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

September 2, 2020

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

RE: **Notice of Exempt Modification for T-Mobile:**
881364 - T-Mobile Site ID: CT11762A
123 Costello Road, Newington, CT 06111
Latitude: 41° 39′ 18.72″ / Longitude: -72° 43′ 17.19″

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 94-foot mount on the existing 145-foot Monopole Tower, located at 123 Costello Road, Newington, CT. The tower is owned by Crown Castle and the property is owned by Costello Industries Inc. T-Mobile now intends to add three (3) new 2500/2500 MHz antennas. The new antennas will be installed at the 194-ft level of the tower. T-Mobile is also proposing tower mount modification as shown on the enclosed Mount Analysis.

Planned Modifications:
Tower:

Remove:
(1) 1 5/8" Coax
(3) TMA

Install New:
(1) 1 5/8" Hybrid Fiber Line
(3) AIR6449 B41 Antenna 2500/2500 MHz
(3) Radio 4415 B25

Existing to Remain:
(10) 1 5/8" Coax
(3) Hybrid Fiber line
(3) AIR32_B66A_B2A Antenna 1900/2100 MHz
(3) RFS-APXVAARR24_43-U-NA20 Antenna 600/700 MHz
(3) Radio 4449 B71/B12
(3) AIR21 KRC118023-1_B2A_B4P Antenna 1900/2100 MHz

Ground:

Remove generator.
Remove and replace cabinet.

The facility was approved by the Town of Newington in the year 1999 though the original decision could not be located. Subsequent colocation approvals and amendments to the Special Permits are included for reference.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Beth DelBuono, Mayor for the Town of Newington, Craig Minor, Town Planner, Crown Castle as the tower owner, and Costello Industries Inc, 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, T-Mobile respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Anne Marie Zsamba.

Sincerely,

Anne Marie Zsamba
Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
(201) 236-9224
AnneMarie.Zsamba@crowncastle.com

Attachments

cc:

Beth DelBuono, Mayor (*via email only to bdelbuono@newingtonct.gov*)
Town of Newington
Town Hall – Council's Chambers
131 Cedar Street

Newington, CT 06111

Craig Minor, Town Planner (*via email only to cminor@newingtonct.gov*)
Town of Newington
Planning & Zoning
131 Cedar Street
Newington, CT 06111

Costello Industries Inc, Property Owner (*via email only to fcostello@costelloindustries.com*)
PO Box 370125
West Hartford, CT 06137-0125

Crown Castle, Tower Owner

From: Zsamba, Anne Marie
To: fcostello@costelloindustries.com
Subject: Notice of Exempt Modification - 123 Costello Road, Newington - T-Mobile - 881364
Date: Wednesday, September 2, 2020 9:24:00 AM
Attachments: EM-T-MOBILE-123 COSTELO RD NEWINGTON-881364-CT11782A-notice.pdf

---

Dear Costello Industries Inc:

Attached please find T-Mobile's exempt modification application that is being submitted to the Connecticut Siting Council today, September 2, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: "bdelbuono@newingtonct.gov"
Subject: Notice of Exempt Modification - 123 Costello Road, Newington - T-Mobile - 881364
Date: Wednesday, September 2, 2020 9:25:00 AM
Attachments: EM-T-MOBILE-123 COSTELO RD NEWINGTON-881364-CT11782A-notice.pdf

---

Dear Mayor DelBuono:

Attached please find T-Mobile's exempt modification application that is being submitted to the Connecticut Siting Council today, September 2, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: "cminor@newingtonct.gov"
Subject: Notice of Exempt Modification - 123 Costello Road, Newington - T-Mobile - 881364
Date: Wednesday, September 2, 2020 9:25:00 AM
Attachments: EM-T-MOBILE-123 COSTELO RD NEWINGTON-881364-CT11782A-notice.pdf

---

Dear Town Planner Minor:

Attached please find T-Mobile's exempt modification application that is being submitted to the Connecticut Siting Council today, September 2, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

Exhibit A

Original Facility Approval

29196

VOL. 1408 PAGE 97

TOWN OF NEWINGTON

Town Hall • 131 Cedar Street, Newington, Connecticut 06111
Central Telephone (860) 665-8500
Department Telephone (860)
Department Fax No. (860)665-8575
665-8577

RECEIVED & RECORDED IN NEWINGTON LAND RECORDS

Certified Mail No. 7106 4575 1292 0696 1614
OFFICE OF THE TOWN PLANNER

APR 20 10 55 AM '01
VOL. 1408 97
BY Joan A. Finnegan
TOWN CLERK

CERTIFICATE OF ACTION

TO: Anthony B. Gioffre III
Cuddy, Feder & Worby LLC
90 Maple Avenue
White Plains, New York 10601

DATE: April 16, 2001

SUBJECT: PETITION 10-01 123 Costello Road, AT & T Wireless Services PCS LLC 12 Omega Drive, 2nd floor Stamford, CT 06902 applicant, represented by Anthony B. Gioffre III, Cuddy, Feder & Worby LLC 90 Maple Avenue, White Plains, New York 10601, Costello Industries, Inc. property owner, requests Special Exception Section 3.2.7 for co location of antennae on existing monopole. I Zone.

At a meeting held April 11, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of AT&T Wireless PCS antenna as a co-locator on the existing monopole and on the existing platform at approximately 145' elevation as shown on plans prepared by URS Corporation AES entitled "Existing Monopole Co-Locate Compound Plan and Tower Elevation" sheet Z01 site plan scale 1"=30' and sheet Z02 compound plan and tower elevation, scale 1"=10' dated 12/14/00.

2. All ground equipment shall be located within the existing 8' chain link fence.

3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the applicant, AT&T Wireless Services PCS, LLC.

4. Prior to the installation of the AT&T Wireless antenna building permits shall be obtained.

5. Prior to the issuance of building permits a revised site plan mylar shall be submitted to the Town Planner for the Chairman's signature.

Certified by:

Edmund J. Meehan (EJC)

Edmund J. Meehan
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.

CA411-3

-43552 VOL. 1478 PAGE 241

TOWN OF NEWINGTON

Town Hall • 131 Cedar Street, Newington, Connecticut 06111
Central Telephone (860) 665-8500
Department Telephone (860) 665-8575
Department Fax No (860) 665-8577

Certified Mail No. 7106 4575 1292 0696 5209
OFFICE OF THE TOWN PLANNER

CERTIFICATE OF ACTION

TO: Kenneth C. Baldwin
Robinson & Cole LLP
280 Trumbull Street
Hartford CT 06103-3597

DATE: December 3, 2001

SUBJECT: PETITION 65-01 123 Costello Road, Costello Industries owner, Cellco Partnership d/b/a Verizon Wireless applicant, represented by Kenneth C. Baldwin, Robinson & Cole LLP, 280 Trumbull Street Hartford, CT 06103-3597 requests Special Exception Section 3.2.7 PCS antenna co location and ground base equipment, PD Zone District.

At a meeting held November 28, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of Verizon Wireless PCS platform and antenna as a co-locator on the existing monopole at the elevation of 125' as shown on plans prepared by URS Corporation AES, 795 Brook Street Rocky Hill, CT, dated 10-11-01, Sheets T-1, Z-1 and Z-2, entitled "123 Costello Road", Newington, Connecticut."

2. All ground equipment shall be located within an 8' fence enclosure, no equipment shall be placed within 10' side setback area.

3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the Verizon Wireless.

4. Prior to the installation of the Verizon Wireless antenna building permits shall be obtained.

-1-(Continued on Page 2)

Certified by:

Edmund J. Meehan
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.

This Site Plan Modification will not become effective until 1) a transparency of the Certificate of Action is affixed to the original site plan mylar, 2) the modification is incorporated into the site plan and noted as a revision and 3) a mylar copy of the modified signed site plan original mylar is filed in the Town Plan and Zoning Office.

An Autocad DXF File shall be provided to the Town Planner for incorporation into the Town's GIS database at the time of submission of the plan mylar.

cs1128-2/3

RECEIVED & RECORDED IN
NEWINGTON LAND RECORDS
Dec. 10, 2001 at 11:00 A.M
VOLUME 1478 PAGE 241
BY Teri A. Henderson
TOWN CLERK

VOL. 1394 PAGE 43

TOWN OF NEWINGTON

28148

Town Hall • 131 Cedar Street, Newington, Connecticut 06111
Central Telephone (860) 665-8500
Department Telephone (860)
Department Fax No (860)665-8575
665-8577

Certified Mail No. P 972 914 104
OFFICE OF THE TOWN PLANNER

CERTIFICATE OF ACTION

TO: Attorney John W. Knuff
Hurwitz & Sagarin, LLC
147 Broad ST
Milford CT 06460

DATE: February 16, 2001

SUBJECT: PETITION 01-2001 123 Costello Road, Costello Industries owner, Nextel Communications of the Mid-Atlantic, Inc. 100 Corporate Place, Rocky Hill, applicant represented by John W. Knuff, Hurwitz & Sagarin, LLC 147 Broad Street Milford, CT 06460 request Special Exception Section 3.2.Z to add antenna to existing monopole, PD Zone.

At a meeting held February 14, 2001, the Newington Town Plan and Zoning Commission voted to approve the above referenced PETITION subject to the following conditions:

1. Approval is granted for the placement of Nextel PCS platform and antenna as a co-locator on the existing monopole at the elevation of 135' as shown on plans prepared by URS Corporation AES, 500 Enterprise Drive Rocky Hill, CT , dated 11-15-00, Sheets T-1, Z-1 and Z-2, entitled "Site No. CT-2517, 123 Costello Road, Newington, Connecticut."

2. All ground equipment shall be located within an 8' fence enclosure, no equipment shall be placed within 10' side yard setback area.

3. The approval of this special exception shall be void and of no effect unless construction of the project commences within one year from the date of the Commission's approval. The term "construction" pertains to the installation of the antenna and support ground facilities by the applicant, Nextel Communications.

4. Prior to the installation of the Nextel antenna building permits shall be obtained.

Certified by:

Edmund J. Meehan
Town Planner

This Special Exception will not become effective until this Certificate of Action is filed by the applicant on the Land Records of the Town of Newington.

Cu216-1

RECEIVED & RECORDED IN
NEWINGTON LAND RECORDS

FEB 21 2 03 PM '01
VOL. 1394 PAGE 43
BY
TOWN CLERK

Exhibit B

Property Card

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2015.

Information on the Property Records for the Municipality of Newington was last updated on 9/1/2020.

Parcel Information

Location:	123 COSTELLO RD	Property Use:	Industrial	Primary Use:	Office Warehouse
Unique ID:	C0685500	Map Block Lot:	32/018/00A	Acres:	2.84
490 Acres:	0.00	Zone:	PD	Volume / Page:	1304/ 147
Developers Map / Lot:	S/E 2020 & 2815	Census:			

Value Information

	Appraised Value	Assessed Value
Land	382,500	267,750
Buildings	212,671	148,870
Detached Outbuildings	287,500	201,250
Total	882,671	617,870

Owner's Information

Owner's Data
COSTELLO INDUSTRIES INC PO BOX 370125 WEST HARTFORD, CT 06137-0125

Building 1

Category:	Industrial	Use:	Warehouse	GLA:	10,150
Stories:	1.00	Construction:	Steel	Year Built:	1975
Heating:	Unit Heater/AC	Fuel:	Natural Gas	Cooling Percent:	0

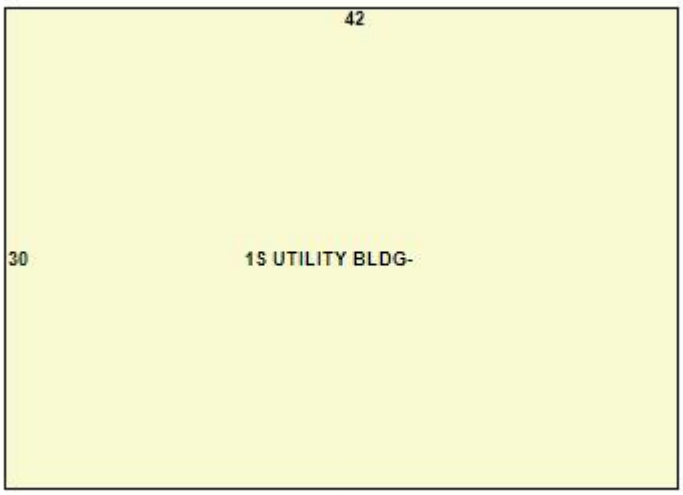
Siding:	Concrete Block	Roof Material:	Other	Beds/Units:	0

Special Features

Overhead Doors	2

Attached Components

Building 2



Category:	Industrial	Use:	Utility Building	GLA:	1,260

Stories:	1.00	Construction:	Steel	Year Built:	1981
Heating:	Unit Heater/AC	Fuel:	Natural Gas	Cooling Percent:	0
Siding:	Metal	Roof Material:	Other	Beds/Units:	0

Special Features

Overhead Doors	1

Attached Components

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Paving	1975	1.00	25,000.00	25,000
Cell Tower	1975	0.00	0.00	1

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
COSTELLO INDUSTRIES INC	1304	0147	09/03/1999	Quit Claim	No	$0
TAGATAC SANDRA	1304	0144	09/03/1999	Quit Claim	No	$0
COSTELLO INDUSTRIES INC	0573	0098	03/31/1986		No	$0
COSTELLO INDUSTRIES INC	0399	0332	08/18/1980		No	$0
COSTELLO INDUSTRIES INC	0385	0280	12/18/1979		No	$0
COSTELLO INDUSTRIES INC	0385	0278	12/18/1979		No	$0
COSTELLO INDUSTRIES INC	0314	0129	06/06/1977		No	$0
COSTELLO CONSTRUCTION CORP THE	0284	0147	02/19/1976		No	$0

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
COSTELLO CONSTRUCTION CORP THE	0271	0180	06/17/1975		No	$0

Building Permits

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
B-19-115	Comm Renovations	03/21/2019		Imported Record	AT&T proposes to modify their existing antenna configuration on the telecommunications tower by repl
B-19-15	Comm Renovations	01/10/2019		Imported Record	Verizon to replace six remote radio heads (non-antenna) to their existing antenna equipment on the t
B-18-695	Comm Renovations	11/27/2018		Imported Record	Adding (3) Antennas and its ancillary equipment/cables, replacing Remote Radio Heads (RRH) with New.
E-18-414	Electrical	11/16/2018		Imported Record	INSTALLATION OF DIESEL DC GENERATOR FOR T-MOBILE (REPLACEMENT)
B-18-676	Foundation	11/15/2018		Imported Record	T-Mobile to swap out (3) Antennas and (3) RRUs and swap out (1) coax for (1) hybrid fiber line
B-16-927	Foundation	12/12/2016		Closed	Verizon Wireless is looking to replace antenna panels and Remote Radio Heads to existing Cell Tower.
B-16-909	Other	12/05/2016		Closed	AT&T to replace three (3) antennas and replace six (6) Triplexors to their existing antennas equipme
E-16-425	Electrical	09/22/2016		Imported Record	INSTALL NEW OUTLETS & LIGHTING IN NEW ADDITION. INSTALL NEW 150A 3PH SUBPANEL IN ADDITION TO FEED N
B-16-527	Comm Renovations	05/30/2016		Closed	REPLACE (3) NEW AIR 32 ANTENNA
B-16-531	Comm Renovations	05/30/2016		Closed	BUILD NEW ADDITION ABUTTING EXISTING BUILDING
TB-16-150	Other	03/15/2016		Closed	AT&T (3) ANTENNAS AND (3) RRU'S
B-16-23	Addition	02/19/2016		Closed	T-MOBILE (3) NEW ANTENNAS
TB-14-114	Remodel	03/07/2014		Closed	ANTENNAS MODIFACATION
TB-13-447	Other	07/26/2013		Closed	6 ANTENNAS CELL TOWER

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
TB-13-173	Remodel	04/19/2013		Closed	REPLACE (3) ANTENNAS MONOPOLE
B-13-51	Remodel	03/07/2013		Closed	CONCRETE PAD TO 9'X10'
B-12-318	Addition	07/05/2012		Closed	
	Remodel	09/16/2010		Closed	REMOVE & REPLACE 12 EXISTING VERIZON
76610	Other	12/02/2008		Closed	100 AMP TELECOMMUNICATIONS EQUIP
61582	Building	03/27/2001		Closed	FOUND FOR PRE-F
60016	Building	05/16/2000		Closed	ANTENNA'S EXIST
58584	Building	08/23/1999		Closed	REPLACE TOWER


Newington CT
Cabinet store
Industrial Protection Products, Inc
On Site Gas Systems
Monro Auto Service And Tire Centers
Tire shop
Ferguson Waterworks
Ashley HomeStore
Furniture store
123 Costello Road
CubeSmart Self Stora
Costello Rd
Berlin Turnpike
Goodwill Newington Store & Donation Station
Thrift store
Friendly's
Takeout • Delivery
Countryside Condominium
Webster Ct
Webster Ct
Adam Dr
15
5

Exhibit C

Construction Drawings

T-Mobile

T-MOBILE SITE NUMBER: CT11782A
T-MOBILE SITE NAME: CT782/COSTELLO MP
SITE TYPE: MONOPOLE
TOWER HEIGHT: 145'-0"

BUSINESS UNIT #: 881364
SITE ADDRESS: 123 COSTELLO ROAD NEWINGTON, CT 06111
COUNTY: HARTFORD
JURISDICTION: TOWN OF NEWINGTON

T-MOBILE ANCHOR SITE CONFIGURATION: 67D5992DB

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	NEWINGTON
SITE ADDRESS:	123 COSTELLO ROAD NEWINGTON, CT 06111
COUNTY:	HARTFORD
MAP/PARCEL #:	32-018-00A
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.655206°
LONGITUDE:	72.721396°
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	140 FT
CURRENT ZONING:	PD
JURISDICTION:	TOWN OF NEWINGTON
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	COSTELLO INDUSTRIES INC PO BOX 370125 WEST HARTFORD, CT 06137
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	T-MOBILE 35 GRIFFIN ROAD BLOOMFIELD, CT 06002
ELECTRIC PROVIDER:	NOT PROVIDED
TELCO PROVIDER:	AT&T HOME PHONE (888) 637-9527

PROJECT TEAM

A&E FIRM:	CROWN CASTLE USA INC. 2000 CORPORATE DRIVE CANONSBURG, PA 15317 CROWNAE.APPROVAL@CROWNCASTLE.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	1500 CORPORATE DRIVE CANONSBURG, PA 15317
	JOSEPH CLARK - PROJECT MANAGER JOSEPH.CLARK@CROWNCASTLE.COM

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	OVERALL SITE PLAN
C-1.2	SITE PLAN & ENLARGED SITE PLAN
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	ANTENNA & CABLE SCHEDULE
C-4	PLUMBING DIAGRAM
C-5	EQUIPMENT SPECS
E-1	AC PANEL SCHEDULES & ONE LINE DIAGRAM
G-1	ANTENNA GROUNDING DIAGRAM
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 24X36. 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.

PROJECT DESCRIPTION

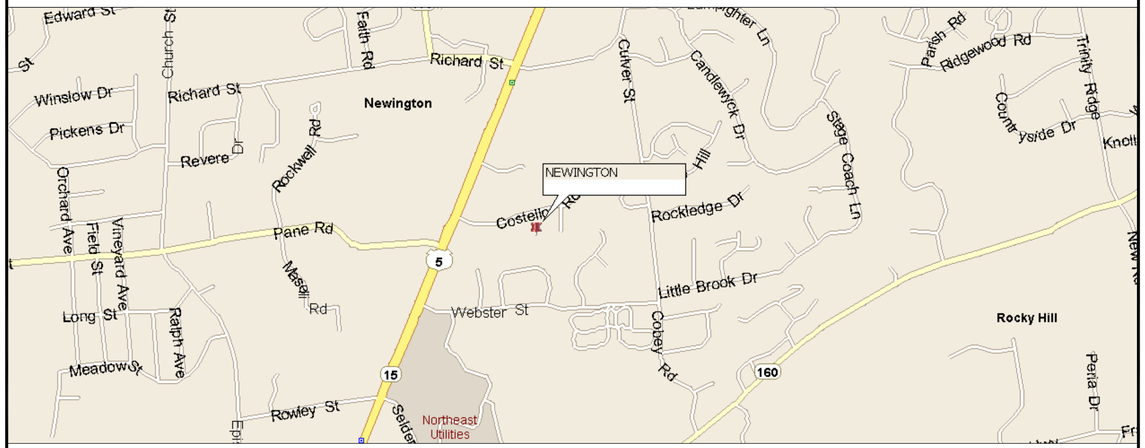
THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:
- REMOVE (3) TMAs
- REMOVE (1) COAX CABLE (1 5/8")
- INSTALL (3) ANTENNAS
- INSTALL (3) RRHs
- INSTALL (1) HANDRAIL KIT
- INSTALL (1) 6x12 HCS CABLE (1-5/8")

GROUND SCOPE OF WORK:
- REMOVE (1) GENERATOR
- REMOVE (1) NEXTEL CABINET
- INSTALL (1) ENCLOSURE 6160
- INSTALL (1) B160 BATTERY CABINET
- INSTALL (3) BB 6630s
- INSTALL (1) BB 6648

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

LOCATION MAP



NO SCALE

APPLICABLE CODES/REFERENCE DOCUMENTS

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

CODE TYPE	CODE
BUILDING	2018 CT STATE BUILDING CODE
MECHANICAL	2018 CT STATE BUILDING CODE
ELECTRICAL	2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	NOT PROVIDED
DATED:	
MOUNT ANALYSIS:	BY OTHERS
DATED:	6/15/20
RFDS REVISION:	5
DATED:	5/11/20
ORDER ID:	524005
REVISION:	0

CALL CONNECTICUT ONE CALL
(800) 922-4455 CBYD.COM
CALL 2 WORKING DAYS BEFORE YOU DIG!

APPROVALS

APPROVAL	SIGNATURE	DATE
PROPERTY OWNER OR REP.		
LAND USE PLANNER		
T-MOBILE		
OPERATIONS		
RF		
NETWORK		
BACKHAUL		
CONSTRUCTION MANAGER		

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

T-Mobile
35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

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

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-MOBILE SITE NUMBER: **CT11782A**

BU #: **881364**
NEWINGTON

123 COSTELLO ROAD
NEWINGTON, CT 06111

EXISTING
145'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/15/20	BEL	CONSTRUCTION	RMC
1	8/7/20	MLC	CONSTRUCTION	FWP
2	8/13/20	MLC	CONSTRUCTION	MTJ

STATE OF CONNECTICUT
31627
LICENSED PROFESSIONAL ENGINEER
8/13/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: T-1
REVISION: 2

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED– NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800–788–7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
2. "LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
   THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED–STD–10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH QAS–STD–10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
   CARRIER: T–MOBILE
   TOWER OWNER: CROWN CASTLE USA INC.
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE–THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER–TO–CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
   #4 BARS AND SMALLER 40 ksi
   #5 BARS AND LARGER 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 BARS AND LARGER 2"
   #5 BARS AND SMALLER 1–1/2"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
   SLAB AND WALLS 3/4"
   BEAMS AND COLUMNS 1–1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON–ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON–METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON–METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD–WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
   4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
   4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON–PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER–ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "T–MOBILE".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE		
SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
	NEG (–)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

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CROWN CASTLE
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CHARLOTTE, NC 28277

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-MOBILE SITE NUMBER: **CT11782A**

BU #: **881364**
NEWINGTON

123 COSTELLO ROAD
NEWINGTON, CT 06111

EXISTING
145'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/15/20	BEL	CONSTRUCTION	RMC
1	8/7/20	MLC	CONSTRUCTION	FWP
2	8/13/20	MLC	CONSTRUCTION	MTJ

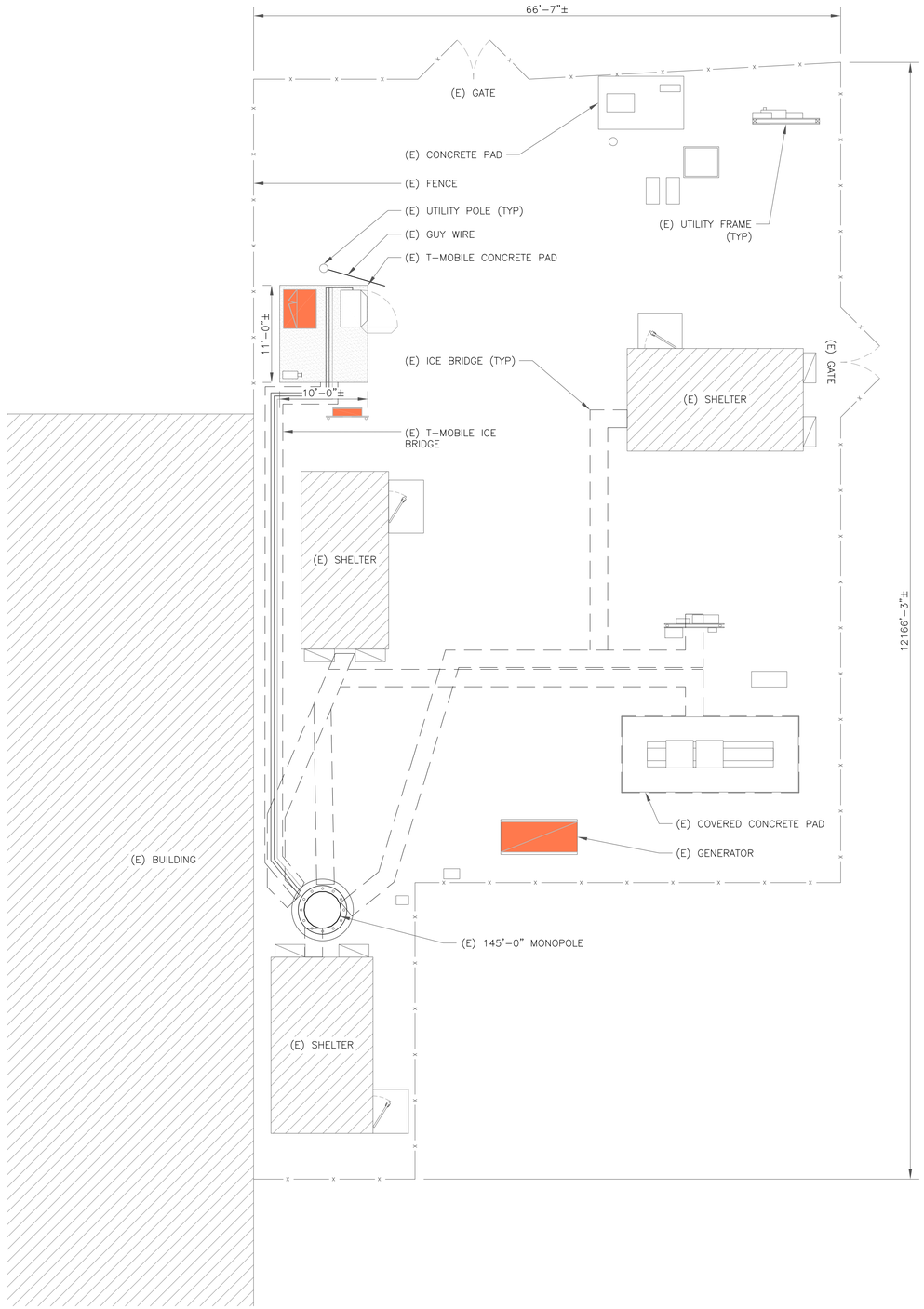
STATE OF CONNECTICUT LICENSED PROFESSIONAL ENGINEER 31627
8/13/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: **T-2**
REVISION: **2**

SITE PLAN DISCLAIMER:

PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS OR FROM ASSESSORS MAPS. CROWN CASTLE USA INC. HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIMS AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET



1 OVERALL SITE PLAN

SCALE: 4" 3" 2" 1" 0 4" 1/4"=1'-0" (FULL SIZE) 1/8"=1'-0" (11x17)

N

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STATE OF CONNECTICUT
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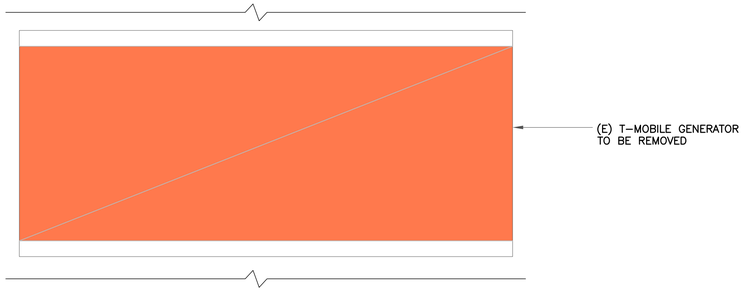
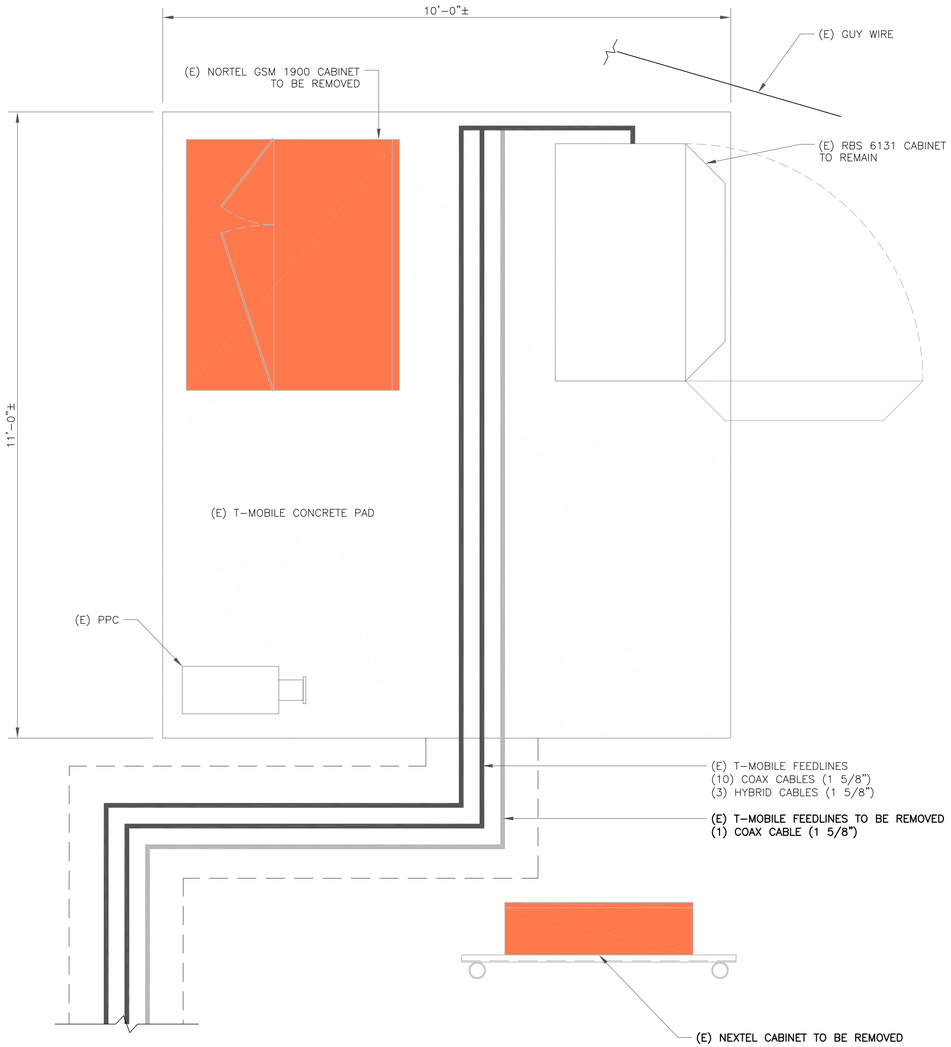
SHEET NUMBER: C-1.1

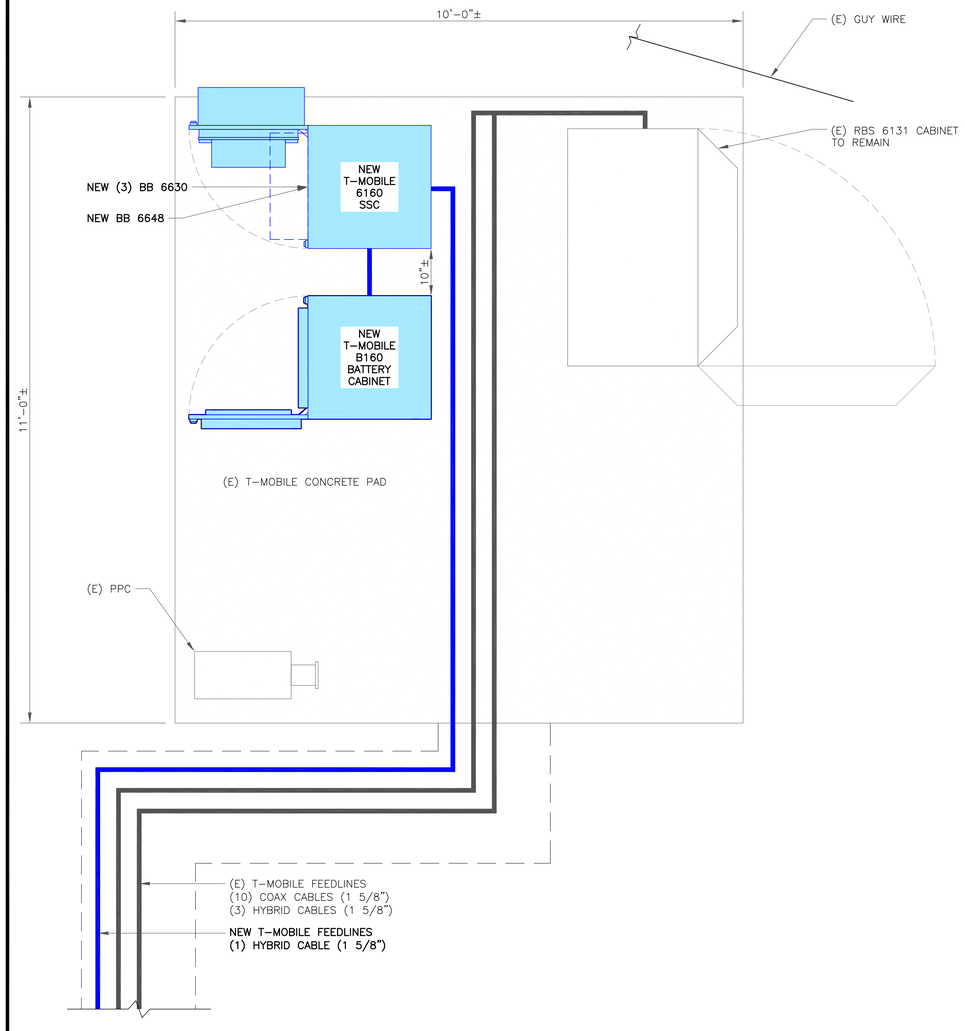
REVISION: 2





1 SITE PLAN
SCALE: 0 6" 1" 1-1/2"=1'-0" (FULL SIZE) 3/4"=1'-0" (11x17)

N



2 ENLARGED SITE PLAN
SCALE: 0 6" 1" 1-1/2"=1'-0" (FULL SIZE) 3/4"=1'-0" (11x17)

N

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123 COSTELLO ROAD
NEWINGTON, CT 06111

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STATE OF CONNECTICUT
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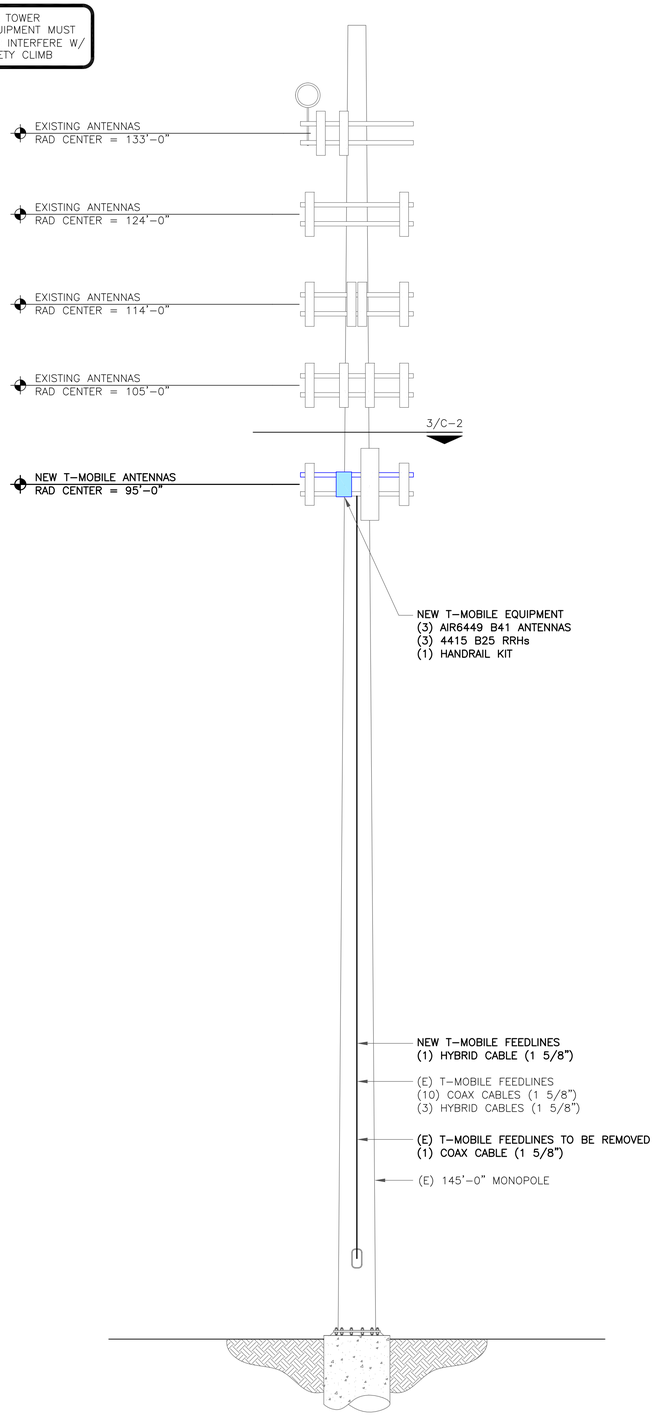
SHEET NUMBER: C-1.2

REVISION: 2

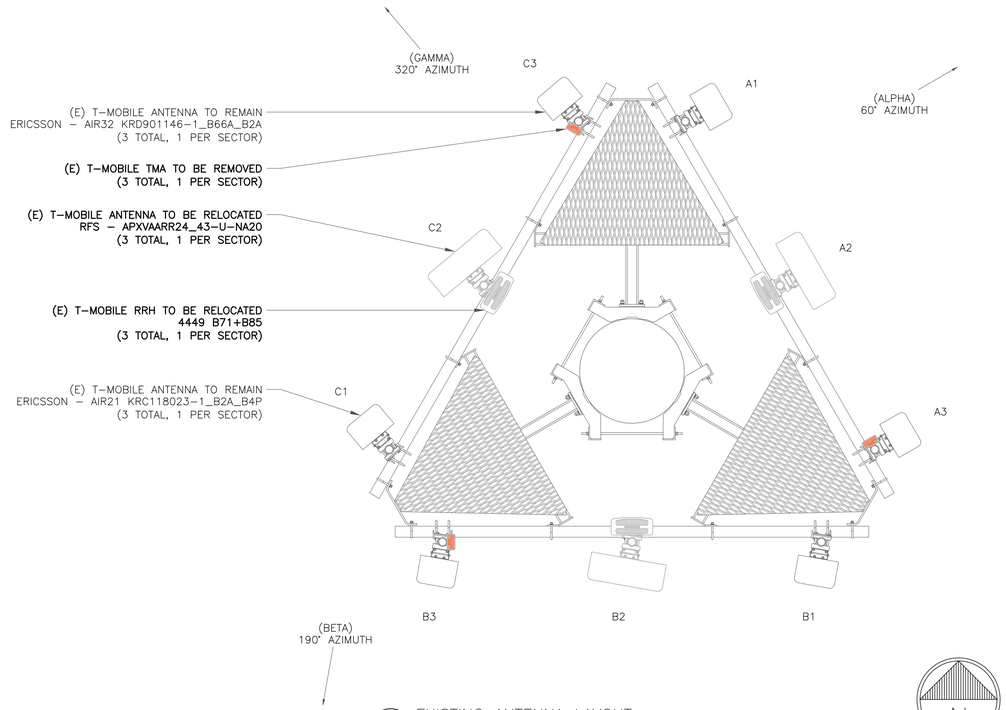
T–MOBILE EQUIPMENT

ANTENNA CL: 95'–0"
MOUNT CL: 95'–0"

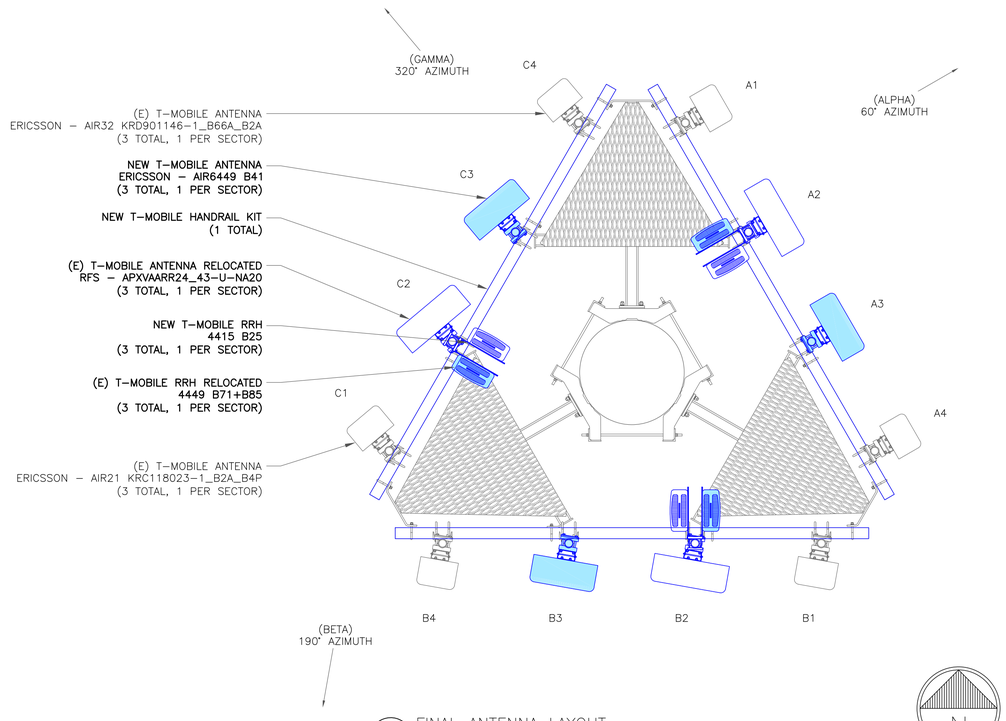
ANY AND ALL TOWER MOUNTED EQUIPMENT MUST NOT TRAP OR INTERFERE W/ EXISTING SAFETY CLIMB



1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA LAYOUT
SCALE: NOT TO SCALE



3 FINAL ANTENNA LAYOUT
SCALE: NOT TO SCALE

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STATE OF CONNECTICUT
MICHAEL T. JOHNSON
31627
LICENSED PROFESSIONAL ENGINEER
8/13/20

B&T ENGINEERING, INC.
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Expires 2/10/21

SHEET NUMBER: C-2

REVISION: 2

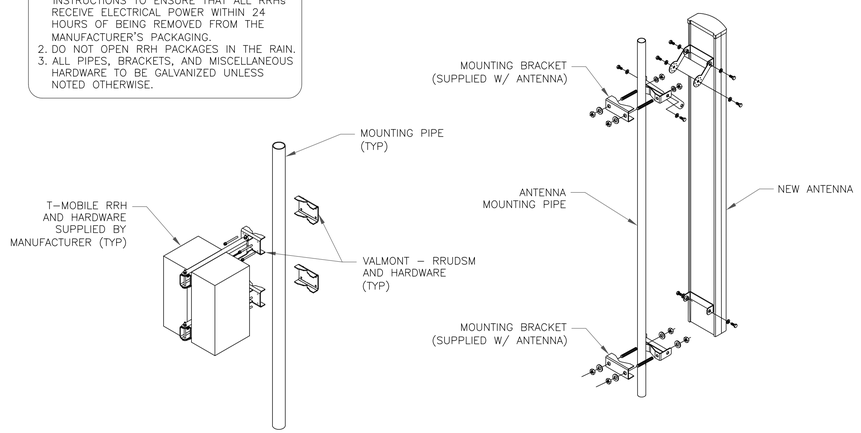
ANTENNA SCHEDULE

SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	L2100/L1900	95'-0"	60°	ERICSSON	AIR32 KRD901146-1_B66A_B2A	0°	0°/0°	-	(1) 1-5/8" HYBRID
ALPHA	A2	L700/L600/N600 **L1900**	95'-0"	60°	RFS	APXVAARR24_43-U-NA20	0°	0°/0°	(1) ERICSSON - RRUS 4449 B71+B85 **(1) ERICSSON - RRUS 4415 B25**	(1) 1-5/8" HYBRID
ALPHA	**A3**	**L2500/N2500**	**95'-0"**	**60°**	**ERICSSON**	**AIR6449 B41**	**0°**	**0°**	-	**(1) 1-5/8" HYBRID**
ALPHA	A4	G1900/U2100	95'-0"	60°	ERICSSON	AIR21 KRC118023-1B2A_B4P	0°	0°/0°	-	(1) 1-5/8" HYBRID
BETA	B1	L2100/L1900	95'-0"	190°	ERICSSON	AIR32 KRD901146-1_B66A_B2A	0°	0°/0°	-	(SHARED) 1-5/8" HYBRID W/ A1
BETA	B2	L700/L600/N600 **L1900**	95'-0"	190°	RFS	APXVAARR24_43-U-NA20	0°	0°/0°	(1) ERICSSON - RRUS 4449 B71+B85 **(1) ERICSSON - RRUS 4415 B25**	(SHARED) 1-5/8" HYBRID W/ A2
BETA	**B3**	**L2500/N2500**	**95'-0"**	**190°**	**ERICSSON**	**AIR6449 B41**	**0°**	**0°**	-	**(SHARED) 1-5/8" HYBRID W/ A3**
BETA	B4	G1900/U2100	95'-0"	190°	ERICSSON	AIR21 KRC118023-1B2A_B4P	0°	0°/0°	-	(SHARED) 1-5/8" HYBRID W/ A4
GAMMA	C1	L2100/L1900	95'-0"	320°	ERICSSON	AIR32 KRD901146-1_B66A_B2A	0°	0°/0°	-	(SHARED) 1-5/8" HYBRID W/ A1
GAMMA	C2	L700/L600/N600 **L1900**	95'-0"	320°	RFS	APXVAARR24_43-U-NA20	0°	0°/0°	(1) ERICSSON - RRUS 4449 B71+B85 **(1) ERICSSON - RRUS 4415 B25**	(SHARED) 1-5/8" HYBRID W/ A2
GAMMA	**C3**	**L2500/N2500**	**95'-0"**	**320°**	**ERICSSON**	**AIR6449 B41**	**0°**	**0°**	-	**(SHARED) 1-5/8" HYBRID W/ A3**
GAMMA	C4	G1900/U2100	95'-0"	320°	ERICSSON	AIR21 KRC118023-1B2A_B4P	0°	0°/0°	-	(SHARED) 1-5/8" HYBRID W/ A4

1 ANTENNA AND CABLE SCHEDULE
SCALE: NOT TO SCALE

INSTALLER NOTES:

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



2 ANTENNA WITH RRHs MOUNTING DETAIL
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD
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T-MOBILE SITE NUMBER: **CT11782A**

BU #: **881364**
NEWINGTON

123 COSTELLO ROAD
NEWINGTON, CT 06111

EXISTING
145'-0" MONOPOLE

ISSUED FOR:

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STATE OF CONNECTICUT
31627
LICENSED PROFESSIONAL ENGINEER
8/13/20

B&T ENGINEERING, INC.
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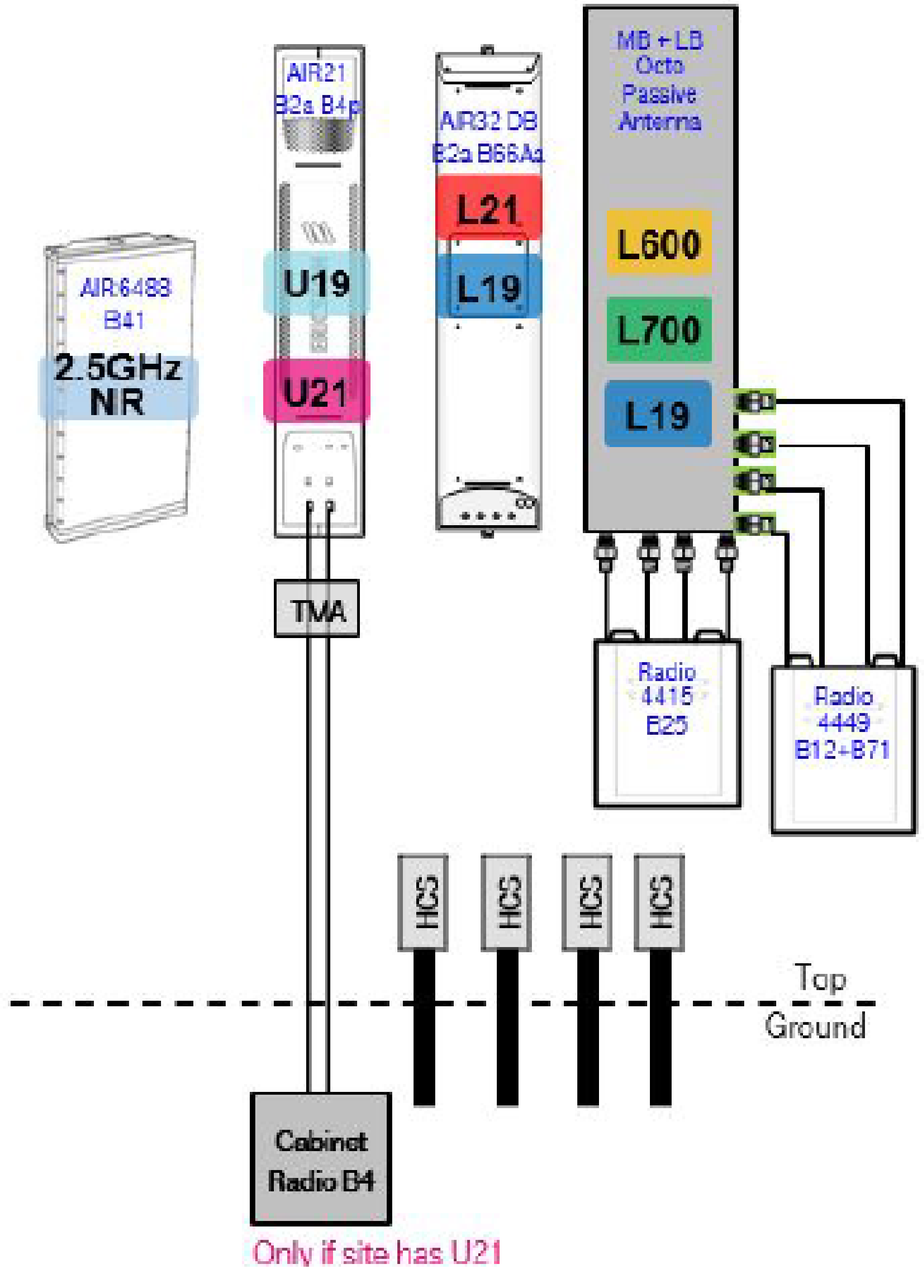
SHEET NUMBER: C-3

REVISION: 2



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

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35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
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NEWINGTON

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STATE OF CONNECTICUT
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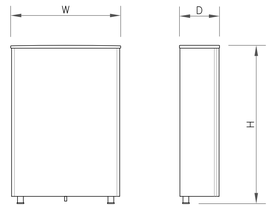
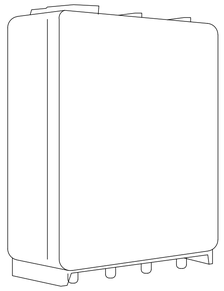
SHEET NUMBER: C-4

REVISION: 2



ANTENNA SPECS	
MANUFACTURER	ERICSSON
MODEL #	AIR 6449 B41
WIDTH	20.63"
DEPTH	8.60"
HEIGHT	33.10"
WEIGHT	104.0 LBS

1 AIR6449 B41
SCALE: NOT TO SCALE



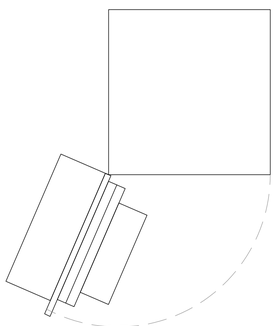
RRU SPECIFICATIONS	
MANUFACTURER	NOKIA
MODEL #	4415 B25
WIDTH	13.4"
DEPTH	5.9"
HEIGHT	16.5"
WEIGHT	46.0 LBS

2 RRUS 4415 B25
SCALE: NOT TO SCALE

BATTERY CABINET SPECIFICATIONS	
MODEL #	B160
MANUF.	ERICSSON
HEIGHT	63"
WIDTH	26"
DEPTH	26"
WEIGHT	

3 ERICSSON B160 BATTERY CABINET
SCALE: NOT TO SCALE

ERICSSON 6160 SSC
WEIGHT: 60.0 LBS
SIZE (HxWxD): 63"x25.6"x33.5" IN.



4 ERICSSON 6160 SSC
SCALE: NOT TO SCALE

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STATE OF CONNECTICUT
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PROFESSIONAL ENGINEER
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B&T ENGINEERING, INC.
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SHEET NUMBER: C-5

REVISION: 2

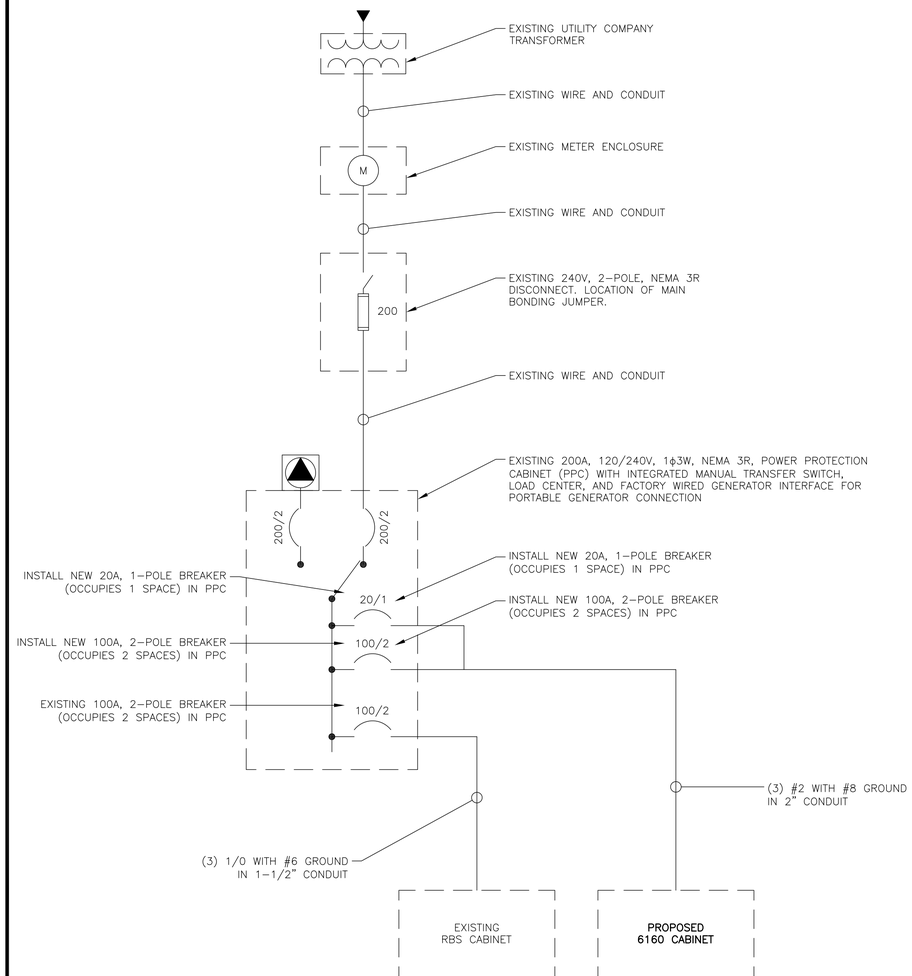
FINAL PANEL SCHEDULE

LOAD	POLES	AMPS	BUS L1	BUS L2	AMPS	POLES	LOAD
PROPOSED 6160	2	100A	1	2	30A	1	TVSS
			3	4			
PROPOSED GFCI	1	20A	5	6	100A	2	RBS 6131
			7	8			
			9	10			
			11	12			
			13	14			
			15	16			
			17	18			
			19	20			
			21	22			
SAFETY LIGHT	1	20A	23	24			

RATED VOLTAGE: ■120/240 ☐_____. 1 PHASE, 3 WIRE	BRANCH POLES: ☐12 ■24 ☐30 ☐42	APPROVED MF'RS
RATED AMPS: ☐100 ■200 ☐400 ☐_____.	CABINET: ■SURFACE ☐FLUSH	NEMA ☐1 ■3R ☐4X
☐MAIN LUGS ONLY MAIN 200 AMPS ■BREAKER ☐FUSED SWITCH	■HINGED DOOR	■KEYED DOOR LATCH
☐FUSED ■CIRCUIT BREAKER BRANCH DEVICES	☐_____ TO BE GFCI BREAKERS	FULL NEUTRAL BUS GROUND BAR
ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 10,000 AMPS SYMMETRICAL		

REPLACE EXISTING BREAKER IN POSITION 1 AND 3 WITH A NEW 2P 100A BREAKER. INSTALL NEW 1P 20A BREAKER IN POSITION 5. INSTALL NEW WIRES FOR PROPOSED 6160 CABINET WITH (2) 1/0 AWG THWN (COPPER) AND (1) #2G AWG. MINIMUM CONDUIT SIZE TO BE 2". FINAL PANEL DESIGN AND CALCULATIONS FOR WIRE SIZE WERE BASED OFF OF EXISTING PHOTOS

1 FINAL AC PANEL SCHEDULE
SCALE: NOT TO SCALE



NOTES:

1. ALL NEW CONDUCTORS TO BE INSTALLED SHALL BE COPPER. ALL CONDUCTORS SHALL BE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 UNLESS NOTED OTHERWISE.
2. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE-LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. ALL GROUNDING AND BONDING PER THE NEC.

2 ONE LINE DIAGRAM
SCALE: NOT TO SCALE

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8/13/20

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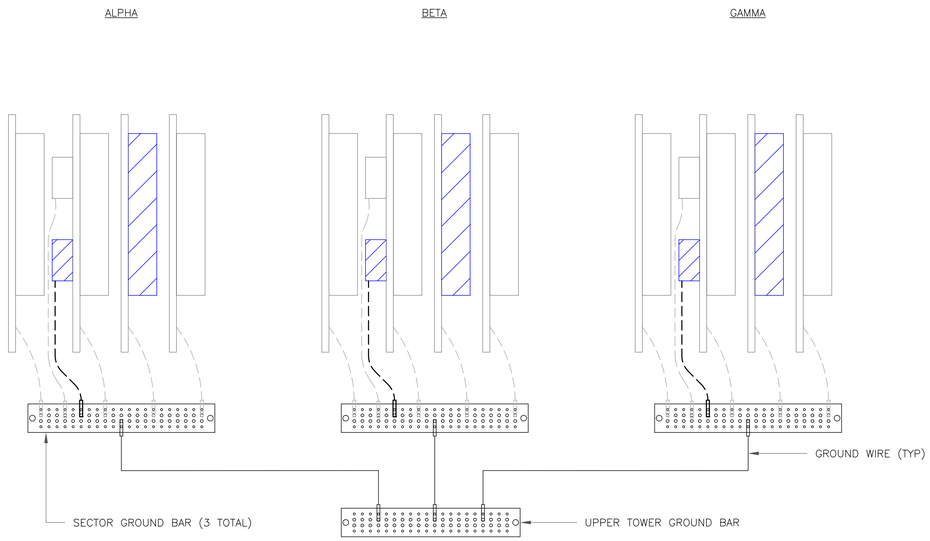
SHEET NUMBER: E-1

REVISION: 2



NOTE:

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

1 ANTENNA GROUNDING DIAGRAM
SCALE: NOT TO SCALE

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LICENSED PROFESSIONAL ENGINEER
8/13/20

B&T ENGINEERING, INC.
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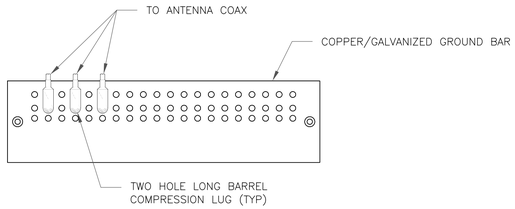
Expires 2/10/21

SHEET NUMBER: G-1

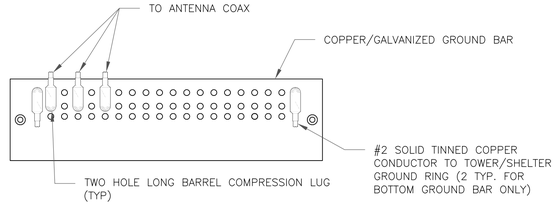
REVISION: 2



NOTES:

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

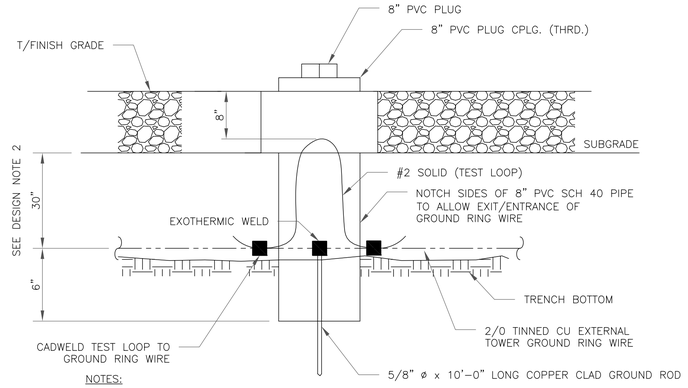
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

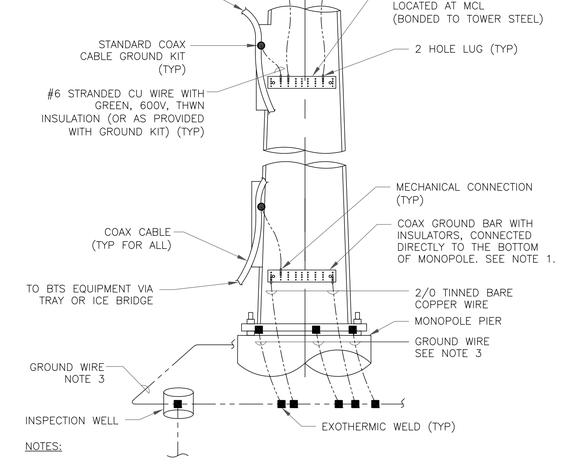
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

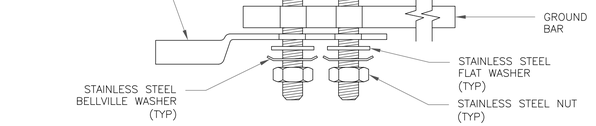
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



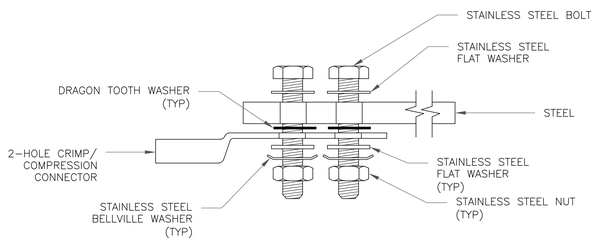
NOTES:

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

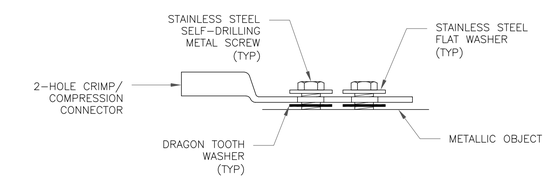
4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

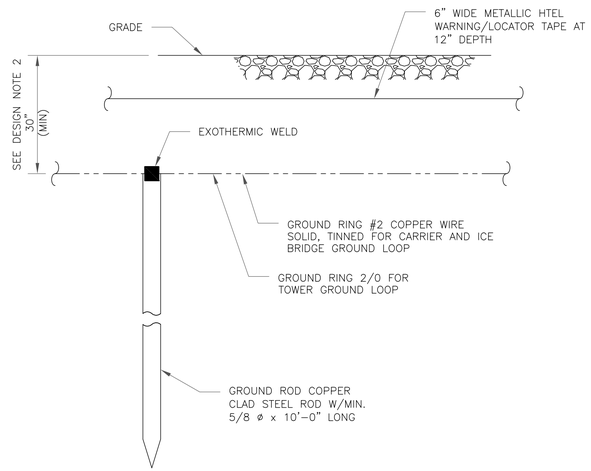


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

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

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-MOBILE SITE NUMBER: **CT11782A**

BU #: **881364**
NEWINGTON

123 COSTELLO ROAD
NEWINGTON, CT 06111

EXISTING
145'-0" MONOPOLE

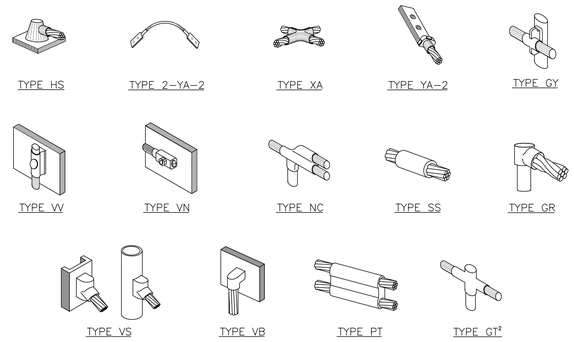
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/15/20	BEL	CONSTRUCTION	RMC
1	8/7/20	MLC	CONSTRUCTION	FWP
2	8/13/20	MLC	CONSTRUCTION	MTJ

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: G-2

REVISION: 2

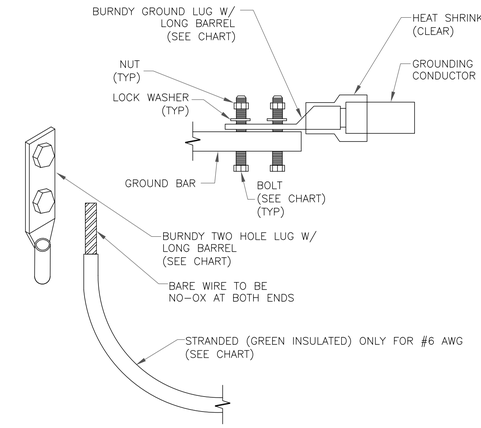


NOTE:

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

1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE

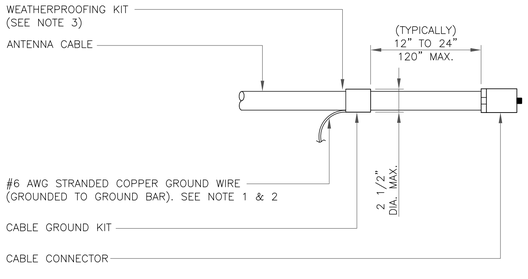
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER,GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

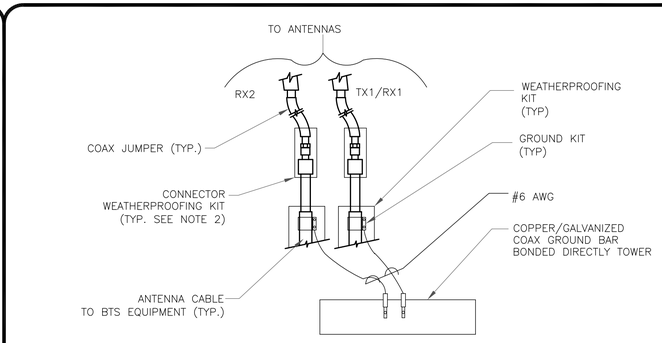
2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



NOTES:

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

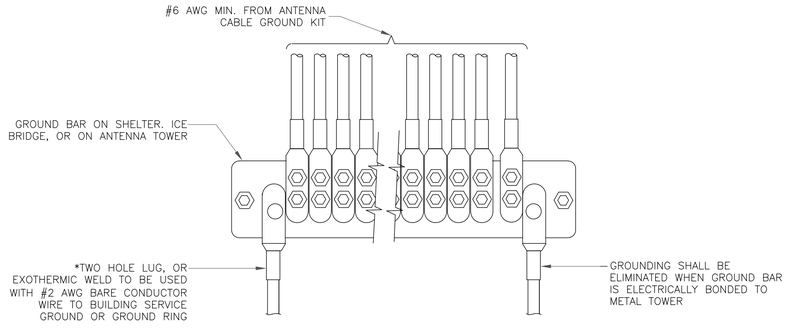
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



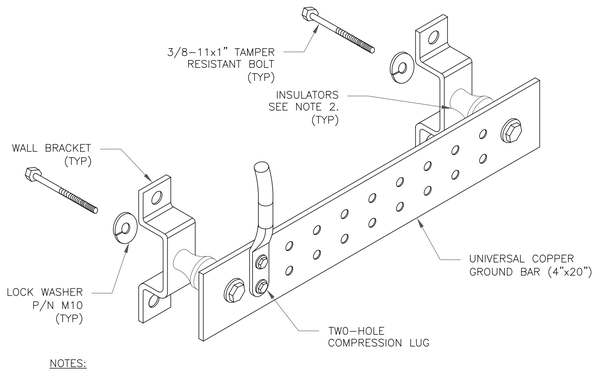
NOTES:

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

4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



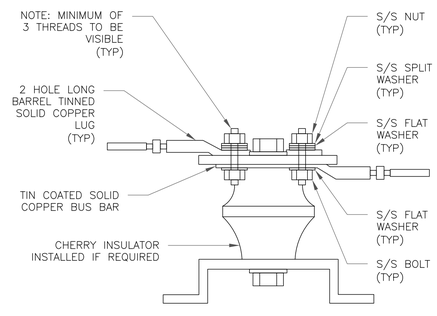
5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



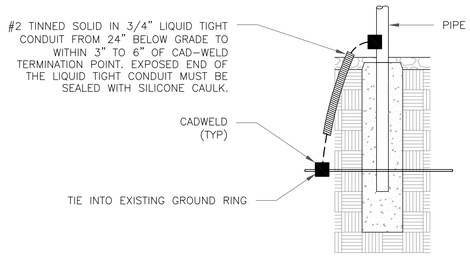
NOTES:

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

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

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

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-MOBILE SITE NUMBER: **CT11782A**

BU #: **881364**
NEWINGTON

123 COSTELLO ROAD
NEWINGTON, CT 06111

EXISTING
145'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/15/20	BEL	CONSTRUCTION	RMC
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2	8/13/20	MLC	CONSTRUCTION	MTJ

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: G-3

REVISION: 2

Exhibit D

Structural Analysis Report

PAUL J. FORD & COMPANY

Date: June 17, 2020

Stephanie Lipscomb
Crown Castle
370 Mallory Station Rd
Franklin, TN 37067

Paul J. Ford and Company
250 E. Broad St., Ste 600
Columbus, OH 43215
614-221-6679

Subject:	**Structural Analysis Report**	
Carrier Designation:	***T-Mobile* Co-Locate**	
	Carrier Site Number:	CT11782A
	Carrier Site Name:	CT782/Costello MP
Crown Castle Designation:	**Crown Castle BU Number:**	881364
	Crown Castle Site Name:	Newington
	Crown Castle JDE Job Number:	613803
	Crown Castle Work Order Number:	1859452
	Crown Castle Order Number:	524005 Rev. 0
Engineering Firm Designation:	**Paul J. Ford and Company Project Number:**	37520-1104.001.7805
Site Data:	**123 Costelo Road, Newington, Hartford County, CT**	
	Latitude *41° 39' 18.72"*, Longitude *-72° 43' 17.19"*	
	145 Foot - Monopole Tower	

Dear Stephanie Lipscomb,

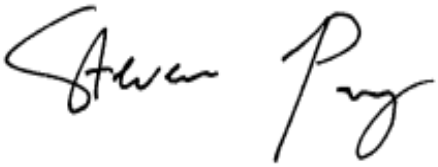
Paul J. Ford and Company is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above mentioned tower.

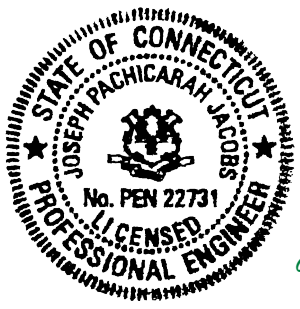
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Proposed Equipment Configuration **Sufficient Capacity – 81.8%**

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

Respectfully submitted by:





06.17.2020

Steven Pozz, EI
Structural Designer
spozz@pauljford.com

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 145 ft Monopole tower designed by SUMMIT in August of 1999.

The tower has been modified per reinforcement drawings prepared by PJF in November of 2015. Reinforcement consist of shaft reinforcing and transition stiffeners.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	2 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)
94.0	95.0	3	ericsson	AIR -32 B2A/B66AA	13	1-5/8
		3	ericsson	AIR6449 B41		
		3	ericsson	ERICSSON AIR 21 B2A B4P_T-MOBILE		
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	ericsson	RRUS 4415 B25_CCIV2		
		3	rfs celwave	APXVAARR24_43-U-NA20		
	94.0	1	tower mounts	Platform Mount [LP 302-1]		

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)
133.0	139.0	2	andrew	VHLP2.5-11	2 6 2	1/2 5/16 2" Cond.
		1	dragonwave	HORIZON COMPACT		
		1	samsung telecommunications	WIMAX DAP HEAD		
	135.0	3	argus technologies	LLPX310R-V1 w/ Mount Pipe		
		1	dragonwave	HORIZON COMPACT		
		1	motorola	TIMING 2000		
		2	samsung telecommunications	WIMAX DAP HEAD		
	133.0	1	tower mounts	Platform Mount [LP 712-1]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
124.0	124.0	3	alcatel lucent	TD-RRH8x20-25	4	1-1/4
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
		3	rfs celwave	IBC1900BB-1		
		3	rfs celwave	IBC1900HG-2A		
		1	tower mounts	Platform Mount [LP 712-1]		
122.0	122.0	3	alcatel lucent	PCS 1900MHz 4x45W-65MHz	-	-
		1	tower mounts	Side Arm Mount [SO 102-3]		
	118.0	3	alcatel lucent	800MHz 2X50W RRH W/FILTER		
114.0	116.0	1	lucent	KS24019-L112A	8 1	1-5/8 1/2
	115.0	6	andrew	SBNHH-1D65B w/ Mount Pipe		
		6	antel	BXA-80063/4CFx5 w/ Mount Pipe		
		2	rfs celwave	DB-T1-6Z-8AB-0Z		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
	114.0	1	tower mounts	Platform Mount [LP 712-1_KCKR]		
105.0	105.0	3	cci antennas	OPA-65R-LCUU-H6	12 6 2 2	1-5/8 3/4 3/8 2” Cond.
		6	cci antennas	TPX-070821		
		3	ericsson	RRUS 32		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	ericsson	RRUS 8843 B2/B66A		
		3	kathrein	80010965		
		3	powerwave technologies	7770.00		
		6	powerwave technologies	LGP21401		
		3	quintel technology	QS66512-2		
		3	raycap	DC6-48-60-18-8F		
		1	tower mounts	Platform Mount [LP 302-1]		
80.0	80.0	2	tower mounts	Side Arm Mount [SO 701-1]	-	-
77.0	77.0	1	symmetricom	58532A	1	1/2
		1	tower mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	Dr. Clarence Welti, 08/10/1999	1425352	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	Summit/PJF, 5153/29299-105, 08/11/1999	1425473	CCISITES
4-TOWER MANUFACTURER DRAWINGS	Summit, 5153, 08/10/1999	1425417	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	PJF, 37515-0757.007.7700, 11/11/2015	5976614	CCISITES
4-POST-MODIFICATION INSPECTION	ETS, 160020, 02/29/2016	6120832	CCISITES
4-TOWER STRUCTURAL ANALYSIS REPORTS	CCI, 351250, 09/11/2010	2700302	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. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 Standard.

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

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
3) The structure was modified in conformance with the referenced modification drawings as shown in the referenced post modification inspection.
4) The existing flange bolt information was taken from the referenced structure analysis (doc ID 2700302).

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L1	145 - 140	Pole	TP24.923x24x0.1875	Pole	0.2%	Pass
L2	140 - 135	Pole	TP25.847x24.923x0.1875	Pole	1.4%	Pass
L3	135 - 130	Pole	TP26.77x25.847x0.1875	Pole	4.8%	Pass
L4	130 - 125	Pole	TP27.709x26.77x0.25	Pole	5.8%	Pass
L5	125 - 120	Pole	TP28.648x27.709x0.25	Pole	9.9%	Pass
L6	120 - 115	Pole	TP29.588x28.648x0.25	Pole	14.3%	Pass
L7	115 - 110	Pole	TP30.527x29.588x0.25	Pole	20.8%	Pass
L8	110 - 105	Pole	TP31.466x30.527x0.25	Pole	26.9%	Pass
L9	105 - 100	Pole	TP32.405x31.466x0.25	Pole	35.3%	Pass
L10	100 - 95	Pole	TP33.345x32.405x0.25	Pole	42.8%	Pass
L11	95 - 90	Pole	TP34.284x33.345x0.25	Pole	51.8%	Pass
L12	90 - 89.25	Pole	TP35.27x34.284x0.25	Pole	53.1%	Pass
L13	89.25 - 84.25	Pole	TP34.851x33.925x0.3125	Pole	46.8%	Pass
L14	84.25 - 79.25	Pole	TP35.777x34.851x0.3125	Pole	52.5%	Pass
L15	79.25 - 74.25	Pole	TP36.703x35.777x0.3125	Pole	57.9%	Pass
L16	74.25 - 69.25	Pole	TP37.629x36.703x0.3125	Pole	62.9%	Pass
L17	69.25 - 64.25	Pole	TP38.555x37.629x0.3125	Pole	67.7%	Pass
L18	64.25 - 59.25	Pole	TP39.482x38.555x0.3125	Pole	72.1%	Pass
L19	59.25 - 58.08	Pole	TP39.698x39.482x0.3125	Pole	73.1%	Pass
L20	58.08 - 57.83	Pole + Reinf.	TP39.745x39.698x0.4125	Reinf. 2 Tension Rupture	72.6%	Pass
L21	57.83 - 52.83	Pole + Reinf.	TP40.671x39.745x0.4188	Reinf. 2 Tension Rupture	76.5%	Pass
L22	52.83 - 49.5	Pole + Reinf.	TP42.26x40.671x0.4125	Reinf. 2 Tension Rupture	79.1%	Pass
L23	49.5 - 43.25	Pole + Reinf.	TP41.82x40.663x0.475	Reinf. 2 Tension Rupture	75.2%	Pass
L24	43.25 - 38.25	Pole + Reinf.	TP42.746x41.82x0.475	Reinf. 2 Tension Rupture	78.1%	Pass
L25	38.25 - 33.25	Pole + Reinf.	TP43.672x42.746x0.475	Reinf. 2 Tension Rupture	80.8%	Pass
L26	33.25 - 31.25	Pole + Reinf.	TP44.042x43.672x0.475	Reinf. 2 Tension Rupture	81.8%	Pass
L27	31.25 - 31	Pole + Reinf.	TP44.089x44.042x0.5375	Reinf. 1 Compression	64.5%	Pass
L28	31 - 26	Pole + Reinf.	TP45.015x44.089x0.5375	Reinf. 1 Compression	66.5%	Pass
L29	26 - 21	Pole + Reinf.	TP45.941x45.015x0.525	Reinf. 1 Compression	68.5%	Pass
L30	21 - 16	Pole + Reinf.	TP46.867x45.941x0.525	Reinf. 1 Compression	70.3%	Pass
L31	16 - 11	Pole + Reinf.	TP47.793x46.867x0.525	Reinf. 1 Compression	72.0%	Pass
L32	11 - 6	Pole + Reinf.	TP48.719x47.793x0.5188	Reinf. 1 Compression	73.6%	Pass
L33	6 - 4.75	Pole + Reinf.	TP48.95x48.719x0.5188	Reinf. 1 Compression	74.0%	Pass
L34	4.75 - 4.5	Pole + Reinf.	TP48.997x48.95x0.6125	Reinf. 3 Connection	73.2%	Pass
L35	4.5 - 0	Pole + Reinf.	TP49.83x48.997x0.6	Reinf. 3 Connection	74.5%	Pass
					Summary	
				Pole	73.1%	Pass
				Reinforcement	81.8%	Pass
				Overall	81.8%	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Flange Bolts	130	7.0	Pass
1	Flange Plates	130	2.1	Pass
1	Anchor Rods	0	69.3	Pass
1	Base Plate	0	68.4	Pass
1	Base Foundation	0	54.3	Pass
1	Base Foundation Soil Interaction	0	51.3	Pass

Structure Rating (max from all components) =	81.8%

Notes:
- All structural ratings are per TIA-222-H Section 15.5.

1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.

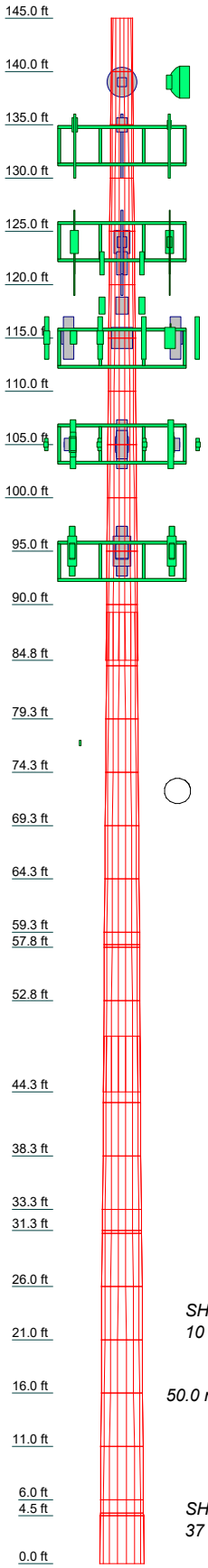
4.1) Recommendations

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

APPENDIX A

TNXTOWER OUTPUT

Section	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Length (ft)	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	6.2500	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	4.5000
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	18	18	18	18
Thickness (in)	0.1875	0.1875	0.1875	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.3125	0.3125	0.3125	0.3125	0.3125	0.3125	0.3125	0.4125	0.4125	0.4125	0.4750	0.4750	0.4750	0.4750	0.5250	0.5250	0.5250	0.5250	0.5250	0.5188	0.5188	0.6000	0.6000
Socket Length (ft)																						5.2500													
Top Dia (in)	24.0000	24.9233	25.8467	26.7700	27.7092	28.6485	29.5877	30.5269	31.4661	32.4054	33.3446	34.2838	35.2230	36.1623	37.1015	38.0407	38.9799	39.9192	40.8584	41.7976	42.7369	43.6761	44.6153	45.5545	46.4938	47.4330	48.3722	49.3115	50.2507	51.1899	52.1291	53.0684	54.0076	54.9468	55.8860
Bot Dia (in)	24.9233	25.8467	26.7700	27.7092	28.6485	29.5877	30.5269	31.4661	32.4054	33.3446	34.2838	35.2230	36.1623	37.1015	38.0407	38.9799	39.9192	40.8584	41.7976	42.7369	43.6761	44.6153	45.5545	46.4938	47.4330	48.3722	49.3115	50.2507	51.1899	52.1291	53.0684	54.0076	54.9468	55.8860	56.8253
Grade	A607-65																																		
Weight (K)	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.2	1.0	1.7	1.4	1.2	1.2	0.5	1.4	1.5	1.5	1.5	1.5	1.4	0.4	0.4	1.4	24.6



ALL REACTIONS ARE FACTORED

AXIAL 102 K

SHEAR 10 K / *MOMENT 1081 kip-ft*

TORQUE 0 kip-ft

50.0 mph WIND - 2.0000 in ICE

AXIAL 53 K

SHEAR 37 K / *MOMENT 3646 kip-ft*

TORQUE 2 kip-ft

REACTIONS - 125.0 mph WIND

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 125.0 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50.0 mph basic wind with 2.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60.0 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.0000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 81.8%

PJFLogo

Paul J. Ford and Company
250 E. Broad St., Ste 600
Columbus, OH 43215
Phone: 614-221-6679
FAX:

Job: ***145 ft Monopole / Newington***			
Project: ***37520-1104 / BU 881364***			
Client: Crown Castle	Drawn by: Steven Pozz		App'd:
Code: TIA-222-H	Date: 06/17/20		Scale: NTS
Path: G:\TOWER\375_Crown_Castle\2020\37520-1104_881364_Newington\37520-1104.001.7805_SA_185945\37520-1104.001.7805_SRLH_CCIpole.eri			Dwg No. E-1

Tower Input Data

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

1) Tower is located in Hartford County, Connecticut.
2) Tower base elevation above sea level: 141.0000 ft.
3) Basic wind speed of 125.0 mph.
4) Risk Category II.
5) Exposure Category C.
6) Simplified Topographic Factor Procedure for wind speed-up calculations is used.
7) Topographic Category: 1.
8) Crest Height: 0.0000 ft.
9) Nominal ice thickness of 2.0000 in.
10) Ice thickness is considered to increase with height.
11) Ice density of 56 pcf.
12) A wind speed of 50.0 mph is used in combination with ice.
13) Temperature drop of 50 °F.
14) Deflections calculated using a wind speed of 60.0 mph.
15) TIA-222-H Annex S..
16) A non-linear (P-delta) analysis was used.
17) Pressures are calculated at each section.
18) Stress ratio used in pole design is 1.05.
19) Tower analysis based on target reliabilities in accordance with Annex S.
20) Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
21) Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned		Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
	Use Code Stress Ratios		Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys		Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-H Bracing Resist. Exemption
	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Use TIA-222-H Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
	Secondary Horizontal Braces Leg		Sort Capacity Reports By Component	√	Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole Without Linear Attachments
					Pole With Shroud Or No Appurtenances
					Outside and Inside Corner Radii Are Known

Tapered Pole Section Geometry

Section	*Elevation ft*	*Section Length ft*	*Splice Length ft*	*Number of Sides*	*Top Diameter in*	*Bottom Diameter in*	*Wall Thickness in*	*Bend Radius in*	*Pole Grade*
L1	145.0000-140.0000	5.0000	0.00	18	24.0000	24.9233	0.1875	0.7500	A607-65 (65 ksi)
L2	140.0000-135.0000	5.0000	0.00	18	24.9233	25.8467	0.1875	0.7500	A607-65 (65 ksi)
L3	135.0000-130.0000	5.0000	0.00	18	25.8467	26.7700	0.1875	0.7500	A607-65 (65 ksi)
L4	130.0000-125.0000	5.0000	0.00	18	26.7700	27.7092	0.2500	1.0000	A607-65 (65 ksi)

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L5	125.0000-120.0000	5.0000	0.00	18	27.7092	28.6485	0.2500	1.0000	A607-65 (65 ksi)
L6	120.0000-115.0000	5.0000	0.00	18	28.6485	29.5877	0.2500	1.0000	A607-65 (65 ksi)
L7	115.0000-110.0000	5.0000	0.00	18	29.5877	30.5269	0.2500	1.0000	A607-65 (65 ksi)
L8	110.0000-105.0000	5.0000	0.00	18	30.5269	31.4661	0.2500	1.0000	A607-65 (65 ksi)
L9	105.0000-100.0000	5.0000	0.00	18	31.4661	32.4054	0.2500	1.0000	A607-65 (65 ksi)
L10	100.0000-95.0000	5.0000	0.00	18	32.4054	33.3446	0.2500	1.0000	A607-65 (65 ksi)
L11	95.0000-90.0000	5.0000	0.00	18	33.3446	34.2838	0.2500	1.0000	A607-65 (65 ksi)
L12	90.0000-84.7500	5.2500	4.50	18	34.2838	35.2700	0.2500	1.0000	A607-65 (65 ksi)
L13	84.7500-84.2500	5.0000	0.00	18	33.9247	34.8508	0.3125	1.2500	A607-65 (65 ksi)
L14	84.2500-79.2500	5.0000	0.00	18	34.8508	35.7770	0.3125	1.2500	A607-65 (65 ksi)
L15	79.2500-74.2500	5.0000	0.00	18	35.7770	36.7031	0.3125	1.2500	A607-65 (65 ksi)
L16	74.2500-69.2500	5.0000	0.00	18	36.7031	37.6293	0.3125	1.2500	A607-65 (65 ksi)
L17	69.2500-64.2500	5.0000	0.00	18	37.6293	38.5554	0.3125	1.2500	A607-65 (65 ksi)
L18	64.2500-59.2500	5.0000	0.00	18	38.5554	39.4816	0.3125	1.2500	A607-65 (65 ksi)
L19	59.2500-58.0800	1.1700	0.00	18	39.4816	39.6983	0.3125	1.2500	A607-65 (65 ksi)
L20	58.0800-57.8300	0.2500	0.00	18	39.6983	39.7446	0.4125	1.6500	A607-65 (65 ksi)
L21	57.8300-52.8300	5.0000	0.00	18	39.7446	40.6707	0.4188	1.6750	A607-65 (65 ksi)
L22	52.8300-44.2500	8.5800	5.25	18	40.6707	42.2600	0.4125	1.6500	A607-65 (65 ksi)
L23	44.2500-43.2500	6.2500	0.00	18	40.6625	41.8200	0.4750	1.9000	A607-65 (65 ksi)
L24	43.2500-38.2500	5.0000	0.00	18	41.8200	42.7460	0.4750	1.9000	A607-65 (65 ksi)
L25	38.2500-33.2500	5.0000	0.00	18	42.7460	43.6720	0.4750	1.9000	A607-65 (65 ksi)
L26	33.2500-31.2500	2.0000	0.00	18	43.6720	44.0424	0.4750	1.9000	A607-65 (65 ksi)
L27	31.2500-31.0000	0.2500	0.00	18	44.0424	44.0887	0.5375	2.1500	A607-65 (65 ksi)
L28	31.0000-26.0000	5.0000	0.00	18	44.0887	45.0147	0.5375	2.1500	A607-65 (65 ksi)
L29	26.0000-21.0000	5.0000	0.00	18	45.0147	45.9408	0.5250	2.1000	A607-65 (65 ksi)
L30	21.0000-16.0000	5.0000	0.00	18	45.9408	46.8668	0.5250	2.1000	A607-65 (65 ksi)
L31	16.0000-11.0000	5.0000	0.00	18	46.8668	47.7928	0.5250	2.1000	A607-65 (65 ksi)
L32	11.0000-6.0000	5.0000	0.00	18	47.7928	48.7188	0.5188	2.0750	A607-65 (65 ksi)
L33	6.0000-4.7500	1.2500	0.00	18	48.7188	48.9503	0.5188	2.0750	A607-65 (65 ksi)
L34	4.7500-4.5000	0.2500	0.00	18	48.9503	48.9966	0.6125	2.4500	A607-65 (65 ksi)
L35	4.5000-0.0000	4.5000		18	48.9966	49.8300	0.6000	2.4000	A607-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	24.3413	14.1714	1015.2211	8.4534	12.1920	83.2694	2031.7780	7.0871	3.8940	20.768
	25.2789	14.7209	1137.9555	8.7812	12.6611	89.8784	2277.4084	7.3619	4.0565	21.635
L2	25.2789	14.7209	1137.9555	8.7812	12.6611	89.8784	2277.4084	7.3619	4.0565	21.635
	26.2165	15.2704	1270.2034	9.1090	13.1301	96.7398	2542.0783	7.6367	4.2190	22.501
L3	26.2165	15.2704	1270.2034	9.1090	13.1301	96.7398	2542.0783	7.6367	4.2190	22.501
	27.1540	15.8199	1412.3200	9.4368	13.5992	103.8535	2826.4984	7.9115	4.3815	23.368
L4	27.1444	21.0436	1869.8421	9.4146	13.5992	137.4969	3742.1446	10.5238	4.2715	17.086
	28.0981	21.7889	2075.6269	9.7480	14.0763	147.4556	4153.9849	10.8965	4.4368	17.747
L5	28.0981	21.7889	2075.6269	9.7480	14.0763	147.4556	4153.9849	10.8965	4.4368	17.747
	29.0518	22.5342	2295.9817	10.0815	14.5534	157.7624	4594.9846	11.2692	4.6021	18.409
L6	29.0518	22.5342	2295.9817	10.0815	14.5534	157.7624	4594.9846	11.2692	4.6021	18.409
	30.0056	23.2794	2531.4052	10.4149	15.0305	168.4174	5066.1412	11.6419	4.7674	19.07
L7	30.0056	23.2794	2531.4052	10.4149	15.0305	168.4174	5066.1412	11.6419	4.7674	19.07
	30.9593	24.0247	2782.3955	10.7483	15.5077	179.4206	5568.4521	12.0146	4.9327	19.731
L8	30.9593	24.0247	2782.3955	10.7483	15.5077	179.4206	5568.4521	12.0146	4.9327	19.731
	31.9130	24.7700	3049.4511	11.0817	15.9848	190.7720	6102.9147	12.3874	5.0980	20.392
L9	31.9130	24.7700	3049.4511	11.0817	15.9848	190.7720	6102.9147	12.3874	5.0980	20.392
	32.8667	25.5153	3333.0703	11.4152	16.4619	202.4715	6670.5263	12.7601	5.2633	21.053
L10	32.8667	25.5153	3333.0703	11.4152	16.4619	202.4715	6670.5263	12.7601	5.2633	21.053
	33.8204	26.2606	3633.7515	11.7486	16.9390	214.5192	7272.2844	13.1328	5.4286	21.715
L11	33.8204	26.2606	3633.7515	11.7486	16.9390	214.5192	7272.2844	13.1328	5.4286	21.715
	34.7741	27.0058	3951.9931	12.0820	17.4162	226.9151	7909.1863	13.5055	5.5940	22.376
L12	34.7741	27.0058	3951.9931	12.0820	17.4162	226.9151	7909.1863	13.5055	5.5940	22.376
	35.7755	27.7884	4305.5913	12.4321	17.9172	240.3055	8616.8481	13.8968	5.7675	23.07
L13	35.2462	33.3391	4758.6642	11.9323	17.2337	276.1248	9523.5900	16.6727	5.4207	17.346
	35.3403	34.2577	5162.9606	12.2611	17.7042	291.6230	10332.7148	17.1321	5.5837	17.868
L14	35.3403	34.2577	5162.9606	12.2611	17.7042	291.6230	10332.7148	17.1321	5.5837	17.868
	36.2807	35.1763	5589.5314	12.5899	18.1747	307.5445	11186.4176	17.5915	5.7467	18.39
L15	36.2807	35.1763	5589.5314	12.5899	18.1747	307.5445	11186.4176	17.5915	5.7467	18.39
	37.2211	36.0950	6038.9738	12.9187	18.6452	323.8891	12085.8938	18.0509	5.9098	18.911
L16	37.2211	36.0950	6038.9738	12.9187	18.6452	323.8891	12085.8938	18.0509	5.9098	18.911
	38.1616	37.0136	6511.8851	13.2475	19.1157	340.6569	13032.3387	18.5103	6.0728	19.433
L17	38.1616	37.0136	6511.8851	13.2475	19.1157	340.6569	13032.3387	18.5103	6.0728	19.433
	39.1020	37.9322	7008.8626	13.5762	19.5862	357.8478	14026.9476	18.9697	6.2358	19.954
L18	39.1020	37.9322	7008.8626	13.5762	19.5862	357.8478	14026.9476	18.9697	6.2358	19.954
	40.0424	38.8508	7530.5036	13.9050	20.0566	375.4620	15070.9160	19.4291	6.3988	20.476
L19	40.0424	38.8508	7530.5036	13.9050	20.0566	375.4620	15070.9160	19.4291	6.3988	20.476
	40.2625	39.0658	7656.1927	13.9820	20.1667	379.6448	15322.4596	19.5366	6.4369	20.598
L20	40.2471	51.4359	10029.3913	13.9465	20.1667	497.3237	20071.9795	25.7228	6.2609	15.178
	40.2941	51.4965	10064.8989	13.9629	20.1903	498.5029	20143.0414	25.7532	6.2690	15.198
L21	40.2931	52.2685	10212.5274	13.9607	20.1903	505.8148	20438.4927	26.1392	6.2580	14.945
	41.2335	53.4994	10951.1849	14.2895	20.6607	530.0482	21916.7797	26.7548	6.4210	15.334
L22	41.2345	52.7091	10792.7603	14.2917	20.6607	522.3803	21599.7219	26.3596	6.4320	15.593
	42.8483	54.7899	12122.0726	14.8559	21.4681	564.6556	24260.0957	27.4001	6.7118	16.271
L23	42.2038	60.5887	12362.6323	14.2666	20.6565	598.4849	24741.5317	30.3001	6.3206	13.307
	42.3919	62.3338	13461.9313	14.6775	21.2446	633.6647	26941.5761	31.1728	6.5243	13.735
L24	42.3919	62.3338	13461.9313	14.6775	21.2446	633.6647	26941.5761	31.1728	6.5243	13.735

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
	43.3322	63.7299	14386.8677	15.0062	21.7150	662.5319	28792.6659	31.8710	6.6873	14.079
L25	43.3322	63.7299	14386.8677	15.0062	21.7150	662.5319	28792.6659	31.8710	6.6873	14.079
	44.2725	65.1260	15353.2291	15.3349	22.1854	692.0423	30726.6605	32.5692	6.8503	14.422
L26	44.2725	65.1260	15353.2291	15.3349	22.1854	692.0423	30726.6605	32.5692	6.8503	14.422
	44.6486	65.6844	15751.5760	15.4664	22.3736	704.0264	31523.8784	32.8485	6.9155	14.559
L27	44.6389	74.2205	17747.5525	15.4443	22.3736	793.2378	35518.4577	37.1173	6.8055	12.661
	44.6860	74.2995	17804.2768	15.4607	22.3971	794.9375	35631.9809	37.1568	6.8136	12.676
L28	44.6860	74.2995	17804.2768	15.4607	22.3971	794.9375	35631.9809	37.1568	6.8136	12.676
	45.6263	75.8793	18964.2883	15.7894	22.8675	829.3121	37953.5303	37.9469	6.9766	12.98
L29	45.6282	74.1355	18538.8802	15.7939	22.8675	810.7090	37102.1543	37.0748	6.9986	13.331
	46.5685	75.6785	19720.7472	16.1226	23.3379	845.0093	39467.4434	37.8465	7.1616	13.641
L30	46.5685	75.6785	19720.7472	16.1226	23.3379	845.0093	39467.4434	37.8465	7.1616	13.641
	47.5088	77.2216	20951.8059	16.4513	23.8083	880.0204	41931.1808	38.6181	7.3246	13.952
L31	47.5088	77.2216	20951.8059	16.4513	23.8083	880.0204	41931.1808	38.6181	7.3246	13.952
	48.4491	78.7647	22233.0596	16.7801	24.2787	915.7422	44495.3739	39.3898	7.4875	14.262
L32	48.4500	77.8373	21977.0958	16.7823	24.2787	905.1995	43983.1095	38.9260	7.4985	14.455
	49.3903	79.3620	23294.0295	17.1110	24.7491	941.2055	46618.7099	39.6885	7.6615	14.769
L33	49.3903	79.3620	23294.0295	17.1110	24.7491	941.2055	46618.7099	39.6885	7.6615	14.769
	49.6254	79.7431	23631.2845	17.1932	24.8667	950.3167	47293.6637	39.8791	7.7023	14.848
L34	49.6109	93.9723	27740.2805	17.1599	24.8667	1115.5573	55517.0624	46.9951	7.5373	12.306
	49.6580	94.0623	27820.0702	17.1764	24.8903	1117.7087	55676.7468	47.0401	7.5454	12.319
L35	49.6599	92.1665	27273.4410	17.1808	24.8903	1095.7472	54582.7691	46.0920	7.5674	12.612
	50.5061	93.7536	28706.8229	17.4766	25.3136	1134.0456	57451.4190	46.8857	7.7141	12.857

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 145.0000-140.0000				1	1	1			
L2 140.0000-135.0000				1	1	1			
L3 135.0000-130.0000				1	1	1			
L4 130.0000-125.0000				1	1	1			
L5 125.0000-120.0000				1	1	1			
L6 120.0000-115.0000				1	1	1			
L7 115.0000-110.0000				1	1	1			
L8 110.0000-105.0000				1	1	1			

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L9 105.0000-100.0000				1	1	1			
L10 100.0000-95.0000				1	1	1			
L11 95.0000-90.0000				1	1	1			
L12 90.0000-84.7500				1	1	1			
L13 84.7500-84.2500				1	1	1			
L14 84.2500-79.2500				1	1	1			
L15 79.2500-74.2500				1	1	1			
L16 74.2500-69.2500				1	1	1			
L17 69.2500-64.2500				1	1	1			
L18 64.2500-59.2500				1	1	1			
L19 59.2500-58.0800				1	1	1			
L20 58.0800-57.8300				1	1	1.10905			
L21 57.8300-52.8300				1	1	1.0847			
L22 52.8300-44.2500				1	1	1.09579			
L23 44.2500-43.2500				1	1	1.08016			
L24 43.2500-38.2500				1	1	1.07379			
L25 38.2500-33.2500				1	1	1.0677			
L26 33.2500-31.2500				1	1	1.06533			
L27 31.2500-31.0000				1	1	1.1293			
L28 31.0000-26.0000				1	1	1.12031			
L29 26.0000-21.0000				1	1	1.13785			
L30 21.0000-16.0000				1	1	1.12939			
L31 16.0000-11.0000				1	1	1.12125			
L32 11.0000-6.0000				1	1	1.1267			
L33 6.0000-4.7500				1	1	1.12477			
L34 4.7500-4.5000				1	1	0.954134			
L35 4.5000-0.0000				1	1	0.967856			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
***										
HJ7-50A(1-5/8)	C	No	Surface Ar (CaAa)	94.0000 - 0.0000	7	7	0.275 0.500	1.9800		1.04

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)	A	No	Surface Ar (CaAa)	77.0000 - 0.0000	1	1	-0.150 -0.150	0.6250		0.15
****										
CCI-085125 Reinforcement	A	No	Surface Af (CaAa)	35.5000 - 0.5000	1	1	0.167 0.167	1.5341	5.5683	0.00
CCI-085125 Reinforcement	C	No	Surface Af (CaAa)	35.5000 - 0.5000	1	1	0.167 0.167	1.5341	5.5683	0.00
CCI-085125 Reinforcement	C	No	Surface Af (CaAa)	35.5000 - 0.5000	1	1	-0.500 -0.500	1.5341	5.5683	0.00
CCI-060100 Reinforcement	A	No	Surface Af (CaAa)	60.5800 - 35.5000	1	1	0.167 0.167	0.1000	2.2000	0.00
CCI-060100 Reinforcement	C	No	Surface Af (CaAa)	60.5800 - 35.5000	1	1	0.167 0.167	0.1000	2.2000	0.00
CCI-060100 Reinforcement	C	No	Surface Af (CaAa)	60.5800 - 35.5000	1	1	-0.500 -0.500	0.1000	2.2000	0.00

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
ATCB-B01-005(5/16")	C	No	No	Inside Pole	133.0000 - 0.0000	6	No Ice	0.0000	0.07
							1/2" Ice	0.0000	0.07
							1" Ice	0.0000	0.07
							2" Ice	0.0000	0.07
FSJ4-50B(1/2)	C	No	No	Inside Pole	133.0000 - 0.0000	2	No Ice	0.0000	0.14
							1/2" Ice	0.0000	0.14
							1" Ice	0.0000	0.14
							2" Ice	0.0000	0.14
2" (Nominal) Conduit	C	No	No	Inside Pole	133.0000 - 0.0000	2	No Ice	0.0000	0.72
							1/2" Ice	0.0000	0.72
							1" Ice	0.0000	0.72
							2" Ice	0.0000	0.72
***									
HB114-1-08U4-M5J(1 1/4")	C	No	No	Inside Pole	124.0000 - 0.0000	3	No Ice	0.0000	1.08
							1/2" Ice	0.0000	1.08
							1" Ice	0.0000	1.08
							2" Ice	0.0000	1.08
HB114-21U3M12-XXXF(1-1/4)	C	No	No	Inside Pole	124.0000 - 0.0000	1	No Ice	0.0000	1.22
							1/2" Ice	0.0000	1.22
							1" Ice	0.0000	1.22
							2" Ice	0.0000	1.22
***									
LDF4-50A(1/2)	C	No	No	Inside Pole	114.0000 - 0.0000	1	No Ice	0.0000	0.15
							1/2" Ice	0.0000	0.15
							1" Ice	0.0000	0.15
							2" Ice	0.0000	0.15
HB158-1-08U8-S8J18(1-5/8)	C	No	No	Inside Pole	114.0000 - 0.0000	2	No Ice	0.0000	1.30
							1/2" Ice	0.0000	1.30
							1" Ice	0.0000	1.30
							2" Ice	0.0000	1.30
LDF7-50A(1-5/8)	C	No	No	Inside Pole	114.0000 - 0.0000	6	No Ice	0.0000	0.82
							1/2" Ice	0.0000	0.82
							1" Ice	0.0000	0.82
							2" Ice	0.0000	0.82
***									
LCF158-50A(1-5/8)	C	No	No	Inside Pole	105.0000 - 0.0000	12	No Ice	0.0000	0.80
							1/2" Ice	0.0000	0.80
							1" Ice	0.0000	0.80
							2" Ice	0.0000	0.80
WR-VG86ST-BRD(3/4)	C	No	No	Inside Pole	105.0000 - 0.0000	6	No Ice	0.0000	0.58
							1/2" Ice	0.0000	0.58
							1" Ice	0.0000	0.58
							2" Ice	0.0000	0.58

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
FB-L98B-002-75000(3/8)	C	No	No	Inside Pole	105.0000 - 0.0000	2	No Ice	0.0000	0.06
							1/2" Ice	0.0000	0.06
							1" Ice	0.0000	0.06
							2" Ice	0.0000	0.06
2" (Nominal) Conduit	C	No	No	Inside Pole	105.0000 - 0.0000	2	No Ice	0.0000	0.72
							1/2" Ice	0.0000	0.72
							1" Ice	0.0000	0.72
							2" Ice	0.0000	0.72
HJ7-50A(1-5/8")	C	No	No	Inside Pole	94.0000 - 0.0000	6	No Ice	0.0000	1.04
							1/2" Ice	0.0000	1.04
							1" Ice	0.0000	1.04
							2" Ice	0.0000	1.04
***									
***									
***									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	145.0000-140.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	140.0000-135.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L3	135.0000-130.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.01
L4	130.0000-125.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.01
L5	125.0000-120.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.03
L6	120.0000-115.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.03
L7	115.0000-110.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.06
L8	110.0000-105.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.07
L9	105.0000-100.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.14
L10	100.0000-95.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.14
L11	95.0000-90.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	5.544	0.000	0.20
L12	90.0000-84.7500	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	7.277	0.000	0.22
L13	84.7500-84.2500	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.693	0.000	0.02
L14	84.2500-79.2500	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.930	0.000	0.21
L15	79.2500-74.2500	A	0.000	0.000	0.172	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.930	0.000	0.21
L16	74.2500-69.2500	A	0.000	0.000	0.313	0.000	0.00

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.930	0.000	0.21
L17	69.2500-64.2500	A	0.000	0.000	0.313	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.930	0.000	0.21
L18	64.2500-59.2500	A	0.000	0.000	0.335	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.974	0.000	0.21
L19	59.2500-58.0800	A	0.000	0.000	0.093	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.661	0.000	0.05
L20	58.0800-57.8300	A	0.000	0.000	0.020	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.355	0.000	0.01
L21	57.8300-52.8300	A	0.000	0.000	0.396	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	7.097	0.000	0.21
L22	52.8300-44.2500	A	0.000	0.000	0.679	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	12.178	0.000	0.36
L23	44.2500-43.2500	A	0.000	0.000	0.079	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.419	0.000	0.04
L24	43.2500-38.2500	A	0.000	0.000	0.396	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	7.097	0.000	0.21
L25	38.2500-33.2500	A	0.000	0.000	0.934	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	8.172	0.000	0.21
L26	33.2500-31.2500	A	0.000	0.000	0.636	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	3.795	0.000	0.08
L27	31.2500-31.0000	A	0.000	0.000	0.080	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.474	0.000	0.01
L28	31.0000-26.0000	A	0.000	0.000	1.591	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.487	0.000	0.21
L29	26.0000-21.0000	A	0.000	0.000	1.591	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.487	0.000	0.21
L30	21.0000-16.0000	A	0.000	0.000	1.591	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.487	0.000	0.21
L31	16.0000-11.0000	A	0.000	0.000	1.591	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.487	0.000	0.21
L32	11.0000-6.0000	A	0.000	0.000	1.591	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.487	0.000	0.21
L33	6.0000-4.7500	A	0.000	0.000	0.398	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.372	0.000	0.05
L34	4.7500-4.5000	A	0.000	0.000	0.080	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.474	0.000	0.01
L35	4.5000-0.0000	A	0.000	0.000	1.304	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	8.283	0.000	0.19

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	145.0000-140.0000	A	1.968	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L2	140.0000-135.0000	A	1.961	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L3	135.0000-130.0000	A	1.954	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.01
L4	130.0000-125.0000	A	1.946	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.01
L5	125.0000-120.0000	A	1.938	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.03
L6	120.0000-115.0000	A	1.930	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.03
L7	115.0000-110.0000	A	1.922	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.06
L8	110.0000-105.0000	A	1.913	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.07
L9	105.0000-100.0000	A	1.904	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.14
L10	100.0000-95.0000	A	1.894	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.14
L11	95.0000-90.0000	A	1.885	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	8.815	0.000	0.31
L12	90.0000-84.7500	A	1.874	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	11.555	0.000	0.37
L13	84.7500-84.2500	A	1.868	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.100	0.000	0.04
L14	84.2500-79.2500	A	1.861	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	10.989	0.000	0.35
L15	79.2500-74.2500	A	1.850	0.000	0.000	1.189	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	10.975	0.000	0.35
L16	74.2500-69.2500	A	1.837	0.000	0.000	2.150	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	10.959	0.000	0.35
L17	69.2500-64.2500	A	1.824	0.000	0.000	2.137	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	10.943	0.000	0.35
L18	64.2500-59.2500	A	1.810	0.000	0.000	2.626	0.000	0.04
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	11.932	0.000	0.36
L19	59.2500-58.0800	A	1.801	0.000	0.000	0.935	0.000	0.01
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.435	0.000	0.10
L20	58.0800-57.8300	A	1.798	0.000	0.000	0.200	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.734	0.000	0.02
L21	57.8300-52.8300	A	1.790	0.000	0.000	3.976	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	14.647	0.000	0.41
L22	52.8300-44.2500	A	1.767	0.000	0.000	6.743	0.000	0.10
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	25.004	0.000	0.70
L23	44.2500-43.2500	A	1.749	0.000	0.000	0.786	0.000	0.01
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	2.914	0.000	0.08
L24	43.2500-38.2500	A	1.736	0.000	0.000	3.868	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	14.472	0.000	0.40

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L25	38.2500-33.2500	A	1.714	0.000	0.000	4.361	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	15.474	0.000	0.41
L26	33.2500-31.2500	A	1.696	0.000	0.000	1.993	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	6.693	0.000	0.17
L27	31.2500-31.0000	A	1.690	0.000	0.000	0.249	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.836	0.000	0.02
L28	31.0000-26.0000	A	1.675	0.000	0.000	4.941	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.664	0.000	0.41
L29	26.0000-21.0000	A	1.643	0.000	0.000	4.877	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.560	0.000	0.41
L30	21.0000-16.0000	A	1.604	0.000	0.000	4.800	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.433	0.000	0.40
L31	16.0000-11.0000	A	1.555	0.000	0.000	4.700	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.272	0.000	0.40
L32	11.0000-6.0000	A	1.484	0.000	0.000	4.559	0.000	0.05
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.043	0.000	0.39
L33	6.0000-4.7500	A	1.418	0.000	0.000	1.107	0.000	0.01
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.957	0.000	0.09
L34	4.7500-4.5000	A	1.397	0.000	0.000	0.219	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.788	0.000	0.02
L35	4.5000-0.0000	A	1.299	0.000	0.000	3.513	0.000	0.04
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	13.382	0.000	0.32

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	145.0000-140.0000	0.0000	0.0000	0.0000	0.0000
L2	140.0000-135.0000	0.0000	0.0000	0.0000	0.0000
L3	135.0000-130.0000	0.0000	0.0000	0.0000	0.0000
L4	130.0000-125.0000	0.0000	0.0000	0.0000	0.0000
L5	125.0000-120.0000	0.0000	0.0000	0.0000	0.0000
L6	120.0000-115.0000	0.0000	0.0000	0.0000	0.0000
L7	115.0000-110.0000	0.0000	0.0000	0.0000	0.0000
L8	110.0000-105.0000	0.0000	0.0000	0.0000	0.0000
L9	105.0000-100.0000	0.0000	0.0000	0.0000	0.0000
L10	100.0000-95.0000	0.0000	0.0000	0.0000	0.0000
L11	95.0000-90.0000	-4.5169	4.2863	-3.7345	3.5439
L12	90.0000-84.7500	-5.2315	4.9645	-4.3028	4.0832
L13	84.7500-84.2500	-5.2338	4.9667	-4.3049	4.0852
L14	84.2500-79.2500	-5.2594	4.9910	-4.3310	4.1100
L15	79.2500-74.2500	-5.4255	4.9506	-4.8330	3.8895
L16	74.2500-69.2500	-5.5683	4.9255	-5.2331	3.7295
L17	69.2500-64.2500	-5.6145	4.9661	-5.2865	3.7714
L18	64.2500-59.2500	-5.6326	4.9769	-5.0543	3.5412
L19	59.2500-58.0800	-5.5873	4.9231	-4.4082	2.9181
L20	58.0800-57.8300	-5.5948	4.9297	-4.4163	2.9242

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L21	57.8300-52.8300	-5.6175	4.9495	-4.4433	2.9448
L22	52.8300-44.2500	-5.6743	4.9992	-4.5112	2.9979
L23	44.2500-43.2500	-5.6867	5.0101	-4.5255	3.0071
L24	43.2500-38.2500	-5.7110	5.0313	-4.5545	3.0385
L25	38.2500-33.2500	-5.1702	4.4404	-4.3636	2.8489
L26	33.2500-31.2500	-4.5948	3.8139	-4.1243	2.6146
L27	31.2500-31.0000	-4.6041	3.8214	-4.1339	2.6227
L28	31.0000-26.0000	-4.6244	3.8379	-4.1552	2.6412
L29	26.0000-21.0000	-4.6624	3.8686	-4.1943	2.6772
L30	21.0000-16.0000	-4.6996	3.8987	-4.2314	2.7151
L31	16.0000-11.0000	-4.7359	3.9281	-4.2658	2.7562
L32	11.0000-6.0000	-4.7714	3.9568	-4.2957	2.8038
L33	6.0000-4.7500	-4.7933	3.9745	-4.3103	2.8412
L34	4.7500-4.5000	-4.7993	3.9794	-4.3135	2.8524
L35	4.5000-0.0000	-4.9385	4.1270	-4.4412	3.0243

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
L11	18	HJ7-50A(1-5/8)	90.00 - 94.00	1.0000	1.0000
L12	18	HJ7-50A(1-5/8)	84.75 - 90.00	1.0000	1.0000
L14	18	HJ7-50A(1-5/8)	79.25 - 84.25	1.0000	1.0000
L15	18	HJ7-50A(1-5/8)	74.25 - 79.25	1.0000	1.0000
L15	32	LDF4-50A(1/2)	74.25 - 77.00	1.0000	1.0000
L16	18	HJ7-50A(1-5/8)	69.25 - 74.25	1.0000	1.0000
L16	32	LDF4-50A(1/2)	69.25 - 74.25	1.0000	1.0000
L17	18	HJ7-50A(1-5/8)	64.25 - 69.25	1.0000	1.0000
L17	32	LDF4-50A(1/2)	64.25 - 69.25	1.0000	1.0000
L18	18	HJ7-50A(1-5/8)	59.25 - 64.25	1.0000	1.0000
L18	32	LDF4-50A(1/2)	59.25 - 64.25	1.0000	1.0000
L18	43	CCI-060100 Reinforcement	59.25 - 60.58	1.0000	1.0000
L18	44	CCI-060100 Reinforcement	59.25 - 60.58	1.0000	1.0000
L18	45	CCI-060100 Reinforcement	59.25 - 60.58	1.0000	1.0000
L19	18	HJ7-50A(1-5/8)	58.08 - 59.25	1.0000	1.0000
L19	32	LDF4-50A(1/2)	58.08 - 59.25	1.0000	1.0000
L19	43	CCI-060100 Reinforcement	58.08 - 59.25	1.0000	1.0000
L19	44	CCI-060100 Reinforcement	58.08 - 59.25	1.0000	1.0000
L19	45	CCI-060100 Reinforcement	58.08 - 59.25	1.0000	1.0000
L20	18	HJ7-50A(1-5/8)	57.83 - 58.08	1.0000	1.0000
L20	32	LDF4-50A(1/2)	57.83 - 58.08	1.0000	1.0000
L20	43	CCI-060100 Reinforcement	57.83 - 58.08	1.0000	1.0000
L20	44	CCI-060100 Reinforcement	57.83 - 58.08	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L20	45	CCI-060100 Reinforcement	57.83 - 58.08	1.0000	1.0000
L21	18	HJ7-50A(1-5/8)	52.83 - 57.83	1.0000	1.0000
L21	32	LDF4-50A(1/2)	52.83 - 57.83	1.0000	1.0000
L21	43	CCI-060100 Reinforcement	52.83 - 57.83	1.0000	1.0000
L21	44	CCI-060100 Reinforcement	52.83 - 57.83	1.0000	1.0000
L21	45	CCI-060100 Reinforcement	52.83 - 57.83	1.0000	1.0000
L22	18	HJ7-50A(1-5/8)	44.25 - 52.83	1.0000	1.0000
L22	32	LDF4-50A(1/2)	44.25 - 52.83	1.0000	1.0000
L22	43	CCI-060100 Reinforcement	44.25 - 52.83	1.0000	1.0000
L22	44	CCI-060100 Reinforcement	44.25 - 52.83	1.0000	1.0000
L22	45	CCI-060100 Reinforcement	44.25 - 52.83	1.0000	1.0000
L24	18	HJ7-50A(1-5/8)	38.25 - 43.25	1.0000	1.0000
L24	32	LDF4-50A(1/2)	38.25 - 43.25	1.0000	1.0000
L24	43	CCI-060100 Reinforcement	38.25 - 43.25	1.0000	1.0000
L24	44	CCI-060100 Reinforcement	38.25 - 43.25	1.0000	1.0000
L24	45	CCI-060100 Reinforcement	38.25 - 43.25	1.0000	1.0000
L25	18	HJ7-50A(1-5/8)	33.25 - 38.25	1.0000	1.0000
L25	32	LDF4-50A(1/2)	33.25 - 38.25	1.0000	1.0000
L25	40	CCI-085125 Reinforcement	33.25 - 35.50	1.0000	1.0000
L25	41	CCI-085125 Reinforcement	33.25 - 35.50	1.0000	1.0000
L25	42	CCI-085125 Reinforcement	33.25 - 35.50	1.0000	1.0000
L25	43	CCI-060100 Reinforcement	35.50 - 38.25	1.0000	1.0000
L25	44	CCI-060100 Reinforcement	35.50 - 38.25	1.0000	1.0000
L25	45	CCI-060100 Reinforcement	35.50 - 38.25	1.0000	1.0000
L26	18	HJ7-50A(1-5/8)	31.25 - 33.25	1.0000	1.0000
L26	32	LDF4-50A(1/2)	31.25 - 33.25	1.0000	1.0000
L26	40	CCI-085125 Reinforcement	31.25 - 33.25	1.0000	1.0000
L26	41	CCI-085125 Reinforcement	31.25 - 33.25	1.0000	1.0000
L26	42	CCI-085125 Reinforcement	31.25 - 33.25	1.0000	1.0000
L27	18	HJ7-50A(1-5/8)	31.00 - 31.25	1.0000	1.0000
L27	32	LDF4-50A(1/2)	31.00 - 31.25	1.0000	1.0000
L27	40	CCI-085125 Reinforcement	31.00 - 31.25	1.0000	1.0000
L27	41	CCI-085125 Reinforcement	31.00 - 31.25	1.0000	1.0000
L27	42	CCI-085125 Reinforcement	31.00 - 31.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L28	18	HJ7-50A(1-5/8)	26.00 - 31.00	1.0000	1.0000
L28	32	LDF4-50A(1/2)	26.00 - 31.00	1.0000	1.0000
L28	40	CCI-085125 Reinforcement	26.00 - 31.00	1.0000	1.0000
L28	41	CCI-085125 Reinforcement	26.00 - 31.00	1.0000	1.0000
L28	42	CCI-085125 Reinforcement	26.00 - 31.00	1.0000	1.0000
L29	18	HJ7-50A(1-5/8)	21.00 - 26.00	1.0000	1.0000
L29	32	LDF4-50A(1/2)	21.00 - 26.00	1.0000	1.0000
L29	40	CCI-085125 Reinforcement	21.00 - 26.00	1.0000	1.0000
L29	41	CCI-085125 Reinforcement	21.00 - 26.00	1.0000	1.0000
L29	42	CCI-085125 Reinforcement	21.00 - 26.00	1.0000	1.0000
L30	18	HJ7-50A(1-5/8)	16.00 - 21.00	1.0000	1.0000
L30	32	LDF4-50A(1/2)	16.00 - 21.00	1.0000	1.0000
L30	40	CCI-085125 Reinforcement	16.00 - 21.00	1.0000	1.0000
L30	41	CCI-085125 Reinforcement	16.00 - 21.00	1.0000	1.0000
L30	42	CCI-085125 Reinforcement	16.00 - 21.00	1.0000	1.0000
L31	18	HJ7-50A(1-5/8)	11.00 - 16.00	1.0000	1.0000
L31	32	LDF4-50A(1/2)	11.00 - 16.00	1.0000	1.0000
L31	40	CCI-085125 Reinforcement	11.00 - 16.00	1.0000	1.0000
L31	41	CCI-085125 Reinforcement	11.00 - 16.00	1.0000	1.0000
L31	42	CCI-085125 Reinforcement	11.00 - 16.00	1.0000	1.0000
L32	18	HJ7-50A(1-5/8)	6.00 - 11.00	1.0000	1.0000
L32	32	LDF4-50A(1/2)	6.00 - 11.00	1.0000	1.0000
L32	40	CCI-085125 Reinforcement	6.00 - 11.00	1.0000	1.0000
L32	41	CCI-085125 Reinforcement	6.00 - 11.00	1.0000	1.0000
L32	42	CCI-085125 Reinforcement	6.00 - 11.00	1.0000	1.0000
L33	18	HJ7-50A(1-5/8)	4.75 - 6.00	1.0000	1.0000
L33	32	LDF4-50A(1/2)	4.75 - 6.00	1.0000	1.0000
L33	40	CCI-085125 Reinforcement	4.75 - 6.00	1.0000	1.0000
L33	41	CCI-085125 Reinforcement	4.75 - 6.00	1.0000	1.0000
L33	42	CCI-085125 Reinforcement	4.75 - 6.00	1.0000	1.0000
L34	18	HJ7-50A(1-5/8)	4.50 - 4.75	1.0000	1.0000
L34	32	LDF4-50A(1/2)	4.50 - 4.75	1.0000	1.0000
L34	40	CCI-085125 Reinforcement	4.50 - 4.75	1.0000	1.0000
L34	41	CCI-085125 Reinforcement	4.50 - 4.75	1.0000	1.0000
L34	42	CCI-085125 Reinforcement	4.50 - 4.75	1.0000	1.0000
L35	18	HJ7-50A(1-5/8)	0.00 - 4.50	1.0000	1.0000
L35	32	LDF4-50A(1/2)	0.00 - 4.50	1.0000	1.0000
L35	40	CCI-085125 Reinforcement	0.50 - 4.50	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L35	41	CCI-085125 Reinforcement	0.50 - 4.50	1.0000	1.0000
L35	42	CCI-085125 Reinforcement	0.50 - 4.50	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
LLPX310R-V1 w/ Mount Pipe	A	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	3.8800 4.2900 4.7200 5.6100	2.3600 2.7300 3.1200 3.9400	0.06 0.09 0.13 0.24
LLPX310R-V1 w/ Mount Pipe	B	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	3.8800 4.2900 4.7200 5.6100	2.3600 2.7300 3.1200 3.9400	0.06 0.09 0.13 0.24
LLPX310R-V1 w/ Mount Pipe	C	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	3.8800 4.2900 4.7200 5.6100	2.3600 2.7300 3.1200 3.9400	0.06 0.09 0.13 0.24
TIMING 2000	A	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.1079 0.1518 0.2031 0.3280	0.1079 0.1518 0.2031 0.3280	0.00 0.00 0.01 0.01
WIMAX DAP HEAD	A	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.5467 1.7037 1.8681 2.2193	0.6840 0.7999 0.9228 1.1926	0.03 0.04 0.06 0.09
WIMAX DAP HEAD	B	From Leg	4.0000 0.00 6.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.5467 1.7037 1.8681 2.2193	0.6840 0.7999 0.9228 1.1926	0.03 0.04 0.06 0.09
WIMAX DAP HEAD	C	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.5467 1.7037 1.8681 2.2193	0.6840 0.7999 0.9228 1.1926	0.03 0.04 0.06 0.09
HORIZON COMPACT	A	From Leg	4.0000 0.00 6.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.7208 0.8278 0.9422 1.1933	0.3681 0.4499 0.5391 0.7396	0.01 0.02 0.03 0.05
HORIZON COMPACT	B	From Leg	4.0000 0.00 2.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.7208 0.8278 0.9422 1.1933	0.3681 0.4499 0.5391 0.7396	0.01 0.02 0.03 0.05
(3) 2.375" OD x 6' Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09
(3) 2.375" OD x 6' Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice			
(3) 2.375" OD x 6' Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09
Platform Mount [LP 712-1]	C	None		0.000	133.0000	No Ice 1/2" Ice 1" Ice 2" Ice	24.5600 27.9200 31.2700 37.9800	24.5600 27.9200 31.2700 37.9800	1.34 1.91 2.55 3.97
***									
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.6000 5.0500 5.5000 6.4400	4.0100 4.4500 4.8900 5.8200	0.10 0.16 0.23 0.42
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.6000 5.0500 5.5000 6.4400	4.0100 4.4500 4.8900 5.8200	0.10 0.16 0.23 0.42
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.6000 5.0500 5.5000 6.4400	4.0100 4.4500 4.8900 5.8200	0.10 0.16 0.23 0.42
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0900 4.4800 4.8800 5.7100	2.8600 3.2300 3.6100 4.4000	0.08 0.13 0.19 0.33
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0900 4.4800 4.8800 5.7100	2.8600 3.2300 3.6100 4.4000	0.08 0.13 0.19 0.33
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0900 4.4800 4.8800 5.7100	2.8600 3.2300 3.6100 4.4000	0.08 0.13 0.19 0.33
TD-RRH8x20-25	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0455 4.2975 4.5570 5.0981	1.5345 1.7142 1.9008 2.2951	0.07 0.10 0.13 0.20
TD-RRH8x20-25	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0455 4.2975 4.5570 5.0981	1.5345 1.7142 1.9008 2.2951	0.07 0.10 0.13 0.20
TD-RRH8x20-25	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.0455 4.2975 4.5570 5.0981	1.5345 1.7142 1.9008 2.2951	0.07 0.10 0.13 0.20
IBC1900HG-2A	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.9660 1.0908 1.2230 1.5097	0.4635 0.5576 0.6599 0.8927	0.02 0.03 0.04 0.06
IBC1900HG-2A	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice	0.9660 1.0908 1.2230	0.4635 0.5576 0.6599	0.02 0.03 0.04

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						1" Ice	1.5097	0.8927	0.06
						2" Ice			
IBC1900HG-2A	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.9660 1.0908 1.2230 1.5097	0.4635 0.5576 0.6599 0.8927	0.02 0.03 0.04 0.06
IBC1900BB-1	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.9660 1.0908 1.2230 1.5097	0.4635 0.5576 0.6599 0.8927	0.02 0.03 0.04 0.06
IBC1900BB-1	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.9660 1.0908 1.2230 1.5097	0.4635 0.5576 0.6599 0.8927	0.02 0.03 0.04 0.06
IBC1900BB-1	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	0.9660 1.0908 1.2230 1.5097	0.4635 0.5576 0.6599 0.8927	0.02 0.03 0.04 0.06
2.375" OD x 6' Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09
2.375" OD x 6' Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09
2.375" OD x 6' Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.4250 1.9250 2.2939 3.0596	1.4250 1.9250 2.2939 3.0596	0.03 0.04 0.05 0.09
Platform Mount [LP 712-1]	C	None		0.000	124.0000	No Ice 1/2" Ice 1" Ice 2" Ice	24.5600 27.9200 31.2700 37.9800	24.5600 27.9200 31.2700 37.9800	1.34 1.91 2.55 3.97
***									
800MHz 2X50W RRH W/FILTER	A	From Leg	1.0000 0.00 -4.00	0.000	122.0000	No Ice 1/2" Ice 1" Ice 2" Ice	2.0583 2.2398 2.4287 2.8287	1.9317 2.1087 2.2931 2.6843	0.06 0.09 0.11 0.17
800MHz 2X50W RRH W/FILTER	B	From Leg	1.0000 0.00 -4.00	0.000	122.0000	No Ice 1/2" Ice 1" Ice 2" Ice	2.0583 2.2398 2.4287 2.8287	1.9317 2.1087 2.2931 2.6843	0.06 0.09 0.11 0.17
800MHz 2X50W RRH W/FILTER	C	From Leg	1.0000 0.00 -4.00	0.000	122.0000	No Ice 1/2" Ice 1" Ice 2" Ice	2.0583 2.2398 2.4287 2.8287	1.9317 2.1087 2.2931 2.6843	0.06 0.09 0.11 0.17
PCS 1900MHz 4x45W-65MHz	A	From Leg	1.0000 0.00 0.00	0.000	122.0000	No Ice 1/2" Ice 1" Ice 2" Ice	2.3218 2.5266 2.7388 3.1855	2.2381 2.4407 2.6507 3.0929	0.06 0.08 0.11 0.17
PCS 1900MHz 4x45W-65MHz	B	From Leg	1.0000 0.00	0.000	122.0000	No Ice	2.3218 2.5266	2.2381 2.4407	0.06 0.08

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2" Ice	2.7388	2.6507	0.11
						1" Ice	3.1855	3.0929	0.17
						2" Ice			
PCS 1900MHz 4x45W-65MHz	C	From Leg	1.0000	0.000	122.0000	No Ice	2.3218	2.2381	0.06
			0.00			1/2" Ice	2.5266	2.4407	0.08
			0.00			1" Ice	2.7388	2.6507	0.11
						2" Ice	3.1855	3.0929	0.17
2.375" OD x 6' Mount Pipe	A	From Leg	4.0000	0.000	122.0000	No Ice	1.4250	1.4250	0.03
			0.00			1/2" Ice	1.9250	1.9250	0.04
			0.00			1" Ice	2.2939	2.2939	0.05
						2" Ice	3.0596	3.0596	0.09
2.375" OD x 6' Mount Pipe	B	From Leg	4.0000	0.000	122.0000	No Ice	1.4250	1.4250	0.03
			0.00			1/2" Ice	1.9250	1.9250	0.04
			0.00			1" Ice	2.2939	2.2939	0.05
						2" Ice	3.0596	3.0596	0.09
2.375" OD x 6' Mount Pipe	C	From Leg	4.0000	0.000	122.0000	No Ice	1.4250	1.4250	0.03
			0.00			1/2" Ice	1.9250	1.9250	0.04
			0.00			1" Ice	2.2939	2.2939	0.05
						2" Ice	3.0596	3.0596	0.09
Side Arm Mount [SO 102-3]	C	None		0.000	122.0000	No Ice	3.6000	3.6000	0.07
						1/2" Ice	4.1800	4.1800	0.11
						1" Ice	4.7500	4.7500	0.14
						2" Ice	5.9000	5.9000	0.20
***									
(2) BXA-80063/4CFx5 w/ Mount Pipe	A	From Leg	4.0000	0.000	114.0000	No Ice	4.9453	3.6158	0.03
			0.00			1/2" Ice	5.3243	4.2169	0.07
			1.00			1" Ice	5.7120	4.8343	0.12
						2" Ice	6.5142	6.1053	0.23
(2) BXA-80063/4CFx5 w/ Mount Pipe	B	From Leg	4.0000	0.000	114.0000	No Ice	4.9453	3.6158	0.03
			0.00			1/2" Ice	5.3243	4.2169	0.07
			1.00			1" Ice	5.7120	4.8343	0.12
						2" Ice	6.5142	6.1053	0.23
(2) BXA-80063/4CFx5 w/ Mount Pipe	C	From Leg	4.0000	0.000	114.0000	No Ice	4.9453	3.6158	0.03
			0.00			1/2" Ice	5.3243	4.2169	0.07
			1.00			1" Ice	5.7120	4.8343	0.12
						2" Ice	6.5142	6.1053	0.23
(2) SBNHH-1D65B w/ Mount Pipe	A	From Leg	4.0000	0.000	114.0000	No Ice	4.0900	3.3000	0.07
			0.00			1/2" Ice	4.4900	3.6800	0.13
			1.00			1" Ice	4.8900	4.0700	0.20
						2" Ice	5.7200	4.8700	0.39
(2) SBNHH-1D65B w/ Mount Pipe	B	From Leg	4.0000	0.000	114.0000	No Ice	4.0900	3.3000	0.07
			0.00			1/2" Ice	4.4900	3.6800	0.13
			1.00			1" Ice	4.8900	4.0700	0.20
						2" Ice	5.7200	4.8700	0.39
(2) SBNHH-1D65B w/ Mount Pipe	C	From Leg	4.0000	0.000	114.0000	No Ice	4.0900	3.3000	0.07
			0.00			1/2" Ice	4.4900	3.6800	0.13
			1.00			1" Ice	4.8900	4.0700	0.20
						2" Ice	5.7200	4.8700	0.39
KS24019-L112A	B	From Leg	4.0000	0.000	114.0000	No Ice	0.1407	0.1407	0.01
			0.00			1/2" Ice	0.1979	0.1979	0.01
			2.00			1" Ice	0.2621	0.2621	0.01
						2" Ice	0.4148	0.4148	0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
DB-T1-6Z-8AB-0Z	B	From Leg	4.0000 0.00 1.00	0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.8000 5.0704 5.3481 5.9259	2.0000 2.1926 2.3926 2.8148	0.04 0.08 0.12 0.21
DB-T1-6Z-8AB-0Z	A	From Leg	4.0000 0.00 1.00	0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	4.8000 5.0704 5.3481 5.9259	2.0000 2.1926 2.3926 2.8148	0.04 0.08 0.12 0.21
(2) RFV01U-D2A	A	From Leg	4.0000 0.00 1.00	0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.8750 2.0454 2.2231 2.6009	1.0125 1.1445 1.2840 1.5851	0.07 0.09 0.11 0.15
RFV01U-D2A	C	From Leg	4.0000 0.00 1.00	0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.8750 2.0454 2.2231 2.6009	1.0125 1.1445 1.2840 1.5851	0.07 0.09 0.11 0.15
(3) RFV01U-D1A	C	From Leg	4.0000 0.00 1.00	0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	1.8750 2.0454 2.2231 2.6009	1.2500 1.3926 1.5426 1.8648	0.08 0.10 0.12 0.18
Platform Mount [LP 712-1_KCKR]	C	None		0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	35.7800 42.1400 48.6600 62.2300	35.7800 42.1400 48.6600 62.2300	1.61 2.33 3.15 5.06
Miscellaneous [NA 510-1]	C	None		0.000	114.0000	No Ice 1/2" Ice 1" Ice 2" Ice	6.3600 8.5200 10.6200 14.6400	6.3600 8.5200 10.6200 14.6400	0.26 0.34 0.46 0.77
*** **********									
7770.00	A	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice 1" Ice 2" Ice	5.5085 5.8673 6.2332 6.9859	2.9282 3.2730 3.6252 4.3517	0.04 0.07 0.11 0.20
7770.00	B	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice 1" Ice 2" Ice	5.5085 5.8673 6.2332 6.9859	2.9282 3.2730 3.6252 4.3517	0.04 0.07 0.11 0.20
7770.00	C	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice 1" Ice 2" Ice	5.5085 5.8673 6.2332 6.9859	2.9282 3.2730 3.6252 4.3517	0.04 0.07 0.11 0.20
OPA-65R-LCUU-H6	A	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice 1" Ice 2" Ice	9.2000 9.9700 10.7600 12.3900	4.6300 5.3400 6.0700 7.5700	0.08 0.14 0.20 0.35
OPA-65R-LCUU-H6	B	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice 1" Ice 2" Ice	9.2000 9.9700 10.7600 12.3900	4.6300 5.3400 6.0700 7.5700	0.08 0.14 0.20 0.35
OPA-65R-LCUU-H6	C	From Leg	4.0000 0.00 0.00	0.000	105.0000	No Ice 1/2" Ice	9.2000 9.9700 10.7600	4.6300 5.3400 6.0700	0.08 0.14 0.20

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
							1" Ice	12.3900	7.5700	0.35
							2" Ice			
80010965	A	From Leg	4.0000		0.000	105.0000	No Ice	12.2300	4.2100	0.11
			0.00				1/2"	13.0000	4.8800	0.19
			0.00				Ice	13.7900	5.5700	0.27
							1" Ice	15.4100	6.9900	0.46
							2" Ice			
80010965	B	From Leg	4.0000		0.000	105.0000	No Ice	12.2300	4.2100	0.11
			0.00				1/2"	13.0000	4.8800	0.19
			0.00				Ice	13.7900	5.5700	0.27
							1" Ice	15.4100	6.9900	0.46
							2" Ice			
80010965	C	From Leg	4.0000		0.000	105.0000	No Ice	12.2300	4.2100	0.11
			0.00				1/2"	13.0000	4.8800	0.19
			0.00				Ice	13.7900	5.5700	0.27
							1" Ice	15.4100	6.9900	0.46
							2" Ice			
QS66512-2	A	From Leg	4.0000		0.000	105.0000	No Ice	4.0100	3.3700	0.11
			0.00				1/2"	4.4100	3.7600	0.17
			0.00				Ice	4.8100	4.1500	0.23
							1" Ice	5.6500	4.9700	0.38
							2" Ice			
QS66512-2	B	From Leg	4.0000		0.000	105.0000	No Ice	4.0100	3.3700	0.11
			0.00				1/2"	4.4100	3.7600	0.17
			0.00				Ice	4.8100	4.1500	0.23
							1" Ice	5.6500	4.9700	0.38
							2" Ice			
QS66512-2	C	From Leg	4.0000		0.000	105.0000	No Ice	4.0100	3.3700	0.11
			0.00				1/2"	4.4100	3.7600	0.17
			0.00				Ice	4.8100	4.1500	0.23
							1" Ice	5.6500	4.9700	0.38
							2" Ice			
RRUS 4478 B14	A	From Leg	4.0000		0.000	105.0000	No Ice	2.0212	1.2459	0.06
			0.00				1/2"	2.1999	1.3960	0.08
			0.00				Ice	2.3860	1.5536	0.10
							1" Ice	2.7804	1.8909	0.15
							2" Ice			
RRUS 4478 B14	B	From Leg	4.0000		0.000	105.0000	No Ice	2.0212	1.2459	0.06
			0.00				1/2"	2.1999	1.3960	0.08
			0.00				Ice	2.3860	1.5536	0.10
							1" Ice	2.7804	1.8909	0.15
							2" Ice			
RRUS 4478 B14	C	From Leg	4.0000		0.000	105.0000	No Ice	2.0212	1.2459	0.06
			0.00				1/2"	2.1999	1.3960	0.08
			0.00				Ice	2.3860	1.5536	0.10
							1" Ice	2.7804	1.8909	0.15
							2" Ice			
(3) DC6-48-60-18-8F	A	From Leg	4.0000		0.000	105.0000	No Ice	1.2117	1.2117	0.03
			0.00				1/2"	1.8924	1.8924	0.05
			0.00				Ice	2.1051	2.1051	0.08
							1" Ice	2.5703	2.5703	0.14
							2" Ice			
(2) LGP21401	A	From Leg	4.0000		0.000	105.0000	No Ice	1.1040	0.3471	0.01
			0.00				1/2"	1.2388	0.4422	0.02
			0.00				Ice	1.3810	0.5444	0.03
							1" Ice	1.6877	0.7696	0.05
							2" Ice			
(2) LGP21401	B	From Leg	4.0000		0.000	105.0000	No Ice	1.1040	0.3471	0.01
			0.00				1/2"	1.2388	0.4422	0.02
			0.00				Ice	1.3810	0.5444	0.03
							1" Ice	1.6877	0.7696	0.05
							2" Ice			
(2) LGP21401	C	From Leg	4.0000		0.000	105.0000	No Ice	1.1040	0.3471	0.01
			0.00				1/2"	1.2388	0.4422	0.02
			0.00				Ice	1.3810	0.5444	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
							1" Ice	1.6877	0.7696	0.05
							2" Ice			
(2) TPX-070821	A	From Leg	4.0000	0.00	0.000	105.0000	No Ice	0.4688	0.1009	0.01
			0.00				1/2" Ice	0.5585	0.1471	0.01
							1" Ice	0.6556	0.2020	0.02
							2" Ice	0.8721	0.3340	0.03
(2) TPX-070821	B	From Leg	4.0000	0.00	0.000	105.0000	No Ice	0.4688	0.1009	0.01
			0.00				1/2" Ice	0.5585	0.1471	0.01
							1" Ice	0.6556	0.2020	0.02
							2" Ice	0.8721	0.3340	0.03
(2) TPX-070821	C	From Leg	4.0000	0.00	0.000	105.0000	No Ice	0.4688	0.1009	0.01
			0.00				1/2" Ice	0.5585	0.1471	0.01
							1" Ice	0.6556	0.2020	0.02
							2" Ice	0.8721	0.3340	0.03
RRUS 32	A	From Leg	4.0000	0.00	0.000	105.0000	No Ice	2.8571	1.7766	0.06
			0.00				1/2" Ice	3.0830	1.9677	0.08
							1" Ice	3.3163	2.1658	0.10
							2" Ice	3.8052	2.5829	0.16
RRUS 32	B	From Leg	4.0000	0.00	0.000	105.0000	No Ice	2.8571	1.7766	0.06
			0.00				1/2" Ice	3.0830	1.9677	0.08
							1" Ice	3.3163	2.1658	0.10
							2" Ice	3.8052	2.5829	0.16
RRUS 32	C	From Leg	4.0000	0.00	0.000	105.0000	No Ice	2.8571	1.7766	0.06
			0.00				1/2" Ice	3.0830	1.9677	0.08
							1" Ice	3.3163	2.1658	0.10
							2" Ice	3.8052	2.5829	0.16
RRUS 4449 B5/B12	A	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.9675	1.4081	0.07
			0.00				1/2" Ice	2.1439	1.5637	0.09
							1" Ice	2.3278	1.7267	0.11
							2" Ice	2.7177	2.0749	0.16
RRUS 4449 B5/B12	B	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.9675	1.4081	0.07
			0.00				1/2" Ice	2.1439	1.5637	0.09
							1" Ice	2.3278	1.7267	0.11
							2" Ice	2.7177	2.0749	0.16
RRUS 4449 B5/B12	C	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.9675	1.4081	0.07
			0.00				1/2" Ice	2.1439	1.5637	0.09
							1" Ice	2.3278	1.7267	0.11
							2" Ice	2.7177	2.0749	0.16
RRUS 8843 B2/B66A	A	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.6390	1.3534	0.07
			0.00				1/2" Ice	1.7988	1.5005	0.09
							1" Ice	1.9660	1.6549	0.11
							2" Ice	2.3227	1.9860	0.16
RRUS 8843 B2/B66A	B	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.6390	1.3534	0.07
			0.00				1/2" Ice	1.7988	1.5005	0.09
							1" Ice	1.9660	1.6549	0.11
							2" Ice	2.3227	1.9860	0.16
RRUS 8843 B2/B66A	C	From Leg	4.0000	0.00	0.000	105.0000	No Ice	1.6390	1.3534	0.07
			0.00				1/2" Ice	1.7988	1.5005	0.09
							1" Ice	1.9660	1.6549	0.11
							2" Ice	2.3227	1.9860	0.16
Platform Mount [LP 302-1]	C	None			0.000	105.0000	No Ice	26.5600	26.5600	1.71
							1/2" Ice	33.6700	33.6700	2.26
								40.3900	40.3900	2.95

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						1" Ice	53.2300	53.2300	4.70
						2" Ice			
***									
AIR -32 B2A/B66AA	A	From Leg	4.0000	0.000	94.0000	No Ice	6.5099	4.7123	0.13
			0.00			1/2"	6.8870	5.0683	0.18
			1.00			Ice	7.2712	5.4313	0.23
						1" Ice	8.0604	6.1782	0.35
						2" Ice			
AIR -32 B2A/B66AA	B	From Leg	4.0000	0.000	94.0000	No Ice	6.5099	4.7123	0.13
			0.00			1/2"	6.8870	5.0683	0.18
			1.00			Ice	7.2712	5.4313	0.23
						1" Ice	8.0604	6.1782	0.35
						2" Ice			
AIR -32 B2A/B66AA	C	From Leg	4.0000	0.000	94.0000	No Ice	6.5099	4.7123	0.13
			0.00			1/2"	6.8870	5.0683	0.18
			1.00			Ice	7.2712	5.4313	0.23
						1" Ice	8.0604	6.1782	0.35
						2" Ice			
APXVAARR24_43-U-NA20	A	From Leg	4.0000	0.000	94.0000	No Ice	14.6700	5.3200	0.15
			0.00			1/2"	15.4300	5.9900	0.27
			1.00			Ice	16.2100	6.6800	0.39
						1" Ice	17.8100	8.0800	0.66
						2" Ice			
APXVAARR24_43-U-NA20	B	From Leg	4.0000	0.000	94.0000	No Ice	14.6700	5.3200	0.15
			0.00			1/2"	15.4300	5.9900	0.27
			1.00			Ice	16.2100	6.6800	0.39
						1" Ice	17.8100	8.0800	0.66
						2" Ice			
APXVAARR24_43-U-NA20	C	From Leg	4.0000	0.000	94.0000	No Ice	14.6700	5.3200	0.15
			0.00			1/2"	15.4300	5.9900	0.27
			1.00			Ice	16.2100	6.6800	0.39
						1" Ice	17.8100	8.0800	0.66
						2" Ice			
ERICSSON AIR 21 B2A B4P_T-MOBILE	A	From Leg	4.0000	0.000	94.0000	No Ice	6.0917	4.2966	0.09
			0.00			1/2"	6.4616	4.6490	0.13
			1.00			Ice	6.8384	5.0045	0.18
						1" Ice	7.6131	5.7366	0.29
						2" Ice			
ERICSSON AIR 21 B2A B4P_T-MOBILE	B	From Leg	4.0000	0.000	94.0000	No Ice	6.0917	4.2966	0.09
			0.00			1/2"	6.4616	4.6490	0.13
			1.00			Ice	6.8384	5.0045	0.18
						1" Ice	7.6131	5.7366	0.29
						2" Ice			
ERICSSON AIR 21 B2A B4P_T-MOBILE	C	From Leg	4.0000	0.000	94.0000	No Ice	6.0917	4.2966	0.09
			0.00			1/2"	6.4616	4.6490	0.13
			1.00			Ice	6.8384	5.0045	0.18
						1" Ice	7.6131	5.7366	0.29
						2" Ice			
AIR6449 B41	A	From Leg	4.0000	0.000	94.0000	No Ice	5.6822	2.4907	0.10
			0.00			1/2"	5.9842	2.7180	0.14
			1.00			Ice	6.2936	2.9523	0.19
						1" Ice	6.9348	3.4420	0.29
						2" Ice			
AIR6449 B41	B	From Leg	4.0000	0.000	94.0000	No Ice	5.6822	2.4907	0.10
			0.00			1/2"	5.9842	2.7180	0.14
			1.00			Ice	6.2936	2.9523	0.19
						1" Ice	6.9348	3.4420	0.29
						2" Ice			
AIR6449 B41	C	From Leg	4.0000	0.000	94.0000	No Ice	5.6822	2.4907	0.10
			0.00			1/2"	5.9842	2.7180	0.14
			1.00			Ice	6.2936	2.9523	0.19
						1" Ice	6.9348	3.4420	0.29
						2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.0000	0.000	94.0000	No Ice	1.9701	1.5865	0.07
			0.00				2.1466	1.7488	0.09

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			1.00			1/2" Ice	2.3306	1.9185	0.12
						1" Ice	2.7207	2.2800	0.17
						2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.0000	0.000	94.0000	No Ice	1.9701	1.5865	0.07
			0.00			1/2" Ice	2.1466	1.7488	0.09
			1.00			1" Ice	2.3306	1.9185	0.12
						2" Ice	2.7207	2.2800	0.17
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.0000	0.000	94.0000	No Ice	1.9701	1.5865	0.07
			0.00			1/2" Ice	2.1466	1.7488	0.09
			1.00			1" Ice	2.3306	1.9185	0.12
						2" Ice	2.7207	2.2800	0.17
RRUS 4415 B25_CCIV2	A	From Leg	4.0000	0.000	94.0000	No Ice	1.8425	0.8202	0.05
			0.00			1/2" Ice	2.0123	0.9434	0.06
			1.00			1" Ice	2.1895	1.0750	0.08
						2" Ice	2.5662	1.3683	0.12
RRUS 4415 B25_CCIV2	B	From Leg	4.0000	0.000	94.0000	No Ice	1.8425	0.8202	0.05
			0.00			1/2" Ice	2.0123	0.9434	0.06
			1.00			1" Ice	2.1895	1.0750	0.08
						2" Ice	2.5662	1.3683	0.12
RRUS 4415 B25_CCIV2	C	From Leg	4.0000	0.000	94.0000	No Ice	1.8425	0.8202	0.05
			0.00			1/2" Ice	2.0123	0.9434	0.06
			1.00			1" Ice	2.1895	1.0750	0.08
						2" Ice	2.5662	1.3683	0.12
Platform Mount [LP 302-1]	C	None		0.000	94.0000	No Ice	26.5600	26.5600	1.71
						1/2" Ice	33.6700	33.6700	2.26
						1" Ice	40.3900	40.3900	2.95
						2" Ice	53.2300	53.2300	4.70
***									
***									
Side Arm Mount [SO 701-1]	A	None		0.000	80.0000	No Ice	0.8500	1.6700	0.07
						1/2" Ice	1.1400	2.3400	0.08
						1" Ice	1.4300	3.0100	0.09
						2" Ice	2.0100	4.3500	0.12
Side Arm Mount [SO 701-1]	B	None		0.000	80.0000	No Ice	0.8500	1.6700	0.07
						1/2" Ice	1.1400	2.3400	0.08
						1" Ice	1.4300	3.0100	0.09
						2" Ice	2.0100	4.3500	0.12
***									
Side Arm Mount [SO 701-1]	C	None		0.000	77.0000	No Ice	0.8500	1.6700	0.07
						1/2" Ice	1.1400	2.3400	0.08
						1" Ice	1.4300	3.0100	0.09
						2" Ice	2.0100	4.3500	0.12
58532A	C	From Leg	3.0000	0.000	77.0000	No Ice	0.1893	0.1893	0.00
			0.00			1/2" Ice	0.2483	0.2483	0.00
			0.00			1" Ice	0.3147	0.3147	0.01
						2" Ice	0.4698	0.4698	0.02
***									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
VHLP2.5-11	A	Paraboloid w/Shroud (HP)	From Leg	4.0000 0.00 6.00	13.000		133.0000	2.9167	No Ice 1/2" Ice 1" Ice 2" Ice	6.6800 7.0700 7.4600 8.2300	0.05 0.08 0.12 0.19
VHLP2.5-11	B	Paraboloid w/Shroud (HP)	From Leg	4.0000 0.00 6.00	83.000		133.0000	2.9167	No Ice 1/2" Ice 1" Ice 2" Ice	6.6800 7.0700 7.4600 8.2300	0.05 0.08 0.12 0.19

Tower Pressures - No Ice

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
L1 145.0000-140.0000	142.4843	1.364	49	10.338	A	0.000	10.338	10.338	100.00	0.000	0.000
					B	0.000	10.338		100.00	0.000	0.000
					C	0.000	10.338		100.00	0.000	0.000
L2 140.0000-135.0000	137.4848	1.353	49	10.728	A	0.000	10.728	10.728	100.00	0.000	0.000
					B	0.000	10.728		100.00	0.000	0.000
					C	0.000	10.728		100.00	0.000	0.000
L3 135.0000-130.0000	132.4854	1.343	48	11.119	A	0.000	11.119	11.119	100.00	0.000	0.000
					B	0.000	11.119		100.00	0.000	0.000
					C	0.000	11.119		100.00	0.000	0.000
L4 130.0000-125.0000	127.4856	1.332	48	11.509	A	0.000	11.509	11.509	100.00	0.000	0.000
					B	0.000	11.509		100.00	0.000	0.000
					C	0.000	11.509		100.00	0.000	0.000
L5 125.0000-120.0000	122.4861	1.321	47	11.906	A	0.000	11.906	11.906	100.00	0.000	0.000
					B	0.000	11.906		100.00	0.000	0.000
					C	0.000	11.906		100.00	0.000	0.000
L6 120.0000-115.0000	117.4866	1.309	47	12.304	A	0.000	12.304	12.304	100.00	0.000	0.000
					B	0.000	12.304		100.00	0.000	0.000
					C	0.000	12.304		100.00	0.000	0.000
L7 115.0000-110.0000	112.4870	1.297	47	12.701	A	0.000	12.701	12.701	100.00	0.000	0.000
					B	0.000	12.701		100.00	0.000	0.000
					C	0.000	12.701		100.00	0.000	0.000
L8 110.0000-105.0000	107.4874	1.285	46	13.098	A	0.000	13.098	13.098	100.00	0.000	0.000
					B	0.000	13.098		100.00	0.000	0.000
					C	0.000	13.098		100.00	0.000	0.000
L9 105.0000-100.0000	102.4877	1.272	46	13.496	A	0.000	13.496	13.496	100.00	0.000	0.000
					B	0.000	13.496		100.00	0.000	0.000
					C	0.000	13.496		100.00	0.000	0.000
L10 100.0000-95.0000	97.4881	1.259	45	13.893	A	0.000	13.893	13.893	100.00	0.000	0.000
					B	0.000	13.893		100.00	0.000	0.000
					C	0.000	13.893		100.00	0.000	0.000
L11 95.0000-90.0000	92.4884	1.245	45	14.291	A	0.000	14.291	14.291	100.00	0.000	0.000
					B	0.000	14.291		100.00	0.000	0.000
					C	0.000	14.291		100.00	5.544	0.000
L12 90.0000-84.7500	87.3626	1.23	44	15.433	A	0.000	15.433	15.433	100.00	0.000	0.000
					B	0.000	15.433		100.00	0.000	0.000
					C	0.000	15.433		100.00	7.277	0.000
L13 84.7500-84.2500	84.4999	1.222	44	1.471	A	0.000	1.471	1.471	100.00	0.000	0.000
					B	0.000	1.471		100.00	0.000	0.000
					C	0.000	1.471		100.00	0.693	0.000
L14 84.2500-79.2500	81.7391	1.213	44	14.921	A	0.000	14.921	14.921	100.00	0.000	0.000
					B	0.000	14.921		100.00	0.000	0.000
					C	0.000	14.921		100.00	6.930	0.000
L15 79.2500-74.2500	76.7394	1.197	43	15.313	A	0.000	15.313	15.313	100.00	0.172	0.000
					B	0.000	15.313		100.00	0.000	0.000
					C	0.000	15.313		100.00	6.930	0.000
L16 74.2500-69.2500	71.7396	1.18	42	15.705	A	0.000	15.705	15.705	100.00	0.313	0.000
					B	0.000	15.705		100.00	0.000	0.000
					C	0.000	15.705		100.00	6.930	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L17 69.2500-64.2500	66.7399	1.162	42	16.097	A	0.000	16.097	16.097	100.00	0.313	0.000
					B	0.000	16.097		100.00	0.000	0.000
					C	0.000	16.097		100.00	6.930	0.000
L18 64.2500-59.2500	61.7401	1.143	41	16.488	A	0.000	16.488	16.488	100.00	0.335	0.000
					B	0.000	16.488		100.00	0.000	0.000
					C	0.000	16.488		100.00	6.974	0.000
L19 59.2500-58.0800	58.6645	1.131	41	3.915	A	0.000	3.915	3.915	100.00	0.093	0.000
					B	0.000	3.915		100.00	0.000	0.000
					C	0.000	3.915		100.00	1.661	0.000
L20 58.0800-57.8300	57.9550	1.128	41	0.839	A	0.000	0.839	0.839	100.00	0.020	0.000
					B	0.000	0.839		100.00	0.000	0.000
					C	0.000	0.839		100.00	0.355	0.000
L21 57.8300-52.8300	55.3204	1.117	40	16.985	A	0.000	16.985	16.985	100.00	0.396	0.000
					B	0.000	16.985		100.00	0.000	0.000
					C	0.000	16.985		100.00	7.097	0.000
L22 52.8300-44.2500	48.5126	1.087	39	30.060	A	0.000	30.060	30.060	100.00	0.679	0.000
					B	0.000	30.060		100.00	0.000	0.000
					C	0.000	30.060		100.00	12.178	0.000
L23 44.2500-43.2500	43.7496	1.063	38	3.525	A	0.000	3.525	3.525	100.00	0.079	0.000
					B	0.000	3.525		100.00	0.000	0.000
					C	0.000	3.525		100.00	1.419	0.000
L24 43.2500-38.2500	40.7409	1.048	38	17.859	A	0.000	17.859	17.859	100.00	0.396	0.000
					B	0.000	17.859		100.00	0.000	0.000
					C	0.000	17.859		100.00	7.097	0.000
L25 38.2500-33.2500	35.7411	1.019	37	18.251	A	0.000	18.251	18.251	100.00	0.934	0.000
					B	0.000	18.251		100.00	0.000	0.000
					C	0.000	18.251		100.00	8.172	0.000
L26 33.2500-31.2500	32.2486	0.997	36	7.410	A	0.000	7.410	7.410	100.00	0.636	0.000
					B	0.000	7.410		100.00	0.000	0.000
					C	0.000	7.410		100.00	3.795	0.000
L27 31.2500-31.0000	31.1250	0.99	36	0.930	A	0.000	0.930	0.930	100.00	0.080	0.000
					B	0.000	0.930		100.00	0.000	0.000
					C	0.000	0.930		100.00	0.474	0.000
L28 31.0000-26.0000	28.4913	0.972	35	18.815	A	0.000	18.815	18.815	100.00	1.591	0.000
					B	0.000	18.815		100.00	0.000	0.000
					C	0.000	18.815		100.00	9.487	0.000
L29 26.0000-21.0000	23.4915	0.933	34	19.208	A	0.000	19.208	19.208	100.00	1.591	0.000
					B	0.000	19.208		100.00	0.000	0.000
					C	0.000	19.208		100.00	9.487	0.000
L30 21.0000-16.0000	18.4917	0.887	32	19.599	A	0.000	19.599	19.599	100.00	1.591	0.000
					B	0.000	19.599		100.00	0.000	0.000
					C	0.000	19.599		100.00	9.487	0.000
L31 16.0000-11.0000	13.4918	0.85	31	19.991	A	0.000	19.991	19.991	100.00	1.591	0.000
					B	0.000	19.991		100.00	0.000	0.000
					C	0.000	19.991		100.00	9.487	0.000
L32 11.0000-6.0000	8.4920	0.85	31	20.383	A	0.000	20.383	20.383	100.00	1.591	0.000
					B	0.000	20.383		100.00	0.000	0.000
					C	0.000	20.383		100.00	9.487	0.000
L33 6.0000-4.7500	5.3745	0.85	31	5.157	A	0.000	5.157	5.157	100.00	0.398	0.000
					B	0.000	5.157		100.00	0.000	0.000
					C	0.000	5.157		100.00	2.372	0.000
L34 4.7500-4.5000	4.6250	0.85	31	1.034	A	0.000	1.034	1.034	100.00	0.080	0.000
					B	0.000	1.034		100.00	0.000	0.000
					C	0.000	1.034		100.00	0.474	0.000
L35 4.5000-0.0000	2.2437	0.85	31	18.781	A	0.000	18.781	18.781	100.00	1.304	0.000
					B	0.000	18.781		100.00	0.000	0.000
					C	0.000	18.781		100.00	8.283	0.000

Tower Pressure - With Ice

G_H = 1.100

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 145.0000-140.0000	142.4843	1.364	8	1.9678	11.977	A	0.000	11.977	11.977	100.00	0.000	0.000
						B	0.000	11.977		100.00	0.000	0.000
						C	0.000	11.977		100.00	0.000	0.000
L2 140.0000-135.0000	137.4848	1.353	8	1.9608	12.362	A	0.000	12.362	12.362	100.00	0.000	0.000
						B	0.000	12.362		100.00	0.000	0.000
						C	0.000	12.362		100.00	0.000	0.000
L3 135.0000-130.0000	132.4854	1.343	8	1.9535	12.747	A	0.000	12.747	12.747	100.00	0.000	0.000
						B	0.000	12.747		100.00	0.000	0.000
						C	0.000	12.747		100.00	0.000	0.000
L4 130.0000-125.0000	127.4856	1.332	8	1.9460	13.131	A	0.000	13.131	13.131	100.00	0.000	0.000
						B	0.000	13.131		100.00	0.000	0.000
						C	0.000	13.131		100.00	0.000	0.000
L5 125.0000-120.0000	122.4861	1.321	8	1.9382	13.521	A	0.000	13.521	13.521	100.00	0.000	0.000
						B	0.000	13.521		100.00	0.000	0.000
						C	0.000	13.521		100.00	0.000	0.000
L6 120.0000-115.0000	117.4866	1.309	8	1.9302	13.912	A	0.000	13.912	13.912	100.00	0.000	0.000
						B	0.000	13.912		100.00	0.000	0.000
						C	0.000	13.912		100.00	0.000	0.000
L7 115.0000-110.0000	112.4870	1.297	7	1.9218	14.303	A	0.000	14.303	14.303	100.00	0.000	0.000
						B	0.000	14.303		100.00	0.000	0.000
						C	0.000	14.303		100.00	0.000	0.000
L8 110.0000-105.0000	107.4874	1.285	7	1.9131	14.693	A	0.000	14.693	14.693	100.00	0.000	0.000
						B	0.000	14.693		100.00	0.000	0.000
						C	0.000	14.693		100.00	0.000	0.000
L9 105.0000-100.0000	102.4877	1.272	7	1.9040	15.082	A	0.000	15.082	15.082	100.00	0.000	0.000
						B	0.000	15.082		100.00	0.000	0.000
						C	0.000	15.082		100.00	0.000	0.000
L10 100.0000-95.0000	97.4881	1.259	7	1.8945	15.472	A	0.000	15.472	15.472	100.00	0.000	0.000
						B	0.000	15.472		100.00	0.000	0.000
						C	0.000	15.472		100.00	0.000	0.000
L11 95.0000-90.0000	92.4884	1.245	7	1.8845	15.861	A	0.000	15.861	15.861	100.00	0.000	0.000
						B	0.000	15.861		100.00	0.000	0.000
						C	0.000	15.861		100.00	8.815	0.000
L12 90.0000-84.7500	87.3626	1.23	7	1.8738	17.072	A	0.000	17.072	17.072	100.00	0.000	0.000
						B	0.000	17.072		100.00	0.000	0.000
						C	0.000	17.072		100.00	11.555	0.000
L13 84.7500-84.2500	84.4999	1.222	7	1.8676	1.627	A	0.000	1.627	1.627	100.00	0.000	0.000
						B	0.000	1.627		100.00	0.000	0.000
						C	0.000	1.627		100.00	1.100	0.000
L14 84.2500-79.2500	81.7391	1.213	7	1.8614	16.472	A	0.000	16.472	16.472	100.00	0.000	0.000
						B	0.000	16.472		100.00	0.000	0.000
						C	0.000	16.472		100.00	10.989	0.000
L15 79.2500-74.2500	76.7394	1.197	7	1.8497	16.854	A	0.000	16.854	16.854	100.00	1.189	0.000
						B	0.000	16.854		100.00	0.000	0.000
						C	0.000	16.854		100.00	10.975	0.000
L16 74.2500-69.2500	71.7396	1.18	7	1.8373	17.236	A	0.000	17.236	17.236	100.00	2.150	0.000
						B	0.000	17.236		100.00	0.000	0.000
						C	0.000	17.236		100.00	10.959	0.000
L17 69.2500-64.2500	66.7399	1.162	7	1.8240	17.617	A	0.000	17.617	17.617	100.00	2.137	0.000
						B	0.000	17.617		100.00	0.000	0.000
						C	0.000	17.617		100.00	10.943	0.000
L18 64.2500-59.2500	61.7401	1.143	7	1.8099	17.997	A	0.000	17.997	17.997	100.00	2.626	0.000
						B	0.000	17.997		100.00	0.000	0.000
						C	0.000	17.997		100.00	11.932	0.000
L19 59.2500-58.0800	58.6645	1.131	7	1.8007	4.266	A	0.000	4.266	4.266	100.00	0.935	0.000
						B	0.000	4.266		100.00	0.000	0.000
						C	0.000	4.266		100.00	3.435	0.000
L20 58.0800-57.8300	57.9550	1.128	6	1.7985	0.914	A	0.000	0.914	0.914	100.00	0.200	0.000
						B	0.000	0.914		100.00	0.000	0.000
						C	0.000	0.914		100.00	0.734	0.000
L21 57.8300-52.8300	55.3204	1.117	6	1.7901	18.477	A	0.000	18.477	18.477	100.00	3.976	0.000
						B	0.000	18.477		100.00	0.000	0.000
						C	0.000	18.477		100.00	14.647	0.000
L22 52.8300-44.2500	48.5126	1.087	6	1.7668	32.586	A	0.000	32.586	32.586	100.00	6.743	0.000
						B	0.000	32.586		100.00	0.000	0.000
						C	0.000	32.586		100.00	25.004	0.000
L23 44.2500-43.2500	43.7496	1.063	6	1.7486	3.819	A	0.000	3.819	3.819	100.00	0.786	0.000
						B	0.000	3.819		100.00	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
						C	0.000	3.819		100.00	2.914	0.000
L24 43.2500-38.2500	40.7409	1.048	6	1.7362	19.306	A	0.000	19.306	19.306	100.00	3.868	0.000
						B	0.000	19.306		100.00	0.000	0.000
						C	0.000	19.306		100.00	14.472	0.000
L25 38.2500-33.2500	35.7411	1.019	6	1.7136	19.679	A	0.000	19.679	19.679	100.00	4.361	0.000
						B	0.000	19.679		100.00	0.000	0.000
						C	0.000	19.679		100.00	15.474	0.000
L26 33.2500-31.2500	32.2486	0.997	6	1.6961	7.975	A	0.000	7.975	7.975	100.00	1.993	0.000
						B	0.000	7.975		100.00	0.000	0.000
						C	0.000	7.975		100.00	6.693	0.000
L27 31.2500-31.0000	31.1250	0.99	6	1.6901	1.001	A	0.000	1.001	1.001	100.00	0.249	0.000
						B	0.000	1.001		100.00	0.000	0.000
						C	0.000	1.001		100.00	0.836	0.000
L28 31.0000-26.0000	28.4913	0.972	6	1.6752	20.211	A	0.000	20.211	20.211	100.00	4.941	0.000
						B	0.000	20.211		100.00	0.000	0.000
						C	0.000	20.211		100.00	16.664	0.000
L29 26.0000-21.0000	23.4915	0.933	5	1.6432	20.577	A	0.000	20.577	20.577	100.00	4.877	0.000
						B	0.000	20.577		100.00	0.000	0.000
						C	0.000	20.577		100.00	16.560	0.000
L30 21.0000-16.0000	18.4917	0.887	5	1.6043	20.936	A	0.000	20.936	20.936	100.00	4.800	0.000
						B	0.000	20.936		100.00	0.000	0.000
						C	0.000	20.936		100.00	16.433	0.000
L31 16.0000-11.0000	13.4918	0.85	5	1.5545	21.287	A	0.000	21.287	21.287	100.00	4.700	0.000
						B	0.000	21.287		100.00	0.000	0.000
						C	0.000	21.287		100.00	16.272	0.000
L32 11.0000-6.0000	8.4920	0.85	5	1.4842	21.620	A	0.000	21.620	21.620	100.00	4.559	0.000
						B	0.000	21.620		100.00	0.000	0.000
						C	0.000	21.620		100.00	16.043	0.000
L33 6.0000-4.7500	5.3745	0.85	5	1.4179	5.452	A	0.000	5.452	5.452	100.00	1.107	0.000
						B	0.000	5.452		100.00	0.000	0.000
						C	0.000	5.452		100.00	3.957	0.000
L34 4.7500-4.5000	4.6250	0.85	5	1.3967	1.092	A	0.000	1.092	1.092	100.00	0.219	0.000
						B	0.000	1.092		100.00	0.000	0.000
						C	0.000	1.092		100.00	0.788	0.000
L35 4.5000-0.0000	2.2437	0.85	5	1.2993	19.756	A	0.000	19.756	19.756	100.00	3.513	0.000
						B	0.000	19.756		100.00	0.000	0.000
						C	0.000	19.756		100.00	13.382	0.000

Tower Pressure - Service

G_H = 1.100

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 145.0000-140.0000	142.4843	1.364	11	10.338	A	0.000	10.338	10.338	100.00	0.000	0.000
					B	0.000	10.338		100.00	0.000	0.000
					C	0.000	10.338		100.00	0.000	0.000
L2 140.0000-135.0000	137.4848	1.353	11	10.728	A	0.000	10.728	10.728	100.00	0.000	0.000
					B	0.000	10.728		100.00	0.000	0.000
					C	0.000	10.728		100.00	0.000	0.000
L3 135.0000-130.0000	132.4854	1.343	10	11.119	A	0.000	11.119	11.119	100.00	0.000	0.000
					B	0.000	11.119		100.00	0.000	0.000
					C	0.000	11.119		100.00	0.000	0.000
L4 130.0000-125.0000	127.4856	1.332	10	11.509	A	0.000	11.509	11.509	100.00	0.000	0.000
					B	0.000	11.509		100.00	0.000	0.000
					C	0.000	11.509		100.00	0.000	0.000
L5 125.0000-120.0000	122.4861	1.321	10	11.906	A	0.000	11.906	11.906	100.00	0.000	0.000
					B	0.000	11.906		100.00	0.000	0.000
					C	0.000	11.906		100.00	0.000	0.000
L6 120.0000-115.0000	117.4866	1.309	10	12.304	A	0.000	12.304	12.304	100.00	0.000	0.000
					B	0.000	12.304		100.00	0.000	0.000
					C	0.000	12.304		100.00	0.000	0.000
L7 115.0000-110.0000	112.4870	1.297	10	12.701	A	0.000	12.701	12.701	100.00	0.000	0.000
					B	0.000	12.701		100.00	0.000	0.000
					C	0.000	12.701		100.00	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L8 110.0000-105.0000	107.4874	1.285	10	13.098	A	0.000	13.098	13.098	100.00	0.000	0.000
					B	0.000	13.098		100.00	0.000	0.000
					C	0.000	13.098		100.00	0.000	0.000
L9 105.0000-100.0000	102.4877	1.272	10	13.496	A	0.000	13.496	13.496	100.00	0.000	0.000
					B	0.000	13.496		100.00	0.000	0.000
					C	0.000	13.496		100.00	0.000	0.000
L10 100.0000-95.0000	97.4881	1.259	10	13.893	A	0.000	13.893	13.893	100.00	0.000	0.000
					B	0.000	13.893		100.00	0.000	0.000
					C	0.000	13.893		100.00	0.000	0.000
L11 95.0000-90.0000	92.4884	1.245	10	14.291	A	0.000	14.291	14.291	100.00	0.000	0.000
					B	0.000	14.291		100.00	0.000	0.000
					C	0.000	14.291		100.00	5.544	0.000
L12 90.0000-84.7500	87.3626	1.23	10	15.433	A	0.000	15.433	15.433	100.00	0.000	0.000
					B	0.000	15.433		100.00	0.000	0.000
					C	0.000	15.433		100.00	7.277	0.000
L13 84.7500-84.2500	84.4999	1.222	10	1.471	A	0.000	1.471	1.471	100.00	0.000	0.000
					B	0.000	1.471		100.00	0.000	0.000
					C	0.000	1.471		100.00	0.693	0.000
L14 84.2500-79.2500	81.7391	1.213	9	14.921	A	0.000	14.921	14.921	100.00	0.000	0.000
					B	0.000	14.921		100.00	0.000	0.000
					C	0.000	14.921		100.00	6.930	0.000
L15 79.2500-74.2500	76.7394	1.197	9	15.313	A	0.000	15.313	15.313	100.00	0.172	0.000
					B	0.000	15.313		100.00	0.000	0.000
					C	0.000	15.313		100.00	6.930	0.000
L16 74.2500-69.2500	71.7396	1.18	9	15.705	A	0.000	15.705	15.705	100.00	0.313	0.000
					B	0.000	15.705		100.00	0.000	0.000
					C	0.000	15.705		100.00	6.930	0.000
L17 69.2500-64.2500	66.7399	1.162	9	16.097	A	0.000	16.097	16.097	100.00	0.313	0.000
					B	0.000	16.097		100.00	0.000	0.000
					C	0.000	16.097		100.00	6.930	0.000
L18 64.2500-59.2500	61.7401	1.143	9	16.488	A	0.000	16.488	16.488	100.00	0.335	0.000
					B	0.000	16.488		100.00	0.000	0.000
					C	0.000	16.488		100.00	6.974	0.000
L19 59.2500-58.0800	58.6645	1.131	9	3.915	A	0.000	3.915	3.915	100.00	0.093	0.000
					B	0.000	3.915		100.00	0.000	0.000
					C	0.000	3.915		100.00	1.661	0.000
L20 58.0800-57.8300	57.9550	1.128	9	0.839	A	0.000	0.839	0.839	100.00	0.020	0.000
					B	0.000	0.839		100.00	0.000	0.000
					C	0.000	0.839		100.00	0.355	0.000
L21 57.8300-52.8300	55.3204	1.117	9	16.985	A	0.000	16.985	16.985	100.00	0.396	0.000
					B	0.000	16.985		100.00	0.000	0.000
					C	0.000	16.985		100.00	7.097	0.000
L22 52.8300-44.2500	48.5126	1.087	8	30.060	A	0.000	30.060	30.060	100.00	0.679	0.000
					B	0.000	30.060		100.00	0.000	0.000
					C	0.000	30.060		100.00	12.178	0.000
L23 44.2500-43.2500	43.7496	1.063	8	3.525	A	0.000	3.525	3.525	100.00	0.079	0.000
					B	0.000	3.525		100.00	0.000	0.000
					C	0.000	3.525		100.00	1.419	0.000
L24 43.2500-38.2500	40.7409	1.048	8	17.859	A	0.000	17.859	17.859	100.00	0.396	0.000
					B	0.000	17.859		100.00	0.000	0.000
					C	0.000	17.859		100.00	7.097	0.000
L25 38.2500-33.2500	35.7411	1.019	8	18.251	A	0.000	18.251	18.251	100.00	0.934	0.000
					B	0.000	18.251		100.00	0.000	0.000
					C	0.000	18.251		100.00	8.172	0.000
L26 33.2500-31.2500	32.2486	0.997	8	7.410	A	0.000	7.410	7.410	100.00	0.636	0.000
					B	0.000	7.410		100.00	0.000	0.000
					C	0.000	7.410		100.00	3.795	0.000
L27 31.2500-31.0000	31.1250	0.99	8	0.930	A	0.000	0.930	0.930	100.00	0.080	0.000
					B	0.000	0.930		100.00	0.000	0.000
					C	0.000	0.930		100.00	0.474	0.000
L28 31.0000-26.0000	28.4913	0.972	8	18.815	A	0.000	18.815	18.815	100.00	1.591	0.000
					B	0.000	18.815		100.00	0.000	0.000
					C	0.000	18.815		100.00	9.487	0.000
L29 26.0000-21.0000	23.4915	0.933	7	19.208	A	0.000	19.208	19.208	100.00	1.591	0.000
					B	0.000	19.208		100.00	0.000	0.000
					C	0.000	19.208		100.00	9.487	0.000
L30 21.0000-16.0000	18.4917	0.887	7	19.599	A	0.000	19.599	19.599	100.00	1.591	0.000
					B	0.000	19.599		100.00	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	0.000	19.599		100.00	9.487	0.000
L31 16.0000-11.0000	13.4918	0.85	7	19.991	A	0.000	19.991	19.991	100.00	1.591	0.000
					B	0.000	19.991		100.00	0.000	0.000
					C	0.000	19.991		100.00	9.487	0.000
L32 11.0000-6.0000	8.4920	0.85	7	20.383	A	0.000	20.383	20.383	100.00	1.591	0.000
					B	0.000	20.383		100.00	0.000	0.000
					C	0.000	20.383		100.00	9.487	0.000
L33 6.0000-4.7500	5.3745	0.85	7	5.157	A	0.000	5.157	5.157	100.00	0.398	0.000
					B	0.000	5.157		100.00	0.000	0.000
					C	0.000	5.157		100.00	2.372	0.000
L34 4.7500-4.5000	4.6250	0.85	7	1.034	A	0.000	1.034	1.034	100.00	0.080	0.000
					B	0.000	1.034		100.00	0.000	0.000
					C	0.000	1.034		100.00	0.474	0.000
L35 4.5000-0.0000	2.2437	0.85	7	18.781	A	0.000	18.781	18.781	100.00	1.304	0.000
					B	0.000	18.781		100.00	0.000	0.000
					C	0.000	18.781		100.00	8.283	0.000

Load Combinations

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

Comb. No.	Description
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	145 - 140	Pole	Max Tension	21	0.00	-0.00	-0.00
			Max. Compression	26	-0.62	0.00	0.00
			Max. Mx	8	-0.26	-1.07	0.00
			Max. My	2	-0.26	-0.00	1.07
			Max. Vy	8	0.43	-1.07	0.00
			Max. Vx	2	-0.43	-0.00	1.07
			Max. Torque	21			-0.00
L2	140 - 135	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-1.65	-0.86	0.50
			Max. Mx	8	-0.61	-6.56	1.29
			Max. My	2	-0.58	-0.69	7.66
			Max. Vy	8	1.37	-6.56	1.29
			Max. Vx	14	1.67	0.42	-7.36
			Max. Torque	2			-2.07
L3	135 - 130	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-8.51	-1.08	0.70
			Max. Mx	8	-2.95	-23.91	2.64
			Max. My	2	-2.91	-1.40	26.55
			Max. Vy	8	4.44	-23.91	2.64
			Max. Vx	2	-4.76	-1.40	26.55
			Max. Torque	2			-2.14
L4	130 - 125	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-9.31	-1.08	0.70
			Max. Mx	8	-3.36	-47.31	4.03
			Max. My	2	-3.33	-2.13	51.52
			Max. Vy	8	4.92	-47.31	4.03
			Max. Vx	2	-5.24	-2.13	51.52
			Max. Torque	2			-2.14
L5	125 - 120	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-19.51	-1.07	0.71
			Max. Mx	8	-6.84	-86.77	5.45
			Max. My	2	-6.79	-2.88	92.58
			Max. Vy	8	9.54	-86.77	5.45
			Max. Vx	2	-9.87	-2.88	92.58
			Max. Torque	2			-2.14
L6	120 - 115	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-20.38	-1.07	0.72
			Max. Mx	8	-7.32	-135.72	6.87
			Max. My	2	-7.27	-3.62	143.14
			Max. Vy	8	10.04	-135.72	6.87
			Max. Vx	2	-10.36	-3.62	143.14
			Max. Torque	2			-2.14
L7	115 - 110	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-32.55	1.18	1.06
			Max. Mx	20	-11.04	210.29	-6.00
			Max. My	2	-10.98	-2.98	219.34
			Max. Vy	8	15.58	-208.45	8.31
			Max. Vx	2	-15.98	-2.98	219.34
			Max. Torque	2			-2.14
L8	110 - 105	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.52	1.19	1.07
			Max. Mx	20	-11.61	289.35	-7.10
			Max. My	2	-11.55	-3.73	300.47
			Max. Vy	8	16.08	-287.58	9.75
			Max. Vx	2	-16.48	-3.73	300.47
			Max. Torque	25			-1.65
L9	105 - 100	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.60	1.21	3.31
			Max. Mx	20	-16.33	399.54	-7.70

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	2	-16.26	-4.50	413.35
			Max. Vy	8	22.31	-397.85	11.73
			Max. Vx	2	-22.72	-4.50	413.35
			Max. Torque	25			-2.06
L10	100 - 95	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.71	1.22	3.32
			Max. Mx	20	-17.06	512.24	-8.82
			Max. My	2	-17.00	-5.26	528.16
			Max. Vy	8	22.81	-510.63	13.19
			Max. Vx	2	-23.22	-5.26	528.16
			Max. Torque	25			-2.06
L11	95 - 90	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.60	1.21	3.09
			Max. Mx	20	-21.75	650.43	-9.99
			Max. My	2	-21.69	-6.03	668.42
			Max. Vy	8	28.22	-648.89	14.62
			Max. Vx	2	-28.64	-6.03	668.42
			Max. Torque	25			-2.06
L12	90 - 84.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.81	1.21	3.05
			Max. Mx	20	-21.89	671.61	-10.17
			Max. My	2	-21.82	-6.14	689.91
			Max. Vy	8	28.30	-670.08	14.83
			Max. Vx	14	28.71	8.21	-688.43
			Max. Torque	25			-2.05
L13	84.75 - 84.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.20	1.21	2.76
			Max. Mx	20	-23.36	814.41	-11.36
			Max. My	2	-23.30	-6.92	834.77
			Max. Vy	8	28.86	-812.96	16.24
			Max. Vx	14	29.28	8.94	-833.42
			Max. Torque	25			-2.05
L14	84.25 - 79.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-63.99	1.21	2.47
			Max. Mx	20	-24.55	959.94	-12.55
			Max. My	2	-24.49	-7.68	982.36
			Max. Vy	8	29.52	-958.56	17.64
			Max. Vx	2	-29.93	-7.68	982.36
			Max. Torque	25			-2.05
L15	79.25 - 74.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-65.71	1.28	2.15
			Max. Mx	20	-25.70	1108.85	-13.74
			Max. My	2	-25.65	-8.45	1133.31
			Max. Vy	8	30.09	-1107.54	19.04
			Max. Vx	2	-30.50	-8.45	1133.31
			Max. Torque	25			-2.05
L16	74.25 - 69.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.32	1.32	1.87
			Max. Mx	20	-26.82	1260.31	-14.93
			Max. My	2	-26.77	-9.21	1286.82
			Max. Vy	8	30.55	-1259.07	20.43
			Max. Vx	2	-30.96	-9.21	1286.82
			Max. Torque	25			-2.01
L17	69.25 - 64.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-68.95	1.35	1.59
			Max. Mx	20	-27.96	1414.07	-16.11
			Max. My	2	-27.92	-9.96	1442.61
			Max. Vy	8	31.01	-1412.91	21.82
			Max. Vx	14	31.42	11.85	-1441.80
			Max. Torque	25			-2.01
L18	64.25 - 59.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.63	1.39	1.28
			Max. Mx	20	-29.13	1570.08	-17.30

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	2	-29.09	-10.71	1600.64
			Max. Vy	8	31.45	-1568.99	23.19
			Max. Vx	14	31.86	12.57	-1599.97
			Max. Torque	25			-2.01
L19	59.25 - 58.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.05	1.40	1.20
			Max. Mx	20	-29.41	1606.90	-17.57
			Max. My	2	-29.37	-10.89	1637.94
			Max. Vy	8	31.56	-1605.83	23.51
			Max. Vx	2	-31.96	-10.89	1637.94
			Max. Torque	25			-2.01
L20	58.08 - 57.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.15	1.40	1.19
			Max. Mx	20	-29.50	1614.79	-17.63
			Max. My	2	-29.46	-10.93	1645.93
			Max. Vy	20	-31.59	1614.79	-17.63
			Max. Vx	14	32.01	12.77	-1645.30
			Max. Torque	25			-2.01
L21	57.83 - 52.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.30	1.44	0.82
			Max. Mx	20	-31.02	1773.74	-18.81
			Max. My	2	-30.99	-11.67	1806.89
			Max. Vy	8	32.06	-1772.75	24.93
			Max. Vx	14	32.46	13.48	-1806.41
			Max. Torque	25			-2.01
L22	52.83 - 44.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-74.74	1.47	0.58
			Max. Mx	20	-32.06	1880.92	-19.59
			Max. My	2	-32.02	-12.17	1915.41
			Max. Vy	8	32.37	-1879.99	25.84
			Max. Vx	2	-32.77	-12.17	1915.41
			Max. Torque	25			-2.01
L23	44.25 - 43.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-79.42	1.51	0.12
			Max. Mx	20	-35.41	2085.31	-21.06
			Max. My	2	-35.38	-13.10	2122.30
			Max. Vy	8	33.07	-2084.47	27.52
			Max. Vx	14	33.47	14.85	-2122.10
			Max. Torque	25			-2.01
L24	43.25 - 38.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-81.77	1.55	-0.25
			Max. Mx	20	-37.16	2251.63	-22.24
			Max. My	2	-37.14	-13.84	2290.61
			Max. Vy	8	33.52	-2250.86	28.87
			Max. Vx	14	33.92	15.56	-2290.57
			Max. Torque	25			-2.01
L25	38.25 - 33.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-84.16	1.59	-0.63
			Max. Mx	20	-38.94	2420.14	-23.41
			Max. My	14	-38.92	16.27	-2461.23
			Max. Vy	8	33.95	-2419.45	30.21
			Max. Vx	2	-34.35	-14.58	2461.11
			Max. Torque	25			-2.01
L26	33.25 - 31.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.13	1.61	-0.79
			Max. Mx	20	-39.66	2488.14	-23.88
			Max. My	14	-39.64	16.55	-2530.08
			Max. Vy	8	34.12	-2487.48	30.74
			Max. Vx	2	-34.51	-14.87	2529.90
			Max. Torque	25			-2.00
L27	31.25 - 31	Pole	Max Tension	1	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	26	-85.27	1.61	-0.81
			Max. Mx	20	-39.77	2496.67	-23.93
			Max. My	14	-39.75	16.58	-2538.72
			Max. Vy	8	34.14	-2496.01	30.81
			Max. Vx	14	34.55	16.58	-2538.72
			Max. Torque	25			-2.00
L28	31 - 26	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-87.98	1.65	-1.21
			Max. Mx	20	-41.85	2668.25	-25.10
			Max. My	14	-41.83	17.29	-2712.43
			Max. Vy	8	34.56	-2667.68	32.13
			Max. Vx	2	-34.96	-15.64	2712.09
			Max. Torque	25			-2.00
L29	26 - 21	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-90.71	1.69	-1.61
			Max. Mx	20	-43.96	2841.89	-26.27
			Max. My	14	-43.94	17.98	-2888.20
			Max. Vy	8	34.96	-2841.39	33.45
			Max. Vx	2	-35.35	-16.37	2887.69
			Max. Torque	25			-2.00
L30	21 - 16	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-93.46	1.73	-2.01
			Max. Mx	20	-46.10	3017.44	-27.42
			Max. My	14	-46.08	18.68	-3065.86
			Max. Vy	8	35.32	-3017.01	34.75
			Max. Vx	2	-35.72	-17.10	3065.18
			Max. Torque	25			-2.00
L31	16 - 11	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-96.21	1.76	-2.41
			Max. Mx	20	-48.26	3194.75	-28.58
			Max. My	14	-48.25	19.37	-3245.28
			Max. Vy	8	35.67	-3194.40	36.05
			Max. Vx	2	-36.05	-17.82	3244.43
			Max. Torque	25			-2.00
L32	11 - 6	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-98.95	1.80	-2.80
			Max. Mx	20	-50.45	3373.75	-29.73
			Max. My	14	-50.44	20.06	-3426.37
			Max. Vy	8	36.00	-3373.48	37.33
			Max. Vx	2	-36.39	-18.53	3425.34
			Max. Torque	25			-2.00
L33	6 - 4.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-99.64	1.81	-2.89
			Max. Mx	20	-51.00	3418.75	-30.02
			Max. My	14	-50.99	20.23	-3471.91
			Max. Vy	8	36.09	-3418.50	37.65
			Max. Vx	2	-36.47	-18.71	3470.83
			Max. Torque	25			-2.00
L34	4.75 - 4.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-99.77	1.81	-2.91
			Max. Mx	20	-51.12	3427.77	-30.07
			Max. My	14	-51.12	20.26	-3481.03
			Max. Vy	8	36.09	-3427.52	37.72
			Max. Vx	14	36.48	20.26	-3481.03
			Max. Torque	25			-2.00
L35	4.5 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-102.19	1.83	-3.22
			Max. Mx	20	-53.09	3590.78	-31.10
			Max. My	14	-53.09	20.87	-3645.91
			Max. Vy	8	36.42	-3590.61	38.86
			Max. Vx	2	-36.80	-19.38	3644.67
			Max. Torque	25			-2.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	102.19	-0.00	-0.00
	Max. H_x	20	53.11	36.38	-0.21
	Max. H_z	3	39.83	-0.14	36.78
	Max. M_x	2	3644.67	-0.14	36.78
	Max. M_z	8	3590.61	-36.40	0.27
	Max. Torsion	10	1.54	-31.40	-18.41
	Min. Vert	21	39.83	36.38	-0.21
	Min. H_x	9	39.83	-36.40	0.27
	Min. H_z	15	39.83	0.14	-36.78
	Min. M_x	14	-3645.91	0.14	-36.78
	Min. M_z	20	-3590.78	36.38	-0.21
	Min. Torsion	25	-2.00	17.94	31.90

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	44.26	-0.00	-0.00	0.58	0.96	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	53.11	0.14	-36.78	-3644.67	-19.38	1.48
0.9 Dead+1.0 Wind 0 deg - No Ice	39.83	0.14	-36.78	-3610.07	-19.47	1.51
1.2 Dead+1.0 Wind 30 deg - No Ice	53.11	18.27	-31.90	-3163.68	-1805.48	0.60
0.9 Dead+1.0 Wind 30 deg - No Ice	39.83	18.27	-31.90	-3133.60	-1788.58	0.63
1.2 Dead+1.0 Wind 60 deg - No Ice	53.11	31.52	-18.62	-1855.83	-3109.19	0.01
0.9 Dead+1.0 Wind 60 deg - No Ice	39.83	31.52	-18.62	-1838.19	-3079.88	0.04
1.2 Dead+1.0 Wind 90 deg - No Ice	53.11	36.40	-0.27	-38.86	-3590.61	-0.83
0.9 Dead+1.0 Wind 90 deg - No Ice	39.83	36.40	-0.27	-38.57	-3556.76	-0.81
1.2 Dead+1.0 Wind 120 deg - No Ice	53.11	31.40	18.41	1826.59	-3091.73	-1.54
0.9 Dead+1.0 Wind 120 deg - No Ice	39.83	31.40	18.41	1808.97	-3062.63	-1.54
1.2 Dead+1.0 Wind 150 deg - No Ice	53.11	17.97	31.91	3166.17	-1761.85	-1.31
0.9 Dead+1.0 Wind 150 deg - No Ice	39.83	17.97	31.91	3135.73	-1745.46	-1.32
1.2 Dead+1.0 Wind 180 deg - No Ice	53.11	-0.14	36.78	3645.91	20.87	-0.77
0.9 Dead+1.0 Wind 180 deg - No Ice	39.83	-0.14	36.78	3611.03	20.32	-0.80
1.2 Dead+1.0 Wind 210 deg - No Ice	53.11	-18.27	31.91	3166.26	1806.86	-0.11
0.9 Dead+1.0 Wind 210 deg - No Ice	39.83	-18.27	31.91	3135.83	1789.31	-0.14
1.2 Dead+1.0 Wind 240 deg - No Ice	53.11	-31.49	18.63	1858.49	3107.53	0.28
0.9 Dead+1.0 Wind 240 deg - No Ice	39.83	-31.49	18.63	1840.50	3077.63	0.26
1.2 Dead+1.0 Wind 270 deg - No Ice	53.11	-36.38	0.21	31.10	3590.78	0.91
0.9 Dead+1.0 Wind 270 deg - No Ice	39.83	-36.38	0.21	30.57	3556.12	0.90
1.2 Dead+1.0 Wind 300 deg - No Ice	53.11	-31.43	-18.35	-1816.28	3098.97	1.55
0.9 Dead+1.0 Wind 300 deg - No Ice	39.83	-31.43	-18.35	-1799.11	3069.16	1.55
1.2 Dead+1.0 Wind 330 deg - No Ice	53.11	-17.94	-31.90	-3163.46	1759.36	1.99

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
0.9 Dead+1.0 Wind 330 deg - No Ice	39.83	-17.94	-31.90	-3133.39	1742.37	2.00
1.2 Dead+1.0 Ice+1.0 Temp	102.19	0.00	0.00	3.22	1.83	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	102.19	0.03	-10.28	-1074.18	-2.23	0.24
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	102.19	5.12	-8.91	-931.39	-532.97	-0.02
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	102.19	8.83	-5.19	-542.68	-920.68	-0.19
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	102.19	10.20	-0.05	-5.28	-1063.50	-0.36
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	102.19	8.81	5.14	542.34	-916.97	-0.45
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	102.19	5.06	8.91	937.75	-523.74	-0.31
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	102.19	-0.03	10.28	1080.34	6.29	-0.10
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	102.19	-5.11	8.91	937.80	537.00	0.12
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	102.19	-8.83	5.19	549.10	924.07	0.25
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	102.19	-10.20	0.04	9.50	1067.32	0.38
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	102.19	-8.82	-5.13	-534.31	922.24	0.45
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	102.19	-5.05	-8.91	-931.32	526.95	0.45
Dead+Wind 0 deg - Service	44.26	0.03	-7.98	-786.16	-3.43	0.33
Dead+Wind 30 deg - Service	44.26	3.97	-6.92	-682.32	-388.89	0.14
Dead+Wind 60 deg - Service	44.26	6.84	-4.04	-400.06	-670.24	0.01
Dead+Wind 90 deg - Service	44.26	7.90	-0.06	-7.95	-774.15	-0.18
Dead+Wind 120 deg - Service	44.26	6.81	3.99	394.61	-666.46	-0.34
Dead+Wind 150 deg - Service	44.26	3.90	6.92	683.70	-379.48	-0.29
Dead+Wind 180 deg - Service	44.26	-0.03	7.98	787.33	5.25	-0.17
Dead+Wind 210 deg - Service	44.26	-3.96	6.92	683.74	390.69	-0.03
Dead+Wind 240 deg - Service	44.26	-6.83	4.04	401.49	671.39	0.06
Dead+Wind 270 deg - Service	44.26	-7.89	0.05	7.13	775.73	0.20
Dead+Wind 300 deg - Service	44.26	-6.82	-3.98	-391.53	669.52	0.34
Dead+Wind 330 deg - Service	44.26	-3.89	-6.92	-682.26	380.44	0.44

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.00	-44.26	0.00	0.00	44.26	0.00	0.000%
2	0.14	-53.11	-36.78	-0.14	53.11	36.78	0.002%
3	0.14	-39.83	-36.78	-0.14	39.83	36.78	0.002%
4	18.27	-53.11	-31.90	-18.27	53.11	31.90	0.000%
5	18.27	-39.83	-31.90	-18.27	39.83	31.90	0.000%
6	31.52	-53.11	-18.62	-31.52	53.11	18.62	0.000%
7	31.52	-39.83	-18.62	-31.52	39.83	18.62	0.000%
8	36.40	-53.11	-0.27	-36.40	53.11	0.27	0.002%
9	36.40	-39.83	-0.27	-36.40	39.83	0.27	0.002%
10	31.40	-53.11	18.41	-31.40	53.11	-18.41	0.000%
11	31.40	-39.83	18.41	-31.40	39.83	-18.41	0.000%
12	17.97	-53.11	31.91	-17.97	53.11	-31.91	0.000%
13	17.97	-39.83	31.91	-17.97	39.83	-31.91	0.000%
14	-0.14	-53.11	36.78	0.14	53.11	-36.78	0.004%
15	-0.14	-39.83	36.78	0.14	39.83	-36.78	0.004%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
16	-18.27	-53.11	31.91	18.27	53.11	-31.91	0.000%
17	-18.27	-39.83	31.91	18.27	39.83	-31.91	0.000%
18	-31.49	-53.11	18.63	31.49	53.11	-18.63	0.000%
19	-31.49	-39.83	18.63	31.49	39.83	-18.63	0.000%
20	-36.39	-53.11	0.21	36.38	53.11	-0.21	0.004%
21	-36.39	-39.83	0.21	36.38	39.83	-0.21	0.008%
22	-31.43	-53.11	-18.35	31.43	53.11	18.35	0.000%
23	-31.43	-39.83	-18.35	31.43	39.83	18.35	0.000%
24	-17.94	-53.11	-31.90	17.94	53.11	31.90	0.000%
25	-17.94	-39.83	-31.90	17.94	39.83	31.90	0.000%
26	0.00	-102.19	0.00	-0.00	102.19	-0.00	0.001%
27	0.03	-102.19	-10.28	-0.03	102.19	10.28	0.000%
28	5.12	-102.19	-8.91	-5.12	102.19	8.91	0.000%
29	8.84	-102.19	-5.19	-8.83	102.19	5.19	0.000%
30	10.20	-102.19	-0.05	-10.20	102.19	0.05	0.000%
31	8.81	-102.19	5.14	-8.81	102.19	-5.14	0.000%
32	5.06	-102.19	8.91	-5.06	102.19	-8.91	0.000%
33	-0.03	-102.19	10.28	0.03	102.19	-10.28	0.000%
34	-5.11	-102.19	8.91	5.11	102.19	-8.91	0.000%
35	-8.83	-102.19	5.19	8.83	102.19	-5.19	0.000%
36	-10.20	-102.19	0.04	10.20	102.19	-0.04	0.000%
37	-8.82	-102.19	-5.13	8.82	102.19	5.13	0.000%
38	-5.05	-102.19	-8.91	5.05	102.19	8.91	0.000%
39	0.03	-44.26	-7.98	-0.03	44.26	7.98	0.002%
40	3.97	-44.26	-6.92	-3.97	44.26	6.92	0.002%
41	6.84	-44.26	-4.04	-6.84	44.26	4.04	0.002%
42	7.90	-44.26	-0.06	-7.90	44.26	0.06	0.002%
43	6.81	-44.26	4.00	-6.81	44.26	-3.99	0.002%
44	3.90	-44.26	6.92	-3.90	44.26	-6.92	0.002%
45	-0.03	-44.26	7.98	0.03	44.26	-7.98	0.002%
46	-3.96	-44.26	6.93	3.96	44.26	-6.92	0.002%
47	-6.83	-44.26	4.04	6.83	44.26	-4.04	0.002%
48	-7.90	-44.26	0.05	7.89	44.26	-0.05	0.002%
49	-6.82	-44.26	-3.98	6.82	44.26	3.98	0.002%
50	-3.89	-44.26	-6.92	3.89	44.26	6.92	0.002%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	17	0.00002664	0.00014750
3	Yes	17	0.00000001	0.00011583
4	Yes	21	0.00000001	0.00012040
5	Yes	21	0.00000001	0.00008753
6	Yes	21	0.00000001	0.00011947
7	Yes	21	0.00000001	0.00008679
8	Yes	17	0.00002670	0.00012334
9	Yes	17	0.00000001	0.00009328
10	Yes	21	0.00000001	0.00011323
11	Yes	21	0.00000001	0.00008232
12	Yes	21	0.00000001	0.00011806
13	Yes	21	0.00000001	0.00008594
14	Yes	16	0.00005554	0.00011051
15	Yes	16	0.00003773	0.00007782
16	Yes	21	0.00000001	0.00011896
17	Yes	21	0.00000001	0.00008630
18	Yes	21	0.00000001	0.00011942
19	Yes	21	0.00000001	0.00008676
20	Yes	16	0.00005566	0.00009832
21	Yes	15	0.00007868	0.00012531
22	Yes	21	0.00000001	0.00011859
23	Yes	21	0.00000001	0.00008632
24	Yes	21	0.00000001	0.00011137
25	Yes	21	0.00000001	0.00008079
26	Yes	6	0.00000001	0.00009037
27	Yes	20	0.00000001	0.00010176
28	Yes	20	0.00000001	0.00011560
29	Yes	20	0.00000001	0.00011533
30	Yes	20	0.00000001	0.00009990
31	Yes	20	0.00000001	0.00011348
32	Yes	20	0.00000001	0.00011434
33	Yes	20	0.00000001	0.00010129
34	Yes	20	0.00000001	0.00011580
35	Yes	20	0.00000001	0.00011538
36	Yes	20	0.00000001	0.00010046
37	Yes	20	0.00000001	0.00011490
38	Yes	20	0.00000001	0.00011478
39	Yes	15	0.00009372	0.00005248
40	Yes	15	0.00009362	0.00013573
41	Yes	15	0.00009361	0.00013040
42	Yes	15	0.00000001	0.00004668
43	Yes	15	0.00000001	0.00011956
44	Yes	15	0.00009361	0.00013692
45	Yes	15	0.00009370	0.00004666
46	Yes	15	0.00009362	0.00013032
47	Yes	15	0.00009362	0.00013087
48	Yes	15	0.00000001	0.00004573
49	Yes	15	0.00000001	0.00013881
50	Yes	15	0.00009363	0.00011701

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	145 - 140	19.48	39	1.066	0.005
L2	140 - 135	18.36	39	1.066	0.005
L3	135 - 130	17.24	39	1.065	0.004
L4	130 - 125	16.13	39	1.061	0.004
L5	125 - 120	15.02	39	1.055	0.003
L6	120 - 115	13.92	46	1.045	0.003
L7	115 - 110	12.84	46	1.030	0.002
L8	110 - 105	11.77	46	1.010	0.002
L9	105 - 100	10.73	46	0.982	0.002
L10	100 - 95	9.72	46	0.948	0.002
L11	95 - 90	8.75	46	0.906	0.002
L12	90 - 84.75	7.82	46	0.858	0.001

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L13	89.25 - 84.25	7.69	46	0.850	0.001
L14	84.25 - 79.25	6.81	46	0.822	0.001
L15	79.25 - 74.25	5.98	46	0.770	0.001
L16	74.25 - 69.25	5.20	46	0.715	0.001
L17	69.25 - 64.25	4.48	46	0.656	0.001
L18	64.25 - 59.25	3.83	46	0.594	0.001
L19	59.25 - 58.08	3.24	46	0.530	0.001
L20	58.08 - 57.83	3.11	46	0.515	0.001
L21	57.83 - 52.83	3.08	46	0.512	0.001
L22	52.83 - 44.25	2.57	46	0.462	0.000
L23	49.5 - 43.25	2.26	46	0.428	0.000
L24	43.25 - 38.25	1.72	46	0.392	0.000
L25	38.25 - 33.25	1.34	46	0.343	0.000
L26	33.25 - 31.25	1.01	46	0.294	0.000
L27	31.25 - 31	0.89	46	0.274	0.000
L28	31 - 26	0.87	46	0.272	0.000
L29	26 - 21	0.61	46	0.228	0.000
L30	21 - 16	0.39	46	0.183	0.000
L31	16 - 11	0.23	46	0.138	0.000
L32	11 - 6	0.10	46	0.094	0.000
L33	6 - 4.75	0.03	46	0.048	0.000
L34	4.75 - 4.5	0.02	46	0.037	0.000
L35	4.5 - 0	0.02	46	0.035	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
139.0000	VHLP2.5-11	39	18.14	1.066	0.005	392185
133.0000	LLPX310R-V1 w/ Mount Pipe	39	16.80	1.064	0.004	85981
124.0000	APXVSPP18-C-A20 w/ Mount Pipe	39	14.80	1.054	0.003	32876
122.0000	800MHz 2X50W RRH W/FILTER	46	14.36	1.050	0.003	27230
114.0000	(2) BXA-80063/4CFx5 w/ Mount Pipe	46	12.62	1.027	0.002	15162
105.0000	7770.00	46	10.73	0.982	0.002	9325
94.0000	AIR -32 B2A/B66AA	46	8.56	0.897	0.002	6196
80.0000	Side Arm Mount [SO 701-1]	46	6.10	0.779	0.001	5449
77.0000	Side Arm Mount [SO 701-1]	46	5.62	0.745	0.001	5101

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	145 - 140	90.25	2	4.941	0.020
L2	140 - 135	85.08	2	4.940	0.020
L3	135 - 130	79.91	2	4.936	0.017
L4	130 - 125	74.76	2	4.919	0.015
L5	125 - 120	69.63	2	4.892	0.013
L6	120 - 115	64.53	2	4.846	0.011
L7	115 - 110	59.50	2	4.777	0.010
L8	110 - 105	54.55	2	4.681	0.009
L9	105 - 100	49.72	2	4.554	0.008
L10	100 - 95	45.03	2	4.395	0.007
L11	95 - 90	40.53	2	4.203	0.007
L12	90 - 84.75	36.25	14	3.979	0.006
L13	89.25 - 84.25	35.63	14	3.943	0.006
L14	84.25 - 79.25	31.56	14	3.814	0.005
L15	79.25 - 74.25	27.70	14	3.573	0.005
L16	74.25 - 69.25	24.09	14	3.315	0.004
L17	69.25 - 64.25	20.76	14	3.040	0.003
L18	64.25 - 59.25	17.73	14	2.753	0.003
L19	59.25 - 58.08	15.00	14	2.456	0.003

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L20	58.08 - 57.83	14.41	14	2.385	0.002
L21	57.83 - 52.83	14.29	14	2.374	0.002
L22	52.83 - 44.25	11.92	14	2.142	0.002
L23	49.5 - 43.25	10.48	14	1.982	0.002
L24	43.25 - 38.25	7.99	14	1.815	0.002
L25	38.25 - 33.25	6.20	14	1.590	0.001
L26	33.25 - 31.25	4.66	14	1.363	0.001
L27	31.25 - 31	4.10	14	1.271	0.001
L28	31 - 26	4.04	14	1.261	0.001
L29	26 - 21	2.82	14	1.058	0.001
L30	21 - 16	1.83	14	0.850	0.001
L31	16 - 11	1.04	14	0.641	0.000
L32	11 - 6	0.48	14	0.434	0.000
L33	6 - 4.75	0.14	14	0.224	0.000
L34	4.75 - 4.5	0.09	14	0.172	0.000
L35	4.5 - 0	0.08	14	0.163	0.000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
139.0000	VHLP2.5-11	2	84.05	4.940	0.019	97609
133.0000	LLPX310R-V1 w/ Mount Pipe	2	77.85	4.931	0.016	20045
124.0000	APXVSPP18-C-A20 w/ Mount Pipe	2	68.60	4.884	0.013	7314
122.0000	800MHz 2X50W RRH W/FILTER	2	66.56	4.867	0.012	6037
114.0000	(2) BXA-80063/4CFx5 w/ Mount Pipe	2	58.50	4.760	0.010	3320
105.0000	7770.00	2	49.72	4.554	0.008	2041
94.0000	AIR -32 B2A/B66AA	2	39.66	4.162	0.006	1353
80.0000	Side Arm Mount [SO 701-1]	14	28.26	3.614	0.005	1184
77.0000	Side Arm Mount [SO 701-1]	14	26.04	3.456	0.004	1108

Compression Checks
Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K
L1	145 - 140 (1)	TP24.9233x24x0.1875	5.0000	0.0000	0.0	14.7209	-0.26
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	5.0000	0.0000	0.0	15.2704	-0.58
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	5.0000	0.0000	0.0	15.8199	-2.91
L4	130 - 125 (4)	TP27.7092x26.77x0.25	5.0000	0.0000	0.0	21.7889	-3.33
L5	125 - 120 (5)	TP28.6485x27.7092x0.25	5.0000	0.0000	0.0	22.5342	-6.79
L6	120 - 115 (6)	TP29.5877x28.6485x0.25	5.0000	0.0000	0.0	23.2794	-7.27
L7	115 - 110 (7)	TP30.5269x29.5877x0.25	5.0000	0.0000	0.0	24.0247	-10.98
L8	110 - 105 (8)	TP31.4661x30.5269x0.25	5.0000	0.0000	0.0	24.7700	-11.56
L9	105 - 100 (9)	TP32.4054x31.4661x0.25	5.0000	0.0000	0.0	25.5153	-16.26
L10	100 - 95 (10)	TP33.3446x32.4054x0.25	5.0000	0.0000	0.0	26.2606	-17.00
L11	95 - 90 (11)	TP34.2838x33.3446x0.25	5.0000	0.0000	0.0	27.0058	-21.69
L12	90 - 84.75 (12)	TP35.27x34.2838x0.25	5.2500	0.0000	0.0	27.1176	-21.82

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K
L13	84.75 - 84.25 (13)	TP34.8508x33.9247x0.3125	5.0000	0.0000	0.0	34.2577	-23.30
L14	84.25 - 79.25 (14)	TP35.777x34.8508x0.3125	5.0000	0.0000	0.0	35.1763	-24.49
L15	79.25 - 74.25 (15)	TP36.7031x35.777x0.3125	5.0000	0.0000	0.0	36.0950	-25.65
L16	74.25 - 69.25 (16)	TP37.6293x36.7031x0.3125	5.0000	0.0000	0.0	37.0136	-26.77
L17	69.25 - 64.25 (17)	TP38.5554x37.6293x0.3125	5.0000	0.0000	0.0	37.9322	-27.92
L18	64.25 - 59.25 (18)	TP39.4816x38.5554x0.3125	5.0000	0.0000	0.0	38.8508	-29.09
L19	59.25 - 58.08 (19)	TP39.6983x39.4816x0.3125	1.1700	0.0000	0.0	39.0658	-29.37
L20	58.08 - 57.83 (20)	TP39.7446x39.6983x0.4125	0.2500	0.0000	0.0	51.4965	-29.46
L21	57.83 - 52.83 (21)	TP40.6707x39.7446x0.4188	5.0000	0.0000	0.0	53.4994	-30.99
L22	52.83 - 44.25 (22)	TP42.26x40.6707x0.4125	8.5800	0.0000	0.0	53.5167	-32.02
L23	44.25 - 43.25 (23)	TP41.82x40.6625x0.475	6.2500	0.0000	0.0	62.3338	-35.38
L24	43.25 - 38.25 (24)	TP42.746x41.82x0.475	5.0000	0.0000	0.0	63.7299	-37.14
L25	38.25 - 33.25 (25)	TP43.672x42.746x0.475	5.0000	0.0000	0.0	65.1260	-38.92
L26	33.25 - 31.25 (26)	TP44.0424x43.672x0.475	2.0000	0.0000	0.0	65.6844	-39.64
L27	31.25 - 31 (27)	TP44.0887x44.0424x0.5375	0.2500	0.0000	0.0	74.2995	-39.75
L28	31 - 26 (28)	TP45.0147x44.0887x0.5375	5.0000	0.0000	0.0	75.8793	-41.83
L29	26 - 21 (29)	TP45.9408x45.0147x0.525	5.0000	0.0000	0.0	75.6786	-43.94
L30	21 - 16 (30)	TP46.8668x45.9408x0.525	5.0000	0.0000	0.0	77.2216	-46.08
L31	16 - 11 (31)	TP47.7928x46.8668x0.525	5.0000	0.0000	0.0	78.7647	-48.25
L32	11 - 6 (32)	TP48.7188x47.7928x0.5188	5.0000	0.0000	0.0	79.3620	-50.44
L33	6 - 4.75 (33)	TP48.9503x48.7188x0.5188	1.2500	0.0000	0.0	79.7431	-50.99
L34	4.75 - 4.5 (34)	TP48.9966x48.9503x0.6125	0.2500	0.0000	0.0	94.0623	-51.12
L35	4.5 - 0 (35)	TP49.83x48.9966x0.6	4.5000	0.0000	0.0	93.7536	-53.09

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	M_{uy} kip-ft
L1	145 - 140 (1)	TP24.9233x24x0.1875	1.07	0.00
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	7.82	0.00
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	26.70	0.00
L4	130 - 125 (4)	TP27.7092x26.77x0.25	51.70	0.00
L5	125 - 120 (5)	TP28.6485x27.7092x0.25	92.79	0.00
L6	120 - 115 (6)	TP29.5877x28.6485x0.25	143.37	0.00
L7	115 - 110 (7)	TP30.5269x29.5877x0.25	219.64	0.00
L8	110 - 105 (8)	TP31.4661x30.5269x0.25	300.73	0.00
L9	105 - 100 (9)	TP32.4054x31.4661x0.25	413.38	0.00
L10	100 - 95 (10)	TP33.3446x32.4054x0.25	528.19	0.00
L11	95 - 90 (11)	TP34.2838x33.3446x0.25	668.45	0.00
L12	90 - 84.75 (12)	TP35.27x34.2838x0.25	689.94	0.00
L13	84.75 - 84.25 (13)	TP34.8508x33.9247x0.3125	834.80	0.00
L14	84.25 - 79.25 (14)	TP35.777x34.8508x0.3125	982.39	0.00
L15	79.25 - 74.25 (15)	TP36.7031x35.777x0.3125	1133.34	0.00
L16	74.25 - 69.25 (16)	TP37.6293x36.7031x0.3125	1286.85	0.00
L17	69.25 - 64.25 (17)	TP38.5554x37.6293x0.3125	1442.65	0.00

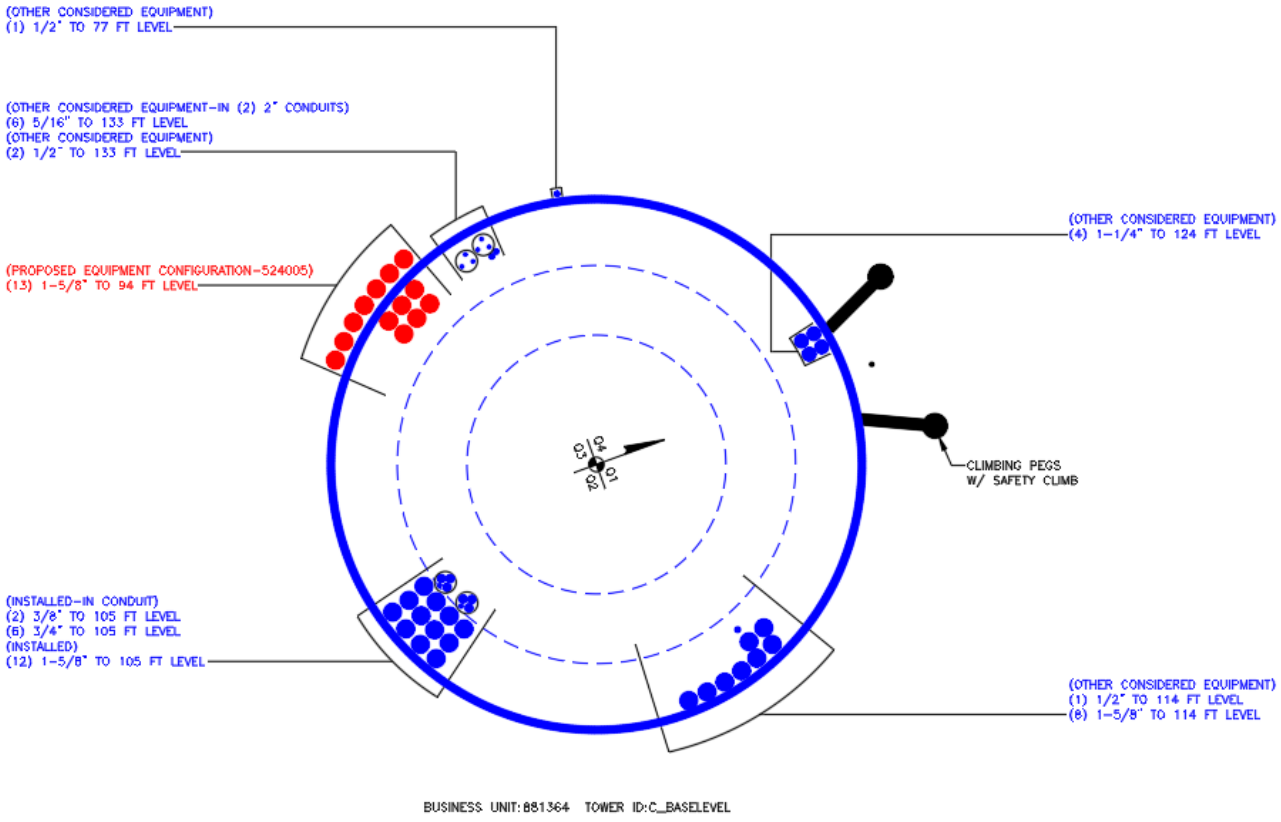
Section No.	Elevation ft	Size	M_{ux} kip-ft	M_{uy} kip-ft
L18	64.25 - 59.25 (18)	TP39.4816x38.5554x0.3125	1600.68	0.00
L19	59.25 - 58.08 (19)	TP39.6983x39.4816x0.3125	1637.97	0.00
L20	58.08 - 57.83 (20)	TP39.7446x39.6983x0.4125	1645.97	0.00
L21	57.83 - 52.83 (21)	TP40.6707x39.7446x0.4188	1806.93	0.00
L22	52.83 - 44.25 (22)	TP42.26x40.6707x0.4125	1915.45	0.00
L23	44.25 - 43.25 (23)	TP41.82x40.6625x0.475	2122.34	0.00
L24	43.25 - 38.25 (24)	TP42.746x41.82x0.475	2290.66	0.00
L25	38.25 - 33.25 (25)	TP43.672x42.746x0.475	2461.28	0.00
L26	33.25 - 31.25 (26)	TP44.0424x43.672x0.475	2530.13	0.00
L27	31.25 - 31 (27)	TP44.0887x44.0424x0.5375	2538.77	0.00
L28	31 - 26 (28)	TP45.0147x44.0887x0.5375	2712.49	0.00
L29	26 - 21 (29)	TP45.9408x45.0147x0.525	2888.26	0.00
L30	21 - 16 (30)	TP46.8668x45.9408x0.525	3065.92	0.00
L31	16 - 11 (31)	TP47.7928x46.8668x0.525	3245.34	0.00
L32	11 - 6 (32)	TP48.7188x47.7928x0.5188	3426.43	0.00
L33	6 - 4.75 (33)	TP48.9503x48.7188x0.5188	3471.97	0.00
L34	4.75 - 4.5 (34)	TP48.9966x48.9503x0.6125	3481.08	0.00
L35	4.5 - 0 (35)	TP49.83x48.9966x0.6	3645.97	0.00

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	Actual T_u kip-ft
L1	145 - 140 (1)	TP24.9233x24x0.1875	0.43	0.00
L2	140 - 135 (2)	TP25.8467x24.9233x0.1875	1.69	1.59
L3	135 - 130 (3)	TP26.77x25.8467x0.1875	4.76	1.62
L4	130 - 125 (4)	TP27.7092x26.77x0.25	5.24	1.62
L5	125 - 120 (5)	TP28.6485x27.7092x0.25	9.87	1.62
L6	120 - 115 (6)	TP29.5877x28.6485x0.25	10.37	1.62
L7	115 - 110 (7)	TP30.5269x29.5877x0.25	15.97	0.55
L8	110 - 105 (8)	TP31.4661x30.5269x0.25	16.48	0.55
L9	105 - 100 (9)	TP32.4054x31.4661x0.25	22.72	1.53
L10	100 - 95 (10)	TP33.3446x32.4054x0.25	23.22	1.52
L11	95 - 90 (11)	TP34.2838x33.3446x0.25	28.64	1.52
L12	90 - 84.75 (12)	TP35.27x34.2838x0.25	28.71	1.52
L13	84.75 - 84.25 (13)	TP34.8508x33.9247x0.3125	29.27	1.52
L14	84.25 - 79.25 (14)	TP35.777x34.8508x0.3125	29.93	1.52
L15	79.25 - 74.25 (15)	TP36.7031x35.777x0.3125	30.50	1.49
L16	74.25 - 69.25 (16)	TP37.6293x36.7031x0.3125	30.96	1.49
L17	69.25 - 64.25 (17)	TP38.5554x37.6293x0.3125	31.42	1.48
L18	64.25 - 59.25 (18)	TP39.4816x38.5554x0.3125	31.86	1.48
L19	59.25 - 58.08 (19)	TP39.6983x39.4816x0.3125	31.96	1.48
L20	58.08 - 57.83 (20)	TP39.7446x39.6983x0.4125	31.99	1.48
L21	57.83 - 52.83 (21)	TP40.6707x39.7446x0.4188	32.46	1.48
L22	52.83 - 44.25 (22)	TP42.26x40.6707x0.4125	32.77	1.48
L23	44.25 - 43.25 (23)	TP41.82x40.6625x0.475	33.47	1.48
L24	43.25 - 38.25 (24)	TP42.746x41.82x0.475	33.92	1.48
L25	38.25 - 33.25 (25)	TP43.672x42.746x0.475	34.35	0.77
L26	33.25 - 31.25 (26)	TP44.0424x43.672x0.475	34.51	0.77
L27	31.25 - 31 (27)	TP44.0887x44.0424x0.5375	34.55	0.77
L28	31 - 26 (28)	TP45.0147x44.0887x0.5375	34.96	0.77
L29	26 - 21 (29)	TP45.9408x45.0147x0.525	35.35	0.77
L30	21 - 16 (30)	TP46.8668x45.9408x0.525	35.71	0.77
L31	16 - 11 (31)	TP47.7928x46.8668x0.525	36.05	0.77
L32	11 - 6 (32)	TP48.7188x47.7928x0.5188	36.38	0.77
L33	6 - 4.75 (33)	TP48.9503x48.7188x0.5188	36.47	0.77
L34	4.75 - 4.5 (34)	TP48.9966x48.9503x0.6125	36.48	0.77
L35	4.5 - 0 (35)	TP49.83x48.9966x0.6	36.80	0.77

APPENDIX B

BASE LEVEL DRAWING


(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 77 FT LEVEL
(OTHER CONSIDERED EQUIPMENT-IN (2) 2" CONDUITS)
(6) 5/16" TO 133 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 1/2" TO 133 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION-524005)
(13) 1-5/8" TO 94 FT LEVEL
(INSTALLED-IN CONDUIT)
(2) 3/8" TO 105 FT LEVEL
(6) 3/4" TO 105 FT LEVEL
(INSTALLED)
(12) 1-5/8" TO 105 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(4) 1-1/4" TO 124 FT LEVEL
CLIMBING PEGS
W/ SAFETY CLIMB
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 114 FT LEVEL
(8) 1-5/8" TO 114 FT LEVEL
Q1
Q2
Q3
Q4
BUSINESS UNIT: 881364 TOWER ID:C_BASELEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

CCIpole

per TIA-222- H

Site BU: 881364

Work Order: 1859452

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	145	15	0	18	24	26.77	0.1875	Auto	A607-65
2	130	45.25	4.5	18	26.77	35.27	0.25	Auto	A607-65
3	89.25	45	5.25	18	33.92	42.26	0.3125	Auto	A607-65
4	49.5	49.5	0	18	40.66	49.83	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	4.75	31.25	plate	CCI-AFP-085125	3			o						o				o					
2	31.25	58.08	plate	CCI-AFP-060100	3			o						o				o					
3	0	4.75	plate	FP 1.25 x 8.5_1	3		c							c					o				
4																							
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_u (in)	Net Area (in^2)	Bolt Hole Size (in)	Reinforcement Material
1	8.5	1.25	10.625	0.625	51.000	51.000	17.000	9.063	1.1875	A572-65
2	6	1	6	0.5	30.000	30.000	16.000	4.750	1.1875	A572-65
3	1.25	8.5	10.625	4.25	n/a	n/a	0.000	10.625	0.0000	A572-65

TNX Geometry Input

Increment (ft): 5 Export to TNX

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	145 - 140	5		18	24.000	24.923	0.1875	A607-65	1.000
2	140 - 135	5		18	24.923	25.847	0.1875	A607-65	1.000
3	135 - 130	5	0	18	25.847	26.770	0.1875	A607-65	1.000
4	130 - 125	5		18	26.770	27.709	0.25	A607-65	1.000
5	125 - 120	5		18	27.709	28.648	0.25	A607-65	1.000
6	120 - 115	5		18	28.648	29.588	0.25	A607-65	1.000
7	115 - 110	5		18	29.588	30.527	0.25	A607-65	1.000
8	110 - 105	5		18	30.527	31.466	0.25	A607-65	1.000
9	105 - 100	5		18	31.466	32.405	0.25	A607-65	1.000
10	100 - 95	5		18	32.405	33.345	0.25	A607-65	1.000
11	95 - 90	5		18	33.345	34.284	0.25	A607-65	1.000
12	90 - 89.25	5.25	4.5	18	34.284	35.270	0.25	A607-65	1.000
13	89.25 - 84.25	5		18	33.925	34.851	0.3125	A607-65	1.000
14	84.25 - 79.25	5		18	34.851	35.777	0.3125	A607-65	1.000
15	79.25 - 74.25	5		18	35.777	36.703	0.3125	A607-65	1.000
16	74.25 - 69.25	5		18	36.703	37.629	0.3125	A607-65	1.000
17	69.25 - 64.25	5		18	37.629	38.555	0.3125	A607-65	1.000
18	64.25 - 59.25	5		18	38.555	39.482	0.3125	A607-65	1.000
19	59.25 - 58.08	1.17		18	39.482	39.698	0.3125	A607-65	1.000
20	58.08 - 57.83	0.25		18	39.698	39.745	0.4125	A607-65	1.109
21	57.83 - 52.83	5		18	39.745	40.671	0.41875	A607-65	1.085
22	52.83 - 49.5	8.58	5.25	18	40.671	42.260	0.4125	A607-65	1.096
23	49.5 - 43.25	6.25		18	40.663	41.820	0.475	A607-65	1.080
24	43.25 - 38.25	5		18	41.820	42.746	0.475	A607-65	1.074
25	38.25 - 33.25	5		18	42.746	43.672	0.475	A607-65	1.068
26	33.25 - 31.25	2		18	43.672	44.042	0.475	A607-65	1.065
27	31.25 - 31	0.25		18	44.042	44.089	0.5375	A607-65	1.129
28	31 - 26	5		18	44.089	45.015	0.5375	A607-65	1.120
29	26 - 21	5		18	45.015	45.941	0.525	A607-65	1.138
30	21 - 16	5		18	45.941	46.867	0.525	A607-65	1.129
31	16 - 11	5		18	46.867	47.793	0.525	A607-65	1.121
32	11 - 6	5		18	47.793	48.719	0.51875	A607-65	1.127
33	6 - 4.75	1.25		18	48.719	48.950	0.51875	A607-65	1.125
34	4.75 - 4.5	0.25		18	48.950	48.997	0.6125	A607-65	0.954
35	4.5 - 0	4.5		18	48.997	49.830	0.6	A607-65	0.968

TNX Section Forces

Increment (ft):	5	TNX Output		
	Section Height (ft)	P_u (K)	M_{ux} (kip-ft)	V_u (K)
1	145 - 140	0.26	1.07	0.43
2	140 - 135	0.58	7.82	1.69
3	135 - 130	2.91	26.70	4.76
4	130 - 125	3.33	51.70	5.24
5	125 - 120	6.79	92.79	9.87
6	120 - 115	7.27	143.37	10.37
7	115 - 110	10.98	219.64	15.97
8	110 - 105	11.56	300.73	16.48
9	105 - 100	16.26	413.37	22.72
10	100 - 95	17.00	528.19	23.22
11	95 - 90	21.69	668.45	28.64
12	90 - 89.25	21.82	689.94	28.71
13	89.25 - 84.25	23.30	834.80	29.27
14	84.25 - 79.25	24.49	982.39	29.93
15	79.25 - 74.25	25.65	1133.34	30.50
16	74.25 - 69.25	26.77	1286.85	30.96
17	69.25 - 64.25	27.92	1442.65	31.42
18	64.25 - 59.25	29.09	1600.68	31.86
19	59.25 - 58.08	29.37	1637.98	31.96
20	58.08 - 57.83	29.46	1645.96	31.99
21	57.83 - 52.83	30.99	1806.93	32.46
22	52.83 - 49.5	32.02	1915.45	32.77
23	49.5 - 43.25	35.38	2122.34	33.47
24	43.25 - 38.25	37.14	2290.66	33.92
25	38.25 - 33.25	38.92	2461.28	34.35
26	33.25 - 31.25	39.64	2530.14	34.51
27	31.25 - 31	39.75	2538.77	34.55
28	31 - 26	41.83	2712.49	34.96
29	26 - 21	43.94	2888.26	35.35
30	21 - 16	46.08	3065.92	35.71
31	16 - 11	48.25	3245.34	36.05
32	11 - 6	50.44	3426.43	36.38
33	6 - 4.75	50.99	3471.96	36.47
34	4.75 - 4.5	51.12	3481.08	36.48
35	4.5 - 0	53.09	3645.97	36.80

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
145 - 140	Pole	TP24.923x24x0.1875	Pole	0.2%	Pass
140 - 135	Pole	TP25.847x24.923x0.1875	Pole	1.4%	Pass
135 - 130	Pole	TP26.77x25.847x0.1875	Pole	4.8%	Pass
130 - 125	Pole	TP27.709x26.77x0.25	Pole	5.8%	Pass
125 - 120	Pole	TP28.648x27.709x0.25	Pole	9.9%	Pass
120 - 115	Pole	TP29.588x28.648x0.25	Pole	14.3%	Pass
115 - 110	Pole	TP30.527x29.588x0.25	Pole	20.8%	Pass
110 - 105	Pole	TP31.466x30.527x0.25	Pole	26.9%	Pass
105 - 100	Pole	TP32.405x31.466x0.25	Pole	35.3%	Pass
100 - 95	Pole	TP33.345x32.405x0.25	Pole	42.8%	Pass
95 - 90	Pole	TP34.284x33.345x0.25	Pole	51.8%	Pass
90 - 89.25	Pole	TP35.27x34.284x0.25	Pole	53.1%	Pass
89.25 - 84.25	Pole	TP34.851x33.925x0.3125	Pole	46.8%	Pass
84.25 - 79.25	Pole	TP35.777x34.851x0.3125	Pole	52.5%	Pass
79.25 - 74.25	Pole	TP36.703x35.777x0.3125	Pole	57.9%	Pass
74.25 - 69.25	Pole	TP37.629x36.703x0.3125	Pole	62.9%	Pass
69.25 - 64.25	Pole	TP38.555x37.629x0.3125	Pole	67.7%	Pass
64.25 - 59.25	Pole	TP39.482x38.555x0.3125	Pole	72.1%	Pass
59.25 - 58.08	Pole	TP39.698x39.482x0.3125	Pole	73.1%	Pass
58.08 - 57.83	Pole + Reinf.	TP39.745x39.698x0.4125	Reinf. 2 Tension Rupture	72.6%	Pass
57.83 - 52.83	Pole + Reinf.	TP40.671x39.745x0.4188	Reinf. 2 Tension Rupture	76.5%	Pass
52.83 - 49.5	Pole + Reinf.	TP42.26x40.671x0.4125	Reinf. 2 Tension Rupture	79.1%	Pass
49.5 - 43.25	Pole + Reinf.	TP41.82x40.663x0.475	Reinf. 2 Tension Rupture	75.2%	Pass
43.25 - 38.25	Pole + Reinf.	TP42.746x41.82x0.475	Reinf. 2 Tension Rupture	78.1%	Pass
38.25 - 33.25	Pole + Reinf.	TP43.672x42.746x0.475	Reinf. 2 Tension Rupture	80.8%	Pass
33.25 - 31.25	Pole + Reinf.	TP44.042x43.672x0.475	Reinf. 2 Tension Rupture	81.8%	Pass
31.25 - 31	Pole + Reinf.	TP44.089x44.042x0.5375	Reinf. 1 Compression	64.5%	Pass
31 - 26	Pole + Reinf.	TP45.015x44.089x0.5375	Reinf. 1 Compression	66.5%	Pass
26 - 21	Pole + Reinf.	TP45.941x45.015x0.525	Reinf. 1 Compression	68.5%	Pass
21 - 16	Pole + Reinf.	TP46.867x45.941x0.525	Reinf. 1 Compression	70.3%	Pass
16 - 11	Pole + Reinf.	TP47.793x46.867x0.525	Reinf. 1 Compression	72.0%	Pass
11 - 6	Pole + Reinf.	TP48.719x47.793x0.5188	Reinf. 1 Compression	73.6%	Pass
6 - 4.75	Pole + Reinf.	TP48.95x48.719x0.5188	Reinf. 1 Compression	74.0%	Pass
4.75 - 4.5	Pole + Reinf.	TP48.997x48.95x0.6125	Reinf. 3 Connection	73.2%	Pass
4.5 - 0	Pole + Reinf.	TP49.83x48.997x0.6	Reinf. 3 Connection	74.5%	Pass
				Summary	
			Pole	73.1%	Pass
			Reinforcement	81.8%	Pass
			Overall	81.8%	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
145 - 140	1138	n/a	1138	14.72	n/a	14.72	0.2%			
140 - 135	1270	n/a	1270	15.27	n/a	15.27	1.4%			
135 - 130	1412	n/a	1412	15.82	n/a	15.82	4.8%			
130 - 125	2075	n/a	2075	21.79	n/a	21.79	5.8%			
125 - 120	2295	n/a	2295	22.53	n/a	22.53	9.9%			
120 - 115	2531	n/a	2531	23.28	n/a	23.28	14.3%			
115 - 110	2781	n/a	2781	24.02	n/a	24.02	20.8%			
110 - 105	3048	n/a	3048	24.77	n/a	24.77	26.9%			
105 - 100	3332	n/a	3332	25.51	n/a	25.51	35.3%			
100 - 95	3632	n/a	3632	26.26	n/a	26.26	42.8%			
95 - 90	3951	n/a	3951	27.00	n/a	27.00	51.8%			
90 - 89.25	4000	n/a	4000	27.12	n/a	27.12	53.1%			
89.25 - 84.25	5161	n/a	5161	34.26	n/a	34.26	46.8%			
84.25 - 79.25	5588	n/a	5588	35.18	n/a	35.18	52.5%			
79.25 - 74.25	6037	n/a	6037	36.09	n/a	36.09	57.9%			
74.25 - 69.25	6510	n/a	6510	37.01	n/a	37.01	62.9%			
69.25 - 64.25	7006	n/a	7006	37.93	n/a	37.93	67.7%			
64.25 - 59.25	7528	n/a	7528	38.85	n/a	38.85	72.1%			
59.25 - 58.08	7653	n/a	7653	39.06	n/a	39.06	73.1%			
58.08 - 57.83	7749	2376	10125	39.11	18.00	57.11	59.0%		72.6%	
57.83 - 52.83	8311	2678	10989	40.03	18.00	58.03	61.8%		76.5%	
52.83 - 49.5	8696	2758	11455	40.64	18.00	58.64	64.1%		79.1%	
49.5 - 43.25	10776	2849	13624	49.33	18.00	67.33	56.8%		75.2%	
43.25 - 38.25	11511	2974	14486	50.43	18.00	68.43	59.2%		78.1%	
38.25 - 33.25	12280	3102	15383	51.53	18.00	69.53	61.6%		80.8%	
33.25 - 31.25	12597	3155	15751	51.97	18.00	69.97	62.5%		81.8%	
31.25 - 31	12721	5200	17921	52.03	31.88	83.90	56.2%	64.5%		
31 - 26	13542	5414	18956	53.13	31.88	85.01	58.3%	66.5%		
26 - 21	14398	5632	20030	54.23	31.88	86.11	60.3%	68.5%		
21 - 16	15289	5855	21143	55.33	31.88	87.21	62.2%	70.3%		
16 - 11	16215	6082	22297	56.44	31.88	88.31	64.1%	72.0%		
11 - 6	17179	6314	23493	57.54	31.88	89.41	65.8%	73.6%		
6 - 4.75	17426	6372	23798	57.81	31.88	89.69	66.3%	74.0%		
4.75 - 4.5	17329	10355	27684	57.87	31.88	89.74	55.4%			73.2%
4.5 - 0	18234	10656	28891	58.86	31.88	90.74	56.9%			74.5%

Note: Section capacity checked in 5 degree increments.

Rating per TIA-222-H Section 15.5.

Monopole Flange Plate Connection

Elevation = 130 ft.

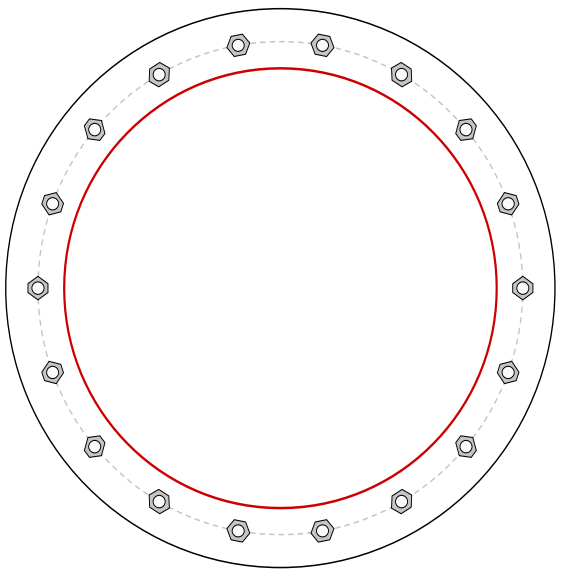
BU #	881364
Site Name	Newington
Order #	524005 Rev. 0

TIA-222 Revision	H

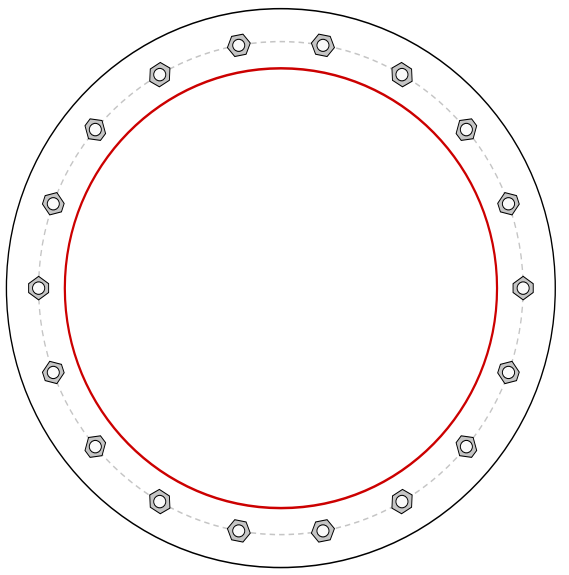
Applied Loads	
Moment (kip-ft)	26.70
Axial Force (kips)	2.91
Shear Force (kips)	4.76

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - External



Connection Properties

Bolt Data

(18) 3/4" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 30" BC

Top Plate Data

34" OD x 1.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

Top Stiffener Data

N/A

Top Pole Data

26.77" x 0.1875" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Bottom Plate Data

34" OD x 1.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

26.77" x 0.25" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	2.21	
Allowable (kips)	30.06	
Stress Rating:	**7.0%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	0.98	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	**2.1%**	**Pass**
Tension Side Stress Rating:	**0.9%**	**Pass**

Bottom Plate Capacity

Max Stress (ksi):	0.98	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	**2.1%**	**Pass**
Tension Side Stress Rating:	**0.9%**	**Pass**

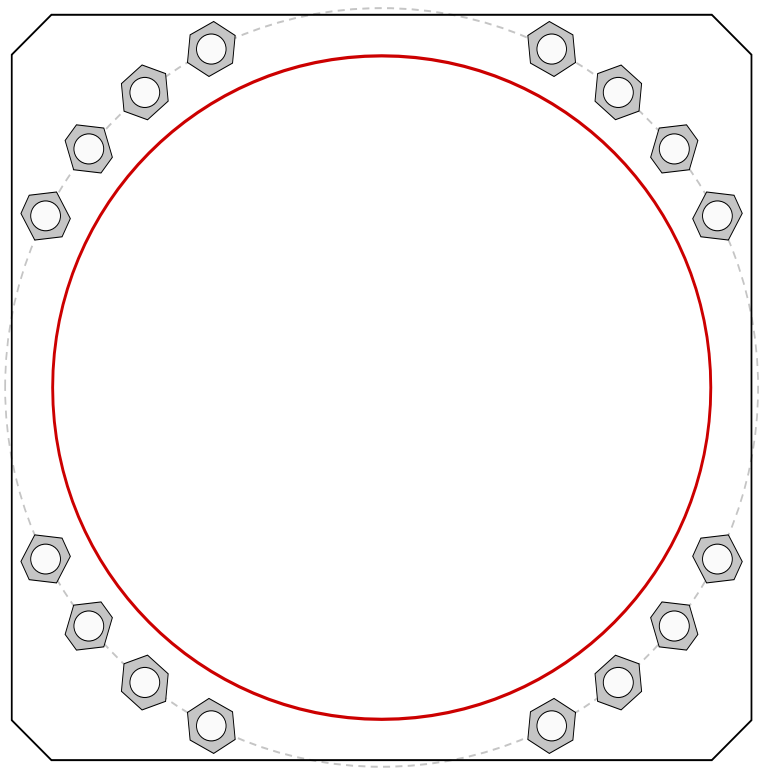
Monopole Base Plate Connection

Site Info	
BU #	881364
Site Name	Newington
Order #	524005 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	1.25

Applied Loads	
Moment (kip-ft)	3645.97
Axial Force (kips)	53.09
Shear Force (kips)	36.80

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

(16) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 57" BC

Anchor Spacing: 6 in

Base Plate Data

56" OD x 3" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

Stiffener Data

N/A

Pole Data

49.83" x 0.375" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

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

Pu_c = 195.09	ϕPn_c = 268.39	**Stress Rating**
Vu = 2.3	ϕVn = 120.77	**69.3%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	32.32	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	**68.4%**	**Pass**

Drilled Pier Foundation

BU # :	881364
Site Name:	Newington
Order Number:	524005 Rev. 0

TIA-222 Revison:	H
Tower Type:	Monopole

Applied Loads	Comp.	Uplift
Moment (kip-ft)	3646	
Axial Force (kips)	53	
Shear Force (kips)	37	

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

Pier Design Data		
Depth	25	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
From 0.5' above grade to 25' below grade		
Pier Diameter	7	ft
Rebar Quantity	28	
Rebar Size	11	
Clear Cover to Ties	4	in
Tie Size	5	

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

Analysis Results		
Soil Lateral Check	*Compression*	*Uplift*
$D_{v=0}$ (ft from TOC)	5.88	-
Soil Safety Factor	2.48	-
Max Moment (kip-ft)	3825.56	-
Rating*	*51.2%*	-
Soil Vertical Check	*Compression*	*Uplift*
Skin Friction (kips)	0.00	-
End Bearing (kips)	346.36	-
Weight of Concrete (kips)	133.42	-
Total Capacity (kips)	346.36	-
Axial (kips)	186.42	-
Rating*	*51.3%*	-
Reinforced Concrete Check	*Compression*	*Uplift*
Critical Depth (ft from TOC)	5.56	-
Critical Moment (kip-ft)	3824.55	-
Critical Moment Capacity	6704.54	-
Rating*	*54.3%*	-

Soil Interaction Rating*	**51.3%**
Structural Foundation Rating*	**54.3%**

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

*Rating per TIA-222-H Section 15.5

Soil Profile

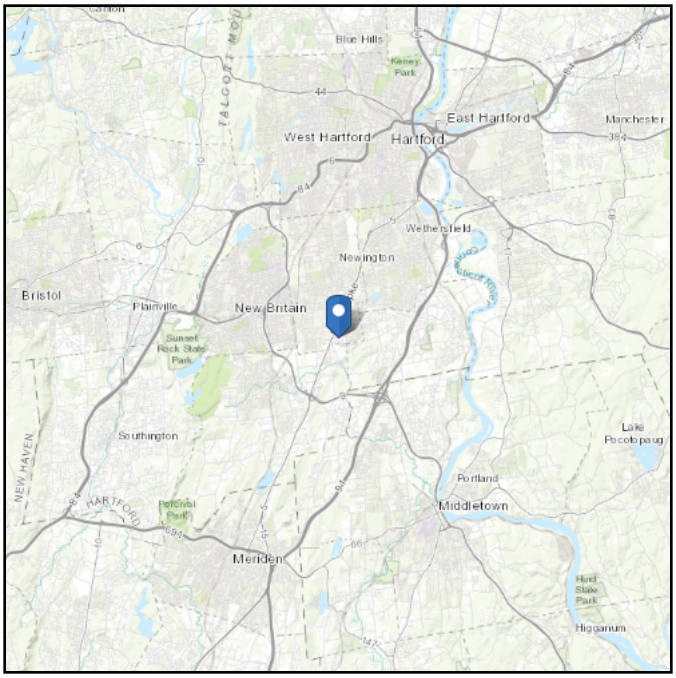
Groundwater Depth	10	# of Layers	6

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	3	3	125	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	3	4	1	125	150	0	34	0.000	0.000	0.00	0.80			Cohesionless
3	4	10	6	125	150	0	34	0.000	0.000	0.00	0.80			Cohesionless
4	10	12	2	65	87.6	0	34	0.000	0.000	0.00	0.80			Cohesionless
5	12	15	3	65	87.6	0	30	0.000	0.000	0.00	0.80			Cohesionless
6	15	25	10	65	87.6	0	30	0.000	0.000	0.00	1.20	12		Cohesionless

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-10	**Elevation:**	141.56 ft (NAVD 88)
Risk Category:	II	**Latitude:**	41.6552
Soil Class:	D - Stiff Soil	**Longitude:**	-72.721442



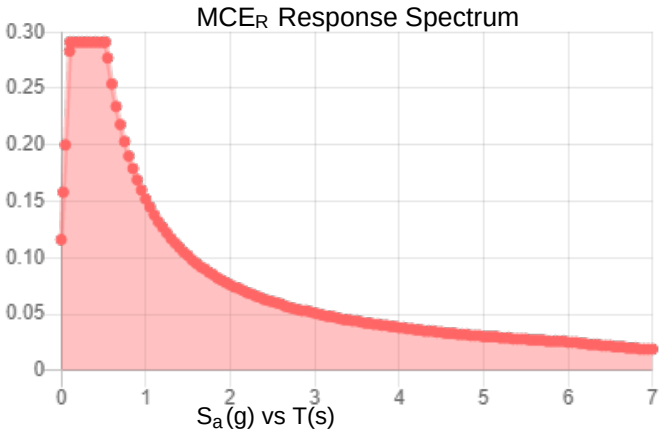
Seismic

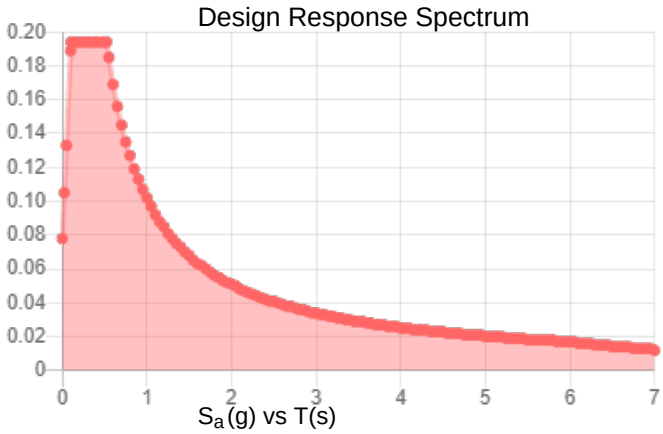
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.182	S_{DS} :	0.194
S_1 :	0.063	S_{D1} :	0.102
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.092
S_{MS} :	0.291	PGA_M :	0.148
S_{M1} :	0.152	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Wed Jun 17 2020

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:	Wed Jun 17 2020

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.

Exhibit E

Mount Analysis

Date: **June 15, 2020**

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

Engineered Tower Solutions, PLLC
8774 Yates Drive, Suite 150
Westminster, CO 80031
(919) 782-2710
jason.hill@ets-pllc.com

Subject:	**Mount Analysis Report**	
Carrier Designation:	**T-Mobile Equipment Change Out**	
	Carrier Site Number:	CT11782A
	Carrier Site Name:	CT782/Costello MP
Crown Castle Designation:	**Crown Castle BU Number:**	881364
	Crown Castle Site Name:	Newington
	Crown Castle JDE Job Number:	613803
	Crown Castle Order Number:	524005 Rev. 0
Engineering Firm Designation:	**ETS, PLLC Report Designation:**	202680.14
Site Data:	**123 Costelo Road, Newington, Hartford County, CT 06111** **Latitude: 41º 39' 18.72" Longitude: -72º 43' 17.19"**	
Structure Information:	**Tower Height & Type:**	**145.0 ft Monopole**
	Mount Elevation:	**94.0 ft**
	Mount Type:	**14.5 ft Platform Mount**

Dear Darcy Tarr,

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

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

Platform Mount **Sufficient**

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.

Mount analysis prepared by: Jason A. Hill, EIT

Respectfully Submitted by:

Frederic Geoffrey Bost, PE
President/Owner
(919) 782-2710
Geoff.Bost@ets-pllc.com

6/15/20

TABLE OF CONTENTS

1) INTRODUCTION

This mount is an existing (3)-sector 14.5 ft Platform mount designed by Site Pro 1.

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 Factor at Base:	1.0
Topographic Factor at Mount:	1.0
Ice Thickness:	2.00 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.182
Seismic S_1:	0.064
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lbs
Man Live Load at Mount Pipes:	500 lbs

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
94.0	95.0	3	Ericsson	AIR -32 B2A/B66AA	(1) 14.5 ft Platform Mount
		3	Ericsson	AIR6449 B41	
		3	Ericsson	ERICSSON AIR 21 B2A B4P_T-Mobile	
		3	RFS/Celwave	APXVAARR24_43-U-NA20	
		3	Ericsson	RADIO 4449 B71 B85A_T-Mobile	
		3	Ericsson	RRUS 4415 B25_CCIV2	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Carrier Application	T-Mobile	06/05/2020	CCIsites
4-Structural Analysis Report	Paul J. Ford and Company	8511891	CCIsites
Level Drawing (Proposed)	T-Mobile Northeast LLC	06/08/2020	CCIsites
4-Mount Analysis Report	Engineered Tower Solutions, PLLC	8494791	CCIsites

3.1) Analysis Method

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

A tool internally developed, using Microsoft Excel, by ETS, PLLC was used to calculate wind loading on all appurtenances, dishes, and mount members 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 *Mount Analysis* (Revision D).

3.2) Assumptions

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

Channel, Solid Round, Angle, Plate, Threaded Rod	ASTM A36 (Gr. 36)
HSS (Rectangular)	ASTM A500 (Gr. B-46)
HSS (Round)	ASTM A500 (Gr. B-42)
Pipe	ASTM A53 (Gr. 35)
Connection Bolts	ASTM A325
U-Bolt	SAE J429 (Gr. 2)

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

4) ANALYSIS RESULTS

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

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1	Face Mount - Horizontal	FM-BOT-0	94.0	28.8	Pass
	Side Arm - Horizontal	SA-3		93.5	Pass
	Support Rail - Horizontal	FM-TOP-0		38.2	Pass
	Side Arm - Brace	BRACE-1		41.8	Pass
	Side Arm - Grate Support	GRATE-H-120-2		49.0	Pass
	Mount Pipe	MP3		59.5	Pass
2	Mount to Tower Connection	-		65.6	Pass

Structure Rating (max from all components) =	93.5%

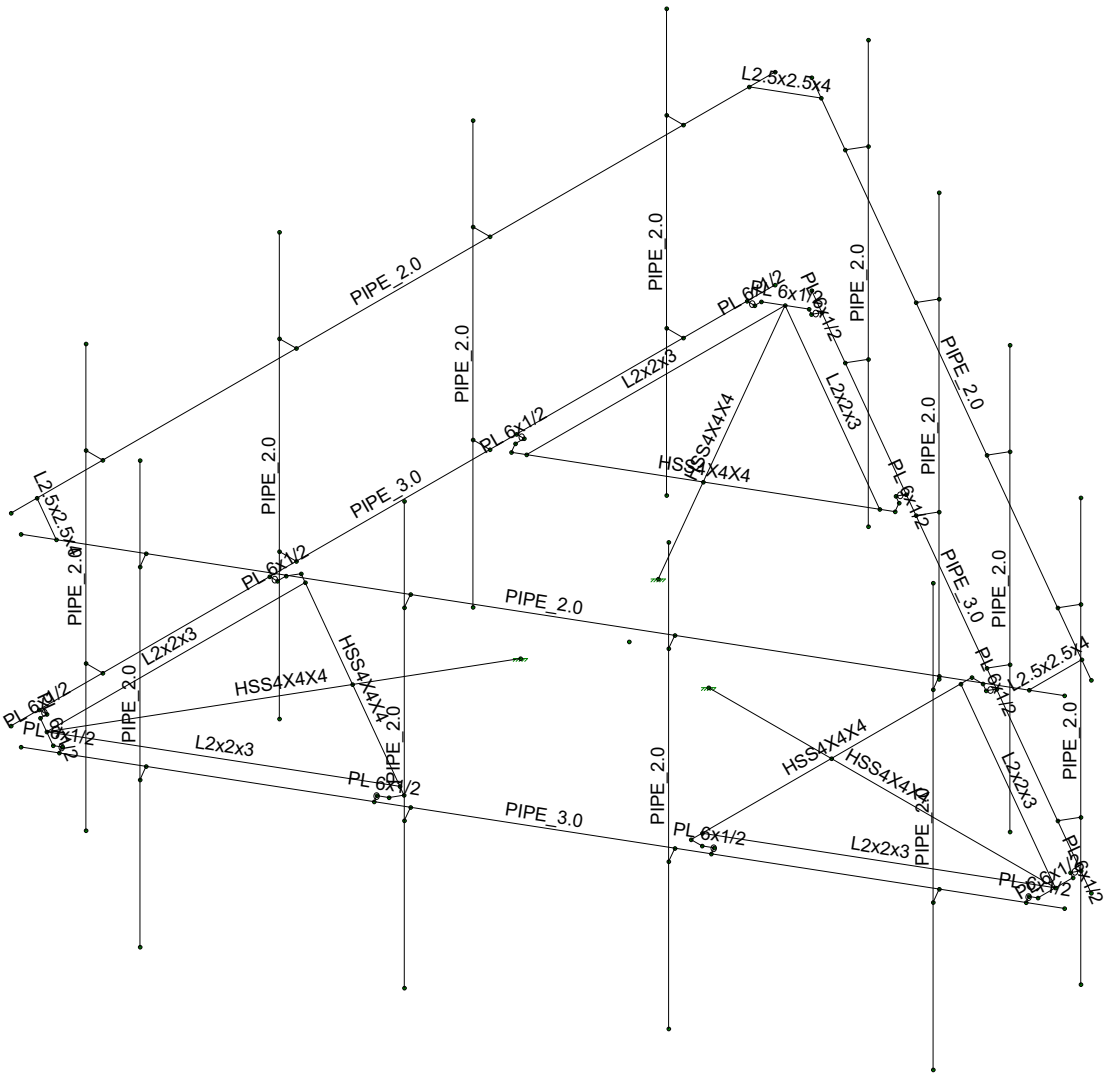
Notes:
1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
2) See additional documentation in "Appendix D - Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

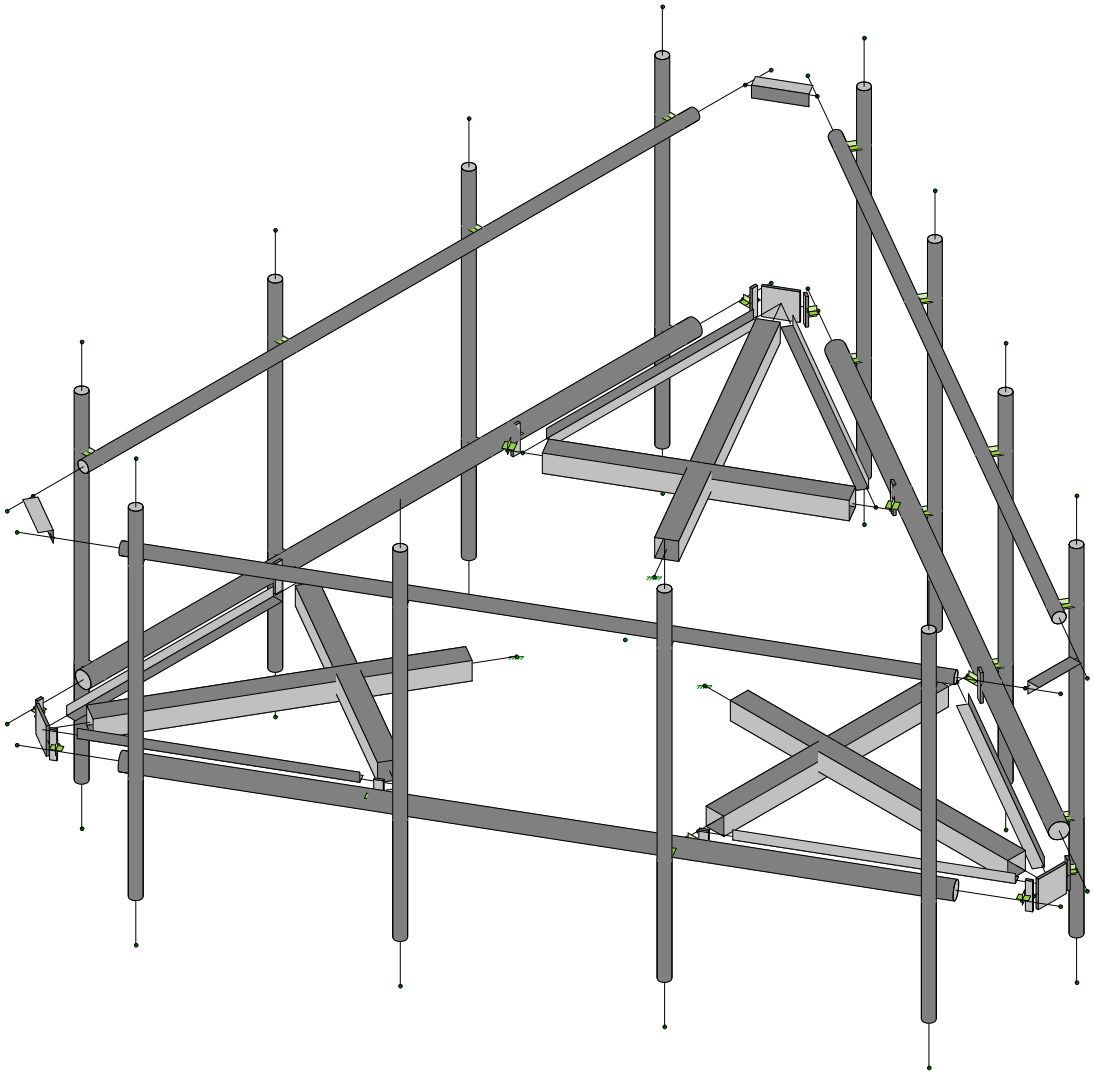
The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

APPENDIX A

WIRE FRAME AND RENDERED MODELS



ETS, PLLC	Newington	SK - 1
JAH		June 15, 2020 at 10:39 AM
ETS Job No. 202680.14		Newington Loaded.r3d



ETS, PLLC	Newington	SK - 2
JAH		June 15, 2020 at 10:39 AM
ETS Job No. 202680.14		Newington Loaded.r3d

APPENDIX B

SOFTWARE INPUT CALCULATIONS

TIA-222-H Mount Load Generator

Site Inputs	
Mount Support (Tower, or Building Support)?	Tower
Risk Category (TIA Table 2-1)	II
Exposure Category	C
Basic Wind Speed without Ice, V	125 mph
Basic Wind Speed with Ice, V_i	50 mph
Design of Ice, δ_{ice}	56 pcf
Design Ice Thickness, t_i	2.00 in
Basic Wind Speed (Maintenance)	30 mph
Maintenance Load, L_m	500 lb
Maintenance Load, L_v	250 lb
Height of Structure, h	145.0 ft
Mount Centerline, h_m	94.0 ft
Topographic Factor, K_{zt}	1.00
Rooftop Wind Speed-Up Factor, K_s	1.00
Mean Elevation of base of structure above sea level, z_s	142 ft
Ground Elevation Factor, K_e	0.99
Wind Direction Probability Factor, K_d	0.95
Gust Response Factor, G_h	1.00
Shielding Factor for Appurtenances, K_a	0.90

Seismic Design Input/Output	
0.182	Spectral response acceleration at short periods, S_s
0.064	Spectral response acceleration at a period of 1 second, S_1
D	Soil Site Class
1.600	Short-period site coefficient, F_a
2.400	Long-period site coefficient, F_v
0.194	Design spectral response acceleration at short periods, S_{DS}
0.102	Design spectral response acceleration at a period of 1 second, S_{D1}
2.00	Response modification coefficient, R
1.00	Earthquake amplification factor, A_s
1.00	Importance Factor
0.0971	Seismic Response Coefficient, C_s
Eh = 0.097 W	Total Seismic Shear Force, $E_h = \rho Q_E$ ($Q_E = \rho C_s W A_s$ & $\rho = 1.0$)
Ev = 0.039 D	Vertical Seismic Load Effect, $E_v = 0.2 S_{DS} D A_s$

Output File Name: Newington Loaded

Mount Pipe Information							Mount Pipe Forces					
Mount Pipe	Mount Location	Vertical Offset	Length	Diameter	Weight	Shape	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
P 2 SCH 40 x 96	MP1	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	30.66 lb	89.63 lb	2.220 in	99.67 lb	15.66 lb	34.87 lb
P 2 SCH 40 x 96	MP2	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	14.04 lb	89.63 lb	2.220 in	99.67 lb	8.03 lb	34.87 lb
P 2 SCH 40 x 96	MP3	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	48.94 lb	89.63 lb	2.220 in	99.67 lb	24.05 lb	34.87 lb
P 2 SCH 40 x 96	MP4	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	31.12 lb	89.63 lb	2.220 in	99.67 lb	15.87 lb	34.87 lb
P 2 SCH 40 x 96	MP5	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	30.66 lb	89.63 lb	2.220 in	99.67 lb	15.66 lb	34.87 lb
P 2 SCH 40 x 96	MP6	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	14.04 lb	89.63 lb	2.220 in	99.67 lb	8.03 lb	34.87 lb
P 2 SCH 40 x 96	MP7	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	48.94 lb	89.63 lb	2.220 in	99.67 lb	24.05 lb	34.87 lb
P 2 SCH 40 x 96	MP8	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	31.12 lb	89.63 lb	2.220 in	99.67 lb	15.87 lb	34.87 lb
P 2 SCH 40 x 96	MP9	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	30.66 lb	89.63 lb	2.220 in	99.67 lb	15.66 lb	34.87 lb
P 2 SCH 40 x 96	MP10	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	14.04 lb	89.63 lb	2.220 in	99.67 lb	8.03 lb	34.87 lb
P 2 SCH 40 x 96	MP11	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	48.94 lb	89.63 lb	2.220 in	99.67 lb	24.05 lb	34.87 lb
P 2 SCH 40 x 96	MP12	-0.50 ft	96.00 in	2.38 in	29.25 lb	Round	31.12 lb	89.63 lb	2.220 in	99.67 lb	15.87 lb	34.87 lb

Engineered Tower Solutions, PLLC
3227 Wellington Court
Raleigh, NC 27615

Appurtenance Information - MP1							Appurtenance Forces - MP1					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR -32 B2A/B66AA	1	1.00 ft	56.60 in	12.90 in	8.70 in	132.20 lb	308.13 lb	223.05 lb	2.223 in	227.80 lb	58.13 lb	45.74 lb
Radio 4449 B71 B85A_T-Mobile	1	1.00 ft	17.91 in	13.20 in	10.63 in	73.21 lb	93.25 lb	75.10 lb	2.223 in	77.71 lb	18.58 lb	17.41 lb
RRUS 4415 B25_CCIV2	1	1.00 ft	16.50 in	13.40 in	5.90 in	46.00 lb	87.21 lb	38.82 lb	2.223 in	62.98 lb	17.38 lb	10.54 lb

Appurtenance Information - MP2							Appurtenance Forces - MP2					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
APXVAARR24_43-U-NA20	1	1.00 ft	95.90 in	24.00 in	8.70 in	96.80 lb	694.19 lb	251.91 lb	2.223 in	574.60 lb	137.74 lb	63.69 lb

Appurtenance Information - MP3							Appurtenance Forces - MP3					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR6449 B41	1	1.00 ft	33.10 in	20.60 in	8.60 in	104.00 lb	268.95 lb	117.89 lb	2.223 in	183.89 lb	49.18 lb	25.86 lb

Appurtenance Information - MP4							Appurtenance Forces - MP4					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR 21 B2A B4P_T-Mobile	1	1.00 ft	56.00 in	12.10 in	7.87 in	91.50 lb	288.34 lb	203.37 lb	2.223 in	211.12 lb	54.85 lb	42.33 lb

Appurtenance Information - MP5							Appurtenance Forces - MP5					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR -32 B2A/B66AA	1	1.00 ft	56.60 in	12.90 in	8.70 in	132.20 lb	308.13 lb	223.05 lb	2.223 in	227.80 lb	58.13 lb	45.74 lb
Radio 4449 B71 B85A_T-Mobile	1	1.00 ft	17.91 in	13.20 in	10.63 in	73.21 lb	93.25 lb	75.10 lb	2.223 in	77.71 lb	18.58 lb	17.41 lb
RRUS 4415 B25_CCIV2	1	1.00 ft	16.50 in	13.40 in	5.90 in	46.00 lb	87.21 lb	38.82 lb	2.223 in	62.98 lb	17.38 lb	10.54 lb

Appurtenance Information - MP6							Appurtenance Forces - MP6					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
APXVAARR24_43-U-NA20	1	1.00 ft	95.90 in	24.00 in	8.70 in	96.80 lb	694.19 lb	251.91 lb	2.223 in	574.60 lb	137.74 lb	63.69 lb

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3227 Wellington Court
Raleigh, NC 27615

Appurtenance Information - MP7							Appurtenance Forces - MP7					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR6449 B41	1	1.00 ft	33.10 in	20.60 in	8.60 in	104.00 lb	268.95 lb	117.89 lb	2.223 in	183.89 lb	49.18 lb	25.86 lb

Appurtenance Information - MP8							Appurtenance Forces - MP8					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR 21 B2A B4P_T-Mobile	1	1.00 ft	56.00 in	12.10 in	7.87 in	91.50 lb	288.34 lb	203.37 lb	2.223 in	211.12 lb	54.85 lb	42.33 lb

Appurtenance Information - MP9							Appurtenance Forces - MP9					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR -32 B2A/B66AA	1	1.00 ft	56.60 in	12.90 in	8.70 in	132.20 lb	308.13 lb	223.05 lb	2.223 in	227.80 lb	58.13 lb	45.74 lb
Radio 4449 B71 B85A_T-Mobile	1	1.00 ft	17.91 in	13.20 in	10.63 in	73.21 lb	93.25 lb	75.10 lb	2.223 in	77.71 lb	18.58 lb	17.41 lb
RRUS 4415 B25_CCIV2	1	1.00 ft	16.50 in	13.40 in	5.90 in	46.00 lb	87.21 lb	38.82 lb	2.223 in	62.98 lb	17.38 lb	10.54 lb

Appurtenance Information - MP10							Appurtenance Forces - MP10					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
APXVAARR24_43-U-NA20	1	1.00 ft	95.90 in	24.00 in	8.70 in	96.80 lb	694.19 lb	251.91 lb	2.223 in	574.60 lb	137.74 lb	63.69 lb

Appurtenance Information - MP11							Appurtenance Forces - MP11					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR6449 B41	1	1.00 ft	33.10 in	20.60 in	8.60 in	104.00 lb	268.95 lb	117.89 lb	2.223 in	183.89 lb	49.18 lb	25.86 lb

Appurtenance Information - MP12							Appurtenance Forces - MP12					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{iz}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
AIR 21 B2A B4P_T-Mobile	1	1.00 ft	56.00 in	12.10 in	7.87 in	91.50 lb	288.34 lb	203.37 lb	2.223 in	211.12 lb	54.85 lb	42.33 lb

Member Distributed Loads	Member Information			Member Forces		
Mount Members	Width/Diameter (in)	Depth/Diameter (in)	Length (in)	Ka * Force / Length, No Ice	Ice Weight (plf)	Ka * Force / Length, Ice
PIPE 3.0	3.500 in	3.500 in	174.0 in	14.3 lb/ft	15.5 lb/ft	5.2 lb/ft
PIPE 2.0	2.380 in	2.380 in	174.0 in	10.1 lb/ft	12.5 lb/ft	4.6 lb/ft
HSS 4x4	4.000 in	4.000 in	79.0 in	16.3 lb/ft	21.4 lb/ft	4.8 lb/ft
L2x2	2.000 in	2.000 in	59.0 in	14.2 lb/ft	13.7 lb/ft	4.4 lb/ft
L2.5x2.5	2.500 in	2.500 in	12.0 in	11.5 lb/ft	15.6 lb/ft	3.6 lb/ft
PL 6x1/2	6.000 in	0.500 in	8.0 in	25.5 lb/ft	22.4 lb/ft	5.8 lb/ft

Member Lookup	Member Label	Position	Maintenance Load
HSS 4x4	BRACE-1	330°	
HSS 4x4	BRACE-2	90°	
HSS 4x4	BRACE-3	210°	
L2.5x2.5	CORNER-L-1	330°	
L2.5x2.5	CORNER-L-2	90°	
L2.5x2.5	CORNER-L-3	210°	
PL 6x1/2	CORNER-PL-1	330°	
PL 6x1/2	CORNER-PL-2	90°	
PL 6x1/2	CORNER-PL-3	210°	
PIPE 3.0	FM-BOT-0	90°	Start/Mid/End
PIPE 3.0	FM-BOT-120	210°	Start/Mid/End
PIPE 3.0	FM-BOT-240	330°	Start/Mid/End
PIPE 2.0	FM-TOP-0	90°	Start/Mid/End
PIPE 2.0	FM-TOP-120	210°	Start/Mid/End
PIPE 2.0	FM-TOP-240	330°	Start/Mid/End
L2x2	GRATE-H-0-1	90°	Mid

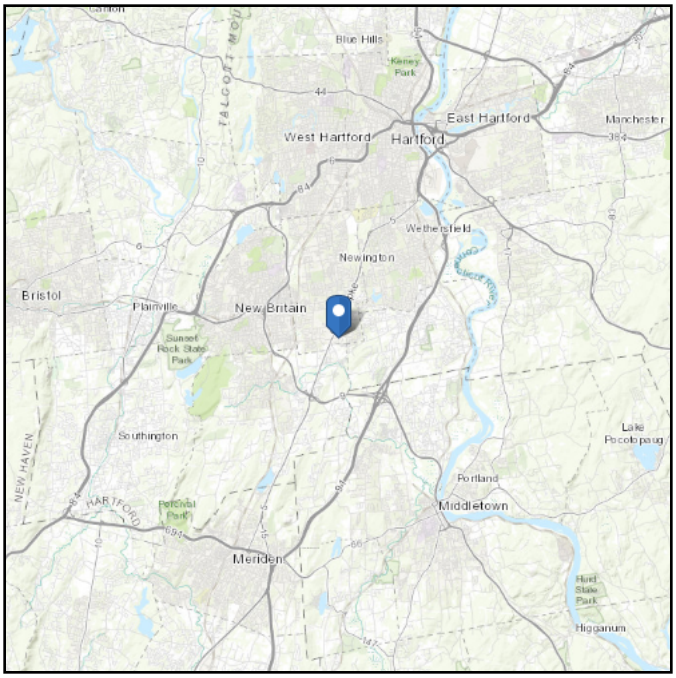
Member Lookup	Member Label	Position	Maintenance Load
L2x2	GRATE-H-0-2	90°	Mid
L2x2	GRATE-H-120-1	210°	Mid
L2x2	GRATE-H-120-2	210°	Mid
L2x2	GRATE-H-240-1	330°	Mid
L2x2	GRATE-H-240-2	330°	Mid
HSS 4x4	SA-1	60°	
HSS 4x4	SA-2	180°	
HSS 4x4	SA-3	300°	

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 141.56 ft (NAVD 88)
Latitude: 41.6552
Longitude: -72.721442



Wind

Results:

Wind Speed:	123 Vmph	Local Code: 125 Vmph
10-year MRI	77 Vmph	
25-year MRI	87 Vmph	
50-year MRI	93 Vmph	
100-year MRI	100 Vmph	

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

Date Accessed: Mon Jun 15 2020

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.

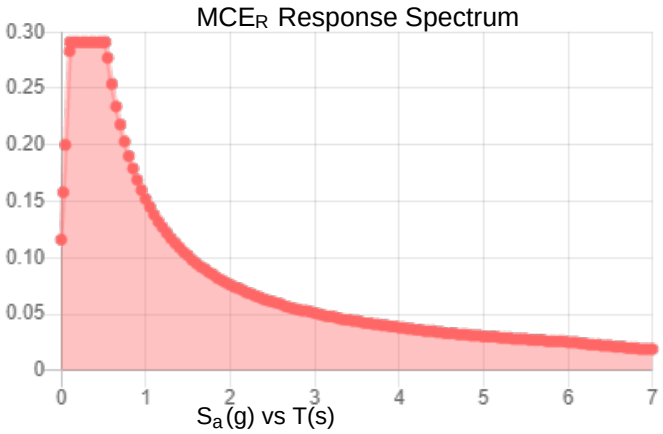
Seismic

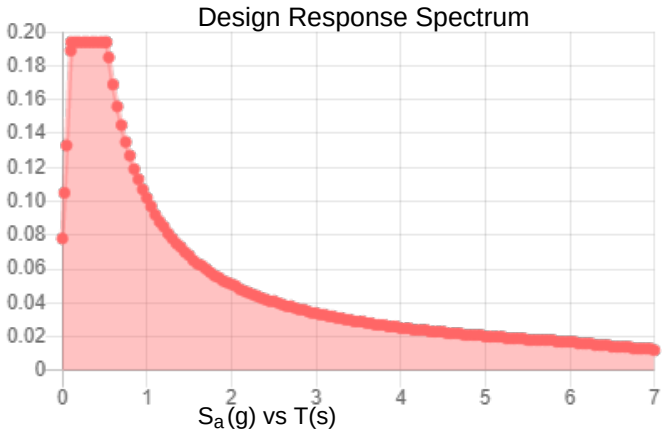
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.182	S_{DS} :	0.194
S_1 :	0.063	S_{D1} :	0.102
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.092
S_{MS} :	0.291	PGA_M :	0.148
S_{M1} :	0.152	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Mon Jun 15 2020

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:	Mon Jun 15 2020

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.

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
1	BRACE-1	N27	N28			HSS4X4X4	None	None	Q235	Typical
2	BRACE-2	N21	N22			HSS4X4X4	None	None	Q235	Typical
3	BRACE-3	N15	N16			HSS4X4X4	None	None	Q235	Typical
4	CONN-PL-0-1	N119	N120			PL 6x1/2	None	None	Q235	Typical
5	CONN-PL-0-2	N27	N119			RIGID	None	None	RIGID	Typical
6	CONN-PL-0-3	N22	N128			RIGID	None	None	RIGID	Typical
7	CONN-PL-0-4	N128	N129			PL 6x1/2	None	None	Q235	Typical
8	CONN-PL-120-1	N21	N125			RIGID	None	None	RIGID	Typical
9	CONN-PL-120-2	N125	N126			PL 6x1/2	None	None	Q235	Typical
10	CONN-PL-120-3	N16	N134			RIGID	None	None	RIGID	Typical
11	CONN-PL-120-4	N134	N135			PL 6x1/2	None	None	Q235	Typical
12	CONN-PL-240-1	N122	N123			PL 6x1/2	None	None	Q235	Typical
13	CONN-PL-240-2	N15	N122			RIGID	None	None	RIGID	Typical
14	CONN-PL-240-3	N28	N131			RIGID	None	None	RIGID	Typical
15	CONN-PL-240-4	N131	N132			PL 6x1/2	None	None	Q235	Typical
16	CORNER-L-1	N42	N43		90	L2.5x2.5x4	None	None	Q235	Typical
17	CORNER-L-2	N38	N39		180	L2.5x2.5x4	None	None	Q235	Typical
18	CORNER-L-3	N44	N45		90	L2.5x2.5x4	None	None	Q235	Typical
19	CORNER-PL-1	N7	N8			PL 6x1/2	None	None	Q235	Typical
20	CORNER-PL-2	N3	N4			PL 6x1/2	None	None	Q235	Typical
21	CORNER-PL-3	N9	N10			PL 6x1/2	None	None	Q235	Typical
22	FM-BOT-0	N1	N2			PIPE_3.0	None	None	A53 Gr.B	Typical
23	FM-BOT-120	N5	N6			PIPE_3.0	None	None	A53 Gr.B	Typical
24	FM-BOT-240	N11	N12			PIPE_3.0	None	None	A53 Gr.B	Typical
25	FM-TOP-0	N36	N37			PIPE_2.0	None	None	A53 Gr.B	Typical
26	FM-TOP-120	N40	N41			PIPE_2.0	None	None	A53 Gr.B	Typical
27	FM-TOP-240	N46	N47			PIPE_2.0	None	None	A53 Gr.B	Typical
28	GRATE-H-0-1	N29	N30			L2x2x3	Beam	None	Q235	Typical
29	GRATE-H-0-2	N23	N19		270	L2x2x3	None	None	Q235	Typical
30	GRATE-H-120-1	N23	N24			L2x2x3	None	None	Q235	Typical
31	GRATE-H-120-2	N17	N13		270	L2x2x3	None	None	Q235	Typical
32	GRATE-H-240-1	N17	N18			L2x2x3	None	None	Q235	Typical
33	GRATE-H-240-2	N29	N25		270	L2x2x3	None	None	Q235	Typical
34	M66	N120	N121			RIGID	None	None	RIGID	Typical
35	M69	N123	N124			RIGID	None	None	RIGID	Typical
36	M72	N126	N127			RIGID	None	None	RIGID	Typical
37	M75	N129	N130			RIGID	None	None	RIGID	Typical
38	M78	N132	N133			RIGID	None	None	RIGID	Typical
39	M79	N9	N137			PL 6x1/2	None	None	Q235	Typical
40	M80	N137	N138			RIGID	None	None	RIGID	Typical
41	M81	N135	N136			RIGID	None	None	RIGID	Typical
42	M81A	N8	N139			PL 6x1/2	None	None	Q235	Typical
43	M82	N139	N140			RIGID	None	None	RIGID	Typical
44	M83	N4	N141			PL 6x1/2	None	None	Q235	Typical
45	M84	N141	N142			RIGID	None	None	RIGID	Typical
46	M85	N10	N143			PL 6x1/2	None	None	Q235	Typical
47	M86	N143	N144			RIGID	None	None	RIGID	Typical
48	M87	N7	N145			PL 6x1/2	None	None	Q235	Typical
49	M88	N145	N146			RIGID	None	None	RIGID	Typical
50	M89	N3	N147			PL 6x1/2	None	None	Q235	Typical
51	M90	N147	N148			RIGID	None	None	RIGID	Typical
52	MP1	N51	N50			PIPE_2.0	None	None	A53 Gr.B	Typical
53	MP2	N58	N57			PIPE_2.0	None	None	A53 Gr.B	Typical
54	MP3	N64	N63			PIPE_2.0	None	None	A53 Gr.B	Typical
55	MP4	N70	N69			PIPE_2.0	None	None	A53 Gr.B	Typical
56	MP5	N100	N99			PIPE_2.0	None	None	A53 Gr.B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
57	MP6	N106	N105			PIPE_2.0	None	None	A53 Gr.B	Typical
58	MP7	N112	N111			PIPE_2.0	None	None	A53 Gr.B	Typical
59	MP8	N118	N117			PIPE_2.0	None	None	A53 Gr.B	Typical
60	MP9	N76	N75			PIPE_2.0	None	None	A53 Gr.B	Typical
61	MP10	N82	N81			PIPE_2.0	None	None	A53 Gr.B	Typical
62	MP11	N88	N87			PIPE_2.0	None	None	A53 Gr.B	Typical
63	MP12	N94	N93			PIPE_2.0	None	None	A53 Gr.B	Typical
64	RL1	N32	N33			RIGID	None	None	RIGID	Typical
65	RL2	N48	N49			RIGID	None	None	RIGID	Typical
66	RL3	N53	N54			RIGID	None	None	RIGID	Typical
67	RL4	N55	N56			RIGID	None	None	RIGID	Typical
68	RL5	N59	N60			RIGID	None	None	RIGID	Typical
69	RL6	N61	N62			RIGID	None	None	RIGID	Typical
70	RL7	N65	N66			RIGID	None	None	RIGID	Typical
71	RL8	N67	N68			RIGID	None	None	RIGID	Typical
72	RL9	N71	N72			RIGID	None	None	RIGID	Typical
73	RL10	N73	N74			RIGID	None	None	RIGID	Typical
74	RL11	N77	N78			RIGID	None	None	RIGID	Typical
75	RL12	N79	N80			RIGID	None	None	RIGID	Typical
76	RL13	N83	N84			RIGID	None	None	RIGID	Typical
77	RL14	N85	N86			RIGID	None	None	RIGID	Typical
78	RL15	N89	N90			RIGID	None	None	RIGID	Typical
79	RL16	N91	N92			RIGID	None	None	RIGID	Typical
80	RL17	N95	N96			RIGID	None	None	RIGID	Typical
81	RL18	N97	N98			RIGID	None	None	RIGID	Typical
82	RL19	N101	N102			RIGID	None	None	RIGID	Typical
83	RL20	N103	N104			RIGID	None	None	RIGID	Typical
84	RL21	N107	N108			RIGID	None	None	RIGID	Typical
85	RL22	N109	N110			RIGID	None	None	RIGID	Typical
86	RL23	N113	N114			RIGID	None	None	RIGID	Typical
87	RL24	N115	N116			RIGID	None	None	RIGID	Typical
88	SA-1	N29	N26			HSS4X4X4	None	None	Q235	Typical
89	SA-2	N23	N20			HSS4X4X4	None	None	Q235	Typical
90	SA-3	N17	N14			HSS4X4X4	None	None	Q235	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RIGID		42	128.3	0
3	Total General		42	128.3	0
4					
5	Hot Rolled Steel				
6	A53 Gr.B	PIPE_3.0	3	522	.306
7	A53 Gr.B	PIPE_2.0	15	1674	.484
8	Q235	HSS4X4X4	6	428.9	.41
9	Q235	L2.5x2.5x4	3	36	.012
10	Q235	L2x2x3	6	353.3	.072
11	Q235	PL 6x1/2	15	44.9	.038
12	Total HR Steel		48	3059.1	1.323

Member Point Loads (BLC 1 : Dead Load)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-251.4	%69
2	MP2	Y	-96.8	%50

Member Point Loads (BLC 1 : Dead Load) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP3	Y	-104	%50
4	MP4	Y	-91.5	%50
5	MP5	Y	-251.4	%69
6	MP6	Y	-96.8	%50
7	MP7	Y	-104	%50
8	MP8	Y	-91.5	%50
9	MP9	Y	-251.4	%69
10	MP10	Y	-96.8	%50
11	MP11	Y	-104	%50
12	MP12	Y	-91.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	190	%69
2	MP2	X	12.6	%50
3	MP3	X	44	%50
4	MP4	X	28	%50
5	MP5	X	184.9	%69
6	MP6	X	63.7	%50
7	MP7	X	71.5	%50
8	MP8	X	67.5	%50
9	MP9	X	184.9	%69
10	MP10	X	63.7	%50
11	MP11	X	71.5	%50
12	MP12	X	67.5	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	163.1	%69
2	MP2	X	25.7	%50
3	MP3	X	46.1	%50
4	MP4	X	35.7	%50
5	MP5	X	158.6	%69
6	MP6	X	69.9	%50
7	MP7	X	69.9	%50
8	MP8	X	69.9	%50
9	MP9	X	163.1	%69
10	MP10	X	25.7	%50
11	MP11	X	46.1	%50
12	MP12	X	35.7	%50
13	MP1	Z	94.2	%69
14	MP2	Z	14.8	%50
15	MP3	Z	26.6	%50
16	MP4	Z	20.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
17	MP5	Z	91.6	%69
18	MP6	Z	40.3	%50
19	MP7	Z	40.3	%50
20	MP8	Z	40.3	%50
21	MP9	Z	94.2	%69
22	MP10	Z	14.8	%50
23	MP11	Z	26.6	%50
24	MP12	Z	20.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	92.4	%69
2	MP2	X	31.8	%50
3	MP3	X	35.8	%50
4	MP4	X	33.8	%50
5	MP5	X	92.4	%69
6	MP6	X	31.8	%50
7	MP7	X	35.8	%50
8	MP8	X	33.8	%50
9	MP9	X	95	%69
10	MP10	X	6.3	%50
11	MP11	X	22	%50
12	MP12	X	14	%50
13	MP1	Z	160.1	%69
14	MP2	Z	55.1	%50
15	MP3	Z	61.9	%50
16	MP4	Z	58.5	%50
17	MP5	Z	160.1	%69
18	MP6	Z	55.1	%50
19	MP7	Z	61.9	%50
20	MP8	Z	58.5	%50
21	MP9	Z	164.5	%69
22	MP10	Z	10.9	%50
23	MP11	Z	38.1	%50
24	MP12	Z	24.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	183.2	%69
14	MP2	Z	80.7	%50
15	MP3	Z	80.7	%50
16	MP4	Z	80.7	%50
17	MP5	Z	188.3	%69
18	MP6	Z	29.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
19	MP7	Z	53.2	%50
20	MP8	Z	41.2	%50
21	MP9	Z	188.3	%69
22	MP10	Z	29.6	%50
23	MP11	Z	53.2	%50
24	MP12	Z	41.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-92.4	%69
2	MP2	X	-31.8	%50
3	MP3	X	-35.8	%50
4	MP4	X	-33.8	%50
5	MP5	X	-95	%69
6	MP6	X	-6.3	%50
7	MP7	X	-22	%50
8	MP8	X	-14	%50
9	MP9	X	-92.4	%69
10	MP10	X	-31.8	%50
11	MP11	X	-35.8	%50
12	MP12	X	-33.8	%50
13	MP1	Z	160.1	%69
14	MP2	Z	55.1	%50
15	MP3	Z	61.9	%50
16	MP4	Z	58.5	%50
17	MP5	Z	164.5	%69
18	MP6	Z	10.9	%50
19	MP7	Z	38.1	%50
20	MP8	Z	24.3	%50
21	MP9	Z	160.1	%69
22	MP10	Z	55.1	%50
23	MP11	Z	61.9	%50
24	MP12	Z	58.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-163.1	%69
2	MP2	X	-25.7	%50
3	MP3	X	-46.1	%50
4	MP4	X	-35.7	%50
5	MP5	X	-163.1	%69
6	MP6	X	-25.7	%50
7	MP7	X	-46.1	%50
8	MP8	X	-35.7	%50
9	MP9	X	-158.6	%69
10	MP10	X	-69.9	%50
11	MP11	X	-69.9	%50
12	MP12	X	-69.9	%50
13	MP1	Z	94.2	%69
14	MP2	Z	14.8	%50
15	MP3	Z	26.6	%50
16	MP4	Z	20.6	%50
17	MP5	Z	94.2	%69
18	MP6	Z	14.8	%50
19	MP7	Z	26.6	%50
20	MP8	Z	20.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
21	MP9	Z	91.6	%69
22	MP10	Z	40.3	%50
23	MP11	Z	40.3	%50
24	MP12	Z	40.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-190	%69
2	MP2	X	-12.6	%50
3	MP3	X	-44	%50
4	MP4	X	-28	%50
5	MP5	X	-184.9	%69
6	MP6	X	-63.7	%50
7	MP7	X	-71.5	%50
8	MP8	X	-67.5	%50
9	MP9	X	-184.9	%69
10	MP10	X	-63.7	%50
11	MP11	X	-71.5	%50
12	MP12	X	-67.5	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-163.1	%69
2	MP2	X	-25.7	%50
3	MP3	X	-46.1	%50
4	MP4	X	-35.7	%50
5	MP5	X	-158.6	%69
6	MP6	X	-69.9	%50
7	MP7	X	-69.9	%50
8	MP8	X	-69.9	%50
9	MP9	X	-163.1	%69
10	MP10	X	-25.7	%50
11	MP11	X	-46.1	%50
12	MP12	X	-35.7	%50
13	MP1	Z	-94.2	%69
14	MP2	Z	-14.8	%50
15	MP3	Z	-26.6	%50
16	MP4	Z	-20.6	%50
17	MP5	Z	-91.6	%69
18	MP6	Z	-40.3	%50
19	MP7	Z	-40.3	%50
20	MP8	Z	-40.3	%50
21	MP9	Z	-94.2	%69
22	MP10	Z	-14.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	MP11	Z	-26.6	%50
24	MP12	Z	-20.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-92.4	%69
2	MP2	X	-31.8	%50
3	MP3	X	-35.8	%50
4	MP4	X	-33.8	%50
5	MP5	X	-92.4	%69
6	MP6	X	-31.8	%50
7	MP7	X	-35.8	%50
8	MP8	X	-33.8	%50
9	MP9	X	-95	%69
10	MP10	X	-6.3	%50
11	MP11	X	-22	%50
12	MP12	X	-14	%50
13	MP1	Z	-160.1	%69
14	MP2	Z	-55.1	%50
15	MP3	Z	-61.9	%50
16	MP4	Z	-58.5	%50
17	MP5	Z	-160.1	%69
18	MP6	Z	-55.1	%50
19	MP7	Z	-61.9	%50
20	MP8	Z	-58.5	%50
21	MP9	Z	-164.5	%69
22	MP10	Z	-10.9	%50
23	MP11	Z	-38.1	%50
24	MP12	Z	-24.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-183.2	%69
14	MP2	Z	-80.7	%50
15	MP3	Z	-80.7	%50
16	MP4	Z	-80.7	%50
17	MP5	Z	-188.3	%69
18	MP6	Z	-29.6	%50
19	MP7	Z	-53.2	%50
20	MP8	Z	-41.2	%50
21	MP9	Z	-188.3	%69
22	MP10	Z	-29.6	%50
23	MP11	Z	-53.2	%50
24	MP12	Z	-41.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	92.4	%69
2	MP2	X	31.8	%50
3	MP3	X	35.8	%50
4	MP4	X	33.8	%50
5	MP5	X	95	%69
6	MP6	X	6.3	%50
7	MP7	X	22	%50
8	MP8	X	14	%50
9	MP9	X	92.4	%69
10	MP10	X	31.8	%50
11	MP11	X	35.8	%50
12	MP12	X	33.8	%50
13	MP1	Z	-160.1	%69
14	MP2	Z	-55.1	%50
15	MP3	Z	-61.9	%50
16	MP4	Z	-58.5	%50
17	MP5	Z	-164.5	%69
18	MP6	Z	-10.9	%50
19	MP7	Z	-38.1	%50
20	MP8	Z	-24.3	%50
21	MP9	Z	-160.1	%69
22	MP10	Z	-55.1	%50
23	MP11	Z	-61.9	%50
24	MP12	Z	-58.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	163.1	%69
2	MP2	X	25.7	%50
3	MP3	X	46.1	%50
4	MP4	X	35.7	%50
5	MP5	X	163.1	%69
6	MP6	X	25.7	%50
7	MP7	X	46.1	%50
8	MP8	X	35.7	%50
9	MP9	X	158.6	%69
10	MP10	X	69.9	%50
11	MP11	X	69.9	%50
12	MP12	X	69.9	%50
13	MP1	Z	-94.2	%69
14	MP2	Z	-14.8	%50
15	MP3	Z	-26.6	%50
16	MP4	Z	-20.6	%50
17	MP5	Z	-94.2	%69
18	MP6	Z	-14.8	%50
19	MP7	Z	-26.6	%50
20	MP8	Z	-20.6	%50
21	MP9	Z	-91.6	%69
22	MP10	Z	-40.3	%50
23	MP11	Z	-40.3	%50
24	MP12	Z	-40.3	%50

Member Point Loads (BLC 14 : Ice Load)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-468.2	%69
2	MP2	Y	-674.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP3	Y	-283.6	%50
4	MP4	Y	-310.8	%50
5	MP5	Y	-468.2	%69
6	MP6	Y	-674.3	%50
7	MP7	Y	-283.6	%50
8	MP8	Y	-310.8	%50
9	MP9	Y	-468.2	%69
10	MP10	Y	-674.3	%50
11	MP11	Y	-283.6	%50
12	MP12	Y	-310.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	46.5	%69
2	MP2	X	7.2	%50
3	MP3	X	21.6	%50
4	MP4	X	14.3	%50
5	MP5	X	54	%69
6	MP6	X	25.3	%50
7	MP7	X	28.9	%50
8	MP8	X	27.1	%50
9	MP9	X	54	%69
10	MP10	X	25.3	%50
11	MP11	X	28.9	%50
12	MP12	X	27.1	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	42.4	%69
2	MP2	X	11.5	%50
3	MP3	X	20.9	%50
4	MP4	X	16.1	%50
5	MP5	X	49	%69
6	MP6	X	27.2	%50
7	MP7	X	27.2	%50
8	MP8	X	27.2	%50
9	MP9	X	42.4	%69
10	MP10	X	11.5	%50
11	MP11	X	20.9	%50
12	MP12	X	16.1	%50
13	MP1	Z	24.5	%69
14	MP2	Z	6.6	%50
15	MP3	Z	12	%50
16	MP4	Z	9.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
17	MP5	Z	28.3	%69
18	MP6	Z	15.7	%50
19	MP7	Z	15.7	%50
20	MP8	Z	15.7	%50
21	MP9	Z	24.5	%69
22	MP10	Z	6.6	%50
23	MP11	Z	12	%50
24	MP12	Z	9.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	27	%69
2	MP2	X	12.7	%50
3	MP3	X	14.5	%50
4	MP4	X	13.6	%50
5	MP5	X	27	%69
6	MP6	X	12.7	%50
7	MP7	X	14.5	%50
8	MP8	X	13.6	%50
9	MP9	X	23.2	%69
10	MP10	X	3.6	%50
11	MP11	X	10.8	%50
12	MP12	X	7.1	%50
13	MP1	Z	46.8	%69
14	MP2	Z	21.9	%50
15	MP3	Z	25.1	%50
16	MP4	Z	23.5	%50
17	MP5	Z	46.8	%69
18	MP6	Z	21.9	%50
19	MP7	Z	25.1	%50
20	MP8	Z	23.5	%50
21	MP9	Z	40.2	%69
22	MP10	Z	6.3	%50
23	MP11	Z	18.7	%50
24	MP12	Z	12.4	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	56.5	%69
14	MP2	Z	31.4	%50
15	MP3	Z	31.4	%50
16	MP4	Z	31.4	%50
17	MP5	Z	49	%69
18	MP6	Z	13.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
19	MP7	Z	24.1	%50
20	MP8	Z	18.6	%50
21	MP9	Z	49	%69
22	MP10	Z	13.3	%50
23	MP11	Z	24.1	%50
24	MP12	Z	18.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-27	%69
2	MP2	X	-12.7	%50
3	MP3	X	-14.5	%50
4	MP4	X	-13.6	%50
5	MP5	X	-23.2	%69
6	MP6	X	-3.6	%50
7	MP7	X	-10.8	%50
8	MP8	X	-7.1	%50
9	MP9	X	-27	%69
10	MP10	X	-12.7	%50
11	MP11	X	-14.5	%50
12	MP12	X	-13.6	%50
13	MP1	Z	46.8	%69
14	MP2	Z	21.9	%50
15	MP3	Z	25.1	%50
16	MP4	Z	23.5	%50
17	MP5	Z	40.2	%69
18	MP6	Z	6.3	%50
19	MP7	Z	18.7	%50
20	MP8	Z	12.4	%50
21	MP9	Z	46.8	%69
22	MP10	Z	21.9	%50
23	MP11	Z	25.1	%50
24	MP12	Z	23.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-42.4	%69
2	MP2	X	-11.5	%50
3	MP3	X	-20.9	%50
4	MP4	X	-16.1	%50
5	MP5	X	-42.4	%69
6	MP6	X	-11.5	%50
7	MP7	X	-20.9	%50
8	MP8	X	-16.1	%50
9	MP9	X	-49	%69
10	MP10	X	-27.2	%50
11	MP11	X	-27.2	%50
12	MP12	X	-27.2	%50
13	MP1	Z	24.5	%69
14	MP2	Z	6.6	%50
15	MP3	Z	12	%50
16	MP4	Z	9.3	%50
17	MP5	Z	24.5	%69
18	MP6	Z	6.6	%50
19	MP7	Z	12	%50
20	MP8	Z	9.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
21	MP9	Z	28.3	%69
22	MP10	Z	15.7	%50
23	MP11	Z	15.7	%50
24	MP12	Z	15.7	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-46.5	%69
2	MP2	X	-7.2	%50
3	MP3	X	-21.6	%50
4	MP4	X	-14.3	%50
5	MP5	X	-54	%69
6	MP6	X	-25.3	%50
7	MP7	X	-28.9	%50
8	MP8	X	-27.1	%50
9	MP9	X	-54	%69
10	MP10	X	-25.3	%50
11	MP11	X	-28.9	%50
12	MP12	X	-27.1	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-42.4	%69
2	MP2	X	-11.5	%50
3	MP3	X	-20.9	%50
4	MP4	X	-16.1	%50
5	MP5	X	-49	%69
6	MP6	X	-27.2	%50
7	MP7	X	-27.2	%50
8	MP8	X	-27.2	%50
9	MP9	X	-42.4	%69
10	MP10	X	-11.5	%50
11	MP11	X	-20.9	%50
12	MP12	X	-16.1	%50
13	MP1	Z	-24.5	%69
14	MP2	Z	-6.6	%50
15	MP3	Z	-12	%50
16	MP4	Z	-9.3	%50
17	MP5	Z	-28.3	%69
18	MP6	Z	-15.7	%50
19	MP7	Z	-15.7	%50
20	MP8	Z	-15.7	%50
21	MP9	Z	-24.5	%69
22	MP10	Z	-6.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	MP11	Z	-12	%50
24	MP12	Z	-9.3	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-27	%69
2	MP2	X	-12.7	%50
3	MP3	X	-14.5	%50
4	MP4	X	-13.6	%50
5	MP5	X	-27	%69
6	MP6	X	-12.7	%50
7	MP7	X	-14.5	%50
8	MP8	X	-13.6	%50
9	MP9	X	-23.2	%69
10	MP10	X	-3.6	%50
11	MP11	X	-10.8	%50
12	MP12	X	-7.1	%50
13	MP1	Z	-46.8	%69
14	MP2	Z	-21.9	%50
15	MP3	Z	-25.1	%50
16	MP4	Z	-23.5	%50
17	MP5	Z	-46.8	%69
18	MP6	Z	-21.9	%50
19	MP7	Z	-25.1	%50
20	MP8	Z	-23.5	%50
21	MP9	Z	-40.2	%69
22	MP10	Z	-6.3	%50
23	MP11	Z	-18.7	%50
24	MP12	Z	-12.4	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-56.5	%69
14	MP2	Z	-31.4	%50
15	MP3	Z	-31.4	%50
16	MP4	Z	-31.4	%50
17	MP5	Z	-49	%69
18	MP6	Z	-13.3	%50
19	MP7	Z	-24.1	%50
20	MP8	Z	-18.6	%50
21	MP9	Z	-49	%69
22	MP10	Z	-13.3	%50
23	MP11	Z	-24.1	%50
24	MP12	Z	-18.6	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	27	%69
2	MP2	X	12.7	%50
3	MP3	X	14.5	%50
4	MP4	X	13.6	%50
5	MP5	X	23.2	%69
6	MP6	X	3.6	%50
7	MP7	X	10.8	%50
8	MP8	X	7.1	%50
9	MP9	X	27	%69
10	MP10	X	12.7	%50
11	MP11	X	14.5	%50
12	MP12	X	13.6	%50
13	MP1	Z	-46.8	%69
14	MP2	Z	-21.9	%50
15	MP3	Z	-25.1	%50
16	MP4	Z	-23.5	%50
17	MP5	Z	-40.2	%69
18	MP6	Z	-6.3	%50
19	MP7	Z	-18.7	%50
20	MP8	Z	-12.4	%50
21	MP9	Z	-46.8	%69
22	MP10	Z	-21.9	%50
23	MP11	Z	-25.1	%50
24	MP12	Z	-23.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	42.4	%69
2	MP2	X	11.5	%50
3	MP3	X	20.9	%50
4	MP4	X	16.1	%50
5	MP5	X	42.4	%69
6	MP6	X	11.5	%50
7	MP7	X	20.9	%50
8	MP8	X	16.1	%50
9	MP9	X	49	%69
10	MP10	X	27.2	%50
11	MP11	X	27.2	%50
12	MP12	X	27.2	%50
13	MP1	Z	-24.5	%69
14	MP2	Z	-6.6	%50
15	MP3	Z	-12	%50
16	MP4	Z	-9.3	%50
17	MP5	Z	-24.5	%69
18	MP6	Z	-6.6	%50
19	MP7	Z	-12	%50
20	MP8	Z	-9.3	%50
21	MP9	Z	-28.3	%69
22	MP10	Z	-15.7	%50
23	MP11	Z	-15.7	%50
24	MP12	Z	-15.7	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	251.4	%69
2	MP2	X	96.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP3	X	104	%50
4	MP4	X	91.5	%50
5	MP5	X	251.4	%69
6	MP6	X	96.8	%50
7	MP7	X	104	%50
8	MP8	X	91.5	%50
9	MP9	X	251.4	%69
10	MP10	X	96.8	%50
11	MP11	X	104	%50
12	MP12	X	91.5	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	217.7	%69
2	MP2	X	83.8	%50
3	MP3	X	90.1	%50
4	MP4	X	79.2	%50
5	MP5	X	217.7	%69
6	MP6	X	83.8	%50
7	MP7	X	90.1	%50
8	MP8	X	79.2	%50
9	MP9	X	217.7	%69
10	MP10	X	83.8	%50
11	MP11	X	90.1	%50
12	MP12	X	79.2	%50
13	MP1	Z	125.7	%69
14	MP2	Z	48.4	%50
15	MP3	Z	52	%50
16	MP4	Z	45.7	%50
17	MP5	Z	125.7	%69
18	MP6	Z	48.4	%50
19	MP7	Z	52	%50
20	MP8	Z	45.7	%50
21	MP9	Z	125.7	%69
22	MP10	Z	48.4	%50
23	MP11	Z	52	%50
24	MP12	Z	45.7	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	125.7	%69
2	MP2	X	48.4	%50
3	MP3	X	52	%50
4	MP4	X	45.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
5	MP5	X	125.7	%69
6	MP6	X	48.4	%50
7	MP7	X	52	%50
8	MP8	X	45.8	%50
9	MP9	X	125.7	%69
10	MP10	X	48.4	%50
11	MP11	X	52	%50
12	MP12	X	45.8	%50
13	MP1	Z	217.7	%69
14	MP2	Z	83.8	%50
15	MP3	Z	90.1	%50
16	MP4	Z	79.2	%50
17	MP5	Z	217.7	%69
18	MP6	Z	83.8	%50
19	MP7	Z	90.1	%50
20	MP8	Z	79.2	%50
21	MP9	Z	217.7	%69
22	MP10	Z	83.8	%50
23	MP11	Z	90.1	%50
24	MP12	Z	79.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	251.4	%69
14	MP2	Z	96.8	%50
15	MP3	Z	104	%50
16	MP4	Z	91.5	%50
17	MP5	Z	251.4	%69
18	MP6	Z	96.8	%50
19	MP7	Z	104	%50
20	MP8	Z	91.5	%50
21	MP9	Z	251.4	%69
22	MP10	Z	96.8	%50
23	MP11	Z	104	%50
24	MP12	Z	91.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-125.7	%69
2	MP2	X	-48.4	%50
3	MP3	X	-52	%50
4	MP4	X	-45.7	%50
5	MP5	X	-125.7	%69
6	MP6	X	-48.4	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
7	MP7	X	-52	%50
8	MP8	X	-45.7	%50
9	MP9	X	-125.7	%69
10	MP10	X	-48.4	%50
11	MP11	X	-52	%50
12	MP12	X	-45.7	%50
13	MP1	Z	217.7	%69
14	MP2	Z	83.8	%50
15	MP3	Z	90.1	%50
16	MP4	Z	79.2	%50
17	MP5	Z	217.7	%69
18	MP6	Z	83.8	%50
19	MP7	Z	90.1	%50
20	MP8	Z	79.2	%50
21	MP9	Z	217.7	%69
22	MP10	Z	83.8	%50
23	MP11	Z	90.1	%50
24	MP12	Z	79.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-217.7	%69
2	MP2	X	-83.8	%50
3	MP3	X	-90.1	%50
4	MP4	X	-79.2	%50
5	MP5	X	-217.7	%69
6	MP6	X	-83.8	%50
7	MP7	X	-90.1	%50
8	MP8	X	-79.2	%50
9	MP9	X	-217.7	%69
10	MP10	X	-83.8	%50
11	MP11	X	-90.1	%50
12	MP12	X	-79.2	%50
13	MP1	Z	125.7	%69
14	MP2	Z	48.4	%50
15	MP3	Z	52	%50
16	MP4	Z	45.7	%50
17	MP5	Z	125.7	%69
18	MP6	Z	48.4	%50
19	MP7	Z	52	%50
20	MP8	Z	45.7	%50
21	MP9	Z	125.7	%69
22	MP10	Z	48.4	%50
23	MP11	Z	52	%50
24	MP12	Z	45.7	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-251.4	%69
2	MP2	X	-96.8	%50
3	MP3	X	-104	%50
4	MP4	X	-91.5	%50
5	MP5	X	-251.4	%69
6	MP6	X	-96.8	%50
7	MP7	X	-104	%50
8	MP8	X	-91.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
9	MP9	X	-251.4	%69
10	MP10	X	-96.8	%50
11	MP11	X	-104	%50
12	MP12	X	-91.5	%50
13	MP1	Z	0	%69
14	MP2	Z	0	%50
15	MP3	Z	0	%50
16	MP4	Z	0	%50
17	MP5	Z	0	%69
18	MP6	Z	0	%50
19	MP7	Z	0	%50
20	MP8	Z	0	%50
21	MP9	Z	0	%69
22	MP10	Z	0	%50
23	MP11	Z	0	%50
24	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-217.7	%69
2	MP2	X	-83.8	%50
3	MP3	X	-90.1	%50
4	MP4	X	-79.2	%50
5	MP5	X	-217.7	%69
6	MP6	X	-83.8	%50
7	MP7	X	-90.1	%50
8	MP8	X	-79.2	%50
9	MP9	X	-217.7	%69
10	MP10	X	-83.8	%50
11	MP11	X	-90.1	%50
12	MP12	X	-79.2	%50
13	MP1	Z	-125.7	%69
14	MP2	Z	-48.4	%50
15	MP3	Z	-52	%50
16	MP4	Z	-45.8	%50
17	MP5	Z	-125.7	%69
18	MP6	Z	-48.4	%50
19	MP7	Z	-52	%50
20	MP8	Z	-45.8	%50
21	MP9	Z	-125.7	%69
22	MP10	Z	-48.4	%50
23	MP11	Z	-52	%50
24	MP12	Z	-45.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-125.7	%69
2	MP2	X	-48.4	%50
3	MP3	X	-52	%50
4	MP4	X	-45.8	%50
5	MP5	X	-125.7	%69
6	MP6	X	-48.4	%50
7	MP7	X	-52	%50
8	MP8	X	-45.8	%50
9	MP9	X	-125.7	%69
10	MP10	X	-48.4	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
11	MP11	X	-52	%50
12	MP12	X	-45.8	%50
13	MP1	Z	-217.7	%69
14	MP2	Z	-83.8	%50
15	MP3	Z	-90.1	%50
16	MP4	Z	-79.2	%50
17	MP5	Z	-217.7	%69
18	MP6	Z	-83.8	%50
19	MP7	Z	-90.1	%50
20	MP8	Z	-79.2	%50
21	MP9	Z	-217.7	%69
22	MP10	Z	-83.8	%50
23	MP11	Z	-90.1	%50
24	MP12	Z	-79.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	%69
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%69
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%69
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	Z	-251.4	%69
14	MP2	Z	-96.8	%50
15	MP3	Z	-104	%50
16	MP4	Z	-91.5	%50
17	MP5	Z	-251.4	%69
18	MP6	Z	-96.8	%50
19	MP7	Z	-104	%50
20	MP8	Z	-91.5	%50
21	MP9	Z	-251.4	%69
22	MP10	Z	-96.8	%50
23	MP11	Z	-104	%50
24	MP12	Z	-91.5	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	125.7	%69
2	MP2	X	48.4	%50
3	MP3	X	52	%50
4	MP4	X	45.8	%50
5	MP5	X	125.7	%69
6	MP6	X	48.4	%50
7	MP7	X	52	%50
8	MP8	X	45.8	%50
9	MP9	X	125.7	%69
10	MP10	X	48.4	%50
11	MP11	X	52	%50
12	MP12	X	45.8	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
13	MP1	Z	-217.7	%69
14	MP2	Z	-83.8	%50
15	MP3	Z	-90.1	%50
16	MP4	Z	-79.2	%50
17	MP5	Z	-217.7	%69
18	MP6	Z	-83.8	%50
19	MP7	Z	-90.1	%50
20	MP8	Z	-79.2	%50
21	MP9	Z	-217.7	%69
22	MP10	Z	-83.8	%50
23	MP11	Z	-90.1	%50
24	MP12	Z	-79.2	%50

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	217.7	%69
2	MP2	X	83.8	%50
3	MP3	X	90.1	%50
4	MP4	X	79.2	%50
5	MP5	X	217.7	%69
6	MP6	X	83.8	%50
7	MP7	X	90.1	%50
8	MP8	X	79.2	%50
9	MP9	X	217.7	%69
10	MP10	X	83.8	%50
11	MP11	X	90.1	%50
12	MP12	X	79.2	%50
13	MP1	Z	-125.7	%69
14	MP2	Z	-48.4	%50
15	MP3	Z	-52	%50
16	MP4	Z	-45.8	%50
17	MP5	Z	-125.7	%69
18	MP6	Z	-48.4	%50
19	MP7	Z	-52	%50
20	MP8	Z	-45.8	%50
21	MP9	Z	-125.7	%69
22	MP10	Z	-48.4	%50
23	MP11	Z	-52	%50
24	MP12	Z	-45.8	%50

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Member Point Loads (BLC 75 : Maintenance Load, Lv (Pos. 1))

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

Member Point Loads (BLC 76 : Maintenance Load, Lv (Pos. 2))

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

Member Point Loads (BLC 77 : Maintenance Load, Lv (Pos. 3))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-BOT-0	Y	-250	%100

Member Point Loads (BLC 78 : Maintenance Load, Lv (Pos. 4))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-BOT-120	Y	-250	0

Member Point Loads (BLC 79 : Maintenance Load, Lv (Pos. 5))

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

Member Point Loads (BLC 80 : Maintenance Load, Lv (Pos. 6))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-BOT-120	Y	-250	%100

Member Point Loads (BLC 81 : Maintenance Load, Lv (Pos. 7))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-BOT-240	Y	-250	0

Member Point Loads (BLC 82 : Maintenance Load, Lv (Pos. 8))

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

Member Point Loads (BLC 83 : Maintenance Load, Lv (Pos. 9))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-BOT-240	Y	-250	%100

Member Point Loads (BLC 84 : Maintenance Load, Lv (Pos. 10))

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

Member Point Loads (BLC 85 : Maintenance Load, Lv (Pos. 11))

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

Member Point Loads (BLC 86 : Maintenance Load, Lv (Pos. 12))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-TOP-0	Y	-250	%100

Member Point Loads (BLC 87 : Maintenance Load, Lv (Pos. 13))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-TOP-120	Y	-250	0

Member Point Loads (BLC 88 : Maintenance Load, Lv (Pos. 14))

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

Member Point Loads (BLC 89 : Maintenance Load, Lv (Pos. 15))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-TOP-120	Y	-250	%100

Member Point Loads (BLC 90 : Maintenance Load, Lv (Pos. 16))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-TOP-240	Y	-250	0

Member Point Loads (BLC 91 : Maintenance Load, Lv (Pos. 17))

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

Member Point Loads (BLC 92 : Maintenance Load, Lv (Pos. 18))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	FM-TOP-240	Y	-250	%100

Member Point Loads (BLC 93 : Maintenance Load, Lv (Pos. 19))

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

Member Point Loads (BLC 94 : Maintenance Load, Lv (Pos. 20))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	GRATE-H-0-2	Y	-250	%50

Member Point Loads (BLC 95 : Maintenance Load, Lv (Pos. 21))

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

Member Point Loads (BLC 96 : Maintenance Load, Lv (Pos. 22))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	GRATE-H-120-2	Y	-250	%50

Member Point Loads (BLC 97 : Maintenance Load, Lv (Pos. 23))

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

Member Point Loads (BLC 98 : Maintenance Load, Lv (Pos. 24))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	GRATE-H-240-2	Y	-250	%50

Member Point Loads (BLC 175 : Antenna Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	138.7	%45.521
2	MP1	X	138.7	%91.979
3	MP2	X	244.7	%25.052
4	MP2	X	380.1	%96.875
5	MP3	X	121	%57.76
6	MP3	X	121	%79.74
7	MP4	X	129.8	%45.833
8	MP4	X	129.8	%91.667
9	MP5	X	109.9	%45.521
10	MP5	X	109.9	%91.979
11	MP6	X	127.7	%25.052
12	MP6	X	198.5	%96.875
13	MP7	X	70	%57.76
14	MP7	X	70	%79.74
15	MP8	X	101.1	%45.833
16	MP8	X	101.1	%91.667
17	MP9	X	109.9	%45.521
18	MP9	X	109.9	%91.979
19	MP10	X	127.7	%25.052
20	MP10	X	198.5	%96.875
21	MP11	X	70	%57.76
22	MP11	X	70	%79.74
23	MP12	X	101.1	%45.833
24	MP12	X	101.1	%91.667
25	MP1	Z	0	0

Member Point Loads (BLC 175 : Antenna Wind Load (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	MP1	Z	0	0
27	MP2	Z	0	0
28	MP2	Z	0	0
29	MP3	Z	0	0
30	MP3	Z	0	0
31	MP4	Z	0	0
32	MP4	Z	0	0
33	MP5	Z	0	0
34	MP5	Z	0	0
35	MP6	Z	0	0
36	MP6	Z	0	0
37	MP7	Z	0	0
38	MP7	Z	0	0
39	MP8	Z	0	0
40	MP8	Z	0	0
41	MP9	Z	0	0
42	MP9	Z	0	0
43	MP10	Z	0	0
44	MP10	Z	0	0
45	MP11	Z	0	0
46	MP11	Z	0	0
47	MP12	Z	0	0
48	MP12	Z	0	0

Member Point Loads (BLC 176 : Antenna Wind Load (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	111.8	%45.521
2	MP1	X	111.8	%91.979
3	MP2	X	178.1	%25.052
4	MP2	X	276.8	%96.875
5	MP3	X	90.1	%57.76
6	MP3	X	90.1	%79.74
7	MP4	X	104.1	%45.833
8	MP4	X	104.1	%91.667
9	MP5	X	86.9	%45.521
10	MP5	X	86.9	%91.979
11	MP6	X	76.9	%25.052
12	MP6	X	119.5	%96.875
13	MP7	X	45.9	%57.76
14	MP7	X	45.9	%79.74
15	MP8	X	79.3	%45.833
16	MP8	X	79.3	%91.667
17	MP9	X	111.8	%45.521
18	MP9	X	111.8	%91.979
19	MP10	X	178.1	%25.052
20	MP10	X	276.8	%96.875
21	MP11	X	90.1	%57.76
22	MP11	X	90.1	%79.74
23	MP12	X	104.1	%45.833
24	MP12	X	104.1	%91.667
25	MP1	Z	64.5	%45.521
26	MP1	Z	64.5	%91.979
27	MP2	Z	102.8	%25.052
28	MP2	Z	159.8	%96.875
29	MP3	Z	52	%57.76
30	MP3	Z	52	%79.74

Member Point Loads (BLC 176 : Antenna Wind Load (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
31	MP4	Z	60.1	%45.833
32	MP4	Z	60.1	%91.667
33	MP5	Z	50.2	%45.521
34	MP5	Z	50.2	%91.979
35	MP6	Z	44.4	%25.052
36	MP6	Z	69	%96.875
37	MP7	Z	26.5	%57.76
38	MP7	Z	26.5	%79.74
39	MP8	Z	45.8	%45.833
40	MP8	Z	45.8	%91.667
41	MP9	Z	64.5	%45.521
42	MP9	Z	64.5	%91.979
43	MP10	Z	102.8	%25.052
44	MP10	Z	159.8	%96.875
45	MP11	Z	52	%57.76
46	MP11	Z	52	%79.74
47	MP12	Z	60.1	%45.833
48	MP12	Z	60.1	%91.667

Member Point Loads (BLC 177 : Antenna Wind Load (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	55	%45.521
2	MP1	X	55	%91.979
3	MP2	X	63.9	%25.052
4	MP2	X	99.2	%96.875
5	MP3	X	35	%57.76
6	MP3	X	35	%79.74
7	MP4	X	50.5	%45.833
8	MP4	X	50.5	%91.667
9	MP5	X	55	%45.521
10	MP5	X	55	%91.979
11	MP6	X	63.9	%25.052
12	MP6	X	99.2	%96.875
13	MP7	X	35	%57.76
14	MP7	X	35	%79.74
15	MP8	X	50.5	%45.833
16	MP8	X	50.5	%91.667
17	MP9	X	69.3	%45.521
18	MP9	X	69.3	%91.979
19	MP10	X	122.3	%25.052
20	MP10	X	190.1	%96.875
21	MP11	X	60.5	%57.76
22	MP11	X	60.5	%79.74
23	MP12	X	64.9	%45.833
24	MP12	X	64.9	%91.667
25	MP1	Z	95.2	%45.521
26	MP1	Z	95.2	%91.979
27	MP2	Z	110.6	%25.052
28	MP2	Z	171.9	%96.875
29	MP3	Z	60.7	%57.76
30	MP3	Z	60.7	%79.74
31	MP4	Z	87.5	%45.833
32	MP4	Z	87.5	%91.667
33	MP5	Z	95.2	%45.521
34	MP5	Z	95.2	%91.979
35	MP6	Z	110.6	%25.052

Member Point Loads (BLC 177 : Antenna Wind Load (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
36	MP6	Z	171.9	%96.875
37	MP7	Z	60.7	%57.76
38	MP7	Z	60.7	%79.74
39	MP8	Z	87.5	%45.833
40	MP8	Z	87.5	%91.667
41	MP9	Z	120.1	%45.521
42	MP9	Z	120.1	%91.979
43	MP10	Z	211.9	%25.052
44	MP10	Z	329.2	%96.875
45	MP11	Z	104.8	%57.76
46	MP11	Z	104.8	%79.74
47	MP12	Z	112.4	%45.833
48	MP12	Z	112.4	%91.667

Member Point Loads (BLC 178 : Antenna Wind Load (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP1	Z	100.4	%45.521
26	MP1	Z	100.4	%91.979
27	MP2	Z	88.8	%25.052
28	MP2	Z	137.9	%96.875
29	MP3	Z	53.1	%57.76
30	MP3	Z	53.1	%79.74
31	MP4	Z	91.5	%45.833
32	MP4	Z	91.5	%91.667
33	MP5	Z	129.1	%45.521
34	MP5	Z	129.1	%91.979
35	MP6	Z	205.7	%25.052
36	MP6	Z	319.6	%96.875
37	MP7	Z	104	%57.76
38	MP7	Z	104	%79.74
39	MP8	Z	120.2	%45.833
40	MP8	Z	120.2	%91.667

Member Point Loads (BLC 178 : Antenna Wind Load (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
41	MP9	Z	129.1	%45.521
42	MP9	Z	129.1	%91.979
43	MP10	Z	205.7	%25.052
44	MP10	Z	319.6	%96.875
45	MP11	Z	104	%57.76
46	MP11	Z	104	%79.74
47	MP12	Z	120.2	%45.833
48	MP12	Z	120.2	%91.667

Member Point Loads (BLC 179 : Antenna Wind Load (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-55	%45.521
2	MP1	X	-55	%91.979
3	MP2	X	-63.9	%25.052
4	MP2	X	-99.2	%96.875
5	MP3	X	-35	%57.76
6	MP3	X	-35	%79.74
7	MP4	X	-50.5	%45.833
8	MP4	X	-50.5	%91.667
9	MP5	X	-69.3	%45.521
10	MP5	X	-69.3	%91.979
11	MP6	X	-122.3	%25.052
12	MP6	X	-190.1	%96.875
13	MP7	X	-60.5	%57.76
14	MP7	X	-60.5	%79.74
15	MP8	X	-64.9	%45.833
16	MP8	X	-64.9	%91.667
17	MP9	X	-55	%45.521
18	MP9	X	-55	%91.979
19	MP10	X	-63.9	%25.052
20	MP10	X	-99.2	%96.875
21	MP11	X	-35	%57.76
22	MP11	X	-35	%79.74
23	MP12	X	-50.5	%45.833
24	MP12	X	-50.5	%91.667
25	MP1	Z	95.2	%45.521
26	MP1	Z	95.2	%91.979
27	MP2	Z	110.6	%25.052
28	MP2	Z	171.9	%96.875
29	MP3	Z	60.7	%57.76
30	MP3	Z	60.7	%79.74
31	MP4	Z	87.5	%45.833
32	MP4	Z	87.5	%91.667
33	MP5	Z	120.1	%45.521
34	MP5	Z	120.1	%91.979
35	MP6	Z	211.9	%25.052
36	MP6	Z	329.2	%96.875
37	MP7	Z	104.8	%57.76
38	MP7	Z	104.8	%79.74
39	MP8	Z	112.4	%45.833
40	MP8	Z	112.4	%91.667
41	MP9	Z	95.2	%45.521
42	MP9	Z	95.2	%91.979
43	MP10	Z	110.6	%25.052
44	MP10	Z	171.9	%96.875
45	MP11	Z	60.7	%57.76

Member Point Loads (BLC 179 : Antenna Wind Load (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	MP11	Z	60.7	%79.74
47	MP12	Z	87.5	%45.833
48	MP12	Z	87.5	%91.667

Member Point Loads (BLC 180 : Antenna Wind Load (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-111.8	%45.521
2	MP1	X	-111.8	%91.979
3	MP2	X	-178.1	%25.052
4	MP2	X	-276.8	%96.875
5	MP3	X	-90.1	%57.76
6	MP3	X	-90.1	%79.74
7	MP4	X	-104.1	%45.833
8	MP4	X	-104.1	%91.667
9	MP5	X	-111.8	%45.521
10	MP5	X	-111.8	%91.979
11	MP6	X	-178.1	%25.052
12	MP6	X	-276.8	%96.875
13	MP7	X	-90.1	%57.76
14	MP7	X	-90.1	%79.74
15	MP8	X	-104.1	%45.833
16	MP8	X	-104.1	%91.667
17	MP9	X	-86.9	%45.521
18	MP9	X	-86.9	%91.979
19	MP10	X	-76.9	%25.052
20	MP10	X	-119.5	%96.875
21	MP11	X	-45.9	%57.76
22	MP11	X	-45.9	%79.74
23	MP12	X	-79.3	%45.833
24	MP12	X	-79.3	%91.667
25	MP1	Z	64.5	%45.521
26	MP1	Z	64.5	%91.979
27	MP2	Z	102.8	%25.052
28	MP2	Z	159.8	%96.875
29	MP3	Z	52	%57.76
30	MP3	Z	52	%79.74
31	MP4	Z	60.1	%45.833
32	MP4	Z	60.1	%91.667
33	MP5	Z	64.5	%45.521
34	MP5	Z	64.5	%91.979
35	MP6	Z	102.8	%25.052
36	MP6	Z	159.8	%96.875
37	MP7	Z	52	%57.76
38	MP7	Z	52	%79.74
39	MP8	Z	60.1	%45.833
40	MP8	Z	60.1	%91.667
41	MP9	Z	50.2	%45.521
42	MP9	Z	50.2	%91.979
43	MP10	Z	44.4	%25.052
44	MP10	Z	69	%96.875
45	MP11	Z	26.5	%57.76
46	MP11	Z	26.5	%79.74
47	MP12	Z	45.8	%45.833
48	MP12	Z	45.8	%91.667

Member Point Loads (BLC 181 : Antenna Wind Load (180 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-138.7	%45.521
2	MP1	X	-138.7	%91.979
3	MP2	X	-244.7	%25.052
4	MP2	X	-380.1	%96.875
5	MP3	X	-121	%57.76
6	MP3	X	-121	%79.74
7	MP4	X	-129.8	%45.833
8	MP4	X	-129.8	%91.667
9	MP5	X	-109.9	%45.521
10	MP5	X	-109.9	%91.979
11	MP6	X	-127.7	%25.052
12	MP6	X	-198.5	%96.875
13	MP7	X	-70	%57.76
14	MP7	X	-70	%79.74
15	MP8	X	-101.1	%45.833
16	MP8	X	-101.1	%91.667
17	MP9	X	-109.9	%45.521
18	MP9	X	-109.9	%91.979
19	MP10	X	-127.7	%25.052
20	MP10	X	-198.5	%96.875
21	MP11	X	-70	%57.76
22	MP11	X	-70	%79.74
23	MP12	X	-101.1	%45.833
24	MP12	X	-101.1	%91.667
25	MP1	Z	0	0
26	MP1	Z	0	0
27	MP2	Z	0	0
28	MP2	Z	0	0
29	MP3	Z	0	0
30	MP3	Z	0	0
31	MP4	Z	0	0
32	MP4	Z	0	0
33	MP5	Z	0	0
34	MP5	Z	0	0
35	MP6	Z	0	0
36	MP6	Z	0	0
37	MP7	Z	0	0
38	MP7	Z	0	0
39	MP8	Z	0	0
40	MP8	Z	0	0
41	MP9	Z	0	0
42	MP9	Z	0	0
43	MP10	Z	0	0
44	MP10	Z	0	0
45	MP11	Z	0	0
46	MP11	Z	0	0
47	MP12	Z	0	0
48	MP12	Z	0	0

Member Point Loads (BLC 182 : Antenna Wind Load (210 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-111.8	%45.521
2	MP1	X	-111.8	%91.979
3	MP2	X	-178.1	%25.052
4	MP2	X	-276.8	%96.875
5	MP3	X	-90.1	%57.76

Member Point Loads (BLC 182 : Antenna Wind Load (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
6	MP3	X	-90.1	%79.74
7	MP4	X	-104.1	%45.833
8	MP4	X	-104.1	%91.667
9	MP5	X	-86.9	%45.521
10	MP5	X	-86.9	%91.979
11	MP6	X	-76.9	%25.052
12	MP6	X	-119.5	%96.875
13	MP7	X	-45.9	%57.76
14	MP7	X	-45.9	%79.74
15	MP8	X	-79.3	%45.833
16	MP8	X	-79.3	%91.667
17	MP9	X	-111.8	%45.521
18	MP9	X	-111.8	%91.979
19	MP10	X	-178.1	%25.052
20	MP10	X	-276.8	%96.875
21	MP11	X	-90.1	%57.76
22	MP11	X	-90.1	%79.74
23	MP12	X	-104.1	%45.833
24	MP12	X	-104.1	%91.667
25	MP1	Z	-64.5	%45.521
26	MP1	Z	-64.5	%91.979
27	MP2	Z	-102.8	%25.052
28	MP2	Z	-159.8	%96.875
29	MP3	Z	-52	%57.76
30	MP3	Z	-52	%79.74
31	MP4	Z	-60.1	%45.833
32	MP4	Z	-60.1	%91.667
33	MP5	Z	-50.2	%45.521
34	MP5	Z	-50.2	%91.979
35	MP6	Z	-44.4	%25.052
36	MP6	Z	-69	%96.875
37	MP7	Z	-26.5	%57.76
38	MP7	Z	-26.5	%79.74
39	MP8	Z	-45.8	%45.833
40	MP8	Z	-45.8	%91.667
41	MP9	Z	-64.5	%45.521
42	MP9	Z	-64.5	%91.979
43	MP10	Z	-102.8	%25.052
44	MP10	Z	-159.8	%96.875
45	MP11	Z	-52	%57.76
46	MP11	Z	-52	%79.74
47	MP12	Z	-60.1	%45.833
48	MP12	Z	-60.1	%91.667

Member Point Loads (BLC 183 : Antenna Wind Load (240 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-55	%45.521
2	MP1	X	-55	%91.979
3	MP2	X	-63.9	%25.052
4	MP2	X	-99.2	%96.875
5	MP3	X	-35	%57.76
6	MP3	X	-35	%79.74
7	MP4	X	-50.5	%45.833
8	MP4	X	-50.5	%91.667
9	MP5	X	-55	%45.521
10	MP5	X	-55	%91.979

Member Point Loads (BLC 183 : Antenna Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
11	MP6	X	-63.9	%25.052
12	MP6	X	-99.2	%96.875
13	MP7	X	-35	%57.76
14	MP7	X	-35	%79.74
15	MP8	X	-50.5	%45.833
16	MP8	X	-50.5	%91.667
17	MP9	X	-69.3	%45.521
18	MP9	X	-69.3	%91.979
19	MP10	X	-122.3	%25.052
20	MP10	X	-190.1	%96.875
21	MP11	X	-60.5	%57.76
22	MP11	X	-60.5	%79.74
23	MP12	X	-64.9	%45.833
24	MP12	X	-64.9	%91.667
25	MP1	Z	-95.2	%45.521
26	MP1	Z	-95.2	%91.979
27	MP2	Z	-110.6	%25.052
28	MP2	Z	-171.9	%96.875
29	MP3	Z	-60.7	%57.76
30	MP3	Z	-60.7	%79.74
31	MP4	Z	-87.5	%45.833
32	MP4	Z	-87.5	%91.667
33	MP5	Z	-95.2	%45.521
34	MP5	Z	-95.2	%91.979
35	MP6	Z	-110.6	%25.052
36	MP6	Z	-171.9	%96.875
37	MP7	Z	-60.7	%57.76
38	MP7	Z	-60.7	%79.74
39	MP8	Z	-87.5	%45.833
40	MP8	Z	-87.5	%91.667
41	MP9	Z	-120.1	%45.521
42	MP9	Z	-120.1	%91.979
43	MP10	Z	-211.9	%25.052
44	MP10	Z	-329.2	%96.875
45	MP11	Z	-104.8	%57.76
46	MP11	Z	-104.8	%79.74
47	MP12	Z	-112.4	%45.833
48	MP12	Z	-112.4	%91.667

Member Point Loads (BLC 184 : Antenna Wind Load (270 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0

Member Point Loads (BLC 184 : Antenna Wind Load (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP1	Z	-100.4	%45.521
26	MP1	Z	-100.4	%91.979
27	MP2	Z	-88.8	%25.052
28	MP2	Z	-137.9	%96.875
29	MP3	Z	-53.1	%57.76
30	MP3	Z	-53.1	%79.74
31	MP4	Z	-91.5	%45.833
32	MP4	Z	-91.5	%91.667
33	MP5	Z	-129.1	%45.521
34	MP5	Z	-129.1	%91.979
35	MP6	Z	-205.7	%25.052
36	MP6	Z	-319.6	%96.875
37	MP7	Z	-104	%57.76
38	MP7	Z	-104	%79.74
39	MP8	Z	-120.2	%45.833
40	MP8	Z	-120.2	%91.667
41	MP9	Z	-129.1	%45.521
42	MP9	Z	-129.1	%91.979
43	MP10	Z	-205.7	%25.052
44	MP10	Z	-319.6	%96.875
45	MP11	Z	-104	%57.76
46	MP11	Z	-104	%79.74
47	MP12	Z	-120.2	%45.833
48	MP12	Z	-120.2	%91.667

Member Point Loads (BLC 185 : Antenna Wind Load (300 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	55	%45.521
2	MP1	X	55	%91.979
3	MP2	X	63.9	%25.052
4	MP2	X	99.2	%96.875
5	MP3	X	35	%57.76
6	MP3	X	35	%79.74
7	MP4	X	50.5	%45.833
8	MP4	X	50.5	%91.667
9	MP5	X	69.3	%45.521
10	MP5	X	69.3	%91.979
11	MP6	X	122.3	%25.052
12	MP6	X	190.1	%96.875
13	MP7	X	60.5	%57.76
14	MP7	X	60.5	%79.74
15	MP8	X	64.9	%45.833
16	MP8	X	64.9	%91.667
17	MP9	X	55	%45.521
18	MP9	X	55	%91.979
19	MP10	X	63.9	%25.052
20	MP10	X	99.2	%96.875

Member Point Loads (BLC 185 : Antenna Wind Load (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
21	MP11	X	35	%57.76
22	MP11	X	35	%79.74
23	MP12	X	50.5	%45.833
24	MP12	X	50.5	%91.667
25	MP1	Z	-95.2	%45.521
26	MP1	Z	-95.2	%91.979
27	MP2	Z	-110.6	%25.052
28	MP2	Z	-171.9	%96.875
29	MP3	Z	-60.7	%57.76
30	MP3	Z	-60.7	%79.74
31	MP4	Z	-87.5	%45.833
32	MP4	Z	-87.5	%91.667
33	MP5	Z	-120.1	%45.521
34	MP5	Z	-120.1	%91.979
35	MP6	Z	-211.9	%25.052
36	MP6	Z	-329.2	%96.875
37	MP7	Z	-104.8	%57.76
38	MP7	Z	-104.8	%79.74
39	MP8	Z	-112.4	%45.833
40	MP8	Z	-112.4	%91.667
41	MP9	Z	-95.2	%45.521
42	MP9	Z	-95.2	%91.979
43	MP10	Z	-110.6	%25.052
44	MP10	Z	-171.9	%96.875
45	MP11	Z	-60.7	%57.76
46	MP11	Z	-60.7	%79.74
47	MP12	Z	-87.5	%45.833
48	MP12	Z	-87.5	%91.667

Member Point Loads (BLC 186 : Antenna Wind Load (330 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	111.8	%45.521
2	MP1	X	111.8	%91.979
3	MP2	X	178.1	%25.052
4	MP2	X	276.8	%96.875
5	MP3	X	90.1	%57.76
6	MP3	X	90.1	%79.74
7	MP4	X	104.1	%45.833
8	MP4	X	104.1	%91.667
9	MP5	X	111.8	%45.521
10	MP5	X	111.8	%91.979
11	MP6	X	178.1	%25.052
12	MP6	X	276.8	%96.875
13	MP7	X	90.1	%57.76
14	MP7	X	90.1	%79.74
15	MP8	X	104.1	%45.833
16	MP8	X	104.1	%91.667
17	MP9	X	86.9	%45.521
18	MP9	X	86.9	%91.979
19	MP10	X	76.9	%25.052
20	MP10	X	119.5	%96.875
21	MP11	X	45.9	%57.76
22	MP11	X	45.9	%79.74
23	MP12	X	79.3	%45.833
24	MP12	X	79.3	%91.667
25	MP1	Z	-64.5	%45.521

Member Point Loads (BLC 186 : Antenna Wind Load (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	MP1	Z	-64.5	%91.979
27	MP2	Z	-102.8	%25.052
28	MP2	Z	-159.8	%96.875
29	MP3	Z	-52	%57.76
30	MP3	Z	-52	%79.74
31	MP4	Z	-60.1	%45.833
32	MP4	Z	-60.1	%91.667
33	MP5	Z	-64.5	%45.521
34	MP5	Z	-64.5	%91.979
35	MP6	Z	-102.8	%25.052
36	MP6	Z	-159.8	%96.875
37	MP7	Z	-52	%57.76
38	MP7	Z	-52	%79.74
39	MP8	Z	-60.1	%45.833
40	MP8	Z	-60.1	%91.667
41	MP9	Z	-50.2	%45.521
42	MP9	Z	-50.2	%91.979
43	MP10	Z	-44.4	%25.052
44	MP10	Z	-69	%96.875
45	MP11	Z	-26.5	%57.76
46	MP11	Z	-26.5	%79.74
47	MP12	Z	-45.8	%45.833
48	MP12	Z	-45.8	%91.667

Member Point Loads (BLC 187 : Antenna Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	26.2	%45.521
2	MP1	X	26.2	%91.979
3	MP2	X	48.5	%25.052
4	MP2	X	75.4	%96.875
5	MP3	X	22.1	%57.76
6	MP3	X	22.1	%79.74
7	MP4	X	24.7	%45.833
8	MP4	X	24.7	%91.667
9	MP5	X	22	%45.521
10	MP5	X	22	%91.979
11	MP6	X	29	%25.052
12	MP6	X	45	%96.875
13	MP7	X	14.3	%57.76
14	MP7	X	14.3	%79.74
15	MP8	X	20.5	%45.833
16	MP8	X	20.5	%91.667
17	MP9	X	22	%45.521
18	MP9	X	22	%91.979
19	MP10	X	29	%25.052
20	MP10	X	45	%96.875
21	MP11	X	14.3	%57.76
22	MP11	X	14.3	%79.74
23	MP12	X	20.5	%45.833
24	MP12	X	20.5	%91.667
25	MP1	Z	0	0
26	MP1	Z	0	0
27	MP2	Z	0	0
28	MP2	Z	0	0
29	MP3	Z	0	0
30	MP3	Z	0	0

Member Point Loads (BLC 187 : Antenna Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
31	MP4	Z	0	0
32	MP4	Z	0	0
33	MP5	Z	0	0
34	MP5	Z	0	0
35	MP6	Z	0	0
36	MP6	Z	0	0
37	MP7	Z	0	0
38	MP7	Z	0	0
39	MP8	Z	0	0
40	MP8	Z	0	0
41	MP9	Z	0	0
42	MP9	Z	0	0
43	MP10	Z	0	0
44	MP10	Z	0	0
45	MP11	Z	0	0
46	MP11	Z	0	0
47	MP12	Z	0	0
48	MP12	Z	0	0

Member Point Loads (BLC 188 : Antenna Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	21.4	%45.521
2	MP1	X	21.4	%91.979
3	MP2	X	36.4	%25.052
4	MP2	X	56.5	%96.875
5	MP3	X	16.9	%57.76
6	MP3	X	16.9	%79.74
7	MP4	X	20.2	%45.833
8	MP4	X	20.2	%91.667
9	MP5	X	17.8	%45.521
10	MP5	X	17.8	%91.979
11	MP6	X	19.4	%25.052
12	MP6	X	30.2	%96.875
13	MP7	X	10.1	%57.76
14	MP7	X	10.1	%79.74
15	MP8	X	16.5	%45.833
16	MP8	X	16.5	%91.667
17	MP9	X	21.4	%45.521
18	MP9	X	21.4	%91.979
19	MP10	X	36.4	%25.052
20	MP10	X	56.5	%96.875
21	MP11	X	16.9	%57.76
22	MP11	X	16.9	%79.74
23	MP12	X	20.2	%45.833
24	MP12	X	20.2	%91.667
25	MP1	Z	12.4	%45.521
26	MP1	Z	12.4	%91.979
27	MP2	Z	21	%25.052
28	MP2	Z	32.6	%96.875
29	MP3	Z	9.8	%57.76
30	MP3	Z	9.8	%79.74
31	MP4	Z	11.6	%45.833
32	MP4	Z	11.6	%91.667
33	MP5	Z	10.3	%45.521
34	MP5	Z	10.3	%91.979
35	MP6	Z	11.2	%25.052

Member Point Loads (BLC 188 : Antenna Wind on Ice (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
36	MP6	Z	17.4	%96.875
37	MP7	Z	5.8	%57.76
38	MP7	Z	5.8	%79.74
39	MP8	Z	9.5	%45.833
40	MP8	Z	9.5	%91.667
41	MP9	Z	12.4	%45.521
42	MP9	Z	12.4	%91.979
43	MP10	Z	21	%25.052
44	MP10	Z	32.6	%96.875
45	MP11	Z	9.8	%57.76
46	MP11	Z	9.8	%79.74
47	MP12	Z	11.6	%45.833
48	MP12	Z	11.6	%91.667

Member Point Loads (BLC 189 : Antenna Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	11	%45.521
2	MP1	X	11	%91.979
3	MP2	X	14.5	%25.052
4	MP2	X	22.5	%96.875
5	MP3	X	7.1	%57.76
6	MP3	X	7.1	%79.74
7	MP4	X	10.2	%45.833
8	MP4	X	10.2	%91.667
9	MP5	X	11	%45.521
10	MP5	X	11	%91.979
11	MP6	X	14.5	%25.052
12	MP6	X	22.5	%96.875
13	MP7	X	7.1	%57.76
14	MP7	X	7.1	%79.74
15	MP8	X	10.2	%45.833
16	MP8	X	10.2	%91.667
17	MP9	X	13.1	%45.521
18	MP9	X	13.1	%91.979
19	MP10	X	24.3	%25.052
20	MP10	X	37.7	%96.875
21	MP11	X	11.1	%57.76
22	MP11	X	11.1	%79.74
23	MP12	X	12.3	%45.833
24	MP12	X	12.3	%91.667
25	MP1	Z	19	%45.521
26	MP1	Z	19	%91.979
27	MP2	Z	25.1	%25.052
28	MP2	Z	39	%96.875
29	MP3	Z	12.3	%57.76
30	MP3	Z	12.3	%79.74
31	MP4	Z	17.7	%45.833
32	MP4	Z	17.7	%91.667
33	MP5	Z	19	%45.521
34	MP5	Z	19	%91.979
35	MP6	Z	25.1	%25.052
36	MP6	Z	39	%96.875
37	MP7	Z	12.3	%57.76
38	MP7	Z	12.3	%79.74
39	MP8	Z	17.7	%45.833
40	MP8	Z	17.7	%91.667

Member Point Loads (BLC 189 : Antenna Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
41	MP9	Z	22.7	%45.521
42	MP9	Z	22.7	%91.979
43	MP10	Z	42	%25.052
44	MP10	Z	65.3	%96.875
45	MP11	Z	19.2	%57.76
46	MP11	Z	19.2	%79.74
47	MP12	Z	21.4	%45.833
48	MP12	Z	21.4	%91.667

Member Point Loads (BLC 190 : Antenna Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP1	Z	20.6	%45.521
26	MP1	Z	20.6	%91.979
27	MP2	Z	22.4	%25.052
28	MP2	Z	34.9	%96.875
29	MP3	Z	11.6	%57.76
30	MP3	Z	11.6	%79.74
31	MP4	Z	19	%45.833
32	MP4	Z	19	%91.667
33	MP5	Z	24.8	%45.521
34	MP5	Z	24.8	%91.979
35	MP6	Z	42	%25.052
36	MP6	Z	65.3	%96.875
37	MP7	Z	19.5	%57.76
38	MP7	Z	19.5	%79.74
39	MP8	Z	23.3	%45.833
40	MP8	Z	23.3	%91.667
41	MP9	Z	24.8	%45.521
42	MP9	Z	24.8	%91.979
43	MP10	Z	42	%25.052
44	MP10	Z	65.3	%96.875
45	MP11	Z	19.5	%57.76

Member Point Loads (BLC 190 : Antenna Wind on Ice (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	MP11	Z	19.5	%79.74
47	MP12	Z	23.3	%45.833
48	MP12	Z	23.3	%91.667

Member Point Loads (BLC 191 : Antenna Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-11	%45.521
2	MP1	X	-11	%91.979
3	MP2	X	-14.5	%25.052
4	MP2	X	-22.5	%96.875
5	MP3	X	-7.1	%57.76
6	MP3	X	-7.1	%79.74
7	MP4	X	-10.2	%45.833
8	MP4	X	-10.2	%91.667
9	MP5	X	-13.1	%45.521
10	MP5	X	-13.1	%91.979
11	MP6	X	-24.3	%25.052
12	MP6	X	-37.7	%96.875
13	MP7	X	-11.1	%57.76
14	MP7	X	-11.1	%79.74
15	MP8	X	-12.3	%45.833
16	MP8	X	-12.3	%91.667
17	MP9	X	-11	%45.521
18	MP9	X	-11	%91.979
19	MP10	X	-14.5	%25.052
20	MP10	X	-22.5	%96.875
21	MP11	X	-7.1	%57.76
22	MP11	X	-7.1	%79.74
23	MP12	X	-10.2	%45.833
24	MP12	X	-10.2	%91.667
25	MP1	Z	19	%45.521
26	MP1	Z	19	%91.979
27	MP2	Z	25.1	%25.052
28	MP2	Z	39	%96.875
29	MP3	Z	12.3	%57.76
30	MP3	Z	12.3	%79.74
31	MP4	Z	17.7	%45.833
32	MP4	Z	17.7	%91.667
33	MP5	Z	22.7	%45.521
34	MP5	Z	22.7	%91.979
35	MP6	Z	42	%25.052
36	MP6	Z	65.3	%96.875
37	MP7	Z	19.2	%57.76
38	MP7	Z	19.2	%79.74
39	MP8	Z	21.4	%45.833
40	MP8	Z	21.4	%91.667
41	MP9	Z	19	%45.521
42	MP9	Z	19	%91.979
43	MP10	Z	25.1	%25.052
44	MP10	Z	39	%96.875
45	MP11	Z	12.3	%57.76
46	MP11	Z	12.3	%79.74
47	MP12	Z	17.7	%45.833
48	MP12	Z	17.7	%91.667

Member Point Loads (BLC 192 : Antenna Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-21.4	%45.521
2	MP1	X	-21.4	%91.979
3	MP2	X	-36.4	%25.052
4	MP2	X	-56.5	%96.875
5	MP3	X	-16.9	%57.76
6	MP3	X	-16.9	%79.74
7	MP4	X	-20.2	%45.833
8	MP4	X	-20.2	%91.667
9	MP5	X	-21.4	%45.521
10	MP5	X	-21.4	%91.979
11	MP6	X	-36.4	%25.052
12	MP6	X	-56.5	%96.875
13	MP7	X	-16.9	%57.76
14	MP7	X	-16.9	%79.74
15	MP8	X	-20.2	%45.833
16	MP8	X	-20.2	%91.667
17	MP9	X	-17.8	%45.521
18	MP9	X	-17.8	%91.979
19	MP10	X	-19.4	%25.052
20	MP10	X	-30.2	%96.875
21	MP11	X	-10.1	%57.76
22	MP11	X	-10.1	%79.74
23	MP12	X	-16.5	%45.833
24	MP12	X	-16.5	%91.667
25	MP1	Z	12.4	%45.521
26	MP1	Z	12.4	%91.979
27	MP2	Z	21	%25.052
28	MP2	Z	32.6	%96.875
29	MP3	Z	9.8	%57.76
30	MP3	Z	9.8	%79.74
31	MP4	Z	11.6	%45.833
32	MP4	Z	11.6	%91.667
33	MP5	Z	12.4	%45.521
34	MP5	Z	12.4	%91.979
35	MP6	Z	21	%25.052
36	MP6	Z	32.6	%96.875
37	MP7	Z	9.8	%57.76
38	MP7	Z	9.8	%79.74
39	MP8	Z	11.6	%45.833
40	MP8	Z	11.6	%91.667
41	MP9	Z	10.3	%45.521
42	MP9	Z	10.3	%91.979
43	MP10	Z	11.2	%25.052
44	MP10	Z	17.4	%96.875
45	MP11	Z	5.8	%57.76
46	MP11	Z	5.8	%79.74
47	MP12	Z	9.5	%45.833
48	MP12	Z	9.5	%91.667

Member Point Loads (BLC 193 : Antenna Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-26.2	%45.521
2	MP1	X	-26.2	%91.979
3	MP2	X	-48.5	%25.052
4	MP2	X	-75.4	%96.875
5	MP3	X	-22.1	%57.76

Member Point Loads (BLC 193 : Antenna Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
6	MP3	X	-22.1	%79.74
7	MP4	X	-24.7	%45.833
8	MP4	X	-24.7	%91.667
9	MP5	X	-22	%45.521
10	MP5	X	-22	%91.979
11	MP6	X	-29	%25.052
12	MP6	X	-45	%96.875
13	MP7	X	-14.3	%57.76
14	MP7	X	-14.3	%79.74
15	MP8	X	-20.5	%45.833
16	MP8	X	-20.5	%91.667
17	MP9	X	-22	%45.521
18	MP9	X	-22	%91.979
19	MP10	X	-29	%25.052
20	MP10	X	-45	%96.875
21	MP11	X	-14.3	%57.76
22	MP11	X	-14.3	%79.74
23	MP12	X	-20.5	%45.833
24	MP12	X	-20.5	%91.667
25	MP1	Z	0	0
26	MP1	Z	0	0
27	MP2	Z	0	0
28	MP2	Z	0	0
29	MP3	Z	0	0
30	MP3	Z	0	0
31	MP4	Z	0	0
32	MP4	Z	0	0
33	MP5	Z	0	0
34	MP5	Z	0	0
35	MP6	Z	0	0
36	MP6	Z	0	0
37	MP7	Z	0	0
38	MP7	Z	0	0
39	MP8	Z	0	0
40	MP8	Z	0	0
41	MP9	Z	0	0
42	MP9	Z	0	0
43	MP10	Z	0	0
44	MP10	Z	0	0
45	MP11	Z	0	0
46	MP11	Z	0	0
47	MP12	Z	0	0
48	MP12	Z	0	0

Member Point Loads (BLC 194 : Antenna Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-21.4	%45.521
2	MP1	X	-21.4	%91.979
3	MP2	X	-36.4	%25.052
4	MP2	X	-56.5	%96.875
5	MP3	X	-16.9	%57.76
6	MP3	X	-16.9	%79.74
7	MP4	X	-20.2	%45.833
8	MP4	X	-20.2	%91.667
9	MP5	X	-17.8	%45.521
10	MP5	X	-17.8	%91.979

Member Point Loads (BLC 194 : Antenna Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
11	MP6	X	-19.4	%25.052
12	MP6	X	-30.2	%96.875
13	MP7	X	-10.1	%57.76
14	MP7	X	-10.1	%79.74
15	MP8	X	-16.5	%45.833
16	MP8	X	-16.5	%91.667
17	MP9	X	-21.4	%45.521
18	MP9	X	-21.4	%91.979
19	MP10	X	-36.4	%25.052
20	MP10	X	-56.5	%96.875
21	MP11	X	-16.9	%57.76
22	MP11	X	-16.9	%79.74
23	MP12	X	-20.2	%45.833
24	MP12	X	-20.2	%91.667
25	MP1	Z	-12.4	%45.521
26	MP1	Z	-12.4	%91.979
27	MP2	Z	-21	%25.052
28	MP2	Z	-32.6	%96.875
29	MP3	Z	-9.8	%57.76
30	MP3	Z	-9.8	%79.74
31	MP4	Z	-11.6	%45.833
32	MP4	Z	-11.6	%91.667
33	MP5	Z	-10.3	%45.521
34	MP5	Z	-10.3	%91.979
35	MP6	Z	-11.2	%25.052
36	MP6	Z	-17.4	%96.875
37	MP7	Z	-5.8	%57.76
38	MP7	Z	-5.8	%79.74
39	MP8	Z	-9.5	%45.833
40	MP8	Z	-9.5	%91.667
41	MP9	Z	-12.4	%45.521
42	MP9	Z	-12.4	%91.979
43	MP10	Z	-21	%25.052
44	MP10	Z	-32.6	%96.875
45	MP11	Z	-9.8	%57.76
46	MP11	Z	-9.8	%79.74
47	MP12	Z	-11.6	%45.833
48	MP12	Z	-11.6	%91.667

Member Point Loads (BLC 195 : Antenna Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-11	%45.521
2	MP1	X	-11	%91.979
3	MP2	X	-14.5	%25.052
4	MP2	X	-22.5	%96.875
5	MP3	X	-7.1	%57.76
6	MP3	X	-7.1	%79.74
7	MP4	X	-10.2	%45.833
8	MP4	X	-10.2	%91.667
9	MP5	X	-11	%45.521
10	MP5	X	-11	%91.979
11	MP6	X	-14.5	%25.052
12	MP6	X	-22.5	%96.875
13	MP7	X	-7.1	%57.76
14	MP7	X	-7.1	%79.74
15	MP8	X	-10.2	%45.833

Member Point Loads (BLC 195 : Antenna Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
16	MP8	X	-10.2	%91.667
17	MP9	X	-13.1	%45.521
18	MP9	X	-13.1	%91.979
19	MP10	X	-24.3	%25.052
20	MP10	X	-37.7	%96.875
21	MP11	X	-11.1	%57.76
22	MP11	X	-11.1	%79.74
23	MP12	X	-12.3	%45.833
24	MP12	X	-12.3	%91.667
25	MP1	Z	-19	%45.521
26	MP1	Z	-19	%91.979
27	MP2	Z	-25.1	%25.052
28	MP2	Z	-39	%96.875
29	MP3	Z	-12.3	%57.76
30	MP3	Z	-12.3	%79.74
31	MP4	Z	-17.7	%45.833
32	MP4	Z	-17.7	%91.667
33	MP5	Z	-19	%45.521
34	MP5	Z	-19	%91.979
35	MP6	Z	-25.1	%25.052
36	MP6	Z	-39	%96.875
37	MP7	Z	-12.3	%57.76
38	MP7	Z	-12.3	%79.74
39	MP8	Z	-17.7	%45.833
40	MP8	Z	-17.7	%91.667
41	MP9	Z	-22.7	%45.521
42	MP9	Z	-22.7	%91.979
43	MP10	Z	-42	%25.052
44	MP10	Z	-65.3	%96.875
45	MP11	Z	-19.2	%57.76
46	MP11	Z	-19.2	%79.74
47	MP12	Z	-21.4	%45.833
48	MP12	Z	-21.4	%91.667

Member Point Loads (BLC 196 : Antenna Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0

Member Point Loads (BLC 196 : Antenna Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP1	Z	-20.6	%45.521
26	MP1	Z	-20.6	%91.979
27	MP2	Z	-22.4	%25.052
28	MP2	Z	-34.9	%96.875
29	MP3	Z	-11.6	%57.76
30	MP3	Z	-11.6	%79.74
31	MP4	Z	-19	%45.833
32	MP4	Z	-19	%91.667
33	MP5	Z	-24.8	%45.521
34	MP5	Z	-24.8	%91.979
35	MP6	Z	-42	%25.052
36	MP6	Z	-65.3	%96.875
37	MP7	Z	-19.5	%57.76
38	MP7	Z	-19.5	%79.74
39	MP8	Z	-23.3	%45.833
40	MP8	Z	-23.3	%91.667
41	MP9	Z	-24.8	%45.521
42	MP9	Z	-24.8	%91.979
43	MP10	Z	-42	%25.052
44	MP10	Z	-65.3	%96.875
45	MP11	Z	-19.5	%57.76
46	MP11	Z	-19.5	%79.74
47	MP12	Z	-23.3	%45.833
48	MP12	Z	-23.3	%91.667

Member Point Loads (BLC 197 : Antenna Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	11	%45.521
2	MP1	X	11	%91.979
3	MP2	X	14.5	%25.052
4	MP2	X	22.5	%96.875
5	MP3	X	7.1	%57.76
6	MP3	X	7.1	%79.74
7	MP4	X	10.2	%45.833
8	MP4	X	10.2	%91.667
9	MP5	X	13.1	%45.521
10	MP5	X	13.1	%91.979
11	MP6	X	24.3	%25.052
12	MP6	X	37.7	%96.875
13	MP7	X	11.1	%57.76
14	MP7	X	11.1	%79.74
15	MP8	X	12.3	%45.833
16	MP8	X	12.3	%91.667
17	MP9	X	11	%45.521
18	MP9	X	11	%91.979
19	MP10	X	14.5	%25.052
20	MP10	X	22.5	%96.875
21	MP11	X	7.1	%57.76
22	MP11	X	7.1	%79.74
23	MP12	X	10.2	%45.833
24	MP12	X	10.2	%91.667
25	MP1	Z	-19	%45.521

Member Point Loads (BLC 197 : Antenna Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	MP1	Z	-19	%91.979
27	MP2	Z	-25.1	%25.052
28	MP2	Z	-39	%96.875
29	MP3	Z	-12.3	%57.76
30	MP3	Z	-12.3	%79.74
31	MP4	Z	-17.7	%45.833
32	MP4	Z	-17.7	%91.667
33	MP5	Z	-22.7	%45.521
34	MP5	Z	-22.7	%91.979
35	MP6	Z	-42	%25.052
36	MP6	Z	-65.3	%96.875
37	MP7	Z	-19.2	%57.76
38	MP7	Z	-19.2	%79.74
39	MP8	Z	-21.4	%45.833
40	MP8	Z	-21.4	%91.667
41	MP9	Z	-19	%45.521
42	MP9	Z	-19	%91.979
43	MP10	Z	-25.1	%25.052
44	MP10	Z	-39	%96.875
45	MP11	Z	-12.3	%57.76
46	MP11	Z	-12.3	%79.74
47	MP12	Z	-17.7	%45.833
48	MP12	Z	-17.7	%91.667

Member Point Loads (BLC 198 : Antenna Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	21.4	%45.521
2	MP1	X	21.4	%91.979
3	MP2	X	36.4	%25.052
4	MP2	X	56.5	%96.875
5	MP3	X	16.9	%57.76
6	MP3	X	16.9	%79.74
7	MP4	X	20.2	%45.833
8	MP4	X	20.2	%91.667
9	MP5	X	21.4	%45.521
10	MP5	X	21.4	%91.979
11	MP6	X	36.4	%25.052
12	MP6	X	56.5	%96.875
13	MP7	X	16.9	%57.76
14	MP7	X	16.9	%79.74
15	MP8	X	20.2	%45.833
16	MP8	X	20.2	%91.667
17	MP9	X	17.8	%45.521
18	MP9	X	17.8	%91.979
19	MP10	X	19.4	%25.052
20	MP10	X	30.2	%96.875
21	MP11	X	10.1	%57.76
22	MP11	X	10.1	%79.74
23	MP12	X	16.5	%45.833
24	MP12	X	16.5	%91.667
25	MP1	Z	-12.4	%45.521
26	MP1	Z	-12.4	%91.979
27	MP2	Z	-21	%25.052
28	MP2	Z	-32.6	%96.875
29	MP3	Z	-9.8	%57.76
30	MP3	Z	-9.8	%79.74

Member Point Loads (BLC 198 : Antenna Wind on Ice (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
31	MP4	Z	-11.6	%45.833
32	MP4	Z	-11.6	%91.667
33	MP5	Z	-12.4	%45.521
34	MP5	Z	-12.4	%91.979
35	MP6	Z	-21	%25.052
36	MP6	Z	-32.6	%96.875
37	MP7	Z	-9.8	%57.76
38	MP7	Z	-9.8	%79.74
39	MP8	Z	-11.6	%45.833
40	MP8	Z	-11.6	%91.667
41	MP9	Z	-10.3	%45.521
42	MP9	Z	-10.3	%91.979
43	MP10	Z	-11.2	%25.052
44	MP10	Z	-17.4	%96.875
45	MP11	Z	-5.8	%57.76
46	MP11	Z	-5.8	%79.74
47	MP12	Z	-9.5	%45.833
48	MP12	Z	-9.5	%91.667

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	16.3	16.3	0	0
2	BRACE-2	X	16.3	16.3	0	0
3	BRACE-3	X	16.3	16.3	0	0
4	CORNER-L-1	X	11.5	11.5	0	0
5	CORNER-L-2	X	11.5	11.5	0	0
6	CORNER-L-3	X	11.5	11.5	0	0
7	CORNER-PL-1	X	25.5	25.5	0	0
8	CORNER-PL-2	X	25.5	25.5	0	0
9	CORNER-PL-3	X	25.5	25.5	0	0
10	FM-BOT-0	X	14.3	14.3	0	0
11	FM-BOT-120	X	14.3	14.3	0	0
12	FM-BOT-240	X	14.3	14.3	0	0
13	FM-TOP-0	X	10.1	10.1	0	0
14	FM-TOP-120	X	10.1	10.1	0	0
15	FM-TOP-240	X	10.1	10.1	0	0
16	GRATE-H-0-1	X	14.2	14.2	0	0
17	GRATE-H-0-2	X	14.2	14.2	0	0
18	GRATE-H-120-1	X	14.2	14.2	0	0
19	GRATE-H-120-2	X	14.2	14.2	0	0
20	GRATE-H-240-1	X	14.2	14.2	0	0
21	GRATE-H-240-2	X	14.2	14.2	0	0
22	SA-1	X	16.3	16.3	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	16.3	16.3	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	0	0	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	14.1	14.1	0	0
2	BRACE-2	X	14.1	14.1	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	10	10	0	0
5	CORNER-L-2	X	10	10	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	22.1	22.1	0	0
8	CORNER-PL-2	X	22.1	22.1	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	12.4	12.4	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	12.4	12.4	0	0
13	FM-TOP-0	X	8.8	8.8	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	8.8	8.8	0	0
16	GRATE-H-0-1	X	12.3	12.3	0	0
17	GRATE-H-0-2	X	12.3	12.3	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	12.3	12.3	0	0
21	GRATE-H-240-2	X	12.3	12.3	0	0
22	SA-1	X	14.1	14.1	0	0
23	SA-2	X	14.1	14.1	0	0
24	SA-3	X	14.1	14.1	0	0
25	BRACE-1	Z	8.1	8.1	0	0
26	BRACE-2	Z	8.1	8.1	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	5.8	5.8	0	0
29	CORNER-L-2	Z	5.8	5.8	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	12.8	12.8	0	0
32	CORNER-PL-2	Z	12.8	12.8	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	7.1	7.1	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	7.1	7.1	0	0
37	FM-TOP-0	Z	5.1	5.1	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	5.1	5.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
40	GRATE-H-0-1	Z	7.1	7.1	0	0
41	GRATE-H-0-2	Z	7.1	7.1	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	7.1	7.1	0	0
45	GRATE-H-240-2	Z	7.1	7.1	0	0
46	SA-1	Z	8.1	8.1	0	0
47	SA-2	Z	8.1	8.1	0	0
48	SA-3	Z	8.1	8.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	8.1	8.1	0	0
2	BRACE-2	X	8.1	8.1	0	0
3	BRACE-3	X	8.1	8.1	0	0
4	CORNER-L-1	X	5.8	5.8	0	0
5	CORNER-L-2	X	5.8	5.8	0	0
6	CORNER-L-3	X	5.8	5.8	0	0
7	CORNER-PL-1	X	12.8	12.8	0	0
8	CORNER-PL-2	X	12.8	12.8	0	0
9	CORNER-PL-3	X	12.8	12.8	0	0
10	FM-BOT-0	X	7.1	7.1	0	0
11	FM-BOT-120	X	7.1	7.1	0	0
12	FM-BOT-240	X	7.1	7.1	0	0
13	FM-TOP-0	X	5.1	5.1	0	0
14	FM-TOP-120	X	5.1	5.1	0	0
15	FM-TOP-240	X	5.1	5.1	0	0
16	GRATE-H-0-1	X	7.1	7.1	0	0
17	GRATE-H-0-2	X	7.1	7.1	0	0
18	GRATE-H-120-1	X	7.1	7.1	0	0
19	GRATE-H-120-2	X	7.1	7.1	0	0
20	GRATE-H-240-1	X	7.1	7.1	0	0
21	GRATE-H-240-2	X	7.1	7.1	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	8.1	8.1	0	0
24	SA-3	X	8.1	8.1	0	0
25	BRACE-1	Z	14.1	14.1	0	0
26	BRACE-2	Z	14.1	14.1	0	0
27	BRACE-3	Z	14.1	14.1	0	0
28	CORNER-L-1	Z	10	10	0	0
29	CORNER-L-2	Z	10	10	0	0
30	CORNER-L-3	Z	10	10	0	0
31	CORNER-PL-1	Z	22.1	22.1	0	0
32	CORNER-PL-2	Z	22.1	22.1	0	0
33	CORNER-PL-3	Z	22.1	22.1	0	0
34	FM-BOT-0	Z	12.4	12.4	0	0
35	FM-BOT-120	Z	12.4	12.4	0	0
36	FM-BOT-240	Z	12.4	12.4	0	0
37	FM-TOP-0	Z	8.8	8.8	0	0
38	FM-TOP-120	Z	8.8	8.8	0	0
39	FM-TOP-240	Z	8.8	8.8	0	0
40	GRATE-H-0-1	Z	12.3	12.3	0	0
41	GRATE-H-0-2	Z	12.3	12.3	0	0
42	GRATE-H-120-1	Z	12.3	12.3	0	0
43	GRATE-H-120-2	Z	12.3	12.3	0	0
44	GRATE-H-240-1	Z	12.3	12.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
45	GRATE-H-240-2	Z	12.3	12.3	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	14.1	14.1	0	0
48	SA-3	Z	14.1	14.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	0	0	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	0	0	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	0	0	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	0	0	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	0	0	0	0
17	GRATE-H-0-2	X	0	0	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	16.3	16.3	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	16.3	16.3	0	0
28	CORNER-L-1	Z	11.5	11.5	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	11.5	11.5	0	0
31	CORNER-PL-1	Z	25.5	25.5	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	25.5	25.5	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	14.3	14.3	0	0
36	FM-BOT-240	Z	14.3	14.3	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	10.1	10.1	0	0
39	FM-TOP-240	Z	10.1	10.1	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	14.2	14.2	0	0
43	GRATE-H-120-2	Z	14.2	14.2	0	0
44	GRATE-H-240-1	Z	14.2	14.2	0	0
45	GRATE-H-240-2	Z	14.2	14.2	0	0
46	SA-1	Z	16.3	16.3	0	0
47	SA-2	Z	16.3	16.3	0	0
48	SA-3	Z	16.3	16.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-8.1	-8.1	0	0
2	BRACE-2	X	-8.1	-8.1	0	0
3	BRACE-3	X	-8.1	-8.1	0	0
4	CORNER-L-1	X	-5.8	-5.8	0	0
5	CORNER-L-2	X	-5.8	-5.8	0	0
6	CORNER-L-3	X	-5.8	-5.8	0	0
7	CORNER-PL-1	X	-12.8	-12.8	0	0
8	CORNER-PL-2	X	-12.8	-12.8	0	0
9	CORNER-PL-3	X	-12.8	-12.8	0	0
10	FM-BOT-0	X	-7.1	-7.1	0	0
11	FM-BOT-120	X	-7.1	-7.1	0	0
12	FM-BOT-240	X	-7.1	-7.1	0	0
13	FM-TOP-0	X	-5.1	-5.1	0	0
14	FM-TOP-120	X	-5.1	-5.1	0	0
15	FM-TOP-240	X	-5.1	-5.1	0	0
16	GRATE-H-0-1	X	-7.1	-7.1	0	0
17	GRATE-H-0-2	X	-7.1	-7.1	0	0
18	GRATE-H-120-1	X	-7.1	-7.1	0	0
19	GRATE-H-120-2	X	-7.1	-7.1	0	0
20	GRATE-H-240-1	X	-7.1	-7.1	0	0
21	GRATE-H-240-2	X	-7.1	-7.1	0	0
22	SA-1	X	-8.1	-8.1	0	0
23	SA-2	X	-8.1	-8.1	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	14.1	14.1	0	0
26	BRACE-2	Z	14.1	14.1	0	0
27	BRACE-3	Z	14.1	14.1	0	0
28	CORNER-L-1	Z	10	10	0	0
29	CORNER-L-2	Z	10	10	0	0
30	CORNER-L-3	Z	10	10	0	0
31	CORNER-PL-1	Z	22.1	22.1	0	0
32	CORNER-PL-2	Z	22.1	22.1	0	0
33	CORNER-PL-3	Z	22.1	22.1	0	0
34	FM-BOT-0	Z	12.4	12.4	0	0
35	FM-BOT-120	Z	12.4	12.4	0	0
36	FM-BOT-240	Z	12.4	12.4	0	0
37	FM-TOP-0	Z	8.8	8.8	0	0
38	FM-TOP-120	Z	8.8	8.8	0	0
39	FM-TOP-240	Z	8.8	8.8	0	0
40	GRATE-H-0-1	Z	12.3	12.3	0	0
41	GRATE-H-0-2	Z	12.3	12.3	0	0
42	GRATE-H-120-1	Z	12.3	12.3	0	0
43	GRATE-H-120-2	Z	12.3	12.3	0	0
44	GRATE-H-240-1	Z	12.3	12.3	0	0
45	GRATE-H-240-2	Z	12.3	12.3	0	0
46	SA-1	Z	14.1	14.1	0	0
47	SA-2	Z	14.1	14.1	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	-14.1	-14.1	0	0
3	BRACE-3	X	-14.1	-14.1	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	-10	-10	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
6	CORNER-L-3	X	-10	-10	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	-22.1	-22.1	0	0
9	CORNER-PL-3	X	-22.1	-22.1	0	0
10	FM-BOT-0	X	-12.4	-12.4	0	0
11	FM-BOT-120	X	-12.4	-12.4	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	-8.8	-8.8	0	0
14	FM-TOP-120	X	-8.8	-8.8	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	-12.3	-12.3	0	0
17	GRATE-H-0-2	X	-12.3	-12.3	0	0
18	GRATE-H-120-1	X	-12.3	-12.3	0	0
19	GRATE-H-120-2	X	-12.3	-12.3	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	-14.1	-14.1	0	0
23	SA-2	X	-14.1	-14.1	0	0
24	SA-3	X	-14.1	-14.1	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	8.1	8.1	0	0
27	BRACE-3	Z	8.1	8.1	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	5.8	5.8	0	0
30	CORNER-L-3	Z	5.8	5.8	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	12.8	12.8	0	0
33	CORNER-PL-3	Z	12.8	12.8	0	0
34	FM-BOT-0	Z	7.1	7.1	0	0
35	FM-BOT-120	Z	7.1	7.1	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	5.1	5.1	0	0
38	FM-TOP-120	Z	5.1	5.1	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	7.1	7.1	0	0
41	GRATE-H-0-2	Z	7.1	7.1	0	0
42	GRATE-H-120-1	Z	7.1	7.1	0	0
43	GRATE-H-120-2	Z	7.1	7.1	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	8.1	8.1	0	0
47	SA-2	Z	8.1	8.1	0	0
48	SA-3	Z	8.1	8.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-16.3	-16.3	0	0
2	BRACE-2	X	-16.3	-16.3	0	0
3	BRACE-3	X	-16.3	-16.3	0	0
4	CORNER-L-1	X	-11.5	-11.5	0	0
5	CORNER-L-2	X	-11.5	-11.5	0	0
6	CORNER-L-3	X	-11.5	-11.5	0	0
7	CORNER-PL-1	X	-25.5	-25.5	0	0
8	CORNER-PL-2	X	-25.5	-25.5	0	0
9	CORNER-PL-3	X	-25.5	-25.5	0	0
10	FM-BOT-0	X	-14.3	-14.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
11	FM-BOT-120	X	-14.3	-14.3	0	0
12	FM-BOT-240	X	-14.3	-14.3	0	0
13	FM-TOP-0	X	-10.1	-10.1	0	0
14	FM-TOP-120	X	-10.1	-10.1	0	0
15	FM-TOP-240	X	-10.1	-10.1	0	0
16	GRATE-H-0-1	X	-14.2	-14.2	0	0
17	GRATE-H-0-2	X	-14.2	-14.2	0	0
18	GRATE-H-120-1	X	-14.2	-14.2	0	0
19	GRATE-H-120-2	X	-14.2	-14.2	0	0
20	GRATE-H-240-1	X	-14.2	-14.2	0	0
21	GRATE-H-240-2	X	-14.2	-14.2	0	0
22	SA-1	X	-16.3	-16.3	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	-16.3	-16.3	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	0	0	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-14.1	-14.1	0	0
2	BRACE-2	X	-14.1	-14.1	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	-10	-10	0	0
5	CORNER-L-2	X	-10	-10	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	-22.1	-22.1	0	0
8	CORNER-PL-2	X	-22.1	-22.1	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	-12.4	-12.4	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	-12.4	-12.4	0	0
13	FM-TOP-0	X	-8.8	-8.8	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	-8.8	-8.8	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
16	GRATE-H-0-1	X	-12.3	-12.3	0	0
17	GRATE-H-0-2	X	-12.3	-12.3	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	-12.3	-12.3	0	0
21	GRATE-H-240-2	X	-12.3	-12.3	0	0
22	SA-1	X	-14.1	-14.1	0	0
23	SA-2	X	-14.1	-14.1	0	0
24	SA-3	X	-14.1	-14.1	0	0
25	BRACE-1	Z	-8.1	-8.1	0	0
26	BRACE-2	Z	-8.1	-8.1	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	-5.8	-5.8	0	0
29	CORNER-L-2	Z	-5.8	-5.8	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	-12.8	-12.8	0	0
32	CORNER-PL-2	Z	-12.8	-12.8	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	-7.1	-7.1	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	-7.1	-7.1	0	0
37	FM-TOP-0	Z	-5.1	-5.1	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	-5.1	-5.1	0	0
40	GRATE-H-0-1	Z	-7.1	-7.1	0	0
41	GRATE-H-0-2	Z	-7.1	-7.1	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	-7.1	-7.1	0	0
45	GRATE-H-240-2	Z	-7.1	-7.1	0	0
46	SA-1	Z	-8.1	-8.1	0	0
47	SA-2	Z	-8.1	-8.1	0	0
48	SA-3	Z	-8.1	-8.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-8.1	-8.1	0	0
2	BRACE-2	X	-8.1	-8.1	0	0
3	BRACE-3	X	-8.1	-8.1	0	0
4	CORNER-L-1	X	-5.8	-5.8	0	0
5	CORNER-L-2	X	-5.8	-5.8	0	0
6	CORNER-L-3	X	-5.8	-5.8	0	0
7	CORNER-PL-1	X	-12.8	-12.8	0	0
8	CORNER-PL-2	X	-12.8	-12.8	0	0
9	CORNER-PL-3	X	-12.8	-12.8	0	0
10	FM-BOT-0	X	-7.1	-7.1	0	0
11	FM-BOT-120	X	-7.1	-7.1	0	0
12	FM-BOT-240	X	-7.1	-7.1	0	0
13	FM-TOP-0	X	-5.1	-5.1	0	0
14	FM-TOP-120	X	-5.1	-5.1	0	0
15	FM-TOP-240	X	-5.1	-5.1	0	0
16	GRATE-H-0-1	X	-7.1	-7.1	0	0
17	GRATE-H-0-2	X	-7.1	-7.1	0	0
18	GRATE-H-120-1	X	-7.1	-7.1	0	0
19	GRATE-H-120-2	X	-7.1	-7.1	0	0
20	GRATE-H-240-1	X	-7.1	-7.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
21	GRATE-H-240-2	X	-7.1	-7.1	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	-8.1	-8.1	0	0
24	SA-3	X	-8.1	-8.1	0	0
25	BRACE-1	Z	-14.1	-14.1	0	0
26	BRACE-2	Z	-14.1	-14.1	0	0
27	BRACE-3	Z	-14.1	-14.1	0	0
28	CORNER-L-1	Z	-10	-10	0	0
29	CORNER-L-2	Z	-10	-10	0	0
30	CORNER-L-3	Z	-10	-10	0	0
31	CORNER-PL-1	Z	-22.1	-22.1	0	0
32	CORNER-PL-2	Z	-22.1	-22.1	0	0
33	CORNER-PL-3	Z	-22.1	-22.1	0	0
34	FM-BOT-0	Z	-12.4	-12.4	0	0
35	FM-BOT-120	Z	-12.4	-12.4	0	0
36	FM-BOT-240	Z	-12.4	-12.4	0	0
37	FM-TOP-0	Z	-8.8	-8.8	0	0
38	FM-TOP-120	Z	-8.8	-8.8	0	0
39	FM-TOP-240	Z	-8.8	-8.8	0	0
40	GRATE-H-0-1	Z	-12.3	-12.3	0	0
41	GRATE-H-0-2	Z	-12.3	-12.3	0	0
42	GRATE-H-120-1	Z	-12.3	-12.3	0	0
43	GRATE-H-120-2	Z	-12.3	-12.3	0	0
44	GRATE-H-240-1	Z	-12.3	-12.3	0	0
45	GRATE-H-240-2	Z	-12.3	-12.3	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	-14.1	-14.1	0	0
48	SA-3	Z	-14.1	-14.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	0	0	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	0	0	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	0	0	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	0	0	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	0	0	0	0
17	GRATE-H-0-2	X	0	0	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	-16.3	-16.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	-16.3	-16.3	0	0
28	CORNER-L-1	Z	-11.5	-11.5	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	-11.5	-11.5	0	0
31	CORNER-PL-1	Z	-25.5	-25.5	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	-25.5	-25.5	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	-14.3	-14.3	0	0
36	FM-BOT-240	Z	-14.3	-14.3	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	-10.1	-10.1	0	0
39	FM-TOP-240	Z	-10.1	-10.1	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	-14.2	-14.2	0	0
43	GRATE-H-120-2	Z	-14.2	-14.2	0	0
44	GRATE-H-240-1	Z	-14.2	-14.2	0	0
45	GRATE-H-240-2	Z	-14.2	-14.2	0	0
46	SA-1	Z	-16.3	-16.3	0	0
47	SA-2	Z	-16.3	-16.3	0	0
48	SA-3	Z	-16.3	-16.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	8.1	8.1	0	0
2	BRACE-2	X	8.1	8.1	0	0
3	BRACE-3	X	8.1	8.1	0	0
4	CORNER-L-1	X	5.8	5.8	0	0
5	CORNER-L-2	X	5.8	5.8	0	0
6	CORNER-L-3	X	5.8	5.8	0	0
7	CORNER-PL-1	X	12.8	12.8	0	0
8	CORNER-PL-2	X	12.8	12.8	0	0
9	CORNER-PL-3	X	12.8	12.8	0	0
10	FM-BOT-0	X	7.1	7.1	0	0
11	FM-BOT-120	X	7.1	7.1	0	0
12	FM-BOT-240	X	7.1	7.1	0	0
13	FM-TOP-0	X	5.1	5.1	0	0
14	FM-TOP-120	X	5.1	5.1	0	0
15	FM-TOP-240	X	5.1	5.1	0	0
16	GRATE-H-0-1	X	7.1	7.1	0	0
17	GRATE-H-0-2	X	7.1	7.1	0	0
18	GRATE-H-120-1	X	7.1	7.1	0	0
19	GRATE-H-120-2	X	7.1	7.1	0	0
20	GRATE-H-240-1	X	7.1	7.1	0	0
21	GRATE-H-240-2	X	7.1	7.1	0	0
22	SA-1	X	8.1	8.1	0	0
23	SA-2	X	8.1	8.1	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	-14.1	-14.1	0	0
26	BRACE-2	Z	-14.1	-14.1	0	0
27	BRACE-3	Z	-14.1	-14.1	0	0
28	CORNER-L-1	Z	-10	-10	0	0
29	CORNER-L-2	Z	-10	-10	0	0
30	CORNER-L-3	Z	-10	-10	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
31	CORNER-PL-1	Z	-22.1	-22.1	0	0
32	CORNER-PL-2	Z	-22.1	-22.1	0	0
33	CORNER-PL-3	Z	-22.1	-22.1	0	0
34	FM-BOT-0	Z	-12.4	-12.4	0	0
35	FM-BOT-120	Z	-12.4	-12.4	0	0
36	FM-BOT-240	Z	-12.4	-12.4	0	0
37	FM-TOP-0	Z	-8.8	-8.8	0	0
38	FM-TOP-120	Z	-8.8	-8.8	0	0
39	FM-TOP-240	Z	-8.8	-8.8	0	0
40	GRATE-H-0-1	Z	-12.3	-12.3	0	0
41	GRATE-H-0-2	Z	-12.3	-12.3	0	0
42	GRATE-H-120-1	Z	-12.3	-12.3	0	0
43	GRATE-H-120-2	Z	-12.3	-12.3	0	0
44	GRATE-H-240-1	Z	-12.3	-12.3	0	0
45	GRATE-H-240-2	Z	-12.3	-12.3	0	0
46	SA-1	Z	-14.1	-14.1	0	0
47	SA-2	Z	-14.1	-14.1	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	14.1	14.1	0	0
3	BRACE-3	X	14.1	14.1	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	10	10	0	0
6	CORNER-L-3	X	10	10	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	22.1	22.1	0	0
9	CORNER-PL-3	X	22.1	22.1	0	0
10	FM-BOT-0	X	12.4	12.4	0	0
11	FM-BOT-120	X	12.4	12.4	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	8.8	8.8	0	0
14	FM-TOP-120	X	8.8	8.8	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	12.3	12.3	0	0
17	GRATE-H-0-2	X	12.3	12.3	0	0
18	GRATE-H-120-1	X	12.3	12.3	0	0
19	GRATE-H-120-2	X	12.3	12.3	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	14.1	14.1	0	0
23	SA-2	X	14.1	14.1	0	0
24	SA-3	X	14.1	14.1	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	-8.1	-8.1	0	0
27	BRACE-3	Z	-8.1	-8.1	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	-5.8	-5.8	0	0
30	CORNER-L-3	Z	-5.8	-5.8	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	-12.8	-12.8	0	0
33	CORNER-PL-3	Z	-12.8	-12.8	0	0
34	FM-BOT-0	Z	-7.1	-7.1	0	0
35	FM-BOT-120	Z	-7.1	-7.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	-5.1	-5.1	0	0
38	FM-TOP-120	Z	-5.1	-5.1	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	-7.1	-7.1	0	0
41	GRATE-H-0-2	Z	-7.1	-7.1	0	0
42	GRATE-H-120-1	Z	-7.1	-7.1	0	0
43	GRATE-H-120-2	Z	-7.1	-7.1	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	-8.1	-8.1	0	0
47	SA-2	Z	-8.1	-8.1	0	0
48	SA-3	Z	-8.1	-8.1	0	0

Member Distributed Loads (BLC 14 : Ice Load)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	Y	-21.4	-21.4	0	0
2	BRACE-2	Y	-21.4	-21.4	0	0
3	BRACE-3	Y	-21.4	-21.4	0	0
4	CORNER-L-1	Y	-15.6	-15.6	0	0
5	CORNER-L-2	Y	-15.6	-15.6	0	0
6	CORNER-L-3	Y	-15.6	-15.6	0	0
7	CORNER-PL-1	Y	-22.4	-22.4	0	0
8	CORNER-PL-2	Y	-22.4	-22.4	0	0
9	CORNER-PL-3	Y	-22.4	-22.4	0	0
10	FM-BOT-0	Y	-15.5	-15.5	0	0
11	FM-BOT-120	Y	-15.5	-15.5	0	0
12	FM-BOT-240	Y	-15.5	-15.5	0	0
13	FM-TOP-0	Y	-12.5	-12.5	0	0
14	FM-TOP-120	Y	-12.5	-12.5	0	0
15	FM-TOP-240	Y	-12.5	-12.5	0	0
16	GRATE-H-0-1	Y	-13.7	-13.7	0	0
17	GRATE-H-0-2	Y	-13.7	-13.7	0	0
18	GRATE-H-120-1	Y	-13.7	-13.7	0	0
19	GRATE-H-120-2	Y	-13.7	-13.7	0	0
20	GRATE-H-240-1	Y	-13.7	-13.7	0	0
21	GRATE-H-240-2	Y	-13.7	-13.7	0	0
22	SA-1	Y	-21.4	-21.4	0	0
23	SA-2	Y	-21.4	-21.4	0	0
24	SA-3	Y	-21.4	-21.4	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	4.8	4.8	0	0
2	BRACE-2	X	4.8	4.8	0	0
3	BRACE-3	X	4.8	4.8	0	0
4	CORNER-L-1	X	3.6	3.6	0	0
5	CORNER-L-2	X	3.6	3.6	0	0
6	CORNER-L-3	X	3.6	3.6	0	0
7	CORNER-PL-1	X	5.8	5.8	0	0
8	CORNER-PL-2	X	5.8	5.8	0	0
9	CORNER-PL-3	X	5.8	5.8	0	0
10	FM-BOT-0	X	5.2	5.2	0	0
11	FM-BOT-120	X	5.2	5.2	0	0
12	FM-BOT-240	X	5.2	5.2	0	0
13	FM-TOP-0	X	4.6	4.6	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
14	FM-TOP-120	X	4.6	4.6	0	0
15	FM-TOP-240	X	4.6	4.6	0	0
16	GRATE-H-0-1	X	4.4	4.4	0	0
17	GRATE-H-0-2	X	4.4	4.4	0	0
18	GRATE-H-120-1	X	4.4	4.4	0	0
19	GRATE-H-120-2	X	4.4	4.4	0	0
20	GRATE-H-240-1	X	4.4	4.4	0	0
21	GRATE-H-240-2	X	4.4	4.4	0	0
22	SA-1	X	4.8	4.8	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	4.8	4.8	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	0	0	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	4.1	4.1	0	0
2	BRACE-2	X	4.1	4.1	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	3.1	3.1	0	0
5	CORNER-L-2	X	3.1	3.1	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	5.1	5.1	0	0
8	CORNER-PL-2	X	5.1	5.1	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	4.5	4.5	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	4.5	4.5	0	0
13	FM-TOP-0	X	4	4	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	4	4	0	0
16	GRATE-H-0-1	X	3.8	3.8	0	0
17	GRATE-H-0-2	X	3.8	3.8	0	0
18	GRATE-H-120-1	X	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	3.8	3.8	0	0
21	GRATE-H-240-2	X	3.8	3.8	0	0
22	SA-1	X	4.1	4.1	0	0
23	SA-2	X	4.1	4.1	0	0
24	SA-3	X	4.1	4.1	0	0
25	BRACE-1	Z	2.4	2.4	0	0
26	BRACE-2	Z	2.4	2.4	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	1.8	1.8	0	0
29	CORNER-L-2	Z	1.8	1.8	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	2.9	2.9	0	0
32	CORNER-PL-2	Z	2.9	2.9	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	2.6	2.6	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	2.6	2.6	0	0
37	FM-TOP-0	Z	2.3	2.3	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	2.3	2.3	0	0
40	GRATE-H-0-1	Z	2.2	2.2	0	0
41	GRATE-H-0-2	Z	2.2	2.2	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	2.2	2.2	0	0
45	GRATE-H-240-2	Z	2.2	2.2	0	0
46	SA-1	Z	2.4	2.4	0	0
47	SA-2	Z	2.4	2.4	0	0
48	SA-3	Z	2.4	2.4	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	2.4	2.4	0	0
2	BRACE-2	X	2.4	2.4	0	0
3	BRACE-3	X	2.4	2.4	0	0
4	CORNER-L-1	X	1.8	1.8	0	0
5	CORNER-L-2	X	1.8	1.8	0	0
6	CORNER-L-3	X	1.8	1.8	0	0
7	CORNER-PL-1	X	2.9	2.9	0	0
8	CORNER-PL-2	X	2.9	2.9	0	0
9	CORNER-PL-3	X	2.9	2.9	0	0
10	FM-BOT-0	X	2.6	2.6	0	0
11	FM-BOT-120	X	2.6	2.6	0	0
12	FM-BOT-240	X	2.6	2.6	0	0
13	FM-TOP-0	X	2.3	2.3	0	0
14	FM-TOP-120	X	2.3	2.3	0	0
15	FM-TOP-240	X	2.3	2.3	0	0
16	GRATE-H-0-1	X	2.2	2.2	0	0
17	GRATE-H-0-2	X	2.2	2.2	0	0
18	GRATE-H-120-1	X	2.2	2.2	0	0
19	GRATE-H-120-2	X	2.2	2.2	0	0
20	GRATE-H-240-1	X	2.2	2.2	0	0
21	GRATE-H-240-2	X	2.2	2.2	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	2.4	2.4	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
24	SA-3	X	2.4	2.4	0	0
25	BRACE-1	Z	4.1	4.1	0	0
26	BRACE-2	Z	4.1	4.1	0	0
27	BRACE-3	Z	4.1	4.1	0	0
28	CORNER-L-1	Z	3.1	3.1	0	0
29	CORNER-L-2	Z	3.1	3.1	0	0
30	CORNER-L-3	Z	3.1	3.1	0	0
31	CORNER-PL-1	Z	5.1	5.1	0	0
32	CORNER-PL-2	Z	5.1	5.1	0	0
33	CORNER-PL-3	Z	5.1	5.1	0	0
34	FM-BOT-0	Z	4.5	4.5	0	0
35	FM-BOT-120	Z	4.5	4.5	0	0
36	FM-BOT-240	Z	4.5	4.5	0	0
37	FM-TOP-0	Z	4	4	0	0
38	FM-TOP-120	Z	4	4	0	0
39	FM-TOP-240	Z	4	4	0	0
40	GRATE-H-0-1	Z	3.8	3.8	0	0
41	GRATE-H-0-2	Z	3.8	3.8	0	0
42	GRATE-H-120-1	Z	3.8	3.8	0	0
43	GRATE-H-120-2	Z	3.8	3.8	0	0
44	GRATE-H-240-1	Z	3.8	3.8	0	0
45	GRATE-H-240-2	Z	3.8	3.8	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	4.1	4.1	0	0
48	SA-3	Z	4.1	4.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	0	0	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	0	0	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	0	0	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	0	0	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	0	0	0	0
17	GRATE-H-0-2	X	0	0	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	4.8	4.8	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	4.8	4.8	0	0
28	CORNER-L-1	Z	3.6	3.6	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	3.6	3.6	0	0
31	CORNER-PL-1	Z	5.8	5.8	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	5.8	5.8	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	5.2	5.2	0	0
36	FM-BOT-240	Z	5.2	5.2	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	4.6	4.6	0	0
39	FM-TOP-240	Z	4.6	4.6	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	4.4	4.4	0	0
43	GRATE-H-120-2	Z	4.4	4.4	0	0
44	GRATE-H-240-1	Z	4.4	4.4	0	0
45	GRATE-H-240-2	Z	4.4	4.4	0	0
46	SA-1	Z	4.8	4.8	0	0
47	SA-2	Z	4.8	4.8	0	0
48	SA-3	Z	4.8	4.8	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-2.4	-2.4	0	0
2	BRACE-2	X	-2.4	-2.4	0	0
3	BRACE-3	X	-2.4	-2.4	0	0
4	CORNER-L-1	X	-1.8	-1.8	0	0
5	CORNER-L-2	X	-1.8	-1.8	0	0
6	CORNER-L-3	X	-1.8	-1.8	0	0
7	CORNER-PL-1	X	-2.9	-2.9	0	0
8	CORNER-PL-2	X	-2.9	-2.9	0	0
9	CORNER-PL-3	X	-2.9	-2.9	0	0
10	FM-BOT-0	X	-2.6	-2.6	0	0
11	FM-BOT-120	X	-2.6	-2.6	0	0
12	FM-BOT-240	X	-2.6	-2.6	0	0
13	FM-TOP-0	X	-2.3	-2.3	0	0
14	FM-TOP-120	X	-2.3	-2.3	0	0
15	FM-TOP-240	X	-2.3	-2.3	0	0
16	GRATE-H-0-1	X	-2.2	-2.2	0	0
17	GRATE-H-0-2	X	-2.2	-2.2	0	0
18	GRATE-H-120-1	X	-2.2	-2.2	0	0
19	GRATE-H-120-2	X	-2.2	-2.2	0	0
20	GRATE-H-240-1	X	-2.2	-2.2	0	0
21	GRATE-H-240-2	X	-2.2	-2.2	0	0
22	SA-1	X	-2.4	-2.4	0	0
23	SA-2	X	-2.4	-2.4	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	4.1	4.1	0	0
26	BRACE-2	Z	4.1	4.1	0	0
27	BRACE-3	Z	4.1	4.1	0	0
28	CORNER-L-1	Z	3.1	3.1	0	0
29	CORNER-L-2	Z	3.1	3.1	0	0
30	CORNER-L-3	Z	3.1	3.1	0	0
31	CORNER-PL-1	Z	5.1	5.1	0	0
32	CORNER-PL-2	Z	5.1	5.1	0	0
33	CORNER-PL-3	Z	5.1	5.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
34	FM-BOT-0	Z	4.5	4.5	0	0
35	FM-BOT-120	Z	4.5	4.5	0	0
36	FM-BOT-240	Z	4.5	4.5	0	0
37	FM-TOP-0	Z	4	4	0	0
38	FM-TOP-120	Z	4	4	0	0
39	FM-TOP-240	Z	4	4	0	0
40	GRATE-H-0-1	Z	3.8	3.8	0	0
41	GRATE-H-0-2	Z	3.8	3.8	0	0
42	GRATE-H-120-1	Z	3.8	3.8	0	0
43	GRATE-H-120-2	Z	3.8	3.8	0	0
44	GRATE-H-240-1	Z	3.8	3.8	0	0
45	GRATE-H-240-2	Z	3.8	3.8	0	0
46	SA-1	Z	4.1	4.1	0	0
47	SA-2	Z	4.1	4.1	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	-4.1	-4.1	0	0
3	BRACE-3	X	-4.1	-4.1	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	-3.1	-3.1	0	0
6	CORNER-L-3	X	-3.1	-3.1	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	-5.1	-5.1	0	0
9	CORNER-PL-3	X	-5.1	-5.1	0	0
10	FM-BOT-0	X	-4.5	-4.5	0	0
11	FM-BOT-120	X	-4.5	-4.5	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	-4	-4	0	0
14	FM-TOP-120	X	-4	-4	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	-3.8	-3.8	0	0
17	GRATE-H-0-2	X	-3.8	-3.8	0	0
18	GRATE-H-120-1	X	-3.8	-3.8	0	0
19	GRATE-H-120-2	X	-3.8	-3.8	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	-4.1	-4.1	0	0
23	SA-2	X	-4.1	-4.1	0	0
24	SA-3	X	-4.1	-4.1	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	2.4	2.4	0	0
27	BRACE-3	Z	2.4	2.4	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	1.8	1.8	0	0
30	CORNER-L-3	Z	1.8	1.8	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	2.9	2.9	0	0
33	CORNER-PL-3	Z	2.9	2.9	0	0
34	FM-BOT-0	Z	2.6	2.6	0	0
35	FM-BOT-120	Z	2.6	2.6	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	2.3	2.3	0	0
38	FM-TOP-120	Z	2.3	2.3	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	2.2	2.2	0	0
41	GRATE-H-0-2	Z	2.2	2.2	0	0
42	GRATE-H-120-1	Z	2.2	2.2	0	0
43	GRATE-H-120-2	Z	2.2	2.2	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	2.4	2.4	0	0
47	SA-2	Z	2.4	2.4	0	0
48	SA-3	Z	2.4	2.4	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-4.8	-4.8	0	0
2	BRACE-2	X	-4.8	-4.8	0	0
3	BRACE-3	X	-4.8	-4.8	0	0
4	CORNER-L-1	X	-3.6	-3.6	0	0
5	CORNER-L-2	X	-3.6	-3.6	0	0
6	CORNER-L-3	X	-3.6	-3.6	0	0
7	CORNER-PL-1	X	-5.8	-5.8	0	0
8	CORNER-PL-2	X	-5.8	-5.8	0	0
9	CORNER-PL-3	X	-5.8	-5.8	0	0
10	FM-BOT-0	X	-5.2	-5.2	0	0
11	FM-BOT-120	X	-5.2	-5.2	0	0
12	FM-BOT-240	X	-5.2	-5.2	0	0
13	FM-TOP-0	X	-4.6	-4.6	0	0
14	FM-TOP-120	X	-4.6	-4.6	0	0
15	FM-TOP-240	X	-4.6	-4.6	0	0
16	GRATE-H-0-1	X	-4.4	-4.4	0	0
17	GRATE-H-0-2	X	-4.4	-4.4	0	0
18	GRATE-H-120-1	X	-4.4	-4.4	0	0
19	GRATE-H-120-2	X	-4.4	-4.4	0	0
20	GRATE-H-240-1	X	-4.4	-4.4	0	0
21	GRATE-H-240-2	X	-4.4	-4.4	0	0
22	SA-1	X	-4.8	-4.8	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	-4.8	-4.8	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	0	0	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-4.1	-4.1	0	0
2	BRACE-2	X	-4.1	-4.1	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	-3.1	-3.1	0	0
5	CORNER-L-2	X	-3.1	-3.1	0	0
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	-5.1	-5.1	0	0
8	CORNER-PL-2	X	-5.1	-5.1	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	-4.5	-4.5	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	-4.5	-4.5	0	0
13	FM-TOP-0	X	-4	-4	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	-4	-4	0	0
16	GRATE-H-0-1	X	-3.8	-3.8	0	0
17	GRATE-H-0-2	X	-3.8	-3.8	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	-3.8	-3.8	0	0
21	GRATE-H-240-2	X	-3.8	-3.8	0	0
22	SA-1	X	-4.1	-4.1	0	0
23	SA-2	X	-4.1	-4.1	0	0
24	SA-3	X	-4.1	-4.1	0	0
25	BRACE-1	Z	-2.4	-2.4	0	0
26	BRACE-2	Z	-2.4	-2.4	0	0
27	BRACE-3	Z	0	0	0	0
28	CORNER-L-1	Z	-1.8	-1.8	0	0
29	CORNER-L-2	Z	-1.8	-1.8	0	0
30	CORNER-L-3	Z	0	0	0	0
31	CORNER-PL-1	Z	-2.9	-2.9	0	0
32	CORNER-PL-2	Z	-2.9	-2.9	0	0
33	CORNER-PL-3	Z	0	0	0	0
34	FM-BOT-0	Z	-2.6	-2.6	0	0
35	FM-BOT-120	Z	0	0	0	0
36	FM-BOT-240	Z	-2.6	-2.6	0	0
37	FM-TOP-0	Z	-2.3	-2.3	0	0
38	FM-TOP-120	Z	0	0	0	0
39	FM-TOP-240	Z	-2.3	-2.3	0	0
40	GRATE-H-0-1	Z	-2.2	-2.2	0	0
41	GRATE-H-0-2	Z	-2.2	-2.2	0	0
42	GRATE-H-120-1	Z	0	0	0	0
43	GRATE-H-120-2	Z	0	0	0	0
44	GRATE-H-240-1	Z	-2.2	-2.2	0	0
45	GRATE-H-240-2	Z	-2.2	-2.2	0	0
46	SA-1	Z	-2.4	-2.4	0	0
47	SA-2	Z	-2.4	-2.4	0	0
48	SA-3	Z	-2.4	-2.4	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-2.4	-2.4	0	0
2	BRACE-2	X	-2.4	-2.4	0	0
3	BRACE-3	X	-2.4	-2.4	0	0
4	CORNER-L-1	X	-1.8	-1.8	0	0
5	CORNER-L-2	X	-1.8	-1.8	0	0
6	CORNER-L-3	X	-1.8	-1.8	0	0
7	CORNER-PL-1	X	-2.9	-2.9	0	0
8	CORNER-PL-2	X	-2.9	-2.9	0	0
9	CORNER-PL-3	X	-2.9	-2.9	0	0
10	FM-BOT-0	X	-2.6	-2.6	0	0
11	FM-BOT-120	X	-2.6	-2.6	0	0
12	FM-BOT-240	X	-2.6	-2.6	0	0
13	FM-TOP-0	X	-2.3	-2.3	0	0
14	FM-TOP-120	X	-2.3	-2.3	0	0
15	FM-TOP-240	X	-2.3	-2.3	0	0
16	GRATE-H-0-1	X	-2.2	-2.2	0	0
17	GRATE-H-0-2	X	-2.2	-2.2	0	0
18	GRATE-H-120-1	X	-2.2	-2.2	0	0
19	GRATE-H-120-2	X	-2.2	-2.2	0	0
20	GRATE-H-240-1	X	-2.2	-2.2	0	0
21	GRATE-H-240-2	X	-2.2	-2.2	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	-2.4	-2.4	0	0
24	SA-3	X	-2.4	-2.4	0	0
25	BRACE-1	Z	-4.1	-4.1	0	0
26	BRACE-2	Z	-4.1	-4.1	0	0
27	BRACE-3	Z	-4.1	-4.1	0	0
28	CORNER-L-1	Z	-3.1	-3.1	0	0
29	CORNER-L-2	Z	-3.1	-3.1	0	0
30	CORNER-L-3	Z	-3.1	-3.1	0	0
31	CORNER-PL-1	Z	-5.1	-5.1	0	0
32	CORNER-PL-2	Z	-5.1	-5.1	0	0
33	CORNER-PL-3	Z	-5.1	-5.1	0	0
34	FM-BOT-0	Z	-4.5	-4.5	0	0
35	FM-BOT-120	Z	-4.5	-4.5	0	0
36	FM-BOT-240	Z	-4.5	-4.5	0	0
37	FM-TOP-0	Z	-4	-4	0	0
38	FM-TOP-120	Z	-4	-4	0	0
39	FM-TOP-240	Z	-4	-4	0	0
40	GRATE-H-0-1	Z	-3.8	-3.8	0	0
41	GRATE-H-0-2	Z	-3.8	-3.8	0	0
42	GRATE-H-120-1	Z	-3.8	-3.8	0	0
43	GRATE-H-120-2	Z	-3.8	-3.8	0	0
44	GRATE-H-240-1	Z	-3.8	-3.8	0	0
45	GRATE-H-240-2	Z	-3.8	-3.8	0	0
46	SA-1	Z	0	0	0	0
47	SA-2	Z	-4.1	-4.1	0	0
48	SA-3	Z	-4.1	-4.1	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
6	CORNER-L-3	X	0	0	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	0	0	0	0
9	CORNER-PL-3	X	0	0	0	0
10	FM-BOT-0	X	0	0	0	0
11	FM-BOT-120	X	0	0	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	0	0	0	0
14	FM-TOP-120	X	0	0	0	0
15	FM-TOP-240	X	0	0	0	0
16	GRATE-H-0-1	X	0	0	0	0
17	GRATE-H-0-2	X	0	0	0	0
18	GRATE-H-120-1	X	0	0	0	0
19	GRATE-H-120-2	X	0	0	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	0	0	0	0
23	SA-2	X	0	0	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	-4.8	-4.8	0	0
26	BRACE-2	Z	0	0	0	0
27	BRACE-3	Z	-4.8	-4.8	0	0
28	CORNER-L-1	Z	-3.6	-3.6	0	0
29	CORNER-L-2	Z	0	0	0	0
30	CORNER-L-3	Z	-3.6	-3.6	0	0
31	CORNER-PL-1	Z	-5.8	-5.8	0	0
32	CORNER-PL-2	Z	0	0	0	0
33	CORNER-PL-3	Z	-5.8	-5.8	0	0
34	FM-BOT-0	Z	0	0	0	0
35	FM-BOT-120	Z	-5.2	-5.2	0	0
36	FM-BOT-240	Z	-5.2	-5.2	0	0
37	FM-TOP-0	Z	0	0	0	0
38	FM-TOP-120	Z	-4.6	-4.6	0	0
39	FM-TOP-240	Z	-4.6	-4.6	0	0
40	GRATE-H-0-1	Z	0	0	0	0
41	GRATE-H-0-2	Z	0	0	0	0
42	GRATE-H-120-1	Z	-4.4	-4.4	0	0
43	GRATE-H-120-2	Z	-4.4	-4.4	0	0
44	GRATE-H-240-1	Z	-4.4	-4.4	0	0
45	GRATE-H-240-2	Z	-4.4	-4.4	0	0
46	SA-1	Z	-4.8	-4.8	0	0
47	SA-2	Z	-4.8	-4.8	0	0
48	SA-3	Z	-4.8	-4.8	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	2.4	2.4	0	0
2	BRACE-2	X	2.4	2.4	0	0
3	BRACE-3	X	2.4	2.4	0	0
4	CORNER-L-1	X	1.8	1.8	0	0
5	CORNER-L-2	X	1.8	1.8	0	0
6	CORNER-L-3	X	1.8	1.8	0	0
7	CORNER-PL-1	X	2.9	2.9	0	0
8	CORNER-PL-2	X	2.9	2.9	0	0
9	CORNER-PL-3	X	2.9	2.9	0	0
10	FM-BOT-0	X	2.6	2.6	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
11	FM-BOT-120	X	2.6	2.6	0	0
12	FM-BOT-240	X	2.6	2.6	0	0
13	FM-TOP-0	X	2.3	2.3	0	0
14	FM-TOP-120	X	2.3	2.3	0	0
15	FM-TOP-240	X	2.3	2.3	0	0
16	GRATE-H-0-1	X	2.2	2.2	0	0
17	GRATE-H-0-2	X	2.2	2.2	0	0
18	GRATE-H-120-1	X	2.2	2.2	0	0
19	GRATE-H-120-2	X	2.2	2.2	0	0
20	GRATE-H-240-1	X	2.2	2.2	0	0
21	GRATE-H-240-2	X	2.2	2.2	0	0
22	SA-1	X	2.4	2.4	0	0
23	SA-2	X	2.4	2.4	0	0
24	SA-3	X	0	0	0	0
25	BRACE-1	Z	-4.1	-4.1	0	0
26	BRACE-2	Z	-4.1	-4.1	0	0
27	BRACE-3	Z	-4.1	-4.1	0	0
28	CORNER-L-1	Z	-3.1	-3.1	0	0
29	CORNER-L-2	Z	-3.1	-3.1	0	0
30	CORNER-L-3	Z	-3.1	-3.1	0	0
31	CORNER-PL-1	Z	-5.1	-5.1	0	0
32	CORNER-PL-2	Z	-5.1	-5.1	0	0
33	CORNER-PL-3	Z	-5.1	-5.1	0	0
34	FM-BOT-0	Z	-4.5	-4.5	0	0
35	FM-BOT-120	Z	-4.5	-4.5	0	0
36	FM-BOT-240	Z	-4.5	-4.5	0	0
37	FM-TOP-0	Z	-4	-4	0	0
38	FM-TOP-120	Z	-4	-4	0	0
39	FM-TOP-240	Z	-4	-4	0	0
40	GRATE-H-0-1	Z	-3.8	-3.8	0	0
41	GRATE-H-0-2	Z	-3.8	-3.8	0	0
42	GRATE-H-120-1	Z	-3.8	-3.8	0	0
43	GRATE-H-120-2	Z	-3.8	-3.8	0	0
44	GRATE-H-240-1	Z	-3.8	-3.8	0	0
45	GRATE-H-240-2	Z	-3.8	-3.8	0	0
46	SA-1	Z	-4.1	-4.1	0	0
47	SA-2	Z	-4.1	-4.1	0	0
48	SA-3	Z	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	4.1	4.1	0	0
3	BRACE-3	X	4.1	4.1	0	0
4	CORNER-L-1	X	0	0	0	0
5	CORNER-L-2	X	3.1	3.1	0	0
6	CORNER-L-3	X	3.1	3.1	0	0
7	CORNER-PL-1	X	0	0	0	0
8	CORNER-PL-2	X	5.1	5.1	0	0
9	CORNER-PL-3	X	5.1	5.1	0	0
10	FM-BOT-0	X	4.5	4.5	0	0
11	FM-BOT-120	X	4.5	4.5	0	0
12	FM-BOT-240	X	0	0	0	0
13	FM-TOP-0	X	4	4	0	0
14	FM-TOP-120	X	4	4	0	0
15	FM-TOP-240	X	0	0	0	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
16	GRATE-H-0-1	X	3.8	3.8	0	0
17	GRATE-H-0-2	X	3.8	3.8	0	0
18	GRATE-H-120-1	X	3.8	3.8	0	0
19	GRATE-H-120-2	X	3.8	3.8	0	0
20	GRATE-H-240-1	X	0	0	0	0
21	GRATE-H-240-2	X	0	0	0	0
22	SA-1	X	4.1	4.1	0	0
23	SA-2	X	4.1	4.1	0	0
24	SA-3	X	4.1	4.1	0	0
25	BRACE-1	Z	0	0	0	0
26	BRACE-2	Z	-2.4	-2.4	0	0
27	BRACE-3	Z	-2.4	-2.4	0	0
28	CORNER-L-1	Z	0	0	0	0
29	CORNER-L-2	Z	-1.8	-1.8	0	0
30	CORNER-L-3	Z	-1.8	-1.8	0	0
31	CORNER-PL-1	Z	0	0	0	0
32	CORNER-PL-2	Z	-2.9	-2.9	0	0
33	CORNER-PL-3	Z	-2.9	-2.9	0	0
34	FM-BOT-0	Z	-2.6	-2.6	0	0
35	FM-BOT-120	Z	-2.6	-2.6	0	0
36	FM-BOT-240	Z	0	0	0	0
37	FM-TOP-0	Z	-2.3	-2.3	0	0
38	FM-TOP-120	Z	-2.3	-2.3	0	0
39	FM-TOP-240	Z	0	0	0	0
40	GRATE-H-0-1	Z	-2.2	-2.2	0	0
41	GRATE-H-0-2	Z	-2.2	-2.2	0	0
42	GRATE-H-120-1	Z	-2.2	-2.2	0	0
43	GRATE-H-120-2	Z	-2.2	-2.2	0	0
44	GRATE-H-240-1	Z	0	0	0	0
45	GRATE-H-240-2	Z	0	0	0	0
46	SA-1	Z	-2.4	-2.4	0	0
47	SA-2	Z	-2.4	-2.4	0	0
48	SA-3	Z	-2.4	-2.4	0	0

Member Distributed Loads (BLC 199 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-3	Y	-.004	-.22	0	4.264
2	BRACE-3	Y	-.22	-.483	4.264	8.528
3	BRACE-3	Y	-.483	-.85	8.528	12.792
4	BRACE-3	Y	-.85	-1.231	12.792	17.056
5	BRACE-3	Y	-1.231	-1.322	17.056	21.321
6	BRACE-3	Y	-1.322	-.971	21.321	25.585
7	BRACE-3	Y	-.971	-.491	25.585	29.849
8	BRACE-3	Y	-.491	-.495	29.849	34.113
9	BRACE-3	Y	-.495	-.975	34.113	38.377
10	BRACE-3	Y	-.975	-1.32	38.377	42.641
11	BRACE-3	Y	-1.32	-1.268	42.641	46.905
12	BRACE-3	Y	-1.268	-.99	46.905	51.169
13	BRACE-3	Y	-.99	-.592	51.169	55.433
14	BRACE-3	Y	-.592	-.174	55.433	59.697
15	BRACE-3	Y	-.174	-.004	59.697	63.962
16	GRATE-H-120-2	Y	-.033	-.164	0	4.206
17	GRATE-H-120-2	Y	-.164	-.322	4.206	8.413
18	GRATE-H-120-2	Y	-.322	-.573	8.413	12.619
19	GRATE-H-120-2	Y	-.573	-.711	12.619	16.826
20	GRATE-H-120-2	Y	-.711	-.804	16.826	21.032

Member Distributed Loads (BLC 199 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
21	GRATE-H-120-2	Y	-.804	-1.027	21.032	25.238
22	GRATE-H-120-2	Y	-1.027	-1.22	25.238	29.445
23	GRATE-H-120-2	Y	-1.22	-1.251	29.445	33.651
24	GRATE-H-120-2	Y	-1.251	-1.36	33.651	37.858
25	GRATE-H-120-2	Y	-1.36	-1.438	37.858	42.064
26	GRATE-H-120-2	Y	-1.438	-1.127	42.064	46.271
27	GRATE-H-120-2	Y	-1.127	-.694	46.271	50.477
28	GRATE-H-120-2	Y	-.694	-.337	50.477	54.683
29	GRATE-H-120-2	Y	-.337	-.029	54.683	58.89
30	GRATE-H-240-1	Y	-.032	-.161	0	4.206
31	GRATE-H-240-1	Y	-.161	-.355	4.206	8.413
32	GRATE-H-240-1	Y	-.355	-.575	8.413	12.619
33	GRATE-H-240-1	Y	-.575	-.684	12.619	16.826
34	GRATE-H-240-1	Y	-.684	-.801	16.826	21.032
35	GRATE-H-240-1	Y	-.801	-.97	21.032	25.238
36	GRATE-H-240-1	Y	-.97	-1.188	25.238	29.445
37	GRATE-H-240-1	Y	-1.188	-1.329	29.445	33.651
38	GRATE-H-240-1	Y	-1.329	-1.443	33.651	37.858
39	GRATE-H-240-1	Y	-1.443	-1.461	37.858	42.064
40	GRATE-H-240-1	Y	-1.461	-1.21	42.064	46.271
41	GRATE-H-240-1	Y	-1.21	-.759	46.271	50.477
42	GRATE-H-240-1	Y	-.759	-.278	50.477	54.683
43	GRATE-H-240-1	Y	-.278	-.006	54.683	58.89
44	SA-3	Y	-.003	-.267	0	4.254
45	SA-3	Y	-.267	-.759	4.254	8.508
46	SA-3	Y	-.759	-1.053	8.508	12.762
47	SA-3	Y	-1.053	-1.225	12.762	17.015
48	SA-3	Y	-1.225	-1.568	17.015	21.269
49	SA-3	Y	-1.568	-1.931	21.269	25.523
50	SA-3	Y	-1.931	-2.102	25.523	29.777
51	SA-3	Y	-2.102	-2.817	29.777	34.031
52	SA-3	Y	-2.817	-3.208	34.031	38.285
53	SA-3	Y	-3.208	-2.111	38.285	42.538
54	SA-3	Y	-2.111	-.836	42.538	46.792
55	SA-3	Y	-.836	-.144	46.792	51.046
56	SA-3	Y	-.144	-.003	51.046	55.3
57	BRACE-1	Y	-.003	-.186	0	4.264
58	BRACE-1	Y	-.186	-.558	4.264	8.528
59	BRACE-1	Y	-.558	-.936	8.528	12.792
60	BRACE-1	Y	-.936	-1.216	12.792	17.056
61	BRACE-1	Y	-1.216	-1.317	17.056	21.321
62	BRACE-1	Y	-1.317	-.969	21.321	25.585
63	BRACE-1	Y	-.969	-.49	25.585	29.849
64	BRACE-1	Y	-.49	-.494	29.849	34.113
65	BRACE-1	Y	-.494	-.975	34.113	38.377
66	BRACE-1	Y	-.975	-1.32	38.377	42.641
67	BRACE-1	Y	-1.32	-1.267	42.641	46.905
68	BRACE-1	Y	-1.267	-.989	46.905	51.169
69	BRACE-1	Y	-.989	-.592	51.169	55.433
70	BRACE-1	Y	-.592	-.173	55.433	59.697
71	BRACE-1	Y	-.173	-.003	59.697	63.962
72	GRATE-H-0-1	Y	-.031	-.161	0	4.206
73	GRATE-H-0-1	Y	-.161	-.355	4.206	8.413
74	GRATE-H-0-1	Y	-.355	-.575	8.413	12.619
75	GRATE-H-0-1	Y	-.575	-.683	12.619	16.825
76	GRATE-H-0-1	Y	-.683	-.801	16.825	21.032
77	GRATE-H-0-1	Y	-.801	-.97	21.032	25.238

Member Distributed Loads (BLC 199 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
78	GRATE-H-0-1	Y	-.97	-1.187	25.238	29.445
79	GRATE-H-0-1	Y	-1.187	-1.329	29.445	33.651
80	GRATE-H-0-1	Y	-1.329	-1.441	33.651	37.857
81	GRATE-H-0-1	Y	-1.441	-1.452	37.857	42.064
82	GRATE-H-0-1	Y	-1.452	-1.175	42.064	46.27
83	GRATE-H-0-1	Y	-1.175	-.721	46.27	50.476
84	GRATE-H-0-1	Y	-.721	-.264	50.476	54.683
85	GRATE-H-0-1	Y	-.264	-.005	54.683	58.889
86	GRATE-H-240-2	Y	-.033	-.164	0	4.206
87	GRATE-H-240-2	Y	-.164	-.322	4.206	8.413
88	GRATE-H-240-2	Y	-.322	-.573	8.413	12.619
89	GRATE-H-240-2	Y	-.573	-.711	12.619	16.826
90	GRATE-H-240-2	Y	-.711	-.804	16.826	21.032
91	GRATE-H-240-2	Y	-.804	-1.027	21.032	25.238
92	GRATE-H-240-2	Y	-1.027	-1.22	25.238	29.445
93	GRATE-H-240-2	Y	-1.22	-1.251	29.445	33.651
94	GRATE-H-240-2	Y	-1.251	-1.36	33.651	37.858
95	GRATE-H-240-2	Y	-1.36	-1.438	37.858	42.064
96	GRATE-H-240-2	Y	-1.438	-1.127	42.064	46.27
97	GRATE-H-240-2	Y	-1.127	-.694	46.27	50.477
98	GRATE-H-240-2	Y	-.694	-.337	50.477	54.683
99	GRATE-H-240-2	Y	-.337	-.029	54.683	58.889
100	SA-1	Y	-.003	-.267	0	4.254
101	SA-1	Y	-.267	-.759	4.254	8.508
102	SA-1	Y	-.759	-1.053	8.508	12.761
103	SA-1	Y	-1.053	-1.225	12.761	17.015
104	SA-1	Y	-1.225	-1.568	17.015	21.269
105	SA-1	Y	-1.568	-1.931	21.269	25.523
106	SA-1	Y	-1.931	-2.102	25.523	29.777
107	SA-1	Y	-2.102	-2.817	29.777	34.031
108	SA-1	Y	-2.817	-3.208	34.031	38.284
109	SA-1	Y	-3.208	-2.111	38.284	42.538
110	SA-1	Y	-2.111	-.836	42.538	46.792
111	SA-1	Y	-.836	-.144	46.792	51.046
112	SA-1	Y	-.144	-.003	51.046	55.3
113	BRACE-2	Y	-.003	-.186	0	4.264
114	BRACE-2	Y	-.186	-.558	4.264	8.528
115	BRACE-2	Y	-.558	-.936	8.528	12.792
116	BRACE-2	Y	-.936	-1.216	12.792	17.056
117	BRACE-2	Y	-1.216	-1.317	17.056	21.321
118	BRACE-2	Y	-1.317	-.969	21.321	25.585
119	BRACE-2	Y	-.969	-.49	25.585	29.849
120	BRACE-2	Y	-.49	-.494	29.849	34.113
121	BRACE-2	Y	-.494	-.975	34.113	38.377
122	BRACE-2	Y	-.975	-1.32	38.377	42.641
123	BRACE-2	Y	-1.32	-1.267	42.641	46.905
124	BRACE-2	Y	-1.267	-.989	46.905	51.169
125	BRACE-2	Y	-.989	-.592	51.169	55.433
126	BRACE-2	Y	-.592	-.173	55.433	59.697
127	BRACE-2	Y	-.173	-.003	59.697	63.962
128	GRATE-H-0-2	Y	-.033	-.164	0	4.206
129	GRATE-H-0-2	Y	-.164	-.322	4.206	8.413
130	GRATE-H-0-2	Y	-.322	-.573	8.413	12.619
131	GRATE-H-0-2	Y	-.573	-.711	12.619	16.825
132	GRATE-H-0-2	Y	-.711	-.804	16.825	21.032
133	GRATE-H-0-2	Y	-.804	-1.027	21.032	25.238
134	GRATE-H-0-2	Y	-1.027	-1.22	25.238	29.445

Member Distributed Loads (BLC 199 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
135	GRATE-H-0-2	Y	-1.22	-1.251	29.445	33.651
136	GRATE-H-0-2	Y	-1.251	-1.36	33.651	37.857
137	GRATE-H-0-2	Y	-1.36	-1.438	37.857	42.064
138	GRATE-H-0-2	Y	-1.438	-1.127	42.064	46.27
139	GRATE-H-0-2	Y	-1.127	-.694	46.27	50.476
140	GRATE-H-0-2	Y	-.694	-.337	50.476	54.683
141	GRATE-H-0-2	Y	-.337	-.029	54.683	58.889
142	GRATE-H-120-1	Y	-.031	-.161	0	4.206
143	GRATE-H-120-1	Y	-.161	-.355	4.206	8.413
144	GRATE-H-120-1	Y	-.355	-.575	8.413	12.619
145	GRATE-H-120-1	Y	-.575	-.683	12.619	16.826
146	GRATE-H-120-1	Y	-.683	-.801	16.826	21.032
147	GRATE-H-120-1	Y	-.801	-.97	21.032	25.238
148	GRATE-H-120-1	Y	-.97	-1.187	25.238	29.445
149	GRATE-H-120-1	Y	-1.187	-1.329	29.445	33.651
150	GRATE-H-120-1	Y	-1.329	-1.441	33.651	37.858
151	GRATE-H-120-1	Y	-1.441	-1.452	37.858	42.064
152	GRATE-H-120-1	Y	-1.452	-1.175	42.064	46.27
153	GRATE-H-120-1	Y	-1.175	-.721	46.27	50.477
154	GRATE-H-120-1	Y	-.721	-.264	50.477	54.683
155	GRATE-H-120-1	Y	-.264	-.005	54.683	58.889
156	SA-2	Y	-.003	-.267	0	4.254
157	SA-2	Y	-.267	-.759	4.254	8.508
158	SA-2	Y	-.759	-1.053	8.508	12.761
159	SA-2	Y	-1.053	-1.225	12.761	17.015
160	SA-2	Y	-1.225	-1.568	17.015	21.269
161	SA-2	Y	-1.568	-1.931	21.269	25.523
162	SA-2	Y	-1.931	-2.102	25.523	29.777
163	SA-2	Y	-2.102	-2.817	29.777	34.031
164	SA-2	Y	-2.817	-3.208	34.031	38.284
165	SA-2	Y	-3.208	-2.111	38.284	42.538
166	SA-2	Y	-2.111	-.836	42.538	46.792
167	SA-2	Y	-.836	-.144	46.792	51.046
168	SA-2	Y	-.144	-.003	51.046	55.3

Member Distributed Loads (BLC 200 : BLC 14 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BRACE-3	Y	-.042	-2.603	0	4.264
2	BRACE-3	Y	-2.603	-5.731	4.264	8.528
3	BRACE-3	Y	-5.731	-10.082	8.528	12.792
4	BRACE-3	Y	-10.082	-14.594	12.792	17.056
5	BRACE-3	Y	-14.594	-15.67	17.056	21.321
6	BRACE-3	Y	-15.67	-11.509	21.321	25.585
7	BRACE-3	Y	-11.509	-5.824	25.585	29.849
8	BRACE-3	Y	-5.824	-5.866	29.849	34.113
9	BRACE-3	Y	-5.866	-11.564	34.113	38.377
10	BRACE-3	Y	-11.564	-15.656	38.377	42.641
11	BRACE-3	Y	-15.656	-15.029	42.641	46.905
12	BRACE-3	Y	-15.029	-11.741	46.905	51.169
13	BRACE-3	Y	-11.741	-7.024	51.169	55.433
14	BRACE-3	Y	-7.024	-2.063	55.433	59.697
15	BRACE-3	Y	-2.063	-.042	59.697	63.962
16	GRATE-H-120-2	Y	-.397	-1.941	0	4.206
17	GRATE-H-120-2	Y	-1.941	-3.823	4.206	8.413
18	GRATE-H-120-2	Y	-3.823	-6.797	8.413	12.619
19	GRATE-H-120-2	Y	-6.797	-8.431	12.619	16.826

Member Distributed Loads (BLC 200 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
20	GRATE-H-120-2	Y	-8.431	-9.526	16.826	21.032
21	GRATE-H-120-2	Y	-9.526	-12.18	21.032	25.238
22	GRATE-H-120-2	Y	-12.18	-14.468	25.238	29.445
23	GRATE-H-120-2	Y	-14.468	-14.834	29.445	33.651
24	GRATE-H-120-2	Y	-14.834	-16.119	33.651	37.858
25	GRATE-H-120-2	Y	-16.119	-17.05	37.858	42.064
26	GRATE-H-120-2	Y	-17.05	-13.362	42.064	46.271
27	GRATE-H-120-2	Y	-13.362	-8.226	46.271	50.477
28	GRATE-H-120-2	Y	-8.226	-3.999	50.477	54.683
29	GRATE-H-120-2	Y	-3.999	-.34	54.683	58.89
30	GRATE-H-240-1	Y	-.375	-1.914	0	4.206
31	GRATE-H-240-1	Y	-1.914	-4.209	4.206	8.413
32	GRATE-H-240-1	Y	-4.209	-6.819	8.413	12.619
33	GRATE-H-240-1	Y	-6.819	-8.104	12.619	16.826
34	GRATE-H-240-1	Y	-8.104	-9.501	16.826	21.032
35	GRATE-H-240-1	Y	-9.501	-11.503	21.032	25.238
36	GRATE-H-240-1	Y	-11.503	-14.08	25.238	29.445
37	GRATE-H-240-1	Y	-14.08	-15.759	29.445	33.651
38	GRATE-H-240-1	Y	-15.759	-17.105	33.651	37.858
39	GRATE-H-240-1	Y	-17.105	-17.316	37.858	42.064
40	GRATE-H-240-1	Y	-17.316	-14.349	42.064	46.271
41	GRATE-H-240-1	Y	-14.349	-8.997	46.271	50.477
42	GRATE-H-240-1	Y	-8.997	-3.3	50.477	54.683
43	GRATE-H-240-1	Y	-3.3	-.069	54.683	58.89
44	SA-3	Y	-.041	-3.165	0	4.254
45	SA-3	Y	-3.165	-9.002	4.254	8.508
46	SA-3	Y	-9.002	-12.481	8.508	12.762
47	SA-3	Y	-12.481	-14.524	12.762	17.015
48	SA-3	Y	-14.524	-18.59	17.015	21.269
49	SA-3	Y	-18.59	-22.899	21.269	25.523
50	SA-3	Y	-22.899	-24.919	25.523	29.777
51	SA-3	Y	-24.919	-33.4	29.777	34.031
52	SA-3	Y	-33.4	-38.032	34.031	38.285
53	SA-3	Y	-38.032	-25.027	38.285	42.538
54	SA-3	Y	-25.027	-9.907	42.538	46.792
55	SA-3	Y	-9.907	-1.703	46.792	51.046
56	SA-3	Y	-1.703	-.041	51.046	55.3
57	BRACE-1	Y	-.033	-2.202	0	4.264
58	BRACE-1	Y	-2.202	-6.621	4.264	8.528
59	BRACE-1	Y	-6.621	-11.091	8.528	12.792
60	BRACE-1	Y	-11.091	-14.42	12.792	17.056
61	BRACE-1	Y	-14.42	-15.617	17.056	21.321
62	BRACE-1	Y	-15.617	-11.494	21.321	25.585
63	BRACE-1	Y	-11.494	-5.814	25.585	29.849
64	BRACE-1	Y	-5.814	-5.856	29.849	34.113
65	BRACE-1	Y	-5.856	-11.555	34.113	38.377
66	BRACE-1	Y	-11.555	-15.646	38.377	42.641
67	BRACE-1	Y	-15.646	-15.019	42.641	46.905
68	BRACE-1	Y	-15.019	-11.731	46.905	51.169
69	BRACE-1	Y	-11.731	-7.014	51.169	55.433
70	BRACE-1	Y	-7.014	-2.053	55.433	59.697
71	BRACE-1	Y	-2.053	-.033	59.697	63.962
72	GRATE-H-0-1	Y	-.372	-1.91	0	4.206
73	GRATE-H-0-1	Y	-1.91	-4.205	4.206	8.413
74	GRATE-H-0-1	Y	-4.205	-6.816	8.413	12.619
75	GRATE-H-0-1	Y	-6.816	-8.1	12.619	16.825
76	GRATE-H-0-1	Y	-8.1	-9.497	16.825	21.032

Member Distributed Loads (BLC 200 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
77	GRATE-H-0-1	Y	-9.497	-11.499	21.032	25.238
78	GRATE-H-0-1	Y	-11.499	-14.077	25.238	29.445
79	GRATE-H-0-1	Y	-14.077	-15.755	29.445	33.651
80	GRATE-H-0-1	Y	-15.755	-17.086	33.651	37.857
81	GRATE-H-0-1	Y	-17.086	-17.217	37.857	42.064
82	GRATE-H-0-1	Y	-17.217	-13.933	42.064	46.27
83	GRATE-H-0-1	Y	-13.933	-8.547	46.27	50.476
84	GRATE-H-0-1	Y	-8.547	-3.133	50.476	54.683
85	GRATE-H-0-1	Y	-3.133	-.065	54.683	58.889
86	GRATE-H-240-2	Y	-.397	-1.941	0	4.206
87	GRATE-H-240-2	Y	-1.941	-3.823	4.206	8.413
88	GRATE-H-240-2	Y	-3.823	-6.797	8.413	12.619
89	GRATE-H-240-2	Y	-6.797	-8.431	12.619	16.826
90	GRATE-H-240-2	Y	-8.431	-9.526	16.826	21.032
91	GRATE-H-240-2	Y	-9.526	-12.18	21.032	25.238
92	GRATE-H-240-2	Y	-12.18	-14.468	25.238	29.445
93	GRATE-H-240-2	Y	-14.468	-14.834	29.445	33.651
94	GRATE-H-240-2	Y	-14.834	-16.119	33.651	37.858
95	GRATE-H-240-2	Y	-16.119	-17.05	37.858	42.064
96	GRATE-H-240-2	Y	-17.05	-13.362	42.064	46.27
97	GRATE-H-240-2	Y	-13.362	-8.226	46.27	50.477
98	GRATE-H-240-2	Y	-8.226	-3.999	50.477	54.683
99	GRATE-H-240-2	Y	-3.999	-.34	54.683	58.889
100	SA-1	Y	-.041	-3.165	0	4.254
101	SA-1	Y	-3.165	-9.002	4.254	8.508
102	SA-1	Y	-9.002	-12.481	8.508	12.761
103	SA-1	Y	-12.481	-14.524	12.761	17.015
104	SA-1	Y	-14.524	-18.59	17.015	21.269
105	SA-1	Y	-18.59	-22.899	21.269	25.523
106	SA-1	Y	-22.899	-24.919	25.523	29.777
107	SA-1	Y	-24.919	-33.4	29.777	34.031
108	SA-1	Y	-33.4	-38.03	34.031	38.284
109	SA-1	Y	-38.03	-25.026	38.284	42.538
110	SA-1	Y	-25.026	-9.907	42.538	46.792
111	SA-1	Y	-9.907	-1.703	46.792	51.046
112	SA-1	Y	-1.703	-.041	51.046	55.3
113	BRACE-2	Y	-.033	-2.202	0	4.264
114	BRACE-2	Y	-2.202	-6.621	4.264	8.528
115	BRACE-2	Y	-6.621	-11.092	8.528	12.792
116	BRACE-2	Y	-11.092	-14.42	12.792	17.056
117	BRACE-2	Y	-14.42	-15.617	17.056	21.321
118	BRACE-2	Y	-15.617	-11.494	21.321	25.585
119	BRACE-2	Y	-11.494	-5.814	25.585	29.849
120	BRACE-2	Y	-5.814	-5.856	29.849	34.113
121	BRACE-2	Y	-5.856	-11.555	34.113	38.377
122	BRACE-2	Y	-11.555	-15.646	38.377	42.641
123	BRACE-2	Y	-15.646	-15.019	42.641	46.905
124	BRACE-2	Y	-15.019	-11.731	46.905	51.169
125	BRACE-2	Y	-11.731	-7.014	51.169	55.433
126	BRACE-2	Y	-7.014	-2.053	55.433	59.697
127	BRACE-2	Y	-2.053	-.033	59.697	63.962
128	GRATE-H-0-2	Y	-.397	-1.941	0	4.206
129	GRATE-H-0-2	Y	-1.941	-3.823	4.206	8.413
130	GRATE-H-0-2	Y	-3.823	-6.797	8.413	12.619
131	GRATE-H-0-2	Y	-6.797	-8.431	12.619	16.825
132	GRATE-H-0-2	Y	-8.431	-9.526	16.825	21.032
133	GRATE-H-0-2	Y	-9.526	-12.18	21.032	25.238

Member Distributed Loads (BLC 200 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
134	GRATE-H-0-2	Y	-12.18	-14.468	25.238	29.445
135	GRATE-H-0-2	Y	-14.468	-14.834	29.445	33.651
136	GRATE-H-0-2	Y	-14.834	-16.119	33.651	37.857
137	GRATE-H-0-2	Y	-16.119	-17.05	37.857	42.064
138	GRATE-H-0-2	Y	-17.05	-13.362	42.064	46.27
139	GRATE-H-0-2	Y	-13.362	-8.226	46.27	50.476
140	GRATE-H-0-2	Y	-8.226	-3.999	50.476	54.683
141	GRATE-H-0-2	Y	-3.999	-.34	54.683	58.889
142	GRATE-H-120-1	Y	-.372	-1.91	0	4.206
143	GRATE-H-120-1	Y	-1.91	-4.205	4.206	8.413
144	GRATE-H-120-1	Y	-4.205	-6.816	8.413	12.619
145	GRATE-H-120-1	Y	-6.816	-8.1	12.619	16.826
146	GRATE-H-120-1	Y	-8.1	-9.497	16.826	21.032
147	GRATE-H-120-1	Y	-9.497	-11.499	21.032	25.238
148	GRATE-H-120-1	Y	-11.499	-14.077	25.238	29.445
149	GRATE-H-120-1	Y	-14.077	-15.755	29.445	33.651
150	GRATE-H-120-1	Y	-15.755	-17.086	33.651	37.858
151	GRATE-H-120-1	Y	-17.086	-17.217	37.858	42.064
152	GRATE-H-120-1	Y	-17.217	-13.933	42.064	46.27
153	GRATE-H-120-1	Y	-13.933	-8.547	46.27	50.477
154	GRATE-H-120-1	Y	-8.547	-3.133	50.477	54.683
155	GRATE-H-120-1	Y	-3.133	-.065	54.683	58.889
156	SA-2	Y	-.041	-3.165	0	4.254
157	SA-2	Y	-3.165	-9.002	4.254	8.508
158	SA-2	Y	-9.002	-12.481	8.508	12.761
159	SA-2	Y	-12.481	-14.524	12.761	17.015
160	SA-2	Y	-14.524	-18.59	17.015	21.269
161	SA-2	Y	-18.59	-22.899	21.269	25.523
162	SA-2	Y	-22.899	-24.919	25.523	29.777
163	SA-2	Y	-24.919	-33.4	29.777	34.031
164	SA-2	Y	-33.4	-38.03	34.031	38.284
165	SA-2	Y	-38.03	-25.026	38.284	42.538
166	SA-2	Y	-25.026	-9.907	42.538	46.792
167	SA-2	Y	-9.907	-1.703	46.792	51.046
168	SA-2	Y	-1.703	-.041	51.046	55.3

Load Combinations

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		1	1.4																				
2	1.2D + 1.0W (0 deg)	Yes	Y		1	1.2	2	1	175	1																
3	1.2D + 1.0W (30 deg)	Yes	Y		1	1.2	3	1	176	1																
4	1.2D + 1.0W (60 deg)	Yes	Y		1	1.2	4	1	177	1																
5	1.2D + 1.0W (90 deg)	Yes	Y		1	1.2	5	1	178	1																
6	1.2D + 1.0W (120 deg)	Yes	Y		1	1.2	6	1	179	1																
7	1.2D + 1.0W (150 deg)	Yes	Y		1	1.2	7	1	180	1																
8	1.2D + 1.0W (180 deg)	Yes	Y		1	1.2	8	1	181	1																
9	1.2D + 1.0W (210 deg)	Yes	Y		1	1.2	9	1	182	1																
10	1.2D + 1.0W (240 deg)	Yes	Y		1	1.2	10	1	183	1																
11	1.2D + 1.0W (270 deg)	Yes	Y		1	1.2	11	1	184	1																
12	1.2D + 1.0W (300 deg)	Yes	Y		1	1.2	12	1	185	1																
13	1.2D + 1.0W (330 deg)	Yes	Y		1	1.2	13	1	186	1																
14	1.2D + Di + Wi (0 deg)	Yes	Y		1	1.2	14	1	15	1	1...	1														
15	1.2D + Di + Wi (30 deg)	Yes	Y		1	1.2	14	1	16	1	1...	1														
16	1.2D + Di + Wi (60 deg)	Yes	Y		1	1.2	14	1	17	1	1...	1														
17	1.2D + Di + Wi (90 deg)	Yes	Y		1	1.2	14	1	18	1	1...	1														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
18	1.2D + Di + Wi (120 deg)	Yes	Y		1	1.2	14	1	19	1	1...	1												
19	1.2D + Di + Wi (150 deg)	Yes	Y		1	1.2	14	1	20	1	1...	1												
20	1.2D + Di + Wi (180 deg)	Yes	Y		1	1.2	14	1	21	1	1...	1												
21	1.2D + Di + Wi (210 deg)	Yes	Y		1	1.2	14	1	22	1	1...	1												
22	1.2D + Di + Wi (240 deg)	Yes	Y		1	1.2	14	1	23	1	1...	1												
23	1.2D + Di + Wi (270 deg)	Yes	Y		1	1.2	14	1	24	1	1...	1												
24	1.2D + Di + Wi (300 deg)	Yes	Y		1	1.2	14	1	25	1	1...	1												
25	1.2D + Di + Wi (330 deg)	Yes	Y		1	1.2	14	1	26	1	1...	1												
26	1.2D + 1.0 Ev + 1.0Eh (0 deg)	Yes	Y		1	1.2	1	.039	27	.097														
27	1.2D + 1.0 Ev + 1.0Eh (30 deg)	Yes	Y		1	1.2	1	.039	28	.097														
28	1.2D + 1.0 Ev + 1.0Eh (60 deg)	Yes	Y		1	1.2	1	.039	29	.097														
29	1.2D + 1.0 Ev + 1.0Eh (90 deg)	Yes	Y		1	1.2	1	.039	30	.097														
30	1.2D + 1.0 Ev + 1.0Eh (120 deg)	Yes	Y		1	1.2	1	.039	31	.097														
31	1.2D + 1.0 Ev + 1.0Eh (150 deg)	Yes	Y		1	1.2	1	.039	32	.097														
32	1.2D + 1.0 Ev + 1.0Eh (180 deg)	Yes	Y		1	1.2	1	.039	33	.097														
33	1.2D + 1.0 Ev + 1.0Eh (210 deg)	Yes	Y		1	1.2	1	.039	34	.097														
34	1.2D + 1.0 Ev + 1.0Eh (240 deg)	Yes	Y		1	1.2	1	.039	35	.097														
35	1.2D + 1.0 Ev + 1.0Eh (270 deg)	Yes	Y		1	1.2	1	.039	36	.097														
36	1.2D + 1.0 Ev + 1.0Eh (300 deg)	Yes	Y		1	1.2	1	.039	37	.097														
37	1.2D + 1.0 Ev + 1.0Eh (330 deg)	Yes	Y		1	1.2	1	.039	38	.097														
38	1.2D + 1.5Lm1 + 1.0Wm (0 deg)	Yes	Y		1	1.2	39	1.5	2	.058	1...	.058												
39	1.2D + 1.5Lm1 + 1.0Wm (30 de...	Yes	Y		1	1.2	39	1.5	3	.058	1...	.058												
40	1.2D + 1.5Lm1 + 1.0Wm (60 de...	Yes	Y		1	1.2	39	1.5	4	.058	1...	.058												
41	1.2D + 1.5Lm1 + 1.0Wm (90 de...	Yes	Y		1	1.2	39	1.5	5	.058	1...	.058												
42	1.2D + 1.5Lm1 + 1.0Wm (120 d...	Yes	Y		1	1.2	39	1.5	6	.058	1...	.058												
43	1.2D + 1.5Lm1 + 1.0Wm (150 d...	Yes	Y		1	1.2	39	1.5	7	.058	1...	.058												
44	1.2D + 1.5Lm1 + 1.0Wm (180 d...	Yes	Y		1	1.2	39	1.5	8	.058	1...	.058												
45	1.2D + 1.5Lm1 + 1.0Wm (210 d...	Yes	Y		1	1.2	39	1.5	9	.058	1...	.058												
46	1.2D + 1.5Lm1 + 1.0Wm (240 d...	Yes	Y		1	1.2	39	1.5	10	.058	1...	.058												
47	1.2D + 1.5Lm1 + 1.0Wm (270 d...	Yes	Y		1	1.2	39	1.5	11	.058	1...	.058												
48	1.2D + 1.5Lm1 + 1.0Wm (300 d...	Yes	Y		1	1.2	39	1.5	12	.058	1...	.058												
49	1.2D + 1.5Lm1 + 1.0Wm (330 d...	Yes	Y		1	1.2	39	1.5	13	.058	1...	.058												
50	1.2D + 1.5Lm2 + 1.0Wm (0 deg)	Yes	Y		1	1.2	40	1.5	2	.058	1...	.058												
51	1.2D + 1.5Lm2 + 1.0Wm (30 de...	Yes	Y		1	1.2	40	1.5	3	.058	1...	.058												
52	1.2D + 1.5Lm2 + 1.0Wm (60 de...	Yes	Y		1	1.2	40	1.5	4	.058	1...	.058												
53	1.2D + 1.5Lm2 + 1.0Wm (90 de...	Yes	Y		1	1.2	40	1.5	5	.058	1...	.058												
54	1.2D + 1.5Lm2 + 1.0Wm (120 d...	Yes	Y		1	1.2	40	1.5	6	.058	1...	.058												
55	1.2D + 1.5Lm2 + 1.0Wm (150 d...	Yes	Y		1	1.2	40	1.5	7	.058	1...	.058												
56	1.2D + 1.5Lm2 + 1.0Wm (180 d...	Yes	Y		1	1.2	40	1.5	8	.058	1...	.058												
57	1.2D + 1.5Lm2 + 1.0Wm (210 d...	Yes	Y		1	1.2	40	1.5	9	.058	1...	.058												
58	1.2D + 1.5Lm2 + 1.0Wm (240 d...	Yes	Y		1	1.2	40	1.5	10	.058	1...	.058												
59	1.2D + 1.5Lm2 + 1.0Wm (270 d...	Yes	Y		1	1.2	40	1.5	11	.058	1...	.058												
60	1.2D + 1.5Lm2 + 1.0Wm (300 d...	Yes	Y		1	1.2	40	1.5	12	.058	1...	.058												
61	1.2D + 1.5Lm2 + 1.0Wm (330 d...	Yes	Y		1	1.2	40	1.5	13	.058	1...	.058												
62	1.2D + 1.5Lm3 + 1.0Wm (0 deg)	Yes	Y		1	1.2	41	1.5	2	.058	1...	.058												
63	1.2D + 1.5Lm3 + 1.0Wm (30 de...	Yes	Y		1	1.2	41	1.5	3	.058	1...	.058												
64	1.2D + 1.5Lm3 + 1.0Wm (60 de...	Yes	Y		1	1.2	41	1.5	4	.058	1...	.058												
65	1.2D + 1.5Lm3 + 1.0Wm (90 de...	Yes	Y		1	1.2	41	1.5	5	.058	1...	.058												
66	1.2D + 1.5Lm3 + 1.0Wm (120 d...	Yes	Y		1	1.2	41	1.5	6	.058	1...	.058												
67	1.2D + 1.5Lm3 + 1.0Wm (150 d...	Yes	Y		1	1.2	41	1.5	7	.058	1...	.058												
68	1.2D + 1.5Lm3 + 1.0Wm (180 d...	Yes	Y		1	1.2	41	1.5	8	.058	1...	.058												
69	1.2D + 1.5Lm3 + 1.0Wm (210 d...	Yes	Y		1	1.2	41	1.5	9	.058	1...	.058												
70	1.2D + 1.5Lm3 + 1.0Wm (240 d...	Yes	Y		1	1.2	41	1.5	10	.058	1...	.058												
71	1.2D + 1.5Lm3 + 1.0Wm (270 d...	Yes	Y		1	1.2	41	1.5	11	.058	1...	.058												
72	1.2D + 1.5Lm3 + 1.0Wm (300 d...	Yes	Y		1	1.2	41	1.5	12	.058	1...	.058												
73	1.2D + 1.5Lm3 + 1.0Wm (330 d...	Yes	Y		1	1.2	41	1.5	13	.058	1...	.058												
74	1.2D + 1.5Lm4 + 1.0Wm (0 deg)	Yes	Y		1	1.2	42	1.5	2	.058	1...	.058												

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
75	1.2D + 1.5Lm4 + 1.0Wm (30 de...	Yes	Y		1	1.2	42	1.5	3	.058	1...	.058														
76	1.2D + 1.5Lm4 + 1.0Wm (60 de...	Yes	Y		1	1.2	42	1.5	4	.058	1...	.058														
77	1.2D + 1.5Lm4 + 1.0Wm (90 de...	Yes	Y		1	1.2	42	1.5	5	.058	1...	.058														
78	1.2D + 1.5Lm4 + 1.0Wm (120 d...	Yes	Y		1	1.2	42	1.5	6	.058	1...	.058														
79	1.2D + 1.5Lm4 + 1.0Wm (150 d...	Yes	Y		1	1.2	42	1.5	7	.058	1...	.058														
80	1.2D + 1.5Lm4 + 1.0Wm (180 d...	Yes	Y		1	1.2	42	1.5	8	.058	1...	.058														
81	1.2D + 1.5Lm4 + 1.0Wm (210 d...	Yes	Y		1	1.2	42	1.5	9	.058	1...	.058														
82	1.2D + 1.5Lm4 + 1.0Wm (240 d...	Yes	Y		1	1.2	42	1.5	10	.058	1...	.058														
83	1.2D + 1.5Lm4 + 1.0Wm (270 d...	Yes	Y		1	1.2	42	1.5	11	.058	1...	.058														
84	1.2D + 1.5Lm4 + 1.0Wm (300 d...	Yes	Y		1	1.2	42	1.5	12	.058	1...	.058														
85	1.2D + 1.5Lm4 + 1.0Wm (330 d...	Yes	Y		1	1.2	42	1.5	13	.058	1...	.058														
86	1.2D + 1.5Lm5 + 1.0Wm (0 deg)	Yes	Y		1	1.2	43	1.5	2	.058	1...	.058														
87	1.2D + 1.5Lm5 + 1.0Wm (30 de...	Yes	Y		1	1.2	43	1.5	3	.058	1...	.058														
88	1.2D + 1.5Lm5 + 1.0Wm (60 de...	Yes	Y		1	1.2	43	1.5	4	.058	1...	.058														
89	1.2D + 1.5Lm5 + 1.0Wm (90 de...	Yes	Y		1	1.2	43	1.5	5	.058	1...	.058														
90	1.2D + 1.5Lm5 + 1.0Wm (120 d...	Yes	Y		1	1.2	43	1.5	6	.058	1...	.058														
91	1.2D + 1.5Lm5 + 1.0Wm (150 d...	Yes	Y		1	1.2	43	1.5	7	.058	1...	.058														
92	1.2D + 1.5Lm5 + 1.0Wm (180 d...	Yes	Y		1	1.2	43	1.5	8	.058	1...	.058														
93	1.2D + 1.5Lm5 + 1.0Wm (210 d...	Yes	Y		1	1.2	43	1.5	9	.058	1...	.058														
94	1.2D + 1.5Lm5 + 1.0Wm (240 d...	Yes	Y		1	1.2	43	1.5	10	.058	1...	.058														
95	1.2D + 1.5Lm5 + 1.0Wm (270 d...	Yes	Y		1	1.2	43	1.5	11	.058	1...	.058														
96	1.2D + 1.5Lm5 + 1.0Wm (300 d...	Yes	Y		1	1.2	43	1.5	12	.058	1...	.058														
97	1.2D + 1.5Lm5 + 1.0Wm (330 d...	Yes	Y		1	1.2	43	1.5	13	.058	1...	.058														
98	1.2D + 1.5Lm6 + 1.0Wm (0 deg)	Yes	Y		1	1.2	44	1.5	2	.058	1...	.058														
99	1.2D + 1.5Lm6 + 1.0Wm (30 de...	Yes	Y		1	1.2	44	1.5	3	.058	1...	.058														
100	1.2D + 1.5Lm6 + 1.0Wm (60 de...	Yes	Y		1	1.2	44	1.5	4	.058	1...	.058														
101	1.2D + 1.5Lm6 + 1.0Wm (90 de...	Yes	Y		1	1.2	44	1.5	5	.058	1...	.058														
102	1.2D + 1.5Lm6 + 1.0Wm (120 d...	Yes	Y		1	1.2	44	1.5	6	.058	1...	.058														
103	1.2D + 1.5Lm6 + 1.0Wm (150 d...	Yes	Y		1	1.2	44	1.5	7	.058	1...	.058														
104	1.2D + 1.5Lm6 + 1.0Wm (180 d...	Yes	Y		1	1.2	44	1.5	8	.058	1...	.058														
105	1.2D + 1.5Lm6 + 1.0Wm (210 d...	Yes	Y		1	1.2	44	1.5	9	.058	1...	.058														
106	1.2D + 1.5Lm6 + 1.0Wm (240 d...	Yes	Y		1	1.2	44	1.5	10	.058	1...	.058														
107	1.2D + 1.5Lm6 + 1.0Wm (270 d...	Yes	Y		1	1.2	44	1.5	11	.058	1...	.058														
108	1.2D + 1.5Lm6 + 1.0Wm (300 d...	Yes	Y		1	1.2	44	1.5	12	.058	1...	.058														
109	1.2D + 1.5Lm6 + 1.0Wm (330 d...	Yes	Y		1	1.2	44	1.5	13	.058	1...	.058														
110	1.2D + 1.5Lm7 + 1.0Wm (0 deg)	Yes	Y		1	1.2	45	1.5	2	.058	1...	.058														
111	1.2D + 1.5Lm7 + 1.0Wm (30 de...	Yes	Y		1	1.2	45	1.5	3	.058	1...	.058														
112	1.2D + 1.5Lm7 + 1.0Wm (60 de...	Yes	Y		1	1.2	45	1.5	4	.058	1...	.058														
113	1.2D + 1.5Lm7 + 1.0Wm (90 de...	Yes	Y		1	1.2	45	1.5	5	.058	1...	.058														
114	1.2D + 1.5Lm7 + 1.0Wm (120 d...	Yes	Y		1	1.2	45	1.5	6	.058	1...	.058														
115	1.2D + 1.5Lm7 + 1.0Wm (150 d...	Yes	Y		1	1.2	45	1.5	7	.058	1...	.058														
116	1.2D + 1.5Lm7 + 1.0Wm (180 d...	Yes	Y		1	1.2	45	1.5	8	.058	1...	.058														
117	1.2D + 1.5Lm7 + 1.0Wm (210 d...	Yes	Y		1	1.2	45	1.5	9	.058	1...	.058														
118	1.2D + 1.5Lm7 + 1.0Wm (240 d...	Yes	Y		1	1.2	45	1.5	10	.058	1...	.058														
119	1.2D + 1.5Lm7 + 1.0Wm (270 d...	Yes	Y		1	1.2	45	1.5	11	.058	1...	.058														
120	1.2D + 1.5Lm7 + 1.0Wm (300 d...	Yes	Y		1	1.2	45	1.5	12	.058	1...	.058														
121	1.2D + 1.5Lm7 + 1.0Wm (330 d...	Yes	Y		1	1.2	45	1.5	13	.058	1...	.058														
122	1.2D + 1.5Lm8 + 1.0Wm (0 deg)	Yes	Y		1	1.2	46	1.5	2	.058	1...	.058														
123	1.2D + 1.5Lm8 + 1.0Wm (30 de...	Yes	Y		1	1.2	46	1.5	3	.058	1...	.058														
124	1.2D + 1.5Lm8 + 1.0Wm (60 de...	Yes	Y		1	1.2	46	1.5	4	.058	1...	.058														
125	1.2D + 1.5Lm8 + 1.0Wm (90 de...	Yes	Y		1	1.2	46	1.5	5	.058	1...	.058														
126	1.2D + 1.5Lm8 + 1.0Wm (120 d...	Yes	Y		1	1.2	46	1.5	6	.058	1...	.058														
127	1.2D + 1.5Lm8 + 1.0Wm (150 d...	Yes	Y		1	1.2	46	1.5	7	.058	1...	.058														
128	1.2D + 1.5Lm8 + 1.0Wm (180 d...	Yes	Y		1	1.2	46	1.5	8	.058	1...	.058														
129	1.2D + 1.5Lm8 + 1.0Wm (210 d...	Yes	Y		1	1.2	46	1.5	9	.058	1...	.058														
130	1.2D + 1.5Lm8 + 1.0Wm (240 d...	Yes	Y		1	1.2	46	1.5	10	.058	1...	.058														
131	1.2D + 1.5Lm8 + 1.0Wm (270 d...	Yes	Y		1	1.2	46	1.5	11	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
132	1.2D + 1.5Lm8 + 1.0Wm (300 d...	Yes	Y		1	1.2	46	1.5	12	.058	1...	.058														
133	1.2D + 1.5Lm8 + 1.0Wm (330 d...	Yes	Y		1	1.2	46	1.5	13	.058	1...	.058														
134	1.2D + 1.5Lm9 + 1.0Wm (0 deg)	Yes	Y		1	1.2	47	1.5	2	.058	1...	.058														
135	1.2D + 1.5Lm9 + 1.0Wm (30 de...	Yes	Y		1	1.2	47	1.5	3	.058	1...	.058														
136	1.2D + 1.5Lm9 + 1.0Wm (60 de...	Yes	Y		1	1.2	47	1.5	4	.058	1...	.058														
137	1.2D + 1.5Lm9 + 1.0Wm (90 de...	Yes	Y		1	1.2	47	1.5	5	.058	1...	.058														
138	1.2D + 1.5Lm9 + 1.0Wm (120 d...	Yes	Y		1	1.2	47	1.5	6	.058	1...	.058														
139	1.2D + 1.5Lm9 + 1.0Wm (150 d...	Yes	Y		1	1.2	47	1.5	7	.058	1...	.058														
140	1.2D + 1.5Lm9 + 1.0Wm (180 d...	Yes	Y		1	1.2	47	1.5	8	.058	1...	.058														
141	1.2D + 1.5Lm9 + 1.0Wm (210 d...	Yes	Y		1	1.2	47	1.5	9	.058	1...	.058														
142	1.2D + 1.5Lm9 + 1.0Wm (240 d...	Yes	Y		1	1.2	47	1.5	10	.058	1...	.058														
143	1.2D + 1.5Lm9 + 1.0Wm (270 d...	Yes	Y		1	1.2	47	1.5	11	.058	1...	.058														
144	1.2D + 1.5Lm9 + 1.0Wm (300 d...	Yes	Y		1	1.2	47	1.5	12	.058	1...	.058														
145	1.2D + 1.5Lm9 + 1.0Wm (330 d...	Yes	Y		1	1.2	47	1.5	13	.058	1...	.058														
146	1.2D + 1.5Lm10 + 1.0Wm (0 de...	Yes	Y		1	1.2	48	1.5	2	.058	1...	.058														
147	1.2D + 1.5Lm10 + 1.0Wm (30 d...	Yes	Y		1	1.2	48	1.5	3	.058	1...	.058														
148	1.2D + 1.5Lm10 + 1.0Wm (60 d...	Yes	Y		1	1.2	48	1.5	4	.058	1...	.058														
149	1.2D + 1.5Lm10 + 1.0Wm (90 d...	Yes	Y		1	1.2	48	1.5	5	.058	1...	.058														
150	1.2D + 1.5Lm10 + 1.0Wm (120 ...	Yes	Y		1	1.2	48	1.5	6	.058	1...	.058														
151	1.2D + 1.5Lm10 + 1.0Wm (150 ...	Yes	Y		1	1.2	48	1.5	7	.058	1...	.058														
152	1.2D + 1.5Lm10 + 1.0Wm (180 ...	Yes	Y		1	1.2	48	1.5	8	.058	1...	.058														
153	1.2D + 1.5Lm10 + 1.0Wm (210 ...	Yes	Y		1	1.2	48	1.5	9	.058	1...	.058														
154	1.2D + 1.5Lm10 + 1.0Wm (240 ...	Yes	Y		1	1.2	48	1.5	10	.058	1...	.058														
155	1.2D + 1.5Lm10 + 1.0Wm (270 ...	Yes	Y		1	1.2	48	1.5	11	.058	1...	.058														
156	1.2D + 1.5Lm10 + 1.0Wm (300 ...	Yes	Y		1	1.2	48	1.5	12	.058	1...	.058														
157	1.2D + 1.5Lm10 + 1.0Wm (330 ...	Yes	Y		1	1.2	48	1.5	13	.058	1...	.058														
158	1.2D + 1.5Lm11 + 1.0Wm (0 de...	Yes	Y		1	1.2	49	1.5	2	.058	1...	.058														
159	1.2D + 1.5Lm11 + 1.0Wm (30 d...	Yes	Y		1	1.2	49	1.5	3	.058	1...	.058														
160	1.2D + 1.5Lm11 + 1.0Wm (60 d...	Yes	Y		1	1.2	49	1.5	4	.058	1...	.058														
161	1.2D + 1.5Lm11 + 1.0Wm (90 d...	Yes	Y		1	1.2	49	1.5	5	.058	1...	.058														
162	1.2D + 1.5Lm11 + 1.0Wm (120 ...	Yes	Y		1	1.2	49	1.5	6	.058	1...	.058														
163	1.2D + 1.5Lm11 + 1.0Wm (150 ...	Yes	Y		1	1.2	49	1.5	7	.058	1...	.058														
164	1.2D + 1.5Lm11 + 1.0Wm (180 ...	Yes	Y		1	1.2	49	1.5	8	.058	1...	.058														
165	1.2D + 1.5Lm11 + 1.0Wm (210 ...	Yes	Y		1	1.2	49	1.5	9	.058	1...	.058														
166	1.2D + 1.5Lm11 + 1.0Wm (240 ...	Yes	Y		1	1.2	49	1.5	10	.058	1...	.058														
167	1.2D + 1.5Lm11 + 1.0Wm (270 ...	Yes	Y		1	1.2	49	1.5	11	.058	1...	.058														
168	1.2D + 1.5Lm11 + 1.0Wm (300 ...	Yes	Y		1	1.2	49	1.5	12	.058	1...	.058														
169	1.2D + 1.5Lm11 + 1.0Wm (330 ...	Yes	Y		1	1.2	49	1.5	13	.058	1...	.058														
170	1.2D + 1.5Lm12 + 1.0Wm (0 de...	Yes	Y		1	1.2	50	1.5	2	.058	1...	.058														
171	1.2D + 1.5Lm12 + 1.0Wm (30 d...	Yes	Y		1	1.2	50	1.5	3	.058	1...	.058														
172	1.2D + 1.5Lm12 + 1.0Wm (60 d...	Yes	Y		1	1.2	50	1.5	4	.058	1...	.058														
173	1.2D + 1.5Lm12 + 1.0Wm (90 d...	Yes	Y		1	1.2	50	1.5	5	.058	1...	.058														
174	1.2D + 1.5Lm12 + 1.0Wm (120 ...	Yes	Y		1	1.2	50	1.5	6	.058	1...	.058														
175	1.2D + 1.5Lm12 + 1.0Wm (150 ...	Yes	Y		1	1.2	50	1.5	7	.058	1...	.058														
176	1.2D + 1.5Lm12 + 1.0Wm (180 ...	Yes	Y		1	1.2	50	1.5	8	.058	1...	.058														
177	1.2D + 1.5Lm12 + 1.0Wm (210 ...	Yes	Y		1	1.2	50	1.5	9	.058	1...	.058														
178	1.2D + 1.5Lm12 + 1.0Wm (240 ...	Yes	Y		1	1.2	50	1.5	10	.058	1...	.058														
179	1.2D + 1.5Lm12 + 1.0Wm (270 ...	Yes	Y		1	1.2	50	1.5	11	.058	1...	.058														
180	1.2D + 1.5Lm12 + 1.0Wm (300 ...	Yes	Y		1	1.2	50	1.5	12	.058	1...	.058														
181	1.2D + 1.5Lm12 + 1.0Wm (330 ...	Yes	Y		1	1.2	50	1.5	13	.058	1...	.058														
182	1.2D + 1.5Lm13 + 1.0Wm (0 de...		Y		1	1.2	51	1.5	2	.058	1...	.058														
183	1.2D + 1.5Lm13 + 1.0Wm (30 d...		Y		1	1.2	51	1.5	3	.058	1...	.058														
184	1.2D + 1.5Lm13 + 1.0Wm (60 d...		Y		1	1.2	51	1.5	4	.058	1...	.058														
185	1.2D + 1.5Lm13 + 1.0Wm (90 d...		Y		1	1.2	51	1.5	5	.058	1...	.058														
186	1.2D + 1.5Lm13 + 1.0Wm (120 ...		Y		1	1.2	51	1.5	6	.058	1...	.058														
187	1.2D + 1.5Lm13 + 1.0Wm (150 ...		Y		1	1.2	51	1.5	7	.058	1...	.058														
188	1.2D + 1.5Lm13 + 1.0Wm (180 ...		Y		1	1.2	51	1.5	8	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
189	1.2D + 1.5Lm13 + 1.0Wm (210 ...		Y		1	1.2	51	1.5	9	.058	1...	.058														
190	1.2D + 1.5Lm13 + 1.0Wm (240 ...		Y		1	1.2	51	1.5	10	.058	1...	.058														
191	1.2D + 1.5Lm13 + 1.0Wm (270 ...		Y		1	1.2	51	1.5	11	.058	1...	.058														
192	1.2D + 1.5Lm13 + 1.0Wm (300 ...		Y		1	1.2	51	1.5	12	.058	1...	.058														
193	1.2D + 1.5Lm13 + 1.0Wm (330 ...		Y		1	1.2	51	1.5	13	.058	1...	.058														
194	1.2D + 1.5Lm14 + 1.0Wm (0 de...		Y		1	1.2	52	1.5	2	.058	1...	.058														
195	1.2D + 1.5Lm14 + 1.0Wm (30 d...		Y		1	1.2	52	1.5	3	.058	1...	.058														
196	1.2D + 1.5Lm14 + 1.0Wm (60 d...		Y		1	1.2	52	1.5	4	.058	1...	.058														
197	1.2D + 1.5Lm14 + 1.0Wm (90 d...		Y		1	1.2	52	1.5	5	.058	1...	.058														
198	1.2D + 1.5Lm14 + 1.0Wm (120 ...		Y		1	1.2	52	1.5	6	.058	1...	.058														
199	1.2D + 1.5Lm14 + 1.0Wm (150 ...		Y		1	1.2	52	1.5	7	.058	1...	.058														
200	1.2D + 1.5Lm14 + 1.0Wm (180 ...		Y		1	1.2	52	1.5	8	.058	1...	.058														
201	1.2D + 1.5Lm14 + 1.0Wm (210 ...		Y		1	1.2	52	1.5	9	.058	1...	.058														
202	1.2D + 1.5Lm14 + 1.0Wm (240 ...		Y		1	1.2	52	1.5	10	.058	1...	.058														
203	1.2D + 1.5Lm14 + 1.0Wm (270 ...		Y		1	1.2	52	1.5	11	.058	1...	.058														
204	1.2D + 1.5Lm14 + 1.0Wm (300 ...		Y		1	1.2	52	1.5	12	.058	1...	.058														
205	1.2D + 1.5Lm14 + 1.0Wm (330 ...		Y		1	1.2	52	1.5	13	.058	1...	.058														
206	1.2D + 1.5Lm15 + 1.0Wm (0 de...		Y		1	1.2	53	1.5	2	.058	1...	.058														
207	1.2D + 1.5Lm15 + 1.0Wm (30 d...		Y		1	1.2	53	1.5	3	.058	1...	.058														
208	1.2D + 1.5Lm15 + 1.0Wm (60 d...		Y		1	1.2	53	1.5	4	.058	1...	.058														
209	1.2D + 1.5Lm15 + 1.0Wm (90 d...		Y		1	1.2	53	1.5	5	.058	1...	.058														
210	1.2D + 1.5Lm15 + 1.0Wm (120 ...		Y		1	1.2	53	1.5	6	.058	1...	.058														
211	1.2D + 1.5Lm15 + 1.0Wm (150 ...		Y		1	1.2	53	1.5	7	.058	1...	.058														
212	1.2D + 1.5Lm15 + 1.0Wm (180 ...		Y		1	1.2	53	1.5	8	.058	1...	.058														
213	1.2D + 1.5Lm15 + 1.0Wm (210 ...		Y		1	1.2	53	1.5	9	.058	1...	.058														
214	1.2D + 1.5Lm15 + 1.0Wm (240 ...		Y		1	1.2	53	1.5	10	.058	1...	.058														
215	1.2D + 1.5Lm15 + 1.0Wm (270 ...		Y		1	1.2	53	1.5	11	.058	1...	.058														
216	1.2D + 1.5Lm15 + 1.0Wm (300 ...		Y		1	1.2	53	1.5	12	.058	1...	.058														
217	1.2D + 1.5Lm15 + 1.0Wm (330 ...		Y		1	1.2	53	1.5	13	.058	1...	.058														
218	1.2D + 1.5Lm16 + 1.0Wm (0 de...		Y		1	1.2	54	1.5	2	.058	1...	.058														
219	1.2D + 1.5Lm16 + 1.0Wm (30 d...		Y		1	1.2	54	1.5	3	.058	1...	.058														
220	1.2D + 1.5Lm16 + 1.0Wm (60 d...		Y		1	1.2	54	1.5	4	.058	1...	.058														
221	1.2D + 1.5Lm16 + 1.0Wm (90 d...		Y		1	1.2	54	1.5	5	.058	1...	.058														
222	1.2D + 1.5Lm16 + 1.0Wm (120 ...		Y		1	1.2	54	1.5	6	.058	1...	.058														
223	1.2D + 1.5Lm16 + 1.0Wm (150 ...		Y		1	1.2	54	1.5	7	.058	1...	.058														
224	1.2D + 1.5Lm16 + 1.0Wm (180 ...		Y		1	1.2	54	1.5	8	.058	1...	.058														
225	1.2D + 1.5Lm16 + 1.0Wm (210 ...		Y		1	1.2	54	1.5	9	.058	1...	.058														
226	1.2D + 1.5Lm16 + 1.0Wm (240 ...		Y		1	1.2	54	1.5	10	.058	1...	.058														
227	1.2D + 1.5Lm16 + 1.0Wm (270 ...		Y		1	1.2	54	1.5	11	.058	1...	.058														
228	1.2D + 1.5Lm16 + 1.0Wm (300 ...		Y		1	1.2	54	1.5	12	.058	1...	.058														
229	1.2D + 1.5Lm16 + 1.0Wm (330 ...		Y		1	1.2	54	1.5	13	.058	1...	.058														
230	1.2D + 1.5Lm17 + 1.0Wm (0 de...		Y		1	1.2	55	1.5	2	.058	1...	.058														
231	1.2D + 1.5Lm17 + 1.0Wm (30 d...		Y		1	1.2	55	1.5	3	.058	1...	.058														
232	1.2D + 1.5Lm17 + 1.0Wm (60 d...		Y		1	1.2	55	1.5	4	.058	1...	.058														
233	1.2D + 1.5Lm17 + 1.0Wm (90 d...		Y		1	1.2	55	1.5	5	.058	1...	.058														
234	1.2D + 1.5Lm17 + 1.0Wm (120 ...		Y		1	1.2	55	1.5	6	.058	1...	.058														
235	1.2D + 1.5Lm17 + 1.0Wm (150 ...		Y		1	1.2	55	1.5	7	.058	1...	.058														
236	1.2D + 1.5Lm17 + 1.0Wm (180 ...		Y		1	1.2	55	1.5	8	.058	1...	.058														
237	1.2D + 1.5Lm17 + 1.0Wm (210 ...		Y		1	1.2	55	1.5	9	.058	1...	.058														
238	1.2D + 1.5Lm17 + 1.0Wm (240 ...		Y		1	1.2	55	1.5	10	.058	1...	.058														
239	1.2D + 1.5Lm17 + 1.0Wm (270 ...		Y		1	1.2	55	1.5	11	.058	1...	.058														
240	1.2D + 1.5Lm17 + 1.0Wm (300 ...		Y		1	1.2	55	1.5	12	.058	1...	.058														
241	1.2D + 1.5Lm17 + 1.0Wm (330 ...		Y		1	1.2	55	1.5	13	.058	1...	.058														
242	1.2D + 1.5Lm18 + 1.0Wm (0 de...		Y		1	1.2	56	1.5	2	.058	1...	.058														
243	1.2D + 1.5Lm18 + 1.0Wm (30 d...		Y		1	1.2	56	1.5	3	.058	1...	.058														
244	1.2D + 1.5Lm18 + 1.0Wm (60 d...		Y		1	1.2	56	1.5	4	.058	1...	.058														
245	1.2D + 1.5Lm18 + 1.0Wm (90 d...		Y		1	1.2	56	1.5	5	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
246	1.2D + 1.5Lm18 + 1.0Wm (120 ...		Y		1	1.2	56	1.5	6	.058	1...	.058														
247	1.2D + 1.5Lm18 + 1.0Wm (150 ...		Y		1	1.2	56	1.5	7	.058	1...	.058														
248	1.2D + 1.5Lm18 + 1.0Wm (180 ...		Y		1	1.2	56	1.5	8	.058	1...	.058														
249	1.2D + 1.5Lm18 + 1.0Wm (210 ...		Y		1	1.2	56	1.5	9	.058	1...	.058														
250	1.2D + 1.5Lm18 + 1.0Wm (240 ...		Y		1	1.2	56	1.5	10	.058	1...	.058														
251	1.2D + 1.5Lm18 + 1.0Wm (270 ...		Y		1	1.2	56	1.5	11	.058	1...	.058														
252	1.2D + 1.5Lm18 + 1.0Wm (300 ...		Y		1	1.2	56	1.5	12	.058	1...	.058														
253	1.2D + 1.5Lm18 + 1.0Wm (330 ...		Y		1	1.2	56	1.5	13	.058	1...	.058														
254	1.2D + 1.5Lm19 + 1.0Wm (0 de...		Y		1	1.2	57	1.5	2	.058	1...	.058														
255	1.2D + 1.5Lm19 + 1.0Wm (30 d...		Y		1	1.2	57	1.5	3	.058	1...	.058														
256	1.2D + 1.5Lm19 + 1.0Wm (60 d...		Y		1	1.2	57	1.5	4	.058	1...	.058														
257	1.2D + 1.5Lm19 + 1.0Wm (90 d...		Y		1	1.2	57	1.5	5	.058	1...	.058														
258	1.2D + 1.5Lm19 + 1.0Wm (120 ...		Y		1	1.2	57	1.5	6	.058	1...	.058														
259	1.2D + 1.5Lm19 + 1.0Wm (150 ...		Y		1	1.2	57	1.5	7	.058	1...	.058														
260	1.2D + 1.5Lm19 + 1.0Wm (180 ...		Y		1	1.2	57	1.5	8	.058	1...	.058														
261	1.2D + 1.5Lm19 + 1.0Wm (210 ...		Y		1	1.2	57	1.5	9	.058	1...	.058														
262	1.2D + 1.5Lm19 + 1.0Wm (240 ...		Y		1	1.2	57	1.5	10	.058	1...	.058														
263	1.2D + 1.5Lm19 + 1.0Wm (270 ...		Y		1	1.2	57	1.5	11	.058	1...	.058														
264	1.2D + 1.5Lm19 + 1.0Wm (300 ...		Y		1	1.2	57	1.5	12	.058	1...	.058														
265	1.2D + 1.5Lm19 + 1.0Wm (330 ...		Y		1	1.2	57	1.5	13	.058	1...	.058														
266	1.2D + 1.5Lm20 + 1.0Wm (0 de...		Y		1	1.2	58	1.5	2	.058	1...	.058														
267	1.2D + 1.5Lm20 + 1.0Wm (30 d...		Y		1	1.2	58	1.5	3	.058	1...	.058														
268	1.2D + 1.5Lm20 + 1.0Wm (60 d...		Y		1	1.2	58	1.5	4	.058	1...	.058														
269	1.2D + 1.5Lm20 + 1.0Wm (90 d...		Y		1	1.2	58	1.5	5	.058	1...	.058														
270	1.2D + 1.5Lm20 + 1.0Wm (120 ...		Y		1	1.2	58	1.5	6	.058	1...	.058														
271	1.2D + 1.5Lm20 + 1.0Wm (150 ...		Y		1	1.2	58	1.5	7	.058	1...	.058														
272	1.2D + 1.5Lm20 + 1.0Wm (180 ...		Y		1	1.2	58	1.5	8	.058	1...	.058														
273	1.2D + 1.5Lm20 + 1.0Wm (210 ...		Y		1	1.2	58	1.5	9	.058	1...	.058														
274	1.2D + 1.5Lm20 + 1.0Wm (240 ...		Y		1	1.2	58	1.5	10	.058	1...	.058														
275	1.2D + 1.5Lm20 + 1.0Wm (270 ...		Y		1	1.2	58	1.5	11	.058	1...	.058														
276	1.2D + 1.5Lm20 + 1.0Wm (300 ...		Y		1	1.2	58	1.5	12	.058	1...	.058														
277	1.2D + 1.5Lm20 + 1.0Wm (330 ...		Y		1	1.2	58	1.5	13	.058	1...	.058														
278	1.2D + 1.5Lm21 + 1.0Wm (0 de...		Y		1	1.2	59	1.5	2	.058	1...	.058														
279	1.2D + 1.5Lm21 + 1.0Wm (30 d...		Y		1	1.2	59	1.5	3	.058	1...	.058														
280	1.2D + 1.5Lm21 + 1.0Wm (60 d...		Y		1	1.2	59	1.5	4	.058	1...	.058														
281	1.2D + 1.5Lm21 + 1.0Wm (90 d...		Y		1	1.2	59	1.5	5	.058	1...	.058														
282	1.2D + 1.5Lm21 + 1.0Wm (120 ...		Y		1	1.2	59	1.5	6	.058	1...	.058														
283	1.2D + 1.5Lm21 + 1.0Wm (150 ...		Y		1	1.2	59	1.5	7	.058	1...	.058														
284	1.2D + 1.5Lm21 + 1.0Wm (180 ...		Y		1	1.2	59	1.5	8	.058	1...	.058														
285	1.2D + 1.5Lm21 + 1.0Wm (210 ...		Y		1	1.2	59	1.5	9	.058	1...	.058														
286	1.2D + 1.5Lm21 + 1.0Wm (240 ...		Y		1	1.2	59	1.5	10	.058	1...	.058														
287	1.2D + 1.5Lm21 + 1.0Wm (270 ...		Y		1	1.2	59	1.5	11	.058	1...	.058														
288	1.2D + 1.5Lm21 + 1.0Wm (300 ...		Y		1	1.2	59	1.5	12	.058	1...	.058														
289	1.2D + 1.5Lm21 + 1.0Wm (330 ...		Y		1	1.2	59	1.5	13	.058	1...	.058														
290	1.2D + 1.5Lm22 + 1.0Wm (0 de...		Y		1	1.2	60	1.5	2	.058	1...	.058														
291	1.2D + 1.5Lm22 + 1.0Wm (30 d...		Y		1	1.2	60	1.5	3	.058	1...	.058														
292	1.2D + 1.5Lm22 + 1.0Wm (60 d...		Y		1	1.2	60	1.5	4	.058	1...	.058														
293	1.2D + 1.5Lm22 + 1.0Wm (90 d...		Y		1	1.2	60	1.5	5	.058	1...	.058														
294	1.2D + 1.5Lm22 + 1.0Wm (120 ...		Y		1	1.2	60	1.5	6	.058	1...	.058														
295	1.2D + 1.5Lm22 + 1.0Wm (150 ...		Y		1	1.2	60	1.5	7	.058	1...	.058														
296	1.2D + 1.5Lm22 + 1.0Wm (180 ...		Y		1	1.2	60	1.5	8	.058	1...	.058														
297	1.2D + 1.5Lm22 + 1.0Wm (210 ...		Y		1	1.2	60	1.5	9	.058	1...	.058														
298	1.2D + 1.5Lm22 + 1.0Wm (240 ...		Y		1	1.2	60	1.5	10	.058	1...	.058														
299	1.2D + 1.5Lm22 + 1.0Wm (270 ...		Y		1	1.2	60	1.5	11	.058	1...	.058														
300	1.2D + 1.5Lm22 + 1.0Wm (300 ...		Y		1	1.2	60	1.5	12	.058	1...	.058														
301	1.2D + 1.5Lm22 + 1.0Wm (330 ...		Y		1	1.2	60	1.5	13	.058	1...	.058														
302	1.2D + 1.5Lm23 + 1.0Wm (0 de...		Y		1	1.2	61	1.5	2	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
303	1.2D + 1.5Lm23 + 1.0Wm (30 d...		Y		1	1.2	61	1.5	3	.058	1...	.058														
304	1.2D + 1.5Lm23 + 1.0Wm (60 d...		Y		1	1.2	61	1.5	4	.058	1...	.058														
305	1.2D + 1.5Lm23 + 1.0Wm (90 d...		Y		1	1.2	61	1.5	5	.058	1...	.058														
306	1.2D + 1.5Lm23 + 1.0Wm (120 ...		Y		1	1.2	61	1.5	6	.058	1...	.058														
307	1.2D + 1.5Lm23 + 1.0Wm (150 ...		Y		1	1.2	61	1.5	7	.058	1...	.058														
308	1.2D + 1.5Lm23 + 1.0Wm (180 ...		Y		1	1.2	61	1.5	8	.058	1...	.058														
309	1.2D + 1.5Lm23 + 1.0Wm (210 ...		Y		1	1.2	61	1.5	9	.058	1...	.058														
310	1.2D + 1.5Lm23 + 1.0Wm (240 ...		Y		1	1.2	61	1.5	10	.058	1...	.058														
311	1.2D + 1.5Lm23 + 1.0Wm (270 ...		Y		1	1.2	61	1.5	11	.058	1...	.058														
312	1.2D + 1.5Lm23 + 1.0Wm (300 ...		Y		1	1.2	61	1.5	12	.058	1...	.058														
313	1.2D + 1.5Lm23 + 1.0Wm (330 ...		Y		1	1.2	61	1.5	13	.058	1...	.058														
314	1.2D + 1.5Lm24 + 1.0Wm (0 de...		Y		1	1.2	62	1.5	2	.058	1...	.058														
315	1.2D + 1.5Lm24 + 1.0Wm (30 d...		Y		1	1.2	62	1.5	3	.058	1...	.058														
316	1.2D + 1.5Lm24 + 1.0Wm (60 d...		Y		1	1.2	62	1.5	4	.058	1...	.058														
317	1.2D + 1.5Lm24 + 1.0Wm (90 d...		Y		1	1.2	62	1.5	5	.058	1...	.058														
318	1.2D + 1.5Lm24 + 1.0Wm (120 ...		Y		1	1.2	62	1.5	6	.058	1...	.058														
319	1.2D + 1.5Lm24 + 1.0Wm (150 ...		Y		1	1.2	62	1.5	7	.058	1...	.058														
320	1.2D + 1.5Lm24 + 1.0Wm (180 ...		Y		1	1.2	62	1.5	8	.058	1...	.058														
321	1.2D + 1.5Lm24 + 1.0Wm (210 ...		Y		1	1.2	62	1.5	9	.058	1...	.058														
322	1.2D + 1.5Lm24 + 1.0Wm (240 ...		Y		1	1.2	62	1.5	10	.058	1...	.058														
323	1.2D + 1.5Lm24 + 1.0Wm (270 ...		Y		1	1.2	62	1.5	11	.058	1...	.058														
324	1.2D + 1.5Lm24 + 1.0Wm (300 ...		Y		1	1.2	62	1.5	12	.058	1...	.058														
325	1.2D + 1.5Lm24 + 1.0Wm (330 ...		Y		1	1.2	62	1.5	13	.058	1...	.058														
326	1.2D + 1.5Lm25 + 1.0Wm (0 de...		Y		1	1.2	63	1.5	2	.058	1...	.058														
327	1.2D + 1.5Lm25 + 1.0Wm (30 d...		Y		1	1.2	63	1.5	3	.058	1...	.058														
328	1.2D + 1.5Lm25 + 1.0Wm (60 d...		Y		1	1.2	63	1.5	4	.058	1...	.058														
329	1.2D + 1.5Lm25 + 1.0Wm (90 d...		Y		1	1.2	63	1.5	5	.058	1...	.058														
330	1.2D + 1.5Lm25 + 1.0Wm (120 ...		Y		1	1.2	63	1.5	6	.058	1...	.058														
331	1.2D + 1.5Lm25 + 1.0Wm (150 ...		Y		1	1.2	63	1.5	7	.058	1...	.058														
332	1.2D + 1.5Lm25 + 1.0Wm (180 ...		Y		1	1.2	63	1.5	8	.058	1...	.058														
333	1.2D + 1.5Lm25 + 1.0Wm (210 ...		Y		1	1.2	63	1.5	9	.058	1...	.058														
334	1.2D + 1.5Lm25 + 1.0Wm (240 ...		Y		1	1.2	63	1.5	10	.058	1...	.058														
335	1.2D + 1.5Lm25 + 1.0Wm (270 ...		Y		1	1.2	63	1.5	11	.058	1...	.058														
336	1.2D + 1.5Lm25 + 1.0Wm (300 ...		Y		1	1.2	63	1.5	12	.058	1...	.058														
337	1.2D + 1.5Lm25 + 1.0Wm (330 ...		Y		1	1.2	63	1.5	13	.058	1...	.058														
338	1.2D + 1.5Lm26 + 1.0Wm (0 de...		Y		1	1.2	64	1.5	2	.058	1...	.058														
339	1.2D + 1.5Lm26 + 1.0Wm (30 d...		Y		1	1.2	64	1.5	3	.058	1...	.058														
340	1.2D + 1.5Lm26 + 1.0Wm (60 d...		Y		1	1.2	64	1.5	4	.058	1...	.058														
341	1.2D + 1.5Lm26 + 1.0Wm (90 d...		Y		1	1.2	64	1.5	5	.058	1...	.058														
342	1.2D + 1.5Lm26 + 1.0Wm (120 ...		Y		1	1.2	64	1.5	6	.058	1...	.058														
343	1.2D + 1.5Lm26 + 1.0Wm (150 ...		Y		1	1.2	64	1.5	7	.058	1...	.058														
344	1.2D + 1.5Lm26 + 1.0Wm (180 ...		Y		1	1.2	64	1.5	8	.058	1...	.058														
345	1.2D + 1.5Lm26 + 1.0Wm (210 ...		Y		1	1.2	64	1.5	9	.058	1...	.058														
346	1.2D + 1.5Lm26 + 1.0Wm (240 ...		Y		1	1.2	64	1.5	10	.058	1...	.058														
347	1.2D + 1.5Lm26 + 1.0Wm (270 ...		Y		1	1.2	64	1.5	11	.058	1...	.058														
348	1.2D + 1.5Lm26 + 1.0Wm (300 ...		Y		1	1.2	64	1.5	12	.058	1...	.058														
349	1.2D + 1.5Lm26 + 1.0Wm (330 ...		Y		1	1.2	64	1.5	13	.058	1...	.058														
350	1.2D + 1.5Lm27 + 1.0Wm (0 de...		Y		1	1.2	65	1.5	2	.058	1...	.058														
351	1.2D + 1.5Lm27 + 1.0Wm (30 d...		Y		1	1.2	65	1.5	3	.058	1...	.058														
352	1.2D + 1.5Lm27 + 1.0Wm (60 d...		Y		1	1.2	65	1.5	4	.058	1...	.058														
353	1.2D + 1.5Lm27 + 1.0Wm (90 d...		Y		1	1.2	65	1.5	5	.058	1...	.058														
354	1.2D + 1.5Lm27 + 1.0Wm (120 ...		Y		1	1.2	65	1.5	6	.058	1...	.058														
355	1.2D + 1.5Lm27 + 1.0Wm (150 ...		Y		1	1.2	65	1.5	7	.058	1...	.058														
356	1.2D + 1.5Lm27 + 1.0Wm (180 ...		Y		1	1.2	65	1.5	8	.058	1...	.058														
357	1.2D + 1.5Lm27 + 1.0Wm (210 ...		Y		1	1.2	65	1.5	9	.058	1...	.058														
358	1.2D + 1.5Lm27 + 1.0Wm (240 ...		Y		1	1.2	65	1.5	10	.058	1...	.058														
359	1.2D + 1.5Lm27 + 1.0Wm (270 ...		Y		1	1.2	65	1.5	11	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
360	1.2D + 1.5Lm27 + 1.0Wm (300 ...		Y		1	1.2	65	1.5	12	.058	1...	.058														
361	1.2D + 1.5Lm27 + 1.0Wm (330 ...		Y		1	1.2	65	1.5	13	.058	1...	.058														
362	1.2D + 1.5Lm28 + 1.0Wm (0 de...		Y		1	1.2	66	1.5	2	.058	1...	.058														
363	1.2D + 1.5Lm28 + 1.0Wm (30 d...		Y		1	1.2	66	1.5	3	.058	1...	.058														
364	1.2D + 1.5Lm28 + 1.0Wm (60 d...		Y		1	1.2	66	1.5	4	.058	1...	.058														
365	1.2D + 1.5Lm28 + 1.0Wm (90 d...		Y		1	1.2	66	1.5	5	.058	1...	.058														
366	1.2D + 1.5Lm28 + 1.0Wm (120 ...		Y		1	1.2	66	1.5	6	.058	1...	.058														
367	1.2D + 1.5Lm28 + 1.0Wm (150 ...		Y		1	1.2	66	1.5	7	.058	1...	.058														
368	1.2D + 1.5Lm28 + 1.0Wm (180 ...		Y		1	1.2	66	1.5	8	.058	1...	.058														
369	1.2D + 1.5Lm28 + 1.0Wm (210 ...		Y		1	1.2	66	1.5	9	.058	1...	.058														
370	1.2D + 1.5Lm28 + 1.0Wm (240 ...		Y		1	1.2	66	1.5	10	.058	1...	.058														
371	1.2D + 1.5Lm28 + 1.0Wm (270 ...		Y		1	1.2	66	1.5	11	.058	1...	.058														
372	1.2D + 1.5Lm28 + 1.0Wm (300 ...		Y		1	1.2	66	1.5	12	.058	1...	.058														
373	1.2D + 1.5Lm28 + 1.0Wm (330 ...		Y		1	1.2	66	1.5	13	.058	1...	.058														
374	1.2D + 1.5Lm29 + 1.0Wm (0 de...		Y		1	1.2	67	1.5	2	.058	1...	.058														
375	1.2D + 1.5Lm29 + 1.0Wm (30 d...		Y		1	1.2	67	1.5	3	.058	1...	.058														
376	1.2D + 1.5Lm29 + 1.0Wm (60 d...		Y		1	1.2	67	1.5	4	.058	1...	.058														
377	1.2D + 1.5Lm29 + 1.0Wm (90 d...		Y		1	1.2	67	1.5	5	.058	1...	.058														
378	1.2D + 1.5Lm29 + 1.0Wm (120 ...		Y		1	1.2	67	1.5	6	.058	1...	.058														
379	1.2D + 1.5Lm29 + 1.0Wm (150 ...		Y		1	1.2	67	1.5	7	.058	1...	.058														
380	1.2D + 1.5Lm29 + 1.0Wm (180 ...		Y		1	1.2	67	1.5	8	.058	1...	.058														
381	1.2D + 1.5Lm29 + 1.0Wm (210 ...		Y		1	1.2	67	1.5	9	.058	1...	.058														
382	1.2D + 1.5Lm29 + 1.0Wm (240 ...		Y		1	1.2	67	1.5	10	.058	1...	.058														
383	1.2D + 1.5Lm29 + 1.0Wm (270 ...		Y		1	1.2	67	1.5	11	.058	1...	.058														
384	1.2D + 1.5Lm29 + 1.0Wm (300 ...		Y		1	1.2	67	1.5	12	.058	1...	.058														
385	1.2D + 1.5Lm29 + 1.0Wm (330 ...		Y		1	1.2	67	1.5	13	.058	1...	.058														
386	1.2D + 1.5Lm30 + 1.0Wm (0 de...		Y		1	1.2	68	1.5	2	.058	1...	.058														
387	1.2D + 1.5Lm30 + 1.0Wm (30 d...		Y		1	1.2	68	1.5	3	.058	1...	.058														
388	1.2D + 1.5Lm30 + 1.0Wm (60 d...		Y		1	1.2	68	1.5	4	.058	1...	.058														
389	1.2D + 1.5Lm30 + 1.0Wm (90 d...		Y		1	1.2	68	1.5	5	.058	1...	.058														
390	1.2D + 1.5Lm30 + 1.0Wm (120 ...		Y		1	1.2	68	1.5	6	.058	1...	.058														
391	1.2D + 1.5Lm30 + 1.0Wm (150 ...		Y		1	1.2	68	1.5	7	.058	1...	.058														
392	1.2D + 1.5Lm30 + 1.0Wm (180 ...		Y		1	1.2	68	1.5	8	.058	1...	.058														
393	1.2D + 1.5Lm30 + 1.0Wm (210 ...		Y		1	1.2	68	1.5	9	.058	1...	.058														
394	1.2D + 1.5Lm30 + 1.0Wm (240 ...		Y		1	1.2	68	1.5	10	.058	1...	.058														
395	1.2D + 1.5Lm30 + 1.0Wm (270 ...		Y		1	1.2	68	1.5	11	.058	1...	.058														
396	1.2D + 1.5Lm30 + 1.0Wm (300 ...		Y		1	1.2	68	1.5	12	.058	1...	.058														
397	1.2D + 1.5Lm30 + 1.0Wm (330 ...		Y		1	1.2	68	1.5	13	.058	1...	.058														
398	1.2D + 1.5Lm31 + 1.0Wm (0 de...		Y		1	1.2	69	1.5	2	.058	1...	.058														
399	1.2D + 1.5Lm31 + 1.0Wm (30 d...		Y		1	1.2	69	1.5	3	.058	1...	.058														
400	1.2D + 1.5Lm31 + 1.0Wm (60 d...		Y		1	1.2	69	1.5	4	.058	1...	.058														
401	1.2D + 1.5Lm31 + 1.0Wm (90 d...		Y		1	1.2	69	1.5	5	.058	1...	.058														
402	1.2D + 1.5Lm31 + 1.0Wm (120 ...		Y		1	1.2	69	1.5	6	.058	1...	.058														
403	1.2D + 1.5Lm31 + 1.0Wm (150 ...		Y		1	1.2	69	1.5	7	.058	1...	.058														
404	1.2D + 1.5Lm31 + 1.0Wm (180 ...		Y		1	1.2	69	1.5	8	.058	1...	.058														
405	1.2D + 1.5Lm31 + 1.0Wm (210 ...		Y		1	1.2	69	1.5	9	.058	1...	.058														
406	1.2D + 1.5Lm31 + 1.0Wm (240 ...		Y		1	1.2	69	1.5	10	.058	1...	.058														
407	1.2D + 1.5Lm31 + 1.0Wm (270 ...		Y		1	1.2	69	1.5	11	.058	1...	.058														
408	1.2D + 1.5Lm31 + 1.0Wm (300 ...		Y		1	1.2	69	1.5	12	.058	1...	.058														
409	1.2D + 1.5Lm31 + 1.0Wm (330 ...		Y		1	1.2	69	1.5	13	.058	1...	.058														
410	1.2D + 1.5Lm32 + 1.0Wm (0 de...		Y		1	1.2	70	1.5	2	.058	1...	.058														
411	1.2D + 1.5Lm32 + 1.0Wm (30 d...		Y		1	1.2	70	1.5	3	.058	1...	.058														
412	1.2D + 1.5Lm32 + 1.0Wm (60 d...		Y		1	1.2	70	1.5	4	.058	1...	.058														
413	1.2D + 1.5Lm32 + 1.0Wm (90 d...		Y		1	1.2	70	1.5	5	.058	1...	.058														
414	1.2D + 1.5Lm32 + 1.0Wm (120 ...		Y		1	1.2	70	1.5	6	.058	1...	.058														
415	1.2D + 1.5Lm32 + 1.0Wm (150 ...		Y		1	1.2	70	1.5	7	.058	1...	.058														
416	1.2D + 1.5Lm32 + 1.0Wm (180 ...		Y		1	1.2	70	1.5	8	.058	1...	.058														

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
417	1.2D + 1.5Lm32 + 1.0Wm (210 ...		Y		1	1.2	70	1.5	9	.058	1...	.058														
418	1.2D + 1.5Lm32 + 1.0Wm (240 ...		Y		1	1.2	70	1.5	10	.058	1...	.058														
419	1.2D + 1.5Lm32 + 1.0Wm (270 ...		Y		1	1.2	70	1.5	11	.058	1...	.058														
420	1.2D + 1.5Lm32 + 1.0Wm (300 ...		Y		1	1.2	70	1.5	12	.058	1...	.058														
421	1.2D + 1.5Lm32 + 1.0Wm (330 ...		Y		1	1.2	70	1.5	13	.058	1...	.058														
422	1.2D + 1.5Lm33 + 1.0Wm (0 de...		Y		1	1.2	71	1.5	2	.058	1...	.058														
423	1.2D + 1.5Lm33 + 1.0Wm (30 d...		Y		1	1.2	71	1.5	3	.058	1...	.058														
424	1.2D + 1.5Lm33 + 1.0Wm (60 d...		Y		1	1.2	71	1.5	4	.058	1...	.058														
425	1.2D + 1.5Lm33 + 1.0Wm (90 d...		Y		1	1.2	71	1.5	5	.058	1...	.058														
426	1.2D + 1.5Lm33 + 1.0Wm (120 ...		Y		1	1.2	71	1.5	6	.058	1...	.058														
427	1.2D + 1.5Lm33 + 1.0Wm (150 ...		Y		1	1.2	71	1.5	7	.058	1...	.058														
428	1.2D + 1.5Lm33 + 1.0Wm (180 ...		Y		1	1.2	71	1.5	8	.058	1...	.058														
429	1.2D + 1.5Lm33 + 1.0Wm (210 ...		Y		1	1.2	71	1.5	9	.058	1...	.058														
430	1.2D + 1.5Lm33 + 1.0Wm (240 ...		Y		1	1.2	71	1.5	10	.058	1...	.058														
431	1.2D + 1.5Lm33 + 1.0Wm (270 ...		Y		1	1.2	71	1.5	11	.058	1...	.058														
432	1.2D + 1.5Lm33 + 1.0Wm (300 ...		Y		1	1.2	71	1.5	12	.058	1...	.058														
433	1.2D + 1.5Lm33 + 1.0Wm (330 ...		Y		1	1.2	71	1.5	13	.058	1...	.058														
434	1.2D + 1.5Lm34 + 1.0Wm (0 de...		Y		1	1.2	72	1.5	2	.058	1...	.058														
435	1.2D + 1.5Lm34 + 1.0Wm (30 d...		Y		1	1.2	72	1.5	3	.058	1...	.058														
436	1.2D + 1.5Lm34 + 1.0Wm (60 d...		Y		1	1.2	72	1.5	4	.058	1...	.058														
437	1.2D + 1.5Lm34 + 1.0Wm (90 d...		Y		1	1.2	72	1.5	5	.058	1...	.058														
438	1.2D + 1.5Lm34 + 1.0Wm (120 ...		Y		1	1.2	72	1.5	6	.058	1...	.058														
439	1.2D + 1.5Lm34 + 1.0Wm (150 ...		Y		1	1.2	72	1.5	7	.058	1...	.058														
440	1.2D + 1.5Lm34 + 1.0Wm (180 ...		Y		1	1.2	72	1.5	8	.058	1...	.058														
441	1.2D + 1.5Lm34 + 1.0Wm (210 ...		Y		1	1.2	72	1.5	9	.058	1...	.058														
442	1.2D + 1.5Lm34 + 1.0Wm (240 ...		Y		1	1.2	72	1.5	10	.058	1...	.058														
443	1.2D + 1.5Lm34 + 1.0Wm (270 ...		Y		1	1.2	72	1.5	11	.058	1...	.058														
444	1.2D + 1.5Lm34 + 1.0Wm (300 ...		Y		1	1.2	72	1.5	12	.058	1...	.058														
445	1.2D + 1.5Lm34 + 1.0Wm (330 ...		Y		1	1.2	72	1.5	13	.058	1...	.058														
446	1.2D + 1.5Lm35 + 1.0Wm (0 de...		Y		1	1.2	73	1.5	2	.058	1...	.058														
447	1.2D + 1.5Lm35 + 1.0Wm (30 d...		Y		1	1.2	73	1.5	3	.058	1...	.058														
448	1.2D + 1.5Lm35 + 1.0Wm (60 d...		Y		1	1.2	73	1.5	4	.058	1...	.058														
449	1.2D + 1.5Lm35 + 1.0Wm (90 d...		Y		1	1.2	73	1.5	5	.058	1...	.058														
450	1.2D + 1.5Lm35 + 1.0Wm (120 ...		Y		1	1.2	73	1.5	6	.058	1...	.058														
451	1.2D + 1.5Lm35 + 1.0Wm (150 ...		Y		1	1.2	73	1.5	7	.058	1...	.058														
452	1.2D + 1.5Lm35 + 1.0Wm (180 ...		Y		1	1.2	73	1.5	8	.058	1...	.058														
453	1.2D + 1.5Lm35 + 1.0Wm (210 ...		Y		1	1.2	73	1.5	9	.058	1...	.058														
454	1.2D + 1.5Lm35 + 1.0Wm (240 ...		Y		1	1.2	73	1.5	10	.058	1...	.058														
455	1.2D + 1.5Lm35 + 1.0Wm (270 ...		Y		1	1.2	73	1.5	11	.058	1...	.058														
456	1.2D + 1.5Lm35 + 1.0Wm (300 ...		Y		1	1.2	73	1.5	12	.058	1...	.058														
457	1.2D + 1.5Lm35 + 1.0Wm (330 ...		Y		1	1.2	73	1.5	13	.058	1...	.058														
458	1.2D + 1.5Lm36 + 1.0Wm (0 de...		Y		1	1.2	74	1.5	2	.058	1...	.058														
459	1.2D + 1.5Lm36 + 1.0Wm (30 d...		Y		1	1.2	74	1.5	3	.058	1...	.058														
460	1.2D + 1.5Lm36 + 1.0Wm (60 d...		Y		1	1.2	74	1.5	4	.058	1...	.058														
461	1.2D + 1.5Lm36 + 1.0Wm (90 d...		Y		1	1.2	74	1.5	5	.058	1...	.058														
462	1.2D + 1.5Lm36 + 1.0Wm (120 ...		Y		1	1.2	74	1.5	6	.058	1...	.058														
463	1.2D + 1.5Lm36 + 1.0Wm (150 ...		Y		1	1.2	74	1.5	7	.058	1...	.058														
464	1.2D + 1.5Lm36 + 1.0Wm (180 ...		Y		1	1.2	74	1.5	8	.058	1...	.058														
465	1.2D + 1.5Lm36 + 1.0Wm (210 ...		Y		1	1.2	74	1.5	9	.058	1...	.058														
466	1.2D + 1.5Lm36 + 1.0Wm (240 ...		Y		1	1.2	74	1.5	10	.058	1...	.058														
467	1.2D + 1.5Lm36 + 1.0Wm (270 ...		Y		1	1.2	74	1.5	11	.058	1...	.058														
468	1.2D + 1.5Lm36 + 1.0Wm (300 ...		Y		1	1.2	74	1.5	12	.058	1...	.058														
469	1.2D + 1.5Lm36 + 1.0Wm (330 ...		Y		1	1.2	74	1.5	13	.058	1...	.058														
470	1.2D + 1.5Lv (Position 1)	Yes	Y		1	1.2	75	1.5																		
471	1.2D + 1.5Lv (Position 2)	Yes	Y		1	1.2	76	1.5																		
472	1.2D + 1.5Lv (Position 3)	Yes	Y		1	1.2	77	1.5																		
473	1.2D + 1.5Lv (Position 4)	Yes	Y		1	1.2	78	1.5																		

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
474	1.2D + 1.5Lv (Position 5)	Yes	Y		1	1.2	79	1.5																		
475	1.2D + 1.5Lv (Position 6)	Yes	Y		1	1.2	80	1.5																		
476	1.2D + 1.5Lv (Position 7)	Yes	Y		1	1.2	81	1.5																		
477	1.2D + 1.5Lv (Position 8)	Yes	Y		1	1.2	82	1.5																		
478	1.2D + 1.5Lv (Position 9)	Yes	Y		1	1.2	83	1.5																		
479	1.2D + 1.5Lv (Position 10)	Yes	Y		1	1.2	84	1.5																		
480	1.2D + 1.5Lv (Position 11)	Yes	Y		1	1.2	85	1.5																		
481	1.2D + 1.5Lv (Position 12)	Yes	Y		1	1.2	86	1.5																		
482	1.2D + 1.5Lv (Position 13)	Yes	Y		1	1.2	87	1.5																		
483	1.2D + 1.5Lv (Position 14)	Yes	Y		1	1.2	88	1.5																		
484	1.2D + 1.5Lv (Position 15)	Yes	Y		1	1.2	89	1.5																		
485	1.2D + 1.5Lv (Position 16)	Yes	Y		1	1.2	90	1.5																		
486	1.2D + 1.5Lv (Position 17)	Yes	Y		1	1.2	91	1.5																		
487	1.2D + 1.5Lv (Position 18)	Yes	Y		1	1.2	92	1.5																		
488	1.2D + 1.5Lv (Position 19)	Yes	Y		1	1.2	93	1.5																		
489	1.2D + 1.5Lv (Position 20)	Yes	Y		1	1.2	94	1.5																		
490	1.2D + 1.5Lv (Position 21)	Yes	Y		1	1.2	95	1.5																		
491	1.2D + 1.5Lv (Position 22)	Yes	Y		1	1.2	96	1.5																		
492	1.2D + 1.5Lv (Position 23)	Yes	Y		1	1.2	97	1.5																		
493	1.2D + 1.5Lv (Position 24)	Yes	Y		1	1.2	98	1.5																		
494	1.2D + 1.5Lv (Position 25)		Y		1	1.2	99	1.5																		
495	1.2D + 1.5Lv (Position 26)		Y		1	1.2	1...	1.5																		
496	1.2D + 1.5Lv (Position 27)		Y		1	1.2	1...	1.5																		
497	1.2D + 1.5Lv (Position 28)		Y		1	1.2	1...	1.5																		
498	1.2D + 1.5Lv (Position 29)		Y		1	1.2	1...	1.5																		
499	1.2D + 1.5Lv (Position 30)		Y		1	1.2	1...	1.5																		
500	1.2D + 1.5Lv (Position 31)		Y		1	1.2	1...	1.5																		
501	1.2D + 1.5Lv (Position 32)		Y		1	1.2	1...	1.5																		
502	1.2D + 1.5Lv (Position 33)		Y		1	1.2	1...	1.5																		
503	1.2D + 1.5Lv (Position 34)		Y		1	1.2	1...	1.5																		
504	1.2D + 1.5Lv (Position 35)		Y		1	1.2	1...	1.5																		
505	1.2D + 1.5Lv (Position 36)		Y		1	1.2	1...	1.5																		
506	1.2D + 1.5Lv (Position 37)		Y		1	1.2	1...	1.5																		
507	1.2D + 1.5Lv (Position 38)		Y		1	1.2	1...	1.5																		
508	1.2D + 1.5Lv (Position 39)		Y		1	1.2	1...	1.5																		
509	1.2D + 1.5Lv (Position 40)		Y		1	1.2	1...	1.5																		
510	1.2D + 1.5Lv (Position 41)		Y		1	1.2	1...	1.5																		
511	1.2D + 1.5Lv (Position 42)		Y		1	1.2	1...	1.5																		
512	1.2D + 1.5Lv (Position 43)		Y		1	1.2	1...	1.5																		
513	1.2D + 1.5Lv (Position 44)		Y		1	1.2	1...	1.5																		
514	1.2D + 1.5Lv (Position 45)		Y		1	1.2	1...	1.5																		
515	1.2D + 1.5Lv (Position 46)		Y		1	1.2	1...	1.5																		
516	1.2D + 1.5Lv (Position 47)		Y		1	1.2	1...	1.5																		
517	1.2D + 1.5Lv (Position 48)		Y		1	1.2	1...	1.5																		
518	1.2D + 1.5Lv (Position 49)		Y		1	1.2	1...	1.5																		
519	1.2D + 1.5Lv (Position 50)		Y		1	1.2	1...	1.5																		
520	1.2D + 1.5Lv (Position 51)		Y		1	1.2	1...	1.5																		
521	1.2D + 1.5Lv (Position 52)		Y		1	1.2	1...	1.5																		
522	1.2D + 1.5Lv (Position 53)		Y		1	1.2	1...	1.5																		
523	1.2D + 1.5Lv (Position 54)		Y		1	1.2	1...	1.5																		
524	1.2D + 1.5Lv (Position 55)		Y		1	1.2	1...	1.5																		
525	1.2D + 1.5Lv (Position 56)		Y		1	1.2	1...	1.5																		
526	1.2D + 1.5Lv (Position 57)		Y		1	1.2	1...	1.5																		
527	1.2D + 1.5Lv (Position 58)		Y		1	1.2	1...	1.5																		
528	1.2D + 1.5Lv (Position 59)		Y		1	1.2	1...	1.5																		
529	1.2D + 1.5Lv (Position 60)		Y		1	1.2	1...	1.5																		
530	1.2D + 1.5Lv (Position 61)		Y		1	1.2	1...	1.5																		

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
531	1.2D + 1.5Lv (Position 62)		Y		1	1.2	1...	1.5																		
532	1.2D + 1.5Lv (Position 63)		Y		1	1.2	1...	1.5																		
533	1.2D + 1.5Lv (Position 64)		Y		1	1.2	1...	1.5																		
534	1.2D + 1.5Lv (Position 65)		Y		1	1.2	1...	1.5																		
535	1.2D + 1.5Lv (Position 66)		Y		1	1.2	1...	1.5																		
536	1.2D + 1.5Lv (Position 67)		Y		1	1.2	1...	1.5																		
537	1.2D + 1.5Lv (Position 68)		Y		1	1.2	1...	1.5																		
538	1.2D + 1.5Lv (Position 69)		Y		1	1.2	1...	1.5																		
539	1.2D + 1.5Lv (Position 70)		Y		1	1.2	1...	1.5																		
540	1.2D + 1.5Lv (Position 71)		Y		1	1.2	1...	1.5																		
541	1.2D + 1.5Lv (Position 72)		Y		1	1.2	1...	1.5																		
542	1.2D + 1.5Lv (Position 73)		Y		1	1.2	1...	1.5																		
543	1.2D + 1.5Lv (Position 74)		Y		1	1.2	1...	1.5																		
544	1.2D + 1.5Lv (Position 75)		Y		1	1.2	1...	1.5																		
545	1.2D + 1.5Lv (Position 76)		Y		1	1.2	1...	1.5																		
546	1.2D + 1.5Lv (Position 77)		Y		1	1.2	1...	1.5																		
547	1.2D + 1.5Lv (Position 78)		Y		1	1.2	1...	1.5																		
548	1.2D + 1.5Lv (Position 79)		Y		1	1.2	1...	1.5																		
549	1.2D + 1.5Lv (Position 80)		Y		1	1.2	1...	1.5																		
550	1.2D + 1.5Lv (Position 81)		Y		1	1.2	1...	1.5																		
551	1.2D + 1.5Lv (Position 82)		Y		1	1.2	1...	1.5																		
552	1.2D + 1.5Lv (Position 83)		Y		1	1.2	1...	1.5																		
553	1.2D + 1.5Lv (Position 84)		Y		1	1.2	1...	1.5																		
554	1.2D + 1.5Lv (Position 85)		Y		1	1.2	1...	1.5																		
555	1.2D + 1.5Lv (Position 86)		Y		1	1.2	1...	1.5																		
556	1.2D + 1.5Lv (Position 87)		Y		1	1.2	1...	1.5																		
557	1.2D + 1.5Lv (Position 88)		Y		1	1.2	1...	1.5																		
558	1.2D + 1.5Lv (Position 89)		Y		1	1.2	1...	1.5																		
559	1.2D + 1.5Lv (Position 90)		Y		1	1.2	1...	1.5																		
560	1.2D + 1.5Lv (Position 91)		Y		1	1.2	1...	1.5																		
561	1.2D + 1.5Lv (Position 92)		Y		1	1.2	1...	1.5																		
562	1.2D + 1.5Lv (Position 93)		Y		1	1.2	1...	1.5																		
563	1.2D + 1.5Lv (Position 94)		Y		1	1.2	1...	1.5																		
564	1.2D + 1.5Lv (Position 95)		Y		1	1.2	1...	1.5																		
565	1.2D + 1.5Lv (Position 96)		Y		1	1.2	1...	1.5																		
566	1.2D + 1.5Lv (Position 97)		Y		1	1.2	1...	1.5																		
567	1.2D + 1.5Lv (Position 98)		Y		1	1.2	1...	1.5																		
568	1.2D + 1.5Lv (Position 99)		Y		1	1.2	1...	1.5																		
569	1.2D + 1.5Lv (Position 100)		Y		1	1.2	1...	1.5																		

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N26	max	1874.713	9	4337.945	22	2674.706	10	10002.337	22	1648.69	2	1149.009	3
2		min	-1907.627	3	-179.531	4	-2732.342	4	-1605.062	4	-1640.361	8	-5533.322	21
3	N20	max	3054.306	8	4337.91	14	1140.24	12	1229.295	11	1649.274	6	11416.991	14
4		min	-2987.577	2	-178.303	8	-1140.651	6	-1318.339	5	-1640.93	12	-1875.937	8
5	N14	max	1720.226	7	4338.009	18	2600.722	11	1651.417	12	1648.292	10	963.142	13
6		min	-1754.106	13	-179.472	12	-2544.272	5	-9773.276	18	-1639.955	4	-5907.393	18
7	Totals:	max	6270.019	8	11948.272	16	5769.189	11						
8		min	-6270.02	2	3610.758	10	-5769.209	5						

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

	Member	Shape	Code Check	Loc[...	LC	Shear C...	Loc....	...	...	phi*P...	phi*P...	phi*M...	phi*M.....		Eqn
1	SA-3	HSS4X4...	.935	79	17	.193	79	y	20	1002...	106155	1231...	1231...	...	H1-1b
2	SA-2	HSS4X4...	.935	79	25	.193	79	y	16	1002...	106155	1231...	1231...	...	H1-1b
3	SA-1	HSS4X4...	.935	79	22	.193	79	y	24	1002...	106155	1231...	1231...	...	H1-1b
4	MP3	PIPE_2.0	.595	33	9	.113	33		2	1491...	32130	1871....	1871....	...	H1-1b
5	MP7	PIPE_2.0	.594	33	13	.113	33		6	1491...	32130	1871....	1871....	...	H1-1b
6	MP11	PIPE_2.0	.594	33	5	.113	33		10	1491...	32130	1871....	1871....	...	H1-1b
7	MP6	PIPE_2.0	.587	33	6	.075	33		5	1491...	32130	1871....	1871....	...	H1-1b
8	MP10	PIPE_2.0	.587	33	10	.075	33		9	1491...	32130	1871....	1871....	...	H1-1b
9	MP2	PIPE_2.0	.586	33	2	.075	33		13	1491...	32130	1871....	1871....	...	H1-1b
10	MP4	PIPE_2.0	.582	33	21	.154	33		12	1491...	32130	1871....	1871....	...	H1-1b
11	MP8	PIPE_2.0	.582	33	25	.154	33		4	1491...	32130	1871....	1871....	...	H1-1b
12	MP12	PIPE_2.0	.582	33	17	.154	33		8	1491...	32130	1871....	1871....	...	H1-1b
13	MP1	PIPE_2.0	.553	33	15	.209	33		13	1491...	32130	1871....	1871....	...	H1-1b
14	MP9	PIPE_2.0	.553	33	23	.209	33		9	1491...	32130	1871....	1871....	...	H1-1b
15	MP5	PIPE_2.0	.553	33	19	.209	33		5	1491...	32130	1871....	1871....	...	H1-1b
16	GRATE-H-...	L2x2x3	.490	0	491	.032	0	z	...	7116....	22743	542.2...	1135....	...	H2-1
17	GRATE-H-...	L2x2x3	.490	0	493	.032	0	z	...	7117....	22743	542.2...	1135....	...	H2-1
18	GRATE-H-...	L2x2x3	.490	0	489	.032	0	z	...	7117....	22743	542.2...	1135....	...	H2-1
19	GRATE-H-...	L2x2x3	.481	0	492	.031	0	y	...	7116....	22743	542.2...	1131....	...	H2-1
20	GRATE-H-...	L2x2x3	.481	0	490	.031	0	y	...	7117....	22743	542.2...	1131....	...	H2-1
21	GRATE-H-...	L2x2x3	.481	0	488	.031	0	y	...	7117....	22743	542.2...	1131....	...	H2-1
22	BRACE-1	HSS4X4...	.418	31.9...	22	.134	31....	y	21	1031...	106155	1231...	1231...	...	H1-1b
23	BRACE-3	HSS4X4...	.418	31.9...	18	.134	31....	y	17	1031...	106155	1231...	1231...	...	H1-1b
24	BRACE-2	HSS4X4...	.418	31.9...	14	.134	31....	y	25	1031...	106155	1231...	1231...	...	H1-1b
25	FM-TOP-0	PIPE_2.0	.382	65.25	9	.165	63....		13	4678....	32130	1871....	1871....	...	H1-1b
26	FM-TOP-120	PIPE_2.0	.382	108....	13	.165	11...		5	4678....	32130	1871....	1871....	...	H1-1b
27	FM-TOP-240	PIPE_2.0	.382	65.25	5	.165	63....		9	4678....	32130	1871....	1871....	...	H1-1b
28	CORNER-L...	L2.5x2.5...	.364	12.0...	6	.193	12....	z	3	3631...	37485	1082....	2466....	...	H2-1
29	CORNER-L...	L2.5x2.5...	.364	12.0...	10	.193	12....	z	7	3631...	37485	1082....	2466....	...	H2-1
30	CORNER-L...	L2.5x2.5...	.364	0	2	.193	0	y	11	3631...	37485	1082....	2466....	...	H2-1
31	FM-BOT-0	PIPE_3.0	.288	116	25	.176	59....		7	5729...	65205	5748....	5748....	...	H1-1b
32	FM-BOT-120	PIPE_3.0	.288	58	17	.176	11...		11	5729...	65205	5748....	5748....	...	H1-1b
33	FM-BOT-240	PIPE_3.0	.288	116	21	.176	59....		3	5729...	65205	5748....	5748....	...	H1-1b
34	CORNER-P...	PL 6x1/2	.163	3.98	6	.295	7.9...	y	4	8087...	94500	984.3...	1181...	...	H1-1b
35	CORNER-P...	PL 6x1/2	.163	3.98	2	.295	0	y	12	8087...	94500	984.3...	1181...	...	H1-1b
36	CORNER-P...	PL 6x1/2	.158	3.897	10	.295	7.9...	y	8	8087...	94500	984.3...	1181...	...	H1-1b
37	CONN-PL-...	PL 6x1/2	.091	0	6	1.024	0	y	7	9357...	94500	984.3...	1181...	...	H1-1b
38	CONN-PL-...	PL 6x1/2	.091	0	10	1.024	0	y	11	9357...	94500	984.3...	1181...	...	H1-1b
39	CONN-PL-...	PL 6x1/2	.091	0	2	1.024	0	y	3	9357...	94500	984.3...	1181...	...	H1-1b
40	M79	PL 6x1/2	.083	0	6	.578	0	y	8	9397...	94500	984.3...	1181...	...	H1-1b
41	M87	PL 6x1/2	.083	0	10	.579	0	y	12	9397...	94500	984.3...	1181...	...	H1-1b
42	M83	PL 6x1/2	.083	0	2	.579	0	y	4	9397...	94500	984.3...	1181...	...	H1-1b
43	M81A	PL 6x1/2	.073	0	10	.578	1.5	y	8	9397...	94500	984.3...	1181...	...	H1-1b
44	M85	PL 6x1/2	.073	0	6	.579	1.5	y	4	9397...	94500	984.3...	1181...	...	H1-1b
45	M89	PL 6x1/2	.073	0	2	.579	1.5	y	12	9397...	94500	984.3...	1181...	...	H1-1b
46	CONN-PL-...	PL 6x1/2	.071	0	9	1.002	0	y	10	9357...	94500	984.3...	1181...	...	H1-1b
47	CONN-PL-...	PL 6x1/2	.071	0	13	1.001	0	y	2	9357...	94500	984.3...	1181...	...	H1-1b
48	CONN-PL-...	PL 6x1/2	.071	0	5	1.002	0	y	6	9357...	94500	984.3...	1181...	...	H1-1b

APPENDIX D

ADDITIONAL CALCULATIONS

TIA-222-H 4-Bolt Connection Check

Connection Details	
Bolt Diameter =	0.625 in
Bolt Quantity =	4
Bolt Threads/Inch, n =	11
Vertical Bolt Spacing =	6.000 in
Horizontal Bolt Spacing =	6.000 in
Bolt Grade =	A325
Plate Height =	8.000 in
Plate Width =	8.000 in
Plate Thickness =	0.75
Plate Grade =	Other
Standoff Member Type=	HSS
Member Height =	4.000 in
Member Width =	4.000 in
Member Thickness =	0.250 in
Use TIA-222-H Section 15.5?	No
Weld Size =	3/16 in

ENGINEERED TOWER SOLUTIONS, PLLC

Connection Check (Bolts)			
Ø =	0.75		Strength Reduction Factor
A_n =	0.226 in^2		Net Bolt Area (AISC Table 7-17)
A_b =	0.307 in^2		Gross Bolt Area
Fu_{bolt} =	120 ksi		Bolt Ultimate Stress Capacity
$ØR_{nt}$ =	20.34 kip		Bolt Nominal Tensile Capacity (TIA-H 4.9.6.1)
$ØR_{nv}$ =	13.81 kip		Bolt Nominal Shear Capacity (TIA-H 4.9.6.3)
Vu_{bolt} =	1.406 kip		Shear Force Per Bolt
Tu_{bolt} =	11.629 kip		Tension Force Per Bolt
CSR =	57.2%	OK	(TIA 4.9.6.4)

Connection Check (Plate)			
Ø =	0.9		Strength Reduction Factor
F_y =	35 ksi		Plate Yield Capacity
YL_H =	7.48 in		Horizontal plate yield line
YL_V =	7.48 in		Vertical plate yield line
YL_D =	5.66 in		Diagonal plate yield line
M_{max} =	16.4 kip-in		Plate Bending Moment
F_b =	31.5 ksi		Nominal Plate Yield Capacity
f_b =	20.7 ksi		Plate Bending Stress Demand
CSR =	65.6%	OK	

Connection Check (Welds)			
Ø =	0.75		Strength Reduction Factor
F_{EXX} =	70 ksi		Filler Metal Strength (70 ksi assumed)
Fu_{bm} =	58 ksi		Base Metal Strength
$ØR_n$ =	66.8 k/in		Nominal Weld Capacity
R_u =	6.5 k/in		Weld Shear Demand
CSR =	9.7%	OK	

Exhibit F

Power Density/RF Emissions Report

EBI Consulting

environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11782A

CT782/Costello MP
123 Costello Road
Newington, Connecticut 06111

July 10, 2020

EBI Project Number: 6220002990

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**56.64%**

July 10, 2020

T-Mobile
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, Connecticut 06002

Emissions Analysis for Site: CT11782A - CT782/Costello MP

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **123 Costello Road** in **Newington, Connecticut** for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

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

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately 400 $\mu W/cm^2$ and 467 $\mu W/cm^2$, respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 123 Costello Road in Newington, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

1) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 1 NR channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 80 Watts.

3) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

4) 4 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

5) 4 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

6) 2 UMTS channels (AWS Band - 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

7) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

8) 2 LTE channels (BRS Band - 2500 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

9) 2 NR channels (BRS Band - 2500 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

10) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

11) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

12) The antennas used in this modeling are the Ericsson AIR 32 for the 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 21 for the 1900 MHz / 2100 MHz channel(s) in Sector A, the Ericsson AIR 32 for the 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 21 for the 1900 MHz / 2100 MHz channel(s) in Sector B, the Ericsson AIR 32 for the 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 21 for the 1900 MHz / 2100 MHz channel(s) in Sector C. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and

20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

13) The antenna mounting height centerline of the proposed antennas is 95 feet above ground level (AGL).

14) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32
Frequency Bands:	1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 2100 MHz
Gain:	15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.85 dBd
Height (AGL):	95 feet	Height (AGL):	95 feet	Height (AGL):	95 feet
Channel Count:	4	Channel Count:	4	Channel Count:	4
Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts
ERP (W):	8,728.31	ERP (W):	8,728.31	ERP (W):	8,728.31
Antenna A1 MPE %:	**3.48%**	Antenna B1 MPE %:	**3.48%**	Antenna C1 MPE %:	**3.48%**
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd
Height (AGL):	95 feet	Height (AGL):	95 feet	Height (AGL):	95 feet
Channel Count:	7	Channel Count:	7	Channel Count:	7
Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts
ERP (W):	8,466.41	ERP (W):	8,466.41	ERP (W):	8,466.41
Antenna A2 MPE %:	**5.61%**	Antenna B2 MPE %:	**5.61%**	Antenna C2 MPE %:	**5.61%**
Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449
Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz
Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd
Height (AGL):	95 feet	Height (AGL):	95 feet	Height (AGL):	95 feet
Channel Count:	4	Channel Count:	4	Channel Count:	4
Total TX Power (W):	160 Watts	Total TX Power (W):	160 Watts	Total TX Power (W):	160 Watts
ERP (W):	25,651.93	ERP (W):	25,651.93	ERP (W):	25,651.93
Antenna A3 MPE %:	**10.22%**	Antenna B3 MPE %:	**10.22%**	Antenna C3 MPE %:	**10.22%**
Antenna #:	4	Antenna #:	4	Antenna #:	4
Make / Model:	Ericsson AIR 21	Make / Model:	Ericsson AIR 21	Make / Model:	Ericsson AIR 21
Frequency Bands:	1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 2100 MHz
Gain:	15.35 dBd / 15.35 dBd	Gain:	15.35 dBd / 15.35 dBd	Gain:	15.35 dBd / 15.35 dBd
Height (AGL):	95 feet	Height (AGL):	95 feet	Height (AGL):	95 feet
Channel Count:	6	Channel Count:	6	Channel Count:	6
Total TX Power (W):	180 Watts	Total TX Power (W):	180 Watts	Total TX Power (W):	180 Watts
ERP (W):	6,169.82	ERP (W):	6,169.82	ERP (W):	6,169.82
Antenna A4 MPE %:	**2.46%**	Antenna B4 MPE %:	**2.46%**	Antenna C4 MPE %:	**2.46%**

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	21.77%
Verizon	8.7%
Metro PCS	1.85%
Clearwire	0.12%
Sprint/Nextel	0.49%
AT&T	23.71%
Site Total MPE % :	56.64%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	21.77%
T-Mobile Sector B Total:	21.77%
T-Mobile Sector C Total:	21.77%
Site Total MPE % :	56.64%

T-Mobile Maximum MPE Power Values (Sector A)

T-Mobile Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density (μW/cm²)	Frequency (MHz)	Allowable MPE (μW/cm²)	Calculated % MPE
T-Mobile 1900 MHz LTE	2	2056.61	95.0	16.39	1900 MHz LTE	1000	1.64%
T-Mobile 2100 MHz LTE	2	2307.55	95.0	18.38	2100 MHz LTE	1000	1.84%
T-Mobile 600 MHz LTE	2	591.73	95.0	4.71	600 MHz LTE	400	1.18%
T-Mobile 600 MHz NR	1	1577.94	95.0	6.29	600 MHz NR	400	1.57%
T-Mobile 700 MHz LTE	2	648.82	95.0	5.17	700 MHz LTE	467	1.11%
T-Mobile 1900 MHz LTE	2	2203.69	95.0	17.56	1900 MHz LTE	1000	1.76%
T-Mobile 2500 MHz LTE	2	6412.98	95.0	51.09	2500 MHz LTE	1000	5.11%
T-Mobile 2500 MHz NR	2	6412.98	95.0	51.09	2500 MHz NR	1000	5.11%
T-Mobile 1900 MHz GSM	4	1028.30	95.0	16.39	1900 MHz GSM	1000	1.64%
T-Mobile 2100 MHz UMTS	2	1028.30	95.0	8.19	2100 MHz UMTS	1000	0.82%
						Total:	**21.77%**

• NOTE: Totals may vary by approximately 0.01% due to summation of remainders in calculations.

Summary

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

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

T-Mobile Sector	Power Density Value (%)
Sector A:	21.77%
Sector B:	21.77%
Sector C:	21.77%
T-Mobile Maximum MPE % (Sector A):	21.77%
Site Total:	56.64%
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **56.64%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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