399	-0.090
Dead+Wind 210 deg - Service	40.479	-3.661	6.351	612.121	353.198	0.092
Dead+Wind 240 deg - Service	40.479	-6.353	3.660	352.148	613.255	0.250
Dead+Wind 270 deg - Service	40.479	-7.343	-0.012	-2.333	709.089	0.341
Dead+Wind 300 deg - Service	40.479	-6.365	-3.680	-356.340	615.023	0.340
Dead+Wind 330 deg - Service	40.479	-3.682	-6.363	-615.018	356.261	0.248

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.000	-40.479	0.000	0.000	40.479	0.000	0.000%
2	-0.057	-48.575	-35.606	0.057	48.575	35.606	0.000%
3	-0.057	-36.431	-35.606	0.057	36.431	35.606	0.000%
4	17.760	-48.575	-30.807	-17.760	48.575	30.807	0.000%
5	17.760	-36.431	-30.807	-17.760	36.431	30.807	0.000%
6	30.818	-48.575	-17.754	-30.818	48.575	17.754	0.000%
7	30.818	-36.431	-17.754	-30.818	36.431	17.754	0.000%
8	35.618	-48.575	0.057	-35.618	48.575	-0.057	0.000%
9	35.618	-36.431	0.057	-35.618	36.431	-0.057	0.000%
10	30.875	-48.575	17.853	-30.875	48.575	-17.853	0.000%
11	30.875	-36.431	17.853	-30.875	36.431	-17.853	0.000%
12	17.859	-48.575	30.864	-17.859	48.575	-30.864	0.000%
13	17.859	-36.431	30.864	-17.859	36.431	-30.864	0.000%
14	0.057	-48.575	35.606	-0.057	48.575	-35.606	0.000%
15	0.057	-36.431	35.606	-0.057	36.431	-35.606	0.000%
16	-17.760	-48.575	30.807	17.760	48.575	-30.807	0.000%
17	-17.760	-36.431	30.807	17.760	36.431	-30.807	0.000%
18	-30.818	-48.575	17.754	30.818	48.575	-17.754	0.000%
19	-30.818	-36.431	17.754	30.818	36.431	-17.754	0.000%
20	-35.618	-48.575	-0.057	35.618	48.575	0.057	0.000%
21	-35.618	-36.431	-0.057	35.618	36.431	0.057	0.000%
22	-30.875	-48.575	-17.853	30.875	48.575	17.853	0.000%
23	-30.875	-36.431	-17.853	30.875	36.431	17.853	0.000%
24	-17.859	-48.575	-30.864	17.859	48.575	30.864	0.000%
25	-17.859	-36.431	-30.864	17.859	36.431	30.864	0.000%
26	0.000	-78.689	0.000	0.000	78.689	0.000	0.000%
27	-0.010	-78.689	-8.305	0.010	78.689	8.305	0.000%
28	4.150	-78.689	-7.187	-4.150	78.689	7.187	0.000%
29	7.199	-78.689	-4.144	-7.199	78.689	4.144	0.000%
30	8.318	-78.689	0.010	-8.318	78.689	-0.010	0.000%
31	7.209	-78.689	4.161	-7.209	78.689	-4.161	0.000%
32	4.168	-78.689	7.197	-4.168	78.689	-7.197	0.000%
33	0.010	-78.689	8.305	-0.010	78.689	-8.305	0.000%
34	-4.150	-78.689	7.187	4.150	78.689	-7.187	0.000%
35	-7.199	-78.689	4.144	7.199	78.689	-4.144	0.000%
36	-8.318	-78.689	-0.010	8.318	78.689	0.010	0.000%
37	-7.209	-78.689	-4.161	7.209	78.689	4.161	0.000%
38	-4.168	-78.689	-7.197	4.168	78.689	7.197	0.000%
39	-0.012	-40.479	-7.340	0.012	40.479	7.340	0.000%
40	3.661	-40.479	-6.351	-3.661	40.479	6.351	0.000%
41	6.353	-40.479	-3.660	-6.353	40.479	3.660	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
42	7.343	-40.479	0.012	-7.343	40.479	-0.012	0.000%
43	6.365	-40.479	3.680	-6.365	40.479	-3.680	0.000%
44	3.682	-40.479	6.363	-3.682	40.479	-6.363	0.000%
45	0.012	-40.479	7.340	-0.012	40.479	-7.340	0.000%
46	-3.661	-40.479	6.351	3.661	40.479	-6.351	0.000%
47	-6.353	-40.479	3.660	6.353	40.479	-3.660	0.000%
48	-7.343	-40.479	-0.012	7.343	40.479	0.012	0.000%
49	-6.365	-40.479	-3.680	6.365	40.479	3.680	0.000%
50	-3.682	-40.479	-6.363	3.682	40.479	6.363	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00017104
3	Yes	4	0.00000001	0.00009293
4	Yes	5	0.00000001	0.00013100
5	Yes	5	0.00000001	0.00005940
6	Yes	5	0.00000001	0.00013685
7	Yes	5	0.00000001	0.00006223
8	Yes	4	0.00000001	0.00044374
9	Yes	4	0.00000001	0.00027734
10	Yes	5	0.00000001	0.00012872
11	Yes	5	0.00000001	0.00005820
12	Yes	5	0.00000001	0.00013909
13	Yes	5	0.00000001	0.00006319
14	Yes	4	0.00000001	0.00022406
15	Yes	4	0.00000001	0.00013058
16	Yes	5	0.00000001	0.00013370
17	Yes	5	0.00000001	0.00006073
18	Yes	5	0.00000001	0.00012820
19	Yes	5	0.00000001	0.00005808
20	Yes	4	0.00000001	0.00051579
21	Yes	4	0.00000001	0.00032348
22	Yes	5	0.00000001	0.00014094
23	Yes	5	0.00000001	0.00006406
24	Yes	5	0.00000001	0.00013022
25	Yes	5	0.00000001	0.00005889
26	Yes	4	0.00000001	0.00000001
27	Yes	5	0.00000001	0.00019254
28	Yes	5	0.00000001	0.00020471
29	Yes	5	0.00000001	0.00020498
30	Yes	5	0.00000001	0.00019156
31	Yes	5	0.00000001	0.00020350
32	Yes	5	0.00000001	0.00020362
33	Yes	5	0.00000001	0.00018997
34	Yes	5	0.00000001	0.00020272
35	Yes	5	0.00000001	0.00020291
36	Yes	5	0.00000001	0.00019195
37	Yes	5	0.00000001	0.00020646
38	Yes	5	0.00000001	0.00020588
39	Yes	4	0.00000001	0.00002833
40	Yes	4	0.00000001	0.00007325
41	Yes	4	0.00000001	0.00008237
42	Yes	4	0.00000001	0.00003544
43	Yes	4	0.00000001	0.00007078
44	Yes	4	0.00000001	0.00008384
45	Yes	4	0.00000001	0.00002845
46	Yes	4	0.00000001	0.00007692
47	Yes	4	0.00000001	0.00007042
48	Yes	4	0.00000001	0.00003594
49	Yes	4	0.00000001	0.00008747
50	Yes	4	0.00000001	0.00007180

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 132.278	10.491	50	0.607	0.001
L2	132.278 - 114.556	8.257	50	0.590	0.001
L3	114.556 - 96.8334	6.178	50	0.524	0.001
L4	102.5 - 84.3334	4.932	50	0.462	0.001
L5	84.3334 - 66.1667	3.301	50	0.386	0.000
L6	66.1667 - 48	2.011	50	0.292	0.000
L7	55 - 36.6667	1.399	49	0.232	0.000
L8	36.6667 - 18.3334	0.622	49	0.163	0.000
L9	18.3334 - 0	0.154	49	0.081	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
147.000	BXA-70063-6CF-EDIN-4 w/ Mount Pipe	50	10.109	0.605	0.001	89418
139.000	800MHz 2X50W RRH W/FILTER	50	9.095	0.600	0.001	40644
137.000	APXVSPP18-C-A20 w/ Mount Pipe	50	8.844	0.598	0.001	34391
117.000	BCD-87010	50	6.449	0.536	0.001	11976

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 132.278	51.021	24	2.953	0.006
L2	132.278 - 114.556	40.156	22	2.869	0.005
L3	114.556 - 96.8334	30.050	22	2.549	0.004
L4	102.5 - 84.3334	23.989	22	2.246	0.003
L5	84.3334 - 66.1667	16.058	22	1.877	0.002
L6	66.1667 - 48	9.784	22	1.418	0.001
L7	55 - 36.6667	6.804	22	1.130	0.001
L8	36.6667 - 18.3334	3.025	22	0.794	0.001
L9	18.3334 - 0	0.750	22	0.392	0.000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
147.000	BXA-70063-6CF-EDIN-4 w/ Mount Pipe	22	49.162	2.947	0.006	18571
139.000	800MHz 2X50W RRH W/FILTER	22	44.232	2.920	0.005	8441
137.000	APXVSPP18-C-A20 w/ Mount	22	43.011	2.908	0.005	7142

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
117.000	Pipe BCD-87010	22	31.366	2.607	0.004	2472

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	150 - 132.278 (1)	TP30.53x26.19x0.313	17.722	0.000	0.0	30.406	-8.624	2124.130	0.004
L2	132.278 - 114.556 (2)	TP34.87x30.53x0.313	17.722	0.000	0.0	34.773	-11.242	2302.170	0.005
L3	114.556 - 96.8334 (3)	TP39.21x34.87x0.313	17.722	0.000	0.0	37.744	-13.215	2405.040	0.005
L4	96.8334 - 84.3334 (4)	TP41.657x37.197x0.406	18.167	0.000	0.0	53.961	-18.173	3700.850	0.005
L5	84.3334 - 66.1667 (5)	TP46.103x41.657x0.406	18.167	0.000	0.0	59.778	-22.747	3927.660	0.006
L6	66.1667 - 48 (6)	TP50.55x46.103x0.406	18.167	0.000	0.0	63.353	-25.799	4050.450	0.006
L7	48 - 36.6667 (7)	TP52.52x48.024x0.5	18.333	0.000	0.0	83.752	-34.013	5688.970	0.006
L8	36.6667 - 18.3334 (8)	TP57.01x52.52x0.5	18.333	0.000	0.0	90.981	-41.002	5965.080	0.007
L9	18.3334 - 0 (9)	TP61.5x57.01x0.5	18.333	0.000	0.0	98.210	-48.569	6207.030	0.008

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	150 - 132.278 (1)	TP30.53x26.19x0.313	149.262	1304.508	0.114	0.000	1304.508	0.000
L2	132.278 - 114.556 (2)	TP34.87x30.53x0.313	426.555	1618.992	0.263	0.000	1618.992	0.000
L3	114.556 - 96.8334 (3)	TP39.21x34.87x0.313	643.363	1837.125	0.350	0.000	1837.125	0.000
L4	96.8334 - 84.3334 (4)	TP41.657x37.197x0.406	1014.233	3104.192	0.327	0.000	3104.192	0.000
L5	84.3334 - 66.1667 (5)	TP46.103x41.657x0.406	1439.342	3653.025	0.394	0.000	3653.025	0.000
L6	66.1667 - 48 (6)	TP50.55x46.103x0.406	1728.275	3994.550	0.433	0.000	3994.550	0.000
L7	48 - 36.6667 (7)	TP52.52x48.024x0.5	2249.975	6019.008	0.374	0.000	6019.008	0.000
L8	36.6667 - 18.3334 (8)	TP57.01x52.52x0.5	2827.108	6861.050	0.412	0.000	6861.050	0.000
L9	18.3334 - 0 (9)	TP61.5x57.01x0.5	3456.058	7711.575	0.448	0.000	7711.575	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 $\frac{T_u}{\phi T_n}$
L1	150 - 132.278 (1)	TP30.53x26.19x0.313	14.319	533.632	0.027	0.480	1389.217	0.000
L2	132.278 - 114.556 (2)	TP34.87x30.53x0.313	17.078	610.275	0.028	1.203	1821.700	0.001
L3	114.556 - 96.8334 (3)	TP39.21x34.87x0.313	18.910	662.411	0.029	1.203	2149.342	0.001
L4	96.8334 - 84.3334 (4)	TP41.657x37.197x0.406	21.901	947.011	0.023	1.203	3368.892	0.000
L5	84.3334 - 66.1667 (5)	TP46.103x41.657x0.406	24.945	1049.090	0.024	1.645	4142.342	0.000
L6	66.1667 - 48 (6)	TP50.55x46.103x0.406	26.819	1111.840	0.024	1.645	4657.408	0.000
L7	48 - 36.6667 (7)	TP52.52x48.024x0.5	30.026	1469.850	0.020	1.645	6597.125	0.000
L8	36.6667 - 18.3334 (8)	TP57.01x52.52x0.5	32.965	1596.720	0.021	1.644	7797.117	0.000
L9	18.3334 - 0 (9)	TP61.5x57.01x0.5	35.674	1723.590	0.021	1.644	9097.333	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	150 - 132.278 (1)	0.004	0.114	0.000	0.027	0.000	0.119	1.050	4.8.2
L2	132.278 - 114.556 (2)	0.005	0.263	0.000	0.028	0.001	0.269	1.050	4.8.2
L3	114.556 - 96.8334 (3)	0.005	0.350	0.000	0.029	0.001	0.357	1.050	4.8.2
L4	96.8334 - 84.3334 (4)	0.005	0.327	0.000	0.023	0.000	0.332	1.050	4.8.2
L5	84.3334 - 66.1667 (5)	0.006	0.394	0.000	0.024	0.000	0.400	1.050	4.8.2
L6	66.1667 - 48 (6)	0.006	0.433	0.000	0.024	0.000	0.440	1.050	4.8.2
L7	48 - 36.6667 (7)	0.006	0.374	0.000	0.020	0.000	0.380	1.050	4.8.2
L8	36.6667 - 18.3334 (8)	0.007	0.412	0.000	0.021	0.000	0.419	1.050	4.8.2
L9	18.3334 - 0 (9)	0.008	0.448	0.000	0.021	0.000	0.456	1.050	4.8.2

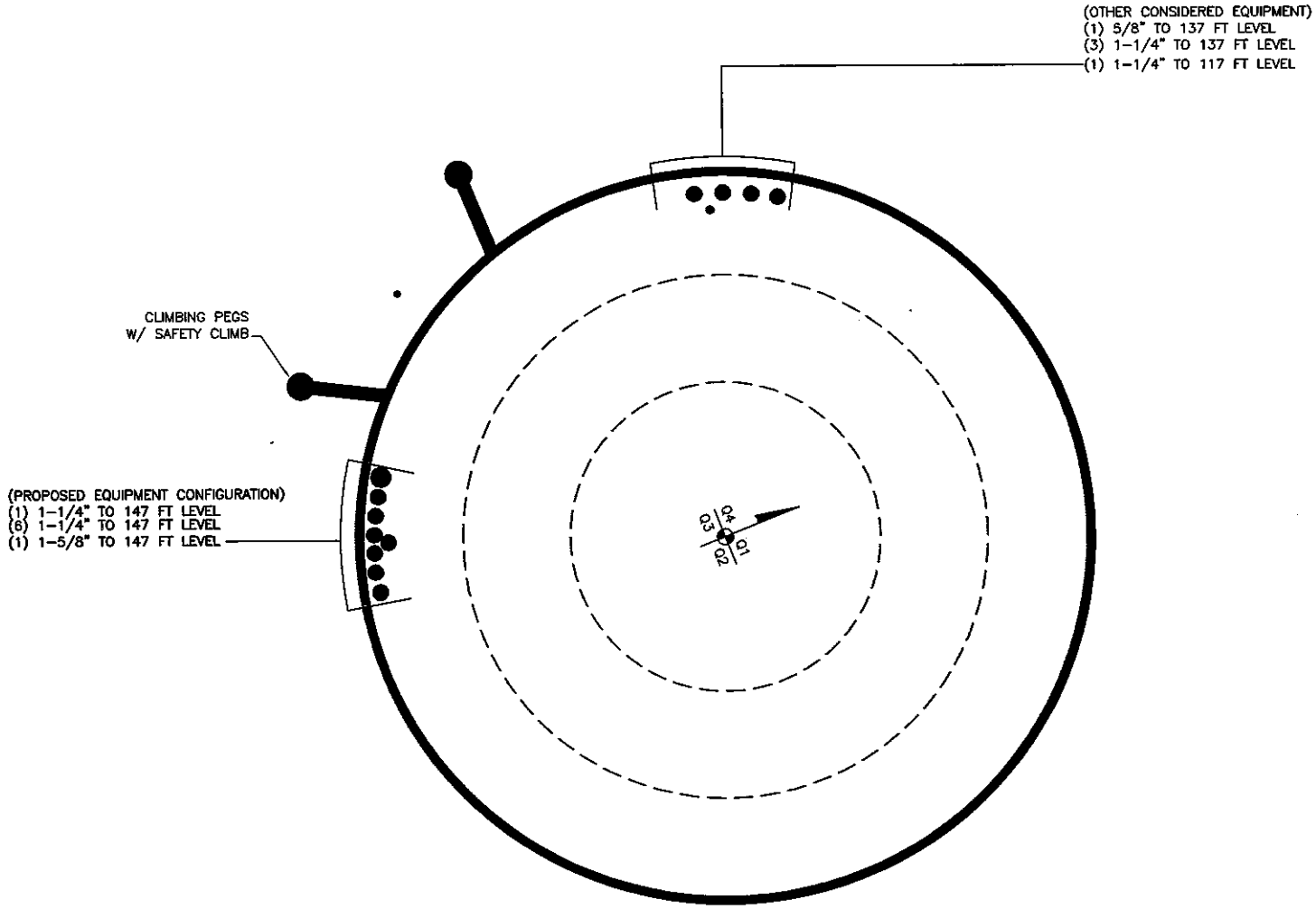
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	150 - 132.278	Pole	TP30.53x26.19x0.313	1	-8.624	2230.336	11.4	Pass
L2	132.278 - 114.556	Pole	TP34.87x30.53x0.313	2	-11.242	2417.278	25.6	Pass
L3	114.556 - 96.8334	Pole	TP39.21x34.87x0.313	3	-13.215	2525.292	34.0	Pass
L4	96.8334 - 84.3334	Pole	TP41.657x37.197x0.406	4	-18.173	3885.892	31.6	Pass
L5	84.3334 - 66.1667	Pole	TP46.103x41.657x0.406	5	-22.747	4124.043	38.1	Pass
L6	66.1667 - 48	Pole	TP50.55x46.103x0.406	6	-25.799	4252.972	41.9	Pass
L7	48 - 36.6667	Pole	TP52.52x48.024x0.5	7	-34.013	5973.418	36.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L8	36.6667 - 18.3334	Pole	TP57.01x52.52x0.5	8	-41.002	6263.334	39.9	Pass
L9	18.3334 - 0	Pole	TP61.5x57.01x0.5	9	-48.569	6517.381	43.5	Pass
							Summary	
						Pole (L9)	43.5	Pass
						RATING =	**43.5**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 806370 TOWER ID: C_BASELEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

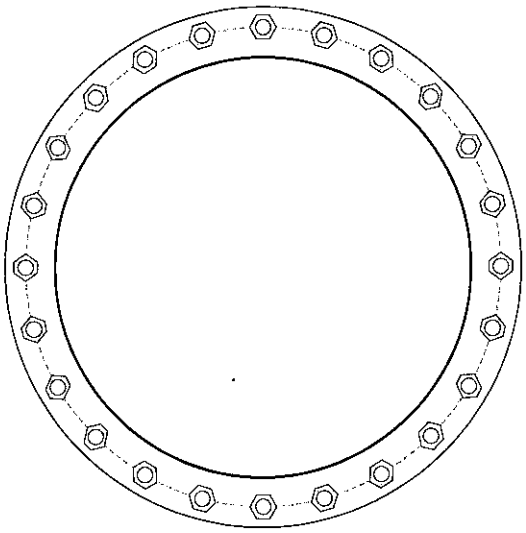
Monopole Base Plate Connection

CROWN CASTLE

Site Info	
BU #	806370
Site Name	HRT 099 943226
Order #	457789 Rev 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{gr} (in)	2

Applied Loads	
Moment (kip-ft)	3456.06
Axial Force (kips)	48.57
Shear Force (kips)	35.67



Connection Properties

Anchor Rod Data

(24) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 70.17" BC

Base Plate Data

76.17" OD x 3" Plate (A572-60; Fy=60 ksi, Fu=75 ksi)

Stiffener Data

N/A

Pole Data

61.5" x 0.5" 12-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

Pu = 100.49	ϕPn = 243.75	**Stress Rating**
Vu = 1.49	ϕVn = 73.13	**39.3%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	14.65	(Flexural)
Allowable Stress (ksi):	54	
Stress Rating:	**25.8%**	**Pass**

Drilled Pier Foundation

BU # :	806370
Site Name:	HRT 099 943226
Order Number:	457789 Rev 0

TIA-222 Revison:	H
Tower Type:	Monopole

Applied Loads	Comp.	Uplift
Moment (kip-ft)	3456	
Axial Force (kips)	49	
Shear Force (kips)	36	

Material Properties		
Concrete Strength, f'c:	3	ksi
Rebar Strength, Fy:	60	ksi

Pier Design Data		
Depth	24.5	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
From 0.5' above grade to 24.5' below grade		
Pier Diameter	9	ft
Rebar Quantity	60	
Rebar Size	10	
Clear Cover to Ties	3	in
Tie Size	3	

Analysis Results		
Soil Lateral Capacity	*Compression*	*Uplift*
$D_{v=0}$ (ft from TOC)	6.74	-
Soil Safety Factor	2.30	-
Max Moment (kip-ft)	3733.62	-
Rating*	*55.1%*	-
Soil Vertical Capacity	*Compression*	*Uplift*
Skin Friction (kips)	290.52	-
End Bearing (kips)	286.28	-
Weight of Concrete (kips)	236.26	-
Total Capacity (kips)	576.80	-
Axial (kips)	285.26	-
Rating*	*47.1%*	-
Reinforced Concrete Capacity	*Compression*	*Uplift*
Critical Depth (ft from TOC)	6.73	-
Critical Moment (kip-ft)	3733.62	-
Critical Moment Capacity	15012.79	-
Rating*	*23.7%*	-

Soil Interaction Rating*	**55.1%**
Structural Foundation Rating*	**23.7%**

*Rating per TIA-222-H Section 15.5

Check Limitation	
Apply TIA-222-H Section 15.5:	☑

Soil Profile		
Groundwater Depth	14	ft
# of Layers	4	

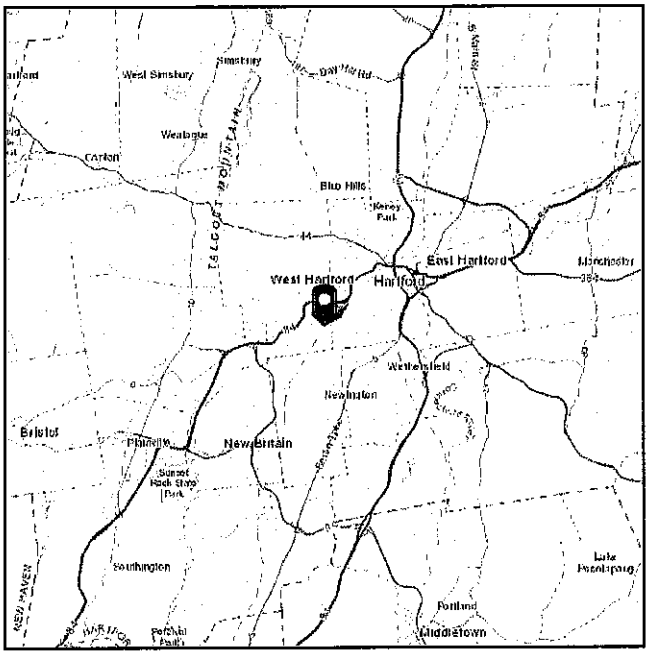
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ_{soil} (pcf)	$\gamma_{concrete}$ (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	5	5	100	150			0.000	0.000					Cohesionless
2	5	14	9	100	150	0.3	30	0.000	0.000	0.80	0.80			Cohesionless
3	14	15	1	36	87.6	0.1	23	0.363	0.363	0.80	0.80			Silty
4	15	24.5	9.5	36	87.6	0.1	23	0.465	0.465	0.60	0.60	6		Silty

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 67.47 ft (NAVD 88)
Latitude: 41.73625
Longitude: -72.720611



Wind

Results:

Wind Speed:	122 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	100 Vmph

USE 125 MPH PER 2016 CONNECTICUT STATE BUILDING CODE

Data Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014

Date Accessed: Thu Sep 06 2018

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

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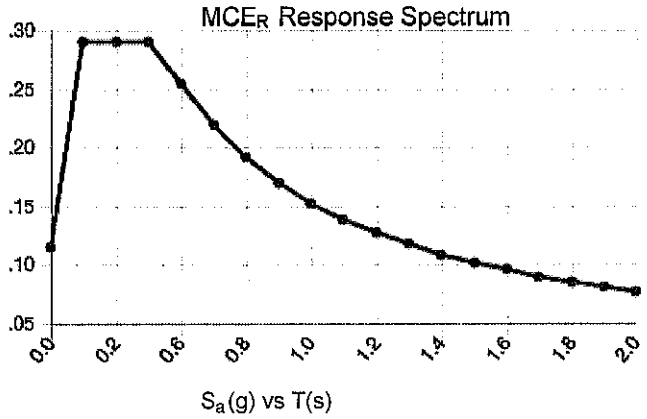
Seismic

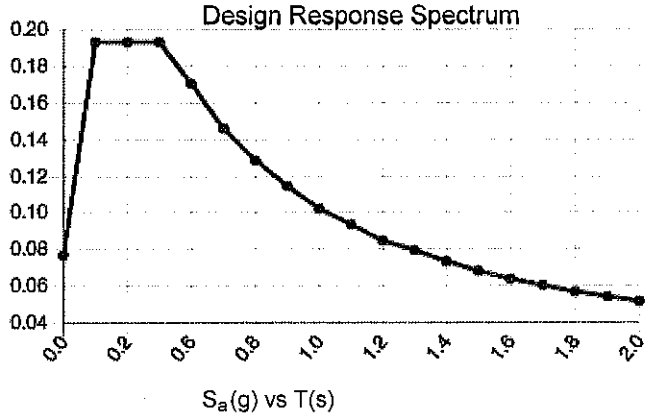
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.181	S_{DS} :	0.193
S_1 :	0.064	S_{D1} :	0.102
F_a :	1.600	T_L :	6.000
F_v :	2.400	PGA :	0.091
S_{MS} :	0.290	PGA_M :	0.146
S_{M1} :	0.153	F_{PGA} :	1.600
		I_e :	1

Seismic Design Category B





Data Accessed: Thu Sep 06 2018

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

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Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	5 F
Gust Speed:	50 mph

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

Date Accessed: Thu Sep 06 2018

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

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Date: **October 08, 2018**

Charles McGuirt
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
Charles.McGuirt@crowncastle.com

Engineered Tower Solutions, PLLC
8120 Sheridan Blvd, Suite A-311
Westminster, CO 80003
(919) 782-2710
brandon.little@ets-pllc.com

Subject:	**Mount Structural Analysis**	
Contractor Designation:	***Verizon Wireless* Co-Locate**	
	Carrier Site Number:	1926
	Carrier Site Number:	West Hartford CT
Crown Castle Designation:	**Crown Castle BU Number:**	806370
	Crown Castle Site Name:	HRT 099 943226
	Crown Castle JDE Number:	528516
	Crown Castle PO Number:	1263842
	Crown Castle Application Number:	457789 Rev. 0
Engineering Firm Designation:	**ETS Project No.:**	184430.14
Site Data:	**570 New Park Avenue, West Hartford, Hartford County, CT 06110**	
	Latitude: 41° 44' 10.50" Longitude: -72° 43' 14.20"	
Structure Information:	**Tower Height & Type:**	150.0-ft Monopole
	Mount Elevation:	147.0-ft
	Mount Width & Type:	12.0-ft Platform Mount

Dear Charles McGuirt,

Engineered Tower Solutions, PLLC is pleased to submit this **"Mount Structural Analysis Report"** to determine the structural integrity of *Verizon Wireless* antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

Based upon our analysis, we have determined the adequacy of the antenna mounting system that will support the existing and proposed loading to be for the following Load Case:

Platform Mount **Sufficient Capacity**

The analysis has been performed in accordance with the TIA-222-H Standard. This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the ***2016 Connecticut State Building Code***. Applicable Standard references and design criteria are listed in Section 2 -- Analysis Criteria.

We at Engineered Tower Solutions, PLLC 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.

Mount structural analysis prepared by:

Helen Tesfaye, EI
Structural Engineer I

Respectfully Submitted by:

Frederic G. Bost, PE
Owner/President

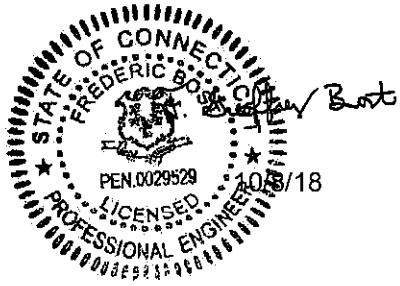


TABLE OF CONTENTS

1) INTRODUCTION

This mount is a 12.0 ft Platform mount installed at the 147.0 ft elevation of the 150.0 ft Monopole. Engineered Tower Solutions, PLLC, did not visit the site. A mapping and/or mount manufacturer drawings were not provided. Therefore, per direction of Crown Castle, photos of the tower were compared with other mounts within our database and a similar and comparable mount was used to perform this mount analysis

2) ANALYSIS CRITERIA

Building Code:	2012 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	2.00 in
Wind Speed with Ice:	50 mph
Seismic Ss:	0.181
Seismic S1:	0.064
Service Wind Speed:	30 mph

Table 1 – Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
147.0	147.0	3	ANTEL	BXA-70063-6CF-EDIN-4	12.0 ft Platform Mount
		3	ANTEL	BXA-70063-6CF-EDIN-5	
		6	COMMSCOPE	SBNHH-1D65B	
		1	RAYCAP	RVZDC-6627-PF-48	
		1	RFS/CELWAVE	DB-T1-6Z-8AB-0Z	
		3	SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	
		3	SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	

3) ANALYSIS PROCEDURE

Table 2 – Documents Provided

Document	Remarks	Reference	Source
Structural Level Drawings (Installed)	Crown Castle	08/31/2018	CCI Sites
Structural Level Drawing (Proposed)	Crown Castle	08/31/2018	CCI Sites
Carrier Application	App # 457789 Rev. 0	08/22/2018	CCI Sites
4-Structural Analysis Report	Tectonic	7793965	CCI Sites

3.1) Analysis Method

RISA-3D (version 16.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix C.

3.2) Assumptions

1) Engineered Tower Solutions, PLLC, did not visit the site. A mapping and/or mount manufacturer drawings were not provided. Therefore, per direction of Crown Castle, photos of the tower were compared with other mounts within our database and a similar and comparable mount was used to perform this mount analysis
2) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design and manufacturer's specification.
3) The configuration of antennas, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
4) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5) This Structural Analysis is not a condition assessment of the mount and is an evaluation of the theoretical structural capacity.
6) This analysis is based from the information supplied, and therefore, this report's results are as accurate as the supplied data.
7) Engineered Tower Solutions, PLLC makes no warranties, expressed and/or implied, in connection with this report, and disclaims any liability associated with material, fabrication, or erection of the mount. Engineered Tower Solutions, PLLC will not be held responsible from any consequential or incidental damages sustained by any person, firm, or organization as a result of the contents of this report. The maximum liability of Engineered Tower Solutions, PLLC pursuant to this report will be limited to the total fee received for compilation of this report.
8) It is the tower owner's responsibility to verify that the mount modeled and analyzed is the correct structure modeled.
9) The use of this report shall be limited to the purpose for which it was commissioned and may not be used for any other purposes without the written consent of Engineered Tower Solutions, PLLC.
10) Member connections are assumed to have been designed to meet or exceed the theoretical capacity of the connected member.
11) Steel grades have been assumed as follows:

a)	Channel, Solid Round, Angle, Plate	ASTM A36 (Gr 36)
b)	HSS (Rectangular)	ASTM 500 (Gr B-46)
c)	HSS (Round)	ASTM 500 (Gr B-42)
d)	Pipe	ASTM A53 (Gr 35)
e)	Connection Bolts	ASTM A325
f)	U-Bolts	SAE 429 Gr.2

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

4) ANALYSIS RESULTS

Table 3 – Mount Component Stresses vs. Capacity

Mount Centerline (ft)	Component	% Capacity	Pass/Fail	Notes
147.0	Face Mount – Horizontal	23.6	PASS	1
	Mount Pipe – Vertical	53.5	PASS	1
	Sidearm – Horizontal	80.5	PASS	1
	Brace - Horizontal	7.8	PASS	1

Notes:

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

Tower Mount Rating (max from all components) =	80.5%

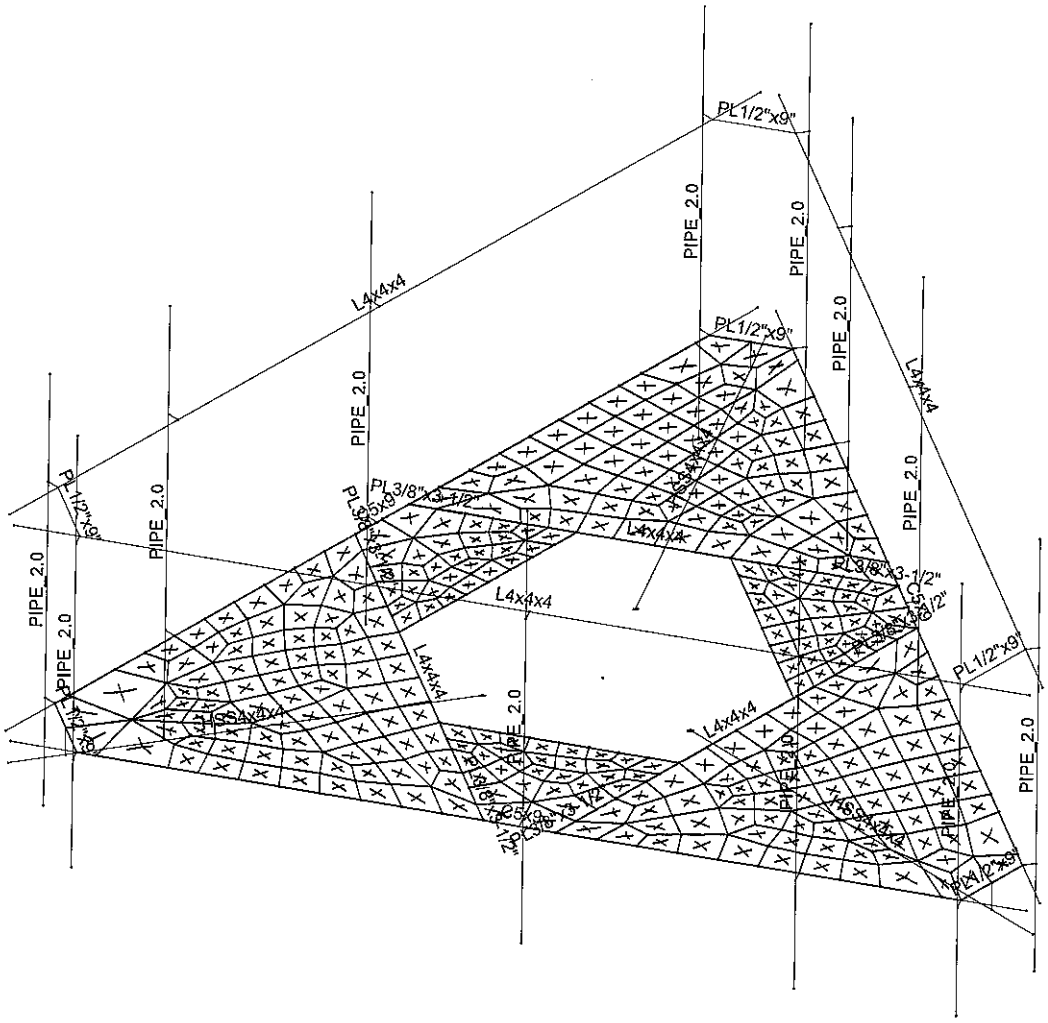
Verizon Mount Classification	M650R(450)-4[18]

4.1) Recommendations

The tower mount has sufficient capacity to carry the existing and proposed load configuration. No modifications are required at this time.

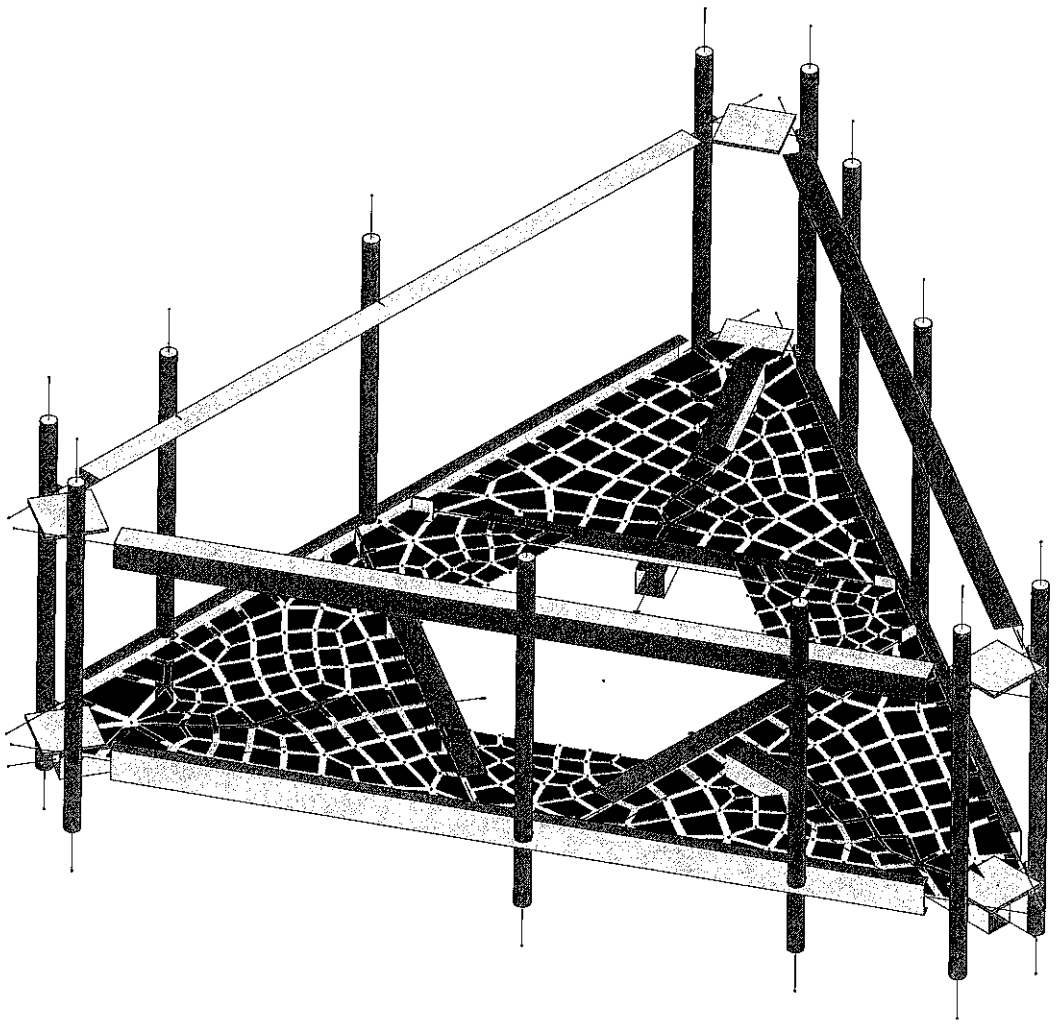
APPENDIX A

WIRE FRAME AND RENDERED MODELS



Loads: BLC 67, Maintenance Load, Lv (Pos. 11)

Crown Castle	806370-HRT 099 943226	SK - 1
HHT		Oct 8, 2018 at 9:20 AM
ETS Job No. 184430.14		HRT 099 943226_Loaded.r3d



Loads: BLC 67, Maintenance Load, Lv (Pos. 11)

Crown Castle	806370-HRT 099 943226	SK - 2
HHT		Oct 8, 2018 at 9:20 AM
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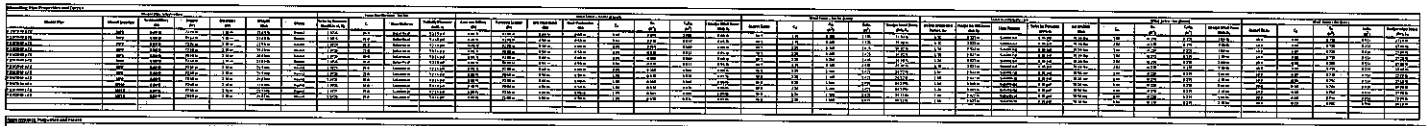
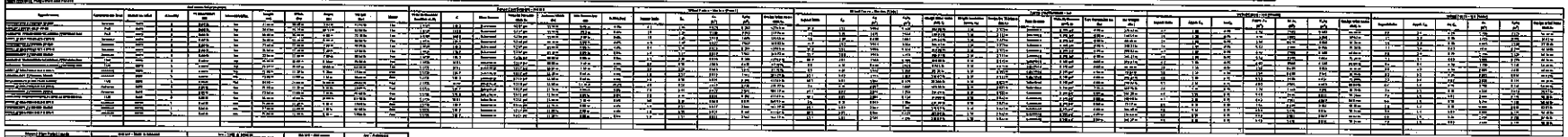
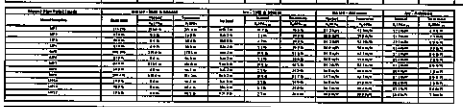
APPENDIX B

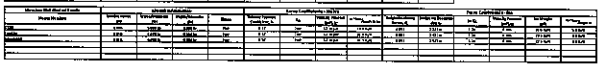
SOFTWARE INPUT CALCULATIONS

ENGINEERED TOWER SOLUTIONS, PLLC









APPENDIX C

SOFTWARE ANALYSIS OUTPUT

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(de...	Section/Shape	Type	Design List	Material	Design Rules
1	BRACE-1	N14	N12		180	Face Bracing	None	None	A36 Gr.36	Typical
2	BRACE-2	N32	N30		180	Face Bracing	None	None	A36 Gr.36	Typical
3	BRACE-3	N23	N21		180	Face Bracing	None	None	A36 Gr.36	Typical
4	CORNER-PL-1	N11	N10		90	Connection Pl...	None	None	A36 Gr.36	Typical
5	CORNER-PL-2	N28	N29		90	Connection Pl...	None	None	A36 Gr.36	Typical
6	CORNER-PL-3	N20	N19		90	Connection Pl...	None	None	A36 Gr.36	Typical
7	FM-0	N25	N9		180	C5x9	None	None	A36 Gr.36	Typical
8	FM-120	N16	N27		180	C5x9	None	None	A36 Gr.36	Typical
9	FM-240	N7	N18		180	C5x9	None	None	A36 Gr.36	Typical
10	PL4	N4	N14			Connection Pl...	None	None	A36 Gr.36	Typical
11	PL5	N12	N5			Connection Pl...	None	None	A36 Gr.36	Typical
12	PL6	N23	N6			Connection Pl...	None	None	A36 Gr.36	Typical
13	PL7	N21	N1			Connection Pl...	None	None	A36 Gr.36	Typical
14	PL8	N32	N2			Connection Pl...	None	None	A36 Gr.36	Typical
15	PL9	N30	N3			Connection Pl...	None	None	A36 Gr.36	Typical
16	RL1	N15	N38			RIGID	None	None	RIGID	Typical
17	RL3	N24	N40			RIGID	None	None	RIGID	Typical
18	RL6	N33	N42			RIGID	None	None	RIGID	Typical
19	SA-1	N8	N34			Standoff Hori...	None	None	A500 Gr....	Typical
20	SA-2	N26	N35			Standoff Hori...	None	None	A500 Gr....	Typical
21	SA-3	N17	N36			Standoff Hori...	None	None	A500 Gr....	Typical
22	HR1	N476	N479		90	L4x4x4	Beam	Single Angle	A36 Gr.36	Typical
23	HR2	N477	N480		180	L4x4x4	Beam	Single Angle	A36 Gr.36	Typical
24	HR3	N478	N475		90	L4x4x4	Beam	Single Angle	A36 Gr.36	Typical
25	CORNER-PL-4	N482	N481		90	Connection Pl...	None	None	A36 Gr.36	Typical
26	CORNER-PL-5	N485	N486		90	Connection Pl...	None	None	A36 Gr.36	Typical
27	CORNER-PL-6	N484	N483		90	Connection Pl...	None	None	A36 Gr.36	Typical
28	M28	N11	N451A			RIGID	None	None	RIGID	Typical
29	M29	N116	N453A			RIGID	None	None	RIGID	Typical
30	M30	N450B	N454A			RIGID	None	None	RIGID	Typical
31	M31	N28	N452A			RIGID	None	None	RIGID	Typical
32	M32	N482	N459A			RIGID	None	None	RIGID	Typical
33	M33	N457A	N461A			RIGID	None	None	RIGID	Typical
34	M34	N458A	N462A			RIGID	None	None	RIGID	Typical
35	M35	N485	N460A			RIGID	None	None	RIGID	Typical
36	MP1	N465A	N461B			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
37	MP2	N467A	N463A			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
38	MP3	N468A	N464A			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
39	MP4	N466A	N462B			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
40	M40	N20	N476A			RIGID	None	None	RIGID	Typical
41	M41	N366	N478A			RIGID	None	None	RIGID	Typical
42	M42	N475A	N479A			RIGID	None	None	RIGID	Typical
43	M43	N10	N477A			RIGID	None	None	RIGID	Typical
44	M44	N484	N482A			RIGID	None	None	RIGID	Typical
45	M45	N480A	N484A			RIGID	None	None	RIGID	Typical
46	M46A	N481A	N485A			RIGID	None	None	RIGID	Typical
47	M47A	N481	N483A			RIGID	None	None	RIGID	Typical
48	MP9	N490	N486A			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
49	MP10	N492	N488			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
50	MP11	N493	N489			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
51	MP12	N491	N487			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
52	M52	N29	N501			RIGID	None	None	RIGID	Typical
53	M53	N230	N503			RIGID	None	None	RIGID	Typical
54	M54	N500	N504			RIGID	None	None	RIGID	Typical
55	M55	N19	N502			RIGID	None	None	RIGID	Typical
56	M56	N486	N507			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(de...	Section/Shape	Type	Design List	Material	Design Rules
57	M57	N505	N509			RIGID	None	None	RIGID	Typical
58	M58	N506	N510			RIGID	None	None	RIGID	Typical
59	M59	N483	N508			RIGID	None	None	RIGID	Typical
60	MP5	N515	N511			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
61	MP6	N517	N513			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
62	MP7	N518	N514			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical
63	MP8	N516	N512			PIPE_2.0	Column	Pipe	A53 Gr.B	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RIGID		27	57.9	0
3	Total General		27	57.9	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	C5x9	3	432	.3
7	A36 Gr.36	L4x4x4	6	617.1	.3
8	A36 Gr.36	PL1/2"x9"	6	71	0
9	A36 Gr.36	PL3/8"x3-1/2"	6	23.1	0
10	A500 Gr.B Rect	HSS4x4x4	3	200.6	.2
11	A53 Gr.B	PIPE_2.0	12	864	.2
12	Total HR Steel		36	2207.8	1.2
13					
14	Plate Elements	Thickness (in)		Volume (yds^3)	
15	GRATE	.1	358	0	.3
16	Total Plates		358	0	.3

Member Point Loads (BLC 1 : Dead Load)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-213.2	%50
2	MP2	Y	-17	%50
3	MP3	Y	-40.6	%50
4	MP4	Y	-17	%50
5	MP5	Y	-195.3	%50
6	MP6	Y	-17	%50
7	MP7	Y	-84.6	%50
8	MP8	Y	-17	%50
9	MP9	Y	-209.4	%50
10	MP10	Y	-17	%50
11	MP11	Y	-40.6	%50
12	MP12	Y	-17	%50

Member Point Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	354	%50
2	MP2	X	.8	%50
3	MP3	X	0	%50
4	MP4	X	.8	%50
5	MP5	X	173.8	%50
6	MP6	X	50.4	%50
7	MP7	X	149	%50
8	MP8	X	50.4	%50
9	MP9	X	182.2	%50

Member Point Loads (BLC 2 : Wind Load (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
10	MP10	X	50.4	%50
11	MP11	X	50.2	%50
12	MP12	X	50.4	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%50
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

Member Point Loads (BLC 3 : Wind Load (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	290.6	%50
2	MP2	X	15	%50
3	MP3	X	14.5	%50
4	MP4	X	15	%50
5	MP5	X	149.9	%50
6	MP6	X	57.9	%50
7	MP7	X	139.2	%50
8	MP8	X	57.9	%50
9	MP9	X	154.2	%50
10	MP10	X	15	%50
11	MP11	X	14.5	%50
12	MP12	X	15	%50
13	MP1	Z	167.8	%50
14	MP2	Z	8.7	%50
15	MP3	Z	8.4	%50
16	MP4	Z	8.7	%50
17	MP5	Z	86.5	%50
18	MP6	Z	33.4	%50
19	MP7	Z	80.4	%50
20	MP8	Z	33.4	%50
21	MP9	Z	89	%50
22	MP10	Z	8.7	%50
23	MP11	Z	8.4	%50
24	MP12	Z	8.7	%50

Member Point Loads (BLC 4 : Wind Load (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	149.2	%50
2	MP2	X	25.2	%50
3	MP3	X	25.1	%50
4	MP4	X	25.2	%50
5	MP5	X	86.9	%50
6	MP6	X	25.2	%50
7	MP7	X	74.5	%50
8	MP8	X	25.2	%50
9	MP9	X	88	%50
10	MP10	X	.4	%50
11	MP11	X	0	%50

Member Point Loads (BLC 4 : Wind Load (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP12	X	.4	%50
13	MP1	Z	258.5	%50
14	MP2	Z	43.6	%50
15	MP3	Z	43.4	%50
16	MP4	Z	43.6	%50
17	MP5	Z	150.5	%50
18	MP6	Z	43.6	%50
19	MP7	Z	129	%50
20	MP8	Z	43.6	%50
21	MP9	Z	152.4	%50
22	MP10	Z	.7	%50
23	MP11	Z	0	%50
24	MP12	Z	.7	%50

Member Point Loads (BLC 5 : Wind Load (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	279.9	%50
14	MP2	Z	66.9	%50
15	MP3	Z	66.9	%50
16	MP4	Z	66.9	%50
17	MP5	Z	175.3	%50
18	MP6	Z	17.3	%50
19	MP7	Z	125.4	%50
20	MP8	Z	17.3	%50
21	MP9	Z	178.1	%50
22	MP10	Z	17.3	%50
23	MP11	Z	16.7	%50
24	MP12	Z	17.3	%50

Member Point Loads (BLC 6 : Wind Load (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-149.2	%50
2	MP2	X	-25.2	%50
3	MP3	X	-25.1	%50
4	MP4	X	-25.2	%50
5	MP5	X	-88	%50
6	MP6	X	-.4	%50
7	MP7	X	-56.8	%50
8	MP8	X	-.4	%50
9	MP9	X	-91.1	%50
10	MP10	X	-25.2	%50
11	MP11	X	-25.1	%50
12	MP12	X	-25.2	%50
13	MP1	Z	258.5	%50

Member Point Loads (BLC 6 : Wind Load (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
14	MP2	Z	43.6	%50
15	MP3	Z	43.4	%50
16	MP4	Z	43.6	%50
17	MP5	Z	152.4	%50
18	MP6	Z	.7	%50
19	MP7	Z	98.4	%50
20	MP8	Z	.7	%50
21	MP9	Z	157.8	%50
22	MP10	Z	43.6	%50
23	MP11	Z	43.4	%50
24	MP12	Z	43.6	%50

Member Point Loads (BLC 7 : Wind Load (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-290.6	%50
2	MP2	X	-15	%50
3	MP3	X	-14.5	%50
4	MP4	X	-15	%50
5	MP5	X	-151.8	%50
6	MP6	X	-15	%50
7	MP7	X	-108.6	%50
8	MP8	X	-15	%50
9	MP9	X	-159.6	%50
10	MP10	X	-57.9	%50
11	MP11	X	-57.9	%50
12	MP12	X	-57.9	%50
13	MP1	Z	167.8	%50
14	MP2	Z	8.7	%50
15	MP3	Z	8.4	%50
16	MP4	Z	8.7	%50
17	MP5	Z	87.6	%50
18	MP6	Z	8.7	%50
19	MP7	Z	62.7	%50
20	MP8	Z	8.7	%50
21	MP9	Z	92.1	%50
22	MP10	Z	33.4	%50
23	MP11	Z	33.4	%50
24	MP12	Z	33.4	%50

Member Point Loads (BLC 8 : Wind Load (180 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-354	%50
2	MP2	X	-.8	%50
3	MP3	X	0	%50
4	MP4	X	-.8	%50
5	MP5	X	-173.8	%50
6	MP6	X	-50.4	%50
7	MP7	X	-149	%50
8	MP8	X	-50.4	%50
9	MP9	X	-182.2	%50
10	MP10	X	-50.4	%50
11	MP11	X	-50.2	%50
12	MP12	X	-50.4	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50

Member Point Loads (BLC 8 : Wind Load (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
16	MP4	Z	0	%50
17	MP5	Z	0	%50
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

Member Point Loads (BLC 9 : Wind Load (210 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-290.6	%50
2	MP2	X	-15	%50
3	MP3	X	-14.5	%50
4	MP4	X	-15	%50
5	MP5	X	-149.9	%50
6	MP6	X	-57.9	%50
7	MP7	X	-139.2	%50
8	MP8	X	-57.9	%50
9	MP9	X	-154.2	%50
10	MP10	X	-15	%50
11	MP11	X	-14.5	%50
12	MP12	X	-15	%50
13	MP1	Z	-167.8	%50
14	MP2	Z	-8.7	%50
15	MP3	Z	-8.4	%50
16	MP4	Z	-8.7	%50
17	MP5	Z	-86.5	%50
18	MP6	Z	-33.4	%50
19	MP7	Z	-80.4	%50
20	MP8	Z	-33.4	%50
21	MP9	Z	-89	%50
22	MP10	Z	-8.7	%50
23	MP11	Z	-8.4	%50
24	MP12	Z	-8.7	%50

Member Point Loads (BLC 10 : Wind Load (240 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-149.2	%50
2	MP2	X	-25.2	%50
3	MP3	X	-25.1	%50
4	MP4	X	-25.2	%50
5	MP5	X	-86.9	%50
6	MP6	X	-25.2	%50
7	MP7	X	-74.5	%50
8	MP8	X	-25.2	%50
9	MP9	X	-88	%50
10	MP10	X	-.4	%50
11	MP11	X	0	%50
12	MP12	X	-.4	%50
13	MP1	Z	-258.5	%50
14	MP2	Z	-43.6	%50
15	MP3	Z	-43.4	%50
16	MP4	Z	-43.6	%50
17	MP5	Z	-150.5	%50

Member Point Loads (BLC 10 : Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
18	MP6	Z	-43.6	%50
19	MP7	Z	-129	%50
20	MP8	Z	-43.6	%50
21	MP9	Z	-152.4	%50
22	MP10	Z	-.7	%50
23	MP11	Z	0	%50
24	MP12	Z	-.7	%50

Member Point Loads (BLC 11 : Wind Load (270 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-279.9	%50
14	MP2	Z	-66.9	%50
15	MP3	Z	-66.9	%50
16	MP4	Z	-66.9	%50
17	MP5	Z	-175.3	%50
18	MP6	Z	-17.3	%50
19	MP7	Z	-125.4	%50
20	MP8	Z	-17.3	%50
21	MP9	Z	-178.1	%50
22	MP10	Z	-17.3	%50
23	MP11	Z	-16.7	%50
24	MP12	Z	-17.3	%50

Member Point Loads (BLC 12 : Wind Load (300 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	149.2	%50
2	MP2	X	25.2	%50
3	MP3	X	25.1	%50
4	MP4	X	25.2	%50
5	MP5	X	88	%50
6	MP6	X	.4	%50
7	MP7	X	56.8	%50
8	MP8	X	.4	%50
9	MP9	X	91.1	%50
10	MP10	X	25.2	%50
11	MP11	X	25.1	%50
12	MP12	X	25.2	%50
13	MP1	Z	-258.5	%50
14	MP2	Z	-43.6	%50
15	MP3	Z	-43.4	%50
16	MP4	Z	-43.6	%50
17	MP5	Z	-152.4	%50
18	MP6	Z	-.7	%50
19	MP7	Z	-98.4	%50

Member Point Loads (BLC 12 : Wind Load (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
20	MP8	Z	-.7	%50
21	MP9	Z	-157.8	%50
22	MP10	Z	-43.6	%50
23	MP11	Z	-43.4	%50
24	MP12	Z	-43.6	%50

Member Point Loads (BLC 13 : Wind Load (330 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	290.6	%50
2	MP2	X	15	%50
3	MP3	X	14.5	%50
4	MP4	X	15	%50
5	MP5	X	151.8	%50
6	MP6	X	15	%50
7	MP7	X	108.6	%50
8	MP8	X	15	%50
9	MP9	X	159.6	%50
10	MP10	X	57.9	%50
11	MP11	X	57.9	%50
12	MP12	X	57.9	%50
13	MP1	Z	-167.8	%50
14	MP2	Z	-8.7	%50
15	MP3	Z	-8.4	%50
16	MP4	Z	-8.7	%50
17	MP5	Z	-87.6	%50
18	MP6	Z	-8.7	%50
19	MP7	Z	-62.7	%50
20	MP8	Z	-8.7	%50
21	MP9	Z	-92.1	%50
22	MP10	Z	-33.4	%50
23	MP11	Z	-33.4	%50
24	MP12	Z	-33.4	%50

Member Point Loads (BLC 14 : Ice Load)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-640.7	%50
2	MP2	Y	-326.2	%50
3	MP3	Y	-358.8	%50
4	MP4	Y	-326.2	%50
5	MP5	Y	-499.7	%50
6	MP6	Y	-326.2	%50
7	MP7	Y	-519.5	%50
8	MP8	Y	-326.2	%50
9	MP9	Y	-503.2	%50
10	MP10	Y	-326.2	%50
11	MP11	Y	-358.8	%50
12	MP12	Y	-326.2	%50

Member Point Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	70.7	%50
2	MP2	X	2.1	%50
3	MP3	X	1.7	%50
4	MP4	X	2.1	%50
5	MP5	X	47.8	%50

Member Point Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
6	MP6	X	19.2	%50
7	MP7	X	39.6	%50
8	MP8	X	19.2	%50
9	MP9	X	49.4	%50
10	MP10	X	19.2	%50
11	MP11	X	19.1	%50
12	MP12	X	19.2	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%50
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

Member Point Loads (BLC 16 : Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	62.3	%50
2	MP2	X	6.7	%50
3	MP3	X	6.5	%50
4	MP4	X	6.7	%50
5	MP5	X	44.7	%50
6	MP6	X	21.6	%50
7	MP7	X	40.2	%50
8	MP8	X	21.6	%50
9	MP9	X	35.4	%50
10	MP10	X	6.7	%50
11	MP11	X	6.5	%50
12	MP12	X	6.7	%50
13	MP1	Z	36	%50
14	MP2	Z	3.9	%50
15	MP3	Z	3.7	%50
16	MP4	Z	3.9	%50
17	MP5	Z	25.8	%50
18	MP6	Z	12.4	%50
19	MP7	Z	23.2	%50
20	MP8	Z	12.4	%50
21	MP9	Z	20.4	%50
22	MP10	Z	3.9	%50
23	MP11	Z	3.7	%50
24	MP12	Z	3.9	%50

Member Point Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	37.2	%50
2	MP2	X	9.6	%50
3	MP3	X	9.5	%50
4	MP4	X	9.6	%50
5	MP5	X	23.9	%50
6	MP6	X	9.6	%50
7	MP7	X	19.8	%50

Member Point Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
8	MP8	X	9.6	%50
9	MP9	X	18.3	%50
10	MP10	X	1	%50
11	MP11	X	.9	%50
12	MP12	X	1	%50
13	MP1	Z	64.4	%50
14	MP2	Z	16.6	%50
15	MP3	Z	16.5	%50
16	MP4	Z	16.6	%50
17	MP5	Z	41.4	%50
18	MP6	Z	16.6	%50
19	MP7	Z	34.3	%50
20	MP8	Z	16.6	%50
21	MP9	Z	31.6	%50
22	MP10	Z	1.8	%50
23	MP11	Z	1.5	%50
24	MP12	Z	1.8	%50

Member Point Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	75.6	%50
14	MP2	Z	24.9	%50
15	MP3	Z	24.9	%50
16	MP4	Z	24.9	%50
17	MP5	Z	40.3	%50
18	MP6	Z	7.8	%50
19	MP7	Z	25.9	%50
20	MP8	Z	7.8	%50
21	MP9	Z	40.8	%50
22	MP10	Z	7.8	%50
23	MP11	Z	7.5	%50
24	MP12	Z	7.8	%50

Member Point Loads (BLC 19 : Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-37.2	%50
2	MP2	X	-9.6	%50
3	MP3	X	-9.5	%50
4	MP4	X	-9.6	%50
5	MP5	X	-18.3	%50
6	MP6	X	-1	%50
7	MP7	X	-9.5	%50
8	MP8	X	-1	%50
9	MP9	X	-24.7	%50

Member Point Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
10	MP10	X	-9.6	%50
11	MP11	X	-9.5	%50
12	MP12	X	-9.6	%50
13	MP1	Z	64.4	%50
14	MP2	Z	16.6	%50
15	MP3	Z	16.5	%50
16	MP4	Z	16.6	%50
17	MP5	Z	31.6	%50
18	MP6	Z	1.8	%50
19	MP7	Z	16.5	%50
20	MP8	Z	1.8	%50
21	MP9	Z	42.8	%50
22	MP10	Z	16.6	%50
23	MP11	Z	16.5	%50
24	MP12	Z	16.6	%50

Member Point Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-62.3	%50
2	MP2	X	-6.7	%50
3	MP3	X	-6.5	%50
4	MP4	X	-6.7	%50
5	MP5	X	-34.9	%50
6	MP6	X	-6.7	%50
7	MP7	X	-22.4	%50
8	MP8	X	-6.7	%50
9	MP9	X	-46.5	%50
10	MP10	X	-21.6	%50
11	MP11	X	-21.6	%50
12	MP12	X	-21.6	%50
13	MP1	Z	36	%50
14	MP2	Z	3.9	%50
15	MP3	Z	3.7	%50
16	MP4	Z	3.9	%50
17	MP5	Z	20.1	%50
18	MP6	Z	3.9	%50
19	MP7	Z	12.9	%50
20	MP8	Z	3.9	%50
21	MP9	Z	26.9	%50
22	MP10	Z	12.4	%50
23	MP11	Z	12.4	%50
24	MP12	Z	12.4	%50

Member Point Loads (BLC 21 : Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-70.7	%50
2	MP2	X	-2.1	%50
3	MP3	X	-1.7	%50
4	MP4	X	-2.1	%50
5	MP5	X	-47.8	%50
6	MP6	X	-19.2	%50
7	MP7	X	-39.6	%50
8	MP8	X	-19.2	%50
9	MP9	X	-49.4	%50
10	MP10	X	-19.2	%50
11	MP11	X	-19.1	%50

Member Point Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP12	X	-19.2	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%50
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

Member Point Loads (BLC 22 : Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-62.3	%50
2	MP2	X	-6.7	%50
3	MP3	X	-6.5	%50
4	MP4	X	-6.7	%50
5	MP5	X	-44.7	%50
6	MP6	X	-21.6	%50
7	MP7	X	-40.2	%50
8	MP8	X	-21.6	%50
9	MP9	X	-35.4	%50
10	MP10	X	-6.7	%50
11	MP11	X	-6.5	%50
12	MP12	X	-6.7	%50
13	MP1	Z	-36	%50
14	MP2	Z	-3.9	%50
15	MP3	Z	-3.7	%50
16	MP4	Z	-3.9	%50
17	MP5	Z	-25.8	%50
18	MP6	Z	-12.4	%50
19	MP7	Z	-23.2	%50
20	MP8	Z	-12.4	%50
21	MP9	Z	-20.4	%50
22	MP10	Z	-3.9	%50
23	MP11	Z	-3.7	%50
24	MP12	Z	-3.9	%50

Member Point Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-37.2	%50
2	MP2	X	-9.6	%50
3	MP3	X	-9.5	%50
4	MP4	X	-9.6	%50
5	MP5	X	-23.9	%50
6	MP6	X	-9.6	%50
7	MP7	X	-19.8	%50
8	MP8	X	-9.6	%50
9	MP9	X	-18.3	%50
10	MP10	X	-1	%50
11	MP11	X	-.9	%50
12	MP12	X	-1	%50
13	MP1	Z	-64.4	%50

Member Point Loads (BLC 23 : Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
14	MP2	Z	-16.6	%50
15	MP3	Z	-16.5	%50
16	MP4	Z	-16.6	%50
17	MP5	Z	-41.4	%50
18	MP6	Z	-16.6	%50
19	MP7	Z	-34.3	%50
20	MP8	Z	-16.6	%50
21	MP9	Z	-31.6	%50
22	MP10	Z	-1.8	%50
23	MP11	Z	-1.5	%50
24	MP12	Z	-1.8	%50

Member Point Loads (BLC 24 : Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-75.6	%50
14	MP2	Z	-24.9	%50
15	MP3	Z	-24.9	%50
16	MP4	Z	-24.9	%50
17	MP5	Z	-40.3	%50
18	MP6	Z	-7.8	%50
19	MP7	Z	-25.9	%50
20	MP8	Z	-7.8	%50
21	MP9	Z	-40.8	%50
22	MP10	Z	-7.8	%50
23	MP11	Z	-7.5	%50
24	MP12	Z	-7.8	%50

Member Point Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	37.2	%50
2	MP2	X	9.6	%50
3	MP3	X	9.5	%50
4	MP4	X	9.6	%50
5	MP5	X	18.3	%50
6	MP6	X	1	%50
7	MP7	X	9.5	%50
8	MP8	X	1	%50
9	MP9	X	24.7	%50
10	MP10	X	9.6	%50
11	MP11	X	9.5	%50
12	MP12	X	9.6	%50
13	MP1	Z	-64.4	%50
14	MP2	Z	-16.6	%50
15	MP3	Z	-16.5	%50

Member Point Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
16	MP4	Z	-16.6	%50
17	MP5	Z	-31.6	%50
18	MP6	Z	-1.8	%50
19	MP7	Z	-16.5	%50
20	MP8	Z	-1.8	%50
21	MP9	Z	-42.8	%50
22	MP10	Z	-16.6	%50
23	MP11	Z	-16.5	%50
24	MP12	Z	-16.6	%50

Member Point Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	62.3	%50
2	MP2	X	6.7	%50
3	MP3	X	6.5	%50
4	MP4	X	6.7	%50
5	MP5	X	34.9	%50
6	MP6	X	6.7	%50
7	MP7	X	22.4	%50
8	MP8	X	6.7	%50
9	MP9	X	46.5	%50
10	MP10	X	21.6	%50
11	MP11	X	21.6	%50
12	MP12	X	21.6	%50
13	MP1	Z	-36	%50
14	MP2	Z	-3.9	%50
15	MP3	Z	-3.7	%50
16	MP4	Z	-3.9	%50
17	MP5	Z	-20.1	%50
18	MP6	Z	-3.9	%50
19	MP7	Z	-12.9	%50
20	MP8	Z	-3.9	%50
21	MP9	Z	-26.9	%50
22	MP10	Z	-12.4	%50
23	MP11	Z	-12.4	%50
24	MP12	Z	-12.4	%50

Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	213.2	%50
2	MP2	X	17	%50
3	MP3	X	40.6	%50
4	MP4	X	17	%50
5	MP5	X	195.3	%50
6	MP6	X	17	%50
7	MP7	X	84.6	%50
8	MP8	X	17	%50
9	MP9	X	209.4	%50
10	MP10	X	17	%50
11	MP11	X	40.6	%50
12	MP12	X	17	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%50

Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

Member Point Loads (BLC 28 : Horizontal Seismic, Eh (30))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	184.6	%50
2	MP2	X	14.7	%50
3	MP3	X	35.2	%50
4	MP4	X	14.7	%50
5	MP5	X	169.1	%50
6	MP6	X	14.7	%50
7	MP7	X	73.3	%50
8	MP8	X	14.7	%50
9	MP9	X	181.3	%50
10	MP10	X	14.7	%50
11	MP11	X	35.2	%50
12	MP12	X	14.7	%50
13	MP1	Z	106.6	%50
14	MP2	Z	8.5	%50
15	MP3	Z	20.3	%50
16	MP4	Z	8.5	%50
17	MP5	Z	97.6	%50
18	MP6	Z	8.5	%50
19	MP7	Z	42.3	%50
20	MP8	Z	8.5	%50
21	MP9	Z	104.7	%50
22	MP10	Z	8.5	%50
23	MP11	Z	20.3	%50
24	MP12	Z	8.5	%50

Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	106.6	%50
2	MP2	X	8.5	%50
3	MP3	X	20.3	%50
4	MP4	X	8.5	%50
5	MP5	X	97.7	%50
6	MP6	X	8.5	%50
7	MP7	X	42.3	%50
8	MP8	X	8.5	%50
9	MP9	X	104.7	%50
10	MP10	X	8.5	%50
11	MP11	X	20.3	%50
12	MP12	X	8.5	%50
13	MP1	Z	184.6	%50
14	MP2	Z	14.7	%50
15	MP3	Z	35.2	%50
16	MP4	Z	14.7	%50
17	MP5	Z	169.1	%50
18	MP6	Z	14.7	%50
19	MP7	Z	73.3	%50

Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
20	MP8	Z	14.7	%50
21	MP9	Z	181.3	%50
22	MP10	Z	14.7	%50
23	MP11	Z	35.2	%50
24	MP12	Z	14.7	%50

Member Point Loads (BLC 30 : Horizontal Seismic, Eh (90))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	213.2	%50
14	MP2	Z	17	%50
15	MP3	Z	40.6	%50
16	MP4	Z	17	%50
17	MP5	Z	195.3	%50
18	MP6	Z	17	%50
19	MP7	Z	84.6	%50
20	MP8	Z	17	%50
21	MP9	Z	209.4	%50
22	MP10	Z	17	%50
23	MP11	Z	40.6	%50
24	MP12	Z	17	%50

Member Point Loads (BLC 31 : Horizontal Seismic, Eh (120))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-106.6	%50
2	MP2	X	-8.5	%50
3	MP3	X	-20.3	%50
4	MP4	X	-8.5	%50
5	MP5	X	-97.6	%50
6	MP6	X	-8.5	%50
7	MP7	X	-42.3	%50
8	MP8	X	-8.5	%50
9	MP9	X	-104.7	%50
10	MP10	X	-8.5	%50
11	MP11	X	-20.3	%50
12	MP12	X	-8.5	%50
13	MP1	Z	184.6	%50
14	MP2	Z	14.7	%50
15	MP3	Z	35.2	%50
16	MP4	Z	14.7	%50
17	MP5	Z	169.1	%50
18	MP6	Z	14.7	%50
19	MP7	Z	73.3	%50
20	MP8	Z	14.7	%50
21	MP9	Z	181.3	%50

Member Point Loads (BLC 31 : Horizontal Seismic, Eh (120)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
22	MP10	Z	14.7	%50
23	MP11	Z	35.2	%50
24	MP12	Z	14.7	%50

Member Point Loads (BLC 32 : Horizontal Seismic, Eh (150))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-184.6	%50
2	MP2	X	-14.7	%50
3	MP3	X	-35.2	%50
4	MP4	X	-14.7	%50
5	MP5	X	-169.1	%50
6	MP6	X	-14.7	%50
7	MP7	X	-73.3	%50
8	MP8	X	-14.7	%50
9	MP9	X	-181.3	%50
10	MP10	X	-14.7	%50
11	MP11	X	-35.2	%50
12	MP12	X	-14.7	%50
13	MP1	Z	106.6	%50
14	MP2	Z	8.5	%50
15	MP3	Z	20.3	%50
16	MP4	Z	8.5	%50
17	MP5	Z	97.6	%50
18	MP6	Z	8.5	%50
19	MP7	Z	42.3	%50
20	MP8	Z	8.5	%50
21	MP9	Z	104.7	%50
22	MP10	Z	8.5	%50
23	MP11	Z	20.3	%50
24	MP12	Z	8.5	%50

Member Point Loads (BLC 33 : Horizontal Seismic, Eh (180))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-213.2	%50
2	MP2	X	-17	%50
3	MP3	X	-40.6	%50
4	MP4	X	-17	%50
5	MP5	X	-195.3	%50
6	MP6	X	-17	%50
7	MP7	X	-84.6	%50
8	MP8	X	-17	%50
9	MP9	X	-209.4	%50
10	MP10	X	-17	%50
11	MP11	X	-40.6	%50
12	MP12	X	-17	%50
13	MP1	Z	0	%50
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%50
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%50
22	MP10	Z	0	%50
23	MP11	Z	0	%50

Member Point Loads (BLC 33 : Horizontal Seismic, Eh (180)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
24	MP12	Z	0	%50

Member Point Loads (BLC 34 : Horizontal Seismic, Eh (210))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-184.6	%50
2	MP2	X	-14.7	%50
3	MP3	X	-35.2	%50
4	MP4	X	-14.7	%50
5	MP5	X	-169.1	%50
6	MP6	X	-14.7	%50
7	MP7	X	-73.3	%50
8	MP8	X	-14.7	%50
9	MP9	X	-181.3	%50
10	MP10	X	-14.7	%50
11	MP11	X	-35.2	%50
12	MP12	X	-14.7	%50
13	MP1	Z	-106.6	%50
14	MP2	Z	-8.5	%50
15	MP3	Z	-20.3	%50
16	MP4	Z	-8.5	%50
17	MP5	Z	-97.7	%50
18	MP6	Z	-8.5	%50
19	MP7	Z	-42.3	%50
20	MP8	Z	-8.5	%50
21	MP9	Z	-104.7	%50
22	MP10	Z	-8.5	%50
23	MP11	Z	-20.3	%50
24	MP12	Z	-8.5	%50

Member Point Loads (BLC 35 : Horizontal Seismic, Eh (240))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-106.6	%50
2	MP2	X	-8.5	%50
3	MP3	X	-20.3	%50
4	MP4	X	-8.5	%50
5	MP5	X	-97.7	%50
6	MP6	X	-8.5	%50
7	MP7	X	-42.3	%50
8	MP8	X	-8.5	%50
9	MP9	X	-104.7	%50
10	MP10	X	-8.5	%50
11	MP11	X	-20.3	%50
12	MP12	X	-8.5	%50
13	MP1	Z	-184.6	%50
14	MP2	Z	-14.7	%50
15	MP3	Z	-35.2	%50
16	MP4	Z	-14.7	%50
17	MP5	Z	-169.1	%50
18	MP6	Z	-14.7	%50
19	MP7	Z	-73.3	%50
20	MP8	Z	-14.7	%50
21	MP9	Z	-181.3	%50
22	MP10	Z	-14.7	%50
23	MP11	Z	-35.2	%50
24	MP12	Z	-14.7	%50

Member Point Loads (BLC 36 : Horizontal Seismic, Eh (270))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-213.2	%50
14	MP2	Z	-17	%50
15	MP3	Z	-40.6	%50
16	MP4	Z	-17	%50
17	MP5	Z	-195.3	%50
18	MP6	Z	-17	%50
19	MP7	Z	-84.6	%50
20	MP8	Z	-17	%50
21	MP9	Z	-209.4	%50
22	MP10	Z	-17	%50
23	MP11	Z	-40.6	%50
24	MP12	Z	-17	%50

Member Point Loads (BLC 37 : Horizontal Seismic, Eh (300))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	106.6	%50
2	MP2	X	8.5	%50
3	MP3	X	20.3	%50
4	MP4	X	8.5	%50
5	MP5	X	97.7	%50
6	MP6	X	8.5	%50
7	MP7	X	42.3	%50
8	MP8	X	8.5	%50
9	MP9	X	104.7	%50
10	MP10	X	8.5	%50
11	MP11	X	20.3	%50
12	MP12	X	8.5	%50
13	MP1	Z	-184.6	%50
14	MP2	Z	-14.7	%50
15	MP3	Z	-35.2	%50
16	MP4	Z	-14.7	%50
17	MP5	Z	-169.1	%50
18	MP6	Z	-14.7	%50
19	MP7	Z	-73.3	%50
20	MP8	Z	-14.7	%50
21	MP9	Z	-181.3	%50
22	MP10	Z	-14.7	%50
23	MP11	Z	-35.2	%50
24	MP12	Z	-14.7	%50

Member Point Loads (BLC 38 : Horizontal Seismic, Eh (330))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	184.6	%50
2	MP2	X	14.7	%50

Member Point Loads (BLC 38 : Horizontal Seismic, Eh (330)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP3	X	35.2	%50
4	MP4	X	14.7	%50
5	MP5	X	169.1	%50
6	MP6	X	14.7	%50
7	MP7	X	73.3	%50
8	MP8	X	14.7	%50
9	MP9	X	181.3	%50
10	MP10	X	14.7	%50
11	MP11	X	35.2	%50
12	MP12	X	14.7	%50
13	MP1	Z	-106.6	%50
14	MP2	Z	-8.5	%50
15	MP3	Z	-20.3	%50
16	MP4	Z	-8.5	%50
17	MP5	Z	-97.7	%50
18	MP6	Z	-8.5	%50
19	MP7	Z	-42.3	%50
20	MP8	Z	-8.5	%50
21	MP9	Z	-104.7	%50
22	MP10	Z	-8.5	%50
23	MP11	Z	-20.3	%50
24	MP12	Z	-8.5	%50

Member Point Loads (BLC 39 : Maintenance Load, Lm (MP1))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-500	%50

Member Point Loads (BLC 40 : Maintenance Load, Lm (MP2))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	Y	-500	%50

Member Point Loads (BLC 41 : Maintenance Load, Lm (MP3))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP3	Y	-500	%50

Member Point Loads (BLC 42 : Maintenance Load, Lm (MP4))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	Y	-500	%50

Member Point Loads (BLC 43 : Maintenance Load, Lm (MP5))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP5	Y	-500	%50

Member Point Loads (BLC 44 : Maintenance Load, Lm (MP6))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP6	Y	-500	%50

Member Point Loads (BLC 45 : Maintenance Load, Lm (MP7))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP7	Y	-500	%50

Member Point Loads (BLC 46 : Maintenance Load, Lm (MP8))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]

Member Point Loads (BLC 46 : Maintenance Load, Lm (MP8)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP8	Y	-500	%50

Member Point Loads (BLC 47 : Maintenance Load, Lm (MP9))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP9	Y	-500	%50

Member Point Loads (BLC 48 : Maintenance Load, Lm (MP10))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP10	Y	-500	%50

Member Point Loads (BLC 49 : Maintenance Load, Lm (MP11))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP11	Y	-500	%50

Member Point Loads (BLC 50 : Maintenance Load, Lm (MP12))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP12	Y	-500	%50

Member Point Loads (BLC 57 : Maintenance Load, Lv (Pos. 1))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-0	Y	-250	%50

Member Point Loads (BLC 58 : Maintenance Load, Lv (Pos. 2))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-120	Y	-250	%50

Member Point Loads (BLC 59 : Maintenance Load, Lv (Pos. 3))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-240	Y	-250	%50

Member Point Loads (BLC 60 : Maintenance Load, Lv (Pos. 4))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	SA-2	Y	-250	0

Member Point Loads (BLC 61 : Maintenance Load, Lv (Pos. 5))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	SA-3	Y	-250	0

Member Point Loads (BLC 62 : Maintenance Load, Lv (Pos. 6))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	BRACE-1	Y	0	0

Member Point Loads (BLC 63 : Maintenance Load, Lv (Pos. 7))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	SA-1	Y	-250	0

Member Distributed Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	14.9	14.9	0	0
2	FM-120	X	14.9	14.9	0	0

Member Distributed Loads (BLC 2 : Wind Load (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
3	FM-240	X	14.9	14.9	0	0
4	SA-1	X	31.3	31.3	0	0
5	SA-2	X	31.3	31.3	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	31.3	31.3	0	0
8	BRACE-2	X	31.3	31.3	0	0
9	BRACE-3	X	31.3	31.3	0	0
10	HR1	X	31.3	31.3	0	0
11	HR2	X	31.3	31.3	0	0
12	HR3	X	31.3	31.3	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	0	0	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	64.2	64.2	0	%100
26	MP2	X	60	60	%.694	%99.306
27	MP3	X	64.2	64.2	0	%100
28	MP4	X	60	60	%.694	%99.306
29	MP5	X	64.2	64.2	0	%100
30	MP6	X	39.8	39.8	%.694	%99.306
31	MP7	X	47.9	47.9	0	%100
32	MP8	X	39.8	39.8	%.694	%99.306
33	MP9	X	47.9	47.9	0	%100
34	MP10	X	39.8	39.8	%.694	%99.306
35	MP11	X	47.9	47.9	0	%100
36	MP12	X	39.8	39.8	%.694	%99.306
37	MP1	Z	0	0	0	0
38	MP2	Z	0	0	0	0
39	MP3	Z	0	0	0	0
40	MP4	Z	0	0	0	0
41	MP5	Z	0	0	0	0
42	MP6	Z	0	0	0	0
43	MP7	Z	0	0	0	0
44	MP8	Z	0	0	0	0
45	MP9	Z	0	0	0	0
46	MP10	Z	0	0	0	0
47	MP11	Z	0	0	0	0
48	MP12	Z	0	0	0	0

Member Distributed Loads (BLC 3 : Wind Load (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	12.9	12.9	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	12.9	12.9	0	0
4	SA-1	X	27.1	27.1	0	0
5	SA-2	X	27.1	27.1	0	0
6	SA-3	X	27.1	27.1	0	0
7	BRACE-1	X	0	0	0	0

Member Distributed Loads (BLC 3 : Wind Load (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
8	BRACE-2	X	27.1	27.1	0	0
9	BRACE-3	X	27.1	27.1	0	0
10	HR1	X	27.1	27.1	0	0
11	HR2	X	0	0	0	0
12	HR3	X	27.1	27.1	0	0
13	FM-0	Z	7.4	7.4	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	7.4	7.4	0	0
16	SA-1	Z	15.6	15.6	0	0
17	SA-2	Z	15.6	15.6	0	0
18	SA-3	Z	15.6	15.6	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	15.6	15.6	0	0
21	BRACE-3	Z	15.6	15.6	0	0
22	HR1	Z	15.6	15.6	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	15.6	15.6	0	0
25	MP1	X	50.9	50.9	0	%100
26	MP2	X	46.1	46.1	%.694	%99.306
27	MP3	X	50.9	50.9	0	%100
28	MP4	X	46.1	46.1	%.694	%99.306
29	MP5	X	50.9	50.9	0	%100
30	MP6	X	28.6	28.6	%.694	%99.306
31	MP7	X	36.7	36.7	0	%100
32	MP8	X	28.6	28.6	%.694	%99.306
33	MP9	X	36.7	36.7	0	%100
34	MP10	X	28.6	28.6	%.694	%99.306
35	MP11	X	50.9	50.9	0	%100
36	MP12	X	46.1	46.1	%.694	%99.306
37	MP1	Z	29.4	29.4	0	%100
38	MP2	Z	26.6	26.6	%.694	%99.306
39	MP3	Z	29.4	29.4	0	%100
40	MP4	Z	26.6	26.6	%.694	%99.306
41	MP5	Z	29.4	29.4	0	%100
42	MP6	Z	16.5	16.5	%.694	%99.306
43	MP7	Z	21.2	21.2	0	%100
44	MP8	Z	16.5	16.5	%.694	%99.306
45	MP9	Z	21.2	21.2	0	%100
46	MP10	Z	16.5	16.5	%.694	%99.306
47	MP11	Z	29.4	29.4	0	%100
48	MP12	Z	26.6	26.6	%.694	%99.306

Member Distributed Loads (BLC 4 : Wind Load (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	7.4	7.4	0	0
2	FM-120	X	7.4	7.4	0	0
3	FM-240	X	7.4	7.4	0	0
4	SA-1	X	15.6	15.6	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	15.6	15.6	0	0
7	BRACE-1	X	15.6	15.6	0	0
8	BRACE-2	X	15.6	15.6	0	0
9	BRACE-3	X	15.6	15.6	0	0
10	HR1	X	15.6	15.6	0	0
11	HR2	X	15.6	15.6	0	0
12	HR3	X	15.6	15.6	0	0

Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
13	FM-0	Z	12.9	12.9	0	0
14	FM-120	Z	12.9	12.9	0	0
15	FM-240	Z	12.9	12.9	0	0
16	SA-1	Z	27.1	27.1	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	27.1	27.1	0	0
19	BRACE-1	Z	27.1	27.1	0	0
20	BRACE-2	Z	27.1	27.1	0	0
21	BRACE-3	Z	27.1	27.1	0	0
22	HR1	Z	27.1	27.1	0	0
23	HR2	Z	27.1	27.1	0	0
24	HR3	Z	27.1	27.1	0	0
25	MP1	X	23.9	23.9	0	%100
26	MP2	X	19.9	19.9	%.694	%99.306
27	MP3	X	23.9	23.9	0	%100
28	MP4	X	19.9	19.9	%.694	%99.306
29	MP5	X	23.9	23.9	0	%100
30	MP6	X	19.9	19.9	%.694	%99.306
31	MP7	X	23.9	23.9	0	%100
32	MP8	X	19.9	19.9	%.694	%99.306
33	MP9	X	23.9	23.9	0	%100
34	MP10	X	19.9	19.9	%.694	%99.306
35	MP11	X	32.1	32.1	0	%100
36	MP12	X	30	30	%.694	%99.306
37	MP1	Z	41.5	41.5	0	%100
38	MP2	Z	34.4	34.4	%.694	%99.306
39	MP3	Z	41.5	41.5	0	%100
40	MP4	Z	34.4	34.4	%.694	%99.306
41	MP5	Z	41.5	41.5	0	%100
42	MP6	Z	34.4	34.4	%.694	%99.306
43	MP7	Z	41.5	41.5	0	%100
44	MP8	Z	34.4	34.4	%.694	%99.306
45	MP9	Z	41.5	41.5	0	%100
46	MP10	Z	34.4	34.4	%.694	%99.306
47	MP11	Z	55.6	55.6	0	%100
48	MP12	Z	52	52	%.694	%99.306

Member Distributed Loads (BLC 5 : Wind Load (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	0	0	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	HR1	X	0	0	0	0
11	HR2	X	0	0	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	14.9	14.9	0	0
15	FM-240	Z	14.9	14.9	0	0
16	SA-1	Z	31.3	31.3	0	0
17	SA-2	Z	31.3	31.3	0	0

Member Distributed Loads (BLC 5 : Wind Load (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
18	SA-3	Z	31.3	31.3	0	0
19	BRACE-1	Z	31.3	31.3	0	0
20	BRACE-2	Z	31.3	31.3	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	31.3	31.3	0	0
24	HR3	Z	31.3	31.3	0	0
25	MP1	X	0	0	0	0
26	MP2	X	0	0	0	0
27	MP3	X	0	0	0	0
28	MP4	X	0	0	0	0
29	MP5	X	0	0	0	0
30	MP6	X	0	0	0	0
31	MP7	X	0	0	0	0
32	MP8	X	0	0	0	0
33	MP9	X	0	0	0	0
34	MP10	X	0	0	0	0
35	MP11	X	0	0	0	0
36	MP12	X	0	0	0	0
37	MP1	Z	42.4	42.4	0	%100
38	MP2	Z	33	33	%.694	%99.306
39	MP3	Z	42.4	42.4	0	%100
40	MP4	Z	33	33	%.694	%99.306
41	MP5	Z	42.4	42.4	0	%100
42	MP6	Z	53.3	53.3	%.694	%99.306
43	MP7	Z	58.7	58.7	0	%100
44	MP8	Z	53.3	53.3	%.694	%99.306
45	MP9	Z	58.7	58.7	0	%100
46	MP10	Z	53.3	53.3	%.694	%99.306
47	MP11	Z	58.7	58.7	0	%100
48	MP12	Z	53.3	53.3	%.694	%99.306

Member Distributed Loads (BLC 6 : Wind Load (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-7.4	-7.4	0	0
2	FM-120	X	-7.4	-7.4	0	0
3	FM-240	X	-7.4	-7.4	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	-15.6	-15.6	0	0
6	SA-3	X	-15.6	-15.6	0	0
7	BRACE-1	X	-15.6	-15.6	0	0
8	BRACE-2	X	-15.6	-15.6	0	0
9	BRACE-3	X	-15.6	-15.6	0	0
10	HR1	X	-15.6	-15.6	0	0
11	HR2	X	-15.6	-15.6	0	0
12	HR3	X	-15.6	-15.6	0	0
13	FM-0	Z	12.9	12.9	0	0
14	FM-120	Z	12.9	12.9	0	0
15	FM-240	Z	12.9	12.9	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	27.1	27.1	0	0
18	SA-3	Z	27.1	27.1	0	0
19	BRACE-1	Z	27.1	27.1	0	0
20	BRACE-2	Z	27.1	27.1	0	0
21	BRACE-3	Z	27.1	27.1	0	0
22	HR1	Z	27.1	27.1	0	0

Member Distributed Loads (BLC 6 : Wind Load (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
23	HR2	Z	27.1	27.1	0	0
24	HR3	Z	27.1	27.1	0	0
25	MP1	X	-23.9	-23.9	0	%100
26	MP2	X	-19.9	-19.9	%.694	%99.306
27	MP3	X	-23.9	-23.9	0	%100
28	MP4	X	-19.9	-19.9	%.694	%99.306
29	MP5	X	-23.9	-23.9	0	%100
30	MP6	X	-30	-30	%.694	%99.306
31	MP7	X	-32.1	-32.1	0	%100
32	MP8	X	-30	-30	%.694	%99.306
33	MP9	X	-32.1	-32.1	0	%100
34	MP10	X	-30	-30	%.694	%99.306
35	MP11	X	-23.9	-23.9	0	%100
36	MP12	X	-19.9	-19.9	%.694	%99.306
37	MP1	Z	41.5	41.5	0	%100
38	MP2	Z	34.4	34.4	%.694	%99.306
39	MP3	Z	41.5	41.5	0	%100
40	MP4	Z	34.4	34.4	%.694	%99.306
41	MP5	Z	41.5	41.5	0	%100
42	MP6	Z	52	52	%.694	%99.306
43	MP7	Z	55.6	55.6	0	%100
44	MP8	Z	52	52	%.694	%99.306
45	MP9	Z	55.6	55.6	0	%100
46	MP10	Z	52	52	%.694	%99.306
47	MP11	Z	41.5	41.5	0	%100
48	MP12	Z	34.4	34.4	%.694	%99.306

Member Distributed Loads (BLC 7 : Wind Load (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-12.9	-12.9	0	0
2	FM-120	X	-12.9	-12.9	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	-27.1	-27.1	0	0
5	SA-2	X	-27.1	-27.1	0	0
6	SA-3	X	-27.1	-27.1	0	0
7	BRACE-1	X	-27.1	-27.1	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	-27.1	-27.1	0	0
10	HR1	X	-27.1	-27.1	0	0
11	HR2	X	-27.1	-27.1	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	7.4	7.4	0	0
14	FM-120	Z	7.4	7.4	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	15.6	15.6	0	0
17	SA-2	Z	15.6	15.6	0	0
18	SA-3	Z	15.6	15.6	0	0
19	BRACE-1	Z	15.6	15.6	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	15.6	15.6	0	0
22	HR1	Z	15.6	15.6	0	0
23	HR2	Z	15.6	15.6	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	-50.9	-50.9	0	%100
26	MP2	X	-46.1	-46.1	%.694	%99.306
27	MP3	X	-50.9	-50.9	0	%100

Member Distributed Loads (BLC 7 : Wind Load (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
28	MP4	X	-46.1	-46.1	%.694	%99.306
29	MP5	X	-50.9	-50.9	0	%100
30	MP6	X	-46.1	-46.1	%.694	%99.306
31	MP7	X	-50.9	-50.9	0	%100
32	MP8	X	-46.1	-46.1	%.694	%99.306
33	MP9	X	-50.9	-50.9	0	%100
34	MP10	X	-46.1	-46.1	%.694	%99.306
35	MP11	X	-36.7	-36.7	0	%100
36	MP12	X	-28.6	-28.6	%.694	%99.306
37	MP1	Z	29.4	29.4	0	%100
38	MP2	Z	26.6	26.6	%.694	%99.306
39	MP3	Z	29.4	29.4	0	%100
40	MP4	Z	26.6	26.6	%.694	%99.306
41	MP5	Z	29.4	29.4	0	%100
42	MP6	Z	26.6	26.6	%.694	%99.306
43	MP7	Z	29.4	29.4	0	%100
44	MP8	Z	26.6	26.6	%.694	%99.306
45	MP9	Z	29.4	29.4	0	%100
46	MP10	Z	26.6	26.6	%.694	%99.306
47	MP11	Z	21.2	21.2	0	%100
48	MP12	Z	16.5	16.5	%.694	%99.306

Member Distributed Loads (BLC 8 : Wind Load (180 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-14.9	-14.9	0	0
2	FM-120	X	-14.9	-14.9	0	0
3	FM-240	X	-14.9	-14.9	0	0
4	SA-1	X	-31.3	-31.3	0	0
5	SA-2	X	-31.3	-31.3	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	-31.3	-31.3	0	0
8	BRACE-2	X	-31.3	-31.3	0	0
9	BRACE-3	X	-31.3	-31.3	0	0
10	HR1	X	-31.3	-31.3	0	0
11	HR2	X	-31.3	-31.3	0	0
12	HR3	X	-31.3	-31.3	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	0	0	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	-64.2	-64.2	0	%100
26	MP2	X	-60	-60	%.694	%99.306
27	MP3	X	-64.2	-64.2	0	%100
28	MP4	X	-60	-60	%.694	%99.306
29	MP5	X	-64.2	-64.2	0	%100
30	MP6	X	-39.8	-39.8	%.694	%99.306
31	MP7	X	-47.9	-47.9	0	%100
32	MP8	X	-39.8	-39.8	%.694	%99.306

Member Distributed Loads (BLC 8 : Wind Load (180 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
33	MP9	X	-47.9	-47.9	0	%100
34	MP10	X	-39.8	-39.8	%.694	%99.306
35	MP11	X	-47.9	-47.9	0	%100
36	MP12	X	-39.8	-39.8	%.694	%99.306
37	MP1	Z	0	0	0	0
38	MP2	Z	0	0	0	0
39	MP3	Z	0	0	0	0
40	MP4	Z	0	0	0	0
41	MP5	Z	0	0	0	0
42	MP6	Z	0	0	0	0
43	MP7	Z	0	0	0	0
44	MP8	Z	0	0	0	0
45	MP9	Z	0	0	0	0
46	MP10	Z	0	0	0	0
47	MP11	Z	0	0	0	0
48	MP12	Z	0	0	0	0

Member Distributed Loads (BLC 9 : Wind Load (210 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-12.9	-12.9	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	-12.9	-12.9	0	0
4	SA-1	X	-27.1	-27.1	0	0
5	SA-2	X	-27.1	-27.1	0	0
6	SA-3	X	-27.1	-27.1	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	-27.1	-27.1	0	0
9	BRACE-3	X	-27.1	-27.1	0	0
10	HR1	X	-27.1	-27.1	0	0
11	HR2	X	0	0	0	0
12	HR3	X	-27.1	-27.1	0	0
13	FM-0	Z	-7.4	-7.4	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	-7.4	-7.4	0	0
16	SA-1	Z	-15.6	-15.6	0	0
17	SA-2	Z	-15.6	-15.6	0	0
18	SA-3	Z	-15.6	-15.6	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	-15.6	-15.6	0	0
21	BRACE-3	Z	-15.6	-15.6	0	0
22	HR1	Z	-15.6	-15.6	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	-15.6	-15.6	0	0
25	MP1	X	-50.9	-50.9	0	%100
26	MP2	X	-46.1	-46.1	%.694	%99.306
27	MP3	X	-50.9	-50.9	0	%100
28	MP4	X	-46.1	-46.1	%.694	%99.306
29	MP5	X	-50.9	-50.9	0	%100
30	MP6	X	-28.6	-28.6	%.694	%99.306
31	MP7	X	-36.7	-36.7	0	%100
32	MP8	X	-28.6	-28.6	%.694	%99.306
33	MP9	X	-36.7	-36.7	0	%100
34	MP10	X	-28.6	-28.6	%.694	%99.306
35	MP11	X	-50.9	-50.9	0	%100
36	MP12	X	-46.1	-46.1	%.694	%99.306
37	MP1	Z	-29.4	-29.4	0	%100

Member Distributed Loads (BLC 9 : Wind Load (210 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
38	MP2	Z	-26.6	-26.6	%.694	%99.306
39	MP3	Z	-29.4	-29.4	0	%100
40	MP4	Z	-26.6	-26.6	%.694	%99.306
41	MP5	Z	-29.4	-29.4	0	%100
42	MP6	Z	-16.5	-16.5	%.694	%99.306
43	MP7	Z	-21.2	-21.2	0	%100
44	MP8	Z	-16.5	-16.5	%.694	%99.306
45	MP9	Z	-21.2	-21.2	0	%100
46	MP10	Z	-16.5	-16.5	%.694	%99.306
47	MP11	Z	-29.4	-29.4	0	%100
48	MP12	Z	-26.6	-26.6	%.694	%99.306

Member Distributed Loads (BLC 10 : Wind Load (240 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-7.4	-7.4	0	0
2	FM-120	X	-7.4	-7.4	0	0
3	FM-240	X	-7.4	-7.4	0	0
4	SA-1	X	-15.6	-15.6	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	-15.6	-15.6	0	0
7	BRACE-1	X	-15.6	-15.6	0	0
8	BRACE-2	X	-15.6	-15.6	0	0
9	BRACE-3	X	-15.6	-15.6	0	0
10	HR1	X	-15.6	-15.6	0	0
11	HR2	X	-15.6	-15.6	0	0
12	HR3	X	-15.6	-15.6	0	0
13	FM-0	Z	-12.9	-12.9	0	0
14	FM-120	Z	-12.9	-12.9	0	0
15	FM-240	Z	-12.9	-12.9	0	0
16	SA-1	Z	-27.1	-27.1	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	-27.1	-27.1	0	0
19	BRACE-1	Z	-27.1	-27.1	0	0
20	BRACE-2	Z	-27.1	-27.1	0	0
21	BRACE-3	Z	-27.1	-27.1	0	0
22	HR1	Z	-27.1	-27.1	0	0
23	HR2	Z	-27.1	-27.1	0	0
24	HR3	Z	-27.1	-27.1	0	0
25	MP1	X	-23.9	-23.9	0	%100
26	MP2	X	-19.9	-19.9	%.694	%99.306
27	MP3	X	-23.9	-23.9	0	%100
28	MP4	X	-19.9	-19.9	%.694	%99.306
29	MP5	X	-23.9	-23.9	0	%100
30	MP6	X	-19.9	-19.9	%.694	%99.306
31	MP7	X	-23.9	-23.9	0	%100
32	MP8	X	-19.9	-19.9	%.694	%99.306
33	MP9	X	-23.9	-23.9	0	%100
34	MP10	X	-19.9	-19.9	%.694	%99.306
35	MP11	X	-32.1	-32.1	0	%100
36	MP12	X	-30	-30	%.694	%99.306
37	MP1	Z	-41.5	-41.5	0	%100
38	MP2	Z	-34.4	-34.4	%.694	%99.306
39	MP3	Z	-41.5	-41.5	0	%100
40	MP4	Z	-34.4	-34.4	%.694	%99.306
41	MP5	Z	-41.5	-41.5	0	%100
42	MP6	Z	-34.4	-34.4	%.694	%99.306

Member Distributed Loads (BLC 10 : Wind Load (240 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
43	MP7	Z	-41.5	-41.5	0	%100
44	MP8	Z	-34.4	-34.4	%.694	%99.306
45	MP9	Z	-41.5	-41.5	0	%100
46	MP10	Z	-34.4	-34.4	%.694	%99.306
47	MP11	Z	-55.6	-55.6	0	%100
48	MP12	Z	-52	-52	%.694	%99.306

Member Distributed Loads (BLC 11 : Wind Load (270 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	0	0	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	HR1	X	0	0	0	0
11	HR2	X	0	0	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	-14.9	-14.9	0	0
15	FM-240	Z	-14.9	-14.9	0	0
16	SA-1	Z	-31.3	-31.3	0	0
17	SA-2	Z	-31.3	-31.3	0	0
18	SA-3	Z	-31.3	-31.3	0	0
19	BRACE-1	Z	-31.3	-31.3	0	0
20	BRACE-2	Z	-31.3	-31.3	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	-31.3	-31.3	0	0
24	HR3	Z	-31.3	-31.3	0	0
25	MP1	X	0	0	0	0
26	MP2	X	0	0	0	0
27	MP3	X	0	0	0	0
28	MP4	X	0	0	0	0
29	MP5	X	0	0	0	0
30	MP6	X	0	0	0	0
31	MP7	X	0	0	0	0
32	MP8	X	0	0	0	0
33	MP9	X	0	0	0	0
34	MP10	X	0	0	0	0
35	MP11	X	0	0	0	0
36	MP12	X	0	0	0	0
37	MP1	Z	-42.4	-42.4	0	%100
38	MP2	Z	-33	-33	%.694	%99.306
39	MP3	Z	-42.4	-42.4	0	%100
40	MP4	Z	-33	-33	%.694	%99.306
41	MP5	Z	-42.4	-42.4	0	%100
42	MP6	Z	-53.3	-53.3	%.694	%99.306
43	MP7	Z	-58.7	-58.7	0	%100
44	MP8	Z	-53.3	-53.3	%.694	%99.306
45	MP9	Z	-58.7	-58.7	0	%100
46	MP10	Z	-53.3	-53.3	%.694	%99.306
47	MP11	Z	-58.7	-58.7	0	%100

Member Distributed Loads (BLC 11 : Wind Load (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
48	MP12	Z	-53.3	-53.3	%.694	%99.306

Member Distributed Loads (BLC 12 : Wind Load (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	7.4	7.4	0	0
2	FM-120	X	7.4	7.4	0	0
3	FM-240	X	7.4	7.4	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	15.6	15.6	0	0
6	SA-3	X	15.6	15.6	0	0
7	BRACE-1	X	15.6	15.6	0	0
8	BRACE-2	X	15.6	15.6	0	0
9	BRACE-3	X	15.6	15.6	0	0
10	HR1	X	15.6	15.6	0	0
11	HR2	X	15.6	15.6	0	0
12	HR3	X	15.6	15.6	0	0
13	FM-0	Z	-12.9	-12.9	0	0
14	FM-120	Z	-12.9	-12.9	0	0
15	FM-240	Z	-12.9	-12.9	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	-27.1	-27.1	0	0
18	SA-3	Z	-27.1	-27.1	0	0
19	BRACE-1	Z	-27.1	-27.1	0	0
20	BRACE-2	Z	-27.1	-27.1	0	0
21	BRACE-3	Z	-27.1	-27.1	0	0
22	HR1	Z	-27.1	-27.1	0	0
23	HR2	Z	-27.1	-27.1	0	0
24	HR3	Z	-27.1	-27.1	0	0
25	MP1	X	23.9	23.9	0	%100
26	MP2	X	19.9	19.9	%.694	%99.306
27	MP3	X	23.9	23.9	0	%100
28	MP4	X	19.9	19.9	%.694	%99.306
29	MP5	X	23.9	23.9	0	%100
30	MP6	X	30	30	%.694	%99.306
31	MP7	X	32.1	32.1	0	%100
32	MP8	X	30	30	%.694	%99.306
33	MP9	X	32.1	32.1	0	%100
34	MP10	X	30	30	%.694	%99.306
35	MP11	X	23.9	23.9	0	%100
36	MP12	X	19.9	19.9	%.694	%99.306
37	MP1	Z	-41.5	-41.5	0	%100
38	MP2	Z	-34.4	-34.4	%.694	%99.306
39	MP3	Z	-41.5	-41.5	0	%100
40	MP4	Z	-34.4	-34.4	%.694	%99.306
41	MP5	Z	-41.5	-41.5	0	%100
42	MP6	Z	-52	-52	%.694	%99.306
43	MP7	Z	-55.6	-55.6	0	%100
44	MP8	Z	-52	-52	%.694	%99.306
45	MP9	Z	-55.6	-55.6	0	%100
46	MP10	Z	-52	-52	%.694	%99.306
47	MP11	Z	-41.5	-41.5	0	%100
48	MP12	Z	-34.4	-34.4	%.694	%99.306

Member Distributed Loads (BLC 13 : Wind Load (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	12.9	12.9	0	0

Member Distributed Loads (BLC 13 : Wind Load (330 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
2	FM-120	X	12.9	12.9	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	27.1	27.1	0	0
5	SA-2	X	27.1	27.1	0	0
6	SA-3	X	27.1	27.1	0	0
7	BRACE-1	X	27.1	27.1	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	27.1	27.1	0	0
10	HR1	X	27.1	27.1	0	0
11	HR2	X	27.1	27.1	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	-7.4	-7.4	0	0
14	FM-120	Z	-7.4	-7.4	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	-15.6	-15.6	0	0
17	SA-2	Z	-15.6	-15.6	0	0
18	SA-3	Z	-15.6	-15.6	0	0
19	BRACE-1	Z	-15.6	-15.6	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	-15.6	-15.6	0	0
22	HR1	Z	-15.6	-15.6	0	0
23	HR2	Z	-15.6	-15.6	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	50.9	50.9	0	%100
26	MP2	X	46.1	46.1	%.694	%99.306
27	MP3	X	50.9	50.9	0	%100
28	MP4	X	46.1	46.1	%.694	%99.306
29	MP5	X	50.9	50.9	0	%100
30	MP6	X	46.1	46.1	%.694	%99.306
31	MP7	X	50.9	50.9	0	%100
32	MP8	X	46.1	46.1	%.694	%99.306
33	MP9	X	50.9	50.9	0	%100
34	MP10	X	46.1	46.1	%.694	%99.306
35	MP11	X	36.7	36.7	0	%100
36	MP12	X	28.6	28.6	%.694	%99.306
37	MP1	Z	-29.4	-29.4	0	%100
38	MP2	Z	-26.6	-26.6	%.694	%99.306
39	MP3	Z	-29.4	-29.4	0	%100
40	MP4	Z	-26.6	-26.6	%.694	%99.306
41	MP5	Z	-29.4	-29.4	0	%100
42	MP6	Z	-26.6	-26.6	%.694	%99.306
43	MP7	Z	-29.4	-29.4	0	%100
44	MP8	Z	-26.6	-26.6	%.694	%99.306
45	MP9	Z	-29.4	-29.4	0	%100
46	MP10	Z	-26.6	-26.6	%.694	%99.306
47	MP11	Z	-21.2	-21.2	0	%100
48	MP12	Z	-16.5	-16.5	%.694	%99.306

Member Distributed Loads (BLC 14 : Ice Load)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	Y	-21.8	-21.8	0	0
2	FM-120	Y	-21.8	-21.8	0	0
3	FM-240	Y	-21.8	-21.8	0	0
4	SA-1	Y	-22.6	-22.6	0	0
5	SA-2	Y	-22.6	-22.6	0	0
6	SA-3	Y	-22.6	-22.6	0	0

Member Distributed Loads (BLC 14 : Ice Load) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
7	BRACE-1	Y	-22.6	-22.6	0	0
8	BRACE-2	Y	-22.6	-22.6	0	0
9	BRACE-3	Y	-22.6	-22.6	0	0
10	HR1	Y	-22.6	-22.6	0	0
11	HR2	Y	-22.6	-22.6	0	0
12	HR3	Y	-22.6	-22.6	0	0

Member Distributed Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	5.9	5.9	0	0
2	FM-120	X	5.9	5.9	0	0
3	FM-240	X	5.9	5.9	0	0
4	SA-1	X	8.5	8.5	0	0
5	SA-2	X	8.5	8.5	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	8.5	8.5	0	0
8	BRACE-2	X	8.5	8.5	0	0
9	BRACE-3	X	8.5	8.5	0	0
10	HR1	X	8.5	8.5	0	0
11	HR2	X	8.5	8.5	0	0
12	HR3	X	8.5	8.5	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	0	0	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	12.1	12.1	0	%100
26	MP2	X	11.4	11.4	%.694	%99.306
27	MP3	X	12.1	12.1	0	%100
28	MP4	X	11.4	11.4	%.694	%99.306
29	MP5	X	12.1	12.1	0	%100
30	MP6	X	8.4	8.4	%.694	%99.306
31	MP7	X	9.7	9.7	0	%100
32	MP8	X	8.4	8.4	%.694	%99.306
33	MP9	X	9.7	9.7	0	%100
34	MP10	X	8.4	8.4	%.694	%99.306
35	MP11	X	9.7	9.7	0	%100
36	MP12	X	8.4	8.4	%.694	%99.306
37	MP1	Z	0	0	0	0
38	MP2	Z	0	0	0	0
39	MP3	Z	0	0	0	0
40	MP4	Z	0	0	0	0
41	MP5	Z	0	0	0	0
42	MP6	Z	0	0	0	0
43	MP7	Z	0	0	0	0
44	MP8	Z	0	0	0	0
45	MP9	Z	0	0	0	0
46	MP10	Z	0	0	0	0
47	MP11	Z	0	0	0	0

Member Distributed Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
48	MP12	Z	0	0	0	0

Member Distributed Loads (BLC 16 : Wind on Ice (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	5.1	5.1	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	5.1	5.1	0	0
4	SA-1	X	7.4	7.4	0	0
5	SA-2	X	7.4	7.4	0	0
6	SA-3	X	7.4	7.4	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	7.4	7.4	0	0
9	BRACE-3	X	7.4	7.4	0	0
10	HR1	X	7.4	7.4	0	0
11	HR2	X	0	0	0	0
12	HR3	X	7.4	7.4	0	0
13	FM-0	Z	2.9	2.9	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	2.9	2.9	0	0
16	SA-1	Z	4.2	4.2	0	0
17	SA-2	Z	4.2	4.2	0	0
18	SA-3	Z	4.2	4.2	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	4.2	4.2	0	0
21	BRACE-3	Z	4.2	4.2	0	0
22	HR1	Z	4.2	4.2	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	4.2	4.2	0	0
25	MP1	X	9.8	9.8	0	%100
26	MP2	X	9	9	%.694	%99.306
27	MP3	X	9.8	9.8	0	%100
28	MP4	X	9	9	%.694	%99.306
29	MP5	X	9.8	9.8	0	%100
30	MP6	X	6.3	6.3	%.694	%99.306
31	MP7	X	7.7	7.7	0	%100
32	MP8	X	6.3	6.3	%.694	%99.306
33	MP9	X	7.7	7.7	0	%100
34	MP10	X	6.3	6.3	%.694	%99.306
35	MP11	X	9.8	9.8	0	%100
36	MP12	X	9	9	%.694	%99.306
37	MP1	Z	5.7	5.7	0	%100
38	MP2	Z	5.2	5.2	%.694	%99.306
39	MP3	Z	5.7	5.7	0	%100
40	MP4	Z	5.2	5.2	%.694	%99.306
41	MP5	Z	5.7	5.7	0	%100
42	MP6	Z	3.7	3.7	%.694	%99.306
43	MP7	Z	4.5	4.5	0	%100
44	MP8	Z	3.7	3.7	%.694	%99.306
45	MP9	Z	4.5	4.5	0	%100
46	MP10	Z	3.7	3.7	%.694	%99.306
47	MP11	Z	5.7	5.7	0	%100
48	MP12	Z	5.2	5.2	%.694	%99.306

Member Distributed Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	2.9	2.9	0	0

Member Distributed Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
2	FM-120	X	2.9	2.9	0	0
3	FM-240	X	2.9	2.9	0	0
4	SA-1	X	4.2	4.2	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	4.2	4.2	0	0
7	BRACE-1	X	4.2	4.2	0	0
8	BRACE-2	X	4.2	4.2	0	0
9	BRACE-3	X	4.2	4.2	0	0
10	HR1	X	4.2	4.2	0	0
11	HR2	X	4.2	4.2	0	0
12	HR3	X	4.2	4.2	0	0
13	FM-0	Z	5.1	5.1	0	0
14	FM-120	Z	5.1	5.1	0	0
15	FM-240	Z	5.1	5.1	0	0
16	SA-1	Z	7.4	7.4	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	7.4	7.4	0	0
19	BRACE-1	Z	7.4	7.4	0	0
20	BRACE-2	Z	7.4	7.4	0	0
21	BRACE-3	Z	7.4	7.4	0	0
22	HR1	Z	7.4	7.4	0	0
23	HR2	Z	7.4	7.4	0	0
24	HR3	Z	7.4	7.4	0	0
25	MP1	X	4.9	4.9	0	%100
26	MP2	X	4.2	4.2	%.694	%99.306
27	MP3	X	4.9	4.9	0	%100
28	MP4	X	4.2	4.2	%.694	%99.306
29	MP5	X	4.9	4.9	0	%100
30	MP6	X	4.2	4.2	%.694	%99.306
31	MP7	X	4.9	4.9	0	%100
32	MP8	X	4.2	4.2	%.694	%99.306
33	MP9	X	4.9	4.9	0	%100
34	MP10	X	4.2	4.2	%.694	%99.306
35	MP11	X	6.1	6.1	0	%100
36	MP12	X	5.7	5.7	%.694	%99.306
37	MP1	Z	8.4	8.4	0	%100
38	MP2	Z	7.2	7.2	%.694	%99.306
39	MP3	Z	8.4	8.4	0	%100
40	MP4	Z	7.2	7.2	%.694	%99.306
41	MP5	Z	8.4	8.4	0	%100
42	MP6	Z	7.2	7.2	%.694	%99.306
43	MP7	Z	8.4	8.4	0	%100
44	MP8	Z	7.2	7.2	%.694	%99.306
45	MP9	Z	8.4	8.4	0	%100
46	MP10	Z	7.2	7.2	%.694	%99.306
47	MP11	Z	10.5	10.5	0	%100
48	MP12	Z	9.9	9.9	%.694	%99.306

Member Distributed Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	0	0	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	0	0	0	0

Member Distributed Loads (BLC 18 : Wind on Ice (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	HR1	X	0	0	0	0
11	HR2	X	0	0	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	5.9	5.9	0	0
15	FM-240	Z	5.9	5.9	0	0
16	SA-1	Z	8.5	8.5	0	0
17	SA-2	Z	8.5	8.5	0	0
18	SA-3	Z	8.5	8.5	0	0
19	BRACE-1	Z	8.5	8.5	0	0
20	BRACE-2	Z	8.5	8.5	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	8.5	8.5	0	0
24	HR3	Z	8.5	8.5	0	0
25	MP1	X	0	0	0	0
26	MP2	X	0	0	0	0
27	MP3	X	0	0	0	0
28	MP4	X	0	0	0	0
29	MP5	X	0	0	0	0
30	MP6	X	0	0	0	0
31	MP7	X	0	0	0	0
32	MP8	X	0	0	0	0
33	MP9	X	0	0	0	0
34	MP10	X	0	0	0	0
35	MP11	X	0	0	0	0
36	MP12	X	0	0	0	0
37	MP1	Z	8.9	8.9	0	%100
38	MP2	Z	7.3	7.3	%.694	%99.306
39	MP3	Z	8.9	8.9	0	%100
40	MP4	Z	7.3	7.3	%.694	%99.306
41	MP5	Z	8.9	8.9	0	%100
42	MP6	Z	10.4	10.4	%.694	%99.306
43	MP7	Z	11.3	11.3	0	%100
44	MP8	Z	10.4	10.4	%.694	%99.306
45	MP9	Z	11.3	11.3	0	%100
46	MP10	Z	10.4	10.4	%.694	%99.306
47	MP11	Z	11.3	11.3	0	%100
48	MP12	Z	10.4	10.4	%.694	%99.306

Member Distributed Loads (BLC 19 : Wind on Ice (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-2.9	-2.9	0	0
2	FM-120	X	-2.9	-2.9	0	0
3	FM-240	X	-2.9	-2.9	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	-4.2	-4.2	0	0
6	SA-3	X	-4.2	-4.2	0	0
7	BRACE-1	X	-4.2	-4.2	0	0
8	BRACE-2	X	-4.2	-4.2	0	0
9	BRACE-3	X	-4.2	-4.2	0	0
10	HR1	X	-4.2	-4.2	0	0
11	HR2	X	-4.2	-4.2	0	0

Member Distributed Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
12	HR3	X	-4.2	-4.2	0	0
13	FM-0	Z	5.1	5.1	0	0
14	FM-120	Z	5.1	5.1	0	0
15	FM-240	Z	5.1	5.1	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	7.4	7.4	0	0
18	SA-3	Z	7.4	7.4	0	0
19	BRACE-1	Z	7.4	7.4	0	0
20	BRACE-2	Z	7.4	7.4	0	0
21	BRACE-3	Z	7.4	7.4	0	0
22	HR1	Z	7.4	7.4	0	0
23	HR2	Z	7.4	7.4	0	0
24	HR3	Z	7.4	7.4	0	0
25	MP1	X	-4.9	-4.9	0	%100
26	MP2	X	-4.2	-4.2	%.694	%99.306
27	MP3	X	-4.9	-4.9	0	%100
28	MP4	X	-4.2	-4.2	%.694	%99.306
29	MP5	X	-4.9	-4.9	0	%100
30	MP6	X	-5.7	-5.7	%.694	%99.306
31	MP7	X	-6.1	-6.1	0	%100
32	MP8	X	-5.7	-5.7	%.694	%99.306
33	MP9	X	-6.1	-6.1	0	%100
34	MP10	X	-5.7	-5.7	%.694	%99.306
35	MP11	X	-4.9	-4.9	0	%100
36	MP12	X	-4.2	-4.2	%.694	%99.306
37	MP1	Z	8.4	8.4	0	%100
38	MP2	Z	7.2	7.2	%.694	%99.306
39	MP3	Z	8.4	8.4	0	%100
40	MP4	Z	7.2	7.2	%.694	%99.306
41	MP5	Z	8.4	8.4	0	%100
42	MP6	Z	9.9	9.9	%.694	%99.306
43	MP7	Z	10.5	10.5	0	%100
44	MP8	Z	9.9	9.9	%.694	%99.306
45	MP9	Z	10.5	10.5	0	%100
46	MP10	Z	9.9	9.9	%.694	%99.306
47	MP11	Z	8.4	8.4	0	%100
48	MP12	Z	7.2	7.2	%.694	%99.306

Member Distributed Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-5.1	-5.1	0	0
2	FM-120	X	-5.1	-5.1	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	-7.4	-7.4	0	0
5	SA-2	X	-7.4	-7.4	0	0
6	SA-3	X	-7.4	-7.4	0	0
7	BRACE-1	X	-7.4	-7.4	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	-7.4	-7.4	0	0
10	HR1	X	-7.4	-7.4	0	0
11	HR2	X	-7.4	-7.4	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	2.9	2.9	0	0
14	FM-120	Z	2.9	2.9	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	4.2	4.2	0	0

Member Distributed Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
17	SA-2	Z	4.2	4.2	0	0
18	SA-3	Z	4.2	4.2	0	0
19	BRACE-1	Z	4.2	4.2	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	4.2	4.2	0	0
22	HR1	Z	4.2	4.2	0	0
23	HR2	Z	4.2	4.2	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	-9.8	-9.8	0	%100
26	MP2	X	-9	-9	%.694	%99.306
27	MP3	X	-9.8	-9.8	0	%100
28	MP4	X	-9	-9	%.694	%99.306
29	MP5	X	-9.8	-9.8	0	%100
30	MP6	X	-9	-9	%.694	%99.306
31	MP7	X	-9.8	-9.8	0	%100
32	MP8	X	-9	-9	%.694	%99.306
33	MP9	X	-9.8	-9.8	0	%100
34	MP10	X	-9	-9	%.694	%99.306
35	MP11	X	-7.7	-7.7	0	%100
36	MP12	X	-6.3	-6.3	%.694	%99.306
37	MP1	Z	5.7	5.7	0	%100
38	MP2	Z	5.2	5.2	%.694	%99.306
39	MP3	Z	5.7	5.7	0	%100
40	MP4	Z	5.2	5.2	%.694	%99.306
41	MP5	Z	5.7	5.7	0	%100
42	MP6	Z	5.2	5.2	%.694	%99.306
43	MP7	Z	5.7	5.7	0	%100
44	MP8	Z	5.2	5.2	%.694	%99.306
45	MP9	Z	5.7	5.7	0	%100
46	MP10	Z	5.2	5.2	%.694	%99.306
47	MP11	Z	4.5	4.5	0	%100
48	MP12	Z	3.7	3.7	%.694	%99.306

Member Distributed Loads (BLC 21 : Wind on Ice (180 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-5.9	-5.9	0	0
2	FM-120	X	-5.9	-5.9	0	0
3	FM-240	X	-5.9	-5.9	0	0
4	SA-1	X	-8.5	-8.5	0	0
5	SA-2	X	-8.5	-8.5	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	-8.5	-8.5	0	0
8	BRACE-2	X	-8.5	-8.5	0	0
9	BRACE-3	X	-8.5	-8.5	0	0
10	HR1	X	-8.5	-8.5	0	0
11	HR2	X	-8.5	-8.5	0	0
12	HR3	X	-8.5	-8.5	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	0	0	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	0	0	0	0

Member Distributed Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
22	HR1	Z	0	0	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	-12.1	-12.1	0	%100
26	MP2	X	-11.4	-11.4	%.694	%99.306
27	MP3	X	-12.1	-12.1	0	%100
28	MP4	X	-11.4	-11.4	%.694	%99.306
29	MP5	X	-12.1	-12.1	0	%100
30	MP6	X	-8.4	-8.4	%.694	%99.306
31	MP7	X	-9.7	-9.7	0	%100
32	MP8	X	-8.4	-8.4	%.694	%99.306
33	MP9	X	-9.7	-9.7	0	%100
34	MP10	X	-8.4	-8.4	%.694	%99.306
35	MP11	X	-9.7	-9.7	0	%100
36	MP12	X	-8.4	-8.4	%.694	%99.306
37	MP1	Z	0	0	0	0
38	MP2	Z	0	0	0	0
39	MP3	Z	0	0	0	0
40	MP4	Z	0	0	0	0
41	MP5	Z	0	0	0	0
42	MP6	Z	0	0	0	0
43	MP7	Z	0	0	0	0
44	MP8	Z	0	0	0	0
45	MP9	Z	0	0	0	0
46	MP10	Z	0	0	0	0
47	MP11	Z	0	0	0	0
48	MP12	Z	0	0	0	0

Member Distributed Loads (BLC 22 : Wind on Ice (210 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-5.1	-5.1	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	-5.1	-5.1	0	0
4	SA-1	X	-7.4	-7.4	0	0
5	SA-2	X	-7.4	-7.4	0	0
6	SA-3	X	-7.4	-7.4	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	-7.4	-7.4	0	0
9	BRACE-3	X	-7.4	-7.4	0	0
10	HR1	X	-7.4	-7.4	0	0
11	HR2	X	0	0	0	0
12	HR3	X	-7.4	-7.4	0	0
13	FM-0	Z	-2.9	-2.9	0	0
14	FM-120	Z	0	0	0	0
15	FM-240	Z	-2.9	-2.9	0	0
16	SA-1	Z	-4.2	-4.2	0	0
17	SA-2	Z	-4.2	-4.2	0	0
18	SA-3	Z	-4.2	-4.2	0	0
19	BRACE-1	Z	0	0	0	0
20	BRACE-2	Z	-4.2	-4.2	0	0
21	BRACE-3	Z	-4.2	-4.2	0	0
22	HR1	Z	-4.2	-4.2	0	0
23	HR2	Z	0	0	0	0
24	HR3	Z	-4.2	-4.2	0	0
25	MP1	X	-9.8	-9.8	0	%100
26	MP2	X	-9	-9	%.694	%99.306

Member Distributed Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
27	MP3	X	-9.8	-9.8	0	%100
28	MP4	X	-9	-9	%.694	%99.306
29	MP5	X	-9.8	-9.8	0	%100
30	MP6	X	-6.3	-6.3	%.694	%99.306
31	MP7	X	-7.7	-7.7	0	%100
32	MP8	X	-6.3	-6.3	%.694	%99.306
33	MP9	X	-7.7	-7.7	0	%100
34	MP10	X	-6.3	-6.3	%.694	%99.306
35	MP11	X	-9.8	-9.8	0	%100
36	MP12	X	-9	-9	%.694	%99.306
37	MP1	Z	-5.7	-5.7	0	%100
38	MP2	Z	-5.2	-5.2	%.694	%99.306
39	MP3	Z	-5.7	-5.7	0	%100
40	MP4	Z	-5.2	-5.2	%.694	%99.306
41	MP5	Z	-5.7	-5.7	0	%100
42	MP6	Z	-3.7	-3.7	%.694	%99.306
43	MP7	Z	-4.5	-4.5	0	%100
44	MP8	Z	-3.7	-3.7	%.694	%99.306
45	MP9	Z	-4.5	-4.5	0	%100
46	MP10	Z	-3.7	-3.7	%.694	%99.306
47	MP11	Z	-5.7	-5.7	0	%100
48	MP12	Z	-5.2	-5.2	%.694	%99.306

Member Distributed Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	-2.9	-2.9	0	0
2	FM-120	X	-2.9	-2.9	0	0
3	FM-240	X	-2.9	-2.9	0	0
4	SA-1	X	-4.2	-4.2	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	-4.2	-4.2	0	0
7	BRACE-1	X	-4.2	-4.2	0	0
8	BRACE-2	X	-4.2	-4.2	0	0
9	BRACE-3	X	-4.2	-4.2	0	0
10	HR1	X	-4.2	-4.2	0	0
11	HR2	X	-4.2	-4.2	0	0
12	HR3	X	-4.2	-4.2	0	0
13	FM-0	Z	-5.1	-5.1	0	0
14	FM-120	Z	-5.1	-5.1	0	0
15	FM-240	Z	-5.1	-5.1	0	0
16	SA-1	Z	-7.4	-7.4	0	0
17	SA-2	Z	0	0	0	0
18	SA-3	Z	-7.4	-7.4	0	0
19	BRACE-1	Z	-7.4	-7.4	0	0
20	BRACE-2	Z	-7.4	-7.4	0	0
21	BRACE-3	Z	-7.4	-7.4	0	0
22	HR1	Z	-7.4	-7.4	0	0
23	HR2	Z	-7.4	-7.4	0	0
24	HR3	Z	-7.4	-7.4	0	0
25	MP1	X	-4.9	-4.9	0	%100
26	MP2	X	-4.2	-4.2	%.694	%99.306
27	MP3	X	-4.9	-4.9	0	%100
28	MP4	X	-4.2	-4.2	%.694	%99.306
29	MP5	X	-4.9	-4.9	0	%100
30	MP6	X	-4.2	-4.2	%.694	%99.306
31	MP7	X	-4.9	-4.9	0	%100

Member Distributed Loads (BLC 23 : Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
32	MP8	X	-4.2	-4.2	%.694	%99.306
33	MP9	X	-4.9	-4.9	0	%100
34	MP10	X	-4.2	-4.2	%.694	%99.306
35	MP11	X	-6.1	-6.1	0	%100
36	MP12	X	-5.7	-5.7	%.694	%99.306
37	MP1	Z	-8.4	-8.4	0	%100
38	MP2	Z	-7.2	-7.2	%.694	%99.306
39	MP3	Z	-8.4	-8.4	0	%100
40	MP4	Z	-7.2	-7.2	%.694	%99.306
41	MP5	Z	-8.4	-8.4	0	%100
42	MP6	Z	-7.2	-7.2	%.694	%99.306
43	MP7	Z	-8.4	-8.4	0	%100
44	MP8	Z	-7.2	-7.2	%.694	%99.306
45	MP9	Z	-8.4	-8.4	0	%100
46	MP10	Z	-7.2	-7.2	%.694	%99.306
47	MP11	Z	-10.5	-10.5	0	%100
48	MP12	Z	-9.9	-9.9	%.694	%99.306

Member Distributed Loads (BLC 24 : Wind on Ice (270 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	0	0	0	0
2	FM-120	X	0	0	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	0	0	0	0
6	SA-3	X	0	0	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	HR1	X	0	0	0	0
11	HR2	X	0	0	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	0	0	0	0
14	FM-120	Z	-5.9	-5.9	0	0
15	FM-240	Z	-5.9	-5.9	0	0
16	SA-1	Z	-8.5	-8.5	0	0
17	SA-2	Z	-8.5	-8.5	0	0
18	SA-3	Z	-8.5	-8.5	0	0
19	BRACE-1	Z	-8.5	-8.5	0	0
20	BRACE-2	Z	-8.5	-8.5	0	0
21	BRACE-3	Z	0	0	0	0
22	HR1	Z	0	0	0	0
23	HR2	Z	-8.5	-8.5	0	0
24	HR3	Z	-8.5	-8.5	0	0
25	MP1	X	0	0	0	0
26	MP2	X	0	0	0	0
27	MP3	X	0	0	0	0
28	MP4	X	0	0	0	0
29	MP5	X	0	0	0	0
30	MP6	X	0	0	0	0
31	MP7	X	0	0	0	0
32	MP8	X	0	0	0	0
33	MP9	X	0	0	0	0
34	MP10	X	0	0	0	0
35	MP11	X	0	0	0	0
36	MP12	X	0	0	0	0

Member Distributed Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
37	MP1	Z	-8.9	-8.9	0	%100
38	MP2	Z	-7.3	-7.3	%.694	%99.306
39	MP3	Z	-8.9	-8.9	0	%100
40	MP4	Z	-7.3	-7.3	%.694	%99.306
41	MP5	Z	-8.9	-8.9	0	%100
42	MP6	Z	-10.4	-10.4	%.694	%99.306
43	MP7	Z	-11.3	-11.3	0	%100
44	MP8	Z	-10.4	-10.4	%.694	%99.306
45	MP9	Z	-11.3	-11.3	0	%100
46	MP10	Z	-10.4	-10.4	%.694	%99.306
47	MP11	Z	-11.3	-11.3	0	%100
48	MP12	Z	-10.4	-10.4	%.694	%99.306

Member Distributed Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	2.9	2.9	0	0
2	FM-120	X	2.9	2.9	0	0
3	FM-240	X	2.9	2.9	0	0
4	SA-1	X	0	0	0	0
5	SA-2	X	4.2	4.2	0	0
6	SA-3	X	4.2	4.2	0	0
7	BRACE-1	X	4.2	4.2	0	0
8	BRACE-2	X	4.2	4.2	0	0
9	BRACE-3	X	4.2	4.2	0	0
10	HR1	X	4.2	4.2	0	0
11	HR2	X	4.2	4.2	0	0
12	HR3	X	4.2	4.2	0	0
13	FM-0	Z	-5.1	-5.1	0	0
14	FM-120	Z	-5.1	-5.1	0	0
15	FM-240	Z	-5.1	-5.1	0	0
16	SA-1	Z	0	0	0	0
17	SA-2	Z	-7.4	-7.4	0	0
18	SA-3	Z	-7.4	-7.4	0	0
19	BRACE-1	Z	-7.4	-7.4	0	0
20	BRACE-2	Z	-7.4	-7.4	0	0
21	BRACE-3	Z	-7.4	-7.4	0	0
22	HR1	Z	-7.4	-7.4	0	0
23	HR2	Z	-7.4	-7.4	0	0
24	HR3	Z	-7.4	-7.4	0	0
25	MP1	X	4.9	4.9	0	%100
26	MP2	X	4.2	4.2	%.694	%99.306
27	MP3	X	4.9	4.9	0	%100
28	MP4	X	4.2	4.2	%.694	%99.306
29	MP5	X	4.9	4.9	0	%100
30	MP6	X	5.7	5.7	%.694	%99.306
31	MP7	X	6.1	6.1	0	%100
32	MP8	X	5.7	5.7	%.694	%99.306
33	MP9	X	6.1	6.1	0	%100
34	MP10	X	5.7	5.7	%.694	%99.306
35	MP11	X	4.9	4.9	0	%100
36	MP12	X	4.2	4.2	%.694	%99.306
37	MP1	Z	-8.4	-8.4	0	%100
38	MP2	Z	-7.2	-7.2	%.694	%99.306
39	MP3	Z	-8.4	-8.4	0	%100
40	MP4	Z	-7.2	-7.2	%.694	%99.306
41	MP5	Z	-8.4	-8.4	0	%100

Member Distributed Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
42	MP6	Z	-9.9	-9.9	%.694	%99.306
43	MP7	Z	-10.5	-10.5	0	%100
44	MP8	Z	-9.9	-9.9	%.694	%99.306
45	MP9	Z	-10.5	-10.5	0	%100
46	MP10	Z	-9.9	-9.9	%.694	%99.306
47	MP11	Z	-8.4	-8.4	0	%100
48	MP12	Z	-7.2	-7.2	%.694	%99.306

Member Distributed Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	FM-0	X	5.1	5.1	0	0
2	FM-120	X	5.1	5.1	0	0
3	FM-240	X	0	0	0	0
4	SA-1	X	7.4	7.4	0	0
5	SA-2	X	7.4	7.4	0	0
6	SA-3	X	7.4	7.4	0	0
7	BRACE-1	X	7.4	7.4	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	7.4	7.4	0	0
10	HR1	X	7.4	7.4	0	0
11	HR2	X	7.4	7.4	0	0
12	HR3	X	0	0	0	0
13	FM-0	Z	-2.9	-2.9	0	0
14	FM-120	Z	-2.9	-2.9	0	0
15	FM-240	Z	0	0	0	0
16	SA-1	Z	-4.2	-4.2	0	0
17	SA-2	Z	-4.2	-4.2	0	0
18	SA-3	Z	-4.2	-4.2	0	0
19	BRACE-1	Z	-4.2	-4.2	0	0
20	BRACE-2	Z	0	0	0	0
21	BRACE-3	Z	-4.2	-4.2	0	0
22	HR1	Z	-4.2	-4.2	0	0
23	HR2	Z	-4.2	-4.2	0	0
24	HR3	Z	0	0	0	0
25	MP1	X	9.8	9.8	0	%100
26	MP2	X	9	9	%.694	%99.306
27	MP3	X	9.8	9.8	0	%100
28	MP4	X	9	9	%.694	%99.306
29	MP5	X	9.8	9.8	0	%100
30	MP6	X	9	9	%.694	%99.306
31	MP7	X	9.8	9.8	0	%100
32	MP8	X	9	9	%.694	%99.306
33	MP9	X	9.8	9.8	0	%100
34	MP10	X	9	9	%.694	%99.306
35	MP11	X	7.7	7.7	0	%100
36	MP12	X	6.3	6.3	%.694	%99.306
37	MP1	Z	-5.7	-5.7	0	%100
38	MP2	Z	-5.2	-5.2	%.694	%99.306
39	MP3	Z	-5.7	-5.7	0	%100
40	MP4	Z	-5.2	-5.2	%.694	%99.306
41	MP5	Z	-5.7	-5.7	0	%100
42	MP6	Z	-5.2	-5.2	%.694	%99.306
43	MP7	Z	-5.7	-5.7	0	%100
44	MP8	Z	-5.2	-5.2	%.694	%99.306
45	MP9	Z	-5.7	-5.7	0	%100
46	MP10	Z	-5.2	-5.2	%.694	%99.306

Member Distributed Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
47	MP11	Z	-4.5	-4.5	0	%100
48	MP12	Z	-3.7	-3.7	%.694	%99.306

Load Combinations

	Description	Sol..	PDelta	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
1	1.4D	Yes	Y		1	1.4																				
2	1.2D + 1.0..	Yes	Y		1	1.2	2	1																		
3	1.2D + 1.0..	Yes	Y		1	1.2	3	1																		
4	1.2D + 1.0..	Yes	Y		1	1.2	4	1																		
5	1.2D + 1.0..	Yes	Y		1	1.2	5	1																		
6	1.2D + 1.0..	Yes	Y		1	1.2	6	1																		
7	1.2D + 1.0..	Yes	Y		1	1.2	7	1																		
8	1.2D + 1.0..	Yes	Y		1	1.2	8	1																		
9	1.2D + 1.0..	Yes	Y		1	1.2	9	1																		
10	1.2D + 1.0..	Yes	Y		1	1.2	10	1																		
11	1.2D + 1.0..	Yes	Y		1	1.2	11	1																		
12	1.2D + 1.0..	Yes	Y		1	1.2	12	1																		
13	1.2D + 1.0..	Yes	Y		1	1.2	13	1																		
14	1.2D + Di ..	Yes	Y		1	1.2	14	1	15	1																
15	1.2D + Di ..	Yes	Y		1	1.2	14	1	16	1																
16	1.2D + Di ..	Yes	Y		1	1.2	14	1	17	1																
17	1.2D + Di ..	Yes	Y		1	1.2	14	1	18	1																
18	1.2D + Di ..	Yes	Y		1	1.2	14	1	19	1																
19	1.2D + Di ..	Yes	Y		1	1.2	14	1	20	1																
20	1.2D + Di ..	Yes	Y		1	1.2	14	1	21	1																
21	1.2D + Di ..	Yes	Y		1	1.2	14	1	22	1																
22	1.2D + Di ..	Yes	Y		1	1.2	14	1	23	1																
23	1.2D + Di ..	Yes	Y		1	1.2	14	1	24	1																
24	1.2D + Di ..	Yes	Y		1	1.2	14	1	25	1																
25	1.2D + Di ..	Yes	Y		1	1.2	14	1	26	1																
26	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	27	.097																
27	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	28	.097																
28	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	29	.097																
29	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	30	.097																
30	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	31	.097																
31	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	32	.097																
32	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	33	.097																
33	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	34	.097																
34	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	35	.097																
35	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	36	.097																
36	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	37	.097																
37	1.2D + 1.0..	Yes	Y		1	1.2	1	.039	38	.097																
38	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	2	.058																
39	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	3	.058																
40	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	4	.058																
41	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	5	.058																
42	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	6	.058																
43	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	7	.058																
44	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	8	.058																
45	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	9	.058																
46	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	10	.058																
47	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	11	.058																
48	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	12	.058																
49	1.2D + 1.5..	Yes	Y		1	1.2	39	1.5	13	.058																
50	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	2	.058																

Load Combinations (Continued)

	Description	Sol..	PDelta	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
51	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	3	.058														
52	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	4	.058														
53	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	5	.058														
54	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	6	.058														
55	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	7	.058														
56	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	8	.058														
57	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	9	.058														
58	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	10	.058														
59	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	11	.058														
60	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	12	.058														
61	1.2D + 1.5..	Yes	Y		1	1.2	40	1.5	13	.058														
62	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	2	.058														
63	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	3	.058														
64	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	4	.058														
65	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	5	.058														
66	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	6	.058														
67	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	7	.058														
68	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	8	.058														
69	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	9	.058														
70	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	10	.058														
71	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	11	.058														
72	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	12	.058														
73	1.2D + 1.5..	Yes	Y		1	1.2	41	1.5	13	.058														
74	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	2	.058														
75	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	3	.058														
76	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	4	.058														
77	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	5	.058														
78	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	6	.058														
79	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	7	.058														
80	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	8	.058														
81	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	9	.058														
82	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	10	.058														
83	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	11	.058														
84	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	12	.058														
85	1.2D + 1.5..	Yes	Y		1	1.2	42	1.5	13	.058														
86	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	2	.058														
87	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	3	.058														
88	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	4	.058														
89	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	5	.058														
90	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	6	.058														
91	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	7	.058														
92	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	8	.058														
93	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	9	.058														
94	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	10	.058														
95	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	11	.058														
96	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	12	.058														
97	1.2D + 1.5..	Yes	Y		1	1.2	43	1.5	13	.058														
98	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	2	.058														
99	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	3	.058														
100	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	4	.058														
101	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	5	.058														
102	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	6	.058														
103	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	7	.058														
104	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	8	.058														
105	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	9	.058														
106	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	10	.058														
107	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	11	.058														

Load Combinations (Continued)

	Description	Sol..	P-Delta	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
108	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	12	.058														
109	1.2D + 1.5..	Yes	Y		1	1.2	44	1.5	13	.058														
110	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	2	.058														
111	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	3	.058														
112	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	4	.058														
113	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	5	.058														
114	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	6	.058														
115	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	7	.058														
116	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	8	.058														
117	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	9	.058														
118	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	10	.058														
119	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	11	.058														
120	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	12	.058														
121	1.2D + 1.5..	Yes	Y		1	1.2	45	1.5	13	.058														
122	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	2	.058														
123	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	3	.058														
124	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	4	.058														
125	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	5	.058														
126	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	6	.058														
127	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	7	.058														
128	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	8	.058														
129	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	9	.058														
130	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	10	.058														
131	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	11	.058														
132	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	12	.058														
133	1.2D + 1.5..	Yes	Y		1	1.2	46	1.5	13	.058														
134	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	2	.058														
135	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	3	.058														
136	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	4	.058														
137	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	5	.058														
138	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	6	.058														
139	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	7	.058														
140	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	8	.058														
141	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	9	.058														
142	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	10	.058														
143	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	11	.058														
144	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	12	.058														
145	1.2D + 1.5..	Yes	Y		1	1.2	47	1.5	13	.058														
146	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	2	.058														
147	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	3	.058														
148	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	4	.058														
149	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	5	.058														
150	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	6	.058														
151	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	7	.058														
152	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	8	.058														
153	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	9	.058														
154	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	10	.058														
155	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	11	.058														
156	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	12	.058														
157	1.2D + 1.5..	Yes	Y		1	1.2	48	1.5	13	.058														
158	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	2	.058														
159	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	3	.058														
160	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	4	.058														
161	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	5	.058														
162	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	6	.058														
163	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	7	.058														
164	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	8	.058														

Load Combinations (Continued)

	Description	Sol..	PDelta	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
165	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	9	.058														
166	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	10	.058														
167	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	11	.058														
168	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	12	.058														
169	1.2D + 1.5..	Yes	Y		1	1.2	49	1.5	13	.058														
170	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	2	.058														
171	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	3	.058														
172	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	4	.058														
173	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	5	.058														
174	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	6	.058														
175	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	7	.058														
176	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	8	.058														
177	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	9	.058														
178	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	10	.058														
179	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	11	.058														
180	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	12	.058														
181	1.2D + 1.5..	Yes	Y		1	1.2	50	1.5	13	.058														
182	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	2	.058														
183	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	3	.058														
184	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	4	.058														
185	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	5	.058														
186	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	6	.058														
187	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	7	.058														
188	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	8	.058														
189	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	9	.058														
190	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	10	.058														
191	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	11	.058														
192	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	12	.058														
193	1.2D + 1.5..	Yes	Y		1	1.2	51	1.5	13	.058														
194	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	2	.058														
195	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	3	.058														
196	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	4	.058														
197	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	5	.058														
198	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	6	.058														
199	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	7	.058														
200	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	8	.058														
201	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	9	.058														
202	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	10	.058														
203	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	11	.058														
204	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	12	.058														
205	1.2D + 1.5..	Yes	Y		1	1.2	52	1.5	13	.058														
206	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	2	.058														
207	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	3	.058														
208	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	4	.058														
209	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	5	.058														
210	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	6	.058														
211	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	7	.058														
212	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	8	.058														
213	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	9	.058														
214	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	10	.058														
215	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	11	.058														
216	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	12	.058														
217	1.2D + 1.5..	Yes	Y		1	1.2	53	1.5	13	.058														
218	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	2	.058														
219	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	3	.058														
220	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	4	.058														
221	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	5	.058														

Load Combinations (Continued)

	Description	Sol..	PDelta	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
222	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	6	.058																
223	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	7	.058																
224	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	8	.058																
225	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	9	.058																
226	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	10	.058																
227	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	11	.058																
228	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	12	.058																
229	1.2D + 1.5..	Yes	Y		1	1.2	54	1.5	13	.058																
230	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	2	.058																
231	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	3	.058																
232	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	4	.058																
233	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	5	.058																
234	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	6	.058																
235	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	7	.058																
236	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	8	.058																
237	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	9	.058																
238	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	10	.058																
239	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	11	.058																
240	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	12	.058																
241	1.2D + 1.5..	Yes	Y		1	1.2	55	1.5	13	.058																
242	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	2	.058																
243	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	3	.058																
244	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	4	.058																
245	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	5	.058																
246	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	6	.058																
247	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	7	.058																
248	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	8	.058																
249	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	9	.058																
250	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	10	.058																
251	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	11	.058																
252	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	12	.058																
253	1.2D + 1.5..	Yes	Y		1	1.2	56	1.5	13	.058																
254	1.2D + 1.5..	Yes	Y		1	1.2	57	1.5																		
255	1.2D + 1.5..	Yes	Y		1	1.2	58	1.5																		
256	1.2D + 1.5..	Yes	Y		1	1.2	59	1.5																		
257	1.2D + 1.5..	Yes	Y		1	1.2	60	1.5																		
258	1.2D + 1.5..	Yes	Y		1	1.2	61	1.5																		
259	1.2D + 1.5..	Yes	Y		1	1.2	62	1.5																		
260	1.2D + 1.5..	Yes	Y		1	1.2	63	1.5																		
261	1.2D + 1.5..	Yes	Y		1	1.2	64	1.5																		
262	1.2D + 1.5..	Yes	Y		1	1.2	65	1.5																		
263	1.2D + 1.5..	Yes	Y		1	1.2	66	1.5																		
264	1.2D + 1.5..	Yes	Y		1	1.2	67	1.5																		
265	1.2D + 1.5..	Yes	Y		1	1.2	68	1.5																		
266	1.2D + 1.5..	Yes	Y		1	1.2	69	1.5																		
267	1.2D + 1.5..	Yes	Y		1	1.2	70	1.5																		
268	1.2D + 1.5..	Yes	Y		1	1.2	71	1.5																		
269	1.2D + 1.5..	Yes	Y		1	1.2	72	1.5																		
270	1.2D + 1.5..	Yes	Y		1	1.2	73	1.5																		
271	1.2D + 1.5..	Yes	Y		1	1.2	74	1.5																		
272	1.2D + 1.5..	Yes	Y		1	1.2	75	1.5																		
273	1.2D + 1.5..	Yes	Y		1	1.2	76	1.5																		
274	1.2D + 1.5..	Yes	Y		1	1.2	77	1.5																		
275	1.2D + 1.5..	Yes	Y		1	1.2	78	1.5																		
276	1.2D + 1.5..	Yes	Y		1	1.2	79	1.5																		
277	1.2D + 1.5..	Yes	Y		1	1.2	80	1.5																		

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N34	max	-130.099	6	3824.27	18	16927.957	24	3530.194	12	2021.071	9	1992.559	12
2		min	-9807.204	24	-139.476	12	414.489	6	-10144.611	18	-2028.506	3	-6053.624	18
3	N35	max	-464.122	10	3760.166	22	-657.874	10	10153.483	22	1695.413	13	1891.762	4
4		min	-9724.299	16	-72.098	4	-16890.765	16	-3167.462	4	-1669.959	7	-5657.769	22
5	N36	max	19525.183	20	3770.665	14	746.911	11	645.794	11	1865.107	5	11686.694	14
6		min	555.842	2	-114.238	8	-740.2	5	-739.934	5	-1870.373	11	-3977.56	8
7	Totals:	max	7276.648	8	10614.258	20	6470.964	11						
8		min	-7276.641	2	2890.86	2	-6470.966	5						

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc...	LC	She...	Loc[i...		LC	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
1	SA-1	HSS4x4...	.805	66....	18	.125	57.4...	y	20	1225...	139518	1618...	1618...	...	H1-1b
2	SA-3	HSS4x4...	.795	66....	14	.120	57.4...	y	16	1225...	139518	1618...	1618...	...	H1-1b
3	SA-2	HSS4x4...	.793	66....	22	.123	66.8...	y	24	1225...	139518	1618...	1618...	...	H1-1b
4	MP12	PIPE_2.0	.535	18....	8	.131	18.1...		8	2086...	32130	1871....	1871....	...	H1-1b
5	MP4	PIPE_2.0	.520	18....	12	.131	18.1...		12	2086...	32130	1871....	1871....	...	H1-1b
6	MP8	PIPE_2.0	.508	18....	4	.122	18.1...		4	2086...	32130	1871....	1871....	...	H1-1b
7	MP11	PIPE_2.0	.486	18....	8	.100	18.1...		6	2086...	32130	1871....	1871....	...	H1-1b
8	MP7	PIPE_2.0	.478	18....	2	.100	18.1...		2	2086...	32130	1871....	1871....	...	H1-1b
9	MP3	PIPE_2.0	.472	18....	12	.095	18.1...		10	2086...	32130	1871....	1871....	...	H1-1b
10	MP9	PIPE_2.0	.455	18....	12	.126	18.1...		12	2086...	32130	1871....	1871....	...	H1-1b
11	MP1	PIPE_2.0	.450	18....	4	.124	18.1...		3	2086...	32130	1871....	1871....	...	H1-1b
12	MP5	PIPE_2.0	.448	18....	8	.123	18.1...		8	2086...	32130	1871....	1871....	...	H1-1b
13	MP10	PIPE_2.0	.413	18....	12	.092	18.1...		8	2086...	32130	1871....	1871....	...	H1-1b
14	MP6	PIPE_2.0	.398	18....	8	.097	18.1...		5	2086...	32130	1871....	1871....	...	H1-1b
15	MP2	PIPE_2.0	.383	18....	4	.093	18.1...		13	2086...	32130	1871....	1871....	...	H1-1b
16	CORNER-PL-1	PL1/2"x9"	.353	5.8...	20	.404	5.976	y	20	9867...	145800	1518....	2733...	...	H1-1b
17	CORNER-PL-2	PL1/2"x9"	.348	5.9...	24	.418	0	y	22	9867...	145800	1518....	2733...	...	H1-1b
18	CORNER-PL-3	PL1/2"x9"	.343	5.8...	16	.433	5.976	y	14	9867...	145800	1518....	2733...	...	H1-1b
19	HR2	L4x4x4	.259	72....	14	.050	133....	z	12	1289...	62532	3137....	5347...	...	H2-1
20	FM-120	C5x9	.236	72....	16	.341	77.0...	z	12	3048...	85536	1909....	1119...	...	H1-1b
21	HR3	L4x4x4	.234	13...	13	.043	10.1...	y	4	1289...	62532	3137....	5562...	...	H2-1
22	HR1	L4x4x4	.225	13...	12	.050	10.1...	y	8	1289...	62532	3137....	5690...	...	H2-1
23	FM-0	C5x9	.214	72....	24	.304	77.0...	z	8	3048...	85536	1909....	1101...	...	H1-1b
24	FM-240	C5x9	.212	72....	20	.289	77.0...	z	4	3048...	85536	1909....	1107...	...	H1-1b
25	CORNER-PL-6	PL1/2"x9"	.148	0	12	.085	0	y	5	9867...	145800	1518....	2733...	...	H1-1b
26	CORNER-PL-5	PL1/2"x9"	.147	11....	8	.084	0	y	13	9867...	145800	1518....	2733...	...	H1-1b
27	CORNER-PL-4	PL1/2"x9"	.134	0	4	.086	0	y	9	9867...	145800	1518....	2733...	...	H1-1b
28	PL8	PL3/8"x...	.089	0	6	.007	3.858	y	24	3977...	42525	332.2...	3090...	...	H1-1b
29	PL4	PL3/8"x...	.088	3.8...	2	.046	0	y	2	3977...	42525	332.2...	3100...	...	H1-1b
30	PL6	PL3/8"x...	.082	0	10	.045	3.857	y	10	3977...	42525	332.2...	3100...	...	H1-1b
31	BRACE-2	L4x4x4	.078	0	6	.042	49.8...	z	15	4230...	62532	3137....	6447...	...	H2-1
32	BRACE-1	L4x4x4	.077	0	2	.038	42.3...	z	24	4230...	62532	3137....	6445...	...	H2-1
33	BRACE-3	L4x4x4	.073	16....	22	.041	49.8...	z	20	4230...	62532	3137....	6220...	...	H2-1
34	PL7	PL3/8"x...	.059	0	6	.013	3.858	y	9	3977...	42525	332.2...	3099...	...	H1-1b
35	PL9	PL3/8"x...	.058	0	2	.050	3.857	y	2	3977...	42525	332.2...	3100...	...	H1-1b
36	PL5	PL3/8"x...	.053	0	10	.048	3.857	y	10	3977...	42525	332.2...	3100...	...	H1-1b

APPENDIX D

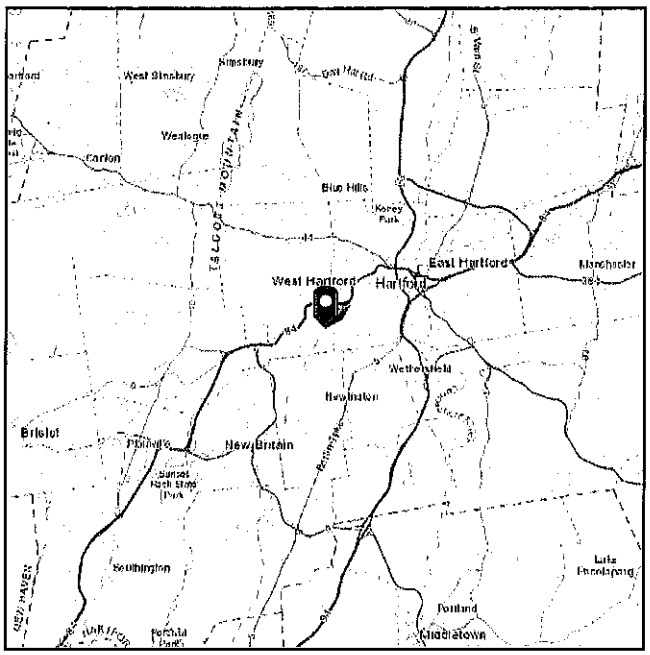
ASCE 7 HAZARDS REPORT

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 0 ft (NAVD 88)
Latitude: 41.73625
Longitude: -72.720611



Wind

Results:

Wind Speed:	122 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	100 Vmph
Data Source:	ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014
Date Accessed:	Mon Oct 08 2018

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

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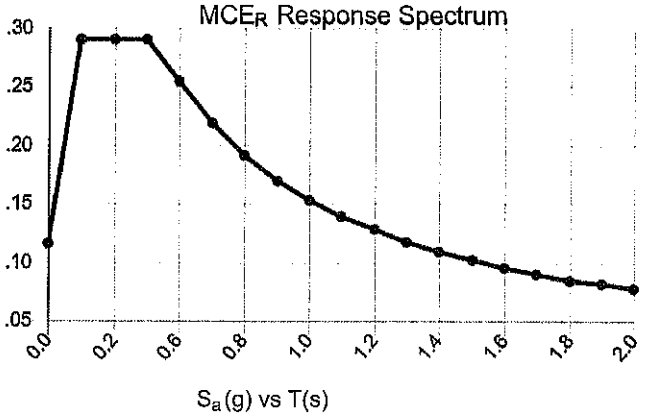
Seismic

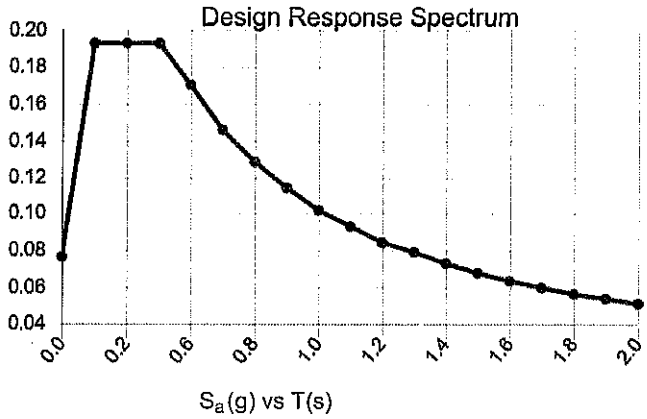
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.181	S_{DS} :	0.193
S_1 :	0.064	S_{D1} :	0.102
F_a :	1.600	T_L :	6.000
F_v :	2.400	PGA :	0.091
S_{MS} :	0.290	PGA_M :	0.146
S_{M1} :	0.153	F_{PGA} :	1.600
		I_e :	1

Seismic Design Category B





Data Accessed: Mon Oct 08 2018

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

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Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	5 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Mon Oct 08 2018

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

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.