



300 Meridian Centre
Rochester, NY 14618

December 12, 2019

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

**RE: Notice of Exempt Modification for Verizon
Crown Site BU: 8855662
340 Bloomfield Avenue, Windsor, CT 06095
Lat: 41° 51' 9.34" / Long: -72° 39' 37.79"**

Dear Ms. Bachman:

Verizon currently maintains twelve (12) total antennas at the 128-foot mount on the existing 150-foot monopole tower, located at 340 Bloomfield Avenue, Windsor, CT. The tower is owned by Crown Castle and the property is owned by the Town of Windsor. Verizon now intends to replace three (3) existing antennas at the 128-foot mount.

Tower modifications:

- Remove three (3) powerwave P6516XL antennas
- Add three (3) CBRS antennas
- Add three (3) CBRS RRHs

Ground modifications:

- None

Melanie A. Bachman

This facility was approved by the by the Town of Windsor Planning & Zoning Commission on October 10, 2000. This approval included the conditions that:

1. Final approval of the Fire Marshal regarding fire safety issues

This condition was related to the original building of the tower and not modifications going forward. This modification complies with the aforementioned condition(s).

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 The Honorable Donald S. Trinks, Mayor, Town of Windsor, as well as the property 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 my attention at the address listed below.

Sincerely,



Richard Zajac
Network Real Estate Specialist
300 Meridian Centre
Rochester, NY 14618
585-445-5896
richard.zajac@crowncastle.com

The Foundation for a Wireless World.

CrownCastle.com

Melanie A. Bachman

cc:

The Honorable Donald S. Trinks, Mayor
Town of Windsor
275 Broad Street
Windsor, CT 06095

Town of Windsor Planning & Zoning
275 Broad Street
Windsor, CT 06095

ORIGIN ID: ONHA (585) 445-5896
RICHARD ZAJAC
CROWN CASTLE
300 MERIDIAN CENTRE
ROCHESTER, NY 14618
UNITED STATES US

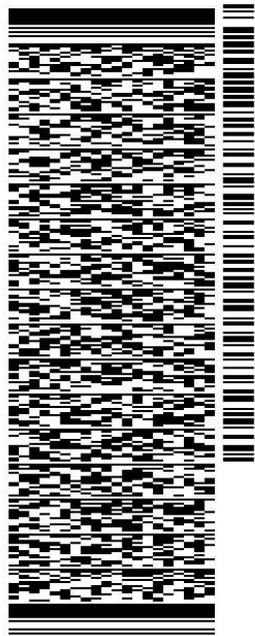
SHIP DATE: 12DEC19
ACTWGT: 1.00 LB
CAD: 104924194/N/ET4160

BILL SENDER

TO DONALD S. TRINKS - MAYOR
TOWN OF WINDSOR
275 BROAD STREET

WINDSOR CT 06095

(860) 285-1902 REF: 1734 7890
INV/ DEPT:
PO:

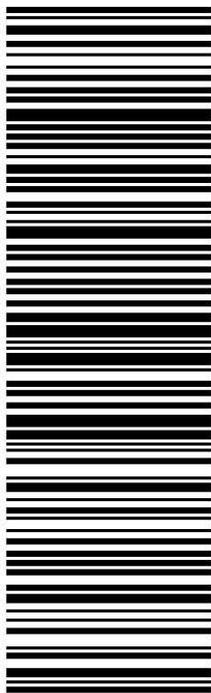


J192119091901ur

567J2118DD05A2

TRK# 7772 2605 3021 FRI - 13 DEC 3:00P
0201 STANDARD OVERNIGHT

XE EHTA DSR 06095
CT-US BDL



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. 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 \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID: ONHA (585) 445-5896
RICHARD ZAJAC
CROWN CASTLE
300 MERIDIAN CENTRE
ROCHESTER, NY 14618
UNITED STATES US

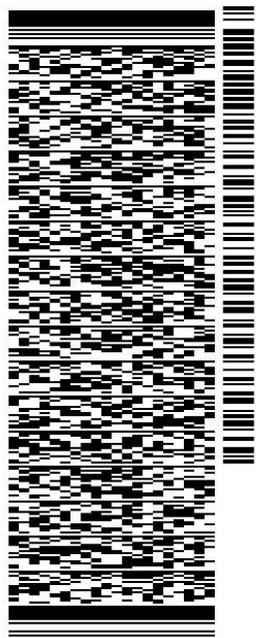
SHIP DATE: 12DEC19
ACTWGT: 1.00 LB
CAD: 104924194/INET4160

BILL SENDER

TO **PLANNING AND ZONING DEPT**
TOWN OF WINDSOR
275 BROAD STREET

WINDSOR CT 06095

(860) 285-1902 REF: 1734 7890
INV/ DEPT:
PO:



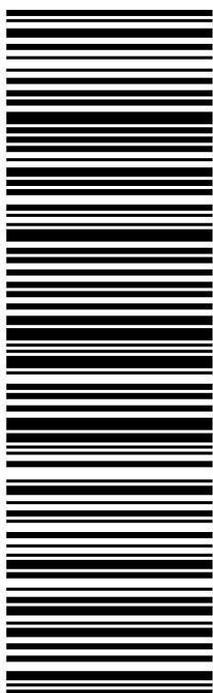
J192119091901ur

567J2118DD05A2

TRK# 7772 2608 4513
0201
FRI - 13 DEC 3:00P
STANDARD OVERNIGHT

XE EHTA

DSR 06095
CT-US BDL



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. 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 \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Exhibit A

Original Facility Approval



First in Connecticut. First for its citizens.

October 25, 2000

Cuddy & Feder & Worby LLP
ATTN: Daniel F. Leary
90 Maple Avenue
White Plains, NY 10601-5196

Subject: Special Use #546 - Wireless Telecommunications Tower, 340 Bloomfield Avenue, Zoning Regulations Sections 12.2 & 2.2.19E(1), NZ Zone, Town of Windsor/AT&T Wireless PCS, LLC

Site Plan #308E - Revision, Wireless Telecommunications Tower, 340 Bloomfield Avenue, NZ Zone, Town of Windsor/AT&T Wireless PCS, LLC

Dear Mr. Leary:

At its meeting on October 10, 2000 the Windsor Town Planning & Zoning Commission took the following action on the subject applications:

Approved subject to the following condition:

- 1) Final approval of the Fire Marshal regarding fire safety issues**

Approval includes the following distance waiver:

- 1) 83 feet for Bloomfield Avenue south of site**

Very truly yours,

Town Planning & Zoning Commission

/mm

Exhibit B

Property Card

CURRENT OWNER				TOPO.	UTILITIES	STRT./ROAD	LOCATION	CURRENT ASSESSMENT				
WINDSOR TOWN OF C/O AT&T MOBILITY 575 MOROSGO DR SUITE 13-F WEST TOWER ATTN: NREA TAX DEPT ATLANTA, GA 30324 Additional Owners:								Description	Code	Appraised Value	Assessed Value	6164 WINDSOR, CT
								IND LAND	3-1	205,000	143,500	
								IND BLDG	3-2	19,100	13,370	
								IND IMPR	3-3	220,500	154,350	VISION
SUPPLEMENTAL DATA								Total		444,600	311,220	
Account #	03788.01	TRACT	4736.02	INC:	CBLOCK	208	GH	DIST	HEART	2007	277340		GL YEAR
GIS ID:	3788.01	ASSOC PID#										

RECORD OF OWNERSHIP				BK-VOL/PAGE	SALE DATE	q/u	w/i	SALE PRICE	V.C.	PREVIOUS ASSESSMENTS (HISTORY)								
WINDSOR TOWN OF				190/ 568	08/06/1963					Yr.	Code	Assessed Value	Yr.	Code	Assessed Value	Yr.	Code	Assessed Value
										2018	3-1	143,500	2017	3-1	143,500	2016	3-1	143,500
										2018	3-2	13,370	2017	3-2	10,290	2016	3-2	10,290
										2018	3-3	154,350	2017	3-3	154,350	2016	3-3	154,350
										Total:		311,220	Total:		308,140	Total:		308,140

EXEMPTIONS			
Year	Type	Description	Amount
Total:			

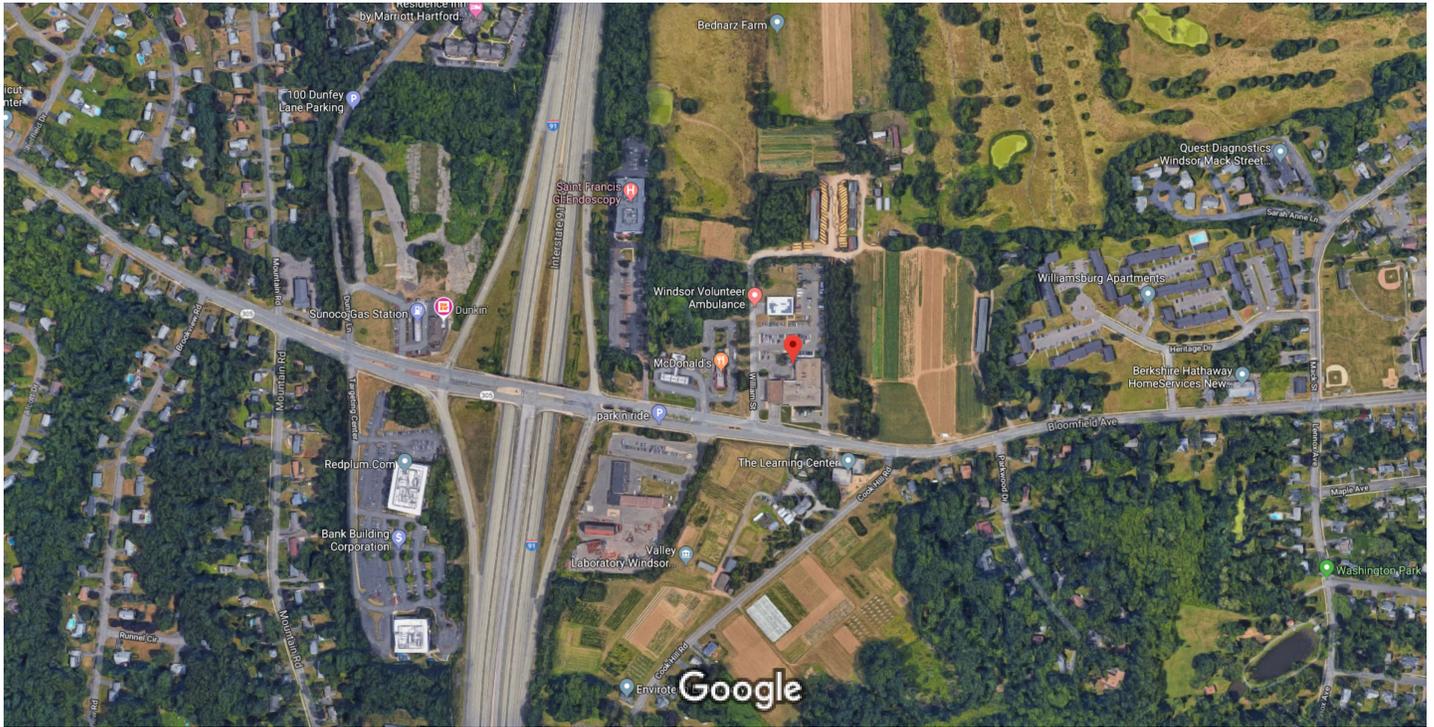
This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY	
Appraised Bldg. Value (Card)	0
Appraised XF (B) Value (Bldg)	0
Appraised OB (L) Value (Bldg)	220,500
Appraised Land Value (Bldg)	205,000
Special Land Value	0
Total Appraised Parcel Value	444,600
Valuation Method:	I
Adjustment:	0
Net Total Appraised Parcel Value	444,600

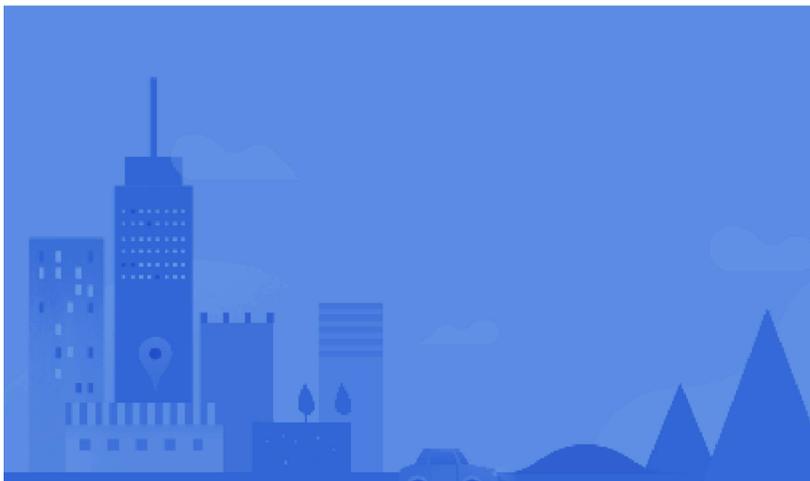
NOTES	
09310.01	LAND VALUE ADJUSTED
54-456-98T	PER INC APPR 10/2003
AT&T CELLULAR TOWER	
MARKET VALUE PER	
INCOME CAPITALIZATION	
10/01/2001 SK	

BUILDING PERMIT RECORD									VISIT/ CHANGE HISTORY					
Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments	Type	Date	IS	ID	Cd.	Purpose/Result
P-190267	02/13/2019	PL	Plumbing	2,500		0		GAS PIPING FOR GENE		06/19/2015		LL	20	Bldg Permit Insp
B-190129	01/23/2019	CM	Commercial	8,500		0		INSTALL GENERATOR		10/01/2001		SK	01	Measur+1 Visit
B-182243	09/05/2018	RE	Renovation	15,000		0		GENERATOR ON CONC						
B-170622	03/30/2017	CM	Commercial	20,000	08/17/2017	100	10/01/2017	REPLACE 3 ANTENNAS						
E-160074	01/11/2016	EL	Electric	15,000	08/18/2016	100	10/01/2016	REPLACE 6 ANTENNA						
B-150876	05/01/2015	CM	Commercial	20,000	06/19/2015	100	10/01/2015	ADD 3 NEW ANTENNA						
B-141344	04/15/2015	CM	Commercial	0	06/19/2015	100	10/01/2015	SWAPPING 6 ANTENNA						

LAND LINE VALUATION SECTION																		
B#	Use Code	Description	Zone	D	Frontage	Depth	Units	Unit Price	I. Factor	S.A.	S.O.	C. Factor	ST. Idx	Adj.	Notes- Adj	Special Pricing	Land Value	
1	4340	Cell Tower	NZ				0.05	AC	82,000.00	50.0000	0	0		1.00			CELL TOWER SITE	205,000
Total Card Land Units:							0.05	AC	Parcel Total Land Area:			0.05	AC	Total Land Value:			205,000	



Imagery ©2019 Google, Imagery ©2019 CNES / Airbus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data 200 ft ©2019



41°51'09.3"N 72°39'37.8"W

41.852594, -72.660497



Directions



Save



Nearby



Send to your phone



Share



340 Bloomfield Ave, Windsor, CT 06095



V83Q+2R Windsor, Connecticut

Exhibit C

Construction Drawings



verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (608) 330-3300

WINDSOR 3 CT

340 BLOOMFIELD AVE
WINDSOR, CT 06095
EXISTING MONOPOLE

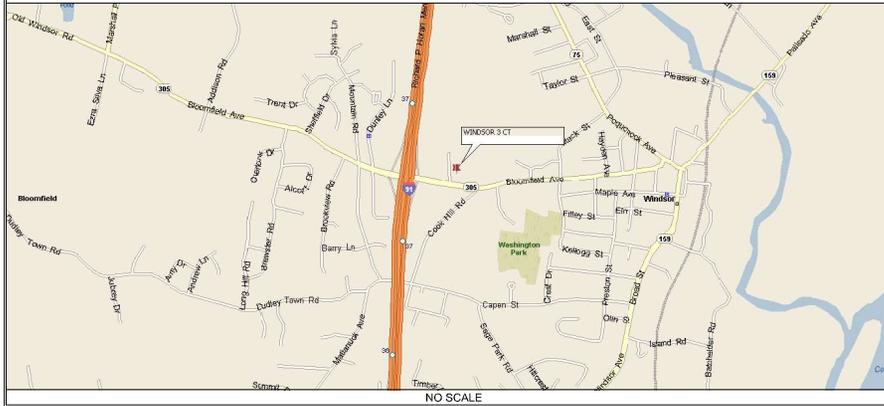
verizon

WINDSOR 3 CT
340 BLOOMFIELD AVE
WINDSOR, CT 06095

PROJECT SUMMARY

SITE NAME: WINDSOR 3 CT
SITE ADDRESS: 340 BLOOMFIELD AVE WINDSOR, CT 06095
TOWER OWNER: CROWN CASTLE 2000 CORPORATE DR CANONSBURG, PA 15317 855662
BU NUMBER: 54
MAP NUMBER: 456
LOT NUMBER: 456
CUSTOMER/APPLICANT: VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
CONTACT: ANDREW LEONE (617) 620-4175
NAD83: 41° 51' 9.34" N
LATITUDE: 72° 39' 37.79" W
ELEVATION: 118'
CURRENT ZONING: NZ
A&E FIRM: B+T GROUP 1717 S BOULDER, SUITE 300 TULSA, OK 74119 MIKE DAKES (918) 587-4630
OCCUPANCY TYPE: UNMANNED
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

LOCATION MAP



DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
T-1	TITLE SHEET	1
A-1	COMPOUND PLAN AND TOWER ELEVATION	1
A-2	EQUIPMENT DETAILS	1

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
OWNER:		
R.F. ENGINEER:		
CONSTRUCTION MGR.:		
LEASING & ZONING:		
VERIZON WIRELESS:		

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11x17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CODE COMPLIANCE

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

CODE TYPE	CODE
BUILDING	2018 CT SBC
STRUCTURAL	2018 CT SBC
MECHANICAL	2018 CT SBC
ELECTRICAL	NEC 2017

DRIVING DIRECTIONS

DEPART FROM BRADLEY INTERNATIONAL AIRPORT ON LOCAL ROAD. TAKE LOCAL ROAD ONTO TERMINAL RD. ROAD NAME CHANGES TO BRADLEY FIELD CONNECTOR. ROAD NAME CHANGES TO CT-20 [BRADLEY FIELD CONNECTOR]. TAKE RAMP ONTO I-91 [RICHARD P HORAN MEMORIAL HWY]. AT EXIT 37, TURN RIGHT ONTO RAMP. TURN RIGHT ONTO CT-305 [BLOOMFIELD AVE]. TURN LEFT ONTO WILLIAM ST. TURN RIGHT ONTO LOCAL ROAD. ARRIVE AT WINDSOR 3 CT.

PROJECT NO: 91728.01L01
CHECKED BY: RMC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	12/10/19	STH	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20



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

SHEET NUMBER: T-1
REVISION: 1



CALL CONNECTICUT ONE CALL
(800) 922-4455
CALL 3 WORKING DAYS
BEFORE YOU DIG!





verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (608) 330-3300

WINDSOR 3 CT

340 BLOOMFIELD AVE
WINDSOR, CT 06095
EXISTING MONOPOLE

PROJECT NO: 91728.011.01
CHECKED BY: RMC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	12/10/19	STH	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

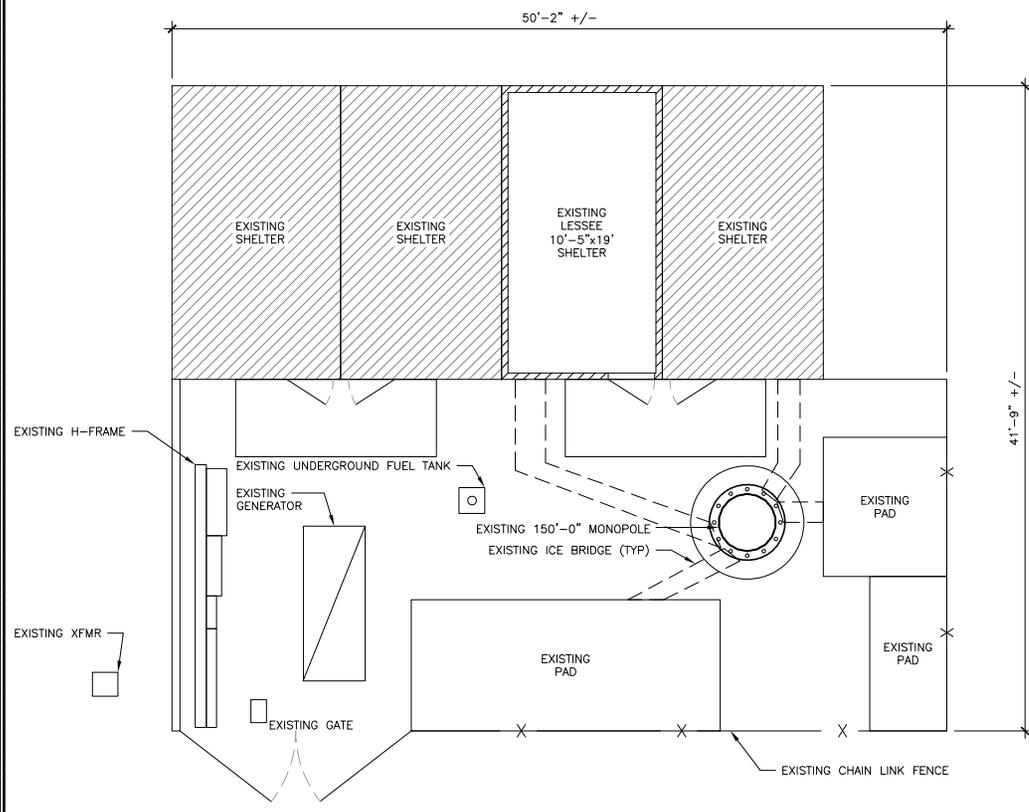
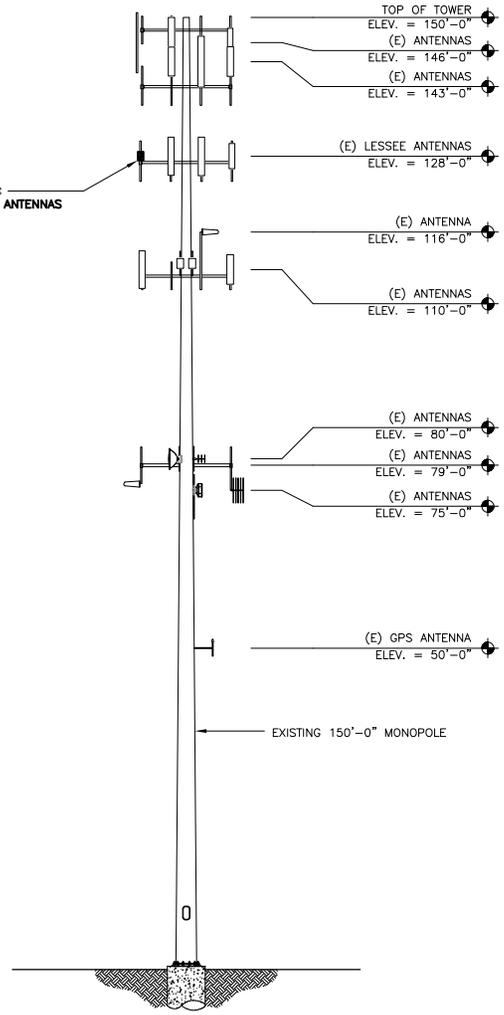


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **A-1** REVISION: **1**

- NOTES:
- CONTRACTOR TO VERIFY EXACT COAX AND ANTENNA INSTALLATION AND ANTENNA HEIGHT WITH LATEST RF DATA SHEETS PRIOR TO INSTALLATION.
 - STRUCTURAL ANALYSIS DONE BY OTHERS.
 - VERIZON SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED STATE STRUCTURAL ENGINEER CERTIFYING THAT THE EXISTING TOWER AND PROPOSED IMPROVEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL NEW WORK THAT WILL BE DONE IN COMPLIANCE WITH THE CURRENT EDITION OF BUILDING CODES AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY AND ALL IMPROVEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWING OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.CAP AND WEATHERPROFF UNUSED ANTENNA PORTS.
 - ESTIMATED HYBRIFLEX CABLE LENGTH: 177' (EACH RUN)

- EXISTING TO BE REMOVED:
(5) POWERWAVE P6516XL ANTENNAS
EXISTING TO REMAIN:
(3) CDMA ANTENNAS
(6) LTE ANTENNAS
(6) LTE RRHS
(6) COAX CABLES
(1) HYBRID CABLE
PROPOSED:
(3) CBRSS ANTENNAS
(3) CBRSS RRHS



1 COMPOUND PLAN
SCALE: 0' 1' 4' 8' 20'



2 FINAL TOWER ELEVATION
SCALE: N.T.S.

91728_855682_WindsorCompound.dwg - Sheet1-1 - User: ghoyses - Dec 10, 2019 - 10:33am



verizon
 400 FRIBERG PARKWAY
 WESTBOROUGH, MA 01581
 PH: (608) 330-3300

WINDSOR 3 CT
 340 BLOOMFIELD AVE
 WINDSOR, CT 06095
 EXISTING MONOPOLE

PROJECT NO: 91728.01L01
 CHECKED BY: RMC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	12/10/19	STH	CONSTRUCTION

B&T ENGINEERING, INC.
 PEC.0001564
 Expires 2/10/20



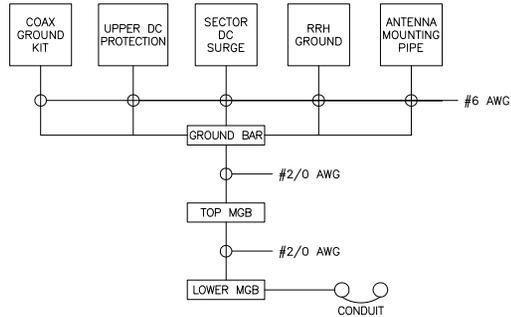
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **A-2** REVISION: **1**

- NOTE:
1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS AND HARDWARE ACCORDING WITH MANUFACTURE'S RECOMMENDATIONS.
 2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES AND RRHs IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
 3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANT INSTALLED SAFETY DEVICES.
 4. EQUIPMENT TO BE INSTALLED AT VERIZON'S RAD. CENTER IN ACCORDANCE WITH TOWER STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).

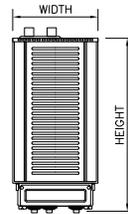
REMOTE RADIO HEAD DIMENSIONS (INCHES)

MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
CBRS RT4401-48A	12.1"	8.5"	4.1"	18.64 LBS

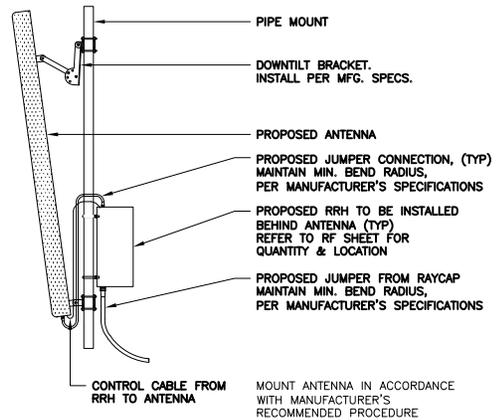


- NOTE:
1. BOND ANTENNA GROUNDING KIT CABLES TO TOP CIBE.
 2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIBE.
 3. TYPICAL FOR ALL SECTORS.

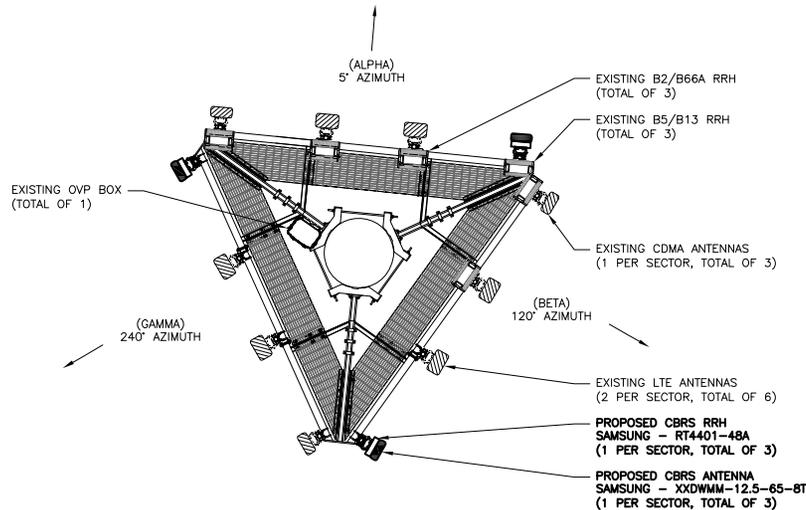
1 GROUNDING SCHEMATIC DIAGRAM
 SCALE: N.T.S.



2 RRH SPECIFICATIONS
 SCALE: N.T.S.



3 ANTENNA MOUNTING DETAIL
 SCALE: N.T.S.



4 PROPOSED ANTENNA ORIENTATION
 SCALE: N.T.S.



91728_855682_Windsor3.ct.dwg - Sheet14-2 - User: gboyas - Dec 10, 2019 - 10:33am

Exhibit D

Structural Analysis Report

Date: **November 8, 2019**

Denice Nicholson
Crown Castle
3 Corporate Dr.
Clifton Park, NY 12065



Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351

Subject: Structural Analysis Report

Carrier Designation: **Verizon Wireless Co-Locate**
Carrier Site Number: NG36734
Carrier Site Name: Windsor 3 CT

Crown Castle Designation: **Crown Castle BU Number:** 855662
Crown Castle Site Name: WindsorCentral
Crown Castle JDE Job Number: 592727
Crown Castle Work Order Number: 1803411
Crown Castle Order Number: 506813 Rev. 0

Engineering Firm Designation: **TEP Project Number:** 58885.319440

Site Data: **340 Bloomfield Avenue, Windsor, Hartford County, CT 06095**
Latitude 41° 51' 9.34", Longitude -72° 39' 37.79"
148 Foot - Monopole Tower

Dear Denice Nicholson,

Tower Engineering Professionals is pleased to submit this "**Structural Analysis Report**" to determine the structural integrity of the above-mentioned tower.

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

LC7: Proposed Equipment Configuration

Sufficient Capacity – 85.0%

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Clint P. Oestreich / MBB

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

11/08/2019

TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

Table 2 - Other Considered Equipment

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Table 5 - Tower Component Stresses vs. Capacity

4.1) Recommendations

5) APPENDIX A

tnxTower Output

6) APPENDIX B

Base Level Drawing

7) APPENDIX C

Additional Calculations

1) INTRODUCTION

This tower is a 148-ft monopole tower designed by Paul J. Ford and Company and mapped by BTE Management Group, LLC in July of 2012. The tower has been modified per reinforcement drawings prepared by B+T Group in October of 2014. All information provided to TEP was assumed to be accurate and complete.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1.0
Ice Thickness:	2.0 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
126.0	127.0	3	Antel	BXA-70063-4CF-EDIN-X w/ Mount Pipe	7	1-5/8
		6	Commscope	SBNHH-1D65B w/ Mount Pipe		
		3	Samsung Telecom.	CBRS w/ Mount Pipe		
		3	Samsung Telecom.	20W CBRS		
		1	RFS Celwave	DB-T1-6Z-8AB-0Z		
	126.0	3	Samsung Telecom.	RFV01U-D1A		
		3	Samsung Telecom.	RFV01U-D2A		
		1	SitePro 1	HRK14 Handrail Kit		
		1	SitePro 1	PRK-1245L Kicker Kit		
		1	Tower Mounts	Low Profile Platform Mount [LP 403-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)		
148.0	152.0	1	RFS Celwave	PD320-2	7	1-5/8		
	148.0	1	Tower Mounts	Platform Mount [LP 1201-1_HR-1]				
	146.0	3	Kathrein	800 10121 w/ Mount Pipe			2	3/4
		1	Quintel Technology	QS86512-2 w/ Mount Pipe			1	3/8
		2	Quintel Technology	QS66512-2 w/ Mount Pipe			1	7/8
		1	Raycap	DC6-48-60-18-8F				
		3	Ericsson	RRUS12/RRUS A2				
		3	Ericsson	RRUS 11				
		3	CCI Antennas	DTMABP7819VG12A				

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)		
139.0	139.0	3	Ericsson	AIR 21 B2A B4P w/ Mount Pipe	13	1-5/8		
		3	Ericsson	AIR 32 B2A/B66AA w/ Mount Pipe				
		3	RFS Celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe				
		3	Ericsson	Radio 4449 B12/B71				
		3	Ericsson	KRY 112 144/1				
		1	SitePro 1	HRK14 Handrail Kit				
		1	Tower Mounts	Platform Mount [LP 1201-1]				
111.0	111.0	3	Alcatel Lucent	800MHz 2X50W RRH w/ Filter	-	-		
		3	Alcatel Lucent	PCS 1900MHz 4x45W-65MHz				
		1	Tower Mounts	Pipe Mount [PM 601-3]				
109.0	116.0	1	Decibel	DB205-L	5	7/8		
		1	Kathrein	K732267				
	113.0	1	Sinclair	SD212-SF3P2SNM w/ Mount Pipe			3	5/16
	110.0	3	RFS Celwave	APXVTM14-C-120 w/ Mount Pipe			1	5/8
		4	RFS Celwave	APXVSP18-C-A20 w/ Mount Pipe			3	1-1/4
		3	Alcatel Lucent	TD-RRH8X20-25				
	109.0	1	Tower Mounts	Platform Mount [LP 1201-1]				
80.0	80.0	1	RFS Celwave	SC3-W100ASTX	1	EU 90-FR 1/2		
		1	Telewave	ANT450Y5-WR				
		2	Tower Mounts	Pipe Mount [PM 601-1]				
79.0	79.0	1	Tower Mounts	Side Arm Mount [SO 702-3]	2	7/8		
	76.0	1	Kathrein	K732267				
	75.0	1	Sinclair	SRL-227				
74.0	75.0	1	Radiowaves	HP2-23	1	3/8		
	74.0	1	Tower Mounts	Pipe Mount [PM 601-1]				
50.0	51.0	1	Pctel	GPS-TMG-HR-26N	1	1/2		
	50.0	1	Tower Mounts	Side Arm Mount [SO 701-1]				

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Geotechnical Report	Tectonic Engineering Consultants, P.C.	5269642	CCISites
Tower Foundation Drawings	Paul J. Ford and Company	4864324	CCISites
Tower Manufacturer Drawings	Paul J. Ford and Company	5338627	CCISites
Tower Mapping Report	BTE Management Group, LLC		
Tower Reinforcement Drawings	B+T Group	5373232	CCISites
Post-Modification Inspection	Tower Engineering Professionals	5649676	CCISites

3.1) Analysis Method

tnxTower (version 8.0.5.0), 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.

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

3.2) Assumptions

- 1) The tower and foundation were built and maintained in accordance with the manufacturer's specification.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2, and the referenced drawings.
- 3) All tower components are in sufficient condition to carry their full design capacity.
- 4) Serviceability with respect to antenna twist, tilt, roll, or lateral translation, is not checked and is left to the carrier or tower owner to ensure conformance.
- 5) All antenna mounts and mounting hardware are structurally sufficient to carry the full design capacity requirements of appurtenance wind area and weight as provided by the original manufacturer specifications. It is the carrier's responsibility to ensure compliance to the structural limitations of the existing and/or proposed antenna mounts. TEP did not perform a site visit to verify the size, condition or capacity of the antenna mounts and did not analyze antennas supporting mounts as part of this structural analysis report.
- 6) When applicable, the effective projected area (EPA) of appurtenances was determined by computational fluid dynamics (CFD) testing performed by Crown Castle. TEP assumes the means and methods used to determine the EPA's yields results that follow the intent of TIA-222-H and are accurate and complete.

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)^{1,2}

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
148 - 143	Pole	TP24.975x24x0.2188	Pole	3.6%	Pass
143 - 138	Pole	TP25.95x24.975x0.2188	Pole	8.4%	Pass
138 - 133	Pole	TP26.925x25.95x0.2188	Pole	15.5%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
133 - 128	Pole	TP27.901x26.925x0.2188	Pole	22.2%	Pass
128 - 123	Pole	TP28.876x27.901x0.2188	Pole	30.6%	Pass
123 - 119.75	Pole	TP30.241x28.876x0.2188	Pole	36.0%	Pass
119.75 - 114.75	Pole	TP30.047x29.072x0.25	Pole	37.6%	Pass
114.75 - 109.75	Pole	TP31.022x30.047x0.25	Pole	43.9%	Pass
109.75 - 104.75	Pole	TP31.997x31.022x0.25	Pole	52.3%	Pass
104.75 - 99.75	Pole	TP32.972x31.997x0.25	Pole	59.5%	Pass
99.75 - 94.75	Pole	TP33.947x32.972x0.25	Pole	66.2%	Pass
94.75 - 93.5	Pole	TP34.191x33.947x0.25	Pole	67.8%	Pass
93.5 - 93.25	Pole + Reinf.	TP34.24x34.191x0.4375	Reinf. 4 Tension Rupture	56.2%	Pass
93.25 - 88.25	Pole + Reinf.	TP35.215x34.24x0.4313	Reinf. 4 Tension Rupture	61.5%	Pass
88.25 - 83.25	Pole + Reinf.	TP36.19x35.215x0.425	Reinf. 4 Tension Rupture	66.5%	Pass
83.25 - 79.5	Pole + Reinf.	TP37.847x36.19x0.425	Reinf. 4 Tension Rupture	70.1%	Pass
79.5 - 74.5	Pole + Reinf.	TP37.396x36.421x0.4875	Reinf. 4 Tension Rupture	66.7%	Pass
74.5 - 69.5	Pole + Reinf.	TP38.371x37.396x0.475	Reinf. 4 Tension Rupture	70.8%	Pass
69.5 - 64.5	Pole + Reinf.	TP39.346x38.371x0.475	Reinf. 4 Tension Rupture	74.7%	Pass
64.5 - 59.5	Pole + Reinf.	TP40.321x39.346x0.4688	Reinf. 4 Tension Rupture	78.4%	Pass
59.5 - 57.75	Pole + Reinf.	TP40.663x40.321x0.4625	Reinf. 4 Tension Rupture	79.6%	Pass
57.75 - 57.5	Pole + Reinf.	TP40.711x40.663x0.525	Reinf. 2 Tension Rupture	70.3%	Pass
57.5 - 52.5	Pole + Reinf.	TP41.687x40.711x0.525	Reinf. 2 Tension Rupture	73.5%	Pass
52.5 - 47.5	Pole + Reinf.	TP42.662x41.687x0.5125	Reinf. 2 Tension Rupture	76.6%	Pass
47.5 - 45	Pole + Reinf.	TP44.222x42.662x0.5125	Reinf. 2 Tension Rupture	78.1%	Pass
45 - 38.5	Pole + Reinf.	TP43.792x42.524x0.575	Reinf. 2 Tension Rupture	74.6%	Pass
38.5 - 33.5	Pole + Reinf.	TP44.767x43.792x0.5625	Reinf. 2 Tension Rupture	77.0%	Pass
33.5 - 31.75	Pole + Reinf.	TP45.108x44.767x0.5625	Reinf. 2 Tension Rupture	77.8%	Pass
31.75 - 31.5	Pole + Reinf.	TP45.157x45.108x0.725	Reinf. 1 Bolt Shear	64.9%	Pass
31.5 - 28.25	Pole + Reinf.	TP45.791x45.157x0.725	Reinf. 1 Compression	63.7%	Pass
28.25 - 28	Pole + Reinf.	TP45.84x45.791x0.5375	Reinf. 1 Compression	71.9%	Pass
28 - 23	Pole + Reinf.	TP46.815x45.84x0.5375	Reinf. 1 Compression	73.9%	Pass
23 - 18	Pole + Reinf.	TP47.79x46.815x0.525	Reinf. 1 Compression	75.8%	Pass
18 - 13	Pole + Reinf.	TP48.765x47.79x0.525	Reinf. 1 Compression	77.6%	Pass
13 - 8	Pole + Reinf.	TP49.74x48.765x0.525	Reinf. 1 Compression	79.3%	Pass
8 - 3	Pole + Reinf.	TP50.715x49.74x0.525	Reinf. 1 Compression	80.9%	Pass
3 - 0	Pole + Reinf.	TP51.3x50.715x0.5188	Reinf. 1 Bolt Shear	85.0%	Pass
				Summary	
			Pole	71.4%	Pass
			Reinforcement	85.0%	Pass
			Overall	85.0%	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	83.8	Pass
1,2	Base Plate	-	75.0	Pass
1,2	Base Foundation Soil Interaction	-	73.3	Pass
1,2	Base Foundation Structural	-	83.0	Pass

Structure Rating (max from all components) =	85.0%
---	--------------

Notes:

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

4.1) Recommendations

- 1) If the load differs from that described in Tables 1 and 2 of this report, the referenced drawings, or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
- 2) 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	10	11	12	14	15	16	17	18	19	20	23	24	25	26	27	30	32	33	34	35	36	37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Length (ft)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Number of Sides	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Thickness (in)	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188	0.2188																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Socket Length (ft)	3.75																4.75										5.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Top Dia (in)	24.0000	24.9752	25.9503	26.9255	27.9006	28.8758	29.8509	30.8261	31.8012	32.7763	33.7514	34.7265	35.7016	36.6767	37.6518	38.6269	39.6020	40.5771	41.5522	42.5273	43.5024	44.4775	45.4526	46.4277	47.4028	48.3779	49.3530	50.3281	51.3032	52.2783	53.2534	54.2285																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Bot Dia (in)	24.9752	25.9503	26.9255	27.9006	28.8758	29.8509	30.8261	31.8012	32.7763	33.7514	34.7265	35.7016	36.6767	37.6518	38.6269	39.6020	40.5771	41.5522	42.5273	43.5024	44.4775	45.4526	46.4277	47.4028	48.3779	49.3530	50.3281	51.3032	52.2783	53.2534	54.2285																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Grade	A607-65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Weight (lb)	286.2	296.2	309.7	321.2	332.8	345.2	357.7	370.2	382.7	395.2	407.7	420.2	432.7	445.2	457.7	470.2	482.7	495.2	507.7	520.2	532.7	545.2	557.7	570.2	582.7	595.2	607.7	620.2	632.7	645.2	657.7	670.2	682.7	695.2	707.7	720.2	732.7	745.2	757.7	770.2	782.7	795.2	807.7	820.2	832.7	845.2	857.7	870.2	882.7	895.2	907.7	920.2	932.7	945.2	957.7	970.2	982.7	995.2	1007.7	1020.2	1032.7	1045.2	1057.7	1070.2	1082.7	1095.2	1107.7	1120.2	1132.7	1145.2	1157.7	1170.2	1182.7	1195.2	1207.7	1220.2	1232.7	1245.2	1257.7	1270.2	1282.7	1295.2	1307.7	1320.2	1332.7	1345.2	1357.7	1370.2	1382.7	1395.2	1407.7	1420.2	1432.7	1445.2	1457.7	1470.2	1482.7	1495.2	1507.7	1520.2	1532.7	1545.2	1557.7	1570.2	1582.7	1595.2	1607.7	1620.2	1632.7	1645.2	1657.7	1670.2	1682.7	1695.2	1707.7	1720.2	1732.7	1745.2	1757.7	1770.2	1782.7	1795.2	1807.7	1820.2	1832.7	1845.2	1857.7	1870.2	1882.7	1895.2	1907.7	1920.2	1932.7	1945.2	1957.7	1970.2	1982.7	1995.2	2007.7	2020.2	2032.7	2045.2	2057.7	2070.2	2082.7	2095.2	2107.7	2120.2	2132.7	2145.2	2157.7	2170.2	2182.7	2195.2	2207.7	2220.2	2232.7	2245.2	2257.7	2270.2	2282.7	2295.2	2307.7	2320.2	2332.7	2345.2	2357.7	2370.2	2382.7	2395.2	2407.7	2420.2	2432.7	2445.2	2457.7	2470.2	2482.7	2495.2	2507.7	2520.2	2532.7	2545.2	2557.7	2570.2	2582.7	2595.2	2607.7	2620.2	2632.7	2645.2	2657.7	2670.2	2682.7	2695.2	2707.7	2720.2	2732.7	2745.2	2757.7	2770.2	2782.7	2795.2	2807.7	2820.2	2832.7	2845.2	2857.7	2870.2	2882.7	2895.2	2907.7	2920.2	2932.7	2945.2	2957.7	2970.2	2982.7	2995.2	3007.7	3020.2	3032.7	3045.2	3057.7	3070.2	3082.7	3095.2	3107.7	3120.2	3132.7	3145.2	3157.7	3170.2	3182.7	3195.2	3207.7	3220.2	3232.7	3245.2	3257.7	3270.2	3282.7	3295.2	3307.7	3320.2	3332.7	3345.2	3357.7	3370.2	3382.7	3395.2	3407.7	3420.2	3432.7	3445.2	3457.7	3470.2	3482.7	3495.2	3507.7	3520.2	3532.7	3545.2	3557.7	3570.2	3582.7	3595.2	3607.7	3620.2	3632.7	3645.2	3657.7	3670.2	3682.7	3695.2	3707.7	3720.2	3732.7	3745.2	3757.7	3770.2	3782.7	3795.2	3807.7	3820.2	3832.7	3845.2	3857.7	3870.2	3882.7	3895.2	3907.7	3920.2	3932.7	3945.2	3957.7	3970.2	3982.7	3995.2	4007.7	4020.2	4032.7	4045.2	4057.7	4070.2	4082.7	4095.2	4107.7	4120.2	4132.7	4145.2	4157.7	4170.2	4182.7	4195.2	4207.7	4220.2	4232.7	4245.2	4257.7	4270.2	4282.7	4295.2	4307.7	4320.2	4332.7	4345.2	4357.7	4370.2	4382.7	4395.2	4407.7	4420.2	4432.7	4445.2	4457.7	4470.2	4482.7	4495.2	4507.7	4520.2	4532.7	4545.2	4557.7	4570.2	4582.7	4595.2	4607.7	4620.2	4632.7	4645.2	4657.7	4670.2	4682.7	4695.2	4707.7	4720.2	4732.7	4745.2	4757.7	4770.2	4782.7	4795.2	4807.7	4820.2	4832.7	4845.2	4857.7	4870.2	4882.7	4895.2	4907.7	4920.2	4932.7	4945.2	4957.7	4970.2	4982.7	4995.2	5007.7	5020.2	5032.7	5045.2	5057.7	5070.2	5082.7	5095.2	5107.7	5120.2	5132.7	5145.2	5157.7	5170.2	5182.7	5195.2	5207.7	5220.2	5232.7	5245.2	5257.7	5270.2	5282.7	5295.2	5307.7	5320.2	5332.7	5345.2	5357.7	5370.2	5382.7	5395.2	5407.7	5420.2	5432.7	5445.2	5457.7	5470.2	5482.7	5495.2	5507.7	5520.2	5532.7	5545.2	5557.7	5570.2	5582.7	5595.2	5607.7	5620.2	5632.7	5645.2	5657.7	5670.2	5682.7	5695.2	5707.7	5720.2	5732.7	5745.2	5757.7	5770.2	5782.7	5795.2	5807.7	5820.2	5832.7	5845.2	5857.7	5870.2	5882.7	5895.2	5907.7	5920.2	5932.7	5945.2	5957.7	5970.2	5982.7	5995.2	6007.7	6020.2	6032.7	6045.2	6057.7	6070.2	6082.7	6095.2	6107.7	6120.2	6132.7	6145.2	6157.7	6170.2	6182.7	6195.2	6207.7	6220.2	6232.7	6245.2	6257.7	6270.2	6282.7	6295.2	6307.7	6320.2	6332.7	6345.2	6357.7	6370.2	6382.7	6395.2	6407.7	6420.2	6432.7	6445.2	6457.7	6470.2	6482.7	6495.2	6507.7	6520.2	6532.7	6545.2	6557.7	6570.2	6582.7	6595.2	6607.7	6620.2	6632.7	6645.2	6657.7	6670.2	6682.7	6695.2	6707.7	6720.2	6732.7	6745.2	6757.7	6770.2	6782.7	6795.2	6807.7	6820.2	6832.7	6845.2	6857.7	6870.2	6882.7	6895.2	6907.7	6920.2	6932.7	6945.2	6957.7	6970.2	6982.7	6995.2	7007.7	7020.2	7032.7	7045.2	7057.7	7070.2	7082.7	7095.2	7107.7	7120.2	7132.7	7145.2	7157.7	7170.2	7182.7	7195.2	7207.7	7220.2	7232.7	7245.2	7257.7	7270.2	7282.7	7295.2	7307.7	7320.2	7332.7	7345.2	7357.7	7370.2	7382.7	7395.2	7407.7	7420.2	7432.7	7445.2	7457.7	7470.2	7482.7	7495.2	7507.7	7520.2	7532.7	7545.2	7557.7	7570.2	7582.7	7595.2	7607.7	7620.2	7632.7	7645.2	7657.7	7670.2	7682.7	7695.2	7707.7	7720.2	7732.7	7745.2	7757.7	7770.2	7782.7	7795.2	7807.7	7820.2	7832.7	7845.2	7857.7	7870.2	7882.7	7895.2	7907.7	7920.2	7932.7	7945.2	7957.7	7970.2	7982.7	7995.2	8007.7	8020.2	8032.7	8045.2	8057.7	8070.2	8082.7	8095.2	8107.7	8120.2	8132.7	8145.2	8157.7	8170.2	8182.7	8195.2	8207.7	8220.2	8232.7	8245.2	8257.7	8270.2	8282.7	8295.2	8307.7	8320.2	8332.7	8345.2	8357.7	8370.2	8382.7	8395.2	8407.7	8420.2	8432.7	8445.2	8457.7	8470.2	8482.7	8495.2	8507.7	8520.2	8532.7	8545.2	8557.7	8570.2	8582.7	8595.2	8607.7	8620.2	8632.7	8645.2	8657.7	8670.2	8682.7	8695.2	8707.7	8720.2	8732.7	8745.2	8757.7	8770.2	8782.7	8795.2	8807.7	8820.2	8832.7	8845.2	8857.7	8870.2	8882.7	8895.2	8907.7	8920.2	8932.7	8945.2	8957.7	8970.2	8982.7	8995.2	9007.7	9020.2	9032.7	9045.2	9057.7	9070.2	9082.7	9095.2	9107.7	9120.2	9132.7	9145.2	9157.7	9170.2	9182.7	9195.2	9207.7	9220.2	9232.7	9245.2	9257.7	9270.2	9282.7	9295.2	9307.7	9320.2	9332.7	9345.2	9357.7	9370.2	9382.7	9395.2	9407.7	9420.2	9432.7	9445.2	9457.7	9470.2	9482.7	9495.2	9507.7	9520.2	9532.7	9545.2	9557.7	9570.2	9582.7	9595.2	9607.7	9620.2	9632.7	9645.2	9657.7	9670.2	9682.7	9695.2	9707.7	9720.2	9732.7	9745.2	9757.7	9770.2	9782.7	9795.2	9807.7	9820.2	9832.7	9845.2	9857.7	9870.2	9882.7	9895.2	9907.7	9920.2	9932.7	9945.2	9957.7	9970.2	9982.7	9995.2	10007.7	10020.2	10032.7	10045.2	10057.7	10070.2	10082.7	10095.2	10107.7	10120.2	10132.7	10145.2	10157.7	10170.2	10182.7	10195.2	10207.7	10220.2	10232.7	10245.2	10257.7	10270.2	10282.7	10295.2	10307.7	10320.2	10332.7	10345.2	10357.7	10370.2	10382.7	10395.2	10407.7	10420.2	10432.7	10445.2	10457.7	10470.2	10482.7	10495.2	10507.7	10520.2	10532.7	10545.2	10557.7	10570.2	10582.7	10595.2	10607.7	10620.2	10632.7	10645.2	10657.7	10670.2	10682.7	10695.2	10707.7	10720.2	10732.7	10745.2	10757.7	10770.2	10782.7	10795.2	10807.7	10820.2	10832.7	10845.2	10857.7</

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job WindsorCentral (BU 855662)	Page 1 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

- Tower base elevation above sea level: 115.00 ft.
- Basic wind speed of 125 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 2.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.00 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.05.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric | <ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs | <ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known |
|--|---|---|

Tapered Pole Section Geometry

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	WindsorCentral (BU 855662)	Page	2 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

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	148.00-143.00	5.00	0.00	18	24.0000	24.9752	0.2188	0.8750	A607-65 (65 ksi)
L2	143.00-138.00	5.00	0.00	18	24.9752	25.9503	0.2188	0.8750	A607-65 (65 ksi)
L3	138.00-133.00	5.00	0.00	18	25.9503	26.9255	0.2188	0.8750	A607-65 (65 ksi)
L4	133.00-128.00	5.00	0.00	18	26.9255	27.9006	0.2188	0.8750	A607-65 (65 ksi)
L5	128.00-123.00	5.00	0.00	18	27.9006	28.8758	0.2188	0.8750	A607-65 (65 ksi)
L6	123.00-116.00	7.00	3.75	18	28.8758	30.2410	0.2188	0.8750	A607-65 (65 ksi)
L7	116.00-114.75	5.00	0.00	18	29.0721	30.0471	0.2500	1.0000	A607-65 (65 ksi)
L8	114.75-109.75	5.00	0.00	18	30.0471	31.0221	0.2500	1.0000	A607-65 (65 ksi)
L9	109.75-104.75	5.00	0.00	18	31.0221	31.9971	0.2500	1.0000	A607-65 (65 ksi)
L10	104.75-99.75	5.00	0.00	18	31.9971	32.9721	0.2500	1.0000	A607-65 (65 ksi)
L11	99.75-94.75	5.00	0.00	18	32.9721	33.9471	0.2500	1.0000	A607-65 (65 ksi)
L12	94.75-93.50	1.25	0.00	18	33.9471	34.1908	0.2500	1.0000	A607-65 (65 ksi)
L13	93.50-93.25	0.25	0.00	18	34.1908	34.2396	0.4375	1.7500	A607-65 (65 ksi)
L14	93.25-88.25	5.00	0.00	18	34.2396	35.2145	0.4313	1.7250	A607-65 (65 ksi)
L15	88.25-83.25	5.00	0.00	18	35.2145	36.1895	0.4250	1.7000	A607-65 (65 ksi)
L16	83.25-74.75	8.50	4.75	18	36.1895	37.8470	0.4250	1.7000	A607-65 (65 ksi)
L17	74.75-74.50	5.00	0.00	18	36.4208	37.3959	0.4875	1.9500	A607-65 (65 ksi)
L18	74.50-69.50	5.00	0.00	18	37.3959	38.3711	0.4750	1.9000	A607-65 (65 ksi)
L19	69.50-64.50	5.00	0.00	18	38.3711	39.3462	0.4750	1.9000	A607-65 (65 ksi)
L20	64.50-59.50	5.00	0.00	18	39.3462	40.3214	0.4688	1.8750	A607-65 (65 ksi)
L21	59.50-57.75	1.75	0.00	18	40.3214	40.6627	0.4625	1.8500	A607-65 (65 ksi)
L22	57.75-57.50	0.25	0.00	18	40.6627	40.7114	0.5250	2.1000	A607-65 (65 ksi)
L23	57.50-52.50	5.00	0.00	18	40.7114	41.6866	0.5250	2.1000	A607-65 (65 ksi)
L24	52.50-47.50	5.00	0.00	18	41.6866	42.6618	0.5125	2.0500	A607-65 (65 ksi)
L25	47.50-39.50	8.00	5.50	18	42.6618	44.2220	0.5125	2.0500	A607-65 (65 ksi)
L26	39.50-38.50	6.50	0.00	18	42.5243	43.7919	0.5750	2.3000	A607-65 (65 ksi)
L27	38.50-33.50	5.00	0.00	18	43.7919	44.7670	0.5625	2.2500	A607-65 (65 ksi)
L28	33.50-31.75	1.75	0.00	18	44.7670	45.1083	0.5625	2.2500	A607-65 (65 ksi)
L29	31.75-31.50	0.25	0.00	18	45.1083	45.1570	0.7250	2.9000	A607-65 (65 ksi)
L30	31.50-28.25	3.25	0.00	18	45.1570	45.7908	0.7250	2.9000	A607-65 (65 ksi)
L31	28.25-28.00	0.25	0.00	18	45.7908	45.8396	0.5375	2.1500	A607-65

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	3 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L32	28.00-23.00	5.00	0.00	18	45.8396	46.8147	0.5375	2.1500	(65 ksi) A607-65
L33	23.00-18.00	5.00	0.00	18	46.8147	47.7897	0.5250	2.1000	(65 ksi) A607-65
L34	18.00-13.00	5.00	0.00	18	47.7897	48.7648	0.5250	2.1000	(65 ksi) A607-65
L35	13.00-8.00	5.00	0.00	18	48.7648	49.7399	0.5250	2.1000	(65 ksi) A607-65
L36	8.00-3.00	5.00	0.00	18	49.7399	50.7150	0.5250	2.1000	(65 ksi) A607-65
L37	3.00-0.00	3.00		18	50.7150	51.3000	0.5188	2.0750	(65 ksi) A607-65

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L1	24.3365	16.5116	1179.7676	8.4423	12.1920	96.7657	2361.0876	8.2574	3.8390	17.55
	25.3267	17.1887	1330.9301	8.7885	12.6874	104.9019	2663.6114	8.5960	4.0106	18.334
L2	25.3267	17.1887	1330.9301	8.7885	12.6874	104.9019	2663.6114	8.5960	4.0106	18.334
	26.3169	17.8657	1494.4828	9.1347	13.1828	113.3665	2990.9320	8.9346	4.1823	19.119
L3	26.3169	17.8657	1494.4828	9.1347	13.1828	113.3665	2990.9320	8.9346	4.1823	19.119
	27.3071	18.5428	1670.9138	9.4809	13.6781	122.1594	3344.0261	9.2732	4.3539	19.903
L4	27.3071	18.5428	1670.9138	9.4809	13.6781	122.1594	3344.0261	9.2732	4.3539	19.903
	28.2973	19.2199	1860.7111	9.8271	14.1735	131.2808	3723.8705	9.6118	4.5255	20.688
L5	28.2973	19.2199	1860.7111	9.8271	14.1735	131.2808	3723.8705	9.6118	4.5255	20.688
	29.2875	19.8969	2064.3628	10.1732	14.6689	140.7306	4131.4420	9.9504	4.6971	21.473
L6	29.2875	19.8969	2064.3628	10.1732	14.6689	140.7306	4131.4420	9.9504	4.6971	21.473
	30.6738	20.8448	2373.6799	10.6579	15.3624	154.5120	4750.4831	10.4244	4.9374	22.571
L7	30.6738	20.8448	2373.6799	10.6579	15.3624	154.5120	4750.4831	10.4244	4.9374	22.571
	30.2246	22.8704	2400.2845	10.2319	14.7686	162.5257	4803.7274	11.4374	4.6767	18.707
L8	30.4721	23.6440	2652.2055	10.5780	15.2639	173.7563	5307.9008	11.8243	4.8483	19.393
L9	30.4721	23.6440	2652.2055	10.5780	15.2639	173.7563	5307.9008	11.8243	4.8483	19.393
	31.4621	24.4177	2921.1639	10.9241	15.7592	185.3621	5846.1716	12.2112	5.0199	20.08
L10	31.4621	24.4177	2921.1639	10.9241	15.7592	185.3621	5846.1716	12.2112	5.0199	20.08
	32.4521	25.1913	3207.7173	11.2702	16.2545	197.3431	6419.6555	12.5981	5.1915	20.766
L11	32.4521	25.1913	3207.7173	11.2702	16.2545	197.3431	6419.6555	12.5981	5.1915	20.766
	33.4422	25.9650	3512.4232	11.6163	16.7498	209.6992	7029.4682	12.9849	5.3631	21.452
L12	33.4422	25.9650	3512.4232	11.6163	16.7498	209.6992	7029.4682	12.9849	5.3631	21.452
	34.4322	26.7386	3835.8391	11.9625	17.2451	222.4306	7676.7254	13.3718	5.5347	22.139
L13	34.4322	26.7386	3835.8391	11.9625	17.2451	222.4306	7676.7254	13.3718	5.5347	22.139
	34.6797	26.9320	3919.6818	12.0490	17.3689	225.6720	7844.5212	13.4686	5.5776	22.31
L14	34.6797	26.9320	3919.6818	12.0490	17.3689	225.6720	7844.5212	13.4686	5.5776	22.31
	34.7003	46.9384	6775.6619	11.9997	17.3937	389.5470	13560.2394	23.4736	5.2562	12.014
L15	34.7012	46.2764	6682.5722	12.0019	17.3937	384.1951	13373.9375	23.1426	5.2672	12.214
L16	35.6913	47.6109	7277.5542	12.3481	17.8890	406.8176	14564.6844	23.8100	5.4388	12.612
L17	35.6922	46.9293	7175.9492	12.3503	17.8890	401.1378	14361.3407	23.4691	5.4498	12.823
L18	36.6822	48.2446	7796.3386	12.6964	18.3843	424.0764	15602.9357	24.1269	5.6214	13.227
L19	36.6822	48.2446	7796.3386	12.6964	18.3843	424.0764	15602.9357	24.1269	5.6214	13.227
	38.3653	50.4804	8931.2919	13.2848	19.2263	464.5357	17874.3359	25.2450	5.9131	13.913
L20	37.8481	55.6004	9070.0357	12.7563	18.5017	490.2259	18152.0060	27.8055	5.5521	11.389
L21	37.8976	57.1093	9828.6824	13.1025	18.9971	517.3773	19670.2977	28.5601	5.7237	11.741
L22	37.8995	55.6638	9586.3984	13.1069	18.9971	504.6236	19185.4108	27.8372	5.7457	12.096
L23	38.8897	57.1340	10366.2244	13.4531	19.4925	531.8057	20746.0890	28.5724	5.9173	12.457
L24	38.8897	57.1340	10366.2244	13.4531	19.4925	531.8057	20746.0890	28.5724	5.9173	12.457
L25	39.8799	58.6042	11187.2347	13.7993	19.9879	559.7008	22389.1898	29.3077	6.0889	12.819

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p style="text-align: center;">WindsorCentral (BU 855662)</p>	<p>Page</p> <p style="text-align: center;">4 of 29</p>
	<p>Project</p> <p style="text-align: center;">TEP No. 58885.319440</p>	<p>Date</p> <p style="text-align: center;">10:42:59 11/08/19</p>
	<p>Client</p> <p style="text-align: center;">Crown Castle</p>	<p>Designed by</p> <p style="text-align: center;">Dustin T. Smith, P.E.</p>

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L20	39.8809	57.8424	11045.3604	13.8015	19.9879	552.6028	22105.2545	28.9267	6.0999	13.013
	40.8711	59.2932	11897.5265	14.1477	20.4833	580.8414	23810.7081	29.6523	6.2716	13.379
L21	40.8721	58.5118	11744.4166	14.1499	20.4833	573.3665	23504.2869	29.2615	6.2826	13.584
	41.2186	59.0129	12048.7030	14.2711	20.6566	583.2846	24113.2600	29.5120	6.3426	13.714
L22	41.2090	66.8834	13613.2140	14.2489	20.6566	659.0235	27244.3406	33.4481	6.2326	11.872
	41.2585	66.9647	13662.8847	14.2662	20.6814	660.6359	27343.7474	33.4887	6.2412	11.888
L23	41.2585	66.9647	13662.8847	14.2662	20.6814	660.6359	27343.7474	33.4887	6.2412	11.888
	42.2487	68.5896	14681.8359	14.6124	21.1768	693.2984	29382.9906	34.3013	6.4128	12.215
L24	42.2506	66.9769	14345.3297	14.6168	21.1768	677.4081	28709.5353	33.4948	6.4348	12.556
	43.2408	68.5631	15388.9108	14.9630	21.6722	710.0770	30798.0708	34.2881	6.6065	12.891
L25	43.2408	68.5631	15388.9108	14.9630	21.6722	710.0770	30798.0708	34.2881	6.6065	12.891
	44.8251	71.1012	17161.9154	15.5169	22.4648	763.9478	34346.4130	35.5573	6.8811	13.426
L26	44.1808	76.5596	17021.0875	14.8920	21.6024	787.9272	34064.5719	38.2871	6.4723	11.256
	44.3788	78.8731	18611.1779	15.3420	22.2463	836.5966	37246.8448	39.4440	6.6954	11.644
L27	44.3807	77.1807	18222.3897	15.3464	22.2463	819.1201	36468.7570	38.5977	6.7174	11.942
	45.3708	78.9216	19483.4735	15.6926	22.7416	856.7314	38992.5838	39.4683	6.8890	12.247
L28	45.3708	78.9216	19483.4735	15.6926	22.7416	856.7314	38992.5838	39.4683	6.8890	12.247
	45.7174	79.5309	19938.2265	15.8138	22.9150	870.0948	39902.6882	39.7730	6.9491	12.354
L29	45.6923	102.1326	25417.9478	15.7561	22.9150	1109.2272	50869.3411	51.0760	6.6631	9.19
	45.7418	102.2448	25501.8024	15.7734	22.9398	1111.6851	51037.1608	51.1321	6.6716	9.202
L30	45.7418	102.2448	25501.8024	15.7734	22.9398	1111.6851	51037.1608	51.1321	6.6716	9.202
	46.3854	103.7032	26608.7507	15.9984	23.2617	1143.8847	53252.5139	51.8615	6.7832	9.356
L31	46.4143	77.2033	19974.4326	16.0649	23.2617	858.6817	39975.1482	38.6090	7.1132	13.234
	46.4638	77.2865	20039.0606	16.0822	23.2865	860.5438	40104.4892	38.6506	7.1218	13.25
L32	46.4638	77.2865	20039.0606	16.0822	23.2865	860.5438	40104.4892	38.6506	7.1218	13.25
	47.4539	78.9500	21361.0634	16.4284	23.7818	898.2088	42750.2343	39.4825	7.2934	13.569
L33	47.4559	77.1348	20881.2061	16.4328	23.7818	878.0313	41789.8883	38.5747	7.3154	13.934
	48.4460	78.7596	22228.7620	16.7790	24.2772	915.6236	44486.7732	39.3873	7.4870	14.261
L34	48.4460	78.7596	22228.7620	16.7790	24.2772	915.6236	44486.7732	39.3873	7.4870	14.261
	49.4361	80.3844	23633.0811	17.1251	24.7725	954.0039	47297.2593	40.1998	7.6586	14.588
L35	49.4361	80.3844	23633.0811	17.1251	24.7725	954.0039	47297.2593	40.1998	7.6586	14.588
	50.4262	82.0092	25095.3346	17.4713	25.2679	993.1722	50223.6904	41.0124	7.8302	14.915
L36	50.4262	82.0092	25095.3346	17.4713	25.2679	993.1722	50223.6904	41.0124	7.8302	14.915
	51.4163	83.6340	26616.6935	17.8174	25.7632	1033.1285	53268.4099	41.8250	8.0018	15.242
L37	51.4173	82.6487	26309.6544	17.8197	25.7632	1021.2108	52653.9278	41.3322	8.0128	15.446
	52.0114	83.6120	27240.3475	18.0273	26.0604	1045.2774	54516.5385	41.8139	8.1158	15.645

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L1				1	1	1			
148.00-143.00									
L2				1	1	1			
143.00-138.00									
L3				1	1	1			
138.00-133.00									
L4				1	1	1			
133.00-128.00									
L5				1	1	1			
128.00-123.00									
L6				1	1	1			
123.00-116.00									
L7				1	1	1			
116.00-114.75									
L8				1	1	1			
114.75-109.75									
L9				1	1	1			
109.75-104.75									
L10				1	1	1			

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	WindsorCentral (BU 855662)	Page	5 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
104.75-99.75									
L11				1	1	1			
99.75-94.75									
L12				1	1	1			
94.75-93.50									
L13				1	1	0.958094			
93.50-93.25									
L14				1	1	0.960809			
93.25-88.25									
L15				1	1	0.964226			
88.25-83.25									
L16				1	1	0.956693			
83.25-74.75									
L17				1	1	0.959261			
74.75-74.50									
L18				1	1	0.975776			
74.50-69.50									
L19				1	1	0.967801			
69.50-64.50									
L20				1	1	0.972867			
64.50-59.50									
L21				1	1	0.983226			
59.50-57.75									
L22				1	1	0.962397			
57.75-57.50									
L23				1	1	0.953698			
57.50-52.50									
L24				1	1	0.968174			
52.50-47.50									
L25				1	1	0.964075			
47.50-39.50									
L26				1	1	0.964244			
39.50-38.50									
L27				1	1	0.978356			
38.50-33.50									
L28				1	1	0.975968			
33.50-31.75									
L29				1	1	0.992017			
31.75-31.50									
L30				1	1	0.98534			
31.50-28.25									
L31				1	1	1.11262			
28.25-28.00									
L32				1	1	1.10388			
28.00-23.00									
L33				1	1	1.12128			
23.00-18.00									
L34				1	1	1.11305			
18.00-13.00									
L35				1	1	1.10515			
13.00-8.00									
L36				1	1	1.09756			
8.00-3.00									
L37				1	1	1.10618			
3.00-0.00									

Feed Line/Linear Appurtenances - Entered As Round Or Flat

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	6 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
*** LDF4-50A(1/2")	C	No	Surface Ar (CaAa)	50.00 - 0.00	1	1	0.000 0.000	0.6300		0.15
*** Safety Line 3/8	A	No	Surface Ar (CaAa)	148.00 - 0.00	1	1	-0.250 -0.250	0.3750		0.22
***MOD**										
(Area) CCI-65FP-085125 (H)	A	No	Surface Af (CaAa)	35.50 - 0.00	1	1	-0.250 -0.250	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	A	No	Surface Af (CaAa)	35.50 - 0.00	1	1	0.500 0.500	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	B	No	Surface Af (CaAa)	35.50 - 0.00	1	1	0.250 0.250	8.5000	19.5000	0.00

(Area) CCI-65FP-065125 (H)	B	No	Surface Af (CaAa)	60.50 - 25.50	1	1	-0.250 -0.250	6.5000	15.5000	0.00
(Area) CCI-65FP-065125 (H)	C	No	Surface Af (CaAa)	60.50 - 25.50	1	1	-0.250 -0.250	6.5000	15.5000	0.00
(Area) CCI-65FP-065125 (H)	A	No	Surface Af (CaAa)	60.50 - 35.50	1	1	-0.250 -0.250	6.5000	15.5000	0.00

(Area) CCI-65FP-060100 (H)	A	No	Surface Af (CaAa)	95.50 - 60.50	1	1	-0.250 -0.250	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	B	No	Surface Af (CaAa)	95.50 - 60.50	1	1	-0.250 -0.250	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	C	No	Surface Af (CaAa)	95.50 - 60.50	1	1	-0.250 -0.250	6.0000	14.0000	0.00

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C _{AA} ft ² /ft	Weight plf
LDF5-50A(7/8")	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	1	No Ice 0.00 1/2" Ice 0.00 1" Ice 0.00 2" Ice 0.00	0.33 0.33 0.33 0.33
LDF7-50A(1-5/8")	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	1	No Ice 0.00 1/2" Ice 0.00 1" Ice 0.00 2" Ice 0.00	0.82 0.82 0.82 0.82

2" Flexible Conduit	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	2	No Ice 0.00 1/2" Ice 0.00 1" Ice 0.00 2" Ice 0.00	0.34 0.34 0.34 0.34
LDF7-50A(1-5/8")	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	6	No Ice 0.00 1/2" Ice 0.00 1" Ice 0.00 2" Ice 0.00	0.82 0.82 0.82 0.82
FB-L98B-002-7500 (0/3/8)	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	1	No Ice 0.00 1/2" Ice 0.00 1" Ice 0.00 2" Ice 0.00	0.06 0.06 0.06 0.06
WR-VG86ST-BRD(	B	No	No	Inside Pole	148.00 - 0.00	0.0000	0	2	No Ice 0.00	0.58

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	7 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#		C _{AA} ft ² /ft	Weight plf
3/4)									1/2" Ice	0.00	0.58
									1" Ice	0.00	0.58
									2" Ice	0.00	0.58

MLE Hybrid 9Power/18Fiber RL 2(1-5/8")	A	No	No	Inside Pole	139.00 - 0.00	0.0000	0	13	No Ice	0.00	1.07
									1/2" Ice	0.00	1.07
									1" Ice	0.00	1.07
									2" Ice	0.00	1.07

HJ7-50A(1-5/8")	C	No	No	Inside Pole	126.00 - 0.00	0.0000	0	7	No Ice	0.00	1.04
									1/2" Ice	0.00	1.04
									1" Ice	0.00	1.04
									2" Ice	0.00	1.04

LDF5-50A(7/8")	A	No	No	Inside Pole	109.00 - 0.00	0.0000	0	5	No Ice	0.00	0.33
									1/2" Ice	0.00	0.33
									1" Ice	0.00	0.33
									2" Ice	0.00	0.33
ATCB-B01-006(5/16")	A	No	No	Inside Pole	109.00 - 0.00	0.0000	0	3	No Ice	0.00	0.07
									1/2" Ice	0.00	0.07
									1" Ice	0.00	0.07
									2" Ice	0.00	0.07
MLE Hybrid 3Power/6Fiber RL 2(1-1/4")	A	No	No	Inside Pole	109.00 - 0.00	0.0000	0	3	No Ice	0.00	0.68
									1/2" Ice	0.00	0.68
									1" Ice	0.00	0.68
									2" Ice	0.00	0.68
HB058-M12-XXXF (5/8")	A	No	No	Inside Pole	109.00 - 0.00	0.0000	0	1	No Ice	0.00	0.24
									1/2" Ice	0.00	0.24
									1" Ice	0.00	0.24
									2" Ice	0.00	0.24

EU 90-FR(ELLIPTICAL)	B	No	No	Inside Pole	80.00 - 0.00	0.0000	0	1	No Ice	0.00	0.34
									1/2" Ice	0.00	0.34
									1" Ice	0.00	0.34
									2" Ice	0.00	0.34
LDF4-50A(1/2)	B	No	No	Inside Pole	80.00 - 0.00	0.0000	0	1	No Ice	0.00	0.15
									1/2" Ice	0.00	0.15
									1" Ice	0.00	0.15
									2" Ice	0.00	0.15

LDF5-50A(7/8")	A	No	No	Inside Pole	79.00 - 0.00	0.0000	0	2	No Ice	0.00	0.33
									1/2" Ice	0.00	0.33
									1" Ice	0.00	0.33
									2" Ice	0.00	0.33
**											
LDF2-50(3/8")	A	No	No	Inside Pole	74.00 - 0.00	0.0000	0	1	No Ice	0.00	0.08
									1/2" Ice	0.00	0.08
									1" Ice	0.00	0.08
									2" Ice	0.00	0.08

3/8-in Detuner Wire	A	No	No	CaAa (Out Of Face)	147.00 - 15.00	36.0000	0	1	No Ice	0.02	0.10
									1/2" Ice	0.12	0.52
									1" Ice	0.22	1.55
									2" Ice	0.42	5.44
3/8-in Detuner Wire	B	No	No	CaAa (Out Of Face)	147.00 - 15.00	36.0000	0	1	No Ice	0.02	0.10
									1/2" Ice	0.12	0.52
									1" Ice	0.22	1.55
									2" Ice	0.42	5.44
3/8-in Detuner Wire	C	No	No	CaAa (Out Of Face)	147.00 - 15.00	36.0000	0	1	No Ice	0.02	0.10
									1/2" Ice	0.12	0.52

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	8 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C _{AA}	Weight plf
								1" Ice	0.22	1.55
								2" Ice	0.42	5.44

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight lb
L1	148.00-143.00	A	0.000	0.000	0.188	0.075	1
		B	0.000	0.000	0.000	0.075	40
		C	0.000	0.000	0.000	0.075	0
L2	143.00-138.00	A	0.000	0.000	0.188	0.094	15
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	0
L3	138.00-133.00	A	0.000	0.000	0.188	0.094	71
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	0
L4	133.00-128.00	A	0.000	0.000	0.188	0.094	71
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	0
L5	128.00-123.00	A	0.000	0.000	0.188	0.094	71
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	22
L6	123.00-116.00	A	0.000	0.000	0.263	0.131	100
		B	0.000	0.000	0.000	0.131	57
		C	0.000	0.000	0.000	0.131	52
L7	116.00-114.75	A	0.000	0.000	0.047	0.023	18
		B	0.000	0.000	0.000	0.023	10
		C	0.000	0.000	0.000	0.023	9
L8	114.75-109.75	A	0.000	0.000	0.188	0.094	71
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	37
L9	109.75-104.75	A	0.000	0.000	0.188	0.094	89
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	37
L10	104.75-99.75	A	0.000	0.000	0.188	0.094	92
		B	0.000	0.000	0.000	0.094	40
		C	0.000	0.000	0.000	0.094	37
L11	99.75-94.75	A	0.000	0.000	0.938	0.094	92
		B	0.000	0.000	0.750	0.094	40
		C	0.000	0.000	0.750	0.094	37
L12	94.75-93.50	A	0.000	0.000	1.297	0.023	23
		B	0.000	0.000	1.250	0.023	10
		C	0.000	0.000	1.250	0.023	9
L13	93.50-93.25	A	0.000	0.000	0.259	0.005	5
		B	0.000	0.000	0.250	0.005	2
		C	0.000	0.000	0.250	0.005	2
L14	93.25-88.25	A	0.000	0.000	5.188	0.094	92
		B	0.000	0.000	5.000	0.094	40
		C	0.000	0.000	5.000	0.094	37
L15	88.25-83.25	A	0.000	0.000	5.188	0.094	92
		B	0.000	0.000	5.000	0.094	40
		C	0.000	0.000	5.000	0.094	37
L16	83.25-74.75	A	0.000	0.000	8.819	0.159	159
		B	0.000	0.000	8.500	0.159	71
		C	0.000	0.000	8.500	0.159	63

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	WindsorCentral (BU 855662)	Page	9 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
L17	74.75-74.50	A	0.000	0.000	0.259	0.005	5
		B	0.000	0.000	0.250	0.005	2
		C	0.000	0.000	0.250	0.005	2
L18	74.50-69.50	A	0.000	0.000	5.188	0.094	95
		B	0.000	0.000	5.000	0.094	43
		C	0.000	0.000	5.000	0.094	37
L19	69.50-64.50	A	0.000	0.000	5.188	0.094	96
		B	0.000	0.000	5.000	0.094	43
		C	0.000	0.000	5.000	0.094	37
L20	64.50-59.50	A	0.000	0.000	5.271	0.094	96
		B	0.000	0.000	5.083	0.094	43
		C	0.000	0.000	5.083	0.094	37
L21	59.50-57.75	A	0.000	0.000	1.961	0.033	33
		B	0.000	0.000	1.896	0.033	15
		C	0.000	0.000	1.896	0.033	13
L22	57.75-57.50	A	0.000	0.000	0.280	0.005	5
		B	0.000	0.000	0.271	0.005	2
		C	0.000	0.000	0.271	0.005	2
L23	57.50-52.50	A	0.000	0.000	5.604	0.094	96
		B	0.000	0.000	5.417	0.094	43
		C	0.000	0.000	5.417	0.094	37
L24	52.50-47.50	A	0.000	0.000	5.604	0.094	96
		B	0.000	0.000	5.417	0.094	43
		C	0.000	0.000	5.574	0.094	37
L25	47.50-39.50	A	0.000	0.000	8.967	0.150	153
		B	0.000	0.000	8.667	0.150	68
		C	0.000	0.000	9.171	0.150	60
L26	39.50-38.50	A	0.000	0.000	1.121	0.019	19
		B	0.000	0.000	1.083	0.019	9
		C	0.000	0.000	1.146	0.019	8
L27	38.50-33.50	A	0.000	0.000	9.104	0.094	96
		B	0.000	0.000	8.250	0.094	43
		C	0.000	0.000	5.732	0.094	38
L28	33.50-31.75	A	0.000	0.000	5.024	0.033	33
		B	0.000	0.000	4.375	0.033	15
		C	0.000	0.000	2.006	0.033	13
L29	31.75-31.50	A	0.000	0.000	0.718	0.005	5
		B	0.000	0.000	0.625	0.005	2
		C	0.000	0.000	0.287	0.005	2
L30	31.50-28.25	A	0.000	0.000	9.330	0.061	62
		B	0.000	0.000	8.125	0.061	28
		C	0.000	0.000	3.726	0.061	24
L31	28.25-28.00	A	0.000	0.000	0.718	0.005	5
		B	0.000	0.000	0.625	0.005	2
		C	0.000	0.000	0.287	0.005	2
L32	28.00-23.00	A	0.000	0.000	14.354	0.094	96
		B	0.000	0.000	9.792	0.094	43
		C	0.000	0.000	3.023	0.094	38
L33	23.00-18.00	A	0.000	0.000	14.354	0.094	96
		B	0.000	0.000	7.083	0.094	43
		C	0.000	0.000	0.315	0.094	38
L34	18.00-13.00	A	0.000	0.000	14.354	0.056	95
		B	0.000	0.000	7.083	0.056	43
		C	0.000	0.000	0.315	0.056	37
L35	13.00-8.00	A	0.000	0.000	14.354	0.000	95
		B	0.000	0.000	7.083	0.000	42
		C	0.000	0.000	0.315	0.000	37
L36	8.00-3.00	A	0.000	0.000	14.354	0.000	95
		B	0.000	0.000	7.083	0.000	42
		C	0.000	0.000	0.315	0.000	37
L37	3.00-0.00	A	0.000	0.000	8.613	0.000	57

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>WindsorCentral (BU 855662)</p>	<p>Page</p> <p>10 of 29</p>
	<p>Project</p> <p>TEP No. 58885.319440</p>	<p>Date</p> <p>10:42:59 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>Dustin T. Smith, P.E.</p>

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
		B	0.000	0.000	4.250	0.000	25
		C	0.000	0.000	0.189	0.000	22

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} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
L1	148.00-143.00	A	1.972	0.000	0.000	2.159	1.653	51
		B		0.000	0.000	0.000	1.653	61
		C		0.000	0.000	0.000	1.653	21
L2	143.00-138.00	A	1.965	0.000	0.000	2.152	2.059	70
		B		0.000	0.000	0.000	2.059	66
		C		0.000	0.000	0.000	2.059	27
L3	138.00-133.00	A	1.958	0.000	0.000	2.145	2.052	125
		B		0.000	0.000	0.000	2.052	66
		C		0.000	0.000	0.000	2.052	26
L4	133.00-128.00	A	1.951	0.000	0.000	2.138	2.044	125
		B		0.000	0.000	0.000	2.044	66
		C		0.000	0.000	0.000	2.044	26
L5	128.00-123.00	A	1.943	0.000	0.000	2.130	2.037	124
		B		0.000	0.000	0.000	2.037	66
		C		0.000	0.000	0.000	2.037	48
L6	123.00-116.00	A	1.933	0.000	0.000	2.969	2.838	173
		B		0.000	0.000	0.000	2.838	92
		C		0.000	0.000	0.000	2.838	87
L7	116.00-114.75	A	1.927	0.000	0.000	0.530	0.507	31
		B		0.000	0.000	0.000	0.507	16
		C		0.000	0.000	0.000	0.507	16
L8	114.75-109.75	A	1.921	0.000	0.000	2.109	2.015	123
		B		0.000	0.000	0.000	2.015	66
		C		0.000	0.000	0.000	2.015	62
L9	109.75-104.75	A	1.913	0.000	0.000	2.100	2.006	140
		B		0.000	0.000	0.000	2.006	65
		C		0.000	0.000	0.000	2.006	62
L10	104.75-99.75	A	1.904	0.000	0.000	2.091	1.997	143
		B		0.000	0.000	0.000	1.997	65
		C		0.000	0.000	0.000	1.997	62
L11	99.75-94.75	A	1.894	0.000	0.000	3.116	1.988	154
		B		0.000	0.000	1.034	1.988	77
		C		0.000	0.000	1.034	1.988	73
L12	94.75-93.50	A	1.888	0.000	0.000	2.241	0.495	55
		B		0.000	0.000	1.722	0.495	36
		C		0.000	0.000	1.722	0.495	35
L13	93.50-93.25	A	1.886	0.000	0.000	0.448	0.099	11
		B		0.000	0.000	0.344	0.099	7
		C		0.000	0.000	0.344	0.099	7
L14	93.25-88.25	A	1.881	0.000	0.000	8.949	1.975	219
		B		0.000	0.000	6.881	1.975	142
		C		0.000	0.000	6.881	1.975	139
L15	88.25-83.25	A	1.870	0.000	0.000	8.928	1.964	218
		B		0.000	0.000	6.870	1.964	141
		C		0.000	0.000	6.870	1.964	138
L16	83.25-74.75	A	1.855	0.000	0.000	15.126	3.313	371
		B		0.000	0.000	11.653	3.313	241
		C		0.000	0.000	11.653	3.313	232
L17	74.75-74.50	A	1.845	0.000	0.000	0.445	0.097	11
		B		0.000	0.000	0.343	0.097	7

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	WindsorCentral (BU 855662)	Page	11 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight lb
L18	74.50-69.50	C		0.000	0.000	0.343	0.097	7
		A	1.838	0.000	0.000	8.863	1.932	219
		B		0.000	0.000	6.838	1.932	141
		C		0.000	0.000	6.838	1.932	135
L19	69.50-64.50	A	1.825	0.000	0.000	8.837	1.918	218
		B		0.000	0.000	6.825	1.918	140
		C		0.000	0.000	6.825	1.918	134
L20	64.50-59.50	A	1.811	0.000	0.000	8.892	1.904	217
		B		0.000	0.000	6.894	1.904	140
		C		0.000	0.000	6.894	1.904	134
L21	59.50-57.75	A	1.801	0.000	0.000	3.222	0.663	77
		B		0.000	0.000	2.526	0.663	50
		C		0.000	0.000	2.526	0.663	48
L22	57.75-57.50	A	1.797	0.000	0.000	0.460	0.095	11
		B		0.000	0.000	0.361	0.095	7
		C		0.000	0.000	0.361	0.095	7
L23	57.50-52.50	A	1.789	0.000	0.000	9.182	1.883	219
		B		0.000	0.000	7.206	1.883	143
		C		0.000	0.000	7.206	1.883	137
L24	52.50-47.50	A	1.772	0.000	0.000	9.148	1.866	218
		B		0.000	0.000	7.189	1.866	142
		C		0.000	0.000	8.232	1.866	149
L25	47.50-39.50	A	1.748	0.000	0.000	14.559	2.946	344
		B		0.000	0.000	11.463	2.946	224
		C		0.000	0.000	14.763	2.946	256
L26	39.50-38.50	A	1.729	0.000	0.000	1.820	0.368	43
		B		0.000	0.000	1.433	0.368	28
		C		0.000	0.000	1.845	0.368	32
L27	38.50-33.50	A	1.715	0.000	0.000	13.220	1.809	252
		B		0.000	0.000	10.651	1.809	172
		C		0.000	0.000	9.161	1.809	157
L28	33.50-31.75	A	1.698	0.000	0.000	6.807	0.627	108
		B		0.000	0.000	5.564	0.627	78
		C		0.000	0.000	3.195	0.627	54
L29	31.75-31.50	A	1.693	0.000	0.000	0.972	0.089	15
		B		0.000	0.000	0.794	0.089	11
		C		0.000	0.000	0.456	0.089	8
L30	31.50-28.25	A	1.683	0.000	0.000	12.612	1.155	199
		B		0.000	0.000	10.313	1.155	143
		C		0.000	0.000	5.914	1.155	100
L31	28.25-28.00	A	1.673	0.000	0.000	0.969	0.088	15
		B		0.000	0.000	0.792	0.088	11
		C		0.000	0.000	0.454	0.088	8
L32	28.00-23.00	A	1.657	0.000	0.000	19.324	1.750	302
		B		0.000	0.000	12.277	1.750	181
		C		0.000	0.000	5.508	1.750	116
L33	23.00-18.00	A	1.621	0.000	0.000	19.217	1.715	296
		B		0.000	0.000	8.704	1.715	143
		C		0.000	0.000	1.936	1.715	79
L34	18.00-13.00	A	1.576	0.000	0.000	19.083	1.002	281
		B		0.000	0.000	8.660	1.002	132
		C		0.000	0.000	1.891	1.002	70
L35	13.00-8.00	A	1.516	0.000	0.000	18.902	0.000	261
		B		0.000	0.000	8.599	0.000	117
		C		0.000	0.000	1.831	0.000	57
L36	8.00-3.00	A	1.421	0.000	0.000	18.617	0.000	248
		B		0.000	0.000	8.504	0.000	111
		C		0.000	0.000	1.736	0.000	55
L37	3.00-0.00	A	1.248	0.000	0.000	10.858	0.000	135
		B		0.000	0.000	4.999	0.000	61
		C		0.000	0.000	0.938	0.000	31

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	12 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Feed Line Center of Pressure

Section	Elevation	CP _X	CP _Z	CP _X Ice	CP _Z Ice
	ft	in	in	in	in
L1	148.00-143.00	-0.2926	0.0000	-1.2483	0.0000
L2	143.00-138.00	-0.2910	0.0000	-1.1984	0.0000
L3	138.00-133.00	-0.2915	0.0000	-1.2154	0.0000
L4	133.00-128.00	-0.2919	0.0000	-1.2315	0.0000
L5	128.00-123.00	-0.2923	0.0000	-1.2465	0.0000
L6	123.00-116.00	-0.2927	0.0000	-1.2633	0.0000
L7	116.00-114.75	-0.2929	0.0000	-1.2695	0.0000
L8	114.75-109.75	-0.2931	0.0000	-1.2752	0.0000
L9	109.75-104.75	-0.2934	0.0000	-1.2872	0.0000
L10	104.75-99.75	-0.2937	0.0000	-1.2984	0.0000
L11	99.75-94.75	-0.2432	0.0000	-1.1734	0.0000
L12	94.75-93.50	-0.1243	0.0000	-0.7470	0.0000
L13	93.50-93.25	-0.1246	0.0000	-0.7488	0.0000
L14	93.25-88.25	-0.1257	0.0000	-0.7545	0.0000
L15	88.25-83.25	-0.1277	0.0000	-0.7650	0.0000
L16	83.25-74.75	-0.1304	0.0000	-0.7782	0.0000
L17	74.75-74.50	-0.1311	0.0000	-0.7828	0.0000
L18	74.50-69.50	-0.1321	0.0000	-0.7848	0.0000
L19	69.50-64.50	-0.1340	0.0000	-0.7933	0.0000
L20	64.50-59.50	-0.1346	0.0000	-0.7972	0.0000
L21	59.50-57.75	-0.1312	0.0000	-0.7866	0.0000
L22	57.75-57.50	-0.1316	0.0000	-0.7880	0.0000
L23	57.50-52.50	-0.1325	0.0000	-0.7915	0.0000
L24	52.50-47.50	-0.1335	0.1135	-0.7820	0.4213
L25	47.50-39.50	-0.1350	0.2281	-0.7739	0.8297
L26	39.50-38.50	-0.1354	0.2289	-0.7766	0.8326
L27	38.50-33.50	2.9337	-0.5090	1.6181	0.1852
L28	33.50-31.75	5.9931	-1.2436	4.2910	-0.5322
L29	31.75-31.50	6.0120	-1.2472	4.3061	-0.5348
L30	31.50-28.25	6.0433	-1.2531	4.3313	-0.5393
L31	28.25-28.00	6.0733	-1.2588	4.3557	-0.5438
L32	28.00-23.00	5.3624	-0.6765	3.6015	0.0012
L33	23.00-18.00	4.4529	0.0853	2.6858	0.6759
L34	18.00-13.00	4.5214	0.0890	2.8307	0.6958
L35	13.00-8.00	4.5962	0.0928	3.0369	0.7219
L36	8.00-3.00	4.6493	0.0962	3.1016	0.6966
L37	3.00-0.00	4.6911	0.0989	3.1872	0.6378

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	33	Safety Line 3/8	143.00 - 148.00	1.0000	1.0000
L2	33	Safety Line 3/8	138.00 -	1.0000	1.0000

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job WindsorCentral (BU 855662)	Page 13 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
			143.00		
L3	33	Safety Line 3/8	133.00 - 138.00	1.0000	1.0000
L4	33	Safety Line 3/8	128.00 - 133.00	1.0000	1.0000
L5	33	Safety Line 3/8	123.00 - 128.00	1.0000	1.0000
L6	33	Safety Line 3/8	116.00 - 123.00	1.0000	1.0000
L8	33	Safety Line 3/8	109.75 - 114.75	1.0000	1.0000
L9	33	Safety Line 3/8	104.75 - 109.75	1.0000	1.0000
L10	33	Safety Line 3/8	99.75 - 104.75	1.0000	1.0000
L11	33	Safety Line 3/8	94.75 - 99.75	1.0000	1.0000
L11	43	(Area) CCI-65FP-060100 (H)	94.75 - 95.50	1.0000	1.0000
L11	44	(Area) CCI-65FP-060100 (H)	94.75 - 95.50	1.0000	1.0000
L11	45	(Area) CCI-65FP-060100 (H)	94.75 - 95.50	1.0000	1.0000
L12	33	Safety Line 3/8	93.50 - 94.75	1.0000	1.0000
L12	43	(Area) CCI-65FP-060100 (H)	93.50 - 94.75	1.0000	1.0000
L12	44	(Area) CCI-65FP-060100 (H)	93.50 - 94.75	1.0000	1.0000
L12	45	(Area) CCI-65FP-060100 (H)	93.50 - 94.75	1.0000	1.0000
L13	33	Safety Line 3/8	93.25 - 93.50	1.0000	1.0000
L13	43	(Area) CCI-65FP-060100 (H)	93.25 - 93.50	1.0000	1.0000
L13	44	(Area) CCI-65FP-060100 (H)	93.25 - 93.50	1.0000	1.0000
L13	45	(Area) CCI-65FP-060100 (H)	93.25 - 93.50	1.0000	1.0000
L14	33	Safety Line 3/8	88.25 - 93.25	1.0000	1.0000
L14	43	(Area) CCI-65FP-060100 (H)	88.25 - 93.25	1.0000	1.0000
L14	44	(Area) CCI-65FP-060100 (H)	88.25 - 93.25	1.0000	1.0000
L14	45	(Area) CCI-65FP-060100 (H)	88.25 - 93.25	1.0000	1.0000
L15	33	Safety Line 3/8	83.25 - 88.25	1.0000	1.0000
L15	43	(Area) CCI-65FP-060100 (H)	83.25 - 88.25	1.0000	1.0000
L15	44	(Area) CCI-65FP-060100 (H)	83.25 - 88.25	1.0000	1.0000
L15	45	(Area) CCI-65FP-060100 (H)	83.25 - 88.25	1.0000	1.0000
L16	33	Safety Line 3/8	74.75 - 83.25	1.0000	1.0000
L16	43	(Area) CCI-65FP-060100 (H)	74.75 - 83.25	1.0000	1.0000
L16	44	(Area) CCI-65FP-060100 (H)	74.75 - 83.25	1.0000	1.0000
L16	45	(Area) CCI-65FP-060100 (H)	74.75 - 83.25	1.0000	1.0000
L18	33	Safety Line 3/8	69.50 - 74.50	1.0000	1.0000
L18	43	(Area) CCI-65FP-060100 (H)	69.50 - 74.50	1.0000	1.0000
L18	44	(Area) CCI-65FP-060100 (H)	69.50 - 74.50	1.0000	1.0000
L18	45	(Area) CCI-65FP-060100 (H)	69.50 - 74.50	1.0000	1.0000
L19	33	Safety Line 3/8	64.50 - 69.50	1.0000	1.0000
L19	43	(Area) CCI-65FP-060100 (H)	64.50 - 69.50	1.0000	1.0000
L19	44	(Area) CCI-65FP-060100 (H)	64.50 - 69.50	1.0000	1.0000
L19	45	(Area) CCI-65FP-060100 (H)	64.50 - 69.50	1.0000	1.0000
L20	33	Safety Line 3/8	59.50 - 64.50	1.0000	1.0000
L20	39	(Area) CCI-65FP-065125 (H)	59.50 - 60.50	1.0000	1.0000
L20	40	(Area) CCI-65FP-065125 (H)	59.50 - 60.50	1.0000	1.0000
L20	41	(Area) CCI-65FP-065125 (H)	59.50 - 60.50	1.0000	1.0000
L20	43	(Area) CCI-65FP-060100 (H)	60.50 - 64.50	1.0000	1.0000
L20	44	(Area) CCI-65FP-060100 (H)	60.50 - 64.50	1.0000	1.0000
L20	45	(Area) CCI-65FP-060100 (H)	60.50 - 64.50	1.0000	1.0000
L21	33	Safety Line 3/8	57.75 - 59.50	1.0000	1.0000
L21	39	(Area) CCI-65FP-065125 (H)	57.75 - 59.50	1.0000	1.0000
L21	40	(Area) CCI-65FP-065125 (H)	57.75 - 59.50	1.0000	1.0000
L21	41	(Area) CCI-65FP-065125 (H)	57.75 - 59.50	1.0000	1.0000
L22	33	Safety Line 3/8	57.50 - 57.75	1.0000	1.0000
L22	39	(Area) CCI-65FP-065125 (H)	57.50 - 57.75	1.0000	1.0000
L22	40	(Area) CCI-65FP-065125 (H)	57.50 - 57.75	1.0000	1.0000
L22	41	(Area) CCI-65FP-065125 (H)	57.50 - 57.75	1.0000	1.0000
L23	33	Safety Line 3/8	52.50 - 57.50	1.0000	1.0000

tnxTower**Tower Engineering
Professionals**326 Tryon Rd.
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350**Job**

WindsorCentral (BU 855662)

Page

14 of 29

Project

TEP No. 58885.319440

Date

10:42:59 11/08/19

Client

Crown Castle

Designed byDustin T. Smith,
P.E.

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L23	39	(Area) CCI-65FP-065125 (H)	52.50 - 57.50	1.0000	1.0000
L23	40	(Area) CCI-65FP-065125 (H)	52.50 - 57.50	1.0000	1.0000
L23	41	(Area) CCI-65FP-065125 (H)	52.50 - 57.50	1.0000	1.0000
L24	27	LDF4-50A(1/2")	47.50 - 50.00	1.0000	1.0000
L24	33	Safety Line 3/8	47.50 - 52.50	1.0000	1.0000
L24	39	(Area) CCI-65FP-065125 (H)	47.50 - 52.50	1.0000	1.0000
L24	40	(Area) CCI-65FP-065125 (H)	47.50 - 52.50	1.0000	1.0000
L24	41	(Area) CCI-65FP-065125 (H)	47.50 - 52.50	1.0000	1.0000
L25	27	LDF4-50A(1/2")	39.50 - 47.50	1.0000	1.0000
L25	33	Safety Line 3/8	39.50 - 47.50	1.0000	1.0000
L25	39	(Area) CCI-65FP-065125 (H)	39.50 - 47.50	1.0000	1.0000
L25	40	(Area) CCI-65FP-065125 (H)	39.50 - 47.50	1.0000	1.0000
L25	41	(Area) CCI-65FP-065125 (H)	39.50 - 47.50	1.0000	1.0000
L27	27	LDF4-50A(1/2")	33.50 - 38.50	1.0000	1.0000
L27	33	Safety Line 3/8	33.50 - 38.50	1.0000	1.0000
L27	35	(Area) CCI-65FP-085125 (H)	33.50 - 35.50	1.0000	1.0000
L27	36	(Area) CCI-65FP-085125 (H)	33.50 - 35.50	1.0000	1.0000
L27	37	(Area) CCI-65FP-085125 (H)	33.50 - 35.50	1.0000	1.0000
L27	39	(Area) CCI-65FP-065125 (H)	33.50 - 38.50	1.0000	1.0000
L27	40	(Area) CCI-65FP-065125 (H)	33.50 - 38.50	1.0000	1.0000
L27	41	(Area) CCI-65FP-065125 (H)	33.50 - 38.50	1.0000	1.0000
L28	27	LDF4-50A(1/2")	31.75 - 33.50	1.0000	1.0000
L28	33	Safety Line 3/8	31.75 - 33.50	1.0000	1.0000
L28	35	(Area) CCI-65FP-085125 (H)	31.75 - 33.50	1.0000	1.0000
L28	36	(Area) CCI-65FP-085125 (H)	31.75 - 33.50	1.0000	1.0000
L28	37	(Area) CCI-65FP-085125 (H)	31.75 - 33.50	1.0000	1.0000
L28	39	(Area) CCI-65FP-065125 (H)	31.75 - 33.50	1.0000	1.0000
L28	40	(Area) CCI-65FP-065125 (H)	31.75 - 33.50	1.0000	1.0000
L29	27	LDF4-50A(1/2")	31.50 - 31.75	1.0000	1.0000
L29	33	Safety Line 3/8	31.50 - 31.75	1.0000	1.0000
L29	35	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L29	36	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L29	37	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L29	39	(Area) CCI-65FP-065125 (H)	31.50 - 31.75	1.0000	1.0000
L29	40	(Area) CCI-65FP-065125 (H)	31.50 - 31.75	1.0000	1.0000
L30	27	LDF4-50A(1/2")	28.25 - 31.50	1.0000	1.0000
L30	33	Safety Line 3/8	28.25 - 31.50	1.0000	1.0000
L30	35	(Area) CCI-65FP-085125 (H)	28.25 - 31.50	1.0000	1.0000
L30	36	(Area) CCI-65FP-085125 (H)	28.25 - 31.50	1.0000	1.0000
L30	37	(Area) CCI-65FP-085125 (H)	28.25 - 31.50	1.0000	1.0000
L30	39	(Area) CCI-65FP-065125 (H)	28.25 - 31.50	1.0000	1.0000
L30	40	(Area) CCI-65FP-065125 (H)	28.25 - 31.50	1.0000	1.0000
L31	27	LDF4-50A(1/2")	28.00 - 28.25	1.0000	1.0000
L31	33	Safety Line 3/8	28.00 - 28.25	1.0000	1.0000
L31	35	(Area) CCI-65FP-085125 (H)	28.00 - 28.25	1.0000	1.0000
L31	36	(Area) CCI-65FP-085125 (H)	28.00 - 28.25	1.0000	1.0000
L31	37	(Area) CCI-65FP-085125 (H)	28.00 - 28.25	1.0000	1.0000
L31	39	(Area) CCI-65FP-065125 (H)	28.00 - 28.25	1.0000	1.0000
L31	40	(Area) CCI-65FP-065125 (H)	28.00 - 28.25	1.0000	1.0000
L32	27	LDF4-50A(1/2")	23.00 - 28.00	1.0000	1.0000
L32	33	Safety Line 3/8	23.00 - 28.00	1.0000	1.0000
L32	35	(Area) CCI-65FP-085125 (H)	23.00 - 28.00	1.0000	1.0000
L32	36	(Area) CCI-65FP-085125 (H)	23.00 - 28.00	1.0000	1.0000
L32	37	(Area) CCI-65FP-085125 (H)	23.00 - 28.00	1.0000	1.0000
L32	39	(Area) CCI-65FP-065125 (H)	25.50 - 28.00	1.0000	1.0000
L32	40	(Area) CCI-65FP-065125 (H)	25.50 - 28.00	1.0000	1.0000
L33	27	LDF4-50A(1/2")	18.00 - 23.00	1.0000	1.0000
L33	33	Safety Line 3/8	18.00 - 23.00	1.0000	1.0000
L33	35	(Area) CCI-65FP-085125 (H)	18.00 - 23.00	1.0000	1.0000
L33	36	(Area) CCI-65FP-085125 (H)	18.00 - 23.00	1.0000	1.0000
L33	37	(Area) CCI-65FP-085125 (H)	18.00 - 23.00	1.0000	1.0000
L34	27	LDF4-50A(1/2")	13.00 - 18.00	1.0000	1.0000

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job WindsorCentral (BU 855662)	Page 15 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L34	33	Safety Line 3/8	13.00 - 18.00	1.0000	1.0000
L34	35	(Area) CCI-65FP-085125 (H)	13.00 - 18.00	1.0000	1.0000
L34	36	(Area) CCI-65FP-085125 (H)	13.00 - 18.00	1.0000	1.0000
L34	37	(Area) CCI-65FP-085125 (H)	13.00 - 18.00	1.0000	1.0000
L35	27	LDF4-50A(1/2")	8.00 - 13.00	1.0000	1.0000
L35	33	Safety Line 3/8	8.00 - 13.00	1.0000	1.0000
L35	35	(Area) CCI-65FP-085125 (H)	8.00 - 13.00	1.0000	1.0000
L35	36	(Area) CCI-65FP-085125 (H)	8.00 - 13.00	1.0000	1.0000
L35	37	(Area) CCI-65FP-085125 (H)	8.00 - 13.00	1.0000	1.0000
L36	27	LDF4-50A(1/2")	3.00 - 8.00	1.0000	1.0000
L36	33	Safety Line 3/8	3.00 - 8.00	1.0000	1.0000
L36	35	(Area) CCI-65FP-085125 (H)	3.00 - 8.00	1.0000	1.0000
L36	36	(Area) CCI-65FP-085125 (H)	3.00 - 8.00	1.0000	1.0000
L36	37	(Area) CCI-65FP-085125 (H)	3.00 - 8.00	1.0000	1.0000
L37	27	LDF4-50A(1/2")	0.00 - 3.00	1.0000	1.0000
L37	33	Safety Line 3/8	0.00 - 3.00	1.0000	1.0000
L37	35	(Area) CCI-65FP-085125 (H)	0.00 - 3.00	1.0000	1.0000
L37	36	(Area) CCI-65FP-085125 (H)	0.00 - 3.00	1.0000	1.0000
L37	37	(Area) CCI-65FP-085125 (H)	0.00 - 3.00	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C_{AA} Front	C_{AA} Side	Weight	
			ft ft ft	°	ft	ft ²	ft ²	lb	
148									
800 10121 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.60 4.00 4.42 5.29	2.95 3.34 3.74 4.59	72 115 166 297
800 10121 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.60 4.00 4.42 5.29	2.95 3.34 3.74 4.59	72 115 166 297
800 10121 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.60 4.00 4.42 5.29	2.95 3.34 3.74 4.59	72 115 166 297
QS66512-2 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.04 4.42 4.82 5.63	4.18 4.57 4.97 5.79	137 206 287 482
QS86512-2 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.42 5.92 6.43 7.48	5.62 6.12 6.63 7.69	173 264 368 619
QS66512-2 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 -2.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.04 4.42 4.82 5.63	4.18 4.57 4.97 5.79	137 206 287 482
PD320-2	B	From	4.00	0.0000	148.00	No Ice	2.03	2.03	15

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	16 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
DC6-48-60-18-8F	B	Centroid-Face	0.00	0.0000	148.00	1/2" Ice	4.58	34
			4.00			1" Ice	7.13	53
						2" Ice	12.23	91
		From Centroid-Face	4.00	0.0000	148.00	No Ice	1.21	33
			0.00			1/2" Ice	1.89	55
			-2.00			1" Ice	2.11	80
RRUS12/RRUS A2	A	From Centroid-Face	4.00	0.0000	148.00	2" Ice	2.57	138
			0.00			No Ice	3.14	72
			-2.00			1/2" Ice	3.36	99
				0.0000	148.00	1" Ice	3.59	130
						2" Ice	4.07	203
						No Ice	3.14	72
RRUS12/RRUS A2	B	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	3.36	99
			0.00			1" Ice	3.59	130
			-2.00			2" Ice	4.07	203
				0.0000	148.00	No Ice	3.14	72
						1/2" Ice	3.36	99
						1" Ice	3.59	130
RRUS12/RRUS A2	C	From Centroid-Face	4.00	0.0000	148.00	2" Ice	4.07	203
			0.00			No Ice	3.14	72
			-2.00			1/2" Ice	3.36	99
				0.0000	148.00	1" Ice	3.59	130
						2" Ice	4.07	203
						No Ice	2.79	51
RRUS 11	A	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	3.00	72
			0.00			1" Ice	3.21	95
			-2.00			2" Ice	3.67	153
				0.0000	148.00	No Ice	2.79	51
						1/2" Ice	3.00	72
						1" Ice	3.21	95
RRUS 11	B	From Centroid-Face	4.00	0.0000	148.00	2" Ice	3.67	153
			0.00			No Ice	2.79	51
			-2.00			1/2" Ice	3.00	72
				0.0000	148.00	1" Ice	3.21	95
						2" Ice	3.67	153
						No Ice	2.79	51
RRUS 11	C	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	3.00	72
			0.00			1" Ice	3.21	95
			-2.00			2" Ice	3.67	153
				0.0000	148.00	No Ice	2.79	51
						1/2" Ice	3.00	72
						1" Ice	3.21	95
DTMABP7819VG12A	A	From Centroid-Face	4.00	0.0000	148.00	2" Ice	3.67	153
			0.00			No Ice	0.98	19
			-2.00			1/2" Ice	1.10	26
				0.0000	148.00	1" Ice	1.23	36
						2" Ice	1.52	60
						No Ice	0.98	19
DTMABP7819VG12A	B	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	1.10	26
			0.00			1" Ice	1.23	36
			-2.00			2" Ice	1.52	60
				0.0000	148.00	No Ice	0.98	19
						1/2" Ice	1.10	26
						1" Ice	1.23	36
DTMABP7819VG12A	C	From Centroid-Face	4.00	0.0000	148.00	2" Ice	1.52	60
			0.00			No Ice	0.98	19
			-2.00			1/2" Ice	1.10	26
				0.0000	148.00	1" Ice	1.23	36
						2" Ice	1.52	60
						No Ice	1.43	22
(2) 2.4" Dia. x 6-ft	A	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	1.92	33
			0.00			1" Ice	2.29	48
			-2.00			2" Ice	3.06	90
				0.0000	148.00	No Ice	1.43	22
						1/2" Ice	1.92	33
						1" Ice	2.29	48
(2) 2.4" Dia. x 6-ft	B	From Centroid-Face	4.00	0.0000	148.00	2" Ice	3.06	90
			0.00			No Ice	1.43	22
			-2.00			1/2" Ice	1.92	33
				0.0000	148.00	1" Ice	2.29	48
						2" Ice	3.06	90
						No Ice	1.43	22
(2) 2.4" Dia. x 6-ft	C	From Centroid-Face	4.00	0.0000	148.00	1/2" Ice	1.92	33
			0.00			1" Ice	2.29	48
			-2.00			2" Ice	3.06	90
				0.0000	148.00	No Ice	1.43	22
						1/2" Ice	1.92	33
						1" Ice	2.29	48
Platform Mount [LP 1201-1_HR-1]	C	None		0.0000	148.00	2" Ice	3.06	90
						No Ice	26.39	2356
						1/2" Ice	31.40	3061

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	17 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
						1" Ice	36.20	36.20	3864
						2" Ice	45.40	45.40	5764
139									
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.33 5.64 6.78 7.13 7.21 8.12	112 169 233 383
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.33 5.64 6.78 7.13 7.21 8.12	112 169 233 383
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.33 5.64 6.78 7.13 7.21 8.12	112 169 233 383
AIR 32 B2A/B66AA w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.75 6.07 7.20 6.87 7.65 7.58	153 214 282 441
AIR 32 B2A/B66AA w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.75 6.07 7.20 6.87 7.65 7.58	153 214 282 441
AIR 32 B2A/B66AA w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.75 6.07 7.20 6.87 7.65 7.58	153 214 282 441
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	14.69 6.87 15.46 7.55 16.23 8.25	186 315 458 788
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	14.69 6.87 15.46 7.55 16.23 8.25	186 315 458 788
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	14.69 6.87 15.46 7.55 16.23 8.25	186 315 458 788
RADIO 4449 B12/B71	A	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.15 1.80 1.29 1.97 1.44	74 90 109 155
RADIO 4449 B12/B71	B	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.15 1.80 1.29 1.97 1.44	74 90 109 155
RADIO 4449 B12/B71	C	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.15 1.80 1.29 1.97 1.44	74 90 109 155
KRY 112 144/1	A	From Centroid-Face	4.00 0.00 0.00		0.0000	139.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.35 0.16 0.43 0.22 0.51 0.28	11 14 18 32
KRY 112 144/1	B	From Centroid-Face	4.00 0.00		0.0000	139.00	No Ice 1/2" Ice	0.35 0.16 0.43 0.22	11 14

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	18 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
		ce	0.00			1" Ice 0.51	0.28	18
						2" Ice 0.70	0.44	32
KRY 112 144/1	C	From Centroid-Face	4.00 0.00 0.00	0.0000	139.00	No Ice 0.35	0.16	11
						1/2" Ice 0.43	0.22	14
						1" Ice 0.51	0.28	18
						2" Ice 0.70	0.44	32
(2) 2.4" Dia. x 4-ft	A	From Centroid-Face	4.00 0.00 0.00	0.0000	139.00	No Ice 0.87	0.87	15
						1/2" Ice 1.12	1.12	22
						1" Ice 1.37	1.37	32
						2" Ice 1.91	1.91	62
(2) 2.4" Dia. x 4-ft	B	From Centroid-Face	4.00 0.00 0.00	0.0000	139.00	No Ice 0.87	0.87	15
						1/2" Ice 1.12	1.12	22
						1" Ice 1.37	1.37	32
						2" Ice 1.91	1.91	62
(2) 2.4" Dia. x 4-ft	C	From Centroid-Face	4.00 0.00 0.00	0.0000	139.00	No Ice 0.87	0.87	15
						1/2" Ice 1.12	1.12	22
						1" Ice 1.37	1.37	32
						2" Ice 1.91	1.91	62
Platform Mount [LP 1201-1_HR-1]	C	None		0.0000	139.00	No Ice 26.39	26.39	2356
						1/2" Ice 31.40	31.40	3061
						1" Ice 36.20	36.20	3864
						2" Ice 45.40	45.40	5764
126								
BXA-70063-4CF-EDIN-X w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.95	3.69	28
						1/2" Ice 5.32	4.29	70
						1" Ice 5.71	4.91	118
						2" Ice 6.51	6.18	235
BXA-70063-4CF-EDIN-X w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.95	3.69	28
						1/2" Ice 5.32	4.29	70
						1" Ice 5.71	4.91	118
						2" Ice 6.51	6.18	235
BXA-70063-4CF-EDIN-X w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.95	3.69	28
						1/2" Ice 5.32	4.29	70
						1" Ice 5.71	4.91	118
						2" Ice 6.51	6.18	235
(2) SBNHH-1D65B w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.09	3.30	66
						1/2" Ice 4.49	3.68	130
						1" Ice 4.89	4.07	204
						2" Ice 5.72	4.87	386
(2) SBNHH-1D65B w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.09	3.30	66
						1/2" Ice 4.49	3.68	130
						1" Ice 4.89	4.07	204
						2" Ice 5.72	4.87	386
(2) SBNHH-1D65B w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 4.09	3.30	66
						1/2" Ice 4.49	3.68	130
						1" Ice 4.89	4.07	204
						2" Ice 5.72	4.87	386
CBRS w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 1.71	1.17	32
						1/2" Ice 1.93	1.44	50
						1" Ice 2.17	1.72	72
						2" Ice 2.66	2.35	127
CBRS w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 1.00	0.0000	126.00	No Ice 1.71	1.17	32
						1/2" Ice 1.93	1.44	50
						1" Ice 2.17	1.72	72
						2" Ice 2.66	2.35	127
CBRS w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00	0.0000	126.00	No Ice 1.71	1.17	32
						1/2" Ice 1.93	1.44	50

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	19 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Lateral					
			ft	ft	°	ft	ft ²	ft ²	lb
		g	1.00			1" Ice	2.17	1.72	72
						2" Ice	2.66	2.35	127
(3) RFV01U-D1A	A	From Centroid-Le	4.00	0.0000	126.00	No Ice	1.88	1.25	84
		g	0.00			1/2" Ice	2.05	1.39	103
			0.00			1" Ice	2.22	1.54	124
						2" Ice	2.60	1.86	175
RFV01U-D2A	A	From Centroid-Le	4.00	0.0000	126.00	No Ice	1.88	1.01	70
		g	0.00			1/2" Ice	2.05	1.14	87
			0.00			1" Ice	2.22	1.28	106
						2" Ice	2.60	1.59	153
(2) RFV01U-D2A	B	From Centroid-Le	4.00	0.0000	126.00	No Ice	1.88	1.01	70
		g	0.00			1/2" Ice	2.05	1.14	87
			0.00			1" Ice	2.22	1.28	106
						2" Ice	2.60	1.59	153
20W CBRS	B	From Centroid-Le	4.00	0.0000	126.00	No Ice	0.86	0.42	19
		g	0.00			1/2" Ice	0.98	0.51	26
			1.00			1" Ice	1.10	0.61	34
						2" Ice	1.37	0.83	58
(2) 20W CBRS	C	From Centroid-Le	4.00	0.0000	126.00	No Ice	0.86	0.42	19
		g	0.00			1/2" Ice	0.98	0.51	26
			1.00			1" Ice	1.10	0.61	34
						2" Ice	1.37	0.83	58
DB-T1-6Z-8AB-0Z	C	From Centroid-Le	4.00	0.0000	126.00	No Ice	4.80	2.00	44
		g	0.00			1/2" Ice	5.07	2.19	80
			1.00			1" Ice	5.35	2.39	120
						2" Ice	5.93	2.81	213
Platform Mount [LP 404-1_KCKR]	C	None		0.0000	126.00	No Ice	35.82	35.82	2318
						1/2" Ice	45.85	45.85	3016
						1" Ice	55.76	55.76	3886
						2" Ice	75.77	75.77	6142
111									
TME-800MHz 2X50W RRH W/FILTER	A	From Leg	1.00	0.0000	111.00	No Ice	2.06	1.93	64
			0.00			1/2" Ice	2.24	2.11	86
			0.00			1" Ice	2.43	2.29	111
						2" Ice	2.83	2.68	172
TME-800MHz 2X50W RRH W/FILTER	B	From Leg	1.00	0.0000	111.00	No Ice	2.06	1.93	64
			0.00			1/2" Ice	2.24	2.11	86
			0.00			1" Ice	2.43	2.29	111
						2" Ice	2.83	2.68	172
TME-800MHz 2X50W RRH W/FILTER	C	From Leg	1.00	0.0000	111.00	No Ice	2.06	1.93	64
			0.00			1/2" Ice	2.24	2.11	86
			0.00			1" Ice	2.43	2.29	111
						2" Ice	2.83	2.68	172
PCS 1900MHz 4x45W-65MHz	A	From Leg	1.00	0.0000	111.00	No Ice	2.32	2.24	60
			0.00			1/2" Ice	2.53	2.44	83
			0.00			1" Ice	2.74	2.65	110
						2" Ice	3.19	3.09	173
PCS 1900MHz 4x45W-65MHz	B	From Leg	1.00	0.0000	111.00	No Ice	2.32	2.24	60
			0.00			1/2" Ice	2.53	2.44	83
			0.00			1" Ice	2.74	2.65	110
						2" Ice	3.19	3.09	173
PCS 1900MHz 4x45W-65MHz	C	From Leg	1.00	0.0000	111.00	No Ice	2.32	2.24	60
			0.00			1/2" Ice	2.53	2.44	83
			0.00			1" Ice	2.74	2.65	110
						2" Ice	3.19	3.09	173
Pipe Mount [PM 601-3]	C	None		0.0000	111.00	No Ice	3.17	3.17	195
						1/2" Ice	3.79	3.79	232

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	20 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	lb	
						1" Ice	4.42	4.42	279	
						2" Ice	5.76	5.76	401	
109										
APXVTM14-C-120 w/ Mount Pipe	A	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.09 4.48 4.88 5.71	2.86 3.23 3.61 4.40	77 127 185 331
APXVTM14-C-120 w/ Mount Pipe	B	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.09 4.48 4.88 5.71	2.86 3.23 3.61 4.40	77 127 185 331
APXVTM14-C-120 w/ Mount Pipe	C	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.09 4.48 4.88 5.71	2.86 3.23 3.61 4.40	77 127 185 331
APXVSP18-C-A20 w/ Mount Pipe	A	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.60 5.05 5.50 6.44	4.01 4.45 4.89 5.82	95 160 235 419
APXVSP18-C-A20 w/ Mount Pipe	B	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.60 5.05 5.50 6.44	4.01 4.45 4.89 5.82	95 160 235 419
(2) APXVSP18-C-A20 w/ Mount Pipe	C	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.60 5.05 5.50 6.44	4.01 4.45 4.89 5.82	95 160 235 419
SD212-SF3P2SNM W/ Mount Pipe	B	From Centroid-Log	4.00 0.00 4.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.37 6.97 7.58 8.82	28.33 29.54 30.62 32.84	40 189 343 687
TD-RRH8X20-25	A	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.70 3.95 4.20 4.72	1.29 1.46 1.64 2.02	66 90 117 183
TD-RRH8X20-25	B	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.70 3.95 4.20 4.72	1.29 1.46 1.64 2.02	66 90 117 183
TD-RRH8X20-25	C	From Centroid-Log	4.00 0.00 1.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.70 3.95 4.20 4.72	1.29 1.46 1.64 2.02	66 90 117 183
DB205-L	B	From Centroid-Log	4.00 0.00 7.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.72 3.45 5.20 8.75	1.72 3.45 5.20 8.75	36 52 78 164
K732267	A	From Centroid-Log	4.00 0.00 7.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.10 3.47 3.84 4.58	0.65 0.81 0.97 1.30	14 35 56 98
(2) 2.4" Dia. x 6-ft	A	From Centroid-Log	4.00 0.00 0.00		0.0000	109.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.43 1.92 2.29 3.06	1.43 1.92 2.29 3.06	22 33 48 90
(2) 2.4" Dia. x 6-ft	B	From Centroid-Log	4.00 0.00		0.0000	109.00	No Ice 1/2" Ice	1.43 1.92	1.43 1.92	22 33

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	21 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
		g	0.00			1" Ice	2.29	2.29	48
						2" Ice	3.06	3.06	90
(2) 2.4" Dia. x 6-ft	C	From Centroid-Log	4.00	0.0000	109.00	No Ice	1.43	1.43	22
			0.00			1/2" Ice	1.92	1.92	33
			0.00			1" Ice	2.29	2.29	48
						2" Ice	3.06	3.06	90
Platform Mount [LP 1201-1]	C	None		0.0000	109.00	No Ice	18.38	18.38	2100
						1/2" Ice	22.11	22.11	2652
						1" Ice	25.87	25.87	3263
						2" Ice	33.47	33.47	4662
80									
ANT450Y5-WR	A	From Face	1.00	0.0000	80.00	No Ice	0.01	0.01	5
			0.00			1/2" Ice	0.11	0.17	8
			0.00			1" Ice	0.21	0.32	10
						2" Ice	0.41	0.61	15
Pipe Mount [PM 601-1]	A	From Face	0.50	0.0000	80.00	No Ice	1.32	1.32	65
			0.00			1/2" Ice	1.58	1.58	77
			0.00			1" Ice	1.84	1.84	93
						2" Ice	2.40	2.40	134
Pipe Mount [PM 601-1]	B	From Face	0.50	0.0000	80.00	No Ice	1.32	1.32	65
			0.00			1/2" Ice	1.58	1.58	77
			0.00			1" Ice	1.84	1.84	93
						2" Ice	2.40	2.40	134
79									
SRL-227	A	From Leg	6.00	0.0000	79.00	No Ice	4.63	1.45	35
			0.00			1/2" Ice	9.39	3.73	71
			-4.00			1" Ice	14.15	6.02	106
						2" Ice	23.67	10.59	178
K732267	B	From Leg	4.00	0.0000	79.00	No Ice	3.10	0.65	14
			0.00			1/2" Ice	3.47	0.81	35
			-3.00			1" Ice	3.84	0.97	56
						2" Ice	4.58	1.30	98
2.4" Dia. x 4-ft	A	From Leg	6.00	0.0000	79.00	No Ice	0.87	0.87	15
			0.00			1/2" Ice	1.12	1.12	22
			0.00			1" Ice	1.37	1.37	32
						2" Ice	1.91	1.91	62
2.4" Dia. x 4-ft	B	From Leg	6.00	0.0000	79.00	No Ice	0.87	0.87	15
			0.00			1/2" Ice	1.12	1.12	22
			0.00			1" Ice	1.37	1.37	32
						2" Ice	1.91	1.91	62
2.4" Dia. x 4-ft	C	From Leg	6.00	0.0000	79.00	No Ice	0.87	0.87	15
			0.00			1/2" Ice	1.12	1.12	22
			0.00			1" Ice	1.37	1.37	32
						2" Ice	1.91	1.91	62
Side Arm Mount [SO 702-3]	C	None		0.0000	79.00	No Ice	2.53	2.53	81
						1/2" Ice	3.37	3.37	126
						1" Ice	4.12	4.12	188
						2" Ice	5.76	5.76	365
74									
Pipe Mount [PM 601-1]	A	From Leg	0.50	0.0000	74.00	No Ice	3.00	0.90	65
			0.00			1/2" Ice	3.74	1.12	79
			0.00			1" Ice	4.48	1.34	93
						2" Ice	5.96	1.78	122
50									
GPS-TMG-HR-26N	A	From Leg	4.00	0.0000	50.00	No Ice	0.21	0.13	1
			0.00			1/2" Ice	0.27	0.18	3
			1.00			1" Ice	0.33	0.24	6

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job WindsorCentral (BU 855662)	Page 22 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
2.4" Dia. x 2-ft	A	From Leg	3.00	0.0000	50.00	2" Ice	0.49	0.37	17
			0.00	0.0000		No Ice	0.35	0.35	7
			0.00	0.0000		1/2" Ice	0.48	0.48	11
			0.00	0.0000		1" Ice	0.62	0.62	17
Side Arm Mount [SO 701-1]	A	From Leg	1.50	0.0000	50.00	2" Ice	0.92	0.92	33
			0.00	0.0000		No Ice	0.85	1.67	65
			0.00	0.0000		1/2" Ice	1.14	2.34	79
			0.00	0.0000		1" Ice	1.43	3.01	93
						2" Ice	2.01	4.35	121
**									

Side Arm Mount [SO 601-3]	C	None		0.0000	147.00	No Ice	7.63	7.63	476
				0.0000		1/2" Ice	9.41	9.41	587
				0.0000		1" Ice	11.34	11.34	724
				0.0000		2" Ice	15.83	15.83	1077
Side Arm Mount [SO 601-3]	C	None		0.0000	15.00	No Ice	7.63	7.63	476
				0.0000		1/2" Ice	9.41	9.41	587
				0.0000		1" Ice	11.34	11.34	724
				0.0000		2" Ice	15.83	15.83	1077

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight
				Horz Lateral	Vert						
			ft	ft	°	°	ft	ft	ft ²	lb	
SC3-W100ASTX	B	Paraboloid w/Shroud (HP)	From Face	1.00	-61.0000	80.00	3.29	No Ice	8.51	40	
				0.00	-61.0000				1/2" Ice	8.95	86
				0.00	-61.0000				1" Ice	9.38	132
				0.00	-61.0000				2" Ice	10.26	224
**											
HP2-23	A	Paraboloid w/Shroud (HP)	From Leg	1.00	0.0000	74.00	2.04	No Ice	3.27	27	
				0.00	0.0000				1/2" Ice	3.55	45
				0.00	0.0000				1" Ice	3.82	62
				0.00	0.0000				2" Ice	4.36	97

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

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job WindsorCentral (BU 855662)	Page 23 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Comb. No.	Description
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
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 Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	148 - 143	19.735	40	1.1660	0.0058
L2	143 - 138	18.515	40	1.1639	0.0055
L3	138 - 133	17.300	40	1.1563	0.0053
L4	133 - 128	16.096	40	1.1405	0.0051
L5	128 - 123	14.914	40	1.1165	0.0049
L6	123 - 116	13.761	40	1.0845	0.0047
L7	119.75 - 114.75	13.031	40	1.0587	0.0046
L8	114.75 - 109.75	11.935	40	1.0315	0.0045

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>WindsorCentral (BU 855662)</p>	<p>Page</p> <p>24 of 29</p>
	<p>Project</p> <p>TEP No. 58885.319440</p>	<p>Date</p> <p>10:42:59 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>Dustin T. Smith, P.E.</p>

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L9	109.75 - 104.75	10.879	40	0.9836	0.0044
L10	104.75 - 99.75	9.877	40	0.9294	0.0039
L11	99.75 - 94.75	8.935	40	0.8690	0.0033
L12	94.75 - 93.5	8.059	40	0.8037	0.0029
L13	93.5 - 93.25	7.851	40	0.7868	0.0027
L14	93.25 - 88.25	7.810	40	0.7849	0.0027
L15	88.25 - 83.25	7.009	40	0.7434	0.0025
L16	83.25 - 74.75	6.254	40	0.6994	0.0022
L17	79.5 - 74.5	5.718	40	0.6653	0.0020
L18	74.5 - 69.5	5.033	40	0.6420	0.0019
L19	69.5 - 64.5	4.384	40	0.5970	0.0017
L20	64.5 - 59.5	3.783	40	0.5510	0.0015
L21	59.5 - 57.75	3.230	40	0.5036	0.0013
L22	57.75 - 57.5	3.049	40	0.4868	0.0012
L23	57.5 - 52.5	3.024	40	0.4847	0.0012
L24	52.5 - 47.5	2.539	40	0.4414	0.0011
L25	47.5 - 39.5	2.100	40	0.3966	0.0009
L26	45 - 38.5	1.898	40	0.3741	0.0009
L27	38.5 - 33.5	1.408	40	0.3416	0.0008
L28	33.5 - 31.75	1.073	40	0.2982	0.0006
L29	31.75 - 31.5	0.967	40	0.2832	0.0006
L30	31.5 - 28.25	0.952	40	0.2815	0.0006
L31	28.25 - 28	0.768	40	0.2594	0.0005
L32	28 - 23	0.754	40	0.2571	0.0005
L33	23 - 18	0.509	40	0.2118	0.0004
L34	18 - 13	0.311	40	0.1654	0.0003
L35	13 - 8	0.162	40	0.1193	0.0002
L36	8 - 3	0.061	40	0.0733	0.0001
L37	3 - 0	0.009	40	0.0276	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
148.00	800 10121 w/ Mount Pipe	40	19.735	1.1660	0.0058	58348
147.00	Side Arm Mount [SO 601-3]	40	19.491	1.1658	0.0058	58348
139.00	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	40	17.542	1.1584	0.0053	29030
126.00	BXA-70063-4CF-EDIN-X w/ Mount Pipe	40	14.449	1.1051	0.0048	8954
111.00	TME-800MHz 2X50W RRH W/FILTER	40	11.138	0.9970	0.0046	5902
109.00	APXVTM14-C-120 w/ Mount Pipe	40	10.725	0.9756	0.0045	5498
80.00	SC3-W100ASTX	40	5.788	0.6689	0.0022	8254
79.00	SRL-227	40	5.648	0.6622	0.0021	8777
75.00	HP2-23	40	5.100	0.6448	0.0020	8484
74.00	Pipe Mount [PM 601-1]	40	4.966	0.6387	0.0020	8005
50.00	GPS-TMG-HR-26N	40	2.313	0.4195	0.0010	6372
15.00	Side Arm Mount [SO 601-3]	40	0.216	0.1377	0.0003	6176

Maximum Tower Deflections - Design Wind

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>WindsorCentral (BU 855662)</p>	<p>Page</p> <p>25 of 29</p>
	<p>Project</p> <p>TEP No. 58885.319440</p>	<p>Date</p> <p>10:42:59 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>Dustin T. Smith, P.E.</p>

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	148 - 143	91.352	4	5.4015	0.0274
L2	143 - 138	85.712	4	5.3927	0.0262
L3	138 - 133	80.095	4	5.3581	0.0250
L4	133 - 128	74.532	4	5.2855	0.0240
L5	128 - 123	69.066	4	5.1743	0.0230
L6	123 - 116	63.733	4	5.0267	0.0221
L7	119.75 - 114.75	60.358	4	4.9085	0.0216
L8	114.75 - 109.75	55.283	4	4.7829	0.0211
L9	109.75 - 104.75	50.398	4	4.5616	0.0204
L10	104.75 - 99.75	45.758	4	4.3103	0.0179
L11	99.75 - 94.75	41.395	4	4.0302	0.0154
L12	94.75 - 93.5	37.337	4	3.7270	0.0131
L13	93.5 - 93.25	36.373	4	3.6490	0.0126
L14	93.25 - 88.25	36.182	4	3.6397	0.0125
L15	88.25 - 83.25	32.475	4	3.4471	0.0113
L16	83.25 - 74.75	28.975	4	3.2428	0.0102
L17	79.5 - 74.5	26.492	4	3.0846	0.0094
L18	74.5 - 69.5	23.318	4	2.9763	0.0088
L19	69.5 - 64.5	20.312	4	2.7677	0.0078
L20	64.5 - 59.5	17.527	4	2.5544	0.0068
L21	59.5 - 57.75	14.968	4	2.3345	0.0059
L22	57.75 - 57.5	14.127	4	2.2567	0.0056
L23	57.5 - 52.5	14.009	4	2.2468	0.0056
L24	52.5 - 47.5	11.762	4	2.0459	0.0049
L25	47.5 - 39.5	9.729	4	1.8383	0.0042
L26	45 - 38.5	8.794	4	1.7340	0.0039
L27	38.5 - 33.5	6.525	4	1.5832	0.0035
L28	33.5 - 31.75	4.973	4	1.3821	0.0029
L29	31.75 - 31.5	4.479	4	1.3124	0.0027
L30	31.5 - 28.25	4.410	4	1.3045	0.0027
L31	28.25 - 28	3.557	4	1.2019	0.0025
L32	28 - 23	3.495	4	1.1914	0.0024
L33	23 - 18	2.357	4	0.9812	0.0020
L34	18 - 13	1.442	4	0.7665	0.0015
L35	13 - 8	0.752	4	0.5525	0.0010
L36	8 - 3	0.285	4	0.3395	0.0006
L37	3 - 0	0.040	4	0.1278	0.0002

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
148.00	800 10121 w/ Mount Pipe	4	91.352	5.4015	0.0274	13438
147.00	Side Arm Mount [SO 601-3]	4	90.223	5.4007	0.0272	13438
139.00	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	4	81.215	5.3678	0.0253	6489
126.00	BXA-70063-4CF-EDIN-X w/ Mount Pipe	4	66.914	5.1217	0.0227	1978
111.00	TME-800MHz 2X50W RRH W/FILTER	4	51.598	4.6235	0.0214	1295
109.00	APXVTM14-C-120 w/ Mount Pipe	4	49.685	4.5245	0.0209	1205
80.00	SC3-W100ASTX	4	26.817	3.1013	0.0099	1790
79.00	SRL-227	4	26.168	3.0702	0.0097	1903
75.00	HP2-23	4	23.628	2.9894	0.0093	1840
74.00	Pipe Mount [PM 601-1]	4	23.009	2.9610	0.0091	1736
50.00	GPS-TMG-HR-26N	4	10.718	1.9445	0.0048	1377

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job WindsorCentral (BU 855662)	Page 26 of 29
	Project TEP No. 58885.319440	Date 10:42:59 11/08/19
	Client Crown Castle	Designed by Dustin T. Smith, P.E.

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
15.00	Side Arm Mount [SO 601-3]	4	1.001	0.6379	0.0013	1333

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio P _u /φP _n
L1	148 - 143 (1)	TP24.9752x24x0.2188	5.00	0.00	0.0	17.1887	-4842	1005540	0.005
L2	143 - 138 (2)	TP25.9503x24.9752x0.2188	5.00	0.00	0.0	17.8657	-9620	1045150	0.009
L3	138 - 133 (3)	TP26.9255x25.9503x0.2188	5.00	0.00	0.0	18.5428	-10095	1084750	0.009
L4	133 - 128 (4)	TP27.9006x26.9255x0.2188	5.00	0.00	0.0	19.2199	-10592	1124360	0.009
L5	128 - 123 (5)	TP28.8758x27.9006x0.2188	5.00	0.00	0.0	19.8969	-14908	1163970	0.013
L6	123 - 116 (6)	TP30.241x28.8758x0.2188	7.00	0.00	0.0	20.3370	-15296	1189720	0.013
L7	116 - 114.75 (7)	TP30.0471x29.0721x0.25	5.00	0.00	0.0	23.6440	-16255	1383170	0.012
L8	114.75 - 109.75 (8)	TP31.0221x30.0471x0.25	5.00	0.00	0.0	24.4177	-17575	1428430	0.012
L9	109.75 - 104.75 (9)	TP31.9971x31.0221x0.25	5.00	0.00	0.0	25.1913	-21762	1473690	0.015
L10	104.75 - 99.75 (10)	TP32.9721x31.9971x0.25	5.00	0.00	0.0	25.9650	-22564	1518950	0.015
L11	99.75 - 94.75 (11)	TP33.9471x32.9721x0.25	5.00	0.00	0.0	26.7386	-23396	1564210	0.015
L12	94.75 - 93.5 (12)	TP34.1908x33.9471x0.25	1.25	0.00	0.0	26.9320	-23599	1575520	0.015
L13	93.5 - 93.25 (13)	TP34.2396x34.1908x0.4375	0.25	0.00	0.0	46.9384	-23671	2745900	0.009
L14	93.25 - 88.25 (14)	TP35.2145x34.2396x0.4313	5.00	0.00	0.0	47.6109	-24815	2785240	0.009
L15	88.25 - 83.25 (15)	TP36.1895x35.2145x0.425	5.00	0.00	0.0	48.2446	-25992	2822310	0.009
L16	83.25 - 74.75 (16)	TP37.847x36.1895x0.425	8.50	0.00	0.0	49.2310	-27076	2880010	0.009
L17	74.75 - 74.5 (17)	TP37.3959x36.4208x0.4875	5.00	0.00	0.0	57.1093	-29537	3340900	0.009
L18	74.5 - 69.5 (18)	TP38.3711x37.3959x0.475	5.00	0.00	0.0	57.1340	-30995	3342340	0.009
L19	69.5 - 64.5 (19)	TP39.3462x38.3711x0.475	5.00	0.00	0.0	58.6042	-32418	3428350	0.009
L20	64.5 - 59.5 (20)	TP40.3214x39.3462x0.4688	5.00	0.00	0.0	59.2932	-33871	3468650	0.010
L21	59.5 - 57.75 (21)	TP40.6627x40.3214x0.4625	1.75	0.00	0.0	59.0129	-34378	3452250	0.010
L22	57.75 - 57.5 (22)	TP40.7114x40.6627x0.525	0.25	0.00	0.0	66.9647	-34478	3917430	0.009
L23	57.5 - 52.5 (23)	TP41.6866x40.7114x0.525	5.00	0.00	0.0	68.5896	-36078	4012490	0.009
L24	52.5 - 47.5 (24)	TP42.6618x41.6866x0.5125	5.00	0.00	0.0	68.5631	-37802	4010940	0.009
L25	47.5 - 39.5 (25)	TP44.222x42.6618x0.5125	8.00	0.00	0.0	69.3563	-38631	4057340	0.010
L26	39.5 - 38.5 (26)	TP43.7919x42.5243x0.575	6.50	0.00	0.0	78.8731	-42474	4614070	0.009
L27	38.5 - 33.5 (27)	TP44.767x43.7919x0.5625	5.00	0.00	0.0	78.9216	-44347	4616910	0.010
L28	33.5 - 31.75 (28)	TP45.1083x44.767x0.5625	1.75	0.00	0.0	79.5309	-45001	4652560	0.010
L29	31.75 - 31.5 (29)	TP45.157x45.1083x0.725	0.25	0.00	0.0	102.245	-45140	5981320	0.008
L30	31.5 - 28.25	TP45.7908x45.157x0.725	3.25	0.00	0.0	103.703	-46668	6066640	0.008

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	27 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
	(30)					0			
L31	28.25 - 28 (31)	TP45.8396x45.7908x0.5375	0.25	0.00	0.0	77.2865	-46781	4521260	0.010
L32	28 - 23 (32)	TP46.8147x45.8396x0.5375	5.00	0.00	0.0	78.9500	-48865	4618570	0.011
L33	23 - 18 (33)	TP47.7897x46.8147x0.525	5.00	0.00	0.0	78.7596	-50998	4607440	0.011
L34	18 - 13 (34)	TP48.7648x47.7897x0.525	5.00	0.00	0.0	80.3844	-53726	4702490	0.011
L35	13 - 8 (35)	TP49.7399x48.7648x0.525	5.00	0.00	0.0	82.0092	-55912	4797540	0.012
L36	8 - 3 (36)	TP50.715x49.7399x0.525	5.00	0.00	0.0	83.6340	-58124	4892590	0.012
L37	3 - 0 (37)	TP51.3x50.715x0.5188	3.00	0.00	0.0	83.6120	-59466	4891300	0.012

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} lb-ft	φM _{ux} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} lb-ft	φM _{uy} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L1	148 - 143 (1)	TP24.9752x24x0.2188	20609	619979	0.033	0	619979	0.000
L2	143 - 138 (2)	TP25.9503x24.9752x0.2188	53233	662160	0.080	0	662160	0.000
L3	138 - 133 (3)	TP26.9255x25.9503x0.2188	109324	705064	0.155	0	705064	0.000
L4	133 - 128 (4)	TP27.9006x26.9255x0.2188	167842	748623	0.224	0	748623	0.000
L5	128 - 123 (5)	TP28.8758x27.9006x0.2188	245286	792771	0.309	0	792771	0.000
L6	123 - 116 (6)	TP30.241x28.8758x0.2188	300912	821749	0.366	0	821749	0.000
L7	116 - 114.75 (7)	TP30.0471x29.0721x0.25	388653	1010683	0.385	0	1010683	0.000
L8	114.75 - 109.75 (8)	TP31.0221x30.0471x0.25	479848	1066967	0.450	0	1066967	0.000
L9	109.75 - 104.75 (9)	TP31.9971x31.0221x0.25	601640	1123983	0.535	0	1123983	0.000
L10	104.75 - 99.75 (10)	TP32.9721x31.9971x0.25	722063	1181667	0.611	0	1181667	0.000
L11	99.75 - 94.75 (11)	TP33.9471x32.9721x0.25	844775	1239942	0.681	0	1239942	0.000
L12	94.75 - 93.5 (12)	TP34.1908x33.9471x0.25	875867	1254592	0.698	0	1254592	0.000
L13	93.5 - 93.25 (13)	TP34.2396x34.1908x0.4375	882117	2411783	0.366	0	2411783	0.000
L14	93.25 - 88.25 (14)	TP35.2145x34.2396x0.4313	1009467	2518708	0.401	0	2518708	0.000
L15	88.25 - 83.25 (15)	TP36.1895x35.2145x0.425	1141325	2625567	0.435	0	2625567	0.000
L16	83.25 - 74.75 (16)	TP37.847x36.1895x0.425	1243658	2734667	0.455	0	2734667	0.000
L17	74.75 - 74.5 (17)	TP37.3959x36.4208x0.4875	1387775	3203208	0.433	0	3203208	0.000
L18	74.5 - 69.5 (18)	TP38.3711x37.3959x0.475	1538475	3292542	0.467	0	3292542	0.000
L19	69.5 - 64.5 (19)	TP39.3462x38.3711x0.475	1693558	3465250	0.489	0	3465250	0.000
L20	64.5 - 59.5 (20)	TP40.3214x39.3462x0.4688	1853100	3596133	0.515	0	3596133	0.000
L21	59.5 - 57.75 (21)	TP40.6627x40.3214x0.4625	1909983	3611258	0.529	0	3611258	0.000
L22	57.75 - 57.5 (22)	TP40.7114x40.6627x0.525	1918158	4090158	0.469	0	4090158	0.000
L23	57.5 - 52.5 (23)	TP41.6866x40.7114x0.525	2083933	4292383	0.485	0	4292383	0.000
L24	52.5 - 47.5 (24)	TP42.6618x41.6866x0.5125	2254617	4396267	0.513	0	4396267	0.000
L25	47.5 - 39.5 (25)	TP44.222x42.6618x0.5125	2341558	4499183	0.520	0	4499183	0.000
L26	39.5 - 38.5 (26)	TP43.7919x42.5243x0.575	2573167	5179575	0.497	0	5179575	0.000
L27	38.5 - 33.5 (27)	TP44.767x43.7919x0.5625	2756517	5304242	0.520	0	5304242	0.000
L28	33.5 - 31.75 (28)	TP45.1083x44.767x0.5625	2821683	5386975	0.524	0	5386975	0.000

<p>tnxTower</p> <p>Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	WindsorCentral (BU 855662)	Page	28 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

Section No.	Elevation ft	Size	M_{ux} lb-ft	ϕM_{ux} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M_{uy} lb-ft	ϕM_{uy} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L29	31.75 - 31.5 (29)	TP45.157x45.1083x0.725	2831033	6882717	0.411	0	6882717	0.000
L30	31.5 - 28.25 (30)	TP45.7908x45.157x0.725	2953583	7082075	0.417	0	7082075	0.000
L31	28.25 - 28 (31)	TP45.8396x45.7908x0.5375	2963083	5327842	0.556	0	5327842	0.000
L32	28 - 23 (32)	TP46.8147x45.8396x0.5375	3155142	5561033	0.567	0	5561033	0.000
L33	23 - 18 (33)	TP47.7897x46.8147x0.525	3350058	5668858	0.591	0	5668858	0.000
L34	18 - 13 (34)	TP48.7648x47.7897x0.525	3547283	5906475	0.601	0	5906475	0.000
L35	13 - 8 (35)	TP49.7399x48.7648x0.525	3746942	6148975	0.609	0	6148975	0.000
L36	8 - 3 (36)	TP50.715x49.7399x0.525	3948208	6387725	0.618	0	6387725	0.000
L37	3 - 0 (37)	TP51.3x50.715x0.5188	4069725	6425658	0.633	0	6425658	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	148 - 143 (1)	TP24.9752x24x0.2188	5237	301661	0.017	497	654014	0.001
L2	143 - 138 (2)	TP25.9503x24.9752x0.2188	10980	313544	0.035	497	706553	0.001
L3	138 - 133 (3)	TP26.9255x25.9503x0.2188	11464	325426	0.035	497	761120	0.001
L4	133 - 128 (4)	TP27.9006x26.9255x0.2188	11952	337309	0.035	496	817718	0.001
L5	128 - 123 (5)	TP28.8758x27.9006x0.2188	16965	349191	0.049	257	876342	0.000
L6	123 - 116 (6)	TP30.241x28.8758x0.2188	17280	356915	0.048	257	915542	0.000
L7	116 - 114.75 (7)	TP30.0471x29.0721x0.25	17820	414952	0.043	256	1082808	0.000
L8	114.75 - 109.75 (8)	TP31.0221x30.0471x0.25	19045	428530	0.044	255	1154833	0.000
L9	109.75 - 104.75 (9)	TP31.9971x31.0221x0.25	23866	442108	0.054	4799	1229167	0.004
L10	104.75 - 99.75 (10)	TP32.9721x31.9971x0.25	24328	455685	0.053	4797	1305825	0.004
L11	99.75 - 94.75 (11)	TP33.9471x32.9721x0.25	24784	469263	0.053	4794	1384800	0.003
L12	94.75 - 93.5 (12)	TP34.1908x33.9471x0.25	24993	472657	0.053	4793	1404908	0.003
L13	93.5 - 93.25 (13)	TP34.2396x34.1908x0.4375	25057	823769	0.030	4793	2438533	0.002
L14	93.25 - 88.25 (14)	TP35.2145x34.2396x0.4313	25933	835572	0.031	4792	2545275	0.002
L15	88.25 - 83.25 (15)	TP36.1895x35.2145x0.425	26834	846692	0.032	4790	2651908	0.002
L16	83.25 - 74.75 (16)	TP37.847x36.1895x0.425	28015	864003	0.032	5407	2761458	0.002
L17	74.75 - 74.5 (17)	TP37.3959x36.4208x0.4875	29586	1002270	0.030	5250	3239583	0.002
L18	74.5 - 69.5 (18)	TP38.3711x37.3959x0.475	30587	1002700	0.031	5207	3327717	0.002
L19	69.5 - 64.5 (19)	TP39.3462x38.3711x0.475	31479	1028500	0.031	5205	3501175	0.001
L20	64.5 - 59.5 (20)	TP40.3214x39.3462x0.4688	32366	1040600	0.031	5204	3631775	0.001
L21	59.5 - 57.75 (21)	TP40.6627x40.3214x0.4625	32686	1035680	0.032	5203	3646125	0.001
L22	57.75 - 57.5 (22)	TP40.7114x40.6627x0.525	32726	1175230	0.028	5203	4136017	0.001
L23	57.5 - 52.5 (23)	TP41.6866x40.7114x0.525	33620	1203750	0.028	5202	4339183	0.001
L24	52.5 - 47.5 (24)	TP42.6618x41.6866x0.5125	34577	1203280	0.029	5033	4441583	0.001
L25	47.5 - 39.5 (25)	TP44.222x42.6618x0.5125	35011	1217200	0.029	5032	4544933	0.001
L26	39.5 - 38.5 (26)	TP43.7919x42.5243x0.575	36266	1384220	0.026	5032	5238892	0.001

tnxTower Tower Engineering Professionals 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	WindsorCentral (BU 855662)	Page	29 of 29
	Project	TEP No. 58885.319440	Date	10:42:59 11/08/19
	Client	Crown Castle	Designed by	Dustin T. Smith, P.E.

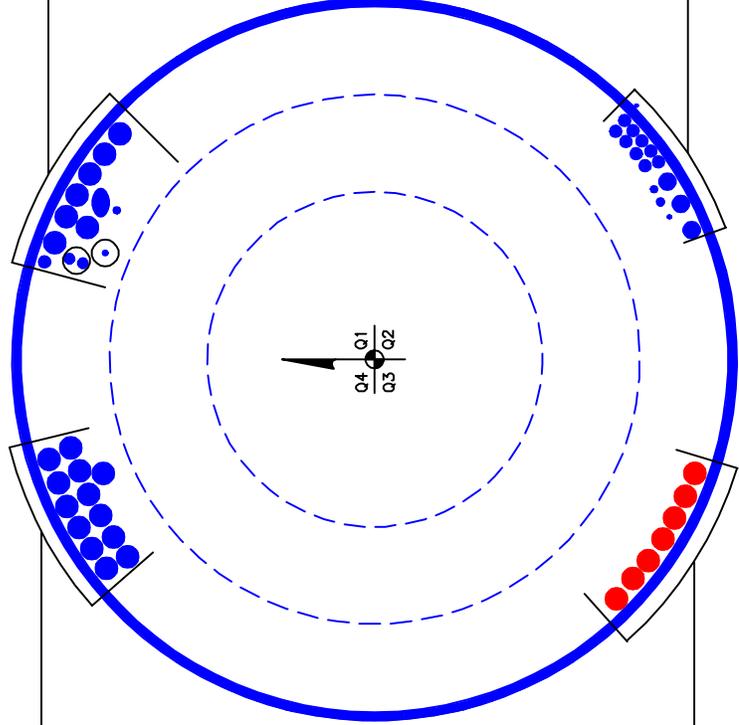
Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
L27	38.5 - 33.5 (27)	TP44.767x43.7919x0.5625	37107	1385070	0.027	5031	5361908	0.001
L28	33.5 - 31.75 (28)	TP45.1083x44.767x0.5625	37411	1395770	0.027	5030	5445025	0.001
L29	31.75 - 31.5 (29)	TP45.157x45.1083x0.725	37436	1794400	0.021	5030	6982233	0.001
L30	31.5 - 28.25 (30)	TP45.7908x45.157x0.725	38002	1819990	0.021	5030	7182850	0.001
L31	28.25 - 28 (31)	TP45.8396x45.7908x0.5375	38036	1356380	0.028	5030	5381200	0.001
L32	28 - 23 (32)	TP46.8147x45.8396x0.5375	38814	1385570	0.028	5029	5615333	0.001
L33	23 - 18 (33)	TP47.7897x46.8147x0.525	39191	1382230	0.028	5028	5721341	0.001
L34	18 - 13 (34)	TP48.7648x47.7897x0.525	39791	1410750	0.028	5028	5959841	0.001
L35	13 - 8 (35)	TP49.7399x48.7648x0.525	40114	1439260	0.028	5027	6203208	0.001
L36	8 - 3 (36)	TP50.715x49.7399x0.525	40433	1467780	0.028	5027	6451441	0.001
L37	3 - 0 (37)	TP51.3x50.715x0.5188	40621	1467390	0.028	5027	6525725	0.001

APPENDIX B
BASE LEVEL DRAWING



- (OTHER CONSIDERED EQUIPMENT—IN CONDUIT)
- (1) 3/8" TO 148 FT LEVEL
 - (2) 3/4" TO 148 FT LEVEL
- (OTHER CONSIDERED EQUIPMENT)
- (1) EU 90—FR TO 80 FT LEVEL
 - (1) 1/2" TO 80 FT LEVEL
 - (1) 7/8" TO 148 FT LEVEL
 - (1) 1-5/8" TO 148 FT LEVEL
 - (6) 1-5/8" TO 148 FT LEVEL

- (OTHER CONSIDERED EQUIPMENT)
- (13) 1-5/8" TO 139 FT LEVEL



- (OTHER CONSIDERED EQUIPMENT)
- (1) 1/2" TO 50 FT LEVEL
 - (1) 3/8" TO 74 FT LEVEL
 - (2) 7/8" TO 79 FT LEVEL
 - (3) 5/16" TO 109 FT LEVEL
 - (1) 5/8" TO 109 FT LEVEL
 - (5) 7/8" TO 109 FT LEVEL
 - (3) 1-1/4" TO 109 FT LEVEL

- (PROPOSED EQUIPMENT CONFIGURATION)
- (7) 1-5/8" TO 126 FT LEVEL

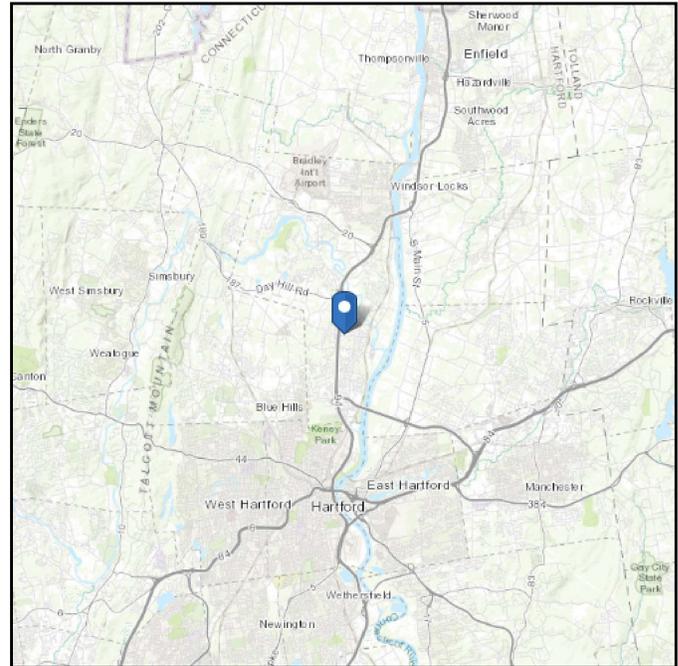
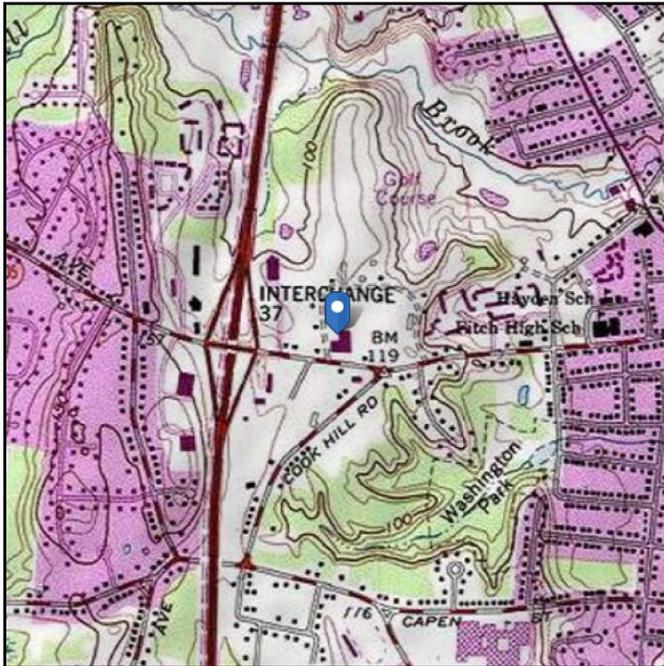
APPENDIX C
ADDITIONAL CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This
Location

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

Elevation: 115.16 ft (NAVD 88)
Latitude: 41.852594
Longitude: -72.660497



Wind

Results:

Wind Speed:	121 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

Wind speed updated per
local jurisdiction
requirements

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

Date Accessed: Tue Nov 05 2019

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).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

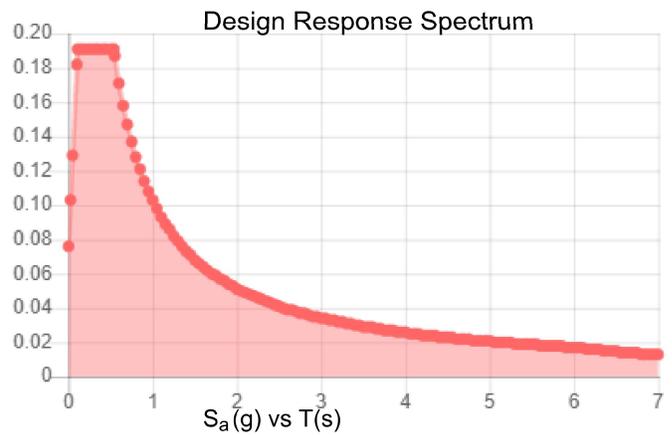
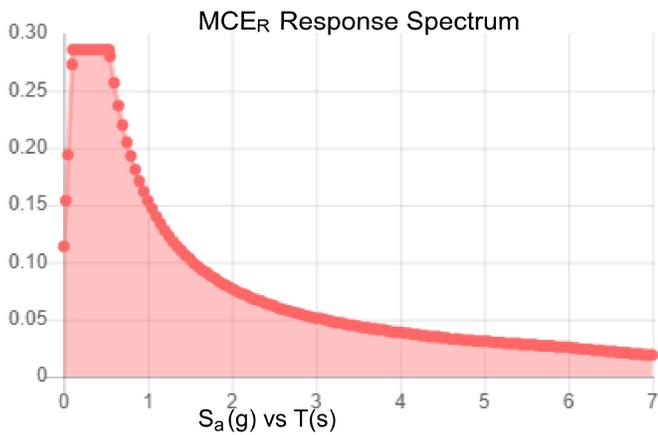
Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

Site Soil Class: D - Stiff Soil

Results:

S_s :	0.179	S_{DS} :	0.191
S_1 :	0.064	S_{D1} :	0.103
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.089
S_{MS} :	0.286	PGA _M :	0.142
S_{M1} :	0.154	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B



Data Accessed:

Tue Nov 05 2019

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.

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: Tue Nov 05 2019

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.

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

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

Site BU: 855662
Work Order: 1803411

Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	148	32	3.75	18	24	30.241	0.21875	Auto	A607-65
2	119.75	45	4.75	18	29.07	37.847	0.25	Auto	A607-65
3	79.5	40	5.5	18	36.42	44.222	0.3125	Auto	A607-65
4	45	45	0	18	42.52	51.3	0.375	Auto	A607-65

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	31.75	plate	CCI-SFP-085125	3								x					x					x
2	28.25	57.75	plate	CCI-SFP-065125	2					x							x						
3	31.75	57.75	plate	CCI-SFP-065125	1																		x
4	57.75	93.5	plate	CCI-SFP-060100	3						x						x						x
5																							
6																							
7																							
8																							
9																							
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in ²)	Pole Face to Centroid (in)	Bottom Termination Length (in)	Top Termination Length (in)	L _w (in)	Net Area (in ²)	Bolt Hole Size (in)	Reinforcement Material
1	8.5	1.25	10.625	0.625	45.000	45.000	17.000	9.063	1.1875	A572-65
2	6.5	1.25	8.125	0.625	33.000	33.000	19.000	6.563	1.1875	A572-65
3	6.5	1.25	8.125	0.625	33.000	33.000	19.000	6.563	1.1875	A572-65
4	6	1	6	0.5	24.000	24.000	16.000	4.750	1.1875	A572-65

TNX Geometry Input

Increment (ft): 5

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	148 - 143	5		18	24.000	24.975	0.21875	A607-65	1.000
2	143 - 138	5		18	24.975	25.950	0.21875	A607-65	1.000
3	138 - 133	5		18	25.950	26.925	0.21875	A607-65	1.000
4	133 - 128	5		18	26.925	27.901	0.21875	A607-65	1.000
5	128 - 123	5		18	27.901	28.876	0.21875	A607-65	1.000
6	123 - 119.75	7	3.75	18	28.876	30.241	0.21875	A607-65	1.000
7	119.75 - 114.75	5		18	29.072	30.047	0.25	A607-65	1.000
8	114.75 - 109.75	5		18	30.047	31.022	0.25	A607-65	1.000
9	109.75 - 104.75	5		18	31.022	31.997	0.25	A607-65	1.000
10	104.75 - 99.75	5		18	31.997	32.972	0.25	A607-65	1.000
11	99.75 - 94.75	5		18	32.972	33.947	0.25	A607-65	1.000
12	94.75 - 93.5	1.25		18	33.947	34.191	0.25	A607-65	1.000
13	93.5 - 93.25	0.25		18	34.191	34.240	0.4375	A607-65	0.958
14	93.25 - 88.25	5		18	34.240	35.215	0.43125	A607-65	0.961
15	88.25 - 83.25	5		18	35.215	36.190	0.425	A607-65	0.964
16	83.25 - 79.5	8.5	4.75	18	36.190	37.847	0.425	A607-65	0.957
17	79.5 - 74.5	5		18	36.421	37.396	0.4875	A607-65	0.959
18	74.5 - 69.5	5		18	37.396	38.371	0.475	A607-65	0.976
19	69.5 - 64.5	5		18	38.371	39.346	0.475	A607-65	0.968
20	64.5 - 59.5	5		18	39.346	40.321	0.46875	A607-65	0.973
21	59.5 - 57.75	1.75		18	40.321	40.663	0.4625	A607-65	0.983
22	57.75 - 57.5	0.25		18	40.663	40.711	0.525	A607-65	0.962
23	57.5 - 52.5	5		18	40.711	41.687	0.525	A607-65	0.954
24	52.5 - 47.5	5		18	41.687	42.662	0.5125	A607-65	0.968
25	47.5 - 45	8	5.5	18	42.662	44.222	0.5125	A607-65	0.964
26	45 - 38.5	6.5		18	42.524	43.792	0.575	A607-65	0.964
27	38.5 - 33.5	5		18	43.792	44.767	0.5625	A607-65	0.978
28	33.5 - 31.75	1.75		18	44.767	45.108	0.5625	A607-65	0.976
29	31.75 - 31.5	0.25		18	45.108	45.157	0.725	A607-65	0.992
30	31.5 - 28.25	3.25		18	45.157	45.791	0.725	A607-65	0.985
31	28.25 - 28	0.25		18	45.791	45.840	0.5375	A607-65	1.113
32	28 - 23	5		18	45.840	46.815	0.5375	A607-65	1.104
33	23 - 18	5		18	46.815	47.790	0.525	A607-65	1.121
34	18 - 13	5		18	47.790	48.765	0.525	A607-65	1.113
35	13 - 8	5		18	48.765	49.740	0.525	A607-65	1.105
36	8 - 3	5		18	49.740	50.715	0.525	A607-65	1.098
37	3 - 0	3		18	50.715	51.300	0.51875	A607-65	1.106

TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P _u (K)	M _{ux} (kip-ft)	V _u (K)
1	148 - 143		4.84	20.61	5.24
2	143 - 138		9.62	53.23	10.98
3	138 - 133		10.09	109.32	11.46
4	133 - 128		10.59	167.84	11.95
5	128 - 123		14.91	245.29	16.96
6	123 - 119.75		15.30	300.91	17.28
7	119.75 - 114.75		16.26	388.65	17.82
8	114.75 - 109.75		17.58	479.85	19.05
9	109.75 - 104.75		21.76	601.64	23.87
10	104.75 - 99.75		22.56	722.06	24.33
11	99.75 - 94.75		23.40	844.78	24.78
12	94.75 - 93.5		23.60	875.87	24.99
13	93.5 - 93.25		23.67	882.12	25.06
14	93.25 - 88.25		24.82	1009.47	25.93
15	88.25 - 83.25		25.99	1141.33	26.83
16	83.25 - 79.5		27.08	1243.66	28.02
17	79.5 - 74.5		29.54	1387.78	29.59
18	74.5 - 69.5		30.99	1538.47	30.59
19	69.5 - 64.5		32.42	1693.56	31.48
20	64.5 - 59.5		33.87	1853.10	32.37
21	59.5 - 57.75		34.38	1909.98	32.69
22	57.75 - 57.5		34.48	1918.16	32.73
23	57.5 - 52.5		36.08	2083.93	33.62
24	52.5 - 47.5		37.80	2254.61	34.58
25	47.5 - 45		38.63	2341.56	35.01
26	45 - 38.5		42.47	2573.17	36.27
27	38.5 - 33.5		44.35	2756.52	37.11
28	33.5 - 31.75		45.00	2821.68	37.41
29	31.75 - 31.5		45.14	2831.04	37.44
30	31.5 - 28.25		46.67	2953.58	38.00
31	28.25 - 28		46.78	2963.08	38.04
32	28 - 23		48.86	3155.14	38.81
33	23 - 18		51.00	3350.06	39.19
34	18 - 13		53.73	3547.28	39.79
35	13 - 8		55.91	3746.94	40.11
36	8 - 3		58.12	3948.21	40.43
37	3 - 0		59.47	4069.72	40.62

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
148 - 143	Pole	TP24.975x24x0.2188	Pole	3.6%	Pass
143 - 138	Pole	TP25.95x24.975x0.2188	Pole	8.4%	Pass
138 - 133	Pole	TP26.925x25.95x0.2188	Pole	15.5%	Pass
133 - 128	Pole	TP27.901x26.925x0.2188	Pole	22.2%	Pass
128 - 123	Pole	TP28.876x27.901x0.2188	Pole	30.6%	Pass
123 - 119.75	Pole	TP30.241x28.876x0.2188	Pole	36.0%	Pass
119.75 - 114.75	Pole	TP30.047x29.072x0.25	Pole	37.6%	Pass
114.75 - 109.75	Pole	TP31.022x30.047x0.25	Pole	43.9%	Pass
109.75 - 104.75	Pole	TP31.997x31.022x0.25	Pole	52.3%	Pass
104.75 - 99.75	Pole	TP32.972x31.997x0.25	Pole	59.5%	Pass
99.75 - 94.75	Pole	TP33.947x32.972x0.25	Pole	66.2%	Pass
94.75 - 93.5	Pole	TP34.191x33.947x0.25	Pole	67.8%	Pass
93.5 - 93.25	Pole + Reinf.	TP34.24x34.191x0.4375	Reinf. 4 Tension Rupture	56.2%	Pass
93.25 - 88.25	Pole + Reinf.	TP35.215x34.24x0.4313	Reinf. 4 Tension Rupture	61.5%	Pass
88.25 - 83.25	Pole + Reinf.	TP36.19x35.215x0.425	Reinf. 4 Tension Rupture	66.5%	Pass
83.25 - 79.5	Pole + Reinf.	TP37.847x36.19x0.425	Reinf. 4 Tension Rupture	70.1%	Pass
79.5 - 74.5	Pole + Reinf.	TP37.396x36.421x0.4875	Reinf. 4 Tension Rupture	66.7%	Pass
74.5 - 69.5	Pole + Reinf.	TP38.371x37.396x0.475	Reinf. 4 Tension Rupture	70.8%	Pass
69.5 - 64.5	Pole + Reinf.	TP39.346x38.371x0.475	Reinf. 4 Tension Rupture	74.7%	Pass
64.5 - 59.5	Pole + Reinf.	TP40.321x39.346x0.4688	Reinf. 4 Tension Rupture	78.4%	Pass
59.5 - 57.75	Pole + Reinf.	TP40.663x40.321x0.4625	Reinf. 4 Tension Rupture	79.6%	Pass
57.75 - 57.5	Pole + Reinf.	TP40.711x40.663x0.525	Reinf. 2 Tension Rupture	70.3%	Pass
57.5 - 52.5	Pole + Reinf.	TP41.687x40.711x0.525	Reinf. 2 Tension Rupture	73.5%	Pass
52.5 - 47.5	Pole + Reinf.	TP42.662x41.687x0.5125	Reinf. 2 Tension Rupture	76.6%	Pass
47.5 - 45	Pole + Reinf.	TP44.222x42.662x0.5125	Reinf. 2 Tension Rupture	78.1%	Pass
45 - 38.5	Pole + Reinf.	TP43.792x42.524x0.575	Reinf. 2 Tension Rupture	74.6%	Pass
38.5 - 33.5	Pole + Reinf.	TP44.767x43.792x0.5625	Reinf. 2 Tension Rupture	77.0%	Pass
33.5 - 31.75	Pole + Reinf.	TP45.108x44.767x0.5625	Reinf. 2 Tension Rupture	77.8%	Pass
31.75 - 31.5	Pole + Reinf.	TP45.157x45.108x0.725	Reinf. 1 Bolt Shear	64.9%	Pass
31.5 - 28.25	Pole + Reinf.	TP45.791x45.157x0.725	Reinf. 1 Compression	63.7%	Pass
28.25 - 28	Pole + Reinf.	TP45.84x45.791x0.5375	Reinf. 1 Compression	71.9%	Pass
28 - 23	Pole + Reinf.	TP46.815x45.84x0.5375	Reinf. 1 Compression	73.9%	Pass
23 - 18	Pole + Reinf.	TP47.79x46.815x0.525	Reinf. 1 Compression	75.8%	Pass
18 - 13	Pole + Reinf.	TP48.765x47.79x0.525	Reinf. 1 Compression	77.6%	Pass
13 - 8	Pole + Reinf.	TP49.74x48.765x0.525	Reinf. 1 Compression	79.3%	Pass
8 - 3	Pole + Reinf.	TP50.715x49.74x0.525	Reinf. 1 Compression	80.9%	Pass
3 - 0	Pole + Reinf.	TP51.3x50.715x0.5188	Reinf. 1 Bolt Shear	85.0%	Pass
				Summary	
			Pole	71.4%	Pass
			Reinforcement	85.0%	Pass
			Overall	85.0%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in ⁴)			Area (in ²)			% Capacity*				
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4
148 - 143	1330	n/a	1330	17.19	n/a	17.19	3.6%				
143 - 138	1494	n/a	1494	17.87	n/a	17.87	8.4%				
138 - 133	1670	n/a	1670	18.54	n/a	18.54	15.5%				
133 - 128	1860	n/a	1860	19.22	n/a	19.22	22.2%				
128 - 123	2064	n/a	2064	19.90	n/a	19.90	30.6%				
123 - 119.75	2204	n/a	2204	20.34	n/a	20.34	36.0%				
119.75 - 114.75	2651	n/a	2651	23.64	n/a	23.64	37.6%				
114.75 - 109.75	2920	n/a	2920	24.42	n/a	24.42	43.9%				
109.75 - 104.75	3207	n/a	3207	25.19	n/a	25.19	52.3%				
104.75 - 99.75	3511	n/a	3511	25.96	n/a	25.96	59.5%				
99.75 - 94.75	3834	n/a	3834	26.74	n/a	26.74	66.2%				
94.75 - 93.5	3918	n/a	3918	26.93	n/a	26.93	67.8%				
93.5 - 93.25	3935	2822	6757	26.97	18.00	44.97	39.2%				56.2%
93.25 - 88.25	4284	2979	7262	27.74	18.00	45.74	43.3%				61.5%
88.25 - 83.25	4652	3140	7792	28.52	18.00	46.52	47.4%				66.5%
83.25 - 79.5	4942	3263	8205	29.10	18.00	47.10	50.5%				70.1%
79.5 - 74.5	6388	3345	9733	36.78	18.00	54.78	44.5%				66.7%
74.5 - 69.5	6906	3515	10421	37.75	18.00	55.75	47.6%				70.8%
69.5 - 64.5	7450	3690	11140	38.72	18.00	56.72	50.7%				74.7%
64.5 - 59.5	8022	3870	11892	39.68	18.00	57.68	53.6%				78.4%
59.5 - 57.75	8230	3933	12163	40.02	18.00	58.02	54.7%				79.6%
57.75 - 57.5	8259	5409	13669	40.07	24.38	64.44	49.0%		70.3%	70.3%	
57.5 - 52.5	8872	5662	14534	41.04	24.38	65.41	51.6%		73.5%	73.5%	
52.5 - 47.5	9514	5920	15434	42.00	24.38	66.38	54.3%		76.6%	76.6%	
47.5 - 45	9847	6051	15897	42.49	24.38	66.86	55.6%		78.1%	78.1%	
45 - 38.5	12303	6226	18529	51.68	24.38	76.05	50.2%		74.6%	74.6%	
38.5 - 33.5	13150	6496	19647	52.84	24.38	77.21	52.2%		77.0%	77.0%	
33.5 - 31.75	13456	6593	20048	53.24	24.38	77.62	52.9%		77.8%	77.8%	
31.75 - 31.5	13800	12075	25875	53.30	48.13	101.42	46.1%	64.9%	59.2%		
31.5 - 28.25	14389	12408	26798	54.05	48.13	102.18	47.3%	63.7%	60.4%		
28.25 - 28	14322	5866	20187	54.11	31.88	85.99	60.9%	71.9%			
28 - 23	15257	6111	21369	55.27	31.88	87.15	62.9%	73.9%			
23 - 18	16233	6362	22595	56.43	31.88	88.31	64.9%	75.8%			
18 - 13	17249	6618	23867	57.59	31.88	89.47	66.8%	77.6%			
13 - 8	18307	6880	25186	58.75	31.88	90.63	68.6%	79.3%			
8 - 3	19407	7146	26553	59.91	31.88	91.79	70.3%	80.9%			
3 - 0	20088	7309	27396	60.61	31.88	92.49	71.4%	85.0%			

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

Monopole Base Plate Connection

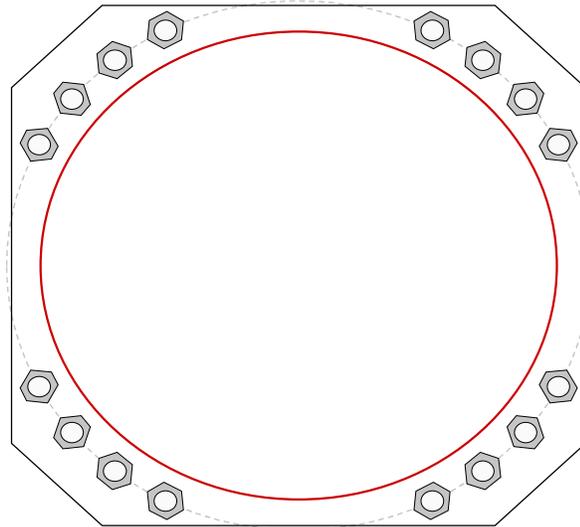


Site Info	
BU #	855662
Site Name	WindsorCentral
Order #	506813 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	1.5

Applied Loads	
Moment (kip-ft)	4069.72
Axial Force (kips)	59.47
Shear Force (kips)	40.62

*TIA-222-H Section 15.5 Applied



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

Anchor Rod Data
(16) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 58" BC <i>Anchor Spacing: 6 in</i>
Base Plate Data
57" OD x 2.75" Plate (A572-55; $F_y=55$ ksi, $F_u=70$ ksi)
Stiffener Data
N/A
Pole Data
51.3" x 0.375" 18-sided pole (A607-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary		<i>(units of kips, kip-in)</i>
$P_{u,c} = 214.09$	$\phi P_{n,c} = 243.75$	Stress Rating
$V_u = 2.54$	$\phi V_n = 73.13$	83.8%
$M_u = n/a$	$\phi M_n = n/a$	Pass
Base Plate Summary		
Max Stress (ksi):	38.98	(Flexural)
Allowable Stress (ksi):	49.5	
Stress Rating:	75.0%	Pass

Drilled Pier Foundation

BU # : 855662
 Site Name : WindsorCentral
 Order Number: 506813 Rev. 0

TIA-222 Revision: H
 Tower Type: Monopole

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	4069.724	-
Axial Force (kips)	59.481	-
Shear Force (kips)	41.908	-

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

Pier Design Data	
Depth	32.5 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 32.5' below grade</i>	
Pier Diameter	7 ft
Rebar Quantity	20
Rebar Size	11
Clear Cover to Ties	4 in
Tie Size	5

Groundwater Depth 2 ft

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	2	2	110	150	0		0.000	0.000	0.00	0.00			Cohesionless
2	2	5	3	50	87.6	0		0.000	0.000	0.00	0.00			Cohesionless
3	5	12	7	55	87.6		35	0.000	0.000	0.36	0.36			Cohesionless
4	12	16	4	50	87.6		31	0.000	0.000	0.49	0.49			Cohesionless
5	16	32.5	16.5	50	87.6	0.8		0.440	0.440	0.28	0.28	6.58		Cohesive

of Layers 5

Soil Profile

Analysis Results		
Soil Lateral Capacity	Compression	Uplift
$D_{v=0}$ (ft from TOC)	7.67	-
Soil Safety Factor	1.73	-
Max Moment (kip-ft)	4360.31	-
Rating*	73.3%	-
Soil Vertical Capacity	Compression	Uplift
Skin Friction (kips)	150.09	-
End Bearing (kips)	189.92	-
Weight of Concrete (kips)	140.71	-
Total Capacity (kips)	340.01	-
Axial (kips)	200.19	-
Rating*	56.1%	-
Reinforced Concrete Capacity	Compression	Uplift
Critical Depth (ft from TOC)	7.71	-
Critical Moment (kip-ft)	4360.30	-
Critical Moment Capacity	5004.69	-
Rating*	83.0%	-

Soil Interaction Rating* 73.3%
 Structural Foundation Rating* 83.0%

*Rating per TIA-222-H Section 15.5

Check Limitation	
Apply TIA-222-H Section 15.5:	N/A



Exhibit E

Mount Analysis

November 4, 2019

Darcy Tarr
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
(704) 405-6589



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

Subject: Mount Analysis

Carrier Designation: Verizon Wireless Reconfiguration
Client Site Number: NG36734
Client Site Name: WINDSOR 3 CT

Crown Castle Designation: Crown Castle BU Number: 855662
Crown Castle Site Name: WINDSORCENTRAL
Crown Castle JDE Job Number: 592727
Crown Castle Order Number: 506813 Rev. 0

Engineering Firm Designation: TEP Project Number: 58885.317809

Site Data: 340 Bloomfield Avenue, Windsor, Hartford County, CT 06095
Latitude 41° 51' 09.34", Longitude -72° 39' 37.79"

Structure Information: Tower Height & Type: 150.0± ft Monopole
Mount Elevation: 126.0 ft
Mount Width & Type: 15.25 ft Low Profile Platform

Dear Darcy Tarr,

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

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

Low Profile Platform Mount

Sufficient Capacity

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph from the 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Lauren Gibson, E.I.

Respectfully submitted by:

Aaron T. Rucker, P.E.
Structural Division Manager



Electronic Copy

11/04/2019

TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity

Table 4 - Tieback Connection Data Table

4.1) Recommendations

5) APPENDIX A

Wire Frame and Rendered Models

6) APPENDIX B

Software Input Calculations

7) APPENDIX C

Software Analysis Output

1) INTRODUCTION

The mount is an existing 15.25-ft Low Profile Platform mount, mapped by ProVertic.

2) ANALYSIS CRITERIA

Building Code:	2015 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	125 mph
Exposure Category:	C
Topographic Category at Base:	1.0
Topographic Category at Mount:	1.0
Ice Thickness:	2.0 in
Wind Speed with Ice:	50 mph
Seismic Design Category:	B
Seismic S_s:	0.179
Seismic S₁:	0.064
Live Loading Wind Speed:	30 mph
Live Loading at Mid/End-Points:	250 lb
Man Live Loading at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
126.0	127.0	3	Antel	BXA-70063-4CF-EDIN-X	Low Profile Platform Mount
		6	Commscope	SBNHH-1D65B	
		3	Samsung Telecommunications	CBRS	
		3	Samsung Telecommunications	20W CBRS	
		1	RFS/Celwave	DB-T1-6Z-8AB-0Z	
	126.0	3	Samsung Telecommunications	RFV01U-D1A	
		3	Samsung Telecommunications	RFV01U-D2A	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Constructions Drawings	Hudson Design Group LLC	-	CCIsites
Mount Mapping Report	ProVertic	-	CCIsites
Loading Application	Verizon Wireless	Order 506813 Rev. 0	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

TEP Mount Analysis Tool, a tool internally developed by TEP using Microsoft Excel, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

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

In addition, this analysis is in accordance with NSTD-445 *Antennas Mounting System Classification Standard*.

3.2) Assumptions

- 1) The mount was built in accordance with the manufacturer's specifications.
- 2) The mount has been maintained in accordance with the manufacturer's specification.
- 3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
- 4) All mount components are in sufficient condition to carry their full design capacity.
- 5) TEP did not analyze the collar mount connection to the pole and assumes it to have sufficient structural capacity to transfer the applied forces from the mount to the tower.
- 6) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA-3D output for confirmation on grades used in this analysis.

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

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Low Profile Platform Mount)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FFTH	126.0	68.9	Pass
1	Support Horizontals	SA-2L	126.0	57.3	Pass
1	Handrail	FFHR	126.0	56.3	Pass
1	Mount Pipes	MP-2	126.0	70.3	Pass

Structure Rating (max from all components) =	70.3%
---	--------------

Notes:

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

Table 4 - Tieback Connection Data Table

Tower Connection Node No.	Existing/ Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb) ³	Notes
-	-	-	-	-	-	-

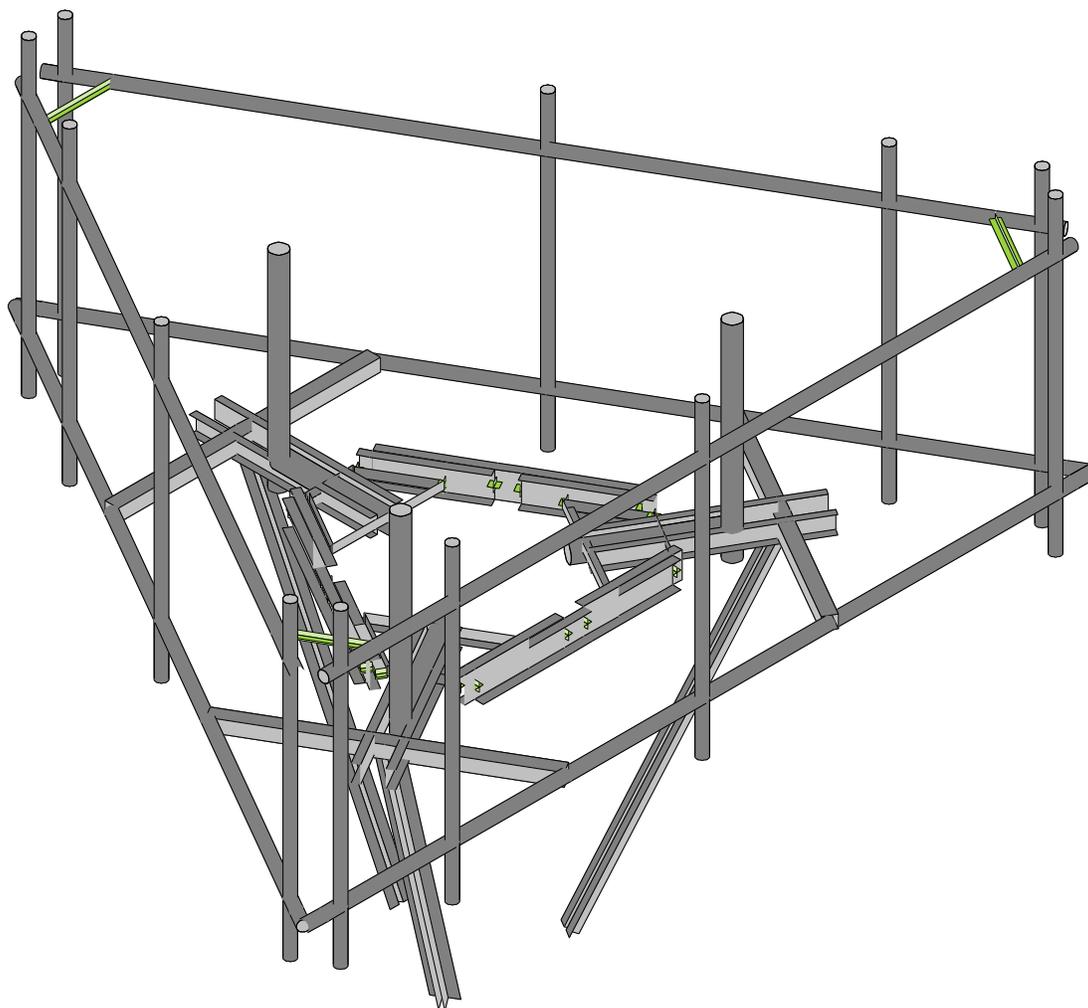
Notes:

- 1) Tieback connection point is within 25% of either end of the connected tower member.
- 2) Tower connection point is NOT within 25% of either end of the connected tower member.
- 3) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances*.

4.1) Recommendations

- 1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
- 2) The mount and its connection have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

APPENDIX A
WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

Tower Engineering Profess...

LEG

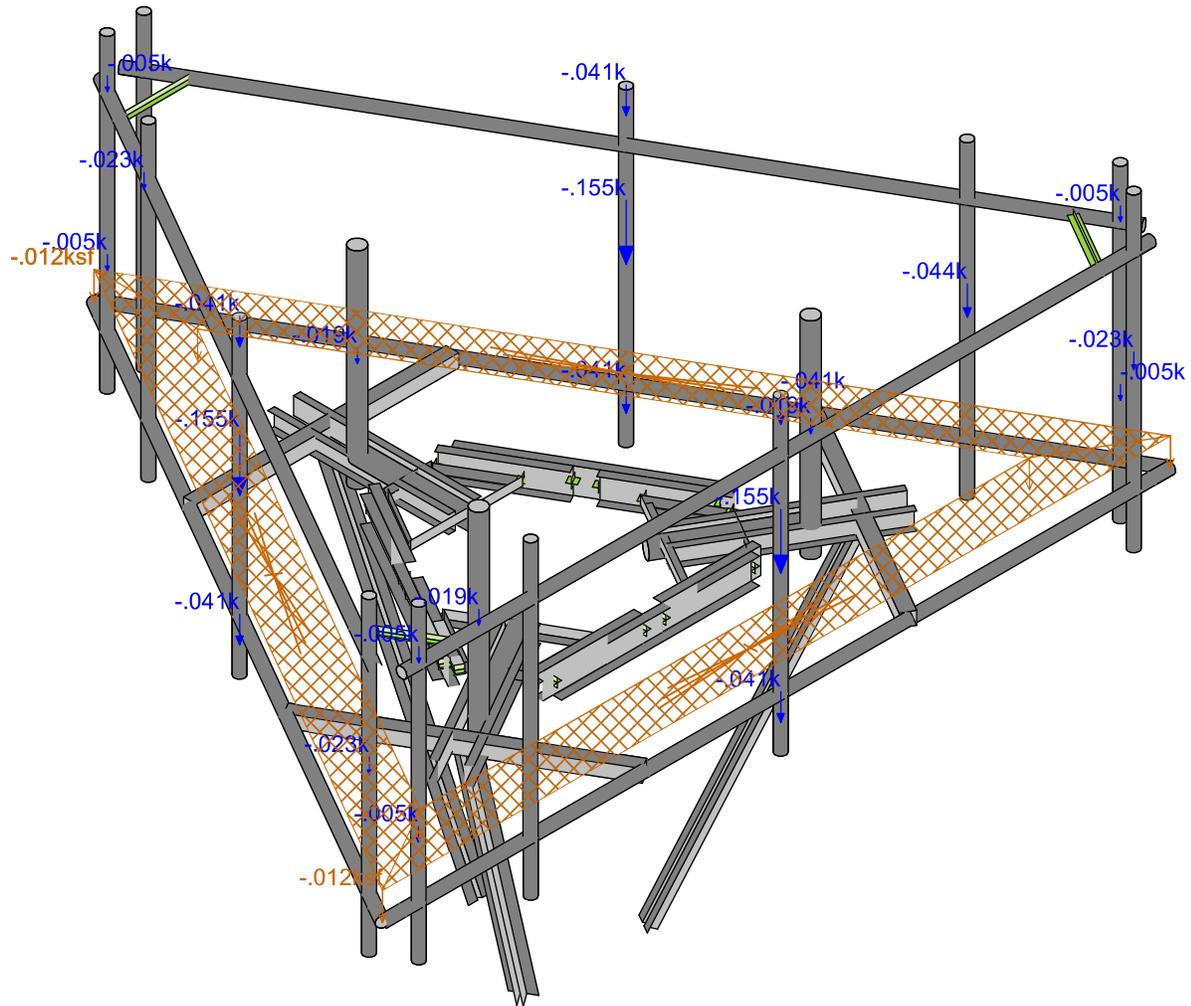
TEP No. 58885.317809

BU# 855662 - WINDSORCENTRAL

SK - 1

Nov 1, 2019 at 12:27 PM

Mount Rev H.r3d



Loads: BLC 1, Dead
Envelope Only Solution

Tower Engineering Profes...

LEG

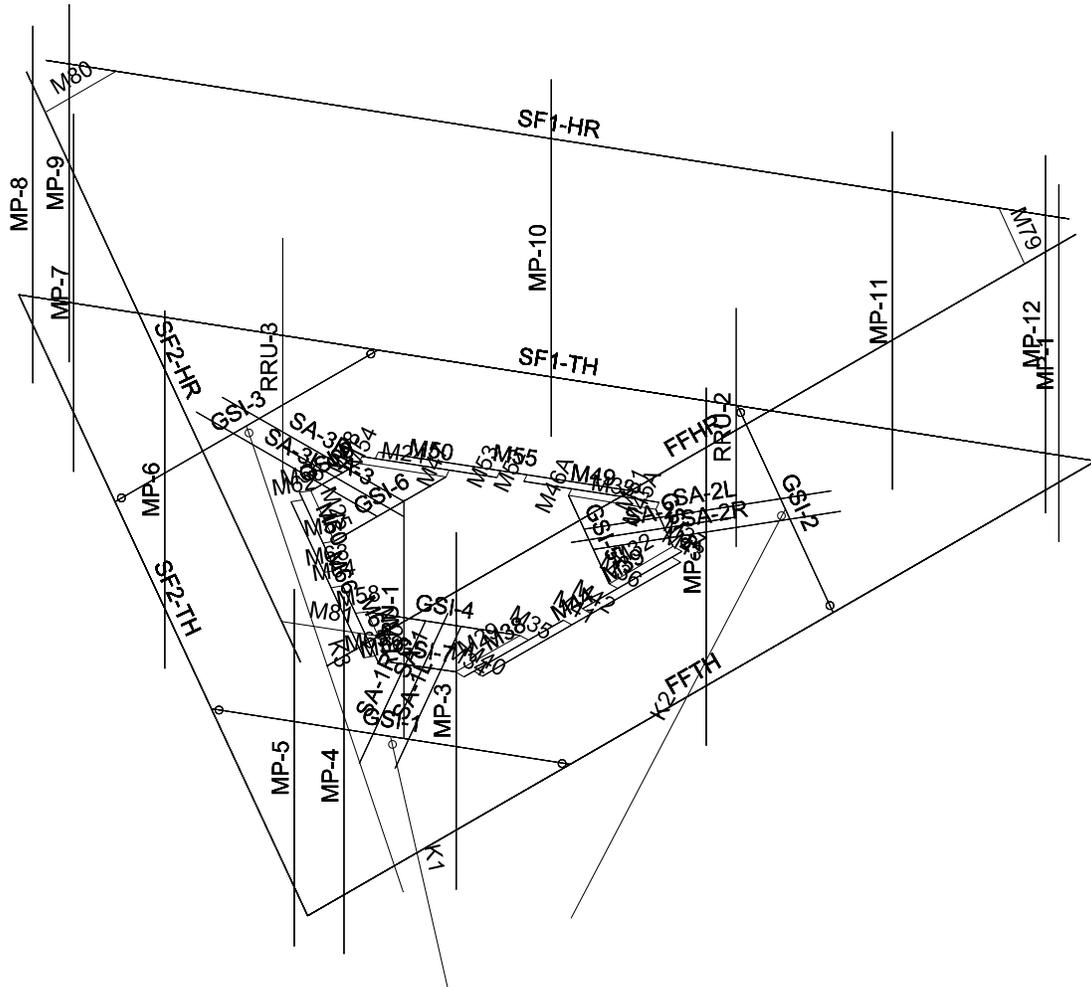
TEP No. 58885.317809

BU# 855662 - WINDSORCENTRAL

SK - 2

Nov 1, 2019 at 12:27 PM

Mount Rev H.r3d



Envelope Only Solution

Tower Engineering Profess...

LEG

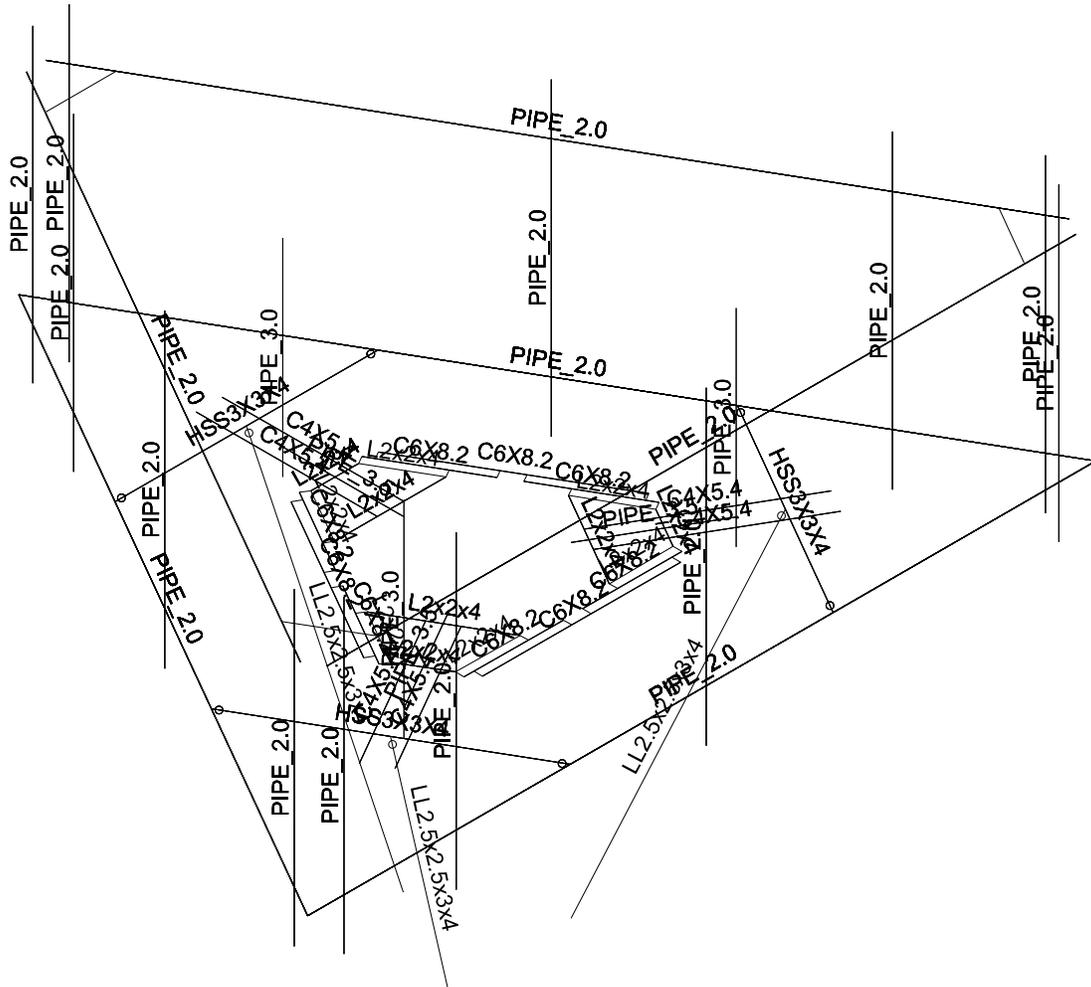
TEP No. 58885.317809

BU# 855662 - WINDSORCENTRAL

SK - 4

Nov 1, 2019 at 12:28 PM

Mount Rev H.r3d



Envelope Only Solution

Tower Engineering Profess...

LEG

TEP No. 58885.317809

BU# 855662 - WINDSORCENTRAL

SK - 5

Nov 1, 2019 at 12:28 PM

Mount Rev H.r3d

APPENDIX B
SOFTWARE INPUT CALCULATIONS



Code Revisions:	TIA-222-H	IBC 2015
Tower Type:	Monopole	

Wind Inputs:

Ult. Wind Velocity:	125.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	50.0	mph
Base Ice Thickness:	2.00	inches
Mount Centerline:	126.0	ft
Antenna Centerline:	127.0	ft
Exposure Category:	C	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	115	ft

Wind Calculations:

K_{zt} :	1.000	Section 2.6.6
K_d :	0.950	
$K_{z-Mount}$:	1.329	Section 2.6.5.2
$K_{z-Antenna}$:	1.331	Section 2.6.5.2
K_{iz} :	1.144	Section 2.6.10
Ice Thickness:	2.288	inches - Section 2.6.10

Without Ice - (psf)	With Ice - (psf)
$(q_z G_h)_{Mount}$: 50.28	$(q_z G_h)_{Mount}$: 8.05
$(q_z G_h)_{Antenna}$: 50.37	$(q_z G_h)_{Antenna}$: 8.06

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

Seismic Input

S_{DS} :	0.191	Design Short Period Spectral Accel.
I_p :	1.0	Importance Factor
R_p :	2.0	Response Modification Factor
ρ :	1.0	
A_s :	1.0	Applification Factor - TIA-222-H Section 2.7.8.1
S_1 :	0.064	Short Period Spectral Accel.

Seismic Design Force

Cs:	0.096	kips/kip	TIA-H Sec 2.7.7.1.1
Cs-min:	0.030	kips/kip	TIA-H Sec 2.7.7.1.1



BU# 855662 - WINDSORCENTRAL
 58885.317809
TEP No.
 11/1/2019
Analysis By: LEG
 11/1/2019
Checked By: HBC
 11/1/2019

Antenna Loads are Calculated in Accordance with TIA-222-H
 Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
SAMSUNG TELECOMMUNICATIONS	CBRS	16.16	11.39	5.45	23.14	0.00	1	Flat	MP-1	3.00		
COMMSCOPE	SBHHH-1D65B (x2)	72.90	23.80	7.10	81.20	0.00	1	Flat	MP-2	0.50	5.50	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	15.00	10.00	15.00	84.40	0.00	1	Flat	MP-2	3.00		
SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	15.00	8.10	15.00	70.30	0.00	1	Flat	MP-2	3.00		
ANTEL	BXA-70063-4CF-EDIN-X	47.40	11.20	5.20	9.90	0.00	1	Flat	MP-4	1.00	4.00	
SAMSUNG TELECOMMUNICATIONS	CBRS	16.16	11.39	5.45	23.14	120.00	1	Flat	MP-5	3.00		
COMMSCOPE	SBHHH-1D65B (x2)	72.90	23.80	7.10	81.20	120.00	1	Flat	MP-6	0.50	5.50	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	15.00	10.00	15.00	84.40	120.00	1	Flat	MP-6	3.00		
SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	15.00	8.10	15.00	70.30	120.00	1	Flat	MP-6	3.00		
ANTEL	BXA-70063-4CF-EDIN-X	47.40	11.20	5.20	9.90	120.00	1	Flat	MP-8	1.00	4.00	
SAMSUNG TELECOMMUNICATIONS	CBRS	16.16	11.39	5.45	23.14	240.00	1	Flat	MP-9	3.00		
COMMSCOPE	SBHHH-1D65B (x2)	72.90	23.80	7.10	81.20	240.00	1	Flat	MP-10	0.50	5.50	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	15.00	10.00	15.00	84.40	240.00	1	Flat	MP-10	3.00		
SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	15.00	8.10	15.00	70.30	240.00	1	Flat	MP-10	3.00		
RFS/CELLWAVE	DB-T1-6Z-8AB-0Z	24.00	24.00	10.00	44.00	240.00	1	Flat	MP-11	3.00		
ANTEL	BXA-70063-4CF-EDIN-X	47.40	11.20	5.20	9.90	240.00	1	Flat	MP-12	1.00	4.00	
SAMSUNG TELECOMMUNICATIONS	20W CBRS	12.10	8.50	4.10	18.64	0.00	1	Flat	RRU-1	2.00		
SAMSUNG TELECOMMUNICATIONS	20W CBRS	12.10	8.50	4.10	18.64	120.00	1	Flat	RRU-2	2.00		
SAMSUNG TELECOMMUNICATIONS	20W CBRS	12.10	8.50	4.10	18.64	240.00	1	Flat	RRU-3	2.00		



**TOWER
ENGINEERING
PROFESSIONALS**

BU# 855662 - WINDSORCENTRAL

TEP No. 58885.317809

Analysis By: LEG 11/1/2019

Checked By: HBC 11/1/2019

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

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
FFTH	2.375	183.00	Round	90.00	7.46
MP-1	2.375	72.00	Round		7.46
MP-2	2.375	72.00	Round		7.46
MP-3	2.375	72.00	Round		7.46
MP-4	2.375	72.00	Round		7.46
SF1-TH	2.375	183.00	Round	30.00	7.46
MP-6	2.375	72.00	Round		7.46
MP-7	2.375	72.00	Round		7.46
SF2-TH	2.375	183.00	Round	-30.00	7.46
MP-10	2.375	72.00	Round		7.46
MP-11	2.375	72.00	Round		7.46
SA-1	4.000	28.00	Round	-60.00	12.57
SA-2	4.000	28.00	Round	60.00	12.57
SA-3	4.000	28.00	Round	0.00	12.57
GSI-1	3.000	60.92	Flat	30.00	12.00
GSI-2	3.000	60.92	Flat	-30.00	12.00
GSI-3	3.000	60.92	Flat	90.00	12.00
GSI-6	2.000	26.00	Flat	90.00	8.00
GSI-9	2.000	11.00	Flat	90.00	8.00
M24	2.000	14.88	Flat	30.27	8.00
M25	2.000	14.88	Flat	-30.27	8.00
GSI-4	2.000	26.00	Flat	30.00	8.00
M28	2.000	14.88	Flat	-29.73	8.00
M29	2.000	14.88	Flat	89.73	8.00
GSI-5	2.000	26.00	Flat	-30.00	8.00
M32	2.000	14.88	Flat	-89.73	8.00
M33	2.000	14.88	Flat	29.73	8.00
GSI-7	2.000	11.00	Flat	30.00	8.00
GSI-8	2.000	11.00	Flat	-30.00	8.00
M38	6.000	23.00	Flat	90.00	19.60
M39	6.000	23.00	Flat	90.00	19.60
M44	6.000	46.00	Flat	90.00	19.60
M49	6.000	23.00	Flat	30.00	19.60
M50	6.000	23.00	Flat	30.00	19.60
M55	6.000	46.00	Flat	30.00	19.60
M60	6.000	23.00	Flat	-30.00	19.60
M61	6.000	23.00	Flat	-30.00	19.60
M66	6.000	46.00	Flat	-30.00	19.60

SA-3R	4.000	42.00	Flat	0.00	14.40
SA-3L	4.000	42.00	Flat	0.00	14.40
SA-1R	4.000	42.00	Flat	-60.00	14.40
SA-1L	4.000	42.00	Flat	-60.00	14.40
SA-2R	4.000	42.00	Flat	60.00	14.40
SA-2L	4.000	42.00	Flat	60.00	14.40
RRU-2	3.500	48.00	Round		11.00
RRU-1	3.500	48.00	Round		11.00
RRU-3	3.500	48.00	Round		11.00
MP-9	2.375	72.00	Round		7.46
MP-12	2.375	72.00	Round		7.46
MP-5	2.375	72.00	Round		7.46
MP-8	2.375	72.00	Round		7.46
FFHR	2.375	174.00	Round	90.00	7.46
SF1-HR	2.375	174.00	Round	30.00	7.46
SF2-HR	2.375	174.00	Round	-30.00	7.46
K1	2.500	84.00	Flat		15.00
K2	2.500	84.00	Flat		15.00
K3	2.500	84.00	Flat		15.00

APPENDIX C
SOFTWARE ANALYSIS OUTPUT



Global Model Settings. Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T.X (sec)	Not Entered
T.Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

Label	E (ksi)	G (ksi)	Nu	Therm (1/E...)	Density(k/ft...)	Yield(ksi)	Rv	Fv (ksi)	Fz (ksi)	Rt
1	A997	29000	11154	.3	.65	49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	49	50	1.1	65	1.1
4	A500 Gr.B.RND	29000	11154	.3	.65	49	42	1.4	58	1.3
5	A500 Gr.B.Rect	29000	11154	.3	.65	49	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	49	50	1.4	65	1.3

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design....	A (in2)	Iy (in4)	Iz (in4)	J (in4)	
1	Face Horizontal	PIPE 2.0	Beam	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Mount Pipe	PIPE 2.0	Column	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	RRU Pipe	PIPE 3.0	Column	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
4	Internal HSS	HSS3X3X4	Beam	None	A500 Gr.B Rect	Typical	2.44	3.02	3.02	5.08
5	Support Arm	PIPE 3.5	Beam	None	A53 Gr.B	Typical	2.5	4.52	4.52	9.04
6	Support Angles	L2x2x4	Beam	None	A36 Gr.36	Typical	.944	.346	.346	.021
7	Support Channels	C4X5.4	Beam	None	A36 Gr.36	Typical	1.58	.312	.312	.04
8	Internal Channel	C6X8.2	Beam	None	A36 Gr.36	Typical	2.39	.687	.687	1.3
9	HRK14	PIPE 2.0	Beam	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
10	PRK-1245L	LL2.5x2.5x3x4 H...	Beam	None	A36 Gr.36	Typical	1.805	2.305	1.093	.02

Material Takeoff

Material	Size	Pieces	Length(ft)	Weight(K)
1	General			
2	RIGID	27	8.1	0
3	Total General	27	8.1	0
4				
5	Hot Rolled Steel			
6	A36 Gr.36	6	21	.1
7	A36 Gr.36	9	23	.2
8	A36 Gr.36	3	21	.1
9	A36 Gr.36	12	16.7	0
10	A500 Gr.B Rect	3	15.2	.1



Global Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

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

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8



Member Primary Data (Continued)

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
45	M49	N93	N91		Internal Channel	Beam	None	A36 Gr.36	Typical
46	M50	N94	N92	180	Internal Channel	Beam	None	A36 Gr.36	Typical
47	M51	N95	N99		RIGID	Beam	None	RIGID	Typical
48	M52	N93	N97		RIGID	Beam	None	RIGID	Typical
49	M53	N94	N98		RIGID	Beam	None	RIGID	Typical
50	M54	N96	N100		RIGID	Beam	None	RIGID	Typical
51	M55	N100	N99	180	Internal Channel	Beam	None	A36 Gr.36	Typical
52	M56	N59	N107		RIGID	Beam	None	RIGID	Typical
53	M57	N56	N105		RIGID	Beam	None	RIGID	Typical
54	M58	N63	N106		RIGID	Beam	None	RIGID	Typical
55	M59	N87	N108		RIGID	Beam	None	RIGID	Typical
56	M60	N109	N107		Internal Channel	Beam	None	A36 Gr.36	Typical
57	M61	N110	N108	180	Internal Channel	Beam	None	A36 Gr.36	Typical
58	M62	N111	N115		RIGID	Beam	None	RIGID	Typical
59	M63	N109	N113		RIGID	Beam	None	RIGID	Typical
60	M64	N110	N114		RIGID	Beam	None	RIGID	Typical
61	M65	N112	N116		RIGID	Beam	None	RIGID	Typical
62	M66	N116	N115	180	Internal Channel	Beam	None	A36 Gr.36	Typical
63	SA-3R	N109A	N111A		Support Arm Channels	Beam	None	A36 Gr.36	Typical
64	SA-3L	N112A	N110A		Support Arm Channels	Beam	None	A36 Gr.36	Typical
65	SA-1R	N117	N119		Support Arm Channels	Beam	None	A36 Gr.36	Typical
66	SA-1L	N120	N118		Support Arm Channels	Beam	None	A36 Gr.36	Typical
67	SA-2R	N125	N127		Support Arm Channels	Beam	None	A36 Gr.36	Typical
68	SA-2L	N128	N126		Support Arm Channels	Beam	None	A36 Gr.36	Typical
69	RRU-2	N138	N135		RRU Pipe	Column	None	A53 Gr.B	Typical
70	RRU-1	N137	N134		RRU Pipe	Column	None	A53 Gr.B	Typical
71	RRU-3	N136	N133		RRU Pipe	Column	None	A53 Gr.B	Typical
72	MP-9	N127A	N129A		Mount Pipe	Column	None	A53 Gr.B	Typical
73	MP-12	N128A	N130A		Mount Pipe	Column	None	A53 Gr.B	Typical
74	MP-5	N133A	N135A		Mount Pipe	Column	None	A53 Gr.B	Typical
75	MP-8	N134A	N136A		Mount Pipe	Column	None	A53 Gr.B	Typical
76	FFHR	N157	N158		HRK14	Beam	None	A53 Gr.B	Typical
77	SF1-HR	N159	N160		HRK14	Beam	None	A53 Gr.B	Typical
78	SF2-HR	N161	N162		HRK14	Beam	None	A53 Gr.B	Typical
79	M79	N164	N165		RIGID	Beam	None	RIGID	Typical
80	M80	N166	N167		RIGID	Beam	None	RIGID	Typical
81	M81	N168	N163		RIGID	Beam	None	RIGID	Typical
82	K1	N49	N170		PRK-1245L	Beam	None	A36 Gr.36	Typical
83	K2	N50	N170		PRK-1245L	Beam	None	A36 Gr.36	Typical
84	K3	N51	N171		PRK-1245L	Beam	None	A36 Gr.36	Typical

Member Advanced Data

Label	I Release	J Release	K Release	I Offset(in)	J Offset(in)	T/C Only	Physical	Defl Rati...	Analysis Off...	Seismi...
1	FFTH						Yes	** NA	**	None
2	MP-1						Yes	** NA	**	None
3	MP-2						Yes	** NA	**	None
4	MP-3						Yes	** NA	**	None
5	MP-4						Yes	** NA	**	None
6	SF1-TH						Yes	** NA	**	None
7	MP-6						Yes	** NA	**	None
8	MP-7						Yes	** NA	**	None
9	SF2-TH						Yes	** NA	**	None
10	MP-10						Yes	** NA	**	None
11	MP-11						Yes	** NA	**	None
12	SA-1						Yes			None
13	SA-2						Yes			None
14	SA-3						Yes			None
15	GSI-1	BenPIN	BenPIN				Yes	Default		None
16	GSI-2	BenPIN	BenPIN				Yes	Default		None
17	GSI-3	BenPIN	BenPIN				Yes	Default		None
18	GSI-6						Yes			None



Material Takeoff (Continued)

Material	Size	Pieces	Length(ft)	Weight(K)
11	A53 Gr.B	18	161.2	.6
12	A53 Gr.B	3	12	0
13	A53 Gr.B	3	7	0
14	Total HR Steel	57	277.2	1.3

Joint Boundary Conditions

Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot. [k-ft/rad]	Y Rot. [k-ft/rad]	Z Rot. [k-ft/rad]
1	SA3	Reaction	Reaction	Reaction	Reaction	Reaction
2	SA2	Reaction	Reaction	Reaction	Reaction	Reaction
3	SA1	Reaction	Reaction	Reaction	Reaction	Reaction
4	N169	Reaction	Reaction	Reaction	Reaction	Reaction
5	N170	Reaction	Reaction	Reaction	Reaction	Reaction
6	N171	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	FFTH	FF2			Face Horizontal	Beam	None	A53 Gr.B	Typical
2	MP-1	MP-1A	MP-1B		Mount Pipe	Column	None	A53 Gr.B	Typical
3	MP-2	MP-2A	MP-2B		Mount Pipe	Column	None	A53 Gr.B	Typical
4	MP-3	MP-3A	MP-3B		Mount Pipe	Column	None	A53 Gr.B	Typical
5	MP-4	MP-4A	MP-4B		Mount Pipe	Column	None	A53 Gr.B	Typical
6	SF1-TH	FF1	FF5		Face Horizontal	Beam	None	A53 Gr.B	Typical
7	MP-6	MP-10A	MP-10B		Mount Pipe	Column	None	A53 Gr.B	Typical
8	MP-7	MP-11A	MP-11B		Mount Pipe	Column	None	A53 Gr.B	Typical
9	SF2-TH	FF5	FF2		Face Horizontal	Beam	None	A53 Gr.B	Typical
10	MP-10	MP-18A	MP-18B		Mount Pipe	Column	None	A53 Gr.B	Typical
11	MP-11	MP-19A	MP-19B		Mount Pipe	Column	None	A53 Gr.B	Typical
12	SA-1	SA1	N53		Support Arm	Beam	None	A53 Gr.B	Typical
13	SA-2	SA2	N54		Support Arm	Beam	None	A53 Gr.B	Typical
14	SA-3	SA3	N52		Support Arm	Beam	None	A53 Gr.B	Typical
15	GSI-1	GS1	GS4		Internal HSS	Beam	None	A500 Gr....	Typical
16	GSI-2	GS2	GS5		Internal HSS	Beam	None	A500 Gr....	Typical
17	GSI-3	GS3	GS6		Internal HSS	Beam	None	A500 Gr....	Typical
18	GSI-6	N57	N56		Support Angles	Beam	None	A36 Gr.36	Typical
19	GSI-9	N60	N59	270	Support Angles	Beam	None	A36 Gr.36	Typical
20	M24	N60	N57	270	Support Angles	Beam	None	A36 Gr.36	Typical
21	M25	N56	N59	270	Support Angles	Beam	None	A36 Gr.36	Typical
22	GSI-4	N63	N62		Support Angles	Beam	None	A36 Gr.36	Typical
23	M28	N87	N63		Support Angles	Beam	None	A36 Gr.36	Typical
24	M29	N82	N66		Support Angles	Beam	None	A36 Gr.36	Typical
25	GSI-5	N69	N68		Support Angles	Beam	None	A36 Gr.36	Typical
26	M32	N90	N69	270	Support Angles	Beam	None	A36 Gr.36	Typical
27	M33	N88	N89	270	Support Angles	Beam	None	A36 Gr.36	Typical
28	GSI-7	N87	N86	270	Support Angles	Beam	None	A36 Gr.36	Typical
29	GSI-8	N90	N89	270	Support Angles	Beam	None	A36 Gr.36	Typical
30	M34	N86	N75		RIGID	Beam	None	RIGID	Typical
31	M35	N62	N73		RIGID	Beam	None	RIGID	Typical
32	M36	N69	N74		RIGID	Beam	None	RIGID	Typical
33	M37	N90	N76		RIGID	Beam	None	RIGID	Typical
34	M38	N77	N75		Internal Channel	Beam	None	A36 Gr.36	Typical
35	M39	N78	N76	180	Internal Channel	Beam	None	A36 Gr.36	Typical
36	M40	N79	N83		RIGID	Beam	None	RIGID	Typical
37	M41	N77	N81		RIGID	Beam	None	RIGID	Typical
38	M42	N78	N82		RIGID	Beam	None	RIGID	Typical
39	M43	N80	N84		RIGID	Beam	None	RIGID	Typical
40	M44	N84	N83	180	Internal Channel	Beam	None	A36 Gr.36	Typical
41	M45A	N89	N91		RIGID	Beam	None	RIGID	Typical
42	M46A	N68	N89A		RIGID	Beam	None	RIGID	Typical
43	M47	N57	N90A		RIGID	Beam	None	RIGID	Typical
44	M48	N60	N92		RIGID	Beam	None	RIGID	Typical

Hot Rolled Steel Design Parameters (Continued)

Label	Shape	Length(ft)	Lbyy(ft)	Lbzz(ft)	Lcomp top...	Lcomp bot...	Ldrag...	Kyy	Kzz	Cb	Funcdi...
56	K2	PRK-1245L	7		Lbw			1	1		Lateral
57	K3	PRK-1245L	7		Lbw			1	1		Lateral

Basic Load Cases

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(F...
1 Dead	None					25		3
2 0 Wind - No Ice	None		-1			25	57	
3 30 Wind - No Ice	None					50	114	
4 45 Wind - No Ice	None					50	114	
5 60 Wind - No Ice	None					50	114	
6 90 Wind - No Ice	None					25	57	
7 120 Wind - No Ice	None					50	114	
8 135 Wind - No Ice	None					50	114	
9 150 Wind - No Ice	None					50	114	
10 180 Wind - No Ice	None					25	57	
11 210 Wind - No Ice	None					50	114	
12 225 Wind - No Ice	None					50	114	
13 240 Wind - No Ice	None					50	114	
14 270 Wind - No Ice	None					25	57	
15 300 Wind - No Ice	None					50	114	
16 315 Wind - No Ice	None					50	114	
17 330 Wind - No Ice	None					50	114	
18 Ice Weight	None					25	57	3
19 0 Wind - Ice	None					50	114	
20 30 Wind - Ice	None					50	114	
21 45 Wind - Ice	None					50	114	
22 60 Wind - Ice	None					50	114	
23 90 Wind - Ice	None					25	57	
24 120 Wind - Ice	None					50	114	
25 135 Wind - Ice	None					50	114	
26 150 Wind - Ice	None					50	114	
27 180 Wind - Ice	None					25	57	
28 210 Wind - Ice	None					50	114	
29 225 Wind - Ice	None					50	114	
30 240 Wind - Ice	None					50	114	
31 270 Wind - Ice	None					25	57	
32 300 Wind - Ice	None					50	114	
33 315 Wind - Ice	None					50	114	
34 330 Wind - Ice	None					50	114	
35 Lm	None				1			
36 Lv	None				1			
37 Seismic Load X	ELX					25		
38 Seismic Load Z	ELZ	-1				25		
39 BLC 1 Transient Area...	None						39	
40 BLC 18 Transient Ave...	None						39	

Load Combinations (Continued)

Description	So...P...	S...	BLC Fac...						
13 0.9D+1.0 240-Wind	Yes	Y	1	9	13	1			
14 0.9D+1.0 270-Wind	Yes	Y	1	9	14	1			
15 0.9D+1.0 300-Wind	Yes	Y	1	9	15	1			
16 0.9D+1.0 315-Wind	Yes	Y	1	9	16	1			
17 0.9D+1.0 330-Wind	Yes	Y	1	9	17	1			
18 1.2D+1.0 0-Wind	Yes	Y	1	12	2	1			
19 1.2D+1.0 30-Wind	Yes	Y	1	12	3	1			
20 1.2D+1.0 45-Wind	Yes	Y	1	12	4	1			
21 1.2D+1.0 60-Wind	Yes	Y	1	12	5	1			
22 1.2D+1.0 90-Wind	Yes	Y	1	12	6	1			
23 1.2D+1.0 120-Wind	Yes	Y	1	12	7	1			
24 1.2D+1.0 135-Wind	Yes	Y	1	12	8	1			
25 1.2D+1.0 150-Wind	Yes	Y	1	12	9	1			
26 1.2D+1.0 180-Wind	Yes	Y	1	12	10	1			
27 1.2D+1.0 210-Wind	Yes	Y	1	12	11	1			
28 1.2D+1.0 225-Wind	Yes	Y	1	12	12	1			
29 1.2D+1.0 240-Wind	Yes	Y	1	12	13	1			
30 1.2D+1.0 270-Wind	Yes	Y	1	12	14	1			
31 1.2D+1.0 300-Wind	Yes	Y	1	12	15	1			
32 1.2D+1.0 315-Wind	Yes	Y	1	12	16	1			
33 1.2D+1.0 330-Wind	Yes	Y	1	12	17	1			
34 1.2D+1.0D+1.0 0...	Yes	Y	1	12	18	1	19	1	
35 1.2D+1.0D+1.0 30...	Yes	Y	1	12	18	1	20	1	
36 1.2D+1.0D+1.0 45...	Yes	Y	1	12	18	1	21	1	
37 1.2D+1.0D+1.0 60...	Yes	Y	1	12	18	1	22	1	
38 1.2D+1.0D+1.0 90...	Yes	Y	1	12	18	1	23	1	
39 1.2D+1.0D+1.0 12...	Yes	Y	1	12	18	1	24	1	
40 1.2D+1.0D+1.0 13...	Yes	Y	1	12	18	1	25	1	
41 1.2D+1.0D+1.0 15...	Yes	Y	1	12	18	1	26	1	
42 1.2D+1.0D+1.0 18...	Yes	Y	1	12	18	1	27	1	
43 1.2D+1.0D+1.0 21...	Yes	Y	1	12	18	1	28	1	
44 1.2D+1.0D+1.0 22...	Yes	Y	1	12	18	1	29	1	
45 1.2D+1.0D+1.0 24...	Yes	Y	1	12	18	1	30	1	
46 1.2D+1.0D+1.0 27...	Yes	Y	1	12	18	1	31	1	
47 1.2D+1.0D+1.0 30...	Yes	Y	1	12	18	1	32	1	
48 1.2D+1.0D+1.0 31...	Yes	Y	1	12	18	1	33	1	
49 1.2D+1.0D+1.0 33...	Yes	Y	1	12	18	1	34	1	
50 1.2D+1.5LV	Yes	Y	36	15	1	12			
51 1.2D+1.5Lm+1.0 0...	Yes	Y	1	12	2	058	35	15	
52 1.2D+1.5Lm+1.0 30...	Yes	Y	1	12	3	058	35	15	
53 1.2D+1.5Lm+1.0 45...	Yes	Y	1	12	4	058	35	15	
54 1.2D+1.5Lm+1.0 60...	Yes	Y	1	12	5	058	35	15	
55 1.2D+1.5Lm+1.0 8...	Yes	Y	1	12	6	058	35	15	
56 1.2D+1.5Lm+1.0 10...	Yes	Y	1	12	7	058	35	15	
57 1.2D+1.5Lm+1.0 1...	Yes	Y	1	12	8	058	35	15	
58 1.2D+1.5Lm+1.0 1...	Yes	Y	1	12	9	058	35	15	
59 1.2D+1.5Lm+1.0 1...	Yes	Y	1	12	10	058	35	15	
60 1.2D+1.5Lm+1.0 2...	Yes	Y	1	12	11	058	35	15	
61 1.2D+1.5Lm+1.0 2...	Yes	Y	1	12	12	058	35	15	
62 1.2D+1.5Lm+1.0 2...	Yes	Y	1	12	13	058	35	15	
63 1.2D+1.5Lm+1.0 2...	Yes	Y	1	12	14	058	35	15	
64 1.2D+1.5Lm+1.0 3...	Yes	Y	1	12	15	058	35	15	
65 1.2D+1.5Lm+1.0 3...	Yes	Y	1	12	16	058	35	15	
66 1.2D+1.5Lm+1.0 3...	Yes	Y	1	12	17	058	35	15	
67 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	096	0		
68 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	083	ELZ	048	
69 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	068	ELZ	068	
70 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	048	ELZ	083	
71 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	0	ELZ	096		
72 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	-048	ELZ	083	
73 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	068	ELZ	068	
74 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	083	ELZ	048	
75 1.2+0.2SsID+1.0 ...	Yes	Y	1	238	ELX	-096	0		



Joint Coordinates and Temperatures (Continued)

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
162	4.077528	4	7.437495	0	
163	4.402296	4	6.24999	0	
164	4.402296	4	-6.24999	0	
165	3.211502	4	-6.937495	0	
166	-7.613798	4	-0.687505	0	
167	-7.613798	4	0.687505	0	
168	3.211502	4	6.937495	0	
169	0.6875	-6.309	1.190785	0	
170	0.6875	-6.309	-1.190785	0	
171	0	-1.375	-6.309	0	
172	-6.804592	0	0	0	
173	3.402296	0	5.892949	0	
174	3.402296	0	-5.892949	0	

Joint Loads and Enforced Displacements (BLC 35 : Lm)

Joint Label	L	D	M	Direction	Magnitude[(k-k-ft), (in.rad), (k*s^2/ft...)]
N40				Y	-5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

Joint Label	L	D	M	Direction	Magnitude[(k-k-ft), (in.rad), (k*s^2/ft...)]
FF2				Y	-25

Member Point Loads (BLC 1 : Dead)

Member Label	Direction	Magnitude[(k-ft)]	Location[ft, %]
MP-1	Y	-0.23	3
MP-2	Y	-0.41	5
MP-2	Y	-0.84	3
MP-2	Y	-0.7	3
MP-4	Y	-0.05	1
MP-5	Y	-0.23	3
MP-6	Y	-0.41	5
MP-6	Y	-0.84	3
MP-6	Y	-0.7	3
MP-8	Y	-0.05	1
MP-9	Y	-0.23	3
MP-10	Y	-0.41	5
MP-10	Y	-0.84	3
MP-10	Y	-0.7	3
MP-11	Y	-0.44	3
MP-12	Y	-0.05	1
RRU-1	Y	-0.19	2
RRU-2	Y	-0.19	2
RRU-3	Y	-0.19	2
MP-2	Y	-0.41	5.5
MP-4	Y	-0.05	4
MP-6	Y	-0.41	5.5
MP-8	Y	-0.05	4
MP-10	Y	-0.41	5.5
MP-12	Y	-0.05	4

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

Member Label	Direction	Magnitude[(k-ft)]	Location[ft, %]
MP-1	X	-0.7	3
MP-2	X	-3.35	5
MP-2	X	-0.57	3
MP-2	X	-0.46	3
MP-4	X	-1.07	1
MP-5	X	-0.43	3
MP-6	X	-1.76	5



Joint Coordinates and Temperatures (Continued)

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
99	-5.125	0	-25	0	
N111A	-5.125	0	-25	0	
N112A	-4.07946	0	0	0	
N117A	-4.07946	0	0	0	
N118A	-4.07946	0	0	0	
N119A	-2.696	0	-25	0	
N120A	-2.696	0	25	0	
N117	0.595994	0	1.532291	0	
N118	1.029006	0	1.282291	0	
N119	2.345994	0	4.56338	0	
N120	2.779006	0	4.3138	0	
N121	1.987466	0	3.942393	0	
N122	2.420479	0	3.692393	0	
N123	1.131494	0	2.459804	0	
N124	1.564506	0	2.209804	0	
N125	1.029006	0	-1.282291	0	
N126	0.595994	0	-1.532291	0	
N127	2.779006	0	-4.3138	0	
N128	2.345994	0	-4.56338	0	
N129	2.420479	0	-3.692393	0	
N130	1.987466	0	-3.942393	0	
N131	1.564506	0	-2.209804	0	
N132	1.131494	0	-2.459804	0	
N133	-3.708	-5	0	0	
N134	1.854	-5	3.211222	0	
N135	1.854	-5	-3.211222	0	
N136	-3.708	3.5	0	0	
N137	1.854	3.5	3.211222	0	
N138	1.854	3.5	-3.211222	0	
N127A	-8.191151	5	-0.35417	0	
N128A	3.788855	5	-7.27083	0	
N129A	-8.191151	5	-0.35417	0	
N130A	3.788855	-1	-7.27083	0	
N131A	-8.191151	0	-0.35417	0	
N132A	3.788855	0	-7.27083	0	
N133A	3.788855	5	7.27083	0	
N134A	-8.191151	5	0.35417	0	
N135A	3.788855	-1	7.27083	0	
N136A	-8.191151	-1	0.35417	0	
N137A	3.788855	0	7.27083	0	
N138A	-8.191151	0	0.35417	0	
N139	4.402296	0	7.24999	0	
N140	4.402296	0	-7.24999	0	
N141	4.077528	0	-7.437495	0	
N142	-8.479823	0	-0.187505	0	
N143	-8.479823	0	0.187505	0	
N144	4.077528	0	7.437495	0	
N145	4.402296	4	-6.91666	0	
N146	4.402296	4	-0.083333	0	
N147	4.402296	4	4.75	0	
N148	4.402296	4	6.91666	0	
N149	-2.273316	4	-3.770834	0	
N150	1.912473	4	-6.1875	0	
N151	-2.128979	4	3.854166	0	
N152	-6.314769	4	1.4375	0	
N153	-8.191151	4	-0.35417	0	
N154	3.788855	4	-7.27083	0	
N155	3.788855	4	7.27083	0	
N156	-8.191151	4	0.35417	0	
N157	4.402296	4	7.24999	0	
N158	4.402296	4	-7.24999	0	
N159	4.077528	4	-7.437495	0	
N160	-8.479823	4	-0.187505	0	
N161	-8.479823	4	0.187505	0	



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

Member Label	Direction	Magnitude(k, kdf)	Location(fft,%)
8	X	-0.78	3
9	X	-0.75	3
10	X	-0.69	1
11	X	-0.43	3
12	X	-1.76	5
13	X	-0.78	3
14	X	-0.75	3
15	X	-1.22	3
16	X	-0.69	1
17	X	-0.39	2
18	X	-0.24	2
19	X	-0.24	2
20	X	-0.335	5.5
21	X	-1.07	4
22	X	-1.76	5.5
23	X	-0.69	4
24	X	-1.76	5.5
25	X	-0.69	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(fft,%)
1	X	-0.92	3
2	X	-2.44	5
3	X	-0.55	3
4	X	-0.48	3
5	X	-0.82	1
6	X	-0.29	3
7	X	-1.06	.5
8	X	-0.74	3
9	X	-0.74	3
10	X	-0.49	1
11	X	-0.52	3
12	X	-2.44	5
13	X	-0.95	3
14	X	-0.48	3
15	X	-1.61	3
16	X	-0.82	1
17	X	-0.29	2
18	X	-0.17	2
19	X	-0.29	2
20	X	-2.44	5.5
21	X	-0.82	4
22	X	-1.06	5.5
23	X	-0.49	4
24	X	-2.44	5.5
25	X	-0.82	4
26	Z	-0.3	3
27	Z	-1.41	.5
28	Z	-0.32	3
29	Z	-0.28	3
30	Z	-0.47	1
31	Z	-0.17	3
32	Z	-0.61	.5
33	Z	-0.42	3
34	Z	-0.42	3
35	Z	-0.29	1
36	Z	-0.3	3
37	Z	-1.41	5
38	Z	-0.32	3
39	Z	-0.28	3
40	Z	-0.93	3
41	Z	-0.47	1



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

Member Label	Direction	Magnitude(k, kdf)	Location(fft,%)
42	Z	-0.17	2
43	Z	-0.1	2
44	Z	-0.17	2
45	Z	-1.41	5.5
46	Z	-0.47	4
47	Z	-0.61	5.5
48	Z	-0.29	4
49	Z	-1.41	5.5
50	Z	-0.47	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(fft,%)
1	X	-0.37	3
2	X	-1.62	5
3	X	-0.5	3
4	X	-0.46	3
5	X	-0.58	1
6	X	-0.26	3
7	X	-0.97	.5
8	X	-0.59	3
9	X	-0.58	3
10	X	-0.43	1
11	X	-0.47	3
12	X	-2.27	.5
13	X	-0.41	3
14	X	-0.34	3
15	X	-1.48	3
16	X	-0.73	1
17	X	-0.2	2
18	X	-0.14	2
19	X	-0.27	2
20	X	-1.62	5.5
21	X	-0.58	4
22	X	-0.97	5.5
23	X	-0.43	4
24	X	-2.27	5.5
25	X	-0.73	4
26	Z	-0.37	3
27	Z	-1.62	5
28	Z	-0.5	3
29	Z	-0.46	3
30	Z	-0.58	1
31	Z	-0.26	3
32	Z	-0.97	5
33	Z	-0.59	3
34	Z	-0.58	3
35	Z	-0.43	1
36	Z	-0.47	3
37	Z	-2.27	.5
38	Z	-0.41	3
39	Z	-0.34	3
40	Z	-1.48	3
41	Z	-0.73	1
42	Z	-0.2	2
43	Z	-0.14	2
44	Z	-0.27	2
45	Z	-1.62	5.5
46	Z	-0.58	4
47	Z	-0.97	5.5
48	Z	-0.43	4
49	Z	-2.27	5.5
50	Z	-0.73	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.21	3
2	X	-0.88	5
3	X	-0.39	3
4	X	-0.38	3
5	X	-0.35	1
6	X	-0.21	3
7	X	-0.88	5
8	X	-0.39	3
9	X	-0.38	3
10	X	-0.35	1
11	X	-0.35	3
12	X	-1.67	5
13	X	-0.28	3
14	X	-0.23	3
15	X	-1.09	3
16	X	-0.53	1
17	X	-0.12	2
18	X	-0.12	2
19	X	-0.19	2
20	X	-0.88	5.5
21	X	-0.35	4
22	X	-0.88	5.5
23	X	-0.35	4
24	X	-1.67	5.5
25	X	-0.53	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.65	3
35	Z	-0.6	1
36	Z	-0.6	3
37	Z	-2.9	5
38	Z	-0.49	3
39	Z	-0.4	3
40	Z	-1.88	3
41	Z	-0.92	1
42	Z	-0.21	2
43	Z	-0.34	2
44	Z	-1.52	5.5
45	Z	-0.6	4
46	Z	-1.52	5.5
47	Z	-0.6	4
48	Z	-0.6	4
49	Z	-2.9	5.5
50	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
10	Z	-0.94	1
11	Z	-0.61	3
12	Z	-2.82	5
13	Z	-0.64	3
14	Z	-0.56	3
15	Z	-1.86	3
16	Z	-0.94	1
17	Z	-0.19	2
18	Z	-0.34	2
19	Z	-0.34	2
20	Z	-1.23	5.5
21	Z	-0.57	4
22	Z	-2.82	5.5
23	Z	-0.94	4
24	Z	-2.82	5.5
25	Z	-0.94	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	0.21	3
2	X	0.88	5
3	X	0.39	3
4	X	0.38	3
5	X	0.35	1
6	X	0.35	3
7	X	1.67	5
8	X	0.28	3
9	X	0.23	3
10	X	0.53	1
11	X	0.21	3
12	X	0.88	5
13	X	0.39	3
14	X	0.38	3
15	X	0.61	3
16	X	0.35	1
17	X	0.12	2
18	X	0.19	2
19	X	0.12	2
20	X	0.88	5.5
21	X	0.35	4
22	X	1.67	5.5
23	X	0.53	4
24	X	0.88	5.5
25	X	0.35	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.4	3
35	Z	-0.92	1
36	Z	-0.21	2
37	Z	-0.34	2
38	Z	-1.52	5.5
39	Z	-0.6	4
40	Z	-1.52	5.5
41	Z	-0.6	4
42	Z	-2.9	5.5
43	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.21	3
2	X	-0.88	5
3	X	-0.39	3
4	X	-0.38	3
5	X	-0.35	1
6	X	-0.21	3
7	X	-0.88	5
8	X	-0.39	3
9	X	-0.38	3
10	X	-0.35	1
11	X	-0.35	3
12	X	-1.67	5
13	X	-0.28	3
14	X	-0.23	3
15	X	-1.09	3
16	X	-0.53	1
17	X	-0.12	2
18	X	-0.12	2
19	X	-0.19	2
20	X	-0.88	5.5
21	X	-0.35	4
22	X	-0.88	5.5
23	X	-0.35	4
24	X	-1.67	5.5
25	X	-0.53	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.65	3
35	Z	-0.6	1
36	Z	-0.6	3
37	Z	-2.9	5
38	Z	-0.49	3
39	Z	-0.4	3
40	Z	-1.88	3
41	Z	-0.92	1
42	Z	-0.21	2
43	Z	-0.34	2
44	Z	-1.52	5.5
45	Z	-0.6	4
46	Z	-1.52	5.5
47	Z	-0.6	4
48	Z	-0.6	4
49	Z	-2.9	5.5
50	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	0.21	3
2	X	0.88	5
3	X	0.39	3
4	X	0.38	3
5	X	0.35	1
6	X	0.35	3
7	X	1.67	5
8	X	0.28	3
9	X	0.23	3
10	X	0.53	1
11	X	0.21	3
12	X	0.88	5
13	X	0.39	3
14	X	0.38	3
15	X	0.61	3
16	X	0.35	1
17	X	0.12	2
18	X	0.19	2
19	X	0.12	2
20	X	0.88	5.5
21	X	0.35	4
22	X	1.67	5.5
23	X	0.53	4
24	X	0.88	5.5
25	X	0.35	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.4	3
35	Z	-0.92	1
36	Z	-0.21	2
37	Z	-0.34	2
38	Z	-1.52	5.5
39	Z	-0.6	4
40	Z	-1.52	5.5
41	Z	-0.6	4
42	Z	-2.9	5.5
43	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.21	3
2	X	-0.88	5
3	X	-0.39	3
4	X	-0.38	3
5	X	-0.35	1
6	X	-0.21	3
7	X	-0.88	5
8	X	-0.39	3
9	X	-0.38	3
10	X	-0.35	1
11	X	-0.35	3
12	X	-1.67	5
13	X	-0.28	3
14	X	-0.23	3
15	X	-1.09	3
16	X	-0.53	1
17	X	-0.12	2
18	X	-0.12	2
19	X	-0.19	2
20	X	-0.88	5.5
21	X	-0.35	4
22	X	-0.88	5.5
23	X	-0.35	4
24	X	-1.67	5.5
25	X	-0.53	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.4	3
35	Z	-0.92	1
36	Z	-0.21	2
37	Z	-0.34	2
38	Z	-1.52	5.5
39	Z	-0.6	4
40	Z	-1.52	5.5
41	Z	-0.6	4
42	Z	-2.9	5.5
43	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	0.21	3
2	X	0.88	5
3	X	0.39	3
4	X	0.38	3
5	X	0.35	1
6	X	0.35	3
7	X	1.67	5
8	X	0.28	3
9	X	0.23	3
10	X	0.53	1
11	X	0.21	3
12	X	0.88	5
13	X	0.39	3
14	X	0.38	3
15	X	0.61	3
16	X	0.35	1
17	X	0.12	2
18	X	0.19	2
19	X	0.12	2
20	X	0.88	5.5
21	X	0.35	4
22	X	1.67	5.5
23	X	0.53	4
24	X	0.88	5.5
25	X	0.35	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.4	3
35	Z	-0.92	1
36	Z	-0.21	2
37	Z	-0.34	2
38	Z	-1.52	5.5
39	Z	-0.6	4
40	Z	-1.52	5.5
41	Z	-0.6	4
42	Z	-2.9	5.5
43	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.21	3
2	X	-0.88	5
3	X	-0.39	3
4	X	-0.38	3
5	X	-0.35	1
6	X	-0.21	3
7	X	-0.88	5
8	X	-0.39	3
9	X	-0.38	3
10	X	-0.35	1
11	X	-0.35	3
12	X	-1.67	5
13	X	-0.28	3
14	X	-0.23	3
15	X	-1.09	3
16	X	-0.53	1
17	X	-0.12	2
18	X	-0.12	2
19	X	-0.19	2
20	X	-0.88	5.5
21	X	-0.35	4
22	X	-0.88	5.5
23	X	-0.35	4
24	X	-1.67	5.5
25	X	-0.53	4
26	Z	-0.37	3
27	Z	-1.52	5
28	Z	-0.67	3
29	Z	-0.65	3
30	Z	-0.6	1
31	Z	-0.37	3
32	Z	-1.52	5
33	Z	-0.67	3
34	Z	-0.4	3
35	Z	-0.92	1
36	Z	-0.21	2
37	Z	-0.34	2
38	Z	-1.52	5.5
39	Z	-0.6	4
40	Z	-1.52	5.5
41	Z	-0.6	4
42	Z	-2.9	5.5
43	Z	-0.92	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	0.21	3
2	X	0.88	5
3	X	0.39	3
4	X	0.38	3
5	X	0.35	1
6	X	0.35	3
7	X		



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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
44	Z	-0.21	2
45	Z	-1.52	5.5
46	Z	-0.6	4
47	Z	-29	5.5
48	Z	-0.92	4
49	Z	-1.52	5.5
50	Z	-0.6	4

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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	X	0.37	3
2	X	1.62	5
3	X	0.5	3
4	X	0.46	3
5	X	0.58	1
6	X	0.47	3
7	X	2.27	5
8	X	0.41	3
9	X	0.34	3
10	X	0.73	1
11	X	0.26	3
12	X	0.97	5
13	X	0.59	3
14	X	0.58	3
15	X	0.7	3
16	X	0.43	1
17	X	0.2	2
18	X	0.27	2
19	X	0.14	2
20	X	1.62	5.5
21	X	0.58	4
22	X	2.27	5.5
23	X	0.73	4
24	X	0.97	5.5
25	X	0.43	4
26	X	0.37	3
27	Z	-1.62	5
28	Z	-0.5	3
29	Z	-0.46	3
30	Z	-0.58	1
31	Z	-0.47	3
32	Z	-2.27	5
33	Z	-0.41	3
34	Z	-0.34	3
35	Z	-0.73	1
36	Z	-0.26	3
37	Z	-0.97	5
38	Z	-0.59	3
39	Z	-0.58	3
40	Z	-0.7	3
41	Z	-0.43	1
42	Z	-0.2	2
43	Z	-0.27	2
44	Z	-0.14	2
45	Z	-1.62	5.5
46	Z	-0.58	4
47	Z	-2.27	5.5
48	Z	-0.73	4
49	Z	-0.97	5.5
50	Z	-0.43	4



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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	X	0.52	3
2	X	2.44	5
3	X	0.55	3
4	X	0.48	3
5	X	0.82	1
6	X	0.52	3
7	X	2.44	5
8	X	0.55	3
9	X	0.48	3
10	X	0.82	1
11	X	0.29	3
12	X	1.06	5
13	X	0.74	3
14	X	0.74	3
15	X	0.79	3
16	X	0.49	1
17	X	0.29	2
18	X	0.29	2
19	X	0.17	2
20	X	2.44	5.5
21	X	0.82	4
22	X	2.44	5.5
23	X	0.82	4
24	X	1.06	5.5
25	X	0.49	4
26	Z	-0.3	3
27	Z	-1.41	5
28	Z	-0.32	3
29	Z	-0.28	3
30	Z	-0.47	1
31	Z	-0.3	3
32	Z	-1.41	5
33	Z	-0.32	3
34	Z	-0.28	3
35	Z	-0.47	1
36	Z	-0.17	3
37	Z	-0.61	5
38	Z	-0.42	3
39	Z	-0.42	3
40	Z	-0.45	3
41	Z	-0.29	1
42	Z	-0.17	2
43	Z	-0.17	2
44	Z	-0.1	2
45	Z	-1.41	5.5
46	Z	-0.47	4
47	Z	-1.41	5.5
48	Z	-0.47	4
49	Z	-0.61	5.5
50	Z	-0.29	4

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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	X	0.7	3
2	X	3.35	5
3	X	0.57	3
4	X	0.46	3
5	X	1.07	3
6	X	0.43	3
7	X	1.76	5
8	X	0.78	3
9	X	0.75	3





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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
10	MP-8	.069	1
11	MP-9	.043	3
12	MP-10	.176	.5
13	MP-10	.078	3
14	MP-10	.075	3
15	MP-11	.122	3
16	MP-12	.069	1
17	RRU-1	.039	2
18	RRU-2	.024	2
19	RRU-3	.024	2
20	MP-2	.335	5.5
21	MP-4	.107	4
22	MP-6	.176	5.5
23	MP-8	.069	4
24	MP-10	.176	5.5
25	MP-12	.069	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	.052	3
2	MP-2	.244	3
3	MP-2	.055	3
4	MP-2	.048	3
5	MP-4	.082	1
6	MP-5	.029	3
7	MP-6	.106	5
8	MP-6	.074	3
9	MP-6	.074	3
10	MP-8	.049	1
11	MP-9	.052	3
12	MP-10	.244	.5
13	MP-10	.055	3
14	MP-10	.048	3
15	MP-11	.161	3
16	MP-12	.082	1
17	RRU-1	.029	2
18	RRU-2	.017	2
19	RRU-3	.029	2
20	MP-2	.244	5.5
21	MP-4	.082	4
22	MP-6	.106	5.5
23	MP-8	.049	4
24	MP-10	.244	5.5
25	MP-10	.082	4
26	MP-1	.03	3
27	MP-2	.141	.5
28	MP-2	.032	3
29	MP-2	.028	3
30	MP-4	.047	1
31	MP-5	.017	3
32	MP-6	.061	5
33	MP-6	.042	3
34	MP-6	.042	3
35	MP-8	.029	1
36	MP-9	.03	3
37	MP-10	.141	.5
38	MP-10	.032	3
39	MP-10	.028	3
40	MP-11	.093	3
41	MP-12	.047	1
42	RRU-1	.017	2
43	RRU-2	.01	2



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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
44	RRU-3	.017	2
45	MP-2	.141	5.5
46	MP-4	.047	4
47	MP-6	.061	5.5
48	MP-8	.029	4
49	MP-10	.141	5.5
50	MP-12	.047	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	.037	3
2	MP-2	.162	.5
3	MP-2	.05	3
4	MP-2	.046	3
5	MP-4	.058	1
6	MP-5	.028	3
7	MP-6	.097	.5
8	MP-6	.059	3
9	MP-6	.058	3
10	MP-8	.043	1
11	MP-9	.047	3
12	MP-10	.227	.5
13	MP-10	.041	3
14	MP-10	.034	3
15	MP-11	.148	3
16	MP-12	.073	1
17	RRU-1	.02	2
18	RRU-2	.014	2
19	RRU-3	.027	2
20	MP-2	.162	5.5
21	MP-4	.058	4
22	MP-6	.097	5.5
23	MP-8	.043	4
24	MP-10	.227	5.5
25	MP-12	.073	4
26	MP-1	.037	3
27	MP-2	.162	.5
28	MP-2	.05	3
29	MP-2	.046	3
30	MP-4	.058	1
31	MP-5	.026	3
32	MP-6	.097	.5
33	MP-6	.059	3
34	MP-6	.058	3
35	MP-8	.043	1
36	MP-9	.047	3
37	MP-10	.227	.5
38	MP-10	.041	3
39	MP-10	.034	3
40	MP-11	.148	3
41	MP-12	.073	1
42	RRU-1	.02	2
43	RRU-2	.014	2
44	RRU-3	.027	2
45	MP-2	.162	5.5
46	MP-4	.058	4
47	MP-6	.097	5.5
48	MP-8	.043	4
49	MP-10	.227	5.5
50	MP-12	.073	4



Company : Tower Engineering Professionals, Inc.
 Designer : LEG
 Job Number : TEP No. 58885.317809
 Model Name : BU# 855662 - WINDSORCENTRAL

Nov 4, 2019
 9:45 AM
 Checked By: HBC

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	.021	3
2	X	.088	.5
3	X	.039	3
4	X	.038	3
5	X	.035	1
6	X	.021	3
7	X	.088	.5
8	X	.039	3
9	X	.038	3
10	X	.035	1
11	X	.035	3
12	X	.167	5
13	X	.028	3
14	X	.023	3
15	X	.109	3
16	X	.053	1
17	X	.012	2
18	X	.012	2
19	X	.019	2
20	X	.088	5.5
21	X	.035	4
22	X	.088	5.5
23	X	.035	4
24	X	.167	5.5
25	X	.053	4
26	X	.037	3
27	X	.152	.5
28	X	.067	3
29	X	.065	3
30	X	.06	1
31	X	.037	3
32	X	.152	.5
33	X	.067	3
34	X	.065	3
35	X	.06	1
36	X	.06	3
37	X	.29	5
38	X	.049	3
39	X	.04	3
40	X	.188	3
41	X	.092	1
42	X	.021	2
43	X	.021	2
44	X	.034	2
45	X	.152	5.5
46	X	.06	4
47	X	.152	5.5
48	X	.06	4
49	X	.29	5.5
50	X	.092	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	Z	.034	3
2	Z	.123	.5
3	Z	.085	3
4	Z	.085	3
5	Z	.057	1
6	Z	.061	3
7	Z	.282	.5
8	Z	.064	3
9	Z	.056	3



Company : Tower Engineering Professionals, Inc.
 Designer : LEG
 Job Number : TEP No. 58885.317809
 Model Name : BU# 855662 - WINDSORCENTRAL

Nov 4, 2019
 9:45 AM
 Checked By: HBC

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
10	Z	.094	1
11	Z	.061	3
12	Z	.282	.5
13	Z	.064	3
14	Z	.056	3
15	Z	.186	3
16	Z	.094	1
17	Z	.019	2
18	Z	.034	2
19	Z	.034	2
20	Z	.123	5.5
21	Z	.067	4
22	Z	.282	5.5
23	Z	.094	4
24	Z	.282	5.5
25	Z	.094	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-.021	3
2	X	-.088	.5
3	X	-.039	3
4	X	-.038	3
5	X	-.035	1
6	X	-.035	3
7	X	-.167	5
8	X	-.028	3
9	X	-.023	3
10	X	-.053	1
11	X	-.021	3
12	X	-.088	.5
13	X	-.039	3
14	X	-.038	3
15	X	-.061	3
16	X	-.035	1
17	X	-.012	2
18	X	-.019	2
19	X	-.012	2
20	X	-.088	5.5
21	X	-.035	4
22	X	-.167	5.5
23	X	-.053	4
24	X	-.088	5.5
25	X	-.035	4
26	Z	.037	3
27	Z	.152	.5
28	Z	.067	3
29	Z	.065	3
30	Z	.06	1
31	Z	.06	3
32	Z	.29	5
33	Z	.049	3
34	Z	.04	3
35	Z	.092	1
36	Z	.037	3
37	Z	.152	.5
38	Z	.067	3
39	Z	.065	3
40	Z	.106	3
41	Z	.06	1
42	Z	.021	2
43	Z	.034	2

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

Member Label	Direction	Magnitude(k,kl)	Location(ft,%)
44	Z	.021	2
45	Z	.152	5.5
46	Z	.06	4
47	Z	.29	5.5
48	Z	.092	4
49	Z	.152	5.5
50	Z	.06	4

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

Member Label	Direction	Magnitude(k,kl)	Location(ft,%)
1	X	-.037	3
2	X	-.162	5
3	X	-.05	3
4	X	-.046	3
5	X	-.058	1
6	X	-.047	3
7	X	-.227	5
8	X	-.041	3
9	X	-.034	3
10	X	-.073	1
11	X	-.026	3
12	X	-.097	5
13	X	-.059	3
14	X	-.058	3
15	X	-.07	3
16	X	-.043	1
17	X	-.02	2
18	X	-.027	2
19	X	-.014	2
20	X	-.162	5.5
21	X	-.058	4
22	X	-.227	5.5
23	X	-.073	4
24	X	-.097	5.5
25	X	-.043	4
26	X	-.037	3
27	X	-.162	5
28	X	.05	3
29	X	.046	3
30	X	.058	1
31	X	.047	3
32	X	.227	5
33	X	.041	3
34	X	.034	3
35	X	.073	1
36	X	.026	3
37	X	.097	5
38	X	.059	3
39	X	.058	3
40	X	.07	3
41	X	.043	1
42	X	.02	2
43	X	.027	2
44	X	.014	2
45	X	.162	5.5
46	X	.058	4
47	X	.227	5.5
48	X	.073	4
49	X	.097	5.5
50	X	.043	4

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

Member Label	Direction	Magnitude(k,kl)	Location(ft,%)
1	X	-.052	3
2	X	-.244	5
3	X	-.055	3
4	X	-.048	3
5	X	-.082	1
6	X	-.052	3
7	X	-.244	5
8	X	-.055	3
9	X	-.048	3
10	X	-.082	1
11	X	-.029	3
12	X	-.106	5
13	X	-.074	3
14	X	-.074	3
15	X	-.079	3
16	X	-.049	1
17	X	-.029	2
18	X	-.029	2
19	X	-.017	2
20	X	-.244	5.5
21	X	-.082	4
22	X	-.244	5.5
23	X	-.082	4
24	X	-.106	5.5
25	X	-.049	4
26	X	.03	3
27	X	.141	5
28	X	.032	3
29	X	.028	3
30	X	.047	1
31	X	.03	3
32	X	.141	5
33	X	.032	3
34	X	.028	3
35	X	.047	1
36	X	.017	3
37	X	.061	5
38	X	.042	3
39	X	.042	3
40	X	.045	3
41	X	.029	1
42	X	.017	2
43	X	.017	2
44	X	.01	2
45	X	.141	5.5
46	X	.047	4
47	X	.141	5.5
48	X	.047	4
49	X	.061	5.5
50	X	.029	4

Member Point Loads (BLC 18 - Ice Weight)

Member Label	Direction	Magnitude(k,kl)	Location(ft,%)
1	Y	-.075	3
2	Y	-.216	5
3	Y	-.108	3
4	Y	-.098	3
5	Y	-.085	1
6	Y	-.075	3
7	Y	-.216	5
8	Y	-.108	3
9	Y	-.098	3



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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
16	MP-12	-02	1
17	RRU-1	-01	2
18	RRU-2	-008	2
19	RRU-3	-01	2
20	MP-2	-05	5.5
21	MP-4	-02	4
22	MP-6	-027	5.5
23	MP-8	-015	4
24	MP-10	-05	5.5
25	MP-12	-02	4
26	MP-1	-009	3
27	MP-2	-029	5
28	MP-2	-009	3
29	MP-2	-009	3
30	MP-4	-012	1
31	MP-5	-006	3
32	MP-6	-016	5
33	MP-6	-012	3
34	MP-6	-012	3
35	MP-8	-008	1
36	MP-9	-009	3
37	MP-10	-029	5
38	MP-10	-009	3
39	MP-10	-009	3
40	MP-11	-022	3
41	MP-12	-012	1
42	RRU-1	-006	2
43	RRU-2	-004	2
44	RRU-3	-006	2
45	MP-2	-029	5.5
46	MP-4	-012	4
47	MP-6	-016	5.5
48	MP-8	-008	4
49	MP-10	-029	5.5
50	MP-12	-012	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	-012	3
2	MP-2	-035	5
3	MP-2	-014	3
4	MP-2	-013	3
5	MP-4	-015	1
6	MP-5	-009	3
7	MP-6	-024	5
8	MP-6	-016	3
9	MP-6	-016	3
10	MP-8	-012	1
11	MP-9	-014	3
12	MP-10	-046	5
13	MP-10	-012	3
14	MP-10	-011	3
15	MP-11	-034	3
16	MP-12	-018	1
17	RRU-1	-008	2
18	RRU-2	-006	2
19	RRU-3	-009	2
20	MP-2	-035	5.5
21	MP-4	-015	4
22	MP-6	-024	5.5
23	MP-8	-012	4
24	MP-10	-046	5.5



Member Point Loads (BLC 18 - Ice Weight) (Continued)

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
10	MP-8	-085	1
11	MP-9	-075	3
12	MP-10	-216	5
13	MP-10	-108	3
14	MP-10	-098	3
15	MP-11	-199	3
16	MP-12	-085	1
17	RRU-1	-048	2
18	RRU-2	-048	2
19	RRU-3	-048	2
20	MP-2	-216	5.5
21	MP-4	-085	4
22	MP-6	-216	5.5
23	MP-8	-085	4
24	MP-10	-216	5.5
25	MP-12	-085	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	-02	3
2	MP-2	-067	5
3	MP-2	-017	3
4	MP-2	-015	3
5	MP-4	-026	1
6	MP-5	-02	3
7	MP-6	-067	5
8	MP-6	-017	3
9	MP-6	-015	3
10	MP-8	-026	1
11	MP-9	-02	3
12	MP-10	-067	5
13	MP-10	-017	3
14	MP-10	-015	3
15	MP-11	-049	3
16	MP-12	-026	1
17	RRU-1	-013	2
18	RRU-2	-013	2
19	RRU-3	-013	2
20	MP-2	-067	5.5
21	MP-4	-026	4
22	MP-6	-067	5.5
23	MP-8	-026	4
24	MP-10	-067	5.5
25	MP-12	-026	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	-016	3
2	MP-2	-05	5
3	MP-2	-016	3
4	MP-2	-015	3
5	MP-4	-02	1
6	MP-5	-011	3
7	MP-6	-027	5
8	MP-6	-02	3
9	MP-6	-02	3
10	MP-8	-015	1
11	MP-9	-016	3
12	MP-10	-05	5
13	MP-10	-016	3
14	MP-10	-015	3
15	MP-11	-038	3



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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
16	MP-12	-02	1
17	RRU-1	-01	2
18	RRU-2	-008	2
19	RRU-3	-01	2
20	MP-2	-05	5.5
21	MP-4	-02	4
22	MP-6	-027	5.5
23	MP-8	-015	4
24	MP-10	-05	5.5
25	MP-12	-02	4
26	MP-1	-009	3
27	MP-2	-029	5
28	MP-2	-009	3
29	MP-2	-009	3
30	MP-4	-012	1
31	MP-5	-006	3
32	MP-6	-016	5
33	MP-6	-012	3
34	MP-6	-012	3
35	MP-8	-008	1
36	MP-9	-009	3
37	MP-10	-029	5
38	MP-10	-009	3
39	MP-10	-009	3
40	MP-11	-022	3
41	MP-12	-012	1
42	RRU-1	-006	2
43	RRU-2	-004	2
44	RRU-3	-006	2
45	MP-2	-029	5.5
46	MP-4	-012	4
47	MP-6	-016	5.5
48	MP-8	-008	4
49	MP-10	-029	5.5
50	MP-12	-012	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	MP-1	-012	3
2	MP-2	-035	5
3	MP-2	-014	3
4	MP-2	-013	3
5	MP-4	-015	1
6	MP-5	-009	3
7	MP-6	-024	5
8	MP-6	-016	3
9	MP-6	-016	3
10	MP-8	-012	1
11	MP-9	-014	3
12	MP-10	-046	5
13	MP-10	-012	3
14	MP-10	-011	3
15	MP-11	-034	3
16	MP-12	-018	1
17	RRU-1	-008	2
18	RRU-2	-006	2
19	RRU-3	-009	2
20	MP-2	-035	5.5
21	MP-4	-015	4
22	MP-6	-024	5.5
23	MP-8	-012	4
24	MP-10	-046	5.5



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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
34	Z	-0.18	3
35	MP-6	-0.17	1
36	MP-8	-0.17	3
37	MP-9	-0.17	3
38	MP-10	-0.58	5
39	MP-10	-0.15	3
40	MP-10	-0.13	3
41	MP-11	-0.43	3
42	MP-12	-0.22	1
43	RRU-1	-0.09	2
44	RRU-2	-0.09	2
45	RRU-3	-0.11	2
46	MP-2	-0.35	5.5
47	MP-4	-0.17	4
48	MP-6	-0.35	5.5
49	MP-8	-0.17	4
50	MP-10	-0.58	5.5
	MP-12	-0.22	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	Z	-0.13	3
2	MP-2	-0.32	5
3	MP-2	-0.23	3
4	MP-2	-0.23	3
5	MP-4	-0.17	1
6	MP-5	-0.13	3
7	MP-6	-0.32	5
8	MP-6	-0.23	3
9	MP-6	-0.23	3
10	MP-8	-0.17	1
11	MP-9	-0.13	3
12	MP-10	-0.32	5
13	MP-10	-0.23	3
14	MP-10	-0.23	3
15	MP-11	-0.25	3
16	MP-12	-0.17	1
17	RRU-1	-0.09	2
18	RRU-2	-0.09	2
19	RRU-3	-0.09	2
20	MP-2	-0.32	5.5
21	MP-4	-0.17	4
22	MP-6	-0.32	5.5
23	MP-8	-0.17	4
24	MP-10	-0.32	5.5
25	MP-12	-0.17	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	X	.007	3
2	MP-2	.02	5
3	MP-2	.011	3
4	MP-2	.011	3
5	MP-4	.01	1
6	MP-5	.01	3
7	MP-6	.034	5.5
8	MP-6	.009	3
9	MP-6	.007	3
10	MP-8	.013	1
11	MP-9	.007	3
12	MP-10	.02	5
13	MP-10	.011	3
14	MP-10	.011	3



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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
25	X	-0.18	4
26	MP-1	-0.12	3
27	MP-2	-0.35	5
28	MP-2	-0.14	3
29	MP-2	-0.13	3
30	MP-4	-0.15	1
31	MP-5	-0.09	3
32	MP-6	-0.24	5
33	MP-6	-0.16	3
34	MP-8	-0.12	3
35	MP-8	-0.12	1
36	MP-9	-0.14	3
37	MP-10	-0.46	5
38	MP-10	-0.12	3
39	MP-10	-0.11	3
40	MP-11	-0.34	3
41	MP-12	-0.18	1
42	RRU-1	-0.08	2
43	RRU-2	-0.08	2
44	RRU-3	-0.09	2
45	MP-2	-0.35	5.5
46	MP-4	-0.15	4
47	MP-6	-0.24	5.5
48	MP-8	-0.12	4
49	MP-10	-0.46	5.5
50	MP-12	-0.18	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	X	-0.07	3
2	MP-2	-0.2	5
3	MP-2	-0.11	3
4	MP-2	-0.11	3
5	MP-4	-0.1	1
6	MP-5	-0.07	3
7	MP-6	-0.2	5
8	MP-6	-0.11	3
9	MP-6	-0.11	3
10	MP-8	-0.1	1
11	MP-9	-0.1	3
12	MP-10	-0.34	5
13	MP-10	-0.09	3
14	MP-10	-0.07	3
15	MP-11	-0.25	3
16	MP-12	-0.13	1
17	RRU-1	-0.05	2
18	RRU-2	-0.05	2
19	RRU-3	-0.07	2
20	MP-2	-0.2	5.5
21	MP-4	-0.1	4
22	MP-6	-0.2	5.5
23	MP-8	-0.1	4
24	MP-10	-0.34	5.5
25	MP-12	-0.13	4
26	MP-1	-0.12	3
27	MP-2	-0.35	5
28	MP-2	-0.19	3
29	MP-2	-0.18	3
30	MP-4	-0.17	1
31	MP-5	-0.12	3
32	MP-6	-0.35	5
33	MP-6	-0.19	3



Company : Tower Engineering Professionals, Inc.
 Designer : LEG
 Job Number : TEP No. 58885.317809
 Model Name : BU# 855662 - WINDSORCENTRAL

Nov 4, 2019
 9:45 AM
 Checked By: HBC

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

Member Label	Direction	Magnitudelt, k[d]	Location(fft,%)
15	X	.016	3
16	X	.01	1
17	X	.005	2
18	X	.007	2
19	X	.005	2
20	X	.02	5.5
21	X	.01	4
22	X	.034	5.5
23	X	.013	4
24	X	.02	5.5
25	X	.01	4
26	Z	-.012	3
27	Z	-.035	.5
28	Z	-.019	3
29	Z	-.018	3
30	Z	-.017	1
31	Z	-.017	3
32	Z	-.058	5
33	Z	-.015	3
34	Z	-.013	3
35	Z	-.022	1
36	Z	-.012	3
37	Z	-.035	5
38	Z	-.019	3
39	Z	-.018	3
40	Z	-.027	1
41	Z	-.017	3
42	Z	-.009	2
43	Z	-.011	2
44	Z	-.009	2
45	Z	-.035	5.5
46	Z	-.017	4
47	Z	-.058	5.5
48	Z	-.022	4
49	Z	-.035	5.5
50	Z	-.017	4

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

Member Label	Direction	Magnitudelt, k[d]	Location(fft,%)
1	X	.012	3
2	X	.035	.5
3	X	.014	3
4	X	.013	3
5	X	.015	1
6	X	.014	3
7	X	.046	.5
8	X	.012	3
9	X	.011	3
10	X	.018	1
11	X	.009	3
12	X	.024	5
13	X	.016	3
14	X	.016	3
15	X	.019	3
16	X	.012	1
17	X	.008	2
18	X	.009	2
19	X	.006	2
20	X	.035	5.5
21	X	.015	4
22	X	.046	5.5
23	X	.018	4



Company : Tower Engineering Professionals, Inc.
 Designer : LEG
 Job Number : TEP No. 58885.317809
 Model Name : BU# 855662 - WINDSORCENTRAL

Nov 4, 2019
 9:45 AM
 Checked By: HBC

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

Member Label	Direction	Magnitudelt, k[d]	Location(fft,%)
24	X	.024	5.5
25	X	.012	4
26	Z	-.012	3
27	Z	-.035	.5
28	Z	-.014	3
29	Z	-.013	3
30	Z	-.015	1
31	Z	-.014	3
32	Z	-.046	.5
33	Z	-.012	3
34	Z	-.011	3
35	Z	-.018	1
36	Z	-.009	3
37	Z	-.024	.5
38	Z	-.016	3
39	Z	-.016	3
40	Z	-.019	3
41	Z	-.012	1
42	Z	-.008	2
43	Z	-.009	2
44	Z	-.006	2
45	Z	-.035	5.5
46	Z	-.015	4
47	Z	-.046	5.5
48	Z	-.018	4
49	Z	-.024	5.5
50	Z	-.012	4

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

Member Label	Direction	Magnitudelt, k[d]	Location(fft,%)
1	X	.016	3
2	X	.05	5
3	X	.016	3
4	X	.015	3
5	X	.02	1
6	X	.016	3
7	X	.05	.5
8	X	.016	3
9	X	.015	3
10	X	.02	1
11	X	.011	3
12	X	.027	.5
13	X	.02	3
14	X	.02	3
15	X	.022	3
16	X	.015	1
17	X	.01	2
18	X	.01	2
19	X	.008	2
20	X	.05	5.5
21	X	.02	4
22	X	.05	5.5
23	X	.02	4
24	X	.027	5.5
25	X	.015	4
26	X	-.009	3
27	Z	-.029	5
28	Z	-.009	3
29	Z	-.009	3
30	Z	-.012	1
31	Z	-.009	3
32	Z	-.029	.5



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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
33	Z	-.009	3
34	MP-6	-.009	3
35	MP-8	-.012	1
36	MP-9	-.006	3
37	MP-10	-.016	5
38	MP-10	-.012	3
39	MP-10	-.012	3
40	MP-11	-.013	3
41	MP-12	-.008	1
42	RRU-1	-.006	2
43	RRU-2	-.006	2
44	RRU-3	-.004	2
45	MP-2	-.029	5.5
46	MP-4	-.012	4
47	MP-6	-.029	5.5
48	MP-8	-.012	4
49	MP-10	-.016	5.5
50	MP-12	-.008	4

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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	MP-1	.02	3
2	MP-2	.067	5
3	MP-2	.017	3
4	MP-2	.015	3
5	MP-4	.026	1
6	MP-5	.02	3
7	MP-6	.067	.5
8	MP-6	.017	3
9	MP-6	.015	3
10	MP-8	.026	1
11	MP-9	.02	3
12	MP-10	.067	5
13	MP-10	.017	3
14	MP-10	.015	3
15	MP-11	.049	3
16	MP-12	.026	1
17	RRU-1	.013	2
18	RRU-2	.013	2
19	RRU-3	.013	2
20	MP-2	.067	5.5
21	MP-4	.026	4
22	MP-6	.067	5.5
23	MP-8	.026	4
24	MP-10	.067	5.5
25	MP-12	.026	4

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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	MP-1	.016	3
2	MP-2	.05	.5
3	MP-2	.016	3
4	MP-2	.015	3
5	MP-4	.02	1
6	MP-5	.011	3
7	MP-6	.027	.5
8	MP-6	.02	3
9	MP-6	.02	3
10	MP-8	.015	1
11	MP-9	.016	3
12	MP-10	.05	.5
13	MP-10	.016	3



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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
14	MP-10	.015	3
15	MP-11	.038	3
16	MP-12	.02	1
17	RRU-1	.01	2
18	RRU-2	.008	2
19	RRU-3	.01	2
20	MP-2	.05	5.5
21	MP-4	.02	4
22	MP-6	.027	5.5
23	MP-8	.015	4
24	MP-10	.05	5.5
25	MP-12	.02	4
26	MP-1	.009	3
27	MP-2	.029	.5
28	MP-2	.009	3
29	MP-2	.009	3
30	MP-4	.012	1
31	MP-5	.006	3
32	MP-6	.016	.3
33	MP-6	.012	3
34	MP-6	.012	3
35	MP-8	.008	1
36	MP-9	.009	3
37	MP-10	.029	3
38	MP-10	.009	5
39	MP-10	.009	3
40	MP-11	.022	3
41	MP-12	.012	1
42	RRU-1	.006	2
43	RRU-2	.004	2
44	RRU-3	.006	2
45	MP-2	.029	5.5
46	MP-4	.012	4
47	MP-6	.016	4
48	MP-8	.008	4
49	MP-10	.029	5.5
50	MP-12	.012	4

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

Member Label	Direction	Magnitude(k,kl)	Location(fft,%)
1	MP-1	.012	3
2	MP-2	.035	.5
3	MP-2	.014	3
4	MP-2	.013	3
5	MP-4	.015	1
6	MP-5	.009	3
7	MP-6	.024	.5
8	MP-6	.016	3
9	MP-6	.016	3
10	MP-8	.012	1
11	MP-9	.014	3
12	MP-10	.046	.5
13	MP-10	.012	3
14	MP-10	.011	3
15	MP-11	.034	3
16	MP-12	.018	1
17	RRU-1	.008	2
18	RRU-2	.006	2
19	RRU-3	.009	2
20	MP-2	.035	5.5
21	MP-4	.015	4
22	MP-6	.024	5.5

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
23	X	.012	4
24	X	.046	5.5
25	X	.018	4
26	X	.012	3
27	Z	.035	5
28	Z	.014	3
29	Z	.013	3
30	Z	.015	1
31	Z	.009	3
32	Z	.024	.5
33	Z	.016	3
34	Z	.016	3
35	Z	.012	1
36	Z	.014	3
37	Z	.046	.5
38	Z	.012	3
39	Z	.011	3
40	Z	.034	3
41	Z	.018	1
42	Z	.008	2
43	Z	.006	2
44	Z	.009	2
45	Z	.035	5.5
46	Z	.015	4
47	Z	.024	5.5
48	Z	.012	4
49	Z	.046	5.5
50	Z	.018	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
32	Z	.035	.5
33	Z	.019	3
34	Z	.018	3
35	Z	.017	1
36	Z	.017	3
37	Z	.058	.5
38	Z	.015	3
39	Z	.013	3
40	Z	.043	3
41	Z	.022	1
42	Z	.009	2
43	Z	.009	2
44	Z	.011	2
45	Z	.035	5.5
46	Z	.017	4
47	Z	.035	5.5
48	Z	.017	4
49	Z	.058	5.5
50	Z	.022	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	Z	.013	3
2	Z	.032	.5
3	Z	.023	3
4	Z	.023	3
5	Z	.017	1
6	Z	.013	3
7	Z	.032	.5
8	Z	.023	3
9	Z	.023	3
10	Z	.017	1
11	Z	.013	3
12	Z	.032	.5
13	Z	.023	3
14	Z	.023	3
15	Z	.025	3
16	Z	.017	1
17	Z	.009	2
18	Z	.009	2
19	Z	.009	2
20	Z	.032	5.5
21	Z	.017	4
22	Z	.032	5.5
23	Z	.017	4
24	Z	.032	5.5
25	Z	.017	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	.007	3
2	X	.02	5
3	X	.011	3
4	X	.011	3
5	X	.01	1
6	X	.007	3
7	X	.02	5
8	X	.011	3
9	X	.011	3
10	X	.01	1
11	X	.01	3
12	X	.034	.5
13	X	.009	3
14	X	.007	3
15	X	.025	3
16	X	.013	1
17	X	.005	2
18	X	.005	2
19	X	.007	2
20	X	.02	5.5
21	X	.01	4
22	X	.02	5.5
23	X	.01	4
24	X	.034	5.5
25	X	.013	4
26	Z	.012	3
27	Z	.035	5
28	Z	.019	3
29	Z	.018	3
30	Z	.017	1
31	Z	.012	3

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	Z	.013	3
2	Z	.032	.5
3	Z	.023	3
4	Z	.023	3
5	Z	.017	1
6	Z	.013	3
7	Z	.032	.5
8	Z	.023	3
9	Z	.023	3
10	Z	.017	1
11	Z	.013	3
12	Z	.032	.5
13	Z	.023	3
14	Z	.023	3
15	Z	.025	3
16	Z	.017	1
17	Z	.009	2
18	Z	.009	2
19	Z	.009	2
20	Z	.032	5.5
21	Z	.017	4
22	Z	.032	5.5
23	Z	.017	4
24	Z	.032	5.5
25	Z	.017	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	.007	3
2	X	.02	5
3	X	.011	3
4	X	.011	3
5	X	.01	1
6	X	.007	3
7	X	.02	5
8	X	.011	3
9	X	.011	3
10	X	.01	1
11	X	.01	3
12	X	.034	.5
13	X	.009	3
14	X	.007	3
15	X	.025	3
16	X	.013	1
17	X	.005	2
18	X	.005	2
19	X	.007	2
20	X	.02	5.5
21	X	.01	4
22	X	.02	5.5
23	X	.01	4
24	X	.034	5.5
25	X	.013	4
26	Z	.012	3
27	Z	.035	5
28	Z	.019	3
29	Z	.018	3
30	Z	.017	1
31	Z	.012	3

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
13	X	-0.11	3
14	X	-0.11	3
15	X	-0.16	3
16	X	-0.1	1
17	X	-0.05	2
18	X	-0.07	2
19	X	-0.05	2
20	X	-0.2	5.5
21	X	-0.1	4
22	X	-0.34	5.5
23	X	-0.13	4
24	X	-0.2	5.5
25	X	-0.1	4
26	Z	.012	3
27	Z	.035	.5
28	Z	.019	3
29	Z	.018	3
30	Z	.017	1
31	Z	.017	3
32	Z	.058	.5
33	Z	.015	3
34	Z	.013	3
35	Z	.022	1
36	Z	.012	3
37	Z	.035	.5
38	Z	.019	3
39	Z	.018	3
40	Z	.027	3
41	Z	.017	1
42	Z	.009	2
43	Z	.011	2
44	Z	.009	2
45	Z	.035	5.5
46	Z	.017	4
47	Z	.058	5.5
48	Z	.022	4
49	Z	.035	5.5
50	Z	.017	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	X	-0.12	3
2	X	-0.35	.5
3	X	-0.14	3
4	X	-0.13	3
5	X	-0.15	1
6	X	-0.14	3
7	X	-0.46	.5
8	X	-0.12	3
9	X	-0.11	3
10	X	-0.18	1
11	X	-0.09	3
12	X	-0.24	.5
13	X	-0.16	3
14	X	-0.16	3
15	X	-0.19	3
16	X	-0.12	1
17	X	-0.08	2
18	X	-0.09	2
19	X	-0.06	2
20	X	-0.35	5.5
21	X	-0.15	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
22	X	-0.46	5.5
23	X	-0.18	4
24	X	-0.24	5.5
25	X	-0.12	4
26	Z	.012	3
27	Z	.035	.5
28	Z	.014	3
29	Z	.013	3
30	Z	.015	1
31	Z	.014	3
32	Z	.046	.5
33	Z	.012	3
34	Z	.011	3
35	Z	.018	1
36	Z	.009	3
37	Z	.024	.5
38	Z	.016	3
39	Z	.016	3
40	Z	.019	3
41	Z	.012	1
42	Z	.008	2
43	Z	.009	2
44	Z	.006	2
45	Z	.035	5.5
46	Z	.015	4
47	Z	.046	5.5
48	Z	.018	4
49	Z	.024	5.5
50	Z	.012	4

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

Member Label	Direction	Magnitude(k, kdf)	Location(ft, %)
1	X	-0.16	3
2	X	-0.5	.5
3	X	-0.16	3
4	X	-0.15	3
5	X	-0.2	1
6	X	-0.16	3
7	X	-0.5	.5
8	X	-0.16	3
9	X	-0.15	3
10	X	-0.2	1
11	X	-0.11	3
12	X	-0.27	.5
13	X	-0.2	3
14	X	-0.2	3
15	X	-0.22	3
16	X	-0.15	1
17	X	-0.1	2
18	X	-0.08	2
19	X	-0.08	2
20	X	-0.5	5.5
21	X	-0.2	4
22	X	-0.5	5.5
23	X	-0.2	4
24	X	-0.27	5.5
25	X	-0.15	4
26	Z	.009	3
27	Z	.029	.5
28	Z	.009	3
29	Z	.009	3
30	Z	.012	1



Member Point Loads (BLC 38 - Seismic Load Z) (Continued)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
12	Z	-0.041	.5
13	Z	-0.084	3
14	Z	-0.07	3
15	Z	-0.044	3
16	Z	-0.005	1
17	Z	-0.019	2
18	Z	-0.019	2
19	Z	-0.019	2
20	Z	-0.041	5.5
21	Z	-0.005	4
22	Z	-0.041	5.5
23	Z	-0.005	4
24	Z	-0.041	5.5
25	Z	-0.005	4

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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
31	Z	.009	3
32	Z	.029	.5
33	Z	.009	3
34	Z	.009	3
35	Z	.012	1
36	Z	.006	3
37	Z	.016	.5
38	Z	.012	3
39	Z	.012	3
40	Z	.013	3
41	Z	.008	1
42	Z	.006	2
43	Z	.006	2
44	Z	.004	2
45	Z	.029	5.5
46	Z	.012	4
47	Z	.029	5.5
48	Z	.012	4
49	Z	.016	5.5
50	Z	.008	4

Member Point Loads (BLC 37 - Seismic Load X)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.023	5
2	X	-0.041	3
3	X	-0.084	3
4	X	-0.07	3
5	X	-0.005	1
6	X	-0.023	3
7	X	-0.041	5
8	X	-0.084	3
9	X	-0.07	3
10	X	-0.005	1
11	X	-0.023	3
12	X	-0.041	5
13	X	-0.084	3
14	X	-0.07	3
15	X	-0.044	3
16	X	-0.005	1
17	X	-0.019	2
18	X	-0.019	2
19	X	-0.019	2
20	X	-0.041	5.5
21	X	-0.005	4
22	X	-0.041	5.5
23	X	-0.005	4
24	X	-0.041	5.5
25	X	-0.005	4

Member Point Loads (BLC 38 - Seismic Load Z)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	Z	-0.023	3
2	Z	-0.041	5
3	Z	-0.084	3
4	Z	-0.07	3
5	Z	-0.005	1
6	Z	-0.023	3
7	Z	-0.041	5
8	Z	-0.084	3
9	Z	-0.07	3
10	Z	-0.005	1
11	Z	-0.023	3



Member Point Loads (BLC 38 - Seismic Load Z) (Continued)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
12	Z	-0.041	.5
13	Z	-0.084	3
14	Z	-0.07	3
15	Z	-0.044	3
16	Z	-0.005	1
17	Z	-0.019	2
18	Z	-0.019	2
19	Z	-0.019	2
20	Z	-0.041	5.5
21	Z	-0.005	4
22	Z	-0.041	5.5
23	Z	-0.005	4
24	Z	-0.041	5.5
25	Z	-0.005	4

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

Member Label	Direction	Start Magnitude(k/ft, k/ft-ft)	End Magnitude(k/ft, k/ft-ft)	Start Location(ft, %)	End Location(ft, %)
1	X	-0.11	-0.11	0	0
2	X	-0.11	-0.11	0	0
3	X	-0.11	-0.11	0	0
4	X	-0.11	-0.11	0	0
5	X	-0.11	-0.11	0	0
6	X	-0.005	-0.005	0	0
7	X	-0.11	-0.11	0	0
8	X	-0.11	-0.11	0	0
9	X	-0.005	-0.005	0	0
10	X	-0.11	-0.11	0	0
11	X	-0.11	-0.11	0	0
12	X	-0.007	-0.007	0	0
13	X	-0.007	-0.007	0	0
14	X	0	0	0	0
15	X	-0.009	-0.009	0	0
16	X	-0.009	-0.009	0	0
17	X	-0.021	-0.021	0	0
18	X	-0.012	-0.012	0	0
19	X	-0.01	-0.01	0	0
20	X	-0.005	-0.005	0	0
21	X	-0.005	-0.005	0	0
22	X	-0.005	-0.005	0	0
23	X	-0.005	-0.005	0	0
24	X	-0.011	-0.011	0	0
25	X	-0.005	-0.005	0	0
26	X	-0.11	-0.11	0	0
27	X	-0.005	-0.005	0	0
28	X	-0.005	-0.005	0	0
29	X	-0.005	-0.005	0	0
30	X	-0.028	-0.028	0	0
31	X	-0.028	-0.028	0	0
32	X	-0.032	-0.032	0	0
33	X	-0.014	-0.014	0	0
34	X	-0.014	-0.014	0	0
35	X	-0.014	-0.014	0	0
36	X	-0.014	-0.014	0	0
37	X	-0.014	-0.014	0	0
38	X	-0.014	-0.014	0	0
39	X	0	0	0	0
40	X	0	0	0	0
41	X	-0.019	-0.019	0	0
42	X	-0.019	-0.019	0	0
43	X	-0.019	-0.019	0	0
44	X	-0.019	-0.019	0	0



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

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
31	Z	.009	3
32	Z	.029	.5
33	Z	.009	3
34	Z	.009	3
35	Z	.012	1
36	Z	.006	3
37	Z	.016	.5
38	Z	.012	3
39	Z	.012	3
40	Z	.013	3
41	Z	.008	1
42	Z	.006	2
43	Z	.006	2
44	Z	.004	2
45	Z	.029	5.5
46	Z	.012	4
47	Z	.029	5.5
48	Z	.012	4
49	Z	.016	5.5
50	Z	.008	4

Member Point Loads (BLC 37 - Seismic Load X)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	X	-0.023	5
2	X	-0.041	3
3	X	-0.084	3
4	X	-0.07	3
5	X	-0.005	1
6	X	-0.023	3
7	X	-0.041	5
8	X	-0.084	3
9	X	-0.07	3
10	X	-0.005	1
11	X	-0.023	3
12	X	-0.041	5
13	X	-0.084	3
14	X	-0.07	3
15	X	-0.044	3
16	X	-0.005	1
17	X	-0.019	2
18	X	-0.019	2
19	X	-0.019	2
20	X	-0.041	5.5
21	X	-0.005	4
22	X	-0.041	5.5
23	X	-0.005	4
24	X	-0.041	5.5
25	X	-0.005	4

Member Point Loads (BLC 38 - Seismic Load Z)

Member Label	Direction	Magnitude(k, k-ft)	Location(ft, %)
1	Z	-0.023	3
2	Z	-0.041	5
3	Z	-0.084	3
4	Z	-0.07	3
5	Z	-0.005	1
6	Z	-0.023	3
7	Z	-0.041	5
8	Z	-0.084	3
9	Z	-0.07	3
10	Z	-0.005	1
11	Z	-0.023	3



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
45	RRU-2	X	-0.09	0	%100
46	RRU-1	X	-0.09	0	%100
47	RRU-3	X	-0.09	0	%100
48	MP-9	X	-0.11	0	%100
49	MP-12	X	-0.11	0	%100
50	MP-5	X	-0.11	0	%100
51	MP-8	X	-0.11	0	%100
52	FFHR	X	-0.11	0	%100
53	MP-3	X	-0.11	0	%100
54	FFHR	X	-0.11	0	%100
55	K1	X	-0.05	0	%100
56	SF2-HR	X	-0.05	0	%100
57	K2	X	-0.19	0	%100
58	K3	X	-0.19	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-0.08	0	%100
2	MP-1	X	-0.09	0	%100
3	MP-2	X	-0.09	0	%100
4	MP-3	X	-0.09	0	%100
5	MP-4	X	-0.09	0	%100
6	SF1-TH	X	-0.08	0	%100
7	MP-6	X	-0.09	0	%100
8	MP-7	X	0	0	%100
9	SF2-TH	X	-0.09	0	%100
10	MP-10	X	-0.09	0	%100
11	MP-11	X	-0.09	0	%100
12	SA-1	X	-0.03	0	%100
13	SA-2	X	-0.07	0	%100
14	SA-3	X	-0.04	0	%100
15	GSI-1	X	-0.13	0	%100
16	GSI-2	X	0	0	%100
17	GSI-3	X	-0.16	0	%100
18	GSI-6	X	-0.09	0	%100
19	GSI-9	X	-0.08	0	%100
20	M24	X	-0.07	0	%100
21	M25	X	-3.8e-5	0	%100
22	GSI-4	X	-0.08	0	%100
23	M28	X	-3.8e-5	0	%100
24	M29	X	-0.08	0	%100
25	GSI-5	X	0	0	%100
26	M32	X	-0.08	0	%100
27	M33	X	-0.07	0	%100
28	GSI-7	X	-0.07	0	%100
29	GSI-8	X	0	0	%100
30	M38	X	-0.21	0	%100
31	M39	X	-0.21	0	%100
32	M44	X	-0.24	0	%100
33	M49	X	-0.2	0	%100
34	M50	X	-0.2	0	%100
35	M55	X	-0.21	0	%100
36	M60	X	0	0	%100
37	M61	X	0	0	%100
38	M66	X	0	0	%100
39	SA-3R	X	-0.08	0	%100
40	SA-3L	X	-0.08	0	%100
41	SA-1R	X	-0.1	0	%100
42	SA-1L	X	-0.1	0	%100
43	SA-2R	X	-0.19	0	%100
44	SA-2L	X	-0.19	0	%100
45	RRU-2	X	-0.08	0	%100
46	RRU-1	X	-0.08	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
47	RRU-3	X	-0.08	0	%100
48	MP-9	X	-0.09	0	%100
49	MP-12	X	-0.09	0	%100
50	MP-5	X	-0.09	0	%100
51	MP-8	X	-0.09	0	%100
52	FFHR	X	-0.08	0	%100
53	SF1-HR	X	0	0	%100
54	SF2-HR	X	0	0	%100
55	K1	X	-0.16	0	%100
56	K2	X	-0.16	0	%100
57	K3	X	-0.16	0	%100
58	FFTH	X	-0.05	0	%100
59	MP-1	Z	-0.05	0	%100
60	MP-2	Z	-0.05	0	%100
61	MP-3	Z	-0.05	0	%100
62	MP-4	Z	-0.05	0	%100
63	SF1-TH	Z	-0.05	0	%100
64	MP-6	Z	-0.05	0	%100
65	MP-7	Z	-0.05	0	%100
66	SF2-TH	Z	0	0	%100
67	MP-10	Z	-0.05	0	%100
68	MP-11	Z	-0.05	0	%100
69	SA-1	Z	-0.02	0	%100
70	SA-2	Z	-0.04	0	%100
71	SA-3	Z	-0.02	0	%100
72	GSI-1	Z	-0.09	0	%100
73	GSI-2	Z	0	0	%100
74	GSI-3	Z	-0.09	0	%100
75	GSI-6	Z	-0.05	0	%100
76	GSI-9	Z	-0.04	0	%100
77	M24	Z	-0.05	0	%100
78	M25	Z	-2.4e-5	0	%100
79	GSI-4	Z	-0.05	0	%100
80	M28	Z	-2.4e-5	0	%100
81	M29	Z	-0.04	0	%100
82	GSI-5	Z	0	0	%100
83	M32	Z	-0.04	0	%100
84	M33	Z	-0.04	0	%100
85	GSI-7	Z	-0.04	0	%100
86	GSI-8	Z	0	0	%100
87	M38	Z	-0.12	0	%100
88	M39	Z	-0.12	0	%100
89	M44	Z	-0.14	0	%100
90	M49	Z	-0.12	0	%100
91	M50	Z	-0.12	0	%100
92	M55	Z	-0.14	0	%100
93	M60	Z	0	0	%100
94	M61	Z	0	0	%100
95	M66	Z	0	0	%100
96	SA-3R	Z	-0.06	0	%100
97	SA-3L	Z	-0.06	0	%100
98	SA-1R	Z	-0.05	0	%100
99	SA-1L	Z	-0.05	0	%100
100	SA-2R	Z	-0.1	0	%100
101	SA-2L	Z	-0.1	0	%100
102	RRU-2	Z	-0.05	0	%100
103	RRU-1	Z	-0.05	0	%100
104	RRU-3	Z	-0.05	0	%100
105	MP-9	Z	-0.05	0	%100
106	MP-12	Z	-0.05	0	%100
107	MP-5	Z	-0.05	0	%100
108	MP-8	Z	-0.05	0	%100
109	FFHR	Z	-0.05	0	%100



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

Member Label	Direction	Start Magnitude(k/ft....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
110	SF1-HR	-0.05	-0.05	0	%100
111	SF2-HR	0	0	0	%100
112	K1	-0.09	-0.09	0	%100
113	K2	-0.09	-0.09	0	%100
114	K3	-0.09	-0.09	0	%100

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

Member Label	Direction	Start Magnitude(k/ft....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	-0.05	-0.05	0	%100
2	MP-1	-0.08	-0.08	0	%100
3	MP-2	-0.08	-0.08	0	%100
4	MP-3	-0.08	-0.08	0	%100
5	MP-4	-0.08	-0.08	0	%100
6	SF1-TH	-0.07	-0.07	0	%100
7	MP-6	-0.08	-0.08	0	%100
8	MP-7	-0.08	-0.08	0	%100
9	SF2-TH	-0.02	-0.02	0	%100
10	MP-10	-0.08	-0.08	0	%100
11	MP-11	-0.08	-0.08	0	%100
12	SA-1	-0.01	-0.01	0	%100
13	SA-2	-0.05	-0.05	0	%100
14	SA-3	-0.04	-0.04	0	%100
15	GSI-1	-0.12	-0.12	0	%100
16	GSI-2	-0.03	-0.03	0	%100
17	GSI-3	-0.01	-0.01	0	%100
18	GSI-6	-0.06	-0.06	0	%100
19	GSI-9	-0.05	-0.05	0	%100
20	M24	-0.06	-0.06	0	%100
21	M25	-0.02	-0.02	0	%100
22	GSI-4	-0.07	-0.07	0	%100
23	M28	-0.02	-0.02	0	%100
24	M29	-0.05	-0.05	0	%100
25	GSI-5	-0.02	-0.02	0	%100
26	M32	-0.05	-0.05	0	%100
27	M33	-0.06	-0.06	0	%100
28	GSI-7	-0.06	-0.06	0	%100
29	GSI-8	-0.02	-0.02	0	%100
30	M38	-0.14	-0.14	0	%100
31	M39	-0.14	-0.14	0	%100
32	M44	-0.16	-0.16	0	%100
33	M49	-0.19	-0.19	0	%100
34	M50	-0.19	-0.19	0	%100
35	M55	-0.19	-0.19	0	%100
36	M60	-0.05	-0.05	0	%100
37	M61	-0.05	-0.05	0	%100
38	M66	-0.05	-0.05	0	%100
39	SA-3R	-0.09	-0.09	0	%100
40	SA-3L	-0.09	-0.09	0	%100
41	SA-1R	-0.04	-0.04	0	%100
42	SA-1L	-0.04	-0.04	0	%100
43	SA-2R	-0.15	-0.15	0	%100
44	SA-2L	-0.15	-0.15	0	%100
45	RRU-2	-0.06	-0.06	0	%100
46	RRU-1	-0.06	-0.06	0	%100
47	RRU-3	-0.06	-0.06	0	%100
48	MP-9	-0.08	-0.08	0	%100
49	MP-12	-0.08	-0.08	0	%100
50	MP-5	-0.08	-0.08	0	%100
51	MP-8	-0.08	-0.08	0	%100
52	FFHR	-0.05	-0.05	0	%100
53	SF1-HR	-0.07	-0.07	0	%100
54	SF2-HR	-0.02	-0.02	0	%100



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

Member Label	Direction	Start Magnitude(k/ft....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
55	K1	-0.13	-0.13	0	%100
56	K2	-0.13	-0.13	0	%100
57	K3	-0.13	-0.13	0	%100
58	FFTH	-0.05	-0.05	0	%100
59	MP-1	-0.08	-0.08	0	%100
60	MP-2	-0.08	-0.08	0	%100
61	MP-3	-0.08	-0.08	0	%100
62	MP-4	-0.08	-0.08	0	%100
63	SF1-TH	-0.07	-0.07	0	%100
64	MP-6	-0.08	-0.08	0	%100
65	MP-7	-0.08	-0.08	0	%100
66	SF2-TH	-0.02	-0.02	0	%100
67	MP-10	-0.08	-0.08	0	%100
68	MP-11	-0.08	-0.08	0	%100
69	SA-1	-0.02	-0.02	0	%100
70	SA-2	-0.06	-0.06	0	%100
71	SA-3	-0.04	-0.04	0	%100
72	GSI-1	-0.14	-0.14	0	%100
73	GSI-2	-0.04	-0.04	0	%100
74	GSI-3	-0.01	-0.01	0	%100
75	GSI-6	-0.06	-0.06	0	%100
76	GSI-9	-0.05	-0.05	0	%100
77	M24	-0.07	-0.07	0	%100
78	M25	-0.02	-0.02	0	%100
79	GSI-4	-0.08	-0.08	0	%100
80	M28	-0.02	-0.02	0	%100
81	M29	-0.05	-0.05	0	%100
82	GSI-5	-0.02	-0.02	0	%100
83	M32	-0.05	-0.05	0	%100
84	M33	-0.07	-0.07	0	%100
85	GSI-7	-0.07	-0.07	0	%100
86	GSI-8	-0.02	-0.02	0	%100
87	M38	-0.14	-0.14	0	%100
88	M39	-0.14	-0.14	0	%100
89	M44	-0.16	-0.16	0	%100
90	M49	-0.19	-0.19	0	%100
91	M50	-0.19	-0.19	0	%100
92	M55	-0.21	-0.21	0	%100
93	M60	-0.05	-0.05	0	%100
94	M61	-0.05	-0.05	0	%100
95	M66	-0.06	-0.06	0	%100
96	SA-3R	-0.11	-0.11	0	%100
97	SA-3L	-0.11	-0.11	0	%100
98	SA-1R	-0.04	-0.04	0	%100
99	SA-1L	-0.04	-0.04	0	%100
100	SA-2R	-0.14	-0.14	0	%100
101	SA-2L	-0.14	-0.14	0	%100
102	RRU-2	-0.06	-0.06	0	%100
103	RRU-1	-0.06	-0.06	0	%100
104	RRU-3	-0.06	-0.06	0	%100
105	MP-9	-0.08	-0.08	0	%100
106	MP-12	-0.08	-0.08	0	%100
107	MP-5	-0.08	-0.08	0	%100
108	MP-8	-0.08	-0.08	0	%100
109	FFHR	-0.05	-0.05	0	%100
110	SF1-HR	-0.07	-0.07	0	%100
111	SF2-HR	-0.02	-0.02	0	%100
112	K1	-0.13	-0.13	0	%100
113	K2	-0.13	-0.13	0	%100
114	K3	-0.13	-0.13	0	%100

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

Member Label	Direction	Start Magnitude(k/ft....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
115	K1	-0.13	-0.13	0	%100
116	K2	-0.13	-0.13	0	%100
117	K3	-0.13	-0.13	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
64	MP-6	Z	-0.09	0	%100
65	MP-7	Z	-0.09	0	%100
66	SF2-TH	Z	-0.05	0	%100
67	MP-10	Z	-0.09	0	%100
68	MP-11	Z	-0.09	0	%100
69	SA-1	Z	0	0	%100
70	SA-2	Z	-0.06	0	%100
71	SA-3	Z	-0.06	0	%100
72	GSI-1	Z	-0.17	0	%100
73	GSI-2	Z	-0.09	0	%100
74	GSI-3	Z	-0.09	0	%100
75	GSI-6	Z	-0.05	0	%100
76	GSI-9	Z	-0.04	0	%100
77	M24	Z	-0.09	0	%100
78	M25	Z	-0.04	0	%100
79	GSI-4	Z	-0.01	0	%100
80	M28	Z	-0.05	0	%100
81	M29	Z	-0.04	0	%100
82	GSI-5	Z	-0.05	0	%100
83	M32	Z	-0.04	0	%100
84	M33	Z	-0.09	0	%100
85	GSI-7	Z	-0.08	0	%100
86	GSI-8	Z	-0.04	0	%100
87	M38	Z	-0.12	0	%100
88	M39	Z	-0.12	0	%100
89	M44	Z	-0.14	0	%100
90	M49	Z	-0.24	0	%100
91	M50	Z	-0.24	0	%100
92	M55	Z	-0.27	0	%100
93	M60	Z	-0.12	0	%100
94	M61	Z	-0.12	0	%100
95	M66	Z	-0.14	0	%100
96	SA-3R	Z	-0.17	0	%100
97	SA-3L	Z	-0.17	0	%100
98	SA-1R	Z	0	0	%100
99	SA-1L	Z	0	0	%100
100	SA-2R	Z	-0.15	0	%100
101	SA-2L	Z	-0.15	0	%100
102	RRU-2	Z	-0.08	0	%100
103	RRU-1	Z	-0.08	0	%100
104	RRU-3	Z	-0.08	0	%100
105	MP-9	Z	-0.09	0	%100
106	MP-12	Z	-0.09	0	%100
107	MP-5	Z	-0.09	0	%100
108	MP-8	Z	-0.09	0	%100
109	FFHR	Z	-0.05	0	%100
110	SF1-HR	Z	-0.09	0	%100
111	SF2-HR	Z	-0.05	0	%100
112	K1	Z	-0.16	0	%100
113	K2	Z	-0.16	0	%100
114	K3	Z	-0.16	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	Z	0	0	%100
2	MP-1	Z	-0.11	0	%100
3	MP-2	Z	-0.11	0	%100
4	MP-3	Z	-0.11	0	%100
5	MP-4	Z	-0.11	0	%100
6	SF1-TH	Z	-0.09	0	%100
7	MP-6	Z	-0.11	0	%100
8	MP-7	Z	-0.11	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-0.03	0	%100
2	MP-1	X	-0.05	0	%100
3	MP-2	X	-0.05	0	%100
4	MP-3	X	-0.05	0	%100
5	MP-4	X	-0.05	0	%100
6	SF1-TH	X	-0.05	0	%100
7	MP-6	X	-0.05	0	%100
8	MP-7	X	-0.05	0	%100
9	SF2-TH	X	-0.03	0	%100
10	MP-10	X	-0.05	0	%100
11	MP-11	X	-0.05	0	%100
12	SA-1	X	0	0	%100
13	SA-2	X	-0.03	0	%100
14	SA-3	X	-0.04	0	%100
15	GSI-1	X	-0.09	0	%100
16	GSI-2	X	-0.04	0	%100
17	GSI-3	X	-0.05	0	%100
18	GSI-6	X	-0.03	0	%100
19	GSI-9	X	-0.03	0	%100
20	M24	X	-0.05	0	%100
21	M25	X	-0.02	0	%100
22	GSI-4	X	-0.05	0	%100
23	M28	X	-0.02	0	%100
24	M29	X	-0.03	0	%100
25	GSI-5	X	-0.03	0	%100
26	M32	X	-0.03	0	%100
27	M33	X	-0.05	0	%100
28	GSI-7	X	-0.05	0	%100
29	GSI-8	X	-0.02	0	%100
30	M38	X	-0.07	0	%100
31	M39	X	-0.07	0	%100
32	M44	X	-0.08	0	%100
33	M49	X	-0.14	0	%100
34	M50	X	-0.14	0	%100
35	M55	X	-0.14	0	%100
36	M60	X	-0.07	0	%100
37	M61	X	-0.07	0	%100
38	M66	X	-0.07	0	%100
39	SA-3R	X	-0.08	0	%100
40	SA-3L	X	-0.08	0	%100
41	SA-1R	X	0	0	%100
42	SA-1L	X	0	0	%100
43	SA-2R	X	-0.1	0	%100
44	SA-2L	X	-0.1	0	%100
45	RRU-2	X	-0.05	0	%100
46	RRU-1	X	-0.05	0	%100
47	RRU-3	X	-0.05	0	%100
48	MP-9	X	-0.05	0	%100
49	MP-12	X	-0.05	0	%100
50	MP-5	X	-0.05	0	%100
51	MP-8	X	-0.05	0	%100
52	FFHR	X	-0.03	0	%100
53	SF1-HR	X	-0.05	0	%100
54	SF2-HR	X	-0.03	0	%100
55	K1	X	-0.09	0	%100
56	K2	X	-0.09	0	%100
57	K3	X	-0.09	0	%100
58	FFTH	X	-0.05	0	%100
59	MP-1	Z	-0.09	0	%100
60	MP-2	Z	-0.09	0	%100
61	MP-3	Z	-0.09	0	%100
62	MP-4	Z	-0.09	0	%100
63	SF1-TH	Z	-0.09	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
9	Z	-0.09	-0.09	0	%100
10	SF2-TH	-0.11	-0.11	0	%100
11	MP-10	-0.11	-0.11	0	%100
12	MP-11	-0.11	-0.11	0	%100
13	SA-1	-0.04	-0.04	0	%100
14	SA-2	-0.04	-0.04	0	%100
15	SA-3	-0.08	-0.08	0	%100
16	GSI-1	-0.17	-0.17	0	%100
17	GSI-2	0	0	0	%100
18	GSI-3	0	0	0	%100
19	GSI-4	0	0	0	%100
20	M24	-0.09	-0.09	0	%100
21	M25	-0.09	-0.09	0	%100
22	GSI-4	-0.09	-0.09	0	%100
23	M28	-0.01	-0.01	0	%100
24	M29	-0.09	-0.09	0	%100
25	M32	-4.2e-5	-4.2e-5	0	%100
26	M33	-0.01	-0.01	0	%100
27	M33	-4.2e-5	-4.2e-5	0	%100
28	GSI-7	-0.09	-0.09	0	%100
29	GSI-8	-0.08	-0.08	0	%100
30	M38	0	0	0	%100
31	M39	0	0	0	%100
32	M44	0	0	0	%100
33	M49	-0.24	-0.24	0	%100
34	M50	-0.24	-0.24	0	%100
35	M55	-0.27	-0.27	0	%100
36	M60	-0.24	-0.24	0	%100
37	M61	-0.24	-0.24	0	%100
38	M66	-0.27	-0.27	0	%100
39	SA-3R	-0.23	-0.23	0	%100
40	SA-3L	-0.23	-0.23	0	%100
41	SA-1R	-0.01	-0.01	0	%100
42	SA-1L	-0.01	-0.01	0	%100
43	SA-2R	-0.01	-0.01	0	%100
44	SA-2L	-0.01	-0.01	0	%100
45	RRU-2	-0.09	-0.09	0	%100
46	RRU-1	-0.09	-0.09	0	%100
47	RRU-3	-0.09	-0.09	0	%100
48	MP-9	-0.11	-0.11	0	%100
49	MP-12	-0.11	-0.11	0	%100
50	MP-5	-0.11	-0.11	0	%100
51	MP-8	-0.11	-0.11	0	%100
52	FFHR	0	0	0	%100
53	SF1-HR	-0.09	-0.09	0	%100
54	SF2-HR	-0.09	-0.09	0	%100
55	K1	-0.19	-0.19	0	%100
56	K2	-0.19	-0.19	0	%100
57	K3	-0.19	-0.19	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	0	0	0	%100
2	MP-1	0.003	0.003	0	%100
3	MP-2	0.005	0.005	0	%100
4	MP-3	0.005	0.005	0	%100
5	MP-4	0.005	0.005	0	%100
6	SF1-TH	0.003	0.003	0	%100
7	MP-6	0.005	0.005	0	%100
8	MP-7	0.005	0.005	0	%100
9	SF2-TH	0.005	0.005	0	%100
10	MP-10	0.005	0.005	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
11	MP-11	0.005	0.005	0	%100
12	SA-1	0.003	0.003	0	%100
13	SA-2	0	0	0	%100
14	SA-3	0.004	0.004	0	%100
15	GSI-1	0.004	0.004	0	%100
16	GSI-2	0.009	0.009	0	%100
17	GSI-3	0.005	0.005	0	%100
18	GSI-6	0.003	0.003	0	%100
19	GSI-9	0.003	0.003	0	%100
20	M24	0.002	0.002	0	%100
21	M25	0.005	0.005	0	%100
22	GSI-4	0.003	0.003	0	%100
23	M28	0.005	0.005	0	%100
24	M29	0.003	0.003	0	%100
25	GSI-5	0.005	0.005	0	%100
26	M32	0.003	0.003	0	%100
27	M33	0.002	0.002	0	%100
28	GSI-7	0.002	0.002	0	%100
29	GSI-8	0.005	0.005	0	%100
30	M38	0.007	0.007	0	%100
31	M39	0.007	0.007	0	%100
32	M44	0.008	0.008	0	%100
33	M49	0.007	0.007	0	%100
34	M50	0.007	0.007	0	%100
35	M55	0.007	0.007	0	%100
36	M60	0.014	0.014	0	%100
37	M61	0.014	0.014	0	%100
38	M66	0.014	0.014	0	%100
39	SA-3R	0.008	0.008	0	%100
40	SA-3L	0.008	0.008	0	%100
41	SA-1R	0.01	0.01	0	%100
42	SA-1L	0.01	0.01	0	%100
43	SA-2R	0	0	0	%100
44	SA-2L	0	0	0	%100
45	RRU-2	0.005	0.005	0	%100
46	RRU-1	0.005	0.005	0	%100
47	RRU-3	0.005	0.005	0	%100
48	MP-9	0.005	0.005	0	%100
49	MP-12	0.005	0.005	0	%100
50	MP-5	0.005	0.005	0	%100
51	MP-8	0.005	0.005	0	%100
52	FFHR	0.003	0.003	0	%100
53	SF1-HR	0.003	0.003	0	%100
54	SF2-HR	0.005	0.005	0	%100
55	K1	0.009	0.009	0	%100
56	K2	0.009	0.009	0	%100
57	K3	0.009	0.009	0	%100
58	FFTH	-0.005	-0.005	0	%100
59	MP-1	-0.009	-0.009	0	%100
60	MP-2	-0.009	-0.009	0	%100
61	MP-3	-0.009	-0.009	0	%100
62	MP-4	-0.009	-0.009	0	%100
63	SF1-TH	-0.005	-0.005	0	%100
64	MP-6	-0.009	-0.009	0	%100
65	MP-7	-0.009	-0.009	0	%100
66	SF2-TH	-0.009	-0.009	0	%100
67	MP-10	-0.009	-0.009	0	%100
68	MP-11	-0.009	-0.009	0	%100
69	SA-1	-0.006	-0.006	0	%100
70	SA-2	0	0	0	%100
71	SA-3	-0.006	-0.006	0	%100
72	GSI-1	-0.009	-0.009	0	%100
73	GSI-2	-0.017	-0.017	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.-%)	End Location(ft.-%)
74	Z	-0.09	-0.09	0	%100
75	Z	-0.05	-0.05	0	%100
76	Z	-0.04	-0.04	0	%100
77	Z	-0.04	-0.04	0	%100
78	Z	-0.09	-0.09	0	%100
79	Z	-0.05	-0.05	0	%100
80	Z	-0.09	-0.09	0	%100
81	Z	-0.04	-0.04	0	%100
82	Z	-0.01	-0.01	0	%100
83	Z	-0.04	-0.04	0	%100
84	Z	-0.05	-0.05	0	%100
85	Z	-0.04	-0.04	0	%100
86	Z	-0.08	-0.08	0	%100
87	Z	-0.12	-0.12	0	%100
88	Z	-0.12	-0.12	0	%100
89	Z	-0.14	-0.14	0	%100
90	Z	-0.12	-0.12	0	%100
91	Z	-0.12	-0.12	0	%100
92	Z	-0.14	-0.14	0	%100
93	Z	-0.24	-0.24	0	%100
94	Z	-0.24	-0.24	0	%100
95	Z	-0.27	-0.27	0	%100
96	Z	-0.17	-0.17	0	%100
97	Z	-0.17	-0.17	0	%100
98	Z	-0.15	-0.15	0	%100
99	Z	-0.15	-0.15	0	%100
100	Z	0	0	0	%100
101	Z	0	0	0	%100
102	Z	-0.08	-0.08	0	%100
103	Z	-0.08	-0.08	0	%100
104	Z	-0.08	-0.08	0	%100
105	Z	-0.09	-0.09	0	%100
106	Z	-0.09	-0.09	0	%100
107	Z	-0.09	-0.09	0	%100
108	Z	-0.09	-0.09	0	%100
109	Z	-0.05	-0.05	0	%100
110	Z	-0.05	-0.05	0	%100
111	Z	-0.09	-0.09	0	%100
112	Z	-0.16	-0.16	0	%100
113	Z	-0.16	-0.16	0	%100
114	Z	-0.16	-0.16	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.-%)	End Location(ft.-%)
1	X	.005	.005	0	%100
2	X	.008	.008	0	%100
3	X	.008	.008	0	%100
4	X	.008	.008	0	%100
5	X	.008	.008	0	%100
6	X	.002	.002	0	%100
7	X	.008	.008	0	%100
8	X	.008	.008	0	%100
9	X	.007	.007	0	%100
10	X	.008	.008	0	%100
11	X	.008	.008	0	%100
12	X	.005	.005	0	%100
13	X	.001	.001	0	%100
14	X	.004	.004	0	%100
15	X	.003	.003	0	%100
16	X	.012	.012	0	%100
17	X	.01	.01	0	%100
18	X	.006	.006	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.-%)	End Location(ft.-%)
19	X	.005	.005	0	%100
20	X	.002	.002	0	%100
21	X	.006	.006	0	%100
22	X	.002	.002	0	%100
23	X	.006	.006	0	%100
24	X	.005	.005	0	%100
25	X	.007	.007	0	%100
26	X	.005	.005	0	%100
27	X	.002	.002	0	%100
28	X	.002	.002	0	%100
29	X	.006	.006	0	%100
30	X	.014	.014	0	%100
31	X	.014	.014	0	%100
32	X	.016	.016	0	%100
33	X	.005	.005	0	%100
34	X	.005	.005	0	%100
35	X	.005	.005	0	%100
36	X	.019	.019	0	%100
37	X	.019	.019	0	%100
38	X	.019	.019	0	%100
39	X	.009	.009	0	%100
40	X	.009	.009	0	%100
41	X	.015	.015	0	%100
42	X	.015	.015	0	%100
43	X	.004	.004	0	%100
44	X	.004	.004	0	%100
45	X	.006	.006	0	%100
46	X	.006	.006	0	%100
47	X	.006	.006	0	%100
48	X	.008	.008	0	%100
49	X	.008	.008	0	%100
50	X	.008	.008	0	%100
51	X	.008	.008	0	%100
52	X	.005	.005	0	%100
53	X	.002	.002	0	%100
54	X	.007	.007	0	%100
55	X	.013	.013	0	%100
56	X	.013	.013	0	%100
57	X	.013	.013	0	%100
58	Z	-.005	-.005	0	%100
59	Z	-.008	-.008	0	%100
60	Z	-.008	-.008	0	%100
61	Z	-.008	-.008	0	%100
62	Z	-.008	-.008	0	%100
63	Z	-.002	-.002	0	%100
64	Z	-.008	-.008	0	%100
65	Z	-.008	-.008	0	%100
66	Z	-.007	-.007	0	%100
67	Z	-.008	-.008	0	%100
68	Z	-.008	-.008	0	%100
69	Z	-.006	-.006	0	%100
70	Z	-.002	-.002	0	%100
71	Z	-.004	-.004	0	%100
72	Z	-.004	-.004	0	%100
73	Z	-.014	-.014	0	%100
74	Z	-.01	-.01	0	%100
75	Z	-.006	-.006	0	%100
76	Z	-.005	-.005	0	%100
77	Z	-.002	-.002	0	%100
78	Z	-.007	-.007	0	%100
79	Z	-.002	-.002	0	%100
80	Z	-.007	-.007	0	%100
81	Z	-.005	-.005	0	%100

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
82	Z	-0.08	-0.08	0	%100
83	Z	-0.05	-0.05	0	%100
84	Z	-0.02	-0.02	0	%100
85	Z	-0.02	-0.02	0	%100
86	Z	-0.07	-0.07	0	%100
87	Z	-0.14	-0.14	0	%100
88	Z	-0.14	-0.14	0	%100
89	Z	-0.16	-0.16	0	%100
90	Z	-0.05	-0.05	0	%100
91	Z	-0.05	-0.05	0	%100
92	Z	-0.06	-0.06	0	%100
93	Z	-0.19	-0.19	0	%100
94	Z	-0.19	-0.19	0	%100
95	Z	-0.21	-0.21	0	%100
96	Z	-0.11	-0.11	0	%100
97	Z	-0.11	-0.11	0	%100
98	Z	-0.14	-0.14	0	%100
99	Z	-0.14	-0.14	0	%100
100	Z	-0.04	-0.04	0	%100
101	Z	-0.04	-0.04	0	%100
102	Z	-0.06	-0.06	0	%100
103	Z	-0.06	-0.06	0	%100
104	Z	-0.06	-0.06	0	%100
105	Z	-0.08	-0.08	0	%100
106	Z	-0.08	-0.08	0	%100
107	Z	-0.08	-0.08	0	%100
108	Z	-0.08	-0.08	0	%100
109	Z	-0.05	-0.05	0	%100
110	Z	-0.02	-0.02	0	%100
111	Z	-0.07	-0.07	0	%100
112	Z	-0.13	-0.13	0	%100
113	Z	-0.13	-0.13	0	%100
114	Z	-0.13	-0.13	0	%100

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
1	X	.008	.008	0	%100
2	X	.009	.009	0	%100
3	X	.009	.009	0	%100
4	X	.009	.009	0	%100
5	X	.009	.009	0	%100
6	X	0	0	0	%100
7	X	.009	.009	0	%100
8	X	.009	.009	0	%100
9	X	.008	.008	0	%100
10	X	.009	.009	0	%100
11	X	.009	.009	0	%100
12	X	.007	.007	0	%100
13	X	.003	.003	0	%100
14	X	.004	.004	0	%100
15	X	0	0	0	%100
16	X	.013	.013	0	%100
17	X	.016	.016	0	%100
18	X	.009	.009	0	%100
19	X	.008	.008	0	%100
20	X	3.8e-5	3.8e-5	0	%100
21	X	.007	.007	0	%100
22	X	0	0	0	%100
23	X	.007	.007	0	%100
24	X	.008	.008	0	%100
25	X	.008	.008	0	%100
26	X	.008	.008	0	%100

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
27	X	3.8e-5	3.8e-5	0	%100
28	X	0	0	0	%100
29	X	.007	.007	0	%100
30	X	.021	.021	0	%100
31	X	.021	.021	0	%100
32	X	.024	.024	0	%100
33	X	0	0	0	%100
34	X	0	0	0	%100
35	X	0	0	0	%100
36	X	.02	.02	0	%100
37	X	.02	.02	0	%100
38	X	.021	.021	0	%100
39	X	.008	.008	0	%100
40	X	.008	.008	0	%100
41	X	.019	.019	0	%100
42	X	.019	.019	0	%100
43	X	.01	.01	0	%100
44	X	.01	.01	0	%100
45	X	.008	.008	0	%100
46	X	.008	.008	0	%100
47	X	.008	.008	0	%100
48	X	.009	.009	0	%100
49	X	.009	.009	0	%100
50	X	.009	.009	0	%100
51	X	.009	.009	0	%100
52	X	.008	.008	0	%100
53	X	0	0	0	%100
54	X	.008	.008	0	%100
55	X	.016	.016	0	%100
56	X	.016	.016	0	%100
57	X	.016	.016	0	%100
58	Z	-.005	-.005	0	%100
59	Z	-.005	-.005	0	%100
60	Z	-.005	-.005	0	%100
61	Z	-.005	-.005	0	%100
62	Z	-.005	-.005	0	%100
63	Z	0	0	0	%100
64	Z	-.005	-.005	0	%100
65	Z	-.005	-.005	0	%100
66	Z	-.005	-.005	0	%100
67	Z	-.005	-.005	0	%100
68	Z	-.005	-.005	0	%100
69	Z	-.004	-.004	0	%100
70	Z	-.002	-.002	0	%100
71	Z	-.002	-.002	0	%100
72	Z	0	0	0	%100
73	Z	-.009	-.009	0	%100
74	Z	-.009	-.009	0	%100
75	Z	-.005	-.005	0	%100
76	Z	-.004	-.004	0	%100
77	Z	-2.4e-5	-2.4e-5	0	%100
78	Z	-.005	-.005	0	%100
79	Z	0	0	0	%100
80	Z	-.004	-.004	0	%100
81	Z	-.004	-.004	0	%100
82	Z	-.005	-.005	0	%100
83	Z	-.004	-.004	0	%100
84	Z	-2.4e-5	-2.4e-5	0	%100
85	Z	-.004	-.004	0	%100
86	Z	-.004	-.004	0	%100
87	Z	-.012	-.012	0	%100
88	Z	-.012	-.012	0	%100
89	Z	-.014	-.014	0	%100

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

Member Label	Direction	Start Magnitude(k/ft, F...)	End Magnitude(k/ft, F...)	Start Location(ft, %)	End Location(ft, %)
M49	Z	0	0	0	%100
M50	Z	0	0	0	%100
M55	Z	0	0	0	%100
M60	Z	0	0	0	%100
M61	Z	-0.12	-0.12	0	%100
M66	Z	-0.14	-0.14	0	%100
SA-3R	Z	-0.06	-0.06	0	%100
SA-3L	Z	-0.06	-0.06	0	%100
SA-1R	Z	-0.01	-0.01	0	%100
SA-1L	Z	-0.01	-0.01	0	%100
SA-2R	Z	-0.05	-0.05	0	%100
SA-2L	Z	-0.05	-0.05	0	%100
RRU-2	Z	-0.05	-0.05	0	%100
RRU-1	Z	-0.05	-0.05	0	%100
RRU-3	Z	-0.05	-0.05	0	%100
MP-9	Z	-0.05	-0.05	0	%100
MP-12	Z	-0.05	-0.05	0	%100
MP-5	Z	-0.05	-0.05	0	%100
MP-8	Z	-0.05	-0.05	0	%100
MP-3	Z	-0.05	-0.05	0	%100
FFHR	Z	-0.05	-0.05	0	%100
SF1-HR	Z	-0.05	-0.05	0	%100
SF2-HR	Z	0	0	0	%100
K1	Z	-0.05	-0.05	0	%100
K2	Z	-0.09	-0.09	0	%100
K3	Z	-0.09	-0.09	0	%100

Member Distributed Loads (BLC 10 : 160 Wind - No Ice)

Member Label	Direction	Start Magnitude(k/ft, F...)	End Magnitude(k/ft, F...)	Start Location(ft, %)	End Location(ft, %)	
1	FFTH	X	.011	.011	0	%100
2	MP-1	X	.011	.011	0	%100
3	MP-2	X	.011	.011	0	%100
4	MP-3	X	.011	.011	0	%100
5	MP-4	X	.011	.011	0	%100
6	SF1-TH	X	.005	.005	0	%100
7	MP-6	X	.011	.011	0	%100
8	MP-7	X	.011	.011	0	%100
9	SF2-TH	X	.005	.005	0	%100
10	MP-10	X	.011	.011	0	%100
11	MP-11	X	.011	.011	0	%100
12	SA-1	X	.007	.007	0	%100
13	SA-2	X	.007	.007	0	%100
14	SA-3	X	.007	.007	0	%100
15	GSI-1	X	.009	.009	0	%100
16	GSI-2	X	.021	.021	0	%100
17	GSI-3	X	.012	.012	0	%100
18	GSI-6	X	.012	.012	0	%100
19	GSI-9	X	.005	.005	0	%100
20	M24	X	.005	.005	0	%100
21	M25	X	.005	.005	0	%100
22	GSI-4	X	.005	.005	0	%100
23	M28	X	.011	.011	0	%100
24	M29	X	.005	.005	0	%100
25	GSI-5	X	.005	.005	0	%100
26	M32	X	.011	.011	0	%100
27	M33	X	.005	.005	0	%100
28	GSI-7	X	.005	.005	0	%100
29	GSI-8	X	.005	.005	0	%100
30	M38	X	.028	.028	0	%100
31	M39	X	.032	.032	0	%100
32	M44	X	.014	.014	0	%100
33	M49	X	.014	.014	0	%100
34	M50	X	.014	.014	0	%100

Member Distributed Loads (BLC 10 : 160 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude(k/ft, F...)	End Magnitude(k/ft, F...)	Start Location(ft, %)	End Location(ft, %)
M55	X	.014	.014	0	%100
M60	X	.014	.014	0	%100
M61	X	.014	.014	0	%100
M66	X	.014	.014	0	%100
SA-3R	X	0	0	0	%100
SA-3L	X	0	0	0	%100
SA-1R	X	.019	.019	0	%100
SA-1L	X	.019	.019	0	%100
SA-2R	X	.019	.019	0	%100
SA-2L	X	.019	.019	0	%100
RRU-2	X	.009	.009	0	%100
RRU-1	X	.009	.009	0	%100
RRU-3	X	.009	.009	0	%100
MP-9	X	.011	.011	0	%100
MP-12	X	.011	.011	0	%100
MP-5	X	.011	.011	0	%100
MP-8	X	.011	.011	0	%100
FFHR	X	.005	.005	0	%100
SF1-HR	X	.005	.005	0	%100
SF2-HR	X	.005	.005	0	%100
K1	X	.019	.019	0	%100
K2	X	.019	.019	0	%100
K3	X	.019	.019	0	%100

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

Member Label	Direction	Start Magnitude(k/ft, F...)	End Magnitude(k/ft, F...)	Start Location(ft, %)	End Location(ft, %)	
1	FFTH	X	.008	.008	0	%100
2	MP-1	X	.009	.009	0	%100
3	MP-2	X	.009	.009	0	%100
4	MP-3	X	.009	.009	0	%100
5	MP-4	X	.009	.009	0	%100
6	SF1-TH	X	.008	.008	0	%100
7	MP-6	X	.009	.009	0	%100
8	MP-7	X	.009	.009	0	%100
9	SF2-TH	X	0	0	0	%100
10	MP-10	X	.009	.009	0	%100
11	MP-11	X	.009	.009	0	%100
12	SA-1	X	.003	.003	0	%100
13	SA-2	X	.007	.007	0	%100
14	SA-3	X	.004	.004	0	%100
15	GSI-1	X	.013	.013	0	%100
16	GSI-2	X	0	0	0	%100
17	GSI-3	X	.016	.016	0	%100
18	GSI-6	X	.009	.009	0	%100
19	GSI-9	X	.008	.008	0	%100
20	M24	X	.007	.007	0	%100
21	M25	X	3.8e-5	3.8e-5	0	%100
22	GSI-4	X	.008	.008	0	%100
23	M28	X	3.8e-5	3.8e-5	0	%100
24	M29	X	.008	.008	0	%100
25	GSI-5	X	0	0	0	%100
26	M32	X	.008	.008	0	%100
27	M33	X	.007	.007	0	%100
28	GSI-7	X	.007	.007	0	%100
29	GSI-8	X	0	0	0	%100
30	M38	X	.021	.021	0	%100
31	M39	X	.021	.021	0	%100
32	M44	X	.024	.024	0	%100
33	M49	X	.02	.02	0	%100
34	M50	X	.02	.02	0	%100
35	M55	X	.021	.021	0	%100
36	M60	X	0	0	0	%100

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
100	SA-2R	Z	.01	.01	0
101	SA-2L	Z	.01	.01	0
102	RRU-2	Z	.005	.005	0
103	RRU-1	Z	.005	.005	0
104	RRU-3	Z	.005	.005	0
105	MP-9	Z	.005	.005	0
106	MP-12	Z	.005	.005	0
107	MP-5	Z	.005	.005	0
108	MP-8	Z	.005	.005	0
109	FFHR	Z	.005	.005	0
110	SF1-HR	Z	.005	.005	0
111	SF2-HR	Z	0	0	0
112	K1	Z	.009	.009	0
113	K2	Z	.009	.009	0
114	K3	Z	.009	.009	0

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	.005	.005	0
2	MP-1	X	.008	.008	0
3	MP-2	X	.008	.008	0
4	MP-3	X	.008	.008	0
5	MP-4	X	.008	.008	0
6	SF1-TH	X	.007	.007	0
7	MP-6	X	.008	.008	0
8	MP-7	X	.008	.008	0
9	SF2-TH	X	.002	.002	0
10	MP-10	X	.008	.008	0
11	MP-11	X	.008	.008	0
12	SA-1	X	.001	.001	0
13	SA-2	X	.005	.005	0
14	SA-3	X	.004	.004	0
15	GSI-1	X	.012	.012	0
16	GSI-2	X	.003	.003	0
17	GSI-3	X	.01	.01	0
18	GSI-6	X	.006	.006	0
19	GSI-9	X	.005	.005	0
20	M24	X	.006	.006	0
21	M25	X	.002	.002	0
22	GSI-4	X	.007	.007	0
23	M28	X	.002	.002	0
24	M29	X	.005	.005	0
25	GSI-5	X	.002	.002	0
26	M32	X	.005	.005	0
27	M33	X	.006	.006	0
28	GSI-7	X	.006	.006	0
29	GSI-8	X	.002	.002	0
30	M38	X	.014	.014	0
31	M39	X	.014	.014	0
32	M44	X	.016	.016	0
33	M49	X	.019	.019	0
34	M50	X	.019	.019	0
35	M55	X	.019	.019	0
36	M60	X	.005	.005	0
37	M61	X	.005	.005	0
38	M66	X	.005	.005	0
39	SA-3R	X	.009	.009	0
40	SA-3L	X	.009	.009	0
41	SA-1R	X	.004	.004	0
42	SA-1L	X	.004	.004	0
43	SA-2R	X	.015	.015	0
44	SA-2L	X	.015	.015	0

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
37	M61	X	0	0	0
38	M66	X	0	0	0
39	SA-3R	X	.008	.008	0
40	SA-3L	X	.008	.008	0
41	SA-1R	X	.01	.01	0
42	SA-1L	X	.01	.01	0
43	SA-2R	X	.019	.019	0
44	SA-2L	X	.019	.019	0
45	RRU-2	X	.008	.008	0
46	RRU-1	X	.008	.008	0
47	RRU-3	X	.008	.008	0
48	MP-9	X	.008	.008	0
49	MP-12	X	.009	.009	0
50	MP-5	X	.009	.009	0
51	MP-8	X	.009	.009	0
52	FFHR	X	.008	.008	0
53	SF1-HR	X	.008	.008	0
54	SF2-HR	X	0	0	0
55	K1	X	.016	.016	0
56	K2	X	.016	.016	0
57	K3	X	.016	.016	0
58	FFTH	X	.005	.005	0
59	MP-1	Z	.005	.005	0
60	MP-2	Z	.005	.005	0
61	MP-3	Z	.005	.005	0
62	MP-4	Z	.005	.005	0
63	SF1-TH	Z	.005	.005	0
64	MP-6	Z	.005	.005	0
65	MP-7	Z	.005	.005	0
66	SF2-TH	Z	0	0	0
67	MP-10	Z	.005	.005	0
68	MP-11	Z	.005	.005	0
69	SA-1	Z	.002	.002	0
70	SA-2	Z	.004	.004	0
71	SA-3	Z	.002	.002	0
72	GSI-1	Z	.009	.009	0
73	GSI-2	Z	0	0	0
74	GSI-3	Z	.009	.009	0
75	GSI-6	Z	.005	.005	0
76	GSI-9	Z	.004	.004	0
77	M24	Z	.005	.005	0
78	M25	Z	2.4e-5	2.4e-5	0
79	GSI-4	Z	.005	.005	0
80	M28	Z	2.4e-5	2.4e-5	0
81	M29	Z	.004	.004	0
82	GSI-5	Z	0	0	0
83	M32	Z	.004	.004	0
84	M33	Z	.004	.004	0
85	GSI-7	Z	.004	.004	0
86	GSI-8	Z	0	0	0
87	M38	Z	.012	.012	0
88	M39	Z	.012	.012	0
89	M44	Z	.014	.014	0
90	M49	Z	.012	.012	0
91	M50	Z	.012	.012	0
92	M55	Z	.014	.014	0
93	M60	Z	0	0	0
94	M61	Z	0	0	0
95	M66	Z	0	0	0
96	SA-3R	Z	.006	.006	0
97	SA-3L	Z	.006	.006	0
98	SA-1R	Z	.006	.006	0
99	SA-1L	Z	.006	.006	0



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
45	RRU-2	X	.006	.006	0	%100
46	RRU-1	X	.006	.006	0	%100
47	RRU-3	X	.006	.006	0	%100
48	MP-9	X	.008	.008	0	%100
49	MP-12	X	.008	.008	0	%100
50	MP-5	X	.008	.008	0	%100
51	MP-8	X	.008	.008	0	%100
52	FFHR	X	.005	.005	0	%100
53	SF1-HR	X	.007	.007	0	%100
54	SF2-HR	X	.002	.002	0	%100
55	K1	X	.013	.013	0	%100
56	K2	X	.013	.013	0	%100
57	K3	X	.013	.013	0	%100
58	FFTH	Z	.005	.005	0	%100
59	MP-1	Z	.008	.008	0	%100
60	MP-2	Z	.008	.008	0	%100
61	MP-3	Z	.008	.008	0	%100
62	MP-4	Z	.008	.008	0	%100
63	SF1-TH	Z	.007	.007	0	%100
64	MP-6	Z	.008	.008	0	%100
65	MP-7	Z	.008	.008	0	%100
66	SF2-TH	Z	.002	.002	0	%100
67	MP-10	Z	.008	.008	0	%100
68	MP-11	Z	.008	.008	0	%100
69	SA-1	Z	.002	.002	0	%100
70	SA-2	Z	.006	.006	0	%100
71	SA-3	Z	.004	.004	0	%100
72	GSI-1	Z	.014	.014	0	%100
73	GSI-2	Z	.004	.004	0	%100
74	GSI-3	Z	.01	.01	0	%100
75	GSI-6	Z	.006	.006	0	%100
76	GSI-9	Z	.005	.005	0	%100
77	M24	Z	.007	.007	0	%100
78	M25	Z	.002	.002	0	%100
79	GSI-4	Z	.008	.008	0	%100
80	M28	Z	.002	.002	0	%100
81	M29	Z	.005	.005	0	%100
82	GSI-5	Z	.002	.002	0	%100
83	M32	Z	.005	.005	0	%100
84	M33	Z	.007	.007	0	%100
85	GSI-7	Z	.007	.007	0	%100
86	GSI-8	Z	.002	.002	0	%100
87	M38	Z	.014	.014	0	%100
88	M39	Z	.014	.014	0	%100
89	M44	Z	.016	.016	0	%100
90	M49	Z	.019	.019	0	%100
91	M50	Z	.019	.019	0	%100
92	M55	Z	.021	.021	0	%100
93	M60	Z	.005	.005	0	%100
94	M61	Z	.005	.005	0	%100
95	M66	Z	.006	.006	0	%100
96	SA-3R	Z	.011	.011	0	%100
97	SA-3L	Z	.011	.011	0	%100
98	SA-1R	Z	.004	.004	0	%100
99	SA-1L	Z	.004	.004	0	%100
100	SA-2R	Z	.014	.014	0	%100
101	SA-2L	Z	.014	.014	0	%100
102	RRU-2	Z	.006	.006	0	%100
103	RRU-1	Z	.006	.006	0	%100
104	RRU-3	Z	.006	.006	0	%100
105	MP-9	Z	.008	.008	0	%100
106	MP-12	Z	.008	.008	0	%100
107	MP-5	Z	.008	.008	0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
108	MP-8	Z	.008	.008	0	%100
109	FFHR	Z	.005	.005	0	%100
110	SF1-HR	Z	.007	.007	0	%100
111	SF2-HR	Z	.002	.002	0	%100
112	K1	Z	.013	.013	0	%100
113	K2	Z	.013	.013	0	%100
114	K3	Z	.013	.013	0	%100

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
1	FFTH	X	.003	.003	0	%100
2	MP-1	X	.005	.005	0	%100
3	MP-2	X	.005	.005	0	%100
4	MP-3	X	.005	.005	0	%100
5	MP-4	X	.005	.005	0	%100
6	SF1-TH	X	.005	.005	0	%100
7	MP-6	X	.005	.005	0	%100
8	MP-7	X	.005	.005	0	%100
9	SF2-TH	X	.003	.003	0	%100
10	MP-10	X	.005	.005	0	%100
11	MP-11	X	.005	.005	0	%100
12	SA-1	X	0	0	0	%100
13	SA-2	X	.003	.003	0	%100
14	SA-3	X	.004	.004	0	%100
15	GSI-1	X	.009	.009	0	%100
16	GSI-2	X	.004	.004	0	%100
17	GSI-3	X	.005	.005	0	%100
18	GSI-6	X	.003	.003	0	%100
19	GSI-9	X	.003	.003	0	%100
20	M24	X	.005	.005	0	%100
21	M25	X	.002	.002	0	%100
22	GSI-4	X	.005	.005	0	%100
23	M28	X	.002	.002	0	%100
24	M29	X	.003	.003	0	%100
25	GSI-5	X	.003	.003	0	%100
26	M32	X	.003	.003	0	%100
27	M33	X	.005	.005	0	%100
28	GSI-7	X	.005	.005	0	%100
29	GSI-8	X	.002	.002	0	%100
30	M38	X	.007	.007	0	%100
31	M39	X	.007	.007	0	%100
32	M44	X	.008	.008	0	%100
33	M49	X	.014	.014	0	%100
34	M50	X	.014	.014	0	%100
35	M55	X	.014	.014	0	%100
36	M60	X	.007	.007	0	%100
37	M61	X	.007	.007	0	%100
38	M66	X	.007	.007	0	%100
39	SA-3R	X	.008	.008	0	%100
40	SA-3L	X	.008	.008	0	%100
41	SA-1R	X	0	0	0	%100
42	SA-1L	X	0	0	0	%100
43	SA-2R	X	.01	.01	0	%100
44	SA-2L	X	.01	.01	0	%100
45	RRU-2	X	.005	.005	0	%100
46	RRU-1	X	.005	.005	0	%100
47	RRU-3	X	.005	.005	0	%100
48	MP-9	X	.005	.005	0	%100
49	MP-12	X	.005	.005	0	%100
50	MP-5	X	.005	.005	0	%100
51	MP-8	X	.005	.005	0	%100
52	FFHR	X	.003	.003	0	%100

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



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
53	SF1-HR	X	.005	0	%100
54	SF2-HR	X	.003	0	%100
55	K1	X	.009	0	%100
56	K2	X	.009	0	%100
57	K3	X	.009	0	%100
58	FFTH	Z	.005	0	%100
59	MP-1	Z	.009	0	%100
60	MP-2	Z	.009	0	%100
61	MP-3	Z	.009	0	%100
62	MP-4	Z	.009	0	%100
63	SF1-TH	Z	.009	0	%100
64	MP-6	Z	.009	0	%100
65	MP-7	Z	.009	0	%100
66	SF2-TH	Z	.005	0	%100
67	MP-10	Z	.009	0	%100
68	MP-11	Z	.009	0	%100
69	SA-1	Z	0	0	%100
70	SA-2	Z	.006	0	%100
71	SA-3	Z	.006	0	%100
72	GSI-1	Z	.017	0	%100
73	GSI-2	Z	.009	0	%100
74	GSI-3	Z	.009	0	%100
75	GSI-6	Z	.005	0	%100
76	GSI-9	Z	.004	0	%100
77	M24	Z	.009	0	%100
78	M25	Z	.004	0	%100
79	GSI-4	Z	.01	0	%100
80	M28	Z	.005	0	%100
81	M29	Z	.004	0	%100
82	GSI-5	Z	.005	0	%100
83	M32	Z	.004	0	%100
84	M33	Z	.009	0	%100
85	GSI-7	Z	.008	0	%100
86	GSI-8	Z	.004	0	%100
87	M38	Z	.012	0	%100
88	M39	Z	.012	0	%100
89	M44	Z	.014	0	%100
90	M49	Z	.024	0	%100
91	M50	Z	.024	0	%100
92	M55	Z	.027	0	%100
93	M60	Z	.012	0	%100
94	M61	Z	.012	0	%100
95	M66	Z	.014	0	%100
96	SA-3R	Z	.017	0	%100
97	SA-3L	Z	.017	0	%100
98	SA-1R	Z	0	0	%100
99	SA-1L	Z	0	0	%100
100	SA-2R	Z	.015	0	%100
101	SA-2L	Z	.015	0	%100
102	RRU-2	Z	.008	0	%100
103	RRU-1	Z	.008	0	%100
104	RRU-3	Z	.008	0	%100
105	MP-9	Z	.009	0	%100
106	MP-12	Z	.009	0	%100
107	MP-5	Z	.009	0	%100
108	MP-8	Z	.009	0	%100
109	FFHR	Z	.005	0	%100
110	SF1-HR	Z	.009	0	%100
111	SF2-HR	Z	.005	0	%100
112	K1	Z	.016	0	%100
113	K2	Z	.016	0	%100
114	K3	Z	.016	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	Z	0	0	%100
2	MP-1	Z	.011	0	%100
3	MP-2	Z	.011	0	%100
4	MP-3	Z	.011	0	%100
5	MP-4	Z	.011	0	%100
6	SF1-TH	Z	.009	0	%100
7	MP-6	Z	.011	0	%100
8	MP-7	Z	.011	0	%100
9	SF2-TH	Z	.009	0	%100
10	MP-10	Z	.011	0	%100
11	MP-11	Z	.011	0	%100
12	SA-1	Z	.004	0	%100
13	SA-2	Z	.004	0	%100
14	SA-3	Z	.008	0	%100
15	GSI-1	Z	.017	0	%100
16	GSI-2	Z	.017	0	%100
17	GSI-3	Z	0	0	%100
18	GSI-6	Z	0	0	%100
19	GSI-9	Z	0	0	%100
20	M24	Z	.009	0	%100
21	M25	Z	.009	0	%100
22	GSI-4	Z	.01	0	%100
23	M28	Z	.009	0	%100
24	M29	Z	4.2e-5	0	%100
25	GSI-5	Z	.01	0	%100
26	M32	Z	4.2e-5	0	%100
27	M33	Z	.009	0	%100
28	GSI-7	Z	.008	0	%100
29	GSI-8	Z	.008	0	%100
30	M38	Z	0	0	%100
31	M39	Z	0	0	%100
32	M44	Z	0	0	%100
33	M49	Z	.024	0	%100
34	M50	Z	.024	0	%100
35	M55	Z	.027	0	%100
36	M60	Z	.024	0	%100
37	M61	Z	.024	0	%100
38	M66	Z	.027	0	%100
39	SA-3R	Z	.023	0	%100
40	SA-3L	Z	.023	0	%100
41	SA-1R	Z	.01	0	%100
42	SA-1L	Z	.01	0	%100
43	SA-2R	Z	.01	0	%100
44	SA-2L	Z	.01	0	%100
45	RRU-2	Z	.009	0	%100
46	RRU-1	Z	.009	0	%100
47	RRU-3	Z	.009	0	%100
48	MP-9	Z	.011	0	%100
49	MP-12	Z	.011	0	%100
50	MP-5	Z	.011	0	%100
51	MP-8	Z	.011	0	%100
52	FFHR	Z	0	0	%100
53	SF1-HR	Z	.009	0	%100
54	SF2-HR	Z	.009	0	%100
55	K1	Z	.019	0	%100
56	K2	Z	.019	0	%100
57	K3	Z	.019	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-.003	0	%100
2	MP-1	X	-.005	0	%100



Member Distributed Loads (BL.C.15 : 300 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.%)	End Location(ft.%)
3	MP-2	X	-0.05	0	0	%100
4	MP-3	X	-0.05	-0.05	0	%100
5	MP-4	X	-0.05	-0.05	0	%100
6	SF1-TH	X	-0.03	-0.03	0	%100
7	MP-6	X	-0.05	-0.05	0	%100
8	MP-7	X	-0.05	-0.05	0	%100
9	SF2-TH	X	-0.05	-0.05	0	%100
10	MP-10	X	-0.05	-0.05	0	%100
11	MP-11	X	-0.05	-0.05	0	%100
12	SA-1	X	-0.03	-0.03	0	%100
13	SA-2	X	0	0	0	%100
14	SA-3	X	-0.04	-0.04	0	%100
15	GSI-1	X	-0.04	-0.04	0	%100
16	GSI-2	X	-0.09	-0.09	0	%100
17	GSI-3	X	-0.05	-0.05	0	%100
18	GSI-6	X	-0.03	-0.03	0	%100
19	GSI-9	X	-0.03	-0.03	0	%100
20	M24	X	-0.02	-0.02	0	%100
21	M25	X	-0.05	-0.05	0	%100
22	GSI-4	X	-0.03	-0.03	0	%100
23	M28	X	-0.05	-0.05	0	%100
24	M29	X	-0.03	-0.03	0	%100
25	GSI-5	X	-0.05	-0.05	0	%100
26	M32	X	-0.03	-0.03	0	%100
27	M33	X	-0.02	-0.02	0	%100
28	GSI-7	X	-0.02	-0.02	0	%100
29	GSI-8	X	-0.05	-0.05	0	%100
30	M38	X	-0.07	-0.07	0	%100
31	M39	X	-0.07	-0.07	0	%100
32	M44	X	-0.08	-0.08	0	%100
33	M49	X	-0.07	-0.07	0	%100
34	M50	X	-0.07	-0.07	0	%100
35	M55	X	-0.07	-0.07	0	%100
36	M60	X	-0.14	-0.14	0	%100
37	M61	X	-0.14	-0.14	0	%100
38	M66	X	-0.14	-0.14	0	%100
39	SA-3R	X	-0.08	-0.08	0	%100
40	SA-3L	X	-0.08	-0.08	0	%100
41	SA-1R	X	-0.01	-0.01	0	%100
42	SA-1L	X	-0.01	-0.01	0	%100
43	SA-2R	X	0	0	0	%100
44	SA-2L	X	0	0	0	%100
45	RRU-2	X	-0.05	-0.05	0	%100
46	RRU-1	X	-0.05	-0.05	0	%100
47	RRU-3	X	-0.05	-0.05	0	%100
48	MP-9	X	-0.05	-0.05	0	%100
49	MP-12	X	-0.05	-0.05	0	%100
50	MP-5	X	-0.05	-0.05	0	%100
51	MP-8	X	-0.05	-0.05	0	%100
52	FFHR	X	-0.03	-0.03	0	%100
53	SF1-HR	X	-0.03	-0.03	0	%100
54	SF2-HR	X	-0.05	-0.05	0	%100
55	K1	X	-0.09	-0.09	0	%100
56	K2	X	-0.09	-0.09	0	%100
57	K3	X	-0.09	-0.09	0	%100
58	FFTH	Z	-0.05	-0.05	0	%100
59	MP-1	Z	-0.09	-0.09	0	%100
60	MP-2	Z	-0.09	-0.09	0	%100
61	MP-3	Z	-0.09	-0.09	0	%100
62	MP-4	Z	-0.09	-0.09	0	%100
63	SF1-TH	Z	-0.05	-0.05	0	%100
64	MP-6	Z	-0.09	-0.09	0	%100
65	MP-7	Z	-0.09	-0.09	0	%100



Member Distributed Loads (BL.C.15 : 300 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.%)	End Location(ft.%)
66	SF2-TH	Z	-0.09	-0.09	0	%100
67	MP-10	Z	-0.09	-0.09	0	%100
68	MP-11	Z	-0.09	-0.09	0	%100
69	SA-1	Z	-0.06	-0.06	0	%100
70	SA-2	Z	0	0	0	%100
71	SA-3	Z	-0.06	-0.06	0	%100
72	GSI-1	Z	-0.09	-0.09	0	%100
73	GSI-2	Z	-0.17	-0.17	0	%100
74	GSI-3	Z	-0.09	-0.09	0	%100
75	GSI-6	Z	-0.05	-0.05	0	%100
76	GSI-9	Z	-0.04	-0.04	0	%100
77	M24	Z	-0.04	-0.04	0	%100
78	M25	Z	-0.09	-0.09	0	%100
79	GSI-4	Z	-0.05	-0.05	0	%100
80	M28	Z	-0.09	-0.09	0	%100
81	M29	Z	-0.04	-0.04	0	%100
82	GSI-5	Z	-0.11	-0.11	0	%100
83	M32	Z	-0.04	-0.04	0	%100
84	M33	Z	-0.05	-0.05	0	%100
85	GSI-7	Z	-0.04	-0.04	0	%100
86	GSI-8	Z	-0.08	-0.08	0	%100
87	M38	Z	-0.12	-0.12	0	%100
88	M39	Z	-0.12	-0.12	0	%100
89	M44	Z	-0.14	-0.14	0	%100
90	M49	Z	-0.12	-0.12	0	%100
91	M50	Z	-0.12	-0.12	0	%100
92	M55	Z	-0.14	-0.14	0	%100
93	M60	Z	-0.24	-0.24	0	%100
94	M61	Z	-0.24	-0.24	0	%100
95	M66	Z	-0.27	-0.27	0	%100
96	SA-3R	Z	-0.17	-0.17	0	%100
97	SA-3L	Z	-0.17	-0.17	0	%100
98	SA-1R	Z	-0.15	-0.15	0	%100
99	SA-1L	Z	-0.15	-0.15	0	%100
100	SA-2R	Z	0	0	0	%100
101	SA-2L	Z	0	0	0	%100
102	RRU-2	Z	-0.08	-0.08	0	%100
103	RRU-1	Z	-0.08	-0.08	0	%100
104	RRU-3	Z	-0.08	-0.08	0	%100
105	MP-9	Z	-0.09	-0.09	0	%100
106	MP-12	Z	-0.09	-0.09	0	%100
107	MP-5	Z	-0.09	-0.09	0	%100
108	MP-8	Z	-0.09	-0.09	0	%100
109	FFHR	Z	-0.05	-0.05	0	%100
110	SF1-HR	Z	-0.05	-0.05	0	%100
111	SF2-HR	Z	-0.09	-0.09	0	%100
112	K1	Z	-0.16	-0.16	0	%100
113	K2	Z	-0.16	-0.16	0	%100
114	K3	Z	-0.16	-0.16	0	%100

Member Distributed Loads (BL.C.16 : 315 Wind - No Ice)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-0.05	-0.05	0	%100
2	MP-1	X	-0.08	-0.08	0	%100
3	MP-2	X	-0.08	-0.08	0	%100
4	MP-3	X	-0.08	-0.08	0	%100
5	MP-4	X	-0.08	-0.08	0	%100
6	SF1-TH	X	-0.02	-0.02	0	%100
7	MP-6	X	-0.08	-0.08	0	%100
8	MP-7	X	-0.08	-0.08	0	%100
9	SF2-TH	X	-0.07	-0.07	0	%100
10	MP-10	X	-0.08	-0.08	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
74	Z	.01	.01	0	%100
75	Z	.006	.006	0	%100
76	Z	.005	.005	0	%100
77	Z	.002	.002	0	%100
78	Z	.007	.007	0	%100
79	Z	.002	.002	0	%100
80	Z	.007	.007	0	%100
81	Z	.005	.005	0	%100
82	Z	.008	.008	0	%100
83	Z	.005	.005	0	%100
84	Z	.002	.002	0	%100
85	Z	.002	.002	0	%100
86	Z	.007	.007	0	%100
87	Z	.014	.014	0	%100
88	Z	.014	.014	0	%100
89	Z	.016	.016	0	%100
90	Z	.005	.005	0	%100
91	Z	.005	.005	0	%100
92	Z	.006	.006	0	%100
93	Z	.019	.019	0	%100
94	Z	.019	.019	0	%100
95	Z	.021	.021	0	%100
96	Z	.011	.011	0	%100
97	Z	.011	.011	0	%100
98	Z	.014	.014	0	%100
99	Z	.014	.014	0	%100
100	Z	.004	.004	0	%100
101	Z	.004	.004	0	%100
102	Z	.006	.006	0	%100
103	Z	.006	.006	0	%100
104	Z	.006	.006	0	%100
105	Z	.008	.008	0	%100
106	Z	.008	.008	0	%100
107	Z	.008	.008	0	%100
108	Z	.008	.008	0	%100
109	Z	.005	.005	0	%100
110	Z	.002	.002	0	%100
111	Z	.007	.007	0	%100
112	Z	.013	.013	0	%100
113	Z	.013	.013	0	%100
114	Z	.013	.013	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	X	-.008	-.008	0	%100
2	X	-.009	-.009	0	%100
3	X	-.009	-.009	0	%100
4	X	-.009	-.009	0	%100
5	X	-.009	-.009	0	%100
6	X	0	0	0	%100
7	X	.009	.009	0	%100
8	X	.009	.009	0	%100
9	X	.008	.008	0	%100
10	X	.009	.009	0	%100
11	X	.009	.009	0	%100
12	X	.007	.007	0	%100
13	X	.003	.003	0	%100
14	X	.004	.004	0	%100
15	X	0	0	0	%100
16	X	-.013	-.013	0	%100
17	X	-.016	-.016	0	%100
18	X	-.009	-.009	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
11	X	-.008	-.008	0	%100
12	X	-.005	-.005	0	%100
13	X	-.001	-.001	0	%100
14	X	-.004	-.004	0	%100
15	X	-.003	-.003	0	%100
16	X	-.012	-.012	0	%100
17	X	-.01	-.01	0	%100
18	X	-.006	-.006	0	%100
19	X	-.005	-.005	0	%100
20	X	-.002	-.002	0	%100
21	X	-.006	-.006	0	%100
22	X	-.002	-.002	0	%100
23	X	-.006	-.006	0	%100
24	X	-.005	-.005	0	%100
25	X	-.007	-.007	0	%100
26	X	-.005	-.005	0	%100
27	X	-.002	-.002	0	%100
28	X	-.002	-.002	0	%100
29	X	-.006	-.006	0	%100
30	X	-.014	-.014	0	%100
31	X	-.014	-.014	0	%100
32	X	-.016	-.016	0	%100
33	X	-.005	-.005	0	%100
34	X	-.005	-.005	0	%100
35	X	-.005	-.005	0	%100
36	X	-.019	-.019	0	%100
37	X	-.019	-.019	0	%100
38	X	-.019	-.019	0	%100
39	X	-.009	-.009	0	%100
40	X	-.009	-.009	0	%100
41	X	-.015	-.015	0	%100
42	X	-.015	-.015	0	%100
43	X	-.004	-.004	0	%100
44	X	-.004	-.004	0	%100
45	X	-.006	-.006	0	%100
46	X	-.006	-.006	0	%100
47	X	-.006	-.006	0	%100
48	X	-.008	-.008	0	%100
49	X	-.008	-.008	0	%100
50	X	-.008	-.008	0	%100
51	X	-.008	-.008	0	%100
52	X	-.005	-.005	0	%100
53	X	-.002	-.002	0	%100
54	X	-.007	-.007	0	%100
55	X	-.013	-.013	0	%100
56	X	-.013	-.013	0	%100
57	X	-.013	-.013	0	%100
58	X	.005	.005	0	%100
59	X	.008	.008	0	%100
60	X	.008	.008	0	%100
61	X	.008	.008	0	%100
62	X	.008	.008	0	%100
63	X	.002	.002	0	%100
64	X	.008	.008	0	%100
65	X	.008	.008	0	%100
66	X	.007	.007	0	%100
67	X	.008	.008	0	%100
68	X	.008	.008	0	%100
69	X	.006	.006	0	%100
70	X	.002	.002	0	%100
71	X	.004	.004	0	%100
72	X	.004	.004	0	%100
73	X	.014	.014	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
19	GSI-9	X	-0.08	0	%100
20	M24	X	-3.8e-5	-0.07	%100
21	M25	X	-0.07	0	%100
22	GSI-4	X	0	0	%100
23	M28	X	-0.07	0	%100
24	M29	X	-0.08	0	%100
25	GSI-5	X	-0.08	0	%100
26	M32	X	-0.08	0	%100
27	M33	X	-3.8e-5	0	%100
28	GSI-7	X	0	0	%100
29	GSI-8	X	-0.07	0	%100
30	M38	X	-0.21	0	%100
31	M39	X	-0.21	0	%100
32	M44	X	-0.24	0	%100
33	M49	X	0	0	%100
34	M50	X	0	0	%100
35	M55	X	-0.2	0	%100
36	M60	X	-0.2	0	%100
37	M61	X	-0.21	0	%100
38	M66	X	-0.21	0	%100
39	SA-3R	X	-0.08	0	%100
40	SA-3L	X	-0.08	0	%100
41	SA-1R	X	-0.19	0	%100
42	SA-1L	X	-0.19	0	%100
43	SA-2R	X	-0.1	0	%100
44	SA-2L	X	-0.1	0	%100
45	RRU-2	X	-0.08	0	%100
46	RRU-1	X	-0.08	0	%100
47	RRU-3	X	-0.08	0	%100
48	MP-9	X	-0.09	0	%100
49	MP-12	X	-0.09	0	%100
50	MP-5	X	-0.09	0	%100
51	MP-8	X	-0.09	0	%100
52	FFHR	X	-0.08	0	%100
53	SF1-HR	X	0	0	%100
54	SF2-HR	X	-0.08	0	%100
55	K1	X	-0.16	0	%100
56	K2	X	-0.16	0	%100
57	K3	X	-0.16	0	%100
58	FFTH	Z	-0.05	0	%100
59	MP-1	Z	-0.05	0	%100
60	MP-2	Z	-0.05	0	%100
61	MP-3	Z	-0.05	0	%100
62	MP-4	Z	-0.05	0	%100
63	SF1-TH	Z	0	0	%100
64	MP-6	Z	-0.05	0	%100
65	MP-7	Z	-0.05	0	%100
66	SF2-TH	Z	-0.05	0	%100
67	MP-10	Z	-0.05	0	%100
68	MP-11	Z	-0.05	0	%100
69	SA-1	Z	-0.04	0	%100
70	SA-2	Z	-0.02	0	%100
71	SA-3	Z	-0.02	0	%100
72	GSI-1	Z	0	0	%100
73	GSI-2	Z	-0.09	0	%100
74	GSI-3	Z	-0.09	0	%100
75	GSI-6	Z	-0.05	0	%100
76	GSI-9	Z	-0.04	0	%100
77	M24	Z	2.4e-5	0	%100
78	M25	Z	-0.05	0	%100
79	GSI-4	Z	-0.04	0	%100
80	M28	Z	-0.04	0	%100
81	M29	Z	-0.04	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
82	GSI-5	Z	-0.05	0	%100
83	M32	Z	-0.04	0	%100
84	M33	Z	2.4e-5	0	%100
85	GSI-7	Z	0	0	%100
86	GSI-8	Z	-0.04	0	%100
87	M38	Z	-0.12	0	%100
88	M39	Z	-0.12	0	%100
89	M44	Z	-0.14	0	%100
90	M49	Z	0	0	%100
91	M50	Z	0	0	%100
92	M55	Z	0	0	%100
93	M60	Z	-0.12	0	%100
94	M61	Z	-0.12	0	%100
95	M66	Z	-0.14	0	%100
96	SA-3R	Z	-0.06	0	%100
97	SA-3L	Z	-0.06	0	%100
98	SA-1R	Z	-0.1	0	%100
99	SA-1L	Z	-0.1	0	%100
100	SA-2R	Z	-0.05	0	%100
101	SA-2L	Z	-0.05	0	%100
102	RRU-2	Z	-0.05	0	%100
103	RRU-1	Z	-0.05	0	%100
104	RRU-3	Z	-0.05	0	%100
105	MP-9	Z	-0.05	0	%100
106	MP-12	Z	-0.05	0	%100
107	MP-5	Z	-0.05	0	%100
108	MP-8	Z	-0.05	0	%100
109	FFHR	Z	-0.05	0	%100
110	SF1-HR	Z	0	0	%100
111	SF2-HR	Z	-0.05	0	%100
112	K1	Z	-0.09	0	%100
113	K2	Z	-0.09	0	%100
114	K3	Z	-0.09	0	%100

Member Distributed Loads (BLC.18 : Ice Weight)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	Y	-0.13	0	%100
2	MP-1	Y	-0.14	0	%100
3	MP-2	Y	-0.14	0	%100
4	MP-3	Y	-0.14	0	%100
5	MP-4	Y	-0.14	0	%100
6	SF1-TH	Y	-0.13	0	%100
7	MP-6	Y	-0.14	0	%100
8	MP-7	Y	-0.14	0	%100
9	SF2-TH	Y	-0.13	0	%100
10	MP-10	Y	-0.14	0	%100
11	MP-11	Y	-0.14	0	%100
12	SA-1	Y	-0.2	0	%100
13	SA-2	Y	-0.2	0	%100
14	SA-3	Y	-0.2	0	%100
15	GSI-1	Y	-0.11	0	%100
16	GSI-2	Y	-0.11	0	%100
17	GSI-3	Y	-0.11	0	%100
18	GSI-6	Y	-0.08	0	%100
19	GSI-9	Y	-0.1	0	%100
20	M24	Y	-0.09	0	%100
21	M25	Y	-0.09	0	%100
22	GSI-4	Y	-0.08	0	%100
23	M28	Y	-0.09	0	%100
24	M29	Y	-0.09	0	%100
25	GSI-5	Y	-0.08	0	%100
26	M32	Y	-0.09	0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
27	M33	-009	-009		0	%100
28	GSI7	-01	-01		0	%100
29	GSI8	-01	-01		0	%100
30	M38	-021	-021		0	%100
31	M39	-021	-021		0	%100
32	M44	-019	-019		0	%100
33	M49	-021	-021		0	%100
34	M50	-021	-021		0	%100
35	M55	-019	-019		0	%100
36	M60	-021	-021		0	%100
37	M61	-021	-021		0	%100
38	M66	-019	-019		0	%100
39	SA-3R	-014	-014		0	%100
40	SA-3L	-014	-014		0	%100
41	SA-1R	-014	-014		0	%100
42	SA-1L	-014	-014		0	%100
43	SA-2R	-014	-014		0	%100
44	SA-2L	-014	-014		0	%100
45	RRU-1	-018	-018		0	%100
46	RRU-2	-018	-018		0	%100
47	RRU-3	-018	-018		0	%100
48	MP-9	-014	-014		0	%100
49	MP-12	-014	-014		0	%100
50	MP-5	-014	-014		0	%100
51	MP-8	-014	-014		0	%100
52	FFHR	-013	-013		0	%100
53	SF1-HR	-013	-013		0	%100
54	SF2-HR	-013	-013		0	%100
55	K1	-014	-014		0	%100
56	K2	-014	-014		0	%100
57	K3	-014	-014		0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
29	GSI8	-007	-007		0	%100
30	M38	-009	-009		0	%100
31	M39	-009	-009		0	%100
32	M44	-009	-009		0	%100
33	M49	-009	-009		0	%100
34	M50	-009	-009		0	%100
35	M55	-008	-008		0	%100
36	M60	-009	-009		0	%100
37	M61	-009	-009		0	%100
38	M66	-008	-008		0	%100
39	SA-3R	-007	-007		0	%100
40	SA-3L	-007	-007		0	%100
41	SA-1R	-007	-007		0	%100
42	SA-1L	-007	-007		0	%100
43	SA-2R	-007	-007		0	%100
44	SA-2L	-007	-007		0	%100
45	RRU-2	-004	-004		0	%100
46	RRU-1	-004	-004		0	%100
47	RRU-3	-004	-004		0	%100
48	MP-9	-004	-004		0	%100
49	MP-12	-004	-004		0	%100
50	MP-5	-004	-004		0	%100
51	MP-8	-004	-004		0	%100
52	FFHR	-005	-005		0	%100
53	SF1-HR	-004	-004		0	%100
54	SF2-HR	-004	-004		0	%100
55	K1	-006	-006		0	%100
56	K2	-006	-006		0	%100
57	K3	-006	-006		0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
1	FFTH	-004	-004		0	%100
2	MP-1	-003	-003		0	%100
3	MP-2	-003	-003		0	%100
4	MP-3	-003	-003		0	%100
5	MP-4	-003	-003		0	%100
6	SF1-TH	-003	-003		0	%100
7	MP-6	-003	-003		0	%100
8	MP-7	-003	-003		0	%100
9	SF2-TH	0	0		0	%100
10	MP-10	-003	-003		0	%100
11	MP-11	-003	-003		0	%100
12	SA-1	-002	-002		0	%100
13	SA-2	-004	-004		0	%100
14	SA-3	-002	-002		0	%100
15	GSI-1	-005	-005		0	%100
16	GSI-2	0	0		0	%100
17	GSI-3	-005	-005		0	%100
18	GSH-6	-005	-005		0	%100
19	GSI-9	-005	-005		0	%100
20	M24	-005	-005		0	%100
21	M25	-2.5e-5	-2.5e-5		0	%100
22	GSI-4	-004	-004		0	%100
23	M28	-2.5e-5	-2.5e-5		0	%100
24	M29	-005	-005		0	%100
25	GSI-5	0	0		0	%100
26	M32	-005	-005		0	%100
27	M33	-005	-005		0	%100
28	GSI-7	-005	-005		0	%100
29	GSI-8	0	0		0	%100
30	M38	-007	-007		0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
1	FFTH	-004	-004		0	%100
2	MP-1	-003	-003		0	%100
3	MP-2	-003	-003		0	%100
4	MP-3	-003	-003		0	%100
5	MP-4	-003	-003		0	%100
6	SF1-TH	-003	-003		0	%100
7	MP-6	-003	-003		0	%100
8	MP-7	-003	-003		0	%100
9	SF2-TH	0	0		0	%100
10	MP-10	-003	-003		0	%100
11	MP-11	-003	-003		0	%100
12	SA-1	-002	-002		0	%100
13	SA-2	-004	-004		0	%100
14	SA-3	-002	-002		0	%100
15	GSI-1	-005	-005		0	%100
16	GSI-2	0	0		0	%100
17	GSI-3	-005	-005		0	%100
18	GSH-6	-005	-005		0	%100
19	GSI-9	-005	-005		0	%100
20	M24	-005	-005		0	%100
21	M25	-2.5e-5	-2.5e-5		0	%100
22	GSI-4	-004	-004		0	%100
23	M28	-2.5e-5	-2.5e-5		0	%100
24	M29	-005	-005		0	%100
25	GSI-5	0	0		0	%100
26	M32	-005	-005		0	%100
27	M33	-005	-005		0	%100
28	GSI-7	-005	-005		0	%100
29	GSI-8	0	0		0	%100
30	M38	-007	-007		0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft,....)	F...	Start Location(ft,%)	End Location(ft,%)
1	FFTH	-005	-005		0	%100
2	MP-1	-004	-004		0	%100
3	MP-2	-004	-004		0	%100
4	MP-3	-004	-004		0	%100
5	MP-4	-004	-004		0	%100
6	SF1-TH	-004	-004		0	%100
7	MP-6	-004	-004		0	%100
8	MP-7	-004	-004		0	%100
9	SF2-TH	-004	-004		0	%100
10	MP-10	-004	-004		0	%100
11	MP-11	-004	-004		0	%100
12	SA-1	-004	-004		0	%100
13	SA-2	-004	-004		0	%100
14	SA-3	-004	-004		0	%100
15	GSI-1	-006	-006		0	%100
16	GSI-2	-006	-006		0	%100
17	GSI-3	-007	-007		0	%100
18	GSH-6	-006	-006		0	%100
19	GSI-9	-007	-007		0	%100
20	M24	-006	-006		0	%100
21	M25	-006	-006		0	%100
22	GSI-4	-006	-006		0	%100
23	M28	-006	-006		0	%100
24	M29	-006	-006		0	%100
25	GSI-5	-006	-006		0	%100
26	M32	-006	-006		0	%100
27	M33	-006	-006		0	%100
28	GSI-7	-007	-007		0	%100



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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
94	M61	Z	0	0	%100
95	M66	Z	0	0	%100
96	SA-3R	Z	-0.02	-0.02	%100
97	SA-3L	Z	-0.02	-0.02	%100
98	SA-1R	Z	-0.02	-0.02	%100
99	SA-1L	Z	-0.02	-0.02	%100
100	SA-2R	Z	-0.04	-0.04	%100
101	SA-2L	Z	-0.04	-0.04	%100
102	RRU-2	Z	-0.02	-0.02	%100
103	RRU-1	Z	-0.02	-0.02	%100
104	RRU-3	Z	-0.02	-0.02	%100
105	MP-9	Z	-0.02	-0.02	%100
106	MP-12	Z	-0.02	-0.02	%100
107	MP-5	Z	-0.02	-0.02	%100
108	MP-8	Z	-0.02	-0.02	%100
109	FFHR	Z	-0.02	-0.02	%100
110	SF1-HR	Z	0	0	%100
111	SF2-HR	Z	-0.04	-0.04	%100
112	K1	Z	-0.04	-0.04	%100
113	K2	Z	-0.04	-0.04	%100
114	K3	Z	-0.04	-0.04	%100

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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-0.03	-0.03	%100
2	MP-1	X	-0.03	-0.03	%100
3	MP-2	X	-0.03	-0.03	%100
4	MP-3	X	-0.03	-0.03	%100
5	MP-4	X	-0.03	-0.03	%100
6	SF1-TH	X	-0.03	-0.03	%100
7	MP-6	X	-0.03	-0.03	%100
8	MP-7	X	-0.03	-0.03	%100
9	SF2-TH	X	-0.00749	-0.00749	%100
10	MP-10	X	-0.03	-0.03	%100
11	MP-11	X	-0.03	-0.03	%100
12	SA-1	X	-0.00792	-0.00792	%100
13	SA-2	X	-0.03	-0.03	%100
14	SA-3	X	-0.02	-0.02	%100
15	GSI-1	X	-0.04	-0.04	%100
16	GSI-2	X	-0.01	-0.01	%100
17	GSI-3	X	-0.04	-0.04	%100
18	GSI-6	X	-0.03	-0.03	%100
19	GSI-9	X	-0.03	-0.03	%100
20	M24	X	-0.04	-0.04	%100
21	M25	X	-0.01	-0.01	%100
22	GSI-4	X	-0.04	-0.04	%100
23	M28	X	-0.01	-0.01	%100
24	M29	X	-0.03	-0.03	%100
25	GSI-5	X	-0.01	-0.01	%100
26	M32	X	-0.03	-0.03	%100
27	M33	X	-0.04	-0.04	%100
28	GSI-7	X	-0.05	-0.05	%100
29	GSI-8	X	-0.01	-0.01	%100
30	M38	X	-0.05	-0.05	%100
31	M39	X	-0.05	-0.05	%100
32	M44	X	-0.05	-0.05	%100
33	M49	X	-0.06	-0.06	%100
34	M50	X	-0.06	-0.06	%100
35	M55	X	-0.06	-0.06	%100
36	M60	X	-0.02	-0.02	%100
37	M61	X	-0.02	-0.02	%100
38	M66	X	-0.02	-0.02	%100



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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F...	Start Location(ft.%)	End Location(ft.%)
31	M39	X	-0.07	-0.07	%100
32	M44	X	-0.07	-0.07	%100
33	M49	X	-0.07	-0.07	%100
34	M50	X	-0.07	-0.07	%100
35	M55	X	-0.06	-0.06	%100
36	M60	X	0	0	%100
37	M61	X	0	0	%100
38	M66	X	0	0	%100
39	SA-3R	X	-0.03	-0.03	%100
40	SA-3L	X	-0.03	-0.03	%100
41	SA-1R	X	-0.03	-0.03	%100
42	SA-1L	X	-0.03	-0.03	%100
43	SA-2R	X	-0.06	-0.06	%100
44	SA-2L	X	-0.06	-0.06	%100
45	RRU-2	X	-0.03	-0.03	%100
46	RRU-1	X	-0.03	-0.03	%100
47	RRU-3	X	-0.03	-0.03	%100
48	MP-9	X	-0.03	-0.03	%100
49	MP-12	X	-0.03	-0.03	%100
50	MP-5	X	-0.03	-0.03	%100
51	MP-8	X	-0.03	-0.03	%100
52	FFHR	X	-0.04	-0.04	%100
53	SF1-HR	X	-0.03	-0.03	%100
54	SF2-HR	X	0	0	%100
55	K1	X	-0.06	-0.06	%100
56	K2	X	-0.06	-0.06	%100
57	K3	X	-0.06	-0.06	%100
58	FFTH	Z	-0.02	-0.02	%100
59	MP-1	Z	-0.02	-0.02	%100
60	MP-2	Z	-0.02	-0.02	%100
61	MP-3	Z	-0.02	-0.02	%100
62	MP-4	Z	-0.02	-0.02	%100
63	SF1-TH	Z	-0.02	-0.02	%100
64	MP-6	Z	-0.02	-0.02	%100
65	MP-7	Z	-0.02	-0.02	%100
66	SF2-TH	Z	0	0	%100
67	MP-10	Z	-0.02	-0.02	%100
68	MP-11	Z	-0.02	-0.02	%100
69	SA-1	Z	-0.01	-0.01	%100
70	SA-2	Z	-0.02	-0.02	%100
71	SA-3	Z	-0.01	-0.01	%100
72	GSI-1	Z	-0.03	-0.03	%100
73	GSI-2	Z	0	0	%100
74	GSI-3	Z	-0.03	-0.03	%100
75	GSI-6	Z	-0.02	-0.02	%100
76	GSI-9	Z	-0.03	-0.03	%100
77	M24	Z	-0.03	-0.03	%100
78	M25	Z	-1.5e-5	-1.5e-5	%100
79	GSI-4	Z	-0.03	-0.03	%100
80	M28	Z	-1.5e-5	-1.5e-5	%100
81	M29	Z	-0.03	-0.03	%100
82	GSI-5	Z	0	0	%100
83	M32	Z	-0.03	-0.03	%100
84	M33	Z	-0.03	-0.03	%100
85	GSI-7	Z	-0.03	-0.03	%100
86	GSI-8	Z	0	0	%100
87	M38	Z	-0.04	-0.04	%100
88	M39	Z	-0.04	-0.04	%100
89	M44	Z	-0.04	-0.04	%100
90	M49	Z	-0.04	-0.04	%100
91	M50	Z	-0.04	-0.04	%100
92	M55	Z	-0.04	-0.04	%100
93	M60	Z	0	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)	
102	RRU-2	Z	-0.003	-0.003	0	%100
103	RRU-1	Z	-0.003	-0.003	0	%100
104	RRU-3	Z	-0.003	-0.003	0	%100
105	MP-9	Z	-0.003	-0.003	0	%100
106	MP-12	Z	-0.003	-0.003	0	%100
107	MP-5	Z	-0.003	-0.003	0	%100
108	MP-8	Z	-0.003	-0.003	0	%100
109	FFHR	Z	-0.002	-0.002	0	%100
110	SF1-HR	Z	-0.003	-0.003	0	%100
111	SF2-HR	Z	-0.00899	-0.00899	0	%100
112	K1	Z	-0.005	-0.005	0	%100
113	K2	Z	-0.005	-0.005	0	%100
114	K3	Z	-0.005	-0.005	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)	
1	FFTH	X	-0.001	-0.001	0	%100
2	MP-1	X	-0.002	-0.002	0	%100
3	MP-2	X	-0.002	-0.002	0	%100
4	MP-3	X	-0.002	-0.002	0	%100
5	MP-4	X	-0.002	-0.002	0	%100
6	SF1-TH	X	-0.002	-0.002	0	%100
7	MP-6	X	-0.002	-0.002	0	%100
8	MP-7	X	-0.002	-0.002	0	%100
9	SF2-TH	X	-0.001	-0.001	0	%100
10	MP-10	X	-0.002	-0.002	0	%100
11	MP-11	X	-0.002	-0.002	0	%100
12	SA-1	X	0	0	0	%100
13	SA-2	X	-0.002	-0.002	0	%100
14	SA-3	X	-0.002	-0.002	0	%100
15	GSH-1	X	-0.003	-0.003	0	%100
16	GSH-2	X	-0.002	-0.002	0	%100
17	GSH-3	X	-0.002	-0.002	0	%100
18	GSH-6	X	-0.002	-0.002	0	%100
19	GSH-9	X	-0.002	-0.002	0	%100
20	M24	X	-0.003	-0.003	0	%100
21	M25	X	-0.002	-0.002	0	%100
22	GSH-4	X	-0.003	-0.003	0	%100
23	M28	X	-0.002	-0.002	0	%100
24	M29	X	-0.002	-0.002	0	%100
25	GSH-5	X	-0.001	-0.001	0	%100
26	M32	X	-0.002	-0.002	0	%100
27	M33	X	-0.003	-0.003	0	%100
28	GSH-7	X	-0.003	-0.003	0	%100
29	GSH-8	X	-0.002	-0.002	0	%100
30	M38	X	-0.002	-0.002	0	%100
31	M39	X	-0.002	-0.002	0	%100
32	M44	X	-0.002	-0.002	0	%100
33	M49	X	-0.005	-0.005	0	%100
34	M50	X	-0.005	-0.005	0	%100
35	M55	X	-0.004	-0.004	0	%100
36	M60	X	-0.002	-0.002	0	%100
37	M61	X	-0.002	-0.002	0	%100
38	M66	X	-0.002	-0.002	0	%100
39	SA-3R	X	-0.003	-0.003	0	%100
40	SA-3L	X	-0.003	-0.003	0	%100
41	SA-1R	X	0	0	0	%100
42	SA-1L	X	0	0	0	%100
43	SA-2R	X	-0.003	-0.003	0	%100
44	SA-2L	X	-0.003	-0.003	0	%100
45	RRU-2	X	-0.002	-0.002	0	%100
46	RRU-1	X	-0.002	-0.002	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)	
39	SA-3R	X	-0.003	-0.003	0	%100
40	SA-3L	X	-0.003	-0.003	0	%100
41	SA-1R	X	-0.001	-0.001	0	%100
42	SA-1L	X	-0.001	-0.001	0	%100
43	SA-2R	X	-0.005	-0.005	0	%100
44	SA-2L	X	-0.005	-0.005	0	%100
45	RRU-2	X	-0.003	-0.003	0	%100
46	RRU-1	X	-0.003	-0.003	0	%100
47	RRU-3	X	-0.003	-0.003	0	%100
48	MP-9	X	-0.003	-0.003	0	%100
49	MP-12	X	-0.003	-0.003	0	%100
50	MP-5	X	-0.003	-0.003	0	%100
51	MP-8	X	-0.003	-0.003	0	%100
52	FFHR	X	-0.003	-0.003	0	%100
53	SF1-HR	X	-0.003	-0.003	0	%100
54	SF2-HR	X	-0.00738	-0.00738	0	%100
55	K1	X	-0.005	-0.005	0	%100
56	K2	X	-0.005	-0.005	0	%100
57	K3	X	-0.005	-0.005	0	%100
58	FFTH	Z	-0.002	-0.002	0	%100
59	MP-1	Z	-0.003	-0.003	0	%100
60	MP-2	Z	-0.003	-0.003	0	%100
61	MP-3	Z	-0.003	-0.003	0	%100
62	MP-4	Z	-0.003	-0.003	0	%100
63	SF1-TH	Z	-0.003	-0.003	0	%100
64	MP-6	Z	-0.003	-0.003	0	%100
65	MP-7	Z	-0.003	-0.003	0	%100
66	SF2-TH	Z	-0.00917	-0.00917	0	%100
67	MP-10	Z	-0.003	-0.003	0	%100
68	MP-11	Z	-0.003	-0.003	0	%100
69	SA-1	Z	-0.00771	-0.00771	0	%100
70	SA-2	Z	-0.003	-0.003	0	%100
71	SA-3	Z	-0.002	-0.002	0	%100
72	GSH-1	Z	-0.005	-0.005	0	%100
73	GSH-2	Z	-0.001	-0.001	0	%100
74	GSH-3	Z	-0.003	-0.003	0	%100
75	GSH-6	Z	-0.003	-0.003	0	%100
76	GSH-9	Z	-0.003	-0.003	0	%100
77	M24	Z	-0.004	-0.004	0	%100
78	M25	Z	-0.001	-0.001	0	%100
79	GSH-4	Z	-0.004	-0.004	0	%100
80	M28	Z	-0.001	-0.001	0	%100
81	M29	Z	-0.003	-0.003	0	%100
82	GSH-5	Z	-0.001	-0.001	0	%100
83	M32	Z	-0.003	-0.003	0	%100
84	M33	Z	-0.004	-0.004	0	%100
85	GSH-7	Z	-0.005	-0.005	0	%100
86	GSH-8	Z	-0.001	-0.001	0	%100
87	M38	Z	-0.004	-0.004	0	%100
88	M39	Z	-0.004	-0.004	0	%100
89	M44	Z	-0.004	-0.004	0	%100
90	M49	Z	-0.006	-0.006	0	%100
91	M50	Z	-0.006	-0.006	0	%100
92	M55	Z	-0.002	-0.002	0	%100
93	M60	Z	-0.002	-0.002	0	%100
94	M61	Z	-0.002	-0.002	0	%100
95	M66	Z	-0.002	-0.002	0	%100
96	SA-3R	Z	-0.004	-0.004	0	%100
97	SA-3L	Z	-0.004	-0.004	0	%100
98	SA-1R	Z	-0.001	-0.001	0	%100
99	SA-1L	Z	-0.001	-0.001	0	%100
100	SA-2R	Z	-0.005	-0.005	0	%100
101	SA-2L	Z	-0.005	-0.005	0	%100



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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F....	Start Location(ft.%)	End Location(ft.%)
47	RRU-3	X	-0.02	0	%100
48	MP-9	X	-0.02	0	%100
49	MP-10	X	-0.02	0	%100
50	MP-5	X	-0.02	0	%100
51	MP-8	X	-0.02	0	%100
52	FFHR	X	-0.01	0	%100
53	SF1-HR	X	-0.02	0	%100
54	SF2-HR	X	-0.01	0	%100
55	K1	X	-0.03	0	%100
56	K2	X	-0.03	0	%100
57	K3	X	-0.03	0	%100
58	FFTH	Z	-0.02	0	%100
59	MP-1	Z	-0.03	0	%100
60	MP-2	Z	-0.03	0	%100
61	MP-3	Z	-0.03	0	%100
62	MP-4	Z	-0.03	0	%100
63	SF1-TH	Z	-0.04	0	%100
64	MP-6	Z	-0.03	0	%100
65	MP-7	Z	-0.03	0	%100
66	SF2-TH	Z	-0.02	0	%100
67	MP-10	Z	-0.03	0	%100
68	MP-11	Z	-0.03	0	%100
69	SA-1	Z	0	0	%100
70	SA-2	Z	-0.03	0	%100
71	SA-3	Z	-0.03	0	%100
72	GSI-1	Z	-0.06	0	%100
73	GSI-2	Z	-0.03	0	%100
74	GSI-3	Z	-0.03	0	%100
75	GSI-6	Z	-0.02	0	%100
76	GSI-9	Z	-0.03	0	%100
77	M24	Z	-0.05	0	%100
78	M25	Z	-0.03	0	%100
79	GSI-4	Z	-0.05	0	%100
80	M28	Z	-0.03	0	%100
81	M29	Z	-0.03	0	%100
82	GSI-5	Z	-0.03	0	%100
83	M32	Z	-0.03	0	%100
84	M33	Z	-0.05	0	%100
85	GSI-7	Z	-0.05	0	%100
86	GSI-8	Z	-0.03	0	%100
87	M38	Z	-0.04	0	%100
88	M39	Z	-0.04	0	%100
89	M44	Z	-0.04	0	%100
90	M49	Z	-0.08	0	%100
91	M50	Z	-0.08	0	%100
92	M55	Z	-0.08	0	%100
93	M60	Z	-0.04	0	%100
94	M61	Z	-0.04	0	%100
95	M66	Z	-0.04	0	%100
96	SA-3R	Z	-0.06	0	%100
97	SA-3L	Z	-0.06	0	%100
98	SA-1R	Z	0	0	%100
99	SA-1L	Z	0	0	%100
100	SA-2R	Z	-0.05	0	%100
101	SA-2L	Z	-0.05	0	%100
102	RRU-2	Z	-0.04	0	%100
103	RRU-1	Z	-0.04	0	%100
104	RRU-3	Z	-0.04	0	%100
105	MP-9	Z	-0.03	0	%100
106	MP-12	Z	-0.03	0	%100
107	MP-5	Z	-0.03	0	%100
108	MP-8	Z	-0.03	0	%100
109	FFHR	Z	-0.02	0	%100



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

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F....	Start Location(ft.%)	End Location(ft.%)
110	SF1-HR	Z	-0.04	0	%100
111	SF2-HR	Z	-0.02	0	%100
112	K1	Z	-0.06	0	%100
113	K2	Z	-0.06	0	%100
114	K3	Z	-0.06	0	%100

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.F....	Start Location(ft.%)	End Location(ft.%)
1	FFTH	Z	0	0	%100
2	MP-1	Z	-0.04	0	%100
3	MP-2	Z	-0.04	0	%100
4	MP-3	Z	-0.04	0	%100
5	MP-4	Z	-0.04	0	%100
6	SF1-TH	Z	-0.04	0	%100
7	MP-6	Z	-0.04	0	%100
8	MP-7	Z	-0.04	0	%100
9	SF2-TH	Z	-0.04	0	%100
10	MP-10	Z	-0.04	0	%100
11	SA-1	Z	-0.04	0	%100
12	SA-2	Z	-0.02	0	%100
13	SA-3	Z	-0.04	0	%100
14	GSI-1	Z	-0.06	0	%100
15	GSI-2	Z	-0.06	0	%100
16	GSI-3	Z	0	0	%100
17	GSI-6	Z	0	0	%100
18	GSI-9	Z	0	0	%100
19	M24	Z	-0.05	0	%100
20	M25	Z	-0.05	0	%100
21	M28	Z	-0.05	0	%100
22	GSI-4	Z	-0.05	0	%100
23	M29	Z	-0.05	0	%100
24	M28	Z	-2.9e-5	0	%100
25	GSI-5	Z	-0.05	0	%100
26	M32	Z	-2.9e-5	0	%100
27	M33	Z	-0.05	0	%100
28	GSI-7	Z	-0.06	0	%100
29	GSI-8	Z	-0.06	0	%100
30	M38	Z	0	0	%100
31	M39	Z	0	0	%100
32	M44	Z	0	0	%100
33	M49	Z	-0.08	0	%100
34	M50	Z	-0.08	0	%100
35	M55	Z	-0.08	0	%100
36	M60	Z	-0.08	0	%100
37	M61	Z	-0.08	0	%100
38	M66	Z	-0.08	0	%100
39	SA-3R	Z	-0.08	0	%100
40	SA-3L	Z	-0.08	0	%100
41	SA-1R	Z	-0.04	0	%100
42	SA-1L	Z	-0.04	0	%100
43	SA-2R	Z	-0.04	0	%100
44	SA-2L	Z	-0.04	0	%100
45	RRU-2	Z	-0.04	0	%100
46	RRU-1	Z	-0.04	0	%100
47	RRU-3	Z	-0.04	0	%100
48	MP-9	Z	-0.04	0	%100
49	MP-12	Z	-0.04	0	%100
50	MP-5	Z	-0.04	0	%100
51	MP-8	Z	0	0	%100
52	FFHR	Z	0	0	%100
53	SF1-HR	Z	-0.04	0	%100
54	SF2-HR	Z	-0.04	0	%100



Member Distributed Loads (BLC 23 : 90 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.F...]	Start Location[ft.%]	End Location[ft.%]
55	K1	-0.07	-0.07	0	%100
56	K2	-0.07	-0.07	0	%100
57	K3	-0.07	-0.07	0	%100

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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	FFTH	0	.001	0	%100
2	MP-1	.002	.002	0	%100
3	MP-2	.002	.002	0	%100
4	MP-3	.002	.002	0	%100
5	MP-4	.002	.002	0	%100
6	SF1-TH	.001	.001	0	%100
7	MP-6	.002	.002	0	%100
8	MP-7	.002	.002	0	%100
9	SF2-TH	.002	.002	0	%100
10	MP-10	.002	.002	0	%100
11	MP-11	.002	.002	0	%100
12	SA-1	.002	.002	0	%100
13	SA-2	0	0	0	%100
14	SA-3	.002	.002	0	%100
15	GSH-1	.002	.002	0	%100
16	GSH-2	.003	.003	0	%100
17	GSH-3	.002	.002	0	%100
18	GSH-6	.002	.002	0	%100
19	GSH-9	.002	.002	0	%100
20	M24	.002	.002	0	%100
21	M25	.003	.003	0	%100
22	GSH-4	.001	.001	0	%100
23	M28	.003	.003	0	%100
24	M29	.002	.002	0	%100
25	GSH-5	.003	.003	0	%100
26	M32	.002	.002	0	%100
27	M33	.002	.002	0	%100
28	GSH-7	.002	.002	0	%100
29	GSH-8	.003	.003	0	%100
30	M38	.002	.002	0	%100
31	M39	.002	.002	0	%100
32	M44	.002	.002	0	%100
33	M49	.002	.002	0	%100
34	M50	.002	.002	0	%100
35	M55	.002	.002	0	%100
36	M60	.005	.005	0	%100
37	M61	.005	.005	0	%100
38	M66	.004	.004	0	%100
39	SA-3R	.003	.003	0	%100
40	SA-3L	.003	.003	0	%100
41	SA-1R	.003	.003	0	%100
42	SA-1L	.003	.003	0	%100
43	SA-2R	0	0	0	%100
44	SA-2L	0	0	0	%100
45	RRU-2	.002	.002	0	%100
46	RRU-1	.002	.002	0	%100
47	RRU-3	.002	.002	0	%100
48	MP-9	.002	.002	0	%100
49	MP-12	.002	.002	0	%100
50	MP-5	.002	.002	0	%100
51	MP-8	.002	.002	0	%100
52	FFHR	.001	.001	0	%100
53	SF1-HR	.001	.001	0	%100
54	SF2-HR	.002	.002	0	%100
55	K1	.003	.003	0	%100
56	K2	.003	.003	0	%100



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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.F...]	Start Location[ft.%]	End Location[ft.%]
57	K3	.003	.003	0	%100
58	FFTH	-0.02	-0.02	0	%100
59	MP-1	-0.03	-0.03	0	%100
60	MP-2	-0.03	-0.03	0	%100
61	MP-3	-0.03	-0.03	0	%100
62	MP-4	-0.03	-0.03	0	%100
63	SF1-TH	-0.02	-0.02	0	%100
64	MP-6	-0.03	-0.03	0	%100
65	MP-7	-0.03	-0.03	0	%100
66	SF2-TH	-0.04	-0.04	0	%100
67	MP-4	-0.03	-0.03	0	%100
68	MP-11	-0.03	-0.03	0	%100
69	SA-1	-0.03	-0.03	0	%100
70	SA-2	0	0	0	%100
71	SA-3	-0.03	-0.03	0	%100
72	GSH-1	-0.03	-0.03	0	%100
73	GSH-2	-0.06	-0.06	0	%100
74	GSH-3	-0.03	-0.03	0	%100
75	GSH-6	-0.02	-0.02	0	%100
76	GSH-9	-0.03	-0.03	0	%100
77	M24	-0.03	-0.03	0	%100
78	M25	-0.05	-0.05	0	%100
79	GSH-4	-0.03	-0.03	0	%100
80	M28	-0.05	-0.05	0	%100
81	M29	-0.03	-0.03	0	%100
82	GSH-5	-0.05	-0.05	0	%100
83	M32	-0.03	-0.03	0	%100
84	M33	-0.03	-0.03	0	%100
85	GSH-7	-0.03	-0.03	0	%100
86	GSH-8	-0.06	-0.06	0	%100
87	M38	-0.04	-0.04	0	%100
88	M39	-0.04	-0.04	0	%100
89	M44	-0.04	-0.04	0	%100
90	M49	-0.04	-0.04	0	%100
91	M50	-0.04	-0.04	0	%100
92	M55	-0.04	-0.04	0	%100
93	M60	-0.08	-0.08	0	%100
94	M61	-0.08	-0.08	0	%100
95	M66	-0.08	-0.08	0	%100
96	SA-3R	-0.06	-0.06	0	%100
97	SA-3L	-0.05	-0.05	0	%100
98	SA-1R	-0.05	-0.05	0	%100
99	SA-1L	-0.05	-0.05	0	%100
100	SA-2R	0	0	0	%100
101	SA-2L	0	0	0	%100
102	RRU-2	-0.04	-0.04	0	%100
103	RRU-1	-0.04	-0.04	0	%100
104	RRU-3	-0.04	-0.04	0	%100
105	MP-9	-0.03	-0.03	0	%100
106	MP-12	-0.03	-0.03	0	%100
107	MP-5	-0.03	-0.03	0	%100
108	MP-8	-0.03	-0.03	0	%100
109	FFHR	-0.02	-0.02	0	%100
110	SF1-HR	-0.02	-0.02	0	%100
111	SF2-HR	-0.04	-0.04	0	%100
112	K1	-0.06	-0.06	0	%100
113	K2	-0.06	-0.06	0	%100
114	K3	-0.06	-0.06	0	%100

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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	FFTH	.003	.003	0	%100





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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft, F,....)	Start Location(ft,%)	End Location(ft,%)
2	MP-1	X	.003	0	%100
3	MP-2	X	.003	0	%100
4	MP-3	X	.003	0	%100
5	MP-4	X	.003	0	%100
6	SF1-TH	X	.000749	0	%100
7	MP-6	X	.003	0	%100
8	MP-7	X	.003	0	%100
9	SF2-TH	X	.003	0	%100
10	MP-10	X	.003	0	%100
11	MP-11	X	.003	0	%100
12	SA-1	X	.003	0	%100
13	SA-2	X	.000792	0	%100
14	SA-3	X	.002	0	%100
15	GSI-1	X	.001	0	%100
16	GSI-2	X	.004	0	%100
17	GSI-3	X	.004	0	%100
18	GSI-6	X	.003	0	%100
19	GSI-9	X	.003	0	%100
20	M24	X	.001	0	%100
21	M25	X	.004	0	%100
22	GSI-4	X	.001	0	%100
23	M28	X	.004	0	%100
24	M29	X	.003	0	%100
25	GSI-5	X	.004	0	%100
26	M32	X	.003	0	%100
27	M33	X	.001	0	%100
28	GSI-7	X	.001	0	%100
29	GSI-8	X	.005	0	%100
30	M38	X	.005	0	%100
31	M39	X	.005	0	%100
32	M44	X	.005	0	%100
33	M49	X	.002	0	%100
34	M50	X	.002	0	%100
35	M55	X	.002	0	%100
36	M60	X	.006	0	%100
37	M61	X	.006	0	%100
38	M66	X	.006	0	%100
39	SA-3R	X	.003	0	%100
40	SA-3L	X	.003	0	%100
41	SA-1R	X	.005	0	%100
42	SA-1L	X	.005	0	%100
43	SA-2R	X	.001	0	%100
44	SA-2L	X	.001	0	%100
45	RRU-2	X	.003	0	%100
46	RRU-1	X	.003	0	%100
47	RRU-3	X	.003	0	%100
48	MP-9	X	.003	0	%100
49	MP-12	X	.003	0	%100
50	MP-5	X	.003	0	%100
51	MP-8	X	.003	0	%100
52	FFHR	X	.003	0	%100
53	SF1-HR	X	.000738	0	%100
54	SF2-HR	X	.003	0	%100
55	K1	X	.005	0	%100
56	K2	X	.005	0	%100
57	K3	X	.005	0	%100
58	FFTH	X	.002	0	%100
59	MP-1	Z	-.003	0	%100
60	MP-2	Z	-.003	0	%100
61	MP-3	Z	-.003	0	%100
62	MP-4	Z	-.003	0	%100
63	SF1-TH	Z	-.000917	0	%100
64	MP-6	Z	-.003	0	%100



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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft, F,....)	Start Location(ft,%)	End Location(ft,%)
65	MP-7	Z	-.003	0	%100
66	SF2-TH	Z	-.003	0	%100
67	MP-10	Z	-.003	0	%100
68	MP-11	Z	-.003	0	%100
69	SA-1	Z	-.003	0	%100
70	SA-2	Z	-.000771	0	%100
71	SA-3	Z	-.002	0	%100
72	GSI-1	Z	-.001	0	%100
73	GSI-2	Z	-.005	0	%100
74	GSI-3	Z	-.003	0	%100
75	GSI-6	Z	-.003	0	%100
76	GSI-9	Z	-.003	0	%100
77	M24	Z	-.001	0	%100
78	M25	Z	-.004	0	%100
79	GSI-4	Z	-.001	0	%100
80	M28	Z	-.004	0	%100
81	M29	Z	-.003	0	%100
82	GSI-5	Z	-.004	0	%100
83	M32	Z	-.003	0	%100
84	M33	Z	-.001	0	%100
85	GSI-7	Z	-.001	0	%100
86	GSI-8	Z	-.005	0	%100
87	M38	Z	-.004	0	%100
88	M39	Z	-.004	0	%100
89	M44	Z	-.004	0	%100
90	M49	Z	-.002	0	%100
91	M50	Z	-.002	0	%100
92	M55	Z	-.002	0	%100
93	M60	Z	-.006	0	%100
94	M61	Z	-.006	0	%100
95	M66	Z	-.006	0	%100
96	SA-3R	Z	-.004	0	%100
97	SA-3L	Z	-.004	0	%100
98	SA-1R	Z	-.005	0	%100
99	SA-1L	Z	-.005	0	%100
100	SA-2R	Z	-.001	0	%100
101	SA-2L	Z	-.001	0	%100
102	RRU-2	Z	-.003	0	%100
103	RRU-1	Z	-.003	0	%100
104	RRU-3	Z	-.003	0	%100
105	MP-9	Z	-.003	0	%100
106	MP-12	Z	-.003	0	%100
107	MP-5	Z	-.003	0	%100
108	MP-8	Z	-.003	0	%100
109	FFHR	Z	-.002	0	%100
110	SF1-HR	Z	-.000899	0	%100
111	SF2-HR	Z	-.003	0	%100
112	K1	Z	-.005	0	%100
113	K2	Z	-.005	0	%100
114	K3	Z	-.005	0	%100

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

Member Label	Direction	Start Magnitude(k/ft,....)	End Magnitude(k/ft, F,....)	Start Location(ft,%)	End Location(ft,%)
1	FFTH	X	.004	0	%100
2	MP-1	X	.003	0	%100
3	MP-2	X	.003	0	%100
4	MP-3	X	.003	0	%100
5	MP-4	X	.003	0	%100
6	SF1-TH	X	0	0	%100
7	MP-6	X	.003	0	%100
8	MP-7	X	.003	0	%100
9	SF2-TH	X	.003	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
73	Z	-0.03	-0.03		0	%100
74	Z	-0.03	-0.03		0	%100
75	Z	-0.02	-0.02		0	%100
76	Z	-0.03	-0.03		0	%100
77	Z	-1.5e-5	-1.5e-5		0	%100
78	Z	-0.03	-0.03		0	%100
79	Z	0	0		0	%100
80	Z	-0.03	-0.03		0	%100
81	Z	-0.03	-0.03		0	%100
82	Z	-0.03	-0.03		0	%100
83	Z	-0.03	-0.03		0	%100
84	Z	-1.5e-5	-1.5e-5		0	%100
85	Z	0	0		0	%100
86	Z	-0.03	-0.03		0	%100
87	Z	-0.04	-0.04		0	%100
88	Z	-0.04	-0.04		0	%100
89	Z	-0.04	-0.04		0	%100
90	Z	0	0		0	%100
91	Z	0	0		0	%100
92	Z	0	0		0	%100
93	Z	-0.04	-0.04		0	%100
94	Z	-0.04	-0.04		0	%100
95	Z	-0.04	-0.04		0	%100
96	Z	-0.02	-0.02		0	%100
97	Z	-0.02	-0.02		0	%100
98	Z	-0.04	-0.04		0	%100
99	Z	-0.04	-0.04		0	%100
100	Z	-0.02	-0.02		0	%100
101	Z	-0.02	-0.02		0	%100
102	Z	-0.02	-0.02		0	%100
103	Z	-0.02	-0.02		0	%100
104	Z	-0.02	-0.02		0	%100
105	Z	-0.02	-0.02		0	%100
106	Z	-0.02	-0.02		0	%100
107	Z	-0.02	-0.02		0	%100
108	Z	-0.02	-0.02		0	%100
109	Z	-0.02	-0.02		0	%100
110	Z	0	0		0	%100
111	Z	-0.02	-0.02		0	%100
112	Z	-0.04	-0.04		0	%100
113	Z	-0.04	-0.04		0	%100
114	Z	-0.04	-0.04		0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
1	X	.005	.005		0	%100
2	X	.004	.004		0	%100
3	X	.004	.004		0	%100
4	X	.004	.004		0	%100
5	X	.004	.004		0	%100
6	X	.004	.004		0	%100
7	X	.004	.004		0	%100
8	X	.004	.004		0	%100
9	X	.004	.004		0	%100
10	X	.004	.004		0	%100
11	X	.004	.004		0	%100
12	X	.004	.004		0	%100
13	X	.004	.004		0	%100
14	X	.004	.004		0	%100
15	X	.006	.006		0	%100
16	X	.006	.006		0	%100
17	X	.007	.007		0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
10	X	.003	.003		0	%100
11	X	.003	.003		0	%100
12	X	.004	.004		0	%100
13	X	.002	.002		0	%100
14	X	.002	.002		0	%100
15	X	0	0		0	%100
16	X	.005	.005		0	%100
17	X	.005	.005		0	%100
18	X	.005	.005		0	%100
19	X	.005	.005		0	%100
20	X	2.5e-5	2.5e-5		0	%100
21	X	.005	.005		0	%100
22	X	0	0		0	%100
23	X	.005	.005		0	%100
24	X	.005	.005		0	%100
25	X	.004	.004		0	%100
26	X	.005	.005		0	%100
27	X	2.5e-5	2.5e-5		0	%100
28	X	0	0		0	%100
29	X	.005	.005		0	%100
30	X	.007	.007		0	%100
31	X	.007	.007		0	%100
32	X	.007	.007		0	%100
33	X	0	0		0	%100
34	X	0	0		0	%100
35	X	0	0		0	%100
36	X	.007	.007		0	%100
37	X	.007	.007		0	%100
38	X	.006	.006		0	%100
39	X	.003	.003		0	%100
40	X	.003	.003		0	%100
41	X	.006	.006		0	%100
42	X	.006	.006		0	%100
43	X	.003	.003		0	%100
44	X	.003	.003		0	%100
45	X	.003	.003		0	%100
46	X	.003	.003		0	%100
47	X	.003	.003		0	%100
48	X	.003	.003		0	%100
49	X	.003	.003		0	%100
50	X	.003	.003		0	%100
51	X	.003	.003		0	%100
52	X	.004	.004		0	%100
53	X	0	0		0	%100
54	X	.003	.003		0	%100
55	X	.006	.006		0	%100
56	X	.006	.006		0	%100
57	X	.006	.006		0	%100
58	X	.002	.002		0	%100
59	X	.002	.002		0	%100
60	X	.002	.002		0	%100
61	X	.002	.002		0	%100
62	X	.002	.002		0	%100
63	X	0	0		0	%100
64	X	.002	.002		0	%100
65	X	.002	.002		0	%100
66	X	.002	.002		0	%100
67	X	.002	.002		0	%100
68	X	.002	.002		0	%100
69	X	.002	.002		0	%100
70	X	.001	.001		0	%100
71	X	.001	.001		0	%100
72	X	0	0		0	%100



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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.....]	Start Location(ft.%)	End Location(ft.%)
20	M24	X	.005	.005	0
21	M25	X	2.5e-5	2.5e-5	0
22	GSI-4	X	.004	.004	0
23	M28	X	2.5e-5	2.5e-5	0
24	M29	X	.005	.005	0
25	GSI-5	X	0	0	0
26	M32	X	.005	.005	0
27	M33	X	.005	.005	0
28	GSI-7	X	.005	.005	0
29	GSI-8	X	0	0	0
30	M38	X	.007	.007	0
31	M39	X	.007	.007	0
32	M44	X	.007	.007	0
33	M49	X	.007	.007	0
34	M50	X	.007	.007	0
35	M55	X	.006	.006	0
36	M60	X	0	0	0
37	M61	X	0	0	0
38	M66	X	0	0	0
39	SA-3R	X	.003	.003	0
40	SA-3L	X	.003	.003	0
41	SA-1R	X	.003	.003	0
42	SA-1L	X	.003	.003	0
43	SA-2R	X	.006	.006	0
44	SA-2L	X	.006	.006	0
45	RRU-1	X	.003	.003	0
46	RRU-2	X	.003	.003	0
47	RRU-3	X	.003	.003	0
48	MP-9	X	.003	.003	0
49	MP-12	X	.003	.003	0
50	MP-5	X	.003	.003	0
51	MP-8	X	.003	.003	0
52	MP-5	X	.004	.004	0
53	SF1-HR	X	.003	.003	0
54	SF2-HR	X	0	0	0
55	K1	X	.006	.006	0
56	K2	X	.006	.006	0
57	K3	X	.006	.006	0
58	FFTH	Z	.002	.002	0
59	MP-1	Z	.002	.002	0
60	MP-2	Z	.002	.002	0
61	MP-3	Z	.002	.002	0
62	MP-4	Z	.002	.002	0
63	SF1-TH	Z	.002	.002	0
64	MP-6	Z	.002	.002	0
65	MP-7	Z	.002	.002	0
66	SF2-TH	Z	0	0	0
67	MP-10	Z	.002	.002	0
68	MP-11	Z	.002	.002	0
69	SA-1	Z	.001	.001	0
70	SA-2	Z	.002	.002	0
71	SA-3	Z	.001	.001	0
72	GSI-1	Z	.003	.003	0
73	GSI-2	Z	0	0	0
74	GSI-3	Z	.003	.003	0
75	GSI-6	Z	.002	.002	0
76	GSI-9	Z	.003	.003	0
77	M24	Z	.003	.003	0
78	M25	Z	1.5e-5	1.5e-5	0
79	GSI-4	Z	.003	.003	0
80	M28	Z	1.5e-5	1.5e-5	0
81	M29	Z	.003	.003	0
82	GSI-5	Z	0	0	0



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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.....]	Start Location(ft.%)	End Location(ft.%)
18	GSI-6	X	.006	.006	0
19	GSI-9	X	.007	.007	0
20	M24	X	.006	.006	0
21	M25	X	.006	.006	0
22	GSI-4	X	.006	.006	0
23	M28	X	.006	.006	0
24	M29	X	.006	.006	0
25	GSI-5	X	.006	.006	0
26	M32	X	.006	.006	0
27	M33	X	.006	.006	0
28	GSI-7	X	.007	.007	0
29	GSI-8	X	.007	.007	0
30	M38	X	.009	.009	0
31	M39	X	.009	.009	0
32	M44	X	.009	.009	0
33	M49	X	.009	.009	0
34	M50	X	.009	.009	0
35	M55	X	.008	.008	0
36	M60	X	.009	.009	0
37	M61	X	.009	.009	0
38	M66	X	.008	.008	0
39	SA-3R	X	.007	.007	0
40	SA-3L	X	.007	.007	0
41	SA-1R	X	.007	.007	0
42	SA-1L	X	.007	.007	0
43	SA-2R	X	.007	.007	0
44	SA-2L	X	.007	.007	0
45	RRU-1	X	.004	.004	0
46	RRU-2	X	.004	.004	0
47	RRU-3	X	.004	.004	0
48	MP-9	X	.004	.004	0
49	MP-12	X	.004	.004	0
50	MP-5	X	.004	.004	0
51	MP-8	X	.004	.004	0
52	MP-5	X	.005	.005	0
53	SF1-HR	X	.004	.004	0
54	SF2-HR	X	.004	.004	0
55	K1	X	.006	.006	0
56	K2	X	.006	.006	0
57	K3	X	.006	.006	0

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

Member Label	Direction	Start Magnitude[k/ft.....]	End Magnitude[k/ft.....]	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	.004	.004	0
2	MP-1	X	.003	.003	0
3	MP-2	X	.003	.003	0
4	MP-3	X	.003	.003	0
5	MP-4	X	.003	.003	0
6	SF1-TH	X	.003	.003	0
7	MP-6	X	.003	.003	0
8	MP-7	X	.003	.003	0
9	SF2-TH	X	0	0	0
10	MP-10	X	.003	.003	0
11	MP-11	X	.003	.003	0
12	SA-1	X	.002	.002	0
13	SA-2	X	.004	.004	0
14	SA-3	X	.002	.002	0
15	GSI-1	X	.005	.005	0
16	GSI-2	X	0	0	0
17	GSI-3	X	.005	.005	0
18	GSI-6	X	.005	.005	0
19	GSI-9	X	.005	.005	0



Member Distributed Loads (BL.C.28 : 210 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
83	M32	.003	.003	0	%100
84	M33	.003	.003	0	%100
85	GSL7	.003	.003	0	%100
86	GSL8	0	0	0	%100
87	M38	.004	.004	0	%100
88	M39	.004	.004	0	%100
89	M44	.004	.004	0	%100
90	M49	.004	.004	0	%100
91	M50	.004	.004	0	%100
92	M55	.004	.004	0	%100
93	M60	0	0	0	%100
94	M61	0	0	0	%100
95	M66	0	0	0	%100
96	SA-3R	.002	.002	0	%100
97	SA-3L	.002	.002	0	%100
98	SA-1R	.002	.002	0	%100
99	SA-1L	.002	.002	0	%100
100	SA-2R	.004	.004	0	%100
101	SA-2L	.004	.004	0	%100
102	RRU-2	.002	.002	0	%100
103	RRU-1	.002	.002	0	%100
104	RRU-3	.002	.002	0	%100
105	MP-9	.002	.002	0	%100
106	MP-12	.002	.002	0	%100
107	MP-5	.002	.002	0	%100
108	MP-8	.002	.002	0	%100
109	FFHR	.002	.002	0	%100
110	SF1-HR	.002	.002	0	%100
111	SF2-HR	0	0	0	%100
112	K1	.004	.004	0	%100
113	K2	.004	.004	0	%100
114	K3	.004	.004	0	%100

Member Distributed Loads (BL.C.29 : 225 Wind - Ice)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	.003	.003	0	%100
2	MP-1	.003	.003	0	%100
3	MP-2	.003	.003	0	%100
4	MP-3	.003	.003	0	%100
5	MP-4	.003	.003	0	%100
6	SF1-TH	.003	.003	0	%100
7	MP-6	.003	.003	0	%100
8	MP-7	.003	.003	0	%100
9	SF2-TH	.000749	.000749	0	%100
10	MP-10	.003	.003	0	%100
11	MP-11	.003	.003	0	%100
12	SA-1	.000792	.000792	0	%100
13	SA-2	.003	.003	0	%100
14	SA-3	.002	.002	0	%100
15	GSL1	.004	.004	0	%100
16	GSL2	.001	.001	0	%100
17	GSL3	.004	.004	0	%100
18	GSL6	.003	.003	0	%100
19	GSL9	.003	.003	0	%100
20	M24	.004	.004	0	%100
21	M25	.001	.001	0	%100
22	GSL4	.004	.004	0	%100
23	M28	.001	.001	0	%100
24	M29	.003	.003	0	%100
25	GSL5	.001	.001	0	%100
26	M32	.003	.003	0	%100
27	M33	.004	.004	0	%100



Member Distributed Loads (BL.C.29 : 225 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
28	GSL7	.005	.005	0	%100
29	GSL8	.001	.001	0	%100
30	M38	.005	.005	0	%100
31	M39	.005	.005	0	%100
32	M44	.005	.005	0	%100
33	M49	.006	.006	0	%100
34	M50	.006	.006	0	%100
35	M55	.006	.006	0	%100
36	M60	.002	.002	0	%100
37	M61	.002	.002	0	%100
38	M66	.002	.002	0	%100
39	SA-3R	.003	.003	0	%100
40	SA-3L	.003	.003	0	%100
41	SA-1R	.001	.001	0	%100
42	SA-1L	.001	.001	0	%100
43	SA-2R	.005	.005	0	%100
44	SA-2L	.005	.005	0	%100
45	RRU-2	.003	.003	0	%100
46	RRU-1	.003	.003	0	%100
47	RRU-3	.003	.003	0	%100
48	MP-9	.003	.003	0	%100
49	MP-12	.003	.003	0	%100
50	MP-5	.003	.003	0	%100
51	MP-8	.003	.003	0	%100
52	FFHR	.003	.003	0	%100
53	SF1-HR	.003	.003	0	%100
54	SF2-HR	.000738	.000738	0	%100
55	K1	.005	.005	0	%100
56	K2	.005	.005	0	%100
57	K3	.005	.005	0	%100
58	FFTH	.002	.002	0	%100
59	MP-1	.003	.003	0	%100
60	MP-2	.003	.003	0	%100
61	MP-3	.003	.003	0	%100
62	MP-4	.003	.003	0	%100
63	SF1-TH	.003	.003	0	%100
64	MP-6	.003	.003	0	%100
65	MP-7	.003	.003	0	%100
66	SF2-TH	.000917	.000917	0	%100
67	MP-10	.003	.003	0	%100
68	MP-11	.003	.003	0	%100
69	SA-1	.000771	.000771	0	%100
70	SA-2	.003	.003	0	%100
71	SA-3	.002	.002	0	%100
72	GSL1	.005	.005	0	%100
73	GSL2	.001	.001	0	%100
74	GSL3	.003	.003	0	%100
75	GSL6	.003	.003	0	%100
76	GSL9	.003	.003	0	%100
77	M24	.004	.004	0	%100
78	M25	.001	.001	0	%100
79	GSL4	.004	.004	0	%100
80	M28	.001	.001	0	%100
81	M29	.003	.003	0	%100
82	GSL5	.001	.001	0	%100
83	M32	.003	.003	0	%100
84	M33	.004	.004	0	%100
85	GSL7	.005	.005	0	%100
86	GSL8	.001	.001	0	%100
87	M38	.004	.004	0	%100
88	M39	.004	.004	0	%100
89	M44	.004	.004	0	%100
90	M49	.006	.006	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
91	Z	.006	.006		0	%100
92	M55	.006	.006		0	%100
93	M60	.002	.002		0	%100
94	M61	.002	.002		0	%100
95	M66	.002	.002		0	%100
96	SA-3R	.004	.004		0	%100
97	SA-3L	.004	.004		0	%100
98	SA-1R	.001	.001		0	%100
99	SA-1L	.001	.001		0	%100
100	SA-2R	.005	.005		0	%100
101	SA-2L	.005	.005		0	%100
102	RRU-2	.003	.003		0	%100
103	RRU-1	.003	.003		0	%100
104	RRU-3	.003	.003		0	%100
105	MP-9	.003	.003		0	%100
106	MP-12	.003	.003		0	%100
107	MP-5	.003	.003		0	%100
108	MP-8	.003	.003		0	%100
109	FFHR	.002	.002		0	%100
110	SF1-HR	.003	.003		0	%100
111	SF2-HR	.000899	.000899		0	%100
112	K1	.005	.005		0	%100
113	K2	.005	.005		0	%100
114	K3	.005	.005		0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
36	X	.002	.002		0	%100
37	M61	.002	.002		0	%100
38	M66	.002	.002		0	%100
39	SA-3R	.003	.003		0	%100
40	SA-3L	.003	.003		0	%100
41	SA-1R	0	0		0	%100
42	SA-1L	0	0		0	%100
43	SA-2R	.003	.003		0	%100
44	SA-2L	.003	.003		0	%100
45	RRU-2	.002	.002		0	%100
46	RRU-1	.002	.002		0	%100
47	RRU-3	.002	.002		0	%100
48	MP-9	.002	.002		0	%100
49	MP-12	.002	.002		0	%100
50	MP-5	.002	.002		0	%100
51	MP-8	.002	.002		0	%100
52	FFHR	.001	.001		0	%100
53	SF1-HR	.002	.002		0	%100
54	SF2-HR	.001	.001		0	%100
55	K1	.003	.003		0	%100
56	K2	.003	.003		0	%100
57	K3	.003	.003		0	%100
58	FFTH	.002	.002		0	%100
59	MP-1	.003	.003		0	%100
60	MP-2	.003	.003		0	%100
61	MP-3	.003	.003		0	%100
62	MP-4	.003	.003		0	%100
63	SF1-TH	.004	.004		0	%100
64	MP-6	.003	.003		0	%100
65	MP-7	.003	.003		0	%100
66	SF2-TH	.002	.002		0	%100
67	MP-10	.003	.003		0	%100
68	MP-11	.003	.003		0	%100
69	SA-1	0	0		0	%100
70	SA-2	.003	.003		0	%100
71	SA-3	.003	.003		0	%100
72	GSI-1	.006	.006		0	%100
73	GSI-2	.003	.003		0	%100
74	GSI-3	.003	.003		0	%100
75	GSI-6	.002	.002		0	%100
76	GSI-9	.003	.003		0	%100
77	M24	.005	.005		0	%100
78	M25	.003	.003		0	%100
79	GSI-4	.005	.005		0	%100
80	M28	.003	.003		0	%100
81	M29	.003	.003		0	%100
82	GSI-5	.003	.003		0	%100
83	M32	.003	.003		0	%100
84	M33	.005	.005		0	%100
85	GSI-7	.006	.006		0	%100
86	GSI-8	.003	.003		0	%100
87	M38	.004	.004		0	%100
88	M39	.004	.004		0	%100
89	M44	.004	.004		0	%100
90	M49	.008	.008		0	%100
91	M50	.008	.008		0	%100
92	M55	.008	.008		0	%100
93	M60	.004	.004		0	%100
94	M61	.004	.004		0	%100
95	M66	.004	.004		0	%100
96	SA-3R	.006	.006		0	%100
97	SA-3L	.006	.006		0	%100
98	SA-1R	0	0		0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.....)	F...	Start Location(ft.-%)	End Location(ft.-%)
1	X	.001	.001		0	%100
2	MP-1	.002	.002		0	%100
3	MP-2	.002	.002		0	%100
4	MP-3	.002	.002		0	%100
5	MP-4	.002	.002		0	%100
6	SF1-TH	.002	.002		0	%100
7	MP-6	.002	.002		0	%100
8	MP-7	.002	.002		0	%100
9	SF2-TH	.001	.001		0	%100
10	MP-10	.002	.002		0	%100
11	MP-11	.002	.002		0	%100
12	SA-1	0	0		0	%100
13	SA-2	.002	.002		0	%100
14	SA-3	.002	.002		0	%100
15	GSI-1	.003	.003		0	%100
16	GSI-2	.002	.002		0	%100
17	GSI-3	.002	.002		0	%100
18	GSI-6	.002	.002		0	%100
19	GSI-9	.002	.002		0	%100
20	M24	.003	.003		0	%100
21	M25	.002	.002		0	%100
22	GSI-4	.003	.003		0	%100
23	M28	.002	.002		0	%100
24	M29	.002	.002		0	%100
25	GSI-5	.001	.001		0	%100
26	M32	.002	.002		0	%100
27	M33	.003	.003		0	%100
28	GSI-7	.003	.003		0	%100
29	GSI-8	.002	.002		0	%100
30	M38	.002	.002		0	%100
31	M39	.002	.002		0	%100
32	M44	.002	.002		0	%100
33	M49	.005	.005		0	%100
34	M50	.005	.005		0	%100
35	M55	.004	.004		0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
99	SA-1L	0	0	0	%100
100	SA-2R	0	0	0	%100
101	SA-2L	0.005	0.005	0	%100
102	RRU-1	0.005	0.005	0	%100
103	RRU-2	0.004	0.004	0	%100
104	RRU-3	0.004	0.004	0	%100
105	MP-9	0.003	0.003	0	%100
106	MP-12	0.003	0.003	0	%100
107	MP-5	0.003	0.003	0	%100
108	MP-8	0.003	0.003	0	%100
109	FFHR	0.002	0.002	0	%100
110	SF1-HR	0.004	0.004	0	%100
111	SF2-HR	0.002	0.002	0	%100
112	K1	0.006	0.006	0	%100
113	K2	0.006	0.006	0	%100
114	K3	0.006	0.006	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	0	0	0	%100
2	MP-1	0.004	0.004	0	%100
3	MP-2	0.004	0.004	0	%100
4	MP-3	0.004	0.004	0	%100
5	MP-4	0.004	0.004	0	%100
6	SF1-TH	0.004	0.004	0	%100
7	MP-6	0.004	0.004	0	%100
8	MP-7	0.004	0.004	0	%100
9	MP-10	0.004	0.004	0	%100
10	SF2-TH	0.004	0.004	0	%100
11	MP-11	0.004	0.004	0	%100
12	MP-10	0.004	0.004	0	%100
13	SA-1	0.002	0.002	0	%100
14	SA-2	0.002	0.002	0	%100
15	SA-3	0.004	0.004	0	%100
16	GSI-1	0.006	0.006	0	%100
17	GSI-2	0.006	0.006	0	%100
18	GSI-3	0	0	0	%100
19	GSI-6	0	0	0	%100
20	M24	0	0	0	%100
21	M25	0.005	0.005	0	%100
22	GSI-4	0.005	0.005	0	%100
23	M28	0.005	0.005	0	%100
24	M29	0.005	0.005	0	%100
25	M32	2.9e-5	2.9e-5	0	%100
26	M33	2.9e-5	2.9e-5	0	%100
27	M33	0.005	0.005	0	%100
28	GSI-7	0.006	0.006	0	%100
29	GSI-8	0.006	0.006	0	%100
30	M38	0	0	0	%100
31	M39	0	0	0	%100
32	M44	0	0	0	%100
33	M49	0.008	0.008	0	%100
34	M50	0.008	0.008	0	%100
35	M55	0.008	0.008	0	%100
36	M60	0.008	0.008	0	%100
37	M61	0.008	0.008	0	%100
38	M66	0.008	0.008	0	%100
39	SA-3R	0.008	0.008	0	%100
40	SA-3L	0.008	0.008	0	%100
41	SA-1R	0.004	0.004	0	%100
42	SA-1L	0.004	0.004	0	%100
43	SA-2R	0.004	0.004	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
44	SA-2L	0.004	0.004	0	%100
45	RRU-2	0.004	0.004	0	%100
46	RRU-1	0.004	0.004	0	%100
47	RRU-3	0.004	0.004	0	%100
48	MP-9	0.004	0.004	0	%100
49	MP-12	0.004	0.004	0	%100
50	MP-5	0.004	0.004	0	%100
51	MP-8	0.004	0.004	0	%100
52	FFHR	0	0	0	%100
53	SF1-HR	0.004	0.004	0	%100
54	SF2-HR	0.004	0.004	0	%100
55	K1	0.007	0.007	0	%100
56	K2	0.007	0.007	0	%100
57	K3	0.007	0.007	0	%100

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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	-0.001	-0.001	0	%100
2	MP-1	-0.002	-0.002	0	%100
3	MP-2	-0.002	-0.002	0	%100
4	MP-3	-0.002	-0.002	0	%100
5	MP-4	-0.002	-0.002	0	%100
6	SF1-TH	-0.001	-0.001	0	%100
7	MP-6	-0.002	-0.002	0	%100
8	MP-7	-0.002	-0.002	0	%100
9	SF2-TH	-0.002	-0.002	0	%100
10	MP-10	-0.002	-0.002	0	%100
11	MP-11	-0.002	-0.002	0	%100
12	SA-1	-0.002	-0.002	0	%100
13	SA-2	0	0	0	%100
14	SA-3	-0.002	-0.002	0	%100
15	GSI-1	-0.002	-0.002	0	%100
16	GSI-2	-0.003	-0.003	0	%100
17	GSI-3	-0.002	-0.002	0	%100
18	GSI-6	-0.002	-0.002	0	%100
19	GSI-9	-0.002	-0.002	0	%100
20	M24	-0.002	-0.002	0	%100
21	M25	-0.003	-0.003	0	%100
22	GSI-4	-0.001	-0.001	0	%100
23	M28	-0.003	-0.003	0	%100
24	M29	-0.002	-0.002	0	%100
25	GSI-5	-0.003	-0.003	0	%100
26	M32	-0.002	-0.002	0	%100
27	M33	-0.002	-0.002	0	%100
28	GSI-7	-0.002	-0.002	0	%100
29	GSI-8	-0.003	-0.003	0	%100
30	M38	-0.002	-0.002	0	%100
31	M39	-0.002	-0.002	0	%100
32	M44	-0.002	-0.002	0	%100
33	M49	-0.002	-0.002	0	%100
34	M50	-0.002	-0.002	0	%100
35	M55	-0.002	-0.002	0	%100
36	M60	-0.005	-0.005	0	%100
37	M61	-0.005	-0.005	0	%100
38	M66	-0.004	-0.004	0	%100
39	SA-3R	-0.003	-0.003	0	%100
40	SA-3L	-0.003	-0.003	0	%100
41	SA-1R	-0.003	-0.003	0	%100
42	SA-1L	-0.003	-0.003	0	%100
43	SA-2R	0	0	0	%100
44	SA-2L	0	0	0	%100
45	RRU-2	-0.002	-0.002	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
46	RRU-1	X	-0.02	0	%100
47	RRU-3	X	-0.02	0	%100
48	MP-9	X	-0.02	0	%100
49	MP-12	X	-0.02	0	%100
50	MP-5	X	-0.02	0	%100
51	MP-8	X	-0.02	0	%100
52	FFHR	X	-0.01	0	%100
53	SF1-HR	X	-0.01	0	%100
54	SF2-HR	X	-0.02	0	%100
55	K1	X	-0.03	0	%100
56	K2	X	-0.03	0	%100
57	K3	X	-0.03	0	%100
58	FFTH	Z	0.02	0	%100
59	MP-1	Z	0.03	0	%100
60	MP-2	Z	0.03	0	%100
61	MP-3	Z	0.03	0	%100
62	MP-4	Z	0.03	0	%100
63	SF1-TH	Z	0.02	0	%100
64	MP-6	Z	0.03	0	%100
65	MP-7	Z	0.03	0	%100
66	SF2-TH	Z	0.04	0	%100
67	MP-10	Z	0.03	0	%100
68	MP-11	Z	0.03	0	%100
69	SA-1	Z	0.03	0	%100
70	SA-2	Z	0	0	%100
71	SA-3	Z	0.03	0	%100
72	GSI-1	Z	0.03	0	%100
73	GSI-2	Z	0.06	0	%100
74	GSI-3	Z	0.03	0	%100
75	GSI-6	Z	0.02	0	%100
76	GSI-9	Z	0.03	0	%100
77	M24	Z	0.03	0	%100
78	M25	Z	0.03	0	%100
79	GSI-4	Z	0.03	0	%100
80	M28	Z	0.05	0	%100
81	M29	Z	0.03	0	%100
82	GSI-5	Z	0.06	0	%100
83	M32	Z	0.03	0	%100
84	M33	Z	0.03	0	%100
85	GSI-7	Z	0.03	0	%100
86	GSI-8	Z	0.06	0	%100
87	M38	Z	0.04	0	%100
88	M39	Z	0.04	0	%100
89	M44	Z	0.04	0	%100
90	M49	Z	0.04	0	%100
91	M50	Z	0.04	0	%100
92	M55	Z	0.04	0	%100
93	M60	Z	0.08	0	%100
94	M61	Z	0.08	0	%100
95	M66	Z	0.08	0	%100
96	SA-3R	Z	0.06	0	%100
97	SA-3L	Z	0.06	0	%100
98	SA-1R	Z	0.05	0	%100
99	SA-1L	Z	0.05	0	%100
100	SA-2R	Z	0	0	%100
101	SA-2L	Z	0	0	%100
102	RRU-2	Z	0.04	0	%100
103	RRU-1	Z	0.04	0	%100
104	RRU-3	Z	0.04	0	%100
105	MP-9	Z	0.03	0	%100
106	MP-12	Z	0.03	0	%100
107	MP-5	Z	0.03	0	%100
108	MP-8	Z	0.03	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
109	FFHR	Z	0.02	0	%100
110	SF1-HR	Z	0.02	0	%100
111	SF2-HR	Z	0.04	0	%100
112	K1	Z	0.06	0	%100
113	K2	Z	0.06	0	%100
114	K3	Z	0.06	0	%100

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	FFTH	X	-0.03	0	%100
2	MP-1	X	-0.03	0	%100
3	MP-2	X	-0.03	0	%100
4	MP-3	X	-0.03	0	%100
5	MP-4	X	-0.03	0	%100
6	SF1-TH	X	-0.00749	0	%100
7	MP-6	X	-0.03	0	%100
8	MP-7	X	-0.03	0	%100
9	SF2-TH	X	-0.03	0	%100
10	MP-10	X	-0.03	0	%100
11	MP-11	X	-0.03	0	%100
12	SA-1	X	-0.03	0	%100
13	SA-2	X	-0.00792	0	%100
14	SA-3	X	-0.02	0	%100
15	GSI-1	X	-0.01	0	%100
16	GSI-2	X	-0.04	0	%100
17	GSI-3	X	-0.04	0	%100
18	GSI-6	X	-0.03	0	%100
19	GSI-9	X	-0.03	0	%100
20	M24	X	-0.01	0	%100
21	M25	X	-0.04	0	%100
22	GSI-4	X	-0.01	0	%100
23	M28	X	-0.04	0	%100
24	M29	X	-0.03	0	%100
25	GSI-5	X	-0.04	0	%100
26	M32	X	-0.03	0	%100
27	M33	X	-0.01	0	%100
28	GSI-7	X	-0.01	0	%100
29	GSI-8	X	-0.05	0	%100
30	M38	X	-0.05	0	%100
31	M39	X	-0.05	0	%100
32	M44	X	-0.05	0	%100
33	M49	X	-0.02	0	%100
34	M50	X	-0.02	0	%100
35	M55	X	-0.02	0	%100
36	M60	X	-0.06	0	%100
37	M61	X	-0.06	0	%100
38	M66	X	-0.06	0	%100
39	SA-3R	X	-0.03	0	%100
40	SA-3L	X	-0.03	0	%100
41	SA-1R	X	-0.05	0	%100
42	SA-1L	X	-0.05	0	%100
43	SA-2R	X	-0.01	0	%100
44	SA-2L	X	-0.01	0	%100
45	RRU-2	X	-0.03	0	%100
46	RRU-1	X	-0.03	0	%100
47	RRU-3	X	-0.03	0	%100
48	MP-9	X	-0.03	0	%100
49	MP-12	X	-0.03	0	%100
50	MP-5	X	-0.03	0	%100
51	MP-8	X	-0.03	0	%100
52	FFHR	X	-0.03	0	%100
53	SF1-HR	X	-0.00738	0	%100



Member Distributed Loads (BL.C.33 : 315 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.....	F...	Start Location(ft.-%)	End Location(ft.-%)
54	SF2-HR	X	-0.003		0	%100
55	K1	X	-0.005		0	%100
56	K2	X	-0.005		0	%100
57	K3	X	-0.005		0	%100
58	FFTH	X	.002		0	%100
59	MP-1	Z	.003		0	%100
60	MP-2	Z	.003		0	%100
61	MP-3	Z	.003		0	%100
62	MP-4	Z	.003		0	%100
63	SF1-TH	Z	.000917		0	%100
64	MP-6	Z	.003		0	%100
65	MP-7	Z	.003		0	%100
66	SF2-TH	Z	.003		0	%100
67	MP-10	Z	.003		0	%100
68	MP-11	Z	.003		0	%100
69	SA-1	Z	.003		0	%100
70	SA-2	Z	.000771		0	%100
71	SA-3	Z	.002		0	%100
72	GSI-1	Z	.001		0	%100
73	GSI-2	Z	.005		0	%100
74	GSI-3	Z	.003		0	%100
75	GSI-6	Z	.003		0	%100
76	GSI-9	Z	.003		0	%100
77	M24	Z	.001		0	%100
78	M25	Z	.004		0	%100
79	GSI-4	Z	.001		0	%100
80	M28	Z	.004		0	%100
81	M29	Z	.003		0	%100
82	GSI-5	Z	.004		0	%100
83	M32	Z	.003		0	%100
84	M33	Z	.001		0	%100
85	GSI-7	Z	.001		0	%100
86	GSI-8	Z	.005		0	%100
87	M38	Z	.004		0	%100
88	M39	Z	.004		0	%100
89	M44	Z	.004		0	%100
90	M49	Z	.002		0	%100
91	M50	Z	.002		0	%100
92	M55	Z	.002		0	%100
93	M60	Z	.006		0	%100
94	M61	Z	.006		0	%100
95	M66	Z	.006		0	%100
96	SA-3R	Z	.004		0	%100
97	SA-3L	Z	.004		0	%100
98	SA-1R	Z	.005		0	%100
99	SA-1L	Z	.005		0	%100
100	SA-2R	Z	.001		0	%100
101	SA-2L	Z	.001		0	%100
102	RRU-2	Z	.003		0	%100
103	RRU-1	Z	.003		0	%100
104	RRU-3	Z	.003		0	%100
105	MP-9	Z	.003		0	%100
106	MP-12	Z	.003		0	%100
107	MP-5	Z	.003		0	%100
108	MP-8	Z	.003		0	%100
109	FFHR	Z	.002		0	%100
110	SF1-HR	Z	.000899		0	%100
111	SF2-HR	Z	.003		0	%100
112	K1	Z	.005		0	%100
113	K2	Z	.005		0	%100
114	K3	Z	.005		0	%100



Member Distributed Loads (BL.C.34 : 330 Wind - Ice)

Member Label	Direction	Start Magnitude/k/ft.....	End Magnitude/k/ft.....	F...	Start Location(ft.-%)	End Location(ft.-%)
1	FFTH	X	-0.004		0	%100
2	MP-1	X	-0.003		0	%100
3	MP-2	X	-0.003		0	%100
4	MP-3	X	-0.003		0	%100
5	MP-4	X	-0.003		0	%100
6	SF1-TH	X	0		0	%100
7	MP-6	X	-0.003		0	%100
8	MP-7	X	-0.003		0	%100
9	SF2-TH	X	-0.003		0	%100
10	MP-10	X	-0.003		0	%100
11	MP-11	X	-0.003		0	%100
12	SA-1	X	-0.004		0	%100
13	SA-2	X	-0.002		0	%100
14	SA-3	X	-0.002		0	%100
15	GSI-1	X	0		0	%100
16	GSI-2	X	-0.005		0	%100
17	GSI-3	X	-0.005		0	%100
18	GSI-6	X	-0.005		0	%100
19	GSI-9	X	-0.005		0	%100
20	M24	X	-2.5e-5		0	%100
21	M25	X	-0.005		0	%100
22	GSI-4	X	0		0	%100
23	M28	X	-0.005		0	%100
24	M29	X	-0.005		0	%100
25	GSI-5	X	-0.004		0	%100
26	M32	X	-0.005		0	%100
27	M33	X	-2.5e-5		0	%100
28	GSI-7	X	0		0	%100
29	GSI-8	X	-0.005		0	%100
30	M38	X	-0.007		0	%100
31	M39	X	-0.007		0	%100
32	M44	X	-0.007		0	%100
33	M49	X	0		0	%100
34	M50	X	0		0	%100
35	M55	X	0		0	%100
36	M60	X	-0.007		0	%100
37	M61	X	-0.007		0	%100
38	M66	X	-0.006		0	%100
39	SA-3R	X	-0.003		0	%100
40	SA-3L	X	-0.003		0	%100
41	SA-1R	X	-0.006		0	%100
42	SA-1L	X	-0.006		0	%100
43	SA-2R	X	-0.003		0	%100
44	SA-2L	X	-0.003		0	%100
45	RRU-2	X	-0.003		0	%100
46	RRU-1	X	-0.003		0	%100
47	RRU-3	X	-0.003		0	%100
48	MP-9	X	-0.003		0	%100
49	MP-12	X	-0.003		0	%100
50	MP-5	X	-0.003		0	%100
51	MP-8	X	-0.003		0	%100
52	FFHR	X	-0.004		0	%100
53	SF1-HR	X	0		0	%100
54	SF2-HR	X	-0.003		0	%100
55	K1	X	-0.006		0	%100
56	K2	X	-0.006		0	%100
57	K3	X	-0.006		0	%100
58	FFTH	Z	.002		0	%100
59	MP-1	Z	.002		0	%100
60	MP-2	Z	.002		0	%100
61	MP-3	Z	.002		0	%100
62	MP-4	Z	.002		0	%100
63	SF1-TH	Z	0		0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
64	MP-6	Z	.002	0	%100
65	MP-7	Z	.002	0	%100
66	SF2-TH	Z	.002	0	%100
67	MP-10	Z	.002	0	%100
68	MP-11	Z	.002	0	%100
69	SA-1	Z	.002	0	%100
70	SA-2	Z	.001	0	%100
71	SA-3	Z	.001	0	%100
72	GSI-1	Z	0	0	%100
73	GSI-2	Z	.003	0	%100
74	GSI-3	Z	.003	0	%100
75	GSI-6	Z	.002	0	%100
76	GSI-9	Z	.003	0	%100
77	M24	Z	1.5e-5	0	%100
78	M25	Z	.003	0	%100
79	GSI-4	Z	0	0	%100
80	M28	Z	.003	0	%100
81	M29	Z	.003	0	%100
82	GSI-5	Z	.003	0	%100
83	M32	Z	.003	0	%100
84	M33	Z	1.5e-5	0	%100
85	GSI-7	Z	0	0	%100
86	GSI-8	Z	.003	0	%100
87	M38	Z	.004	0	%100
88	M39	Z	.004	0	%100
89	M44	Z	.004	0	%100
90	M49	Z	0	0	%100
91	M50	Z	0	0	%100
92	M55	Z	0	0	%100
93	M60	Z	.004	0	%100
94	M61	Z	.004	0	%100
95	M66	Z	.004	0	%100
96	SA-3R	Z	.002	0	%100
97	SA-3L	Z	.002	0	%100
98	SA-1R	Z	.004	0	%100
99	SA-1L	Z	.004	0	%100
100	SA-2R	Z	.002	0	%100
101	SA-2L	Z	.002	0	%100
102	RRU-2	Z	.002	0	%100
103	RRU-1	Z	.002	0	%100
104	RRU-3	Z	.002	0	%100
105	MP-9	Z	.002	0	%100
106	MP-12	Z	.002	0	%100
107	MP-5	Z	.002	0	%100
108	MP-8	Z	.002	0	%100
109	FFHR	Z	.002	0	%100
110	SF1-HR	Z	0	0	%100
111	SF2-HR	Z	.002	0	%100
112	K1	Z	.004	0	%100
113	K2	Z	.004	0	%100
114	K3	Z	.004	0	%100



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	SF1-TH	Y	-.007	0	2.179
2	SF1-TH	Y	-.009	2.179	4.357
3	SF1-TH	Y	-.009	4.357	6.536
4	SF1-TH	Y	-.009	6.536	8.714
5	SF1-TH	Y	-.008	8.714	10.893
6	SF1-TH	Y	-.008	10.893	13.071
7	SF1-TH	Y	-.007	13.071	15.25
8	GSI-2	Y	-5.39e-5	3.046	3.723



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
9	GSI-2	Y	-.006	-.011	3.723
10	GSI-2	Y	-.011	4.4	5.077
11	GSI-3	Y	5.561e-5	-.007	3.723
12	GSI-3	Y	-.007	3.723	4.4
13	GSI-3	Y	-.013	4.4	5.077
14	SF2-TH	Y	-.007	-.009	0
15	SF2-TH	Y	-.009	-.008	2.179
16	SF2-TH	Y	-.008	-.009	4.357
17	SF2-TH	Y	-.009	-.009	6.536
18	SF2-TH	Y	-.009	-.009	8.714
19	SF2-TH	Y	-.009	-.009	10.893
20	SF2-TH	Y	-.007	-.007	13.071
21	GSI-1	Y	-5.39e-5	-.006	3.046
22	GSI-1	Y	-.006	-.011	3.723
23	GSI-1	Y	-.011	4.4	5.077
24	GSI-3	Y	-.012	-.013	0
25	GSI-3	Y	-.013	-.013	6.77
26	GSI-3	Y	-.006	-2.693e-5	1.354
27	FFTH	Y	-.007	0	2.179
28	FFTH	Y	-.009	-.008	2.179
29	FFTH	Y	-.008	-.009	4.357
30	FFTH	Y	-.009	-.009	6.536
31	FFTH	Y	-.008	-.008	8.714
32	FFTH	Y	-.008	-.008	10.893
33	FFTH	Y	-.009	-.007	13.071
34	GSI-1	Y	-.012	-.012	0
35	GSI-1	Y	-.013	-.006	6.77
36	GSI-1	Y	-.006	-2.693e-5	1.354
37	GSI-2	Y	-.012	-.013	0
38	GSI-2	Y	-.013	-.013	6.77
39	GSI-2	Y	-.006	-2.693e-5	1.354



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

Member Label	Direction	Start Magnitude(k/ft.....)	End Magnitude(k/ft.F....)	Start Location(ft.%)	End Location(ft.%)
1	SF1-TH	Y	-.004	-.006	0
2	SF1-TH	Y	-.006	-.006	2.179
3	SF1-TH	Y	-.006	-.006	4.357
4	SF1-TH	Y	-.006	-.006	6.536
5	SF1-TH	Y	-.006	-.005	8.714
6	SF1-TH	Y	-.005	-.005	10.893
7	SF1-TH	Y	-.006	-.004	13.071
8	GSI-2	Y	-3.594e-5	-.004	3.046
9	GSI-2	Y	-.004	-.008	3.723
10	GSI-2	Y	-.008	-.007	4.4
11	GSI-3	Y	3.707e-5	-.004	3.046
12	GSI-3	Y	-.004	-.009	3.723
13	GSI-3	Y	-.009	-.009	4.4
14	SF2-TH	Y	-.004	-.006	0
15	SF2-TH	Y	-.005	-.005	2.179
16	SF2-TH	Y	-.005	-.006	4.357
17	SF2-TH	Y	-.006	-.006	6.536
18	SF2-TH	Y	-.006	-.006	8.714
19	SF2-TH	Y	-.006	-.006	10.893
20	SF2-TH	Y	-.006	-.004	13.071
21	GSI-1	Y	-3.594e-5	-.004	3.046
22	GSI-1	Y	-.004	-.008	3.723
23	GSI-1	Y	-.008	-.007	4.4
24	GSI-3	Y	-.008	-.008	0
25	GSI-3	Y	-.008	-.004	6.77
26	GSI-3	Y	-.004	-1.797e-5	1.354
27	FFTH	Y	-.004	-.006	0
28	FFTH	Y	-.006	-.006	2.179



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

Member Label	Direction	Start Magnitude(k/ft)	End Magnitude(k/ft)	F...	Start Location(ft,%)	End Location(ft,%)
29	FE1H	-0.06	4.357		6.536	
30	FE1H	-0.06	6.536		8.714	
31	FE1H	-0.06	8.714		10.893	
32	FE1H	-0.06	10.893		13.071	
33	FE1H	-0.06	13.071		15.25	
34	GS1-1	-0.08	0		6.77	
35	GS1-1	-0.04	6.77		1.354	
36	GS1-1	-0.04	1.354		2.031	
37	GS1-2	-0.08	0		6.77	
38	GS1-2	-0.04	6.77		1.354	
39	GS1-2	-0.04	1.354		2.031	

Member Area Loads (BLC 1 : Dead)

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude(k/sf)
1	FF5	N174	N172	Y	Two Way	-0.12
2	FF5	N172	FF2	Y	Two Way	-0.12
3	FF2	N174	FF1	Y	Two Way	-0.12

Member Area Loads (BLC 18 : Ice Weight)

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude(k/sf)
1	FF5	N174	N172	Y	Two Way	-0.08
2	FF5	N172	FF2	Y	Two Way	-0.08
3	FF2	N174	FF1	Y	Two Way	-0.08

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

Member	Shape	Code Check	Loc(ft)	LC	Shear Check	Loc.....	phi*Pn.....	phi*M.....	phi*W.....	Egn				
1	MP-2	PIPE 2.0	.703	5	22	1.17	5	29	13.788	32.13	1.872	1.872	...	H1-1b
2	MP-10	PIPE 2.0	.691	5	32	1.07	5	24	13.788	32.13	1.872	1.872	...	H1-1b
3	FE1H	PIPE 2.0	.689	4.924	42	.206	5.0	18	4.23	32.13	1.872	1.872	...	H1-1b
4	MP-6	PIPE 2.0	.676	5	27	1.05	5	18	13.788	32.13	1.872	1.872	...	H1-1b
5	SE-1-TH	PIPE 2.0	.642	10.167	34	.217	10.....	29	4.23	32.13	1.872	1.872	...	H1-1b
6	SE-2-TH	PIPE 2.0	.599	10.167	45	.205	10.....	23	4.23	32.13	1.872	1.872	...	H1-1b
7	SA-2R	C4X5.4	.573	2.406	3	.087	1.8.....	20	31.024	51.192	1.2	6.183	...	H1-1b
8	SA-2R	C4X5.4	.571	1.094	19	.078	1.6.....	19	31.024	51.192	1.2	6.183	...	H1-1b
9	FE1H	PIPE 2.0	.563	13.443	13	.243	2.4.....	26	1.061	32.13	1.872	1.872	...	H1-1b
10	SA-3R	C4X5.4	.521	1.094	30	.073	1.6.....	22	31.024	51.192	1.2	6.183	...	H1-1b
11	SA-3R	C4X5.4	.520	2.406	14	.079	1.8.....	20	31.024	51.192	1.2	6.183	...	H1-1b
12	GS1-8	L2X2X4	.520	.716	27	.152	4.68	22	30.041	30.586	.691	1.577	...	H2-1
13	SA-1R	C4X5.4	.511	1.094	25	.071	1.6.....	23	31.024	51.192	1.2	6.183	...	H1-1b
14	SA-1L	C4X5.4	.508	2.406	9	.078	1.8.....	25	31.024	51.192	1.2	6.183	...	H1-1b
15	GS1-2	HSS3X3X4	.507	2.538	39	.198	2.3.....	19	96.042	101.016	8.556	8.556	...	H1-1b
16	GS1-3	HSS3X3X4	.491	2.538	34	.181	2.5.....	20	96.042	101.016	8.556	8.556	...	H1-1b
17	GS1-1	HSS3X3X4	.481	2.274	28	.175	2.5.....	25	96.042	101.016	8.556	8.556	...	H1-1b
18	GS1-9	L2X2X4	.480	.201	30	.141	4.68	19	30.041	30.586	.691	1.577	...	H2-1
19	GS1-7	L2X2X4	.466	.201	25	.154	4.68	19	30.041	30.586	.691	1.577	...	H2-1
20	SE-2-TH	PIPE 2.0	.452	1.057	13	.243	2.4.....	31	1.061	32.13	1.872	1.872	...	H1-1b
21	SE-1-TH	PIPE 2.0	.445	13.443	7	.234	1.0.....	21	1.061	32.13	1.872	1.872	...	H1-1b
22	MP-11	PIPE 2.0	.347	5	34	.158	5	20	13.788	32.13	1.872	1.872	...	H1-1b
23	MP-1	PIPE 2.0	.344	5	44	.113	5	19	13.788	32.13	1.872	1.872	...	H1-1b
24	GS1-4	L2X2X4	.343	1.083	28	.136	1.0.....	28	29.807	30.586	.691	1.577	...	H2-1
25	GS1-6	L2X2X4	.308	1.083	19	.118	1.0.....	19	29.807	30.586	.691	1.577	...	H2-1
26	GS1-5	L2X2X4	.305	1.083	20	.142	1.0.....	20	29.807	30.586	.691	1.577	...	H2-1
27	MP-3	PIPE 2.0	.298	5	39	.134	5	26	13.788	32.13	1.872	1.872	...	H1-1b
28	MP-9	PIPE 2.0	.291	5	39	.107	5	26	13.788	32.13	1.872	1.872	...	H1-1b
29	MP-5	PIPE 2.0	.286	5	66	.104	5	25	13.788	32.13	1.872	1.872	...	H1-1b
30	MP-7	PIPE 2.0	.285	1	29	.133	5	31	30.475	32.13	1.872	1.872	...	H1-1b
31	MP-4	PIPE 2.0	.179	1	53	.101	5	25	30.475	32.13	1.872	1.872	...	H1-1b
32	MP-12	PIPE 2.0	.147	5	47	.106	5	19	13.788	32.13	1.872	1.872	...	H1-1b
33	MP-8	PIPE 2.0	.146	5	42	.103	5	30	13.788	32.13	1.872	1.872	...	H1-1b

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

Member	Shape	Code Check	Loc(ft)	LC	Shear Check	Loc.....	phi*Pn.....	phi*M.....	phi*W.....	Egn				
34	K2	LL2.5x2.5x3x...	.130	7	.007	7	2	19	31.666	58.482	3.793	2.094	...	H1-1b
35	K3	LL2.5x2.5x3x...	.124	7	.007	7	30	31.666	58.482	3.793	2.094	...	H1-1b	
36	K1	LL2.5x2.5x3x...	.121	7	.007	7	25	31.666	58.482	3.793	2.094	...	H1-1b	
37	SA-2	PIPE 3.5	.108	0	.089	0	19	71.409	78.75	7.954	7.954	...	H1-1b	
38	M39	C6X8.2	.105	659	.027	1.7.....	19	71.8	77.436	2.108	13.932	...	H1-1b	
39	M49	C6X8.2	.105	659	.026	1.7.....	25	71.8	77.436	2.108	13.932	...	H1-1b	
40	SA-3	PIPE 3.5	.091	0	.080	0	30	71.409	78.75	7.954	7.954	...	H1-1b	
41	SA-1	PIPE 3.5	.087	0	.079	0	25	71.409	78.75	7.954	7.954	...	H1-1b	
42	M60	C6X8.2	.087	659	.023	1.7.....	22	71.8	77.436	2.108	13.932	...	H1-1b	
43	M50	C6X8.2	.085	659	.025	1.7.....	30	71.8	77.436	2.108	13.932	...	H1-1b	
44	M38	C6X8.2	.084	659	.022	1.7.....	33	71.8	77.436	2.108	13.932	...	H1-1b	
45	M81	C6X8.2	.082	659	.025	1.7.....	25	71.8	77.436	2.108	13.932	...	H1-1b	
46	M33	L2X2X4	.078	1.24	.011	0	22	29.596	30.586	.691	1.577	...	H2-1	
47	M25	L2X2X4	.073	1.24	.011	0	22	29.596	30.586	.691	1.577	...	H2-1	
48	M32	L2X2X4	.073	0	.012	0	18	29.596	30.586	.691	1.577	...	H2-1	
49	M29	L2X2X4	.071	1.24	.010	0	33	29.596	30.586	.691	1.577	...	H2-1	
50	M28	L2X2X4	.071	0	.011	0	24	29.596	30.586	.691	1.577	...	H2-1	
51	M24	L2X2X4	.070	0	.011	0	29	29.596	30.586	.691	1.577	...	H2-1	
52	M44	C6X8.2	.066	2.076	.027	1.7.....	20	64.992	77.436	2.108	13.932	...	H1-1b	
53	M55	C6X8.2	.066	1.757	.024	1.7.....	19	64.992	77.436	2.108	13.932	...	H1-1b	
54	M66	C6X8.2	.060	1.757	.021	1.7.....	25	64.992	77.436	2.108	13.932	...	H1-1b	
55	RRU-1	PIPE 3.0	.020	3.5	.004	3.5	26	48.83	65.205	5.749	5.749	...	H1-1b	
56	RRU-3	PIPE 3.0	.020	3.5	.004	3.5	21	48.83	65.205	5.749	5.749	...	H1-1b	
57	RRU-2	PIPE 3.0	.020	3.5	.004	3.5	23	48.83	65.205	5.749	5.749	...	H1-1b	

Exhibit F

Power Density/RF Emissions Report

General Power Density

Site Name: Windsor 3, CT
 Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm ²)	(mW/cm ²)	(%)
CBRS	3500	1	50	50	128	0.0011	1.0	0.11%
VZW PCS	1970	1	6230	6230	128	0.1367	1.0	13.67%
VZW Cellular LTE	869	1	1610	1610	128	0.0353	0.5793333333	6.10%
VZW Cellular	869	2	408	816	128	0.0179	0.5793333333	3.09%
VZW AWS	2145	1	6170	6170	128	0.1354	1.0	13.54%
VZW 700	746	1	2740	2740	128	0.0601	0.4973333333	12.09%

Total Percentage of Maximum Permissible Exposure 48.61%

*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 C95.1-1992

MHz = Megahertz

mW/cm² = 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.